

Report to Congressional Committees

December 2006

TRANSPORTATION-DISADVANTAGED POPULATIONS

Actions Needed to Clarify Responsibilities and Increase Preparedness for Evacuations





Highlights of GAO-07-44, a report to congressional committees

Why GAO Did This Study

During the evacuation of New Orleans in response to Hurricane Katrina in 2005, many of those who did not own a vehicle and could not evacuate were among the over 1,300 people who died. This raised questions about how well state and local governments, primarily responsible for disaster planning, integrate transportationdisadvantaged populations into such planning. GAO assessed the challenges and barriers state and local officials face; how prepared these governments are and steps they are taking to address challenges and barriers; and federal efforts to provide evacuation assistance. GAO reviewed evacuation plans; Department of Homeland Security (DHS), Department of Transportation (DOT), and other studies; and interviewed officials in five major city and four state governments.

What GAO Recommends

DHS should clarify federal agencies' roles and responsibilities for providing evacuation assistance when state and local governments are overwhelmed. DHS should require state and local evacuation preparedness for transportationdisadvantaged populations and improve information to assist these governments. DOT should encourage its grant recipients to share information to assist in evacuation preparedness for these populations. DOT and DHS agreed to consider our recommendations, and DHS stated it has partly implemented some of them.

www.gao.gov/cgi-bin/getrpt?GAO-07-44.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Kate Siggerud at (202) 512-2834 or SiggerudK@gao.gov.

TRANSPORTATION-DISADVANTAGED POPULATIONS

Actions Needed to Clarify Responsibilities and Increase Preparedness for Evacuations

What GAO Found

State and local governments face evacuation challenges in identifying and locating transportation-disadvantaged populations, determining their needs, and providing for their transportation. These populations are diverse and constantly changing, and information on their location is often not readily available. In addition, these populations' evacuation needs vary widely; some require basic transportation while others need accessible equipment, such as buses with chair lifts. Legal and social barriers impede addressing these evacuation challenges. For example, transportation providers may be unwilling to provide evacuation assistance because of liability concerns.

State and local governments are generally not well prepared—in terms of planning, training, and conducting exercises—to evacuate transportationdisadvantaged populations, but some have begun to address challenges and barriers. For example, DHS reported in June 2006 that only about 10 percent of state and about 12 percent of urban area emergency plans it reviewed adequately addressed evacuating these populations. Furthermore, in one of five major cities GAO visited, officials believed that few residents would require evacuation assistance despite the U.S. Census reporting 16.5 percent of car-less households in that major city. DHS also found that most states and urban areas significantly underestimated the advance planning and coordination required to effectively address the needs of persons with disabilities. Steps being taken by some such governments include collaboration with social service and transportation providers and transportation planning organizations—some of which are DOT grantees and stakeholders—to determine transportation needs and develop agreements for emergency use of drivers and vehicles.

The federal government provides evacuation assistance to state and local governments, but gaps in this assistance have hindered many of these governments' ability to sufficiently prepare for evacuations. This includes the lack of any specific requirement to plan, train, and conduct exercises for the evacuation of transportation-disadvantaged populations as well as gaps in the usefulness of DHS's guidance. Although federal law requires that state and local governments with mass evacuation plans incorporate special needs populations into their plans, this requirement does not necessarily ensure the incorporation of all transportation-disadvantaged populations. Additionally, while DHS has made improvements to an online portal for sharing related information, this information remains difficult to access because of poor search and organizational functions. Moreover, although the federal government can provide evacuation assistance when state and local governments are overwhelmed, the federal government is not prepared to do so. Amendments to the Stafford Act in October 2006 affirmed that FEMA (an agency within DHS) is responsible for leading and coordinating evacuation assistance. DHS has not yet clarified, in the National Response Plan, the lead, coordinating, or supporting agencies in such cases.

Contents

Letter		1
	Results in Brief	5
	Background	12
	Challenges and Barriers Exist in Evacuation Preparedness for	
	Transportation-Disadvantaged Populations	14
	State and Local Governments Are Generally Not Well Prepared to	
	Evacuate Transportation-Disadvantaged Populations, but Some	
	Have Taken Steps to Improve Preparedness	24
	While the Federal Government Provides Some Evacuation	
	Assistance, Gaps Remain Conclusions	32 42
	Recommendations for Executive Action	43
	Agency Comments and Our Evaluation	44
Appendix I	Scope and Methodology	48
Appendix II	Comments from the Department of Homeland Security	52
	GAO Comments	56
Annondir III	CAO's Observations on Federal Droposed	
Appendix III	GAO's Observations on Federal Proposed	
	Recommendations and Initial Conclusions	58
Appendix IV	Other Federal Initiatives Related to Evacuating	
	Transportation-Disadvantaged Populations	62
Appendix V	GAO Contact and Staff Acknowledgments	64
Related GAO Products		65
Inclaign day I I dunges		บอ

Table		
	Table 1: GAO's Observations on Federal Recommendations and Initial Conclusions Addressing Evacuation Planning for Transportation-Disadvantaged Populations	58
Figures		
	Figure 1: Challenges in Evacuating Transportation-Disadvantaged Populations	7
	Figure 2: Major Barriers to Addressing Challenges in Evacuating Transportation-Disadvantaged Populations	19

Abbreviations

DHS Department of Homeland Security
DOT Department of Transportation

FEMA Federal Emergency Management Agency

This is a work of the U.S. government and is not subject to copyright protection in the United States. It may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.



United States Government Accountability Office Washington, DC 20548

December 22, 2006

Congressional Committees:

The evacuation of New Orleans in response to Hurricane Katrina was considered relatively successful for people with their own vehicles; approximately 1 million people evacuated Louisiana prior to landfall. In contrast, about 100,000 people were not evacuated prior to the storm—many of whom lacked access to a vehicle. Hurricane Katrina ultimately resulted in over 1,300 deaths. Among those who could not evacuate were some of society's most vulnerable populations: the elderly, low-income individuals, and persons with disabilities. These populations often lack the ability to provide for their own transportation and may also have difficulty accessing conventional public transportation. As a result, evacuating these "transportation-disadvantaged" populations during emergencies has become an important topic of public policy discussion.

Evacuations of varying scales are common in the United States and can be triggered by a variety of events, including natural disasters such as Hurricanes Katrina and Rita, wildfires, and terrorist attacks like those committed on September 11, 2001. In fact, emergency evacuations of more than 1,000 people occur more than three times a month. While evacuation is only one option in response to an emergency, it is complex and contains

¹For the purposes of this report, we define evacuations as "organized, phased, and supervised withdrawal, dispersal, or removal of civilians from dangerous or potentially dangerous areas, and their reception and care in safe areas."

²As we discuss in this report, transportation-disadvantaged populations can include numerous categories of people without personal vehicles, such as: the elderly and persons with disabilities who have mobility impairments that preclude them from driving or who need medical equipment in order to travel; low-income, homeless, or transient persons who do not have a permanent residence or who do not own or have access to a personal vehicle; children without an adult present during a disaster; tourists and commuters who are frequent users of public transportation; those with limited English proficiency who tend to rely on public transit more than English speakers (see GAO, *Transportation Services: Better Dissemination and Oversight of DOT's Guidance Could Lead to Improved Access for Limited English-Proficient Populations*, GAO-06-52 [Washington, D.C.: Nov. 2, 2006]); or those who, for any other reason, do not own or have access to a personal vehicle.

³Our previous studies have examined the ability of transportation-disadvantaged populations to access public transportation for employment opportunities, health and medical services, educational services, and the community at large.

several critical components, including transportation, shelter, supplies, and security, among others. Each of these components is itself complex and often interrelated to transportation. Those who, by choice or circumstance, do not have access to a personal vehicle or are precluded from driving may require evacuation assistance during emergencies. The 2000 U.S. Census indicates that the population categories we have previously defined as transportation-disadvantaged—the elderly, lowincome individuals, and persons with disabilities—comprise a large segment of the country's total population (now over 300 million). For example, Census data indicated that, in 2000, 12 percent of Americans were age 65 and over, 12 percent were living below the poverty line, and 23 percent had a disability. However, the transportation-disadvantaged not only include vulnerable populations, but all those who are car-less during an emergency. In 2000, the top 10 car-less cities had between 29 and 56 percent of households without a vehicle. However, people who require transportation assistance in an evacuation may be an even larger group because, in an emergency, anyone without immediate access to transportation may require assistance.

State and local governments are primarily responsible for managing responses to disasters. The Robert T. Stafford Disaster Relief and Emergency Assistance Act (the Stafford Act) establishes a disaster management framework for state and local governments⁵ and indicates that disasters should be managed at the lowest possible governmental level. As the Department of Homeland Security (DHS) reaffirmed in July 2006,⁶ this approach also applies to evacuations whereby state and local officials may suggest or require the evacuation of residents from homes and communities before certain catastrophes occur using the authority set out in state laws and local ordinances. The federal government provides assistance to state and local governments in their evacuation preparedness, including requirements, funding, and guidance and technical guidance. If state and local governments are overwhelmed by a

⁴Only those individuals age 21 and over are included in this disability determination. Also, while there is some overlap among transportation-disadvantaged populations—an elderly person with a disability, for example—the numbers of these populations are still large. In addition, it is unlikely that all of those who compromise the aforementioned data would require transportation during an evacuation.

⁵For the purposes of this report, language regarding state and local governments is inclusive of tribal governments.

⁶Letters sent by Secretary of Homeland Security Michael Chertoff to the Governors of Alabama, Louisiana, and Mississippi in July 2006.

catastrophic disaster, the federal government can also provide evacuation assistance. For example, the Department of Transportation (DOT) and the Department of Defense (DOD) worked with state and local officials to conduct evacuations during Hurricane Katrina. Other entities that may be available to assist state and local governments in preparing for evacuations include social service agencies, nonprofit organizations, public transportation providers (such as transit agencies) and private transportation providers (such as ambulance and bus companies), and regional planning organizations—also known as metropolitan planning organizations—which collect transportation and transit data as part of their involvement in planning highway and transit investments. Some of these entities receive DOT grants for programs that provide transportation for the elderly, low-income individuals, persons with disabilities, and other transportation-disadvantaged populations, among other activities. The federal government's plan for disaster response is the DHS National Response Plan.

Reports by the White House, ⁸ Senate, ⁹ and other federal entities studied federal, state, and local evacuation preparedness and response to Hurricane Katrina and issued related recommendations. The Congress mandated that reviews and assessments be conducted in response to concerns raised by Hurricane Katrina. As a result, DHS issued the *Nationwide Plan Review* Phase I and II Reports, a comprehensive assessment of catastrophic planning, in all 50 states and in 75 of the largest urban areas (February and June 2006). ¹⁰ In addition, DOT issued the *Catastrophic Hurricane Evacuation Plan Evaluation: A Report to Congress*, a review of hurricane evacuation plans of five states and 58 counties and parishes on the Gulf Coast, in June 2006. ¹¹ Because of this broad-based congressional interest in concerns raised by Hurricane Katrina, we assessed issues surrounding the evacuation of transportation-

⁷Such programs include the Elderly Individuals and Individuals with Disabilities, Job Access and Reverse Commute, and New Freedom programs.

⁸White House Homeland Security Council, *The Federal Response to Hurricane Katrina: Lessons Learned* (Washington, D.C.: Feb. 2006)

⁹Senate Homeland Security and Governmental Affairs Committee, *Hurricane Katrina: A Nation Still Unprepared* (Washington, D.C.: May 2006).

¹⁰DHS, Nationwide Plan Review: Phase I Report (Washington, D.C.: Feb. 10, 2006). DHS, Nationwide Plan Review: Phase II Report (Washington, D.C.: June 16, 2006).

¹¹DOT in cooperation with DHS, Catastrophic Hurricane Evacuation Plan Evaluation: A Report to Congress (Washington, D.C.: June 1, 2006).

disadvantaged populations under the Comptroller General's authority, which allows him to conduct evaluations on his own initiative. ¹² In May 2006, we reported on preliminary observations from our work. ¹³ To complete our assessment, we examined (1) the challenges state and local governments face in preparing for the evacuation of transportation-disadvantaged populations and the barriers these governments confront in addressing such challenges; (2) how prepared state and local governments are to evacuate transportation-disadvantaged populations, and what steps the governments are taking to address challenges associated with preparing for the evacuation of these populations; and (3) the extent to which the federal government (a) has provided assistance to state and local governments' efforts to prepare for the evacuation of transportation-disadvantaged populations and (b) is responsible for providing evacuation assistance when state and local governments are overwhelmed by a catastrophic disaster.

To address these questions, we conducted literature and document reviews of federal, state, and local emergency plans; activity reports issued after Hurricane Katrina and other recent disasters; studies conducted by the federal government, experts, national associations, and organizations that represent transportation-disadvantaged populations and transportation providers; and related laws and proposed legislation. We interviewed federal officials from DOT, DHS, Health and Human Services, and DOD, in addition to experts in the field of emergency preparedness. We conducted site visits to five major cities: Los Angeles, California; Miami, Florida; New Orleans, Louisiana; Buffalo, New York; and Washington, D.C. We selected these cities based on several factors, including large concentrations of car-less, elderly, disabled, and lowincome populations (according to the 2000 U.S. Census); a medium or high overall vulnerability to hazards; and transportation ridership. At these locations, we interviewed local emergency management, public safety, and transit and transportation agency officials; transportation planners and

¹²31 U.S.C. § 717(b)(1)(2000).

¹³GAO, Disaster Preparedness: Preliminary Observations on the Evacuation of Vulnerable Populations Due to Hurricanes and Other Disasters, GAO-06-790T (Washington, D.C.: May 18, 2006). Also see a list of related GAO products at the end of this report.

¹⁴While the District of Columbia is neither a city nor a state, for the purposes of this report, we refer to the District of Columbia as one of the major cities we visited. We, therefore, did not visit a respective state for the District of Columbia.

representatives of advocacy groups for the elderly and persons with disabilities. We also interviewed state emergency management and transportation agency officials at the four state capitals for the cities we visited: Sacramento, California; Tallahassee, Florida; Baton Rouge, Louisiana; and Albany, New York. We issued a report in July 2006 on the evacuation of health facilities, including hospitals and nursing homes. ¹⁵ As such, this report does not address the evacuation of those who are under the care of these health facilities. In addition, aside from transportation, this report does not address other key considerations in evacuating these populations, such as shelter, security, food and water, and other associated issues.

We conducted our review from December 2005 through December 2006 in accordance with generally accepted government auditing standards. (See app. I for additional information on our scope and methodology.)

Results in Brief

When preparing for the evacuation of transportation-disadvantaged populations, state and local emergency management officials face challenges in identifying and locating these populations, determining their transportation needs, and providing for their transportation. For instance, when preparing evacuation plans, it is difficult for officials to identify transportation-disadvantaged populations because they are large, diverse, and constantly changing. In addition, locating transportationdisadvantaged populations is a challenge for state and local officials because information on their locations has not been or cannot be collected, is not centrally compiled, or has not been traditionally shared with officials responsible for preparing to evacuate these populations. Determining the evacuation transportation needs of these populations is a challenge because the needs of such populations vary—some require little assistance beyond basic transportation, while others may require transportation that is accessible to those with mobility impairments (such as buses with wheelchair lifts) and medical assistance from the home to the shelter. Additionally, officials face challenges in providing for the evacuation transportation of these populations, such as acquiring the appropriate vehicles and other equipment, employing the professionals

¹⁵GAO, Disaster Preparedness: Limitations in Federal Evacuation Assistance for Health Facilities Should Be Addressed, GAO-06-826 (Washington, D.C.: Jul. 20, 2006). This report discusses evacuation challenges faced by hospitals and nursing homes, such as in deciding whether to evacuate, securing transportation, and maintaining communications outside of their facilities.

(such as drivers) necessary to carry out evacuations, and providing relevant training to those professionals, including how to move persons with disabilities in and out of vehicles. For example, 48 percent of respondents to DHS's Nationwide Plan Review stated that they needed to improve their use of all available transportation modes. State and local officials also confront legal and social barriers in addressing these evacuation challenges for transportation-disadvantaged populations. One legal barrier is officials' concern about obtaining client medical information from transportation providers that is used to service clients. Although officials would use this information in evacuation preparedness efforts, privacy issues remain. Another legal barrier is that public and private sector transportation providers—for example, those who transport persons with disabilities, "Meals on Wheels" programs for the elderly, and job access services for low-income individuals—may be dissuaded, along with volunteers, from providing evacuation assistance in an emergency because of liability concerns. An example of this concern is the possibility of being sued for damages if an evacuee becomes injured while boarding a bus. Further, social barriers, which can affect the willingness of any population to evacuate, may make transportation-disadvantaged populations even less likely to accept assistance in evacuating. This can include concerns about a pet, one's health, or fear of losing financial assets. It can also include the risk of adverse health effects if these populations evacuate without their assistance devices, such as life-support systems or service animals. (See fig. 1.)

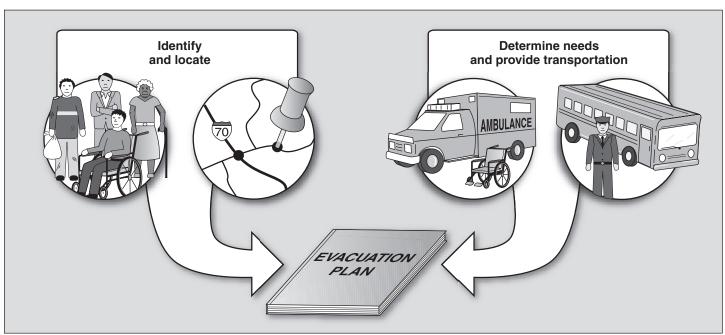


Figure 1: Challenges in Evacuating Transportation-Disadvantaged Populations

Source: GAO

Many state and local governments are generally not well prepared—that is, they do not have the appropriate plans, training, and exercises—to evacuate transportation-disadvantaged populations. DHS's Nationwide Plan Review of emergency plans from all 50 states and 75 of the largest urban areas reported that about 10 percent of states and about 12 percent of urban areas adequately addressed evacuating transportationdisadvantaged populations. DOT's evaluation reported that most state and local evacuation plans focus on highway evacuations by personal vehicles. According to the *Nationwide Plan Review* and our site visits, one reason for this lack of preparedness is the limited awareness or understanding of the importance of preparing to evacuate transportation-disadvantaged populations by many state and local governments. Emergency management officials in one major city we visited after Hurricane Katrina stated that few residents would require transportation assistance and, therefore, these officials did not believe that they needed to plan, train, and conduct exercises for the evacuation of transportation-disadvantaged populations. However, 2000 U.S. Census data reported 16.5 percent of households in that major city are car-less, and many of these households may not be able to self-evacuate. While it is uncertain whether state and local governments' ability to evacuate these populations would be

successful—in part because of limited training and conducting of exercises—we found that some state and local governments we visited have taken steps to address some of the evacuation preparedness challenges and related legal and social barriers. These include the following:

- Identifying and locating transportation-disadvantaged populations: One of the five major cities we visited conducted a disaster preparedness survey of some of its transportation-disadvantaged populations, and another has begun to develop computerized maps that locate transportation-disadvantaged populations. However, while some state and local entities (some of which are DOT grant recipients and stakeholders) can provide information on how to identify and locate transportation-disadvantaged populations, the five major cities and four states we visited have generally not taken advantage of these entities' information. (These entities include social service agencies; nonprofit organizations; public and private sector transportation providers for the elderly, low-income individuals, and persons with disabilities; and metropolitan planning organizations, among others.)
- Determining needs and providing transportation: Two of the five major cities we visited have involved state and local entities—such as advocacy groups and social service transportation providers—in planning efforts to make use of these entities' understanding of, and experience with, the needs of transportation-disadvantaged populations.
- Legal and social barriers: To help address legal barriers, four of the five
 major cities we visited have developed memoranda of understanding and
 mutual aid agreements for the use of vehicles and drivers in an emergency;
 these contracts help address liability concerns. To help overcome social
 barriers, two of the five major cities we visited have established plans to
 evacuate and shelter pets and ensured that evacuees can bring assistance
 devices, such as wheelchairs and life-support systems.

The federal government has provided some evacuation preparedness assistance to state and local governments for transportation-disadvantaged populations, but gaps have hindered many of these governments' ability to sufficiently prepare to address the complex challenges and barriers they face. These gaps include the following:

- **Requirements**: Until October 2006, while federal law required that emergency plans include an evacuation plan, there was no specific requirement that the evacuation plan address how to transport those who cannot self-evacuate. 16 Federal law now requires that state and local governments with mass evacuation plans incorporate special needs populations into their plan. However, this requirement does not necessarily ensure the incorporation of all transportation-disadvantaged populations. This is because state and local governments do not share a consistent definition of special needs populations, as we found in the course of our review, and this term did not encompass all transportationdisadvantaged populations which are important to evacuation preparedness. In addition, a July 2005 report from the National Council on Disability¹⁷ found little evidence that DHS has encouraged state or local grant recipients to include disability and access issues in their emergency preparedness efforts. Changes in federal law from October 2006 will also further protect some transportation-disadvantaged populations.
- Funding: Although DHS grants may be used by state and local governments to plan, train, and conduct exercises for the evacuation of transportation-disadvantaged populations, officials from only two of the five major cities and one state we visited had requested a DHS grant for such purposes. These officials told us that such grants were seldom used to prepare these populations for evacuation because these officials believe DHS placed a greater emphasis on the procurement of equipment (rather than planning) and on terrorism preparedness (as opposed to preparedness for natural or other disasters). In addition, DHS officials told us that they currently do not know how much of the department's grant funds have been used, or are being used, by state and local governments to prepare for the evacuation of transportation-disadvantaged populations.
- **Guidance and technical assistance**: The primary federal guidance for evacuation preparedness recommends planning for transportation-disadvantaged populations, but does not provide any further details for how to do so. As a result, state and local officials told us that additional guidance on how to approach planning for these populations would be helpful. About one-third of DHS's *Nationwide Plan Review* respondents stated that they would like additional guidance in this area. Further, while DHS has an online portal for sharing existing emergency preparedness

¹⁶Title 42 U.S.C. § 11003(c)(7).

¹⁷National Council on Disability, *Saving Lives: Including People with Disabilities in Emergency Planning* (Washington, D.C.: Apr. 15, 2005).

guidance, best practices, and other information—its Lessons Learned Information Sharing online portal—information on preparing to evacuate transportation-disadvantaged populations is difficult to access because of poor search and organizational functions. While several federal agencies, such as the Federal Emergency Management Agency (FEMA), coordinate technical assistance for evacuations, such assistance is generally focused on self-evacuation.

While DHS and DOT have taken several actions in the aftermath of Hurricane Katrina to improve the federal government's ability to provide evacuation assistance when state and local governments are overwhelmed by a catastrophic disaster, gaps remain. Although the Stafford Act gives the federal government the authority to assist state and local governments with evacuations and to respond in a catastrophic disaster, the National Response Plan does not clarify the lead, coordinating, and supporting agencies to provide evacuation assistance for transportationdisadvantaged and other populations when state and local governments are overwhelmed. The absence of lead, coordinating, and supporting agencies for providing evacuation assistance was evident in the federal response for New Orleans during Hurricane Katrina. As both the White House Homeland Security Council report and the Senate Government Affairs and Homeland Security Committee report noted, the federal government was not prepared to evacuate transportation-disadvantaged populations, and this severely complicated and hampered the federal response. 18 Both reports recommended that DOT develop plans to assist states and local governments overwhelmed by catastrophic disasters, and that DHS and DOT work with other agencies to develop the federal government's capability to conduct mass evacuations. To remedy this, the White House report also recommended that DOT be designated as the federal agency responsible for leading and coordinating evacuations when state and local governments are overwhelmed. Amendments to the Stafford Act from October 2006 clarified the responsibility of FEMA (an agency within DHS) in leading and coordinating evacuation assistance when state and local governments are overwhelmed by a catastrophic disaster. In the aftermath of Hurricane Katrina, the federal government has taken several steps to improve its ability to respond to a catastrophic disaster. For instance, during the 2006 hurricane season, the government

¹⁸See White House Homeland Security Council, *The Federal Response to Hurricane Katrina: Lessons Learned* (Washington D.C.: Feb. 2006) and Senate Homeland Security and Governmental Affairs Committee, *Hurricane Katrina: A Nation Still Unprepared* (Washington, D.C.: May 2006).

provided additional evacuation assistance to state and local governments. However, despite these improvements, DHS has not yet clarified in the National Response Plan which federal agencies are responsible for leading, coordinating, and supporting evacuation assistance.

To improve the federal government's ability to assist state and local governments in evacuating transportation-disadvantaged populations, we are making several recommendations to DHS. We recommend, for instance, that DHS clarify in the National Response Plan (as already stated in federal law) that FEMA is the single federal agency responsible for leading and coordinating evacuation assistance when state and local governments are overwhelmed. We also recommend that DHS clarify the supporting federal agencies' roles and responsibilities in providing evacuation assistance. In addition, we are also recommending that DHS use its authority under its various grant programs to require that all state and local governments plan, train, and exercise for the evacuation of these populations; develop additional preparedness guidance and technical assistance; and improve its information sharing online portal to encourage better evacuation preparedness for these populations. We are making a recommendation to DOT that it encourage its grant recipients and stakeholders, through guidance and outreach, to share information that would assist emergency management and transportation officials in identifying and locating as well as determining the evacuation needs of and providing transportation for these populations.

We provided a draft of this report to DHS and DOT for comment. We received written comments from DHS and oral comments from DOT officials, including the National Response Program Manager, Office of Intelligence, Security, and Emergency Response, Office of the Secretary. DOT officials generally agreed with the information contained in our report, and both DOT officials and DHS's letter stated that they would consider our recommendations. DHS's letter also stated that it has partly implemented some recommendations in our draft report, including improvements to its Lessons Learned Information Sharing portal. We recognize that DHS has made improvements to this portal, but some of the issues we previously identified, particularly regarding its limited search functions, remain. We therefore revised our recommendation to recognize DHS's efforts, but retained the recommendation to reflect the need for continued improvement. DHS's letter also noted, in contrast to an earlier discussion we had with DHS officials, that DHS is the single agency responsible for leading and coordinating evacuation support to the states, and that this responsibility was emphasized by amendments to the Stafford Act in October 2006. We therefore modified our draft as

appropriate and retained our recommendation that DHS clarify the lead, coordinating, and supporting federal agencies to provide evacuation assistance and these agencies' responsibilities in the National Response Plan. DHS's letter raised a number of other concerns, including how we characterized its role and responsibilities, and how we characterized the events surrounding Hurricane Katrina, which we have addressed in the report as appropriate. In addition, both DHS and DOT officials offered technical and clarifying comments which we incorporated.

Background

State and local governments are primarily responsible for carrying out evacuations. However, if these governments become overwhelmed by a catastrophic disaster, the federal government can provide essential support, such as evacuation assistance for transportation-disadvantaged and other populations. Such support would require adequate preparation on the part of the federal government.

The Stafford Act outlines the framework for state and local governments to obtain federal support in response to a disaster. First, a governor must submit a request to the President in order for the President to declare a federal disaster. Once the declaration is granted, the state can request specific assistance from FEMA (part of DHS), such as physical assets, personnel, funding, and technical assistance, among others. While the President can declare a disaster without a request from a governor, this does not frequently occur. The Post-Katrina Emergency Management Reform Act of 2006 amended sections of the Stafford Act whereby the President can provide accelerated federal assistance and support where necessary to save lives absent a specific request from a governor and can direct any federal agency to provide assistance to state and local governments in support of "precautionary evacuations." DHS's role is to coordinate federal resources used in disaster response, including evacuations. DHS created the National Response Plan in 2004 to create a comprehensive "all-hazards" approach to enhance the ability of the United States to manage domestic incidents. Under the National Response Plan, DOT is the lead and coordinating federal agency for transportation in a disaster. DOT is primarily responsible for coordinating the provision of federal and civil transportation services, and the recovery, restoration, safety, and security of the transportation infrastructure. However, with respect to evacuations, DOT is only responsible for providing technical assistance in evacuation planning to other federal agencies as well as state and local governments.

The Post-Katrina Emergency Management Reform Act of 2006 also included numerous provisions to help strengthen federal, state, and local evacuation preparedness for some transportation-disadvantaged populations. Among these provisions are: the establishment of the National Advisory Council to advise FEMA on all aspects of emergency management that will include disability and other special needs representatives; the institution of a DHS disability coordinator to assist in emergency preparedness for persons with disabilities; the creation of the National Training Program and the National Exercise Program which are designed to address the unique requirements of special needs populations; and a requirement that federal agencies develop operational plans to respond effectively to disasters, which must address support of state and local governments in conducting mass evacuations, including transportation and provisions for populations with special needs.

To facilitate evacuation preparedness, state and local entities not traditionally involved in emergency management can provide assistance such as information or vehicles—that would be helpful in state and local evacuation-preparedness efforts for transportation-disadvantaged populations. Some such entities receive DOT grants to provide transportation for the elderly, low-income individuals, persons with disabilities, and other transportation-disadvantaged populations. These include social service agencies, nonprofit organizations, and public and private sector transportation providers that coordinate the daily transportation of the elderly, low-income individuals, and persons with disabilities, to provide meals or transportation to and from jobs, medical appointments, and other activities. Finally, as a condition for spending federal highway or transit funds in urbanized areas, federal highway and transit statutes require metropolitan planning organizations to plan, program, and coordinate federal highway and transit investments. To carry out these activities, metropolitan planning organizations collect transportation and transit data. In March 2006, DOT issued guidance that recommends increased interaction between some of its grant recipients and emergency management agencies, among other entities.¹⁹

¹⁹For fiscal year 2007, DOT's Elderly Individuals and Individuals with Disabilities, Job Access and Reverse Commute, and New Freedom programs require some grant recipients to develop a coordinated public transit-human services transportation plan. FTA proposes that this plan is to be a unified, comprehensive strategy for public transportation service delivery that identifies the transportation needs of individuals with disabilities, older adults, and individuals with limited incomes; lays out strategies for meeting these needs; and prioritizes services. All future projects for these programs are to be derived from the local coordinated public transit-human services transportation plans.

To assess state and local evacuation preparedness, DHS's *Nationwide Plan Review* examined the emergency plans of all 50 states and 75 of the largest urban areas, including evacuation plans and annexes. DOT's report to the Congress, entitled *Catastrophic Hurricane Evacuation Plan Evaluation: A Report to Congress* also reviewed the evacuation plans of many of the Gulf Coast region's counties and parishes. Both of these federal reports also recommend that additional actions be taken to address this issue.

There are many relevant federal entities and other entities that have served as advocates for all or subsets of transportation-disadvantaged populations. In the federal government, these include the National Council on Disability; and interagency councils such as the Coordinating Council on Access and Mobility, the Interagency Coordinating Council on Emergency Preparedness and Individuals with Disabilities, and the Interagency Council on Homelessness. Outside of the federal government, relevant entities that have advocated for these populations include the National Organization on Disability and the American Association of Retired Persons, as well as transportation groups such as the American Public Transportation Association, the Community Transportation Association of America, and the Association of Metropolitan Planning Organizations.

Challenges and Barriers Exist in Evacuation Preparedness for Transportation-Disadvantaged Populations State and local emergency management officials face several challenges in preparing for the evacuation of transportation-disadvantaged populations. For example, state and local officials face difficulties in obtaining information about where transportation-disadvantaged populations are located. These state and local officials also face challenges in determining transportation-disadvantaged populations' needs and providing for their transportation, such as arranging for the use of appropriate equipment—buses and vans, for example—to evacuate these populations. Additionally, officials confront legal and social barriers in addressing these challenges, such as concerns about being unable to obtain client medical information from public or private sector transportation providers for use in evacuation preparedness efforts because of privacy issues.

²⁰We issued a report in July 2006 on the evacuation of health facilities, including hospitals and nursing homes. As such, this report does not address the evacuation of those who are under the care of these health facilities. See GAO-06-826.

State and Local Governments Face Challenges in Identifying and Locating Transportation-Disadvantaged Populations, Determining Their Evacuation Needs, and Providing for Their Transportation According to experts and officials, the challenges state and local governments face in preparing for the evacuation of transportation-disadvantaged populations include identifying and locating these populations, determining their evacuation needs, and providing for their transportation. It is difficult for state and local officials to acquire the necessary information to both identify and locate transportation-disadvantaged populations. The difficulty in identifying these populations is due to the fact that these populations represent large, diverse, and constantly changing groups, and that information about them is not always readily available. Transportation-disadvantaged populations can include numerous categories of people without personal vehicles, such as the following:

- the elderly and persons with disabilities who have mobility impairments that preclude them from driving, or who need medical equipment in order to travel;
- low-income, homeless, or transient persons who do not have a permanent residence or who do not own or have access to a personal vehicle;
- children without an adult present during a disaster;
- tourists and commuters who are frequent users of public transportation;
- those with limited English proficiency who tend to rely on public transit more than English speakers;²¹ or
- those who, for any other reason, do not own or have access to a personal vehicle.

These populations can also include those who could be placed in, or qualify for, more than one category among transportation-disadvantaged populations, such as a person who has disabilities, is homeless, and speaks limited English. Both the large number of these populations and the potential for double counting can make identification difficult for state and local officials. For example, although 52 percent of the Gulf Coast jurisdictions evaluated in DOT's *Catastrophic Hurricane Evacuation Plan Evaluation* had identified and located certain transportation-disadvantaged populations, DOT reported that only three jurisdictions had satisfactorily included provisions for schools and day care centers, trailer

²¹See GAO-06-52.

parks and campgrounds, incarcerated and transient individuals, and people with limited English proficiency in their evacuation plans. Twenty-six percent of respondents to a question in DHS's *Nationwide Plan Review* stated that they needed to improve their identification of these populations. Fifteen percent of respondents to this question indicated that a standard federal definition of "transportation-disadvantaged" would facilitate their planning.

Additionally, data on the location of transportation-disadvantaged populations is not readily available because such data:

- have not previously been collected;
- cannot be collected because of the amount of time, staff, and other
 resources required, or cannot be shared due to the preference of some
 transportation-disadvantaged populations; for example, the established
 registration system in one of the five major cities we visited had only
 1400—or 0.3 percent—of the 462,000 people projected to need evacuation
 assistance registered;
- are not compiled in a central location, but reside in separate databases across numerous agencies, companies, or organizations, including social service agencies, departments of motor vehicles, and public and private sector transportation providers;
- are not traditionally shared with emergency management officials; for example, a local metropolitan planning organization may collect data on those who are transit-dependent, but may not have shared that information with emergency management officials; or
- cannot be shared with emergency officials due to privacy restrictions; for example, social service agencies or nonprofit organizations that regularly transport people during non-emergency times and have information on clients' needs, but may not be able or willing to share that data because of privacy concerns.

In addition to identifying and locating transportation-disadvantaged populations, state and local governments also face the challenge of determining the transportation needs of these populations and providing for their transportation in an evacuation. To adequately prepare for evacuating these populations, state and local officials need information on

the medical and transportation needs of each person in addition to his or her location.²² These needs can vary widely from those who can travel by themselves to a government-assisted evacuation pick-up point to those who:

- need to be transported to a government-assisted evacuation pick-up point, but do not require medical assistance or additional transportation;
- live in group homes for persons with mental disabilities and may require medical assistance, but not accessible transportation in an evacuation; or
- are medically frail but not hospitalized, and require acute medical assistance as well as accessible transportation in an evacuation.

However, similar to the location data discussed earlier, it is difficult for state and local officials to obtain information on the transportation needs of these populations.

Another challenge that state and local officials face in preparing for the evacuation of transportation-disadvantaged populations is providing for the transportation of these populations. This challenge includes identifying the appropriate equipment and available modes of transport as well as drivers and other needed professionals, providing training to those drivers and other professionals, and communicating evacuation information to the public. When preparing for an emergency, it can be difficult for state and local officials to identify, arrange for the use of, and determine the proper positioning of equipment needed to transport these populations. The transportation needs of such populations can range from persons who can be evacuated in school buses and charter buses to the mobility-impaired who may require low floor buses, wheelchair lift-equipped vans, and other accessible vehicles. Because of the limited number of vehicles (accessible, multi-passenger, or other) available among both public transportation providers (such as transit agencies) and private transportation providers (such as ambulance and bus companies), we found that emergency officials have to spend additional time and resources arranging for transportation and ensuring that those arrangements are coordinated before an evacuation order is issued. Further, state and local governments also need to have drivers and other professionals trained to operate the

²²Medical needs may include care providers or equipment such as wheelchairs and beds. Transportation needs may include accessible vehicles such as those with chair lifts or low floors.

additional vehicles they have acquired or to move persons with disabilities in and out of vehicles; constraints already exist on the pool of potential drivers. One example of a constrained resource is school bus drivers. If an evacuation is ordered during the school day, the availability of these drivers is severely limited because such drivers must first transport the children home. In addition, drivers who provide transportation to these populations during non-emergency times are often not trained or contracted to provide emergency transportation for these populations. Further, DOT's Catastrophic Hurricane Evacuation Plan Evaluation reported that, even in urban areas where additional modes of transportation are available, few evacuation plans recognize the potential role for intercity buses, trains, airplanes, and ferries. These modes may be particularly important for persons who cannot evacuate in personal vehicles. In response to a question in DHS's Nationwide Plan Review on how well all available modes of transportation are incorporated into evacuation plans, 48 percent of respondents stated that plans needed to improve the use of available modes of transport in evacuation planning. For example, one jurisdiction is investigating using ferries and barges in evacuations.

Legal and Social Barriers to Addressing Transportation-Disadvantaged Evacuation Challenges Confront State and Local Governments According to experts and officials, several legal and social barriers confront state and local governments in addressing the aforementioned challenges to evacuating transportation-disadvantaged populations. (See fig. 2.)

Legal barriers

No! INO!

REVACUES

A CONTROL OF THE PROPERTY OF THE PROPERTY

Figure 2: Major Barriers to Addressing Challenges in Evacuating Transportation-Disadvantaged Populations

Source: GAO.

To begin, state and local emergency management officials often face legal barriers in obtaining data on the identification, location, or the transportation needs of these populations. For example, 11 percent of respondents to a DHS Nationwide Plan Review question on addressing the needs of transportation-disadvantaged individuals before, during, and after emergencies, stated that they were concerned about privacy issues vis-à-vis obtaining medical information from public or private sector transportation providers about their clients that would help officials in their evacuation preparedness. These providers could include those that provide paratransit services for persons with disabilities, "Meals on Wheels" programs for the elderly, and job access services for low-income individuals. DOT's Catastrophic Hurricane Evacuation Plan Evaluation also cited privacy as a legal barrier. Officials in three of the five major cities we visited in addition to several federal officials with whom we spoke expressed concern about what impact the Health Information Portability and Accountability Act's Privacy Rule (the Privacy Rule) might have on their ability to acquire such data. The act's Privacy Rule limits the disclosure of individually identifiable health information by certain entities or persons,²³ but does not apply to transportation providers unless they are

 $^{^{23}}$ See Health Insurance Portability and Accountability Act of 1996, Pub. L. No. 104-191 (August 24, 1996) and HHS Standards for Privacy of Individually Identifiable Health Information, 45 C.F.R. parts 160 & 164 (2005).

also covered entities. Covered entities include health care providers that conduct certain transactions in electronic form, health-care clearinghouses, or health plans. ²⁴ Therefore, transportation providers that are not covered entities would not be prohibited by the Privacy Rule from sharing such information. However, misunderstanding about the act's Privacy Rule may still be discouraging some from sharing this information. Additionally, the general concerns that federal, state, and local officials have expressed may extend to other privacy issues beyond the Privacy Rule, such as potential contractual restrictions on Medicare and Medicaid transportation providers.

Another example of a legal barrier is that some public or private sector transportation providers are hesitant to evacuate these populations because of concerns about reimbursement and liability. State and local officials must often broker arrangements with transportation providers in order to secure their services. However, although these providers may be willing to help state and local officials evacuate these populations, they will sometimes not do so without legal agreements (such as memoranda of understanding or contracts) that ensure reimbursement and that absolve the providers from, or reduce liability in case of, an accident or injury. Creating such an agreement usually requires legal representation as well as additional liability insurance to protect against potential damage or loss of property or life—all entailing monetary costs that state or local governments and transportation providers may not be willing or able to cover. Officials in one of the five major cities we visited told us that additional liability insurance would be cost prohibitive to obtain. We learned of a school district's reluctance to provide vehicles for an evacuation without a legal agreement in one of the five major cities we visited. This was largely due to the fact that the school district had provided vehicles for an evacuation 12 years ago, but FEMA has not yet fully reimbursed it. In one of the five major cities and one of the four states we visited, we also learned of agreements that have been pending for months (or had fallen through) because of one party's liability concerns; these concerns could not be adequately addressed by the state or local government.

An additional legal barrier for state and local officials we identified relates to volunteers (such as nonprofit organizations or Good Samaritans) who may also be dissuaded from providing evacuation assistance in an

²⁴45 C.F.R. § 165.104 (2005).

emergency because of liability concerns.²⁵ Liability concerns may be even more of a barrier after Hurricane Katrina, where volunteers saw that efforts to assist had unintentional consequences, some of which resulted in lawsuits. For example, Operation Brother's Keeper is a Red Cross program that connects transportation-disadvantaged populations in local faith-based congregations with voluntary providers of transportation in those congregations. However, because of liability concerns in the provision of such transportation, voluntary participants of the program are now less willing to provide such transportation. Given that most state Good Samaritan laws only apply to voluntary assistance provided in circumstances that involve urgent medical care, transportation providers may be held liable unless they are responding to an accident scene or transporting a patient to a medical facility. Moreover, we found that in one state, an addendum introduced to modify an existing Good Samaritan law that would indemnify volunteers assisting in evacuations did not pass. The absence of protection from potential liability may also jeopardize efforts to enlist the assistance of volunteers in evacuating the transportationdisadvantaged.

Furthermore, private transportation providers raise an additional legal barrier for emergency officials, as these providers are hesitant to offer evacuation assistance without formal sheltering arrangements already in place. Sheltering arrangements ensure that such transportation providers will not face unexpected complications once they arrive at an evacuation destination. The providers' requirement for sheltering arrangements highlights the fact that there are other significant evacuation barriers for state and local governments which extend beyond transportation. Experts who participated in an August 2006 panel we hosted on disaster housing assistance also described similar sheltering challenges that were discussed earlier in this report, such as challenges related to evacuation preparedness for transportation-disadvantaged populations. For example, some of the panelists discussed difficulty in obtaining information on those who require sheltering, where they are located, and what their sheltering needs are. Further, providing shelter for transient populations,

²⁵Good Samaritan laws are enacted by states to protect health care providers and other volunteer rescuers from being sued when they are giving emergency medical help to a victim.

²⁶We are planning to issue a report on disaster housing assistance in February 2007.

²⁷The GAO Expert Panel on Disaster Housing Assistance was conducted in cooperation with and held at the National Academies in Washington, D.C. on August 17, 2006.

persons with disabilities, undocumented workers, and those with limited English proficiency—many of whom are also transportation-disadvantaged—is a complex task. Finally, as we will discuss in the next section, sharing information to increase preparedness needs improvement.

Social barriers that may affect evacuation efforts for all populations may pose another major obstacle for state and local officials in addressing challenges to evacuating these populations. While social barriers extend beyond transportation-disadvantaged populations to include many of those with access to a car, there are two reasons why such barriers are particularly pronounced when state and local officials prepare for the evacuation of such populations. First, as opposed to those who have access to a personal vehicle, state and local officials must be able to identify, locate, and determine the needs of transportation-disadvantaged populations in order to evacuate them. Second, the unwillingness to evacuate may be more widespread for the car-less than other populations due to health, financial, or other personal reasons that are related to their transportation-disadvantaged status.

Even if the identification, location, or transportation needs data are available for use by state and local officials, we learned that some people may not want to disclose their information to these officials because of concerns that sharing such data will adversely affect their

- medical situation, whereby the privacy of their personal medical information may be compromised;
- financial situation, such that their financial assets will be taken or reduced; and
- legal situation, such that they face consequences if, for example, the
 government learns that they are undocumented workers.
 This barrier may therefore prevent state and local governments from
 determining which populations require evacuation transportation, where
 they are located, and what their specific transportation needs are.

In addition, if state and local officials are able to prepare for the evacuation of transportation-disadvantaged populations, these officials still may confront the unwillingness of these populations to evacuate. State and local officials have the difficult task of making evacuation in advance of emergencies a better alternative for such populations than sheltering in place. Even when the local or state government issues a "mandatory" evacuation order, most state governments do not have the

authority to forcibly remove people from their homes or other areas. Instead, state governments must decide whether they can, or are willing to, voluntarily comply with the order. Further, even if emergency management officials provide transportation to these populations, they may not want to evacuate. One example of this unwillingness to evacuate is that transportation-disadvantaged populations may be concerned about being separated from family members or caregivers upon whom they may depend for mobility or the provision of medical services, or pets upon which they may rely for companionship. In addition, shelters that receive evacuees may not be set up to receive pets. Health concerns may also cause these populations to be reluctant to evacuate. For example, some may be reluctant or unable to leave without the medication or medical equipment (e.g., oxygen tanks or dialysis machines) that are critical to their well-being, or may be concerned that riding on an evacuation vehicle would be extremely painful given their medical condition. In addition, some may feel anxiety concerning the lack of information about their destination, including whether they know someone there or whether the destination will meet their needs.

These populations' unwillingness to evacuate can also stem from fear of losing physical or financial assets. For example, some transportation-disadvantaged populations have limited assets and do not feel safe leaving whatever assets they do have—such as their home or belongings—behind. This sentiment is exacerbated among those whose families have lived in their homes for generations. Further, as was observed during Hurricane Katrina, people may be unwilling to evacuate even if they do have a car; they may not have money to pay for gas or are unwilling to move to a place where their financial situation is less certain.

In attempting to address some of these social barriers by informing transportation-disadvantaged populations about the benefits of evacuating as opposed to sheltering in place, we found that communicating with these populations can be difficult because these populations often

- are dispersed;
- may lack access to a radio or television;
- may not trust emergency announcements; or
- may not be able to read or understand emergency materials or announcements because of a disability, such as a cognitive or vision

impairment, or a lack of proficiency in English.²⁸

State and Local
Governments Are
Generally Not Well
Prepared to Evacuate
TransportationDisadvantaged
Populations, but
Some Have Taken
Steps to Improve
Preparedness

Many state and local governments have gaps in their evacuation preparedness—including planning, training, and conducting exercises—for transportation-disadvantaged populations. Many of these governments generally have limited awareness or understanding of the need to plan for the evacuation of transportation-disadvantaged populations. These governments believe that the risk of an evacuation is too low to warrant planning for these populations. The governments also may have focused only on planning for self-evacuations. In addition, while some state and local governments may be aware of the need to prepare for evacuating these populations, some have made little progress because of insufficient planning details and little training for, and exercising of, plans to evacuate the transportation-disadvantaged. Although some state and local governments have taken steps to address challenges and related barriers, the outcomes of these actions remain uncertain.

Many State and Local Governments Are Generally Not Well Prepared to Evacuate Transportation-Disadvantaged Populations for Several Reasons

Many states and localities are generally not well prepared—including planning, training, and conducting exercises—to evacuate transportationdisadvantaged populations. DHS's Nationwide Plan Review of emergency operation plans from all 50 states and 75 of the largest urban areas reported that 10 percent of state and 12 percent of urban area evacuation planning documents sufficiently addressed assisting those who would not be able to evacuate on their own. The review also identified that such planning often consisted of little more than public information campaigns designed to encourage residents to evacuate by their own means. Even in hurricane-affected areas, most evacuation plans do not fully address the needs of transportation-disadvantaged populations. Most notably, DOT's Catastrophic Hurricane Evacuation Plan Evaluation of 63 Gulf Coast jurisdictions (five states and 58 counties and parishes) reported that, although plans generally address the issue of evacuating those considered transportation-disadvantaged, most do not have detailed information on how to identify and locate populations, or determine their needs and secure transportation and other resources required to carry out an evacuation. The DHS review also reported that most state and urban area

²⁸We are planning to issue a report on the Emergency Alert System, one of several federally managed public warning systems, in March 2007. The system does not currently require multilingual alerts and accessibility for disabled persons.

emergency plans do not address evacuation for persons with disabilities and overlook the availability of timely accessible transportation, such as life-equipped vehicles, emergency communication methods, and the need to keep people together with their family member, caregivers, or medical equipment.

Limited awareness or understanding of the need to prepare for evacuating transportation-disadvantaged populations has contributed to inadequate preparedness on the part of state and local governments. The Nationwide Plan Review stated that some state and local officials believe they will never experience a catastrophic event. These officials also believe that the evacuation of an entire city or state is improbable and expressed concern that strengthening evacuation preparedness standards, such as those related to planning, training, and conducting exercises for the evacuation of transportation-disadvantaged populations, could place unrealistic expectations on communities with limited planning resources and few identified risks. Officials at two of the five major cities we visited also told us that the likelihood of disaster scenarios requiring mass evacuation is too low to warrant spending limited funds on evacuation preparedness for these populations. However, officials at one of the five major cities we visited indicated that they are beginning to address evacuation preparedness for transportation-disadvantaged populations in smaller scale evacuations, which they thought would be more likely to occur. Three of the five major cities and one of the four states we visited have recognized, after Hurricane Katrina, the need to include provisions in their evacuation plans for those without access to their own transportation. Officials at one of these three major cities said that they had not planned, trained, or conducted exercises for these populations until late 2005, when DHS officials started to pose questions for the *Nationwide Plan Review*. A senior emergency management official in another one of those three major cities said that very few residents are without personal vehicles. Therefore, officials in that city focused plans, training, and exercises on evacuation by personal vehicle. However, 2000 U.S. Census data reported that 16.5 percent of households in that major city are car-less. DOT's evaluation reported that most state and local evacuation plans focus on highway evacuations by personal vehicles. We found another example of this focus on personal vehicles in one of the four states we visited. This state spent approximately \$100,000 to develop and distribute an evacuation pamphlet with self-preparedness information and a large evacuation map on how those with access to a personal vehicle can use the highway system to evacuate. Yet, the state did not conduct similar outreach for those who require transportation assistance in evacuations.

DOT's review of evacuation plans in the Gulf Coast reported that, although some jurisdictions have well-coordinated and tested plans, the plans of many other jurisdictions do not include sufficient detail—nor have staff been trained in or practiced with the plans to ensure effective implementation. We observed a similar phenomenon during our site visits. State and local governments vary in their level of preparedness, with many not well prepared to evacuate transportation-disadvantaged populations. For example, at the time of our review, evacuation plans from two of the five major cities and three of the four states we visited did not address the need to prepare for transportation-disadvantaged populations. Further, DOT reported that many Gulf Coast jurisdictions conduct disaster training and exercises without involving key players such as transit agencies, state departments of transportation, and school bus operators, even though some evacuation plans rely on the use of vehicles from these entities. In the past year, officials at three of the five major cities and three of the four states we visited had conducted training or exercises that addressed evacuating transportation-disadvantaged populations, or included such populations in training or exercises. Government reports on Hurricane Katrina highlighted the vulnerability of transportation-disadvantaged populations, leading some emergency officials to reevaluate their level of preparedness to evacuate these populations. As a result, although state and local governments have generally overlooked transportationdisadvantaged populations in the past, some are now taking steps to overcome the challenges and barriers to evacuating transportationdisadvantaged populations.

The lack of evacuation preparedness for transportation-disadvantaged populations may reflect a larger problem in emergency planning, as the DHS *Nationwide Plan Review* has highlighted. For example, DHS reported that responses to its question on emergency planning actions being taken to address transportation-disadvantaged populations received the lowest percentage of sufficient responses from both state and urban areas.²⁹ Some respondents to this question indicated that they were not sure how to proceed in planning for transportation-disadvantaged populations or what was expected of them. For example, one jurisdiction requested guidance to "understand what is expected of them and ideas on how they can achieve it." Another respondent stated they "are wondering

²⁹For the DHS *Nationwide Plan Review*, "sufficient" is the highest rating that can be received. The other ratings DHS used to evaluate plans were "partially sufficient" and "not sufficient."

what areas should be covered to ensure that a response plan is adequate." In addition, DHS found no state or urban area emergency plan annexes to be fully sufficient in addressing transportation-disadvantaged populations. Such annexes pertain to specific emergency functions, including evacuation, but also mass care and communications, among others. DHS reported that emergency plans lack a consistency of approach, depth of planning, or evidence of safeguards and effective implementation. In addition, DHS reported that few plans demonstrate the in-depth planning and proactive thinking needed to meet the needs of these populations.

Some State and Local Governments Have Taken Steps to Address Evacuation Preparedness Challenges and Related Barriers Although, in general, preparedness efforts to evacuate transportation-disadvantaged populations are lacking, state and local governments have taken steps to address challenges in identifying and locating these populations, determining their evacuation needs, and providing for their transportation. With regard to addressing the challenges of identifying and locating transportation-disadvantaged populations, some of the five major cities and four states we visited, as well as those reviewed as part of the DHS and DOT reports, have taken the following steps:

- Conducting surveys and studies: Officials in all five major cities and one of the four states we visited told us that they have conducted surveys or collaborated with academic institutions to locate transportation-disadvantaged populations. For example, one major city conducted a disaster preparedness survey of transportation-disadvantaged populations. Another major city obtained survey data on transportation-disadvantaged populations through collaboration with a local university's school of public health. In a third major city, emergency management officials have plans to collaborate with academics to create simulations of evacuation scenarios. These scenarios would be used for evacuation preparedness activities, such as calculating how many buses would be needed and which routes to take for an evacuation.
- Collaborating with state and local entities: Two of the five major cities we visited have identified, or plan to identify, transportation-disadvantaged populations through faith-based or community outreach programs such as Operation Brother's Keeper (a Red Cross program that matches those with access to a personal vehicle to those in their community without such access) and Neighborhood Watch (a crime-prevention program). In another city, officials stated their intent to use Citizen Corps (which brings community and government leaders together to coordinate the involvement of community members and nongovernmental resources in emergency preparedness and response and whose volunteers are trained, exercised, and managed at the local level) to

help identify, locate, and evacuate transportation-disadvantaged populations. One respondent to DHS's Nationwide Plan Review stated that their jurisdiction is looking at developing partnerships with nonprofit and local social service organizations and community groups that deal with transportation-disadvantaged populations in order to assist in identifying and locating these populations. In addition, two of the five major cities we visited had collaborated with their respective metropolitan planning organizations to collect evacuation-related data, and officials in one state we visited told us that cities and counties in their state need to better coordinate with metropolitan planning organizations to identify transportation-disadvantaged populations. Officials from all of the five metropolitan planning organizations we visited (which are also DOT grant recipients) told us that they had information that could be useful in evacuation preparedness. Because these organizations are required to conduct transportation planning as part of their federal funding agreements, they acquire data on transit-dependent populations that would be useful for emergency officials. Three of these organizations showed us data and maps illustrating the location of transportationdisadvantaged populations, but stated that emergency management officials in their communities had not yet reached out to them for information or assistance. The Association of Metropolitan Planning Organizations told us that although their 385 member organizations differ in capacity, many would be able to provide assistance to emergency management officials in identifying and locating transportationdisadvantaged populations.

• Mapping transportation-disadvantaged populations: DOT's evaluation of evacuation plans in the 63 Gulf Coast jurisdictions found that just over half (33) of those jurisdictions had identified certain transportation-disadvantaged populations (hospitals, nursing homes, and assisted care facilities) by geographic location. DHS's Nationwide Plan Review found that some participants are employing modeling software to determine the size and location of transportation-disadvantaged populations. One of the five major cities we visited worked with academics to use computerized mapping technology—known as geographic information systems—to map the location of these populations. Another major city of the five we visited is working with the state's department of motor vehicles to create a computerized map of households without personal vehicles.

With regard to determining the needs of these populations and providing for transportation, state and local governments in some of the states we visited (as well as governments reviewed in the DHS and DOT reports) have taken the following steps:

- Involving state and local entities that are not traditionally involved in emergency management as part of preparedness efforts: DHS's Nationwide Plan Review stated that federal, state, and local governments should increase the participation of persons with disabilities and disability subject-matter experts in the development and execution of plans, training, and exercises. Officials in two of the five major cities we visited have involved social service agencies, nonprofit or other organizations, and transportation providers—such as schools for the blind and deaf, and paratransit providers for the disabled—in emergency preparedness activities. Some of these state and local entities are DOT grant recipients. Several emergency preparedness experts with whom we spoke recommended involving, in evacuation preparedness, state and local entities that represent or serve transportation-disadvantaged populations. Such entities can assist emergency management officials in efficiently determining the needs of these populations.
- Coordinating with state and local entities that are not traditionally involved in emergency management as part of preparedness efforts: DOT's Catastrophic Hurricane Evacuation Plan Evaluation found that approximately two-thirds (or 43) of the 63 Gulf Coast evacuation plans included the use of public transit vehicles, school buses, and paratransit vehicles. The Nationwide Plan Review states that a critical but often overlooked component of the evacuation process is the availability of timely, accessible transportation (especially lift-equipped vehicles). In one of the five major cities we visited, transportation-disadvantaged populations are evacuated using social service transportation providers with ambulances, school buses, and other vehicles including those with lift-equipment.³⁰
- Training state and local entities that are not traditionally involved in emergency management as part of preparedness efforts: Officials at two of the five major cities we visited have trained, or are planning to train, social service agencies to coordinate and communicate with emergency responders. One of the five major cities we visited found that, during hurricanes, community-based organizations that serve the elderly were operating on a limited basis or not at all. Therefore, this city's government mandated that community-based organizations have continuity of operations plans in place to increase their ability to maintain essential services during a disaster. This city also provided training and technical assistance to help organizations develop such plans. In another major city,

³⁰These social service transportation providers are funded in part by DOT grants.

the paratransit providers that are DOT grant recipients received emergency response training, and have identification that informs law enforcement officials that these providers are authorized to assist in emergency evacuations.

- Training emergency responders to operate multi-passenger vehicles:

 Two of five major cities we visited are considering training police officers and fire fighters to obtain a type of commercial driver's license that would allow them to operate multi-passenger vehicles. This would provide a greater number of available drivers and more flexibility for evacuation assistance.
- Incorporating transportation-disadvantaged populations in exercises: DHS recommended in its Nationwide Plan Review that jurisdictions increase the participation of persons with disabilities and disability subject-matter experts in training and exercises. Several experts we interviewed also emphasized the importance of including transportation-disadvantaged populations in exercises, and one explained that the level of understanding of these populations' needs among emergency management and public safety officials is very low. Three of the five major cities we visited incorporate transportation-disadvantaged populations into their evacuation exercises.

State and local governments in some of the states we visited, as well as in those reviewed in the DHS and DOT reports, have taken steps to address legal and social barriers that could prevent them from successfully evacuating transportation-disadvantaged populations:

Establishing memoranda of understanding and mutual aid agreements: Memoranda of understanding are legal arrangements that allow jurisdictions to borrow vehicles, drivers, or other resources in the event of an emergency. Mutual aid agreements are contracts between jurisdictions in which the jurisdictions agree to help each other by providing resources to respond to an emergency. These agreements often identify resources, coordination steps, and procedures to request and employ potential resources, and may also address liability concerns. DHS's Nationwide Plan Review reported that few emergency operations plans considered the practical implementation of mutual aid, resource management, and other logistical aspects of mutual aid requests. DHS found that 23 percent of urban areas needed to augment or initiate memoranda of understanding to improve their use of available modes of transportation in evacuation planning. DOT's Catastrophic Hurricane Evacuation Plan Evaluation report stated that Gulf Coast evacuation plans have limited information addressing the use of mutual aid agreements or memoranda of

understanding with private motor coach companies, paratransit providers, ambulance companies, railroad companies, and air carriers. However, three of the five major cities we visited have established formal arrangements, such as memoranda of understanding and mutual aid agreements, with neighboring jurisdictions.

- Establishing plans to evacuate and shelter pets: DHS's Nationwide Plan Review found that 23 percent of 50 states and 9 percent of 75 of the largest urban areas satisfactorily address evacuation, sheltering, and care of pets and service animals at the same evacuation destination as their owners. This is important not only to encourage the evacuation of transportation-disadvantaged populations, but the evacuation of those with personal vehicles as well. DOT's Catastrophic Hurricane Evacuation Plan Evaluation found that about one-fifth (19 percent) of 63 Gulf Coast jurisdictions were prepared to evacuate and shelter pets and service animals. One of the five major cities we visited worked with the Society for the Prevention of Cruelty to Animals to arrange a tracking and sheltering system for pets. Because officials at this major city have encountered difficulties in providing shelter space for pets and their owners together, they arranged for a pet shelter and shuttle service for owners to care for their pets.
- Ensuring that evacuees can bring assistance devices or service animals: Transportation-disadvantaged individuals may be unwilling or unable to evacuate if they are unsure that they will be able to bring assistance devices such as wheelchairs, life-support systems, and communications equipment as well as service animals. DOT's Catastrophic Hurricane Evacuation Plan Evaluation found that only one-third (32 percent) of 63 Gulf Coast jurisdictions had made satisfactory provisions for transporting these items along with evacuees.
- Providing extensive information about evacuations and sheltering: In an effort to encourage citizens to evacuate, one of the five major cities we visited provided detailed information about evacuation and sheltering procedures. Despite extensive public education campaigns to raise awareness about evacuations, in two of five major cities we visited officials stated that some people will still choose not to evacuate. In the officials' experience, when an evacuation vehicle arrived at the homes of transportation-disadvantaged populations who had registered for evacuation assistance, some refused to evacuate. These individuals cited multiple reasons, such as disbelief in the danger presented by the storm, discomfort in evacuating, and the absence of a caregiver or necessary medication.

• Emphasizing self-preparedness: Officials from three of the five major cities and two of the four states we visited emphasized citizen self-preparedness, such as developing an evacuation preparedness kit that includes medications, food, water and clothes.

While the Federal Government Provides Some Evacuation Assistance, Gaps Remain

Although the federal government has provided some assistance to state and local governments in preparing for their evacuation of transportationdisadvantaged populations, gaps in this assistance remains. For example, federal guidance provided to state and local emergency officials does not address preparedness challenges and barriers for transportationdisadvantaged populations. Gaps also exist in the federal government's role in and responsibilities for providing evacuation assistance when state and local governments are overwhelmed in a catastrophic disaster. For example, the National Response Plan does not clearly assign the lead, coordinating, and supporting agencies to provide evacuation assistance or outline these agencies' responsibilities. Reports by the White House and others suggest that this lack of clarity slowed the federal response in evacuating disaster victims, especially transportation-disadvantaged populations, during Hurricane Katrina. Amendments to the Stafford Act in October 2006 have further clarified that FEMA, within DHS, is the single federal agency responsible for leading and coordinating evacuation assistance.

The Federal Government Provides Some Evacuation Preparedness Assistance to State and Local Governments

The federal government provides some assistance to state and local governments in preparing for the evacuation of transportation-disadvantaged populations by establishing requirements, funding, and guidance and technical assistance for evacuation preparedness. Examples include:

• Requirements: Federal law requires that local emergency planning officials develop emergency plans, including an evacuation plan that contains provisions for a precautionary evacuation and alternative traffic routes. ³¹ In any program that receives federal funding, additional federal protections clearly exist for persons with disabilities, who, depending on the nature of the disability, potentially could be transportation-disadvantaged. An executive order addresses emergency preparedness for persons with disabilities, and the Americans with Disabilities Act and the Rehabilitation Act requires consideration of persons with disabilities.

³¹Title 42 U.S.C. § 11003(c)(7).

According to Executive Order 13347, in the context of emergency preparedness, executive departments and federal agencies must consider the unique needs of their employees with disabilities and those persons with disabilities whom the agency serves; encourage this consideration for those served by state and local governments and others; and facilitate cooperation among federal, state, local, and other governments in the implementation of the portions of emergency plans relating to persons with disabilities.³² Since October 2006, federal law now requires federal agencies to develop operational plans that address, as appropriate, support of state and local government in conducting mass evacuations, including provisions for populations with special needs, among others. Executive Order 13347 also created the Interagency Coordinating Council on Emergency Preparedness and Individuals with Disabilities to focus on disability issues in emergency preparedness. Additionally, as noted by DHS, the Americans with Disabilities Act requires state and urban areas to include accessibility for persons with disabilities in their emergency preparedness process. Within DHS, the Office of Civil Rights and Civil Liberties reviews and assesses civil rights and civil liberties abuse allegations. Other civil rights laws might also apply to transportationdisadvantaged populations, depending on how such populations are identified. Federal laws prohibit discrimination on the basis of race, color, religion, sex, and national origin.³³ National origin discrimination includes discrimination on the basis of limited English proficiency, and states and localities are required to take reasonable steps to ensure that people with limited English proficiency have meaningful access to their programs. Recipients of DHS grants are allowed to use a reasonable portion of their funding to ensure that they are providing the meaningful access required by law. DHS also has ongoing work to foster a culture of preparedness and promote individual and community preparedness, such as through information available as part of its Ready.gov Website and Citizen Corps

³²The President signed this executive order on July 22, 2004. In January 2005, the Secretary of Homeland Security wrote a letter to all state and territorial governors emphasizing their emergency preparedness responsibilities to individuals with disabilities and listed several steps that emergency planners should undertake in order to ensure that their plans are as comprehensive as possible with regard to the needs of their constituents with disabilities.

³³See Title VI of the Civil Rights Act of 1964 as amended, 42. U.S.C. 2000 et. seq.; Rehabilitation Act of 1973 § 504, as amended, 29 U.S.C. 794; Title IX of the Education Amendments of 1972, as amended, 20 U.S.C. 1681 et. seq.; The Age Discrimination Act of 1975, as amended, 20 U.S.C. 6101 et. seq.; and Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, Exec. Order 12898, 59 Fed. Reg. 7629 (Feb. 11, 1994).

program. Changes in federal law were enacted in October 2006 to further protect some transportation-disadvantaged populations.³⁴ These include:

- the establishment of a National Advisory Council to ensure effective
 and ongoing coordination of federal preparedness, protection,
 response, recovery, and mitigation for natural disasters, acts of
 terrorism, and other man-made disasters, with a cross-section of
 members, including representatives of individuals with disabilities and
 other populations with special needs;
- the appointment of a Disability Coordinator to ensure that needs of individuals with disabilities are being properly addressed in emergency preparedness and disaster relief;
- the establishment of an exercise program to test the National Response Plan, whereby the program must be designed to address the unique requirements of populations with special needs and provide assistance to state and local governments with the design, implementation, and evaluation of exercises; and
- a requirement that federal agencies develop operational plans to respond effectively to disasters, which must address support of state and local governments in conducting mass evacuations, including transportation and provisions for populations with special needs.
- Funding: DHS grants are the primary federal vehicle for funding state and local evacuation preparedness efforts, and these grants can be used to plan evacuations for transportation-disadvantaged populations. DHS's 2006 Homeland Security Grant Program encourages state and local governments to increase their emergency preparedness by focusing on a subset of 37 target capabilities that DHS considers integral to nationwide preparedness for all types of hazards. The state and local governments choose which subset of those capabilities best fits their preparedness needs. One of these target capabilities addresses evacuations. If a state determines that it needs to plan for the evacuation of transportation-disadvantaged populations, it can use funds from its DHS grant for such planning activities. Changes in federal law in October 2006 require states with mass evacuation plans funded through Urban Area Security Initiative and Homeland Security Grant Program grants to "develop procedures for informing the public of evacuation plans before and during an evacuation,

³⁴Pub. L. No. 109-294, § 508, 513, 648, 653 (Oct. 4, 2006).

including individuals with disabilities or other special needs, with limited English proficiency, or who might otherwise have difficulty in obtaining such information." Under this section, FEMA can establish guidelines, standards, or requirements for ensuring effective mass evacuation planning for states and local governments if these governments choose to apply for grant funding for a mass evacuation plan.³⁵

Guidance and Technical Assistance: The federal government provides evacuation preparedness guidance—including planning considerations, studies, and lessons learned—for state and local governments. We found that the primary source of such guidance for state and local officials is FEMA's State and Local Guidance 101, which includes a section on evacuation preparedness considerations. This guidance recommends preparing to evacuate transportation-disadvantaged populations. Additionally, DHS has a Lessons Learned Information Sharing online portal for state and local emergency management and public safety officials where the aforementioned federal guidance can be found.³⁶ The federal government also provides voluntary technical evacuation assistance—such as planning consultants and modeling software—to state and local officials. For example, FEMA, the United States Army Corps of Engineers, and the National Weather Service conduct hurricane evacuation studies from which they provide technical assistance on several preparedness issues (such as analyses on storm modeling, sheltering, and transportation) for state and local officials. Another example is the evacuation liaison team—comprised of FEMA, DOT, and the National Hurricane Center—that works with state and local governments to coordinate interstate transportation during hurricane evacuations.

The federal government has also undertaken several smaller efforts to address evacuation preparedness for transportation-disadvantaged populations. (See app. V.)

³⁵Pub. L. No. 109-294, § 512 (Oct. 4, 2006).

³⁶DHS's Lessons Learned Portal can be accessed at www.llis.gov. The portal states that it seeks to improve preparedness nationwide by allowing local, state, and federal homeland security and response professionals to access information on the most effective planning, training, equipping, and operating practices for preventing, preparing for, responding to, and recovering from acts of terrorism.

Despite Some Federal Assistance to State and Local Governments, Gaps Remain in Evacuation Preparedness for Transportation-Disadvantaged Populations

Although the federal government provides some assistance to state and local governments for preparing to evacuate transportation-disadvantaged populations, gaps in this assistance remain, including the following:

Requirements: Until October 2006, while federal law required that emergency plans include an evacuation plan, there was no specific requirement that the evacuation plan address how to transport those who could not self-evacuate. Federal law now requires that state and local governments with mass evacuation plans incorporate special needs populations into their plan. However, this requirement does not necessarily ensure the incorporation of all transportation-disadvantaged populations. This is because state and local governments do not share a consistent definition of special needs populations. In the course of our review, we found that state and local governments interpreted the term in a much more narrow fashion that did not encompass all transportationdisadvantaged populations, which are important to evacuation preparedness. Third, even though civil rights laws require that no person be excluded on the basis of age, sex, race, color, religion, national origin, or disability, federal laws may not provide protection for transportationdisadvantaged populations during federally funded emergency preparedness efforts (including evacuation planning) because some of these populations do not clearly fall into one of these protected classes. For example, federal laws do not require state and local governments to plan for the evacuation of tourists or the homeless. In addition, although the Americans with Disabilities Act requires state and urban areas to include accessibility for persons with disabilities in their emergency preparedness process, an April 2005 report from the National Council on Disability found little evidence that DHS has encouraged state or local grant recipients to incorporate disability and access issues into their emergency preparedness efforts.³⁷ Additionally, in four of five major cities we visited, advocacy groups representing persons with disabilities told us that persons with disabilities were often not involved in, or could be better integrated into, emergency management training and exercises. In addition, the National Council on Disability and the Interagency Council on Emergency Preparedness for Individuals with Disabilities are respectively working to strengthen relevant legislation and ensure that federal agencies consider transportation-disadvantaged populations in federally funded planning, training, and exercises. For example, the National Council on Disability is recommending that the Congress amend

³⁷National Council on Disability, *Saving Lives: Including People with Disabilities in Emergency Planning* (Washington, DC: Apr. 15, 2005). DHS officials told us that they disagree with the conclusion of the National Council on Disability's report.

the Stafford Act to encourage federal agencies to link a recipient's emergency preparedness grants to compliance with civil rights laws. Similarly, the Interagency Council on Emergency Preparedness for Individuals with Disabilities added disability subject-matter experts to DHS's *Nationwide Plan Review* and worked with DHS's Preparedness Directorate to add transportation-disadvantaged components to Top Officials Four, a federal, state, and local government training exercise held in June 2006 that involved senior agency officials from across the federal government.

Funding: While DHS's grant programs provide funding that can be applied toward evacuation planning, training, and exercises for transportationdisadvantaged populations (as affirmed by language in the Post-Katrina Emergency Management Reform Act of 2006), only two of the five major cities and none of the four states we visited requested DHS grants for activities related to the evacuation of transportation-disadvantaged populations. In addition, we could not determine the amount of funds spent on evacuation planning nationwide because, although DHS is in the process of developing a grant tracking system, it does not currently know how much of its grant funds have been used or are being used by state and local governments to prepare for the evacuation of transportationdisadvantaged populations. Officials at two of the five major cities and two of the four states we visited told us that DHS's grant programs have a continued emphasis on funding the procurement of equipment rather than planning, and on preparedness for terrorist acts rather than on other disasters.38 For example, an official from one of the four states we visited told us that an evacuation preparedness activity was denied by DHS because it did not closely intersect with terrorism preparedness, one of DHS's grant requirements prior to fiscal year 2006.39 Therefore, emergency management officials believe they were discouraged from using DHS funding to plan for natural disasters, such as hurricanes. The Office of Civil Rights and Civil Liberties at DHS—responsible for reviewing and assessing civil rights and civil liberties abuse allegations and, as part of the Nationwide Plan Review, participating in the assessment of persons with

³⁸In addition, a previous GAO report indicates that officials from four state and local governments believe DHS's grant process had too much of an emphasis on terrorism-related activities. See GAO, *Homeland Security: DHS' Efforts to Enhance First Responders' All-Hazards Capabilities Continue to Evolve*, GAO-05-652 (Washington, D.C.: Jul. 11, 2005).

³⁹As of fiscal year 2006, DHS's grant guidance allows for dual-use of grants. The term "dual-use" refers to homeland security projects or activities that are primarily for terrorism response, but could be used in the event of a natural or technical disaster.

disabilities—is currently involved in the grant-guidance development process for fiscal year 2007. DHS has indicated that the office's involvement in the grant process is a priority.

Guidance and Technical Assistance: While acknowledging the need to prepare for the evacuation of transportation-disadvantaged populations, the most widely used FEMA guidance does not provide details about how to plan, train, and conduct exercises for evacuating these populations or how to overcome the challenges and barriers discussed earlier. Officials from three of the five major cities we visited said that additional guidance from DHS would assist their evacuation planning efforts. Further, onethird of the respondents to a DHS Nationwide Plan Review question on emergency planning for transportation-disadvantaged populations requested additional guidance, lessons learned, and best practices from DHS. DHS officials told us that they intend to release new emergency preparedness planning guidance in early calendar year 2007. In addition, although DHS has an online portal—its Lessons Learned Information Sharing portal—which includes the aforementioned guidance and other emergency preparedness information, officials from two of the five major cities and two of the four states we visited told us that specific information is not easy to find, in part, because the portal is difficult to navigate. Upon using the portal, we also found this to be true. 40 For example, the search results appeared to be in no particular order and were not sorted by date or relevant key terms, and searched terms were not highlighted or shown anywhere in the abstracts of listed documents. In addition, some studies were not available through the portal, including studies from some of the experts with whom we have spoken and provided us with useful information on evacuation preparedness for transportation-disadvantaged populations. In commenting on a draft of this report, DHS officials told us that they had improved the overall functionality of DHS's Lessons Learned Information Sharing portal. We revisited the portal as of December 7, 2006 and it appears to have improved some of its search and organizational functions. We have found, however, that some of the issues we previously identified still remain, including, when using the portal's search function, no direct link to key evacuation preparedness documents, such as DHS's Nationwide Plan Review Phase I and II reports.

Aside from the portal, federal evacuation studies of, and lessons learned from, the chemical stockpile and radiological emergency preparedness

⁴⁰According to DHS, our comments about the search engine and general navigation of the system echo the results of a user survey that DHS conducted in summer 2006.

programs could also help state and local officials prepare for these populations. 41 Because chemical stockpile and radiological emergency preparedness programs work with communities that include transportation-disadvantaged populations, some of the studies and lessons learned about these programs address evacuation challenges for these populations. For example, a Department of Energy National Laboratory study on emergency preparedness in Alabama includes information on how to address the needs of transportation-disadvantaged populations in evacuations. However, officials from the chemical stockpile and radiological emergency preparedness programs told us that DHS has not widely disseminated these studies and lessons learned or made them easily available to state and local officials. The federal government has provided technical assistance primarily focused on self-evacuations. Therefore, while Louisiana and surrounding states received technical assistance from FEMA, DOT, and the National Hurricane Center to help manage evacuation traffic prior to Hurricane Katrina, federal officials with whom we spoke were unaware of any similar technical assistance provided for the evacuation of transportation-disadvantaged populations and other populations. In preparation for the 2006 hurricane season, DHS officials reported to us that DHS, along with DOT, provided some technical assistance to three Gulf Coast states on evacuating persons with disabilities and those with function and medical limitations.

⁴¹The Chemical Stockpile Emergency Preparedness Program and the Radiological Emergency Preparedness Program are federal programs that work closely with communities located near the nation's chemical weapons stockpiles and radiological facilities.

Gaps Also Remain in Federal Agencies' Role and Responsibilities for Providing Evacuation Assistance When State and Local Governments are Overwhelmed

Although the Stafford Act gives the federal government the authority to assist state and local governments with an evacuation, ⁴² we found that the National Response Plan—the federal government's plan for disaster response—does not clearly define the lead, coordinating, and supporting agencies to provide evacuation assistance for transportation—disadvantaged and other populations or outline these agencies' responsibilities when state and local governments are overwhelmed by a catastrophic disaster. ⁴³ In our conversations with DHS officials prior to October 2006, officials did not agree that FEMA (an agency within DHS) was the single federal agency responsible for leading and coordinating evacuation assistance. However, after amendments to the Stafford Act in October 2006, DHS officials have agreed that this is DHS's responsibility.

The absence of designated lead, coordinating, and supporting agencies to provide evacuation assistance in the National Response Plan was evident in the federal response for New Orleans during Hurricane Katrina. As both the White House Homeland Security Council report and the Senate Government Affairs and Homeland Security Committee report noted, the federal government was not prepared to evacuate transportation-disadvantaged populations, and this severely complicated and hampered the federal response. Specifically, the Senate report stated that "the federal government played no role in providing transportation for pre-landfall evacuation" prior to the disaster despite federal officials' awareness that as many as 100,000 people in New Orleans would lack the means to

⁴²The Stafford Act gives the federal government the authority to assist state and local governments in an evacuation with or without a request from those governments. See Senate Homeland Security and Government Affairs Committee, *Hurricane Katrina: A Nation Still Unprepared* (Washington, D.C.: May 2006).

⁴³As we have previously reported, a single federal agency, supporting agencies, and their roles and responsibilities for evacuating patients needing hospital care is clear under the National Response Plan. However, we also found limitations in how the federal government provides assistance with the evacuations of health care facilities when state and local governments are overwhelmed. We recommended that the Secretary of Homeland Security (1) clearly delineate how the federal government will assist state and local governments with the movement of patients and residents out of hospitals and nursing homes to a mobilization center where National Disaster Medical System (NDMS) transportation begins; and (2) in consultation with the other NDMS partners, including the Secretaries of Defense, Health and Human Services, and Veterans Affairs, clearly delineate how to address the needs of nursing home residents during evacuations, including arrangements necessary to relocate these residents. See GAO, *Disaster Preparedness: Preliminary Observations on the Evacuation of Vulnerable Populations due to Hurricanes and Other Disasters*, GAO-06-790T (Washington, D.C.: May 18, 2006). Also see related GAO products at the end of this report.

evacuate. The Senate report also stated that DHS officials did not ask state and local officials about the steps being taken to evacuate the 100,000 people without transportation, whether they should deploy buses and drivers to the area, or whether the federal government could help secure multimodal transportation (e.g., buses, trains, and airlines) for the prelandfall evacuation.

The White House report stated that, as a result of actions not taken, the federal government's evacuation response suffered after Hurricane Katrina made landfall. For example, communication problems created difficulty in providing buses and limited situational awareness contributed to difficulties in guiding response efforts; the result was poor coordination with state and local officials in receiving evacuees. This contributed to delayed requests for vehicles and the delayed arrival of vehicles to transport disaster victims, confusion over where vehicles should be staged, where disaster victims would be picked up, and where disaster victims should be taken. We found that there is no entity under the National Response Plan that is responsible for dispatch and control of such evacuation vehicles. Given the problems experienced during the evacuation of New Orleans, the White House and Senate reports concluded that the federal government must be prepared to carry out mass evacuations when disasters overwhelm state and local governments. To achieve that goal, the White House report recommended that DOT be designated as the agency responsible for developing the federal government's capability to carry out mass evacuations when state and local governments are overwhelmed.

In the aftermath of Hurricane Katrina, the federal government has taken several steps to improve its ability to respond to a catastrophic disaster and, for the 2006 hurricane season, provide additional evacuation support to state and local governments. First, in May 2006, DHS made several changes to the National Response Plan, including one related to evacuations. Consistent with a previous recommendation we made, DHS revised the catastrophic incident annex of the National Response Plan to include disasters that may evolve or mature to catastrophic magnitude (such as an approaching hurricane). Therefore, in future disasters, if the federal government has time to assess the requirements and plans, it will tailor its proactive federal response and pre-positioning of assets, such as vehicles, to address the specific situation. Second, for the 2006 hurricane season, DOT was prepared to assist the Gulf Coast states of Alabama, Louisiana, and Mississippi in providing evacuation assistance, clarified command and control by identifying key federal contacts, and worked with the states to finalize plans for pre-positioning of federal assets and

commodities in the region. In addition, a DOT official responsible for overseeing DOT's emergency activities told us that, while the agency was providing transportation services or technical assistance to some of the Gulf Coast states for the 2006 hurricane season, it had not taken the role of lead or coordinating federal agency responsible for providing evacuation assistance. This official also stated that if additional federal evacuation assistance beyond transportation services and technical assistance are needed, DHS would need to delegate such support to other agencies. Further, this official told us that DOT does not yet have any specific plans to provide similar evacuation support in catastrophic disasters after the 2006 hurricane season. Further, because of the damage caused by Hurricane Katrina and the continuing vulnerabilities of southeastern Louisiana, DOT, in cooperation with DHS, has provided additional support to Louisiana. This additional support included working with the state to identify those who could not evacuate on their own; establishing an interagency transportation management unit to coordinate the routing of buses; entering into contracts to provide transportation by bus, rail, and air; and providing transportation from state and local pre-established collection points to shelters, rail sites, or air transportation sites. DHS and DOT planned to assist Louisiana in evacuating the estimated 96,000 persons who could not evacuate by their own means if the state orders an evacuation. Finally, amendments to the Stafford Act in October 2006 have further clarified that FEMA, within DHS, is the single federal agency responsible for leading and coordinating evacuation assistance. 4 DHS officials have since agreed that this is DHS's responsibility.

However, despite these improvements, DHS has not yet clarified, in the National Response Plan, the leading, coordinating, and supporting federal agencies to provide evacuation assistance when state and local governments are overwhelmed, and what their responsibilities are. In commenting on a draft of this report, DHS told us that as part of its National Response Plan review and revision process, DHS plans to encompass several key revisions regarding evacuations, including clarifying roles and responsibilities of federal agencies as well as private sector and nongovernmental agencies.

Conclusions

The experience of Hurricane Katrina illustrated that when state, local, and federal governments are not well prepared to evacuate transportation-

⁴⁴Pub. L. No. 109-295, § 503, 504 (Oct. 4, 2006).

disadvantaged populations during a disaster, thousands of people may not have the ability to evacuate on their own and may be left in extremely hazardous circumstances. While state and local governments have primary responsibility for planning, training, and conducting exercises for the evacuation of these populations, gaps in federal assistance have hindered the ability of many state and local governments to sufficiently prepare to address the complex challenges and barriers of evacuating transportation-disadvantaged populations. This includes the lack of any requirement to plan, train, and conduct exercises for the evacuation of transportation-disadvantaged populations as well as gaps in guidance and technical assistance, such as problems with DHS's Lessons Learned Information Sharing online portal. In addition, information that DOT grantees and stakeholders have could be useful in evacuation preparedness efforts. It is uncertain whether state and local governments will be better positioned to evacuate transportation-disadvantaged populations in the future.

Furthermore, the experience of Hurricane Katrina reinforced the fact that some disasters are likely to overwhelm the ability of state and local governments to respond, and that the federal government needs to be prepared in these instances to carry out an evacuation of transportationdisadvantaged populations. Because DHS has not yet clarified in the National Response Plan the lead, coordinating, and supporting federal agencies to provide evacuation support for other transportationdisadvantaged populations nor outlined these agencies' responsibilities, the federal government cannot ensure that it is taking the necessary steps to prepare for evacuating such populations; this could contribute to leaving behind of some of society's most vulnerable populations in a future catastrophic disaster. The National Response Plan review and revision process provides DHS with the opportunity to clarify the lead. coordinating, and supporting agencies to provide evacuation assistance and outline these agencies' responsibilities in order to strengthen the federal government's evacuation preparedness.

Recommendations for Executive Action

To improve federal, state, and local preparedness for the evacuation of transportation-disadvantaged populations, we are making three recommendations to the Secretary of Homeland Security:

Clarify, in the National Response Plan, that FEMA is the lead and
coordinating agency to provide evacuation assistance when state and local
governments are overwhelmed, and also clarify the supporting federal
agencies and their responsibilities.

- Require that, as part of its grant programs, all state and local governments plan, train, and conduct exercises for the evacuation of transportationdisadvantaged populations.
- Improve technical assistance by (1) working with DOT to provide more detailed guidance and technical assistance on how to plan, train, and conduct exercises for evacuating transportation-disadvantaged populations; and (2) continuing to improve the organization of and search functions for its Lessons Learned Information Sharing online portal to better facilitate access to information on evacuations of transportation-disadvantaged for federal, state, and local officials.

In addition, to encourage state and local information sharing as part of their evacuation preparedness for transportation-disadvantaged populations, we are making one recommendation to the Secretary of Transportation:

 Encourage DOT's grant recipients and stakeholders, through guidance and outreach, to share information that would assist emergency management and transportation officials in identifying and locating as well as determining the evacuation needs of and providing transportation for transportation-disadvantaged populations.

Agency Comments and Our Evaluation

We received written comments on a draft of this report from DHS. (See app. II). DHS also offered additional technical and clarifying comments which we incorporated as appropriate. DHS's letter stated that the draft adequately identified the pertinent issues that have troubled state and local emergency management officials, and that it would consider our recommendations. DHS's letter also stated that some recommendations in our draft report have been partly implemented, including improvements to the overall functionality of the lessons learned information sharing portal. We revisited DHS's Lessons Learned Information Sharing portal as of December 7, 2006 and it appears to have improved some of its search and organizational functions. We have found, however, that some of the issues we previously identified still remain. Therefore, we revised our recommendation to reflect the need for continued improvement of this portal.

DHS's letter raised concerns that our discussion of a single federal agency to lead and coordinate evacuations reflected a misunderstanding of the federal response process because, for large and complex disasters, no single federal agency can provide the entire response support required. We

did not intend to suggest that a single federal agency can provide such support for evacuation. Rather, we stated that the lead, coordinating, and supporting federal agencies to provide evacuation assistance when state and local governments are overwhelmed were not clear in the National Response Plan. DHS's letter notes, in contrast to an earlier discussion we had with DHS officials, that DHS is the single agency responsible for leading and coordinating evacuation support to the states, and that this responsibility was emphasized by the amendments to the Stafford Act in October 2006. We modified our draft as appropriate to reflect DHS's role in response to these amendments, but we retained our recommendation related to this issue because agency roles and responsibilities to provide evacuation assistance still need to be clarified in the National Response Plan. DHS's letter stated that many issues related to evacuations are being considered in ongoing revisions to the National Response Plan, including the roles and responsibilities of federal agencies as well as and private sector and nongovernmental agencies. We are encouraged to learn that these issues are part of the National Response Plan review and revision process. DHS also commented that our draft report implied that the events of Hurricane Katrina were a "typical occurrence." This is not an accurate summary of our findings. Rather, our report emphasizes that there has been a heightened awareness of evacuation preparedness for transportation-disadvantaged populations as a result of Hurricane Katrina, and that we and others remain concerned about the level of preparedness among federal, state, and local governments.

We received oral comments on a draft of this report from DOT officials, including the National Response Program Manager, Office of Intelligence, Security, and Emergency Response, Office of the Secretary. DOT officials generally agreed with the information contained in the report and stated they would consider our recommendation. DOT officials offered additional technical and clarifying comments which we incorporated as appropriate.

We are sending copies of this report to congressional committees and subcommittees with responsibilities for DHS and DOT. We will also make copies available to others upon request. This report will be available at no charge on the GAO Web site at http://www.gao.gov.

If you have any questions about this report, please contact me at (202) 512-2834 or siggerudk@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Staff who made key contributions to this report are listed in appendix V.

Katherine Siggerud

Director, Physical Infrastructure Issues

Katherie Sos

Congressional Committees:

The Honorable Susan Collins Chairman The Honorable Joseph Lieberman Ranking Minority Member Committee on Homeland Security and Governmental Affairs United States Senate

The Honorable James Inhofe Chairman Committee on Environment and Public Works United States Senate

The Honorable Richard Shelby Chairman The Honorable Paul Sarbanes Ranking Minority Member Committee on Banking, Housing, and Urban Affairs United States Senate

The Honorable Tom Davis Chairman The Honorable Henry Waxman Ranking Minority Member Committee on Government Reform House of Representatives

The Honorable Daniel Petri Chairman Subcommittee on Highways, Transit, and Pipeline Committee on Transportation and Infrastructure House of Representatives

The Honorable Bennie Thompson Ranking Minority Member Committee on Homeland Security House of Representatives

Appendix I: Scope and Methodology

Our review focuses on the evacuation of transportation-disadvantaged populations. Because we issued a report in July 2006 on the evacuation of hospitals and nursing homes, we did not include them in the scope of this review.¹

To assess the challenges state and local governments face in evacuating transportation-disadvantaged populations, we reviewed the Department of Homeland Security's (DHS) Nationwide Plan Review and the Department of Transportation's (DOT) Catastrophic Hurricane Evacuation Plan Evaluation. These reports describe many more states, urban areas, counties, and parishes than we were able to visit, providing a broader context to our findings. To assess the experience of transportationdisadvantaged populations during Hurricane Katrina, we reviewed the White House Report: Federal Response to Hurricane Katrina—Lessons Learned; the House of Representatives' report, A Failure of Initiative: Final Report of the Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina; the Senate report, Hurricane Katrina: A Nation Still Unprepared; the DHS Inspector General's report, A Performance Review of the Federal Emergency Management Agency's Disaster Management Activities in Response to Hurricane Katrina; the National Organization on Disability's Report on Special Needs Assessment for Katrina Evacuees Project; and the American Highway Users Alliance Emergency Evacuation Report 2006. We also held a panel organized in cooperation with, and held at, the National Academies. The panelists are experts in the field of disaster housing and were selected from a list of 20 provided by the National Academies. We asked for a mix of academics and practioners with knowledge on sheltering issues related to hurricanes Katrina and Rita as well as previous disasters. These panelists were Pamela Dashiell (Holy Cross Neighborhood Association), Buddy Grantham (Joint Hurricane Housing Task Force), Robert Olshansky (University of Illinois), Jae Park (Mississippi Governor's Office of Recovery and Renewal), Walter Peacock (Texas A&M University), Lori Peek (Colorado State University), Brenda Phillips (Oklahoma State University), and Debra Washington (Louisiana Housing Finance Agency).

¹Hospitals and nursing homes are subject to federal and state requirements relating to evacuations and disaster plans. We found that they also face challenges in evacuation, including deciding whether to evacuate, securing transportation, and maintaining communications outside of their facilities. See GAO, *Disaster Preparedness: Limitations in Federal Evacuation Assistance for Health Facilities Should be Addressed*, GAO-06-826 (Washington, D.C.: July 20, 2006).

To identify challenges and barriers, we reviewed selected reports on evacuations. Studies and papers from Argonne National Laboratory, the National Consortium on the Coordination of Human Services Transportation, and the Congressional Research Service contributed to our identification of challenges to evacuating transportationdisadvantaged populations. To obtain perspectives from officials involved in preparing for the evacuation of these populations, we reviewed the aforementioned federal reports. We also conducted interviews with state and local emergency management, transit and transportation, and public safety agency officials, as well as local metropolitan planning and advocacy organizations at five major cities and four state capitals: Buffalo and Albany, New York; Los Angeles and Sacramento, California; Miami and Tallahassee, Florida; New Orleans and Baton Rouge, Louisiana; and the District of Columbia. Because these sites were selected as part of a non-probability sample, the results cannot be generalized. We undertook site visits to these locations between March 2006 and June 2006. In selecting these major cities, we applied the following criteria: regional diversity; major city with a population of over 250,000; high percentage of population without personal vehicles; high or medium overall vulnerability to hazards; high percent of total population who are elderly, low income, or have a disability; and varied public transit ridership levels.

In making our site selections, we used data from the 2000 U.S. Census on the percentage of occupied housing units with no vehicle available, city populations aged 65 and older, civilian non-institutionalized disabled persons aged five and older, and persons below the poverty level. To determine overall vulnerability, we applied Dr. Susan Cutter's "Overall Vulnerability Index" from her presentation "Preparedness and Response: Learning from Natural Disasters" to DHS on February 14, 2006. Dr. Cutter is a professor of geography at the University of South Carolina, and is part of the National Consortium for the Study of Terrorism and Responses to Terrorism, which is funded by DHS. The Overall Vulnerability Index incorporates three indices measuring social, environmental, and allhazards vulnerability. The social vulnerability index incorporates social demographic factors such as race and income, but also includes factors such as distance from hospitals. The environmental index includes the proximity of dangerous facilities (such as chemical and nuclear plants) and the condition of roadways, among other factors. The all-hazards vulnerability index analyzed all disasters recorded in the last 60 years, and rated urban areas for the frequency of hazards and the resulting financial impact. Public transit ridership was taken from data in the Federal Transit Administration's National Transit Database. We determined that all the

data we used were sufficiently reliable for use as criteria in our site selection process.

To better understand issues related to emergency management and evacuations, particularly of transportation-disadvantaged populations, we interviewed several academics and experts who presented at the 2006 Transportation Research Board conference and the 2006 Working Conference on Emergency Management and Individuals with Disabilities and the Elderly; we also interviewed other academics and experts who were recommended to us by officials, associations, organizations, and others. These academics and experts were Madhu Beriwal (Innovative Emergency Management); Susan Cutter (University of South Carolina); Elizabeth Davis (EAD and Associates); Jay Goodwill and Amber Reep (University of South Florida); John Renne (University of New Orleans); William Metz and Edward Tanzman (Argonne National Laboratory); Brenda Phillips (Oklahoma State University); Tom Sanchez (Virginia Tech); and Kathleen Tierney (University of Colorado at Denver).

To determine what actions state and local governments have taken to address challenges in evacuating transportation-disadvantaged populations, we interviewed, at the four states and five major cities we visited, state and local emergency management agency officials (who prepare for and coordinate evacuations), transit and transportation agency officials (who provide and manage transportation during evacuations), and public safety (fire and police) agency officials (who assist with transportation-disadvantaged populations during an evacuation). We also interviewed advocacy organizations. Much of the work that state and local governments are conducting to address these challenges is ongoing.

In assessing how federal assistance has aided the state and local governments we visited in addressing these challenges and what further assistance the federal government is proposing, we reviewed the Stafford Act; the Homeland Security Act of 2002; the Post-Katrina Emergency Management Reform Act of 2006; the National Response Plan (including the Catastrophic Incident Annex and the Catastrophic Incident Supplement); DHS's Nationwide Plan Review and DOT's Catastrophic Hurricane Evacuation Plan Evaluation; and various studies and reports on Hurricane Katrina such as those prepared by the White House, House of Representatives, and Senate. We interviewed officials from DHS, DOT, and DOD to obtain their perspective on the federal role in evacuations. To obtain the perspective of federal agencies and councils focused on issues specifically related to transportation-disadvantaged populations, we interviewed representatives from the Administration on Aging, the Federal

Appendix I: Scope and Methodology

Interagency Coordinating Council on Access and Mobility, the Interagency Coordinating Council on Emergency Preparedness and Individuals with Disabilities, the National Council on Disability, and the Interagency Council on Homelessness. We also interviewed representatives from several national organizations and associations to help evaluate how federal programs and policies on evacuations have affected transportation-disadvantaged populations. These organizations and associations include the National Organization on Disability, the American Association of Retired Persons, the American Public Transportation Association, the Association of Metropolitan Planning Organizations, and the Community Transportation Association of America.

Appendix II: Comments from the Department of Homeland Security

Note: GAO comments supplementing those in the report text appear at the end of this appendix.

U.S. Department of Homeland Security Washington, DC 20528



December 7, 2006

Ms. Katherine Siggerud Director, Physical Infrastructure Issues U.S. Government Accountability Office 441 G Street, NW Washington, DC 20548

Dear Ms. Siggerud:

RE: Draft Report GAO-07-44, Transportation Disadvantaged Populations: Actions Needed to Clarify Responsibilities and Increase Preparedness for Evacuations (GAO Job Code 542081)

The Department of Homeland Security (DHS) appreciates the opportunity to review and comment on the draft report referenced above. The Government Accountability Office (GAO) makes three recommendations to the Department designed to improve federal, state, and local preparedness for the evacuation of transportation disadvantaged populations. This important and complex issue is being addressed through a number of DHS activities already underway (e.g., the National Response Plan Review and Revision). Additionally, some of the recommendations have already been partly implemented. For example, actions to improve the overall functionality of the lessons learned information sharing portal have been completed. Furthermore, many DHS grant programs have administrative requirements that stress the importance of focusing on special needs populations.

We will take all of the recommendations under advisement and determine the feasibility of further implementation. Any additional concerns and the status of implementing the recommendations will be addressed in our response to appropriate Hill committees and the Office of Management and Budget sixty days after release of the report pursuant to the reporting requirements of 31 U.S.C. Section 720.

The draft report adequately identifies the pertinent issues that have troubled state and local emergency management officials for many years. Hurricane Katrina and Rita made obvious what has been a chronic concern for emergency management officials since Hurricane Elena in 1985, which resulted in the largest peacetime evacuation in the history of this nation at that time, with the movement of over 1.5 million residents from their homes along the Florida Gulf Coast from Naples to Pensacola. Major issues with the movement of special needs populations caused a thorough review of this issue in the

www.dhs.gov

See comment 1. See comment 2.

2

State of Florida and resulted in numerous initiatives to identify such vulnerable populations and regulatory requirements to address their needs.

Subsequent events have dwarfed this number of evacuees, as larger hurricanes have threatened populations from Texas to Maine. The need to determine how to identify, and actively evacuate all special needs populations, to include those who are transportation dependent, has been the cause of much concern. The draft does not adequately address this matter, nor does it recognize the core aspect or problem with the transportation of any special needs person-- that is it is a local responsibility. This is a critical point in that the overall solution to this problem must occur at the local level through proper planning and implementation. The local jurisdiction must take ownership of the problem with state oversight.

As required in the implementation guidance of the NRP, the Secretary of Homeland Security is conducting an interagency review to assess the effectiveness of the NRP, identify improvements, recommend modifications, and reissue the document. As the NRP is predicated on the National Incident Management System (NIMS), DHS is conducting an upgrade to the NIMS in conjunction with the NRP review. The modified NIMS and NRP documents will be released in tandem.

The NRP/NIMS Review and Revision process is being conducted through a NRP/NIMS Task Force co-chaired by FEMA and the Preparedness Directorate, with participation from all levels of stakeholders to include internal DHS components and other Federal, state, local, tribal, territorial, non-governmental and private-sector partners. Stakeholder meetings have been conducted to introduce the review process and timelines, outline proposed key NRP and NIMS revision issues identified through review of Hurricane Katrina After Action Reports and other lessons learned documents, and solicit feedback on the process, timelines, proposed issues and any other relevant topics.

The issue of evacuations is a complex one and encompasses several key revision issues identified in the NRP/NIMS Review and Revision process, including:

- clarification of roles and responsibilities of key structures, positions and levels of the government and private sector as well as other nongovernmental agencies;
- incorporation of companion animal emergency management issues;
- proactive planning for incidents that render state and local governments incapable of an effective response; and
- consideration of special needs populations in incident management activities.

See comment 3.

See comment 4.

3

See comment 5.

See comment 6.

See comment 7.

See comment 8.

The NRP/NIMS Review and Revision process will include a key revision issue and work group on evacuations and a special needs work group to ensure that these issues are fully addressed.

The report raises the issue, beginning on page 11, that, "...the National Response Plan does not assign a single federal agency the responsibility for leading and coordinating evacuations of transportation-disadvantaged populations (not including patients needing hospital care) when state and local governments are overwhelmed." This represents a misunderstanding of the federal response process. The basic premise for the National Response Plan, and the strategy that underlies it, is that for large and complex disasters, no single federal agency can provide the entire response support required. Instead, a coordinated inter-agency effort is required. DHS is responsible for managing that interagency effort and is, in fact, the single federal agency responsible for leading and coordinating evacuation support to states. Implementation of the recently enacted Stafford Act legislative changes will also help address the Federal role in evacuation support and assistance in relation to transportation of disadvantaged populations.

The draft report alludes to the need to identify "special needs persons" and transportation dependent evacuees. This is crucial to local and state emergency management personnel. The lack of definition severely hampers the ability of emergency managers to plan for these evacuees. This is evident in the GAO efforts to identify these populations. There are many different components to special needs/medical management procedures. They consist of pre-disaster special needs registration, special needs shelter identification/operation, medical management screening, medical management placement, and discharge procedures for the shelters/ facilities. The definition of transportation-disadvantaged populations has to be separated from "special needs", "medical management", and "disabled individuals." To include individuals with disabilities with evacuees whose only deficiency is not having transportation, whether permanently or only in an emergency, does a disservice to the disabled population.

The draft report does not recognize that evacuations of transportation-dependent populations have successfully occurred during significant events of the 2004/2005 hurricane season, with the help of intrastate/interstate mutual aid agreements. In some cases, evacuations have been almost routine (e.g., hospital evacuation in the Florida Keys by North Carolina Air National Guard). The draft report implies that the situation that occurred during Katrina was a typical occurrence. The problems with Katrina were caused by the sheer scale of the event, by conditions that contributed to not following recognized standard evacuation procedures (e.g., HURREVAC Timelines), and by impediments or failures to implement evacuations in a timely manner. The National Response Plan provides a mechanism for the Federal government to support local and state governments when they become overwhelmed. Properly used by an integrated team, it can and has been very successful. This was documented during the 2004-2005 hurricane season in Florida when the Department of Health and Human Services was given the mission to create a 5,000 bed special needs shelter in the Orange County Civic Center. The NRP was not signed/approved until December 15, 2004. The federal

4	
response during the 2004 hurricane season was guided by the Initial National Response Plan.	
Technical comments will be provided under separate cover.	
Sincerely,	
Steven J. Pecinovsky Director, GAO/OIG Liaison Office	
ММсР	

Appendix II: Comments from the Department of Homeland Security

The following are GAO's comment on the Department of Homeland's letter dated December 7, 2006

GAO Comments

- 1. DHS commented that it partially implemented one of our recommendations by improving the overall functionality of the lessons learned information sharing portal. We revisited DHS's Lessons Learned Information Sharing portal as of December 7, 2006 and it appears to have improved some of its search and organizational functions. We have found, however, that some of the issues we previously identified still remain. For example, when using the portal's search function, there was no direct link to key evacuation preparedness documents, such as to DHS's *Nationwide Plan Review* reports. Therefore, we revised our recommendation to reflect the need for continued improvement of this portal.
- DHS commented that grant programs have administrative requirements that stress the importance of focusing on special needs populations. These requirements, while encouraging, do not ensure that state and local governments plan, train, and conduct exercises for the evacuation of transportation-disadvantaged populations. During the course of our review, we found that state and local officials do not share a consistent definition of special needs and had interpreted the term in a manner which does not encompass all transportationdisadvantaged populations that should be included in evacuation preparedness. We define transportation-disadvantaged populations to include individuals who, by choice or other reasons, do not have access to a personal vehicle. These can include persons with disabilities, low-income, homeless, or transient persons; children without an adult present at home, tourists and commuters who are frequent users of public transportation; and those with limited English proficiency who tend to rely on public transit more than English speakers.
- 3. DHS commented that our draft report did not adequately address the need to determine how to identify, and actively evacuate all special needs populations, including those who are transportation-disadvantaged. We recognize, in our report, the difficulty that state and local emergency management officials face in identifying and locating transportation-disadvantaged populations, determining their transportation needs, and providing for their transportation. Two of our report's three sections address this very issue.

- 4. DHS commented that our draft report did not recognize that transportation of special needs populations is primarily a local responsibility. Our report recognizes this fact and clearly states that state and local governments are primarily responsible for managing responses to disasters, including the evacuation of transportation-disadvantaged populations.
- 5. DHS commented that its National Response Plan Review and Revision process is currently being conducted and that it will address clarification of roles and responsibilities of key structures, positions and levels of the government and private sector as well as other nongovernmental agencies among other issues related to evacuations. We are encouraged by DHS's efforts in this regard.
- 6. DHS commented for large and complex disasters, no single federal agency can provide the entire response support required. We agree that disaster response is a coordinated interagency effort, but believe that clarification of the lead, coordinating, and supporting agencies for evacuation support is needed in the National Response Plan to ensure a successful response. DHS also commented that it is responsible for managing that interagency effort and is, in fact, the single federal agency responsible for leading and coordinating evacuation support to states. Implementation of enacted Stafford Act legislative changes from October 2006 will help address the federal role in providing evacuation assistance for transportation of disadvantaged populations. We agree that DHS, more specifically FEMA, is responsible for leading and coordinating evacuation support to states.
- 7. DHS commented that our definition of transportation-disadvantaged populations was a disservice to the disabled population. While we recognize that evacuation is a complex issue and believe that persons with disabilities are faced with significant evacuation challenges in the event of a disaster and should be a focus of evacuation preparedness, it is important that federal, state, and local government emergency preparedness efforts address planning for all transportation-disadvantaged populations.
- 8. DHS commented that our draft report implies that the situation that occurred during Katrina was a "typical occurrence." It is not our intent to imply this. However, the events of Hurricane Katrina raised significant awareness about federal, state, and local preparedness to evacuate transportation-disadvantaged populations, and reports, such as DHS's *Nationwide Plan Review* and DOT's *Catastrophic Hurricane Evacuation Plan Evaluation*, have further highlighted the need for increased evacuation preparedness by these governments.

Appendix III: GAO's Observations on Federal Proposed Recommendations and Initial Conclusions

In 2006, the White House and several federal agencies released reports that reviewed federal, state, and local evacuation preparedness and response to Hurricane Katrina. Many of these reports include recommendations or initial conclusions for federal, state, and local governments. We have included a list of recommendations—including some already referenced in our report—that address the evacuation of transportation-disadvantaged populations. Our observations about each recommendation, based on our review, are also listed. (See table 1.)

Table 1: GAO's Observations on Federal Recommendations and Initial Conclusions Addressing Evacuation Planning for Transportation-Disadvantaged Populations

Federal recommendation or initial conclusion	GAO observation
Define "special needs" consistently	
The federal government should develop a consistent definition of the term "special needs."	Select federal, state, and local officials had very different definitions of special needs populations. Moreover, some state and local officials did not have definitions that fully encompassed all special needs populations among the transportation-disadvantaged.
Encourage evacuation preparedness to address transportat	ion-disadvantaged populations
 U.S. DOT should support state and local governments in planning, training, and exercising evacuation plans and ensure that these plans address the challenges posed by evacuating hospitals, nursing homes, and individuals with special needs.^b 	In addition, DOT has specialized transportation knowledge, and pre- existing relationships with state departments of transportation, transit agencies, and contracted private transportation providers. Therefore, DOT is well positioned in experience and expertise to provide preparedness assistance to state and local governments.
 DHS should support state and local governments in planning, training, and exercising evacuation plans and ensure that these plans address the challenges posed by evacuating hospitals, nursing homes, and individuals with special needs.^b 	Several select locations have not fully developed plans, training, and exercises to address evacuations of all segments of the population. In addition, another study we conducted found several challenges in evacuating hospitals and nursing homes.
 Federal, state, and local governments should increase the participation of people with disabilities and disability subject- matter experts in the development and execution of plans, training, and exercises.^a 	In addition to persons with disabilities, in select locations, we found that other transportation-disadvantaged populations, such as the elderly and persons with limited English proficiency, were not adequately considered in evacuation planning.
 All evacuation plans must provide for populations that do not have the means to evacuate. DHS and DOT should make available assistance to state and local governments for the development of these plans to ensure that the nation's most vulnerable citizens are not left behind in a disaster. 	A significant proportion of the population may require evacuation assistance during an emergency and the focus of evacuation planning at the federal, state, and local levels have primarily been found on those who own cars.

Appendix III: GAO's Observations on Federal Proposed Recommendations and Initial Conclusions

Federal recommendation or initial conclusion

States with high-risk urban areas should develop multiphased evacuation plans that provide for the speediest evacuation of residents most at risk, particularly those who lack the means to evacuate on their own. Neighboring political entities should work together to coordinate evacuation plans in advance, and state and local governments should publicize their evacuation plans and ensure that citizens are familiar with one or more evacuation options. States whose location puts them at high risk of recurring hurricanes and tropical storms should use updated storm surge estimates to establish evacuation zones and evacuation clearance times. States whose locations put them at risk of other types of natural disasters should evaluate those risks and consider evacuation zones and clearance times in line with them.^b

GAO observation

One select state that faces frequent natural hazards had developed detailed evacuation plans that provide timely evacuations for transportation-disadvantaged populations. Often, high-risk residents who need transportation assistance are evacuated first because this assistance can be time consuming. In addition, within the state, a major city communicates evacuation plans to citizens in a number of ways (e.g., radio and TV, leaflets and mailings, and community outreach efforts) to enhance individual preparedness during emergencies.

Provide technical assistance for evacuation preparedness for transportation-disadvantaged populations

- The federal government should provide technical assistance
 to clarify the extent to which emergency communications,
 including public information associated with emergencies,
 must be in accessible formats for persons with disabilities.
 This assistance should address all aspects of
 communication, including, for example, televised and other
 types of emergency notification and instructions, shelter
 announcement, and applications and forms for government
 and private disaster benefits.^a
- Select states and cities have experienced challenges in communicating public information, both prior to and during emergencies, to many populations among the transportation-disadvantaged, including persons with disabilities, the elderly, and persons with limited English proficiency.
- Federal, state, and local governments should work with the private sector to identify and coordinate effective means of transporting individuals with disabilities before, during, and after an emergency.^a

Private sector assets, such as buses and ambulance services, along with public sector assets, can be used to provide general and specialized transportation resources during disasters for transportation-disadvantaged populations. Several social service providers from select cities told us that emergency management officials often do not consider these providers useful partners in the planning process.

Clarify federal role regarding evacuations

 Designate DOT as the primary agency responsible for developing the federal government's capability to conduct mass evacuations when disasters overwhelm state and local governments.^c In the wake of Hurricane Katrina, DOT plans to have a more active role in providing transportation to state and local governments for emergency evacuations. In 2006, DOT officials said that, while DOT has not been officially designated under the National Response Plan as the lead and coordinating agency for carrying out evacuations when state and local governments are overwhelmed, it has taken additional steps necessary to provide additional evacuation capabilities.

Appendix III: GAO's Observations on Federal Proposed Recommendations and Initial Conclusions

Federal recommendation or initial conclusion

As the primary federal agency under Emergency Support Function-1 (Transportation), DOT, in coordination with DHS, should develop plans to assist in conducting mass evacuations when an effective evacuation is beyond the capabilities, or is likely to be beyond the capabilities, of the state and affected local governments. DOT should develop plans to quickly deploy transportation assets to an area in need of mass evacuation. DHS should, in coordination with DOT, assist state and affected local governments in evacuating populations when requested; in coordination with the states, DOT should plan, train, and exercise for evacuations, including evacuations of medical patients and others with special needs. These evacuations would be conducted in coordination with other relevant federal agencies, the American Red Cross, and state and local partners. DOT should consider using a variety of transportation modes, including air medical services. DOT should also work with state and local emergency planners in particular, state and local agencies charged with Emergency Support Function-1 responsibilities—to help them (1) assess the resources needed to assist with evacuations, which of these resources are locally available, and what shortfalls exist: (2) determine unique geographical/demographic obstacles to evacuation in particular areas; and (3) develop catalogues of regionally available evacuation-related assets, including transit agencies from various municipalities. Establish liaisons with ESF-6 (Mass Care, Housing, and Human Services) to coordinate sheltering destinations for evacuees from various areas, and work with ESF-13 (Public Safety and Security) to ensure that air, bus, and other transportation providers have appropriate security escorts to ensure safety during evacuation activities.^b

GAO observation

The National Response Plan does not clearly lay out evacuation responsibilities among federal agencies. We found that significant challenges exist in evacuating transportation-disadvantaged populations. Therefore, an effective federal evacuation response may require clarification of roles and responsibilities for the lead, coordinating, and supporting federal agencies to provide evacuation assistance for transportation-disadvantaged and other populations when a disaster overwhelms state and local governments.

Better communicate information on, and incorporate analysis of, needs for transportation-disadvantaged populations

- State and local agencies should work with the special needs communities to develop systems whereby those requiring specialized transportation or sheltering services during evacuations can make these needs known to emergency managers and operators of transportation and sheltering services before evacuations.^d
- Social-service and other transportation providers—both public and private sector—have distinct knowledge about their customers, some of whom may have special needs. This knowledge includes their physical location as well as their transportation and medical needs. However, select local site visits revealed that emergency management officials have often not worked with such providers to enhance their ability to identify, locate, and transport special needs populations during emergencies.
- The federal government should provide guidance to state and local governments on the incorporation of disabilityrelated demographic analysis into emergency planning.^a

Select locations have experienced challenges in locating transportation-disadvantaged populations. However, in those same communities, metropolitan planning organizations have already carried out demographic analysis specific to transportation-disadvantaged populations (including but not limited to persons with disabilities) that can be helpful to emergency planners.

Source: GAO analysis of White House, Senate, DHS and DOT data.

^aDHS, Nationwide Plan Review. Phase II Report (Washington, D.C.: Jun. 16, 2006).

Appendix III: GAO's Observations on Federal Proposed Recommendations and Initial Conclusions

^bSenate Homeland Security and Governmental Affairs Committee, *Hurricane Katrina: A Nation Still Unprepared* (Washington, D.C.: May 2006).

White House Homeland Security Council, *The Federal Response to Hurricane Katrina: Lessons Learned* (Washington, D.C.: Feb. 2006).

^dDOT in cooperation with DHS, *Catastrophic Hurricane Evacuation Plan Evaluation: A Report to Congress* (Washington, D.C.: June 1, 2006).

Appendix IV: Other Federal Initiatives Related to Evacuating Transportation-Disadvantaged Populations

The following is a list of initiatives we identified during our review that the federal government has undertaken to address the evacuation of transportation-disadvantaged populations.

- The Federal Transit Administration has awarded the American Public Transportation Association a \$300,000 grant to establish and administer a transit mutual aid program. The goal of the program is to provide immediate assistance to a community in need of emergency transit services, with a focus on evacuation and business continuity support. The American Public Transportation Association will obtain formal commitments from willing transit agencies and, with committed resources, develop and maintain a database of transit vehicles, personnel, and equipment. The target for the database is to have between 250 and 500 buses nationwide, as well as support equipment and personnel, ready to respond at any time. Moreover, the American Public Transportation Association will reach out to federal, state, and regional agencies to ensure that during an emergency, these agencies can provide a coordinated and effective response.
- The Community Transportation Association of America conducted an expert panel discussion—sponsored by the National Consortium on the Coordination of Human Services Transportation—on the role of public and community transportation services during an emergency. The resulting white paper (which outlines community strategies to evacuate and challenges for transportation-disadvantaged populations during emergencies) and emergency preparedness checklist is intended as guidance for transportation providers and their partner organizations. This panel was conducted in cooperation with the Federal Interagency Coordinating Council on Access and Mobility, and DHS's Interagency Coordinating Council on Emergency Preparedness and Individuals with Disabilities.
- The Federal Transit Administration has awarded a grant to the University of New Orleans to develop a manual and professional development course for transit agencies to enhance their emergency preparedness.
- The Federal Transit Administration, along with the Federal Interagency Coordinating Council on Access and Mobility, has created a pamphlet entitled "Disaster Response and Recovery Resource for Transit Agencies" to provide local transit agencies and transportation providers with useful information and best practices in emergency preparedness and disaster response and recovery. The resource provides summary information for general background, and includes best practices and links to more specific resources and more detailed information for local agencies concerning

Appendix IV: Other Federal Initiatives Related to Evacuating Transportation-Disadvantaged Populations

critical disaster related elements such as emergency preparedness, disaster response, and disaster recovery.

- The Federal Interagency Coordinating Council on Access and Mobility—which awards grants to states for human service transportation coordination between state agencies—added an emergency preparedness priority to its grant guidelines, thereby encouraging state to consider emergency preparedness among its grant priorities. As of July 2006, nine states have addressed emergency preparedness as a priority.
- The Federal Highway Administration is producing a series of primers for state and local emergency managers and transportation officials to aid them in developing evacuation plans for incidents that occur with or without notice. A special primer is under development to aid state and local officials in designing evacuation plans that include transportation-disadvantaged populations. This primer will be released no later than March 2007.
- The Transportation Research Board has convened a committee to examine the role of public transportation in emergency evacuation. The committee will evaluate the role that the public transportation systems serving the 38 largest urbanized areas in the United States could play in the evacuation of, egress, and ingress of people to or from critical locations in times of emergency. The committee is expected to issue a report by April 20, 2008.

¹The committee and report are mandated by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, Section 3046 (a)(1).

Appendix V: GAO Contact and Staff Acknowledgments

GAO Contact	Katherine Siggerud, (202) 512-2834 or siggerudk@gao.gov.
Staff Acknowledgments	In addition to the contact named above, Steve Cohen, Assistant Director; Ashley Alley; Elizabeth Eisenstadt; Colin Fallon; Deborah Landis; Christopher Lyons; SaraAnn Moessbauer; Laina Poon; Tina Won Sherman; and Alwynne Wilbur made key contributions to this report.

Related GAO Products

Catastrophic Disasters: Enhanced Leadership, Capabilities, and Accountability Will Improve the Effectiveness of the Nation's Preparedness, Response, and Recovery System. GAO-06-618. Washington, D.C.: September 6, 2006.

Disaster Preparedness: Limitations in Federal Evacuation Assistance for Health Facilities Should Be Addressed. GAO-06-826. Washington, D.C.: July 20, 2006.

Disaster Preparedness: Preliminary Observations on the Evacuation of Vulnerable Populations due to Hurricanes and Other Disasters. GAO-06-790T. Washington, D.C.: May 18, 2006.

Hurricane Katrina: GAO's Preliminary Observations Regarding Preparedness, Response, and Recovery. GAO-06-442T. Washington, D.C.: March 8, 2006.

Disaster Preparedness: Preliminary Observations on the Evacuation of Hospitals and Nursing Homes Due to Hurricanes. GAO-06-443R. Washington, D.C.: February 16, 2006.

Statement by Comptroller General David M. Walker on GAO's Preliminary Observations Regarding Preparedness and Response to Hurricanes Katrina and Rita. GAO-06-365R. Washington, D.C.: February 1, 2006.

Transportation Services: Better Dissemination and Oversight of DOT's Guidance Could Lead to Improved Access for Limited English-Proficient Populations. GAO-06-52. Washington, D.C.: November 2, 2005.

Transportation Services: Better Dissemination and Oversight of DOT's Guidance Could Lead to Improved Access for Limited English-Proficient Populations (Chinese Edition). GAO-06-186. Washington, D.C.: November 2, 2005.

Transportation Services: Better Dissemination and Oversight of DOT's Guidance Could Lead to Improved Access for Limited English-Proficient Populations (Korean Version). GAO-06-188. Washington, D.C.: November 2, 2005.

Transportation Services: Better Dissemination and Oversight of DOT's Guidance Could Lead to Improved Access for Limited English-Proficient

Populations (Spanish Version). GAO-06-185. Washington, D.C.: November 2, 2005.

Transportation Services: Better Dissemination and Oversight of DOT's Guidance Could Lead to Improved Access for Limited English-Proficient Populations (Vietnamese Version). GAO-06-187. Washington, D.C.: November 2, 2005.

Transportation-Disadvantaged Seniors: Efforts to Enhance Senior Mobility Could Benefit from Additional Guidance and Information. GAO-04-971. Washington, D.C.: August 30, 2004.

Transportation-Disadvantaged Populations: Federal Agencies Are Taking Steps to Assist States and Local Agencies in Coordinating Transportation Services. GAO-04-420R. Washington, D.C.: February 24, 2004.

Transportation-Disadvantaged Populations: Some Coordination Efforts Among Programs Providing Transportation Services, but Obstacles Persist. GAO-03-697. Washington, D.C.: June 30, 2003.

Transportation-Disadvantaged Populations: Many Federal Programs Fund Transportation Services, but Obstacles to Coordination Persist. GAO-03-698T. Washington, D.C.: May 1, 2003.

(542081)

GAO's Mission	The Government Accountability Office, the audit, evaluation and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.	
Obtaining Copies of GAO Reports and Testimony	The fastest and easiest way to obtain copies of GAO documents at no cost is through GAO's Web site (www.gao.gov). Each weekday, GAO posts newly released reports, testimony, and correspondence on its Web site. To have GAO e-mail you a list of newly posted products every afternoon, go to www.gao.gov and select "Subscribe to Updates."	
Order by Mail or Phone	The first copy of each printed report is free. Additional copies are \$2 each. A check or money order should be made out to the Superintendent of Documents. GAO also accepts VISA and Mastercard. Orders for 100 or more copies mailed to a single address are discounted 25 percent. Orders should be sent to:	
	U.S. Government Accountability Office 441 G Street NW, Room LM Washington, D.C. 20548	
	To order by Phone: Voice: (202) 512-6000 TDD: (202) 512-2537 Fax: (202) 512-6061	
To Report Fraud,	Contact:	
Waste, and Abuse in Federal Programs	Web site: www.gao.gov/fraudnet/fraudnet.htm E-mail: fraudnet@gao.gov Automated answering system: (800) 424-5454 or (202) 512-7470	
Congressional Relations	Gloria Jarmon, Managing Director, JarmonG@gao.gov (202) 512-4400 U.S. Government Accountability Office, 441 G Street NW, Room 7125 Washington, D.C. 20548	
Public Affairs	Paul Anderson, Managing Director, AndersonP1@gao.gov (202) 512-4800 U.S. Government Accountability Office, 441 G Street NW, Room 7149 Washington, D.C. 20548	