TESTIMONY OF
THE HONORABLE DEBORAH A.P. HERSMAN
CHAIRMAN, NATIONAL TRANSPORTATION SAFETY BOARD

BEFORE THE
SUBCOMMITTEE ON TRANSPORTATION, HOUSING AND URBAN DEVELOPMENT, AND RELATED AGENCIES
HOUSE COMMITTEE ON APPROPRIATIONS

REGARDING THE NTSB FY2011 APPROPRIATIONS REQUEST
MAY 18, 2010

[Submitted for the Subcommittee's Hearing Record[

Chairman Olver, Ranking Member Latham and Members of the Subcommittee:

Thank you for the opportunity to present the National Transportation Safety Board's (NTSB) funding request for Fiscal Year 2011 (FY11). On behalf of my fellow Board members and the men and women who work at the NTSB, let me say how much we appreciate the support of this subcommittee in providing the funding for the NTSB to accomplish its mission in investigating major transportation accidents and making recommendations to improve safety in all modes of transportation.

As you know, the core mission of the NTSB is to investigate transportation accidents to determine what happened, how it happened, why it happened, and what can be done to keep it from happening again. Today, we continue working hard to improve safety in a transportation environment that looks very little like it did when the agency began in 1967. In the 43 years since then, the mission of the agency has not changed, but the world has. The investigation of transportation accidents has become increasingly complex as machines, technology, and the operational environment have become more sophisticated. Our challenge today is to remain highly skilled and up-do-date with an expert technical staff and state-of-the-art investigative tools to competently and efficiently conduct the thorough investigations you and the American people expect and deserve.

To give a glimpse of the work we do, let me highlight the NTSB's accomplishments in FY09. We issued 18 major accident investigation reports and 2 summary reports. In addition, we produced 15 brief reports, hundreds of regional aviation safety accident briefs, and a special investigation report on pedal misapplications in heavy vehicles. We conducted 13 public or "sunshine" meetings on 14 separate accident reports. We also conducted 6 public hearings on accidents and safety issues, including:

- A 2008 fatal motorcoach accident in Victoria, Texas;
- The safety of helicopter emergency medical services (EMS) flight operations;
- The 2008 collision of a Metrolink commuter train with a Union Pacific freight train in Chatsworth, California;

- The 2009 crash of Colgan Air flight 3407 near Buffalo, New York;
- The 2009 ditching of U.S. Airways flight 1549 in the Hudson River in New York; and
- The 2009 crash of Empire Airlines flight 8284 at Lubbock, Texas.

NTSB – FY 2009 At A Glance	
Established:	April 1967
Number of Employees: (by HQ and Regions)	HQ: 299 Regional: 92
Major Reports and Products Adopted by the Board	18 Major Reports 2 Summary Reports 1 Special Investigation Report 15 Brief Reports
Major Accident Launches:	18
Other Accident Launches:	198
International Accident Launches:	10
Public Hearings:	6
Recommendations Issued:	174
Recommendations Closed:	87 Closed Acceptable Status 22 Closed Unacceptable Status
Vehicle Recorder Readouts:	374
Materials Laboratory Examination Reports:	110

In FY09, we launched to 18 major accidents, including:

- November 28, 2008: A self-propelled, unmanned shuttle train at Miami International Airport failed to stop at the passenger platform and struck a wall at the end of the guideway. 7 injuries.
- December 20, 2008: A Boeing 737 (Continental flight 1404) veered off the side of the runway and crashed during takeoff from Denver International Airport. No fatalities, 37 injuries.
- January 7, 2009: A 29-passenger bus crossed into the opposite travel lanes and overturned near Dolan Springs, Arizona, ejecting 13 occupants and partially ejecting 2 occupants. 7 fatalities, 10 injuries.
- January 15, 2009: An A320 (U.S. Airways flight 1549) made a ditching in the Hudson River following a multiple bird strike just after takeoff from New York's La Guardia Airport. No fatalities.
- January 27, 2009: An ATR-42 cargo aircraft (Empire Airlines flight 8284) crashed short of the runway while landing in Lubbock, Texas. No fatalities.
- February 12, 2009: A Bombardier Dash 8-Q400 operated by Colgan Air (Continental Connection flight 3407) crashed on approach to Buffalo-Niagara International Airport, impacting a house. 50 fatalities.

- March 22, 2009: A Pilatus PC-12 operated by Eagle Cap. Leasing, Inc. crashed on approach to Butte, Montana. 14 fatalities.
- April 12, 2009: An unnamed recreational vessel allided with a towing vessel *Little Man II* near Palm Valley, Florida. 5 fatalities.
- May 4, 2009: An 18-inch diameter high pressure natural gas pipeline ruptured near Palm City, Florida. 3 injuries.
- May 8, 2009: An MBTA light rail passenger train struck the rear of a stopped MBTA train in Boston. The train operator admitted that he was texting on his cell phone when the accident occurred. 51 injuries.
- June 19, 2009: A CN freight train derailed at a highway-rail grade crossing in Cherry Valley, Illinois, causing a breach of 13 tank cars and the release of ethanol, followed by a fire that spread to vehicles stopped at the grade crossing. 1 fatality, 7 injuries;
- June 22, 2009: A WMATA train operating under automatic train control struck the rear of a standing train near Ft. Totten Station in Washington, DC. 9 fatalities, 52 injuries.
- June 26, 2009: A minor accident between a passenger car and a truck tractor/trailer on I-44 near Miami, Oklahoma, blocked the two eastbound lanes of the 4-lane divided highway, causing traffic to stop and a queue to form. Six minutes later, a truck tractor/trailer crashed into the rear of the stopped and slow-moving traffic, causing the collision of 6 vehicles. 10 fatalities, 6 injuries.
- July 1, 2009: An automobile struck a gasoline tank truck near Upper Pittsgrove, New Jersey, rupturing piping beneath the cargo tank (wet lines), resulting in the release of gasoline onto the automobile, which then caught fire. 1 fatality.
- July 15, 2009: A tanker truck rollover occurred as the driver of the truck swerved to avoid colliding with a passenger car which lost control on I-75 near Hazel Park, Michigan. 3 injuries.
- July 15, 2009: A cargo transfer hose ruptured while transferring anhydrous ammonia from a highway cargo tank trailer to a storage tank at an industrial facility in Swansea, South Carolina. The resulting toxic ammonia cloud expanded across a highway where a car drove into the gas cloud causing the death of the driver. 1 fatality; 7 injuries.
- July 18, 2009: A San Francisco MUNI light rail train ran into the rear of a second train at the West Portal Station. 48 injuries.
- August 8, 2009: A Piper PA-32, operated by a private pilot, and a Eurocopter AS350, operated by Liberty Helicopters, collided in midair over the Hudson River near Hoboken, New Jersey. 9 fatalities.

In addition to these major accidents, we launched investigators to 198 accidents, primarily in general aviation, to conduct smaller-scale investigations. We also sent accredited representatives to support 10 foreign accidents including the Air France A330, en route from Rio de Janerio to Paris, that crashed in the Atlantic Ocean on June 1, 2009; the crash of a Sikorsky S-92 helicopter in the sea near St. Johns, Newfoundland, on March 12, 2009; and the crash of a Learjet Model 45 near Mexico City on November 4, 2008.

As you know, the end products of our investigations are our safety recommendations to government agencies, transportation operators, and other stakeholders to improve transportation safety. In our 43-year history, we have issued more than 13,000 recommendations, with an 82 percent acceptance rate. Last year alone, we issued 174 new recommendations. We also closed

109 previously issued recommendations, 87 of those in an acceptable status. Of course, the success of our recommendations is often directly due to the work of our advocates in Congress, many of whom are on this subcommittee. For example, in 2008, Congress made huge strides in advancing railroad safety with the passage of the Federal Rail Safety Improvement Act of 2008 (Public Law 110-432). This historic bill addressed significant safety issues and long-standing recommendations directed to the rail industry, namely, hours of service and positive train control.

Like many government agencies, the NTSB is being called upon to accomplish its goals with fewer resources. We are rising to the challenge, although we will need the continued support of Congress to meet our mission demands. In 2003, the NTSB completed 18 major products and 4 public hearings with 427 employees. In 2009, we completed the same number of major products and two additional hearings but with 33 fewer people.

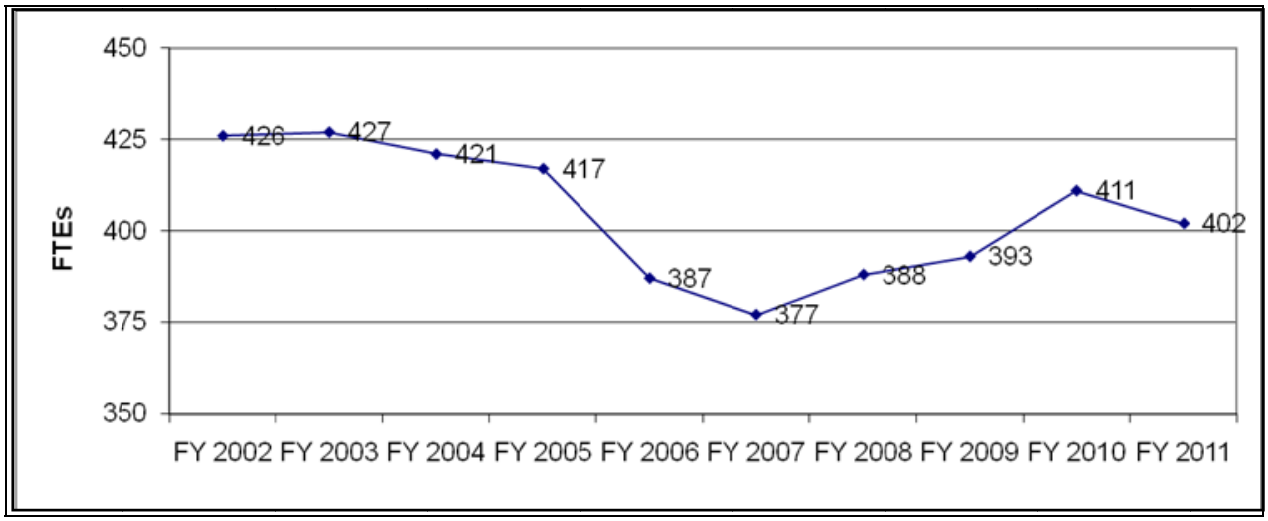

Figure 1: FTE FY2002 through FY2011

As with many government agencies now, the NTSB is facing potential staffing shortages due to retirements. Nearly 20 percent of the NTSB workforce is currently eligible to retire. In fact, 21 percent of our investigators and 27 percent of our executives are age 60 or older. Many of our investigative positions require unique expertise, and a failure to anticipate and prepare for retirements in those positions could leave the agency severely hampered in our ability to accomplish our investigative mission. But in the face of this potentially critical problem, we also see an unprecedented opportunity to adjust a lack of balance in the diversity of our work force, particularly among our investigators and our executives. Toward that end, we have formed an internal Diversity Task Force to develop aggressive marketing, outreach, and recruitment initiatives to attract highly skilled and diverse candidates to staff the next generation of investigators and managers.

Our staffing levels reached a 10-year high in FY03 with 427 full-time equivalent (FTE) positions at the NTSB. Beginning in FY04, staffing levels began to decline. With this subcommittee's support, our recent appropriations levels have permitted us to increase staffing levels, although we are short of our desired level of 477 FTEs. As noted above, we have accomplished the same number of products in FY09 as we did in FY03 with 33 fewer FTE positions. Our hiring mix over the last few years has been in response to significant regulatory requirements, such as the Federal government's computer security directives and General Services Administration (GSA) contracting requirements. While these increases in staff have assisted our investigative staff by improving the caliber of support from headquarters, not all of this hiring has been dedicated to hiring investigators and transportation specialists. It should be noted, however, that the President's budget request for the NTSB would result in the elimination of 13 FTEs. If the NTSB were funded at the requested level, we anticipate that we could accomplish this staff reduction through attrition. Historically, the NTSB experiences the greatest level of staffing turnover in the investigative offices. Although specific reductions are not known at this time, the NTSB's budget request assumed that it would need to give up approximately $3 million for staff funding, as the NTSB has no other means to reduce costs.

The Rail Passenger Family Act of 2008 (RFPA) requires the NTSB to respond to victims and their families affected by passenger rail disasters. To meet the requirements of the RFPA, the NTSB requires an additional $500,000 to its annual appropriation. This funding will go towards developing an effective response program and assisting the industry with implementation, which requires significant ongoing research and training demands that, unless otherwise appropriated, will detract from our investigative needs and investigator hiring. This funding request also includes staffing of 2 FTEs at $217,000 each per year, plus associated training and travel costs. The FY10 appropriation provided funding for these two new positions, but assumed that the positions would be filled by mid-year. Accordingly, our budget request seeks full-year funding for these two positions.

The NTSB headquarters lease is nearing its expiration. We are currently working through the GSA in a competitive lease acquisition. While a headquarters move is not certain, it remains a possibility. If the agency should be required to move to a new headquarters, most costs would occur in FY11. However, we anticipate that there could be some costs incurred in FY10. We appreciate that the Congress appropriated approximately $2.4 million in FY10 for non-recurring expenses associated with the lease. The NTSB anticipates that the total additional funding requirement for a move or a tenant build out to be almost $4.4 million, which is the request that we are seeking for FY11. Our request also includes an increase of almost $3 million for rent increases associated with the headquarters lease. Our current lease was executed in 2000. GSA experts advising the NTSB are informing us that we can anticipate substantial rent increases of almost 45 percent. If this increase is not funded, then the NTSB will be faced with a staff reduction to make up the shortfall. As noted, the Congress provided the NTSB with more than $2 million in FY10 for lease costs, and the NTSB will continue to require that same level of funding to cover the costs associated with the new lease. In addition, we have a number of leases which are expiring for our regional offices. Our budget request includes funding for these leases as well. If we should remain in our current headquarters location in L'Enfant Plaza, we anticipate that there would be some costs involved in making renovations to the space as well as some space adjustments. We expect that a lease will be awarded soon, which will resolve many

of these questions. I will be happy to provide the subcommittee with additional information at that time.

One of the busiest parts of our agency—and it is getting busier all the time—is our laboratory. In our vehicle recorder lab, on-board vehicle recorders are downloaded and studied to support accident investigations. In FY09, our lab processed 374 cockpit voice and flight data recorders, along with digital cameras, video recordings, GPS navigation devices, cockpit displays and engine monitoring devices. About 30 percent of our flight data and voice recorder readouts support foreign accident investigations. The workload in the vehicle recorder lab continues to grow as the number and complexity of recording devices continually expand. In addition, our materials lab examined evidence collected at accident scenes—anything from aircraft engines to pieces of highways—in search of clues to the causes of accidents. Last year, the materials lab produced 110 separate reports.

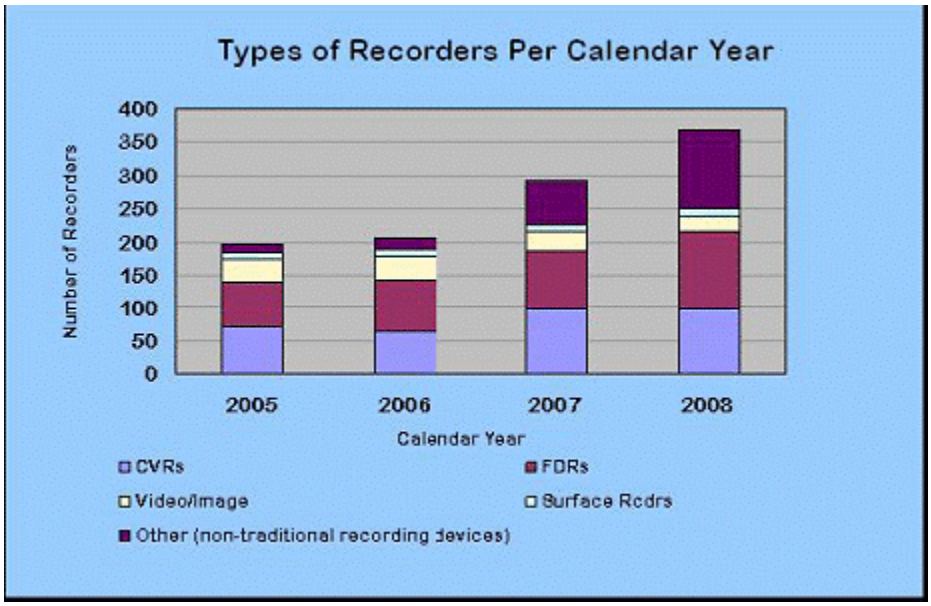

Figure 2: Types of Recorders Per Calendar Year

Our Vehicle Recorder Laboratory reads out on-board vehicle recorders to support the accident investigations. The laboratory workload has increased steadily over the last 5 years. Last year, the laboratory processed over 350 cockpit voice and flight data recorders, along with digital cameras, video recordings, GPS navigation devices, cockpit displays, and engine monitoring devices. Figure 2 above shows the breakdown of the laboratory work over the last several calendar years. For calendar year 2008, the laboratory had a 73 percent increase in workload, compared to calendar year 2005.

The work of the laboratory has earned international recognition. In addition to the critical support it plays in our domestic accident investigations, the laboratory has been called upon to assist in many foreign accident investigations. In fact, nearly 30 percent of the laboratory's flight data and cockpit voice recorder volume has supported foreign accident investigations, under the Chicago Convention of the International Civil Aviation Organization (ICAO). Most recently, the laboratory staff was asked to provide assistance in the investigation of the April

2010 crash of the Polish transport aircraft that killed the president and first lady of Poland, as well as many other prominent government, military and civilian leaders of Poland.

Like other parts of our agency, the laboratory has been called upon to do more with less which has resulted in aging equipment and some erosion of capability. Overall staffing levels for the laboratory have decreased in the last 5 years from 11 to 10 positions. Serious hardware and software shortages threaten the laboratory's ability to provide critical engineering support to accident investigations. The NTSB has had to rely on manufacturers for readout support in numerous investigations over the last few years. In the last year, the NTSB sent staff to two manufacturers' facilities for assistance in the download and readout of about 35 devices. Unfortunately, some manufacturers have not been as willing to aid the NTSB in recovering data from their devices.

The most critical laboratory requirements include an increase in staff of two recorder specialists (2 FTEs at $217,000 each per year) and associated training ($72,000), totaling $500,000. We are also asking for funding that would provide critical hardware and software upgrades for the laboratory, which include:

- Equipment for the readout of damaged Penny and Giles recorders, $75,000
- Equipment to read out recorders on new model aircraft (e.g. the Boeing 787 and the Airbus A350), $100,000
- Equipment for chip-level recovery of recorded data, $175,000
- Equipment for video recording analysis, $50,000
- Continued development of customize flight recorder software (CIDER), $100,000

The total request for laboratory staffing, training and equipment is $1,000,000.

The NTSB laboratories (Materials, Recorder, Animation, and Performance) support accident investigations in all transportation modes and conduct research related to transportation safety. These facilities require continuing capital investments or our current capabilities will be lost. The five-year capital investment plan is intended to bring these facilities back to the world class standards expected by our agency. These costs total $2,855,000 and comprise the following:

- Flight recorder analysis software (CIDER) upgrades: $550,000
- Material structure and composition analysis equipment: $935,000
- Component testing and inspection equipment: $775,000
- Development of a predictive-analytics research capability: $150,000
- Aviation data collection and data sharing tools: $300,000
- Enhancement of vehicle simulation capabilities: $60,000
- Upgrade of engineering graphics and animation capabilities: $135,000

Mr. Chairman, we recognize that in today's budgetary climate, increases in Federal agency budgets will be extremely challenging. In the past, this subcommittee has been fully supportive of the programs and needs of the NTSB. We appreciate your consideration of our request.

Thank you for the opportunity to discuss the NTSB's needs for FY11. I look forward to working with you and your staffs in your efforts to complete the NTSB appropriations for the upcoming fiscal year.