



Transport of Security-Sensitive Materials

Second Half, Fiscal Year 2015

December 8, 2015

Fiscal Year 2015 Report to Congress



Homeland
Security

Transportation Security Administration

Message from the Administrator

December 8, 2015

I am pleased to present the following report, “Transport of Security-Sensitive Materials,” for the second half of Fiscal Year (FY) 2015, which has been prepared by the Transportation Security Administration (TSA).

The report has been compiled pursuant to language in House Report 113-481 accompanying the *FY 2015 Department of Homeland Security Appropriations Act* (P.L. 114-4), and Section 1554 of the *Implementing Recommendations of the 9/11 Commission Act of 2007* (P.L. 110-53). Language directs TSA to provide semiannual updates on the implementation of an interim emergency-ready system to provide basic shipment tracking/visibility and a shipment chain-of-custody control program, and plans for a fully-developed program, including progress on research and development activities.



Pursuant to congressional requirements, this report is being provided to the following Members of Congress:

The Honorable John R. Carter
Chairman, House Appropriations Subcommittee on Homeland Security

The Honorable Lucille Roybal-Allard
Ranking Member, House Appropriations Subcommittee on Homeland Security

The Honorable John Hoeven
Chairman, Senate Appropriations Subcommittee on Homeland Security

The Honorable Jeanne Shaheen
Ranking Member, Senate Appropriations Subcommittee on Homeland Security

Inquiries relating to this report may be directed to me at (571) 227-5284 or to the Department's Deputy Under Secretary for Management and Chief Financial Officer, Chip Fulghum, at (202) 447-5751.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter V. Neffenger". The signature is fluid and cursive, with a large initial "P" and a long, sweeping tail.

Peter V. Neffenger
Administrator

Executive Summary

Pursuant to language in House Report 113-481 accompanying the *Fiscal Year 2015 Department of Homeland Security Appropriations Act* (P.L. 114-4), and Section 1554 of the *Implementing Recommendations of the 9/11 Commission Act of 2007* (P.L. 110-53), the Transportation Security Administration (TSA) is to develop a program to facilitate the tracking of motor carrier shipments of security-sensitive materials. To date, TSA has invested \$5.5 million in the FEDTRAK™ highway security-sensitive material shipment program to conduct research and development; to conduct a cost, benefit, and practicality study on technology; and to begin development of an interim emergency-ready system. Participation in any systems or programs developed would be voluntary. Out of the \$5.5 million invested to date, \$1.5 million was applied in FY 2015 to complete the interim system. Once completed, and following the issuance of a security directive, the system will provide the ability to track custody of shipments.



Transport of Security-Sensitive Materials Second Half, Fiscal Year 2015

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I. Legislative Language

This document has been compiled in response to House Report 113-481 accompanying the *Fiscal Year (FY) 2015 Department of Homeland (DHS) Appropriations Act* (P.L. 114-4), and section 1554 of the *Implementing Recommendations of the 9/11 Commission Act of 2007* (9/11 Commission Act) (P.L. 110-53).

House Report 113-481 includes the following provision:

The Committee directs TSA to move forward with the development of an interim emergency-ready system to provide basic shipment tracking/visibility and shipment chain-of-custody control, and urges the agency to engage in the research and development efforts required to fully develop the Tier 1 HSSM emergency-ready tracking system in the near future. The Committee further directs TSA to provide semi-annual updates on the implementation of an interim program and plans for a fully developed program including progress on research and development activities.

Section 1554 of the 9/11 Act states:

(a) COMMUNICATIONS.--

(1) IN GENERAL.—Not later than 6 months after the date of enactment of this Act, consistent with the findings of the Transportation Security Administration's hazardous materials truck security pilot program, the Secretary, through the Administrator of the Transportation Security Administration and in consultation with the Secretary of Transportation, shall develop a program to facilitate the tracking of motor carrier shipments of security-sensitive materials and to equip vehicles used in such shipments with technology that provides—

- (A) frequent or continuous communications;
- (B) vehicle position location and tracking capabilities; and
- (C) a feature that allows a driver of such vehicles to broadcast an emergency distress signal.

(2) CONSIDERATIONS.—In developing the program required by paragraph (1), the Secretary shall—

- (A) consult with the Secretary of Transportation to coordinate the program with any ongoing or planned efforts for motor carrier or security-sensitive materials tracking at the Department of Transportation;

(B) take into consideration the recommendations and findings of the report on the hazardous material safety and security operational field test released by the Federal Motor Carrier Safety Administration on November 11, 2004; and

(C) evaluate—

(i) any new information related to the costs and benefits of deploying, equipping, and utilizing tracking technology, including portable tracking technology, for motor carriers transporting security-sensitive materials not included in the hazardous material safety and security operational field test report released by the Federal Motor Carrier Safety Administration on November 11, 2004;

(ii) the ability of tracking technology to resist tampering and disabling;

(iii) the capability of tracking technology to collect, display, and store information regarding the movement of shipments of security-sensitive materials by commercial motor vehicles;

(iv) the appropriate range of contact intervals between the tracking technology and a commercial motor vehicle transporting security-sensitive materials;

(v) technology that allows the installation by a motor carrier of concealed electronic devices on commercial motor vehicles that can be activated by law enforcement authorities to disable the vehicle or alert emergency response resources to locate and recover security-sensitive materials in the event of loss or theft of such materials;

(vi) whether installation of the technology described in clause (v) should be incorporated into the program under paragraph (1);

(vii) the costs, benefits, and practicality of such technology described in clause (v) in the context of the overall benefit to national security, including commerce in transportation; and

(viii) other systems and information the Secretary determines appropriate.

II. Background

Pursuant to Section 1554 of the 9/11 Commission Act, TSA is to develop a program to facilitate the tracking of highway security-sensitive material. Toward this end, TSA has engaged with stakeholders, including the Department of Transportation's Federal Motor Carrier Safety Administration and the University of Kentucky. TSA originally entered into an agreement with the University of Kentucky through the DHS Science and Technology Directorate (S&T). Under this agreement, the University of Kentucky's Transportation Center developed the concept for a highway security-sensitive materials shipment program, known as FEDTRAK™. TSA provided \$1 million in FY 2010 general program funds to continue the research and development of FEDTRAK™ for use as a TSA program to track motor carrier shipments of highway security-sensitive material.

In addition to the development of the program, the 9/11 Commission Act requires a cost, benefit, and practicality study of technology [§ 1554 (a)(2)(C)(vii)]. TSA provided a total of \$1.5 million to the University of Kentucky's Transportation Center in FY 2011 and FY 2012 to conduct the study to comply with that requirement.

In 2012, TSA paused research and development to review the program within TSA's risk-based security protocol. In July 2013, the University of Kentucky's Transportation Center provided TSA with a copy of its comprehensive cost-benefit analysis report. The report determined that TSA would need to issue regulations in order to ensure industry participation. As per the 9/11 Commission Act, TSA would have to seek Congressional authority to issue regulations. Based on this report, TSA determined that there were significant costs associated with implementing this program. TSA subsequently has decided to continue limited research and development efforts for the program.

III. Discussion

On July 1, 2014, TSA signed an interagency agreement through S&T with the National Institute of Hometown Security to continue research and development efforts on FEDTRAK™.

Phase I of this effort was initiated in FY 2014, when TSA obligated \$1.5 million to fund an interim emergency-ready system. Development of a final electronic manifest/highway security-sensitive material supply chain-of-custody will enable the business processes of shippers, carriers, and consignees to apply their digital signatures to the electronic manifest, and allow tracking capability by the driver’s smartphone. Phase I was completed in June 2015.

Completion of the system (Phase II) is being undertaken in coordination with the National Protection and Programs Directorate’s Office of Infrastructure Protection (IP). In July 2015, TSA completed the required documents for an intra-agency agreement between TSA and NPPD/IP to include obligating an additional \$1.5 million to complete the system. NPPD/IP has finalized the remaining issues, and the kick-off meeting to initiate Phase II will be held in November 2015. To the extent that shippers, carriers, and consignees voluntarily agree to participate, the completed system will allow limited visibility into the movement of highway security-sensitive material during an emergency, or in the event of the issuance of a security directive pursuant to a highway security-sensitive materials situation.

FEDTRAK™		
Fiscal Year	Award Amount	Appropriation/PPA
FY 2010	\$1,000,000.00	ST101A000D
FY 2011	\$900,000.00	ST112A000D
FY 2012	\$600,000.00	ST123A000D
FY 2014	\$900,000.00	ST134A000D
	\$600,000.00	ST145A000D
FY 2015	\$1,500,000.00	ST145A000D
Total to date	\$5,500,000.00	

Evaluations to date indicate that the benefits of tracking programs such as those described in Section 1554 of the 9/11 Commission Act depend on their use throughout the relevant industry. The 9/11 Commission Act does not authorize TSA to require installation or use

of tracking technology. TSA will consider appropriate next steps based on work accomplished to date, potential benefits from voluntary participation, and costs of implementation compared to TSA's determination of risk.

TSA will continue to provide semi-annual updates on the highway security-sensitive material tracking program.