

**Calendar No. 132**

114TH CONGRESS }  
*1st Session* }

SENATE

{ REPORT  
114-73

IPAWS MODERNIZATION ACT OF 2015

---

R E P O R T

OF THE

COMMITTEE ON HOMELAND SECURITY AND  
GOVERNMENTAL AFFAIRS  
UNITED STATES SENATE

TO ACCOMPANY

S. 1180

TO AMEND THE HOMELAND SECURITY ACT OF 2002 TO  
DIRECT THE ADMINISTRATOR OF THE FEDERAL EMERGENCY  
MANAGEMENT AGENCY TO MODERNIZE THE INTEGRATED PUBLIC  
ALERT AND WARNING SYSTEM OF THE UNITED STATES, AND FOR  
OTHER PURPOSES



JUNE 25, 2015.—Ordered to be printed

---

U.S. GOVERNMENT PUBLISHING OFFICE

49-010

WASHINGTON : 2015

COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS

RON JOHNSON, Wisconsin *Chairman*

JOHN McCAIN, Arizona	THOMAS R. CARPER, Delaware
ROB PORTMAN, Ohio	CLAIRE McCASKILL, Missouri
RAND PAUL, Kentucky	JON TESTER, Montana
JAMES LANKFORD, Oklahoma	TAMMY BALDWIN, Wisconsin
MICHAEL B. ENZI, Wyoming	HEIDI HEITKAMP, North Dakota
KELLY AYOTTE, New Hampshire	CORY A. BOOKER, New Jersey
JONI ERNST, Iowa	GARY C. PETERS, Michigan
BEN SASSE, Nebraska	

KEITH B. ASHDOWN, *Staff Director*

CHRISTOPHER R. HIXON, *Chief Counsel*

DAVID S. LUCKEY, *Director of Homeland Security*

WILLIAM H.W. MCKENNA, *Chief Counsel for Homeland Security*

BROOKE N. ERICSON, *Deputy Chief Counsel for Homeland Security*

GABRIELLE A. BATKIN, *Minority Staff Director*

JOHN P. KILVINGTON, *Minority Deputy Staff Director*

MARY BETH SCHULTZ, *Minority Chief Counsel*

ROBERT H. BRADLEY, *Minority Professional Staff Member*

LAURA W. KILBRIDE, *Chief Clerk*

# CONTENTS

---

I. Purpose and Summary .....	Page 1
II. Background and Need for the Legislation .....	1
III. Legislative History .....	3
IV. Section-by-Section Analysis .....	3
V. Evaluation of Regulatory Impact .....	4
VI. Congressional Budget Office Cost Estimate .....	5
VII. Changes in Existing Law Made by the Bill, as Reported .....	6



## Calendar No. 132

114TH CONGRESS }  
*1st Session* }

SENATE

{ REPORT  
114-73

---

### IPAWS MODERNIZATION ACT OF 2015

---

JUNE 25, 2015.—Ordered to be printed

---

Mr. JOHNSON, from the Committee on Homeland Security and  
Governmental Affairs, submitted the following

### R E P O R T

[To accompany S. 1180]

The Committee on Homeland Security and Governmental Affairs, to which was referred the bill (S. 1180) to amend the Homeland Security Act of 2002 to direct the Administrator of the Federal Emergency Management Agency to modernize the integrated public alert and warning system of the United States, and for other purposes, having considered the same, reports favorably thereon with amendments and recommends that the bill, as amended, do pass.

#### I. PURPOSE AND SUMMARY

The purpose of S. 1180, the Integrated Public Alert and Warning System Modernization Act of 2015, is to modernize the Integrated Public Alert and Warning System (IPAWS) of the United States, establish and integrate into the National Incident Management System a training program to educate federal, state, tribal, and local government officials using the Emergency Alert System, and to establish an integrated public alert and warning system subcommittee. This bill will enhance the ability of state and local governments to integrate IPAWS into their own systems, increasing adoption of the system and advancing the goal of a nationwide integrated and interoperable system. The bill also establishes a Subcommittee to the National Advisory Council composed of IPAWS stakeholders to expand collaboration and recommend improvements to the system. Finally, the bill would also authorize the program, ensuring full Congressional oversight of the system.

#### II. BACKGROUND AND THE NEED FOR LEGISLATION

In 2004, the Federal Emergency Management Agency (FEMA) began developing IPAWS to create a comprehensive public-alert

system.<sup>1</sup> On June 26, 2006, President George W. Bush signed Executive Order 13407 directing the Department of Homeland Security (DHS) to create “an effective, reliable, integrated, flexible, and comprehensive” public alert and warning system for the United States.<sup>2</sup> The Executive Order named FEMA to lead the effort and adopt a set of standards and protocols to support this system.<sup>3</sup> In April 2007, FEMA established the IPAWS Program Management Office to carry out the Executive Order.<sup>4</sup>

IPAWS supports sending local, state, tribal, and territorial government alerts to local areas during regional emergencies, as well as sending national-level alerts from the President, in the event of a catastrophic national emergency.<sup>5</sup> Emergency alerts and information from emergency officials are sent to the public through radio and television via the Emergency Alert System (EAS), cellular phones via Wireless Emergency Alerts (WEA), the National Oceanic and Atmospheric Administration (NOAA) All Hazards Weather Radio via the IPAWS–NOAA gateway, and Internet applications and websites via the IPAWS Public Feed.<sup>6</sup> IPAWS is used to alert the public of, among other things, tornados, evacuations, earthquakes, child abductions (through America’s Missing: Broadcast Emergency Response alerts, also known as AMBER alerts), shelter-in-place, disaster resources, and Presidential alerts.<sup>7</sup> In 2013, for example, the Massachusetts Emergency Management Agency sent alerts through IPAWS after the Boston Marathon bombings.<sup>8</sup> To date, no President has ever sent an alert through the system, though the system was tested at the national level for such an occasion on November 9, 2011.<sup>9</sup>

DHS’s intent in establishing IPAWS was to integrate federal, state, territorial, tribal, and local government alert and warning systems, enabling various messaging options and communications pathways in the event of an emergency.<sup>10</sup> However, in 2009, the Government Accountability Office (GAO) found that IPAWS was struggling with planning and coordination.<sup>11</sup> For example, from 2007 to 2009, IPAWS operated without an implementation plan, and was hindered by two transitions in its mission over that time period.<sup>12</sup> As a result, states made investments in their alert systems without assurances that they would be compatible with federal investments.<sup>13</sup> At the time, GAO also reported that “the scope and range of stakeholder involvement in each new effort is limited

<sup>1</sup>FED. EMERGENCY MGMT. AGENCY, INTEGRATED PUBLIC ALERT AND WARNING SYSTEM (IPAWS): OVERVIEW AND COMMERCIAL MOBILE ALERT SYSTEM CMAS INTRODUCTION 4 (2009), available at [https://www.fema.gov/ppt/emergency/ipaws/ipaws\\_cmas.ppt](https://www.fema.gov/ppt/emergency/ipaws/ipaws_cmas.ppt).

<sup>2</sup>Exec. Order No. 13,407, 3 C.F.R. 236 (2007); see also FED. EMERGENCY MGMT. AGENCY, *supra* note 1 at 4.

<sup>3</sup>Exec. Order No. 13,407, 3 C.F.R. 236 (2007).

<sup>4</sup>FED. EMERGENCY MGMT. AGENCY, *supra* note 1 at 4.

<sup>5</sup>FED. EMERGENCY MGMT. AGENCY, THE INTEGRATED PUBLIC ALERT AND WARNING SYSTEM (IPAWS): IPAWS 101 at 6 (2015), available at <https://www.fema.gov/media-library/assets/documents/105498>.

<sup>6</sup>*Id.*

<sup>7</sup>*Id.* at 10.

<sup>8</sup>*Id.* at 32.

<sup>9</sup>GOV’T ACCOUNTABILITY OFFICE, GAO–13–375, EMERGENCY ALERTING: CAPABILITIES HAVE IMPROVED, BUT ADDITIONAL GUIDANCE AND TESTING ARE NEEDED 20 (2013).

<sup>10</sup>FED. EMERGENCY MGMT. AGENCY, STRATEGIC PLAN FOR THE INTEGRATED PUBLIC ALERT AND WARNING SYSTEM (IPAWS) PROGRAM 5–6 (2010).

<sup>11</sup>GOV’T ACCOUNTABILITY OFFICE, GAO–09–834, EMERGENCY PREPAREDNESS: IMPROVED PLANNING AND COORDINATION NECESSARY FOR MODERNIZATION AND INTEGRATION OF PUBLIC ALERT AND WARNING SYSTEM *passim* (2009).

<sup>12</sup>*Id.* at 16–17.

<sup>13</sup>*Id.* at 24–25.

. . .” and that FEMA faced challenges in developing multilingual alert and alerts that reached people with disabilities.<sup>14</sup>

In 2013, GAO reported that state and local officials needed more guidance from FEMA on how to integrate and test IPAWS capabilities with their existing alerting systems.<sup>15</sup> The absence of sufficient guidance made some states reluctant to fully implement IPAWS.<sup>16</sup> Since IPAWS was designed to be a nationwide system, low state participation “decreases the capability for an integrated, interoperable, and nationwide alerting system.”<sup>17</sup>

FEMA has since addressed some of the issues and recommendations raised in these reports.<sup>18</sup> Moreover, 49 out of 50 states are now actively pursuing integration with IPAWS.<sup>19</sup> This legislation will further this progress and help address many of the other problems stakeholders, Congress, and GAO previously identified, including helping to ensure sufficient training for emergency alerting officials, increasing collaboration at all levels of government, and ensuring Congress’s important role of oversight.

### III. LEGISLATIVE HISTORY

Legislation to authorize IPAWS has been introduced in both the U.S. House of Representatives and the U.S. Senate since the 110th Congress.<sup>20</sup> In the 114th Congress, Chairman Johnson and Senator McCaskill introduced S. 1180 on May 4, 2015, which was referred to the Committee on Homeland Security and Governmental Affairs. The Committee considered S. 1180 at a business meeting on May 6, 2015.

Senator Sasse offered one amendment, clarifying that no state or local jurisdiction is required to use IPAWS. The Committee adopted the amendment and ordered the bill, as amended, reported favorably, both by voice vote. Senators present for both votes were: Johnson, McCain, Portman, Lankford, Ernst, Sasse, Carper, McCaskill, Baldwin, Heitkamp, and Peters.

### IV. SECTION-BY-SECTION ANALYSIS OF THE ACT, AS REPORTED

#### *Section 1. Short title*

This section provides the bill’s short title, the “Integrated Public Alert and Warning System Modernization Act of 2015.”

#### *Section 2. Integrated Public Alert and Warning System Modernization*

Subsection (a) amends Title V of the Homeland Security Act of 2002 (6 U.S.C. 311 et seq.) by adding Sec. 526. Integrated Public Alert and Warning System Modernization. The subsection authorizes the Administrator of FEMA (“the Administrator”) to modernize and implement IPAWS to ensure that under all conditions, the President, Federal agencies, and state, tribal, and local govern-

<sup>14</sup> *Id.* at 24–26.

<sup>15</sup> GOV’T ACCOUNTABILITY OFFICE, EMERGENCY ALERTING, *supra* note 9, at *passim*.

<sup>16</sup> *Id.* at 15–16.

<sup>17</sup> *Id.*

<sup>18</sup> GOV’T ACCOUNTABILITY OFFICE, EMERGENCY PREPAREDNESS, *supra* note 11.

<sup>19</sup> Data Provided to Committee Staff by the Fed. Emergency Mgmt. Agency (May 20, 2015); *see also* Fed. Emergency Mgmt. Agency, IPAWS Public Alerting Authorities (May 1, 2015), <https://www.fema.gov/integrated-public-alert-warning-system-authorities>.

<sup>20</sup> S. 2664, 113th Congress (2014); S. 2319, 112th Congress (2012); H.R. 2591, 111th Congress (2009); H.R. 6038, 110th Congress (2008).

ments can alert and warn the civilian population in areas endangered by natural disasters, acts of terrorism, and other man-made disasters or threats to public safety.

The subsection includes implementation requirements, such as establishing or adopting common alerting and warning protocols; providing for technological and geographic adaptability; ensuring resiliency; including a capability for providing warnings and alerts in other formats to facilitate alerting the disabled and non-English speakers; incorporating IPAWS into existing systems and training and exercise programs; mandatory testing; educating the public about the functions of the system; and consulting and coordinating with stakeholders and regulators, taking into account current regulations and the WEA system. The subsection also establishes system requirements for IPAWS, to maximize reach of emergency alerts and the system's continued effectiveness as technologies evolve, while ensuring individuals' privacy. The subsection limits the use of IPAWS to notification of emergencies and disasters and testing.

In addition, subsection (a) provides for annual implementation and performance reports to Congress for a period of three years after enactment.

Subsection (b) establishes an IPAWS Subcommittee to the National Advisory Council led by FEMA's Deputy Administrator for Protection and National Preparedness and composed of representatives from Federal agencies and other stakeholders—including state and local governments, federally recognized Indian tribes, and the private sector—to develop recommendations for implementation of IPAWS. The subsection requires the Subcommittee to consult with other organizations on technologies that may be beneficial to IPAWS and to submit its recommendations to Congress and the Executive Branch via the National Advisory Council. The subsection also terminates the Subcommittee after three years.

Subsection (c) authorizes to be appropriated to carry out this Act and the amendments made by this Act such sums as may be necessary for each of fiscal years 2016, 2017, and 2018.

Subsection (d) provides various limits on statutory construction, including that this bill does not: affect the authority of the Department of Commerce or the Federal Communications Commission, or provide the Secretary of Homeland Security authority to require any action by the Department of Commerce, the Federal Communications Commission or any non-governmental entity; apply to, or provide the Administrator with authority over, participating commercial mobile service providers, as defined in the subsection, including with respect to testing the public alert and warning system; alter in any way the WEA system established under the Warning, Alert, and Response Network Act or any related orders issued by the Federal Communications Commission after Oct. 13, 2006; or provide FEMA with authority to require a state or local jurisdiction to use IPAWS.

## V. EVALUATION OF REGULATORY IMPACT

Pursuant to the requirements of paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee has considered the regulatory impact of this act and determined that the act will have no regulatory impact within the meaning of the rules. The

Committee agrees with the Congressional Budget Office’s statement that the act contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA) and would impose no costs on state, local, or tribal governments.

VI. CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

MAY 21, 2015.

Hon. RON JOHNSON,  
*Chairman, Committee on Homeland Security and Governmental Affairs, U.S. Senate, Washington, DC.*

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for S. 1180, the Integrated Public Alert and Warning System Modernization Act of 2015.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Martin von Gnechten.

Sincerely,

KEITH HALL.

Enclosure.

*S. 1180—Integrated Public Alert and Warning System Modernization Act of 2015*

Summary: S. 1180 would authorize activities to operate and modernize the Integrated Public Alert and Warning System (IPAWS) within the Department of Homeland Security (DHS) over the 2016–2018 period. The bill also would establish a committee to develop and submit recommendations for improving the system. CBO estimates that implementing S. 1180 would cost \$37 million over the next five years, assuming appropriation of the necessary amounts over the 2016–2018 period.

Enacting this legislation would not affect direct spending or revenues; therefore, pay-as-you-go procedures do not apply.

S. 1180 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA) and would not affect the budgets of state, local, or tribal governments.

Estimated cost to the Federal Government: The estimated budgetary effect of S. 1180 is shown in the following table. The cost of this legislation falls within budget function 450 (community and regional development).

	By fiscal year, in millions of dollars—					
	2016	2017	2018	2019	2020	2016–2020
CHANGES IN SPENDING SUBJECT TO APPROPRIATION						
Estimated Authorization Level .....	13	13	13	0	0	39
Estimated Outlays .....	4	8	11	8	5	37

Note: Details may not sum to totals because of rounding.

Basis of estimate: For this estimate, CBO assumes that the legislation will be enacted near the end of fiscal year 2015 and that the necessary amounts will be appropriated for each year during the three-year authorization period.

CBO estimates that implementing the legislation would cost about \$13 million annually over the 2016–2018 authorization pe-

riod for DHS to modernize and to continue to employ IPAWS. In recent years, \$12 million has been allocated annually for IPAWS, and recent annual budget requests have sought \$15 million or more to operate IPAWS. CBO estimates that continuing the current operation of IPAWS and implementing the additional requirements under the bill would cost \$13 million a year over the next three years.

IPAWS uses multiple technologies (for example, satellite radios, computers, and cellular phones) in addition to traditional radio and television communications to provide information about an impending or ongoing emergency situation. The bill specifies several performance criteria that IPAWS would be required to meet. DHS is currently pursuing several of those criteria under Executive Order 13407. In addition to codifying elements of the executive order, the bill specifies additional criteria for IPAWS, including training state and local governments and other stakeholders to use the system, conducting nationwide testing of the system every three years, and ensuring that IPAWS can withstand terrorist attacks.

The bill also would establish an advisory committee to develop recommendations to continue improving IPAWS and to submit a report to the Congress within one year of enactment. Under the bill, the committee would terminate three years after enactment.

Based on the rate of current spending by DHS for IPAWS work, CBO estimates that implementing the three-year authorization for IPAWS in S. 1180 would cost \$37 million over the 2016–2020 period, assuming appropriation of the necessary amounts.

Pay-As-You-Go considerations: None.

Intergovernmental and private-sector impact: S. 1180 contains no intergovernmental or private-sector mandates as defined in UMRA and would not affect the budgets of state, local, or tribal governments.

Previous CBO estimate: On April 27, 2015, CBO transmitted a cost estimate for H.R. 1472, the Integrated Public Alert and Warning System Modernization Act of 2015, as ordered reported by the House Committee on Transportation and Infrastructure on April 15, 2015. The two bills are similar. However, H.R. 1472 would specify the authorization of nearly \$13 million annually over the 2016–2018 period. S. 1180 would authorize the appropriation of such sums as may be necessary to carry out the legislation over the 2016–2018 period. Those differences do not affect the estimated costs of the bill.

Estimate prepared by: Federal costs: Martin von Gnechten; Impact on state, local, and tribal governments: Melissa Merrell; Impact on the private sector: Logan Smith.

Estimate approved by: H. Samuel Papenfuss, Deputy Assistant Director for Budget Analysis.

#### VII. CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by S. 1180 as reported are shown as follows (existing law proposed to be omitted is enclosed in brackets, new matter is printed in italic, and existing law in which no change is proposed is shown in roman):

## HOMELAND SECURITY ACT OF 2002

\* \* \* \* \*

### TITLE V—NATIONAL EMERGENCY MANAGEMENT

\* \* \* \* \*

#### SEC. 526. INTEGRATED PUBLIC ALERT AND WARNING SYSTEM MODERNIZATION.

(a) *IN GENERAL.*—To provide timely and effective warnings regarding natural disasters, acts of terrorism, and other man-made disasters or threats to public safety, the Administrator shall—

(1) modernize the integrated public alert and warning system of the United States (in this section referred to as the “public alert and warning system”) to help ensure that under all conditions the President and, except to the extent the public alert and warning system is in use by the President, Federal agencies and State, tribal, and local governments can alert and warn the civilian population in areas endangered by natural disasters, acts of terrorism, and other man-made disasters or threats to public safety; and

(2) implement the public alert and warning system to disseminate timely and effective warnings regarding natural disasters, acts of terrorism, and other man-made disasters or threats to public safety.

(b) *IMPLEMENTATION REQUIREMENTS.*—In carrying out subsection (a), the Administrator shall—

(1) establish or adopt, as appropriate, common alerting and warning protocols, standards, terminology, and operating procedures for the public alert and warning system;

(2) include in the public alert and warning system the capability to adapt the distribution and content of communications on the basis of geographic location, risks, and multiple communication systems and technologies, as appropriate and to the extent technically feasible;

(3) include in the public alert and warning system the capability to alert, warn, and provide equivalent information to individuals with disabilities, individuals with access and functional needs, and individuals with limited-English proficiency, to the extent technically feasible;

(4) ensure that training, tests, and exercises are conducted for the public alert and warning system, including by—

(A) incorporating the public alert and warning system into other training and exercise programs of the Department, as appropriate;

(B) establishing and integrating into the National Incident Management System a comprehensive and periodic training program to instruct and educate Federal, State, tribal, and local government officials in the use of the Common Alerting Protocol enabled Emergency Alert System; and

(C) conducting, not less than once every 3 years, periodic nationwide tests of the public alert and warning system;

(5) to the extent practicable, ensure that the public alert and warning system is resilient and secure and can withstand acts of terrorism and other external attacks;

(6) conduct public education efforts so that State, tribal, and local governments, private entities, and the people of the United States reasonably understand the functions of the public alert and warning system and how to access, use, and respond to information from the public alert and warning system through a general market awareness campaign;

(7) consult, coordinate, and cooperate with the appropriate private sector entities and Federal, State, tribal, and local governmental authorities, including the Regional Administrators and emergency response providers;

(8) consult and coordinate with the Federal Communications Commission, taking into account rules and regulations promulgated by the Federal Communications Commission; and

(9) coordinate with and consider the recommendations of the Integrated Public Alert and Warning System Subcommittee established under section 2(b) of the Integrated Public Alert and Warning System Modernization Act of 2015.

(c) **SYSTEM REQUIREMENTS.**—The public alert and warning system shall—

(1) to the extent determined appropriate by the Administrator, incorporate multiple communications technologies;

(2) be designed to adapt to, and incorporate, future technologies for communicating directly with the public;

(3) to the extent technically feasible, be designed—

(A) to provide alerts to the largest portion of the affected population feasible, including nonresident visitors and tourists, individuals with disabilities, individuals with access and functional needs, and individuals with limited-English proficiency; and

(B) to improve the ability of remote areas to receive alerts;

(4) promote local and regional public and private partnerships to enhance community preparedness and response;

(5) provide redundant alert mechanisms where practicable so as to reach the greatest number of people; and

(6) to the extent feasible, include a mechanism to ensure the protection of individual privacy.

(d) **USE OF SYSTEM.**—Except to the extent necessary for testing the public alert and warning system, the public alert and warning system shall not be used to transmit a message that does not relate to a natural disaster, act of terrorism, or other man-made disaster or threat to public safety.

(e) **PERFORMANCE REPORTS.**—

(1) **IN GENERAL.**—Not later than 1 year after the date of enactment of the Integrated Public Alert and Warning System Modernization Act of 2015, and annually thereafter through 2018, the Administrator shall make available on the public website of the Agency a performance report, which shall—

(A) establish performance goals for the implementation of the public alert and warning system by the Agency;

(B) describe the performance of the public alert and warning system, including—

(i) the type of technology used for alerts and warnings issued under the system;

(ii) the measures taken to alert, warn, and provide equivalent information to individuals with disabilities, individuals with access and function needs, and individuals with limited-English proficiency; and

(iii) the training, tests, and exercises performed and the outcomes obtained by the Agency;

(C) identify significant challenges to the effective operation of the public alert and warning system and any plans to address these challenges;

(D) identify other necessary improvements to the system; and

(E) provide an analysis comparing the performance of the public alert and warning system with the performance goals established under subparagraph (A).

(2) CONGRESS.—The Administrator shall submit to the Committee on Homeland Security and Governmental Affairs and the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Transportation and Infrastructure and the Committee on Homeland Security of the House of Representatives each report required under paragraph (1).

\* \* \* \* \*

