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Cybersecurity: Legislation, Hearings, and Executive Branch Documents

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Summary

Cybersecurity vulnerabilities challenge governments, businesses, and individuals worldwide. Attacks have been initiated against individuals, corporations, and countries. Targets have included government networks, companies, and political organizations, depending upon whether the attacker was seeking military intelligence, conducting diplomatic or industrial espionage, engaging in cybercrime, or intimidating political activists. In addition, national borders mean little or nothing to cyberattackers, and attributing an attack to a specific location can be difficult, which may make responding problematic.

Despite many recommendations made over the past decade, most major legislative provisions relating to cybersecurity had been enacted prior to 2002. However, on December 18, 2014, five cybersecurity bills were signed by the President. These bills change federal cybersecurity programs in a number of ways:

- codifying the role of the National Institute of Standards and Technology (NIST) in developing a “voluntary, industry-led set of standards” to reduce cyber risk;
- codifying the Department of Homeland Security’s (DHS’s) National Cybersecurity and Communications Integration Center as a hub for interactions with the private sector;
- updating the Federal Information Security Management Act (FISMA) by requiring the Office of Management and Budget (OMB) to “eliminate ... inefficient and wasteful reports”; and
- requiring DHS to develop a “comprehensive workforce strategy” within a year and giving DHS new authorities for cybersecurity hiring.

This report provides links to cybersecurity legislation in the 112th, 113th, and 114th Congresses. Congress has held cybersecurity hearings every year since 2001. This report also provides links to cybersecurity-related committee hearings in the 112th, 113th, and 114th Congresses.

In the 114th Congress, the House has passed eight bills:

- H.R. 1073, Critical Infrastructure Protection Act.
- H.R. 1560, Protecting Cyber Networks Act.
- H.R. 1731, National Cybersecurity Protection Advancement Act of 2015.
- H.R. 3490, Strengthening State and Local Cyber Crime Fighting Act.
- H.R. 3510, Department of Homeland Security Cybersecurity Strategy Act of 2015.
- H.R. 3869, State and Local Cyber Protection Act of 2015.
- H.R. 3878, Strengthening Cybersecurity Information Sharing and Coordination in Our Ports Act of 2015.
- H.R. 4743, National Cybersecurity Preparedness Consortium Act of 2016.

The Senate has passed 1 bill in the 114th Congress:

- S. 754, Cybersecurity Information Sharing Act of 2015.

On December 18, 2015, H.R. 2029 the Consolidated Appropriations Act, was signed into public law (P.L. 114-113). The omnibus law’s cybersecurity provisions are located in Division N (Cybersecurity Act of 2015), including Title I, Cybersecurity Information Sharing, Title II, National Cybersecurity Advancement, Title III, Federal Cybersecurity Workforce Assessment,

and Title IV, Other Cyber Matters. The measure represents a compromise between the House and Senate intelligence committees and the House Homeland Security Committee. It includes various components of three separate information sharing bills: H.R. 1560 and H.R. 1731, passed by the House earlier this year, and S. 754, passed by the Senate in October. The bill encourages private companies to voluntarily share information about cyber threats with each other as well as the government. Firms that participate in the information sharing will receive liability protection.

For a comparison of House and Senate information-sharing legislation and a discussion of selected legislative proposals in the 114th Congress, see the *Cybersecurity Issue Page* at <http://www.crs.gov>.

Executive orders authorize the President to manage federal government operations. Presidential directives pertain to all aspects of U.S. national security policy as authorized by the President. This report provides a list of executive orders and presidential directives pertaining to information and computer security.

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Legislation

Most major legislative provisions relating to cybersecurity had been enacted prior to 2002, despite many recommendations made over the past decade.

In the 112th Congress, the White House sent a comprehensive, seven-part legislative proposal (*White House Proposal*) to Congress on May 12, 2011.¹ Some elements of that proposal were included in both House and Senate bills. The House passed a series of bills that addressed a variety of issues—from toughening law enforcement of cybercrimes to giving the Department of Homeland Security (DHS) oversight of federal information technology and critical infrastructure security to lessening liability for private companies that adopt cybersecurity best practices. The Senate pursued a comprehensive cybersecurity bill (S. 3414) with several committees working to create a single vehicle for passage, backed by the White House, but the bill failed to overcome two cloture votes and did not pass. Despite the lack of enactment of cybersecurity legislation in the 112th Congress, there still appears to be considerable support in principle for significant legislation to address most of the issues.

In the 113th Congress, five cybersecurity bills were signed by the President on December 18, 2014:

- H.R. 2952, the Cybersecurity Workforce Assessment Act, which requires the DHS to develop a cyber-workforce strategy;
- S. 1353, the Cybersecurity Enhancement Act of 2014, which codifies the National Institute of Standards and Technology's (NIST's) role in cybersecurity;
- S. 1691, the Border Patrol Agent Pay Reform Act of 2014, which gives DHS new authorities for cybersecurity hiring;
- S. 2519, the National Cybersecurity Protection Act of 2014, which codifies DHS's cybersecurity center; and
- S. 2521, the Federal Information Security Modernization Act of 2014, which reforms federal IT security management.

The National Defense Authorization Act for Fiscal Year 2014 became P.L. 113-66 on December 26, 2013.

In February 2013, the White House issued an executive order designed to improve the cybersecurity of U.S. critical infrastructure.² Executive Order 13636 attempts to enhance the security and resiliency of critical infrastructure through voluntary, collaborative efforts involving federal agencies and owners and operators of privately owned critical infrastructure, as well as the use of existing federal regulatory authorities. Given the absence of comprehensive cybersecurity legislation, some security observers contend that E.O. 13636 is a necessary step in securing vital assets against cyberthreats. Others have expressed the view that the executive order could make enactment of a bill less likely or could lead to government intrusiveness into private-sector activities through increased regulation under existing statutory authority. For further discussion of the executive order, see CRS Report R42984, *The 2013 Cybersecurity Executive Order: Overview and Considerations for Congress*, by Eric A. Fischer et al.

¹ The White House, Complete Cybersecurity Proposal, 2011, <http://www.whitehouse.gov/sites/default/files/omb/legislative/letters/law-enforcement-provisions-related-to-computer-security-full-bill.pdf>.

² Executive Order 13636, "Improving Critical Infrastructure Cybersecurity," *Federal Register* 78, no. 33 (February 19, 2013): 11737–11744.

In February 2015, the White House issued Executive Order 13691,³ which, along with a legislative proposal, is aimed at enhancing information sharing in cybersecurity among private sector entities. It promotes the use of information sharing and analysis organizations (ISAOs), which were defined in the Homeland Security Act (6 U.S.C. §131(5)) as entities that gather, analyze, and share information on the security of critical infrastructure (CI)⁴ to assist in defense against and recovery from incidents. The White House initiatives would broaden the reach of ISAOs beyond CI to any affinity group. In that sense, they differ from the more familiar information sharing and analysis centers (ISACs), created in response to Presidential Decision Directive (PDD) 63 in 1998 specifically to address information-sharing needs in CI sectors.

Also in February 2015, the Obama Administration established, via presidential memorandum,⁵ the Cyber Threat Intelligence Integration Center (CTIIC) to be established by the Director of National Intelligence (DNI). Its purposes are to provide integrated analysis on foreign cybersecurity threats and incidents affecting national interests and to support relevant government entities, including the National Cybersecurity and Communications Integration Center (NCCIC) at the Department of Homeland Security (DHS), as well as others at the Department of Defense (DOD) and Department of Justice (DOJ).

More than 20 bills have been introduced in the 114th Congress that would address several issues, including data-breach notification, incidents involving other nation-states, information sharing, law enforcement and cybercrime, protection of critical infrastructure (CI), workforce development, and education. The Obama Administration has released proposals for three bills—on information sharing, data-breach notification, and revision of cybercrime laws. Several bills have received or are expected to receive committee or floor action.

On April 22, 2015, the House passed H.R. 1560, which will provide liability protection to companies that share cyber threat information with the government and other companies so long as personal information is removed before the sharing of such information. On April 23, 2015, the House passed H.R. 1731, which will encourage information sharing with the Department of Homeland Security by protecting entities from civil liabilities.

On October 27, 2015, the Senate passed S. 754, the Cybersecurity Information Sharing Act of 2015 (CISA), by a vote of 74-21 (Roll call vote 291). The House approved companion legislation in April, so the cybersecurity measure is now on track to reach President Obama's desk and be signed into law, once a conference report is negotiated. CISA attempts to open up communication channels between industry and federal agencies by offering legal immunity to companies that share data with the government. For more information on what is covered in the Senate bill, see CRS Legal Sidebar WSLG1429, *Senate Passes Cybersecurity Information Sharing Bill –What's Next?*, by Andrew Nolan.

On November 30, 2015, the House passed H.R. 3490, which would establish in the Department of Homeland Security a National Computer Forensics Institute to be operated by the U.S. Secret Service for the dissemination of homeland security information related to the investigation and

³ E.O. 13691, Encouraging Private-Sector Cybersecurity Collaboration, White House, February 12, 2015, at <http://www.whitehouse.gov/the-press-office/2015/02/12/fact-sheet-executive-order-promoting-private-sector-cybersecurity-inform>.

⁴ PDD-63, Critical Infrastructure Protection, White House, May 22, 1998, at <http://www.fas.org/irp/offdocs/pdd/pdd-63.htm>.

⁵ Presidential Memorandum—Establishment of the Cyber Threat Intelligence Integration Center. White House, February 25, 2015, at <http://www.whitehouse.gov/the-press-office/2015/02/25/presidential-memorandum-establishment-cyber-threat-intelligence-integrat>.

prevention of cyber and electronic crime. On December 10, 2015, the House passed H.R. 3869, State and Local Cyber Protection Act of 2015, which requires the Department of Homeland Security's (DHS's) national cybersecurity and communications integration center (NCCIC) to assist state and local governments with cybersecurity, and on December 16, 2015, the House passed H.R. 3878, Strengthening Cybersecurity Information Sharing and Coordination in Our Ports Act of 2015, which requires DHS to seek to enhance cybersecurity situational awareness and information sharing between and with maritime security stakeholders from federal, state, local, and tribal governments, public safety and emergency response agencies, law enforcement and security organizations, maritime industry participants, port owners and operators, and maritime terminal owners and operators.

On December 18, 2015, H.R. 2029 the Consolidated Appropriations Act, was signed into public law (P.L. 114-113). The omnibus law's cybersecurity provisions are located in Division N (Cybersecurity Act of 2015), including Title I, Cybersecurity Information Sharing, Title II, National Cybersecurity Advancement, Title III, Federal Cybersecurity Workforce Assessment, and Title IV, Other Cyber Matters. The measure represents a compromise between the House and Senate intelligence committees and the House Homeland Security Committee. It includes various components of three separate information sharing bills: H.R. 1560 and H.R. 1731, passed by the House earlier this year, and S. 754, passed by the Senate in October. The bill encourages private companies to voluntarily share information about cyber threats with each other as well as the government. Firms that participate in the information sharing will receive liability protection.

For a comparison of House and Senate information-sharing legislation in the 114th Congress, see CRS Report R44069, *Cybersecurity and Information Sharing: Comparison of H.R. 1560 (PCNA and NCPAA) and S. 754 (CISA)*, by Eric A. Fischer.

For a side-by-side comparison of cybersecurity and information legislation in the 114th Congress, see CRS Report R43996, *Cybersecurity and Information Sharing: Comparison of H.R. 1560 and H.R. 1731 as Passed by the House*, by Eric A. Fischer and Stephanie M. Logan.

CRS Reports and Other CRS Products: Legislation

- CRS Report R43831, *Cybersecurity Issues and Challenges: In Brief*, by Eric A. Fischer
- CRS Report R44069, *Cybersecurity and Information Sharing: Comparison of H.R. 1560 (PCNA and NCPAA) and S. 754 (CISA)*, by Eric A. Fischer
- CRS Report R43996, *Cybersecurity and Information Sharing: Comparison of H.R. 1560 and H.R. 1731 as Passed by the House*, by Eric A. Fischer and Stephanie M. Logan
- CRS Report R42114, *Federal Laws Relating to Cybersecurity: Overview of Major Issues, Current Laws, and Proposed Legislation*, by Eric A. Fischer
- CRS Report R43821, *Legislation to Facilitate Cybersecurity Information Sharing: Economic Analysis*, by N. Eric Weiss
- CRS Report R42474, *Selected Federal Data Security Breach Legislation*, by Kathleen Ann Ruane
- CRS Report R42475, *Data Security Breach Notification Laws*, by Gina Stevens
- CRS Legal Sidebar WSLG480, *Privacy and Civil Liberties Issues Raised by CISPA*, by Andrew Nolan

- CRS Legal Sidebar WSLG478, *House Intelligence Committee Marks Up Cybersecurity Bill CISPA*, by Richard M. Thompson II
- CRS Legal Sidebar CRS Legal Sidebar WSLG481, *CISPA, Private Actors, and the Fourth Amendment*, by Richard M. Thompson II
- CRS Legal Sidebar WSLG1429, *Senate Passes Cybersecurity Information Sharing Bill –What’s Next?*, by Andrew Nolan

Table I. 114th Congress Legislation: House

Bill No.	Title	Committee(s)	Date Introduced	Latest Major Action	Date
H.R. 451	Safe and Secure Federal Websites Act of 2015	Oversight and Government Reform	January 21, 2015	Reported (Amended) by the committee	January 6, 2016
H.R. 1073	Critical Infrastructure Protection Act (CIPA)	Homeland Security	February 25, 2015	Measure, as amended, passed in the House by voice vote, under suspension of the rules (two-thirds vote required).	November 16, 2015
H.R. 1560	Protecting Cyber Networks Act	Intelligence	March 24, 2015	Passed by House April 22, Roll Call Vote 170, Received in Senate	April 22, 2015
H.R. 1731	National Cybersecurity Protection Advancement Act	Homeland Security	April 14, 2015	Passed House, Roll Call Vote 173	April 23, 2015
H.R. 2029 ⁶	Consolidated Appropriations Act	Appropriations	April 24, 2015	Became P.L. 114-113	December 18, 2015
H.R. 2205	Data Security Act of 2015	Energy and Commerce; Financial Services	May 1, 2015	Ordered to be Reported (Amended) by the Yeas and Nays: 46 - 9	December 9, 2015
H.R. 3490	Strengthening State and Local Cyber Crime Fighting Act	Homeland Security and Judiciary	September 11, 2015	Passed House (Amended) by Voice Vote	November 30, 2015
H.R. 3510	Department of Homeland Security Cybersecurity Act of 2015	Homeland Security	September 17, 2015	Passed House by Voice Vote.	October 6, 2015
H.R. 3869	State and Local Cyber Protection Act of 2015	Homeland Security	November 2, 2015	Passed House	December 10, 2015

⁶ The omnibus law's cybersecurity provisions are located in Division N (Cybersecurity Act of 2015), including Title I, Cybersecurity Information Sharing, Title II, National Cybersecurity Advancement, Title III, Federal Cybersecurity Workforce Assessment, and Title IV, Other Cyber Matters. The measure represents a compromise between the House and Senate intelligence committees and the House Homeland Security Committee. It includes various components of three separate information sharing bills: H.R. 1560 and H.R. 1731, passed by the House earlier this year, and S. 754, passed by the Senate in October.

Bill No.	Title	Committee(s)	Date Introduced	Latest Major Action	Date
H.R. 3878	Strengthening Cybersecurity Information Sharing and Coordination in Our Ports Act of 2015	Homeland Security; Transportation and Infrastructure	November 2, 2015	Passed House by voice vote	December 16, 2015
H.R. 4743	National Cybersecurity Preparedness Consortium Act of 2016	House Homeland Security and Senate Homeland Security and Governmental Affairs	March 15, 2016	Passed House	May 16, 2016

Note: This list includes bills with committee action or a House vote.

Source: Compiled by the Congressional Research Service (CRS) from Congress.gov.

Table 2. 114th Congress Legislation: Senate

Bill No.	Title	Committee(s)	Date Introduced	Latest Major Action	Date
H.R. 2029 ⁷	Consolidated Appropriations Act	Appropriations	April 24, 2015	Became P.L. 114-113	December 18, 2015
S. 135	Secure Data Act of 2015	Commerce, Science, and Transportation	January 8, 2015	Referred to committee	January 8, 2015
S. 177	Data Security and Breach Notification Act of 2015	Commerce, Science, and Transportation	January 13, 2015	Referred to committee	January 13, 2015
S. 456	Cyber Threat Sharing Act of 2015	Homeland Security and Governmental Affairs	February 11, 2015	Referred to committee	February 11, 2015
S. 754	Cybersecurity Information Sharing Act of 2015	Intelligence	March 17, 2015	Passed Senate 74-21, Roll Call Vote 291	October 27, 2015
S. 1027	Cybersecurity Information Sharing Credit Act	Commerce, Science and Transportation	April 21, 2015	Referred to committee	April 21, 2015
S. 1241	Enhanced Grid Security Act of 2015	Energy and Natural Resources	May 7, 2015	Hearings held	June 9, 2015

Source: Compiled by CRS from Congress.gov.

⁷ The omnibus law's cybersecurity provisions are located in Division N (Cybersecurity Act of 2015), including Title I, Cybersecurity Information Sharing, Title II, National Cybersecurity Advancement, Title III, Federal Cybersecurity Workforce Assessment, and Title IV, Other Cyber Matters. The measure represents a compromise between the House and Senate intelligence committees and the House Homeland Security Committee. It includes various components of three separate information sharing bills: H.R. 1560 and H.R. 1731, passed by the House earlier this year, and S. 754, passed by the Senate in October.

Table 3 and **Table 4** provide lists of Senate and House legislation under consideration in the 113th Congress.

Table 3. 113th Congress, Major Legislation: Senate

Bill No.	Title	Committee(s)	Date Introduced	Latest Major Action	Date
S. 2588	Cybersecurity Information Sharing Act of 2014	Intelligence	July 10, 2014	Reported to Senate without written report	July 10, 2014
S. 2521	Federal Information Security Modernization Act of 2014	Homeland Security and Government Affairs	June 24, 2014	P.L. 113-283	December 18, 2014
S. 2519	National Cybersecurity and Communications Integration Center Act of 2014	Homeland Security and Governmental Affairs	June 24, 2014	P.L. 113-282	December 18, 2014
S. 2410	Carl Levin National Defense Authorization Act for Fiscal Year 2015	Armed Services	June 2, 2014	With written S.Rept. 113-176	June 2, 2014
S. 2354	DHS Cybersecurity Workforce Recruitment and Retention Act of 2014	Homeland Security and Government Affairs	May 20, 2014	With written S.Rept. 113-207	July 14, 2014
S. 1927	Data Security Act of 2014	Banking, Housing, and Urban Affairs	January 15, 2014	Subcommittee on National Security and International Trade and Finance hearings held	February 3, 2014
S. 1691	Border Patrol Agent Pay Reform Act of 2014	Senate Homeland Security and Governmental Affairs; House Oversight and Government Reform; House Homeland Security	November 13, 2013	P.L. 113-277	December 18, 2014
S. 1353	Cybersecurity Act of 2013	Commerce, Science, and Transportation	July 24, 2013	P.L. 113-274	December 18, 2014
S. 1197	National Defense Authorization for Fiscal Year 2014	Armed Services	June 20, 2013	P.L. 113-66	December 26, 2013

Source: Legislative Information System (LIS).

Table 4. 113th Congress, Major Legislation: House

Bill No.	Title	Committee(s)	Date Introduced	Latest Major Action	Date
H.R. 4435	National Defense Authorization Act for Fiscal Year 2015	Armed Services	April 9, 2014	Passed/agreed to in House, Roll no. 240	May 22, 2014
H.R. 3696	National Cybersecurity and Critical Infrastructure Protection Act	Homeland Security and House Science, Space, and Technology	December 11, 2013	Passed/agreed to in House, by voice vote	July 28, 2014
H.R. 3635	Safe and Secure Federal Websites Act of 2014	House Oversight and Government Reform; Senate Homeland Security and Governmental Affairs	December 3, 2013	Passed House by voice vote	July 28, 2014
H.R. 3304	National Defense Authorization Act for Fiscal Year 2014	House Armed Services; Senate Armed Services	October 22, 2013	P.L. 113-66	December 26, 2013
H.R. 3107	Homeland Security Cybersecurity Boots-on-the-Ground Act	Homeland Security	September 17, 2013	Passed/agreed to in House, Roll No. 457	July 28, 2014
H.R. 2952	Critical Infrastructure Research and Development Advancement Act of 2013	Homeland Security	August 1, 2013	P.L. 113-246	December 18, 2014
H.R. 1163	Federal Information Security Amendments Act of 2013	Oversight and Government Reform	March 14, 2013	Passed House. Referred to Senate Committee on Homeland Security and Governmental Affairs	April 17, 2013
H.R. 967	Advancing America's Networking and Information Technology Research and Development Act of 2013	Science, Space, and Technology	March 14, 2013	Passed House, Roll No. 108. Referred to the Senate Commerce, Science, and Transportation Committee	April 17, 2013
H.R. 756	Cybersecurity R&D [Research and Development]	Science, Space, and Technology	February 15, 2013	Passed House, Roll no. 107. Congressional Record text	April 16, 2013
H.R. 624	Cyber Intelligence Sharing and Protection Act (CISPA)	Permanent Select Committee on Intelligence	February 13, 2013	Passed House. Roll no. 117. Referred to Senate Select Committee on Intelligence	April 18, 2013

Source: LIS.

Table 5 and **Table 7** list major Senate and House legislation considered by the 112th Congress. The tables include bills with committee action, floor action, or significant legislative interest. **Table 6** provides *Congressional Record* links to Senate floor debate of S. 3414, the Cybersecurity Act of 2012. **Table 8** provides *Congressional Record* links to House floor debate of H.R. 3523, the Cyber Intelligence Sharing and Protection Act.

Table 5. 112th Congress, Major Legislation: Senate

Bill No.	Title	Committee(s)	Date Introduced
S. 3414	Cybersecurity Act of 2012	N/A (Placed on Senate Legislative Calendar under Read the First Time)	July 19, 2012
S. 3342	SECURE IT	N/A (Placed on Senate Legislative Calendar under General Orders. Calendar No. 438)	June 27, 2012
S. 3333	Data Security and Breach Notification Act of 2012	Commerce, Science, and Transportation	June 21, 2012
S. 2151	SECURE IT	Commerce, Science, and Transportation	March 1, 2012
S. 2105	Cybersecurity Act of 2012	Homeland Security and Governmental Affairs	February 14, 2012
S. 2102	Cybersecurity Information Sharing Act of 2012	Homeland Security and Governmental Affairs	February 13, 2012
S. 1535	Personal Data Protection and Breach Accountability Act of 2011	Judiciary	September 8, 2011
S. 1342	Grid Cyber Security Act	Energy and Natural Resources	July 11, 2011
S. 1151	Personal Data Privacy and Security Act of 2011	Judiciary	June 7, 2011
S. 413	Cybersecurity and Internet Freedom Act of 2011	Homeland Security and Governmental Affairs	February 17, 2011

Source: LIS.

Table 6. 112th Congress, Senate Floor Debate: S. 3414

Title	Date	Congressional Record Pages
Cybersecurity Act of 2012: Motion to Proceed	July 26, 2012	S5419-S5449
Cybersecurity Act of 2012: Motion to Proceed—Continued and Cloture Vote	July 26, 2012	S5450-S5467
Cybersecurity Act of 2012	July 31, 2012	S5694-S5705
Cybersecurity Act of 2012: Continued	July 31, 2012	S5705-S5724
Cybersecurity Act of 2012: Debate and Cloture Vote	August 2, 2012	S5907-S5919
Cybersecurity Act of 2012: Motion to Proceed	November 14, 2012	S6774-S6784

Source: *Congressional Record*, Government Publishing Office (GPO).

Table 7. 112th Congress, Major Legislation: House

Bill No.	Title	Committee(s)	Date Introduced
H.R. 4257	Federal Information Security Amendments Act of 2012	Oversight and Government Reform	March 26, 2012
H.R. 3834	Advancing America's Networking and Information Technology Research and Development Act of 2012	Science, Space, and Technology	January 27, 2012
H.R. 4263	SECURE IT Act of 2012 Strengthening and Enhancing Cybersecurity by Using Research, Education, Information, and Technology	Oversight and Government Reform; Judiciary; Armed Services; Intelligence (Permanent Select)	March 27, 2012
H.R. 3674	PRECISE Act of 2012	Homeland Security; Oversight and Government Reform; Science, Space, and Technology; Judiciary; Intelligence (Permanent Select)	December 15, 2011
H.R. 3523	Cyber Intelligence Sharing and Protection Act	Committee on Intelligence (Permanent Select)	November 30, 2011
H.R. 2096	Cybersecurity Enhancement Act of 2012	Science, Space, and Technology	June 2, 2011
H.R. 174	Homeland Security Cyber and Physical Infrastructure Protection Act of 2011	Technology; Education and the Workforce; Homeland Security	January 5, 2011
H.R. 76	Cybersecurity Education Enhancement Act of 2011	Homeland Security; House Oversight and Government Reform	January 5, 2011

Source: LIS.

Table 8. 112th Congress, House Floor Debate: H.R. 3523

Title	Date	Congressional Record Pages
Cyber Intelligence Sharing and Protection Act: Providing for Consideration of Motion to Suspend the Rules	April 26, 2012	H2147-2156
Cyber Intelligence Sharing and Protection Act: Consideration of the Bill	April 26, 2012	H2156-2186

Source: *Congressional Record* (GPO).

Hearings in the 114th Congress

The following tables list cybersecurity hearings in the 114th Congress. **Table 9** and **Table 10** contain identical content but are organized differently. **Table 11** lists House hearings arranged by date (most recent first), and **Table 12** lists House hearings arranged by committee. When viewed in HTML, the document titles are active links to the committee's website for that particular hearing.

Table 9. 114th Congress, Senate Hearings, by Date

Title	Date	Committee	Subcommittee
How the Internet of Things (IoT) Can Bring U.S. Transportation and Infrastructure into the 21st Century	June 28, 2016	Commerce, Science and Transportation	Surface Transportation and Merchant Marine Infrastructure, Safety, and Security
International Cybersecurity Strategy: Deterring Foreign Threats and Building Global Cyber Norms	May 25, 2016	Foreign Relations	East Asia, the Pacific, and International Cybersecurity Policy
Assessing the Security of Critical Infrastructure: Threat, Vulnerabilities, and Solutions	May 18, 2016	Homeland Security and Governmental Affairs	
Ransomware: Understanding the Threat and Exploring Solutions	May 18, 2016	Judiciary	
CLOSED: Cybersecurity and United States Cyber Command	April 19, 2016	Armed Services	
Cybersecurity and Protecting Taxpayer Information	April 12, 2016	Finance	
U.S. Cyber Command	April 5, 2016	Armed Services	
Data Brokers – Is Consumers’ Information Secure?	November 3, 2015	Judiciary	Privacy, Technology and the Law
Threats to the Homeland	October 8, 2015	Homeland Security and Governmental Affairs	
The Changing Landscape of U.S.-China Relations: What’s Next?	September 29, 2015	Foreign Relations	East Asia, The Pacific, and International Cybersecurity Policy
United States Cybersecurity Policy and Threats	September 29, 2015	Armed Services	
Intelligence Issues	September 24, 2015	Intelligence	
Protecting the Electric Grid from the Potential Threats of Solar Storms and Electromagnetic Pulse	July 22, 2015	Homeland Security and Governmental Affairs	

Title	Date	Committee	Subcommittee
Counterterrorism, Counterintelligence, and the Challenges of “Going Dark”	July 8, 2015	Intelligence	
Cyber Crime: Modernizing our Legal Framework for the Information Age	July 8, 2015	Judiciary	
Under Attack: Federal Cybersecurity and the OPM Data Breach	June 25, 2015	Homeland Security and Governmental Affairs	
OPM Information Technology Spending & Data Security	June 23, 2015	Appropriations	Financial Services and General Government
Hearing on Energy Accountability and Reform Legislation (including S. 1241, Enhanced Grid Security Act of 2015)	June 9, 2015	Energy and Natural Resources	
The IRS Data Breach: Steps to Protect Americans’ Personal Information	June 2, 2015	Homeland Security and Governmental Affairs	
Cybersecurity: Setting the Rules for Responsible Global Cyber Behavior	May 14, 2015	Foreign Relations	East Asia, The Pacific, And International Cybersecurity Policy
Military Cyber Programs and Posture	April 15, 2015	Armed Services	Emerging Threats and Capabilities
From Protection to Partnership: Funding the DHS role in Cybersecurity	April 15, 2015	Appropriations	Homeland Security
Examining the Evolving Cyber Insurance Marketplace	March 19, 2015	Commerce, Science and Transportation	Consumer Protection, Product Safety, Insurance and Data Security
U.S. Strategic Command, U.S. Transportation Command, and U.S. Cyber Command in review of the Defense Authorization Request for Fiscal Year 2016 and the Future Years Defense Program	March 19, 2015	Armed Services	
[CLOSED] Markup of the “Cybersecurity Information Sharing Act of 2015”	March 12, 2015	Intelligence	
The Connected World: Examining the Internet of Things	February 11, 2015	Commerce, Science & Transportation	

Title	Date	Committee	Subcommittee
Getting it Right on Data Breach and Notification Legislation in the 114 th Congress	February 5, 2015	Commerce, Science & Transportation	Consumer Protection, Product Safety, Insurance, and Data Security
Building a More Secure Cyber Future: Examining Private Sector Experience with the NIST Framework	February 4, 2015	Commerce, Science & Transportation	
Protecting America from Cyber Attacks: The Importance of Information Sharing	January 28, 2015	Homeland Security and Governmental Affairs	

Source: Compiled by CRS from Congress.gov.

Table 10. 114th Congress, Senate Hearings, by Committee

Committee	Subcommittee	Title	Date
Appropriations	Financial Services and General Government	OPM Information Technology Spending & Data Security	June 23, 2015
Appropriations	Homeland Security	From Protection to Partnership: Funding the DHS role in Cybersecurity	April 15, 2015
Armed Services		CLOSED: Cybersecurity and United States Cyber Command	April 19, 2016
Armed Services		U.S. Cyber Command	April 5, 2016
Armed Services		United States Cybersecurity Policy and Threats	September 30, 2015
Armed Services	Emerging Threats and Capabilities	Military Cyber Programs and Posture	April 15, 2015
Armed Services		U.S. Strategic Command, U.S. Transportation Command, and U.S. Cyber Command in review of the Defense Authorization Request for Fiscal Year 2016 and the Future Years Defense Program	March 19, 2015
Commerce, Science and Transportation	Surface Transportation and Merchant Marine Infrastructure, Safety, and Security	How the Internet of Things (IoT) Can Bring U.S. Transportation and Infrastructure into the 21st Century	June 28, 2016
Commerce, Science and Transportation	Consumer Protection, Product Safety, Insurance and Data Security	Examining the Evolving Cyber Insurance Marketplace	March 19, 2015
Commerce, Science & Transportation		The Connected World: Examining the Internet of Things	February 11, 2015
Commerce, Science & Transportation		Getting it Right on Data Breach and Notification Legislation in the 114 th Congress	February 5, 2015
Commerce, Science & Transportation		Building a More Secure Cyber Future: Examining Private Sector Experience with the NIST Framework	February 4, 2015

Committee	Subcommittee	Title	Date
Energy and Natural Resources		Hearing on Energy Accountability and Reform Legislation (including S. 1241, Enhanced Grid Security Act of 2015)	June 9, 2015
Financial Services		A Global Perspective on Cyber Threats	June 16, 2015
Finance		Cybersecurity and Protecting Taxpayer Information	April 12, 2016
Foreign Relations	East Asia, The Pacific, And International Cybersecurity Policy	The Changing Landscape of U.S.-China Relations: What's Next?	September 29, 2015
Foreign Relations	East Asia, The Pacific, And International Cybersecurity Policy	Cybersecurity: Setting the Rules for Responsible Global Cyber Behavior	May 14, 2015
Homeland Security and Governmental Affairs		Assessing the Security of Critical Infrastructure: Threat, Vulnerabilities, and Solutions	May 18, 2016
Homeland Security and Governmental Affairs		Threats to the Homeland	October 8, 2015
Homeland Security and Governmental Affairs		Protecting the Electric Grid from the Potential Threats of Solar Storms and Electromagnetic Pulse	July 22, 2015
Homeland Security and Governmental Affairs		Under Attack: Federal Cybersecurity and the OPM Data Breach	June 25, 2015
Homeland Security and Governmental Affairs		The IRS Data Breach: Steps to Protect Americans' Personal Information	June 2, 2015
Homeland Security and Governmental Affairs		Protecting America from Cyber Attacks: The Importance of Information Sharing	January 28, 2015
Intelligence		Intelligence Issues	September 24, 2015
Intelligence		Counterterrorism, Counterintelligence, and the Challenges of "Going Dark"	July 8, 2015
Intelligence		[CLOSED] Markup of the "Cybersecurity Information Sharing Act of 2015"	March 12, 2015

Committee	Subcommittee	Title	Date
Judiciary		Ransomware: Understanding the Threat and Exploring Solutions	May 18, 2016
Judiciary		Data Brokers – Is Consumers’ Information Secure?	November 3, 2015
Judiciary		Cyber Crime: Modernizing our Legal Framework for the Information Age	July 8, 2015

Source: Compiled by CRS from Congress.gov.

Table II. 114th Congress, House Hearings, by Date

Title	Date	Committee	Subcommittee
Foreign Cyber Threats: Small Business, Big Target	July 7, 2016	Small Business	
Military Cyber Operations	June 22, 2016	Armed Services	
Federal Efforts to Improve Cybersecurity (Field Hearing: Chicago)	June 20, 2016	Oversight and Government Reform	Information Technology
Oversight of the Cybersecurity Act of 2015	June 15, 2016	Homeland Security	Cybersecurity, Infrastructure Protection and Security Technologies
Examining Cybersecurity Responsibilities at HHS	May 25, 2016	Energy and Commerce	
Enhancing Preparedness and Response Capabilities to Address Cyber Threats	May 24, 2016	Homeland Security	Emergency Preparedness, Response and Communications AND Cybersecurity, Infrastructure Protection and Security Technologies
FDIC Data Breaches: Can Americans Trust that Their Private Banking Information Is Secure?	May 12, 2016	Science, Space & Technology	Oversight
Federal Cybersecurity Detection, Response, and Mitigation	April 20, 2016	Oversight and Government Reform	Information Technology
Small Business and the Federal Government: How Cyber-Attacks Threaten Both	April 20, 2016	Small Business	
Hearing on Tax Return Filing Season (focusing on efforts to protect Americans from identity theft related tax fraud and cybersecurity attacks)	April 19, 2016	Ways and Means	Oversight
Blackout! Are We Prepared to Manage the Aftermath of a Cyber-Attack or Other Failure of the Electrical Grid?	April 14, 2016	Transportation and Infrastructure	Economic Development, Public Buildings and Emergency Management
Can the IRS Protect Taxpayers' Personal Information?	April 14, 2016	Science, Space and Technology	Research and Technology

Title	Date	Committee	Subcommittee
Cyber Preparedness and Response at the Local Level (Field Hearing)	April 7, 2016	Homeland Security	Cybersecurity, Infrastructure Protection and Security Technologies
Fiscal Year 2017 Information Technology and Cyber Programs: Foundations for a Secure Warfighting Network	March 23, 2016	Armed Services	Emerging Threats and Capabilities
The Role of Cyber Insurance in Risk Management	March 22, 2016	Homeland Security	Cybersecurity, Infrastructure Protection and Security Technologies
VA Cybersecurity and IT Oversight	March 16, 2016	Oversight and Government Reform	Information Technology
Fiscal 2017 Budget Request for the Department of Homeland Security and Readiness	March 16, 2016	Homeland Security	
Fiscal Year 2017 Budget Request for U.S. Cyber Command: Preparing for Operations in the Cyber Domain	March 16, 2016	Armed Services	Emerging Threats and Capabilities
FY 2017 Budget Hearing - Office of Personnel Management	March 14, 2016	Appropriations	Financial Services and General Government
Emerging Cyber Threats to the United States	February 25, 2016	Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies
U.S. Department of Education: Investigation of the CIO	February 2, 2016	Oversight and Government Reform	
Wassenaar: Cybersecurity and Export Control	January 12, 2016	Oversight and Government Reform	Information Technology
Cyber Security: What the Federal Government Can Learn from the Private Sector	January 8, 2016	Science, Space & Technology	Research and Technology
Document Production Status Update (OPM data breaches)	January 7, 2016	Oversight and Government Reform	
The Internet of Cars	November 18, 2015	Oversight and Government Reform	Transportation and Public Assets
U.S. Department of Education: Information Security Review	November 17, 2015	Oversight and Government Reform	

Title	Date	Committee	Subcommittee
Markup of pending legislation (including cybersecurity bills)	November 4, 2015	Homeland Security	
Cybersecurity for Power Systems	October 21, 2015	Science, Space and Technology	Energy Subcommittee and Research and Technology Subcommittee
Protecting Maritime Facilities in the 21st Century: Are Our Nation's Ports at Risk for a Cyber-Attack?	October 8, 2015	Homeland Security	
The EMV Deadline and What it Means for Small Business	October 7, 2015	Small Business	
Examining the Mission, Structure, and Reorganization Effort of the National Protection and Programs Directorate	October 7, 2015	Homeland Security	Cybersecurity, Infrastructure Protection, and Security
Implementing the Department of Defense Cyber Strategy	September 30, 2015	Armed Services	
The State of the Cloud	September 22, 2015	Oversight and Government Reform	Information Technology (field hearing University of Texas-San Antonio)
Markup: H.R. 3490, H.R. 3493, H.R. 3510, & Committee Print	September 17, 2015	Homeland Security	Cybersecurity, Infrastructure Protection and Security Technologies
Examining Vulnerabilities of America's Power Supply	September 10, 2015	Science, Space & Technology	Oversight/Energy
World Wide Cyber Threats	September 10, 2015	Intelligence	
Internet of Things	July 29, 2015	Judiciary	
Promoting and Incentivizing Cybersecurity Best Practices	July 28, 2015	Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies
Cybersecurity: The Department of the Interior	July 15, 2015	Oversight and Government Reform	Information Technology AND Subcommittee on Interior (Joint hearing)
Is the OPM [Office of Personnel Management] Data Breach the Tip of the Iceberg?	July 8, 2015	Science, Space and Technology	Research and Technology

Title	Date	Committee	Subcommittee
DHS' Efforts to Secure.Gov	June 24, 2015	Homeland Security	Cybersecurity, Infrastructure Protection and Security Technology
OPM Data Breach: Part II	June 24, 2015	Oversight and Government Reform	
Evaluating the Security of the U.S. Financial Sector (Task Force to Investigate Terrorism Financing)	June 24, 2015	Financial Services	
OPM Data Security Review	June 23, 2015	Appropriations	Financial Services and General Government
OPM: Data Breach	June 16, 2015	Oversight and Government Reform	
A Global Perspective on Cyber Threats	June 16, 2015	Financial Services	
Protecting Critical Infrastructure: How the Financial Sector Addresses Cyber Threats	May 19, 2015	Financial Services	Financial Institutions and Consumer Credit
Protecting Consumers: Financial Data Security in the Age of Computer Hackers	May 14, 2015	Financial Services	
Enhancing Cybersecurity of Third-Party Contractors and Vendors	April 22, 2015	Oversight and Government Reform	
Small Business, Big Threat: Protecting Small Businesses from Cyber Attacks	April 22, 2015	Small Business	
Full committee meets to formulate a rule on H.R. 1560, the "Protecting Cyber Networks Act"; and H.R. 1731, the "National Cybersecurity Protection Advancement Act of 2015"	April 21, 2015	Rules	
[CLOSED] Special Activities	April 15, 2015	Intelligence	National Security Agency and Cybersecurity
Markup: H.R. 1731, the National Cybersecurity Protection Advancement Act of 2015	April 14, 2015	Homeland Security	
Markup of H.R. 1770, The Data Security and Breach Notification Act of 2015	April 14, 2015	Energy and Commerce	

Title	Date	Committee	Subcommittee
[CLOSED] Markup of “Protecting Cyber Networks Act”	March 26, 2015	Intelligence	
The Internet of Things: Exploring the Next Technology Frontier	March 24, 2015	Energy and Commerce	Commerce, Manufacturing and Trade
[MARKUP] H.R. 1704, Data Security and Breach Notification Act of 2015	March 24, 2015	Energy and Commerce	
The Growing Cyber Threat and its Impact on American Business	March 19, 2015	Intelligence	
Discussion Draft of H.R. 1704, Data Security and Breach Notification Act of 2015	March 18, 2015	Energy and Commerce	Commerce, Manufacturing, and Trade
Cybersecurity: The Evolving Nature of Cyber Threats Facing the Private Sector	March 18, 2015	Oversight and Government Reform	Information Technology
Industry Perspectives on the President’s Cybersecurity Information Sharing Proposal	March 4, 2015	Homeland Security	Cybersecurity, Infrastructure Protection and Security Technologies
Cyber Operations: Improving the Military Cyber Security Posture in an Uncertain Threat Environment.	March 4, 2015	Armed Services	Emerging Threats and Capabilities
Understanding the Cyber Threat and Implications for the 21 st Century Economy	March 3, 2015	Energy and Commerce	Oversight and Investigations
Examining the President’s Cybersecurity Information Sharing Proposal	February 25, 2015	Homeland Security	
Emerging Threats and Technologies to Protect the Homeland	February 12, 2015	Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies
The Expanding Cyber Threat	January 27, 2015	Science, Space & Technology	Research and Technology
What are the Elements of Sound Data Breach Legislation?	January 27, 2015	Energy and Commerce	
Briefing: The North Korean Threat: Nuclear, Missiles and Cyber	January 13, 2015	Foreign Affairs	

Source: Compiled by CRS from Congress.gov.

Table 12. 114th Congress, House Hearings, by Committee

Committee	Subcommittee	Title	Date
Appropriations	Financial Services and General Government	FY 2017 Budget Hearing - Office of Personnel Management	March 14, 2016
Armed Services		Military Cyber Operations	June 22, 2016
Armed Services	Emerging Threats and Capabilities	Fiscal Year 2017 Information Technology and Cyber Programs: Foundations for a Secure Warfighting Network	March 23, 2016
Armed Services	Emerging Threats and Capabilities	Fiscal Year 2017 Budget Request for U.S. Cyber Command: Preparing for Operations in the Cyber Domain	March 16, 2016
Armed Services		Implementing the Department of Defense Cyber Strategy	September 30, 2015
Armed Services	Emerging Threats and Capabilities	Cyber Operations: Improving the Military Cyber Security Posture in an Uncertain Threat Environment	March 4, 2015
Energy and Commerce		Examining Cybersecurity Responsibilities at HHS	May 25, 2016
Energy and Commerce		Markup of H.R. 1770, The Data Security and Breach Notification Act of 2015	April 14, 2015
Energy and Commerce	Commerce, Manufacturing, and Trade	The Internet of Things: Exploring the Next Technology Frontier	March 24, 2015
Energy and Commerce		[MARKUP] H.R. 1704, Data Security and Breach Notification Act of 2015	March 24, 2015
Energy and Commerce	Commerce, Manufacturing, and Trade	Discussion Draft of H.R. 1704, Data Security and Breach Notification Act	March 18, 2015
Energy and Commerce	Oversight and Investigations	Understanding the Cyber Threat and Implications for the 21 st Century Economy	March 3, 2015
Energy and Commerce		What are the Elements of Sound Data Breach Legislation?	January 27, 2015

Committee	Subcommittee	Title	Date
Financial Services		Evaluating the Security of the U.S. Financial Sector (Task Force to Investigate Terrorism Financing)	June 24, 2015
Financial Services	Financial Institutions and Consumer Credit	Protecting Critical Infrastructure: How the Financial Sector Addresses Cyber Threats	May 19, 2015
Financial Services		Protecting Consumers: Financial Data Security in the Age of Computer Hackers	May 14, 2015
Foreign Affairs		Briefing: The North Korean Threat: Nuclear, Missiles and Cyber	January 13, 2015
Homeland Security	Cybersecurity, Infrastructure Protection and Security Technologies	Oversight of the Cybersecurity Act of 2015	June 15, 2016
Homeland Security	Cybersecurity, Infrastructure Protection and Security Technologies	Enhancing Preparedness and Response Capabilities to Address Cyber Threats	May 24, 2016
Homeland Security	Cybersecurity, Infrastructure Protection and Security Technologies	Cyber Preparedness and Response at the Local Level (Field Hearing)	April 7, 2016
Homeland Security	Cybersecurity, Infrastructure Protection and Security Technologies	The Role of Cyber Insurance in Risk Management	March 22, 2016
Homeland Security		Fiscal 2017 Budget Request for the Department of Homeland Security and Readiness	March 16, 2016
Homeland Security	Cybersecurity, Infrastructure Protection and Security Technologies	Emerging Cyber Threats to the United States	February 25, 2016
Homeland Security		Markup of pending legislation (including cybersecurity bills)	November 4, 2015
Homeland Security		Protecting Maritime Facilities in the 21st Century: Are Our Nation's Ports at Risk for a Cyber-Attack?	October 8, 2015

Committee	Subcommittee	Title	Date
Homeland Security	Cybersecurity, Infrastructure Protection and Security Technologies	Examining the Mission, Structure, and Reorganization Effort of the National Protection and Programs Directorate	October 7, 2015
Homeland Security	Cybersecurity, Infrastructure Protection and Security Technologies	Markup: H.R. 3490, H.R. 3493, H.R. 3510, & Committee	September 17, 2015
Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies	Promoting and Incentivizing Cybersecurity Best Practices	July 28, 2015
Homeland Security	Cybersecurity, Infrastructure Protection and Security Technologies	Oversight and Government Reform	June 24, 2015
Homeland Security		Markup: H.R. 1731, the National Cybersecurity Protection Advancement Act of 2015	April 14, 2015
Homeland Security	Cybersecurity, Infrastructure Protection and Security Technologies	Industry Perspectives on the President's Cybersecurity Information Sharing Proposal	March 4, 2015
Homeland Security		Examining the President's Cybersecurity Information Sharing Proposal	February 25, 2015
Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies	Emerging Threats and Technologies to Protect the Homeland	February 12, 2015
Intelligence		World Wide Cyber Threats	September 10, 2015
Intelligence	National Security Agency and Cybersecurity	[CLOSED] Special Activities	April 15, 2015
Intelligence		[CLOSED] Markup of "Protecting Cyber Networks Act"	March 26, 2015
Intelligence		The Growing Cyber Threat and its Impact on American Business	March 19, 2015
Judiciary		Internet of Things	July 29, 2015
Oversight and Government Reform	Information Technology	Federal Efforts to Improve Cybersecurity (Field Hearing: Chicago)	June 20, 2016

Committee	Subcommittee	Title	Date
Oversight and Government Reform	Information Technology	Federal Cybersecurity Detection, Response, and Mitigation	April 20, 2016
Oversight and Government Reform	Information Technology	VA Cybersecurity and IT Oversight	March 16, 2016
Oversight and Government Reform		U.S. Department of Education: Investigation of the CIO	February 2, 2016
Oversight and Government Reform	Information Technology	Wassenaar: Cybersecurity and Export Control	January 12, 2016
Oversight and Government Reform		Document Production Status (OPM data breaches)	January 7, 2016
Oversight and Government Reform	Transportation and Public Assets	The Internet of Cars	November 18, 2015
Oversight and Government Reform		U.S. Department of Education: Information Security Review	November 17, 2015
Oversight and Government Reform	Information Technology (field hearing University of Texas-San Antonio)	The State of the Cloud	September 22, 2015
Oversight and Government Reform	Information Technology AND Subcommittee on Interior (joint hearing)	Cybersecurity: The Department of the Interior	July 15, 2015
Oversight and Government Reform		OPM Data Breach: Part II	June 24, 2015
Oversight and Government Reform		OPM: Data Breach	June 16, 2015
Oversight and Government Reform		Enhancing Cybersecurity of Third-Party Contractors and Vendors	April 22, 2015
Oversight and Government Reform	Information Technology	Cybersecurity: The Evolving Nature of Cyber Threats Facing the Private Sector	March 18, 2015
Rules		Full committee meets to formulate a rule on H.R. 1560, the “Protecting Cyber Networks Act”; and H.R. 1731, the “National Cybersecurity Protection Advancement Act of 2015”	April 21, 2015
Examining Vulnerabilities of America’s Power Supply		Examining Vulnerabilities of America’s Power Supply	September 10, 2015

Committee	Subcommittee	Title	Date
Science, Space & Technology	Oversight	FDIC Data Breaches: Can Americans Trust that Their Private Banking Information Is Secure?	May 12, 2016
Science, Space & Technology	Research and Technology	Can the IRS Protect Taxpayers' Personal Information?	April 14, 2016
Science, Space & Technology	Research and Technology	Cyber Security: What the Federal Government Can Learn from the Private Sector	January 8, 2016
Science, Space & Technology	Research and Technology Subcommittee and Energy Subcommittee	Cybersecurity for Power Systems	October 21, 2015
Science, Space & Technology	Research and Technology	The Expanding Cyber Threat	January 27, 2015
Small Business		Foreign Cyber Threats: Small Business, Big Target	July 7, 2016
Small Business		Small Business and the Federal Government: How Cyber-Attacks Threaten Both	April 19, 2016
Small Business		The EMV Deadline and What it Means for Small Business	October 7, 2015
Small Business		Small Business, Big Threat: Protecting Small Businesses from Cyber Attacks	April 22, 2015
Transportation and Infrastructure	Economic Development, Public Buildings and Emergency Management	Blackout! Are We Prepared to Manage the Aftermath of a Cyber-Attack or Other Failure of the Electrical Grid?	April 14, 2016
Ways and Means	Oversight	Hearing on Tax Return Filing Season (focusing on efforts to protect Americans from identity theft related tax fraud and cybersecurity attacks)	April 19, 2016

Source: Compiled by CRS from Congress.gov.

Table 13. 114th Congress, Other Hearings

Committee	Subcommittee	Title	Date
U.S.-China Economic and Security Review Commission		Commercial Cyber Espionage and Barriers to Digital Trade in China	June 15, 2015

Source: Compiled by CRS.

Hearings in the 113th Congress

The following tables list cybersecurity hearings in the 113th Congress. **Table 14** and **Table 15** contain identical content but are organized differently. **Table 14** lists House hearings arranged by date (most recent first), and **Table 15** lists House hearings arranged by committee. When viewed in HTML, the document titles are active links to the committee's website for that particular hearing.

Table 14. 113th Congress, House Hearings, by Date

Title	Date	Committee	Subcommittee
How Data Mining Threatens Student Privacy	June 25, 2014	Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies
Assessing Persistent and Emerging Cyber Threats to the U.S. Homeland	May 21, 2014	Homeland Security	Counterterrorism and Intelligence
Electromagnetic Pulse (EMP): Threat to Critical Infrastructure	May 8, 2014	Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies
Protecting Your Personal Data: How Law Enforcement Works With the Private Sector to Prevent Cybercrime	April 16, 2014	Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies (Field Hearing)
Information Technology and Cyber Operations: Modernization and Policy Issues in a Changing National Security Environment	March 12, 2014	Armed Services	Intelligence, Emerging Threats, and Capabilities
International Cybercrime Protection	March 6, 2014	Science, Space, and Technology	Financial Institutions and Consumer Credit
Data Security: Examining Efforts to Protect Americans' Financial Information	March 5, 2014	Financial Services	
Protecting Consumer Information: Can Data Breaches Be Prevented?	February 5, 2014	Energy and Commerce	Commerce, Manufacturing, and Trade
A Roadmap for Hackers? - Documents Detailing HealthCare.gov Security Vulnerabilities	January 28, 2014	Oversight and Government Reform	
HealthCare.gov: Consequences of Stolen Identity	January 19, 2014	Science, Space, and Technology	
HHS' Own Security Concerns About HealthCare.gov	January 16, 2014	Oversight and Government Reform	
Is My Data on Healthcare.gov Secure?	November 19, 2013	Science, Space, and Technology	
Security of Healthcare.gov	November 19, 2013	Energy and Commerce	
Cyber Side-Effects: How Secure is the Personal Information Entered into the Flawed Healthcare.gov?	November 13, 2013	Homeland Security	
Cyber Incident Response: Bridging the Gap Between Cybersecurity and Emergency Management	October 30, 2013	Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies

Title	Date	Committee	Subcommittee
Cybersecurity: 21 st Century Threats, Challenges, and Opportunities	October 23, 2013	Permanent Select Committee on Intelligence	
A Look into the Security and Reliability of the Health Exchange Data Hub	September 11, 2013	Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies
Asia: The Cyber Security Battleground	July 23, 2013	Foreign Affairs	Asia and the Pacific
Oversight of Executive Order 13636 and Development of the Cybersecurity Framework	July 18, 2013	Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies
Reporting Data Breaches: Is Federal Legislation Needed to Protect Consumers?	July 18, 2013	Energy and Commerce	Commerce, Manufacturing, and Trade
Evaluating Privacy, Security, and Fraud Concerns with ObamaCare's Information Sharing Apparatus	July 17, 2013	(Joint Hearing) Homeland Security and Oversight and Government Reform	
Cyber Espionage and the Theft of U.S. Intellectual Property and Technology	July 9, 2013	Energy and Commerce	Oversight and Investigation
Cyber Threats and Security Solutions	May 21, 2013	Energy and Commerce	
Cybersecurity: An Examination of the Communications Supply Chain	May 21, 2013	Energy and Commerce	Communications and Technology
Facilitating Cyber Threat Information Sharing and Partnering with the Private Sector to Protect Critical Infrastructure: An Assessment of DHS Capabilities	May 16, 2013	Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies
Striking the Right Balance: Protecting Our Nation's Critical Infrastructure from Cyber Attack and Ensuring Privacy and Civil Liberties	April 25, 2013	Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies
Cyber Attacks: An Unprecedented Threat to U.S. National Security	March 21, 2013	Foreign Affairs	Europe, Eurasia, and Emerging Threats
Protecting Small Business from Cyber-Attacks	March 21, 2013	Small Business	Healthcare and Technology
Cybersecurity and Critical Infrastructure [CLOSED hearing]	March 20, 2013	Appropriations	
Cyber Threats from China, Russia and Iran: Protecting American Critical Infrastructure	March 20, 2013	Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies

Title	Date	Committee	Subcommittee
DHS Cybersecurity: Roles and Responsibilities to Protect the Nation's Critical Infrastructure	March 13, 2013	Homeland Security	
Investigating and Prosecuting 21 st Century Cyber Threats	March 13, 2013	Judiciary	Crime, Terrorism, Homeland Security and Investigations
Information Technology and Cyber Operations: Modernization and Policy Issues to Support the Future Force	March 13, 2013	Armed Services	Intelligence, Emerging Threats, and Capabilities
Cyber R&D Challenges and Solutions	February 26, 2013	Science, Space, and Technology	Technology
Advanced Cyber Threats Facing Our Nation	February 14, 2013	Select Committee on Intelligence	

Source: Compiled by CRS.

Table 15. 113th Congress, House Hearings, by Committee

Committee	Subcommittee	Title	Date
Appropriations		Cybersecurity and Critical Infrastructure [CLOSED hearing]	March 20, 2013
Armed Services	Intelligence, Emerging Threats, and Capabilities	Information Technology and Cyber Operations: Modernization and Policy Issues in a Changing National Security Environment	March 12, 2014
Armed Services	Intelligence, Emerging Threats, and Capabilities	Information Technology and Cyber Operations: Modernization and Policy Issues to Support the Future Force	March 13, 2013
Energy and Commerce	Commerce, Manufacturing, and Trade	Protecting Consumer Information: Can Data Breaches Be Prevented?	February 5, 2014
Energy and Commerce		Security of Healthcare.gov	November 19, 2013
Energy and Commerce	Commerce, Manufacturing, and Trade	Reporting Data Breaches: Is Federal Legislation Needed to Protect Consumers?	July 18, 2013
Energy and Commerce	Oversight and Investigation	Cyber Espionage and the Theft of U.S. Intellectual Property and Technology	July 9, 2013
Energy and Commerce		Cyber Threats and Security Solutions	May 21, 2013

Committee	Subcommittee	Title	Date
Energy and Commerce	Communications and Technology	Cybersecurity: An Examination of the Communications Supply Chain	May 21, 2013
Financial Services	Financial Institutions and Consumer Credit	Data Security: Examining Efforts to Protect Americans' Financial Information	March 5, 2014
Foreign Affairs	Asia and the Pacific	Asia: The Cyber Security Battleground	July 23, 2013
Foreign Affairs	Europe, Eurasia, and Emerging Threats	Cyber Attacks: An Unprecedented Threat to U.S. National Security	March 21, 2013
Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies	How Data Mining Threatens Student Privacy	June 25, 2014
Homeland Security	Counterterrorism and Intelligence	Assessing Persistent and Emerging Cyber Threats to the U.S. Homeland	May 21, 2014
Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies	Electromagnetic Pulse (EMP): Threat to Critical Infrastructure	May 8, 2014
Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies (Field Hearing)	Protecting Your Personal Data: How Law Enforcement Works With the Private Sector to Prevent Cybercrime	April 16, 2014
Homeland Security		Cyber Side-Effects: How Secure is the Personal Information Entered into the Flawed Healthcare.gov?	November 13, 2013
Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies	Cyber Incident Response: Bridging the Gap Between Cybersecurity and Emergency Management	October 30, 2013
Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies	A Look into the Security and Reliability of the Health Exchange Data Hub	September 11, 2013
Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies	Oversight of Executive Order 13636 and Development of the Cybersecurity Framework	July 18, 2013
Homeland Security (Joint Hearing with Oversight and Government Reform)	Cybersecurity, Infrastructure Protection, and Security Technologies, and Energy Policy, Health Care, and Entitlements (Joint Hearing)	Facilitating Cyber Threat Information Sharing and Partnering with the Private Sector to Protect Critical Infrastructure: An Assessment of DHS Capabilities	May 16, 2013

Committee	Subcommittee	Title	Date
Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies	Striking the Right Balance: Protecting Our Nation's Critical Infrastructure from Cyber Attack and Ensuring Privacy and Civil Liberties	April 25, 2013
Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies	Cyber Threats from China, Russia and Iran: Protecting American Critical Infrastructure	March 20, 2013
Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies	DHS Cybersecurity: Roles and Responsibilities to Protect the Nation's Critical Infrastructure	March 13, 2013
Judiciary	Crime, Terrorism, Homeland Security, and Investigations	Investigating and Prosecuting 21 st Century Cyber Threats	March 13, 2013
Oversight and Government Reform		A Roadmap for Hackers? - Documents Detailing HealthCare.gov Security Vulnerabilities	January 28, 2014
Oversight and Government Reform		HHS' Own Security Concerns About HealthCare.gov	January 16, 2014
Oversight and Government Reform (Joint Hearing with Homeland Security)	Energy Policy, Health Care, and Entitlements (Joint Hearing with Cybersecurity, Infrastructure Protection, and Security Technologies)	Evaluating Privacy, Security, and Fraud Concerns with ObamaCare's Information Sharing Apparatus	July 18, 2013
Science, Space, and Technology		International Cybercrime Protection	March 6, 2014
Science, Space, and Technology		HealthCare.gov: Consequences of Stolen Identity	January 19, 2014
Science, Space, and Technology		Is My Data on Healthcare.gov Secure?	November 19, 2013
Science, Space, and Technology	Technology	Cyber R&D [Research and Development] Challenges and Solutions	February 26, 2013
Select Committee on Intelligence		Advanced Cyber Threats Facing Our Nation	February 14, 2013
Small Business	Healthcare and Technology	Protecting Small Business from Cyber-Attacks	March 21, 2013

Source: Compiled by CRS.

Table 16. 113th Congress, House Committee Markups, by Date

Committee	Subcommittee	Title	Date
Homeland Security		H.R. 3696, National Cybersecurity and Critical Infrastructure Protection Act	February 5, 2014
Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies	H.R. 3696, National Cybersecurity and Critical Infrastructure Protection Act	January 15, 2014
Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies	H.R. 2952, CIRDA Act of 2013, and H.R. 3107, the Homeland Security Cybersecurity Boots-on-the-Ground Act	September 18, 2013

Source: Compiled by CRS.

Table 17. 113th Congress, Senate Hearings, by Date

Title	Date	Committee	Subcommittee
Cybersecurity: Enhancing Coordination to Protect the Financial Sector	December 10, 2014	Banking, Housing, and Urban Affairs	
Taking Down Botnets: Public and Private Efforts to Disrupt and Dismantle Cybercriminal Networks	July 15, 2014	Judiciary	Crime and Terrorism
Investing in Cybersecurity: Understanding Risks and Building Capabilities for the Future	May 7, 2014	Appropriations	Homeland Security
Data Breach on the Rise: Protecting Personal Information from Harm	April 2, 2014	Homeland Security and Governmental Affairs	
Protecting Personal Consumer Information from Cyber Attacks and Data Breaches	March 26, 2014	Commerce, Science, and Transportation	
Strengthening Public-Private Partnerships to Reduce Cyber Risks to Our Nation's Critical Infrastructure	March 26, 2014	Homeland Security and Governmental Affairs	
Nomination of Vice Admiral Michael S. Rogers, USN to be admiral and Director, National Security Agency/ Chief, Central Security Services/ Commander, U.S. Cyber Command	March 11, 2014	Armed Services	

Title	Date	Committee	Subcommittee
U.S. Strategic Command and U.S. Cyber Command in review of the fiscal 2015 Defense Authorization Request and the Future Years Defense Program	February 27, 2014	Armed Services	
Oversight of Financial Stability and Data Security	February 6, 2014	Banking, Housing, and Urban Affairs	
Privacy in the Digital Age: Preventing Data Breaches and Combating Cybercrime	February 4, 2014	Judiciary	
Safeguarding Consumers' Financial Data, Panel 2	February 3, 2014	Banking, Housing, and Urban Affairs	National Security and International Trade and Finance
The Partnership Between NIST [National Institute of Standards and Technology] and the Private Sector: Improving Cybersecurity	July 25, 2013	Commerce, Science, and Transportation	
Resilient Military Systems and the Advanced Cyber Threat (CLOSED BRIEFING)	June 26, 2013	Armed Services	
Cybersecurity: Preparing for and Responding to the Enduring Threat	June 12, 2013	Appropriations	
Cyber Threats: Law Enforcement and Private Sector Responses	May 8, 2013	Judiciary	Crime and Terrorism
Defense Authorization: Cybersecurity Threats: To receive a briefing on cybersecurity threats in review of the Defense Authorization Request for Fiscal Year 2014 and the Future Years Defense Program	March 19, 2013	Armed Services	Emerging Threats and Capabilities
Fiscal 2014 Defense Authorization, Strategic Command: U.S. Cyber Command	March 12, 2013	Armed Services	
The Cybersecurity Partnership Between the Private Sector and Our Government: Protecting Our National and Economic Security	March 7, 2013	(Joint) Homeland Security and Governmental Affairs and Commerce, Science, and Transportation	

Source: Compiled by CRS.

Table 18. 113th Congress, Other Hearings, by Date

Title	Date	Committee	Subcommittee
U.S.-China Cybersecurity Issues	July 11, 2013	Congressional-Executive Commission on China	
Chinese Hacking: Impact on Human Rights and Commercial Rule of Law	June 25, 2013	Congressional-Executive Commission on China	

Source: Compiled by CRS.

Table 19. 113th Congress, Senate Hearings, by Committee

Committee	Subcommittee	Title	Date
Appropriations	Homeland Security	Investing in Cybersecurity: Understanding Risks and Building Capabilities for the Future	May 7, 2014
Appropriations		Cybersecurity: Preparing for and Responding to the Enduring Threat	June 12, 2013
Armed Services		Nomination of Vice Admiral Michael S. Rogers, USN to be admiral and Director, National Security Agency/ Chief, Central Security Services/ Commander, U.S. Cyber Command	March 11, 2014
Armed Services		U.S. Strategic Command and U.S. Cyber Command in review of the Fiscal 2015 Defense Authorization Request and the Future Years Defense Program	February 27, 2014
Armed Services		Resilient Military Systems and the Advanced Cyber Threat (CLOSED BRIEFING)	June 26, 2013
Armed Services	Emerging Threats and Capabilities	Defense Authorization: Cybersecurity Threats	March 19, 2013
Armed Services		Fiscal 2014 Defense Authorization, Strategic Command: U.S. Cyber Command	March 12, 2013
Banking, Housing, and Urban Affairs		Cybersecurity: Enhancing Coordination to Protect the Financial Sector	December 10, 2014
Banking, Housing, and Urban Affairs		Oversight of Financial Stability and Data Security	February 6, 2014

Committee	Subcommittee	Title	Date
Banking, Housing, and Urban Affairs	National Security and International Trade and Finance	Safeguarding Consumers' Financial Data	February 3, 2014
Commerce, Science, and Transportation		Protecting Personal Consumer Information from Cyber Attacks and Data Breaches	March 26, 2014
Commerce, Science, and Transportation		The Partnership Between NIST [National Institute of Standards and Technology] and the Private Sector: Improving Cybersecurity	July 25, 2013
Homeland Security and Governmental Affairs		Data Breach on the Rise: Protecting Personal Information from Harm	April 2, 2014
Homeland Security and Governmental Affairs		Strengthening Public-Private Partnerships to Reduce Cyber Risks to Our Nation's Critical Infrastructure	March 26, 2014
(Joint) Homeland Security and Governmental Affairs and Commerce, Science, and Transportation		The Cybersecurity Partnership Between the Private Sector and Our Government: Protecting Our National and Economic Security	March 7, 2013
Judiciary	Crime and Terrorism	Taking Down Botnets: Public and Private Efforts to Disrupt and Dismantle Cybercriminal Networks	July 15, 2014
Judiciary		Privacy in the Digital Age: Preventing Data Breaches and Combating Cybercrime	February 4, 2014
Judiciary	Crime and Terrorism	Cyber Threats: Law Enforcement and Private Sector Responses	May 8, 2013

Source: Compiled by CRS.

Table 20. 113th Congress, Other Hearings, by Committee

Committee	Subcommittee	Title	Date
Congressional-Executive Commission on China		U.S.-China Cybersecurity Issues	July 11, 2013
Congressional-Executive Commission on China		Chinese Hacking: Impact on Human Rights and Commercial Rule of Law	June 25, 2013

Source: Compiled by CRS.

Hearings in the 112th Congress

The following tables list cybersecurity hearings in the 112th Congress. **Table 21** and **Table 22** contain identical content but are organized differently. **Table 21** lists House hearings arranged by date (most recent first) and **Table 22** lists House hearings arranged by committee. **Table 23** lists House markups by date; **Table 24** and **Table 25** contain identical content. **Table 24** lists Senate hearings arranged by date and **Table 25** lists Senate hearings arranged by committee. **Table 26** lists two congressional committee investigative reports: the House Permanent Select Committee on Intelligence investigative report into the counterintelligence and security threats posed by Chinese telecommunications companies doing business in the United States, and the Senate Permanent Subcommittee on Investigations' review of U.S. Department of Homeland Security efforts to engage state and local intelligence "fusion centers." When viewed in HTML, the document titles are active links to the committee's website for that particular hearing.

Table 21. 112th Congress, House Hearings, by Date

Title	Date	Committee	Subcommittee
Investigation of the Security Threat Posed by Chinese Telecommunications Companies Huawei and ZTE	September 13, 2012	Permanent Select Committee on Intelligence	
Resilient Communications: Current Challenges and Future Advancements	September 12, 2012	Homeland Security	Emergency Preparedness, Response, and Communications
Cloud Computing: An Overview of the Technology and the Issues facing American Innovators	July 25, 2012	Judiciary	Intellectual Property, Competition, and the Internet
Digital Warriors: Improving Military Capabilities for Cyber Operations	July 25, 2012	Armed Services	Emerging Threats and Capabilities
Cyber Threats to Capital Markets and Corporate Accounts	June 1, 2012	Financial Services	Capital Markets and Government Sponsored Enterprises
Iranian Cyber Threat to U.S. Homeland	April 26, 2012	Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies and Counterterrorism and Intelligence
America is Under Cyber Attack: Why Urgent Action is Needed	April 24, 2012	Homeland Security	Oversight, Investigations and Management
The DHS and DOE National Labs: Finding Efficiencies and Optimizing Outputs in Homeland Security Research and Development	April 19, 2012	Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies
Cybersecurity: Threats to Communications Networks and Public-Sector Responses	March 28, 2012	Energy and Commerce	Communications and Technology
IT Supply Chain Security: Review of Government and Industry Efforts	March 27, 2012	Energy and Commerce	Oversight and Investigations
Fiscal Year 2013 Budget Request for Information Technology and Cyber Operations Programs	March 20, 2012	Armed Services	Emerging Threats and Capabilities
Cybersecurity: The Pivotal Role of Communications Networks	March 7, 2012	Energy and Commerce	Communications and Technology
NASA Cybersecurity: An Examination of the Agency's Information Security	February 29, 2012	Science, Space, and Technology	Investigations and Oversight
Critical Infrastructure Cybersecurity: Assessments of Smart Grid Security	February 28, 2012	Energy and Commerce	Oversight and Investigations
Hearing on Draft Legislative Proposal on Cybersecurity	December 6, 2011	Homeland Security and Governmental Affairs	Cybersecurity, Infrastructure Protection, and Security Technologies

Title	Date	Committee	Subcommittee
Cyber Security: Protecting Your Small Business	December 1, 2011	Small Business	Healthcare and Technology
Combating Online Piracy (H.R. 3261, Stop the Online Piracy Act)	November 16, 2011	Judiciary	
Cybersecurity: Protecting America's New Frontier	November 15, 2011	Judiciary	Crime, Terrorism and Homeland Security
Institutionalizing Irregular Warfare Capabilities	November 3, 2011	Armed Services	Emerging Threats and Capabilities
Cloud Computing: What are the Security Implications?	October 6, 2011	Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies
Cyber Threats and Ongoing Efforts to Protect the Nation	October 4, 2011	Permanent Select Intelligence	
The Cloud Computing Outlook	September 21, 2011	Science, Space, and Technology	Technology and Innovation
Cybersecurity: Threats to the Financial Sector	September 14, 2011	Financial Services	Financial Institutions and Consumer Credit
Cybersecurity: An Overview of Risks to Critical Infrastructure	July 26, 2011	Energy and Commerce	Oversight and Investigations
Cybersecurity: Assessing the Nation's Ability to Address the Growing Cyber Threat	July 7, 2011	Oversight and Government Reform	
Field Hearing: "Hacked Off: Helping Law Enforcement Protect Private Financial Information"	June 29, 2011	Financial Services (field hearing in Hoover, AL)	
Examining the Homeland Security Impact of the Obama Administration's Cybersecurity Proposal	June 24, 2011	Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies
Sony and Epsilon: Lessons for Data Security Legislation	June 2, 2011	Energy and Commerce	Commerce, Manufacturing, and Trade
Protecting the Electric Grid: the Grid Reliability and Infrastructure Defense Act	May 31, 2011	Energy and Commerce	
Unlocking the SAFETY Act's [Support Anti-terrorism by Fostering Effective Technologies—P.L. 107-296] Potential to Promote Technology and Combat Terrorism	May 26, 2011	Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies
Protecting Information in the Digital Age: Federal Cybersecurity Research and Development Efforts	May 25, 2011	Science, Space, and Technology	Research and Science Education and Technology and Innovation
Cybersecurity: Innovative Solutions to Challenging Problems	May 25, 2011	Judiciary	Intellectual Property, Competition and the Internet
Cybersecurity: Assessing the Immediate Threat to the United States	May 25, 2011	Oversight and Government Reform	National Security, Homeland Defense and Foreign Operations

Title	Date	Committee	Subcommittee
DHS Cybersecurity Mission: Promoting Innovation and Securing Critical Infrastructure	April 15, 2011	Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies
Communist Chinese Cyber-Attacks, Cyber-Espionage and Theft of American Technology	April 15, 2011	Foreign Affairs	Oversight and Investigations
Budget Hearing—National Protection and Programs Directorate, Cybersecurity and Infrastructure Protection Programs	March 31, 2011	Appropriations (closed/classified)	Energy and Power
Examining the Cyber Threat to Critical Infrastructure and the American Economy	March 16, 2011	Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies
2012 Budget Request from U.S. Cyber Command	March 16, 2011	Armed Services	Emerging Threats and Capabilities
What Should the Department of Defense’s Role in Cyber Be?	February 11, 2011	Armed Services	Emerging Threats and Capabilities
Preventing Chemical Terrorism: Building a Foundation of Security at Our Nation’s Chemical Facilities	February 11, 2011	Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies
World Wide Threats	February 10, 2011	Permanent Select Intelligence	

Source: Compiled by CRS.

Table 22. 112th Congress, House Hearings, by Committee

Committee	Subcommittee	Title	Date
Appropriations (closed/classified)		Budget Hearing—National Protection and Programs Directorate, Cybersecurity and Infrastructure Protection Programs	March 31, 2011
Armed Services	Emerging Threats and Capabilities	Digital Warriors: Improving Military Capabilities for Cyber Operations	July 25, 2012
Armed Services	Emerging Threats and Capabilities	Fiscal 2013 Defense Authorization: IT and Cyber Operations	March 20, 2012
Armed Services	Emerging Threats and Capabilities	Institutionalizing Irregular Warfare Capabilities	November 3, 2011
Armed Services	Emerging Threats and Capabilities	2012 Budget Request for U.S. Cyber Command	March 16, 2011
Armed Services	Emerging Threats and Capabilities	What Should the Department of Defense’s Role in Cyber Be?	February 11, 2011
Energy and Commerce	Communications and Technology	Cybersecurity: Threats to Communications Networks and Public-Sector Responses	March 28, 2012
Energy and Commerce	Oversight and Investigations	IT Supply Chain Security: Review of Government and Industry Efforts	March 27, 2012
Energy and Commerce	Communications and Technology	Cybersecurity: The Pivotal Role of Communications Networks	March 7, 2012

Committee	Subcommittee	Title	Date
Energy and Commerce	Oversight and Investigations	Critical Infrastructure Cybersecurity: Assessments of Smart Grid Security	February 28, 2012
Energy and Commerce	Oversight and Investigations	Cybersecurity: An Overview of Risks to Critical Infrastructure	July 26, 2011
Energy and Commerce	Commerce, Manufacturing, and Trade	Sony and Epsilon: Lessons for Data Security Legislation	June 2, 2011
Energy and Commerce	Energy and Power	Protecting the Electric Grid: the Grid Reliability and Infrastructure Defense Act	May 31, 2011
Financial Services	Capital Markets and Government Sponsored Enterprises	Cyber Threats to Capital Markets and Corporate Account	June 1, 2012
Financial Services	Financial Institutions and Consumer Credit	Cybersecurity: Threats to the Financial Sector	September 14, 2011
Financial Services	Field hearing in Hoover, AL	Field Hearing: "Hacked Off: Helping Law Enforcement Protect Private Financial Information"	June 29, 2011
Foreign Affairs	Oversight and Investigations	Communist Chinese Cyber-Attacks, Cyber-Espionage and Theft of American Technology	April 15, 2011
Homeland Security	Emergency Preparedness, Response, and Communications	Resilient Communications: Current Challenges and Future Advancement	September 12, 2012
Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies and Counterterrorism and Intelligence	Iranian Cyber Threat to U.S. Homeland	April 26, 2012
Homeland Security	Oversight, Investigations and Management	America is Under Cyber Attack: Why Urgent Action is Needed	April 24, 2012
Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies	The DHS and DOE National Labs: Finding Efficiencies and Optimizing Outputs in Homeland Security Research and Development	April 19, 2012
Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies	Hearing on Draft Legislative Proposal on Cybersecurity	December 6, 2011
Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies	Cloud Computing: What are the Security Implications?	October 6, 2011
Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies	Examining the Homeland Security Impact of the Obama Administration's Cybersecurity Proposal	June 24, 2011
Homeland Security		Unlocking the SAFETY Act's [Support Anti-terrorism by Fostering Effective Technologies—P.L. 107-296] Potential to Promote Technology and Combat Terrorism	May 26, 2011
Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies	DHS Cybersecurity Mission: Promoting Innovation and Securing Critical Infrastructure	April 15, 2011

Committee	Subcommittee	Title	Date
Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies	Examining the Cyber Threat to Critical Infrastructure and the American Economy	March 16, 2011
Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies	Preventing Chemical Terrorism: Building a Foundation of Security at Our Nation's Chemical Facilities	February 11, 2011
Judiciary	Intellectual Property, Competition, and the Internet	Cloud Computing: An Overview of the Technology and the Issues facing American Innovators	July 25, 2012
Judiciary		Combating Online Piracy (H.R. 3261, Stop the Online Piracy Act)	November 16, 2011
Judiciary	Crime, Terrorism and Homeland Security	Cybersecurity: Protecting America's New Frontier	November 15, 2011
Judiciary	Intellectual Property, Competition, and the Internet	Cybersecurity: Innovative Solutions to Challenging Problems	May 25, 2011
Oversight and Government Reform		Cybersecurity: Assessing the Nation's Ability to Address the Growing Cyber Threat	July 7, 2011
Oversight and Government Reform	Subcommittee on National Security, Homeland Defense and Foreign Operations	Cybersecurity: Assessing the Immediate Threat to the United States	May 25, 2011
Permanent Select Intelligence		Investigation of the Security Threat Posed by Chinese Telecommunications Companies Huawei and ZTE	September 13, 2012
Permanent Select Intelligence		Cyber Threats and Ongoing Efforts to Protect the Nation	October 4, 2011
Permanent Select Intelligence		World Wide Threats	February 10, 2011
Science, Space, and Technology	Investigations and Oversight	NASA Cybersecurity: An Examination of the Agency's Information Security	February 29, 2012
Science, Space, and Technology	Technology and Innovation	The Cloud Computing Outlook	September 21, 2011
Science, Space, and Technology	Research and Science Education and Technology and Innovation	Protecting Information in the Digital Age: Federal Cybersecurity Research and Development Efforts	May 25, 2011
Small Business	Healthcare and Technology	Cyber Security: Protecting Your Small Business	November 30, 2011

Source: Compiled by CRS.

Table 23. 112th Congress, House Markups, by Date

Title	Date	Committee	Subcommittee
Consideration and Markup of H.R. 3674	February 1, 2012	Homeland Security	Cybersecurity, Infrastructure Protection, and Security Technologies
Markup: Draft Bill: Cyber Intelligence Sharing and Protection Act of 2011	December 1, 2011	Permanent Select Intelligence	
Markup on H.R. 2096, Cybersecurity Enhancement Act of 2011	July 21, 2011	Science, Space, and Technology	
Discussion Draft of H.R. 2577, a bill to require greater protection for sensitive consumer data and timely notification in case of breach	June 15, 2011	Energy and Commerce	Commerce, Manufacturing, and Trade

Source: Compiled by CRS.

Table 24. 112th Congress, Senate Hearings, by Date

Title	Date	Committee	Subcommittee
State of Federal Privacy and Data Security Law: Lagging Behind the Times?	July 31, 2012	Homeland Security and Governmental Affairs	Oversight of Government Management, the Federal Workforce and the District of Columbia
Cyber Security and the Grid	July 17, 2012	Energy and Natural Resources Committee	
U.S. Strategic Command and U.S. Cyber Command	March 27, 2012	Armed Services	
Cybersecurity Research and Development	March 20, 2012	Armed Services	Emerging Threats and Capabilities
The Freedom of Information Act: Safeguarding Critical Infrastructure Information and the Public's Right to Know	March 13, 2012	Judiciary	
Securing America's Future: The Cybersecurity Act of 2012	February 16, 2012	Homeland Security and Governmental Affairs	
Cybercrime: Updating the Computer Fraud and Abuse Act to Protect Cyberspace and Combat Emerging Threats	September 7, 2011	Judiciary	
Role of Small Businesses in Strengthening Cybersecurity Efforts in the United States	July 25, 2011	Small Business and Entrepreneurship	
Privacy and Data Security: Protecting Consumers in the Modern World	June 29, 2011	Commerce, Science, and Transportation	
Cybersecurity: Evaluating the Administration's Proposals	June 21, 2011	Judiciary	Crime and Terrorism

Title	Date	Committee	Subcommittee
Cybersecurity and Data Protection in the Financial Sector	June 21, 2011	Banking, Housing, and Urban Affairs	
Protecting Cyberspace: Assessing the White House Proposal	May 23, 2011	Homeland Security and Governmental Affairs	
Cybersecurity of the Bulk-Power System and Electric Infrastructure and for Other Purposes	May 5, 2011	Energy and Natural Resources	
Health and Status of the Defense Industrial Base	May 3, 2011	Armed Services	Emerging Threats and Capabilities
Cyber Security: Responding to the Threat of Cyber Crime and Terrorism	April 12, 2011	Judiciary	Crime and Terrorism
Oversight of the Federal Bureau of Investigation	March 30, 2011	Judiciary	
Cybersecurity and Critical Electric Infrastructure ^a (closed hearing)	March 15, 2011	Energy and Natural Resources	
Information Sharing in the Era of WikiLeaks: Balancing Security and Collaboration	March 10, 2011	Homeland Security and Governmental Affairs	
Homeland Security Department's Budget Submission for Fiscal Year 2012	February 17, 2011	Homeland Security and Governmental Affairs	

Source: Compiled by CRS.

a. The March 15, 2011, hearing before the Committee on Energy and Natural Resources was closed.

Table 25. 112th Congress, Senate Hearings, by Committee

Committee	Subcommittee	Title	Date
Armed Services	Emerging Threats and Capabilities	Cybersecurity Research and Development	March 20, 2012
Armed Services		U.S. Strategic Command and U.S. Cyber Command	March 27, 2012
Armed Services	Emerging Threats and Capabilities	Health and Status of the Defense Industrial Base	May 3, 2011
Banking, Housing, and Urban Affairs		Cybersecurity and Data Protection in the Financial Sector	June 21, 2011
Commerce, Science, and Transportation		Privacy and Data Security: Protecting Consumers in the Modern World	June 29, 2011
Energy and Natural Resources		Cybersecurity and the Grid	July 17, 2012

Committee	Subcommittee	Title	Date
Energy and Natural Resources		Cybersecurity of the Bulk-Power System and Electric Infrastructure and For Other Purposes	May 5, 2011
Energy and Natural Resources (closed) ^a		Cybersecurity and Critical Electric Infrastructure	March 15, 2011
Homeland Security and Governmental Affairs	Oversight of Government Management, the Federal Workforce and the District of Columbia	State of Federal Privacy and Data Security Law: Lagging Behind the Times?	July 31, 2012
Homeland Security and Governmental Affairs		Securing America's Future: The Cybersecurity Act of 2012	February 16, 2012
Homeland Security and Governmental Affairs		Protecting Cyberspace: Assessing the White House Proposal	May 23, 2011
Homeland Security and Governmental Affairs		Information Sharing in the Era of WikiLeaks: Balancing Security and Collaboration	March 10, 2011
Homeland Security and Governmental Affairs		Homeland Security Department's Budget Submission for Fiscal Year 2012	February 17, 2011
Judiciary		The Freedom of Information Act: Safeguarding Critical Infrastructure Information and the Public's Right to Know	March 13, 2012
Judiciary		Cybercrime: Updating the Computer Fraud and Abuse Act to Protect Cyberspace and Combat Emerging Threats	September 7, 2011
Judiciary	Crime and Terrorism	Cybersecurity: Evaluating the Administration's Proposals	June 21, 2011
Judiciary	Crime and Terrorism	Cyber Security: Responding to the Threat of Cyber Crime and Terrorism	April 12, 2011
Judiciary		Oversight of the Federal Bureau of Investigation	March 30, 2011
Small Business and Entrepreneurship		Role of Small Business in Strengthening Cybersecurity Efforts in the United States	July 25, 2011

Source: Compiled by CRS.

a. The March 15, 2011, hearing before the Committee on Energy and Natural Resources was closed.

Table 26. 112th Congress, Congressional Committee Investigative Reports

Title	Committee	Date	Pages	Notes
Investigative Report on the U.S. National Security Issues Posed by Chinese Telecommunications Companies Huawei and ZTE	House Permanent Select Committee on Intelligence	October 8, 2012	60	The committee initiated this investigation in November 2011 to inquire into the counterintelligence and security threat posed by Chinese telecommunications companies doing business in the United States.
Federal Support for and Involvement in State and Local Fusion Centers	U. S. Senate Permanent Subcommittee on Investigations	October 3, 2012	141	A two-year bipartisan investigation found that U.S. Department of Homeland Security efforts to engage state and local intelligence “fusion centers” has not yielded significant useful information to support federal counterterrorism intelligence efforts. In Section VI, “Fusion Centers Have Been Unable to Meaningfully Contribute to Federal Counterterrorism Efforts,” Part G, “Fusion Centers May Have Hindered, Not Aided, Federal Counterterrorism Efforts,” the report discusses the Russian “Cyberattack” in Illinois.

Source: Compiled by CRS.

Executive Orders and Presidential Directives

Executive orders are official documents through which the President of the United States manages the operations of the federal government. Presidential directives guide the federal rulemaking policy and are signed or authorized by the President.

CRS Reports on Executive Orders and Presidential Directives

The following reports provide additional information on executive orders and presidential directives:

- CRS Report R42984, *The 2013 Cybersecurity Executive Order: Overview and Considerations for Congress*, by Eric A. Fischer et al.
- CRS Report RS20846, *Executive Orders: Issuance, Modification, and Revocation*, by Vivian S. Chu and Todd Garvey
- CRS Report R42740, *National Security and Emergency Preparedness Communications: A Summary of Executive Order 13618*, by Shawn Reese

Table 27 provides a list of executive orders and presidential directives pertaining to cybersecurity. (Titles are linked to documents.)

Table 27. Executive Orders and Presidential Directives
(by date of issuance)

Title	Date	Source	Notes
E.O. 13718, Commission on Enhancing National Cybersecurity	February 9, 2016	White House	The commission will consist of 12 members appointed by the President, including “top strategic, business, and technical thinkers from outside of Government—including members to be designated by the bi-partisan Congressional leadership.”
E.O. 13694, Blocking the Property of Certain Persons Engaging in Significant Malicious Cyber-Enabled Activities	April 1, 2015	White House	The executive order establishes the first sanctions program to allow the Administration to impose penalties on individuals overseas who engage in destructive attacks or commercial espionage in cyberspace. The order declares “significant malicious cyber-enabled activities” a “national emergency” and enables the Treasury Secretary to target foreign individuals and entities that take part in the illicit cyberactivity for sanctions that could include freezing their financial assets and barring commercial transactions with them.
Presidential Memorandum—Establishment of the Cyber Threat Intelligence Integration Center	February 25, 2015	White House	The CTIIC will be a national intelligence center focused on “connecting the dots” regarding malicious foreign cyber threats to the nation and cyber incidents affecting U.S. national interests, and on providing all-source analysis of threats to U.S. policymakers. The CTIIC will also assist relevant departments and agencies in their efforts to identify, investigate, and mitigate those threats
E.O. 13691, Encouraging Private-Sector Cybersecurity Collaboration	February 12, 2015	White House	The executive order calls for establishing new “information sharing and analysis organizations to serve as focal points for cybersecurity information sharing and collaboration within the private sector and between the private sector and government.” It also aims to streamline the process companies use to sign agreements with the federal government and grants DHS new powers to approve sharing classified intelligence with the private sector.
E.O. 13687, Imposing Additional Sanctions with Respect to North Korea	January 2, 2015	White House	The executive order states that North Korea engaged in “provocative, destabilizing, and repressive actions and policies,” including “destructive, coercive cyber-related actions during November and December 2014,” and authorizes sanctions against North Korea. The sanctions prohibit the people and organizations named from accessing the U.S. financial system and forbid any banks

Title	Date	Source	Notes
E.O. 13681, Improving the Security of Consumer Financial Transactions	October 17, 2014	White House	<p>or other financial institutions that do business with the U.S. system from doing business with the sanctioned entities.</p> <p>The executive order mandates that government credit and debit cards be enabled with chip and PIN technology and federal facilities accept chip and PIN-enabled cards at retail terminals.</p>
E.O. 13636, Improving Critical Infrastructure Cybersecurity	February 12, 2013	White House	<p>E.O. 13636 addresses cybersecurity threats to critical infrastructure (CI) by, among other things,</p> <ul style="list-style-type: none"> • expanding to other CI sectors an existing DHS program for information sharing and collaboration between the government and the private sector; • establishing a broadly consultative process for identifying CI with especially high priority for protection; • requiring the National Institute of Standards and Technology to lead in developing a Cybersecurity Framework of standards and best practices for protecting CI; and • requiring regulatory agencies to determine the adequacy of current requirements and their authority to establish requirements to address the risks.
Presidential Policy Directive (PPD) 21 - Critical Infrastructure Security and Resilience	February 12, 2013	White House	<p>This directive establishes national policy on critical infrastructure security and resilience. This endeavor is a shared responsibility among the federal, state, local, tribal, and territorial (SLTT) entities, and public and private owners and operators of critical infrastructure (hereinafter referred to as “critical infrastructure owners and operators”). This directive also refines and clarifies the critical infrastructure-related functions, roles, and responsibilities across the federal government, as well as enhances overall coordination and collaboration. The federal government also has a responsibility to strengthen the security and resilience of its own critical infrastructure, for the continuity of national essential functions, and to organize itself to partner effectively with and add value to the security and resilience efforts of critical infrastructure owners and operators.</p>
E. O. 13618, Assignment of National Security and Emergency Preparedness Communications Functions	July 6, 2012	White House	<p>This order addresses the federal government’s need and responsibility to communicate during national security and emergency situations and crises by</p>

Title	Date	Source	Notes
E.O. 13587, Structural Reforms to Improve the Security of Classified Networks and the Responsible	October 7, 2011	White House	<p>assigning federal national security and emergency preparedness communications functions. EO 13618 is a continuation of older executive orders issued by other presidents and is related to the Communications Act of 1934 (47 U.S.C. §606). This executive order, however, changes federal national security and emergency preparedness communications functions by dissolving the National Communications System, establishing an executive committee to oversee federal national security and emergency preparedness communications functions, establishing a programs office within the DHS to assist the executive committee, and assigning specific responsibilities to federal government entities.</p>
HSPD-23/NSPD-54 -Cybersecurity Policy	January 8, 2008	White House	<p>This order directs structural reforms to ensure responsible sharing and safeguarding of classified information on computer networks that shall be consistent with appropriate protections for privacy and civil liberties. Agencies bear the primary responsibility for meeting these twin goals. These policies and minimum standards will address all agencies that operate or access classified computer networks, all users of classified computer networks (including contractors and others who operate or access classified computer networks controlled by the federal government), and all classified information on those networks.</p>
E.O. 13407, Public Alert and Warning System	June 26, 2006	White House	<p>This directive establishes U.S. policy, strategy, guidelines, and implementation actions to secure cyberspace. It strengthens and augments existing policies for protecting the security and privacy of information entrusted to the federal government and clarifies roles and responsibilities of federal agencies relating to cybersecurity. It requires the federal government to integrate many of its technical and organizational capabilities to better address sophisticated cybersecurity threats and vulnerabilities.</p> <p>The order assigns the Secretary of Homeland Security the responsibility to establish or adopt, as appropriate, common alerting and warning protocols, standards, terminology, and operating procedures for the public alert and warning system to enable interoperability and the secure delivery of coordinated messages to the American people through as many communication pathways as</p>

Title	Date	Source	Notes
HSPD-7, Homeland Security Presidential Directive No. 7: Critical Infrastructure Identification, Prioritization, and Protection	December 17, 2003	White House	<p>practicable, taking account of Federal Communications Commission rules as provided by law.</p> <p>Assigns the Secretary of Homeland Security the responsibility of coordinating the nation's overall efforts in critical infrastructure protection across all sectors. HSPD-7 also designates the DHS as lead agency for the nation's information and telecommunications sectors.</p>
E.O. 13286, Amendment of Executive Orders, and Other Actions, in Connection With the Transfer of Certain Functions to the Secretary of Homeland Security	February 28, 2003	White House	<p>Designates the Secretary of Homeland Security the Executive Agent of the National Communication System Committee of Principals, which are the agencies, designated by the President, that own or lease telecommunication assets identified as part of the National Communication System, or which bear policy, regulatory, or enforcement responsibilities of importance to national security and emergency preparedness telecommunications.</p>
Presidential Decision Directive/NSC-63	May 22, 1998	White House	<p>Sets as a national goal the ability to protect the nation's critical infrastructure from intentional attacks (both physical and cyber) by the year 2003. According to the PDD, any interruptions in the ability of these infrastructures to provide their goods and services must be "brief, infrequent, manageable, geographically isolated, and minimally detrimental to the welfare of the United States."</p>
NSD-42, National Security Directive 42 - National Policy for the Security of National Security Telecommunications and Information Systems	July 5, 1990	White House	<p>Establishes the National Security Telecommunications and Information Systems Security Committee, now called the Committee on National Security Systems (CNSS). CNSS is an interagency committee, chaired by the Department of Defense. Among other assignments, NSD-42 directs the CNSS to provide system security guidance for national security systems to executive departments and agencies and submit annually to the Executive Agent an evaluation of the security status of national security systems. NSD-42 also directs the CNSS to interact, as necessary, with the National Communications System Committee of Principals.</p>

Source: Descriptions compiled by CRS from government websites.

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See CRS Report R42619, *Cybersecurity: CRS Experts*, by Eric A. Fischer for the names and contact information for CRS experts on policy issues related to cybersecurity bills currently being debated in the 114th Congress.