

The background image shows two soldiers in full combat gear, including helmets and body armor, standing in front of a blue train car. The train car has several yellow and white diamond-shaped nuclear warning symbols and orange placards. The scene is set outdoors on a paved area, possibly a train yard or station. The lighting is bright, suggesting daytime.

**An Arms Control Association and  
Partnership for a Secure America Report**

# **Empowering Congress on Nuclear Security:**

# **Blueprints for a New Generation**

**July 2018**

**Jack Brosnan, Andrew Semmel, Nathan Sermonis, and Kingston Reif**



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# **Empowering Congress on Nuclear Security: Blueprints for a New Generation**

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## Acknowledgements

The authors would like to thank Partnership for a Secure America's senior advisor Jenifer Mackby for her assistance in drafting and reviewing this report. The authors would also like to thank the Arms Control Association's Executive Director Daryl G. Kimball, Kelsey Davenport, director for nonproliferation policy, and Alicia Sanders-Zakre, policy and programs research assistant, for their assistance in reviewing this report. Special thanks to Allen Harris for the report's layout and design.

Leland Cogliani, Lee Hamilton, William Perry, Tom Pickering, Bud McFarlane, and Fran Townsend provided thoughtful feedback on this report. The authors would also like to thank Elizabeth Talerman and Liza Ezbiansky from Nucleus Strategy for their assistance on creating the congressional surveys used for this report. Partnership for a Secure America and the Arms Control Association also wish to thank the group of over 100 congressional staff who provided their input through in-person interviews, responses to our digital survey, and participation in our focus group.

This report was made possible by a grant from the John D. and Catherine T. McArthur Foundation.

The authors are responsible for the content of the report, and the statements made and views expressed do not necessarily represent the views of Partnership for a Secure America's Advisory Board or the Arms Control Association's Board of Directors.

## Cover Photo

Highly enriched uranium awaiting secure transportation by rail on September 26, 2010.  
(Photo credit: National Nuclear Security Administration)

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# Executive Summary

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**T**he global nuclear security enterprise is at a critical crossroads. While the worldwide use of nuclear and radioactive materials has grown, the issue of nuclear security, broadly defined by the International Atomic Energy Agency (IAEA) as “security of nuclear materials and the facilities that house them,” has all but faded from the U.S. national conversation. As these materials become more widespread, they will be vulnerable to criminal and terrorist organizations without sufficient security efforts.

Despite this risk nuclear security is not a high priority on Capitol Hill, and leadership is largely ceded to the executive branch where competing interests increasingly sideline this critical issue. The history of bipartisan congressional engagement on nuclear security dramatically contrasts with today’s level of legislative interest. Attention has sharply declined since the end of the Nuclear Security Summit process in 2016 and the exodus of congressional members and staff who formed their worldviews through the Cold War.

To better understand past and present congressional engagement on nuclear security, Partnership for a Secure America (PSA) and the Arms Control Association (ACA) jointly undertook a first-ever study of current congressional staff attitudes on the issue and explored case studies of congressional leadership in this field.

This report is divided into five sections. The first section assesses the current nuclear security threat environment and summarizes the Trump administration’s actions on nuclear security to date. The second section outlines the role of Congress on nuclear security. The third section analyzes three examples of past and current congressional leadership on nuclear security. The fourth section presents the results of our joint study of congressional attitudes, providing ten effective strategies for engaging Congress on nuclear security. And the fifth section provides ten recommendations on action items for Congress.

The Nuclear Security Summit process and U.S. nuclear security and threat reduction programs have played a vital role in reducing the risk of nuclear terrorism. However, significant gaps remain, particularly with respect to the security of highly enriched uranium (HEU) and plutonium stockpiles. About 50 new nuclear power plants are under construction around the world and 20 countries that do not currently have nuclear power programs

have expressed interest in developing them. The use of emerging technologies with potential nuclear proliferation and nuclear security implications poses new challenges.

The task of plugging the gaps and reducing material stockpiles is likely to be more challenging now that the summit process, the last gathering of which took place in March 2016, and the high-level political attention it brought to this issue has come to an end. In addition, Russia, which possesses the largest cache of nuclear weapons usable material on the planet, boycotted the 2016 Summit and ended most nuclear security cooperation with the United States in 2014. Cooperation with other countries that pose significant nuclear security risks remains limited.

Meanwhile, U.S. budgets for nuclear security continue to decline while funding to sustain and upgrade U.S. nuclear weapons trends upward. In addition, Congress has restricted nuclear security cooperation with Russia and taken initial steps to constrain cooperation with China. The Trump administration’s limited interest in nuclear security has also introduced uncertainty about sustaining U.S. leadership on the issue.

Over the years, bipartisan congressional support for nuclear security programs has been a critical feature of U.S. leadership in continuously improving global nuclear security. There is a long legacy of bipartisan congressional action to reduce nuclear risks, such as Senators Sam Nunn (D-Ga.) and Richard Lugar (R-Ind.) in 1991 establishing U.S.-led programs to assist the countries of the former Soviet Union in securing and eliminating nuclear weapons and materials.

However, while the nuclear security challenges facing the nation have only grown more complex, in recent years congressional engagement on the issue has stagnated. Despite recognition by both Republicans and Democrats that nuclear

terrorism remains a critical concern, congressional appropriations for nuclear security programs have declined and each party's leadership has thus far put forward few new ideas to advance the mission.

Our study found that most congressional staff have little knowledge about or stake in the nuclear security issue. While several lawmakers and their staff are highly engaged, nuclear security expertise on Capitol Hill is rare today. Without adequate knowledge or understanding of the issue, Congress will be unwilling and unable to exercise proper oversight of nuclear security policy and programs.

Several key observations from this research offer useful context for engaging Congress on the nuclear security issue:

1. The term “nuclear security” is loosely interpreted by congressional staff as meaning “security from nuclear threats.” It is not understood on Capitol Hill as the nuclear community has defined it—“the prevention of nuclear terrorism through protection of nuclear and radioactive materials and the facilities they reside in.” With few exceptions, staff self-assessed their familiarity with nuclear security as mediocre to poor, and their familiarity with the Nuclear Security Summits as poor to non-existent.
2. Congressional staff have access to a variety of information sources, but on nuclear security issues they rely on non-governmental organizations (NGOs) and think tanks most frequently, followed closely by the Congressional Research Service (CRS). Experienced staff who regularly handle nuclear security issues are more likely to reference the executive branch as a source of information on nuclear security, but their less experienced peers are less disposed to accessing experts in executive branch agencies for information.
3. Perspectives of congressional staff are closely tied to their immediate office priorities, typically defined by their legislative portfolios or the oversight authority of their committees. In the realm of nuclear security, this reality guides their interpretation of the issue and prioritization of associated threats. In academic parlance, these findings exemplify the familiar adage “where you stand depends on where you sit.”

Our complete list of ten observations from the congressional attitudes study can be found in the section *Effective Strategies for Engaging Congress*.

Despite the dedicated leadership of several members of Congress, there is a need for the institution to play

a more active role in shaping U.S. nuclear security policy. Past examples of congressional engagement, such as the Nunn-Lugar Cooperative Threat Reduction (CTR) program, offer several lessons to build upon. Near-term steps should include enhancing oversight by:

1. Requiring the Office of Management and Budget to annually prepare a report summarizing the U.S. budget for nonproliferation and nuclear security programs. The consolidated summary should include all funding by agency/department for U.S. government programs to prevent nuclear and radiological terrorism, prevent the spread of nuclear weapons, implement arms control agreements, halt illicit transfers of nuclear technology, screen cargo at domestic and international ports, research and develop tools and strategies to address future nonproliferation challenges, etc.
2. Holding more congressional hearings on nuclear security, which have been few and far between. In light of the evolving nuclear security threat environment, Congress—specifically the Armed Services, Foreign Relations/Affairs, Intelligence, and Homeland Security committees—should hold a series of hearings in 2018 and early 2019 that examine U.S. nuclear terrorism prevention strategy and spending with government and non-governmental experts.
3. Calling for more regular Executive Branch briefings on nuclear security and organizing more frequent congressional visits to domestic and foreign sites housing nuclear and radiological materials.

Congress should also pursue several larger strategic initiatives, such as:

1. Securing the most vulnerable, highest-risk radiological materials around the world in five years.
2. Expanding the National Nuclear Security Administration's (NNSA) nuclear security and nonproliferation research and development efforts.
3. Establishing a program of activities to strengthen nuclear security in North Korea as part of the phased and verifiable dismantling of North Korea's nuclear arsenal and supporting infrastructure.

Our complete list of ten recommendations for enhancing Congressional leadership can be found in the section *Recommended Action Items for Congress*.

# The Nuclear Security Threat Environment

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A nuclear terrorist attack could come in different forms, ranging from the detonation of stolen or improvised nuclear explosive device, to sabotage of a nuclear facility, to dispersion of radioactive material via a so-called dirty bomb. A terrorist attack using an improvised nuclear explosive device in a heavily populated area could cause tens and perhaps hundreds of thousands of casualties. A terrorist attack using a dirty bomb (combining conventional explosives, such as dynamite, and radiological materials that can be found in hospitals, research facilities, etc.) would result in far fewer direct casualties, but would nonetheless still have enormous economic, social, and humanitarian consequences.

Most experts agree that the probability of a terrorist exploding a dirty bomb is much higher than that of a nuclear device. This is due in large part to the existence of radioactive materials in thousands of locations and in almost every country around the world, many of which are poorly secured and vulnerable to theft. A 2016 report published by the Nuclear Threat Initiative noted that only 14 percent of IAEA member states have agreed to secure their highest risk radiological sources by a specific date.<sup>1</sup>

Because the consequences of a nuclear terrorist attack would be so extreme, intensive action to reduce the risk must be a high priority. The global financial cost and terrible loss of life that would result from such an attack would dwarf the costs of preventing it. Fortunately, there is no evidence to date that terrorists have gotten their hands on a nuclear weapon or the material needed to make one. The obstacles to pulling off a nuclear terrorist attack are substantial, and countries have taken important steps to improve the security of nuclear weapons and materials—especially from 2010 to 2016 when four head-of-state level nuclear security summits took place.

The Nuclear Security Summit process elevated

attention and focus on the importance of nuclear security and resulted in tangible steps towards strengthened international norms and standards for nuclear security.<sup>2</sup> For example, across the four summits enough HEU and plutonium for more than 150 nuclear weapons was removed or downblended from more than 50 facilities in 30 countries.<sup>3</sup>

But this is not a reason to be complacent about the threat of nuclear terrorism. Approximately 900 tons of nuclear weapons-useable material remain in countries where there are significant threats.<sup>4</sup> More work needs to be done to: make the existing patchwork global nuclear security regime more comprehensive; share information to build global confidence; develop international standards, rules, and incentives for the security of nuclear materials; ensure high-level attention and progress in the wake of the end of the nuclear security summits; and consolidate and eliminate civil HEU and plutonium stocks.

Military and intelligence officials and other government experts have repeatedly expressed concern about the threat of nuclear terrorism, including Presidents Donald J. Trump, Barack Obama,





**A billet of highly enriched uranium recovered from scrap processed at the Y-12 National Security Complex Plant. Original and unrotated. (Photo: U.S. Department of Energy/Public Domain)**

and George W. Bush. There have been roughly 20 instances of the seizure of stolen, weapons-usable nuclear material over the past 25 years.<sup>5</sup> Several groups, notably Aum Shinrikyo and al Qaeda have in the past sought to obtain nuclear weapons. And though the power of the Islamic State has been significantly diminished, it remains a nefarious menace and once controlled more people, territory, and resources than al Qaeda did at the peak of its strength. Reports indicated that two of the suicide bombers who perpetrated the March 2016 terrorist attacks in Belgium had also carried out surveillance of a Belgian official with access to a facility with weapons-grade uranium and radioactive material.<sup>6</sup>

Several regions of the world are plagued by conditions that could facilitate access to fissile material or nuclear weapons by terrorist groups, notably South Asia, North Korea, and Russia. India and Pakistan are both increasing the size of their nuclear weapon and material stockpiles and have suffered terrorist attacks, including on military bases.

North Korea's weapons and material holdings have also grown in recent years and we have little, if any, knowledge about what nuclear security is like there. U.S. cooperation with Russia has greatly enhanced the security of Moscow's weapons and material, but crime, corruption, economic woes, and extremist group activity continue to raise concerns. In addition, the end of nearly all U.S. cooperative efforts with Russia on nuclear security has reduced U.S. knowledge and access regarding Moscow's commitment to the issue. Ensuring that programs once responsible for Russian nuclear security are able to continue their work reducing the risk of nuclear terrorism is an ongoing challenge.

To complicate matters, the nuclear terrorism threat is not standing still. Advances in new technologies such as additive manufacturing, offensive cyber tools, and artificial intelligence and machine learning appear poised to diversify and increase potential nuclear security threats by, as a Senate report recently noted, "simplifying the production, manufacturing, and design of nuclear materials and weapons."

## The Trump Administration and Nuclear Security

Like its post-Cold War predecessors, the Trump administration has identified preventing nuclear terrorism as a national security priority.

In an August 2017 speech in Fort Myer, Virginia, President Trump declared that the United States “must prevent nuclear weapons and materials from coming into the hands of terrorists and being used against us, or anywhere in the world.”<sup>7</sup>

Similarly, the administration’s 2018 Nuclear Posture Review (NPR) released in February states that nuclear terrorism is one of “the most significant threats to the security of the United States.”<sup>8</sup> However, the 2018 NPR devotes far less attention to the issue than the 2010 NPR and does not propose any new programs or initiatives to augment nuclear material security.

In addition, the Trump administration’s fiscal year 2019 budget request proposes significant cuts to core

material security and nonproliferation programs at the NNSA, the main government agency responsible for reducing nuclear terrorism risks.<sup>9</sup> The request is \$124 million less than the fiscal year 2018 enacted level for these programs and \$230 million less than what was projected for 2019 in the agency’s fiscal year 2017 budget proposal (which was when the agency last produced a five-year nuclear security budget). If approved by Congress, the proposed reductions would severely reduce the amount of money needed to increase security at nuclear facilities and remove nuclear weapons usable material from other countries.

As noted below, the Obama administration also proposed significant cuts to nuclear security programs, especially during its second term. The Trump administration’s budget request continues this trend and does not include funding for several longstanding nuclear security projects that were being planned by the Obama administration.<sup>10</sup>

# The Role of Congress on Nuclear Security

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Congress has the responsibility of setting nuclear security policies, creating or eliminating programs and initiatives, and appropriating yearly funding for nuclear security programs.

Oversight of nuclear security programs in Congress is shared primarily by the Senate and House Armed Services, Foreign Relations/Affairs, Homeland Security, Intelligence, and Judiciary Committees and the respective appropriations subcommittees that fund these programs. For example, NNSA's programs are funded by the energy and water development subcommittee, the Pentagon's CTR program is funded by the defense subcommittee, and the State Department's nonproliferation programs by the state, foreign operations, and related programs subcommittee.

Congress also influences the nuclear security enterprise by setting policy, conditioning funding, and organizing the relevant executive branch agencies. The House and Senate Armed Services Committees pass a bill every year known as the National Defense Authorization Act, which establishes spending ceilings and policy and legal guidelines for Pentagon programs and activities conducted by NNSA. Most congressional committees do not pass yearly authorization bills, meaning the defense authorization bill is the main vehicle by which Congress shapes nuclear security policy.

In recent years, Congress has failed to pass individual appropriations bills due to partisan gridlock, which limits the opportunities available to those lawmakers who do not sit on a committee of jurisdiction to influence funding decisions. Instead, Congress has passed a series of continuing resolutions followed by massive conglomerations of appropriations bills known as an "omnibus bill," usually well after the fiscal year begins on October 1.

In addition to appropriations and authorization bills, other congressional oversight tools include

hearings, classified briefings, so-called "Dear Colleagues" to educate fellow members, and travel by members and staff, known as congressional delegations or CODELs. The Senate also has a unique role in confirming executive branch nominees, including undersecretaries and assistant secretaries who execute nuclear security programs. Prominent members of Congress can also exert influence via public remarks, published op-eds in important media outlets, and even campaign pledges.

As will be explored further in the report, effective congressional oversight of the nuclear mission is constrained by several challenges.

*Limited institutional knowledge and subject matter expertise.* Nuclear security is not a priority for most members of Congress or their constituents. Engagement on nuclear terrorism prevention issues is typically confined to a small number of members and staff who lead the relevant subcommittees of jurisdiction and dictated by the amount of time and capital the subcommittee chairmen and ranking member are willing to devote to the issue.

Several members of Congress, such as Senator Dianne Feinstein (D-Cal.), Senator Jeff Merkley (D-Ore.), Senator Joe Donnelly (D-Ind.), Senator Lamar Alexander (R-Tenn.), Senator John McCain (R-Ariz.), Senator Tom Carper (D-Del.), Representative Jeff Fortenberry (R-Neb.), Representative Marcy Kaptur (D-Ohio), Representative Bill Foster (D-Ill.), and Representative Rick Larsen (D-Wash.), are strong and passionate champions of the nuclear security cause. But within the past ten years several congressional giants on the issue have either retired or left office, including Representative Ellen Tauscher (D-Cal.), Representative John Spratt (D-S.C.), Representative

Loretta Sanchez (D-Cal.), Senator Carl Levin (D-Mich.), and Senator Lugar.

*Skepticism of mission need.* In recent years, some members of Congress have increasingly characterized U.S. financial assistance to secure and eliminate nuclear materials, particularly in Russia, as unnecessary; they say that recipient countries should pay for nuclear security on their own.<sup>11</sup> Rising tensions with Russia since Moscow's annexation of Crimea in 2014 and the difficulty of engaging other countries such as India and Pakistan have reduced opportunities for cooperation and raised doubts about what more can be accomplished after two decades of effort and investment.

*Competing priorities and funding constraints.* The prioritization by the Obama and Trump administrations to sustain and upgrade the U.S. nuclear arsenal has meant that less funding has been available for NNSA's nuclear security and

nonproliferation programs. This has consequently had a chilling effect on the development of new nonproliferation initiatives and activities. Moreover, to the extent members of Congress have focused on nuclear threats, much of their attention has been consumed by the Iranian and North Korean nuclear challenges.

Despite these challenges, the goal of preventing nuclear terrorism continues to enjoy strong bipartisan support on Capitol Hill. Since the end of the Cold War members of Congress from both parties have worked together to reduce nuclear terrorism and proliferation risks, including through legislating new programs and approving and, in many cases, increasing funding above the executive branch budget requests for nuclear security activities. The task now is to reinvigorate congressional leadership in the face of disappearing nuclear security cooperation with Russia, competing interests, and an evolving threat.

# Notable Examples of Congressional Leadership on Nuclear Security

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## The Nunn-Lugar Amendment

Since the end of the Cold War, Russia and the United States have cooperated on an array of nuclear weapons dismantlement, material security, and nonproliferation activities inside Russia and the other states of the former Soviet Union that have greatly reduced the nuclear threat. These efforts have been pursued primarily under the auspices of the Defense Department's CTR program and the Energy Department's nuclear and radiological material security programs.

U.S. nuclear threat reduction programs have their origins in Congress's November 1991 passage of bipartisan legislation sponsored by former Senators Sam Nunn (D-Ga.) and Lugar known officially as the "Soviet Nuclear Threat Reduction Act of 1991," but more commonly as the "Nunn-Lugar Amendment." The amendment was attached to the implementing legislation for the Conventional Armed Forces in Europe (CFE) Treaty and authorized the transfer of \$400 million in existing fiscal year 1992 Defense Department funds to assist the Soviet Union and its "successor entities" with efforts to "1) destroy nuclear weapons, chemical weapons, and other weapons, 2) transport, store, disable, and safeguard weapons in connection with their destruction, and 3) establish verifiable safeguards against the proliferation of such weapons."

Nunn and Lugar's efforts were driven by urgent concerns about the safety and security of Soviet nuclear weapons in the wake of a failed August 1991 coup against Soviet leader Mikhail Gorbachev and the collapse later that year of the Soviet Union. As the two Senators noted in a Nov. 21, 1991, *Washington Post* op-ed making the case for their legislation:

"Cooperation with Soviet authorities on destroying nuclear and chemical weapons should not be postponed. The benefits of responding are too great, the dangers of inaction too severe. We believe Congress must act now to authorize a program of cooperation with the Soviet Union and its republics on the destruction of those weapons."<sup>12</sup>

Though the CTR program guided cooperative nuclear threat reduction efforts with Russia for over two decades, securing congressional, Defense Department, and White House support for the program was far from assured. Providing a longtime U.S. adversary with hundreds of million dollars in assistance represented a significant departure from longstanding U.S. policy.

Only weeks before the passage of the Nunn-Lugar amendment, Nunn and Representative Les Aspin (D-Wis.), then the chairman of the House Armed Services Committee, had failed to convince the Democratic leadership in both the Senate and House to include a provision in the fiscal year 1992 National Defense Authorization Act that would have authorized a multi-faceted aid package to the Soviet Union, including assistance to secure and destroy Soviet weapons of mass destruction.<sup>13</sup>

But the tide quickly turned after Lugar joined Nunn in championing the cause of nuclear security assistance to Russia and the two Senators shared with their colleagues the contents of a recently completed Harvard University study warning that the breakup of the Soviet Union would pose a major proliferation threat.<sup>14</sup>

Following the passage of their amendment, Nunn and Lugar in 1992 led two separate congressional



**Senator Sam Nunn (D-Ga.) and Senator Richard Lugar (R-Ind.), after being awarded the Distinguished Public Service Award, the highest civilian honor in the Department of Defense, at the National Defense University on December 3, 2012. (Photo: National Defense University)**

delegations to the Soviet successor states to identify how best to disperse U.S. nuclear security aid and build support for their effort. The election of Bill Clinton as president later that year led to the creation within the Defense Department of a specific office and budget line dedicated to implementing and coordinating Nunn-Lugar activities, which put the program in a strong position moving forward.

In the ensuing years, the CTR program worked cooperatively with Belarus, Kazakhstan, Russia, Ukraine and other nations to safely secure and dismantle vulnerable stockpiles of weapons and materials of mass destruction in the former Soviet Union. According to a scorecard posted on the website of the Lugar Center, as of March 2013 the Nunn-Lugar program:

“assisted in the deactivation of more than 7,500 nuclear warheads; the elimination of 2,000 intercontinental missiles; and the destruction of 1,000 missile launchers. The program has helped to secure innumerable biological pathogens, and it is proceeding with a project to destroy almost two million chemical weapons.”

In addition, the program directed by the State Department provided assistance to former Soviet

nuclear scientists and technicians to support peaceful scientific work and prevent the proliferation of their knowledge to other state and non-state actors.

The cooperative work under CTR also resulted in significant political benefits, particularly in the areas of trust building and enhancing stability between two former adversaries.

The program’s initial focus on eliminating nuclear weapons in the former Soviet states expanded over time to also focus on securing nuclear, chemical, and biological materials around the world.

Congress over the years has legislated several reporting requirements designed to improve the effectiveness of and build upon the CTR program, some of which made implementation of the program more difficult. These include reports on how to measure progress and identify success and a strategy to coordinate and advance CTR and related nonproliferation efforts in the Middle East and North Africa.

After nearly two decades of cooperation, by 2012, Russia was sending signals that it may not want to continue the CTR activities because it no longer needed Washington’s financial assistance to carry out the program and did not want to risk revealing sensitive information to the United States. In June 2013, Russia and the United States agreed to a pared-down replacement for the old CTR agreement. The

new arrangement allowed the Energy Department to continue nuclear security activities with Rosatom, but terminated activities involving the Russian Ministry of Defense.<sup>15</sup>

In December 2014, Russia informed the United States that it was ending nearly all cooperation with the United States on the security of nuclear materials inside of Russia.<sup>16</sup>

### **Nuclear Security Budget Increases and Cuts**

As the CRS notes, bipartisan majorities in Congress have over the years offered “significant support” to government programs to secure and eliminate nuclear weapons and programs and “has generally agreed with the executive branch on the priorities and goals for them.”<sup>17</sup> But lawmakers have “adjusted the profile of these programs over the years, sometimes reducing funds, sometimes increasing funds, and sometimes initiating new programs and project areas.”

For example, during the Obama administration, several lawmakers, most notably Feinstein, repeatedly

criticized proposed spending reductions for key NNSA programs that lessen nuclear security and nonproliferation risks. The administration early in its first term outlined a goal of securing the most vulnerable nuclear materials around the world within four years and requested significant budget increases pursuant to this goal in fiscal years 2011 and 2012. But these increases were followed by steep reductions for core NNSA threat reductions programs between fiscal years 2013 and 2015.

At a March 2012 hearing on NNSA’s fiscal year 2013 budget request, Feinstein expressed concern “about potential funding shortfalls for nonproliferation activities, which address the highest risk to the United States, nuclear terrorism.”<sup>18</sup>

In August 2014, a bipartisan group of 26 Senators led by Feinstein and Senator Merkley wrote to the head of the Office of Management and Budget calling on President Obama to support increased funding in the fiscal year 2016 budget to more rapidly secure and permanently dispose of nuclear and radiological materials.<sup>19</sup>



**Missile launch tubes removed from a ballistic missile submarine are eliminated with equipment and services provided by the Department of Defense’s CTR program on January 29, 2010.**  
(Photo: Defense Threat Reduction Agency)



**Senator Dianne Feinstein (D-Cal.) asks questions at a Senate Judiciary Committee hearing at the Dirksen Senate Office Building in Washington, D.C. on June 20, 2012. (Photo: Arva Adams/U.S. Patent and Trademark Office)**

The Senators wrote:

“Reducing budgets for agencies and programs that help keep nuclear and radiological materials out of the hands of terrorists is out of sync with the high priority that the President has rightly placed on nuclear and radiological material security and signals a major retreat in the effort to lock down these materials at an accelerated rate....The recent spate of terrorism in Iraq, Pakistan, and Kenya is a harrowing reminder of the importance of ensuring that terrorist groups and rogue states cannot get their hands on the world’s most dangerous weapons and materials.”

Congress in fiscal years 2013 and 2014 provided over \$150 million above the Obama administration’s requests for programs to accelerate the conversion of research reactors using HEU to use low-enriched uranium (LEU), strengthen nuclear smuggling detection and deterrence, develop an advanced reactor system for naval nuclear propulsion that would run on LEU instead of HEU, and secure radiological materials that could be used to make a dirty bomb. Congress provided an additional \$200

million in additional funding above the budget request in fiscal years 2017 and 2018.

Other members have worked to shine a light on the need to improve the security of radiological materials in the United States. Senator Carper in particular has introduced legislation that among other things would require a strategy for securing all high-risk, low-level radiological material in the United States.<sup>20</sup>

While Congress has increased the budget for some nuclear security programs, it has also restricted nuclear security cooperation with Russia and taken initial steps to constrain cooperation with China.

Congress voted in December 2014 to withhold NNSA’s \$92.3 million fiscal year 2015 budget request for nuclear material security work in Russia amid uncertainty about the future of collaborative efforts between Washington and Moscow in that area.

Congress also put constraints on the Defense Department’s nuclear security work in Russia. The fiscal year 2015 National Defense Authorization Act prohibited funding for CTR programs in Russia beyond fiscal year 2015 without specific authorization from Congress. “[T]he traditional manner in which the program’s activities have been carried out in the Russian Federation is no longer necessary and no longer sustainable,” said the explanatory report accompanying the bill. “[S]ecuring and destroying nuclear weapons and nuclear material is now a Russian responsibility and one that the United States should no longer fund without Russian cooperation,” the report added.

Lawmakers have included a prohibition on nuclear security cooperation with Russia in every defense authorization bill since fiscal year 2015. The prohibition can be waived if the Energy Secretary, with the concurrence of the Secretaries of State and Defense, issues a waiver determining that a nuclear-related threat arising in the Russian Federation must be addressed urgently and it is necessary to waive the prohibition to address that threat. No such waivers appear to have been signed.

The decline in congressional support for nuclear security work in Russia has coincided with Moscow’s decision to end most nuclear security cooperation with the United States. Beginning with the fiscal year 2016 budget request, NNSA has not requested funds for nuclear security work in Russia.

In addition, Congress in the fiscal year 2017 National Defense Authorization Action Act included limitations on the use of CTR funds for activities in China.

### **The Congressional Nuclear Security Working Group**

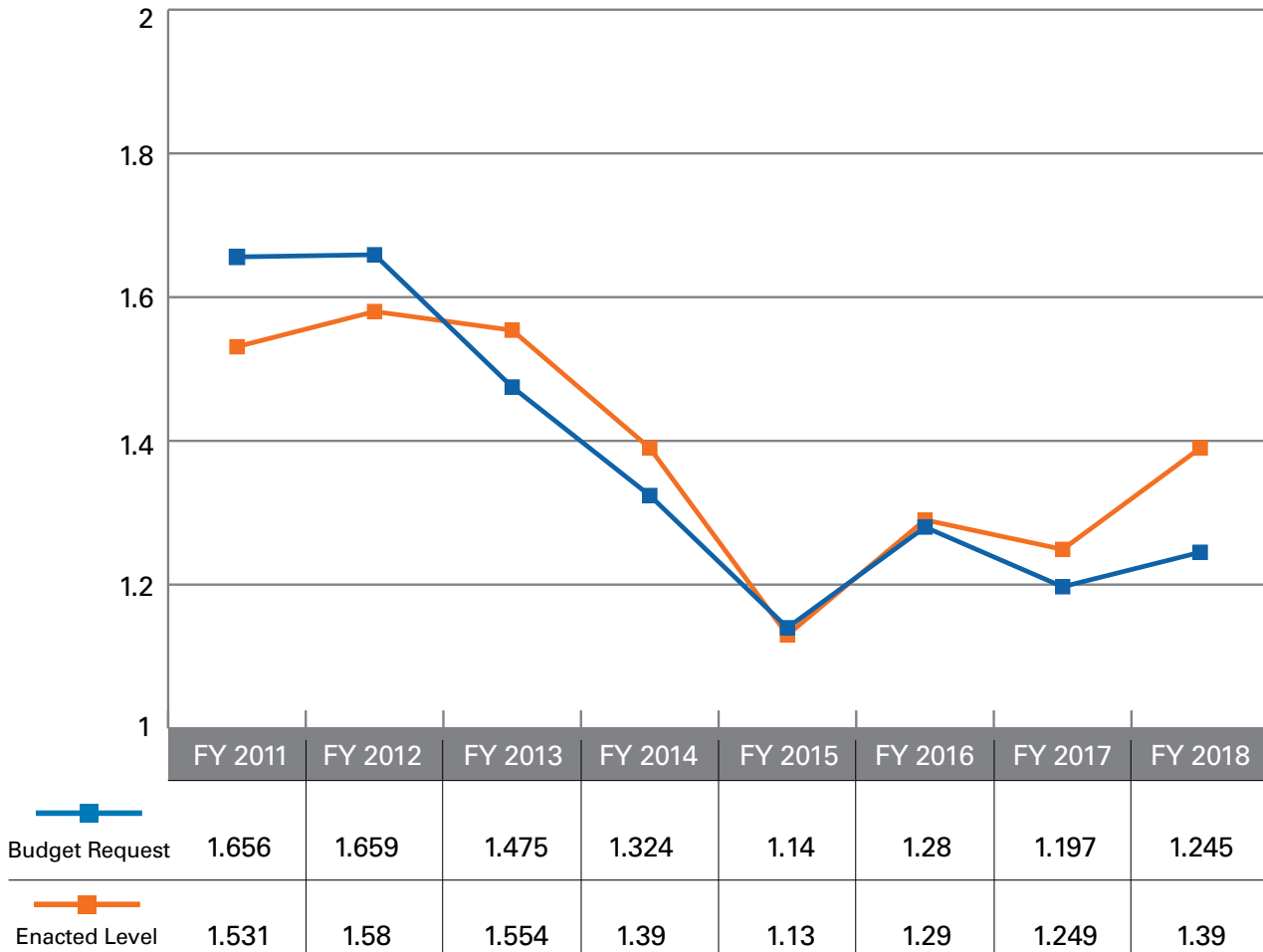
Co-chaired by Representatives Fortenberry and Peter Visclosky (D-Ind.), the 21-member Congressional Nuclear Security Working Group is a bipartisan



## Funding for NNSA Core Nuclear Security Activities (FY 2011—FY 2018)\*

Figures not adjusted for inflation

\*Includes funding for the Global Material Security, Material Management and Minimization, Nonproliferation and Arms Control, and Defense Nuclear Nonpro



House caucus focused on improving awareness and engagement on the threats posed by nuclear proliferation and nuclear terrorism. The goals of the working group include strengthening nuclear safeguards, securing fissile material, and preventing the misuse of sensitive nuclear materials and technology.

The group plays an important role in educating members and staff on the nuclear security issue and elevating the profile of the topic. In 2017, it held three events for congressional staff and three events for members of the entire group.

Beginning in 2017, the working group partnered with George Washington University, the John D.

and Catherine T. MacArthur Foundation, and the Defense Nuclear Facilities Safety Board to establish the Nuclear Security Fellowship program. The mission of the program is to expand the resources and expertise available to Congress pursuant to the goals of the working group.

In January 2017, three Nuclear Security Fellows with backgrounds and expertise in the field began in the offices of Representatives Fortenberry, Visclosky, and Chuck Fleischmann (R-Tenn.). In 2018, the program expanded to the Senate and placed fellows in the offices of Senators Donnelly, Merkley, Heidi Heitkamp (D-N.D.), Robert Casey (D-Pa.), and Steve Daines (R-Mont.).

# Effective Strategies for Engaging Congress

To better understand the current level of congressional engagement on nuclear security, PSA and ACA jointly undertook a first-ever study of congressional staff attitudes and beliefs about the issue.

Based on the study's findings, this report will provide a data-driven foundation from which programs can be developed to help close detected gaps in congressional understanding and identify opportunities to enhance congressional engagement. Capitol Hill staff are the eyes and ears of their members and committees, provide valuable advice, and frequently help set the agenda on legislative priorities. Their attitudes, understanding, and impact on nuclear security are important cogs in the legislative decision wheel because they help shape legislation and the quality of foreign policy in the Congress.

This study specifically targeted congressional staff responsible for national security and foreign policy issues, including nuclear security. Our sample population can be segmented into three groups:

## In-Person Interviewees (n=20)

1. Congressional staff directly responsible for nuclear security issues, as defined by their legislative portfolios and/or their committee assignments (n=10) ["Directly Engaged" group];
2. Congressional staff broadly responsible for national security and foreign policy portfolios, but infrequently engaged in nuclear security issues (n=10) ["Indirectly Engaged" group];
3. Digital survey respondents (n=107) whose legislative responsibilities broadly include national security and foreign policy issues (n=107).

Following in-person interviews and digital surveys, our research included a small focus group of congressional staff (n=10) to reflect on insights from these respondents. All focus group participants included congressional staff whose professional portfolios included national security and foreign policy issues (including nuclear security).

Appendix A provides further details on study sample and methodology.

## Suggestions for Engaging Congress

**1. Among congressional staff, there is no clear understanding of what nuclear security means. The term is broadly interpreted as "security from nuclear threats" within this community and rarely understood as "security of nuclear materials and the facilities that house them."**

Most congressional staff do not associate the term "nuclear security" with the definition used by the IAEA, technical experts, and members of civil society—"security of nuclear materials and the facilities that house them." Focus group participants noted that most staffers think of "nuclear security" as meaning "security from nuclear threats"—a broad umbrella that encompasses the entire range of possible nuclear threat scenarios. In this context, state-based nuclear threats posed by Russia, Iran, North Korea, and Pakistan dominate staff attention. Figure 1 illustrates the range of topics that congressional staff relate to nuclear security.



## Supporting Data

### Interview (n=20)

- i. Analysis showed a positive correlation between:
  1. Years of service in Congress and self-assessed familiarity with nuclear security;
  2. Years of service in Congress and self-assessed familiarity with the Nuclear Security Summits.

In the short term, efforts to advance nuclear security on Capitol Hill should target staff who have jurisdictional responsibility for the issue, or who are, for one reason or another, highly engaged with the issue. In the longer term, inclusive efforts should be launched to introduce younger staff to nuclear security; this would both broaden the pool of staff who regularly work on these issues and serve as a means for engaging members of Congress.

### **3. Staff who are more familiar with nuclear security and the Nuclear Security Summits place a higher priority on the issue. This could mean that better nuclear security education on Capitol Hill can elevate the urgency of this issue.**

Exposure to issues provides staff with important opportunities to accumulate knowledge and experience, driving awareness, understanding, and possibly prioritization. Focus group participants voiced a belief that seeing nuclear security programs and technology (e.g., radiation detection portals) in-person is important for staff, as it helps them to contextualize the issue. Staff within our sample who rely on the news media for nuclear security information are, according to their self-assessment, the least familiar with nuclear security and place a low priority on the issue.

## Supporting Data

### Interview (n=20)

- i. Among in-person interviewees, only three of twenty staff described nuclear security as an overall foreign policy or national security priority for their office. Within the interview sample, assessment of the relationship between familiarity with nuclear security and prioritization of the issue proved inconclusive.

### Digital Survey (n=107)

- i. Analysis of digital survey data showed a positive correlation between:
  1. Self-assessed familiarity with nuclear

security and self-assessed familiarity with the Nuclear Security Summits;

2. Self-assessed familiarity with nuclear security and prioritization of the issue among America's national security concerns.
- ii. Analysis of digital survey data showed a negative correlation between:
  1. Reliance on the media as a source of nuclear security information, and self-assessed familiarity with nuclear security;
  2. Reliance on the media as a source of nuclear security information, and prioritization of nuclear security among America's national security concerns.

Congressional staff who worked on Capitol Hill during the Nuclear Security Summits are important targets for outreach and coalition building. According to this study, these staff are more familiar with nuclear security and rank it a higher national security priority than their less experienced peers. This community, however, is small and continuing to shrink. While the Nuclear Security Summits and related media coverage did spike momentary interest, focus group participants suggested that the summits barely engaged Capitol Hill—even the two summits that took place in Washington, D.C. A spark of momentary interest seems to be insufficient to sustain congressional attention.

It's clear that future efforts to inform Capitol Hill on nuclear security should be tailored specifically to Congress in order to build broader and more sustainable engagement from this community. A well-tailored effort to engage and educate a congressional audience should have a few fundamental characteristics: it should be conducted on Capitol Hill to ensure ease of access for congressional staff; it should offer action items that empower Congress to use the tools at its disposal (e.g., the annual National Defense Authorization Act) to advance policy solutions; and it should explicitly engage a bipartisan collective of the congressional community. These three components are foundational for engagement, but are not all encompassing.

Congress is not a single community with broadly defined interests and should not be approached as such. Targeting the right of congressional staff is as important as the substance and execution of any educational efforts. Educators who understand their target audience can better frame the importance of nuclear security by connecting it to salient threats that resonate on Capitol Hill.

**4.** Staff members' views on the gravest nuclear risk are related to the nuclear issues for which they are responsible. Most staff are responsible for nuclear issues in the context of Iran/North Korea or U.S. nuclear weapons policy. A majority of staff cited "proliferation of nuclear materials" and "illicit trafficking" as the two most concerning risks related to nuclear terrorism.

Staff views are often shaped by their specific legislative portfolios or the responsibilities and issue oversight roles of their committees; as such, staffers typically deal with nuclear issues in specific contexts. Digital survey respondents were asked to indicate which of the following best describe the context in which they are responsible for nuclear issues: Iran/North Korea, U.S. nuclear weapons policy, nuclear energy, nuclear materials/waste, or nuclear terrorism. Most digital survey respondents in this study responded that they are responsible for nuclear issues primarily in the context of Iran/North Korea, while another sizable group worked primarily on U.S. nuclear weapons policy. Nuclear energy was a distant third substantive area of staff work, while nuclear materials or waste and nuclear terrorism were far less common areas of responsibility. As indicated in Figure 2, staffers who worked in these different nuclear contexts tended to prioritize different nuclear security risks.

### Supporting Data

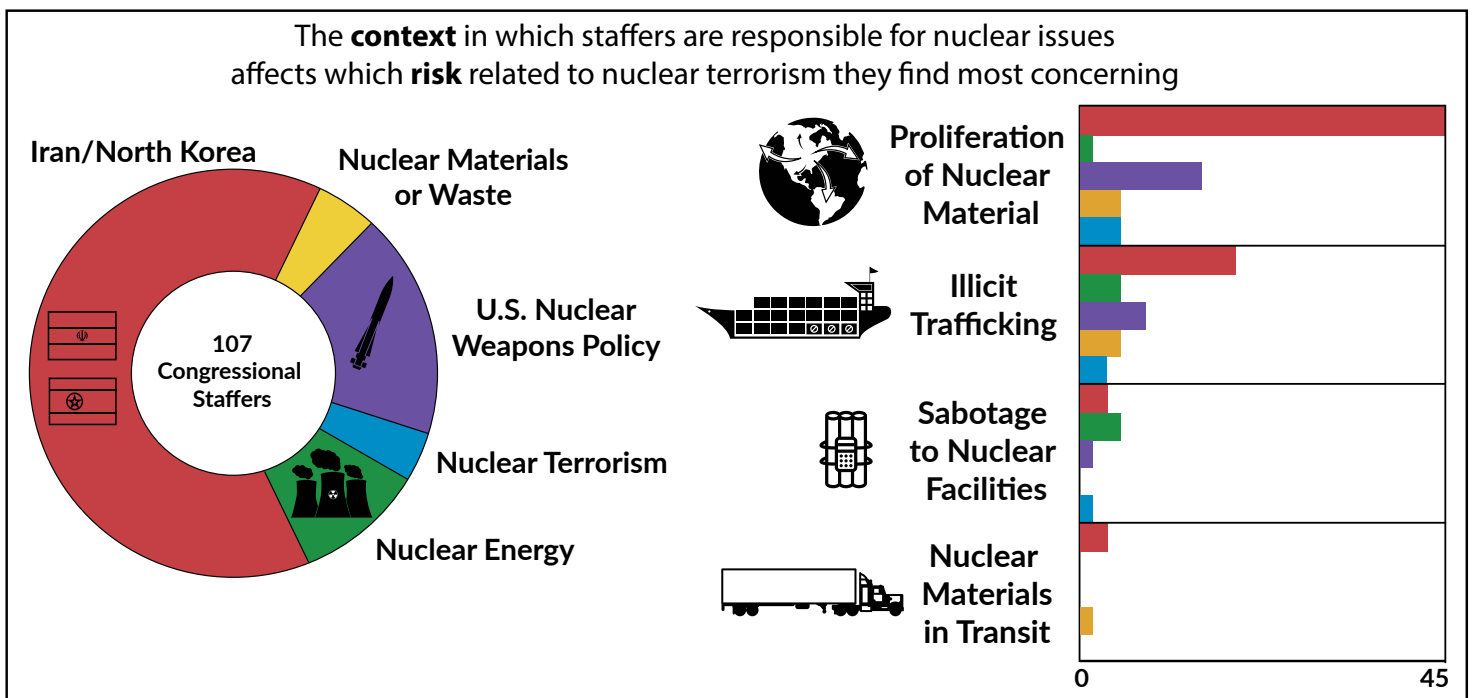
#### Interview (n=20)

- i. Among in-person interviewees, we observed the following:
  1. "Directly Engaged" staff were mostly responsible for nuclear issues in the context of U.S. nuclear weapons policy;
  2. "Indirectly Engaged" staff were mostly responsible for nuclear issues in the context of Iran/North Korea.

#### Digital Survey (n=107)

- i. Within the digital survey data, we observed a correlation between a staffer's job responsibilities with respect to nuclear issues, and the type of risk related to nuclear terrorism they found most concerning;
  1. Staff who were typically responsible for nuclear issues in the context of Iran/North Korea found "proliferation of nuclear material" to be the most concerning risk;
  2. Staff who were typically responsible for nuclear issues in the context of nuclear energy found "sabotage to nuclear facilities" to be the most concerning risk.

**Fig. 2: The context in which a staffer focuses on nuclear issues affects which risk they find most concerning (n=107)**



- ii. Within the digital survey data, we observed that those staff who primarily worked with nuclear issues in the context of Iran/North Korea considered themselves less familiar with nuclear security issues.

Understanding the key policy areas in which staffers work is critical to framing nuclear security issues for presentation to a congressional audience.

Focus group participants noted that knowledge of nuclear materials often lies with a congressional office's energy staffer, due to their responsibility for domestic concerns related to nuclear fuel (e.g., waste management and environmental impacts). The issue of global nuclear security, however, is typically held by foreign policy staffers. According to the congressional analytics tool *Leadership Directories*, these issues rarely overlap in a single legislative staffer's portfolio. Within the legislative staff community, only 11 percent have responsibility for both foreign policy and energy-related issues. Focus group participants explained that legislative staff do not work regularly with staff outside of their issue areas. Because of this, the global nuclear security issue is often lost somewhere in between. Educational efforts to improve Congress' management of nuclear security should include both energy and foreign policy staff members to bring these communities together and connect nuclear materials knowledge with international security perspectives.

## **5. Non-governmental organizations/think tanks and the Congressional Research Service are the most cited sources of information on nuclear security. Staff face significant challenges accessing executive agencies for information (e.g., reliability and availability of legislative liaisons).**

Legislative portfolios often cover a wide range of issues. Out of necessity, staffers rely on others to provide detailed information to advise their members or committees. Staffers choose whom they turn to for information based on key criteria, including: reputation, turnaround time, and ease of access. The CRS and reliable NGOs or think tanks were the most popular sources of information among participants in this study. Use of the executive branch as a source of information was surprisingly lower among study participants. See Figure 3 for a complete chart of responses.

Congressional staff face significant challenges in accessing executive agencies for information. Communication with these agencies requires working through a network of legislative liaisons who are

reputed to slow down access to information. Staff who have personal relationships with executive branch members are better able to short-circuit this system. In communicating with the executive branch, staff worry that political appointees may provide skewed information favoring their agency. On the other hand, civil society organizations are highly accessible, both digitally and through direct communication, making them an attractive and ready source of information on nuclear security.

### **Supporting Data**

#### **Interview (n=20)**

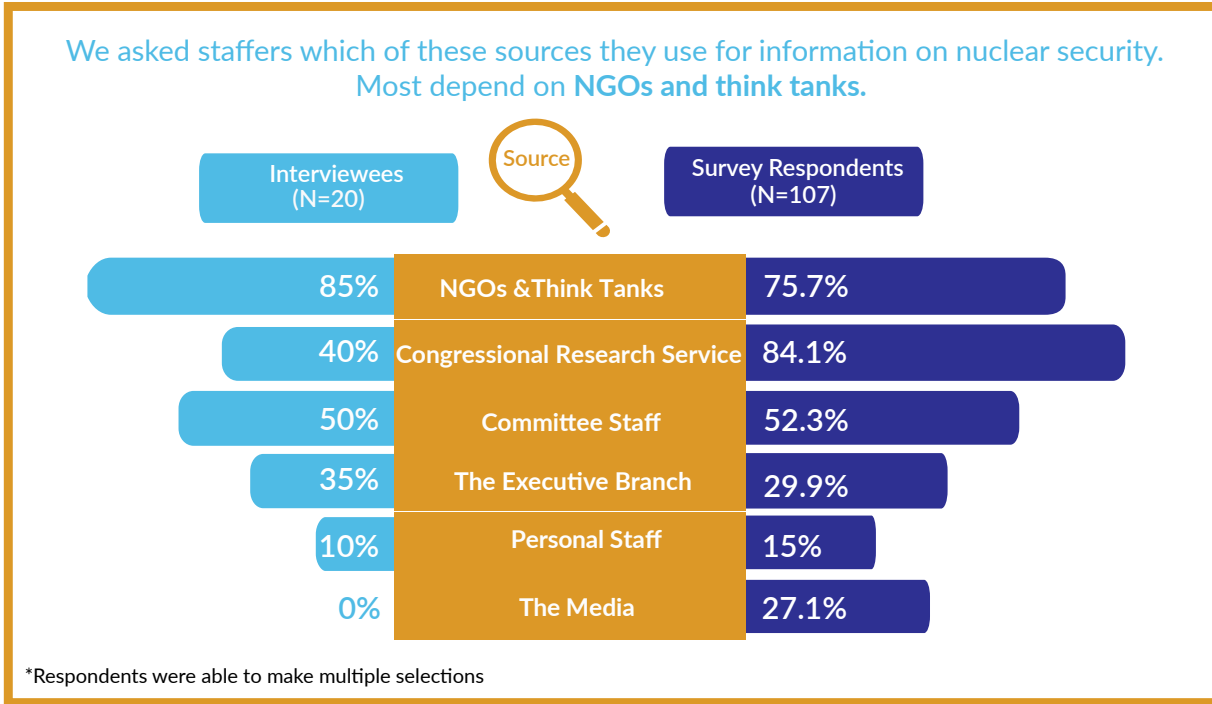
- i. CRS was cited regularly by:
  - 1. 40 percent of interviewees (8/20). "Indirectly Engaged" interviewees were more likely to cite CRS than "Directly Engaged" peers.
- ii. NGOs/think tanks were regularly cited by:
  - 1. 85 percent of interviewees (17/20).
- iii. The executive branch was cited regularly by:
  - 1. 35 percent of interviewees (7/20). "Directly Engaged" interviewees were more likely to cite executive branch than "Indirectly Engaged" peers.

#### **Digital Survey (n=107)**

- i. CRS was cited regularly by:
  - 1. 84.1 percent of digital survey respondents (90/107);
- ii. NGOs/think tanks were regularly cited by:
  - 1. 75.7 percent of digital survey respondents (81/107);
- iii. The executive branch was cited regularly by:
  - 1. 29.9 percent of digital survey respondents (32/107).

Civil society organizations are relied upon heavily to provide important analyses and recommendations to the nuclear security space on Capitol Hill. Efforts should be made to build relationships between civil society organizations and congressional offices. Doing this would provide Capitol Hill staff with a range of perspectives and ideas as policy opportunities arise. Access to the executive branch is complicated by institutional bureaucratic practices. Developing connections between key executive and legislative staff could empower more staff to work around bureaucratic obstacles.

**Fig. 3: Congressional staff use a few key sources for nuclear security information**



**6. Staff who do not handle nuclear security on a regular basis are much less versed in all aspects of the issue than their peers on issue-relevant caucuses or committees. Broadening nuclear security literacy on Capitol Hill will require education on many levels, from technical knowledge to oversight and governance.**

Currently, a core group of staff with jurisdictional responsibility or special interest in nuclear security policy shape the congressional conversation on these issues. If nuclear security expertise is limited to a small pool of staff, preserving institutional knowledge in a frequently changing Congress becomes a serious challenge—and may have contributed to the conditions this study seeks to address. Figure 4 illustrates the nuclear security literacy gaps between a core group of “Directly Engaged” congressional staff and their “Indirectly Engaged” peers.

**Supporting Data**

Within this study, we asked interview participants (n=20) to self-assess their understanding of four separate factors relating to nuclear security:

- U.S. government agencies responsible for implementing nuclear security efforts;
- International organizations supporting global nuclear security;

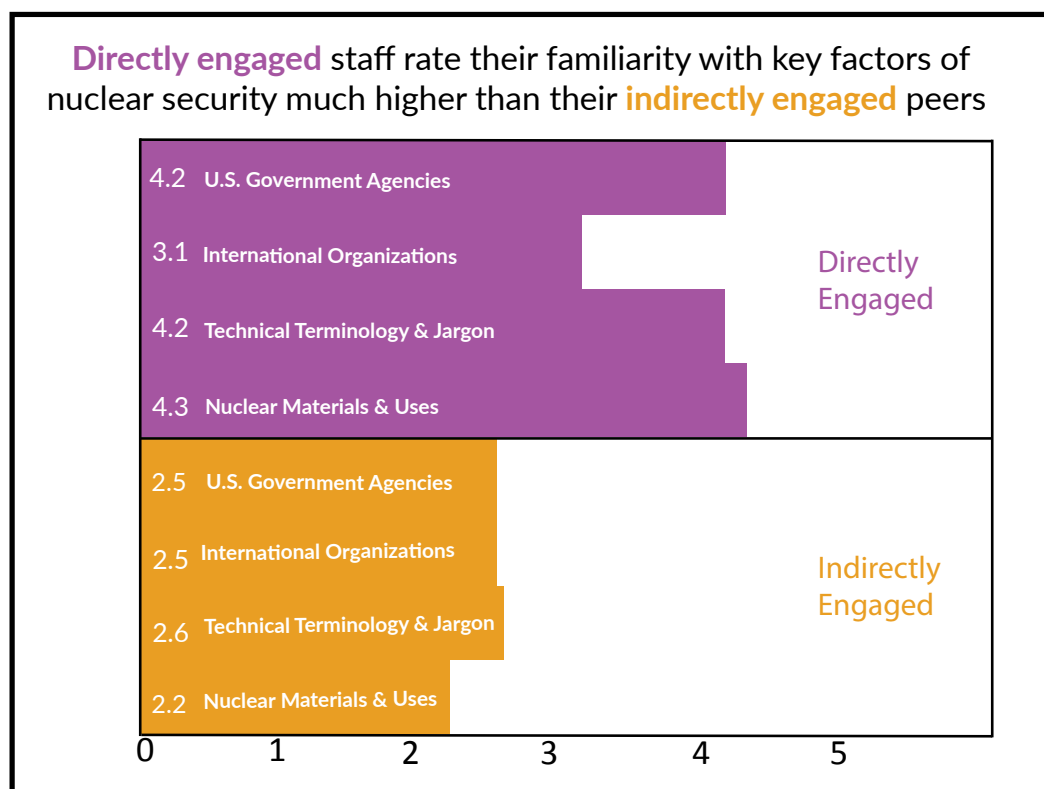
- Technical terminology and “jargon” used to discuss nuclear security; and
- Radioactive/nuclear materials and their civil and military uses.

Our findings show a marked difference in understanding of the nuclear security issue between those we described as “Directly Engaged” and those “Indirectly Engaged” in the nuclear security issue-area.

**Interview (n=20)**

- Directly Engaged Staff:
  - Ranked higher in all four indicators of self-assessed knowledge (listed above) compared to scores from the “Indirectly Engaged” group. Within these measures, Directly Engaged staff scored themselves:
    - Highest in self-assessed understanding of “nuclear and radioactive materials and their civil and military uses” (average score = 4.3 out of 5.0);
    - Lowest in self-assessed understanding of “international organizations supporting the global nuclear security architecture” (average score = 3.1 out of 5.0).

**Fig. 4: Familiarity with key aspects of nuclear security contrasts sharply between “Directly Engaged” and “Indirectly Engaged” staff**



ii. Indirectly Engaged Staff:

1. Ranked lower in all four measures of self-assessed understanding (listed above) *compared to* scores from the “Directly Engaged” group. Within these measures, Indirectly Engaged staff scored themselves:
  - a. Highest in self-assessed understanding of “technical terminology and jargon used to discuss nuclear security issues” (average score = 2.6, see discussion below);
  - b. Lowest in self-assessed understanding of “nuclear and radioactive materials and their civil and military uses” (average score = 2.2).
  - c. All 10 “Indirectly Engaged” interviewees self-assessed their understanding on all four indicators at or below the mean score.
2. Many staff worked in personal offices and managed very broad issue portfolios.

A concerted effort should be made to introduce the new generation of congressional staff to nuclear security through educational and other engagement efforts. Less experienced legislative staff have had significantly fewer opportunities than their predecessors to engage with this issue. Making nuclear security information more accessible to new staff would draw greater attention to the issue and help develop a broader foundation for sustained engagement on Capitol Hill. While “Indirectly Engaged” staff surprisingly rated “technical terminology and jargon” related to nuclear security as their highest knowledge area, this rating is still very low-level at 2.6. This confidence is likely overrated because of the misunderstanding surrounding the term “nuclear security” (as previously discussed). This is a noteworthy point for civil society organizations seeking to engage with congressional staff. Overreliance on technical terminology can muddy the issue and obstruct learning. On the other hand, staff who are already engaged with nuclear security policy could benefit from a deeper-dive into the nuances and complexities of nuclear security issues.



**7. Staff agree that gaps exist in both U.S. and global nuclear security efforts, but there is little consensus, or clarity, about what the gaps are or how to address them.**

Most congressional staff agree that both U.S. and global nuclear security efforts need improvement. When asked what actions should be taken to improve global nuclear security, however, our interviewees provided a broad range of responses that revealed the absence of any overarching strategy. There were several staff recommendations that stand out as points of agreement.

When asked how gaps or shortcomings in U.S. nuclear security efforts could be improved, the two most recurring themes among interviewees were “concerns about U.S. government personnel responsible for nuclear security,” and “resolving funding shortages.” When asked how global nuclear security could be improved, the two most recurring themes were “reforming international legal frameworks,” and “providing additional funding.” Unfortunately, nearly equal numbers of interviewees answered that they weren’t sure how to improve global or U.S. nuclear security (see Figure 5 below).

Focus group participants believed that the absence of consensus on nuclear security issues is partially attributable to a lack of aggressive, congressionally-targeted advocacy by interest groups. They further expounded that the Nuclear Security Summits produced a range of viewpoints on the most pressing nuclear security concerns and the different

solutions available, but provided no unified guidance for Congress.

**Supporting Data**

**Interview (n=20)**

- i. Interviewees unanimously (20 of 20) agreed that the current state of global nuclear security needs improvement;
- ii. Nineteen of twenty interviewees agreed that gaps or shortcomings exist in current U.S. nuclear security efforts (1 was unsure);
- iii. Despite agreeing that current conditions are less than ideal, when asked to rate the priority of nuclear security among U.S. national security concerns on a scale of 1–5, the 20 interviewees produced an average score of 3.35;
- iv. When asked what actions should be taken to redress gaps or shortcomings in U.S. nuclear security efforts, the 20 interviewees produced:
  - 1. Twenty-one unique clusters of suggestions, e.g.:
    - a. Cesium-137 replacement efforts, improving waste management practices, controlling transnational crime, and monitoring trafficking of nuclear materials.
  - 2. Most interviewees provided more than one suggestion;
  - 3. Three interviewees said they didn’t know or weren’t sure what action should be taken.
- v. A request for suggestions on how global nuclear

**Fig. 5: How can global nuclear security be improved? (n=20)**



security conditions could be improved yielded similarly diverse results:

1. Sixteen unique clusters of suggestions, e.g.:
  - a. Limit fissile material production, reform international legal frameworks, revitalize U.S. leadership, provide additional resources for nuclear security.
2. Most interviewees provided more than one suggestion;
3. Four interviewees replied that they did not know or were not sure what should be done.

Results of this study indicate that staff are generally aware of the need to improve global nuclear security, but they expressed no clear strategic direction through which to advance these aims. Building from the points of agreement identified by responses to this survey, civil society should work with relevant congressional offices to establish a set of nuclear security priorities. Once priorities are agreed upon, action items should be identified and a roadmap for congressional action should be developed. Specifically defined legislative objectives should form the core of future congressional engagement efforts. Framing engagement around actionable objectives could empower congressional staff by helping to make them better informed partners and stakeholders in the issue.

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**8. Constituent concern over nuclear security is low. There is no agreement, however, on if or how constituents should be educated on this issue. Most congressional activity around nuclear security is driven by personal interest or committee responsibilities. Many members and staff doubt constituents can or should become a part of the conversation.**

Nuclear and radioactive materials are present in most U.S. states and congressional districts. Despite this, nuclear security is not a highly visible constituent issue. Many interviewees believe nuclear security is too technical to be explained to their constituents; some believe that their constituents would be concerned or engaged only after a doomsday event occurred. A significant share of interviewees indicated that they have no interest in engaging with their constituents on this issue, and/or are unsure how to do so. Several interview participants indicated that engaging with constituents on this issue would only serve to create more work for themselves and might

cause a counterproductive reaction. On balance, congressional staff are content with maintaining the current status quo involving limited constituent interaction with nuclear security policy.

### Supporting Data

#### Interview (n=20)

- i. When asked to rate how concerned their constituents are about nuclear security on a 1–5 scale, interviewees produced an average rating of just 2.3;
  1. When asked to rate their own priority of nuclear security among national security concerns using a 1–5 scale, interviewees produced an average rating of 3.35.
- ii. Eight of twenty interviewees said that they didn't know how to or didn't want to engage with their constituents on nuclear security issues;
- iii. But 15 of 20 interviewees indicated that they were aware of the presence of radioactive or nuclear materials in their state or congressional district.

Absent a cataclysmic nuclear-related or terrorist event at home or abroad, it could be difficult to mount an effective grassroots constituent engagement campaign to improve nuclear security policy in Congress. Efforts to improve nuclear security policy should therefore focus on developing relationships with key stakeholders in government. In the legislative branch, engagement among members of Congress on nuclear security has proven that a member's personal interest in the issue can yield results. Staff are often an effective means of direct engagement with members of Congress, and provide valuable information and advice to their members or committees. Arguably, staff should be a key focus of continued civil society advocacy and engagement efforts.

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**9. Congress has been underperforming on nuclear security. Staff suggest the legislative branch should have a larger impact on nuclear security policy than it currently does, but they doubt that Congress can achieve this role. When asked to cite an example of congressional leadership on nuclear security, most respondents mentioned the Nunn-Lugar CTR program.**

Staff are generally aware of the history of congressional leadership on this issue (based on their familiarity with the Nunn-Lugar program), and many still believe that Congress *should* do more than it *can*

do to improve global nuclear security. Based on the congressional staff responses gathered in this study, Congress is underperforming on nuclear security; there appears to be potential for a more proactive role on nuclear security policy-making by the legislative branch.

### Supporting Data

#### Interview (n=20)

- i. Interviewees were asked to rate the impact that Congress *can* and *should* have on improving global nuclear security using a 1–5 scale. Almost half of interviewees said Congress *can* have less of an impact than it *should* (3.3 vs 4.7 respectively), half rated *can* and *should* the same (4.1 vs 4.1 respectively), and only one person said Congress can have a greater impact than it *should* (5 vs 4 respectively);
- ii. Seven of twenty interviewees made a point to specifically note that Congress *requires* leadership from the executive branch;
- iii. The Nunn-Lugar CTR program was the most-cited example of congressional leadership on nuclear security; when asked if they could name an example of congressional leadership, Nunn-Lugar was mentioned by 10 of 20 interviewees.

Congress has proven capable of taking leadership on nuclear security in the past, but today’s Capitol Hill staff underrate the institution’s ability to guide policy on this issue. Providing staff with instructional narratives of historical congressional achievements, along with concrete policy recommendations, could help set the foundation for renewed legislative leadership on nuclear security. Highlighting the accomplishments of their predecessors and current opportunities for engagement will be necessary to inspire today’s congressional staff and their members toward an active role.

**10. Democrats and Republicans share similar views on nuclear security with few exceptions. Self-assessed knowledge, prioritization of the issue, and other indicators that were measured are similar across party lines.**

When comparing responses across parties, we observed many similarities in nuclear security views among Republican and Democratic staff. Both sides of the aisle appeared to be equally aware of the bipartisan history of nuclear security.

One area in which the two groups *do* differ slightly is in the perception of threats that nuclear

security measures are designed to guard against. Republicans interviewed were most concerned with “proliferation of nuclear material”, while Democrats were more focused on “illicit trafficking.” Nearly all Democrats interviewed said they have been involved in legislative activity related to nuclear security, while fewer than half of Republican interviewees said they have worked on nuclear security related legislation.

### Supporting Data

#### Interview (n=20)

- i. Using the 1–5 scale Likert scale, Republicans and Democrats interviewed in this study produced very similar average scores on several key points:
  1. Their familiarity with nuclear security issues (3.30 among Republicans, 3.44 among Democrats);
  2. Prioritization of nuclear security among America’s national security concerns (3.35 among Republicans, 3.13 among Democrats);
  3. Level of constituent concern about nuclear security issues (2.3 among Republicans, 2.44 among Democrats).
- ii. Equal numbers of Republicans and Democrats interviewed identified the Nunn-Lugar CTR Program as an example of congressional leadership on nuclear security;
- iii. Two key differences observed were:
  1. A slight majority of Democrats interviewed identified “illicit trafficking” as the most concerning risk related to nuclear security, while all Republican interviewees identified “proliferation of nuclear material” as the most concerning risk related to nuclear security;
  2. Nearly all Democrats interviewed said they have been involved in legislative activity related to nuclear security, while fewer than half of Republican interviewees said they have worked on related legislation.

Republican and Democratic staff do not differ significantly in their views on nuclear security and can be served by the same education and outreach efforts. Recognizing where they do differ (such as concern about risks related to nuclear security), should be used to frame the issue for target audiences. Drawing together these viewpoints and offering a bipartisan educational platform would facilitate broader engagement and coalition-building to advance related legislative objectives.

# Recommended Action Items for Congress

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There is a long legacy of bipartisan congressional action to reduce nuclear security risks. But our study demonstrates that congressional staff believe that the legislative branch is currently underperforming in this area, is lacking in expertise, and should do more. At the same time, staff question what Congress can realistically achieve given the erosion of institutional expertise, competing priorities, funding constraints, moribund executive branch leadership, and a dearth of new and creative ideas.

The U.S. government needs to be more focused, agile, and creative in confronting emerging nuclear security challenges. Below are ten ideas for congressional action to sustain and revitalize U.S. and global nuclear and radiological security efforts. These ideas are informed by (and in some cases modeled after) past instances of successful congressional engagement and by our survey of congressional attitudes and understanding of the nuclear security issue.

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## **1. Require the Office of Management and Budget to annually prepare a report summarizing the U.S. budget for nonproliferation and nuclear security programs.**

The consolidated summary should include all funding by agency/department for U.S. government programs to prevent nuclear and radiological terrorism, prevent the spread of nuclear weapons, implement arms control agreements, halt illicit transfers of nuclear technology, screen cargo at domestic and international ports, research and develop tools and strategies to address future nonproliferation challenges, etc. As it now stands, the budget and responsibilities are spread throughout the U.S. government like a scatter gram. A consolidated summary would bring greater clarity to the cost of the government's wide-ranging nuclear threat reduction activities, allow for a better understanding

of the alignment between program goals and budget estimates, and make it easier to identify potential program overlaps and redundancies. In addition, Congress should mandate that the Comptroller General produce an annual report on the government's nuclear security budget. This report should assess changes in the budget estimates from year to year, identify redundancies that may exist across different agencies, examine the extent to which the budget estimates align with plans for nuclear security efforts, provide suggestions on developing new metrics for nuclear security progress, and provide details about how unspent carryover balances are being used.

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## **2. Hold hearings on U.S. nuclear and radiological security strategy.**

In light of the evolving nuclear security threat environment, Congress—specifically the Armed Services, Foreign Relations/Affairs, Intelligence, Homeland Security, Commerce, and Oversight and Government Reform Committees—should hold a series of hearings in 2018 and early 2019 that examine U.S. nuclear terrorism prevention strategy and spending with government and non-governmental experts. Areas of focus could include: an assessment of the current and likely future challenges to material security and nonproliferation, including those which require priority attention; the U.S. government's current areas

of focus in material security and nonproliferation; the ways current U.S. government material security and nonproliferation efforts could be improved and/or expanded; the obstacles that stand in the way of making changes to U.S. government material security and nonproliferation activities and how they might be overcome; and whether current international efforts, including those by the United States, to secure nuclear material are commensurate with the risks and consequences to our country, the global economy and global security, and if not, what more should be done to develop a sustainably effective global effort to secure nuclear material and prevent nuclear terrorism.

**3. Call for more administration briefings on nuclear security issues.** The relevant congressional committees and Congressional Nuclear Security Working Group should request more and regular briefings on nuclear security issues. This should include senior-level briefings, but also discussions between congressional and Energy Department staff focused on threat assessment and implementation at the programmatic level. In addition, the working groups should arrange for more frequent CODELS and STAFFDELS to national and foreign sites where U.S. nuclear security activities are being implemented. Visits could include briefings with international agencies, such as the IAEA and the Nuclear Security Contact Group.

**4. Establish a blue ribbon, bipartisan congressional commission to recommend by 2020 a comprehensive strategy to prevent, counter, and respond to nuclear and radiological terrorism.** The commission would be modeled after the bipartisan Congressional Strategic Posture Commission created by Congress in 2008. Members of the commission would be appointed by the Chairman and Ranking Members of the Senate and House Armed Services, Foreign Relations/Affairs, and Intelligence Committees. This commission should focus on:

- (1) identifying national and international nuclear and radiological terrorism risks and critical emerging threats;
- (2) preventing state and non-state actors from acquiring the technologies, materials, and critical expertise needed to mount nuclear or radiological attacks;
- (3) countering efforts by state and non-state actors to mount such attacks;
- (4) responding to nuclear and radiological terrorism incidents to attribute their origin and help manage their consequences;
- (5) providing the projected resources to

- implement the strategy; and
- (6) delineating indicators for assessing progress toward implementing the strategy.

The strategy should also outline how the administration plans to (1) encourage and incentivize other countries and relevant international organizations (e.g., IAEA, Interpol) to make nuclear security a priority (2) improve cooperation and appropriate integration among federal entities and federal, state, and tribal governments; and (3) improve cooperation between the United States and other countries and international organizations, particularly China, India, Pakistan, and Russia. The fiscal year 2018 National Defense Authorization Act mandates that the JASON defense advisory group conduct a similar review, but a congressional commission would carry a higher profile and thus be more likely to influence policy.

**5. Invest in educational and training programs on Capitol Hill.** Based on findings from the PSA-ACA survey of congressional staff attitudes and understanding of the nuclear security issue-area stemming in part from the erosion of expertise within Congress, there should be a coordinated and sustained plan to supplement executive branch briefings, hearings, and expertise with additional training and educational programs on nuclear security in the Congress.

**6. Establish a nuclear security crosscut initiative.** The initiative would be led by NNSA's Defense Nuclear Nonproliferation (DNN) program, which is the tip of the spear in the U.S. government's effort to reduce nuclear and radiological threats. While DNN plays the lead role, the Energy Department is full of other experts with valuable knowledge about how best to confront emerging nuclear security and nonproliferation challenges. However, their activities could be more effectively coordinated and there is a need to ensure that this expertise does not atrophy. The initiative, which would consist of department offices with a stake in the nuclear security mission, would produce a ten-year strategy and options for shared resource investments. As part of this effort, the initiative would take stock of the department's existing capabilities, identify atrophying capabilities, and outline options to rebuild needed capabilities. Such an analysis would require approximately \$30 million and could be modeled after the congressionally-led effort in 2010 to restore the national laboratories' capabilities to assess foreign nuclear weapons capabilities.<sup>21</sup>

## **7. Expand NNSA's nuclear security and nonproliferation research and development efforts.**

A 2015 Energy Department task force on NNSA nonproliferation programs recommended that the NNSA should expand its efforts to build the foundations for dealing with future nuclear security and nonproliferation challenges and opportunities.<sup>22</sup> Congress should require NNSA to report on its research and development activities and identify where opportunities are available to expand these activities, particularly in coordination with the national laboratories, universities, and industry. The report should focus on NNSA's efforts to:

- (1) Develop new capabilities to detect uranium enrichment, uranium processing, plutonium processing, and weaponization activities;
- (2) Develop improved physical protection, material accounting, and material control technologies;
- (3) Develop new capabilities to detect special nuclear material, including in transport, and to improve the effectiveness of international safeguards;
- (4) Develop alternatives to high-performance research reactors;
- (5) Develop ways to verify that stocks of HEU set aside for naval fuel are not being used for weapons, without revealing sensitive information; and
- (6) Examine ways adversaries could potentially use 3D printing and other new technologies to make nuclear-weapons usable components.

## **8. Call for and support a global strategy, stronger regulations, and increased funding to secure the most vulnerable highest-risk radiological materials around the world in five years.**

A multi-dimensional approach should be implemented that includes:

- (1) securing the most vulnerable sources (where needed);
- (2) implementing stronger regulatory requirements;
- (3) ensuring universal adherence to the IAEA Code of Conduct on the Safety and Security of Radioactive Sources; and
- (4) implementing additional cost sharing by industry and end-users of the radiological sources.

The accelerated effort should prioritize the elimination, consolidation, and security of the

highest risk radioactive sources in the United States that could be used for radiological dispersal devices. This would allow the United States to lead by example and profit U.S. based industries that commercialize and sell non-radioactive technologies. According to one estimate this effort would likely require around \$500 million over five years.<sup>23</sup>

## **9. Continue funding to support conversion of naval reactors to the use of LEU fuel.**

Congress should continue to make funding available for research and development of an advanced nuclear fuel system based on LEU fuel despite the Navy and Energy Department's opposition to the effort.<sup>24</sup> The use of LEU instead of HEU would strengthen nuclear security by reducing the amount of weapons-grade HEU in military inventories and the risk that HEU could be stolen as it is transited from facility to facility for production and processing. Congress has been the driving force behind the effort to find alternatives to HEU, beginning with the fiscal year 2013 National Defense Authorization Act, which directed the Energy Department to update a 1995 department report assessing the technical, environmental, economic, and proliferation implications of using LEU instead of HEU in naval nuclear propulsion systems. Without congressional engagement on this issue, the Navy would not have revealed in 2016 that LEU could be used to power naval vessels. To their credit, both the Senate and House Appropriations Committee versions of the fiscal year 2019 Energy and Water Appropriations Bill include up to \$10 million to fund continued research and development activities.

## **10. Fund a program of activities to strengthen nuclear security in North Korea as part of the phased and verifiable dismantling of North Korea's nuclear arsenal and supporting infrastructure.**

At a historic June 12, 2018 summit meeting in Singapore, Trump and North Korean leader Kim Jong Un committed to work toward the complete denuclearization of the Korean Peninsula. While it remains to be seen whether subsequent negotiations will lead to a breakthrough that reduces the North Korea nuclear threat, even steps toward this goal will pose an immense monitoring and verification challenge. Additional financial support for existing and potentially new verification and threat reduction tools will be required to ensure that the United States, its partners, and the IAEA and other international organizations can achieve the denuclearization goal in a phased and safe manner. The CTR program could serve as a model for how to implement denuclearization steps and enhance the security of North Korean nuclear materials. As

Nunn and Lugar wrote in an April 23 *Washington Post* op-ed:

“We believe this concept should be a critical component of any effort to verifiably and irreversibly dismantle North Korea’s nuclear weapons and related programs, as well as prevent future proliferation of weapons, material or know-how. Such cooperation can also be used to engage thousands of North Korean scientists and engineers, who are now employed in making weapons of mass destruction, in peaceful scientific and technical work. This would also diminish the risk of proliferation of their deadly knowledge to other states or terrorists.”<sup>25</sup>

Laying the groundwork for such efforts should begin now. Congress should provide an additional \$100 million in fiscal year 2019 that would be divided between the Defense Department’s CTR program and the Energy Department’s DNN program to model the verification and security requirements associated with different denuclearization steps and scenarios, identify gaps, and provide recommendations for needed capabilities.

## Conclusion

Observations from this study can provide valuable input for framing informational efforts and

identifying legislative action items on Capitol Hill. A key observation from the research is that congressional staff do not share a uniform understanding of the nuclear security issue. Indeed, there is considerable misunderstanding of the subject on Capitol Hill. This scattershot understanding, we believe, stems in part from the compartmentalization of nuclear issues among those working on budgets, those focusing on strategic threats, and those who concentrate their attention on nuclear energy and related concerns. Clearly, nuclear security does not have the understanding, attention, and priority in the Congress that its national security implications require.

Another important observation from the study was a pervasive doubt among staff in Congress’s ability to lead efforts to improve global nuclear security. Our research and congressional recommendations, however, offer historical evidence to the contrary and provide opportunities for Capitol Hill to be more active in shaping U.S. nuclear security policy.

Finally, to ensure sustained congressional engagement and leadership on this issue, our study suggests civil society should work collectively to improve the level and clarity of understanding and self-confidence about nuclear security among congressional members and staff. Such educational efforts alone will not fulfill all that is needed to secure worldwide nuclear materials and the facilities that house them, but they would better connect nuclear security to existing priorities and provide viable, actionable guidance to Capitol Hill staff.

## Appendix A

# Methodology for Congressional Study of Nuclear Security Attitudes

To better understand the current level of congressional engagement on nuclear security, PSA and the ACA jointly undertook a first-ever study of congressional staff attitudes and beliefs about the issue.

This study specifically targeted congressional staff responsible for national security and foreign policy issues, including nuclear security. Our sample population can be segmented into three groups:

1. Congressional staff directly responsible for nuclear security issues, as defined by their legislative portfolios and/or their committee assignments (n=10) [“Directly Engaged” group];
2. Congressional staff broadly responsible for national security and foreign policy portfolios, but infrequently engaged in nuclear security issues (n=10) [“Indirectly Engaged” group];
3. Digital survey respondents (n=107) whose legislative responsibilities broadly include national security and foreign policy issues (n=107).

### Interview Protocol

To gather nuanced information about congressional staff attitudes on nuclear security, we conducted 20 in-person interviews on Capitol Hill. Interviewees were specifically selected based on their policy portfolios. The median value of years spent working in Congress among interview participants was 3.75 years.

This bipartisan group included:

- Senate staff (2 Republicans, 4 Democrats);
- House staff (5 Republicans, 9 Democrats).

Interviewees worked in both:

- Personal offices (15 interviewees);
- Committee offices (5 interviewees).

All interviews used the same questionnaire consisting of multiple choice, open-response, and Likert scaled (1-5) questions. Interviews took place from September to November 2017 in the Congress. See Appendix B for full interview questionnaire.

### Digital Survey

Separately, we distributed a short electronic survey including a subset of the multiple choice, open-response, and Likert scaled (1, least-5, greatest) questions used in the interview protocol. The survey was distributed from November to December 2017 to the congressional staff community whose legislative responsibilities include national security and foreign policy issues. This survey population includes our target staffers—junior and senior—that are working in this issue space. It specifically includes relevant legislative correspondents, legislative assistants, legislative councils, legislative directors, chiefs of staff, committee staff directors and professional staff members, and other staff assigned to these issues. A self-selecting group of 107 staffers submitted responses. The median value for years spent working in Congress among survey respondents was 4.00 years. See Appendix B for full digital survey.



This bipartisan group included:

- Senate staff (23 Republicans, 26 Democrats);
- House staff (28 Republicans, 30 Democrats).

Survey respondents worked in both:

- Personal offices (83 respondents);
- Committee offices (24 respondents).

### Focus Group

After preliminary analysis of the in-person interviews and the digital responses, PSA and ACA convened a small group of congressional staff (n= 10) to gather additional reflections on insights from these respondents. Significant observations were shared with the group and

discussed under the Chatham House Rule. All focus group participants included congressional staff whose professional portfolios included national security and foreign policy issues (including nuclear security). They included staff who participated in the in-person interviews and other staff reputed to have responsibility for national security policy.

### Treatment of Samples

Information collected from the in-person interviews and the digital survey respondents are assessed and described separately in this study. Due to the anonymous nature of the digital survey, responses from the interviews and survey respondents are not combined to control for potential participant overlap. One exception that integrates all respondents is the cumulative word cloud display in Figure 1.

## Appendix B

# Full Interview Questionnaire and Digital Survey

## Questionnaire

For more than two decades, the U.S. cooperated with Russia to secure nuclear facilities and material in the former Soviet Union. Since 2010, four Nuclear Security Summits have been held to tackle the growing threat of terrorism emanating from unsecured nuclear materials and the facilities that house them around the globe.

I'm here to get a better understanding of the level of knowledge, concern, activity, and engagement of Congress and congressional staff on the issue of nuclear security. This will allow us to launch an educational effort which relates issues in nuclear security to current congressional priorities in an effort to improve engagement on this topic.

For the purpose of this interview, nuclear security can be thought of as "prevention of nuclear terrorism through protection of nuclear and radioactive materials, and the facilities they reside in".

During this interview several questions will ask you to answer using a 1–5 scale. For all such questions you should consider (1) to be the lowest or least value on the scale, and (5) the highest or greatest value. Some questions use a multiple choice selection of answers; for these questions we will provide a cue card containing options.

### General

1. How many years have you been in Congress?
2. a. Across all policy areas, what issue(s) would you consider to be your office's legislative priority in the 115th Congress?
  - Open endedb. Among issues in the foreign policy & national security realm?
  - Open ended

3. Which of the following best describe the context you most often deal with in the nuclear field?

- Nuclear energy
- U.S. nuclear weapons policy
- Iran/North Korea
- Nuclear materials or waste
- Nuclear terrorism
- Other (please specify)

4. How familiar are you with the nuclear security issue as defined in the introduction to these questions, and the threats that nuclear security measures guard against?

- 1–5

### Perception

5. What, in your opinion, are the three biggest threats to American national security in the next ten years?

- Open ended

6. When someone raises the issue of nuclear security in Congress or talks about the threat of nuclear security, what comes to your mind?

- Open ended

7. Whom do you look to when you want to more fully understand issues relating to nuclear security?

- The media
- Fellow personal staff members
- Committee staff
- The Executive Branch
- Congressional Research Service
- Reliable NGOs
- Others

8. In the context of preventing nuclear terrorism, which of the following risks are you most concerned about?
- Proliferation of nuclear material
  - Sabotage to nuclear facilities
  - Nuclear materials in transit
  - Illicit trafficking
9. Does the current state of global nuclear security need improvement? If yes, how?
- Open ended
10. How would you rank nuclear security among America's national security priorities?
- 1–5
11. a. How much of an impact do you think Congress can have on improving global nuclear security?
- 1–5
- b. How much of an impact do you think Congress should have on improving global nuclear security?
- 1–5
- c. Can you think of any examples of Congressional leadership in nuclear security? (e.g., legislation, statements, etc.)
- Open ended

## Knowledge

### Landscape

12. How familiar are you with the Nuclear Security Summits held from 2010–2016 and the goals and outcomes of these four summits?
- 1–5
13. Do you believe that there are any gaps or shortcomings in U.S. nuclear security efforts? If so, can you identify those gaps?
- Open ended
14. a. How would you rate your knowledge of the U.S. government agencies responsible for implementing U.S. nuclear security efforts at home and abroad?
- 1–5
- b. About the international organizations supporting the global nuclear security architecture?
- 1–5
15. Do you know where and how nuclear waste is handled, stored and/or disposed in the U.S.?
- Open ended

## Technical

16. How comfortable would you say that you are with the technical terminology and “jargon” used to discuss nuclear security issues?
- 1–5
17. How familiar are you with radioactive/nuclear materials and their civil and military uses (e.g., plutonium, uranium, thorium, etc.)?
- 1–5
18. How well do you think military nuclear materials around the world are secured in comparison to their civilian counterparts?
- Not as well secured
  - About as well secured
  - Better secured

## Engagement

19. Have you or your member (or Committee) been directly engaged in legislative activity dealing with nuclear security?
- Open ended
20. To your knowledge, is there any radiological material in your state/district? If so, where would it be?
- Open ended
21. a. How concerned are your constituents about nuclear security issues?
- 1–5
- b. What do you think would help your constituents to be more engaged on these issues?
- Open ended
22. Are there any questions that we haven't asked today that you think we should be asking in our interviews?
- Open ended
23. What topic in nuclear security would you be most likely to attend a briefing on?
- Open ended

# Digital Survey

## Survey on Nuclear Security

Your responses to these brief questions will help us to better understand the level of knowledge, concern, activity, and engagement of Congress and congressional staff on the issue of nuclear security. This will allow us to launch an educational effort that relates issues in nuclear security to current congressional priorities, to promote bipartisan engagement on these issues, and to ensure that we provide resources relevant to congressional concerns and interests.

For the purpose of this survey, nuclear security can be thought of as “prevention of nuclear terrorism through protection of nuclear and radioactive materials, and the facilities they reside in.”

**\*Required**

1. How many years have you worked in Congress? \_\_\_\_\_

2. How familiar are you with the nuclear security issue (as defined in the introduction) and the threats that nuclear security measures guard against? \*  
*Mark only one oval.*

Not at all familiar    1    2    3    4    5    Very familiar  
           

3. How would you rank nuclear security among America’s national security priorities? \*  
*Mark only one oval.*

Not at all familiar    1    2    3    4    5    Very familiar  
           

4. How familiar are you with the Nuclear Security Summits held from 2010–2016 and the goals and outcomes of these four summits? \*  
*Mark only one oval.*

Not at all familiar    1    2    3    4    5    Very familiar  
           

5. To whom do you look when you want to more fully understand nuclear security issues? \*  
Choose your top 3  
*Check all that apply.*

- The media
- Personal staff members
- Committee staff
- The executive branch
- Congressional Research Service
- Reliable NGOs
- Other: \_\_\_\_\_

6. Which of the following best describes the context you most often deal with in the nuclear field? \*  
*Mark only one oval.*

- Nuclear energy
- U.S. nuclear weapons policy
- Iran/North Korea
- Nuclear materials or waste
- Nuclear terrorism
- Other: \_\_\_\_\_

7. In the context of preventing nuclear terrorism, which of the following risks are you most concerned about? \*  
*Mark only one oval.*

- Proliferation of nuclear material
- Sabotage to nuclear facilities
- Nuclear materials in transit
- Illicit trafficking

8. When someone raises the issue of nuclear security in Congress, what comes to your mind? \*

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9. What topic in nuclear security would you be most interested in attending a briefing on? \*

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10. Do you have any comments you'd like to add?

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Below are some quick demographic questions; your answers won't be used to identify you but will help us to better understand our sample of respondents.

11. Chamber \*  
*Mark only one oval.*

House

Senate

12. Party affiliation \*

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13. Office \*  
*Mark only one oval.*

Committee

Personal

14. Gender \*  
*Mark only one oval.*

Female

Male

Prefer not to say

Other: \_\_\_\_\_

## ENDNOTES

1. Andrew Bieniawski, Ioanna Iliopoulos, and Michelle Nalabandian, "Radiological Security Progress Report." The Nuclear Threat Initiative, July 2016. Located at: [http://www.nti.org/media/documents/NTL\\_Rad\\_Security\\_Report\\_final\\_0916.pdf](http://www.nti.org/media/documents/NTL_Rad_Security_Report_final_0916.pdf).
2. "Fact Sheet: The Nuclear Security Summits: Securing the World from Nuclear Terrorism." The White House, Office of the Press Secretary, March 29, 2016. Located at: <https://obamawhitehouse.archives.gov/the-press-office/2016/03/29/fact-sheet-nuclear-security-summits-securing-world-nuclear-terrorism>.
3. Ibid.
4. For an inventory of global fissile material stocks as of January 2017, see the website of the International Panel on Fissile Materials at <http://fissilematerials.org/>.
5. Matthew Bunn and Nickolas Roth, "The effects of a single terrorist nuclear bomb." *Bulletin of the Atomic Scientists*, September 28, 2017. Located at: <https://thebulletin.org/effects-single-terrorist-nuclear-bomb11150>.
6. Matthew Bunn, "Belgium Highlights the Nuclear Terrorism Threat and Security Measures to Stop It." *Huffington Post*, March 29, 2016. Located at: [https://www.huffingtonpost.com/matthew-bunn/belgium-nuclear-terrorism\\_b\\_9559006.html](https://www.huffingtonpost.com/matthew-bunn/belgium-nuclear-terrorism_b_9559006.html).
7. "Remarks by President Trump on the Strategy in Afghanistan and South Asia." August 21, 2017. Located at: <https://www.whitehouse.gov/briefings-statements/remarks-president-trump-strategy-afghanistan-south-asia/>.
8. "Nuclear Posture Review." Office of the Secretary of Defense, February 2018. Located at: <https://www.defense.gov/News/SpecialReports/2018NuclearPostureReview.aspx>.
9. Nickolas Roth, Matthew Bunn, and William Tobey, "Rhetoric aside, the US commitment to preventing nuclear terrorism is waning." *The Hill*, April 19, 2018. Located at: <http://thehill.com/opinion/national-security/383596-rhetoric-aside-the-us-commitment-to-preventing-nuclear-terrorism-is>.
10. Ibid.
11. Nickolas Roth, "A Response to Critics of U.S.-Russian Nuclear Security Cooperation." *Nuclear Security Matters*, October 21, 2014. Located at: <https://www.belfercenter.org/publication/response-critics-us-russian-nuclear-security-cooperation>.
12. Sam Nunn and Richard G. Lugar, "Dismantling the Soviet Arsenal: We've Got to Get Involved." *The Washington Post*, November 22, 1991, A25.
13. Paul I. Bernstein and Jason D. Wood, "The Origins of the Nunn-Lugar Cooperative Threat Reduction," National Defense University Press, Washington D.C., April 2010, p. 5.
14. Ibid, p. 7.
15. Daniel Horner and Tom Collina, "Nunn-Lugar Program Scaled Back." *Arms Control Today*, July/August 2013. Located at: [https://www.armscontrol.org/act/2013\\_0708/Nunn-Lugar-Program-Scaled-Back](https://www.armscontrol.org/act/2013_0708/Nunn-Lugar-Program-Scaled-Back).
16. Kingston Reif, "Most U.S.-Russian Nuclear Work Ends." *Arms Control Today*, March 2015. Located at: [https://www.armscontrol.org/ACT/2015\\_03/News/Most-US-Russian-Nuclear-Work-Ends](https://www.armscontrol.org/ACT/2015_03/News/Most-US-Russian-Nuclear-Work-Ends).
17. Mary Beth D. Nikitin and Amy Woolf, "The Evolution of Cooperative Threat Reduction: Issues for Congress." Congressional Research Service, June 13, 2014.
18. Energy and Water Development Appropriations for Fiscal Year 2013. March 21, 2012. Located at: [https://www.appropriations.senate.gov/imo/media/doc/hearings/03\\_21\\_12%20E&W%20NNSA%20Budget%20GPO%20Record.pdf](https://www.appropriations.senate.gov/imo/media/doc/hearings/03_21_12%20E&W%20NNSA%20Budget%20GPO%20Record.pdf).
19. Kelsey Davenport, "Senators Push Nonproliferation Budget." *Arms Control Today*, September 2014. Located at: <https://www.armscontrol.org/node/6566>.
20. "Senator Carper Introduces Amendment to Improve Security of Radiological Material," February 2, 2016. Located at: <https://www.carper.senate.gov/public/index.cfm/pressreleases?ID=C0179159-7EA2-458C-AC55-2F1EF5CBAACB>.
21. Leland Cogliani. "Initiatives to Strengthen Nuclear and Radiological Security Efforts." *Arms Control Today*, July/August 2018. Located at: <https://www.armscontrol.org/act/2018-07/features/initiatives-strengthen-nuclear-radiological-security-efforts>.
22. "Report of the Task Force on Nuclear Nonproliferation," Secretary of Energy Advisory Board, U.S. Department of Energy. March 31, 2015. Located at: [https://www.energy.gov/sites/prod/files/2015/04/f21/2015-03-31\\_FINAL\\_Report\\_SEABNuclearNonproliferationTaskForce\\_0.pdf](https://www.energy.gov/sites/prod/files/2015/04/f21/2015-03-31_FINAL_Report_SEABNuclearNonproliferationTaskForce_0.pdf).
23. Ibid.
24. Kingston Reif, "Navy, NNSA Say No To Navel LEU." *Arms Control Today*, July/August 2018. Located at: <https://www.armscontrol.org/act/2018-07/news/navy-nnsa-say-naval-leu>.
25. Sam Nunn and Richard G. Lugar, "What to do if the talks with North Korea succeed." *The Washington Post*, April 23, 2018, Located at: [https://www.washingtonpost.com/opinions/global-opinions/were-all-preparing-for-the-trump-kim-summit-to-go-wrong-but-what-if-it-goes-right/2018/04/23/77ada258-472c-11e8-9072-f6d4bc32f223\\_story.html?utm\\_term=.c1181e6e156c](https://www.washingtonpost.com/opinions/global-opinions/were-all-preparing-for-the-trump-kim-summit-to-go-wrong-but-what-if-it-goes-right/2018/04/23/77ada258-472c-11e8-9072-f6d4bc32f223_story.html?utm_term=.c1181e6e156c).

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**The global nuclear security enterprise is at a critical crossroads. While the worldwide use of nuclear and radioactive materials has grown, the issue of nuclear security has all but faded from the U.S. national conversation. As these materials become more widespread, they will be vulnerable to criminal and terrorist organizations without sufficient security efforts. This report reveals a concerning loss of congressional leadership and interest in critical efforts to prevent nuclear terrorism. While the threat grows more complex, U.S. funding, oversight, and international cooperation to secure nuclear and radiological materials has diminished. By analyzing historic bipartisan initiatives and current congressional staff attitudes on nuclear security, this report offers an important blueprint to revitalize U.S. leadership through Capitol Hill. Providing recommended action items and effective strategies for engaging Congress, the report is a useful tool for both policymakers and educators.**

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