INNOVATION AT TSA: EXAMINING THREAT MITIGATION THROUGH TECHNOLOGY ACQUISTIONS REFORM

HEARING

BEFORE THE

SUBCOMMITTEE ON TRANSPORTATION AND PROTECTIVE SECURITY

OF THE

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C O N T E N T S

INNOVATION AT TSA: EXAMINING THREAT MITIGATION THROUGH TECHNOLOGY ACQUISTIONS REFORM

Thursday, January 18, 2018

U.S. HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON TRANSPORTATION AND
PROTECTIVE SECURITY,
COMMITTEE ON HOMELAND SECURITY,
Washington, DC.

The subcommittee met, pursuant to notice, at 2:06 p.m., in room HVC–210, Capitol Visitor Center, Hon. John Katko (Chairman of the subcommittee) presiding.

Present: Representatives Katko, Rogers, Higgins, Fitzpatrick, Estes, Watson Coleman, and Payne.

Also present: Representative McCaul.

Mr. KATKO. The Committee on Homeland Security, Subcommittee on Transportation and Protective Security will come to order.

The subcommittee is meeting today to discuss how TSA is working to mitigate threats to transportation security through reforming the agency's broken acquisitions system. In particular, the subcommittee will examine TSA's statutorily required 5-year investment plan that was recently submitted to Congress, as well as the agency's Innovation Task Force and overall procurement practices.

I now recognize myself for an opening statement. During my tenure as Chairman of the subcommittee, I have watched the threat environment grow ever more startling. I, along with my colleagues on the committee on both sides of the aisle, have been continuously briefed on changing security threats and TSA's threat mitigation efforts.

Unfortunately, TSA continues to be plagued by a reactive rather than proactive posture when it comes to technology development and deployment. While terrorists continue to develop better ways to try and defeat our security screening, TSA struggles to quickly and effectively deploy cutting-edge technology to the front lines.

This has been a constant oversight issue for this subcommittee due to a lack of serious change within the agency. My predecessor on this subcommittee, Richard Hudson, passed legislation in the 113th Congress requiring TSA to submit the 5-year investment plan, a legacy we have sought to build upon by introducing legislation to make the plan annual rather than biannual.

Recently, while reviewing the history of this subcommittee's oversight on this topic, I came across a question stemming from a hear-

ing in June 2012 asking why credential authentication technology had been delayed for a third time.

As we sit here today, in 2018, this technology still has yet to be deployed at airports. That is truly amazing. Bureaucratic bottlenecks and understaffing at the TSA Systems Integration Facility, or TSIF, have led to years of delays for technologies that other countries have been using in their airports for quite some time.

Mrs. Watson Coleman, myself and others saw that for ourselves with our own eyes in a recent Congressional Delegation we took to the Middle East and Europe. On a recent bipartisan Congressional Delegation we saw that, as I mentioned to you. Excuse me, got ahead of myself.

Specifically at Schiphol airport in Amsterdam, screening checkpoints utilize advanced Computer Tomography Systems or CT, which offer screeners better picture quality and more advanced threat detection capabilities.

While Schiphol was able to deploy this American technology in a matter of months, TSA continues to be bogged down in a lengthy process for testing systems and developing algorithms. In TSA's own 5-year investment plan, which was submitted to Congress nearly 6 months after the statutory deadline, let me say that again, 6 months after the statutorily-imposed deadline, we finally got this watered-down plan.

The agency states it only plans to procure two CT systems a year for the next 3 fiscal years. That is a total of 6. There are 12 at Schiphol airport alone and there are 450 airports in the United States.

However, the same plan estimates it would need well over 2,000 CT machines and $224 million for full deployment. While TSA has indicated to the committee that it intends to procure and deploy more of these machines, all estimates still fall woefully short of what is needed.

With all the airports in the United States, goals and requests for CT machines should be measured in the hundreds or thousands rather than single digits. The good news is this, Mr. Pekoske: You, in your new role as administrator of TSA, have the opportunity to use the $7.4 billion budget Congress has provided you to fix this broken system and give the American people the type of security they demand and deserve for their tax dollars.

Additionally, this subcommittee stands ready to work in a bipartisan manner to help you accomplish this monumental task through oversight and legislation. In order to be successful, however, we need TSA to come to the table with honest and timely answers and real solutions with a sense of genuine partnership.

I look forward to hearing your vision for reforming the TSA acquisitions process and how Congress can help.

[The statement of Chairman Katko follows:]

STATEMENT OF CHAIRMAN JOHN KATKO

JANUARY 18, 2018

The subcommittee is meeting today to discuss how TSA is working to mitigate threats to transportation security through reforming the agency's broken acquisitions system.

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My predecessor on this subcommittee, Congressman Hudson, passed the legislation in the 113th Congress requiring TSA to submit the 5-year investment plan—a legacy we have sought to build upon by introducing legislation to make the plan annual rather than biannual.

Recently, while reviewing the history of this subcommittee's oversight on this topic, I came across a question stemming from a hearing in June 2012 asking why Credential Authentication Technology had been delayed for a third time. As we sit here today, this technology still has yet to be deployed at airports.

Bureaucratic bottlenecks and understaffing at the Transportation Systems Integration Facility, or TSIF, have led to years of delays for technologies that other countries have been using in their airports for quite some time.

On a recent bipartisan Congressional Delegation to airports in the Middle East and Europe, my colleagues and I were amazed at the level of advanced security equipment utilized by several nations to screen both aviation passengers and employees.

Specifically at Schiphol airport in Amsterdam, screening checkpoints utilize advanced Computed Tomography Systems—or CT—which offer screeners better picture quality and more advanced threat detection capabilities.

While Schiphol was able to deploy these technologies in a matter of months, TSA continues to be bogged down in a lengthy process for testing systems and developing algorithms.

In TSA's own 5-year investment plan, which was submitted to Congress nearly 6 months after the statutory deadline, the agency states it only plans to procure two CT systems a year for the next 3 fiscal years. However, the same plan estimates it would need well over 2,000 CT machines and $224 million for full deployment.

While TSA has indicated to the committee it intends to procure and deploy more CT machines, all estimates still fall woefully short of what is needed. With 435 airports in the United States, goals and requests for CT machines should be measured in the hundreds or thousands rather than single digits.

The good news is this, Mr. Pekoske: You, in your new role as administrator of TSA, have the opportunity to use the $7.4 billion budget Congress has provided you to fix this broken system and give the American people the type of security they demand and deserve for their tax dollars.

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I look forward to hearing your vision for reforming the TSA acquisitions process and how Congress can help.

Mr. KATKO. I am pleased to recognize the Ranking Member of the subcommittee, the gentlelady from New Jersey, Mrs. Watson Coleman for her opening statement.

Mrs. WATSON COLEMAN. Thank you, Mr. Chairman and thank you for convening this hearing.

Mr. Administrator, thank you for appearing before our subcommittee. Today it seems like I haven't seen you in a very long time. Funny, we saw each other earlier today. The Transportation Security Administration is essential to our Nation's security.

Americans rely on the work of TSA employees to keep us safe from a long and growing list of terrorist threats. Over the last year,

we have seen the threat landscape changed and watched TSA work to adapt.

In March, we watched TSA grapple with the question of whether to ban electronic devices larger than the smart phone from all U.S.-bound passenger planes in response to the threat landscape.

Since last summer, TSA has had to reevaluate the level of transportation security on a number of occasions. In August, a serious ISIS-connected cargo-based explosive plot came to light which was to be carried out on an international flight.

Then in December, a would-be terrorist attempted an attack on the New York City subway system. Even though the terrorist threat picture evolves at an uncomfortably quick pace, the number of travelers who rely on TSA security operations has increased.

During the holiday season, TSA screened a record of 42 million passengers and 31 million checked bags at airports across the country. TSA's plate is close to full. Still, we need the agency to do more.

We need TSA to continue to be a leader in aviation security and invest in leading technologies that would keep our transportation system safe. For me, today is an opportunity to look beyond the 5-year technology investment plan that appears to be the impetus for the hearing and to focus on the bigger picture. When is TSA going to fully realize its mission of effectively securing all modes of transportation against terrorism?

As such today, I want to hear from you, Mr. Administrator, about your plans to address the growing threat to soft targets in surface transportation, on-going work force challenges, air cargo security, and behavior detection screening.

Additionally, we need to discuss the passenger security fee diversion. It is unconscionable that at a time when the treats to aviation and surface transportation systems are so sophisticated and diverse, that TSA is forced on an annual basis to hand over $1.28 billion in aviation security fees it collects to the Treasury for the deficit reduction.

The truth of the matter is that we cannot continue to have conversations on how TSA should do better or move faster to deploy innovative security screening equipment without having an honest conversation about TSA's resource needs.

As Members of this subcommittee, we are best positioned to know what TSA needs, and without question TSA needs us to enact H.R. 2514, Funding for Aviation Screeners and Threat Elimination Restoration Act, so that it can receive the funds necessary to procure security screening technology.

We know the President's budget will be released soon. Mr. Administrator, I would ask that you would work really hard to ensure that this time around, in contrast to last year's submission, what we receive actually reflects your operational needs.

Given everything that we are going to discuss today, following this hearing with a tone-deaf budget proposal would be unacceptable. Thank you, again, Mr. Administrator, for your time today. I hope today's hearing will be productive and look forward to hearing your answers to the myriad of transportation security issues facing our Nation.

With that, I yield back the balance of my time.

[The statement of Ranking Member Watson Coleman follows:]

STATEMENT OF RANKING MEMBER BONNIE WATSON COLEMAN

JANUARY 18, 2018

The Transportation Security Administration is essential to our Nation's security. Americans rely on the work of TSA employees to keep us safe from a long and growing list of terrorist threats. Over the last year, we have seen the threat landscape change and watched TSA work to adapt.

In March, we watched TSA grapple with the question of whether to ban electronic devices larger than a smart phone from all U.S.-bound passenger planes in response to the threat landscape. And since last summer, TSA has had to reevaluate the level of transportation security on a number of occasions. In August, a serious ISIS-connected cargo-based explosives plot came to light, which was to be carried out on an international flight. Then in December, a would-be terrorist attempted an attack on the New York City subway system.

Even though the terrorist threat picture evolves at an uncomfortably quick pace, the number of travelers who rely on TSA security operations has increased. During the holiday season, TSA screened a record 42 million passengers and 31 million checked bags at airports across the country.

TSA's plate is close to full. Still, we need the agency to do more. We need TSA to continue to be a leader in aviation security and invest in leading technologies that will keep our transportations systems safe.

For me, today's is an opportunity to look beyond the 5-year technology investment plan that appears to be the impetus for the hearing and to focus on the bigger picture—when is TSA going to fully realize its mission of effectively securing all modes of transportation against terrorism?

As such, today, I want to hear from Administrator Pekoske about his plans to address the growing threat to soft targets in surface transportation, on-going workforce challenges, air cargo security, and behavior detection screening.

Additionally, we need to discuss the passenger security fee diversion. It is unconscionable that at a time when the threats to aviation and surface transportation systems are so sophisticated and diverse, TSA is forced, on an annual basis, to hand over $1.28 billion in aviation security fees it collects to the U.S. Treasury for deficit reduction.

The truth of the matter is that we cannot continue to have conversations on how TSA should do better or move faster to deploy innovative security screening equipment without having an honest conversation about TSA's resource needs.

As Members of this subcommittee, we are best positioned to know what TSA needs and, without question, TSA needs us to enact H.R. 2514, "Funding for Aviation Screeners and Threat Elimination Restoration (FASTER) Act" so that it can receive the funds necessary to procure security screening technology.

We know the President's budget will be released soon. Mr. Administrator, I would ask that you work really hard to ensure that this time around, in contrast to last year's submission, what we receive actually reflects your operational needs. Given everything that we are going to discuss today, following this hearing with a tone-deaf budget proposal would be unacceptable.

Mr. KATKO. Thank you, Mrs. Watson Coleman. Other Members are reminded that statements may be submitted for the record.
[The statement of Ranking Member Thompson follows:]

STATEMENT OF RANKING MEMBER BENNIE G. THOMPSON

JANUARY 18, 2018

A little more than 2 months ago, Administrator Pekoske testified before the full committee that "the threat to international aviation is high and multiple terrorist groups remain intent on attacking our surface transportation systems."

Members of the committee on both sides of the aisle agree that countering such threats demands enhancements to current security systems, including the deployment of innovative technologies such as computed tomography, or "CT" machines. Unfortunately, deploying advanced technologies to the Nation's TSA checkpoints is easier said than done.

While TSA has taken some positive steps such as establishing the Innovation Task Force, piloting CT machines, and publishing a refresh of its Strategic Five-

Year Technology Plan, TSA can and should do more to reduce the time line for deploying new technologies to the field.

Congress must do its part as well. We can start by passing H.R. 2514, the "FASTER Act"—a bill every Democrat on this committee supports—to return $1.28 billion in fees collected by TSA from the flying public for security that is currently being diverted away from TSA.

It defies logic to call out TSA for failing to invest in new technologies while refusing to support the FASTER Act, which could provide TSA with the funding needed to realize the promise of integrating new technology in our aviation security system.

Further, I am not sure it is fair to demand that TSA set out in great detail its plans for technology investments for the next 5 years at a time when the agency is funded on a stop-gap basis.

Nevertheless, enhancing our transportation security efforts remains imperative. In addition to securing aviation systems, TSA must work with transit agencies and stakeholders across the country to secure subways, railroads, buses, and other surface transportation systems. I look forward to hearing about the TSA's efforts to develop and deploy technologies to secure surface transportation systems used daily by millions of Americans.

Finally, I want to emphasize that technology alone will not provide security. Such solutions must be staffed and operated by well-trained, capable officers. We must do more to support TSA officers and work to improve their morale—starting by providing them with workplace protections in place for other Federal workers. Democrats remain committed to doing just that.

Administrator Pekoske, you have a difficult job and I thank you again for joining us today.

Mr. KATKO. The Chairman of the full committee, Mr. McCaul, is going to make an opening statement. But he is on his way over, so in the interest of keeping in time here, we will go with Mr. Pekoske first and then come back to Mr. McCaul.

Mr. Pekoske, welcome. You are the seventh administrator of the TSA, here to testify before us today in this critical topic. I believe you are the sixth either acting or actual administrator that I have seen at TSA in 3 years, which is unacceptable and that is why we had a bill passed that is sitting in the Senate, hopefully to give you a 5-year term to have some stability with TSA.

In your role as administrator, Mr. Pekoske is responsible for securing the Nation's civil aviation system and surface transportation modes. He leads a work force for approximately 60,000 employees who work to protect the Nation's transportation systems while ensuring freedom of movement for people and commerce.

Prior to joining TSA, Mr. Pekoske served as the 26th vice commandant of the U.S. Coast Guard and we thank you for your service.

Let me remind the witness that their entire written statement will appear in the record. The Chair now recognizes Mr. Pekoske for his opening statement.

STATEMENT OF DAVID P. PEKOSKE, ADMINISTRATOR, TRANSPORTATION SECURITY ADMINISTRATION, U.S. DEPARTMENT OF HOMELAND SECURITY

Mr. PEKOSKE. Thank you, Mr. Chairman. Chairman Katko, Ranking Member Watson Coleman, and distinguished Members of the subcommittee. Thank you for the opportunity to appear before you this afternoon.

Innovation is a key priority of mine and I am looking forward to obtaining your perspective as we work together to mitigate threats to transportation security.

First, I want to acknowledge the outstanding men and women of TSA. It is my privilege to serve as administrator to the over 60,000

dedicated professionals that provide security for millions of Americans who use our transportation systems each and every day.

I am proud to highlight that we have made measurable improvements to our aviation security effectiveness over the past few months through training and procedural changes. This was accomplished as passenger volumes continued to increase. I am pleased to report passenger wait times remain on average well within TSA standards.

Transportation security is an all-hands effort. Our aviation security checkpoint personnel are clearly the most visible part of TSA. But there are thousands of other TSA employees working behind the scenes or in the air or with the owners and operators of our Nation's surface transportation systems. They are also key elements of TSA's success.

On behalf of this team, I thank you for your support, enabling TSA to accomplish a mission so critical for the safety, security, and economic well-being of the American people.

Mr. Chairman, I have tremendous respect for the oversight role that this subcommittee performs with respect to TSA. I highly value your perspectives and opinions. You have made us stronger and America safer. I know that TSA needs to be much more responsive to requests for information required by statute or otherwise requested by any Member of this subcommittee.

I have looked into our responsiveness over calendar year 2017. Simply put, we need to do better, much better. I give you my personal pledge to address this issue head-on and provide timely and complete delivery of information you seek going forward.

Since becoming administrator, I have spent the majority of my time intentionally at the front lines of TSA. I have engaged with TSA employees at all levels of the organization and I have met with many of our partners to include the airlines, airports, law enforcement, and public safety professionals at the State and local level, owners and operators of surface transportation systems and international partners as well as industry groups and union leaders.

Everywhere I visited, I found a deep commitment to the mission. It has also become very clear to me that we need to focus on three major lines of effort. The first is leading transportation security by strengthening the effectiveness of our operations.

Second, is to accelerate action by deploying technology faster and third, committing to our people because they are the most valuable resource in our key line of defense against the threat.

As I testified before the full committee in early November, the area that will yield the greatest impact on mitigating threats to aviation is improvement to the technology employed at the checkpoint.

To this end, I am developing a TSA strategy, administrator's intent, and a capital investment plan. These will guide TSA's implementation of future technology development as part of a larger systems approach.

I will ask for time in your calendars to obtain the subcommittee's input on these important documents. We are moving very rapidly to deploy CT X-ray technology at the checkpoints. This is my top priority.

During this current fiscal year, we will field almost 40 units for developmental and operational testing, 28 of those at airports. We are planning a much larger deployment in fiscal year 2019. Details of this will be provided in the President's budget when it is released in a few weeks.

We are employing a flexible approach to test, procure, deploy CT systems while concurrently working to improve automation and achieve substantially enhanced levels of threat detection.

We are enhancing our canine program. We will be at our budget allocation level in September. To ensure we maintain this level and position the program for continued growth, we have increased the capacity of our canine training center to maintain a robust pipeline of trained canines.

I fully support the Domestic Canine Capability Building Act recently passed by this committee and the full House. We are deploying Credential Authentication Technology or CAT to be used at the first position on our security checkpoints.

It will provide improved passenger identification, real-time verification of ticketing status, real-time verification of secure flight vetting status, that will reduce fraudulent ID vulnerabilities and provide real-time vetting information at the checkpoint. That is a significant enhancement.

Currently, there are 33 CAT systems deployed for testing in TSA PreCheck lines at 10 airports. Both DHS and TSA are evaluating existing rapid acquisition processes across the Government to leverage known experience and best practices.

This will be very valuable for future acquisition projects so that our technology stays ahead of the threats posed by our adversary. Our relatively new innovation task force provides industry with a better way to interface with TSA.

Our partnerships with industry, both small and large businesses, are very important to successful deployment of technology. I have strived to engage personally with industry on a regular basis and fully engage the Aviation Security Advisory Committee for their advice and perspective as well.

In closing, I am deeply committed to strengthening our security posture and will do everything in my power to put the proper technology tools in the hands of the dedicated men and women of TSA.

Chairman Katko, Ranking Member Watson Coleman, and Members of the subcommittee, thank you for the opportunity to testify before you today. I look forward to answering your questions.

Thank you, Sir.

[The prepared statement of Mr. Pekoske follows:]

PREPARED STATEMENT OF DAVID P. PEKOSKE

JANUARY 18, 2018

Good afternoon Chairman Katko, Ranking Member Watson Coleman, and distinguished Members of the subcommittee. I appreciate the opportunity to appear before you to discuss the Transportation Security Administration's (TSA) technology initiatives.

First and foremost, I would like to recognize the Transportation Security Officers (TSOs) on their success in providing security to over 44 million airline passengers during the December holiday travel period. They did so professionally and adapted to accommodate daily screening challenges. Over the past 6 months, we have seen 5 of the top 15 total passenger volume days in TSA's history. On average, TSA

screens 2.2 million passengers each day. During this past holiday season, the daily rate grew as high as 2.4 million. Keeping up with this challenge would not be possible without our outstanding workforce.

Additionally, I would like to thank Chairman Katko and Ranking Member Watson Coleman for taking the time to visit TSA headquarters last month for a discussion on transportation security. I look forward to continuing to work with you and your staff to advance TSA's critical mission.

Today's hearing is timely, as technology deployment will be critical to TSA's success in 2018 and beyond. Terrorists continue to target commercial aviation, including cargo, and we must strive each and every day to stay ahead of the myriad threats. In the 5 months since I have been on board at TSA, we have seen scores of threats against aviation. I am committed to ensuring TSA remains as successful as it has been in the 16 years since the agency's founding to protect our transportation systems, especially aviation. Since I have been TSA administrator, we have improved training, deployed enhanced screening procedures, and have aggressively pursued new technologies. We are continually increasing our ability to detect threat items throughout the aviation security system, and improving technology at the checkpoint will be the focus of my remarks today.

CHECKPOINT SYSTEM

One of the most significant initiatives at the checkpoint is the introduction of Computed Tomography technology, or "CT," as it is commonly referred. I know some of you have seen CT being tested overseas at Amsterdam's Schiphol Airport and domestically at Boston Logan International Airport and Phoenix Sky Harbor International Airport. CT is not new technology. The idea for CT was conceived in the 1960's and first employed for medical applications in the early 1970's; however, it has evolved and is now used in other arenas, such as in aviation security. In fact, TSA has been using CT scanners to screen checked baggage since the agency's inception in 2001. Over the past few years, industry has been aggressively working to reduce the technology equipment's size and adjust its configuration to make it a viable option for deployment at most airport checkpoints. TSA continues to work closely and expeditiously with CT equipment manufacturers to improve detection algorithms, optimize throughput, and automate the detection of prohibited items so that CT technology can deliver the full host of capabilities needed to address checkpoint vulnerabilities into the future.

Once fully developed for the aviation environment, checkpoint CT technology will deliver a significant advancement over today's two-dimensional X-ray technology platforms. Checkpoint CT screening technology provides a three-dimensional view of the bag and enables the TSA officer to rotate the bag 360 degrees to show the contents at every angle. CT features allow officers to virtually remove unwanted clutter, and greatly enhances their ability to visually inspect the contents of carry-on bags for explosives and prohibited items. In these ways, CT offers substantially improved detection capability by more effectively detecting smaller and artfully concealed threats, thereby increasing our overall security effectiveness while enabling passengers to leave electronics in their carry-on bags. Ultimately, we hope to refine checkpoint CT technology to the point where, similar to the checked baggage process, we have automated the carry-on baggage screening process and reduced the need for officers to review all images.

In order to further our efforts and capabilities, TSA is working closely with industry partners, the Department of Homeland Security (DHS) Science and Technology Directorate, and international counterparts. Together, we are exchanging information and best practices related to operational and laboratory testing, explosives characterization, CT platform enhancements, and image library development. TSA is working closely with the European Commission, European Civil Aviation Conference, and bilaterally with the United Kingdom, France, Germany, and the Netherlands to share test results with the goal of aligning detection requirements and testing methodologies. The Netherlands, Turkey, Japan, Singapore, and South Africa are currently testing CT technology at their checkpoints, which allows for robust information sharing and ultimately guides the successful deployment of this technology.

We are also leveraging academia to develop innovative software algorithms to more accurately identify prohibited items. Through our own Innovation Task Force, TSA is providing CT vendors with end-user feedback and real-world operational data to further operational development, effectiveness, and efficiencies. In short, checkpoint CT development is a world-wide effort to achieve the best screening solution that is technologically possible today. Deployment of this technology, both here

at home and abroad, is a critical component of raising the global aviation security baseline.

My team has developed an aggressive plan to deploy checkpoint CT technology. We are currently pursuing a flexible approach to test, procure, and deploy CT systems, while concurrently developing CT system algorithms to significantly improve automated threat detection capabilities. This approach employs the concepts of modularity and iterative design to support deployment of specific capabilities as part of a larger solution, while progressively expanding functionality until the full CT capability is realized.

Deployment of CT technology at checkpoints is one of my top priorities, and a priority for DHS leadership as well. In fiscal year 2018, we will field almost 40 units for developmental and operational testing, with the goal of pursuing broader deployment and continued algorithm development in the first half of fiscal year 2019, dependent on funding availability. Such efforts for the acquisition of this technology and others will be reflected in the Capital Investment Plan and TSA Strategy and Intent that I am currently developing to guide our investment approach moving forward.

Concurrent with our CT efforts, we are also pursuing other technologies to increase security at checkpoints. Two such technologies are enhanced Advanced Imaging Technology (AIT) and Credential Authentication Technology (CAT). TSA continues to improve our current AIT capabilities. As you may know, AIT uses imaging technology to scan individuals and analyze the images for the presence of anomalies beneath clothes, and in obscured areas. There are currently 945 AIT units deployed at 340 airports system-wide. Upgrades to this technology include greater detection capabilities in response to some of the vulnerabilities identified by the DHS Office of the Inspector General (OIG) in 2015 and in 2017. Other changes include software that will allow TSOs to process passengers through the AIT more expeditiously, thereby improving passenger flow through the checkpoint. In addition to these upgrades to currently fielded AIT units, TSA is working with other vendors to ensure we are testing every passenger screening technology available to provide our TSOs with better tools to assist them in performing their duties. TSA will be demonstrating an enhanced AIT capability in the field later this quarter, gaining critical insights into potential technology improvements that will move us closer to the future checkpoint vision.

Another key technology under development for our checkpoints is CAT; which will greatly enhance the vital role that the Travel Document Checker (TDC) plays in ID verification, boarding pass validation, and screening status determination. Specifically, CAT will improve the TDC's ability to accurately authenticate passenger identification documents, passenger ticketing status, and Secure Flight passenger vetting status, thereby addressing vulnerabilities associated with ID fraud and providing real-time vetting information at the checkpoint on passengers. There are 33 CAT systems currently deployed for technical testing in TSA PreCheck® lanes at 10 airports, including both Reagan National and Dulles airports, to optimize system functionality and associated Concept of Operations (CONOPS.)

TSA is currently assessing another technology known as Automated Screening Lanes (ASLs). ASLs are already proving their worth and currently 111 ASLs are deployed at 12 airports including Newark, JFK, LaGuardia, Boston, and Atlanta. These lanes are not only designed to increase throughput, they also provide better security by offering capabilities such as automated pulls of bags needing further inspection, automated tracking of bins linking to the X-ray and picture images, and automated bin return allowing officers to focus on security, instead of moving bins from the end of the lane to the beginning. I envision that integrating CTs with ASLs will provide significant technological and screening process improvements at our checkpoints, and we plan on testing this integration in the near future. I appreciate the great partnerships with airlines and airports for their role in the procurement and deployment of ASLs.

ACQUISITION PROCESS

Critical to the success of TSA's technology strategy and our ability to stay ahead of the threat is the capability to acquire, procure, develop, test, and field new technologies in a timely manner. As the Chairman has noted, this is an area that needs improvement and I want to assure you we are evaluating ways to accelerate the acquisition process. In an effort to further identify ways to improve efficiencies in the process, DHS and TSA are evaluating existing rapid acquisition processes across the U.S. Government to leverage known experience and best practices as we develop a model to accelerate acquisition efforts and the ultimate deployment of effective solutions within a dynamic operational environment. With your support, we are con-

fident that we will be able to create an acquisition paradigm that ensures accelerated deployment and preserves the integrity needed to deploy effective and cost-efficient capabilities.

<div align="center">CONCLUSION</div>

TSA is committed to securing the Nation's transportation systems from terrorist activities and attacks. This year, we are focused on maturing and deploying additional CT-based systems and working closely with our domestic and international partners to raise the global baseline for aviation security. In addition, I'm developing a Capital Investment Plan, coupled with the TSA Strategy and Intent, which will chart the future course for improvements in checkpoints and checked baggage systems. I look forward to working with you on these efforts to secure our robust transportation sector. Thank you for the opportunity to discuss these important issues. I look forward to the subcommittee's questions.

Mr. KATKO. Thank you, Mr. Pekoske.

Perfect timing, the Chairman of the full committee, Mr. McCaul, is here and he is recognized for an opening statement.

Mr. MCCAUL. Thank you Chairman Katko.

Administrator, thank you so much for being here and I appreciate your openness and our conversations, both publicly and privately.

When you appeared before our committee in early November, we—briefed by yourself and the DHS inspector general in a Classified setting about specific vulnerabilities at our airports. In the hearing that followed, I said that I found the briefing to be disturbing. I think you would probably agree with that. I know my colleagues on both sides of the aisle feel the same way.

As we have seen across Europe and in New York, many of the most recent terror attacks have been carried out with vehicles and other low-tech means. However, with millions of Americans traveling annually by airplane, our aviation sector still remains in my judgment the crown jewel of the terrorist.

Even though there are 60,000 TSA employees working hard and we are very proud of them, to protect nearly 450 airports across the country, I believe we still need the most innovative and cutting-edge technology to keep our planes and passengers safe.

As I stated at our full committee hearing in November, "America's enemies only have to be right once, but we have to be right 100 percent." They are just one airplane flight away. That is why I remain concerned by the agency's inability to deploy Computed Tomography or CT and Credential Authentication, which would greatly enhance detection of threatening objects.

You and I talked very productively about this. This concern was also made clear in a November 9 letter to Acting Secretary Duke from myself and Chairman Katko, urging TSA to reform the acquisition and procurement process for screening technologies.

Our letter also contained nine questions about what actions DHS and TSA are taking to improve the overall screening system. We appreciate your efforts to get a response to our committee. I must say we were a bit underwhelmed by the lack of details.

In particular, one of the responses stated that CT systems beyond the prototype phase would not be deployed until early to mid-2019. There is an airport in Amsterdam that already uses American-made CT to screen bags. Not having this kind of enhanced security at our own airports I believe is unacceptable.

It is also important that TSA work with our international partners to install CT scanners at airports overseas, particularly those in the high-threat areas from last point of departure which serve for in-bound flights.

This is something I have expressed to you in our most recent conversations as recent as today, and I am hopeful that you and I can work together to come through a resolution to protect the American people.

To keep our homeland safe, we must have the best technology efficiently and effectively deployed without further delay.

Today, I am hoping we can have a detailed discussion on how to get that done so that the American people are better protected. With that, sir, I want to thank you for your service and thank you for being here today. I yield back.

[The statement of Chairman McCaul follows:]

STATEMENT OF CHAIRMAN MICHAEL T. MCCAUL

JANUARY 18, 2018

Before we begin I would like to welcome and thank Administrator Pekoske for joining us this morning to once again discuss how we can strengthen our aviation security.

Administrator, when you appeared before our full committee in early November, we had just been briefed by yourself and the DHS inspector general in a Classified setting about specific vulnerabilities at our airports. In the hearing that followed, I said that I found the briefing to be "disturbing." And I know my colleagues felt the same way.

As we have seen across Europe and in New York City, many of the most recent terror attacks have been carried out with vehicles and other low-tech means. However, with millions of Americans traveling annually by airplane, our aviation sector still remains the "crown jewel" of targets.

Even though there are 60,000 TSA employees working hard to protect nearly 450 airports across the country, we still need the most innovative and cutting-edge technology to keep our planes and passengers safe.

As I stated at our full committee hearing in November, "America's enemies only have to be right once, but we have to be right 100 percent of the time." That is why I remain concerned by the agency's inability to deploy Computed Tomography (CT) and Credential Authentication, which would greatly enhance detection of threatening objects.

This concern was made clear in a November 9 letter to Acting Secretary Duke from myself and Chairman Katko, urging TSA to reform the acquisition and procurement processes for screening technologies. Our letter also contained 9 questions about what actions DHS and TSA are taking to improve the overall screening system. We appreciate TSA's efforts to get a response to our committee, however, we were underwhelmed by the lack of details.

In particular, one of the responses stated that CT systems beyond the prototype phase, would not be deployed until early to mid-2019.

There is an airport in Amsterdam (Schiphol) that already uses American-made CT to screen bags. Not having this kind of enhanced security at our own airports is just unacceptable.

It is also important that TSA work with our international partners to install CT scanners at airports overseas which serve as the last point of departure for in-bound flights. This is something I have expressed to you in our most recent conversation and I am hopeful we can begin to make progress on that very soon.

To keep our homeland safe, we must have the best technology efficiently and effectively deployed without further delay.

Today, I am hoping we can have a detailed discussion on how we can get that done so that the American people are better protected.

Thank you. I yield back the balance of my time.

Mr. KATKO. Thank you, Mr. Chairman.

The Chair now recognizes myself for 5 minutes of questions. I want to say at the outset that we have to begin the line of question

here that I gave you a heads-up on and that was the really terrible delinquencies that this agency has routinely engaged in responding to requests from Congress.

You know, I know, the agency knows, that our request are not optional, particularly when they are in statute and when there is a deadline set. We don't set those deadlines arbitrarily or to make your lives miserable. But, in fact, we set them because we need the information. If you look back on the information we have requested, it has to do as keeping America safe, keeping our airlines safe, having a better procurement system and what-have-you at TSA.

So, it is deeply disturbing that we have to talk about this stuff again and again. But and you and your predecessors have a pretty dismal track record of responding to us in a timely manner to things.

I want to put a graphic up. You see it up on the screens here and you turn on your monitors in front of you as well. If I was a prosecutor, cross-examining someone, I love these types of graphics, but I am not a prosecutor and you are not my adversary.

That is why I don't like this graphic. This graphic shows that of the—in the 115th Congress, 82 percent of the time you have had delinquent or very delinquent responses to inquiries from us, either oral or writing or from statutorily-missed deadlines, the 5-year plan of which was probably the worst.

The content of what was in the 5-year plan to me was at best watered down and not very helpful. That 5-year plan is there and was designed years ago to try and get TSA to look forward and look ahead and it seems like we are beating our heads against the wall with that.

There is just, for the record, so it is clear that out of the 17 requests you had from Congress this year, 14 of them were late or very, very late. We are not talking by a couple of hours. We are talking by days, weeks, and months. That is something that is absolutely unacceptable.

We can provide to you after the hearing today or at any time a copy of each individual request, when it was done, when the deadline was and when the date of response was. It is routine like I said for it to be multiple months late and that is very difficult.

Now, I want to talk about the biannual 5-year technology investment plan, which was submitted to the committee nearly 2 months late. First of all, I guess I would ask why that was? Any reason for that, any justification for that? I understand part of this before you answer that question is that you came in the middle of this. That I understand.

But you also have a professional staff who does a very good job and works very hard. I am just at a loss as to why it would be so late and you would just ignore a statutorily-mandated deadline.

Mr. PEKOSKE. Yes, sir. We don't intentionally ignore deadlines whatsoever and as I said in my opening statement, this is a key priority of mine. I pride myself on being responsive to others' requests for information.

I will take a personal interest in this to make sure that going forward we meet the deadlines that we have established to respond to this committee's—every Member of this committee.

The reason that report was delayed and this is just a reason, it is not—the report should have been on time is the bottom line. The reason it was delayed is I got into office. I looked at the report. It already has been through staff clearance. It is not just staff clearance within TSA, it is staff clearance within the administration as well.

There were some significant things that weren't in that report, for example, CT. You commented that even the report that you have today shows two CT systems being acquired.

That is because we can only report what is in the budget request. That doesn't reflect our current thinking on CT as I just mentioned in my opening statement. So that report needed to be revised to at least bring it up to the more current information that was subsequently provided to the committee.

But bottom line is that it shouldn't be late. I will take a personal interest in making sure that we are responsive to the committee's concerns. Like I said we very much appreciate your oversight. We want this to be a strong partnership.

I think it already is a strong partnership but it can be even stronger. Every time I have talked to any Member of this committee, the first question they ask me after I brief them on whatever information I brief is: How can we help? I really appreciate that and I want to make sure that I do everything I can to provide you the information that you need going forward.

The second thing I would mention, sir, is that I firmly believe in a long view. One of the things that TSA does not have is a long-term capital investment plan. So that is why we do fits-and-starts if you will on some of these projects. What I want to do is to be able to take a little bit longer view, a 5-year look at what our capital requirements are and actually plan that out so that we see it and we can plan to it early enough on so that things go much smoother than what they have in the past.

Mr. KATKO. That is part of the reason why you have the 5-year plans. We can help you looking forward. I mean, we have tried to force you—the agency to look forward. That is something you shouldn't have to start anew. It is something that is already there for you.

I will note just for record that with respect to the letter we sent out on November 9, 2017 with Mr. Chairman to my right, it was a very pressing matter, a very serious matter. We got it Tuesday of just last week, which is almost a couple of months late.

We are trying to help keep the country safe too and we have a job to make sure that oversight is done appropriately. We can't help you, which we want to do, if you don't give us information to help you with.

If you haven't noticed, this is one of the most legislatively active committees probably in the history of Congress, under Mr. McCaul's leadership, and we churn out so many bills that are so important to keeping our country safe.

We can't do the legislation unless we know what the problem is. For example, I am contemplating something to expand the resources for TSIF, which I know is a bottleneck for technology and we want to help with that. But we can't if we don't get the informa-

tion, especially if we don't get the information in a timely manner, so I am confident you got the message.

So with that I will recognize Mrs. Watson Coleman for 5 minutes of questioning.

Mrs. WATSON COLEMAN. Thank you, Mr. Administrator. I wanted to get some clarity. You said that you were—you mentioned that you are going to be deploying 40 CTs through 20 airports and 20 of them are going to go to airports. Is that right?

Mr. PEKOSKE. Yes, Ma'am.

Mrs. WATSON COLEMAN. So where are the other 20 going?

Mr. PEKOSKE. The other 12 are going to our labs, our testing facilities. So we are using three testing facilities and there will be four in each one of the testing facilities.

Mrs. WATSON COLEMAN. Now, how far away do you think you are of actually deploying these to the 440 airports Nation-wide?

Mr. PEKOSKE. The testing articles that we deployed to 28 airports in fiscal year 2018, we are very close to starting that deployment, so I would say in the next 3 or 4 months we will start to deploying those and testing those in a real environment.

With respect to the full deployment, starting to spread out to the 450 airports, that begins in fiscal year 2019. The President's budget when that gets released, I will be able to discuss more fully what our plan is for fiscal 2019. But I can assure that there is a deployment plan in fiscal 2019.

Mrs. WATSON COLEMAN. I want to talk to you a little bit about surface transportation issues because I am always very concerned about that. Since the last time we talked in November there was an attempted terrorist attack in New York City's subway. What is the security technology plan for surface transportation security?

Mr. PEKOSKE. We work with the owners and operators of surface transportation systems and TSA's role is to test technologies that might enable or enhanced surface transportation security. A good example is with that IED, person-borne IED up in New York, we are testing a technology that can detect at a distance if a person has something that is anomalous on their body.

Essentially the technology reads millimeter waves that your body emits. It doesn't send any energy toward the person. It just reads what the person's body is emitting. It can tell at a pretty good distance like from, almost from me to you, Ma'am, whether or not there is an anomaly on your body that we might want to look at further.

Mrs. WATSON COLEMAN. So where would we be? Where are we in that process? How far away are we actually into being able to use this?

Mr. PEKOSKE. Yes, ma'am. The TSIF, Transportation Security Integration Facility has been testing this. They should complete their testing this summer. That will be tested by TSA, the owners and operators of surface transportation systems will know it meets the testing regimen. They will have access to the data and they are able to purchase it knowing that, hey, this has already been tested. They don't have to make the investment in that testing technology.

Mrs. WATSON COLEMAN. So they actually have to purchase the whatever it is that is going to be able to detect this.

Mr. PEKOSKE. Yes. We estimate the cost is about $100,000 per machine.

Mrs. WATSON COLEMAN. Oh my. OK. I also wanted to know about whether or not in any way, shape, or form there are regulations that you are waiting to, sort-of, bring up that will enhance the surface transportation security issues and if you are in any way hampered by this administration's policies with regard to having to eliminate two in order to bring one up. That concerns me particularly in surface transportation because I just don't think we are up to snuff anyway on any level as it relates to surface transportation issues.

So where are we? Do you have any problems with getting out the regulations that you need to get out?

Mr. PEKOSKE. We have three such regulations that required by the 9/11 Act. Two of those three regulations are in the—we are all in the process of being put forward. The other one is still being developed. But we hope to have the first.

The topics they cover are training for surface transportation, vetting for surface transportation employees, and then security plans for surface transportation systems. We expect the first regulation to come out some time this year and the next one the year following that. Then the third one is still in development.

Mrs. WATSON COLEMAN. So are you compelled to have to eliminate two in order to bring one forward? So——

Mr. PEKOSKE. We are still working. Yes, ma'am. We are still working the implementation of that Executive Order inside the administration, so that process is still going on back and forth between the agencies.

Mrs. WATSON COLEMAN. OK. OK. I want to talk to you a little bit more about the TSOs because I think that whole issue with regard to their salary, the conditions under which they are employed. Their ability to make complaints and have those complaints dealt with by independent third parties, that kind of thing, I wanted to know what you have done personally to sort-of advance, not only this career path, but to ensure that they are more fairly compensated and more a part of a predictable system?

Mr. PEKOSKE. Yes, ma'am. That is a key focus of mine. I spend a lot of time at the front line of TSA, meeting with our transportation security officers and understanding the work that they perform and the conditions under which they work.

We have put together a career progression plan for our TSOs that we are still putting the final touches on, but we should have that done very, very shortly. Essentially what that does is it lays out for an employee when you come into TSA, here is your pay level. Here is the training that you are going to be provided at each step along the way of your career. This is provided by TSA. The training would be both resident training, in other words, we will send you to a school, most likely the TSA Academy at Glynco, Georgia for training or training is provided on-site for you.

Then once you meet those training requirements, we have established pay increases for those employees. So you can really, as a new employee look at that map and say, "If I get this training, and if I perform well, in X number of years, I can be at this level in the organization." Assuming there are vacancies there, of course.

Mrs. WATSON COLEMAN. It was anticipated that there would be a coming together of the union and the TSA and discuss, sort of, more formally, routinely what TSOs need and should have. OK. I will shut up in a second.

Mr. KATKO. Yes, it's all right.

Mrs. WATSON COLEMAN. So I know that the legislation hasn't passed but I do wonder whether or not those kinds of meetings are taking place. With that, actually, after you answer that I will yield back the balance of my time.

Mr. PEKOSKE. Whenever I travel to an airport or a Federal air marshal service office in the field, I always do an all-hands session with our employees. I use that opportunity to share with them my vision for the organization, some of the observations that I have made about TSA, where I want to take it, but the vast majority of the time is answering their questions and getting their feedback.

Oftentimes what I will do is, for example, with this career progression, I will test drive it in some of those meetings and say, "Hey, we are thinking about this. Give me some feedback." In almost every case, the union representatives have been part of that discussion.

Mrs. WATSON COLEMAN. Thank you. I yield back.

Mr. KATKO. Thank you, Mrs. Watson Coleman. The Chair now recognizes the gentleman from Texas, Mr. McCaul for 5 minutes of questions.

Mr. MCCAUL. Thank you, Mr. Chairman.

I know votes have been called and I know you know I will be visiting after.

Mr. PEKOSKE. Yes, sir.

Mr. MCCAUL. So, I will keep my questions very brief for the other Members, but I think this threat is getting worse, not better, without getting into a different room and space. I have been a big advocate for full deployment of the CT machines.

Mr. Rogers has been a huge advocate for deployment of canines. Mr. Katko has been a real leader in terms of aviation security. I just want to ask you a very simply. As I understand it, you requested 300 CT machines to be deployed, is that correct?

Mr. PEKOSKE. Yes, sir. In our hearing, the full committee hearing on November 8 that was the number we have been using was 300. And I——

Mr. MCCAUL. I think at a minimum.

Mr. PEKOSKE. Right.

Mr. MCCAUL. As I understand it, is it correct that OMB, did they deny that request or just lower it to a 150 which would be half that amount?

Mr. PEKOSKE. Whenever an agency requests a budget item from the Department of OMB, it goes through a review process and OMB and the Department have topline constraints. So they only have a certain amount of money they need to—they can allocate and they need to stick to that.

Mr. MCCAUL. I understand that, but I mean this is dollars and cents, we are talking about American-wise. One hundred-fifty million dollars, when we are talking about billions of dollars for a lot of other things, $150 million doesn't sound like a whole lot to ensure the safety of the traveling public.

To cut that in half, when I think, quite frankly, we need more than 300 of these machines fully deployed, particularly in these dangerous countries that are last-point-of-departure airports. I flew back from Africa and Paris and Istanbul is—Cairo is frightening when we inspected those airports.

I will just close in saying this and I think speak for all Members on both sides of the aisle, I want to work with you to do two things, to reprogram monies for the request that you made for 300 machines.

If we need an additional appropriation and I understand the confines here within the OMB and the White House, but I think we in Congress can make the case for you because I know what you want and we want to give you want you need to protect the traveling public.

So, let me just end with that I think we all want to work with you to get to that number and I think anything less than that is unacceptable for the American people. So, I yield back.

Mr. KATKO. Mr. Chairman, I couldn't agree with you more and I don't think anyone on the committee disagrees with you at all on that. So, with that, we do have votes. We will stand adjourned until 5 minutes after votes conclude and we will resume at that time.

[Recess.]

Mr. KATKO. The subcommittee is now back in session.

I will turn to the gentleman from New Jersey, Mr. Payne, for 5 minutes of questioning.

Mr. PAYNE. Thank you, Mr. Chairman.

OK, one sec. Let us see, last year, Newark Airport became one of the first airports in the New York City region to have high-tech security checkpoints with the automated screening lanes. However, the strategic plan Refresh mentions that procurements are not anticipated until fiscal year 2020.

To address these concerns and thus the Nation about screening checkpoint delays, does TSA intend to work with industry to accommodate non-Federal investment in ASLs potentially from the airlines or airports?

Mr. PEKOSKE. Yes, Mr. Payne. We have 111 automated screening lanes deployed throughout the system. Every single one of those are automatic screening lanes was funded either by an airline or an airport, so they have provided the funding for those to let us do some developmental and some operational testing.

There are no resources in the budget as it currently stands in fiscal 2018 for automated screening lanes, but we are standing up an acquisition project. This is one of the issues with how we proceed without a capital investment plan: Ideally, you would already have an automated screening lane project on the Government side so that when the industry-funded prototypes ran their course, that you had a project to come in behind that. We may see a little bit of a delay because that project wasn't stood up.

Mr. PAYNE. OK. Now, we expect the President's budget to be out next month. Can you tell us in general terms about some of the TSA priorities in the budget?

Mr. PEKOSKE. Sir, I can't go into any specifics, but in general, the President's budget reflects a resource-constrained approach because

we just do not have unlimited resources to apply to any particular agency. I can share with you that——

Mr. PAYNE. You don't sound too sure.

Mr. PEKOSKE. Well, I know, I just cannot reveal what is in there at this point until the President releases the budget. Then I would be happy to sit down with you one on one to go over the particulars in that budget. But that should be the first or second week of February.

Mr. PAYNE. So, there is something in it, though?

Mr. PEKOSKE. Oh, there is.

Mr. PAYNE. Oh, OK.

Mr. PEKOSKE. Yes.

Mr. PAYNE. All right, very good.

As I am sure you are aware, TSA has consistently struggled with low morale across the work force. In 2016, TSA ranked 303rd out of 305 Government agencies for morale, there is also an immediate need for improvements to the TSO pay and performance system as well as other work force priorities so we can improve the morale and reduce turnover.

I understand that AFGE which represents front-line transportation security officers has reached out to you on issues of importance to the work force. Are you planning to work with those labor representatives to try to rectify some of these issues?

Mr. PEKOSKE. Yes, sir. We are working with labor representatives. In fact, I met with the AFGE president already as one of my initial visits as the new administrator. Additionally, when I travel to airports around the country, the union representatives are always in those meetings, so I think we have a good dialog back and forth.

Mr. PAYNE. How do you see addressing some of these issues from your standpoint?

Mr. PEKOSKE. Sir, in my opening statement, I mentioned three key areas of priority for TSA. A key area, one of those three was a commitment to people. There are a number of subtasks underneath that that go to the very issue of increasing job satisfaction, by increasing retention within our work force.

In my travels around TSA, actually my personal interactions with TSA, men and women at the checkpoints or the folks that are in checked baggage or behind the scenes doing inspections and things like that, I found very high morale and very strong mission focus. So, I am trying to reconcile the survey results with what I see personally.

But, knowing that we do have some work to do there, we have seen some improvement in results from 2016 to 2017. I am open to see continued improvement in 2018, 2019, and 2020 for sure. From my perspective, sir, security effectiveness is directly related to worker satisfaction and job morale, so that is a very high priority one.

Mr. PAYNE. OK. Well, I hope you are successful in that because, you know, being 303rd out of 305 indicates that there are obviously some issues.

Mr. PEKOSKE. Yes, sir.

Mr. PAYNE. I will yield back.

Mr. KATKO. Thank you.

The Chair now recognizes the gentleman from Alabama, Mr. Rogers.

Mr. ROGERS. Thank you, Mr. Chairman.

Thank you for being here. We appreciate your service to our country. We have a lot of threats that originate overseas at last-point-of-departure airports. I am really curious to know what steps, if any, you all have been taking to work with our international partners to help them deal with deficiencies that the AT X-ray machines have in terms of screening passengers.

Mr. PEKOSKE. Yes, sir. We have a number of people deployed overseas that are industry representatives or TSA representatives in countries, roughly 100 people overall. They have direct interaction with both the carriers, the airports, and the nations involved in the last-point-of-departure airports.

As we have worked to raise the global bar in aviation security, those steps that we put in place in July and the additional measures that came into force in October, all of those inspectors and those TSA representatives are visiting all of, every single one of the last-point-of-departure airports just to see how they are doing with implementing those measures and importantly, to see where we can help them out.

Mr. ROGERS. OK. Do they seem receptive to that help?

Mr. PEKOSKE. They do, certainly.

Mr. ROGERS. According to the Refresh plan, TSA plan to procure two CT machines a year until you found the technology worked. I talked with the Chairman about now that you feel comfortable with it, that you would like to have at least 300. Down the road, what is the total number you think that you would be able to need for across the transportation world spectrum?

Mr. PEKOSKE. Yes, sir. Just for planning, it would be very, very simple and that is one for one replacement of the Advanced Technology of the AT machines with the CAT technology. That is roughly 2,400 machines overall. What we will find as we deploy the CAT machines that a one for one replacement may not be necessary. Additionally, a number of airports around the country are doing a lot of investment in their airport infrastructure and the way they invest may require more lanes for us or fewer. So, it is a very exact process to go through airport by airport and see where we can deploy the CT technology.

Finally, there are some restrictions because the CT machines weigh more and they are a little bit bigger and so in some airports, we felt those infrastructure investments, they may not be able to handle a CT machine.

Mr. ROGERS. We understand if you are constrained by the President's budget in your advocacy, but the good news is the President proposes and we decide. So, we are going to do our best, as the Chairman said, to try and help you get what you need. I am curious, if you get to 300, what percentage of your capacity will that accommodate?

Mr. PEKOSKE. If we get 300, I do not have the exact—basically, it would be 300 over roughly 2,400. So, whatever that math turns out to be. What is also important is to have some level of predictability in the future funding stream. That is important for the manufacturers to understand that too.

As we go through the testing process that we are in right now, we have a number of manufacturers' machines that we are testing. We do not know at this point how many manufacturers of this set that we are testing are actually going to succeed in that test and be listed on our product list. So, that will also determine how much capacity we can put out there. Basically it is going to be the capacity of the number of manufacturers.

Mr. ROGERS. OK. I want to shift over and I appreciate the fact that you have been full-throated in your support of the legislation we passed last week together with the establishing a working group for canine production and training. I hope that it is your expectation to give the same commitment to carrying out the report recommendations that they are going to yield as to how we implement those, that production in training.

Mr. PEKOSKE. Yes, sir, absolutely. In fact, I would like to get a start on the requirements in the legislation before the legislation is even passed. I agree with it so much that I think we should not waste any time. We should just get about the business and get it done.

Mr. ROGERS. Great. I know you now talked about the fact that TSA is struggling with American vendors to get green dogs or dogs that have the capability but haven't been trained yet. What is the status? Is there any activity going on within TSA to kind-of modify their procurement processes to reflect more what DOD does?

Mr. PEKOSKE. Yes, sir. We are constantly looking at that because our procurement processes, as many of the other Members have noted, they are lengthy. So my approach is to look at it and say how can we stream—even within the existing requirements that we have, how can we streamline that process to get to an end solution faster?

My central effort in my strategy is going to be accelerate action, because as I look across TSA, many things just take a lot longer than I think they should take no matter what it is. It takes longer than I think what it should take. So, our key focus and certainly a focus on getting technology deployed out to our front-line work force which would include canines, because I firmly believe that we need to do everything we can to get the right tools in the hands of the men and women we have out there.

Mr. ROGERS. Great. My time has expired.

I do have a couple of additional questions that I will submit for the record and I hope you will reply to those. I yield back.

Mr. KATKO. Thank you. I just want to note, we may do a quick second round if warranted.

With that, I will recognize the gentleman from Louisiana.

Mr. HIGGINS. Thank you, Mr. Chairman.

Mr. Pekoske, thank you for appearing before us today.

I would like to touch on a couple of subjects very quickly. My colleague mentioned morale in TSA. Would you have not contributed, the morale status, generally speaking at TSA be due to consistent failures and high turnover, would you contribute that as?

Mr. PEKOSKE. Sir, I think there are a lot of factors that feed into the morale of our employees. Those would be two of the factors. I think other factors are the nature of the work, the competitive nature of the work, the stress that they are under, certainly some of

the feedback they get from customers that might not be fair feedback and things like that.

Mr. HIGGINS. But we touched upon an interesting aspect of this in mentioning a 5-year term rather than frequent turnover at the upper administrative levels. Morale is reflective of consistency in my experience. In 2017, just a couple of months ago, we passed, the Department of Homeland Security Authorization Act and it now languishes in the Senate. If our colleagues in the Senate will act and pass that full authorization which is for the first time, the Department of Homeland Security was authorized since its inception which consolidates it under the oversight of one committee and associated subcommittees.

Would you not see that as a statement of consistency and therefore would contribute to an improvement of morale?

Mr. PEKOSKE. Yes, sir, I would. I think that is very important. To your point on consistency of leadership, the Chairman mentioned the number of leaders he has seen just since he has been a member of this subcommittee and having some stability at the top of the organization I think is very important.

Mr. HIGGINS. Thank you. I think it is very important and I hope my Senate colleagues are listening.

I would like to jump to CT. Can you tell us why the great disparity between the 2017 Refresh Plan that stated 2 units for fiscal years 2018, 2019, and 2020 with a total of 6 and now we are talking about 40 in 2018 which is great, we would like to see you get them in every airport, everywhere at whatever level you need them.

But why the great disparity between that report and you are advising us now?

Mr. PEKOSKE. So the difference is that when that report was written, we didn't have budget numbers for our fiscal 2019 and forward. So what it reflects is the budget numbers that were existent at that time.

Mr. HIGGINS. So, again, the consistency and full authorization of the Department of Homeland Security would assist us as a Nation to deploying this technology. Would you agree?

Mr. PEKOSKE. I would in consistency of funding, I support it.

Mr. HIGGINS. I hope my colleagues in the Senate are listening.

I would like to jump to what you stated. You had stated, sir, in your testimony that, pardon me, you have a plan to aggressively deploy checkpoint CT technology and you are currently pursuing a flexible approach to test, procure, and deploy CT systems. Then you stated that you are focused on maturing and deploying. Maturing, by that, do you mean testing algorithms?

Why can these units not be deployed and put in use protecting American citizens as the algorithms are tested and tweaked and matured? Why can't we go ahead and put the systems in place before we test them for a year or two?

Mr. PEKOSKE. So, again, in fact the plan is to qualify the machines. It is just machines that work that meet a current standard and then the additional testing and the additional software development is for a new accessible property screening standard which gets to a wider range of explosives detection and——

Mr. HIGGINS. So, you concur that that is—is that a goal?

Mr. PEKOSKE. It is a goal, yes, sir. But, there are——

Mr. HIGGINS. Thank you. Thank you, for that answer.

Mr. PEKOSKE. Yes. But, we will have constraints in how fast we can deploy it just based on airport ability.

Mr. HIGGINS. Oh, I see. Well, thank you for that clarification.

My final 30 seconds, please touch on ground transportation and old technology of deployment of canines which this body has authorized the funding for many additional canine teams, do you not see that as an answer for our ground transportation system?

Mr. PEKOSKE. Yes, sir. It is part of a solution set.

Mr. HIGGINS. Are you aggressively pursuing that?

Mr. PEKOSKE. Yes, sir. We have 675 canine teams that we provide to State and law enforcement for both airport and surface transportation.

Mr. HIGGINS. Thank you for that.

Mr. Chairman, I yield back.

Mr. KATKO. Thank you.

The Chair now recognizes the gentleman from Pennsylvania, Mr. Fitzpatrick.

Mr. FITZPATRICK. Thank you, Mr. Chairman.

Thank you, Mr. Pekoske, for being here.

My questions, I want to narrow it on cockpit safety specifically, the flight deck officer program. How is it working? What is working about it? What is not working? What are the areas of improvement with regard to efficiency? It is obviously run and overseen by the Air Marshal program.

As a former Federal agent myself, we had a lot of interaction with that program or with those folks. I just want an update on what is working about it and what is not?

Mr. PEKOSKE. I think it is working very well, sir. I have personally observed the training that the Federal flight deck officers go through. I think it is very rigorous, that they volunteer for this assignment, the airlines support their assignment. It provides an extra layer of security in aircraft which we very much value. So, I see no downside whatsoever to the FFDO program and see only upsides to it.

Mr. FITZPATRICK. Is there anything that can be improved? Is it a purely voluntary program? Are their targeted percentages of the certain percentage of cockpits you want on in pilots or are pilots actually sought out after to participate in the program?

Mr. PEKOSKE. Yes, sir, it is voluntary. Really, the more the better. I mean the more cockpit security we have, I think the better off we are.

Mr. FITZPATRICK. OK, thank you, sir.

My second question also pertaining to the cockpit is the idea of double barriers, something that has come up a lot. I would like it, sir, if can opine on the necessity of them, whether you think that they would make aircraft and airliners and therefore the passengers therein safer and more secure.

Mr. PEKOSKE. I have looked at the overall cockpit security issues and as you know on flights where we deploy Federal air marshals, we generally put them in the forward part of the aircraft to provide that additional layer of security. Then when you consider the reinforced cockpit doors and then the potential of Federal flight deck

officers being on an aircraft, there are several layers of security that are built in there.

The additional barrier piece, I can get back to you as a question for the record on that. I don't have any specifics on that at this time, but I will look into it.

Mr. FITZPATRICK. OK, because certainly the flight deck officer program helps. Certainly the air marshals help, fortified barriers on the doors themselves help. The concern, and the reason why myself and many people think the double barrier was necessary is during the change, when is the change in personnel in and out of the cockpit.

Mr. PEKOSKE. Right.

Mr. FITZPATRICK. Currently, what is being used to protect that are carts and attendants protecting the cockpit. Do you think it is safe to say that a double barrier to protect that change in the cockpit personnel would make the aircraft safer?

Mr. PEKOSKE. Well certainly, it is vulnerable when the change is occurring. So something that could close that vulnerability would be useful for sure.

Mr. FITZPATRICK. OK. Thank you, sir.

I yield back.

Mr. KATKO. Thank you, Mr. Fitzpatrick.

We will do just a brief second round and no one is compelled to ask questions if they are not inclined to do so. I just have a couple of follow-ups I wanted to touch upon.

First of all, with respect to the 5-year plan and some of the responses in there, at one point, you stated that with respect to the CT machines that TSA, quote, expects actual deployment of CT systems to occur in early to mid–2019. What does that mean?

Mr. PEKOSKE. That means that the deployment will probably occur about this time in 2019. Because part of the survey that we need to look at is when do we have surge periods at airports? Basically it is from the week before Thanksgiving all the way through the first week of January. You probably don't want to be deploying these systems during that week just for throughput reasons and for training reasons.

Additionally, whenever we go through a surge period, the transportation security officers are always on duty and they are often working overtime. We do look for periods that are immediately after the surge periods so give them a little bit of time off and to conduct some training that we might not have been able to cover when they were going through a surge.

Mr. KATKO. We touched on this at the last hearing, but I wanted to just follow up just to make sure I am clear with this. You know that the actual machine you are contemplating is available now and you also know that it has been deployed now at least in other airports around the world, so the technology is there.

There is some discussion about doing basically on-the-job tweaking if you will of that technology. Has there been any consideration given to just simply deploying them now as quickly as you can and tweaking, doing some of the tweaking that you need to do as you go, kind-of like learning as you go with this issue?

Mr. PEKOSKE. Yes, sir. When we do the operational and developmental testing that's going to occur in fiscal year 2018, so it is this

fiscal year, we will pick those airports and we do have some flexibility in terms of throughput and do some actual real, live testing of those machines.

Mr. KATKO. That is not going to be something that is widespread. You are basically going to wait until 2019 after the TCIF testing is done?

Mr. PEKOSKE. Two-thousand nineteen is when the first large chunk of money will come into the program.

Mr. KATKO. I see. That is when you will be able to deploy. You are kind of waiting for the money as well, right?

Mr. PEKOSKE. Right.

Mr. KATKO. OK, all right. Also I just want to mention, you mentioned at some point in your testimony earlier this afternoon that the importance of consistent funding streams with respect to Congress, and I couldn't agree more. But one of the complaints we have received from industry routinely is that TSA often moves the goal posts on what the agency plans to buy and when they plan to buy it with their funding request.

I want you to comment on that if you are aware of that issue in your short time there and what are you planning to do as you try to address that? Because one of the concerns I have and we have discussed these many times, there is an awful lot of great technologies out there that never find a way to the battlefield if you will, because of these moving of the goal posts that has occurred in the past.

It discourages entrepreneurs and upstart companies and it also discourages a lot of companies to invest the amount of money they have to, to try and get these contracts. So I wonder if you could address that issue for me.

Mr. PEKOSKE. Yes, sir.

One of the purposes for the innovation task force was to address that very issue, is how do we have a good, robust dialog back and forth with the industry, both large businesses and small businesses and really have an on-going dialog when we are doing developmental testing, so that the industry partners know how the developmental testing is going on? They can make some adjustments to their equipment as it is proceeding.

Once you get into operational testing, that gets to be a little bit of a different animal. But I do think that a predictable funding stream is very, very valuable to the industry. I mean they are going to know that we are planning to invest X amount of dollars in 3 years hence. If they want to put R&D effort to be able to compete for those projects, they can do it early enough on, which actually at the end of the day benefits us as well in the process.

So my goal is to have good, robust dialog with the industry and to see if we can get to a point where in the capital budget, we have a predictable funding stream. Right now, in checked bags, we have a very predictable funding stream. It is $250,000 per year and that allows us to look out. We know, in 3 years, we are going to have $250,000 adjusted for inflation.

So, airports and TSA can make plans for deploying those systems in an orderly fashion. The rest of the capital budget is not like that, so I really think it is very important to get to that capital investment plan.

Mr. KATKO. OK, great. I just want one last question since I have a minute here. This is something that is just a personal bugaboo of mine, I go to airports all over the world and mostly international airports have automated exit lanes and in fact Syracuse, New York of all places which is not exactly the busiest airport in the world has automated exit lanes.

Every time I walk out an exit lane in National Airport or elsewhere, I see they have two to four people in the exit lane just checking IDs when they come through. No bags are being checked or nothing like that. I just wonder, first of all about have you looked into automated exit lane technology and whether that could save any money for TSA and the Government, No. 1?

No. 2, given the current threat climate and I think there was a case last year where one of the flight attendants was trying to smuggle on a significant amount of cocaine through the exit lane check-in procedure. Is there any concern about the exit lanes as being a security gap that might want to be addressed? Because I know the exit lane technology out there now is pretty much 100 percent certainty that people aren't going to sneak through that way. I just want to ask you about that.

Mr. PEKOSKE. Yes, sir.

We look at those technologies and one of my biggest concerns in terms of resourcing overall is the number of people TSA has at the checkpoints, because I don't think that is enough people. It is evidenced by the fact that we are having to use a lot of overtime to get through surge periods that we are not able to conduct training during those surge periods and things like that. I think it affects morale too if you are in a job and you are tasked to work extraordinary hours on a regular basis, I think that affects your overall perspective of that particular position.

So my goal is to look at the resource base of TSA and see where we can put additional resources currently existing in the agency at the front line, because, again, my focus is on that front line.

Mr. KATKO. OK, and I would like to hear more when we get a chance to just think about the exit lane technology, something we addressed in some hearings a couple of years ago. I think it is something we have to take another look at just from a manpower standpoint, but also from a cost standpoint.

With that, the Chair now recognizes the gentlewoman from New Jersey, Mrs. Watson Coleman.

Mrs. WATSON COLEMAN. Thank you.

Mr. Pekoske, you have given us a lot of good information today and you certainly have expressed a commitment and understanding of the challenges and the commitment to resolve a lot of these issues. So, I just hope you have long enough to do that.

Mr. PEKOSKE. Thank you.

Mrs. WATSON COLEMAN. Try not going anywhere for a while.

Mr. KATKO. I will second that.

Mrs. WATSON COLEMAN. Last week, there was this report about a potential conflict of interest between staff at the Department of Homeland Security and a computed tomography contract that was awarded. I think we should all agree that contracts should be awarded fairly.

One article mentioned that the staff was recused from all matters involving the contractor. I am concerned about other potential conflicts at TSA. Would you be able to speak to the sort-of regularity of how this has been happening and would you also be able to provide our staff with the list of the individuals and the reasons for their recusals?

Mr. PEKOSKE. Yes, ma'am. I will definitely take a look into that. I am not familiar with the particulars of that particular case, but I know in my own example, I have recusals from a number of items based on my business relationships before I came into this position, and we are very, very, very careful about making sure that every aspect of that is complied with.

I think that the competition needs to be fair, open, and transparent and if there is any break in that particular model, I want to take a look at it.

Mrs. WATSON COLEMAN. Just to follow up on that, do you find the rate of recusal more now than, let us say, in sort-of the last terms?

Mr. PEKOSKE. I would not have a good basis to make that comparison.

Mrs. WATSON COLEMAN. Can you?

Mr. PEKOSKE. I can get the data. Yes, ma'am.

Mrs. WATSON COLEMAN. Would you share that with us?

Mr. PEKOSKE. Yes, ma'am. Thank you.

Mrs. WATSON COLEMAN. Thanks. I yield back.

Mr. KATKO. The Chair now recognizes the gentleman from Louisiana, Mr. Higgins, for questioning.

Mr. HIGGINS. Thank you, Mr. Chairman.

Mr. Pekoske, I would just like to state that I echo the sentiments of my colleagues that we certainly hope you stay on the job, extremely squared away and your testimony today has been uplifting.

I would like to jump back into canines for a moment regarding cargo and airport employee areas, restricted areas. We expend a great deal of energy and technology to screen our passengers to the extent that the deterrent factor is largely in place. I personally believe that if an airplane is to be hijacked by firearm, it is going to come from the cargo area or the airport employee restricted access area.

So, regarding the use of canines and more specifically American-bred canine teams, what is your vision on using old technology, given what you stated as, I think you used a term called budget-restrained environment, old technology being certainly less expensive than new and canine team technology and capabilities being very, very adequate regarding detection of explosives, how do you envision the cargo areas and restricted access areas of airports and using canine teams?

Mr. PEKOSKE. Yes, sir. Canine teams are effective in that environment. Not only to detect potential issues of concern, but also to provide that deterrent effect as you mentioned. The Aviation Security Advisory Council has a subcommittee on insider threat and I have asked that subcommittee to take another look at that overall issue because I think it is something that we just need to keep a constant stare on and we should not look at it two or 3 years ago

and say, OK, we have got adequate procedures in place, I think we need to constantly review that.

I would also add, sir, that in our global efforts to raise the bar in aviation security, that second phase that began to be implemented on October 26 contains security around aircraft that are destined for the United States in foreign airports.

Mr. HIGGINS. Yes, sir. Thank you for that answer. Thank you for your testimony.

Mr. Chairman, I yield back.

Mr. KATKO. Thank you.

The Chair recognizes the gentleman from New Jersey, Mr. Payne, if he has any questions.

Mr. PAYNE. No questions at this time. Thank you for your service to this country.

Mr. KATKO. OK, thank you very much, Mr. Payne.

Before we close, I do want to note that, listen, we had to get into some tough stuff here. That is part of our job at oversight. We would not be dispatching our duties if we did not do so. But that doesn't take away from the fact that we view what TSA is doing in the front line everyday keeping America safe and keeping the skies guys safe and terror-free is really—they are doing a great job and we appreciate everything.

So yes, our job is to bark at you. Our job is to point out where you are falling down. But, it is also incumbent upon us to point out what you are doing well. The agency is making progress. It has a long way to go, but I am confident that your leadership and your team that is there and even the young lady that would be going there next week with you, that you are going to be all right.

I just hope that you understand that this is an interactive relationship and that when you need things, you have to let this committee know and we will respond. We will respond legislatively. We will respond in any way we can to help you, because I think it is in all of our interests to keep this country safe and we know from our briefings that the bad guys are still trying to get us in any way they can and their technologies are getting more advanced. We have to advance with them. That is why we spend so much time on the acquisitions process and trying to help streamline that process. We have to get the best tools available to the front lines.

I think the same way about my son who has just graduated Fort Benning, Georgia, officer training and could be put in harms' way tomorrow and it is incumbent upon us to make sure that he has every weapon at his disposal to both protect himself and to get the enemy. I view it the same way here.

So, while we point out the tough stuff, we also want to say thank you to each and everybody, each and every person that works at TSA. You can obviously do a lot of other things elsewhere and a lot of you could be making a lot more money elsewhere, but you do that because you want to keep your country safe and that is a very commendable thing.

Before I close, I do want to note that after several years with us, Krista Harvey would be going over to your shop. While we are sad to see her go, we are glad to see her going to your place. I encourage you to use her experience here because she is going to be very

helpful for you. Don't figure out how to get me over, Krista, OK, all right?

So, thank you all very much. With that, let me see if I can find my closing notes here, here we go. I want to thank everybody for their questions today. It was great as usual. I want to thank Bonnie Watson Coleman, my colleague and friend for her usual great work.

The Members of the committee have 5 additional days to submit questions and for the witness to respond in writing. Pursuant to committee Rule VII(D), the hearing record will be held open for 10 days. Without objection, this subcommittee stands adjourned.

[Whereupon, at 4:07 p.m., the subcommittee was adjourned.]

APPENDIX

QUESTIONS FROM CHAIRMAN JOHN KATKO FOR DAVID P. PEKOSKE

Question 1a. Last spring, we saw the emergence of a serious new threat to the aviation system relating to personal electronic devices (PEDs). The threat had a significant, rippling effect on the international aviation system, with last-point-of-departure airports required to take drastic steps to increase security and passengers in the United States are now required to take PEDs out of their carry-on bags. The latest intelligence indicates that we are in a very dynamic and evolving threat landscape that could have significant implications on aviation security and the international economy.

Will the investments outlined in the Refresh Plan for transportation security equipment keep pace with the evolving threats to aviation?

Answer. TSA operates within a complex and evolving threat environment, and technology acquisition programs must proactively respond to emerging threats to protect transportation security. To address threats and increase security effectiveness, TSA is focused on deploying an effective, adaptive, and flexible system of security capabilities. TSA pursues enhanced capability development to address capability gaps, optimize existing technologies, and develop future technologies. It is our intent that the investment detailed in the Strategic Five-Year Technology Investment Plan Biennial Refresh Plan will meet current and future threats to aviation.

Question 1b. Can you describe in detail how the TSA's Refresh Plan will accelerate significant advancements in security technology capabilities and deployment of these systems at the Nation's checkpoints and checked baggage systems?

Answer. TSA's acquisition strategies will continue to transform to address threats within the transportation security environment, and reflect the goals outlined in the Strategic Five-Year Technology Investment Plan Biennial Refresh, which provides industry and other stakeholders with the Agency's strategic direction in order to align investments accordingly. The Refresh provides information regarding planned purchases within established acquisition programs as well as focusing on emerging capability areas. For example, TSA provides its detailed acquisition plan to rapidly test, procure, and deploy available Computed Tomography systems, which TSA believes will significantly increase security effectiveness at the checkpoint. In addition, the on-going technology initiatives and innovative concepts outlined in the Refresh Plan detail TSA's continued progress in its pursuit to address capability gaps, optimize existing technologies, and develop future technologies. Last, the Refresh Plan details how the Innovation Task Force is demonstrating innovative and emerging capabilities. These demonstrations provide stakeholders within the security technology industry real-life operational experience and data, which in turn may reduce technology transition time and cost, and better inform TSA requirements. The Strategic Five-Year Technology Investment Plan Biennial Refresh is one of many avenues that TSA uses to foster dialog and collaboration with its stakeholders and to provide transparency. TSA will continue to work with industry to develop capabilities that meet requirements and will work internally to shorten acquisition time lines to accelerate the deployment of capabilities to checkpoints and checked baggage across the Nation.

Question 1c. Can you describe how the Refresh Plan fosters a robust domestic security manufacturing base and enhances competition to drive innovation in aviation security?

Answer. Within the Strategic Five-Year Technology Investment Plan Biennial Refresh, TSA provides industry and other stakeholders an understanding of where it intends to invest to elevate checkpoint screening capabilities. The Refresh provides information regarding planned purchases within established acquisition programs, as well as focusing on emerging technologies. TSA will continue to collaborate with and inform the domestic security manufacturing base to ensure it has an understanding of TSA's direction, which should foster both competition and innovation.

Question 2a. Last year the Aviation Security Advisory Committee (ASAC) undertook a comprehensive effort to assess the effectiveness of checkpoints at U.S. airports, and presented to TSA 35 specific recommendations in a report titled *Improving Checkpoints at U.S. Airports.* This report sets the vision for checkpoints of the future, which includes the fielding of next-generation technologies that will significantly increase security and improve the passenger experience.

Will the TSA's Refresh Plan meet the vision outlined in the ASAC report?

Answer. TSA continues to work with the ASAC to implement the recommendations within the ASAC report.

TSA concurred with all recommendations within the ASAC report and responded to the subcommittee with detailed implementation plans for each one, including milestones to full implementation. The status of these recommendations are discussed at ASAC subcommittee meetings. In addition, TSA will ensure that future reports to refresh TSA's Strategic Five-Year Technology Investment Plan consider these recommendations, as applicable to security technology.

The Strategic Five-Year Technology Investment Plan Biennial Refresh was considered in the development of the Aviation Security Advisory Committee (ASAC) Report. TSA believes that the efforts detailed within the Refresh Plan show TSA's continued progress to address threats and increase security effectiveness at checkpoints at U.S. Airports.

Question 2b. Does TSA have the funding necessary to accelerate the development and deployment of increased capabilities and next-generation technologies as soon as possible to meet the evolving threats?

Answer. Yes, TSA has been able to work with its allocated funding to best support the development of capabilities to address evolving threats and to develop strategies to test and deploy technologies faster. TSA will continue to use the established processes to request any additional funding if necessary to further accelerate increased capabilities.

Question 2c. Notwithstanding current or anticipated budgets, has the TSA identified the funding requirements needed to accomplish the mission and meet the evolving threats, as the ASAC has recommended?

Answer. Yes, TSA has identified the requirements and will continue to fund those requirements within existing resources. Within a budget-constrained environment, TSA prioritizes and makes difficult decisions of what to resource and what not to resource. TSA will continue to look for funding opportunities to best accomplish its mission to include addressing known and evolving threats and will continue to follow the established acquisition life-cycle process and the established processes to request additional funding if necessary to accelerate increased capabilities.

Question 2d. TSA's Electronic Baggage Screening Program (EBSP) has a $250 million capital fund each year, which provides multi-year funding for screening equipment upgrades and replacement. This provides some consistency and certainty in making future investment decisions for checked baggage system projects. Would the establishment of a capital fund for the Passenger Screening Program (PSP) help the TSA improve the checkpoint equipment?

Answer. The administration has proposed that the traveling public pay a greater share of aviation security costs through higher fees. While the establishment of a capital fund to resource capabilities within the checkpoint would provide a more stable planning, programming, and budgeting process, any additional funds should not increase deficit spending.

Question 3a. The ASAC Checkpoint Report also contains a number of specific recommendations for the TSA to vastly improve the long and expensive security equipment development and acquisitions process. In particular, the TSA test and evaluation process takes many years with high costs to Government and industry. The Refresh Plan provides additional details on the recent TSA reorganization and how it will enhance the process.

Does TSA have examples of any efficiencies or time saved in the development and acquisitions process since the reorganization?

Answer. The TSA reorganization addressed a need to create an organizational structure that centralizes acquisition programs in a single chain of command, establishes a dedicated requirements organization to enhance acquisition life-cycle processes, and separates contracting functions from broader acquisition management. One of the significant efforts that TSA is driving under the new organization is the rapid development, qualification, procurement, and deployment of Computed Tomography (CT) technology for checkpoints. The development of the acquisition strategy to aggressively deploy CT demonstrates how we are working to assess, develop, and deploy technologies faster and marshaling the focus of the entire agency. We are currently using existing processes such as field demonstrations, operational assess-

ments, and developmental testing to develop screening capabilities in a time-con-strained manner.

Question 3b. Has the TSA set specific metrics or goals to measure reduced times for equipment development and qualification? Has the TSA established any specific metrics or goals to reduce the T&E time frame, as a means to measure progress?

Answer. TSA monitors the time it takes for equipment to move through the quali-fication process (also referred to as the test and evaluation process), but much of that time line is dependent on the maturity and readiness of the technology to meet TSA requirements. Some Transportation Security Equipment failures during Quali-fication and Operational Tests have unfortunately created an iterative cycle of test, fix, and re-test that extends acquisition time lines and drives up test and evaluation costs.

One of the goals of the Innovation Task Force (ITF) is to provide more immediate feedback to vendors on the performance of their technologies in the transportation security environment. One metric that ITF uses to assess the success of its Broad Agency Announcement (BAA) is looking at the number of small technology compa-nies, international companies, and/or first-time TSA companies that apply and are accepted for a capability demonstration and comparing it to historical industry de-mographics. The goal is to increase TSA's industry footprint to help identify innova-tive and effective security solutions.

Also, TSA is working on opportunities to enhance test and evaluation practices such as expediting and supplementing testing by accepting vendor and/or third-party agent test data; avoiding duplication by leveraging existing test data through the creation of data-sharing agreements with international government entities; looking into using accredited Modeling & Simulation to augment live testing and support evaluations that cannot be assessed in a live environment; and looking into flexible testing processes that allow for a better understanding of system capabilities prior to entering formal Operational Tests. While the goal is to reduce the burden of excessive, timely, and costly testing, TSA is still in the planning process of this shift and has not established specific metrics for success to date.

Question 3c. TSA is exploring third-party testing to gain efficiencies in the testing process. Will the third-party testing policy ensure that determinations made by the third party will be accepted by the TSA, so the testing process does not have to be replicated?

Answer. The acceptance of data will be based on a thorough data source assess-ment of risk and a review of the test plans and data provided. Vendor-provided doc-umentation demonstrating a robust test organization, sound test plan, and success-ful results executed will be accepted on a case-by-case basis specific to the tech-nology and extent of third-party testing. TSA testing will be reduced when vendor-provided third-party testing demonstrates the necessary rigor to replace Govern-ment-conducted testing.

The TSA Acquisition Qualification Policy and TSA Test and Evaluation (T&E) Guidebook established a consistent acquisition approach that is compliant with the Department of Homeland Security (DHS) Instruction 102–01–001 Acquisition Man-agement Instruction (series). Application of these published documents, allows TSA to ensure vendor-provided information (e.g., third-party test data) is sufficient to demonstrate system readiness to enter the TSA T&E process. As TSA considers third-party data, it may reduce test and evaluation time lines by increasing the ma-turity of systems thereby decreasing the probability of retests and possible reduction of TSA Qualification Testing and help validate and/or supplement TSA T&E results.

Question 3d. TSA has indicated to the vendor community it will open up a no-tional, "checkpoint of the future" in Las Vegas McCarran International Airport to test and evaluate multiple types of technology including biometrics, Advanced Imag-ing Technologies, and CT systems. TSA has also indicated they may test different configurations of AT/CT and ASL configurations due to the lack of space at the TSA Integration Facility located adjacent to Washington Reagan National Airport. Given a shortage of engineering and testing personnel, the existing backlog at the TSIF, and geographic challenges, what new assets and resources will be deployed for the effort at Las Vegas McCarran? Do you anticipate reducing the workforce at the TSIF to accommodate this effort? Were alternative locations closer to TSA testing personnel or manufacturers' facilities considered? Will TSA be funding procurement and installation of various ASL configurations as part of this demonstration?

Answer. TSA does not have a shortage of engineering or testing personnel or a backlog at the TSA System Integration Facility (TSIF). TSA does have a need for additional opportunities to collect live operational data. Las Vegas McCarran Inter-national Airport (LAS) has offered to provide TSA with checkpoint space that is not currently being utilized by the airport for standard operations. The use of this space will allow TSA the flexibility to run parallel tracks at TSIF and in the field. It will

also enable TSA to assess new designs, technologies, and procedures in an operational environment and inform requirements as the agency continues to drive a future security screening strategy. The focus will be reducing the time it will take to assess and deploy systems in specific configurations for demonstration.

TSA has an application process for airports interested in participating as Innovation Sites. Las Vegas McCarran International Airport (LAS) submitted an application and was selected for this opportunity. None of the National Capital Region airports (DCA, IAD, or BWI) have applied to be an Innovation Airport.

TSA is currently identifying requirements surrounding staff availability, local operational impact, benefits to our public-private partnerships and benefits for industry. At this time, TSA is planning to use current resources to conduct its testing and assessment requirements both at its facilities and alternate locations.

In order to fully demonstrate the Computed Tomography (CT) operational capability, TSA intends to demonstrate CT integration with Automated Screening Lanes (ASL) and/or an automated ingress/egress belt system to understand impacts in effectiveness and efficiency. LAS provides an opportunity to rapidly obtain data in a live operational environment, while the TSIF maintains its focus on laboratory functional and developmental testing. Additionally, the number of hardware configurations, between CT and ASL equipment, require significant space.

Question 3e. Figure 2 is an Overview of the Acquisition Lifecycle for Security Technology. The ability to meet evolving threats in the future will be heavily reliant on algorithm development. Will new algorithm acquisition/deployment also proceed under a similar acquisition framework? If not, has that process been defined? Can it be provided to the committee?

Answer. In general, the development and deployment of new algorithms to meet new threats are required to comply with the acquisition framework depicted in Figure 2 of the Refresh Plan and the Department of Homeland Security (DHS) Instruction 102–01–001 Acquisition Management Instruction. When algorithm enhancements are already associated with a technology that has approved requirements, TSA, in coordination with DHS, performs an analysis to determine where, within the framework, TSA can initiate the process to support the development and deployment of new algorithms. In addition, TSA is able to tailor the existing acquisition processes and look to delegate authorities as necessary and appropriate.

Question 3f. Does TSA possess rapid procurement authorities to purchase and install significant quantities of TSE post-Innovation Task Force, bypassing the process outlined in Appendix F? For example, has TSA considered the use of innovative contracting methods to greatly accelerate the prototyping and procurements of new equipment, including executing Urgent Operational Needs (UONs) or Other Transaction Authority (OTAs)? If not, can you please recommend a rapid acquisition authority that would be feasible with TSA's acquisition framework?

Answer. TSA has used rapid acquisition authorities in the past. In September 2016, DHS approved an Urgent Operational Need (UON) justification authorizing the deployment of Automated Screening Lanes at specified airports. This deployment was dependent upon TSA's partnerships with stakeholders. Two of our largest ASL deployments include 22 lanes at Hartsfield-Jackson Atlanta International Airport and 17 lanes at Newark Liberty International Airport.

TSA is working closely with the Department to help draft policy which would help DHS components achieve a more rapid acquisition life cycle when needed. Additionally, TSA is exploring whether it could adopt an emergent acquisition process similar to DOD's Joint Improvised-threat Defeat Organization (JIDO) Joint Emergent Operational Need (JEON) to gain flexibility in responding to non-urgent, but pressing threats. TSA would be glad to brief the committee on its findings from this assessment.

Question 4a. Around 50 percent of all passenger airline travel has cargo in the bay of the aircraft, yet TSA's Refresh Plan makes no reference to cargo security. This omission greatly concerns the committee. We understand that, while TSA delegates responsibility for cargo screening to freight forwarders and therefore does not itself purchase cargo screening equipment, the cargo security threat is recognized and there is work being done within DHS S&T to advance screening technology in this area.

Does TSA accept the findings of such organizations as the GAO and CRS and view air cargo as a serious security concern and, if so, what are TSA's specific plans for incorporating advanced, non-intrusive cargo screening technologies into TSA's R&D and materiel acquisition planning?

Question 4b. Is it possible to tie in the Air Cargo requirements with the requirements of other agencies, such as the CBP Non-Intrusive Inspection organization?

Answer. TSA agrees with GAO and CRS's view of air cargo as a serious security concern, and has had programs addressing air cargo threats since at least 2004. In

response to the increased threat of a bomb being smuggled on-board an aircraft bound for the United States, and working in close coordination with CBP, TSA recently issued emergency directives requiring stricter scrutiny of air cargo being loaded onto flights at last-point-of-departure airports in 6 countries—Egypt, Jordan, Qatar, Saudi Arabia, Turkey, and the United Arab Emirates. These new requirements include required electronic submission of additional data elements for the cargo before any cargo is laden onto an aircraft bound for the United States. TSA is also required by public law and regulation to assess and qualify technologies for screening air cargo. The agency's goal is to stimulate and support a robust air cargo security technology marketplace. TSA has the ability to continuously receive vendor requests for qualification of prospective technologies, and works collaboratively with vendors to refine the technologies they propose.

TSA is also partnering with the Air Cargo Associations and canine companies to initiate a Third-Party Canine Cargo program. This new program will provide the capability for private industry to screen cargo utilizing private canine companies certified to TSA standards.

TSA actively collaborates with CBP and other Government agencies (for example, DOD and DOT) to harmonize requirements. The DHS Joint Requirements Council architecture is also very helpful in this regard. The threat characteristics associated with air cargo on both passenger and all-cargo aircraft are significantly different than those generally associated with cargo transported on other means. Accordingly, not all technologies used by other agencies are effective for air cargo transported in flight.

Question 5a. TSA's Refresh Plan contains an update on the state of hardening the aviation security system against cybersecurity threats and attacks.

Can you describe specifically the status of the cybersecurity elements of the Security Technology Integrated Program (STIP) and any on-going challenges?

Answer. The Security Technology Integrated Program (STIP) comprises a platform of technology that provides secure connectivity to Transportation Security Equipment (TSE) endpoints that are deployed in the field. Currently, and because of DHS internal policies 4300A, DHS 4300B, and NIST cyber controls, most of the TSEs are not connected to the network. In support of generating connectivity for TSE endpoints, DHS/TSA mandated 9 cybersecurity requirements, (OS Currency/Security Patching; OS hardening; AV Updates; PIV Compatibility; Security Scanning Support; Technical Obsolescence; SOC Monitoring; POAM Support and Vendor ISSO Designation) which were established following the OPM breaches in 2015, and are subsequently required to be implemented on TSE devices. Facilitating this secure connectivity establishes a centralized enterprise-wide data management system, which facilitates the exchange of information between the TSE and data center.

STIP is active in multiple activities to further enhance cybersecurity elements. Specifically, STIP is engaging with the security technology acquisition programs to inform them of implementing the 9 DHS/TSA mandated cybersecurity requirements, as well as additional security requirements (e.g., mandated by DHS 4300A policy, NIST standards, etc.) so that programs can achieve an Authority to Operate (ATO), and maintain cybersecurity compliance. The technology acquisition programs are in the initial stages of evaluating its technology for cybersecurity compliance and determining implementation time lines. The Credential Authentication Technology (CAT) program is an exception, as the system has met the 9 DHS/TSA mandated cybersecurity requirements. TSA is working toward deployment of CAT systems in fiscal year 2019. Starting in fiscal year 2018, TSA intends to begin development of technical solutions for security at the endpoints and for the STIP application, which will facilitate all other security technology meeting cybersecurity requirements and enabling the TSA to connect TSE to the network in a phased approach over the next 6 years.

Question 5b. How does TSA ensure the cybersecurity of security technology deployed in the field?

Answer. As part of TSA's plan for continuous monitoring of the field equipment, TSA will be creating multiple systems associated with each type of transportation security equipment (TSE) to meet the requirements of the Federal Information Security Management Act (FISMA). Each identified FISMA system will be required to go through the Security Authorization process which will allow TSA to continuously assess the risks associated with the field TSEs on an on-going basis as well as identify security controls that can be put in place to secure the TSE.

Currently, no additional deployed TSE equipment, with the exceptions of Credential Authentication Technology and Walk-Through Metal Detectors, are connected to the TSA network. TSA has made a determination that for TSE to connect to the TSA Network, the system must meet 9 minimum cybersecurity requirements. Any potential connectivity solution must meet 2 specific security needs. No. 1, it must

be able to protect the TSA network and STIP backend infrastructure. In other words, it must be able to secure the larger TSANet from malware and cyber attacks originating from the TSE. No. 2, it must be able to protect the TSE itself from compromise or attack.

Question 5c. To what extent has TSA conducted penetration tests of this security technology to understand how an adversary might gain unauthorized access to the technology?

Answer. TSA recently conducted a penetration test against STIP in the Test and Production environments and on the Credential Authentication Technology. TSA conducted the test based on known exploits that have been previously identified and approved. The testing, done in concert with other compliance and vulnerability testing, identified several opportunities to increase the security posture of these systems. The testing results have been added to the current system-level patching and deployment schedule.

Question 5d. Could you describe the level of coordination between TSA and the DHS Office of Cybersecurity and Communications (CS&C) on cybersecurity matters? Has TSA ever requested an independent cybersecurity assessment from DHS CS&C?

Answer. TSA has been actively coordinating with CS&C on multiple occasions to include participation in the High-Value Asset Security Assessment Review (SAR) and Risk and Vulnerability Assessment (RVA) which includes penetration testing for TSA's Mission Essential and High-Value Asset Systems. In 2017, CS&C conducted these assessments against the Secure Flight system. The Technology Information Modernization (TIM) will be assessed in April 2018 and the Transportation Vetting System (TVS) is scheduled to be assessed in August 2018.

Question 5e. Does TSA have specific resource constraints associated with delivering on its cybersecurity objectives?

Answer. Once a solution has been approved to implement on TSE equipment, this is an additional 15,000 endpoints that will be on the TSA network. Each endpoint requires incident monitoring, log reviews, as well as forensics investigation support if an incident does occur. On-going Security Authorization and continuous monitoring to ensure each TSE is adhering to DHS policies and guidelines, is required for the FISMA systems that will be defined through the separations of the TSEs boundary. Considering these additional monitoring requirements, TSA will need to assess the requirement for additional financial and human capital resources, to include possible re-prioritization and/or realignment of current resources to address any resource shortfall.

Question 5f. What assistance from industry does TSA need in meeting its cybersecurity objectives?

Answer. As industry continues to design and develop new aviation and screening technologies to meet an evolving threat landscape and TSA requirements, companies need to embrace the idea that new systems and capabilities must be cyber-ready when presented to TSA for consideration.

Question 6a. TSA's Refresh Plan incorporates outdated data and lacks a Classified appendix.

Can you please update Figure 3 to reflect actual TSA TSE procured between August 2015 and August 2017? Please include an update of equipment procured August 2017–January 2018.

Answer.

FIGURE 3.—TSA TRANSPORTATION SECURITY EQUIPMENT AWARDS

TSE	Aug 2015–Aug 2017 (includes options)	Aug 2015–Aug 2017 (actual/no options)	Sept 2017–Feb 2018
Advanced Imaging Technology (AIT)	161	162	0
Advanced Technology (AT) X-ray	70	69	66
Boarding Pass Scanner (BPS)	250	250	500
Explosives Detection System (EDS)	115	118	59
Explosives Trace Detector (ETD)	3,426	1,353	0
Credential Authentication Technology (CAT)	30	30	0
Computed Tomography (CT)	0	0	8

Question 6b. Figure 4 depicts projected useful life for deployed TSE. For AT systems, can you please provide the initial deployment year and number of systems constituting 2170 as of 5/30/2017?

Answer. Figure 4 provides the initial deployment of Advanced Technology (AT) systems from 2008 through May 30, 2017. The total number does not represent the exact number of AT systems deployed to airports as this list includes 46 systems that were decommissioned, four systems in temporary storage, and the remaining in transit or with the original equipment manufacturer for repairs/upgrades.

FIGURE 4.—DEPLOYMENT OF AT BY YEAR

Initial AT Deployment by Year	
2008	504
2009	407
2010	14
2011	205
2012	434
2013	36
2014	499
2015	53
2016	68
2017	5
Total	2,225

Question 6c. Figure 5 is current as of August 2017. Can you please update as of January 2018?
Answer.

FIGURE 5.—APPROVED PSP AND EBSP PLANNED PROCUREMENTS AS OF FEBRUARY 2018

Transportation Security Equipment	FOC [1]	FY17 [2]	FY18	FY19	FY20
Explosives Detection System (EDS)	....	106	190	83	73
Explosives Trace Detector (ETD) [3]	5,860	0	1,898	159	10
Advanced Imaging Technology (AIT)	962	1	....	....	....
Advanced Technology (AT)	2,213	66	....	....	....
Bottled Liquid Scanner (BLS)	1,530	....	....	....	....
Credential Authentication Technology (CAT)	1,520	30	....	294	295
Computed Tomography (CT)	....	8 [4]	30 [3]	145 [5]	120
Enhanced Metal Detector (EMD)	960	....	....	....	....
Boarding Pass Scanner (BPS)	....	500	....	....	....

[1] Full Operational Capability (FOC).

[2] Quantities provided for fiscal year 2017 are now considered actual TSA TSE procured. Quantities provided for fiscal year 2018 and beyond are considered planned procurements.

[3] Includes both Electronic Baggage Screening Program (EBSP) and Passenger Screening Program (PSP).

[4] TSA reprogrammed funding for initial CT development activities and the procurement, testing, and deployment of 42 checkpoint CT prototypes.

[5] These are for the Passenger Screening Program.

Question 6d. What is the anticipated average cost of an Automated Security Lane? Figure 6 projects 125 ASLs in fiscal year 2020. Can you please inform the committee the basis for this number and the assigned security value of ASLs as compared to other TSE? What are the plans for deploying ASLs, and of the 2,170 Checkpoints, how many ASLs are planned to be deployed? Will TSA or airports be the purchasers and what is the site criteria for these deployments?
Answer.

- The anticipated average cost of an Automated Security Lane (ASL) is $280,000 which includes estimated procurement and deployment costs. ASL systems will be procured with a 2-year warranty. Therefore, annual maintenance costs of approximately $25,000 per system will be incurred beginning in fiscal year 2020, upon conclusion of initial system warranty.

- Below provides TSA's deployment plan through fiscal year 2019. Quantities for future years will be determined by the budget process.

Quantities

Fiscal Year 2016.—2
Fiscal Year 2017.—84
Fiscal Year 2018.—114
Fiscal Year 2019.—0
Fiscal Year 2020.—200
Fiscal Year 2021.—200
Fiscal Year 2022.—200
Fiscal Year 2023.—200
Fiscal Year 2024.—200

- Security value of ASLs will be determined as requirements are defined, performance data is collected, and an ASL Program of Record (POR) is established.
- The ASL systems deployed in fiscal year 2016, fiscal year 2017, and fiscal year 2018 represent systems purchased by private entities and deployed under the 2016 Urgent Operational Need by the TSA Innovation Task Force. Those systems to be deployed during fiscal year 2020 and beyond will be systems purchased and deployed under an ASL POR. During fiscal year 2018 and fiscal year 2019, TSA will be finalizing ASL requirements, completing documentation to establish the POR, testing systems against established requirements, and holding a Department of Homeland Security Acquisition Decision Event for approval to purchase and deploy qualified systems.
- Based on space constraints at checkpoints, up to half of all deployed CT systems could be integrated with an ASL system, which would result in a total of 1,376 ASL systems being deployed to the field. Funding for systems integration work to validate this assumption was provided in the 2018 Appropriations Act.
- TSA will continue to work with our industry partners to determine whether there is an opportunity to procure ASL systems under the public-private partnerships strategy under the POR. Under the POR it will be incumbent that any partnership includes the procurement of qualified technologies to ensure screening operations are not negatively impacted, coordination with TSA on logistics, and prioritization of technology placement.
- Site criteria will not be finalized until requirements are established and ASL performance data is collected.

Question 6e. Pg. 25 TSA identifies non-prioritized capability gaps. Can you please provide for the committee a Classified prioritization and fiscal year 2017 and projected fiscal year 2018 funding toward achievement/fulfillment?

Answer. We are in the process of scheduling a Classified briefing with the committee to discuss TSA's screening equipment detection requirements and capabilities, which are written at the SECRET level.

Question 7a. One of your key responsibilities as administrator is ensuring TSA has the information technology tools it needs to accomplish its zero-fail mission. To that end, the IMPACT procurement, which will select a contractor to run all of TSA's IT infrastructure, is essential to the security of the traveling public. How does the IMPACT procurement reflect the latest cybersecurity best practices, including requirements of President Trump's recent cybersecurity Executive Order?

Answer. IT Management, Performance and Analysis, and Collaborative Technologies (IMPACT) procurement of IT support services for the Transportation Security Administration's (TSA) IT environment reflects cybersecurity best practices as outlined by the Office of Management and Budget (OMB) and the U.S. Department of Homeland Security (DHS) in their cybersecurity and information assurance requirements and mandate. For example:

- the IMPACT Task Order Request for Proposal (TORP) specifies the overarching information assurance/cybersecurity requirements of the solicitation; and
- the IMPACT statement of objectives specifies the objectives for the information assurance and cybersecurity support services required of the IMPACT contractor.

Following the issuance of President Trump's recent cybersecurity Executive Order (EO), DHS and TSA seamlessly mapped the requirements of the EO and other relevant sources to the IMPACT TORP. TSA determined that the existing structure and cybersecurity provisions of the IMPACT TORP and its attachments already satisfied these requirements.

Question 7b. How does this take into account priorities surrounding cloud deployment and shared services?

Answer. IMPACT prioritized cloud deployment and shared services throughout its TORP. The IMPACT TORP released in May 2016 identified cloud deployment in Ob-

jective No. 2: "Manage and maintain on-going relationships with TSA's technology providers for services such as, data center, network, anything as a Service (XaaS), application development, and cloud services to ensure service availability and continuity across the TSA IT enterprise, without a break in service."

Cloud deployment was further identified as Priority No. 4: "Utilize the cloud to provide on-demand scalability, increased access, and higher security for all TSA users thereby delivering information more rapidly and enabling more informed decisions and actions. In an effort to reduce future recapitalization expenses, TSA's strategic plans include migration of infrastructure of some or all services covered under IMPACT to a cloud environment."

TSA identified it would need support with the following with respect to cloud deployment:

1. Provide enterprise systems management services for all TSA environments (e.g., Production, Development and Test, etc.,) to meet TSA and DHS policies and guidelines, in close coordination with the data center, XaaS, and cloud services providers.

2. Provide migration-related operations and maintenance support for the movement of systems to other platforms, data centers, and cloud services.

The IMPACT TORP also provided notice that TSA's strategic plans included the migration of e-mail services infrastructure to a commercial cloud.

TSA already utilizes several shared services, including Time and Attendance from U.S. Department of Agriculture; Financials from the U.S. Coast Guard; and Workplace as a Service (WPaaS) from DHS. When replacing an old capability or obtaining a new one, TSA determines the feasibility of adopting an existing shared service/system. The IMPACT contractor's only responsibility for access to these systems is the TSA infrastructure specified for support under the IMPACT solicitation, thus shared services are not mentioned under IMPACT.

Below are some of the policies, directives, SOPs, and standards TSA included in the Virtual Reading Room (VRR), to which all IMPACT Offerors were provided access.

- Federal Information Security Management Act (FISMA)
- DHS Policy Directive 034–03—Continuous Improvement of DHS Cyber Defenses
- DHS USM Memo—Strengthening DHS Cyber Defenses
- DHS Policy Directive 4300A—DHS Sensitive Systems
- TSA Management Directive (MD) 1400.3—Information Technology Security
- TSA MD 1400.3 Attachment 1—TSA Information Assurance Handbook
- TSA Standard Operating Procedure (SOP) 1444—Information Security Vulnerability Management
- TSA SOP 1426—Security Event Testing
- TSA SOP 1410—On-going Authorization (On-going assessments of systems)
- TSA SOP 1402—Security Authorization (Tailoring security authorization process outlined in NIST SP 800–37)
- TSA SOP 1444—Information Security Vulnerability Management
- TSA SOP 1404—Incident Response for Computer Security Incidents
- TSA SOP 1431—Automated IT Security Scanning
- TSA Technical Standard (TS) TS–003—Wi-Fi (802.11)
- TSA TS–006—Network Intrusion Detection and Prevention Systems
- TSA TS–007—Host Intrusion Detection and Prevention Systems
- TSA TS–012—Port Security
- TSA TS–018—Wide Area Network (WAN) Security
- TSA TS–010—Network Interconnections
- TSA TS–072—Cloud Computing and Virtualization
- TSA TS–016—Remote Access
- TSA TS–028—Web Applications
- TSA TS–037—Server Security
- TSA TS–041—Switch Security
- TSA TS–015—Network Logical Access Control
- TSA TS–025—Virtual Private Networks
- TSA TS–022—Public Key Infrastructure (PKI)
- NIST Special Publication (SP) 800–137—Information Security Continuous Monitoring for Federal Information Systems and Organizations
- NIST SP 800–39—Managing Information Security Risk
- NIST SP 800–37—Guide for Applying the Risk Management Framework to Federal Information Systems
- NIST SP 800–53—Security and Privacy Controls for Federal Information Systems and Organizations

- NIST SP 800–18—Guide for Developing Security Plans for Federal Information Systems
- OMB Memorandum M–14–03—Enhancing the Security of Federal Information Systems
- Federal Information Processing Standards (FIPS) Publication (PUB) 199—Standards for Security Categorization of Federal Information and Information Systems
- FIPS PUB 200—Minimum Security Requirements for Federal Information and Information Systems

QUESTION FROM CHAIRMAN MICHAEL T. MCCAUL FOR DAVID P. PEKOSKE

Question. Why did TSA's Technology Investment Plan Biannual Refresh pay little attention to the security of Air Cargo, given the current threat landscape and recent plots against aviation security?

Answer. The Strategic Five-Year Technology Investment Plan Biennial Refresh intends to provide an update to the original Strategic Five-Year Technology Investment Plan and discusses TSA's acquisition programs and technology initiatives. TSA's regulatory role in the air cargo environment is supplemented by outreach and industry/association engagement to ensure carriers have the capability to properly screen air cargo before it is loaded onto an aircraft. TSA does not currently procure or invest in supplying equipment to carriers under an air cargo program and, at this time, there is no plan to establish a program. The carriers themselves own the technology systems or contract with third parties to ensure the strict security requirements for air cargo are implemented.

However, the agency's goal is to stimulate and support the air cargo security technology marketplace. TSA has the ability to continuously receive vendor requests for qualification of prospective technologies, works collaboratively with vendors to refine the technologies they propose, and publishes the TSA Air Cargo Screening Technology List (ACSTL) on our website. TSA also works with industry annually to develop needs and capability gaps that are submitted to DHS S&T, which form the basis for S&T's air cargo R&D programs.

TSA is also partnering with the Air Cargo Associations and canine companies to initiate a Third-Party Canine Cargo program. This new program will provide the capability for private industry to screen cargo utilizing private canine companies certified to TSA standards.

QUESTIONS FROM RANKING MEMBER BENNIE G. THOMPSON FOR DAVID P. PEKOSKE

Question 1a. Last spring, we saw the emergence of a serious new threat to the aviation system relating to personal electronic devices (PEDs). The threat had a signifcant, rippling effect on the international aviation sytem, with last-point-of-departure airports required to take drastic steps to increase security and passengers here in the United States now required to take PEDs out of their carry-on bags. The latest intelligence indicates that we are in a very dynamic and evolving threat landscape that could have significant implications on aviation and the international economy. Will the investments outlined in the Refresh Plan for transportation security equipment keep pace with the evolving threats to aviation?

Cen you describe in detail how the TSA's Refresh Plan will accelerate significant advancements in security technology capabilities and deployment of these systems at the Nation's checkpoints and checked baggage sytems?

Question 1b. Can you describe how the Refresh Plan fosters a robust domestic security manufacturing base and enhances competition to drive innovation in aviation security?

Answer. Response was not received at the time of publication.

Question 2. Around 50% of all passenger airline flights carry cargo in the bay of the aircraft, yet the Refresh Plan makes no reference to cargo security. This omission is of great concern. We understand that while TSA delegates responsibility for cargo screening to freight forwarders and therefore does not itself purchase cargo screening equipment, the cargo security threat is recognized and there is work being done within DHS S&T to advance screening technology in this area. Does TSA accept the findings of such organizations as the GAO and CRS and view air cargo as a serious security concern and, if so, what are TSA's specific plans on incorporating advanced, non-intrusive cargo screening technologies into TSA's R&D and materiel acquisition planning?

Are there opportunities to consolidate Air Cargo requirements with the requirements of other agencies, such as the CBP Non-Intrusive Inspection system?

Answer. Response was not received at the time of publication.

Question 3. The Refresh plan is nearly 50 pages long. Throughout the entire Refresh Plan, there is only one paragraph dedicated to small businesses. That is not good enough. In greater detail than the portion in the Refresh Plan, will you describe how TSA is planning to better integrate small businesses into the security technology development pipeline?

Answer. TSA has an excellent record of working with small businesses, and in fiscal year 2017 exceeded its overall small business goal, awarding 24.8 percent of its contracts to small businesses.

Goal	Achievement (Percent)
Small Business—24 percent	24.8
Small Disadvantaged—5 percent	12.3
Woman-Owned SB—5 percent	9.0
Service-Disabled Veteran-Owned SB—3 percent	3.5
Hub Zone—3 percent	2.92

In addition, in fiscal year 2017, TSA awarded contracts to four Computed Tomography (CT) contractors for CT prototype units. This contracting opportunity was open to all of industry. One of the four contractors that was awarded a CT prototype contract is a small business, Integrated Defense and Security Solutions (IDSS) Holdings, Inc. In fiscal year 2018, TSA has conducted several industry engagements related to CT. These industry engagements include an informational conference that was held on November 8, 2017, an industry day that was held on November 17, 2017, and a notice that was posted on the Federal Business Opportunities (FBO) website inviting vendors to submit their Advanced Technology (AT)/CT system for potential qualification.

Further, the Office of Requirements and Capabilities Analysis (ORCA) is working in partnership with the S&T Silicon Valley Innovation Program (SVIP) on technical calls to start-up companies with solutions to transportation security issues. DHS established the SVIP to keep pace with the innovation community and tackle the hardest problems faced by DHS's operational missions. The SVIP is expanding DHS's reach to find new technologies that strengthen National security with the goal of reshaping how Government, entrepreneurs, and industry work together to find cutting-edge solutions. DHS is reaching out to Silicon Valley and all of the innovation communities across the Nation to harness the commercial R&D ecosystem for Government applications, co-invest in ideas, and accelerate transition-to-market.

Recognizing the value that collaboration, of various perspectives, and early/often engagement brings, TSA does a mix of large and small engagement events across the enterprise. TSA regularly posts Requests for Proposals, Requests for Information, Industry Day Announcements, Pre-Proposal Conferences, as well as Broad Agency Announcements (BAAs) on the Federal Business Opportunities website for known and future requirements. There is currently an open BAA for Transportation Security Innovative Concepts (TSIC) that all vendors, small and large, are available to submit ideas to. TSA seeks research across broad strategic areas which offer potential for advancement and improvement of TSA security operations, technologies, processes, human-factors, and capabilities. TSA is specifically interested in research that will provide for near-term improvement of current security operations and capabilities. TSA reviews all submittals against this BAA, and may or may not fund depending on various factors.

Small businesses may have concerns that, due to the cost burdens of sending employees to the demonstration site or developing interim training, they may not be able to participate in demonstrations. ITF BAAs provide the option for small businesses to receive incidental funding to support demonstration activities on a case-by-case basis. Of the 96 vendors who submitted to the most recent ITF BAA, IDEA, 40 self-identified as a small business. Additionally, 61 percent of respondents had never contracted with TSA before, and 33 percent had never contracted with the Federal Government. ITF is also working to reduce the level of background information on specific TSA processes and activities necessary for a vendor to successfully respond to solution solicitations.

The unsolicited proposal is a valuable means by which unique or novel ideas, concepts, methods, or approaches, which have been developed outside the Government, can be made available to the TSA for use in the accomplishment of its mission. The unsolicited proposal when received would be considered against Federal Acquisition Regulation (FAR) criteria and evaluated accordingly. TSA has created an Unsolicited Proposal Manual available at *www.tsa.gov* that can help small businesses submit ideas to TSA.

Last, TSA has a robust industry engagement program. An experienced, senior management official in the Office of Contracting and Procurement is the TSA Industry Liaison and is an excellent source of information for small businesses and other entities looking to engage TSA. As part of the DHS-wide industry liaison program to establish strategic relationships with suppliers and stakeholders, serves as an information provider for firms seeking to do business with TSA and connects firms with program offices in support of our mission. There is also a Director, Small Business Programs that helps acquisition officials understand various small business programs, conduct market research, and make decisions that affect small business. Both the Industry Liaison and Small Business Advocate work directly with numerous Industry Councils, individual firms, TSA program offices, and DHS to increase transparency and knowledge of business opportunities and processes.

Question 4a. With regard to Automated Screening Lanes (ASLs), the strategic plan refresh indicates that planned procurements are not anticipated until fiscal year 2020. Does TSA intend to work with industry to accommodate possible future non-Federal investment in ASL, potentially from airlines and airports, in the interim, as was done a few years ago to address concerns over screening checkpoint delays?

Question 4b. Are there any particular challenges or concerns regarding the use of non-Federal investments to fund screening checkpoint technologies and infrastructure?

Answer. The Transportation Security Administration (TSA) continues to work with our industry partners to demonstrate emerging technology and explore public-private partnerships. At this time TSA has completed the final deployments authorized by DHS under the approved Urgent Operational Need and is transitioning to the Office of Acquisition Program Management to ensure the sustainment of current capabilities and initiate a formal program.

TSA has not experienced any particular challenges with the use of non-Federal funding, but long-term it will be incumbent that any partnership includes the procurement of qualified technologies to ensure screening operations are not negatively impacted, as well as on-going coordination with TSA on logistics and prioritization of technology placement. There is also the question of maintenance and future upgrades; if the non-Federal investment only covers the initial capital expenditure, then TSA will need to receive Federal funding for equipment maintenance, upon warranty expiration, and any required upgrades of these systems.

Question 5a. On January 15, the DHS Office of Inspector General issued a report (OIG–18–35) which found that "TSA's handling of the Transportation Security Executive Service Employee's disciplinary matter uncovered significant deviations from policy and standard practice indicating that the TSES employee received unusually favorable treatment." The Office of Inspector General recommended that TSA "address the irregularities . . . advise TSA employees to comply with existing policies." Have you had a chance to review the report?

Question 5b. Have you or do you have plans to advise employees to comply with existing policies?

Answer. I have read the report. I am committed to ensuring TSA's core values, of which integrity is part, and all TSA policies are adhered to throughout all levels of the organization.

TSA policy is reviewed and updated on an on-going basis. Upon review of the OIG reports, our processes for disciplinary matters involving members of the Transportation Security Executive Service (TSES) have been revised with great emphasis on oversight and collaboration for decision making. Specifically, effective March 13, 2018, any proposed settlement agreement involving any member of the TSES or Executive-level positions must be coordinated with the TSA Deputy Administrator (DA), the Chiefs of Operations and Mission Support, and the Assistant Administrators of Security Operations, and Law Enforcement/Federal Air Marshal Service, before being finalized.

In addition, as mentioned in the OIG report, during the time of the OIG investigation, TSA was considering modifying the structure of the Office of Professional Responsibility (OPR). TSA has since done so, ensuring that an employee's supervisory chain is involved in the disciplinary decision-making process regarding that employee. To facilitate and ensure compliance with these policy changes, training is being planned for deciding officials regarding their roles and responsibilities. Additionally, an Executive Discipline Review Board administered by OPR will serve as the proposing official for employees in the Transportation Security Executive Service (TSES).

Other policy changes regarding the disciplinary process are also being considered that will provide clarity for managers. For example, a project team consisting of senior executives and subject-matter experts, recently completed a lengthy and in-depth

review of our *Table of Offenses and Penalties for Appropriate Discipline for Common Offenses,* which is the document that provides guidelines to managers and human resources staff on penalties for employee misconduct. The document has been revised and, once it is formally approved, we will plan a targeted communications campaign to supervisors and non-supervisors, notifying them of the changes, the intended use of the document, and the necessity for all employees to read TSA's policies on *Employee Responsibilities and Code of Conduct.* All employees are required to review the conduct policy on an annual basis. Additionally, TSA's Office of Human Capital (OHC) has been conducting Employee Relations "boot camps" at airports around the country to provide local staff with the knowledge and skills necessary to address and resolve employee disciplinary issues at the lowest level possible. OHC has also been conducting similar training for offices at TSA Headquarters.

Question 6a. I understand that the American Federation of Government Employees (AFGE), which represents front-line TSOs, has reached out to you on issues of importance to the workforce. Are you planning to work with labor representatives?

Question 6b. I understand that you have not yet met face-to-face with AFGE's national representation. Are you going to meet with AFGE?

Answer. As TSA is an excepted service agency with delegated authority to establish the employment conditions of the screening workforce, collective bargaining was established under the first Determination issued in 2011. The Determination created the foundation of collective bargaining within TSA and limited the scope of issues that could be negotiated. Although the Determination has been revised over the years (last modified in 2016), the provisions relating to negotiable items has not changed.

TSA continues to engage AFGE on all matters covered by the collective bargaining agreement, and works to resolve any disputes associated with the Determination and the collective bargaining agreement. I held an introductory call with J. David Cox on August 21, 2017, and also met with Mr. Cox on February 23, 2018.

Question 7a. The August 2016 Determination on Collective Bargaining signed by former TSA Administrator Peter Neffenger included section (D), requiring an independent review of the Unitary Dispute Resolution System (UDRS), which is a grievance procedure. Section (D) states as follows: "Within 12 months of the date of this Determination, TSA will identify an expert, independent, third party to evaluate the entire UDRS. The expert, independent third party will evaluate the UDRS processes consistent with this Determination. The exclusive representative will participate in this evaluation. This third party will produce a report for TSA that will be shared with the AFGE and the workforce."

It is my understanding that instead of following an open, competitive process allowing human resource specialists to bid on the contract, TSA awarded the Chickasaw Nation a $500,000 no-bid contract to evaluate the UDRS in September 27, 2017. Did TSA use a non-competitive process to contract for the UDRS evaluation? If so, why?

Answer. Yes. TSA sole sourced to Chickasaw as a means of developing them within the 8(a) program and to meet TSA's small business goals within the 8(a) small business subset category.

This method of procurement was determined by the Contracting Officer as part of a larger Agency procurement strategy to meet the requirements of Federal Acquisitions Regulation, part 19.800 as follows:

"19.800 General.

"(a) Section 8(a) of the Small Business Act (15 U.S.C. 637(a)) established a program that authorizes the Small Business Administration (SBA) to enter into all types of contracts with other agencies and award subcontracts for performing those contracts to firms eligible for program participation. This program is the '8(a) Business Development Program,' commonly referred to as the '8(a) program.' A small business that is accepted into the 8(a) program is known as a 'participant.' SBA's subcontractors are referred to as '8(a) contractors.' As used in this subpart, an 8(a) contractor is an 8(a) participant that is currently performing on a Federal contract or order that was set aside for 8(a) participants.

"(b) Contracts may be awarded to the SBA for performance by eligible 8(a) participants on either a sole source or competitive basis.

"(c) Acting under the authority of the program, the SBA certifies to an agency that SBA is competent and responsible to perform a specific contract. The contracting officer has the discretion to award the contract to the SBA based upon mutually agreeable terms and conditions.

"(d) The contracting officer shall comply with 19.203 before deciding to offer an acquisition to a small business concern under the 8(a) program. **For acquisitions**

above the simplified acquisition threshold, the contracting officer shall consider 8(a) set-asides or sole source awards before considering small business set-asides. (Emphasis added.)

"(e) When SBA has delegated its 8(a) program contract execution authority to an agency, the contracting officer must refer to its agency supplement or other policy directives for appropriate guidance."

Pursuant to this requirement, TSA sole sourced to Chickasaw as a means of developing them within the 8(a) program and to meet our TSA small business goals within the 8(a) small business subset category.

Question 7b. Has TSA previously contracted with the Chickasaw Nation to evaluate a grievance procedure?

Answer. No. TSA's National Resolution Center has not previously contracted with the Chickasaw Nation to evaluate a grievance procedure.

Question 7c. Did TSA work with AFGE or acknowledge their efforts to engage in the selection of "an expert, independent, third party" to evaluation the UDRS?

Answer. No, TSA did not work with AFGE regarding this selection process. There is no requirement in the 2016 Administrator's Determination to work with AFGE in the selection of "an expert, independent, third party." The Determination requires that "TSA will identify an expert independent third party to evaluate the entire UDRS." The Determination further states that "The exclusive representative will participate in this evaluation." Participation in the evaluation is a separate activity from the "identification" of the third party reviewer.

The selection of "an expert, independent, third party" is a procurement effort. The Contracting Officer determined the procurement strategy for this solicitation and deemed this would meet the requirements of a small business set-aside, meeting TSA's Small Business Administration (SBA) goals. TSA did not work with AFGE during the procurement process, which requires the government to control information that is procurement sensitive.

On November 13, 2017, AFGE engaged with TSA by email to inquire about the status of the independent review of the UDRS. The TSA acknowledged AFGE's inquiry on the same day and referred the question to the National Resolution Center (NRC). The NRC responded on November 15, 2017 to AFGE's email, advising AFGE that the NRC anticipated scheduling a meeting with AFGE in early 2018, upon commencement of the UDRS evaluation by Chickasaw Nation Industries.

Question 7d. Could negotiations with the union on a grievance procedure eliminate the need for an expert, third-party evaluation and save the taxpayers hundreds of thousands of dollars?

Answer. It is unlikely that a negotiated grievance procedure would save money as there would be significant costs stemming from: (1) The negotiations, (2) the resolution process for any terms not agreed upon in the negotiations, and (3) the resulting grievance processes. These costs would include increased official time, travel expenses, and litigation costs. Many of the potential costs would be on-going and related to payroll, rather than a one-time contract expenditure. Moreover, an independent evaluation may lead to long-term cost savings because the findings may highlight opportunities to increase efficiency and effectiveness of the UDRS.

TSA's labor framework, including the grievance process, is intended to preserve TSA's flexibility needed to achieve its critical security mission in the midst of emerging threats. Consistent with the Determination, the current grievance process incorporated input from the union. The process also includes expedited arbitration of disciplinary actions and other covered workplace disputes, as agreed upon between TSA and AFGE in a 2012 Memorandum of Agreement.

Question 8a. Please provide the following information:

The number of full-time Equivalent Transportation Security Officers (Transportation Security Officers, Lead Transportation Security Officers, Behavioral Detection Officers, Equipment Maintenance Technicians Officers, and Training Instructors), employed by TSA during each calendar year from 2005–2017.

Answer. See Table 1.

Question 8b. The number of part-time employees (Transportation Security Officers, Lead Transportation Security Officers, Behavioral Detection Officers, Equipment Maintenance Technicians Officers, and Training Instructors) employed by TSA during each calendar from 2005–2017.

Answer. See Table 2.

Question 8c. The number of full-time workers and part-time workers employed by TSA to perform screening, behavioral detection, bomb appraisal, equipment maintenance technician, and training instructor duties during each calendar year from 2005–2017.

Answer. See Table 3.

Question 8d. The number of employees as set forth in paragraphs (1) and (2) hired by TSA during each calendar year from 2005–2017.

Answer. See Table 4.

Question 8e. The number of employees as set forth in paragraphs (1) and (2) separated from TSA during each calendar year from 2005–2017.

Answer. See Table 5.

Question 8f. The annual attrition rates from 2012–2017 for MCO (Orlando International), TPA (Tampa) and MIA (Miami) airports.

Answer. See Table 6.

TABLE 1.—FT HEADCOUNT

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
BDO	....	137	756	2,388	3,005	2,832	2,902	2,986	2,889	2,464	2,174	1,936	....
EMT	....	....	....	....	4	5	5	5	7	7	6	6	5
LTSO	5,482	5,560	5,622	5,547	5,689	5,811	5,910	5,829	5,426	5,158	5,045	5,108	6,274
STI	....	....	....	465	492	577	562	570	628	601	562	548	663
TSO	29,451	26,720	26,672	25,318	22,844	22,979	22,711	23,195	22,635	22,429	22,765	25,155	25,426
Grand Total	34,933	32,417	33,050	33,718	32,034	32,204	32,090	32,585	31,585	30,659	30,552	32,753	32,368

TABLE 2.—PT HEADCOUNT

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
BDO	....	2	8	16	35	8	14	34	16	22	12	12	....
LTSO	135	133	179	172	205	186	209	200	137	132	154	176	145
STI	....	....	....	6	9	7	5	3	5	7	3	4	3
TSO	5,973	9,740	10,851	12,036	10,743	11,652	14,262	13,180	11,467	9,888	9,569	9,513	8,917
Grand Total	6,108	9,875	11,038	12,230	10,992	11,853	14,490	13,417	11,625	10,049	9,738	9,705	9,065

TABLE 3.—BAO COUNT

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
BAO	......	17	100	263	288	379	407	427	392	398	398	396	399
FT	......	17	100	263	288	379	407	427	392	398	398	396	399
BDO	......	139	764	2,404	3,040	2,840	2,916	3,020	2,905	2,486	2,186	1,948	......
FT	......	137	756	2,388	3,005	2,832	2,902	2,986	2,889	2,464	2,174	1,936	......
PT	......	2	8	16	35	8	14	34	16	22	12	12	......
EMT	......	......	......	......	4	5	5	5	7	7	6	6	5
FT	......	......	......	......	4	5	5	5	7	7	6	6	5
LTSO	5,617	5,693	5,801	5,719	5,894	5,997	6,119	6,029	5,563	5,290	5,199	5,284	6,419
FT	5,482	5,560	5,622	5,547	5,689	5,811	5,910	5,829	5,426	5,158	5,045	5,108	6,274
PT	135	133	179	172	205	186	209	200	137	132	154	176	145
STI	......	......	......	471	501	584	567	573	633	608	565	552	666
FT	......	......	......	465	492	577	562	570	628	601	562	548	663
PT	......	......	......	6	9	7	5	3	5	7	3	4	3
TSO	35,424	36,460	37,523	37,354	33,587	34,631	36,973	36,375	34,102	32,317	32,334	34,668	34,343
FT	29,451	26,720	26,672	25,318	22,844	22,979	22,711	23,195	22,635	22,429	22,765	25,155	25,426
PT	5,973	9,740	10,851	12,036	10,743	11,652	14,262	13,180	11,467	9,888	9,569	9,513	8,917
Grand Total	41,041	42,309	44,188	46,211	43,314	44,436	46,987	46,429	43,602	41,106	40,688	42,854	41,832

Note: Duties based on position title.

TABLE 4.—Q4—HIRES

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
BDO	......	......	......	1	......	......	......	......	......	1	2	2	......
LTSO	......	5	4	7	2	3	......	2	4	2	4	5	1
STI	......	......	......	......	......	......	......	......	1	......	......	1	......
TSO	1,406	10,771	12,775	11,278	2,608	5,679	8,069	6,357	4,847	4,854	7,276	10,761	7,938
Grand Total	1,406	10,776	12,779	11,286	2,610	5,682	8,069	6,359	4,852	4,857	7,282	10,769	7,939

TABLE 5.—Q5—SEPARATIONS

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
BDO	....	1	17	48	69	126	132	141	190	287	238	217	185
EMT	....	....	....	....	....	....	....	....	....	....	....	....	1
LTSO	213	425	429	306	198	257	286	441	420	471	436	427	456
STI	....	....	....	6	9	9	21	23	28	41	43	31	34
TSO	3,612	8,044	8,834	7,126	3,708	3,376	4,003	5,509	5,779	5,775	5,565	6,455	6,416
Grand Total	3,825	8,470	9,280	7,486	3,984	3,768	4,442	6,114	6,417	6,574	6,282	7,130	7,092

Note.—In fiscal year 2017, TSA moved away from a "stand-alone" Behavior Detection Officer (BDO) position. TSA has since integrated the skillset into the screening workforce.

TABLE 6

Airport Code	Airport Name	2012 TOTAL Attrition Rate	2013 TOTAL Attrition Rate	2014 TOTAL Attrition Rate	2015 TOTAL Attrition Rate	2016 TOTAL Attrition Rate	2017 TOTAL Attrition Rate
MCO	Orlando International Airport	6.7%	9.1%	11.6%	13.5%	13.7%	11.7%
MIA	Miami International Airport	7.3%	7.4%	11.2%	9.5%	8.3%	8.1%
TPA	Tampa International Airport	9.0%	11.6%	8.3%	12.6%	11.6%	13.0%

Question 8g. The current distribution by pay band for all employees described in paragraphs (1) and (2) working at the airports listed in paragraph (9).
Answer.

Q6—COUNTS FOR MCO, MIA, TPA

	Airport			
	MCO	MIA	TPA	Grand Total
EMT	....	....	....	....
F Band	....	5	....	5
LTSO	144	199	85	428
F Band	144	199	85	428
STI	13	13	9	35
F Band	10	9	7	26
G Band	3	4	2	9
TSO	782	1,041	460	2,283
D Band	106	126	50	282
E Band	666	900	403	1,969

Question 8h. The number of full-time workers and part-time workers employed by screening companies for each airport under the Screening Partnership Program during each calendar year from 2005–2017.
Question 8i. The attrition rates during each calendar year from 2005–2017 by airports that participate in the Screening Partnership Program by full-time and part-time workers.
Answer. The following table provides the attrition rate and average annual headcount for calendar years 2016 and 2017 at Screening Partnership Program (SPP) airports. TSA did not track vendor attrition prior to this time frame. Additionally, TSA does not collect the contractor full-time/part-time ratio data on performance-based contracts, so that requested data is not available.

SPP AIRPORT CONTRACTOR ATTRITION RATES

CAT	Region	Airport	CY '16 Attrition (Percent)	CY '16 Ave Monthly Headcount	CY '17 Attrition (Percent)	CY '17 Ave Monthly Headcount
X	6	SFO	16	1,208	21	1,192
I	3	MCI	32	368	32	383
II	2	EYW	58	33	43	30
II	5	JAC	35	41	18	51
II	3	FSD	63	45	70	51
IV	4	ROW	0	7	13	8
IV	5	HVR	0	5	97	6
IV	5	OLF	0	5	50	4
IV	5	GGW	78	6	76	7
IV	5	GDV	0 percent	5	14 percent	7
IV	5	SDY	0	4	11	9
I	1	ROC	33	131	31	137
IV	4	TUP	0	8	26	8
III	6	STS	66	15	16	19
II	5	BZN	39	82	54	63
III	5	FCA	46	39	40	40
IV	5	WYS	0	0	0	0
II	2	SFB	42	120	45	113
II	2	SRQ	58	85	54	80
III	1	PSM	39	23	26	23
II	2	PGD*	24	54	55	52

*Data for PGD in 2016 starts on June 1, 2016.

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