

DOGS OF DHS: HOW CANINE PROGRAMS CONTRIBUTE TO HOMELAND SECURITY

HEARING

BEFORE THE

COMMITTEE ON
HOMELAND SECURITY AND
GOVERNMENTAL AFFAIRS
UNITED STATES SENATE
ONE HUNDRED FOURTEENTH CONGRESS

SECOND SESSION

MARCH 3, 2016

Available via the World Wide Web: <http://www.fdsys.gov/>

Printed for the use of the
Committee on Homeland Security and Governmental Affairs



U.S. GOVERNMENT PUBLISHING OFFICE

22-766 PDF

WASHINGTON : 2017

For sale by the Superintendent of Documents, U.S. Government Publishing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512-1800; DC area (202) 512-1800
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DOGS OF DHS: HOW CANINE PROGRAMS CONTRIBUTE TO HOMELAND SECURITY

THURSDAY, MARCH 3, 2016

U.S. SENATE,
COMMITTEE ON HOMELAND SECURITY
AND GOVERNMENTAL AFFAIRS,
Washington, DC.

The Committee met, pursuant to notice, at 10:02 a.m., in room SD-342, Dirksen Senate Office Building, Hon. Ron Johnson, Chairman of the Committee, presiding.

Present: Senators Johnson, Ayotte, Ernst, Carper, and Peters.

OPENING STATEMENT OF CHAIRMAN JOHNSON

Chairman JOHNSON. Good morning. This hearing will come to order. I am really looking forward to this hearing. This is something that has been really a couple of years in the planning from my standpoint, because I have always been intrigued by the capabilities of canine units and I love dogs, particularly little puppies like Jerry.

What we are going to first start out with is we are going to introduce the two canine teams that later will be doing a demonstration for us. The first is the Transportation Security Administration (TSA) canine team. Doug Timberlake is a Transportation Security Inspector for TSA, and he is here with his partner, Rriverso, who has a pretty special name, named after somebody who was lost in the World Trade Center, I was told. Mr. Timberlake, kind of walk through it.

TESTIMONY OF DOUG TIMBERLAKE, TRANSPORTATION SECURITY INSPECTOR, TRANSPORTATION SECURITY ADMINISTRATION; ACCOMPANIED BY RRIVERSO

Mr. TIMBERLAKE. Good morning, Mr. Chairman. Good morning, Ranking Member. My name is Douglas Timberlake. I am an explosive detection canine handler with the Transportation Security Administration. My passenger screening canine, Rriverso, and I work at Ronald Reagan Washington National Airport. We conduct screening operations throughout various parts of the airport looking for both stationary improvised explosive devices (IEDs) and person-borne IEDs to ensure the safety of the traveling public.

There is no machine that can detect the presence of explosive materials the way that a canine can. Machines can confirm the presence of explosive substances, but they cannot reason and problem-solve to find the source of a substance.

In a few minutes, you will see a demonstration of what it looks like when Rrivero alerts on a traveler carrying explosive material during a checkpoint screening operation.

Finally, I would like to point out that Rrivero is named after Joseph Rrivero, who was from White Plains, New York, and was in one of the World Trade Center towers on 9/11. A few years ago, he got to meet the family in New York, and I try to tell as many people as possible that he is out here keeping us all safe in Joe's name.

Chairman JOHNSON. Well, thank you. That is a wonderful tribute. Thank you for your service.

Next we will bring our Customs and Border Protection (CBP) canine team, and this is Jennifer Jones, an Agriculture Specialist working with the Office of Field Operations at the Customs and Border Protection agency. She is here with her partner, Hudson.

**TESTIMONY OF JENNIFER JONES, AGRICULTURE SPECIALIST,
U.S. CUSTOMS AND BORDER PROTECTION; ACCOMPANIED
BY HUDSON**

Ms. JONES. Hi. I am Jennifer Jones. I am with Customs and Border Protection. I am an agriculture handler. My partner is Hudson. He is an approximately 8-year-old Beagle that came out of Daytona Animal Control, Daytona, Florida. He is trying to find fruits, plants, meats, and seeds that are in the baggage of passengers that are entering the United States. He runs about 95 percent accurate most days. He does sometimes make a little mistake here and there, but he is usually pretty good. He has found everything from a single grape up to about 100 pounds of coarse sausage that was in a bag.

Chairman JOHNSON. What kind of dog is he, again?

Ms. JONES. He is a Beagle.

Chairman JOHNSON. He is a Beagle, OK. That is a pretty good size Beagle. I had one of those when I was growing up.

Ms. JONES. He is on the bigger end.

Chairman JOHNSON. Ours was plumper. [Laughter.]

Ms. JONES. They can get fat. He walks a lot.

Chairman JOHNSON. Well, thank you.

Next we have Patrick Dowling, and Patrick is a Customs and Border Protection Officer and Instructor. He is here with his partner, Nicky.

**TESTIMONY OF PATRICK DOWLING, OFFICER/INSTRUCTOR,
U.S. CUSTOMS AND BORDER PROTECTION; ACCOMPANIED
BY NICKY**

Mr. DOWLING. Good morning. As you said, my name is Patrick Dowling. This is Nicky. He is a Belgian Malinois. He is 3 years old. He is trained to U.S. currency—and firearms. I currently work at the Dulles International Airport. We focus most of our efforts on the outbound side of detection for currency.

Some of the significant things that he has done outbound finding currency is we intercept folks traveling out of the country and a lot of times they do make an initial report, and once they go by the dog, we find out a lot of times that those reports are not accurate. So we have to send them back. He is in the million dollar club

about three times over now, so he has found about \$3 million in 2 years.

Chairman JOHNSON. Well, thank you, Mr. Dowling. And, again, we are looking forward to the demonstration, which we will have when we have another member showing up, and I do want to have the Senator see that.

Unfortunately, it has been a pretty busy day for different hearings and important hearings, so we do not have quite as many people as I had hoped. But we will convey the experience to everybody else.

I would ask unanimous consent that my written opening statement be entered into the record.¹

As I was saying before, this is a hearing that I have been wanting to hold for a couple of years. As we have held hearings on airport security and border security, I have been intrigued by the capabilities and the cost evaluation of using canine units, because I know they are very effective.

And then I was fortunate to be hosted by Senator Pat Toomey at the University of Pennsylvania and the training center there, and we will have Dr. Otto talk about that in greater depth. But it was unbelievable in terms of the demonstration that we were shown at the University of Pennsylvania, and so I am so pleased that Dr. Otto is here.

But when we take a look at airport security, I think as we talk to Secretary Jeh Johnson, always on his mind is the threat in terms of airlines and airline safety. I really do believe canine units can be one of those layers and a very effective layer in keeping this Nation safe and keeping our air traffic safe as well. So, again, I am really looking forward to this hearing. I am looking forward to the testimony. I want to thank the witnesses for coming and for your thoughtful testimony.

And with that, I will turn it over to Senator Carper.

OPENING STATEMENT OF SENATOR CARPER

Senator CARPER. Thanks, Mr. Chairman, and thanks for bringing us all together. I think most of us in the room have probably had a dog or two in our lives, and the Chairman mentioned that he once had a "plump Beagle," I think he said. It reminds me that when I was a little boy, 5, 6, 7 years old, we had—in fact, up until I was about 12 or 13, we had Jack and Jill, a husband and wife team of Beagles. And they were great rabbit dogs. They chased a lot of rabbits. They were not plump. They were in great shape. But it sort of like reminds me of some of the joy we had with all of them, using their noses to find not currency, not weapons, but to look for rabbits, and to find a bunch of them as well.

I just want to say that during multiple visits I have been fortunate to take down to our Southern Border and up to our Northern Border, I have always been impressed by the use of many force multipliers that help our border security officers maximize their effectiveness. Oftentimes, these force multipliers are high-tech. They are drones, they are fixed-wing aircraft, they are helicopters, they

¹ The prepared statement of Senator Johnson appears in the Appendix on page 25.

are aerostats, they are night vision cameras, surveillance cameras, motion detectors. You name it.

But, also, sometimes we find out that our officers get critical help from some low-tech friends. I am thinking of the horses that guide the Border Patrol—I am sure you remember that visit down at the Texas border with Mexico—border agents trying to make their way through dense brush on horseback and, fortunately, because of the horses, they are able to do a much better job. And then we find that there are those gifted dogs, some of whom we are going to meet today, who can help find things and threats that are invisible to us as human beings.

As we will hear, and perhaps even see, I think, later in the hearing, some of our specially trained dogs, how they can detect people or things that humans or machines just miss. Canines are already at work, as we know, across a number of Department of Homeland Security (DHS) programs. For instance, DHS uses dogs to check for explosives within our airports and trains like the one I took today. We also see dogs hard at work between our ports of entry (POE) where they attempt to detect the illegal entry of people and goods.

We know that the special abilities of these animals have already contributed to our homeland security. For example, canine teams are credited with helping CBP seize more than 4,500 pounds of heroin in the last fiscal year (FY). That same year, dogs helped to track thousands of migrants along the southwest border of our country and discovered 83 people hiding in vehicles crossing through ports of entry. Other dogs have helped detect illicit plants or animals, while some helped find human remains near our borders.

Security is not their only mission. Dogs have also been invaluable in search and rescue following natural disasters. This is an area where I am not sure we are doing enough to take advantage really of their capabilities.

At the same time, these valuable tools are not free. Dogs with the proper abilities and temperament to conduct searches are expensive to buy and even more expensive to train and to deploy effectively, and we will hear about that today. As with all of our security investments, we must make sure we are deploying these canine teams in the most cost-effective way.

Today we are going to hear about some of the open questions regarding canine teams. I think, in particular, the Government Accountability Office (GAO) has taken a hard look at TSA's canine program and raised some questions about how and where they are trained and deployed. And while TSA has successfully addressed some of GAO's earlier concerns, I understand that some other questions remain, and maybe we will have a chance to hear those today.

I look forward to hearing from both agencies about the current status of their canine programs and plans for the future. We also need to drill down on what these canines can and cannot accomplish and what information is needed to make sure we are making the right investments in these force multipliers.

This is going to be an interesting hearing, and we look forward to it. Thank you all for joining us.

Chairman JOHNSON. Thank you, Senator Carper. I do not know about your Beagles, but my Beagle did not realize he was a dog. He was just a younger brother. He actually sat up in a chair.

Senator CARPER. I thought one of these dogs was going to try to get in that chair over there and reach the mic. But it did not happen. [Laughter.]

Chairman JOHNSON. It is the tradition of this Committee to swear in witnesses, so if you will all rise and raise your right hand. Do you swear the testimony you will give before this Committee will be the truth, the whole truth, and nothing but the truth, so help you, God?

Ms. HUTCHINSON. I do.

Mr. MONTES. I do.

Ms. GROVER. I do.

Ms. OTTO. I do.

Chairman JOHNSON. Please be seated.

Let us start with testimony. We are hoping for at least one or two additional Members to come before we do the demonstration, but if they do not, I also want to make sure we get the dogs before they get restless. We may interrupt in between witnesses.

Our first witness is Kimberly Hutchinson. Ms. Hutchinson is the Deputy Assistant Administrator for the Office of Training and Development at the Transportation Security Administration. In her capacity, she oversees TSA's technical and leadership training, workforce development, and engagement programs. Ms. Hutchinson.

TESTIMONY OF KIMBERLY S. HUTCHINSON,¹ DEPUTY ASSISTANT ADMINISTRATOR, OFFICE OF TRAINING AND DEVELOPMENT, TRANSPORTATION SECURITY ADMINISTRATION, U.S. DEPARTMENT OF HOMELAND SECURITY

Ms. HUTCHINSON. Thank you, sir. Chairman Johnson, Ranking Member Carper, and Members of the Committee, thank you for the opportunity to testify regarding TSA's canine training program.

TSA procures, trains, and deploys both TSA-led and State and local law enforcement-led canine teams to secure our Nation's transportation systems. Congress has recognized the value of TSA's canine program through its continued support and funding. It is currently the largest explosives detection canine program in DHS and the second largest in the Federal Government, with 997 funded canine teams currently stationed at more than 100 of our Nation's airports, mass transit, and cargo environments. The success of TSA's canine program is a prime example of Federal, State, and local government entities working together.

Given the security value of explosive detection canines, TSA must ensure a reliable and adequate supply of canines. TSA procures canines primarily through an Interagency Service Agreement with the Department of Defense, which supplies TSA with approximately 230 canines each year. TSA partners with the Department of Defense (DOD) during the canine selection and evaluation proc-

¹The prepared joint statement of Ms. Hutchinson and Mr. Montes appears in the Appendix on page 31.

ess on both State-side vendors and overseas buying trips, ensuring TSA's needs are met.

In addition to procuring canines through DOD, TSA is exploring procurement of both trained and untrained canines from qualified private sector businesses. TSA's goal is to procure an additional 20 trained passenger screening canines and 20 untrained canines suitable for passenger screening in fiscal year 2016 through this new procurement initiative.

Once TSA procures a canine, the agency pairs it with a Federal, State, or local handler to be trained to operate in the aviation, multimodal, maritime, mass transit, or cargo environments.

The majority of canine teams working in the aviation environment are comprised of a canine and a State or local law enforcement officer. For these teams, TSA provides and trains the dog, trains the handler, provides training aids and explosive storage magazines, and conducts annual onsite evaluations of these canines. TSA partially reimburses each participating agency for operational costs associated with maintaining the teams, and in return, the law enforcement agencies agree to use the canines in their assigned environment for at least 80 percent of the handler's duty time.

In addition to State and local law enforcement-led teams, TSA Inspectors lead 322 canine teams, including all of our passenger screening canine teams, which are specifically trained to detect explosives' odor on passengers in the checkpoint environment, in addition to their conventional explosives detection role.

TSA and State and local law enforcement handlers travel from across the country to TSA's Canine Training Center (CTC), located on Lackland Air Force Base down in San Antonio, Texas, to be paired with a canine and complete training. The canine teams learn explosives detection in a very intense training environment, and teams are trained to detect a variety of explosives based on intelligence data and emerging threats.

In fact, tomorrow TSA will hold a ribbon-cutting ceremony for a new 25,000-square-foot facility at the Training Center with seven new classrooms, a 100-seat auditorium, and administrative space.

Approximately 30 days after graduating from the training program and returning to its duty station, each canine team undergoes an assessment to ensure operational proficiency in that environment. Upon successful completion of the assessment, canine teams are then evaluated on an annual basis under the most stringent of applicable certification standards.

TSA allocates canine teams to specific cities and airports utilizing risk-based criteria. Passenger screening canine teams are critical to TSA's risk-based security efforts and are deployed to operate during peak periods at 40 of our Nation's largest airports, where they have the opportunity to screen tens of thousands of passengers every day. TSA is working to train and certify all of its 322 canine teams in both passenger screening and traditional explosive detection screening by the end of fiscal year 2017.

In addition to deployments at passenger screening checkpoints, TSA and law enforcement-led teams conduct a variety of search and high visibility activities that address potential threats in the

transportation domain, including Visible Intermodal Prevention and Response (VIPR) operations.

The Government Accountability Office, DHS Inspector General (IG), and other independent testers have proven canine teams to be one of the most effective means of detecting explosives. Canine teams are critical to TSA's focus on security effectiveness, and TSA continues to develop its canine training program to maximize its contributions to transportation security.

Last, I would like to thank all of the hardworking men and women canine handlers across the Nation's transportation system who keep us safe every day, as well as the very dedicated staff that support the program and train our canines down in Lackland.

Thank you for the opportunity to discuss this important program, and I look forward to your questions.

Chairman JOHNSON. Thank you, Ms. Hutchinson.

Our next witness is Damian Montes. Mr. Montes is the Director of the Canine Program at U.S. Customs and Border Protection. Mr. Montes started his career in the United States Marine Corps (USMC). Subsequently, he graduated from the Department of Defense Military Working Dog Handler Course and joined CBP. He is a former handler. Mr. Montes.

TESTIMONY OF DAMIAN MONTES,¹ DIRECTOR, CANINE TRAINING PROGRAM, OFFICE OF TRAINING AND DEVELOPMENT, U.S. CUSTOMS AND BORDER PROTECTION, U.S. DEPARTMENT OF HOMELAND SECURITY; ACCOMPANIED BY ROBERT LUKASON AND KEITH BARKER

Mr. MONTES. Good morning, Chairman Johnson and Ranking Member Carper. Thank you for the opportunity to appear today and talk about the U.S. Customs and Border Protection Canine Training Program. I am the Director of the CBP Canine Training Program and am responsible for the administrative and operational oversight of our two Canine Training and Delivery Centers, one located in Front Royal, Virginia, and the other in El Paso, Texas.

The CBP Canine Program is the fusion of two legacy training facilities: the legacy U.S. Customs Canine Enforcement Training Center and the U.S. Border Patrol National Canine Facility. The merger of these two training entities afforded the CBP Canine Training Program to build on decades of established expertise in law enforcement canine training and to capitalize on best practices.

The CBP Canine Training Centers are where CBP workers, canines, handlers, and instructors receive classroom and practical training and the canine discipline utilized to support the critical mission of detecting and addressing cross-border illicit activities, including gun and currency smuggling, narcotics smuggling, human trafficking and smuggling, and illegal immigration.

The CBP Canine Training Program delivers several courses for handlers and instructors to support the mission in multiple operational environments. These courses include concealed human and narcotic detection, currency and firearms detection, human re-

¹The prepared joint statement of Mr. Montes and Ms. Hutchinson appears in the Appendix on page 31.

mains/cadaver detection, tracking and trailing, search and rescue, patrol, and recertification instruction course.

Our training cadre is comprised of experienced CBP law enforcement officers and agents, also known as course developer instructors, who come to us from existing field canine units and serve a 3-to 5-year instructor detail. I must highlight the significance of having such subject matter experts with recent and relative field experience deliver canine training and instruction to the next generation of canines, handlers, and instructors. The value they contribute to the CBP Canine Training Program's mission is immeasurable. Furthermore, recruiting experienced canine instructors from within the ranks of CBP ensures a continuity of expertise and availability of training opportunities.

The course developer instructors who work at our training centers bring with them not only the passion of being a canine handler, but being part of a specialized unit that provides a unique and valuable capability to CBP's front-line law enforcement mission. But I would be remiss not to mention our support staff—our veterinarians, our animal health technicians, our animal caretakers, our maintenance support personnel, and our mission support admin personnel, who play an integral part in ensuring the effectiveness and the delivery of our training.

The CBP Canine Training Program can be credited with training some of the best canine teams that work at any of our international border crossings, international airports, and vast open areas of our border. The CBP canine officers and agents who work with the CBP Canine Training Program have also assisted in capacity-building initiatives with the Office of International Affairs and developing and delivering canine training for our international partners. Furthermore, our training centers are available to Federal, State, and local law enforcement agencies wanting to receive formal training and certification in any of the canine training disciplines we deliver.

The canine team is an invaluable asset to the operational border and port environments, regardless of the presence of other detection technologies, providing an unmatched law enforcement capability to address the ever changing challenges and threats.

Over the past 3 years, the CBP Canine Training Program, under the oversight of the Office of Training and Development, has ensured that CBP canine training centers' academic curriculum, practical applications, evaluations, certification, and overall training provides the standard and fidelity that meets the CBP operational needs and requirements.

As border conditions and enforcement environments have ever changed over the past 30 years or more, CBP's law enforcement canine teams have remained constant, reliable, invaluable assets to our Nation's security. Each and every day they demonstrate and validate their importance through numerous seizures and detections.

I am honored to be part of the CBP Canine Program and appreciate the opportunity to share our efforts today, and I am welcome to answer any questions.

Chairman JOHNSON. Thank you, Director Montes.

Our next witness is Jennifer Grover. Director Grover is the Director in the Homeland Security and Justice Team at the U.S. Government Accountability Office. In this position, she oversees GAO's reviews of TSA programs and operations. Director Grover.

TESTIMONY OF JENNIFER GROVER,¹ DIRECTOR, HOMELAND SECURITY AND JUSTICE, U.S. GOVERNMENT ACCOUNTABILITY OFFICE

Ms. GROVER. Good morning, Chairman Johnson, Ranking Member Carper. Thank you for the opportunity to discuss TSA's implementation of their canine program.

TSA has funding for 997 canine teams. They include conventional canines, which are trained to detect explosives in stationary objects such as vehicles and baggage, and passenger screening canines (PSCs), which receive extra training to detect explosives carried by a person. When fully deployed, TSA canines will be paired with about 675 law enforcement handlers and 322 TSA handlers.

Following GAO's 2013 report and recommendations, TSA made significant improvements to its canine program.

First, TSA has enhanced its use of data to monitor program performance. As an example, field canine coordinators now regularly analyze the covert testing data to determine the root causes of team failures so that they can be addressed.

Second, TSA demonstrated that passenger screening canine teams reliably identify explosives and determined that they should be placed at the passenger checkpoint queues to have the greatest impact.

And, third, TSA has deployed PSC teams to the highest-risk airports.

One important issue remains for TSA's consideration based on our prior work. When TSA conducted its initial effectiveness assessment of these specialized passenger screening canines, it also carried out one of the search exercises with three conventional canine teams. So those are the teams that do not receive the specialized training.

The results suggested that the conventional canines might be as effective as the canines with the PSC training at detecting explosives on people under some scenarios. We recommended that TSA should test whether the passenger screening canines provide an enhanced security benefit relative to the conventional canines and, thus, whether the cost of that additional training is warranted.

TSA officials told us that they did not plan to carry out the assessment, citing concerns about the temperament of some of the conventionally trained canines and the potential liability risk to the agency if it operated conventional canines in a passenger screening environment for which they had not been trained. We respect TSA's concerns on these issues and encourage TSA to consider multiple options for going forward with this testing.

Some conventional canines are suitable breeds, initial assessments could take place in a testing environment with role players instead of actual passengers, and conventionally trained canines could be trained to operate at the checkpoint.

¹ The prepared statement of Ms. Grover appears in the Appendix on page 43.

We continue to believe that this assessment is warranted. If the results show that conventional canines are equally as effective as passenger screening canines, then TSA could save resources currently spent on the specialized training.

Regarding the magnitude of the potential savings, in our 2013 study the difference in TSA's startup costs between the passenger screening and the conventional canines was \$19,000 per canine. TSA's update for this hearing indicates that the difference in startup costs has shrunk to \$5,000 per canine, which clearly reduces the potential for savings.

Since TSA plans to expand its PSC training to all 322 canines with TSA handlers, based on TSA's numbers the savings could still be as much as \$1.5 million each time the full set of TSA-led canines is retired and placed. That is a very small fraction of TSA's annual spending for the canine program, but still represents a potential opportunity for TSA to be more efficient with its limited resources.

Finally, whether or not the extra PSC training turns out to make a difference, TSA could realize additional savings if some of the canines were paired with law enforcement handlers instead of TSA handlers. Since TSA covers salary, benefits, and vehicle expenses for its own handlers, the annual cost to TSA for a TSA-led team is \$100,000 more than a team led by a law enforcement officer.

In 2013, TSA officials told us that they were considering this approach, but to this point, TSA has not yet paired passenger screening canines with law enforcement handlers.

Chairman Johnson, Ranking Member Carper, thank you for the opportunity to testify, and I look forward to your questions.

Chairman JOHNSON. Thank you, Director Grover.

Our final witness is Dr. Cynthia Otto. Dr. Otto is the founder and executive director for the Penn Vet Working Center at the University of Pennsylvania. Her research focuses on canine health and behavior. Dr. Otto has also been involved with search and rescue dogs and disaster response as a member of the Pennsylvania Urban Search and Rescue Task Force, including deployments for Hurricane Katrina and during 9/11. Dr. Otto.

TESTIMONY OF CYNTHIA M. OTTO, D.V.M., PH.D.,¹ EXECUTIVE DIRECTOR, PENN VET WORKING DOG CENTER, UNIVERSITY OF PENNSYLVANIA; ACCOMPANIED BY JERRY

Dr. OTTO. Thank you and good morning, Chairman Johnson and Ranking Member Carper. It is a pleasure to be here.

I would like to introduce one of our dogs from the program. He is a 10½-week-old German Shepherd, born in Kansas. He is donated to our program, and his name is Jerry. And like all of the dogs donated to our program, he is named after one of the dogs that worked at the site after 9/11. He is being handled by one of our veterinary students from Penn Vet, Meghan Ramos. You will be able to meet him after the hearing and learn more about his future career.

The Penn Vet Working Dog Center is a not-for-profit research and development center for detection dogs. Our program was devel-

¹ The prepared statement of Dr. Otto appears in the Appendix on page 58.

oped based on our experience with a wide variety of organizations, including DOD, the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), the Federal Emergency Management Agency (FEMA), CBP, TSA, police canine departments, the Seeing Eye, Puppies Behind Bars, and even pet dog training. Our scope of work focuses on the genetic, environmental, behavioral, and physical characteristics that lead to successful detection performance.

Since dogs enter our program at 8 weeks of age, our unique emphasis includes the impact of early development in enhancing the career success of these dogs. Our training philosophy is rooted in positive reinforcement and enhancing the dog's genetic potential.

Dogs in our program attend school 5 days a week to learn job skills, but live with foster families nights and weekends to learn life skills. At the Penn Vet Working Dog Center, we operate based on a hypothesis-driven method rather than a belief system.

Consistent with the theme of our upcoming working dog conference, Working Dogs 360, a multidisciplinary approach, we welcome ideas from all sectors. We then evaluate and collect data to test these hypotheses and determine what works best for each dog, each discipline, and each program.

We embrace the opportunities that arise when things do not go as planned, which is often. We actually find that some of these opportunities are the most valuable learning experiences that we have, and in the case of the dogs, we call it "a training opportunity."

From this perspective, the key points that I would like to highlight for the Committee are: one, that dogs have great value in preserving national security; and, two, there are strategies that as a Nation on which we can come together and will facilitate the success of the dogs in this vital mission.

I think the first fact that is undisputed is that the ability of dogs to smell and identify minute quantities of odor far exceeds that of humans and most machines. The other universal fact across agencies is that one of the biggest challenges to canine programs is the availability of dogs that have the physical and behavioral characteristics necessary to perform the tasks needed.

One of the major reasons for the shortage of quality dogs is that we rely heavily on procurement of dogs from other countries. By outsourcing our national security requirements, we give up control of the type of dogs, the health of the dogs, and the early training of the dogs. We also are at risk for supply interruption due to politics, disaster, or disease.

Given that we know many of the desirable traits are controlled by genetics and that continuous improvements can be made through selective breeding, letting these decisions be made by organizations that do not have our best national interests foremost we are, again, putting ourselves at risk.

The research in our program and others has shown that factors during development of dogs have an important impact on behavior and health, including the length of their working careers. Again, without having control or input over this aspect of the dog's lives increases the risk of shortened working life or failed careers.

So how do we best leverage the scientific knowledge in genetics, development, behavior, and health? To us, a national breeding pro-

gram is a priority. The critical features of a programmatic success include both superior dog performance and sound economics. The goal is to create a cooperative that provides dogs to all of the programs that support national security.

To achieve this, all organizations need to communicate and work together to identify the genetic and behavioral characteristics of the dogs that meet their requirements. So we feel that this would represent a Center of Excellence, which is classic in homeland security.

So I would like to thank you for your attention and welcome any questions.

Chairman JOHNSON. Well, thank you, Dr. Otto.

We are expecting three more members, I am told, within 5 minutes, but that is Senate time.

I want to go back to you, Dr. Otto, because I want to get some sense of how many trained dogs are utilized in the United States for seeing eye purposes, other specialized purposes, as well as law enforcement. Do you have any feel for the total number of specialized trained dogs?

Dr. OTTO. So the specialized trained dogs is sort of an open question. There are so many new areas, particularly if we are talking in the service dog field, where we are talking about seeing eye, the autism support dogs, and other dogs. Through the Scientific Working Group on Dog and Orthogonal detector Guidelines (SWGDOG), I know that they were estimating somewhere between 40,000 and 80,000 dogs used, and remembering that dogs, when they are employed, they have a fixed life span, and so they are retiring at a regular rate. And even if we can improve their working life by a year, we are going to impact the cost-effectiveness.

Chairman JOHNSON. Is that about 8 to 9 years? Is that kind of on average?

Dr. OTTO. Eight to nine is pretty typical. Now, a lot of dogs, some organizations will retire dogs at 9 years of age. This is often fixed—and most dogs do not start until they are about 2. So they may have as short a career as 7 and even less, depending.

Chairman JOHNSON. But service dogs are really completely different from the standpoint of training and their specialty, correct?

Dr. OTTO. Absolutely. The service dogs have taught us a lot about the selective breeding. They have taught us a lot about how to train some of these dogs. But they are very different dogs. They are kind of the opposite end of the spectrum from the high-energy, hunting-driven dogs that we are looking at.

Chairman JOHNSON. And we breed those here in the United States.

Dr. OTTO. Correct. Most of the service dog programs do have their own breeding programs. The Seeing Eye, Canine Companions for Independence, they have really large breeding programs.

Chairman JOHNSON. Now, between TSA and CBP, I have about 2,500 canine units. Is that pretty accurate, about 1,000 with the TSA and about 1,400, 1,500 in CBP?

Mr. MONTES. Yes, sir.

Chairman JOHNSON. Do you have any idea in terms of how many other specialized units, canine units, in just conventional law enforcement?

Mr. MONTES. No. At this time I do not, sir.

Chairman JOHNSON. OK. I want to get back to that. Do we have another member coming? OK. This is it.

As long as we have a quorum for our demonstration, let us proceed with that. And I think we are going to start with TSA, and, Ms. Hutchinson, can you describe what we are going to see in terms of this demonstration?

Ms. HUTCHINSON. Absolutely. Yes, so we have Rriverso, our canine, our Labrador out of Reagan Airport (DCA) here, and his handler, Doug Timberlake. And what we are going to try to simulate here it is a TSA checkpoint. So, essentially, your staff are passengers, and what you are going to see is the passengers are going to come through. There is one passenger that has a training aid explosive on them, and here is Rriverso and Doug.

[Demonstrations begin.]

So what you will see Doug doing is giving some search gestures to Rriverso here as the passengers come through, and then you will see very quickly what passenger has that live explosive on them.

Chairman JOHNSON. Are the passengers coming?

Ms. HUTCHINSON. I think they are here.

Chairman JOHNSON. OK.

Ms. HUTCHINSON. OK. So we have our passengers coming through the checkpoint here. We are going to see Rriverso start to work, use his nose.

And there you go. So if you noticed, he locked in on the passenger with the briefcase very quickly, and then he was immediately rewarded with his tennis ball, which is his reward of choice.

Chairman JOHNSON. And the briefcase had what in it?

Ms. HUTCHINSON. It had an explosive.

Chairman JOHNSON. OK. How many times is that wrapped?

Ms. HUTCHINSON. It is safe.

Chairman JOHNSON. I will move into that in other questions, because that is what amazed me at the University of Pennsylvania is how it just almost impossible to wrap these things enough. It is impossible.

OK. Our next one, Director Montes, can you kind of describe what we are going to be seeing in this next demonstration?

[Demonstration begins.]

Mr. MONTES. Yes, this is Ms. Jones and her canine, Hudson. So Canine Hudson is trained to find five different types of items. In the airport environment, they are going to be screening in the passenger environment for any type of illegal agricultural products.

Chairman JOHNSON. And you have planted some illegal agricultural products in the hearing room somewhere?

Mr. MONTES. Yes, we did.

Chairman JOHNSON. I am a real rule follower.

Mr. MONTES. Now, so she responded. She sat down.

Chairman JOHNSON. So she has located it.

Mr. MONTES. Yes. If you look right over the edge there, you can see it. And then what they have is an apple.

Chairman JOHNSON. It looks harmless enough. [Laughter.]

So that was an agricultural product. Then we have another demonstration of a different type of—

Mr. MONTES. Yes, we do. We have the currency/firearms dog coming in. This is Mr. Dowling and his canine, Nicky. As well, we will have some of your staffers—they will have a training aid planted on them, currency, and as soon as they come in, he will be able to screen them and identify which one is the one that is carrying the currency, the training aid.

[Demonstration begins.]

So as the passengers come through, Mr. Dowling will start screening them with the canine, Nicky.

[Pause.]

And so once he identifies that there is something there that should not be there—i.e., the contraband—he is going to go ahead and respond. And now he is going to get his toy as a reward, and the positive indication. So what he gave him right now is a PVC pipe.

Chairman JOHNSON. I guess whatever works.

Mr. MONTES. Yes.

Chairman JOHNSON. Well, thank you. Thank you very much. I would have thought he would have responded to that blue suit, but that shows you how well trained they are.

Again, thank you. I will say, as impressive as that demonstration is, going to the University of Pennsylvania and seeing them really on the job, it is dramatically more impressive, I mean, what they are able to do. Let us pick up where we left off. Thank you, Senator.

I want to get back to actually supplying the chain and how many dogs we really would like to have and how many we could really employ. So, again, we are talking about within TSA and CBP about 2,500 canine units now. How many would you like to have? Is that kind of adequate for the task? Or could we utilize a lot more? Let us start with you, Director Montes.

Mr. MONTES. I will start with a question. So that would be an operational requirement to determine both components based on their needs of the service to identify what would be their optimal number as far as what would assist their multilayer approach as far as enforcement operations.

On our side of the fence, as far as the training operations, our requirement is to be able to develop the capacity and capability to deliver those dogs once those demands and needs and requirements are addressed.

Chairman JOHNSON. But do you get a sense, working with the other folks in your agency, that there is a greater demand? Is there always demand for what you are trying to do? Or, again, there may not be demand because we just do not have the budget for it.

Mr. MONTES. So the current demand as it stands right now, you have the operational floors for the Office of Border Patrol, which is 1,113, and as well as for the Office of Field Operations, which currently right now is 481. And so those numbers are still vacancies in the field that we are still trying to go ahead and backfill those positions.

So we have not reach that floor yet, so it would pretty much determine on the components to determine how much higher they would want to go after all those positions are filled.

Chairman JOHNSON. So you are saying you are 481 short right now?

Mr. MONTES. No, sir. Those are the positions.

Chairman JOHNSON. Oh, OK. How many short are you?

Mr. MONTES. So 25 positions right now for the Office of Field Operations and 300 for the Office of Border Patrol.

Chairman JOHNSON. So a pretty good shortage.

Ms. Hutchinson, do you have a sense in terms of TSA, if you could have everything you would want to provide the security that we are really looking for in this country, what is your sense?

Ms. HUTCHINSON. I think that is sort of the \$1 million question. I think today we have 997 teams throughout the Nation, so what we have been doing within that group of teams that are currently funded is figuring out how we can really maximize them. So as you saw that PSC capability, we just rolled that out in 2011, so 5 years ago, which is fairly recent for this new concept of operations (CONOPS). So what we are sort of learning over time is how to best utilize their time screening passengers, so really deploying them at those peak periods.

So we are really trying to maximize with what we have. I think moving forward I certainly see we would have more canines as part of the security.

Chairman JOHNSON. But of the 997, it looks like only 300 are doing passenger screening, and others are deployed with other local law enforcement agencies. What are they doing, also transportation? So they are doing trains and bus stations? Is it all transportation-related?

Ms. HUTCHINSON. That is right. They service all the modes. So you would see them, potentially on Amtrak or on buses, transit, yes. So they are covering everything, and many of them are also deployed in aviation.

But to your question earlier about the supply, we lose about 13 percent of our dogs a year, so about 150 either retire for aging out or physical things. So we need to buy about 230 a year just to sustain the current operations, and we have found a good supply, if you will, of the dogs that we need. However, we are going through this process of trying to procure more dogs domestically, so if we did have a surge, we would be able to buy maybe quicker and bring on dogs into the program more quickly.

Chairman JOHNSON. Now, the ones that are not used for passenger screening in airports, those are being handled by local law enforcement officials then? So you are supplying the local agencies?

Ms. HUTCHINSON. That is correct. We train the dogs and the handlers. We work in partnership with them today, yes. If we have an unattended bag as an example, we would call law enforcement for resolving that.

Chairman JOHNSON. So, Dr. Otto, we obviously breed a lot of dogs in this country, and what is the secret sauce in terms of the European breeders that we are only going there? What is preventing us from breeding them here in the United States?

Dr. OTTO. I think it is tradition, and I think it is also why the dogs are being bred in this country. In Eastern Europe, which is the major source of most of our working dogs, they have a long history of breeding dogs for work, whether it is specifically for work

or even competitions that are work-related. In this country we tend to breed dogs for pets and for show, and those are not the same kinds of dogs that we need for this kind of work.

So in order to breed dogs in this country for this kind of work, we really have to look at what are we selecting. A lot of our Labradors are coming from hunting lines, so that is at least a domestic resource. But even so, they are breeding for different reasons, and so we are lucky when we get some of these dogs that are very successful, but we need to think about what are our goals, physically, behaviorally, that support the tasks that these dogs are doing. And it is not always what the breeders who are competing or hunting with their dogs are breeding for. So identifying those traits, identifying if they are heritable so that we can selectively improve the physical and behavioral characteristics of the dogs.

Chairman JOHNSON. OK. Well, I will pick up on this in the next round. Senator CARPER.

Senator CARPER. First, a couple lighthearted questions. I noted that the dogs got a reward for their search efforts. One dog's reward was a tennis ball, and another dog's reward was a piece of PVC pipe.

What is the role and the importance of the reward? How are they selected? And do dogs react if they have the wrong reward or no reward? I presume they act differently. Who chooses the reward? Is it good for a lifetime? Give us a little bit of—just real quickly on that.

Mr. MONTES. Absolutely. So our primary reward is a toy. It is toy-driven prey drive for the canines. So I either have a rubber pipe, a PVC pipe. It depends on what the dog really enjoys to work for, because that is his paycheck at the end of the day.

So if there is a canine that, for example, uses a PVC pipe which he enjoys at this point, but at some point in training decides, hey, I like the rubber better than the other one, then it would transition. The idea is we want the canine to be able to work, and we want to be able to feed that drive toward that reward so that canine continually produces over the course of his service life.

Senator CARPER. All right. How many years, on average, do these dogs serve?

Mr. MONTES. So our canines primarily are between 7 and 9 years old.

Senator CARPER. And what is the average life span of a dog that does this kind of work?

Mr. MONTES. So the average lifetime depends on the canine, sir. Currently, we have some dogs that are still in service at 11 years old. Obviously, we want to make sure that we have a quality of life for our canines. We make high demands from our canines in the field, so we want to make sure we have a process in place to retire them at a suitable age so they have a quality retired life after. So their lifetime really depends on the individual canine, sir.

Senator CARPER. OK. There are other agencies that have canine programs in the Department. For example, I think just within DHS, you have FEMA where they use canine teams to conduct search and rescue operations. The Federal Protective Service I think deploys dogs to sweep Federal buildings looking for explosives.

I do not know who I should ask this of. We will start with you, Damian, but could you just describe for us, if you could, any departmentwide efforts within DHS to share best practices and to find efficiencies in order to improve the respective programs?

Mr. MONTES. Sure. I have been in this position for the last 2½ years, and since I have been in this position, we have conducted numerous outreach on how to improve our program or share best practices with others. We have met with TSA. We have also met with Ms. Otto on different occasions to identify ways that we have in our program that we can improve on.

We have also visited Lackland Air Force Base, DOD, because at the end of the day everybody has and is still and continually evolves their canine training practices.

As far as shared tactics or shared facilities, we do extend our training availability to local, Federal, and State law enforcement agencies. So we are constantly working with them as well to either start a program or to advance or evolve their current program in existence.

Senator CARPER. All right. Thank you.

I was struck, Dr. Otto, by your testimony where you mentioned that many of the errors made by canine teams are not the errors made by the dog but by the human handler. What are the requirements and limitations of a good human handler? And how well are we training that half of the canine team?

Dr. OTTO. So I think that is a really great point, that it is a team, and the dog—

Senator CARPER. Would you say that again?

Dr. OTTO. The dog and the handler are a team.

Senator CARPER. No, I am just kidding. Not many of our witnesses say that, do they, Mr. Chairman? [Laughter.]

Dr. OTTO. That is a great point. It is a very good point. Excellent points.

Senator CARPER. Thank you.

Dr. OTTO. So the team is really critical, and the dog, a lot of times we actually get in the way of the dog. And it really is something that we have to be paying very close attention to. When you have a team that works in synchrony, it is kind of like watching dancers, because they are so good at reading each other, and that is our goal. And I think a lot of times we do focus on the dog side of it, and we are not paying as much attention to training the handler.

In our program we try to help our dogs work as independently as possible, and I think that is a lot of the goals here, too, especially with the passenger screening canines, that they really do need to work more independently.

So I think those are goals that most organizations are working toward, but I think we still have a ways to go in finding our best handlers, training our handlers in the best way possible and making sure that the team is working well together.

Senator CARPER. OK. Thank you.

Another question, and this might be for you, Ms. Hutchinson. It is a question about metrics. What metrics, if any, exist to indicate that the passenger screening canine training provides an added se-

curity benefit in return for the additional costs? And how was the passenger screening canine certification standard developed?

Ms. HUTCHINSON. So we have been developing sort of the standard in the last 5 years, and really it is a training and certification standard. So in terms of metrics, the reason we know that these dogs are highly effective is very high evaluation rate on an annual basis by a third party. Science and Technology (S&T) helps us, another DHS Directorate, helps us in the evaluation process. We go in once a year to every airport and test these dogs on all of the odors to make sure they are proficient, and then just locally. A dog like Rriverso, he has to certify every 45 days on all of those odors, and if he does not, he comes out of the operation and gets re-trained, if you will.

So it is mostly just those evaluations, during the year, and then, of course, certification at the end of the year.

Senator CARPER. OK. Thanks.

And if I could, Ms. Grover, in your testimony, you talked about some of the recommendations maybe the GAO has made to improve these programs. Would you just mention again—I think you did, but maybe a recommendation or two that has not been fully implemented, has not been accepted? Let us just talk about that for a minute.

Ms. GROVER. Sure. TSA has done a terrific job addressing the vast majority of our recommendations, and we completely agree that robust data exists to show that the passenger screening canines are effective at detecting explosives. There is a range. The data show that there are some airports and some teams that do not do as well as others, and so hopefully TSA will follow-up on that information and make sure that they are providing support to the teams that need it so that they can continue to improve.

But the question that remains for GAO is whether or not it is the extra-specialized passenger screening training that makes the PSC canines effective or whether they could do just as well with the conventional training that all the canines receive, what the regular law enforcement handlers and their canines receive as well.

Senator CARPER. OK. My time has expired. As the Chairman mentioned earlier, we all serve on a bunch of different committees and subcommittees, and a number of those are in sessions right now. I am going to slip out and go to one to learn a little bit more about implementing the Trans-Pacific Trade Partnership in the Finance Committee.

So I just want to say thank you again, Mr. Chairman, for pulling this all together. Thanks especially to Rriverso, to Hudson, and to Nicky, and their handlers, and to each of you who vocalized and verbalized on behalf of our canine friends.

Thank you so much.

Chairman JOHNSON. Thank you, Senator Carper.

Let me go back to the metrics, because in our briefing here we did—certainly one metric is apprehensions of drugs, which is probably one of the most successful areas—almost 40,000 apprehensions last year nationwide. I think it was last year—yes, fiscal year 2015. Are there similar—first of all, do we have instances in TSA where we have detected bombs? Have we thwarted any attacks? Or have we just been very fortunate that we have not had those?

Ms. HUTCHINSON. Yes, as far as we know, we have not had a terrorist come through a checkpoint with an explosive to be detected. So to your point, it is hard to measure the deterrence factor of having a dog at a checkpoint or anywhere else. So that is difficult for us.

Chairman JOHNSON. Dr. Otto, can you talk about the specialized nature of the different smells, the different odors, and what that means from the standpoint of training?

Dr. OTTO. So there are a number of different odors, but the concept is all kind of the same on how we are going to train them. In our program we train our dogs with foundation work where they learn how to search. They do not necessarily learn a specific odor. And then depending on their physical characteristics and their behavioral characteristics, we may put them into different careers.

So dogs that are searching for humans in disaster settings are searching for a really large amount of odor associated with that person. And those are dogs that are going to be wide-ranging and really looking for odor.

We also have a medical detection program where we have trained dogs to identify the odor associated with ovarian cancer in blood samples. That is a drop of blood. It is a very minute odor, and the dogs that work in that field are very meticulous and very thorough and work in a controlled environment.

So those are kind of the two ends of the spectrum, and then identifying the environments that you would want, the passenger screening environment is going to be probably more similar to our search and rescue environment; whereas, maybe the more traditional screening of suitcases we might get a little bit closer to what we are dealing with the ovarian cancer detection, but usually the amount of odor is still going to be much, much greater than what we would see in something like the medical detection. Is that what you were asking?

Chairman JOHNSON. Yes. Let us also talk about—because we talked a little bit about breeding capacity. To me that just seems like something we could overcome pretty quickly. There seems to be enough demand for these things, and we should know how to breed, so it is a matter of just getting the right ones.

Let us talk about training capacity. Obviously, you have a certain approach to training which differs from other centers. Do we have a capacity shortage from the standpoint of training? And then ongoing training, too, you talked about a team and how important it is that we these dogs are trained and the handlers actually conduct that training on an ongoing basis, correct?

Dr. OTTO. Well, I can talk about the ongoing training that is necessary based on what SWGDOG has recommended as national guidelines and what the National Institute of Standards and Technology (NIST) Organization of Scientific Area Committees (OSAC) and the Committee on Dogs and Sensors recommends for ongoing training, 16 hours a month of ongoing training for the canine handler teams. But most of what we are doing, we are not really working with those graduate dogs, so I think I probably would defer to CBP or TSA to address some of those issues.

Chairman JOHNSON. OK. Please.

Mr. MONTES. I am sorry, sir. Can you please repeat the question?

Chairman JOHNSON. Really just talking about the ongoing training for the dogs, how the handlers—it is a responsibility. That is certainly what I heard from the University of Pennsylvania. This is not something you train the dog for a couple weeks or a couple months and then they are trained. You have to continually update that on a continuous basis, so if you can just kind of speak to that.

Mr. MONTES. Absolutely. So we all know ground zero is at the training centers. Our canines come in, and they go anywhere from a 14-week course to a 12-week to a 10-week course, 7 or 5. Depending on the variances of we are going to train our handlers, we talk about the team. So the canine itself, it is very important when we start the canine training with the canine that we determine what capacity that dog is going to be working in in the field, and that is based on our initial prior selection test.

Chairman JOHNSON. Now, let me ask, are those dogs pre-trained already and then you are just specifically training them for something? Or are you doing the entire training yourself?

Mr. MONTES. We do the entire training ourselves. What we want to do is we want to identify the canine based on its innate drives and capabilities, because all of our operational environments are very different. So depending on the operational environment, we want to be able to pair that dog in a training center to the operational request. For example, if you have a small border environment, Naco, Arizona, or you have a large border environment, San Isidro, Arizona, we want to make sure that we pair that dog in that environment so to have a successful working life. And that comes with the training that we develop at the training centers, the pairing with that handler coming from that environment, and essentially setting that dog up for success in the field. That is where it starts, at the training center. And then, of course, you have the continuing training that goes on with our subject matter experts, our instructors in the field. So it is more of a lateral handoff which progresses that canine throughout its career.

Chairman JOHNSON. Ms. Hutchinson, do you have anything to add to that?

Ms. HUTCHINSON. So it is slightly different on the TSA side of the house. So our canines, the explosive detection canines, which are all of our teams, are trained in a basic 15-week course. The passenger screening canines have an additional 10 weeks because it is a very different search capability. As you saw, it is not a static bag. It is somebody who is moving, and it is a person. So they have to see that person as a search possibility. And then after we basically imprint all of our dogs on the odors, we pair that dog with a handler for 10 to 12 weeks to figure out how to search people.

One of the things we are trying to do on the training side is to be more efficient and sort of looking at the science with our Science & Technology and training on sort of families of odors, because it does take a long time to train these dogs because it is such a high-stakes business. So how can we look at sort of rather than imprinting odor by odor, looking at families of odors? So we are trying to compress those timelines to be able to deploy dogs faster, but it is a hard job. We have to train to that job.

Chairman JOHNSON. Director Grover, you were talking about team failures. Can you just describe that in greater detail, what

you are talking about there? Just describe what you are talking about.

Ms. GROVER. Well, it would just be an opportunity—it would be a circumstance when a canine team missed an explosive aid during either the annual certification or as part of TSA's cycle assessments where they are really paying great attention to all of the PSC teams to ensure that they are performing well and enhancing their performance.

So the last data that GAO reviewed on this did show significant variation between the teams at the top-performing airports and the lower-performing airports, and that could be just because some teams had a bad day or two at the time of the testing, or it could be a longer-term issue. The details of the failure rates are Sensitive Security Information (SSI), so we can share them with your staff but not in a public environment. And TSA does have the data so that they can followup on that.

Chairman JOHNSON. Dr. Otto, do you have any opinions of why you have team failures? Would it be the handlers not doing the ongoing training, kind of keeping the dog current and themselves current? Could you just kind of speak to that?

Dr. OTTO. I think there are a number of different things that can influence it. What we looked at is, when are our dogs at their peak, when are they doing best? I think, this is another opportunity where we can help the dogs to do their jobs without as much handler influence. The more independent that the dogs are, the less chance of maybe the handler having a bad day, the dog having a bad day, either one of them; that we can really help that move forward.

I do think that there are a combination of environmental aspects that are going to affect it, but we definitely know in these teams that there is an interaction between the handler and the dog. So, paying attention to that.

We have also looked at some of the medical aspects that may affect a dog's ability to detect odor, and happily, we do not have obvious problems in a lot of the medications that we have been testing. But there are some medications that can actually decrease the odor detection ability of a dog.

Chairman JOHNSON. You are saying medications the dogs might—

Ms. OTTO. Dogs' medications.

Chairman JOHNSON. OK. And are there different breeds that are better at different things?

Ms. OTTO. I think there are different personalities within breeds that are better at different things. Again, if we go to our cancer detection, which is a very specialized area, we have a German Shepherd, a Labrador, and a Springer Spaniel. And in our search and rescue dogs, we have a spectrum of breeds as well, and it is so much more the personality within the breed. I think when we are really selecting these dogs that have the genetic capacity for odor detection, it is then how does that dog's personality interact with its genetics.

Chairman JOHNSON. Ms. Grover, you were talking about the added value of the specialized training for the passenger screening versus just conventional training. The bottom line, there is going

to have to be some specialized training because they are dealing with passengers as opposed to down the bowels of the airport just going through bags, correct?

Ms. GROVER. Probably, yes. But GAO is an evidence-based organization, and so we would always want to make sure that TSA has good evidence to support that all of these additional weeks of training are necessary to get the outcomes. No need to spend the taxpayer dollars—

Chairman JOHNSON. And we appreciate that, trust me.

Ms. GROVER. Right—unless it is necessary. And that data is not all in place yet.

Chairman JOHNSON. OK. Being an accountant, I like evidence and I like metrics.

Let me just close it out to both TSA and CBP. I really do want somebody within your organization providing written responses to questions for the record about, what is the desired level of teams here. My guess is you would all agree that they can be very effective, correct? And we really do need to take a hard look at—I do not want to be penny-wise and pound-foolish here. Just one instance of somebody getting through could be pretty harmful to our economy. So what I see, the 1,000 canine units within TSA, the 1,400—it costs money, but it is in the hundreds of millions of dollars versus the potential harm of a problem here. So I really do want to get a pretty good sense of how effective these are. What is the total cost? And what is the desired level? Because I would like to be supportive of this.

Let me just kind of close out the hearing, going down the line, if you have a final comment before we end the hearing. We will start with you, Ms. Hutchinson.

Ms. HUTCHINSON. Thank you for your strong support of our program. As you can see, they are very effective. We saw it here this morning. I know we need more across the system. We will get you that answer. We are looking at that as an organization.

One thing we did not talk about which I think is a huge benefit for canines is just the ability to evolve them with the threat. So we can train them very quickly as new threats emerge, and we can also deploy them differently, so as the threat changes to insider threat, we can move them to the back side of the airport very quickly. So it is a very portable asset for us as well, and I think that is significant for our mission.

Thank you.

Chairman JOHNSON. Mr. Montes.

Mr. MONTES. Once again, thank you as well. I want to point out one significant point. As we continue to evolve our CBP Canine Training Program, one of the emphasis is the type of dogs that we are selecting and the process that we have been able to refine. I will give you the statistical number because you said you liked metrics.

In fiscal year 2015, through our vendors, through our contracts, through our open source, 428 dogs were presented to us for possible selection of entering our service. Through our very rigorous performance and medical selection, we have only selected 278 of those. That is a 64-percent selection. So the dogs—there are an abun-

dance of canines out there, but we are looking for a particular type of canine for our mission.

Now, of those 270, currently we have 208 that have completed training. We have 51 that are in training. And only 11 of those dogs were not able to meet our performance standards. And we talk about lexicon as far as failure. That is what we would consider failures.

So as it is right now, the CBP canine program, the return on investment of taxpayer dollars, we are at a 95-percent success rate of dogs that walk through our door and our training that we are able to train, certify, and create a working dog team for the CBP operational components to enforce and secure our borders.

Chairman JOHNSON. Thank you, Mr. Montes. Director Grover.

Ms. GROVER. Yes, sir. TSA does have an effective program here, and they have made great strides in using the metrics that they need to oversee their program, and we look forward to working with them to address these final issues remaining.

Chairman JOHNSON. Thank you. Dr. Otto.

Dr. OTTO. I think that we all agree that the dogs do give us a huge advantage, and I think continuing in a collaborative research environment so that we can answer some of these questions, that we can provide those metrics. And I agree that the dogs are so flexible that even if a machine could detect some odor, when we look at the environments that they are working in and things that change, that whole ability for the dogs to problem-solve and reason really puts them kind of leaps and bounds ahead of any kind of machine-type approach to this problem.

Chairman JOHNSON. OK. I want to thank you all for your time and your testimony. I want to thank the handlers, the dogs. I know Senator Carper named them. He did not mention Jerry, so thanks to Jerry for being just cute and soft. [Laughter.]

Again, thank you all. I really do appreciate it.

With that, the hearing record will remain open for 15 days until March 18 at 5 p.m. for the submission of statements and questions for the record. This hearing is adjourned.

[Whereupon, at 11:07 a.m., the Committee was adjourned.]

A P P E N D I X

Chairman Johnson Opening Statement
“Dogs of DHS: How Canine Programs Contribute to Homeland Security”
Thursday, March 3, 2016

As submitted for the record:

Good morning and welcome.

Over the course of my time as chairman of this committee, we have held more than a dozen hearings on border and transportation security, both of which are critical components of national security. Today we will discuss the Department of Homeland Security’s canine programs—a significant, if underappreciated, tool in assisting the department every day in its mission to ensure that America is secure.

The concept of a working dog is familiar to most Americans. Dogs can serve as eyes for the blind and ears for the deaf. They can assist many Americans with mobility restrictions. They serve in the military, detecting IEDs and saving the lives of countless men and women in our armed forces. After disasters, dogs search for survivors and help rescue them.

When we encounter canine units in our airports, at our train stations, or even right here on the Capitol grounds, many of us don’t realize how different they are from the pets that live in our homes. Dogs have long been considered “man’s best friend,” but in the case of the DHS canine teams we have in our hearing room today, they are one of the most powerful, accurate and effective tools available to the department.

A dog’s sense of smell is estimated to be 10,000 times more powerful than our own. To put that in perspective, as one scientist put it, “A dog could detect a teaspoon of sugar in a million gallons of water.”

Earlier this year, I learned that dogs are even capable of smelling cancer in humans at rates that exceed some laboratory tests in use today. Diabetic detection dogs are trained to recognize chemical changes in the human body when blood sugar levels start to get too low or too high. Just as the medical community must consider how to take advantage of dogs’ incredible abilities, the homeland security community should continue to explore additional ways to incorporate such an effective, proven capability into its toolbox.

Researchers and scientists have spent billions of dollars and countless hours attempting to create detection technology capable of matching the sophistication of a dog’s nose. To date, these efforts have failed. As the committee of jurisdiction for the DHS, it is important for our members to be aware of how canine detection units are operating, the costs associated with them, and whether it is worth investing additional taxpayer dollars on the research and development of expensive technology if the best technology is sitting right here in front of us.

I look forward to having a better understanding of how and why working dogs are considered an asset to homeland security and learning more about the science behind their success. I thank all

the witnesses, canine handlers, and canines here today for their willingness to share their stories, and I look forward to your testimony.

Statement of Ranking Member Tom Carper
“Dogs of DHS: How Canine Programs Contribute to Homeland Security”
Thursday, March 3, 2016

As prepared for delivery:

During multiple visits to our Southern and Northern borders, I’ve been impressed by the many ‘force multipliers’ that help our border security officers maximize their effectiveness. Often, these force multipliers are high-tech – night vision cameras, aerostats, and surveillance planes.

But sometimes our officers get critical help from some low-tech friends. I’m thinking of the horses that guide Border Patrol agents through dense brush, or – as we will hear about today – of the gifted dogs who can sniff out threats that would be invisible to humans.

As we will hear, and perhaps even see, in moments, specially trained dogs can detect people or things that humans or machines might easily miss. Canines are already at work across a number of DHS programs. For instance, DHS uses dogs to check for explosives within our airports and train stations. We also see dogs hard at work at and between our ports of entry where they attempt to detect the illegal entry of people and goods.

We know that the special abilities of these animals have already contributed to our homeland security. For example, canine teams are credited with helping CBP seize more than 4,500 pounds of heroin in fiscal year 2015. That same year, dogs helped to track thousands of migrants along the Southwest border, and discovered 83 people hiding in vehicles crossing through ports of entry. Other dogs have helped detect illicit plants or animals, while some helped find human remains near the border.

Security is not the only mission for canine teams. Dogs have been invaluable in search and rescue efforts following natural disasters. This is an area where I’m not sure we are doing enough to take advantage of their capabilities.

At the same time, these valuable tools are not free. Dogs with the proper abilities and temperament to conduct searches are expensive to buy and even more expensive to train and deploy effectively. As with all of our security investments, we must make sure we are deploying these canine teams in a cost-effective way.

Today we will hear about some of the open questions regarding canine teams. In particular, GAO has taken a hard look at TSA’s canine program and raised some important questions about how and where they are trained and deployed. While TSA has successfully addressed some of GAO’s earlier concerns, I understand that other questions remain.

I look forward to hearing from both agencies about the current status of their canine programs and plans for the future. We also need to drill down on what these canines can and cannot accomplish and what information is needed to make sure we are making the right investments in these force multipliers.

“With that, I would like to thank our witnesses for being here and for sharing these wonderful dogs and their trainers and handlers with us today.

**Post-Hearing Statement for the Record
Submitted to the Committee on Homeland Security and Governmental Affairs
From Senator Gary C. Peters**

**“Dogs of DHS: How Canine Programs Contribute to Homeland Security”
March 3, 2016**

1. I first want to thank Chairman Johnson and Senator Carper for holding this important hearing. I would like to thank the witnesses, Kimberly Hutchinson, Damien Montes, Jennifer Grover and Cindy Otto, for sharing their valuable expertise and time with us.
2. What has struck me most about this hearing is how the testimony of all the witnesses has raised two connected issues: canine procurement and program costs. Perhaps obtaining more canines from shelters and rescue groups would help resolve both issues. According to The Humane Society of the United States, approximately 6 to 8 million dogs and cats enter the shelter system every year and approximately 2.4 million healthy and treatable animals are euthanized¹. In addition to resolving DHS’s canine supply problem and assisting in bringing down costs, obtaining canines from these sources will also reduce expenditures for state and local governments.
3. This idea is not new. In fact, the U.S. Customs and Border Protection (CBP) Canine Training Program already obtains many dogs from rescue shelters across the United States for its agriculture canine teams – deployed to detect odors that find illegal narcotics, smuggled humans, prohibited agriculture products and other items. Moreover, the U.S. Government Accountability Office (GAO) has previously recommended that the Transportation Security Administration (TSA) use conventional canines instead of Passenger Screening Canines (PSC) to detect explosives odor on passengers. TSA has not sufficiently explained why it has not implemented that recommendation. This is especially troubling as PSCs have the highest start-up costs of all the types of canine teams. Rescued canines are already performing similar tasks as PSC canines and, barring evidence to the contrary, are just as well suited to perform the tasks at a significantly lower cost.
4. The witnesses’ testimony and background briefing memo touched upon another point that bears highlighting: it is incumbent upon us to ensure that all working canines have a home environment including proper enrichment when their shift has ended. According to page 6 of the background briefing memo, while dogs in the TSA and Border Patrol programs are being housed in proper environments, canines working in the

Office of Field Operations (OFO) are not, as they are kenneled at the end of their shifts. Dogs are social animals that thrive in a home environment when provided with love and affection. They benefit from proper home environments where they can engage in their natural, social behavior. A humane housing environment enables them to relax and rejuvenate so that they will be at their best to perform their work day after day.

5. Accordingly, I recommend that we conduct a pilot study using canines procured from shelters and rescue groups to detect explosives odor on passengers and then assess whether DHS should procure dogs from shelters and rescue groups for additional canine programs. Moreover, we must commit to providing canines with appropriate housing during their working career as well as in their retirement, proper enrichment, downtime and rest, and top-notch veterinary care for the remainder of their lives. This committee must ensure that all working canines, regardless of their source, are treated with the respect and dignity that they have earned.

ⁱhttp://www.humanesociety.org/issues/pet_overpopulation/facts/pet_ownership_statistics.html

Testimony of

**Kimberly Hutchinson, Deputy Assistant Administrator,
Office of Training and Development, Transportation Security Administration
U.S. Department of Homeland Security**

and

**Damian Montes, Director, Canine Training Program,
Office of Training and Development, U.S. Customs and Border Protection
U.S. Department of Homeland Security**

before the

Senate Homeland Security and Governmental Affairs Committee

March 3, 2016

Chairman Johnson, Ranking Member Carper, and members of the committee, thank you for the opportunity to testify regarding the canine training programs at the Transportation Security Administration (TSA) and U.S. Customs and Border Protection (CBP). Canine teams at TSA and CBP provide the U.S. Department of Homeland Security (DHS) with reliable and mobile detection capabilities and a visible deterrent against criminal and terrorist threats.

TSA's Canine Training Center (CTC) and National Explosives Detection Canine Team Program (NEDCTP)

TSA procures, trains, and deploys both TSA-led and state and local law enforcement-led canine teams to secure our Nation's transportation systems through effective explosives detection, visible deterrence, and timely, mobile response to support rail stations, airports, passenger terminals, seaports, surface carriers, and other facilities.

TSA's National Explosives Detection Canine Team Program (NEDCTP) began as the Federal Aviation Administration's Explosives Detection Canine Program in 1972 and transferred to TSA in 2002. Congress has recognized the value of TSA's NEDCTP through its continued support and funding. TSA's NEDCTP is currently the largest explosives detection canine program in DHS, and the second largest in the federal government, with 997 funded National Explosives Detection Canine teams currently stationed at more than 100 of the Nation's airports, mass transit, and cargo environments. The success of TSA's NEDCTP is a prime example of federal, state, and local governmental entities working together with a common goal—to protect the transportation domain and the American people.

Given the security value of high quality explosive detection canines, particularly those best suited for passenger screening, TSA must ensure a reliable and adequate supply of canines. TSA procures canines primarily through an Interagency Service Support Agreement (ISSA) with the Department of Defense (DOD). Pursuant to the terms of the ISSA and as a result of our strong relationship with DOD's Military Working Dog Program, approximately 230 canines are supplied to TSA each year. TSA partners with DOD during the canine selection and evaluation process with both state-side vendors and overseas buying trips, ensuring TSA's needs are met.

In addition to procuring canines through DOD, TSA is exploring procurement of both trained and untrained canines from qualified private-sector businesses. TSA's goal is to procure an additional 20 trained Passenger Screening Canines and 20 untrained canines suitable for passenger screening environments in Fiscal Year 2016 through this new procurement initiative.

Once TSA procures a canine, the Agency pairs it with a federal, state, or local handler to be trained to operate in the aviation, multimodal, maritime, mass transit, or cargo environments.

The majority of canine teams working in the aviation environment are comprised of a canine and a state or local law enforcement officer. For these teams, TSA provides and trains the dog, trains the handler, provides training aids and explosive storage magazines, and conducts annual on-site canine team re-certifications. TSA partially reimburses each participating agency for operational costs associated with maintaining the teams, including veterinarians' fees, handlers' salaries, dog food, and equipment. In return, the law enforcement agencies agree to use the canines in their assigned transportation environment for at least 80 percent of the handler's duty time. State and local law enforcement participation in the program is voluntary, and these organizations play a critical role in TSA's mission to ensure the safe movement of commerce and people throughout the Nation's transportation security environment.

In addition to state and local law enforcement-led teams, TSA Inspectors lead 322 canine teams, including all Passenger Screening Canine (PSC) teams, which are specifically trained to detect explosives' odor on passengers in the checkpoint environment, in addition to their conventional explosives detection role.

TSA and state and local law enforcement handlers travel from across the country to TSA's Canine Training Center (CTC), located at Joint Base San Antonio-Lackland, to be paired with a canine and complete either a 10-week conventional Explosives Detection Canine (EDC) course or a 12-week PSC course. The canine teams learn explosives detection in an intense training environment, utilizing 13 indoor venues located on the CTC premises that mimic a variety of transportation sites such as a cargo facility, airport gate, passenger screening checkpoint, baggage claim area, aircraft interior, vehicle parking lot, light rail station, light rail

car, and air cargo facility, among others. Teams are trained to detect a variety of explosives based on intelligence data and emerging threats.

On March 4, 2016, as part of TSA Administrator Peter Neffenger's commitment to world-class training, TSA will hold a ribbon-cutting ceremony for a new 25,000 square-foot facility at the CTC with seven new classrooms, a 100-seat auditorium, and administrative space along with a parking lot and courtyard. The new facility is designed to support TSA's mission by providing, training, and certifying highly effective explosive detection canine teams and is the result of collaborative efforts among TSA, Joint Base San Antonio-Lackland, and the U.S. Army Corps of Engineers.

Once a team graduates from the training program, they return to their duty station to acclimate and familiarize the canine to their assigned operational environment. Approximately 30 days after graduation, an Operational Transition Assessment (OTA) is conducted to ensure each team demonstrates operational proficiency in their environment. OTA assessments include four key elements: the canine's ability to recognize explosives' odors, the handler's ability to interpret the canine's change of behavior, the handler's ability to conduct logical and systematic searches, and the team's ability to locate the explosives' odor source. Upon successful completion of the OTA, NEDCTP canine teams are then evaluated on an annual basis under the most stringent of applicable certification standards.

TSA allocates canine teams to specific cities and airports utilizing risk-based criteria that take into account multiple factors, including threat score, number of people with secure access, and passenger throughput. PSC teams are critical to TSA's risk-based security efforts and are deployed to operate during peak travel times at 40 of the Nation's largest airports, where they

have the opportunity to screen tens of thousands of passengers every day. TSA is working to train and certify all of its 322 canine teams in both PSC and traditional explosive detection by the end of Fiscal Year 2017.

In addition to deployments at passenger screening checkpoints, TSA and law enforcement-led teams conduct a variety of search and high visibility activities that address potential threats in the transportation domain. For example, canine teams participate in Visible Intermodal Prevention and Response (VIPR) operations. VIPR teams can include a variety of federal, state, and local law enforcement and security assets as well as TSA personnel including Federal Air Marshals, Transportation Security Specialists-Explosives, Transportation Security Inspectors, and TSA-certified explosives detection canine teams.

The Government Accountability Office, DHS Inspector General, and other independent testers have proven canine teams to be one of the most effective means of detecting explosive substances. They are critical to TSA's focus on security effectiveness, and TSA continues to develop the NEDCTP to maximize the program's contributions to transportation security.

CBP's Canine Training Program

Canines have a critical role in CBP's mission of securing the border. At our Nation's air, land, and sea ports of entry (POE) and at preclearance locations abroad, CBP officers utilize specially trained canines for interdiction and in support of specialized programs aimed at combating terrorism, as well as countering narcotics, firearms, human, and undeclared currency smuggling. In between the POEs, the U.S. Border Patrol (USBP) uses canines to detect undocumented aliens and illegal drugs at checkpoints and along our borders. The CBP Canine Training Program maintains the largest and most diverse law enforcement canine training

program in the country, primarily responsible for the training of 1,289 of the over 1,400 CBP canine teams currently deployed throughout the United States.¹

The primary mission of the CBP Canine Training Program is to develop, train and certify CBP officer/agent canine handler teams and instructors in the detection and apprehension of undocumented aliens, seizure of controlled substances and other contraband utilized to finance terrorist or criminal drug trafficking organizations. Under the direction of the Office of Training and Development (OTD), the CBP Canine Training Program offers formal training to various federal, state, and local agencies. Additionally, the CBP Canine Training Program supports canine training initiatives under the direction of the Office of International Affairs, in coordination with the Departments of Defense and State and USAID, in their support of providing foreign partners' capacity building and technical assistance, championing the development of global trade and travel standards, and promoting the United States Government's objectives in anti-terrorism, border security, customs, immigration, and facilitation of legitimate trade and travel. As a resource center, the CBP Canine Training Program provides guidance on canine training issues, legal requirements, and certification standards to CBP's operational components – the Office of Field Operations (OFO) and the USBP. While OTD develops and establishes the training requirements of CBP's canines, the utilization, maintenance, and deployment of canine teams is managed by the OFO and the USBP.

¹ Of the current 1,400 canines deployed today in CBP, the CBP Canine Training Program has trained 1,289. The remaining 111 are agriculture canines trained by the U.S. Department of Agriculture in Newnan, GA.

The CBP Canine Training Program oversees two training delivery sites in El Paso, Texas and Front Royal, Virginia. CBP's agriculture canine teams are trained at the USDA's National Detector Dog Training Center in Newnan, Georgia.

CBP Canine Training Program History

During the latter part of 1969, the former U.S. Customs Service carried out a study to determine the feasibility of using detection canines in the fight against drug smuggling. As a result, canine trainers from various branches of the U.S. military were recruited, and on April 1, 1970, the U.S. Customs narcotic detector dog training program was established in San Antonio, Texas. Initially, efforts were concentrated on training dogs to detect the odors of marijuana and hashish, but the ever increasing smuggling of narcotics made the detection of heroin and cocaine equally critical.

In July 1974, the U.S. Customs Service detector dog training operation was relocated from San Antonio to its current location 70 miles west of Washington, D.C., in the town of Front Royal, Virginia. In 1991, Congress approved additional funding for the facility in Front Royal, which enabled the construction of a new 100-run kennel, academic building, small arms firing range, and vehicle training areas. These new additions brought the detection training program facility up to date as it continued to produce canines trained in disciplines such as searching pedestrians and detecting the odors of narcotics, currency, firearms, and explosives.

In 1986, in response to an alarming increase in undocumented alien apprehensions and narcotics seizures, the USBP created a pilot training program which consisted of four canine teams trained to detect concealed humans, and the odors of heroin, cocaine, methamphetamine, and marijuana along our Nation's border. During the first five months of service, the four canine

teams accounted for numerous apprehensions of concealed people and over \$150,000,000 in seized narcotics. The operational impact of a trained detection canine team was clear. By the end of 1988, the USBP added 75 additional certified canine teams.

In order to establish consistency in training and certification standards, in 1993, the USBP established its own canine training facility in El Paso, Texas. The USBP National Canine Facility adopted ideologies and disciplines from European working dog standards and has received numerous accolades and recognition from local, state, federal, and various international law enforcement agencies.

In the aftermath of the terrorist acts of September 11, 2001, as a component of the newly formed CBP, the USBP and OFO's canine training programs were consolidated under CBP's OTD and renamed Canine Center El Paso (CCEP) and Canine Center Front Royal (CCFR). On October 1, 2009, the CCEP and CCFR were merged to create the CBP Canine Training Program. An integrated core curriculum was adopted combining the best practices of the legacy OFO and USBP training programs. Training has been customized to ensure that the unique requirements of the OFO and USBP are met.

CBP took the best practices from the OFO and USBP canine training programs, and combined them into one standardized curriculum containing identical training philosophies and methodologies geared toward individual agency operational requirements. This compatibility strengthened CBP's ability to effectively deploy resources to meet operational requirements regardless of mission and/or operational component, in effect multiplying CBP's canine force through unification.

CBP Canine Training Disciplines

The CBP Canine Training Program possesses a unified training cadre consisting of OFO and USBP personnel who deliver training to integrated classes made up of CBP officers and USBP agents throughout CBP. This commonality brings with it the opportunity to seamlessly interchange staff to further integrate the CBP Canine Training Program. New canine teams continue to be trained in disciplines such as concealed human detection, pedestrian processing, detecting the odors of narcotics, currency and firearms, tracking and trailing, patrol, search and rescue, and human remains detection.

Concealed Human and Narcotic Detection:

The Concealed Human Narcotic Detection Handler course includes in-depth training and certification in all aspects of canine behavior, along with handling, training and employing a passive indication detection canine, as well as canine policy, case law and canine first-aid. Both the officer/agent and the canine are taught proper search sequences when searching private and commercial conveyances, freight, luggage, mail, open areas of land and structures. Concealed Human and Narcotic Detection Canines are taught to detect concealed humans and the odors of marijuana, cocaine, heroin, methamphetamine, hashish, and ecstasy.

Search and Rescue:

The Search and Rescue Handler course includes in-depth training and certification in all aspects of canine behavior, along with handling, training and employing a dual-trained search and rescue trailing canine, as well as canine policy, case law and canine first-aid. In tandem the agent and canine are trained in obedience, tracking/trailing and large area search. The canine

teams receive training in rappelling for helicopter operations, backtracking, and deployments in various environments, including snowy conditions, deserts, forests, and mountains.

Tracking/Trailing:

The Tracking/Trailing Handler course provides added capability to teams previously trained in detection or patrol. This course includes in-depth training involving conditioning a canine to follow the route of a person or persons traversing various types of terrain.

Patrol:

The Patrol Canine Handler course includes in-depth training and certification in all aspects of canine behavior, along with handling, training and employing a patrol canine to search, detain and when necessary physically subdue violent, combative subjects. This course also includes training in canine policy, case law and canine first-aid.

Canine Currency/Firearms Detection:

The Currency/Firearms Detection Handler course includes in-depth training and certification in all aspects of canine behavior, along with handling, training and employing a passive indication detection canine, as well as canine policy, case law and canine first-aid. Both the officer and the canine are taught proper search sequences when searching pedestrians, private and commercial conveyances, freight, luggage, mail, open areas of land and structures.

Human Remains Detection/Cadaver:

In a regimen added to the Search and Rescue capability, canines are trained in the discipline of locating the odors of human decomposition. This ability enables the team to assist

in a myriad of situations ranging from locating the remains of persons who have expired in remote areas to assisting local law enforcement with suspicious death investigations and responding in recovery operations during natural disasters and terrorist attacks.

Canine Instructor:

The CBP Canine Training Program trains experienced agents and officers to function as canine instructors in each of the varied disciplines for their respective components. This consists of extensive academic and practical training on canine methodology and problem solving theory. The instructor develops the canines and handlers to function as a team from the initial point of training through to certification and graduation. Upon completion of training, instructors return to their respective stations or ports to provide maintenance training for existing certified teams, additionally providing insight and guidance to administrative staffs and serving as subject matter experts on the handling and deployment of canine teams.

CBP Agriculture Canines

In 2003, when the USDA transferred Plant Protection and Quarantine Officers to CBP, approximately 74 canine teams were included. Today, about 111 CBP agriculture canine teams provide screening at the border crossings, preclearance locations, air passenger terminals, cruise terminals, cargo warehouses, and mail facilities that process international passengers and commodities. All CBP agriculture specialist canine handlers and their canine partners complete the initial 10- to 13-week CBP Agriculture Specialist Canine Training at the USDA National Detector Dog Training Center (NDDTC). All the detector dogs at the NDDTC are adopted from rescue shelters in the United States or come to the program from private donations.

Conclusion

In conclusion, the TSA and CBP's canine training programs provide highly trained canine teams focused on advancing DHS's mission to secure the homeland and protect Americans. Canine teams offer unique capabilities across various disciplines and can be deployed throughout diverse operating environments. Thank you for the opportunity to discuss these important programs with you today.



United States Government Accountability Office

Testimony
Before the Committee on Homeland
Security and Government Affairs,
U.S. Senate

For Release on Delivery
Expected at 10:00 a.m. ET
Thursday, March 3, 2016

EXPLOSIVES DETECTION CANINES

TSA Has Enhanced Its Canine Program, but Opportunities May Exist to Reduce Costs

Statement of Jennifer Grover, Director
Homeland Security and Justice

GAO Highlights

Highlights of GAO-16-444T, a testimony before the Committee on Homeland Security and Governmental Affairs, U.S. Senate

Why GAO Did This Study

TSA has implemented a multilayered system composed of people, processes, and technology to protect the nation's transportation systems. One of TSA's security layers is comprised of nearly 800 deployed explosives detection canine teams—a canine paired with a handler. These teams include PSC teams trained to detect explosives on passengers and conventional canines trained to detect explosives in objects, such as cargo.

In January 2013, GAO issued a report on TSA's explosives detection canine program. This testimony addresses the steps TSA has taken since 2013 to enhance its canine program and further opportunities to assess the program.

This statement is based on GAO's January 2013 report, a June 2014 testimony, and selected updates conducted in February 2016 on canine training and operations. The products cited in this statement provide detailed information on GAO's scope and methodology. For the selected updates, GAO reviewed the president's fiscal year 2017 budget request for TSA and interviewed TSA officials on changes made to NEDCTP since June 2014, the last time GAO reported on the program.

What GAO Recommends

GAO is making no new recommendations in this statement.

View GAO-16-444T. For more information, contact Jennifer Grover, (202) 512-7141, groverj@gao.gov.

March 3, 2016

EXPLOSIVES DETECTION CANINES

TSA Has Enhanced Its Canine Program, but Opportunities May Exist to Reduce Costs

What GAO Found

The Transportation Security Administration (TSA) has taken steps to enhance its National Explosives Detection Canine Team Program (NEDCTP) since GAO's 2013 report, but further opportunities exist for TSA to assess its canine program and potentially reduce costs.

TSA Uses Data to Assess Canine Team Proficiency and Utilization: In January 2013, GAO reported that TSA needed to take actions to analyze NEDCTP data and ensure canine teams are effectively utilized. GAO recommended that TSA regularly analyze available data to identify program trends and areas that are working well and those in need of corrective action to guide program resources and activities. TSA concurred, and in June 2014, GAO reported that the agency had taken actions that address the recommendation. GAO subsequently closed the recommendation as implemented in August 2014. Since then, according to TSA officials, the agency has continued to enhance its canine program. For example, TSA reported that it requires canine teams to train on all explosives training aids they must be able to detect—any explosive used to test and train a canine—in all search areas (e.g., aircraft), every 45 days.

TSA has Deployed PSC Teams to the Highest-Risk Airports: GAO found in January 2013 that passenger screening canine (PSC) teams were not being deployed to the highest-risk airports as called for in TSA's 2012 Strategic Framework or utilized for passenger screening. GAO recommended that TSA coordinate with airport stakeholders to deploy future PSC teams to the highest-risk airports and ensure that deployed teams were utilized as intended. TSA concurred, and in June 2014, GAO reported that PSC teams had been deployed or allocated to the highest-risk airports. In January 2015, GAO closed the recommendation as implemented after TSA deployed all remaining PSC teams to the highest-risk airports and all teams were being utilized for passenger screening.

Opportunities May Exist for TSA to Reduce Canine Program Costs: GAO reported in 2013 that TSA began deploying PSC teams prior to determining their operational effectiveness and identifying where within the airport these teams would be most effectively utilized. GAO recommended that TSA take actions to comprehensively assess the effectiveness of PSCs. TSA concurred and has taken steps to determine the effectiveness of PSC teams and where in the airport to optimally deploy such teams. However, TSA did not compare the effectiveness of PSCs and conventional canines in detecting explosives odor on passengers to determine if the greater cost of training PSCs is warranted. In December 2014, TSA reported that it did not intend to do this assessment because of the liability of using conventional canines to screen persons when they had not been trained to do so. GAO closed the recommendation as not implemented, stating that conventional canines currently work in close proximity with people as they patrol airport terminals, including ticket counters and curbside areas. GAO continues to believe that opportunities may exist for TSA to reduce costs if conventional canines are found to be as effective at detecting explosives odor on passengers as PSCs.

Chairman Johnson, Ranking Member Carper, and Members of the Committee:

I appreciate the opportunity to discuss our work on the Transportation Security Administration's (TSA) National Explosives Detection Canine Team Program (NEDCTP). TSA, an agency within the Department of Homeland Security (DHS), is the primary federal agency responsible for the security of the nation's transportation systems. Since the terrorist attacks of September 11, 2001, TSA has implemented a multilayered system of security composed of people, processes, and technology to protect transportation systems. One of TSA's security layers is comprised of nearly 800 deployed explosives detection canine teams—a canine paired with a handler—aimed at deterring and detecting the use of explosive devices in U.S. transportation systems.¹

Through NEDCTP, TSA trains, deploys, and certifies explosives detection canine teams. The program began under the Federal Aviation Administration (FAA) in 1972 as a partnership with state and local law enforcement agencies with jurisdiction over airports by pairing state and local law enforcement officer (LEO) handlers with conventional canines—canines trained to detect explosives in objects (e.g., baggage and vehicles). In accordance with the Aviation and Transportation Security Act, enacted in November 2001, TSA assumed from FAA primary responsibility for civil aviation security and, as a result, the transfer of FAA's canine program to TSA was accomplished in March 2003.² TSA subsequently expanded the program beyond airports to other transportation modes, including mass transit and maritime. In January 2008, TSA further expanded the program to include transportation security inspector (TSI) canine teams responsible for screening air cargo.³ In 2011, TSA again expanded the program by deploying TSI handlers to airports with passenger screening canines (PSC)—

¹NEDCTP is located within TSA's Office of Security Operations.

²Specifically, the Aviation and Transportation Security Act established, within the Department of Transportation, TSA as the agency responsible for securing the nation's transportation systems. See Pub. L. No. 107-71, § 101(a), 115 Stat. 597 (2001). TSA subsequently transferred to the newly established DHS pursuant to the Homeland Security Act of 2002. See Pub. L. No. 107-296, § 403, 116 Stat. 2135, 2178 (2002).

³Unlike LEOs, TSIs are unarmed TSA personnel with no authority to take law enforcement action (e.g., arrest or detain).

conventional canines also trained to detect explosives being carried or worn on a person. Furthermore, in 2015, TSA began training and certifying all TSI air cargo teams as PSC teams.⁴ By the end of calendar year 2016, TSA expects that all air cargo teams will be PSC certified, providing the agency greater flexibility in how it can utilize its canine teams.

My testimony today addresses the steps TSA has taken since 2013 to enhance its canine program and further opportunities to assess the program. This statement is based on our January 2013 report, June 2014 testimony, and includes selected updates on canine training and operations.⁵ The products cited in this statement provide detailed information on our scope and methodology. To conduct our selected updates, we reviewed the president's fiscal year 2017 budget request for TSA and interviewed agency officials in February 2016 on changes made to NEDCTP since June 2014. The work upon which this statement is based was conducted in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

NEDCTP's mission is to deter and detect the introduction of explosive devices into U.S. transportation systems. As of February 2016, NEDCTP has deployed 787 of the 997 canine teams for which it has funding available in fiscal year 2016 across transportation systems.⁶ There are four types of LEO canine teams: aviation, mass transit, maritime, and

⁴TSA plans on dual certifying all TSI-led teams as PSC teams, but is not dual certifying LEO-led conventional canine teams.

⁵GAO, *Explosives Detection Canines: TSA Has Taken Steps to Analyze Canine Team Data and Assess the Effectiveness of Passenger Screening Canines*, GAO-14-695T (Washington, D.C.: June 24, 2014); and *TSA Explosives Detection Canine Program: Actions Needed to Analyze Data and Ensure Canine Teams Are Effectively Utilized*, GAO-13-239 (Washington, D.C.: Jan. 31, 2013). GAO-13-239 is a public version of a sensitive report that we issued in December 2012 under the same title. Information TSA deemed Sensitive Security Information was redacted.

⁶As of February 2016, an additional 149 teams are "in transition" meaning that they are in training, awaiting an operational assessment, or canine replacement, among other things.

multimodal; and two types of TSI canine teams: multimodal and PSC. Table 1 shows the number of canine teams by type for which funding is available, describes their roles and responsibilities, and costs per team to TSA.

Table 1: Total Number, Roles and Responsibilities, and Federal Costs of Transportation Security Administration (TSA) Canine Teams by Type of Team

Type of canine team	Number of teams for which funding is available ^a	Description of roles and responsibilities	TSA start-up costs per team ^b	TSA annual costs per team ^c
Law enforcement officer (LEO): aviation	503	Patrol airport terminals, including ticket counters, curbside areas, and secured areas; respond to calls to search unattended items, such as vehicles and baggage; screen air cargo; and serve as general deterrents to would-be terrorists or criminals	\$85,000	\$54,000
LEO: mass transit	127	Patrol mass transit terminals; search platforms, railcars, and buses; respond to calls to search unattended items, such as baggage; and serve as general deterrents to would-be terrorists or criminals	\$85,000	\$54,000
LEO: maritime	11	Conduct similar activities as LEO mass transit teams at ferry terminals	\$85,000	\$54,000
LEO: multimodal	34	Patrol and search transportation modes in their geographic area (e.g., aviation, mass transit, and maritime), and screen air cargo	\$85,000	\$54,000
Transportation security inspector (TSI): multimodal ^d	46	Patrol and search transportation modes in their geographic area (e.g., aviation, mass transit, or maritime), and screen air cargo	\$218,000	\$153,000
TSI: Passenger screening canine (PSC) ^e	276	Primarily search for explosives odor on passengers in airport terminals	\$223,000	\$154,000
Total	997			

Source: GAO analysis of TSA data. | GAO-16-444T

^aThe number of teams for which funding is available in fiscal year 2016.

^bThe cost data are as of July 2015, and have been rounded to the nearest thousand. Start-up costs reflect the costs incurred by TSA during the first year the canine team is deployed. Annual costs include the operations and maintenance costs incurred by TSA to keep canine teams deployed after their first year in the program.

^cWhile the types of TSI-led teams are categorized as either multimodal or passenger screening canine, according to TSA, the agency's long-term intent is to have all 322 TSI teams categorized as multimodal once trained in passenger screening so they can operate across modes to meet mission needs. TSI-led teams previously categorized as air cargo teams have been included above as passenger screening teams since TSA is in the process of certifying those teams as PSC teams.

TSA's start-up costs for LEO teams include the costs of training the canine and handler, and providing the handler's agency a stipend.⁷ The annual costs to TSA for LEO teams reflect the amount of the stipend. TSA's start-up and annual costs for TSI canine teams are greater than those for LEO teams, because TSI handlers are TSA employees and therefore the costs include the handlers' pay and benefits, service vehicles, and cell phones, among other things. PSC teams come at an increased cost to TSA compared with other TSI teams because of the additional 2 weeks of training and costs associated with providing decoys (i.e., persons pretending to be passengers who walk around the airport with explosive training aids). In fiscal year 2016, approximately \$121.7 million of amounts appropriated to TSA were available for its canine program. For fiscal year 2017, TSA is requesting approximately \$131.4 million, a \$9.7 million increase compared to the prior fiscal year. According to a TSA official, the increase is for projected pay increases and 16 additional positions to support canine training and operations, among other things.

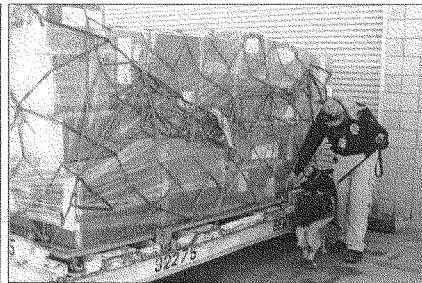
Figure 1 shows LEO, TSI, and PSC teams performing searches in different environments.

⁷The annual stipend is the federal cost share TSA provides per LEO team pursuant to a cooperative agreement between TSA and the LEO team's agency (state or local). Certain items and services are reimbursable by TSA through the stipend, including canine food and veterinary care. The LEO team's agency is responsible for any costs incurred greater than the amount covered by the stipend.

Figure 1: Various Types of Canine Teams



Law enforcement officer team patrolling mass transit terminal



Transportation security inspector team screening air cargo



Passenger screening canine team searching airport terminal

Source: GAO. | GAO-16-444T

Conventional canines undergo 15 weeks of explosives detection training, and PSCs 25 weeks, before being paired with a handler at TSA's Canine Training Center (CTC), located at Lackland Air Force Base. Conventional canine handlers attend a 10-week training course, and PSC handlers attend a 12-week training course.⁸ The 2 additional weeks are used to train PSC teams in actual work environments.⁹ Canines are paired with a LEO or TSI handler during their training course. After canine teams complete this training, and obtain initial certification, they acclimate to their home operating environment for a 30-day period. Upon completion of the acclimation period, CTC conducts a 3-day operational transitional assessment to ensure canine teams are not experiencing any performance challenges in their home operating environment.

⁸The majority of canine teams are trained by TSA's CTC. However, according to TSA officials, because of resource constraints, TSA contracted with Strijder Group K9, which subcontracted to Auburn University's Canine Detection Training Center to train some of the initial PSC teams deployed in 2011 and 2012.

⁹As previously mentioned, TSA is certifying air cargo teams as PSC teams. To facilitate this transition, CTC developed and rolled out a 4-week PSC training course (referred to as the bridge course) for handlers who were already trained and certified with conventional canines.

After initial certification, canine teams are evaluated on an annual basis to maintain certification. During conventional explosives detection evaluations, canine teams must demonstrate their ability to detect all the explosive training aids the canines were trained to detect in five search areas (e.g., aircraft).¹⁰ The five search areas are randomly selected among all the possible types of search areas, but according to CTC, include the area that is most relevant to the type of canine team. For example, teams assigned to airports will be evaluated in areas such as aircraft and cargo. Canine teams must find a certain percentage of the explosive training aids to pass their annual conventional evaluation. In addition, a specified number of nonproductive responses—when a canine responds to a location where no explosives odor is present—are allowed. After passing the conventional evaluation, PSC teams are required to undergo an additional annual evaluation that includes detecting explosives on a person, or being carried by a person. PSC teams are tested in different locations within the sterile areas and passenger screening checkpoints of an airport.¹¹ A certain number of persons with explosive training aids must be detected, and a specified number of nonproductive responses are allowed for PSC certification.

¹⁰An explosive training aid is any explosive used to test and train a canine in explosives detection.

¹¹The sterile area of an airport is the portion in an airport, defined in the airport's security program, that provides passengers access to boarding aircraft and to which the access generally is controlled by TSA through the screening of persons and property. See 49 C.F.R. § 1540.5. The passenger screening checkpoint is the location within an airport at which passenger access to the sterile area and boarding aircraft is controlled through the screening of persons and their accessible property.

TSA Has Taken Steps Since 2013 to Enhance Its Canine Program, but Further Opportunities May Exist to Assess the Program and Reduce Costs

TSA has taken steps to enhance NEDCTP since we issued our 2013 report.¹² For example, TSA has used data, such as the results of covert tests, to assess the proficiency and utilization of its canine teams. However, further opportunities exist for TSA to assess its program related to the use and cost of PSC teams.

TSA Uses Data to Assess Canine Team Proficiency and Utilization

In January 2013, we reported that TSA collected and used key canine program data in its Canine Website System (CWS), a central management database, but it could better analyze these data to identify program trends. For example, we found that TSA did not analyze training minute data over time (from month to month) and therefore was unable to determine trends related to canine teams' compliance with the requirement to train 240 minutes each month. Similarly, TSA collected monthly data on the amount of cargo TSI teams screened in accordance with the agency's requirement, but had not analyzed these data over time to determine if, for example, changes were needed in the screening requirement or the number of teams deployed. Table 2 highlights some of the key data elements included in CWS at the time of our prior review.

Table 2: Key Data Elements Recorded in the Canine Website System (CWS)

Data element	Description
Training minutes	- Canine handlers record time spent conducting training to ensure canine teams maintain proficiency in detecting explosives odor. - The Transportation Security Administration (TSA) requires canine teams to conduct a minimum of 240 proficiency training minutes every 4 weeks (month) and for handlers to record training minutes in CWS within 48 hours.
Utilization minutes	- Law Enforcement Officer teams record time spent patrolling transportation terminals, searching for explosives odor in railcars and buses, for example, and screening air cargo. - Transportation Security Inspector teams record time spent screening cargo, which is their primary responsibility. - TSA requires canine handlers to record utilization minutes in the CWS within 48 hours.

¹²GAO-13-239.

Data element	Description
Certification rates	Canine Training Center evaluators record the results (certified^a or decertified^b) of annual canine team evaluations.
Short notice assessments	- Field Canine Coordinators administer short notice assessments—covert tests to assess canine teams' level of operational effectiveness—on two canine teams within each participating agency they oversee each year. - Field Canine Coordinators are required to document results of short notice assessments, and handlers are required to record results, in CWS.
Final canine responses	- Canine handlers record final canine responses—instances when a canine sits, indicating to its handler that it detects explosives odor. - Canine handlers are instructed to document final canine responses into CWS and submit swab samples to TSA's Canine Explosives Unit to be analyzed for explosives odor.

Source: GAO analysis of TSA documentation. | GAO-16-444T

^aCertified teams are canine teams that passed their annual evaluation and are certified to search for explosives.

^bDecertified teams are canine teams that failed their annual evaluation and are limited to training and providing mobile deterrence.

In January 2013, we recommended that TSA regularly analyze available data to identify program trends and areas that are working well and those in need of corrective action to guide program resources and activities. These analyses could include, but not be limited to, analyzing and documenting trends in proficiency training minutes, canine utilization, results of short notice assessments (covert tests) and final canine responses, performance differences between LEO and TSI canine teams, as well as an assessment of the optimum location and number of canine teams that should be deployed to secure the U.S. transportation system. TSA concurred with our recommendation, and in June 2014 we reported on some of the steps it had taken to implement the recommendation. Specifically, TSA monitored canine teams training minutes over time by producing annual reports. For example, TSA analyzed canine teams' compliance with the training requirement throughout fiscal year 2013 to identify teams repeatedly not in compliance with the monthly requirement. Field Canine Coordinators subsequently completed comprehensive assessment reviews for their canine teams, which involved reporting on the teams that did not meet the requirement. TSA also reinstated short notice assessments in July 2013, since they had suspended them in May 2012. We reported that in the event a team fails a short notice assessment, the Field Canine Coordinator completes a report that includes an analysis of the team's training records to identify an explanation for the failure. According to TSA officials, in March 2014, NEDCTP stood up a new office, known as the Performance Measurement Section, to perform analyses of canine team data. Those actions, among others, addressed the intent of our recommendation by positioning TSA to identify program trends to better target resources and activities based on

what is working well and what may need corrective action. Therefore, we closed the recommendation as implemented in August 2014.

Since we closed the recommendation, according to TSA officials, the agency has continued to take steps to enhance its canine program. For example, TSA eliminated the monthly 240-minute training requirement and instead requires canine teams to train on all explosives training aids they must be able to detect, in all search areas (e.g., aircraft), every 45 days.¹³ In April 2015, TSA also eliminated canine teams' requirement to screen a certain volume of air cargo. Instead, TSA requires TSI-led canine teams to spend at least 40 percent of their time on utilization activities, such as patrolling airport terminals and screening air cargo. Canine teams can spend the rest of the time on administrative activities, such as taking their canine to the veterinarian. Handlers record their daily activities in a web-based system, which allow TSA to assess how the canine teams are being used. According to TSA, utilization time increased five percent in fiscal year 2015 since the requirement changed. In February 2016, TSA officials told us that starting in fiscal year 2016, TSA increased the number of short notice assessments required from two to five per year for each state and local law enforcement agency that participates in NEDCTP. According to a TSA official, the number was increased since TSA believes such assessments are helpful in determining the proficiency of canine teams. Furthermore, CTC placed 34 Regional Canine Training Instructors in the field to review canine teams' training records and assist them in resolving any performance challenges, such as challenges in detecting a particular explosive aid.

TSA has Deployed PSC Teams to the Highest-Risk Airports

We also reported in January 2013 that TSA's 2012 Strategic Framework called for the deployment of PSC teams based on risk; however, airport stakeholder concerns about the appropriateness of TSA's protocols for resolving PSC team responses resulted in these teams not being deployed to the highest-risk airports or utilized for passenger screening.¹⁴ We recommended that TSA coordinate with airport stakeholders to deploy future PSC teams to the highest-risk airports, and ensure that

¹³The new requirement applies to TSI-led canine teams, but TSA officials told us it will apply to LEO-led teams as well starting in October 2016.

¹⁴For the purpose of allocating PSC teams to airports, TSA developed a model to rank airports from highest to lowest risk.

deployed PSC teams are utilized as intended, consistent with the agency's statutory authority to provide for the screening of passengers and their property. TSA concurred with our recommendation, and in June 2014, we reported that the PSC teams for which TSA had funding and not already deployed to a specific airport at the time our 2013 report had been deployed to or allocated to the highest-risk airports. We also reported that, according to TSA officials, of all the airports where PSC teams had been deployed, all but one airport had agreed to allow TSA to conduct screening of individuals using PSC teams at passenger screening checkpoint queues.

According to TSA, the agency was successful in deploying PSC teams to airports where they were previously declined by aviation stakeholders for various reasons. For example, TSA officials explained that stakeholders have realized that PSCs are an effective means for detecting explosives odor, and no checkpoints have closed because of a nonproductive response. In January 2015, we closed the recommendation as implemented after TSA deployed all remaining PSC teams (those which had previously been allocated) to the highest-risk airports and all PSC teams were being utilized for passenger screening. Since we closed the recommendation, TSA has continued to allocate and deploy additional PSC teams for which it has received funding to the highest-risk airports based on its assessment of how high the risks are to particular airports. In addition, from November 2015 to January 2016, TSA relocated PSC teams located at 7 lower-risk airports to higher-risk airports. As a result, TSA has PSC teams deployed at nearly all category X airports, which are generally higher-risk airports.¹⁵ According to TSA officials, all category X airports will have PSC teams by the end of calendar year 2016.

¹⁵TSA classifies TSA-regulated (i.e., commercial) airports in the United States into one of five security risk categories (X, I, II, III, and IV) based on various factors, such as the total number of takeoffs and landings annually, and other special security considerations. In general, category X airports have the largest number of passenger boardings, and category IV airports have the smallest.

**Further Opportunities May
Exist for TSA to Assess Its
Canine Program and
Reduce Costs**

In our January 2013 report, we found that TSA began deploying PSC teams in April 2011 prior to determining the teams' operational effectiveness, and had not completed an assessment to determine where within the airport PSC teams would be most effectively utilized. In June 2012, the DHS Science and Technology Directorate (S&T)¹⁶ and TSA began conducting effectiveness assessments to help demonstrate the effectiveness of PSC teams, but the assessment was not inclusive of all areas of the airport (i.e., the sterile area, passenger screening checkpoint, and public side of the airport).¹⁷ During the June 2012 assessment of PSC teams' effectiveness, TSA conducted one of the search exercises used for the assessment with three conventional canine teams. Although this assessment was not intended to be included as part of DHS S&T and TSA's formal assessment of PSC effectiveness, the results of this assessment suggested, and TSA officials and DHS S&T's Canine Explosives Detection Project Manager agreed, that a systematic assessment with both PSCs and conventional canines could provide TSA with information to determine whether PSCs provide an enhanced security benefit compared with conventional LEO aviation canine teams that have already been deployed to airport terminals.

As a result, we recommended that TSA expand and complete testing, in conjunction with DHS S&T, to assess the effectiveness of PSCs and conventional canines in all airport areas deemed appropriate prior to making additional PSC deployments to help (1) determine whether PSCs are effective at screening passengers, and resource expenditures for PSC training are warranted, and (2) inform decisions regarding the type of canine team to deploy and where to optimally deploy such teams within airports. TSA concurred, and we testified in June 2014 that through its PSC Focused Training and Assessment Initiative—a two-cycle assessment to establish airport-specific optimal working areas, assess team performance, and train teams on best practices—TSA had determined that PSC teams are effective and should be deployed at the passenger checkpoint queue. Furthermore, in February 2014, TSA launched a third PSC assessment cycle to increase the amount of time

¹⁶S&T is the primary research and development arm of DHS and manages science and technology research for the department's components, such as TSA.

¹⁷In general, the public side of an airport includes all areas accessible to people prior to entering a passenger screening checkpoint or after exiting the sterile area of an airport and typically includes the ticketing and baggage claim areas.

canines can work and enhance their ability to detect explosives placed in areas more challenging to detect. Since our June 2014 testimony, TSA has continued to carry out the third assessment cycle. According to TSA officials, as of February 2016, 68 PSC teams have undergone the assessment. Additionally, TSA officials told us they began a fourth assessment cycle in January 2016 to test PSC teams and all other canine teams on threats identified through intelligence.

Although TSA has taken steps to determine whether PSC teams are effective and where in the airport environment to optimally deploy such teams, TSA has not compared the effectiveness of PSCs and conventional canines in order to determine if the greater cost of training canines in the passenger screening method is warranted. In June 2014, we reported that TSA did not plan to include conventional canine teams in PSC assessments because conventional canines have not been through the process used with PSCs to assess their temperament and behavior when working in proximity to people. We acknowledged TSA's position that half of deployed conventional canines are of a breed not accepted for use in the PSC program, but noted that other conventional canines are suitable breeds, and have been paired with LEO aviation handlers working in proximity with people since they patrol airport terminals, including ticket counters and curbside areas.

In December 2014, TSA reported that it did not intend to include conventional canine teams in PSC assessments and cited concerns about the liability of operating conventional canines in an unfamiliar passenger screening environment. In January 2015, we closed the recommendation as not implemented, reiterating that conventional canines paired with LEO handlers work in close proximity with people since, like PSCs, they also patrol airport terminals. Consistent with our recommendation, we continue to believe that opportunities exist for TSA to conduct an assessment to determine whether conventional canines are as effective at detecting explosives odor on passengers when compared to PSC teams working in specific areas, such as the passenger checkpoint queue. If such an assessment were to indicate that conventional canines are equally as effective at detecting explosives odor on passengers as PSCs, then limiting proficiency training requirements of PSCs to those that currently apply to conventional canine teams could save TSA costs associated with maintaining PSC teams.

Also, as we reported in January 2013, TSA was considering providing some PSCs to LEOs to work on the public side of the airport. Should TSA determine that the additional investment for PSCs is warranted, it could

reduce the agency's program costs if it deployed PSCs with LEO handlers rather than TSI handlers. Specifically, TSA could save approximately \$100,000 per team each year, as a PSC team led by a LEO handler would cost TSA about \$54,000 annually (the amount of the stipend), compared with about \$154,000, the annual cost per TSI-led PSC team (see table 1).

Chairman Johnson, Ranking Member Carper, and Members of the committee, this completes my prepared statement. I would be happy to respond to any questions you may have at this time.

GAO Contact and Staff Acknowledgments

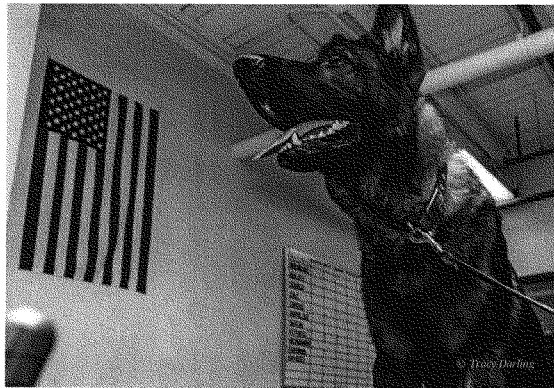
For questions about this statement, please contact Jennifer Grover at (202) 512-7141 or groverj@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this statement. Individuals making key contributions to this statement include Chris Ferencik (Assistant Director), Chuck Bausell, Lisa Canini, Michele Fejfar, Eric Hauswirth, Susan Hsu, Richard Hung, Brendan Kretzschmar, Thomas Lombardi, and Ben Nelson. Key contributors for the previous work that this testimony is based on are listed in those products.



Testimony before the Committee on Homeland
Security and Governmental Affairs US Senate

For release upon delivery
Expected 10:00 am ET
Thursday, March 3, 2016

Dogs of DHS: How Canine Programs Contribute to Homeland Security



Statement of Cynthia M. Otto, DVM, PhD
Executive Director, Penn Vet Working Dog Center
Associate Professor, University of Pennsylvania

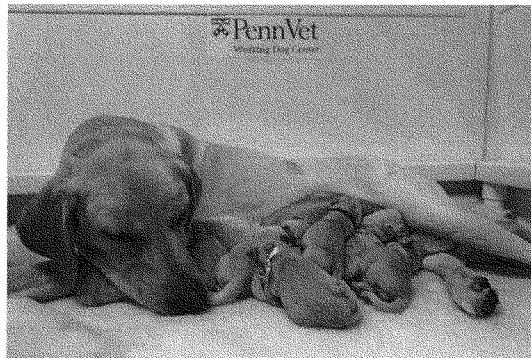
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February 24, 2016

Chairman Johnson, Ranking Member Carper, and Members of the Committee

I am honored to be here to discuss the experience and research of the Penn Vet Working Dog Center (PVWDC) in its role as a national research and development center dedicated to harnessing the unique strengths of our canine partners for public safety and human health. As a veterinarian and scientist, I have dedicated my career to supporting the work of the dogs that keep our country safe. My opportunity to serve at Ground Zero to provide medical care for the responding dogs and subsequently monitor impact of that response on the health and behavior of those dogs has inspired me to expand my contribution to the working dogs of this country. The PVWDC was inspired by the dogs of 9/11 and was founded in 2007 to promote research and education and in 2012 we opened our facility to raise and train detection dogs. Our research mission includes the conduct of basic and applied studies, at the PVWDC and in collaboration with academic centers, industry and government agencies to generate unconstrained knowledge that will enhance the health and performance of detection dogs. Our education mission embraces and shares that new knowledge to inspire those invested in the work of detection dogs, including the dogs themselves, the handlers, the trainers, veterinarians, departments and agencies that employ detection dogs, breeders and the general public. In order to fully explore new avenues and test old theories, the PVWDC maintains a small breeding and development center. Our breeding program was founded on the progress and genetic stock of the TSA breeding program.



As a result of my experience, I have been called upon to lend expertise and consult or collaborate with colleagues from over 15 academic institutions, numerous government agencies including Special Operations Command, US Department of Defense, Customs and Border Protection, Transportation Security Authority, Department of Homeland Defense, Federal Emergency Management Agency, National Institutes of Standards & Technology, Defence Science and

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Technology Laboratory (UK), National American Police Working Dog Association, United States Police Canine Association, local police departments and industry partners. I hope that this experience can help answer some of the questions that have been raised by this committee.

Respectfully,

Dr. Cynthia Otto, DVM, PhD, DACVECC, DACVSMR
Executive Director, Penn Vet Working Dog Center
Associate Professor of Critical Care,
University of Pennsylvania

WHAT SETS THE PVWDC APART?

- COLLABORATIVE RESEARCH
- GENETIC RESEARCH
- EARLY DEVELOPMENTAL EXPOSURE
- POSITIVE REINFORCEMENT TRAINING
- FOCUS ON FITNESS AND CONDITIONING
- COMMUNITY INVOLVEMENT
- EMPHASIS ON EDUCATION

PVWDC Contact and Staff and Collaborator Acknowledgements

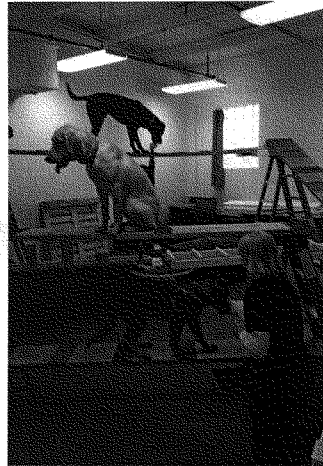
If you or your staff have any questions about this testimony please contact me at cmotto@vet.upenn.edu or 215-898-3390 (office) or 215-898-2200 (Penn Vet Working Dog Center)

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Background

How the Department of Homeland Security utilizes canine units to execute its security operations.

The role of the canine in supporting national security is diverse. In this testimony you will hear from Customs and Border Protection and the Transportation Security Administration demonstrating and explaining how their canine teams make their mission more effective. In addition, it is important to recognize that our local and state police widely employ canine teams for drug interdiction, explosives detection, criminal apprehension and evidence search. The Federal Emergency Management Agency Urban Search and Rescue Teams support the most elite of canine search and rescue teams that participate in disaster response to locate trapped victims or human remains.

The dog's nose is over 1000 times more sensitive than a human's. The dog has about twice as many olfactory receptor genes as humans, 40 times the number of receptors packed at a density of 5 times that of humans. The brain processing center (olfactory bulb) represents a higher percentage of the overall brain (30 times greater than humans). This combined with the cognitive skills and communication of the dog with humans opens the door to unique partnerships to help maintain national security. The ability of a trained search dog to locate a missing person is far more effective than any current technology to date. Similarly, the ability of a dog to discern a trained odor from a background of confounding odors far exceeds any other tool that has been developed.

The use of dogs to support national security is an effective approach. The limitations currently are availability of sufficient high quality dogs and need for science to support the performance and current best practices that have been recommended by the Scientific Working Group on Dog and Orthogonal detector Guidelines (<http://swgdog.fiu.edu/>), which is now under the National Institute of Standards and Technology (NIST) direction (<http://www.nist.gov/forensics/osac/sub-dogs.cfm>). The gaps in performance that can occur with canine teams are often gaps in the human half of the team, whether that is in training, directing or interpreting the dog's response. The research to optimize the performance of these canine teams falls into several categories. Much of the work to date has focused on the canine, including genetics, behavior, and physiology. The interaction between the dog and the handler is also an area of important research as the dog works as part of the team, responding to the handler and communicating back to the handler. The best dog and handler teams represent a blend of art and science. In order to expand the abilities of all dogs and handlers, additional research needs to be directed at the dog, the handler and the partnership.

The majority of dogs are imported from Eastern Europe. The availability is decreasing and price is increasing.

Reliable and economic performance requires healthy and genetically sound dogs. Purchasing dogs from international vendors is a gamble.

DHS supports canine teams with diverse skills requirements. Natural variation in genetics can provide for various phenotypes to meet these needs across agencies.

* Genetic selection can lead to reliable improvement in physical and behavioral traits.

* The early development experience can influence a dog's performance and success.

* Ongoing research is essential to optimize the performance and success.

A national canine breeding and development program

A Homeland Security Canine Center of Excellence



KEY ISSUES

Foreign Procurement of Dogs

Although historically, Eastern Europe has been recognized for their ability to produce excellent working shepherd type dogs for the police and military, the demand for detection dogs has increased to the point that the quality of dogs has suffered and the price has increased dramatically. More developing countries are incorporating detection dog teams into their national security plan. The need to continually replace current dogs that are retired due to medical, behavioral or health reasons represents a constant necessity. The demands for detection dogs outside the realm of national security, (e.g. conservation dogs, medical detection dogs, gas leak detection, bed bug detection, etc.) has further increased pressures on the available resources for dogs with the desired physical and behavioral characteristics. Purchasing dogs through vendors who purchase through a variety of sources does not allow progressive improvement in the breed based on careful genetic monitoring, planning and selection or control of the early development period. As more emphasis is placed on passenger screening dogs, the emphasis on sporting breeds has increased. The US is a major producer of sporting Labradors, but due to historical procurement relationships, vendors are importing Labradors for detection work. Developing countries like Mexico are developing breeding programs, however major health risks (such as Chagas disease) have the potential to result in occult or overt health problems. With emerging infectious diseases like canine influenza, there is the risk that importation of dogs from foreign countries could be shut down cutting off the source of dogs, or worse yet these imported dogs could introduce new diseases to the US. From an economic standpoint, the jobs associated with raising and early training of these dogs could be kept in the US. In summary, the risks of relying on foreign sources of dogs to support our national security are high. While there will always be some exceptional dogs that originate from foreign sources, the foundation of our canine programs should be developed and maintained domestically.

Breeding programs

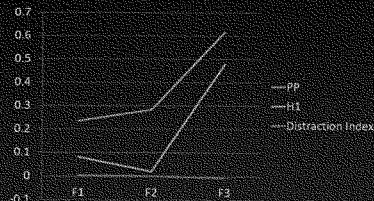
Major canine programs that utilize specialized dogs have relied on breeding programs to selectively improve the physical and behavioral phenotype (observable traits) of those dogs. Examples of successful programs include The Seeing Eye, Guiding Eyes and Canine Companions for Independence. For police and detection dogs, there have been several small US breeding programs, including the current DOD program for breeding Malinois in San Antonio, the CBP breeding program in El Paso and the former TSA breeding program. Following 9/11/2001, the TSA through a collaboration with Australian Customs and in collaboration with Auburn University, initiated a breeding program of sporting dogs (primarily Labrador Retrievers) for explosive detection. Peer review of the DHS S&T funded research at the TSA breeding program held on April 6, 2013 concluded that the program had met its research goals and represented a national resource that was able to improve canine performance success by approximately 10% per year through selective breeding. In addition, they were able to increase key traits (physical possession and hidden 1) associated with successful entry into the training program for explosive detection dogs and decrease hip dysplasia by decreasing hip laxity. Physical possession is the score a dog receives based on a screening test to determine their commitment to hold onto the tug and engage in tug of war with the handler.



This physical possession trait has been shown to be heritable (0.67 or 2/3rds of this response can be attributed to genetics) and associated with future success. Hidden 1 is the trait tested when a towel is hidden under a row of flower pots and the dog is given the opportunity to hunt for it. Success is defined as hunting until they find the pot and actually knock it over to get at the towel. This trait also has a high heritability and prediction of training success. Using this data and hip scores the estimated breeding value (EBV) can be determined and optimal breeding pairs selected to continuously improve the subsequent generations.

Genetic Trends

Statistically significant increasing trend in EBVs for Physical Possession and Hidden 1



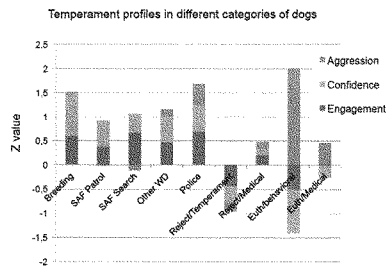
Dog Genetics LLC

*from Dr. Liz Hare,

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The program was discontinued, however the remaining breeding females were provided to the Penn Vet Working Dog Center through a Cooperative Research and Development Agreement. Similarly, the Swedish Armed Forces had a breeding program that was terminated with the plan to rely on the production of dogs by private breeders. In Sweden, eventually this approach was abandoned and the breeding program restarted. The main reason cited for restarting a breeding program was that private breeders have different breeding goals, thus do not actively select for the dogs that are best suited for the needs of National Defense.



**From Erik Wilsson Swedish*

Armed Forces K9 Breeding Program presented at IWDBA 2014

The Swedish experience has been that a breeding program provides dogs that are more stable, healthier, more likely to succeed, able to start work earlier and have a longer working life. The initial cost of a dog from a breeding program is likely to be higher, but the improved health and performance contributes to a longer working career, improved training efficiency and reduced cost over the working lifetime of the dog. With this knowledge, the Penn Vet Working Dog Center has launched a small breeding program primarily focused on research of how to improve the health and performance of detection dogs. A goal of the program is to provide key knowledge for private, government and academic organizations to collaborate on an effective strategy to domestically produce dogs with the health and behavioral traits to successfully support national security.

A National Breeding Center focused on genetic improvement would consist of a database of working dogs, a semen bank, genetic evaluations on individual and potential dogs, and standards for the selection of breeding stock. This Center does not need to be localized; it would be successful as a collaboration between multiple organizations with strengths in specific areas. For example, the International Working Dog Breeders Association (www.IWDBA.org) has a Working Dog Registry under development, and the Penn Vet Working Dog Center has a DNA

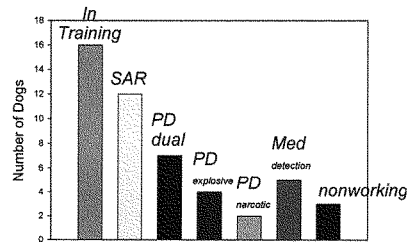


bank and a semen bank with samples from working dogs. The American Kennel Club is under used to support National Defense with their knowledge and expertise.

As we move toward the development of a coordinated breeding program, there are several interim steps that should be considered. First is a quantitative assessment of the performance (phenotype) of the dog. This information will be critical in identifying potential breeding animals and determining the heritability of these traits. This assessment should be used for selecting dogs but also for monitoring the performance of the dogs. For breeding purposes, longevity and health are critical factors that need to be included in selection criteria. In anticipation of a national breeding program, a preparative step would be to establish a national semen bank to capture the genetic potential of the dogs that are currently working at high performance standards. The cattle industry (Select Sires) has maintained such an approach for 50 years driving improvement in production based on clearly heritable traits. Once an active breeding cooperative is established, it should be physically located in multiple locations to limit the risks of catastrophic disease or environmental disasters. Research is needed to determine the optimal amount of early training to increase career success.

At the Penn Vet Working Dog Center puppies enter the program at 8 weeks of age and go through foundation training to enhance search, confidence, persistence and physical fitness. In the 3 years of the PVWDC, we have had 33 dogs complete the program. Of which 30 dogs have working careers. One dog was released for health reasons and 2 for lack of concentration.

Disposition of PVWDC Dogs
(49 in program since 2012)



SAR = search and rescue and includes human remains and conservation dogs

PD dual = dogs trained in apprehension and odor (typically explosives or narcotics)

PD explosives are single purpose explosive detection dogs

PD narcotic are single purpose drug detection dogs

Med detection includes cancer detection and diabetic alert

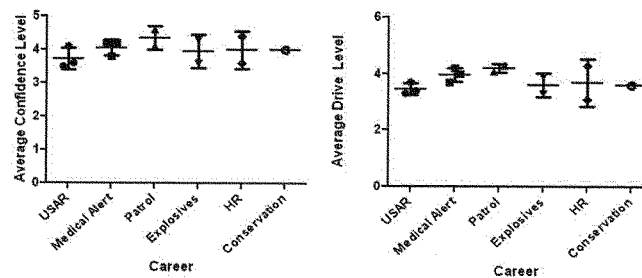
Overall 91% of dogs that have completed the program have working careers.



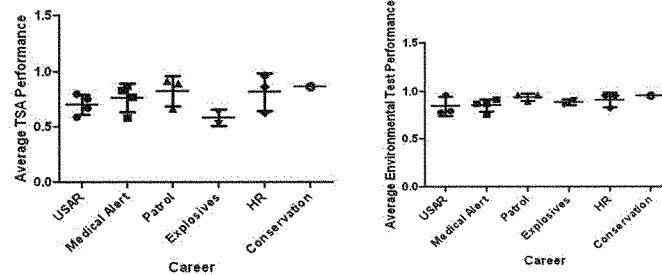
Research

The science of genomics provides great promise for the future in our ability to find genes and metabolic pathways associated with behaviors such as olfactory detection, learning, and memory. Currently, 248 of the related dogs from the TSA program have been genotyped on a high-density genome-wide array. Although none of the traits tested so far show significant association with genetic markers, this is not surprising because of the complexity of behavior traits, which are thought to be expressed as a result of the interaction of many genes of relatively small effect and the environment. With the new, more detailed and statistically robust measured traits in use at the Penn Vet Working Dog Center and more advanced genomic methods, it will be possible to move toward making selection decisions with statistical models that include knowledge of each dog's genome.

Utilizing a battery of tests, the PVWDC evaluates the puppies in the program to determine if there are evaluations that can either predict future career success or be identified as heritable traits. Through a collaboration with CBP, we have implemented a testing protocol during early development through 14 weeks of age. We do not have sufficient data to evaluate the dogs that do not succeed in any career path (n=3 to date). USAR = urban search and rescue, Medical alert includes cancer detection and diabetic alert, HR = human remains detection, conservation is the training for finding invasive or endangered species.



This same group of dogs have been tested with the TSA testing battery at 3, 6, 9 and 12 months of age and environmental assessment at 4, 7, 11 and 14 months. The tests change over time but the average scores are shown here based on career path.



During the developmental phase, there are numerous opportunities to impact the performance of the dogs. We fully recognize that without the proper genetics we are starting at a huge disadvantage, however even some of the most highly heritable traits are only partially determined by genetics. The role of the environment can tip the balance in one direction or the other. In the experience of the PVWDC, of our 33 graduates, 30 have successfully been placed in working careers. We were able to recognize early signs of physical or behavioral problem and in most cases with appropriate interventions prevent problems that could have ended their career potential. A simple example is the development of a tooth that was malpositioned and could have interfered with this dog's career as a police dog. With a simple exercise we were able to redirect that tooth to its normal position



Rigorous research on health aspects like hip dysplasia and the role of exercise to improve function, the impact of diet and nutrition during growth and during work to optimize structure and reduce injury. The use of physical fitness protocols to develop body awareness has the potential to reduce the most common types of injuries in police, search and military dogs, which are those associated with cuts, scrapes and lameness. These approaches need to be carefully studied to evaluate the efficacy and the cost:benefit ratio.



At the PVWDC we have conducted studies evaluating the performance of CBP dogs working the border and the dogs in our program exercising in the heat. These studies have explored ways to keep the dogs hydrated and working effectively. We have learned that contrary to common medical understanding that these dogs can work with body temperatures in excess of 106F. We found that the type of hydration method did not influence how hot the dogs became. Because heat stroke is recognized as one of the preventable causes of death in military working dogs, we continue to explore ways to keep the dogs working safely under these adverse conditions. It is also recognized that dogs often stop working due to musculoskeletal injury or degeneration (low back pain is common in working dogs). Research is ongoing to determine if there are preventive strategies that can help keep dogs working effectively longer.

The science of olfaction is still not well understood. New techniques like functional MRI have helped uncover how the brain is activated when dogs are exposed to various odors, but much of the fundamentals of factors that could alter the ability of a dog to detect odors near the threshold of sensitivity remain unexplored.

The behavioral aspects of canine performance have received perhaps the most attention, evaluation of personality, even the aspects of being left pawed or right pawed have been studied. As part of behavior, the way the dog learns and retains information best is a knowledge gap. The impact of training techniques that are based on positive reinforcement versus coercive methods need to be evaluated for the impact on health, performance and longevity.

The arena of research on how to improve the selection and performance of the canine handler is in its infancy. Many organizations have opted to seek ways to eliminate or minimize the role of the handler. There is no data to demonstrate how to optimize the team.

The challenge remains in that there is no consortium to systematically and collaboratively address the factors, including genetics, development, behavior, health of the dog, handler skills and enhanced partnership between the dog and handler, that have the most potential to impact the detection dog working for national security. The goal to bring together diverse organizations that share the common goal of improving national security through developing and supporting the most effective dog handler teams could be accomplished through the development of a National Center of Excellence for Canine Detection that would partner government, industry and academics to move forward cohesively to bring new knowledge and ways to effectively and efficiently implement that knowledge across all canine disciplines that support national security.



WRITTEN STATEMENT OF
THE AMERICAN CIVIL LIBERTIES UNION

For a Hearing on

Dogs of DHS: How Canine Programs Contribute to Homeland Security

Submitted to the Senate Committee on Homeland Security and Governmental Affairs

March 3, 2016

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The ACLU respectfully submits this statement for the record for the Homeland Security and Governmental Affairs Committee hearing, *Dogs of DHS: How Canine Programs Contribute to Homeland Security*. We urge the Committee to oversee the use of service canines by Customs and Border Protection (CBP), particularly in its interior enforcement operations, and to address civil rights violations that are occurring.

For nearly 100 years, the American Civil Liberties Union (ACLU) has been our nation's guardian of liberty, working in courts, legislatures, and communities to defend and preserve the individual rights and liberties that the Constitution and the laws of the United States guarantee everyone in this country. With more than a million members, activists, and supporters, the ACLU is a nationwide organization that fights tirelessly in all 50 states, Puerto Rico, and Washington, D.C., for the principle that every individual's rights must be protected equally under the law.

I. Effectiveness and Consequences of Service Canine Use by Border Patrol

Residents of the American southwest frequently contact the ACLU to report civil rights violations arising out of encounters at Border Patrol checkpoints located far into the interior of the United States.¹ In recent years, an alarming number of these complaints have involved Border Patrol service canines "alerting" to nonexistent contraband. Southwest border residents—including retired canine handlers—have reported scores of incidents in which these false alerts resulted in the prolonged, unjustified detention and searches of innocent travelers, most of whom are American citizens. The Department of Homeland Security's own records confirm that such incidents are all too common.² The government's records further indicate that these recurring incidents are exacerbated by a lack of oversight, and that the time for Border Patrol to address systemic deficiencies in its use of service canines is long overdue.

Problems with law enforcement use of service canines are well-documented. Law enforcement experts acknowledge, and independent studies have confirmed, that the reliability of service canines is severely compromised in uncontrolled environments, such as vehicle checkpoints. For example, data collected and published under the Illinois Traffic Stop Statistical Study Act of 2003 show that service canines can be wrong as often as they are right.³ A review of that data demonstrates that in 2013, no contraband was found during 40% of the officer searches performed in response to a dog alert. Stated differently, false alerts by police dogs caused police officers to conduct a manual search of the vehicles of 1,715 innocent motorists. The data also showed stark racial disparities: statewide, African American motorists were 55% more likely than white motorists to be subjected to a dog sniff. Yet white motorists were 14% more likely than African American motorists to be found with contraband during officer searches performed in response to a dog alert. In 2013, stops involving Illinois state troopers using service canines had a success rate of just 50%.

Litigation involving the use of service canines by Border Patrol and other law enforcement agencies has raised similar questions about the dogs' reliability in uncontrolled settings, including public spaces like checkpoints.⁴ In one case, Border Patrol canine certification records showed marginal performance, but were too heavily redacted to assess the search.⁵ In another, narcotics were not found in 27 out of 28 alerts at a temporary checkpoint.⁶ And in yet another case, the court file indicated 35 out of 50 encounters produced a false alert.⁷

Still, despite the recognized limitations of service canines in uncontrolled environments and the agency's documented false alerts, Border Patrol does not require continuing service-canine certification based on field performance,⁸ does not record or track false alerts,⁹ and does not take action when a service canine's recurrent false alerts call the dog's accuracy into question.¹⁰ These fundamental deficiencies must be addressed to ensure respect for the rights and well-being of innocent motorists in encounters with Border Patrol. Otherwise, those innocent motorists will continue to be subjected to searches and detentions at Border Patrol checkpoints that violate the Fourth Amendment because Border Patrol cannot search vehicles without a warrant or probable cause (a reasonable belief, based on the circumstances, that an immigration violation or crime has likely occurred).

II. Improper Use of Service Canines: Examples

Agency records obtained by the ACLU in Freedom of Information Act (FOIA) litigation have confirmed what many in the border region have known for years: abuses at Border Patrol checkpoints involving service canines are both common and rarely investigated.¹¹ Those DHS and CBP documents included complaints and investigations, apprehension statistics and stop records, policies, and training materials. Among the extensive complaint and investigation records were dozens of accounts of service canines falsely alerting at vehicle checkpoints, resulting in prolonged detention and searches of innocent travelers. None of those incidents appears to have resulted in an investigation or any other remedial action.

In 2014, the ACLU submitted to DHS complaints of abuse at multiple Arizona Border Patrol checkpoints, including eight complaints of false canine alerts.¹² Of those eight complaints, none resulted in the discovery of contraband. Perhaps even more troubling, in some instances, *agents appeared to be falsely claiming a canine had alerted in order to justify a search for which the agent otherwise lacked probable cause*. Reported incidents of these false alerts resulting in unlawful searches include:

- a. Two individuals at a Border Patrol checkpoint on I-8 were directed to pull into the secondary inspection area. When the individuals did not consent to a search of the vehicle, an agent arrived with a service canine, which circled the vehicle and did not react in any way. After passing the vehicle, the dog alerted to a handbag in an adjacent vehicle, pulling the bag out of the open trunk. The Border Patrol supervisor then notified the individuals, "We need to search your car. The dog got a hit on your car." The individuals objected that the dog had not alerted on their vehicle but rather on an item in an adjacent vehicle. Nonetheless, both the supervisor and agent asserted that the dog had "hit a positive scent" in their vehicle, giving Border Patrol probable cause for a search. The individuals were patted down and detained in a holding cage for nearly an hour while the agent allegedly waited for a warrant to be issued. After they were released, it was apparent the agents had searched the entire vehicle.¹³
- b. A 19-year-old, Hispanic woman on her way home from work was stopped at the Tombstone checkpoint, questioned about her citizenship, and asked to hand over her driver's license. An agent walked around her vehicle with a service canine. The individual saw that the dog did not react to her vehicle and had begun to move to the car behind hers when the agent pulled on the dog and started tapping

on the trunk of the vehicle. The agent then stated the dog had “hit” on something in the car and directed the individual to pull into the secondary inspection area, where the vehicle was searched. This was the second incident for the individual in which a service canine was claimed to have “alerted” giving Border Patrol probable cause to search her car.¹⁴

- c. A family was stopped at a Border Patrol checkpoint on State Route 86 in Sells, Arizona and directed into the secondary inspection area. The family repeatedly requested an explanation and the agent responded that a service canine had alerted to the vehicle. The family stated they did not have anything in the vehicle that would cause the dog to alert and that no dog was nearby. The agent directed the family to exit the vehicle, at which point the family began to record the inspection. The agent yelled to turn off the phone and tried to grab the phone from the mother while poking her chest. The agent stated that the recording was not permitted because the search of the vehicle was “based on probable cause.” The family was eventually permitted to leave, but the experience has traumatized the young children.¹⁵

Additional examples of the improper use of service canines, drawn from ACLU intakes and DHS investigation and complaint records, are provided below.¹⁶ In none of these cases was contraband discovered; all of these individuals were eventually released.

- a. On January 1, 2015, a 65 year-old, retired police officer and former service canine handler, was stopped at an interior Border Patrol checkpoint while driving with his wife. An agent advised the couple that a dog had alerted to contraband in their vehicle and directed them to a secondary inspection area. There, they were separated, interrogated, and detained for more than 45 minutes before finally being released without explanation. Because there was no arrest, agents made no record of the couple’s detention or of the false alert.¹⁷
- b. In March 2013, the Nogales City Attorney’s Office submitted a complaint to Border Patrol alleging racial profiling and abuse of authority after agents at the I-19 interior checkpoint falsely relied on a non-existent service canine alert as a basis for prolonged detention and search. The complaint describes the agents’ actions as “egregious and illegal,” though not isolated, and refers to a Deputy City Attorney detained and searched on multiple occasions on the basis of claimed or false service canine alerts.¹⁸
- c. An off-duty agent departing the Highway 78 checkpoint was pursued, detained, and searched following a Border Patrol service canine’s false alert to his vehicle.¹⁹
- d. Following a false service canine alert, a disabled motorist was detained for over an hour at the Highway 95 checkpoint while Border Patrol agents searched his vehicle, damaging its contents.²⁰
- e. An individual on his way to work was sent to secondary inspection at the Arivaca Road checkpoint for traffic enforcement. When the individual questioned the agents’ authority to enforce traffic laws, the agent stated that a service canine had “alerted.” The agent proceeded to search the interior of the vehicle. The individual was detained for approximately 30 minutes before he was released.²¹

- f. A motorist was detained after a service canine falsely alerted to his vehicle at the I-19 interior checkpoint. After he was released, the individual realized Border Patrol agents had confiscated much of his prescription medication.²²
- g. An individual described being detained and interrogated for up to two hours following false service canine alerts on six separate occasions at interior Border Patrol checkpoints, several of them resulting in damage to the individual's vehicle.²³
- h. A motorist was detained and searched at the I-8 checkpoint after a service canine falsely alerted to the motorist's vehicle. The resulting search damaged an interior compartment. The driver described being detained with other motorists who were also searched and then released.²⁴
- i. A man was detained at the Highway 90 checkpoint after a service canine falsely alerted to his vehicle. When he attempted to record his checkpoint interaction, a Border Patrol agent forcibly confiscated the man's phone while a Huachuca Police Officer looked on.²⁵
- j. A man was detained for an hour because he refused to consent to a search of his trunk at the Highway 83 interior checkpoint. Agents threatened to "lock [him] in a cell" if he did not surrender his keys and empty his pockets. Border Patrol agents later claimed a service canine had alerted to his vehicle, but no contraband was discovered and the man was released.²⁶
- k. A motorist was detained and searched following a service canine alert at the I-8 checkpoint. After being released and returning home, the motorist discovered the dog had damaged the contents of the vehicle.²⁷
- l. Two separate motorists reported vehicle damage caused by a service canine at the I-19 checkpoint on the same day. A third motorist submitted a complaint about a nearly identical incident that occurred at the same checkpoint three days later.²⁸
- m. DHS records describe multiple false alerts at the same checkpoint on Highway 86 over two days: First, a woman was detained in secondary inspection following a false service canine alert. A Border Patrol agent told her to "put the fucking keys in the truck."²⁹ An hour and a half later, a woman and her brother were detained at the same checkpoint, following another false service canine alert; an agent forcibly removed the woman's cell phone from her hand and threatened her brother with an electroshock weapon before releasing them.³⁰ The next day, at the same checkpoint, agents attempted to prevent a different woman from videotaping them and allegedly spat on her following yet another false service canine alert.³¹

These problems are not limited to interior checkpoints. In December 2013, the ACLU filed a lawsuit on behalf of a U.S. citizen subjected to a strip search, multiple genital and cavity searches, a forced bowel movement, an X-ray, and a CT scan following a false alert by a Customs and Border Protection service canine.³²

III. Recommendations

In order to address the improper use of service canines by Border Patrol, the ACLU recommends that:

- a. Border Patrol record all service canine alerts, including false service canine alerts, resulting in detention and/or search of innocent travelers. Service canine performance data should be compiled and made publicly available.
- b. Service canine certification should be based on field performance as well as training. Service canines with unusually high false alert rates must be retrained and recertified or retired. Training of service canines and handlers should be improved as necessary.
- c. Border Patrol should have reasonable suspicion of immigration or criminal law violations before subjecting motorists to service canine searches.
- d. Border Patrol should discontinue or curtail the use of service canines in interior enforcement operations at least until adequate safeguards are in place.

IV. Conclusion

The ACLU commends the Committee for examining the use of service canines by DHS. In light of the recognized limitations of service canines in uncontrolled environments, as well as the many documented false alerts at Border Patrol checkpoints, we urge the Committee to examine the proper use of service canines and implement reforms to collect and disclose data on the use of service canines, and to ensure that transparent policies protecting motorists' rights are in place with meaningful redress when they are violated.

¹ On CBP's "100-mile zone," see generally ACLU, *The Constitution In the 100-Mile Border Zone*, <https://www.aclu.org/constitution-100-mile-border-zone> (last visited Mar. 3, 2016).

² ACLU OF ARIZONA, RECORD OF ABUSE (Oct. 2015), <http://www.acluaz.org/node/5415>.

³ ACLU OF ILLINOIS, RACIAL DISPARITY IN CONSENT SEARCHES AND DOG SNIFF SEARCHES: AN ANALYSIS OF ILLINOIS TRAFFIC STOP DATA FROM 2013 (Aug. 2014), <http://www.aclu-il.org/racial-disparity-in-consent-searches-and-dog-sniff-searches/>.

⁴ See generally Robert C. Bird, *An Examination of the Training and Reliability of the Narcotics Detection Dog*, 85 Ky. L.J. 405, 427, 430 (1997) (noting that "even a very high accuracy rate can produce an unreasonable amount of false positives" and that service canines are "least effective when they survey a random population.").

⁵ See, e.g., *United States v. Thomas*, 726 F.3d 1086, 1093 (9th Cir. 2013).

⁶ *Merrett v. Moore*, 58 F.3d 1547, 1549 (11th Cir. 1995).

⁷ *Doe v. Renfrow*, 631 F.2d 91, 95 (7th Cir. 1980) (Fairchild, C.J., dissenting).

⁸ The government has confirmed in FOIA litigation with the ACLU that service canine certification is based on training, and is not related to field performance.

⁹ RECORD OF ABUSE, *supra* note 2, at 11.

¹⁰ *Id.*

¹¹ RECORD OF ABUSE, *supra* note 2.

¹² ACLU OF ARIZONA, COMPLAINT AND REQUEST FOR INVESTIGATION OF ABUSES AT U.S. BORDER PATROL INTERIOR CHECKPOINTS IN SOUTHERN ARIZONA, INCLUDING UNLAWFUL SEARCH AND SEIZURE, EXCESSIVE FORCE, AND RACIAL PROFILING (Jan. 2014), [hereinafter ACLU COMPLAINT], available at <http://www.acluaz.org/sites/default/files/documents/ACLU%20AZ%20Complaint%20re%20CBP%20Checkpoints%20%202014%2001%2015.pdf>

¹³ *Id.* at 8.

¹⁴ *Id.* at 10.

¹⁵ *Id.* at 9.

¹⁶ More detailed information and additional examples are available in the Record of Abuse report, *supra* note 1, and ACLU Complaint, *supra* note 12.

¹⁷ RECORD OF ABUSE, *supra* note 2, at 11.

¹⁸ *Id.* at 23 (CBP 194-197).

¹⁹ *Id.* at 23 (CBP 785-797).

²⁰ *Id.* at 24 (CBP 811-823).

²¹ ACLU COMPLAINT, *supra* note 12, at 6.

²² RECORD OF ABUSE, *supra* note 2, at 19 (CBP 003-004).

²³ *Id.* (CBP 006).

²⁴ *Id.* (CBP 006-007).

²⁵ *Id.* (CBP 011-012).

²⁶ *Id.* at 20 (CBP 012-013).

²⁷ *Id.* at 21 (CBP 026-027).

²⁸ *Id.* at 22 (CBP 041-042).

²⁹ *Id.* at 24 (CBP 1073-1079).

³⁰ *Id.* at 24 (CBP 1081-1088).

³¹ *Id.* at 24 (CBP 1089-1098).

³² See Complaint, *Jane Doe v. El Paso County Hospital District, et al.*, No. 3:13-CV-00406-DB (W.D. Tx. Dec. 18, 2013), <http://www.aclu-nm.org/wp-content/uploads/2013/12/Complaint-Jane-Doe-v-Various-Defendants-12-18-13.pdf>.

**Post-Hearing Questions for the Record
Submitted to Ms. Kimberly Hutchinson and Mr. Damian Montes
From Senator Rob Portman**

“Dogs of DHS: How Canine Programs Contribute to Homeland Security”

March 3, 2016

Question#:	1
Topic:	Illicit Prescription Opioids
Hearing:	Dogs of DHS: How Canine Programs Contribute to Homeland Security
Primary:	Senator Rob Portman
Committee:	HOMELAND SECURITY (SENATE)

Question: Your testimony indicates that the CBP canines can alert to heroin, a known opioid. As I indicated in my remarks, our nation is currently facing an opioid epidemic. Can canines alert to concealed, illicit prescription opioids?

Response: Theoretically, yes. Canines can alert to any compound that emits odor. The compound must be volatile, meaning it can change into a gaseous state. If the targeted opioids give off odor, that odor can be recognized by canines. However, the only opioid based narcotic the canines are currently trained to detect is heroin. To determine if a canine would detect other opioid substances, would require further testing.

Question: If the dogs can alert to illicit prescription opioids, have they been an effective tool in identifying and seizing them?

Response: Custom and Border Protection’s (CBP) Canine Program does not train its canines to detect prescription opioids.

Question: If not, can they be trained to detect illicit prescription opioids and do you think they would be an effective means to inhibit opioid trafficking into the US?

Response: Currently, CBP canines are trained to detect a single volatile component found in heroin that is produced during the degradation process. Research would be required to determine if a canine could detect other opioid based substances. Effectiveness would depend on multiple factors, to include, whether trafficking organizations are smuggling these substances through areas where CBP canines are deployed and methods of concealment used.

Question#:	2
Topic:	Conventional Canine Detecting Effectiveness 1
Hearing:	Dogs of DHS: How Canine Programs Contribute to Homeland Security
Primary:	Senator Rob Portman
Committee:	HOMELAND SECURITY (SENATE)

Question: According to Ms. Grover's prepared statement, the Government Accountability Office (GAO) found that TSA could possibly reduce its Canine Program costs. Specifically, GAO recommended that TSA evaluate the effectiveness of passenger screening canines (PSCs) and convention detection canines (CDCs) to determine whether CDCs could perform the specific function of PSCs. This would cut training costs for TSA's Canine Program. Ms. Grover's statement further indicated that TSA answered the recommendation in the negative, claiming potential liability.

Has TSA changed its position in whether or not it will assess the effectiveness of CDCs detecting explosives on passengers?

Response: Although the Transportation Security Administration (TSA) has not altered its position, TSA is considering methods to explore the possibility of assessing canines currently operating as Conventional Detection Canines (CDCs) for passenger screening canine (PSC) capabilities. This initiative requires the development of additional testing protocols for canine breeds not previously used for PSC, in order to better ensure the safety of the public and the canines.

Question: Is TSA basing its decision to not assess effectiveness of CDC explosive detection on passengers on previous experimentation?

Response: TSA is basing the decision on the above-mentioned concerns that breeds other than Sporting breed dogs may not integrate into searching in close proximity to passengers without potentially causing apprehension or alarm to the public. TSA's decision is based on a variety of considerations: the ability the ability of the CDCs to properly engage passengers, the anxiety displayed by the public to current CDC utilization, and the liability of having canine teams operate in an environment without formal training.

Question: If not, then please provide a specific overview of the training differences between PSCs and CDCs in addition to their corresponding significance.

Response: The primary difference in training between PSCs and CDCs is the PSCs must be trained to search a person, who may be moving, and not an inanimate object. They are trained to constantly sample the air for explosive vapor or particles and once detected, proactively track the scent back to its source, whereas CDCs are trained to evaluate a stationary source. This variance in training allows the PSC to recognize and follow a person as a possible target. Following a person while detecting odors in the air is a

Question#:	2
Topic:	Conventional Canine Detecting Effectiveness 1
Hearing:	Dogs of DHS: How Canine Programs Contribute to Homeland Security
Primary:	Senator Rob Portman
Committee:	HOMELAND SECURITY (SENATE)

skillset not taught to CDCs. The PSCs must also be able to work in closer proximity to people without being invasive, which takes time and effort to train and accomplish.

Question#:	3
Topic:	Northern Border Canine Teams
Hearing:	Dogs of DHS: How Canine Programs Contribute to Homeland Security
Primary:	Senator Rob Portman
Committee:	HOMELAND SECURITY (SENATE)

Question: How many canine teams does the Border Patrol (OBP) have deployed along the Northern Border?

Response: U.S. Border Patrol (USBP) currently has 83 canine teams on the northern border.

Question: By the Office of Field Operations (OFO) at northern Ports of Entry?

Response: OFO currently has 42 canine teams assigned to the northern border. This is comprised of 33 enforcement teams and nine agriculture teams.

Question#:	4
Topic:	Dogs Sourcing
Hearing:	Dogs of DHS: How Canine Programs Contribute to Homeland Security
Primary:	Senator Rob Portman
Committee:	HOMELAND SECURITY (SENATE)

Question: According to your testimony, canines who serve as a part of the agricultural interdiction team are sourced from rescue shelters and private donations. Their counterparts in CBP and TSA's National Explosive Detection Canine Team Program (NEDCTP) are purchased from either European or American breeders. TSA purchases dogs for around \$4,000 per dog, but CBP spends around \$8,000 per dog.

Is there a particular reason why agricultural dogs are sourced differently?

Response: In 2003, the United States Department of Agriculture (USDA) and DHS signed a Memorandum of Agreement (MOA). Through Article 4 (Training) of the MOA, USDA was designated to provide CBP Agriculture Specialists with training, to include basic canine officer training. All CBP agriculture canine handlers and canines train at the USDA National Detector Dog Training Center (NDDTC). The NDDTC holds the responsibility for procuring the canines to be trained. Per the NDDTC, in the beginning of the USDA's canine program, animal shelters, private donations, and rescue organizations were sought as the most cost effective way of procuring the canines needed for the program. However, there is an ever increasing supply and demand challenge encountered by the NDDTC. The NDDTC strives to produce the best quality canine through a rigid procurement and medical process. The expense associated with this process can range from a free donation to a cost of \$1,000 to \$5,000 per canine. The cost range is associated with the medical expenses and testing that needs to be conducted with the canine when procured from a shelter or private donation in order to certify the canine physically fit for the program. The NDDTC is currently engaged with a vendor to purchase Labrador Retrievers which cost \$6,000 each. This cost is inclusive of the medical tests and vetting of the canines.

Question: By sourcing the dogs from rescue shelters or private donations, is CBP foregoing any known advantages to training a dog with higher quality physical and behavioral traits?

Response: The USDA NDDTC holds the responsibility for procuring and training the canines per the MOA. The canines undergo preliminary testing to determine suitability for training. CBP has been satisfied with the overall quality and performance of the canines assigned to CBP agriculture canine handlers. When the NDDTC procures canines from shelters, animal rescues, and breeders, there is no guarantee that the canine will have lower or higher quality physical and behavioral traits compared to canines purchased from a vendor. For example, the NDDTC recently purchased canines from a reputable vendor. Of the 10 canines received, three were returned due to their inability to

Question#:	4
Topic:	Dogs Sourcing
Hearing:	Dogs of DHS: How Canine Programs Contribute to Homeland Security
Primary:	Senator Rob Portman
Committee:	HOMELAND SECURITY (SENATE)

adapt to the environment, lack of high enough food drive, and a physical condition that did not surface until placed in training. As such, there is an inherent risk to procuring canines that they may not meet qualifications, no matter the source.

Question#:	5
Topic:	Cost Difference
Hearing:	Dogs of DHS: How Canine Programs Contribute to Homeland Security
Primary:	Senator Rob Portman
Committee:	HOMELAND SECURITY (SENATE)

Question: Is there a demonstrable reason why the NEDCTP pays \$4,000 for a pup and CBP is paying around \$8,500 for a pup, a 213% difference in price?

Response: The CBP Canine Training Program, through contracts and purchase orders, works with vendors to schedule canines for testing to identify the desired drives and character traits for use in CBP's operating environments. Vendors deliver canines for testing and evaluation to either one of the Canine Training Centers in El Paso, TX or Front Royal, VA. The cost is marginal in comparison to budgetary and manpower requirements of dedicating resources to exclusively travel within the United States and abroad to locate the volume of qualified canines needed to deliver training.

By this process the CBP Canine Training Centers:

- Do not incur costs associated with travel, veterinary medical screening expenses and transporting the canines back to Front Royal, VA and El Paso, TX;
- All canines are performance tested and medically screened utilizing a standardized procedure in the training environment at the training centers;
- All canines purchased have a suitability clause where if a canine is determined that, for any medical or performance issue identified within an allotted period of time (six months for medical and 15 working days for performance), the canine is returned to the vendor and replaced with another canine at no additional cost;
- All canines that do not pass the process are returned to the vendor, further eliminating any unnecessary cost of maintaining, housing, and adopting canines that never enter training;

In Fiscal Year 2015, 428 canines were presented; of those, 240 (64%) were purchased. This process prevented the purchasing of 188 canines, preventing the loss of \$1.3 million dollars.

TSA, by partnering with Department of Defense (DOD), sends 2-3 personnel overseas to selection test canines approximately four times per year in an effort to purchase approximately 230 canines per year.

TSA and DOD are both located at Joint Base San Antonio which lends itself to this combined purchasing. DOD pays \$4,000 per canine which is solely the cost of the canine from an overseas vendor. TSA reimburses DOD for this cost. The \$4,000 does not include travel for TSA personnel or the transport of canines back to their location in San

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Antonio, TX. TSA pays approximately \$6,000-\$7,500 per person per trip overseas. Also, DOD provides veterinary services for TSA overseas and transports them back to San Antonio, TX. The average price for transporting one canine overseas via commercial air is approximately \$1000. According to TSA they have begun purchasing canines from some U.S. vendors and the cost is approximately \$8,000. This change in purchasing practice is a result of the change in their mission to include passenger screening canines and the need for specific canines to fit that need.

**Post-Hearing Questions for the Record
Submitted to Ms. Kimberly Hutchinson
From Senator Claire McCaskill**

“Dogs of DHS: How Canine Programs Contribute to Homeland Security”

March 3, 2016

Question#:	6
Topic:	Conventional Canine Detecting effectiveness 2
Hearing:	Dogs of DHS: How Canine Programs Contribute to Homeland Security
Primary:	The Honorable Claire McCaskill
Committee:	HOMELAND SECURITY (SENATE)

Question: GAO reported in its testimony that TSA had not compared the effectiveness of passenger screening canines (PSCs) and conventional canines in detecting explosives odor on passengers to determine if the greater cost of training PSCs is warranted. TSA reported that it did not intend to do this assessment because of the liability of using conventional canines to screen persons when they had not been trained to do so. Yet conventional canines already work in close proximity with people as they patrol airport terminals.

How can TSA assess the increased liability of using conventional canines if it has never compared the effectiveness of conventional canines to PSCs?

Response: The liability of the government is unrelated to the ability or effectiveness of the canine to detect an explosive odor. The liability arises from inserting breeds other than Sporting breed dogs into an environment for which it has not received sufficient training. TSA acknowledges the capability to screen passengers will reside in some CDC. However, breeds other than Sporting breed dogs, like any canine being considered for PSC, should be carefully screened for any potential aggressive traits in addition to the PSC protocols. TSA is currently developing further testing protocols to determine the suitability of CDCs for use in PSC.

Question: How much would such a comparison cost?

Response: The cost of such a comparison would be dependent on the type, size, and scope, as well as testing protocols. TSA is currently developing protocols to vet breeds other than Sporting breed dogs to determine suitability for PSC.

Question: How much more expensive is it to train PSCs than conventional canines?

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Topic:	Conventional Canine Detecting effectiveness 2
Hearing:	Dogs of DHS: How Canine Programs Contribute to Homeland Security
Primary:	The Honorable Claire McCaskill
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Response: The additional PSC training cost is approximately \$15,000 over the CDC per team cost. This increase in cost is attributable to the additional training time for the PSC capability and the cost of the role player contract utilized to expose the canines to crowds in the daily training environment. The PSCs are trained to search a person, who may be moving, rather than an inanimate object. This variance in training allows the canine to recognize a person as a possible target, so potentially following this person is a skillset not taught to CDCs. The PSCs must also be able to work in closer proximity to people without being invasive, which takes time and effort to accomplish.

**Post-Hearing Questions for the Record
Submitted to Mr. Damian Montes
From Senator Cory Booker**

“Dogs of DHS: How Canine Programs Contribute to Homeland Security”

March 3, 2016

Question#:	7
Topic:	Canine False Alerts
Hearing:	Dogs of DHS: How Canine Programs Contribute to Homeland Security
Primary:	The Honorable Cory Booker
Committee:	HOMELAND SECURITY (SENATE)

Question: Independent studies show that the reliability of service canines in uncontrolled environments has raised questions. In fact, numerous complaints have been submitted to U.S. Customs and Border Protection (CBP) challenging the dependability of canines in the field in Arizona and elsewhere. Does CBP take any action if a canine consistently provides false alerts? If so, what action is taken?

Response: CBP’s U.S. Border Patrol (USBP) and Office of Field Operation (OFO) canines will not false alert. The USBP and OFO define *Alert* as: “A change in body posture and increased respiration when a dog first encounters the odor(s) he/she has been trained to detect.” A canine will “alert” only to a trained odor.

In the course of daily operations, a USBP or OFO canine may have a *Non-Productive Alert*, in which the USBP and OFO define as: “The canine displayed an alert in an uncontrolled field environment where no tangible trained substances could be located.”

There is no corrective action taken on non-productive alerts because there is no way to verify whether or not a trained odor was present that caused the dog to alert initially. In these cases, it is possible that the trained odor contaminated something encountered by the canine. For example, someone smokes marijuana shortly before an encounter with a canine, but has no marijuana on his or her person at the time of the encounter.

Question: I understand that CBP may not collect information to track false canine alerts. Does CBP track service-canine alerts and false alerts? If it does so, how does it track those alerts and false alerts? If it does not, please explain.

Response: Non-Productive Alerts are not tracked.

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Hearing:	Dogs of DHS: How Canine Programs Contribute to Homeland Security
Primary:	The Honorable Cory Booker
Committee:	HOMELAND SECURITY (SENATE)

Question: Is CBP able to investigate data on false canine alerts and sort the data by sector and provide each complaint's resolution?

Response: Non-Productive Alerts are not tracked.

Question#:	8
Topic:	Continuing Canine Certification
Hearing:	Dogs of DHS: How Canine Programs Contribute to Homeland Security
Primary:	The Honorable Corey Booker
Committee:	HOMELAND SECURITY (SENATE)

Question: I understand CBP may not require continuing canine certification based on field performance. Does CBP require continuing canine certification? If it does not, please explain.

Response: CBP does require on-going maintenance training and annual recertification of all canine teams to be deployed in an operational capacity. The maintenance training requirements for each discipline are:

- Narcotics and Concealed Human/Narcotics – 16 hours per month;
- Currency/Firearms Detection – 16 hours per month;
- Search and Rescue – 16 hours per month;
- Patrol – Eight hours per week;
- Trailing – One exercise a month;
- Human Remains Detection – Three exercises every 45 days;
- Pedestrian Processing – Three exercises every 45 days; and
- Agriculture - 16 hours per month.

The recertification process is the same procedure used in the initial certification of the team. The maintenance training and recertification process is conducted by a certified CBP Canine Instructor who themselves must recertify every three years.