



City of Philadelphia CHDS Alumni & Participants

Partners in Homeland Security

Summary

- 12 Master's Degree Program alumni from Philadelphia along with two current master's students
- Eight Executive Leaders Program (ELP) and five Fusion Center Leaders Program (FCLP) alumni
- 245 homeland security officials access the Center's Homeland Security Digital Library (HSDL)
- Over 200 homeland security officials are Self-Study participants
- Mobile Education Teams (METs) have hosted two Executive Education Seminars in Philadelphia for the mayor and senior officials totaling 68 participants
- Three University and Agency Partnership Initiative (UAPI) Partners with seven Homeland Security Programs

Master's Degree Alumni

- **Edward Baldini**, Lieutenant – Counter Terrorism Operations, Philadelphia Police Department Homeland Security Unit, Philadelphia, PA
- **David Bonk**, Lieutenant, Philadelphia Police Department, Philadelphia, PA
- **Jay Bowen III**, Sergeant-Watch/Operations Intelligence Center, Philadelphia Police Department, Philadelphia, PA
- **Gabriel Chorno**, Assistant City Solicitor, Philadelphia Law Department, Philadelphia, PA
- **John Farrell**, Deputy Managing Director/City Services Coordinator, Managing Director's Office City of Philadelphia, Philadelphia, PA
- **Harry Mayer**, Regional Emergency Coordinator, Field Supervisor, Region Three, U.S. Department of Health and Human Services (DHHS), Philadelphia, PA
- **Catherine Mercogliana**, National Preparedness, Department of Homeland Security, Philadelphia, PA
- **Thomas Nestel**, Chief of Police, Southeastern Pennsylvania Transportation Authority, Philadelphia, PA
- **Samantha Phillips**, Director, Philadelphia Office of Emergency Management, Philadelphia, PA
- **Walter Smith**, Commanding Officer, Homeland Security, Philadelphia Police Department, Philadelphia, PA
- **Michael Touchstone**, Fire Paramedic Services Chief, EMS Training, Philadelphia Fire Department, Philadelphia, PA
- **Nola Joyce**, Deputy Commissioner Organizational Services, Strategy and Innovations, Philadelphia Police Department, Washington, DC

Current Master's Degree Participants

- **Paul Arnett**, Captain/Director of Auxiliary, D5NR, U.S. Coast Guard, Philadelphia, PA
- **Derrick Sawyer**, Fire Commissioner, Philadelphia Fire Department (Temporary Withdraw), Philadelphia, PA



Executive Leaders (ELP) Program Alumni

- **John Brosnan**, Assistant Special Agent in Charge – Philadelphia, Federal Bureau of Investigation, Philadelphia, PA
- **Timothy Crowley**, Regional Administrator, Veterans Employment & Training Service (VETS), U.S. Department of Labor, Philadelphia, PA
- **Richard Davison**, Deputy Fire Commissioner of Homeland Security, Philadelphia Fire Department, Philadelphia, PA
- **Erik Iverson**, Deputy Director for Planning, Philadelphia Office of Emergency Management, Philadelphia, PA
- **Charles Ramsey**, Police Commissioner, Philadelphia Police Department, Philadelphia, PA
- **Jonathan Sarubbi**, Former Regional Administrator, Region III, Federal Emergency Management Agency (FEMA), Philadelphia, PA
- **MaryAnn Tierney**, Regional Administrator, Region III, Federal Emergency Management Agency (FEMA) Philadelphia, PA
- **Steven Ward**, Federal Coordinating Officer, Federal Emergency Management Agency (FEMA), Philadelphia, PA

Fusion Center Leaders (FCLP) Program Alumni

- **Jeremiah Daley**, Executive Director, Philadelphia-Camden HIDTA, Philadelphia, PA
- **Tara Garvey**, Deputy Director, Philadelphia Police Department/Delaware Valley Intelligence Center, Philadelphia, PA
- **Matthew McDonald**, National Coordinator, Regional Information Sharing Systems (RISS), Philadelphia, PA
- **Walter Smith**, Commanding Officer Homeland Security, Philadelphia Police Department, Philadelphia, PA
- **Jeffrey Walker**, Assistant Special Agent in Charge, Federal Bureau of Investigation (FBI), Philadelphia, PA

University and Agency Partnership Initiative (UAPI) Partners

- **Drexel University**
- **Philadelphia University, Homeland Security Programs**
 - Master of Science in Disaster Medicine and Management
- **Saint Joseph's University**
 - **Homeland Security Programs:**
 - Master of Science in Public Safety Management
 - Graduate Certificate in Environmental Protections Safety Management
 - Master of Science in Homeland Security
 - Master of Science in Environmental Protection and Safety Management
 - Online Post-Master's Certificate in Homeland Security
 - Master of Science in Criminal Justice (online)





Philadelphia Master's Degree Alumni Theses Abstracts

Edward Baldini

Lieutenant – Counter Terrorism Operations
Philadelphia Police Department Homeland Security Unit

Thesis: Hunting a Black Swan: Policy Options for America's Police in Preventing Radiological/Nuclear Terrorism

Abstract: In the past three years, major attacks on mass transportation in Moscow, Madrid, London, and Mumbai left hundreds dead, thousands injured and the world searching for answers. Subway systems are not only attractive targets, but evidence persists of a continued terrorist interest in conducting attacks on United States subways and railways. An attack on a subway or rail system in the United States could cause substantial loss of life and could have an adverse impact on public confidence, resulting in massive economic loss. This thesis examines a series of security initiatives that collectively comprise a plan to be used as a template for mass transit systems in the United States that operate a subway to augment security. The core goal of these initiatives identifies ways to increase the probability of early detection to prevent terrorist bombings of all types on United States subway systems.

David Bonk

Lieutenant
Philadelphia Police Department

Thesis: Denying the Dangerous: Preventing Firearms from Entering the Hands of the Dangerously Mentally Ill

Abstract: Mass shootings in the United States tend to be succeeded by a period of great public attention to gun control laws. Often of particular concern is the National Instant Criminal Background Check System (NICS), which is promulgated by law to prevent statutorily defined individuals, including the dangerously mentally ill, from obtaining firearms. This thesis analyzed the NICS, particularly its ability or inability to prevent firearm access to the mentally ill. The examination looked at three criteria: (1) the weaknesses in the NICS that inhibit its ability in preventing the dangerously mentally ill from obtaining firearms, (2) how consistently applicable records are submitted to the NICS from the individual states, and (3) the proposed recommendations to change and create a more efficient NICS. Specific high-profile mass shootings in the United States were reviewed to illustrate legislative response to those shootings and the changes to the NICS, if any, that followed them. The goal was to identify any immediate deficiencies in the NICS and determine any corrective actions necessary to enhance it to produce a more reliable system. This research should serve as a roadmap for committees or individuals tasked with gun control legislation in the United States.

Jay Bowen III

Lieutenant / Operations Intelligence Center
Philadelphia Police Department

Thesis: Avoiding Social Media Hysteria: Creating an "Open Source" Standardized Data-Mining Policy for Law Enforcement Investigators

Abstract: In Progress





John Farrell

Deputy Managing Director / City Services Coordinator
Managing Director's Office City of Philadelphia

Thesis: Community Engagement for Collective Resilience: The Rising System

Abstract: Since the inception of the United States Department of Homeland Security, the American public has been told that it has a prominent role to play in the 'War on Terror.' However, this role has not been clearly defined. This thesis explores the viability of community engagement as a tool to promote public safety and homeland security. Research was primarily conducted through a literature review (to understand how engagement impacts safety), and a comparison of four case studies of safety-centric engagement programs in the U.S. and United Kingdom. While several of the programs in the case studies have proven to be effective at developing trust and improving security, the U.S. federal government has not effectively worked with these resources to improve its understanding of the domestic security landscape. This thesis contends that a new system is necessary to connect the federal government to local engagement programs. This may be accomplished with a domestic coordination and engagement system, referred to as the 'Rising System' for the purposes of this thesis. The goal of the Rising System would be threefold: To link federal, state, and local governments; to build on existing community policing and outreach efforts to help at-risk communities identify their greatest challenges; and to provide a forum where community members can safely work with their government to develop solutions.

Nola Joyce

Deputy Commissioner Organizational Services, Strategy and Innovations,
Philadelphia Police Department

Thesis: Can You Lead Me Now? Leading in the Complex World of Homeland Security

Abstract: This thesis focuses on a theory of leading and the activities and processes used to move a bureaucratic, public agency to a higher level of fitness in the contexts of dynamic equilibrium and the edge of chaos. The main claim is that leading and all of its components -- thinking and sensemaking, storytelling and demonstrating the right ideas, and organizing action and shaping collective movement -- are required for an organization to address the complex, coordinating problems of homeland security. This research is exploratory using the methodology of grounded theory. An in-depth analysis of a single case was used to test a theory of leading in complexity. Descriptive examples are provided of the activities identified in the process of leading. The findings supported the theory of leading and offered some suggestions for leading the work of homeland security. The analysis demonstrated that leading is a process that weaves in a non-linear way from thinking to sensemaking to demonstrating the "right ideas" and identities to organizing collective movement and back around to thinking. It is a process without ends and a process that shows how to accomplish organizational change in the realm of complexity and chaos.





Harry Mayer

Regional Emergency Coordinator, Field Supervisor, Region Three
U.S. Department of Health and Human Services (DHHS)

Thesis: First Responder Readiness: A Systems Approach to Readiness Assessment Using Model Based Vulnerability Analysis Techniques

Abstract: This thesis reviews various tools used by military and civilian First Responders to assess unit readiness. Most civilian readiness assessment tools have fallen short of adequately predicting a response teams probability of mission success or failure. This thesis will explore the use of model based vulnerability analysis techniques and FT++ software as potential tools that could be adopted by the first response community to predict a units operational performance.

Thomas Nestel

Chief of Police
Southeastern Pennsylvania Transportation Authority

Thesis: Using Surveillance Camera Systems to Monitor Public Domains: Can Abuse Be Prevented?

Abstract: After mainland United States suffered a violent attack upon its citizenry, Homeland Security professionals recognized the need to protect a growing number of critical infrastructure locations. Millions of dollars earmarked for emergency management programs were funneled into technologies that enabled public safety to 'do more with less.' Closed circuit television surveillance systems rocketed to the forefront as the must-have technology. Citizens of the United States became subject to video surveillance during their normal daily routines. This thesis examines the management of CCTV systems used by municipal police departments and analyzes the policies created to control the technology and prevent abuse. Using U.S. Census Bureau data, the police departments responsible for protecting the 50 largest cities were contacted and surveyed. The initial step determined what jurisdictions utilized surveillance cameras to monitor public domains. The follow-up steps gathered information about the systems being used; the management decisions regarding where to place the cameras; the training for its operators; supervision standards; the written policies regulating the department's program; analyzing those directives; and finally, presenting step-by-step recommendations for implementing CCTV surveillance systems for Homeland Security use.



Samantha Phillips

Director

Philadelphia Office of Emergency Management

Thesis: Rethinking Disasters: Finding Efficiencies Through Collaboration **Abstract:** Disasters are highly inopportune and represent a convergence of complexities, including multiple layers of government, private and non-profit organizations, and diverse populations. The complexity and unpredictability of disasters has been countered with structured management strategies. While an ordered environment has merit, perhaps the management of disasters is over-engineered that results in missed opportunities to capitalize on collaborative, decentralized solutions. This thesis evaluates the processes and procedures for responding to disasters by examining the current tiered response model (local, state, federal) and exploring whether a nonlinear, adaptive approach could improve interagency collaboration and result in better resource utilization. This research creates a framework for dialogue about the deeper appreciation of the complexities and hardships of disaster response. The management of disasters has been routinely criticized. Using a formative program evaluation method, primary and secondary data analysis focuses on understanding the roles and responsibilities of stakeholders, the effectiveness of resource deployment, and intergovernmental collaboration during disaster response. This thesis concludes with several recommendations ranked based on multiple factors including political acceptability, economic plausibility, public perception, effectiveness, and appropriate utilization of resources.

Walter Smith

Commanding Officer, Homeland Security

Philadelphia Police Department

Thesis: Developing a Model Fusion Center to Enhance Information Sharing

Abstract: Fusion Centers are in a unique position to provide the necessary collaborative space to bring the federal intelligence community together with state, local and tribal initiatives to support homeland security efforts at the grass roots level. Fusion Centers are described as a collaborative effort of two or more agencies to share, or more importantly, fuse information or data from multiple sources. Although, fusion centers have developed at different intervals, the U.S. Department of Homeland Security has provided guiding documents to support fusion center maturation. This research examines these documents and proposed strategies incorporated into four proficient fusion centers in the Northeast Region of the United States to identify best or smart practices, success stories and areas for improvement. There has been a plethora of literature written concerning fusion centers since the tragedies of September 11, 2001. These categories of the literature include: official documents, guidelines and lessons learned for intelligence input, civil liberties safeguards and protections and literature dealing with the intelligence cycle and information sharing. The focus of this thesis is to examine correlation between the implementation of the current United States Department of Homeland Security and U.S. Department of Justice suggested Fusion Center Guidelines, and the employment of these guidelines in the successful development of a model fusion center.

Michael Touchstone

Fire Paramedic Services Chief, EMS Training

Philadelphia Police Department

Thesis: Better, Cheaper; Accelerating Acquisition of Expertise in Paramedic Practice Through Simulation

Abstract: In Progress





Amtrak CHDS Alumni & Participants

Partners in Homeland Security

Summary

- Six Master's Degree Program alumni with one current master's student
- 50 homeland security professionals are users of the Center's Homeland Security Digital Library (HSDL)
- 30 homeland security officials are Self-Study participants

Master's Degree Alumni

- **Robert Giorgio**, Emergency Operations Manager, Amtrak, Philadelphia, PA
- **Jim Metzger**, Deputy Chief, Emergency Management, Amtrak, Philadelphia, PA
- **Brian Ravert**, Captain, Amtrak Police Department, Philadelphia, PA
- **Susan Reinertson**, Chief, Emergency Management and Corporate Security, Amtrak, Washington, DC
- **Lisa Shahade**, Deputy Chief, Amtrak Police Department, Philadelphia, PA
- **William Crosbie**, Former Chief Operating Officer, Amtrak, Washington, DC

Current Master's Degree Participant

- **James Cook**, Captain, Amtrak Police Department, Washington, DC

Amtrak Master's Degree Alumni Theses Abstracts

Robert Giorgio

Intelligence-Urban Area Regional Fusion Center
Delaware Valley Intelligence Center

Thesis: Decade of Experience: Which Network Structures Maximize Fire Service Capacity for Homeland Security Incidents in Metropolitan Regions?

Abstract: The Philadelphia metropolitan region is the fifth most populated metropolitan region in the United States. One method of providing homeland security services involves the use of regional response networks to achieve the capacity required to respond to terrorist incidents. The Philadelphia metropolitan region presents a challenge of coordination because there are two FEMA [Federal Emergency Management Agency] regions, two state borders, two state offices of emergency management, eight county emergency management offices, and 317 local government emergency management coordinators involved. This thesis examines three regional networks to identify the features of successful regional arrangements. The research includes the assessment of leadership, structure, and regional performance to identify features that can serve as recommendations for the Philadelphia Metropolitan Region. The research reviews the impact of federalism on regional networks and identifies one system--the Metropolitan Planning Organization--that serves shared federal, state, and local functions within regions. Recommendations center on creating a regional integrative network that utilizes existing fire service capacity to deliver functional homeland security.





Jim Metzger

Deputy Chief, Emergency Management
Amtrak
Philadelphia, PA

Thesis: Preventing Terrorist Bombings on United States Subway Systems

Abstract: In the past three years, major attacks on mass transportation in Moscow, Madrid, London, and Mumbai left hundreds dead, thousands injured and the world searching for answers. Subway systems are not only attractive targets, but evidence persists of a continued terrorist interest in conducting attacks on United States subways and railways. An attack on a subway or rail system in the United States could cause substantial loss of life and could have an adverse impact on public confidence, resulting in massive economic loss. This thesis examines a series of security initiatives that collectively comprise a plan to be used as a template for mass transit systems in the United States that operate a subway to augment security. The core goal of these initiatives identifies ways to increase the probability of early detection to prevent terrorist bombings of all types on United States subway systems.

Brian Ravert

Captain
Amtrak Police Department
Philadelphia, PA

Thesis: Protecting America through Better Civic Education

Abstract: How does civic education affect homeland security? A civic education curriculum that provides for the foundations of our youths' individual and collective identity may significantly contribute to the preservation of our democracy and enhance homeland security. Through a civic education, students can enhance their grasp of the concepts of our American representative democracy and learn the tenets of good citizenship, critical thinking, and the ability to self-govern. Presidential Directive Number Eight (8) clearly indicates the need for national preparedness using a whole of nation approach. The plan requires robust citizen engagement. To have an informed engaged citizenry and for a democracy to thrive, the populace must be educated. But there is no guidance or mention of the education of American youth or how such education may play a role in achieving the goals of national preparedness. The National Assessment of Educational Progress (NAEP) reported in 2010 that only 27 percent of the nation's fourth-grade students were proficient in civics. Only 22 percent and 24 percent of eighth-grade and twelfth-grade students, respectively, were proficient in the area. Civic education must provide youth with a personal and collective identity.





Susan Reinerton

Chief, Emergency Management and Corporate Security
Amtrak
Washington, DC

Thesis: Resource Sharing: Building Collaboration for Regionalization

Abstract: During the past decade the world has witnessed an increase in the use of Improvised Explosive Devices (IEDs). Explosives in the hands of terrorists continue to pose a significant threat. Lessons learned indicate that when traditional explosives become difficult to obtain, bomb makers turn to common chemicals as precursors to manufacture explosives. Only the imagination and the availability of certain chemicals limits the number explosives which can be manufactured with relative ease utilizing common chemicals readily available in our communities. Availability of precursor chemicals and ease by which explosives can be manufactured, increase the potential that IEDs will be deployed in the Homeland and requires a careful study of the options necessary to defeat IED deployment. This thesis analyzes various options, policies and procedures to ascertain which would be most appropriate to defeat explosives manufactured from common chemicals. Options include removing, restricting, and tracking certain chemicals available to the public as well as increasing awareness to emergency responders and the public. State and federal legislation pertaining to methamphetamine laboratories is analyzed to identify potential crossover legislation to counter explosives manufacture. Intelligence gathering and information sharing technologies and procedures are assessed for effectiveness as law enforcement tools.

Lisa Shahade

Deputy Chief
Amtrak Police Department
Philadelphia, PA

Thesis: Filling Gaps in Interconnected Passenger Rail Security

Abstract: Completed- Restricted



William Crosbie
Former Chief Operating Officer
Washington, DC

Thesis: Public-Private Sector Passenger Rail Intelligence and Terrorism Information Sharing

Abstract: What is an effective methodology for intelligence and terrorism information sharing within a private passenger rail organization and with their external public partners? This thesis uses three distinct research methodologies that collectively lead to an effective strategy for intelligence and terrorism information sharing within a private passenger railroad, and with its external public partners. First, key Amtrak personnel were interviewed to establish and confirm how intelligence information currently flows within Amtrak and with its external intelligence community and law enforcement partners. Second, a survey of key Amtrak operations personnel was conducted to establish Amtrak's intelligence priorities and requirements. Finally, this study examined two case studies on potential models for intelligence and terrorism information sharing. The two main outcomes of this research were that by leveraging the power of informal networks in the context of the abstract megacommunity framework, an effective strategy for intelligence and terrorism information sharing was developed. Also, based on the needs of front line railroad operating personnel, an intelligence product that helps to protect the public and the nation's critical railroad infrastructure was developed.

Press Coverage of the Event



Philadelphia Director of Emergency Management Samantha Phillips (center), CHDS master's degree graduate, speaks at a press conference on May 13, updating the Amtrak train derailment. (Photo by NewsWorks.org)





Philadelphia Police Commissioner Charles Ramsey, an alumnus of the Executive Leaders Program, leaves the scene of the Amtrak derailment on May 12. (Photo by the Boston Globe)



Philadelphia Mayor Michael Nutter speaks at a press conference with CHDS master's degree graduate Samantha Phillips, Philadelphia Director of Emergency Management, behind him.

Additional Press Coverage about the Event

CHDS Master's Degree Graduate Samantha Phillips

Hospitals treated more than 200 patients, said Samantha Phillips, the city's emergency management chief. Amtrak asked even people who were uninjured to call in as authorities tried to match the passenger list with hospital accounts.





<http://www.nbcnews.com/storyline/amtrak-crash/philadelphia-amtrak-crash-black-box-recovered-mayor-says-n358276>

“The most important thing right now is that the incident has been placed under control so we’re starting the family unification process. We’re working with Amtrak, we’re working with our hospitals, we’re working with all of our human services agencies so again if the public is looking for someone, a loved one, start that process by calling Amtrak’s number that’s 1-800-523-9101,” said Samantha Phillips, Director of Emergency Management for the City of Philadelphia.

<http://philadelphia.cbslocal.com/2015/05/12/crews-responding-to-reported-train-derailment-in-port-richmond/>

CHDS Executive Leaders Program Graduate Charles Ramsey

Upon his release from the hospital he spent hours inside East Detective headquarters, and according to Police Commissioner Charles Ramsey, he declined to give a formal statement about the wreck, even after his union lawyer arrived.

[/http://6abc.com/news/7-killed-in-philadelphia-amtrak-crash;-engineer-idd/718111/](http://6abc.com/news/7-killed-in-philadelphia-amtrak-crash;-engineer-idd/718111/)

Police Commissioner Charles Ramsey said officers used “a large number of tourniquets” on the injured.

<http://www.washingtonpost.com/news/morning-mix/wp/2015/05/13/at-least-5-dead-when-amtrak-train-from-d-c-to-n-y-derails-in-philadelphia/>

CHDS Master's Degree Student Derrick Sawyer

Earlier today, Philadelphia Fire Commissioner Derrick Sawyer said that an eighth, and final, victim was found in the first car of the train at around 8 a.m. this morning with the help of cadaver dogs. He said that hydraulic tools were used “to open up the train a little bit” in order to retrieve the body. Laura Finamore, 47, and Bob Gildersleeve, Jr., 45, were the last victims to be identified.

<http://abcnews.go.com/US/amtrak-crash-train-engineer-agrees-speak-probers-spel/story?id=31042574>

“Train cars are overturned,” the Philadelphia Fire Commissioner, Derrick Sawyer, said. “They’re in horrible shape. There’s a bunch of debris down there, sharp objects. It’s a dangerous situation for responders, even more dangerous for the riders out there.”

<http://www.nytimes.com/2015/05/14/us/amtrak-train-derails-crash-philadelphia.html>

