# THE ILLICIT BUSINESS BEHIND THE OPIOID EPIDEMIC

Conference Report

Abstract

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Convened by the TraCCC Center at the Schar School of Policy and Government at George Mason University

# Executive Summary

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## Key Takeaways

- In 2015, 52,404 people in the United States died from opioid overdoses, more than the number of people who died from automobile accidents. Despite the federal, state, and local response to the opioid crisis, opioid overdose deaths are projected to increase in 2017 and 2018.

- In the Washington D.C./Baltimore metropolitan regions, the majority of rural opioid overdose deaths are due to prescription opioids. In urban areas, non-prescription opioids such as heroin cause the majority of overdose deaths.

- Fentanyl, a synthetic opioid 50 times stronger than heroin[1], can cause an overdose for anyone who comes in direct contact with the substance. This makes fentanyl extremely dangerous for law enforcement officers, who must wear HAZMAT protective suits in situations where fentanyl exposure is likely.

- The majority of the fentanyl in the United States is manufactured in China. Sometimes it is shipped directly to the United States, though in many cases it is trans-shipped through Mexico. According to U.S. Customs and Border Protection (CBP), most illicit drugs are smuggled into the United States at the Mexican border.

- There are a variety of actors in the illicit opioid trade, including established transnational criminal organizations such as Mexican drug trafficking organizations and independent, actors transacting on the dark web (websites that are only accessible with encrypted browsers such as Tor).

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[1] "Synthetic Opioid Data." Centers for Disease Control and Prevention, December 16, 2016. https://www.cdc.gov/drugoverdose/data/fentanyl.html.

- Dark web sales of opioids are an emerging trend. Buyers take cryptocurrencies such as Bitcoin for payment to evade detection by law enforcement. Because Fentanyl is so potent, it is shipped in small quantities and is easily concealed. Drug traffickers often use legitimate transport operators (Express Courier, Air Cargo and International Mail) to transport fentanyl.

- Due to the large volume of packages entering the United States, it is impossible for law enforcement to conduct manual inspections on all shipments. Nor can law enforcement individually respond to every opioid-related incident. One panelist observed that "if one police officer was assigned to every single case involving a death from opioid overdose, the entire New York Police Department, which is the largest in the United States, would not have enough officers to investigate such cases."

- The private sector has an important role to play in addressing the opioid epidemic. Financial institutions can be the first line of defense against the laundering of drug proceeds. Shipping, logistics and express consignment operators can play an important role in detecting illicit shipments. Pharmaceutical companies who are impacted by the growth of counterfeit drugs which can be harmful or even fatal to consumers, have important information that they can share with law enforcement.

- Data analysis is increasingly being utilized by law enforcement agencies to combat drug trafficking organizations. Below are several examples:
  - Using geographic information systems to track patterns of drug overdoses
  - CBP and U.S. Postal Inspection Service utilize data analytics programs to detect and interdict high-risk shipments entering the United States
  - The Defense Advanced Research Projects Agency (DARPA) produces tools to index and search the dark web for criminal activity

# Key Recommendations

**Incorporating the Private Sector and Developing Public-Private Partnerships**

- *State legislatures and Congress should create venues for cooperation with the private sector. Both the private and public sectors should remove barriers to information sharing.*
- *Collaborate with technology companies to address the use of social media platforms for conducting illicit drug transactions.*
- *Engage shipping, logistics, and postal companies regarding the comingling of illicit drug shipments within legitimate supply chains*
- *Engage with social media and e-commerce websites to develop monitoring technology that detects illicit drug transactions*

**Taking a Holistic Approach**

- *Develop a comprehensive national strategy to combat the opioid crisis incorporating the perspectives of law enforcement, academia, government agencies, the healthcare sector, and schools.*

**Tackling the Global Dimension**

- *Follow the money. As any other business, drug organizations are hurt most when they lose their financial assets and resources.*
- *Strengthen international cooperation because the vast majority of drugs are shipped to the U.S. from abroad.*
- *Address corrupt pharmaceutical companies, healthcare providers, and government entities that facilitate overprescribing of opioids and transnational drug trafficking.*

**Fostering Innovative Research & Data Methods**

- *Enhance business and law enforcement responses to the opioid crisis based on comprehensive, academic research.*
- *Conduct further research into algorithms that can detect criminal activities such as online narcotics sales.*
- *Increase information sharing between the private sector, academia, and all levels of government through a common portal.*

**Promoting Law Enforcement Innovation**
- *Use emerging methods of criminal investigation, such as sensor networks and new forensic tools, in concert with seizures, asset forfeiture, Medical license suspension and debarment, and special operations.*
- *Inform law enforcement about new research, brief police on new investigative technology, and strengthen their technical capabilities. This is needed so law enforcement can keep pace with technically adept drug trafficking organizations*
- *Utilize comprehensive methods of criminal activities analysis, including network analysis and geospatial analysis.*

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## Foreword: Dr. Mark J. Rozell, Dean of the Schar School of Policy and Government of George Mason University in Virginia

The Schar School of Policy and Government of George Mason University is honored to host *the Illicit Business Behind the Opioid Epidemic Conference* that convenes a distinguished group of professionals engaged in a common cause. The objective of this conference is to search for the best ways to counter the opioid crisis which continues to worsen in the United States. Opioid abuse is a real and major crisis for the United States. Opioids are now killing more people than automobile accidents in our country. This epidemic kills people of all social backgrounds and in all regions of the United States. It undermines communities, families, society, and our labor force.

> **"This crisis is the result of a deadly business caused by companies and criminals who market drugs illegally. It is a transnational crime problem and we need to work together to solve it."**

In 2014, approximately 69,000 people died worldwide from opioid overdoses. American deaths from opioid overdoses were close to 40 percent of the global total. This number continues to grow. Since 1979, when the problem began in the United States, there has been an exponential growth in the number of deaths from opioids. This crisis is the result of a deadly business caused by companies and criminals who market drugs illegally. It is a transnational crime problem and we need to work together to solve it. At the Terrorism, Transnational Crime and Corruption Center (TraCCC) at George Mason University, we have a long tradition of addressing transnational crime as a business. As a university, we plan to conduct research convening different communities and develop policy recommendations to address this critical problem.

This conference is the result of a very significant collaboration of the Terrorism, Transnational Crime and Corruption Center and the Schar School with government, law enforcement, the private sector, and our Northern Virginia community. It testifies to our commitment to doing research on transnational crime and issues that matter to our society. This conference has been possible with the help of a number of key partners, we would like to acknowledge the Washington-Baltimore High Intensity Drug Trafficking Areas (HIDTA), a law-enforcement task force that serves the District of Columbia, Maryland, Virginia, and West Virginia; the Association of Certified Anti-Money Laundering Specialists (ACAMS), in particular their US Capitol Chapter, the Center for Organizational Performance and Integrity (COPY) at the Schar school, whose Director David Williams has played a key role in supporting this conference, and our friends from the private sector who have agreed to share their knowledge. Finally, I would like to thank my colleagues Louise Shelley, Judy Deane, and Kasey Kinnard from TraCCC for their hard work in organizing this conference. Also, I would like to thank Dwight Schar who supports our school and makes this and many other events at the Schar School possible.

# Introduction: Dr. Louise Shelley, Director of the TraCCC Center

It is a great honor for us to host *the Illicit Business Behind the Opioid Epidemic Conference*. We had over 150 people who registered for this conference. They represent different communities: the federal, state, and local governments, the private sector, academia, and civil society. Without the cooperation of all of these communities, it will be impossible to solve the opioid problem. The conference pays particular attention to high-tech applications that can be useful in taming the opioid crisis.

> **"High-tech solutions and data mining have already proved their effectiveness in solving crime problems in other areas, such as human trafficking."**

Since criminal organizations involved in opioid trade increasingly use the internet, we need high-tech tools and data analysis capabilities more than ever, and some of them lie in the private sector. We look forward to promoting a public-private partnership through this conference and future events. High-tech solutions and data mining have already proved their effectiveness in solving crime problems in other areas, such as human trafficking. The holistic approach to these problems is especially important because human trafficking and the opioid epidemic intersect with each other. The opioid crisis affects not only the drug trade, but it also impacts other human life conditions and community conditions that have far-reaching consequences. We see through our Internet analysis how much this problem is growing. DARPA developed tools that proved

> **"The opioid crisis is much more than just a problem of corporate greed or international money laundering, but it also deals with great power politics."**

successful in combating human trafficking. We need to develop strategies to successfully apply them to the area of illicit drugs. This requires collaboration between public and private organizations. George Mason is working with HIDTA in the Fairfax campus on domestic crime, while the Arlington campus focuses more on transnational crime and money-laundering. Collective research efforts are very important because the drug problem has changed significantly in the last few years. It is a multifaceted problem that involves the corporate world, transnational crime, criminal networks, the dark web, and foreign countries.

If we think about the history of the opioid problem, its roots go back to the opium wars in the 19th century when the British tried to force drugs into China to expand their power in the region. It led to the first opium war. In the second opium war, the British were joined by the French and the Americans. The history of crime problems in China reflects the national disgrace of the country defeated by the opium wars and the Western powers. The fact that nowadays most opioids, especially the newest types, such as fentanyl and carfentanil, are coming from China might be considered a sort of long-term payback. This example shows that the opioid crisis is much more than just a problem of corporate greed or

international money laundering, but it also deals with great power politics.

To successfully combat this problem, we need to analyze multiple facets of this large and complicated phenomenon. Since 1979, the number of deaths from opioid overdoses has been growing exponentially, from 2,475 deaths in 1979 to 44,063 deaths in 2014. The opioid crisis is a national tragedy. It undermines our industrial base, our community, and our long-term security. Therefore, we are dealing with a crime problem with unbelievable implications for our society. This much harm cannot be done just by organized crime; it takes many more people to be involved in it. As scholars, we need to understand where to focus our research, and as a policy school, we need to understand how we can help and work with public agencies and private organizations to shape policy responses to this problem, and develop strategies and recommendations for our country. We convened some of the most competent and knowledgeable people in this

room today and it is the beginning of a much larger dialogue and understanding of how we use our great technical resources to help pinpoint the problem and begin to deal with it as a business.

There are many other aspects we need to consider as we deal with the opioid crisis, such as prevention, community and public health responses, which are very important. But our strengths at the Schar School and at TraCCC are focused on the business and crime facets of the opioid problem. Before his murder, Judge Giovanni Falcone, who fought the mafia in Italy, said that you have to understand the business of it and if you don't understand the business, you cannot target it. This is why we set up conference panels with our friends from HIDTA, ACAMS, DARPA, and law enforcement agencies to understand the opioid drug business and to help develop strategies based on the knowledge that has already been accumulated in the area of transnational crime. Our key objective is to define where to go next.

## Setting the Stage: Opioid Epidemic in the Washington Metropolitan Region (Tom Carr, Executive Director of the Office of National Drug Control Policy's, Washington/Baltimore HIDTA)

**The nature and extent of the opioid problem**

In 2015, 52,404 people died from opioid overdoses, which is more than the number of people who died from automobile accidents. In comparison, 58,220 people died in the 17 years of the Vietnam War. According to some experts' estimates, the number of opioid victims will increase to 60,000 deaths from overdoses in 2017 and to over 70,000 in

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2018. These statistics demonstrate the seriousness of this problem as a threat to our nation. Another dangerous trend is the presence of new types of synthetic drugs, such as fentanyl. The latter is more dangerous than heroin, with only 2 milligrams enough to kill an adult.

Among opioid victims in 2015, 22,598 people died from opioid pain relievers, while 19,884 died from the abuse of illegal drugs. Our analysis shows that rural areas in West Virginia suffer more from prescription drugs abuse, while urban areas in Virginia suffer more from heroin and other opioids. In Virginia, over 700 people visit emergency rooms every month because of opioid overdoses. Apart from that, the cocaine problem remains high in the region, with more than 900 overdose deaths in 2016. Importantly, there is an increased risk for overdose when cocaine is injected with central nervous system depressants, including opioids. The mixture of cocaine with fentanyl is extremely deadly.

**Opioid drug business**

> **"The business nature of the opioid trade requires the use of a target-centered approach for its analysis, which concentrates on functions of organizations involved in this trade, their structures, and processes."**

The opioid drug business involves drug trafficking organizations (DTOs) and money laundering organizations (MLOs), which are very complex in their structures and operations. From a policy perspective, it is important to understand that drug dealers are not libertarians who sell drugs because they think it is a right that people should have. They are selling drugs for one purpose only – to make money. This money-making business is related to all other types of crimes, including human trafficking, prostitution, smuggling, homicides, and murders for hire, among others. The business nature of the opioid trade

requires the use of a target-centered approach for its analysis, which concentrates on functions of organizations involved in this trade, their structures, and processes. This approach helps determine a level of threat that such organizations pose to society. This approach is also useful in investigations of such crimes.

One important element of the opioid drug business is competition for market shares, which manifests itself in drug wars, gang wars, and fights for territory. Another important element of this business is the distribution system. The drug traffickers are constantly looking for the best routes with the least exposure, often following the principle "if it fits, it ships." The small size of fentanyl makes it extremely easy to ship. Drug dealers can put it in a box, have a barcode on it, track it into the system, and learn whether or not the package has been stopped by law enforcement.

Structures of criminal organizations are another important element to understand. In the Washington Metropolitan region, organizations selling opioids have a pyramid type of structure, with the CEO and CFO managers on the top. Drug suppliers could be either part of the criminal organization or they can be connected to it through business relationships. An analysis of business processes is extremely important because it shows how these organizations operate, what devices and technology they use in their criminal activities, and how they involve the dark web and social media to get their customers. Finally, drug organizations use a variety of concealment methods, ranging from cars with hidden compartments that are electronically controlled to different types of couriers.

**Network and geospatial analysis**

Network and geospatial analysis are extremely useful in targeting criminal organizations. They help understand functions, structures, and processes of criminal organizations. The final objective is to develop strategies that negatively affect criminal organizations. These strategies are effective if they oblige criminal organizations to reduce profits to beef up security, change

> **"Communication is one of the greatest vulnerabilities of criminal organizations involved in the opioid trade. Mobile phones, online services, and cryptocurrencies leave an electronic trail that can be used in investigations."**

the way they operate, displace their activities, move to another area, or drop out of business. Network analysis helps to trace lines of communication used by criminal organizations. Communication is one of the greatest vulnerabilities of criminal organizations involved in the opioid trade. Mobile phones, online services, and cryptocurrencies leave an electronic trail that can be used in investigations. This is why law enforcement agencies should treat all overdoses as crime scenes. If victims use a cell phone to call their dealers, this information could be indispensable for investigators. CAP (communication analysis portal) makes cell phone data collection and analysis much easier and more efficient. It quickly organizes and de-conflicts phone

numbers from seized phones, revealing key connections. In cases of multiple overdoses

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in the same geographic area, a common call analysis helps identify drug dealers. This is their greatest vulnerability: if they do not communicate, they cannot make sales.

*Geospatial analysis* can be used to show trends and patterns in overdoses in real time. It can also be used to forewarn communities in those areas where overdoses are likely to occur. This analysis is also able to identify organizations responsible for

trafficking drugs in that area. Geospatial analysis proves useful in helping public health organizations identify spikes. For example, a special mapping tool ODMAP provides real-time overdose surveillance data across jurisdictions to support public safety and health efforts to mobilize a response to an overdose spike. It started out in Maryland and West Virginia and now covers 19 states. This tool can help develop policies related to the treatment and prevention of opioid abuse. This type of technology has great potential to revolutionize public responses to the opioid crisis.

> **Recommendation:** *To enhance data collection.* Underreporting of overdoses and drug-related crimes is common. Furthermore, the vast majority of the crimes that are connected to the opioid trade and abuse, including burglaries and homicides, are often not reported as drug-related crimes.

## Perceptions of Drug Use and Crime in Appalachian Kentucky (Dr. Charlotte Gill, Center for Evidence-Based Crime Policy, Department of Criminology, Law and Society, GMU)

**Research project**

The research focuses on Appalachian Kentucky, specifically on the southeastern portion of the state. This project, which is a partnership between George Mason University and Partners for Education at Berea College funded by the Bureau of Justice Assistance's Innovations in Community-Based Crime Reduction (formerly BCJI) program, aims to develop crime reduction programs that involve local

communities, especially in the context of young people in rural areas. An analysis of perceptions of drug use and crime can help us develop effective responses in rural communities. The research project involves communities in three counties (Bell, Clay, and Harlan), which have the most serious public policy issues in terms of youth crime and other social problems involving young people. The methodology involves analysis of Kentucky State Police crime incident data in the period between 2010 and 2016 and in-depth interviews with over 60 youth aged 12-24, their parents and guardians, and over 70 local service providers.

## Findings: Community concerns

The analyzed counties are characterized by low population density, with a high percentage of people living in poverty. One of the reasons is the decline of the coal mining industry, which they historically relied on for development. The unfavorable socio-economic situation is responsible for the spread of drug abuse and the related crimes. A serious cause for concern, as reported by local law enforcement and community members, is the association between crimes such as larceny, theft, and assault, among others, and substance use. The most disturbing finding is that people who are being inundated with drug-related crime are incredibly young

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people. The average age of victims of drug-related crimes is 12 years. Apart from prescription opioids, community members report there are other drugs coming into the communities, such as meth ("ice"), "party drugs" (Xanax, alcohol, marijuana), and heroin. Among young people, drug use can be an escape from the sense of hopelessness associated with a lack of positive activities and employment prospects. Social media plays a huge role in rural areas with low population density and insufficient transportation. As a result, a lot of activities take place on social media, including bullying, "sexting," and

arranging drug deals. A feeling of boredom, helplessness, family breakdown, a lack of role models and empowerment are driving

> **"Social media plays a huge role in rural areas with low population density and insufficient transportation."**

problems in the community, leading young people to drugs and crime. The facilitating factors in the rural environment include unsupervised locations (including long school bus rides), remote areas, and slow police response.

But there are also positive strengths in the community that can be used to fight the opioid crisis. These include deep-rooted connections to place, close-knit and caring residents, a strong youth club in one of the counties and cross-denominational, faith-based programs for youth. The empowerment of local residents to find strengths within their communities is a cornerstone of the project.

Recommendations from the project's directors include a national discussion of the challenges young people in rural areas routinely face. Policymakers are also advised to address the underlying economic stagnation of these regions. Also, those involved should take advantage of the tight-knit communities when seeking to reach vulnerable groups and should work to build local capacity for interventions. Lastly, those involved in this field should work to increase supervision and structure for young people by developing programs focused on positive youth development.

**SESSION TWO. New Technologies: How Can They Facilitate and Counter the Spread of Opioids, Heroin, and Synthetics**

**Summary:** This session provides a description and analysis of some of the high-tech tools available for law enforcement and other actors involved in countering the spread of opioids.

## Memex and Other Tools

Memex (Domain-Specific Search) is a program that DARPA launched in 2014.[2] The idea behind it was related to the fact that traditional web search engines use a centralized, one-size-fits-all approach that searches the Internet with the same set of tools for all queries. For example, the Google search engine indexes somewhere around 3 to 5 percent of the Internet.  But a large section of the internet, such as Craigslist pages from previous years – that are not of interest to the general public, but might be of interest to law enforcement investigators – are difficult to access.

In addition, traditional search engines do not work in the dark web that requires a specialized browser to interface or to interact with.  The dark web uses the Tor (The Onion Router) software to create hidden services. Tor hosts several dozen hidden marketplaces trading in illegal goods, mostly drugs.  These websites generally use 16-character randomly generated addresses. In the next six months, this number is supposed to increase to 52 characters in order to enable new generations of sites that are becoming more popular. To address these concerns, Memex is designed to provide tailored search results for users with specialized needs. It creates narrow indexes across a much deeper swath of the Internet. By doing so, it enhances law enforcement's awareness of what the current online marketplace looks like for human trafficking, narcotic sales, and other illicit commercial activity.

Memex has already proved effective in fighting human trafficking. The initial goal was to understand the footprint of human trafficking in online open spaces and the dark web. The program ended up creating the largest index of online ads for sex and escort services. When an individual is advertised online as being "new in town" or by specific characteristics, those are hints about human trafficking.[3] Movement patterns provide additional information for investigators. They are indicators of whether or not a person is a victim of human trafficking. Other footprints are phone numbers, email addresses, and ways of communications used by criminals. Phone numbers can be associated with massage parlors, nail salons, or other physical businesses. This information can help draw

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[2] More information can be found at https://opencatalog.darpa.mil/MEMEX.html

[3] More information about the use of Memex is available at:
https://www.defense.gov/News/Article/Article/1041509/darpa-program-helps-to-fight-human-trafficking/

linkages to discover a larger network and potentially identify assets associated with that network. Seizures of assets and financial resources severely hurt criminal activities of such networks.

Since the ultimate objective of law enforcement is to take down the entire network associated with human traffickers, investigators need to move up the supply chain to be able to get those individuals who are profiting from illegal activities. Online ads might contain information that coincides with data in other datasets related to suspicious economic activity or currency transaction

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reports, as well as other reports related to financial products. Extracting phone numbers, email addresses, business locations, and comparing them with different databases help identify human trafficking networks and locate their assets. Another advantage of Memex is that it is open source, meaning that government agencies can tailor it to their particular needs.

**Other tools**

In the dark web, individuals can buy drugs online without any physical contact, pay in crypto-currency and then receive the drugs in a mailbox. A special tool called Lighthouse

developed by SRI enables basic search across the dark web. This tool makes it possible to search for a keyword, username, email address, or bitcoin wallet on the dark web. It visualizes dark web pages in a text format to ensure that illegal images are not displayed. It is available for law enforcement. Another tool

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called Profiler is able to search over 170 different social media platforms to see if an individual has social accounts. It helps build criminal profiles. One more tool called Butler is able to search the entire Internet to build criminal profiles in situations where individuals use different names to disguise their identity. It involves significant machine learning that enables crawlers and scrapers to extract the content related to this individual. These tools are useful for combating illegal narcotics. Most people who interact with the dark web think that there is a significant level of anonymity because law enforcement cannot track their IP addresses. Same goes with crypto-currency. However, there is a lot of hidden data that can be picked up. For example, if somebody is shipping and tracking a package, it increases the likelihood that it contains drugs in it. Crypto-currencies also have inherent vulnerabilities within the system that can be potentially tracked by law enforcement.

## ODMAP[4]

ODMAP is a tool developed by the Washington Baltimore HIDTA that provides real-time overdose surveillance data across jurisdictions to support public safety and to mobilize a response to an overdose spike. Data is entered into the system by a Level I user, such as police officers or fire/EMS provider on scene or reported to a central location. Responders enter data into the system identifying whether or not the incident is fatal or non-fatal. No personal identifying information is collected on the victim or location. Level II users, defined as public health or safety staff, are issued a login credential to enter the secure server to view the map. There are several filtering tools for analytical purposes. ODMAP is designed to

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alert Level II users when an overdose spike occurs in real time. Each jurisdiction can set up its own threshold. Individual counties are able to look at their own statistics or to learn what is happening in neighboring jurisdictions. Often, they are related to each other. This is free software which helps save people's lives. It also helps actors share their data and make better decisions. This tool provides empirically-based evidence for policy making

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[4]More information can be found at http://www.hidta.org/odmap/

## SESSION THREE. Panel on Federal Law Enforcement Response: What Can Federal Agencies do to Counter the Epidemic? Where are the Gaps?

**Introduction by the Panel Moderator David Williams, Director of the Center for Organizational Performance and Integrity (COPI) at George Mason University.**

There is no single solution to the opioid crisis. There are many issues that need to be addressed, including public education, treatment, and building incentives and disincentives, among others. This panel focuses on narcotics coming into the United States from other countries. This is an important aspect of the opioid crisis and there are parallel lines between the supply chain of illicit drugs and abuse of opioids. The opioid problem has changed significantly in the last decade, bringing new challenges to law enforcement and public agencies. At the same time, new forensic methods, technological advances, and innovative software help law enforcement react more effectively to these challenges.

**Pilot Projects on the Use of Electronic Advanced Data (EAD) for International Mail Security (Lori Rectanus, Director of Physical Infrastructure Issues at the Government Accountability Office)**

The presentation is based on the 2017 report on international mail security that, among other things, analyzes a collaborative effort of the U.S. Customs and Border Protection (CBP) and the U.S. Postal Service (USPS) to target and find illicit and prohibited items.[5] In 2016, the Postal Service handled over 621 million pieces of inbound international mail, including packets, letters, and other items. This figure does not include express consignment operators (ECO), such as FedEx, DHL, and the United Parcel Service (UPS), that, according to some sources, could handle about 100 million pieces. Taking this volume into account, traditional enforcement mechanisms, such as physical search, cannot ensure mail security.

GAO reviewed available information related to pilot programs conducted by USPS and CBP using electronic advanced data

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(EAD) to target mail for inspection for the period from July 2014 through January 2017. EAD includes the sender's name and address, the recipient's name and address, content information and some other elements. Express consignment operators accept items for delivery to the United States at points of sale in foreign countries and provide EAD to CBP

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[5] The GAO report is available at http://www.gao.gov/assets/690/686377.pdf

prior to the items' scheduled arrival in the United States. CBP then analyzes the EAD and provides lists of targeted items to express consignment operators. However, unlike express consignment operators, USPS does not have control over mail prior to its arrival in the United States, and therefore.is not currently required to provide CBP with EAD for inbound international mail. Instead, USPS has to rely on foreign postal operators to collect and provide EAD voluntarily or by mutual agreement. In 2016, there was about 30-40 percent inbound mail with EAD.

In 2014, CBP and the Postal Service started two pilots at the JFK International Service Center (ISC) in New York. The purpose of this test was to assess the ability of the Postal Service to provide identified items to CBP. The pilots show that the Postal Service could provide between 50-80 percent of the items requested by CBP. In some cases, USPS was unable to provide targeted mail items for inspection because it was difficult to locate them once they arrived at the ISC. The key challenge is the huge volume of inbound mail, so identifying individual items is comparable to searching for a needle in a haystack. It is a manual labor-intensive process. The GAO report concluded that the costs and benefits of using EAD need to be assessed. Since CBP and USPS lacked clear performance goals for these pilots, and there is no clear data on the value of EAD for targeting compared to other enforcement mechanisms, the agencies risk spending additional time and resources without the corresponding benefits.

## New Challenges to USPS (Rafael Medina (Rico), Deputy Chief Data Officer - Office of Chief Data Officer at US Postal Service Office of Inspector General)

The US Postal Service Office of Inspector General is an independent agency within the Postal Service. It is responsible for conducting audits and investigations to ensure the integrity and accountability of the Postal Service. It has about 1,100 auditors, investigators and support staff nationwide. It reports directly to Congress and to the Postal Service's Governors. As far as international mail is concerned, every day about half a million packages come through overseas international centers. The Postal Service is facing a new set of challenges from individuals who are using international mail to move illicit narcotics including opioids. There is no single solution to the problem, but many perspectives on how to manage this huge volume of packages coming to the United States. It is a big problem that requires collaboration between multiple agencies and organizations, not only to investigate cases where prohibited items land in the United States, but also to stop such items before they leave foreign facilities. The opioid crisis is much more than just a law enforcement problem. If one police officer was assigned to every single case involving a death from opioid overdose, the entire New York police department, which is the largest in the United States, would not have enough officers to investigate such cases. Obviously, law enforcement alone cannot stop this opioid crisis.

The opioids problem poses new challenges in the postal environment. One of them includes a recent increase in allegations of collusion by postal employees in

> **"From a drug dealers' perspective, bribing postal staff is an effective way to ensure success of the whole criminal enterprise. Meanwhile, from a law enforcement perspective, collusion by postal employees represents a challenge that needs to be addressed to stop drug trafficking."**

facilitating drug trafficking. As the Postal Service is the final intermediary in the long supply chain, postal carriers and employees are being solicited to participate in criminal activity involving the movement of narcotics through the mail system. From a drug dealers' perspective, bribing postal staff is an effective way to ensure success of the whole criminal enterprise. From a law enforcement perspective, collusion by postal employees represents a challenge that needs to be addressed in order to stop drug trafficking. One of the best ways to identify drug trafficking activities using the mail is through data analytics, and we have stepped up our analytics work in this area. For example, in 2017, in Washington, D.C., a postal supervisor was accused of abusing his office and managing a drug distribution network in

his postal facility.[6] He was sentenced to 97 months in jail, along with two employees who were helping him to distribute drugs locally. The danger is that criminal organizations might find the next letter carrier or supervisor who is willing to accept bribes for distributing drugs. This requires a holistic approach to combatting corruption in this area.

> **Recommendation:** *To expand data analysis in the postal environment*. Traditional investigative approaches should be replaced by the use of different datasets that are collected for crime-related and non-criminal purposes. Similar approaches that have been used in markets to extract information for commercial purposes should be applied by law enforcement to identify drug dealers.

## New Challenges to Drug Enforcement (Jose Roman, Supervisory Special Agent, Washington Division, US Drug Enforcement Administration)

The US Drug Enforcement Administration (DEA) is the only single-mission federal agency dedicated to the drug law enforcement. The mission of the agency is to enforce the controlled substances laws and regulations of the United States and bring to the criminal and civil justice system of the

> **"Another troubling trend is the rise of online purchases of opioids from overseas by domestic labs that use chemicals for further distribution."**

United States, or any other competent jurisdiction, those organizations and principal members of organizations, involved in the growing, manufacture, or distribution of controlled substances appearing in or destined for illicit traffic in the United States;

and to recommend and support non-enforcement programs aimed at reducing the availability of illicit controlled substances on

> **"One of the challenges that law enforcement agencies face in dealing with this crisis is that opioids include pain relievers available legally by prescription. Most heroin users reported that they started from the use of prescription medication."**

the domestic and international markets. The DEA has about 221 offices in the United States divided in 21 divisions and 68 offices overseas in 68 countries.

One of the challenges that law enforcement agencies face in dealing with this crisis is that opioids include pain relievers available legally by prescription. Most heroin users reported that they started from the use of prescription medication. In the 1990s, pharmaceutical companies reassured the medical community that patients would not become addicted to opioid pain relievers.

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[6] For more information, see: https://www.justice.gov/opa/pr/washington-dc-post-office-manager-and-two-letter-carriers-found-guilty-bribery-and-conspiracy

Controlled drugs pose public health risks when they are over-promoted and highly prescribed. OxyContin illustrates some of the associated issues. Widespread diversion and misuse of these medications is the biggest challenge for the DEA. It requires more efforts to prove that doctors intentionally overprescribe opioid pain relievers. It is equally challenging to arrest patients who abuse prescription drugs.

Another troubling trend is the rise of online purchases of opioids from overseas by domestic labs that use chemicals for further distribution. In 2017, DEA and FBI agents took down the largest online market AlphaBay, used by thousands of people to buy illegal drugs, including fentanyl.[7] Often, people who sell and buy drugs in the dark web do not have criminal backgrounds. In one case, a PhD student was buying chemicals on the Internet, mixing them and selling them locally. The danger with fentanyl is that it is much cheaper than heroin. From a criminal perspective, it is more profitable to sell fentanyl than heroin. Yet, it is more deadly. The DEA calls fentanyl an "unprecedented threat" to all law enforcement agencies. As a safety precaution, DEA is no longer field testing powdery substances due to the possible exposure to fentanyl. Fentanyl is so potent that officers must wear level A hazmat suits during seizures, which is the highest protection level available. Recently, the DEA released a video discussing the dangers of improperly handling the drug and its deadly consequences, including for drug-sniffing dogs.[8]

## New Challenges to Customs (Roland Suliveras, Director, National Targeting Center, US Customs and Border Protection)

The US Customs and Border Protection (CBP) is America's unified border agency. CBP plays a critical role in the nation's efforts to keep dangerous drugs from harming the American public.

CBP's Office of Field Operations (OFO) interdicts drugs at our ports of entry (POEs) and multiple mail and ECC facilities, leveraging targeting and intelligence-driven strategies, and working with our partners to combat Drug Trafficking Organizations

> **"CBP uses two types of targeting within mail facilities. The first one is based on data analysis on advance electronic data. The second method involves a manual process where officers are physically looking at packages."**

(DTOs) as part of our multi-layered, risk-based approach to enhance the security of our borders. This layered approach reduces our reliance on any single point or program and extends our zone of security outward, ensuring our physical border is not the first or last line of defense, but one of many According to CBP, most illicit drug smuggling attempts occur at Southwest land POEs, including marijuana, heroin, cocaine,

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[7] For more information, see: https://www.justice.gov/opa/pr/alphabay-largest-online-dark-market-shut-down
[8] The video is available at: https://www.youtube.com/watch?v=8MLsrleGLSw

> **"Drug trafficking organizations utilize the legitimate supply chain (Express Courier, Air Cargo and International Mail)"**

meth, and fentanyl.[9] CBP uses two types of targeting within mail facilities. The first one is based on data analysis on advance electronic data. The second method involves a manual process where officers are physically looking at packages. In terms of electronic targeting, CBP uses a lot of other agencies' information, including the DEA, USPS, and FBI, to identify possible high-risk shipments.

When drugs are moved from foreign countries to the US, they are handled by various transportation companies. Drug trafficking organizations utilize the legitimate

goods, liquid products, etc.) and private vehicles. Criminals are getting more creative. If one shipment does not make it through, they change their tactics and try something else. Illicit synthetic drugs are often purchased from foreign sellers through online transactions. The drugs are then shipped to the United States and delivered to domestic purchasers—DTOs and individuals—primarily via U.S. mail or express couriers. DTOs and individual purchasers move synthetic drugs such as fentanyl in small quantities, making detection and targeting a significant challenge. Follow-on investigations, which are conducted U.S. Immigration and Customs Enforcement—Homeland Security Investigations (ICE-SHI) are also challenging because these shippers often are not the hierarchically structured DTOs we usually encounter.

> **"The abundance of packages shipped from foreign countries to the United States poses the greatest challenge to law enforcement."**

supply chain (Express Courier, Air Cargo and International Mail) supporting illicit movement of drugs. Therefore, a significant part of the criminal logistics chain includes the ordering, transporting and delivery from foreign countries to the United States. The abundance of packages shipped from foreign countries to the United States poses the greatest challenge to law enforcement. In addition, the small size of opioids, such as fentanyl, enables various methods of concealment, including deep concealment of drugs inside legitimate products (electronic

Another challenge is related to the danger of fentanyl for law enforcement. Two primary issues are of concern to front-line CBP personnel: safety and identification. Law Enforcement officers proceed with extreme caution when handling unknown substances, particularly white powdery substances, and seek medical treatment if they experience symptoms consistent with fentanyl exposure. There is a danger if they are exposed, and if fentanyl gets into their system. Routes of exposure include inhalation, absorption, ingestion and injection. The best

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[9] For more information, see the Testimony of Todd C. Owen, Executive Assistant Commissioner, Office of Field Operations, U.S. Customs and Border Protection Department of Homeland Security, before U.S. House of Representatives Committee on Oversight and Government Reform Subcommittee on Government Operations, https://oversight.house.gov/wp-content/uploads/2017/09/Owen_CBP_Testimony_09072017.pdf

precaution for fentanyl encounters is to utilize the issued personal protection equipment (PPE) properly. Most of the new fentanyl analogs are coming from China to the United States. CBP has canines that are trained to identify fentanyl analogs.

## New Challenges to Law Enforcement (Brandon Callahan, Postal Inspector, Prohibited Mail Narcotics, US Postal Inspection Services)

US Postal Inspection Service (USPIS) is one of the country's oldest federal law enforcement agencies, founded by Benjamin Franklin. The agency's primary mission is to safeguard, support and protect the U.S. Postal Service and its employees, infrastructure, and customers; enforce the laws that defend the nation's mail system from illegal or dangerous use; and ensure public trust in the mail. With fentanyl and other synthetic opioids, USPIS

> **"Multi-agency partnerships of federal, state and local law enforcement share information and intelligence. This is why inter-agency cooperation is critically important."**

faces new challenges. Fentanyl and other synthetic opioids have been mailed internationally to the U.S. USPIS investigates these cases. USPIS has a Prohibited Mail Narcotics program where inspectors conduct investigations involving large-scale drug trafficking organizations that have a national impact, helping to identify, dismantle and disrupt these operations. Local and national drug interdictions are conducted by Inspectors and coordinated through Postal Inspection Service Divisions. Multi-agency partnerships of federal, state and local law enforcement share information and intelligence. This is

> **"A cause for concern is the rise of incidents where redistributors are located domestically."**

why inter-agency cooperation is critically important.

As for international mail, one key element is Advanced Electronic Data (AED), from foreign countries, which increased from 1 percent in 2015 to 40 percent in 2017. USPIS brought a lot of resources and attention to the opioid crisis. Recently, USPIS increased seizures of synthetic opioids by 300 percent.

A cause for concern is the rise of incidents where redistributors are located domestically. For example, in June 2017, a Gaithersburg Maryland resident was

> **"Selling fentanyl can fetch large profits and consumers often appreciate the ease of discreetly purchasing synthetic opioids online. This explains why so many people with advanced degrees and good jobs are involved in this business."**

sentenced to life in prison, for distribution of acetyl fentanyl, which resulted in death, as

well as conspiracy to distribute narcotics.[10] Domestic distributors increasingly use the dark web as a platform for communication, which allows them to keep a low profile and remain off the radar during illicit transactions. One reason behind this increase in domestic incidents is the high reward related to selling drugs in the dark web. Selling fentanyl can fetch large profits and consumers often appreciate the ease of discreetly purchasing synthetic opioids online. This reward may appear much higher than the risk associated with it. This explains why so many people with advanced degrees and good jobs are involved in this business . They use high-tech solutions on the dark web to get easy money or purchase their product. The rise of darknet markets requires advanced technological responses by law enforcement. The key problem is recruiting highly-qualified professionals who think outside of the box.

Another challenge is that the production of synthetic opioids is an international problem, whether it starts in China or other countries, and is redistributed or directly sent to the United States. These drug organizations will often disguise or conceal their shipments and utilize various forms of payment options in an attempt to thwart law enforcement from identifying and seizing their mailings.

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[10] More information is available at https://www.justice.gov/usao-md/pr/montgomery-county-man-sentenced-life-federal-prison-distributing-acetyl-fentanyl

# SESSION FOUR. Law Enforcement and Private Sector Efforts to Follow the Money and Combat Counterfeits

## Introduction by the Panel Moderator Steve Gurdak, Washington/Baltimore HIDTA-Northern Virginia's Financial Initiative.

> **"From a business perspective, drugs hit the financial and commodity markets almost simultaneously. Can we start getting more information on the financial side? How can we follow that money?"**

The pharmaceutical industry and financial sector have a lot of information that can be useful for law enforcement. Law enforcement needs to be proactive. From a business perspective, drugs hit the financial and commodity markets almost simultaneously. Does it make more sense to look at the corresponding financial backing based on financial data? Can we start getting more information on the financial side? How can we follow that money? This panel addresses these questions from a private sector perspective. Financial information can help identify patterns of criminal activities. It can provide indicators of drug shipments and help find intermediaries and final beneficiaries.

## Perspectives of the Pharmaceutical Industry (John Clark, VP and Chief Security Officer, Pfizer Global Security)

Pfizer is a multinational company operating in 175 markets. It partners with law enforcement to investigate counterfeit

> **"The current problem of counterfeit medicine generally started around 1998 when counterfeit versions of Viagra were reported in all parts of the globe."**

medicines. It also spends significant efforts on awareness-raising campaigns and education programs. To date, 98 different kinds of Pfizer medications in 111 countries have been found to be counterfeited. The current problem of counterfeit medicine generally started around 1998 when counterfeit versions of Viagra were reported in all parts of the globe. Pfizer recognized at that time that law enforcement was stretched way beyond its means, so it developed a security group to assist law enforcement to mitigate the global counterfeit medicine problem. However, since counterfeit medicines represent very high reward and very low risk for criminal organizations, there has been a drastic rise in counterfeit medicines since that time. Since 2004, Pfizer has worked with different law enforcement agencies to prevent 231 million counterfeit doses from reaching patients.

When Pfizer is made aware of the possibility of counterfeit medicines being sold to patients, the company initiates investigations by making test purchases. If Pfizer's labs confirm that the test-purchased

> **"There has been a disturbing trend in criminal organizations manufacturing counterfeit Xanax in the United States over the last few years. In some cases, the counterfeit Xanax has been infused with fentanyl, a deadly ingredient."**

medicines are counterfeits, Pfizer investigates further and collects substantial evidence, which it turns over to law enforcement for actions to be taken against the criminal vendors. When it comes to scheduled medicines, such as Xanax, Pfizer has historically been precluded from making test purchases in the US. However, there has been a disturbing trend in criminal organizations manufacturing counterfeit Xanax in the United States over the last few years. In some cases, the counterfeit Xanax has been infused with fentanyl, a deadly ingredient. As a result, in 2017, Pfizer was able to establish a partnership with the DEA to address this new problem. The objective was to expedite the DEA's identification and confirmation of US-based manufacturers and distributors of counterfeit Xanax, with an overall goal of reducing the threat posed to US patients. It is pertinent to the opium problem because people who abuse opiates are often also using benzodiazepines, one of the most popular of which is Xanax. As part of this partnership, Pfizer was authorized to make test purchases and test them with DEA oversight. With

DEA's direction, Pfizer employs contractors to conduct undercover transactions with counterfeit Xanax sellers. In the first few months of this partnership, Pfizer contacted 157 purported sellers of Xanax on the Internet. Pfizer was able to make 75 test purchases from those who would actually fulfill an order. All 75 test purchases were confirmed as counterfeit Xanax. DEA and its Strike Force are following up on criminal leads emanating from these test purchases.

Xanax distributors leverage four distinct Internet platforms to advertise sales offers to patients and sellers: open sources, the dark web, business to business (B2B), and social media. Social media is becoming more problematic for the pharmaceutical industry, with a lot of counterfeits being sold on sites such as Facebook and Craigslist. In 2016, Pfizer began to focus its investigative work on the dark web. For example, Pfizer developed and brought one case to UK law authorities related to Hulkedbenzoboss (HBB) that sold Xanax on the dark web. HBB sold up to 700,000 tablets a month, making huge profits. When UK authorities conducted enforcement actions against HBB, they seized approximately 150,000 Euros along with 350,000 counterfeit Xanax tablets. In pursuing criminal organizations selling counterfeit medicines, Pfizer partners with federal agencies, such as DHS/ICE, FDA/OCI, and the FBI, other private-sector companies and financial corporations. As an example of Pfizer's partnership with other private-sector companies, Microsoft developed an algorithm to assist Pfizer in identifying links between Internet rogue online pharmacies selling counterfeit medicine. This algorithm enabled Pfizer to discover entire affiliate networks

which are often comprised of several hundred or thousand otherwise distinct rogue online pharmacies. Thanks in part to Microsoft's algorithm; Pfizer has taken down 21 affiliate networks representing 8,000 rogue online pharmacies over the last four years.

## Perspectives of the Financial Sector

The financial sector plays a critical role in anti-money laundering. The Bank Secrecy Act of 1970 (BSA) requires financial institutions in the United States to assist government agencies to detect and prevent money laundering. In particular, the act requires financial institutions to keep records and file currency transaction reports (CTR) of cash purchases of more than $10,000 (daily aggregate amount), as well as to report suspicious activity that might signify money laundering, tax evasion, or other criminal activities. Another obligation is that financial institutions are required to monitor the transactional activity that is taking place inside of their banks and their networks and to file suspicious activity reports (SAR) to alert law enforcement.

Two sections of the Patriot Act are particularly important for anti-money laundering activities. Section 3.14(b) allows investigators to communicate with other banks while conducting an investigation. Section 3.14(a) of the Patriot Act provides mechanisms for law enforcement to communicate with financial institutions. This is critically important because law enforcement can request directly from any financial institution any sort of documentation related to a target of their investigation. In

addition, SARs provide different avenues to investigate drug-related cases.

The Financial Crimes Enforcement Network (FinCEN) plays an important role in anti-money laundering. It was created in 1990 as a bureau of the United States Department of the Treasury to collect and analyze information about financial transactions in order to combat domestic and international money laundering, terrorist financing, and other financial crimes. It has about 350 employees who serve as a clearing house for CTRs and SARs submitted by all US financial institutions. FinCEN has databases shared with other enforcement agencies, the FBI, and the DEA. It is a useful tool for law enforcement agencies to progress their investigations.

Apart from investigating and reporting suspicious activity that takes place within retail branches, US financial institutions also monitor correspondent bank networks. A correspondent network includes foreign banks that use the US bank to transact operations in U.S. currency on behalf of their customers. And this is what allows foreign banks to access US dollars. If foreign banks want to transact in dollars, they have to open a correspondent account with a US financial institution. US financial institutions are required to ensure that correspondent banks have reasonably designed control systems and are not engaged in any criminal enterprise.

A common industrywide tool is overlapping monitoring systems that are programmed to generate alerts based on sequences or certain patterns of accidents. The first important element of such a system is input coding, that should generate alerts while

minimizing the amount of noise that accompanies the related data collection. The second component of such a monitoring system is human intelligence. The greatest challenge that financial institutions face is identifying illegitimate activity in the sea of legitimate activities. Any money laundering organization (MLO) is sophisticated and tries to diversify financial flows. When an MLO involves multiple banks, it makes it more difficult to investigate its activities. Additional challenges arise when criminal organizations cross national borders. Often, they intentionally involve multiple jurisdictions to confuse and make investigations extremely difficult.

**CONCLUDING SESSION: Where Do We Go from Here? (Policies and strategies) Moderated by Louise Shelley, Director of TraCCC, and David Williams, Director of COPI**

## List of Recommendations

**Bringing in the Private Sector and Building Public-Private Partnerships**

- *To develop public-private partnerships (PPP) in the sphere of counteracting the opioid crisis.* It is important to introduce legislative incentives for the development and implementation of PPP in this arena. It is also necessary to remove barriers to PPP that often exist within agencies and private organizations.
- *To engage social media in policy discussions and the implementation of specific anti-drug programs.* One of the serious issues that requires more attention from policy makers is the distribution of drugs through social media, such as Facebook, Twitter, and other online platforms. It is important to invite their representatives to discussions about the opioid crisis because they can also be part of the solution.
- *To engage shipping companies and postal organizations in policy discussions and the implementation of specific anti-drug programs.* The legitimate supply chain is increasingly abused by drug dealers. Service providers often do not fully realize what critical role they play in the opioid crisis.

**Taking a Holistic Approach**

- *To develop a comprehensive national strategy to combat the opioid crisis.* This strategy should involve both the demand and supply sides of the problem.
- *To identify and map key stakeholders who can potentially contribute to the solution of the opioid crisis.* Involvement of all critical actors in the process of policy making and its implementation will ensure the ultimate success of public-private partnerships.
- *To raise awareness of how dangerous opioids are for individuals, communities, and society as a whole.* From a policy perspective, it is necessary to reduce demand for opioids through national and regional campaigns
- *To intensify responses of educators and health-industry professionals to the opioid crisis.* Educators and health-industry professionals should be involved in policy making and its implementation.
- *To develop comprehensive strategies to target specific socio-economic problems that communities face in rural and urban areas.* Recent research into the opioid problem shows its diversity in different regions of the country. Therefore, strategies to combat this problem should be tailored to specific challenges of local communities.

**Tackling the Global Dimension**

- *Follow the money*. As any other business, drug organizations are hurt most when they lose their financial assets and resources. Assert seizures disrupt their operations.
- *To strengthen international cooperation in this arena*. The opioid crisis is a transnational crime involving money laundering. The vast majority of drugs are coming to the US from other countries, China, Latin America, Ukraine, Turkey, and elsewhere. Therefore, it is necessary to look at international aspects of this problem.
- *To address corruption in the corporate world and public sector.* The harm that the opioid crisis has done to American society would not be possible without myriad facilitators in pharmaceutical companies, medical professionals, and the public sector. The problem of corruption is interlinked with organized crime and should be tackled simultaneously.

**Fostering Innovative Research & Data Methods**

- *To enhance business and law enforcement responses to the opioid crisis based on comprehensive research*. Academia can provide technical and human resources for in-depth analysis of the opioid business.
- *To conduct further research into algorithms associated with criminal activities*. IT companies are called on to develop algorithms to combat drug dealers online. This approach can help to take down higher levels of organized crime on the Internet rather than just a single site.
- *To increase information sharing between government and the private sector through a single portal*. Local, state, and federal agencies, the private sector, civil society and academia can benefit significantly from the creation of an online portal hosting a cloud for different apps and datasets that will enable different stakeholders to share best practices and information.

**Promoting Law Enforcement Innovation**

- *To use a combination of traditional and new tools to target drug dealers in innovative ways*. RICO's seizures, asset forfeiture, suspension and debarment, special operations could be combined with emerging methods of investigation, such as sensor networks and new forensic tools.
- *To inform law enforcement about new research and high-tech tools that are useful for investigations*. There are informational gaps regarding new investigative techniques available that need to be filled.
- *To develop human skills and strengthen their tech capacities to combat new sophisticated forms of criminal organizations*. Criminal organizations use hi-tech solutions to increase their sales and lessen exposure. They are constantly looking for innovative ways of doing their illegal business. Law enforcement should be two steps ahead of them.

- ***To use comprehensive methods of criminal activities analysis, including network and geospatial analysis***. Contemporary criminal organizations use complex structures of formal and informal relationships, functions, and operations, which require more sophisticated methods of their analysis.