

**U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY
SUBCOMMITTEE ON INVESTIGATIONS AND OVERSIGHT AND
SUBCOMMITTEE ON RESEARCH AND TECHNOLOGY JOINT HEARING**

HEARING CHARTER

The Role of Technology in Countering Trafficking in Persons

Tuesday, July 28, 2020
10:00 a.m. EDT – 12:00 p.m. EDT
Cisco WebEx

PURPOSE

The purpose of the hearing is to examine the role of science and technology in assisting nongovernmental organizations, State, local, and Federal governments, financial institutions, and others to disrupt domestic and international human trafficking, including trafficking for forced labor and sexual exploitation. The hearing will also explore the research, technology development, and coordination needs to strengthen Federal anti-trafficking strategies and will be an opportunity to discuss the impact of COVID-19 on human trafficking response.

WITNESSES

- **Ms. Anjana Rajan**, Chief Technology Officer, Polaris
- **Mr. Matthew Daggett**, Technical Staff, Humanitarian Assistance and Disaster Relief Systems Group, Lincoln Laboratory, Massachusetts Institute of Technology
- **Ms. Emily Kennedy**, President and Co-Founder, Marinus Analytics
- **Ms. Hannah Darnton**, Associate Director of Ethics, Technology, and Human Rights, Business for Social Responsibility

OVERARCHING QUESTIONS

- To what extent do we know the prevalence of trafficking in persons in the United States? What are the data gaps and data analysis challenges for understanding and countering trafficking in persons? What are the existing efforts and what are the opportunities for increased data collection and data sharing among nongovernmental organizations (NGO), State, local and Federal governments, law enforcement, and industry?

- How are machine learning and other data analysis tools being applied to data relevant to human trafficking and what is the potential of these technologies to improve understanding and response to trafficking in persons?
- What other types of technologies, including emerging technologies, are being deployed or have the potential to aid in anti-trafficking strategies? What are the challenges to incorporating these technologies into anti-human trafficking efforts in the United States?
- What role can Federal science agencies play in supporting research and technology development to help combat human trafficking?

Trafficking in Persons

Trafficking in persons is a multi-billion-dollar (\$150 billion by Federal estimates), transnational illicit enterprise, second only to drug trafficking in terms of profitability.¹ It impacts every country around the world, including the United States, whether as the country of origin, transit or destination, or combination of all three.² While trafficking of foreign nationals across borders is a well-known issue, U.S. citizens are also victims of trafficking within the United States. Human trafficking operations range from the local level, including parents exploiting their own children, to international syndicates.

This year is the 20th anniversary of both the signing of the United Nations (UN) Protocol to Prevent, Suppress, and Punish Trafficking in Persons, Especially Women and Children (Trafficking in Persons Protocol) and enactment of the *Trafficking Victims Protection Act* (TVPA) [P.L 106-386],³ the Federal law that guides the Federal response to human trafficking.

The UN Trafficking in Persons Protocol defines trafficking as the recruitment, transport, and transfer, harboring, or receipt of a person by such means as threat or use of force or other forms of coercion, abduction, fraud, or deception for the purpose of exploitation.⁴ In the United States, the TVPA defines “severe forms of trafficking in persons” as sex trafficking in which a commercial sex act is induced by force, fraud, or coercion, or in which the person induced to perform the act has not attained 18 years of age; or the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery. According to the 2020 Trafficking in Persons Report, headed by the U.S. Department of

¹ Department of Homeland Security - <https://www.dhs.gov/science-and-technology/news/2019/01/30/st-combatting-human-trafficking-using-social-science>

² United National Office of Drugs and Crime - <https://www.unodc.org/unodc/en/human-trafficking/faqs.html>.

³ The *Trafficking Victims Protection Act of 2000* was enacted as part of the *Victims of Trafficking and Violence Protection Act of 2000*. <https://www.congress.gov/106/plaws/publ386/PLAW-106publ386.pdf>

⁴ <https://www.unodc.org/unodc/en/human-trafficking/what-is-human-trafficking.html>

State, the United States considers the terms “trafficking in persons,” “human trafficking,” and “modern slavery” as interchangeable.⁵

There are many international and domestic efforts to increase public awareness of human trafficking, including the global observation of July 30 as the annual World Day Against Trafficking in Persons. The 2018 Global Report on Trafficking in Persons, released last year by the UN Office on Drugs and Crime, found that reports and detection of trafficking were up globally; however, this could be the result of increased identification of victims or increased numbers of people being trafficked, or both.⁶

The TVPA established minimum standards for the elimination of trafficking, including 1) the prohibition of trafficking; 2) punishing or prosecuting any underlying crime; 3) punishment and prosecution to a degree that acts as a deterrent to trafficking; and 4) making efforts to eliminate severe forms of trafficking. The TVPA also required the establishment of the President’s Interagency Task Force to Monitor and Combat Trafficking, which is chaired by the Department of State and also includes the Departments of Treasury, Defense, Justice, Labor, Homeland Security, Transportation, and several other Federal agencies. The Department of Health and Human Services is also a member of the Task Force and funds the National Human Trafficking Hotline, which has been operated by Polaris since 2007.

The Task Force submits an annual report to Congress measuring the progress of the United States and other countries in human trafficking prevention and protection and assistance to victims. It ranks countries using a four-tier system, with Tier 1 being the highest, meaning that the country meets TVPA’s minimum standards.⁷ The State Department’s 2020 Trafficking in Persons Report states that “[a]lthough the [United States] government meets the minimum standards, it prosecuted fewer cases and secured convictions against fewer traffickers, issued fewer victim trafficking-specific immigration benefits, and did not adequately screen vulnerable populations for human trafficking indicators” in comparison to the previous year.⁸

Science and technology have important roles to play in combatting human trafficking. The 2019 UN Interagency Coordination Group Against Trafficking in Persons report, “Human Trafficking and Technology: Trends, Challenges, and Opportunities,” states that technology can “help practitioners combat trafficking, such as by aiding investigations, enhancing prosecutions,

⁵ 2020 Trafficking in Persons Report, page 3. <https://www.state.gov/wp-content/uploads/2020/06/2020-TIP-Report-Complete-062420-FINAL.pdf>

⁶ Global Report on Trafficking in Person 2018 - https://www.unodc.org/documents/data-and-analysis/glotip/2018/GLOTIP_2018_BOOK_web_small.pdf

⁷ U.S. Department of State’s 2020 Trafficking in Persons Report - <https://www.state.gov/wp-content/uploads/2020/06/2020-TIP-Report-Complete-062420-FINAL.pdf>.

⁸ *Id.* at page 515.

raising awareness, providing service to victims, and shedding light on the make-up and operation of trafficking networks.”⁹

The COVID-19 Pandemic Impact on Human Trafficking

The COVID-19 pandemic may be cutting off some opportunities for traffickers while creating new ones. In particular, experts indicate that the social distancing, shelter-in-place orders, and travel restrictions implemented in response to COVID-19 are creating new opportunities to exploit the vulnerable who no longer have access to or have limited access to shelters, schools, income, and social service resources.¹⁰ Law enforcement experts have reported a drastic increase in livestreaming of sexual exploitation and other cyber-enabled human trafficking online and on the Darknet since the COVID-19 pandemic.

Federal Science and Technology Anti-Human Trafficking Activities

One Federal agency with a significant role in countering human trafficking is the Department of Homeland Security (DHS). DHS operates the Blue Campaign, a national human trafficking public awareness effort to educate the public, law enforcement, and industry to recognize indicators of human trafficking and provide guidance on how to respond. The DHS Science and Technology Directorate (S&T) is working to combat the issue of human trafficking through social science-based research. DHS S&T has initiated the Counter-human Trafficking and Modern Slavery Foundational Effort and the Human Trafficking System Analysis and Technology Roadmap.

The purpose of the Counter-human Trafficking and Modern Slavery Foundational Effort is to provide a domestic and international understanding of human trafficking. The effort will include identifying organizations combatting human trafficking, defining their relationships with one another, and organizing them. DHS S&T is also conducting an analysis of key government stakeholders and non-governmental organizations in order to help the agency develop a more effective counter-human trafficking response capability. Finally, DHS S&T, through the Massachusetts Institute of Technology’s (MIT) Lincoln Laboratory, developed a technology roadmap that consists of near-term, small- and large-scale technology recommendations. The data and results collected will aid operational partners, decision makers, and policymakers in combatting human trafficking and modern slavery.

The Department of Transportation (USDOT) also supports anti-human trafficking activities. The Advisory Committee on Human Trafficking, established in 2018 by the *Combating Human Trafficking in Commercial Vehicles Act* [P.L. 115-99], released its final report last year. The report states that “data collection, analysis, and information-sharing are critical to inform the

⁹ <https://www.un.org/sexualviolenceinconflict/report/human-trafficking-and-technology-trends-challenges-and-opportunities/>

¹⁰ <https://news.un.org/en/story/2020/05/1063342>

transportation industry regarding the nature and severity of human trafficking. Yet little academic research has been conducted and published, particularly empirically based, on the role of the transportation industry in facilitating or preventing human trafficking.”¹¹

USDOT also partners with DHS and U.S. Customs and Border Protection in the Blue Lightning Initiative to train aviation industry personnel to identify and report potential victims and traffickers to Federal law enforcement. Additionally, the National Academies of Sciences, Engineering, and Medicine Transportation Research Board is funding a project on this issue to study State departments of transportation contributions to the study, investigation, and interdiction of human trafficking.¹²

Finally, the National Science Foundation (NSF) is funding a number of active awards focused on human trafficking. For example, one award funds “A New Multi-layered Network Approach for Improving the Detection of Human Trafficking” to enable analysis of data from multiple overlapping networks, including human trafficking supply chains, transport logistics, and financial transactions.¹³ Another award funds a project focused on “Disrupting Human Trafficking via Needs Matching and Capacity Expansion” to provide a need-based prevalence to determine the most efficient use of scarce shelter and services resources.¹⁴ Other projects funded through NSF include research on “A Data Analytic Approach to Understand Human Trafficking Networks”; “Coordinated Interdiction for Disruption of Labor Trafficking in the Agricultural Sector;” and “Disrupting Exploitation and Trafficking Labor Supply Networks in Post-Harvey Rebuild.”¹⁵

Research and Collaboration Opportunities; Technology Needs

Key areas of need for research in human trafficking are measuring the prevalence of trafficking, establishing metrics of success for ongoing efforts to combat trafficking, understanding long- and short-term needs of victims and survivors, and trafficking prevention and demand reduction. While international and U.S. efforts to combat human trafficking have been happening for more than two decades, in the past several years there have been calls to address the lack of adequate methods and data to measure the prevalence of human trafficking.

The National Academies of Sciences, Engineering, and Medicine recently published the proceedings of a workshop held in April 2019 on “Approaches to Estimating the Prevalence of

¹¹ U.S. Department of Transportation Advisory Committee on Human Trafficking Final Report, “Combating human Trafficking in the Transportation Sector,” July 2019.

<https://www.transportation.gov/sites/dot.gov/files/docs/mission/administrations/office-policy/343931/advisory-committee-human-trafficking-final-report.pdf>

¹² <https://apps.trb.org/cmsfeed/TRBNetProjectDisplay.asp?ProjectID=4378>

¹³ National Science Foundation Award Abstract #1837881 -

https://www.nsf.gov/awardsearch/showAward?AWD_ID=1837881&HistoricalAwards=false

¹⁴ National Science Foundation Award Abstract #1935602 -

https://www.nsf.gov/awardsearch/showAward?AWD_ID=1935602&HistoricalAwards=false

¹⁵ <https://www.nsf.gov/awardsearch/simpleSearchResult?queryText=human+trafficking&ActiveAwards=true>

Human Trafficking in the United States: A Workshop.”¹⁶ Patrick Hannon, former director of the Human Smuggling and Trafficking Center, spoke about the Center, which was established in 2004 and is administered by U.S. Immigration and Customs Enforcement as the only nationally directed Federal anti-human trafficking center in the United States. Mr. Hannon noted that the Center’s goal to develop and deliver intelligence for law enforcement and policymakers to respond to human trafficking is challenging because of a “lack of a clear understanding of the priorities and gaps that exist in the research community.”¹⁷

Another panelist, Amy Leffler, lead researcher of the National Institute of Justice’s (NIJ) trafficking in persons research portfolio, said that “prevalence is just one piece of a very complex puzzle. She urged the research community to work with stakeholders from different academic disciplines, law enforcement, and victims’ services to determine what methodological approaches work for each population. She also underscored the need to be mindful of protecting the populations being studied, who are often vulnerable and traumatized.”¹⁸ As the research, development, and evaluation agency of the Department of Justice, the NIJ supported seven projects focused on human trafficking in 2018, including a national census of victim service providers, a report of national data on human trafficking cases in the Federal criminal justice system, and a study to carry out interviews to better understand the victimization status of adults engaged in prostitution.¹⁹

Another obstacle for measuring prevalence and establishing metrics is a lack of standardized definitions and data used in trafficking in persons. For example, the International Labor Organization’s “2017 Global Estimates of Modern Slavery: Forced Labor and Forced Marriage Report” found that in 2016, 40.3 million people were victims of modern slavery, including 25 million people in forced labor and 15 million people in forced marriage. According to this report, women and girls account for 71 percent of modern slavery victims.²⁰ However, different statistics are presented by DHS, which claims that it is estimated that 20.9 million people are victims of sex trafficking, forced labor, and domestic servitude worldwide.²¹ Other organizations report data on calls and tips made to their specific organization.

There are many NGOs and private industry entities participating in anti-trafficking efforts and elevating the role of technology to contribute to this mission. One such effort is the IBM Watson AI to Solve Global Issues XPrize, of which Marinus Analytics is a semi-finalist for their work in using artificial intelligence to combat human trafficking. IBM Watson also helped fund and build out the Traffik Analysis Hub in 2017, an open platform maintained by Stop the Traffik, a global

¹⁶ <https://www.nationalacademies.org/our-work/approaches-to-estimating-the-prevalence-of-human-trafficking-in-the-united-states-a-workshop#sectionCommittee>

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ <https://www.state.gov/human-trafficking-research-chart-of-u-s-government-funded-research/>

²⁰ https://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/publication/wcms_575479.pdf

²¹ <https://www.dhs.gov/science-and-technology/news/2019/01/30/st-combatting-human-trafficking-using-social-science>

coalition of NGOs, technology companies, financial institutions, and law enforcement organizations that serves as a repository of real-time, global human trafficking data.