

**U.S. HOUSE OF REPRESENTATIVES  
COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY**

**HEARING CHARTER**

*Data Challenges Impacting Human Trafficking Research and  
Development of Anti-Trafficking Technological Tools*

Tuesday, February 8, 2022

10:00 a.m. ET

Zoom

**PURPOSE**

The purpose of this hearing is to discuss scientific research and technology development to counter human trafficking in the United States, including trafficking for forced labor and sexual exploitation. This hearing will be an opportunity for experts to provide information related to current gaps in human trafficking research, data analysis challenges, opportunities for technology development to disrupt human trafficking networks, strengthening partnerships between academia and practitioners, and challenges in translating research into evidence-based anti-trafficking policy.

The hearing will also be an opportunity to discuss legislation the Committee may consider to support coordinated interagency research and technology development to prevent, measure, and disrupt trafficking in persons.

**WITNESSES**

- **Dr. Gretta Goodwin**, Director, Homeland Security and Justice, U.S. Government Accountability Office
- **Dr. Louise Shelley**, Omer L. and Nancy Hirst Endowed Chair and University Professor, Director, Terrorism, Transnational Crime and Corruption Center, George Mason University
- **Ms. Theresa Harris**, Interim Program Director, Scientific Responsibility, Human Rights and Law Program, American Association for the Advancement of Science
- **Ms. Hannah Darnton**, Associate Director, Ethics, Human Rights, and Technology, Business for Social Responsibility, Secretariate of Tech Against Trafficking

## OVERARCHING QUESTIONS

- How can Federal science agencies contribute to a coordinated research and technology development approach to combat human trafficking?
- How are machine learning and other data analysis tools being applied to improve anti-trafficking strategies, including detection of human trafficking in supply chains? What are the challenges to adoption and deployment of these technologies into anti-human trafficking efforts in the United States?
- How should we approach the issue of measuring prevalence of human trafficking in United States and what are the challenges? What are the considerations for applying social science methodologies to estimating prevalence?
- What are the data gaps and data analysis challenges for understanding where, when, and why human trafficking occurs in the United States, who is being trafficked, and who the traffickers are? What efforts are being made to have data be more inclusive of underserved and vulnerable populations in order to provide victim-centered, survivor-informed, and culturally-informed human trafficking interventions?
- How do existing data collection practices impact the ability to carry out advanced scientific research on human trafficking? What are opportunities for improved data collection? What are the existing efforts and opportunities for improved data sharing among nongovernmental organizations (NGO), State, local and Federal governments, law enforcement, and industry?

## Human Trafficking

The Federal law that guides the United States' response to human trafficking is the *Trafficking Victims Protection Act* (TVPA) [P.L. 106-386]<sup>1</sup>, which was enacted in 2000. 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.” The United States considers the terms “trafficking in persons,” “human trafficking,” and “modern slavery” as interchangeable.<sup>2</sup>

Human trafficking is a multi-billion-dollar illicit transnational enterprise. 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.<sup>3</sup> 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

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<sup>1</sup> 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>

<sup>2</sup> 2021 Trafficking in Persons Report. <https://www.state.gov/reports/2021-trafficking-in-persons-report/>

<sup>3</sup> United National Office of Drugs and Crime - <https://www.unodc.org/unodc/en/human-trafficking/faqs.html>.

trafficking operations range from those at the local level, including parents exploiting their own children, to international syndicates.

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 includes the Departments of Treasury, Defense, Justice, Interior, Agriculture, Commerce, Labor, Health and Human Services, Transportation, Education, Homeland Security, Domestic Policy Council, National Security Council, Office of Management and Budget, U.S. Trade Representative, Office of the Director of National Intelligence, Federal Bureau of Investigation, U.S. Agency for International Development, and the Equal Employment Opportunity Commission. The Department of Health and Human Services funds the National Human Trafficking Hotline. Additionally, the National Science Foundation is funding a number of active awards focused on human trafficking, including improving the detection and disruption of human trafficking networks; however, it is not a participating agency of the Task Force.

The Task Force submits an annual Trafficking in Persons Report (TIP 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.<sup>4</sup> The 2021 TIP Report ranked 28 countries, including the United States, as Tier 1, 95 countries as Tier 2, 45 countries as Tier 2 Watch List, 17 countries as Tier 3, and three countries as special cases due to on-going conflict and humanitarian crises.

### **Data Challenges and Research and Technology Needs to Combat Human Trafficking**

Research and technology have important roles to play in combatting human trafficking. The 2019 UN Interagency Coordination Group Against Trafficking in Persons report stated that technology can "help practitioners combat trafficking, such as by aiding investigations, enhancing prosecutions, raising awareness, providing service to victims, and shedding light on the make-up and operation of trafficking networks."<sup>5</sup>

In addition to technology, key areas of need for research in human trafficking are trafficking prevention and demand reduction, measuring the prevalence of trafficking, establishing metrics of success for ongoing efforts to combat trafficking, and understanding long- and short-term needs of victims and survivors. In each of these areas, research and data challenges remain.

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<sup>4</sup> 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>.

<sup>5</sup> <https://www.un.org/sexualviolenceinconflict/report/human-trafficking-and-technology-trends-challenges-and-opportunities/>

*Lack of Robust Research and Data*—Lack of data and data fragmentation are major barriers to anti-trafficking efforts, both domestically and globally. In 2019, a group of seven research institutions, including U.S.-based institutions, formed Code 8.7, to leverage computational science and AI to address this issue and develop a global research agenda to counter human trafficking. Eradication of human trafficking is goal 8.7 of the United Nations Sustainable Development Goals adopted in 2015 as part of the 2030 Agenda for Sustainable Development, and hence the eponym for the group.

The sex trafficking of women and girls, especially from Eastern Europe and the former Soviet Union, was a catalyst in the 1990s and 2000s for more significant human trafficking research and interventions in the United States and globally.<sup>6</sup> First generation research on human trafficking focused on law enforcement initiatives, case studies, research on surviving victims, and measuring global prevalence.<sup>7</sup> However, experts have noted that a second generation of research is needed into prevention of human trafficking in order to support evidence-based intervention strategies.<sup>8</sup> Calls have also been made to address the continued lack of adequate methods and data to measure the prevalence of human trafficking.

A 2013 Institute of Medicine and National Research Council report, “Confronting Commercial Sexual Exploitation and Sex Trafficking of Minors in the United States,” recommended strengthening research on prevention and intervention.<sup>9</sup> It recommended a national research agenda on advancing knowledge and understanding, developing effective interventions, and evaluating the effectiveness of prevention and intervention laws, policies, and programs.

Further, Stanford University’s Human Trafficking Data Lab also emphasizes a lack of robust human trafficking research and data per the following statement, “*For decades, researchers have lacked large-scale sources of microdata on human trafficking, limiting the literature to either deep qualitative scholarship or accounting-like attempts to measure the scale of the problem. Apart from a handful of studies applying the tools of operations research to trafficking detection, we are not aware of any formal studies that have attempted to systematically study causal factors, prevention, or reintegration programs with quantitative rigor. Strikingly, only 12 percent of the published literature on trafficking was peer-reviewed. Without rigorous study, the policy response to trafficking has been uncoordinated and has had limited large-scale success.*”<sup>10</sup>

In December 2021, the Biden Administration released an updated National Action Plan to Combat Human Trafficking (National Action Plan), which includes research as a priority. For example, the Department of Homeland Security Science and Technology Directorate advised on

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<sup>6</sup> <https://www.poverty-action.org/sites/default/files/IPA-HTRI-Learning-and-Research-Agenda-2021.pdf>

<sup>7</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6350954/>

<sup>8</sup> *Id.*

<sup>9</sup> <https://www.nap.edu/catalog/18358/confronting-commercial-sexual-exploitation-and-sex-trafficking-of-minors-in-the-united-states>

<sup>10</sup> <https://kingcenter.stanford.edu/our-work/research-initiatives/stanford-human-trafficking-data-lab>

the DHS Strategy to Combat Human Trafficking, the Importation of Goods Produced with Forced Labor, and Child Sexual Exploitation. They are also evaluating ongoing Blue Campaign efforts and supported the National Action Plan released in December 2021. The Blue Campaign is 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.

While agencies under the Interagency Task Force to Monitor and Combat Trafficking collect human trafficking data and carry out some research, experts say this data and research is mission-focused for each agency and results in research and data siloes rather than a coordinated approach to understanding and combatting human trafficking. Recent U.S. Government Accountability Office reports and work also emphasize these Federal data challenges regarding human trafficking-related issues.

Additionally, a 2019 report by the Department of Transportation Advisory Committee on Human Trafficking states that “data collection, analysis, and information-sharing are critical to inform the 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.”<sup>11</sup> Further, at a 2019 National Academies of Sciences, Engineering, and Medicine workshop, a former director of the Human Smuggling and Trafficking Center 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.”<sup>12</sup>

*Prevalence Estimation Challenges-* Human trafficking continues to be a difficult issue to precisely estimate partly because it is carried out in the shadows through hidden operations. Both the American Association for the Advancement of Science and the National Academies of Sciences, Engineering, and Medicine have held events to discuss the techniques and methodologies for gathering data on human trafficking prevalence. At one of those events, the lead researcher on trafficking in persons at the National Institute of Justice recently 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.”<sup>13</sup>

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<sup>11</sup> 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>

<sup>12</sup> <sup>12</sup> <https://www.nationalacademies.org/our-work/approaches-to-estimating-the-prevalence-of-human-trafficking-in-the-united-states-a-workshop#sectionCommittee>.

<sup>13</sup> *Id.*

*Data Standardization* - Another obstacle for measuring prevalence and establishing metrics is a lack of standardized definitions of human trafficking, characterization of the crime, and type of data collected. For example, the International Labor Organization's (ILO) "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.<sup>14</sup> However, forced marriage is not included in the definition of human trafficking under the TVPA, the U.S. law on human trafficking. Statistics presented by the Federal government use the ILO's data and claim that globally, an estimated 25 million people are subjected to human trafficking and forced labor.<sup>15</sup> Other organizations report human trafficking data based on calls and tips made to their specific organization.

Finally, the U.S. Advisory Council on Human Trafficking 2021 report made several data-related recommendations to improve the Federal response to human trafficking. These recommendations include better coordination to collect and analyze data to increase human trafficking prosecutions and increase data collection as well as improve the accuracy of data.<sup>16</sup> The Advisory Council also recommends that the Federal Government develop tools and technologies to specifically target human trafficking, especially human trafficking facilitated online, rather than a one size fits all approach to fighting exploitation.

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<sup>14</sup> [https://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/publication/wcms\\_575479.pdf](https://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/publication/wcms_575479.pdf)

<sup>15</sup> <https://www.whitehouse.gov/briefing-room/statements-releases/2021/12/03/fact-sheet-the-national-action-plan-to-combat-human-trafficking-nap/>

<sup>16</sup> <https://www.state.gov/united-states-advisory-council-on-human-trafficking-annual-report-2021/>