
Presentation at the Annual Meeting of the American Society of Criminology, New Orleans, LA
Objectives

- In this presentation we...
  - Describe methods for three studies using various Federal data sources
  - Discuss evolution of methodologies and the use of novel techniques to improve analysis
  - Highlight the use of mixed-methods approaches to supplement administrative data
  - Share lessons learned for analysts interested in using USSC data sources
Motivation for Series of Studies

- USSC data (public use, restricted data, and narrative Pre-Sentence Report [PSR] files) offer justice system administrative data with unusual breadth and depth.

- Numerous policy-relevant questions about criminal organizations, offenders, crime types, and sentencing have not yet been answered.

- With appropriate permission and protections, USSC data can be linked with PSR data to add rich detail and context at the case and individual level.
Origin of current studies

The basic research design underlying these three projects originated in Abt’s 1990s study of drug traffickers:

1. Used USSC database to identify offenders convicted and sentenced for federal crimes, based on statutes

2. Selected sample of cases, coded data from richly detailed paper pre-sentence investigation reports (PSRs)

3. Selected sample of offenders with coded PSRs that were in BOP custody, conducted interviews
This basic model was adapted and extended for three subsequent studies described here today:

1. Identifying and Studying Human Traffickers in the Federal Criminal Justice System


Key USSC Holdings

- Pre-Sentence Investigation Reports (PSRs)
  - Designed to provide federal courts information about convicted defendants and their roles in the instant offense

- USSC research database
  - Includes information codified from PSRs: identifiers, demographics, charges of conviction, aggravating and mitigating circumstances and consequent sentence adjustments
Pre-Sentence Investigation Reports (PSRs)

- Reports prepared by Federal Probation officers
  - Designed to provide courts information about defendants and their roles in the crime of conviction.
  - Judges use to assess role in offense, aggravating & mitigating factors, other sentencing considerations.

- PSRs contain both individual- and organization-level data

- Reports are in narrative format and only available on-site at USSC offices in .pdf form
USSC Database

- USSC also maintains a public research database
  - Includes information codified from PSRs, including
    - demographic information
    - details of the crime and disposition of charges
    - information and assessments that produce guideline recommendations
  - As of 2013, individuals may have up to 395 distinct counts of conviction.
Strengths and Limitations of USSC Data and Records

- Key Strengths
  - National scope
  - Systematically collected data on nearly all offenders convicted and sentenced for federal charges
  - Perpetual data stream
  - Provides rich detail about offenses, offenders, and criminal organizations – all of which can be linked
  - With proper identifiers and agency permission to do so, can link USSC data to other individual-level data sources, such as federal courts and prison systems
Limitations

- Each study will discuss particular limitations for answering research questions
- Note about access: coding PSRs on-site is resource intensive and requires research proposal and approval by USSC
- Some variables we used in later projects (i.e. “docket ID”) are only available via special request to USSC
Identifying and Studying Human Traffickers in the Federal Criminal Justice System

Kamala Smith
Michael Shively
Sarah Jalbert
Omri Drucker

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Agenda

- Describe how we used USSC data and PSRs to identify and study human traffickers in the Federal Criminal Justice System.
- Describe methods and process for collecting data.
- Describe what we were able to learn about human trafficking from USSC and PSR data.
- Review strengths and challenges.
Study Objectives

1. Document typologies and modalities of trafficking organizations derived from systematically-collected evidence.

2. Describe how organizations are structured to support trafficking operations, and how these operations are facilitated by others.

3. Explore perceptions, motivations, and decision-making processes of individual traffickers.

4. Explore the utility of documents held by U.S. Sentencing Commission for examining human trafficking.
Data Sources

1. USSC public use data file containing demographic, sentencing, and guideline application information on offenders sentenced in federal courts.

2. Pre-Sentence Investigation Reports (PSRs) generated by federal probation officers for the judge’s consideration at sentencing, and maintained by the Monitoring Division of the USSC.

3. Qualitative, semi-structured interviews conducted with inmates in 21 federal prisons located in 12 states.
Methods/Process

- Downloaded and explored the USSC’s publicly-available data file.
- Identified statutes of interest to inform initial sample of individuals convicted of human trafficking and related offenses.
- Analyzed USSC public data and identified sample of individuals for PSR review.
- Applied for and gained access to non-public USSC data (PSR data) through a cooperative agreement with USSC.
- Developed access database and uniform coding protocol to abstract data from PSRs.
- Abstracted data from PSRs onsite at USSC.
- Analyzed the qualitative narrative portion of PSRs using NVIVO software.
## Statutes of Interest

### Title 18, Part I

#### Chapters 117 & 77

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>§ 2421.</td>
<td>Transportation generally</td>
</tr>
<tr>
<td>§ 2422.</td>
<td>Coercion and enticement</td>
</tr>
<tr>
<td>§ 2423.</td>
<td>Transportation of minors</td>
</tr>
<tr>
<td>§ 2424.</td>
<td>Filing factual statement about alien individual</td>
</tr>
<tr>
<td>§ 2425.</td>
<td>Use of interstate facilities to transmit information about a minor</td>
</tr>
<tr>
<td>§ 1581.</td>
<td>Peonage; obstructing enforcement</td>
</tr>
<tr>
<td>§ 1582.</td>
<td>Vessels for slave trade</td>
</tr>
<tr>
<td>§ 1583.</td>
<td>Enticement into slavery</td>
</tr>
<tr>
<td>§ 1584.</td>
<td>Sale into involuntary servitude</td>
</tr>
<tr>
<td>§ 1585.</td>
<td>Seizure, detention, transportation or sale of slaves</td>
</tr>
<tr>
<td>§ 1586.</td>
<td>Service on vessels in slave trade</td>
</tr>
<tr>
<td>§ 1587.</td>
<td>Possession of slaves aboard vessel</td>
</tr>
<tr>
<td>§ 1588.</td>
<td>Transportation of slaves from United States</td>
</tr>
<tr>
<td>§ 1589.</td>
<td>Forced labor</td>
</tr>
<tr>
<td>§ 1590.</td>
<td>Trafficking with respect to peonage, slavery, involuntary servitude, or forced labor</td>
</tr>
<tr>
<td>§ 1591.</td>
<td>Sex trafficking of children or by force, fraud, or § 1592. Unlawful conduct with respect to documents in furtherance of trafficking, peonage, slavery, involuntary servitude, or forced labor</td>
</tr>
<tr>
<td>§ 1593A</td>
<td>Benefitting financially from peonage, slavery, and trafficking in persons</td>
</tr>
</tbody>
</table>
A. All individuals sentenced in the federal system, 2006-2013 (N=619,940)
USSC and PSR Sample Overview

A. All individuals sentenced in the federal system, 2006-2013 (N=619,940)

B. Individuals with human trafficking statutes of interest (n=2,683)
USSC and PSR Sample Overview

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B. Individuals with human trafficking statutes of interest (n=2,683)

C. Individuals sampled, i.e. selected for PSR review at the USSC (n=491, PSRs coded=367)
A. All individuals sentenced in the federal system, 2006-2013 (N=619,940)

B. Individuals with human trafficking statutes of interest (n=2,683)

C. Individuals sampled, i.e. selected for PSR review at the USSC (n=491, PSRs coded=367)

D. Co-defendants and related cases of sampled individuals (n=426, PSRs coded=362)
USSC and PSR Sample Overview

A. All individuals sentenced in the federal system, 2006-2013 (N=619,940)

B. Individuals with human trafficking statutes of interest (n=2,683)

C. Individuals sampled, i.e. selected for PSR review at the USSC (n=491, PSRs coded=367)

D. Co-defendants and related cases of sampled individuals (n=426, PSRs coded=362)

E. Hidden offenders of interest
<table>
<thead>
<tr>
<th>Trafficking Category Based on Federal Statutes</th>
<th>No. in USSC Database</th>
<th>No. Sampled</th>
<th>No. of PSRs Coded</th>
<th>No. of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor Trafficking Only</td>
<td>77</td>
<td>74</td>
<td>74</td>
<td>45</td>
</tr>
<tr>
<td>Sex Trafficking Only</td>
<td>2518</td>
<td>360</td>
<td>356</td>
<td>222</td>
</tr>
<tr>
<td>Both Sex and Labor Trafficking</td>
<td>16</td>
<td>15</td>
<td>15</td>
<td>13</td>
</tr>
<tr>
<td>General Provisions Statute</td>
<td>72</td>
<td>42</td>
<td>27</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>2683</td>
<td>491</td>
<td>472</td>
<td>286</td>
</tr>
</tbody>
</table>

*[1] Title 18, Section 1594, is a general provisions statute that covers most offenses in Chapter 77: Peonage, Slavery and Trafficking in Persons, covering sections 1581, 1583, 1584, 1589, 1590, 1591 and 1592. Because these include both sex and labor trafficking, in the event that a person or case has been convicted of only section 1594, we have separated it as a category.*

*[2] For exploratory purposes, 5 of the 496 individuals selected for review at USSC were sampled from statutes outside of those presented in this table here, leaving 491 individuals sampled from our trafficking statutes of interest. The exploratory statutes include:*
Abstracting Data from PSRs

USSC Human Trafficking

Find a record

Sort By: USSC ID
USSC ID

Find Record
Quit

Export Completed Records
### Offender Information

<table>
<thead>
<tr>
<th>USSC ID</th>
<th>Year</th>
<th>Notes on Record</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004069</td>
<td>2006</td>
<td>Pull From</td>
</tr>
</tbody>
</table>

- **First Name**: 
- **Middle Name**: 
- **Last Name**: 
- **Aliases**: 

- **DOB**: 
- **Offender FBI #**
  - **Offense 1**: 182425
  - **Offense 4**: 
  - **Offense 7**: 
  - **Offense 2**: 
  - **Offense 5**: 
  - **Offense 8**: 
  - **Offense 3**: 
  - **Offense 6**: 
  - **Offense 9**:

**Pull fields from the following USSC ID:**

- **Sort By**: USSC ID
- **USSC ID**: 

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Co-defendants

EntryID | 1
First Name* |
Last Name* |
USCC ID (code) |
Charges |
Role |
Facilitator |
Facilitator Other Specify |
Function |
Function Other Specify |
Conviction |
## Related Cases

<table>
<thead>
<tr>
<th>Overview</th>
<th>Codefendants</th>
<th>Close Related Cases</th>
<th>Part A. Offense 1</th>
<th>Part A. Offense 2</th>
<th>Part B. Defendant's Criminal History</th>
<th>Part C. Characteristics</th>
<th>Part D. Sentencing</th>
</tr>
</thead>
<tbody>
<tr>
<td>USSC ID</td>
<td>1004069</td>
<td>Year 2006</td>
<td>Notes on Record</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Add New Related Case**

- **EntryID**: 1
- **First Name**: 
- **Last Name**: 
- **USSC ID (RC)**: 
- **Charges**: 
- **Role**: 
- **Facilitator**: 
- **Facilitator Other Specify**: 
- **Function**: 
- **Function Other Specify**: 
- **Conviction**: 

*First and/or last name is required*
## Offense Data

### USSC ID | 1004069 | Year | 2006

### Offense Charges and Convictions

### Original Indictment

### Offense Conduct

### Organization Size

### Organization Type

### Other Specify

### Number of Victims

### Role In Organization

### Function In Org

### Function Other Specify
## Offense Data Cont.

<table>
<thead>
<tr>
<th>USSC ID</th>
<th>Year</th>
<th>Notes on Record</th>
<th>Pull From</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004069</td>
<td>2006</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Base Offense Level**: 26
- **Adj Responsibility**: Pre-populated
- **Total Offense Level**: 
- **Other Suspect/Facilitator Names**: 
- **Organization Name**: 
- **Location/Facilitation**: 

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Abt Associates | pg 28
## Defendant’s Criminal History

<table>
<thead>
<tr>
<th>USSC ID</th>
<th>Year</th>
<th>Notes on Record</th>
</tr>
</thead>
<tbody>
<tr>
<td>1004069</td>
<td>2006</td>
<td></td>
</tr>
</tbody>
</table>

**Juvenile Adjudications:**
- **No**

**# Juvenile Offenses:**

**Age First Conviction:**

**Juvenile Conviction:**

**Desc Juvenile Convict Trafficking:**

**Juvenile Arrest No Conviction:**

**PriorAdultConviction:**
- **No**

**Adult Conviction:**

**Adult Criminal Convictions:**

**Adult Arrest No Conviction:**
### Offender Characteristics and Sentencing

#### Part C. Offender Characteristics

- **Personal and Family Data**
- **Mental Health**
- **Substance Abuse**
- **Victim Impact Statement**
- **Employment Record**

#### Part D. Sentencing Options

<table>
<thead>
<tr>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Custody</td>
<td>57</td>
</tr>
<tr>
<td>Supervised Release</td>
<td>36</td>
</tr>
<tr>
<td>Probation</td>
<td>0</td>
</tr>
</tbody>
</table>
What We Learned from USSC’s Public File

- Offender Demographics
- Incidence of Trafficking-specific Offense Convictions
- Disposition of cases
- Sentence lengths
### Offender Demographics

<table>
<thead>
<tr>
<th>Category</th>
<th>All offenders in USSC</th>
<th>Offenders convicted of trafficking and related offenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean age at conviction</td>
<td>35.35</td>
<td>38.57</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>n</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Male</td>
<td>520439</td>
<td>2386</td>
</tr>
<tr>
<td></td>
<td>87%</td>
<td>91%</td>
</tr>
<tr>
<td>Female</td>
<td>79437</td>
<td>235</td>
</tr>
<tr>
<td></td>
<td>13%</td>
<td>9%</td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic Ethnicity</td>
<td>264043</td>
<td>395</td>
</tr>
<tr>
<td></td>
<td>43%</td>
<td>15%</td>
</tr>
<tr>
<td>African-American</td>
<td>130214</td>
<td>545</td>
</tr>
<tr>
<td></td>
<td>21%</td>
<td>20%</td>
</tr>
<tr>
<td>White</td>
<td>403326</td>
<td>1966</td>
</tr>
<tr>
<td></td>
<td>66%</td>
<td>74%</td>
</tr>
<tr>
<td>Asian</td>
<td>11511</td>
<td>106</td>
</tr>
<tr>
<td></td>
<td>2%</td>
<td>4%</td>
</tr>
<tr>
<td>American Indian / Pacific Islander</td>
<td>9381</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>Citizenship</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. Citizen</td>
<td>336586</td>
<td>2269</td>
</tr>
<tr>
<td></td>
<td>56%</td>
<td>87%</td>
</tr>
<tr>
<td>Legal Alien</td>
<td>27558</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Undocumented</td>
<td>223833</td>
<td>205</td>
</tr>
<tr>
<td></td>
<td>37%</td>
<td>8%</td>
</tr>
<tr>
<td>Not a Citizen</td>
<td>8994</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>Extradited Alien</td>
<td>1222</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>
### Incidence of Trafficking-specific Offense Convictions

<table>
<thead>
<tr>
<th>Trafficking Offense Type</th>
<th>Number of convictions*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor</td>
<td>110</td>
</tr>
<tr>
<td>Peonage/Slavery</td>
<td>71</td>
</tr>
<tr>
<td>Recruits, harbors, transports</td>
<td>27</td>
</tr>
<tr>
<td>Unlawful Document Conduct</td>
<td>12</td>
</tr>
<tr>
<td>Sex</td>
<td>567</td>
</tr>
<tr>
<td>Benefitting Financialally</td>
<td>40</td>
</tr>
<tr>
<td>Coercion</td>
<td>173</td>
</tr>
<tr>
<td>Obstructing Enforcement</td>
<td>8</td>
</tr>
<tr>
<td>Peonage/Slavery</td>
<td>103</td>
</tr>
<tr>
<td>Recruits, harbors, transports</td>
<td>243</td>
</tr>
</tbody>
</table>

*Convictions are not person-based; this table is based on convictions by statute. Individuals may be convicted of more than one statute.
# Case Disposition

## Disposition of cases, convicted and sentenced offenders

<table>
<thead>
<tr>
<th>Disposition Type</th>
<th>Non-Trafficker Offenders</th>
<th>Traffickers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>N</td>
</tr>
<tr>
<td>Guilty or Nolo Contendere Plea</td>
<td>595909</td>
<td>2313</td>
</tr>
<tr>
<td>Judge or Jury Trial</td>
<td>20905</td>
<td>355</td>
</tr>
<tr>
<td>Guilty and Jury Trial</td>
<td>282</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>617096</td>
<td>2611</td>
</tr>
</tbody>
</table>

Chi-Square 2 837.8893 <.0001
## Sentence Length

<table>
<thead>
<tr>
<th>Offender Status</th>
<th>Probation Status</th>
<th>N</th>
<th>Mean</th>
<th>Std Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Convicted under non-trafficking statute</strong></td>
<td>Without Probation</td>
<td>414503</td>
<td>67</td>
<td>106</td>
</tr>
<tr>
<td></td>
<td>With Probation</td>
<td>471148</td>
<td>59</td>
<td>102</td>
</tr>
<tr>
<td><strong>Convicted under a trafficking statute</strong></td>
<td>Without Probation</td>
<td>2656</td>
<td>148</td>
<td>186</td>
</tr>
<tr>
<td></td>
<td>With Probation</td>
<td>2680</td>
<td>147</td>
<td>186</td>
</tr>
</tbody>
</table>
What We Learned from PSRs

- Types of trafficking organizations
- Size of cases and organizations
- Investigation Initiation
- Types of facilitators
- Geography of case
- Victim estimates
- Coercion Methods
## Types of Trafficking Organizations

<table>
<thead>
<tr>
<th>Organization Type</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Organization</td>
<td>145</td>
<td>56.64%</td>
</tr>
<tr>
<td>Human Trafficking Organization</td>
<td>55</td>
<td>21.48%</td>
</tr>
<tr>
<td>Human Smuggling Organization</td>
<td>33</td>
<td>12.89%</td>
</tr>
<tr>
<td>Legitimate Business</td>
<td>16</td>
<td>6.25%</td>
</tr>
<tr>
<td>Gang</td>
<td>5</td>
<td>1.95%</td>
</tr>
<tr>
<td>Drug Trafficking Organization</td>
<td>2</td>
<td>0.78%</td>
</tr>
</tbody>
</table>
Case Initiation

**Sex Trafficking**
- Family or Friends: 45%
- Government Agency: 5%
- Human Trafficking Investigation: 11%
- NGO: 2%
- Other Law Enforcement: 14%
- Public: 14%
- Sting: 8%
- Victim: 1%

**Labor Trafficking**
- Family or Friends: 27%
- Government Agency: 13%
- Human Trafficking Investigation: 13%
- NGO: 13%
- Other Law Enforcement: 7%
- Public: 7%
- Sting: 0%
- Victim: 0%
Distribution of Case Size

- 1: 153
- 2-5: 80
- 6-10: 20
- 10+: 16
### Geography of Case by Trafficking Category

<table>
<thead>
<tr>
<th></th>
<th>Sex trafficking</th>
<th>Labor trafficking</th>
<th>Both Sex and Labor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Domestic</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>132</td>
<td>22</td>
<td>5</td>
</tr>
<tr>
<td>%</td>
<td>80%</td>
<td>69%</td>
<td>56%</td>
</tr>
<tr>
<td><strong>International</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>32</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>%</td>
<td>20%</td>
<td>31%</td>
<td>44%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>164</td>
<td>32</td>
<td>9</td>
</tr>
<tr>
<td>%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Victim Estimates

- PSRs provided information about the number of victims in 56% (n=163) of cases.
- PSR often gives a range of victim numbers, or give non-precise estimates like “at least 5.”
- We found an average of between 8 and 11 victims mentioned per case.
Coders were able to ascertain methods of coercion in about half of cases (excluding sting operation cases).
Strengths

- USSC data provides useful information unique to human traffickers and allows us to compare to the general convicted population on offender demographics, incidence of trafficking-specific offense convictions, disposition of cases, sentence types and lengths.

- PSRs provide rich detail about crime, individual offenders, and criminal enterprises.
  - PSRs link individual to co-defendants and related cases.
  - Provides target-rich pool for identifying and studying facilitators.
  - Provides basis for identifying offenders for potential interviews.
Challenges

- PSRs only for convicted federal offenders, does not help build the picture for all human trafficking activities occurring in the U.S. and abroad.

- Linking cases using codefendant and related cases can be challenging using Access database and Abt generated case ID.

- On-site data collection requires a rigorous data collection protocol and data security measures to be in place.
Research on Facilitators of Transnational Organized Crime: Understanding Crime Networks' Logistical Support

Meg Chapman, Omri Drucker, Sarah Jalbert, Sharmini Radakrishnan, Kamala Smith

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Study Objectives

- **Products:**
  1. Method for identifying TOC crimes and facilitating offenders in federal sentencing commission data
  2. Typologies and modalities of TOC organizations and facilitators
  3. Detailed descriptions of how TOC organizations support illegal operations, and how these operations are facilitated by others

- This presentation relates to the first product.
Background

- A transnational organized crime (TOC):
  - Consists of conspiring persons
  - Has a defined structure/hierarchy
  - Generates income or acquires assets through continuing series of illegal acts
  - Operations/criminal activities span national boundaries

- A facilitator of a TOC (TOCF):
  - Engages in a facilitation activity:
    - Money Laundering
    - Fraud, Bribery, Forgery or Graft
    - Violence and Extortion
    - Transportation of Goods
Methodology

- Data Sources
  - USSC Data
  - PSRs
- Sampling
- Model Development
Non-public variable (Docket ID) allowed us to tie individuals together by a docket (case indicator), allowing us to create profiles of criminal conspiracies.

- “Underspread”
  - Occurs when defendants convicted prior to 2006 are part of the conspiracy (no electronic PSR)
  - >5% of cases – Fairly Rare

- “Overspread”
  - Includes defendants in multiple unrelated cases
  - ~24% of Cases – Very Common
PSRs

- Narrative structure is complex and rich
- Details were used to screen cases to confirm two key elements of TOC, which were that the criminal activity or individuals involved crossed national boundaries and that there were two or more people collaborated to commit the crime.
- Details on roles allowed us to identify which co-defendants were engaged in facilitating activities.
Sampling

- TOC is relatively rare in the data. Large portions of the data source are drug trafficking and immigration, but a majority of these are not related to TOC.

- Simple random sampling would not produce meaningful numbers of TOC or TOCF

- Individuals had their criminality profiled and collapsed into their conspiracies.
1. Created sampling grid based on offense categories and group size, and classified all 2006-2014 USSC cases using grid.

2. Stratified Random Sample of cases based on offense categories and group size. “Other” category oversampled to ensure statute classification was accurate.

3. Review PSRs of sampled cases to determine TOC/TOCF status

4. Use collected data to begin Model Driven Iterative Sampling

Diagram:
- Stratified Random Sample from USSC Database
- Collect PSR Data
- Merge PSR Data to USSC Database
- Predict Probability that a Case has TOCF
Model Selection

- Used both traditional statistical models and machine learning algorithms
  - OLS, logistic regression,
  - Generalized boosted logistic regressions, random forest, lasso, tree

- Hierarchical Model: Dependent Variables were TOC / TOCF, use P(TOC) to predict TOCF.

- Predictors include case size, offense types, demographics, and geographic information

- Used 10-repetition conventional validation testing to select the best model (70% / 30% split)

- Random Forest was chosen as the model to use going forward, as it had 1) lowest average MSE, 2) 2nd lowest SD in MSE.
Model – What is Random Forest?

- Random forest is an ensemble learning method that makes use of a number of machine learning algorithms, based on tree classification.

- Random forest works by bootstrapping a dataset in two ways; by both the observations in the data, and by the variables used for prediction.

- Extremely useful for determining small effects and avoiding overfitting the model.
# Model Cross-Validation Results

<table>
<thead>
<tr>
<th>Model</th>
<th>N</th>
<th>Average (MSE)</th>
<th>SD (MSE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lasso</td>
<td>10</td>
<td>0.154</td>
<td>0.012</td>
</tr>
<tr>
<td>Logistic</td>
<td>10</td>
<td>0.149</td>
<td>0.02</td>
</tr>
<tr>
<td>OLS</td>
<td>10</td>
<td>0.159</td>
<td>0.017</td>
</tr>
<tr>
<td>GBM</td>
<td>10</td>
<td>0.152</td>
<td>0.012</td>
</tr>
<tr>
<td><strong>Random Forest</strong></td>
<td><strong>10</strong></td>
<td><strong>0.129</strong></td>
<td><strong>0.019</strong></td>
</tr>
<tr>
<td>Tree</td>
<td>10</td>
<td>0.171</td>
<td>0.03</td>
</tr>
</tbody>
</table>
## Model Cross-Validation Results-TOCF

<table>
<thead>
<tr>
<th>Model</th>
<th>N</th>
<th>Average (MSE)</th>
<th>SD (MSE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lasso</td>
<td>10</td>
<td>0.065</td>
<td>0.012</td>
</tr>
<tr>
<td>Logistic</td>
<td>10</td>
<td>0.067</td>
<td>0.014</td>
</tr>
<tr>
<td>OLS</td>
<td>10</td>
<td>0.066</td>
<td>0.012</td>
</tr>
<tr>
<td>GBM</td>
<td>10</td>
<td>0.071</td>
<td>0.013</td>
</tr>
<tr>
<td>Random Forest</td>
<td>10</td>
<td>0.059</td>
<td>0.011</td>
</tr>
<tr>
<td>Tree</td>
<td>10</td>
<td>0.080</td>
<td>0.021</td>
</tr>
</tbody>
</table>
Model-based Sampling

- Model-based sampling grid defined by 1) likely/not likely to have TOCF, and 2) crime type
- 12 cells, 10 cases per cell – 120 cases per sample
- Likely/not likely determined by maximum predicted probabilities of individual offender being a TOCF
- For most districts, the threshold probability was set at 0.4
- For 7 districts with high rates of overspread, threshold probability was set at 0.7
Final Sample

- 4 stratified random samples
- 5 model-based samples
- Total cases sampled: 947
- Overspread: 230
- Missing values of predictor variables: 19
- Total useable cases: 698 (707 for TOC estimation)
- Total TOC cases: 200
- Total defendants: 1672
- Total TOCF individuals: 272
## Final Sample

<table>
<thead>
<tr>
<th>Crime Type</th>
<th>Number of Individuals in Case</th>
<th>1</th>
<th>2-3</th>
<th>4+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug Trafficking Crimes</td>
<td></td>
<td>68</td>
<td>28</td>
<td>16</td>
<td>112</td>
</tr>
<tr>
<td>Forgery Crimes</td>
<td></td>
<td>70</td>
<td>21</td>
<td>31</td>
<td>122</td>
</tr>
<tr>
<td>Movement of Goods Crimes</td>
<td></td>
<td>69</td>
<td>26</td>
<td>28</td>
<td>123</td>
</tr>
<tr>
<td>Movement of People Crimes</td>
<td></td>
<td>58</td>
<td>21</td>
<td>9</td>
<td>88</td>
</tr>
<tr>
<td>Organizational Crimes</td>
<td></td>
<td>82</td>
<td>22</td>
<td>37</td>
<td>141</td>
</tr>
<tr>
<td>Other Crimes</td>
<td></td>
<td>69</td>
<td>18</td>
<td>25</td>
<td>112</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>416</td>
<td>136</td>
<td>146</td>
<td>698</td>
</tr>
</tbody>
</table>
### Findings: Random Forest Performance over SRS

<table>
<thead>
<tr>
<th></th>
<th>Not TOCF</th>
<th>Is TOCF</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Before MDS</strong></td>
<td>524</td>
<td>77</td>
<td>615</td>
</tr>
<tr>
<td></td>
<td>87.19</td>
<td>12.81</td>
<td></td>
</tr>
<tr>
<td><strong>AFTER MDS</strong></td>
<td>876</td>
<td>195</td>
<td>1080</td>
</tr>
<tr>
<td></td>
<td>81.79</td>
<td>18.21</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1400</td>
<td>272</td>
<td>1672</td>
</tr>
</tbody>
</table>

- >40% TOCF rate over Stratified Random Sample with a decrease in overspread
Model Performance

- TOC Model Performance more important than TOCF Performance

- Model correctly predicted 515 out of 552 cases where a case wasn’t TOC (Class Error Rate: 0.06)

- Model Correctly Predicted 75 out of 155 cases where a case was TOC (Class Error Rate: 0.51)

- Stage 3 of Sampling for Interviews was conducted without concern for locating TOC = 0.

- 85% Accuracy Rate in Identifying TOC
## Findings: Number of Codefendants by Offense Type

<table>
<thead>
<tr>
<th>Group Size</th>
<th>One Individual</th>
<th>2 to 3</th>
<th>4 or more</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug Trafficking</td>
<td>26</td>
<td>7</td>
<td>7</td>
<td>40</td>
</tr>
<tr>
<td>Forgery crimes</td>
<td>7</td>
<td>3</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Movement of Goods</td>
<td>12</td>
<td>7</td>
<td>10</td>
<td>29</td>
</tr>
<tr>
<td>Movement of People</td>
<td>29</td>
<td>18</td>
<td>5</td>
<td>52</td>
</tr>
<tr>
<td>Organizational</td>
<td>27</td>
<td>7</td>
<td>14</td>
<td>48</td>
</tr>
<tr>
<td>Other crimes</td>
<td>0</td>
<td>7</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>101</strong></td>
<td><strong>49</strong></td>
<td><strong>50</strong></td>
<td><strong>200</strong></td>
</tr>
</tbody>
</table>
### Findings: Number of offenders per crime category activity

<table>
<thead>
<tr>
<th>Activity</th>
<th>Frequency</th>
<th>% of facilitators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crime Category</td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>Forgery / Fraud</td>
<td>21</td>
<td>8%</td>
</tr>
<tr>
<td>Organization Crimes</td>
<td>82</td>
<td>30%</td>
</tr>
<tr>
<td>Drug Trafficking</td>
<td>52</td>
<td>19%</td>
</tr>
<tr>
<td>Person Trafficking and Smuggling</td>
<td>66</td>
<td>24%</td>
</tr>
<tr>
<td>Goods Crimes</td>
<td>27</td>
<td>10%</td>
</tr>
<tr>
<td>Other Crimes</td>
<td>78</td>
<td>29%</td>
</tr>
<tr>
<td>Total (Not a sum)</td>
<td>272</td>
<td></td>
</tr>
</tbody>
</table>
## Findings: Number of offenders per facilitation activity

<table>
<thead>
<tr>
<th>Activity</th>
<th>Frequency</th>
<th>% of facilitators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bribery / Corruption</td>
<td>10</td>
<td>3.7%</td>
</tr>
<tr>
<td>Document Fraud</td>
<td>8</td>
<td>2.9%</td>
</tr>
<tr>
<td>Mail Fraud</td>
<td>1</td>
<td>0.4%</td>
</tr>
<tr>
<td>Money Laundering</td>
<td>60</td>
<td>22.1%</td>
</tr>
<tr>
<td>Transportation (Aliens)</td>
<td>71</td>
<td>26.1%</td>
</tr>
<tr>
<td>Transportation (Drugs)</td>
<td>70</td>
<td>25.7%</td>
</tr>
<tr>
<td>Transportation (Money)</td>
<td>42</td>
<td>15.4%</td>
</tr>
<tr>
<td>Transportation (Other)</td>
<td>18</td>
<td>6.6%</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>1.8%</td>
</tr>
<tr>
<td><strong>Total Number of Facilitators (Not a Sum):</strong></td>
<td><strong>272</strong></td>
<td></td>
</tr>
</tbody>
</table>
Summary

- Classification accuracy higher for non-TOC than TOC cases due to rarity of TOC and TOCF.
- Methodology performed better than traditional sampling approaches.
- Provided descriptive information about the sample population.
- Successfully supported the next steps in the project
  - More detailed coding of PSRs
  - Interview facilitators housed in federal prisons

Ryan Kling, Michael Shively, Omri Drucker

This work was supported by Grant No. 2014-R2-CX-0006 awarded by the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice to Abt Associates. Points of view in this presentation are those of the authors and do not represent the official position of the U.S. Department of Justice.
Introduction

- Prior presentations discussed offenders convicted of trafficking.
- This project investigates case processing and criminal justice responses for offenders investigated for human trafficking:
  - Flow and attrition of cases
  - Conviction rates
  - Alternative offenses to trafficking
  - Sentence length
Overview

- Research questions
- The federal criminal justice funnel
  - Process and size of problem
  - Data that address the problem
- Challenges and solutions to using the FJSP data
- Project status & next steps
  - Quantitative
  - Qualitative
Research Questions

- Processing of human trafficking cases
  - Description of the case flow
  - Characteristics of successful case filing and prosecution
  - Reasons for human trafficking charges flow out of the federal CJ system

- Sentencing, corrections, and recidivism of offenders
  - Those convicted of human trafficking
  - Those investigated for, charged with, or facilitated human trafficking but are convicted of another crime
Simplified Federal CJ Funnel

Investigation
Simplified Federal CJ Funnel

Investigation → Filing
Simplified Federal CJ Funnel

- Investigation
- Filing
- Adjudication

Arrest

Next steps:
- Investigation → Filing → Adjudication

Flowchart showing the process from investigation to adjudication with arrest as a possible entry point.
Simplified Federal CJ Funnel

Investigation → Filing → Adjudication → Sentencing → Corrections

Arrest
The Federal CJ Funnel Applied to Human Trafficking

Number of Individuals, 2006 – 2013

Total Sex Trafficker Individuals, 2006 – 2013

Investigation: 5,841
Filing: 3,439
Adjudication: 2,518

Total Number of Labor Trafficker Individuals, 2006 – 2013

Investigation: 1,468
Filing: 543
Adjudication: 77
The Federal CJ Funnel Applied to Human Trafficking

Number of Individuals, 2006 – 2013

**Total Sex Trafficker Individuals, 2006 – 2013**
- 5,841
- 3,439
- 2,518

**Total Number of Labor Trafficker Individuals, 2006 – 2013**
- 1,468
- 543
- 77

-2402
-921
Prior Abt-Led Trafficking Studies

- Investigation
- Filing
- Adjudication
- Sentencing
- Corrections
- Arrest
Linking Data Across the Federal CJ System

- Bureau of Justice Statistics Federal Justice Statistics Program
  - Dyad links offenders across the agencies
  - Public data are archived and regularly available
- Additional measure from many parts of the system
Data that Address the Federal CJ Funnel

Investigation → Filing → Adjudication → Sentencing → Corrections

Arrest

EOUSA Matters

EO Cases IN → AO Cases IN

EO Cases OUT → AO Cases OUT

USMB

USSC

EO Cases
AO Cases

BOP
Data that Address the Federal CJ Funnel

Investigation -> Filing -> Adjudication -> Sentencing -> Corrections

Arrest

EOUSA Matters

USMB

EO Cases IN, AO Cases IN

EO Cases OUT, AO Cases OUT

USSC

EO Cases, AO Cases

BOP
Data that Address the Federal CJ Funnel

Investigation → Filing → Adjudication → Sentencing → Corrections

Arrest

EOUSA Matters → EO Cases IN → EO Cases OUT → USSC → BOP

AO Cases IN → AO Cases OUT
Data that Address the Federal CJ Funnel

Investigation  →  Filing  →  Adjudication  →  Sentencing  →  Corrections

Arrest

EOUSA Matters  →  EO Cases IN  →  EO Cases OUT  →  USSC  →  BOP

AO Cases IN  →  AO Cases OUT

USMB
Data that Address the Federal CJ Funnel

Investigation → Filing → Adjudication → Sentencing → Corrections

EOUSA → EO\text{Cases IN} → EO\text{Cases OUT} → AO\text{Cases IN} → AO\text{Cases OUT} → USSC → BOP

USMB

EO\text{Matters}
Data that Address the Federal CJ Funnel

Investigation → Filing → Adjudication → Sentencing → Corrections

EOUSAMatters

EOCases IN → AOCases IN → EOCases OUT → AOCases OUT → USSC → BOP

USMB
Generalizability of the Dyad Links

Conservative linking rate to EOC OUT records with data from other agencies

<table>
<thead>
<tr>
<th>Year</th>
<th>% with EOM</th>
<th>% with USMB</th>
<th>% with AOC</th>
<th>% with USSC</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>81.11</td>
<td>68.75</td>
<td>78.16</td>
<td>65.36</td>
</tr>
<tr>
<td>2007</td>
<td>82.40</td>
<td>70.42</td>
<td>78.69</td>
<td>68.11</td>
</tr>
<tr>
<td>2008</td>
<td>85.12</td>
<td>73.43</td>
<td>80.89</td>
<td>70.23</td>
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<tr>
<td>2009</td>
<td>86.44</td>
<td>75.07</td>
<td>81.96</td>
<td>71.95</td>
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<tr>
<td>2010</td>
<td>85.82</td>
<td>76.18</td>
<td>81.92</td>
<td>72.61</td>
</tr>
<tr>
<td>2011</td>
<td>88.74</td>
<td>77.88</td>
<td>82.31</td>
<td>69.07</td>
</tr>
<tr>
<td>2012</td>
<td>86.57</td>
<td>71.34</td>
<td>81.38</td>
<td>72.21</td>
</tr>
</tbody>
</table>
## Counts of those Charged with HT Cases – Preliminary

<table>
<thead>
<tr>
<th>Year</th>
<th>EOM OUT: Investigate, not charged with HT</th>
<th>EOC OUT</th>
<th>USSC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Not guilty</td>
<td>Conv: Other crime</td>
</tr>
<tr>
<td>2006</td>
<td></td>
<td>98</td>
<td>0</td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td>94</td>
<td>1</td>
</tr>
<tr>
<td>2008</td>
<td></td>
<td>107</td>
<td>5</td>
</tr>
<tr>
<td>2009</td>
<td></td>
<td>109</td>
<td>0</td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td>86</td>
<td>1</td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td>74</td>
<td>1</td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td>114</td>
<td>10</td>
</tr>
</tbody>
</table>
## Charged Offense Types for those Not Convicted of HT – 06-13

<table>
<thead>
<tr>
<th>Charge Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prostitution / Pornography (Not available after FY2009)</td>
<td>128</td>
</tr>
<tr>
<td>Child Pornography (Not available before FY2010)</td>
<td>60</td>
</tr>
<tr>
<td>Immigration</td>
<td>51</td>
</tr>
<tr>
<td>Sexual Abuse</td>
<td>44</td>
</tr>
<tr>
<td>Racketeering / Extortion</td>
<td>26</td>
</tr>
<tr>
<td>Administration of Justice</td>
<td>26</td>
</tr>
<tr>
<td>Fraud</td>
<td>23</td>
</tr>
<tr>
<td>Money Laundering</td>
<td>20</td>
</tr>
</tbody>
</table>
**Next Steps: Quantitative Measures**

- Finalize description of funnel for offenders investigated, charged, and/or convicted of human trafficking
  - Offender characteristics
  - Characteristics of conspiracies
  - Characteristics of the case
  - Contrasts with other types of cases

- Subsequent criminality
  - Human trafficking offenders
  - Convicted offenders investigated for human trafficking
Next Steps: Qualitative Measures

- Data Sources
  - Generate a sample of offenders from the USSC data to code PSRs
  - Interviews of investigators and US Attorneys

- Information Sought
  - Typical processes for investigating, filing, and prosecuting trafficking cases
  - Typologies of investigations that result in filings; convictions
Next Steps

- Continue and complete the quantitative analysis
- Sample cases for document review from PACER and USSC PSRs
- Choose federal court districts that have large numbers of trafficking cases
  - Engage US Attorneys
  - Engage other investigators