Experimental Data Product: Justice Outcomes Explorer (JOE)

Keith Finlay

U.S. Census Bureau

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What is the Justice Outcomes Explorer?

- Released May 1, 2024
- JOE is a publicly accessible data dashboard that connects administrative criminal justice data to extensive socioeconomic data
- This experimental, blended data product links together:
  - Criminal Justice Administrative Records System (CJARS)
  - Census Bureau demographic data
  - Federal administrative records
- Tables: census.gov/cjars
- Data tool: joe.cjars.org

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CJARS Criminal Justice Administrative Records System

Goals of the Justice Outcomes Explorer

- Better understand the employment, program participation, and health outcomes of people involved in the justice system as they reintegrate into society
- Provide the public an unprecedented window into the outcomes of people charged with offenses, released from prison, or beginning probation or parole sentences
- Allow further research using aggregate level data

Developed for broad set of stakeholders

- The public will be able to better understand the scope of the justice system and see what factors are associated with reintegration
- Criminal justice agencies can better understand their caseload dynamics and outcomes
- Policymakers can see how agencies in their areas are performing
- Researchers can use data to study justice policies and impacts
- For all users: data to support more evidence-based decision-making

Sourcing the criminal justice data: CJARS

- Criminal Justice Administrative Records System (CJARS) began as a partnership between the Census Bureau and the University of Michigan in 2016
- Goal: collect, harmonize, and link longitudinal, multi-jurisdictional criminal justice data and connecting it to Census Bureau records, following individuals and cases across space and time
- CJARS has grown into a leader in criminal justice data infrastructure, creating a premier data resource and helping develop novel tools like the Text-based Offense Classification (TOC) tool and the Justice Outcomes Explorer (JOE)

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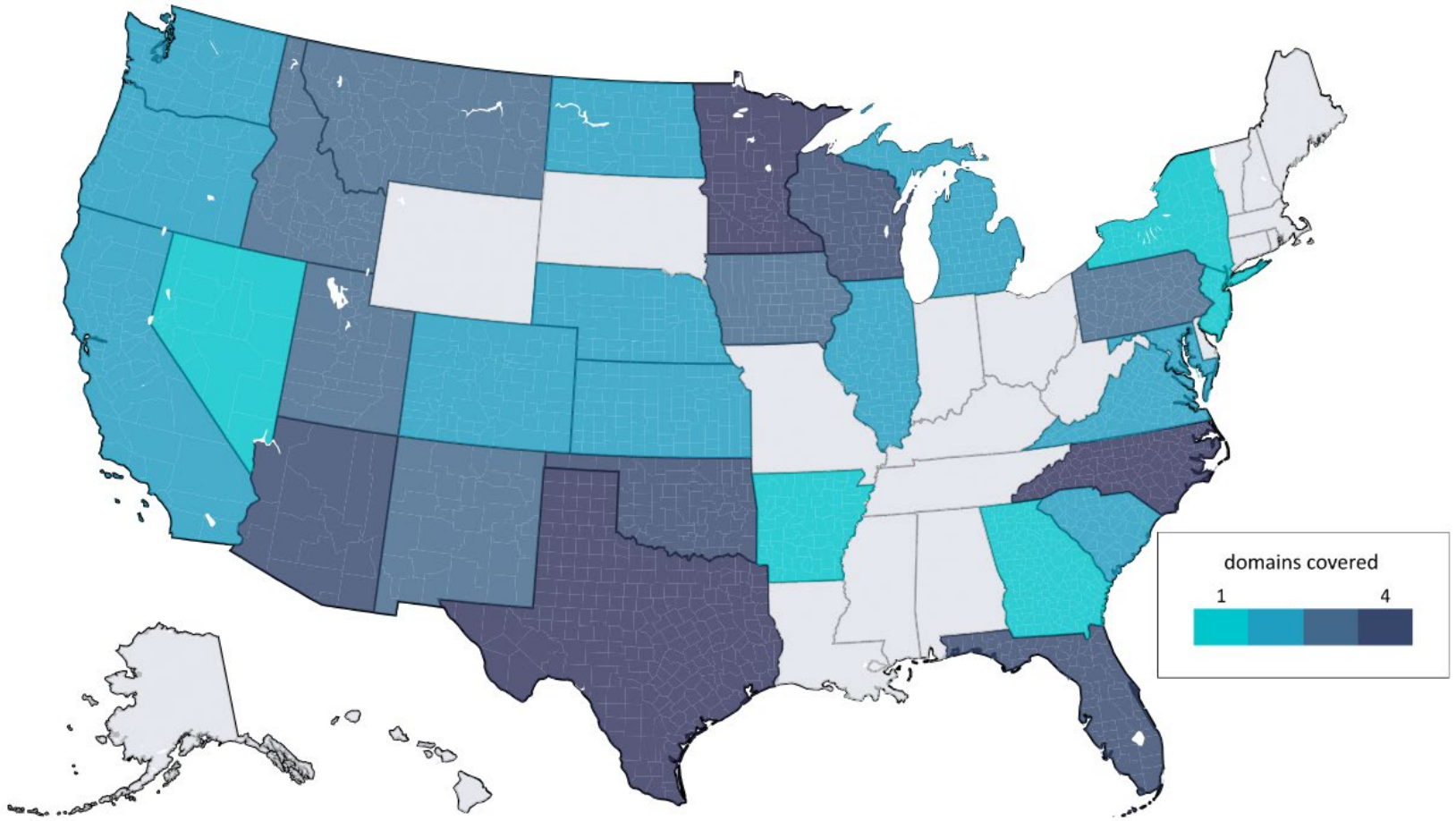
Building out national coverage

- National coverage is an ambitious and complicated goal
- Staff at the University of Michigan actively seek data through a variety of methods, including public records requests, research applications, data-use agreements, data donations, and public downloads/scraping
- Multi-jurisdictional data comes with a unique set of barriers, including:
  - Access challenges
  - Analysis challenges

Current Justice Outcomes Explorer coverage



Source: CJARS team at the University of Michigan. Coverage as of July 2025. Criminal justice domains include: court adjudication, probation, prison, and parole.

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JOE data are new and transformative

- Linked data from multiple stages of the justice system
- Longitudinal coverage of cohorts and post-event outcomes
- High-value statistics constructed from data linkage only available at the Census Bureau
- Additional statistics produced by the University of Michigan without linkage to Census Bureau data allow comparisons of caseloads and recidivism across jurisdictions

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Cohort variables and data sources

Variable	Possible values	Data source
Justice event	misdemeanor charge, felony charge, prison release, probation start, parole start	CJARS
Geography	state, disposition/sentencing county, probation/parole county	CJARS
Justice event window	1- or 2-year windows of events	CJARS
Justice experience	no previous justice events, any previous events	CJARS
Offense type	violent, property, drug (only for charge events)	CJARS
Age group	15-24, 25-39, 40+	Numident
Sex	male, female	Numident
Race/ethnicity	NH White, NH Black, NH Asian/PI, Hispanic, AIAN	BestRace

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Outcome variables and data sources

Variable	Data source
% employed in a year	IRS W-2 information returns
average annual employment earnings	IRS W-2 information returns
% with annual employment earnings above the poverty threshold for a single person under age 65	IRS W-2 information returns
% receiving Supplemental Security Income	SSA Supplemental Security Record
% receiving HUD rental housing assistance	HUD Longitudinal PIC/TRACS
% enrolled in Medicaid	CMS MSIS/T-MSIS
% enrolled in Medicare	CMS EDB
% who have died since the event	Numident

- Outcomes measured 1, 3, and 5 years after justice event

Walking through a JOE statistic

- Data user: wants to understand earnings after prison release and how their caseload's outcomes compare
- Cohort: people released from state prison in 2015
- Outcome: annual earnings from all IRS W-2 returns
  - 1, 3, and 5 years after release (2016, 2018, 2020)
- By state or by county where the conviction occurred

JOE tool has a variety of ways of interacting with complex data

- Multiple data visualization modalities
  - Choropleth maps
  - Scatter plots with local contextual data
  - Time series
  - Tabular comparisons of jurisdictions
- Easy chart export
- Statistical table download

JOE data tool demo

- Data tool: joe.cjars.org
- Mortality estimates and the opioid epidemic
- Jurisdictional comparisons over time
- Local economic context

Released as an experimental data product

- Uses non-survey data sources, some of which have not been evaluated for quality
- Does not cover all of the U.S. because of data availability
- Does not include measures of uncertainty

- We want feedback from data users as we consider features for future releases!

Thank you!

Keith Finlay

keith.ferguson.finlay@census.gov

301-763-6056

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