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# Record Linkage in the Survey of Prison Inmates

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NASEM-NSF Panel: Sharing Blended Data in a 21<sup>st</sup> Century Data Infrastructure

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# Overview

- SPI background
- Record linkage in 2016 SPI
- Challenges
- Future work and considerations



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# History and goals of SPI

- Cross-sectional survey of the U.S. prison population
  - Formerly known as the Survey of Inmates in State and Federal Correctional Facilities
- Conducted periodically among a national sample of persons incarcerated in state and federal prisons
  - State: 1974, 1979, 1986, 1991, 1997, 2004, and 2016
  - Federal: 1991, 1997, 2004, and 2016
- Primary goals
  - Produce national estimates of persons age 18 or older in U.S. prisons



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# SPI 2016: Interview and design

- Interview

- Mode: Computer-assisted personal interviewing (CAPI)
- Average length: 50 minutes

- Variety of topics covered in the 2016 SPI

Demographics

Criminal justice & history

Socio-economic status

Health and health care

Prison misconduct

Prison programs & work assignments

- Two-stage sample design

- 370 eligible facilities sampled; 364 participated (98% response rate)
- 35,509 respondents sampled; 24,848 participated (70% response rate)



# SPI 2016: Consent protocol and rates

- 2016 administration first time requested consent for record linkage
  - Conduct all linkage within 5 years after completion of survey
- Combined consent protocol

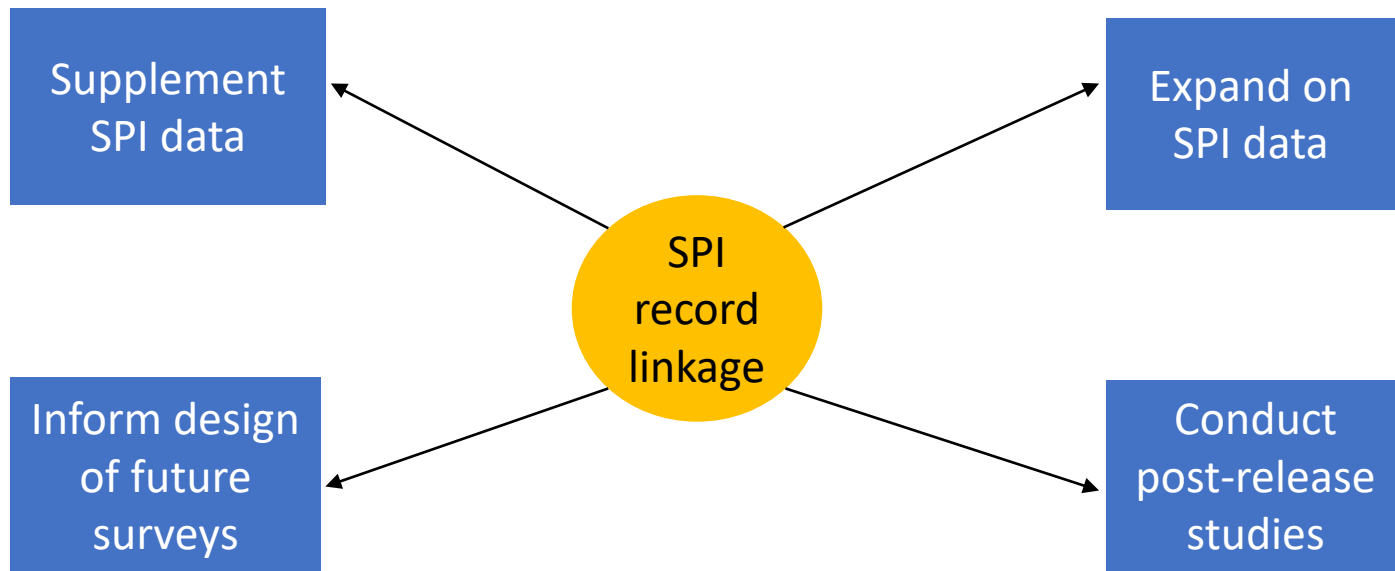
## Consent rates among prisoners who participated in the Survey of Prison Inmates, by type and jurisdiction, 2016

	Total		State		Federal	
	Number	Percent	Number	Percent	Number	Percent
<b>Number of respondents</b>	24,848	100 %	20,064	100 %	4,784	100 %
Full study consent	24,678	99.3	19,910	99.2	4,768	99.7
Partial study consent	170	0.7	154	0.8	16	0.3



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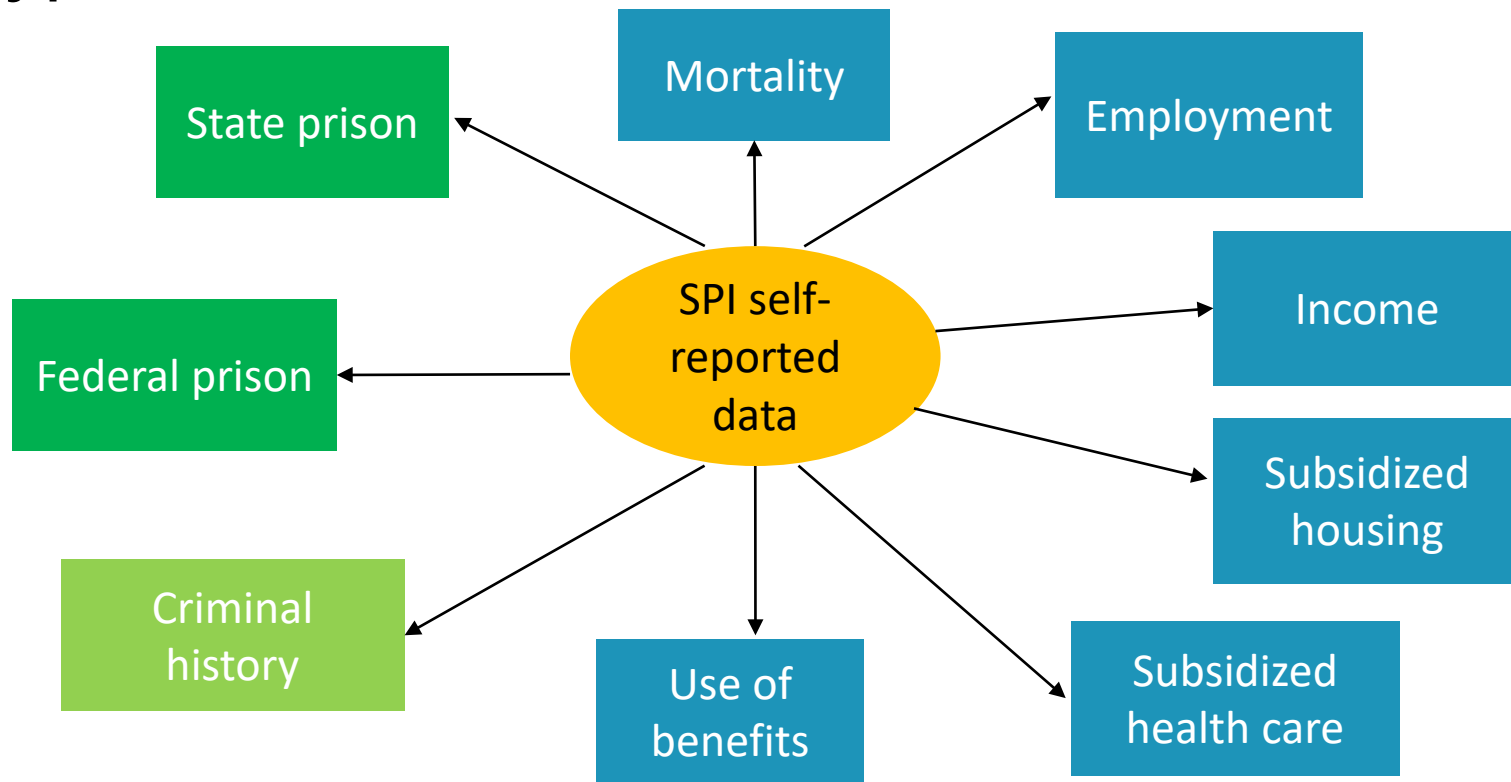
# SPI 2016: Goals of record linkage





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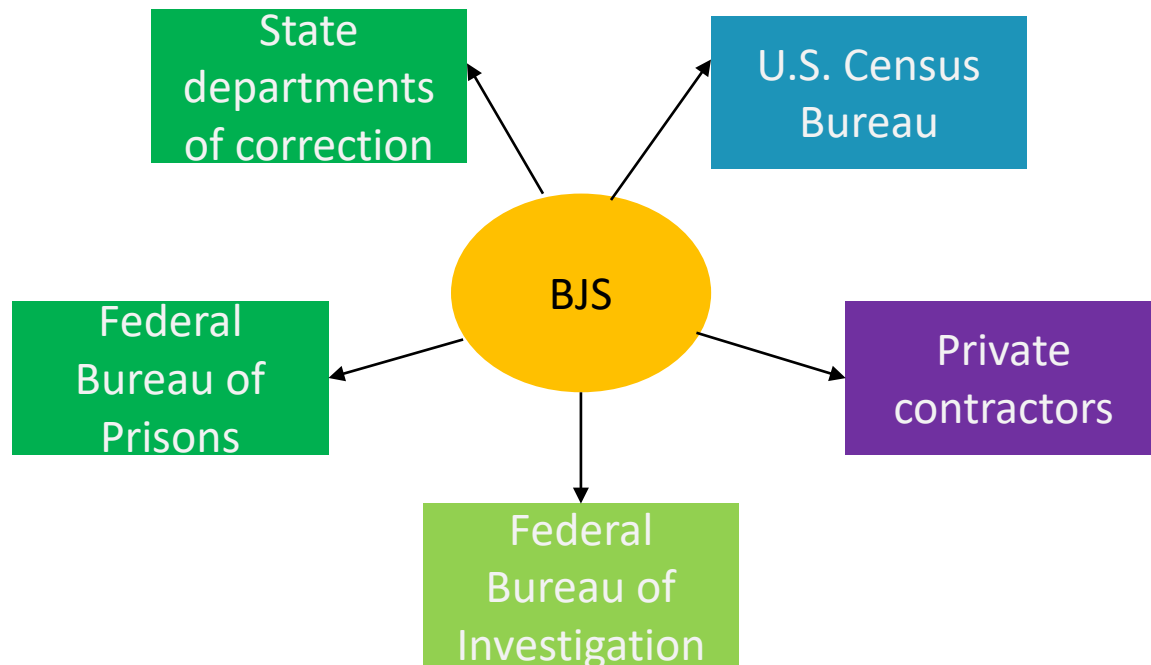
# Types of records linked to 2016 SPI





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# Success of SPI record linkage dependent on voluntary participation and partnerships





# Identifiers used to conduct record linkage in 2016 SPI

Identifiers in SPI	State prison records	Federal prison records	Criminal history records	Socio-economic records <sup>1</sup>
Name	X	X		X
Date of birth	X	X		X
Facility ID	X	X		
FBI ID number	X	X	X	
State ID number	X		X	
Social Security Number <sup>2</sup>	X			X

<sup>1</sup>The U.S. Census Bureau developed the Person Validation Identification System to assign a unique Protected Identification Key (PIK). Biological sex was also used to assign a PIK to SPI respondents.

<sup>2</sup>SSN was obtained through the state/federal prison records that were linked to the SPI self-reported data.



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# Respondent consent in practice and challenges

- Respondent consent active from 2016-2021

[illegible]



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# Some challenges and limitations

- Expiration of respondent consent 5 years after data collection
- Access restrictions
- Documentation
- Data lag
- Standardization
- State-level analyses
- SPI weighted to represent a stock population rather than a release cohort
- Some SPI topics subject to selection bias (for post-release studies)



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# Future work and considerations

- Two technical reports related to SPI record linkage in development
- Two substantive recidivism reports in development
- Future opportunity to assess other post-release outcomes (besides recidivism)
- Explore extending linkage period in respondent consent protocol and the impact on consent rates
- Explore ways to minimize data lags

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