



# Technical Infrastructure Focus Area

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# Recommendations Summary

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## Focus Area Highlights

### ***ACDEB Recommendation #1: NSDS Must Coordinate Secure and Efficient Data Access Methods***

- Move data safely, easily, and efficiently to intermediaries and secure enclaves for evidence building
- Data standards that facilitate data interoperability
- Technical assistance and tools to expedite metadata production

### ***ACDEB Recommendation #2: NSDS Must Use and Promote Privacy Preserving Technologies***

- Pilot program to apply (1) privacy preserving record linkage, (2) private set intersection, and (3) secure multiparty computation
- Leverage the FCSM data protection toolkit and develop a framework for expanding engagements beyond the federal statistical system
- Support experiments and competitions to develop new methods that increase secure access to data

### ***ACDEB Recommendation #3: NSDS Must Expand Data Linkage Capacity***

- Coordinate Federal CDO council efforts to index data inventories and metadata repositories with the NSDS data concierge service
- Evaluate the availability and formats of tokens for linkages
- Promote standards that streamline data linkages in enclaves or in situ

### ***ACDEB Recommendation #4: NSDS Must Provide an Innovation Sandbox***

- Environment to test new and innovative technologies and software for multiple data access tiers, data protection protocols and data analysis
- Develop and refine disclosure limitation techniques and multiple access modes using the sandbox

### ***ACDEB Recommendation #5: NSDS Must Support Fitness for Use Evaluations and Communications***

- Evaluate and publicly communicate the quality of data prior to and after evidence building
- Communicating the quality and utility of data is critical to build social license, and to have public support for the use of administrative data in evidence building.

# Greatest Success and Challenge

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## Focus Area Discussion

- **Greatest success** – Synthesizing the diverse perceptions of “technology” among our subcommittee members, and retaining focus on the needs of the data generators/providers
- **Greatest challenge** – Considering topics to focus on, not knowing whether another subcommittee was tackling it already

# Year 2 Roadmap

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## Focus Area Plans

- Interoperability standards and technologies
- Tools and methods for increasing provider and user capacity and capability
  - Privacy preserving technologies
  - Automating data quality checks, documentation, and harmonization for data providers
- Review past studies and work underway in government and the private sector.
  - Secure multiparty computation
  - Privacy preserving record linkage
  - Tools to automate metadata production and provenance tracking
  - Producing synthetic data with validation servers
- Tiered access models
  - FSRDC
  - NCHS