Data-Driven Decisions in Criminal Justice: The Future of Data Governance in New Mexico

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Institute for Complex Additive Systems Analysis (ICASA)

Courts, Corrections, and Justice Committee

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Agenda Overview

- New Mexico Tech's Institute for Complex Additive Systems Analysis (ICASA)
- Data Science in the Public Interest (DSPI)
- DSPI's Criminal Justice Projects
- Statewide Data Governance Project
- Data Governance: Preliminary Findings
- Future of the Data Governance Project
- Your Engagement

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The Institute for Complex Additive Systems Analysis (ICASA)

Created by NM Legislature in 2001, 21-11-8.1 NMSA, 1978

Research Division of New Mexico Tech (NMT)

Base funding via Research and Public Service Project (RPSP)

Mission: To serve as a pivotal research component of New Mexico Tech (NMT), focusing on the design and development of strategies for safeguarding critical infrastructures.

Vision: Empowering the next generation of critical thinkers to tackle the intricate challenges posed by an increasingly interconnected world.

Key Features:

Interdisciplinary Approach: ICASA adopts a cross-discipline perspective to address complex issues.

Research Spectrum: Our work encompasses both basic and applied research, along with software development

Support for Education: We have provided support to over 200+ students, fostering their growth and development.

Recognition: ICASA holds legislative recognition as a RPSP. We engage in projects at the federal, national, international, and private-sector levels. Notably, RiskSense emerged as a spin-off from ICASA.

News Release
U.S. Sen. Pete Domenici & U.S. Rep. Joe Skeen

FOR IMMEDIATE RELEASE
FEBRUARY 7, 2001

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DOMENICI & SKEEN: N.M. TECH TO LEAD NATIONAL SECURITY RESEARCH ON INFORMATION INFRASTRUCTURE SYSTEMS

iCASA Will Be Unique Public-Private-Academic Venture

WASHINGTON -- U.S. Senator Pete Domenici and Congressman Joe Skeen, both R-N.M., today announced that a New Mexico university will host a new cooperative center whose national security work will serve to help protect U.S. computer, telecommunications or power systems vulnerable to failure or cyber attack.

Domenici and Skeen said the new **Institute for Complex Additive Systems Analysis (iCASA)** will be housed at the New Mexico Institute of Mining and Technology in Socorro, N.M. iCASA is a unique cooperative endeavor between the Defense Department, other federal agencies, academia and the private sector. It is funded through a $5 million appropriation secured by the two New Mexico lawmakers in the FY2001 Defense Appropriations Act.

iCASA will be dedicated to the analysis of complex interdependent systems, i.e., networks and critical infrastructures--electrical grids, water distribution systems, and the computer networks on which they rely. In addition to developing fundamental comprehension of large-scale systems, iCASA will also focus on training and education of future experts to deal with assuring the stability of interdependent systems in the United States.

"iCASA will begin addressing one of the most complex vulnerabilities facing the United States today. This is not the threat of mass destruction, but rather mass disruption. The unintended or deliberate disruption to any number of the daily functions upon which our military, as well as our economic prosperity, rely could be catastrophic," **Domenici** said.

"As public officials it is our responsibility to ensure that our national security and most critical information systems are safe from attacks. We must provide the necessary training and education to maintain the highest level of security for our information systems," **Skeen** said.

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Data Science in the Public Interest (DSPI)

The DSPI team utilizes its data and computer science expertise to support the development of systems and tools that allow entities to leverage their data as a valuable asset.

ICASA provides public sector "customers" with technical assistance, training, and tools/systems for data sharing, analyses, and visualization.

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Department of Public Safety

Consolidated Offender Query

Dover Dispositions

Single State Identifier

Consolidated Offender Query

DPS provides a background report to many judges so they can make an informed decision about bail the morning after someone is arrested.

Uses data from FBI, NMCD, DPS and AOC

- Complications with data sharing has led to multiple delays on this project

Expedite report generation

- enhancing the search process
- simplifying the data gathering process
- automating the report writing process

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Dover Disposition

Assisting DPS with populating the disposition results of their arrest records data (historical and going forward).

Using data from AOC through NMDX
- Recently, AODA has suggested their data would better support this.

Most court records don't have unique identifiers, increasing the complexity of the matching process

Work in progress, currently our match rate falls short of target
- Currently at a pause to do to lack of funding

Single State Identifier

Publishing matching information to NMDX so AOC can add SIDs to their court records.

Worked with DPS to understand what records we could publish without placing AOC under FBI's CJIS handling requirements

AOC is currently consuming data to add the SID to some of their court records.

New Mexico Sentencing Commission

Single State Identifier (previously discussed)

Internal Automation of Data Ingest

Correctional Facility Data to NMDX uplift

CJCC Data Dashboard

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NMSC Internal Automation

Assist NMSC with internal data ingest from multiple Criminal Justice partners. Helps with critical NMSC legislative reporting mandates.

Upload shared data from partners like AOC, AODA, NMCD, etc.

Decreasing overhead on NMSC staff and partners by building data sharing pipelines for required reports

NMCD Data to NMDX lift

Assist NMSC with automating the upload of NMCD data from all correctional facilities onto the NMDX.

Upload all data (historical and go-forward) to NMDX daily

Decreasing overhead on NMSC staff and NMCD partners with automated sharing while providing court judge calendars

CJCC Data dashboard

Create a data dashboard for the Criminal Justice Coordinating Council (CJCC) to see criminal justice related trends by county and judicial district.

Using data available to the NMSC:

- Implement as much of the Sequential Intercept Model (SIMs) as possible
- Implement cutting edge Criminal data analytics from new research in the Criminal Justice field

Project in-progress and currently in the backend development phase

Case Catcher

Improves evidence collection by law enforcement so DA's can create better cases

- Evidence collection has been a friction point between the DA's and Law Enforcement

Educates law enforcement about what the DA's need in terms of evidence to show the charged crimes were committed

Provides a mechanism to share evidence with public defenders

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Statewide Data Governance Project

What is the project?

How does it relate to Criminal Justice?

Statewide Data Governance Project: Preliminary Findings
(Stakeholder Interviews and Asset Map)

Issue-based data collaboration efforts are siloed within that policy area.

Agencies are under-resourced to meet their data and technology needs.

Limited data management protocols are in place for data collaboration, and general apprehension exists about sharing data.

Agencies use different vendors and related software, making it challenging to interact with one another.

There is an appetite for statewide data collaboration driven by the "end user," not outside people or vendors.

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Statewide Data Governance Project: Moving Forward

Fall 2024: Continue gathering data through early 2025 (survey, focus groups, etc)

Winter 2025: Submit Interim Report (Year 1) to the Legislative Finance Committee

Spring 2025: Begin Phase 2 technical application of the project in early 2025 (dependent upon future funding)

Fall 2025: Implement and Complete Phase 2

Spring 2026: Submit Final Report to the Legislative Finance Committee

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Statewide Data Governance Project: Your Engagement

Policy
- Potential Data Governance Bills

Budget
- Funding for the Statewide Data Governance Project - Phase 2 (technical piece)

Narrative
- Elevating the importance of investing in tools and capacity that allows for you to make data-driven policy and financial decisions

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Questions? Discussion.

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