

MAKING A DIFFERENCE THROUGH DATA

WORKING GROUP ON EVALUATION OF PUBLIC
POLICIES AND PROGRAMS

Julia Lane
New York University

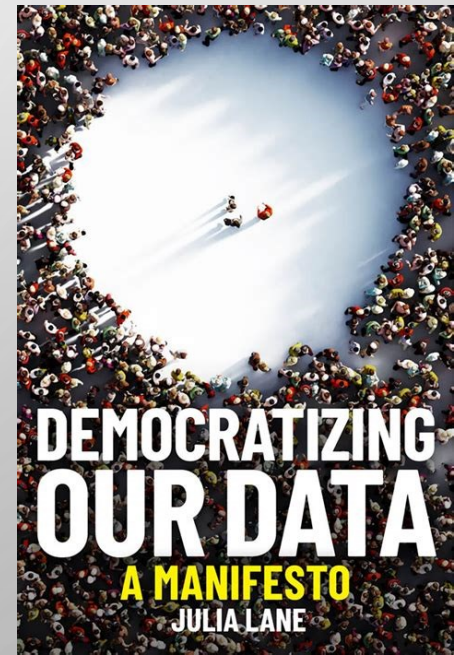
FOCUS OF THE FORUM

How data analysis can be embedded into our practice
and how it can help generate performance audits and
evaluations

that make a difference

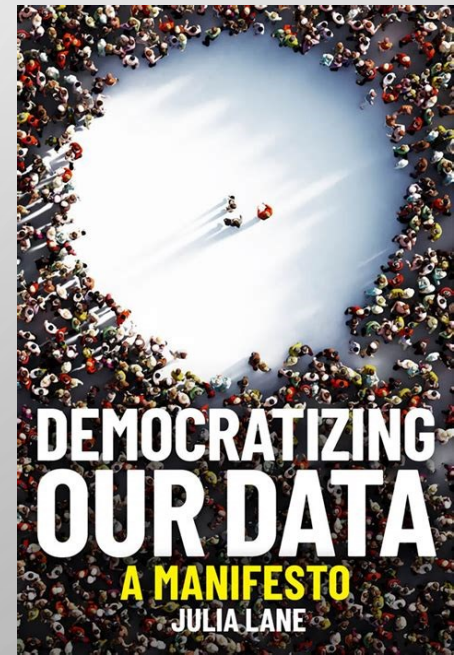
OUTLINE

- THE CONTEXT
- DEMOCRATIZING DATA..AND ANALYSIS
- NEW APPROACH TO EVALUATION
- OPPORTUNITIES



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NEW DATA OFFER MASSIVE OPPORTUNITIES

For information on the data and methods behind each exhibit, readers can click on “information” icons, and “data trust” ratings to trigger pop-up windows containing key information and links to more detailed resources.

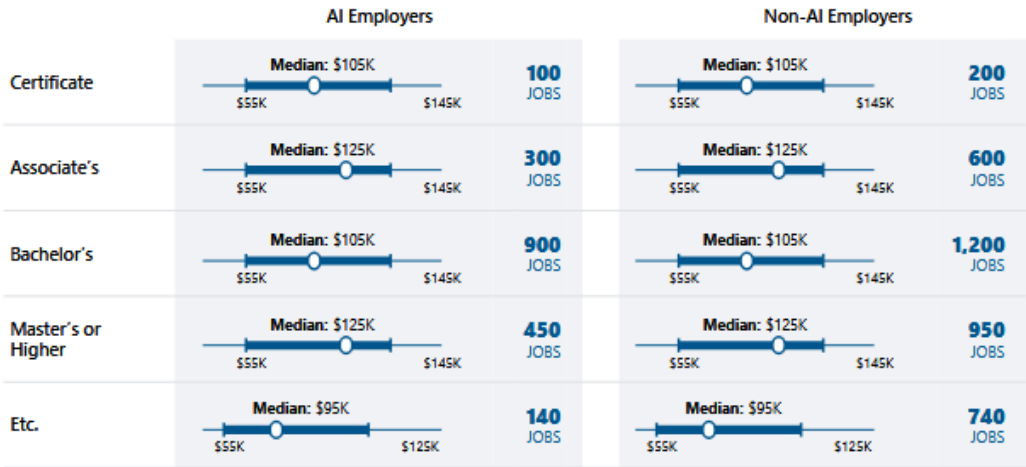
Key Question

What are the earnings of workers at AI-active employers at each education level?

Underlying Data

Source	Data Element
QCEW	Industry
QCEW	Region
QCEW	Timeframe
UI	Employment & Earnings
SLDS	Education
IRIS	AI Activity

Earnings Among AI and non-AI Employers by Education Level, Arkansas (2025, Q1)



SOURCES: Industries of Ideas calculations from Longitudinal Education, Quarterly Census of Earnings and Wages (QCEW), and Longitudinal Employer-Household Dynamics (LEHD) Wage data.



DATA YOU CAN TRUST:

QUALITY »

RISKS & LIMITATIONS »

QUALITY

- Characteristic Title: Insert brief description here and link out to [read more in detail »](#)
- Characteristic Title: Insert brief description here and link out to [read more in detail »](#)
- Characteristic Title: Insert brief description here and link out to [read more in detail »](#)
- Characteristic Title: Insert brief description here and link

Customize Visual

Select primary measure

Qualified Earnings

Select grouping measure

Educational Attainment

Select timeframe

2025, Q1



Notes on Data & Methods

Around one page of key information on the underlying data for this figure: universe, timeframe, geography, and each measure's construction (e.g., assumptions/ thresholds applied). Content will contain slightly more detail than the information you would typically find in the footnotes of a table in a report. Sample text follows.

Quarterly earnings include all jobs earning \$3,950 or more in the quarter. The percentiles presented (25th, 50th, and 75th) were calculated using a “fuzzy median” approach, where the median is defined as the average of the true 45th and 55th percentiles.

Education level represents the highest credential attained by an individual based on... etc.

[Read the full technical documentation »](#)

NEW DATA NEED UNDERSTANDING AND MANAGEMENT

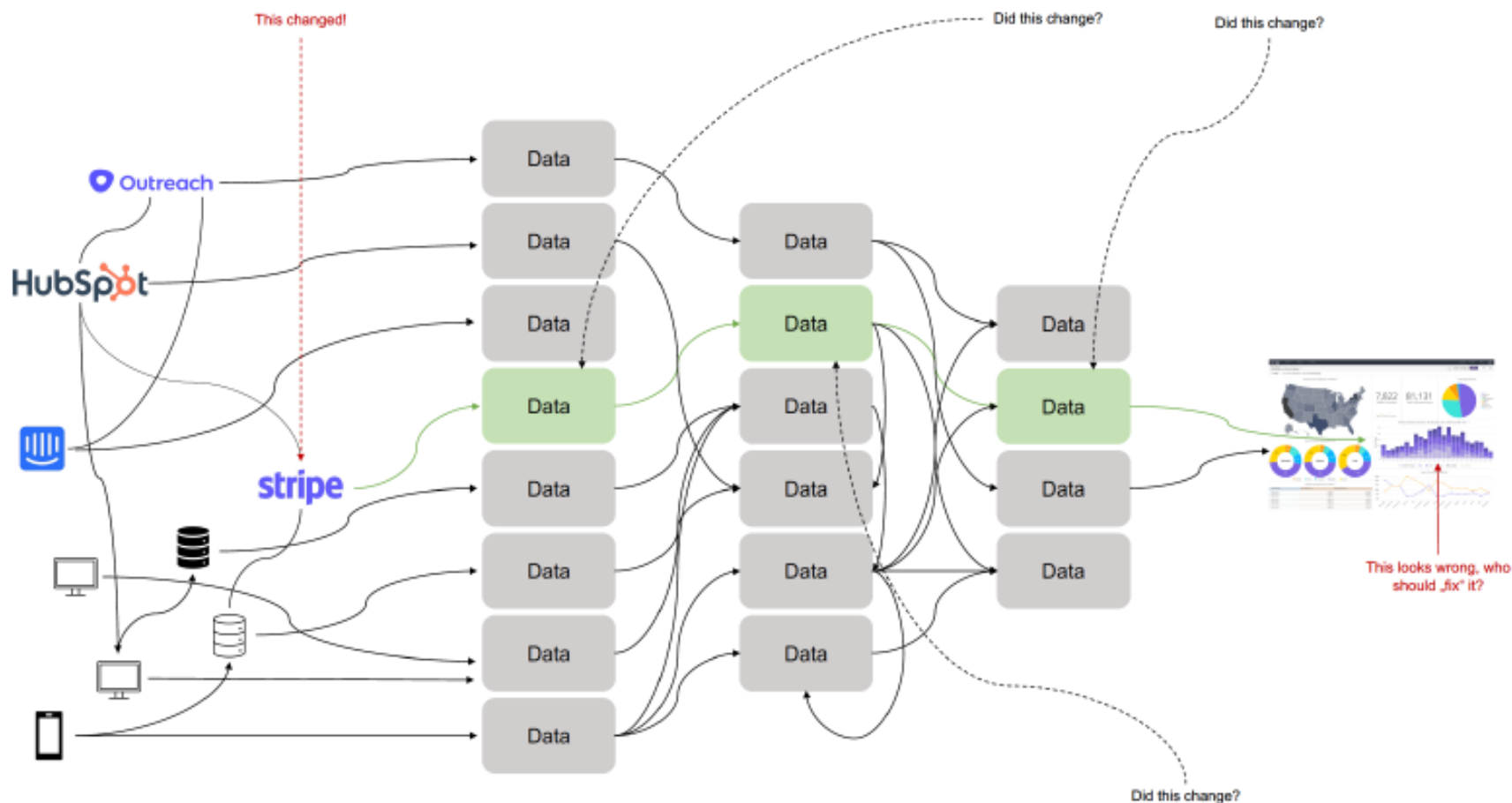
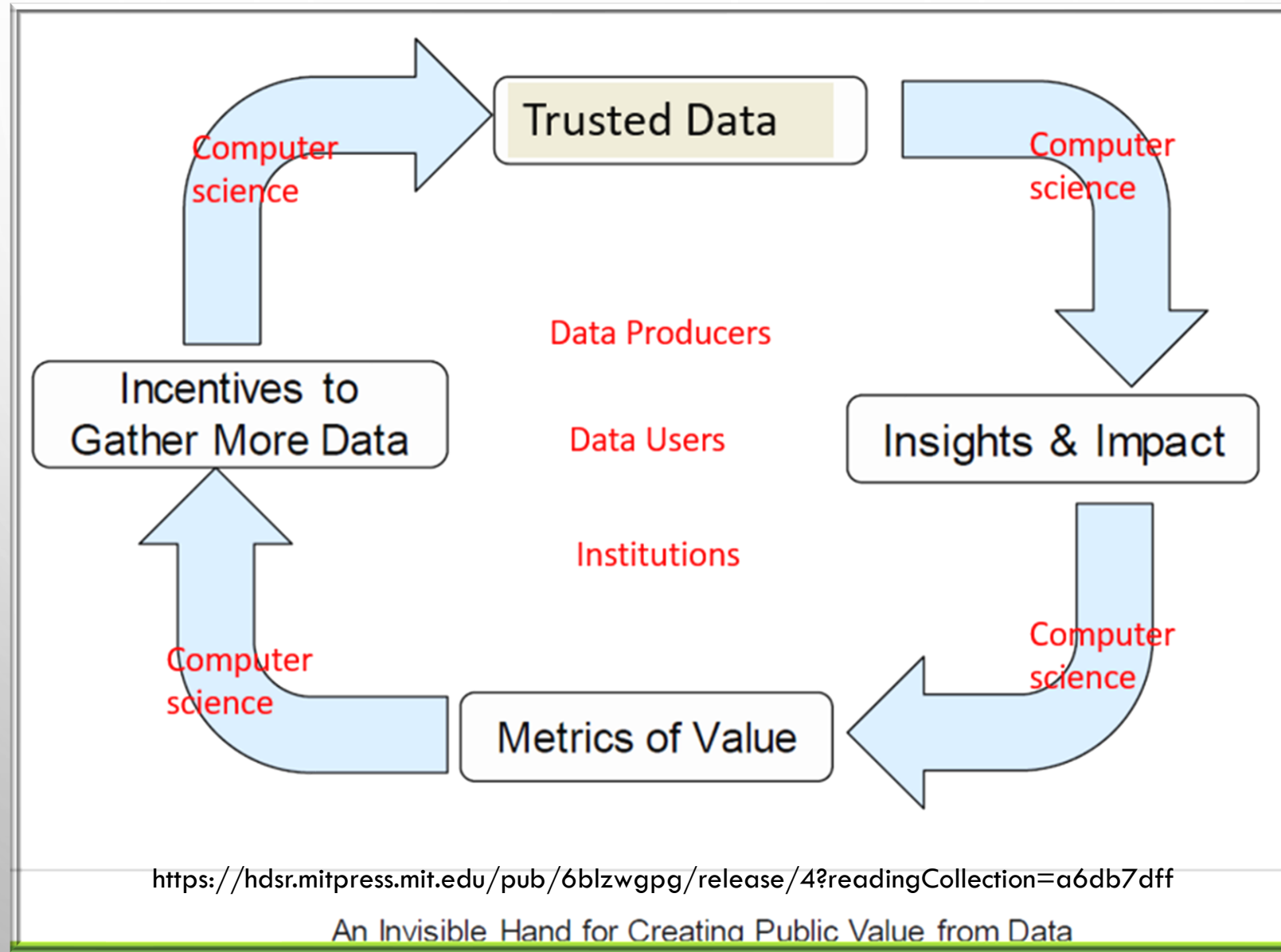


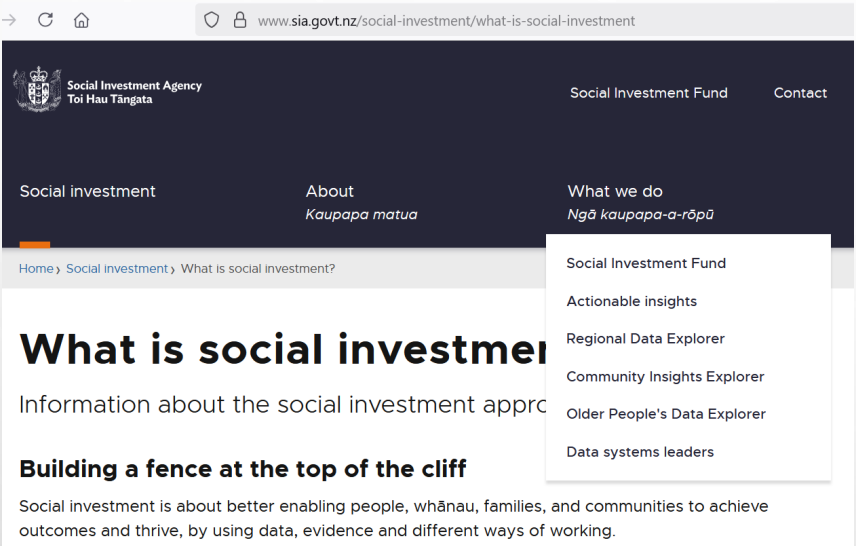
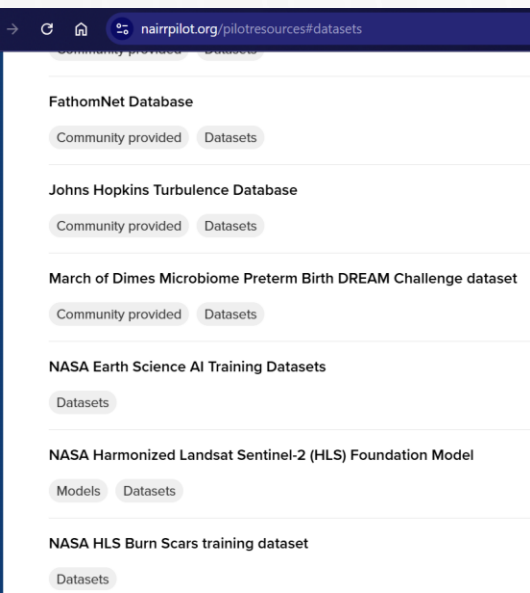
Figure 7. Splitting example

NEED NEW DATA COMMUNITY

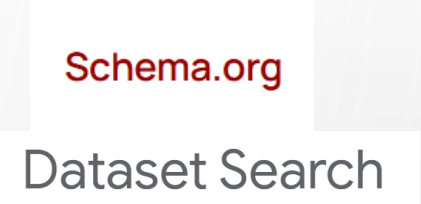


NEED NEW DATA SOURCES, SERVICES, AND PLATFORMS

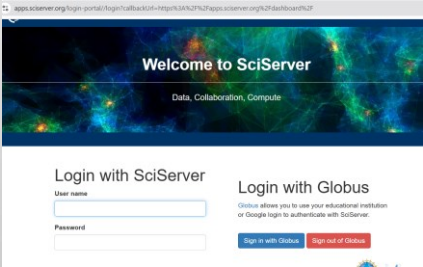
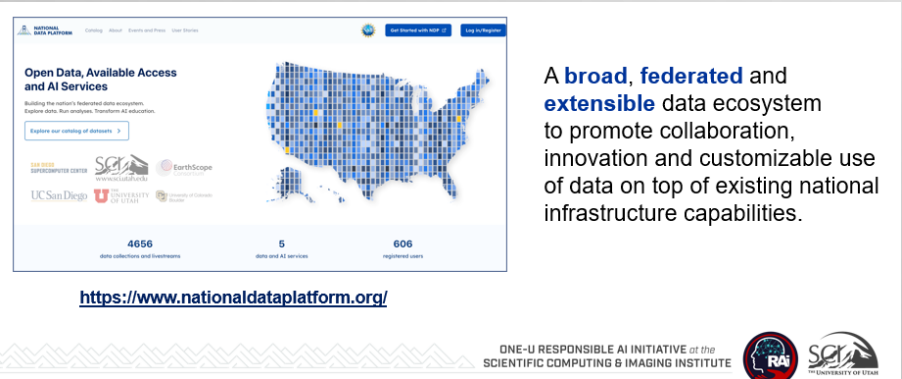
Data Sources



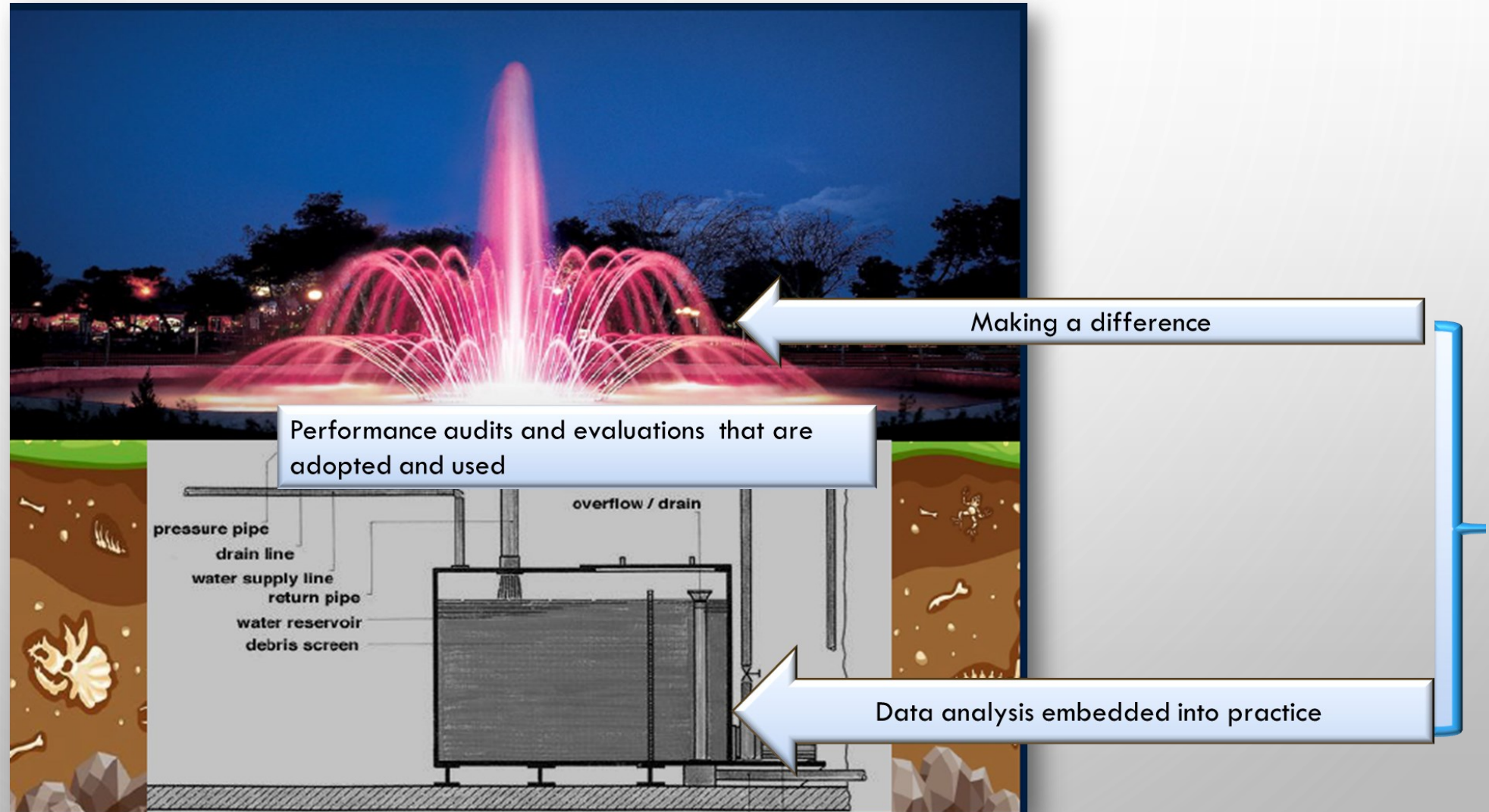
Services



Platforms

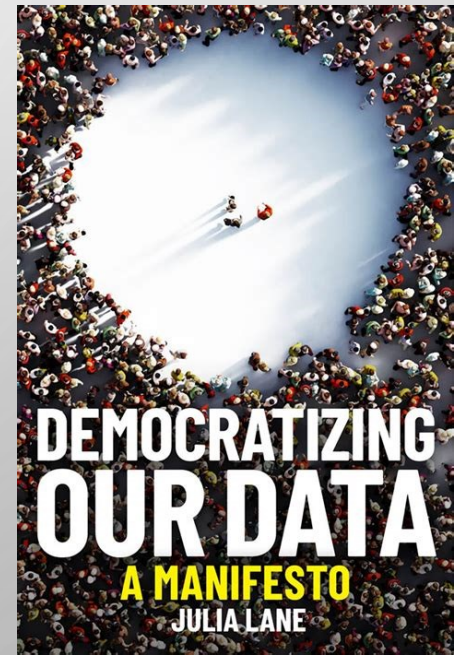


SPARKLY FOUNTAIN – EVALUATION THAT IS ADOPTED



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DEMOCRATIZE DATA ACCESS AND USE

E.G. NATIONAL DATA PLATFORM

Data Registration

- Leverage LLMs to characterize the dataset using keywords
- Approve dataset keywords

Data Collection

- Leverage publication corpora (e.g., OpenAlex, Dimensions) to generate context metadata about who, what, and how data have been used
- Validate generated metadata for accuracy

Data Discovery

- Search query returns context metadata for matching datasets; which is summarized for the user
- The user has the option to launch the DD portal for a more in-depth exploration.

Data Use

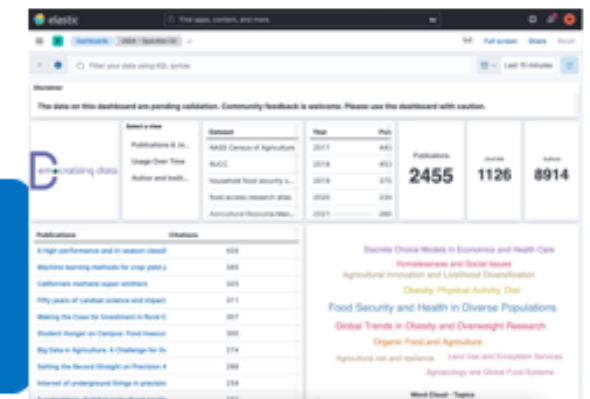
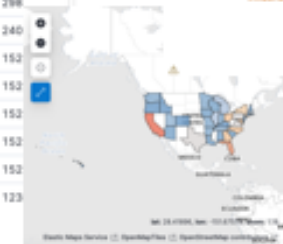
- The user provides feedback on datasets/context metadata and fit for use
- Context metadata is periodically updated



Publications 157 Journals 122 Authors 700

Authors	Pub...	Citati...
Hilary K. Seligman	2	298
Xiang Chen	4	240
Tené T. Lewis	3	152
Laurence S. Sperling	2	152
Muhammad Hammadah	2	152
Viola Vaccarino	2	152
Yi-An Ko	2	152
Lisa Harbeck	2	123

Food Tourism and Gastronomy Research
Ethics in Clinical Research
Impact of Urban Green Space on Public Health
Role of Mediterranean Diet in Health Outcomes
Food Security and Health in Diverse Populations
Obesity, Physical Activity, Diet
Influence of Built Environment on Active Travel



DEMOCRATIZE PROBLEM DEFINITION

CURRENT MULTI-STATE DATA COLLABORATIVE PROJECTS AND PRODUCTS

In development as of January 2025.

▼ K-12 Data Model

▼ Multi-State Post-Secondary Report

▼ Unemployment to Reemployment Portal

▼ Enrollment to Employment

▼ Industries of Ideas: A prototype system for measuring the effects of NSF investments on firms and jobs

▼ Multi-State Teacher Workforce Report

▼ Indiana Credential Outcome Transparency

▼ Expanding the Multi-State Post-Secondary Report Dashboard: Workforce Credentials and Students without Degrees

▼ Equity in Unemployment Insurance Benefit Access and Experience

▼ UI Equity Federal Grant - Multi-State Data Collaborative

▼ Education and Training as a Gateway to Reemployment of the Unemployed: Through the Lens of Equity

▼ Prosperity for Ohio: Mapping Credentials to Success

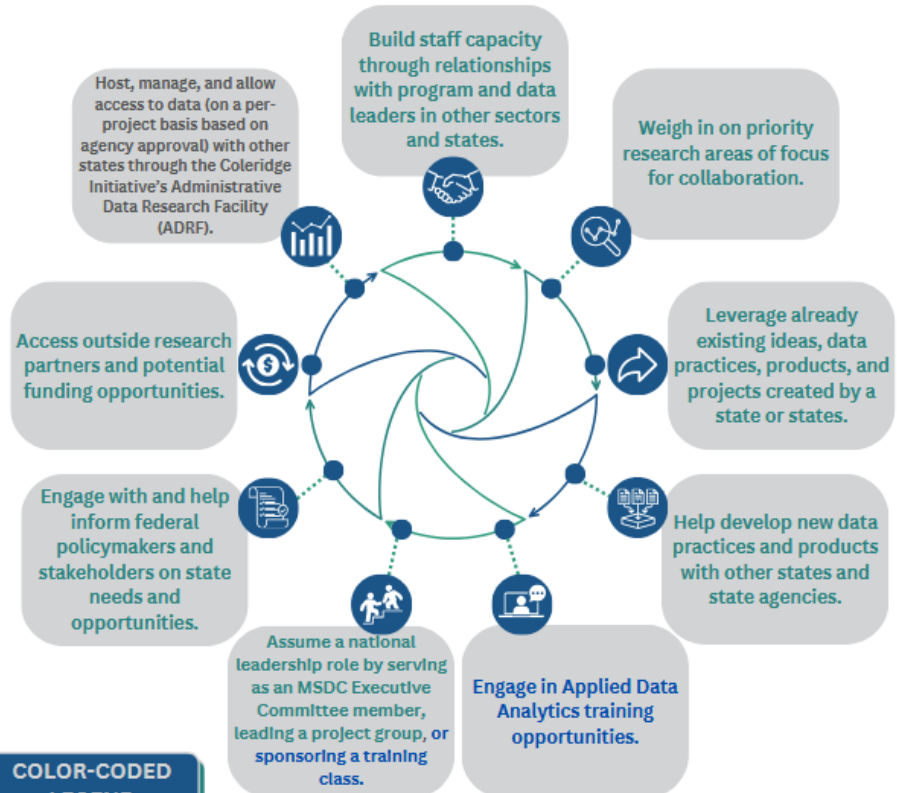
▼ Increasing College Completion in High-Value Career and Technical Fields by Unpacking the Relationships between Workforce Participation and Enrollment in Community College Re/Up-skilling Course Sequences

▼ Early Childhood Workforce Analysis and Modeling

▼ Education Design Lab: Methodology for Documenting Micro-Pathway Participants

DEMOCRATIZE MEASUREMENT

WAYS TO ENGAGE IN THE MULTI-STATE DATA COLLABORATIVE



COLOR-CODED LEGEND

- ✓ Share your interest in joining a topical or regional collaborative meeting by emailing the MSDC team at NASWA at datacollabs@naswa.org.
- ✓ Learn about upcoming training opportunities in the training section of the Coleridge Initiative website and reach out to the training team at training@coleridgeinitiative.org.
- ✓ Learn about the secure data platform in the ADRF section of the Coleridge Initiative website and reach out to the ADRF support team at support@coleridgeinitiative.org.

Want to get involved, but not sure how? We are here to help! Email us at datacollabs@naswa.org.



Measures and Stakeholders

Typical lofl stakeholder measures	Why it matters/Who can act on the information
Jobs: Information about the state and local labor pool	
1. How many jobs with AI active employers are in the area?	Use: Businesses who need to staff up to meet needs; Economic Development Agencies and chambers of commerce who need information for local and potential businesses
How many jobs at each education and skill level? In which industries?	
Earnings: Information about state and local job quality	
2. What are the earnings for jobs with AI active employers in the area?	Use: Education and training providers that are developing curricula; students looking for jobs and choosing majors; job seekers choosing credential qualifications
What are the earnings of workers at each education and skill level? In each industry?	
Skills: Information about employer demand and regional workforce supply of skills	

DEMOCRATIZE ANALYSIS

Quarter: 2016-Q4
Total Organizations: 0
Total Participants: 0



Number of Organizations

0	1-5	5-10	10+

Number of Participants

10	20	30

EVIDENCE

y Of Maryland | KYStats | C

[APPLY HERE](#)

[CLASS](#)

WEEK 3
MEASUREMENT

WEEK
VISUALIZ

DATA LITERACY AND EVIDENCE BUILDING

*Anna-Carolina Haensch, Ben Feder, Julia
Lane, Angela Tombari, Frauke Kreuter*

PRODUCE COMMUNITY-DRIVEN RESULTS

The Leaky CS Pipeline in Syntucky

Dana Brandt, RI
Mike Kahoe, OH
Jacob Kamer, TN
Chris Ledford, KY (Presenter)

Marina Moschos, VA
Jason Neiser, KY
Feng Raoking, VA
Stephanie Walsh, NJ

Angie Tombari, KY (Team Lead)

Watch on  YouTube

How Much Education In Computer Science Do I Need to Succeed?

- Emily Ostrander – State of Ohio
- Lacey Hall – State of Ohio
- Lindsay Barber – State of Ohio
- Maddison Reilly – State of Michigan
- Melissa Gibson – State of Michigan
- Jere Matthews – Commonwealth of Pennsylvania
- Tony Staglano – Commonwealth of Pennsylvania

Led by Dr. Tian Lou – Ohio Education Research Center,
CHRR at The Ohio State University

* This analysis uses Synthetic data



Certificates: A True Short-term Pathway to Success?

A Collaborative Analysis
by:



COLORADO
Department of
Labor and Employment

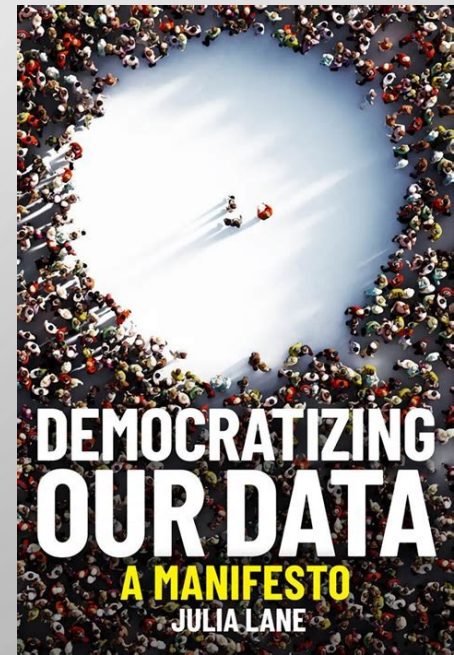
TEXAS
Workforce Commission

Watch on  YouTube



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EVALUATION CRITICAL, BUT NOT ALWAYS APPRECIATED

PRESIDENT DONALD J. TRUMP

The WHITE HOUSE

Fact Sheet: President Trump's
the Reduction of the
Bureaucracy

ELIMINATING WASTE AND REDUCING GOVERNMENT
Donald J. Trump signed an Executive Order
Bureaucracy.

- This Executive Order eliminates non-
functions of unnecessary government
Affected entities include the Federal
States Agency for Global Media

The Economist

Subscribe

Weekly edition The world in brief War in the Middle East War in Ukraine United States The world economy Business Artificial intelligence Games

United States | Losing count

DOGE comes for the data wonks

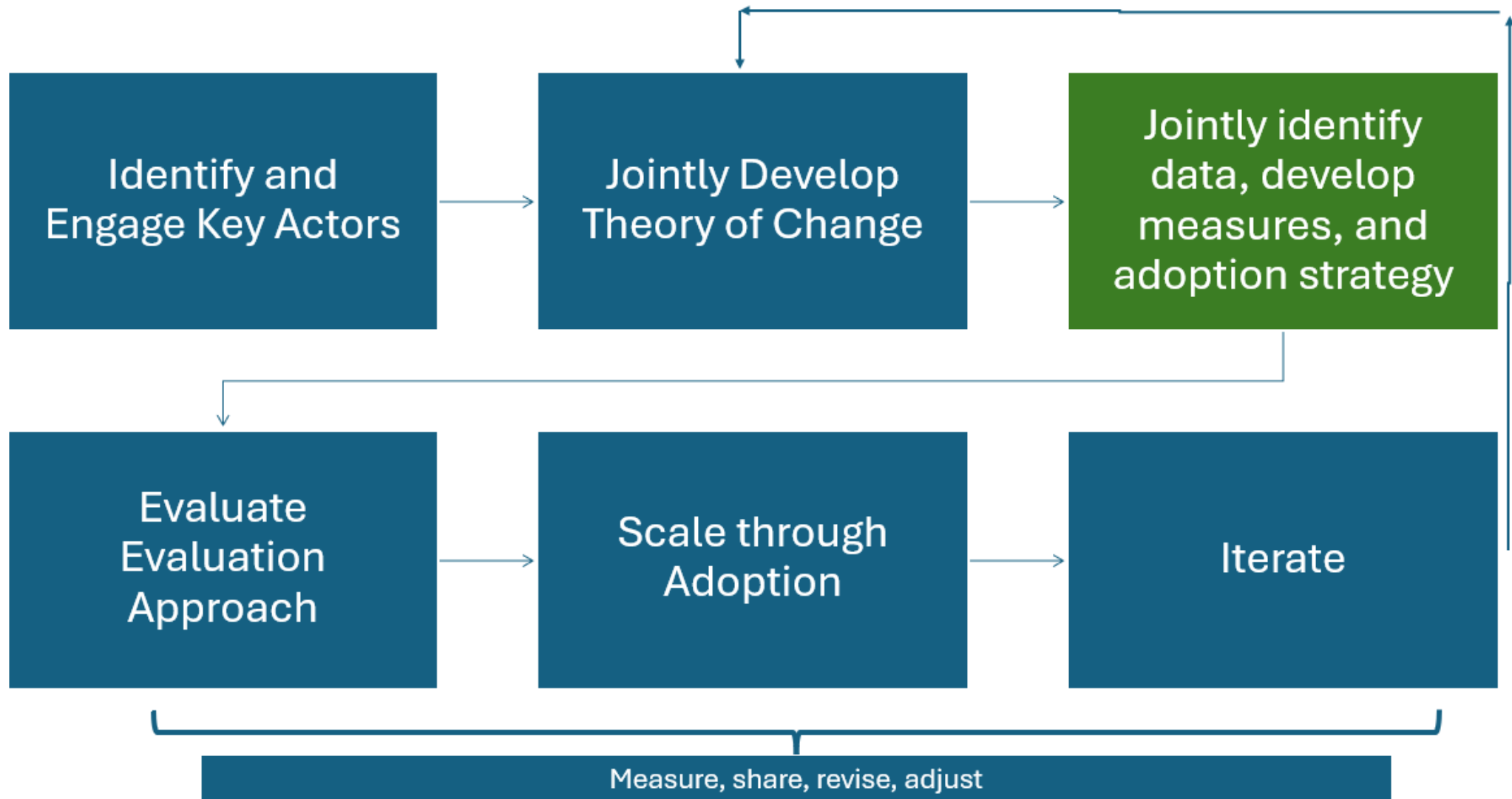
America may soon be unable to measure itself properly

Share



ILLUSTRATION: RICARDO REY

DEMOCRATIZATION KEY TO MAKING A DIFFERENCE



DEMOCRATIZATION IN ACTION

www.naswa.org/partnerships/multi-state-data-collaboratives/multi-state-data-collaboratives



80%



MEMBERSHIP

Multi-State Data Collaboratives

MSDC Learning Agenda

The MSDC is a network for developing data projects and products that answer questions critical to state and local needs that will impact policy or practice. The MSDC is developing a shared learning agenda to systematically identify and address priority questions that are relevant to member states and agencies.

Current priority topics include:

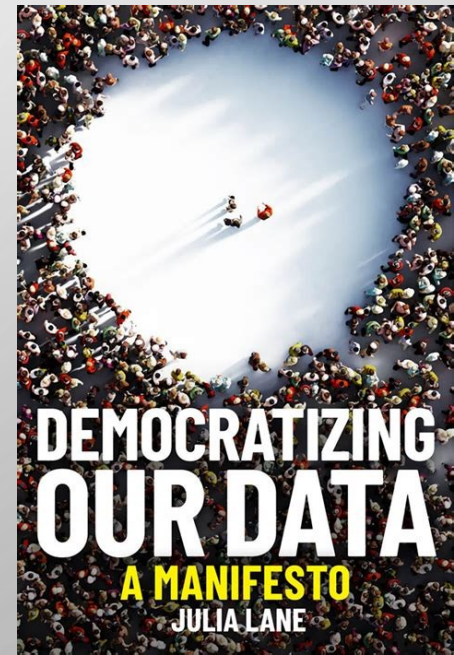
- Credentials of Value
- High-Wage, High-Skill, High-Demand Jobs/Quality Jobs
- Multi-State Post-Secondary Report
- K-12 Education
- Recidivism/Reentry
- Migrants/Refugees
- Temporary Assistance for Needy Families (TANF) and Supplemental Nutrition Assistance Program (SNAP)
- Emerging Technologies/Industries/Occupations
- UI Access/Unemployment to Reemployment
- Subgroup Access and Outcomes

Current technical and methodological topics of interest are:

- Qualitative research methods and applications
- State funding strategies for evidence building
- Streamlining data sharing (procurement processes; legal aspects)
- Data linkages
- Generative Artificial Intelligence use cases
- Access to revenue streams
- Better, more effective engagement with federal agencies and policymakers

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NAIRR Evaluation (Phases 1–4)

The NAIRR system should be designed to achieve its objective and goals in a deliberate manner. A “theory of change” for the NAIRR—that is, a causal model or map of how the goals of a program are intended to be achieved—can inform this process and provide a framework for its planning and evaluation. This includes articulating the inputs (i.e., available resources to leverage), activities (i.e., actions or work conducted to advance the program), outputs (i.e., the immediate, practical benefits of the program), outcomes (i.e., medium-term results), and longer-term impacts of the overall NAIRR effort, and how each successively feeds into the next (see Figure 6 for illustrative examples). The NAIRR is envisioned as a complex system with numerous entities responsible for creating, operating, and overseeing its components, integration, services, and policies.

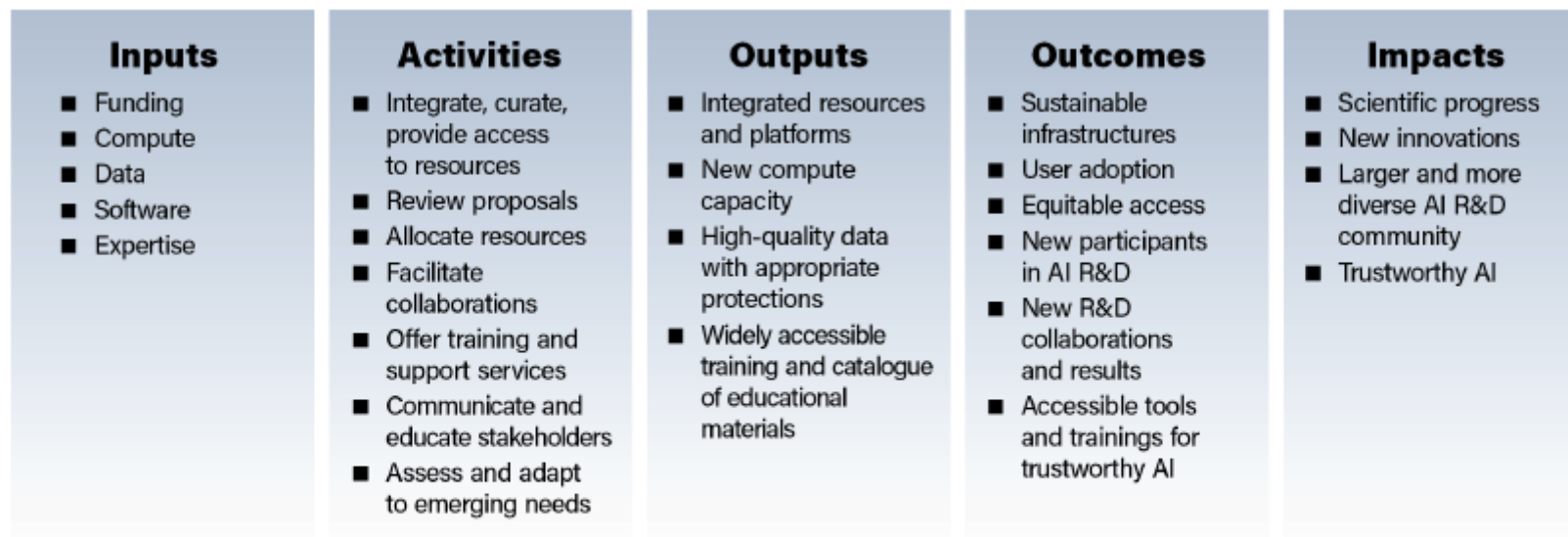


Figure 6. Example Elements of a Theory of Change for the NAIRR

NAIRR governance entities should adopt a standard evaluation framework predicated on a

- other innovative ways to inform, excite, and foster communities relevant to the NAIRR.

II.A.iv. Metrics and Outcomes for Operational Success

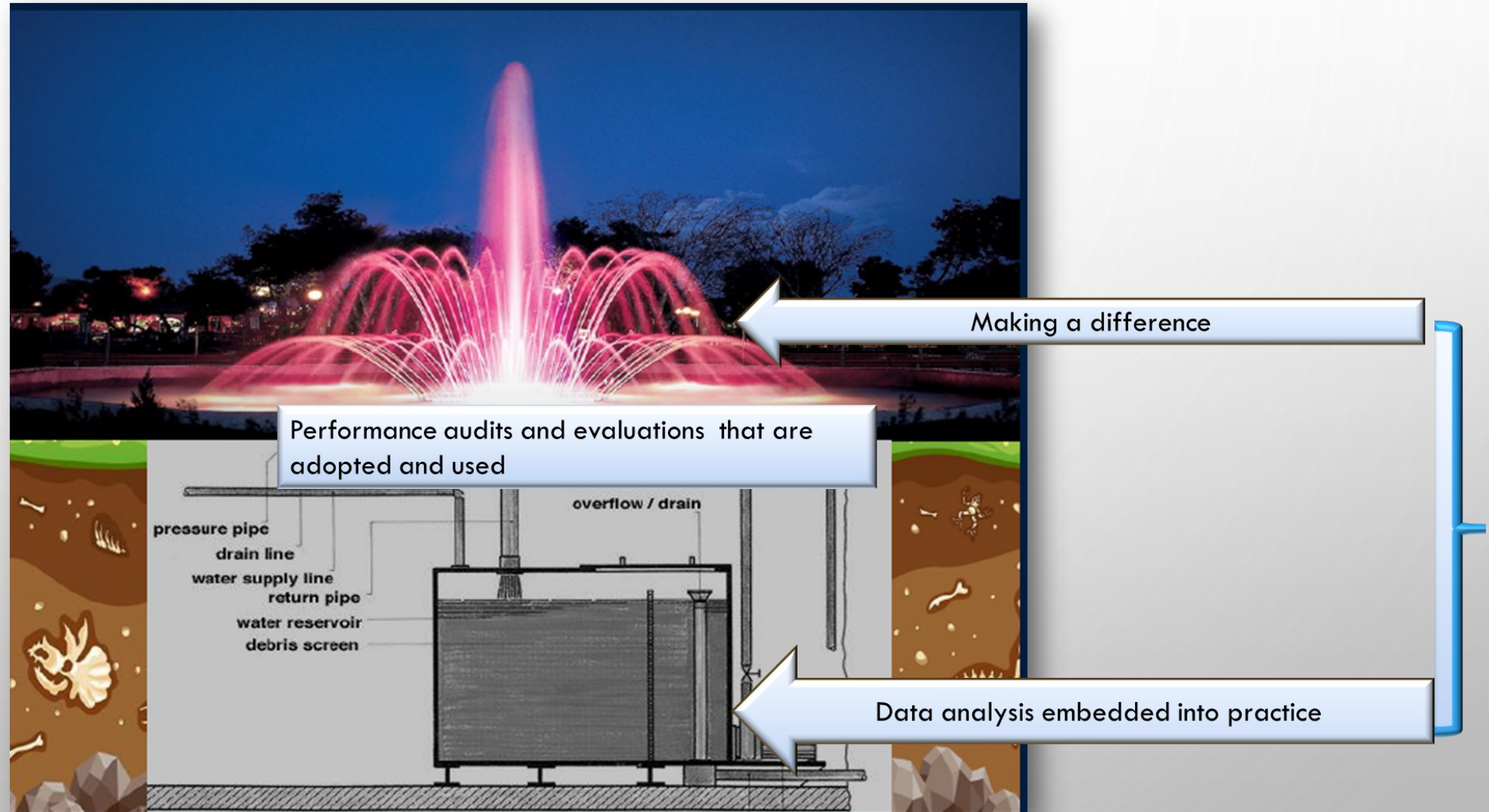
The awardee shall develop and maintain a set of operational metrics and outcomes of the NAIRR-OC strategically tied to the four key goals of the NAIRR enumerated in Section I. Introduction. NSF expects the development of operational success metrics and tracking of outcomes over time to be a significant activity for the NAIRR-OC. Such data should inform decisions on NAIRR-OC activities, future NAIRR offerings, and evaluation of the NAIRR investments as a whole. The operational metrics and collected outcomes will be refined in collaboration with the NAIRR PMO and will inform the performance of the NAIRR-OC.

Proposed metrics may include (but are not limited to): activity metrics for NAIRR users and Resource Providers, students and researchers served, and US geographic reach. Longer term outcome and impact metrics may include (but are not limited to): key innovations, patents or discoveries from researchers using the NAIRR, startups launched based on research supported by the NAIRR, regional innovation activity and job impacts, and the increase in percentage of publications at top AI conferences acknowledging NAIRR resources amongst others.

In addition, NSF may separately support an evaluation entity, form an advisory board, or establish other mechanisms to examine and advise on the entire NAIRR program. The NAIRR-OC will be expected to collaborate with these entities, including by sharing information with them as appropriate.

II.B. Building NAIRR Capabilities and Community

SPARKLY FOUNTAIN – EVALUATION THAT IS ADOPTED



[Home](#) › [Social investment](#) › What is social investment?

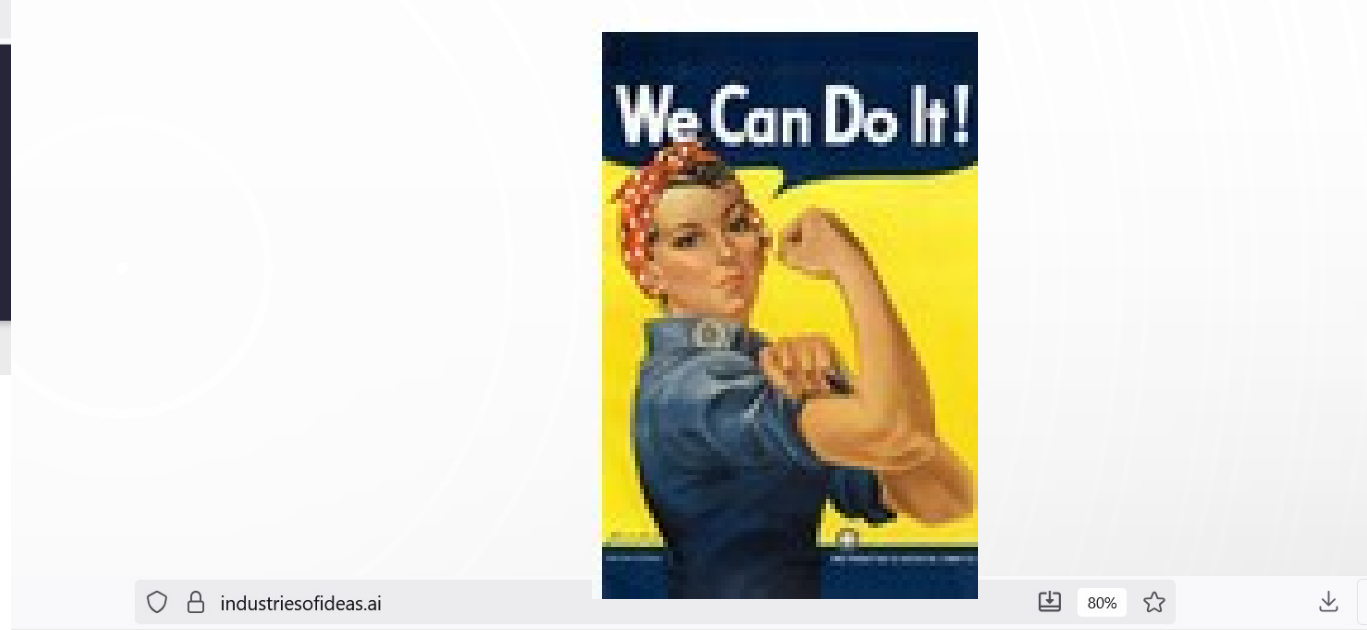
What is social investment

Information about the social investment approach

Building a fence at the top of the cliff

Social investment is about better enabling people, whānau, families, and communities to achieve outcomes and thrive, by using data, evidence and different ways of working.

- Social Investment Fund
- Actionable insights
- Regional Data Explorer
- Community Insights Explorer
- Older People's Data Explorer
- Data systems leaders



industries
of ideas

Sectors ▾

Events

Resources

About

Get involved

Tracing public investment in AI research, workforce, education, and skills

Learn about how public research investments in artificial intelligence (AI) are affecting your community's workforce with timely, local, and actionable information.

Get involved

Explore the data ▾



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INTEGRATED ECONOMIC
COMPETITIVENESS

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THE OHIO STATE
UNIVERSITY

 Department of
Job & Family
Services

 NSF

 UNIVERSITY OF
MICHIGAN

 DOL
NEW JERSEY
DEPARTMENT OF
LABOR

COMMENTS AND QUESTIONS

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