# ACCESSING, LINKING, AND ANALYZING WAGE RECORDS

TANF DIRECTORS' MEETING 2021 SEPTEMBER 22, 2021



# WORKING TOGETHER TO USE DATA TO IMPROVE TANF OUTCOMES

PRESENTED BY RICHARD HENDRA TO THE TANF DIRECTORS' MEETING 2021 SEPTEMBER 22, 2021



# The TDC Team

# Sponsored by







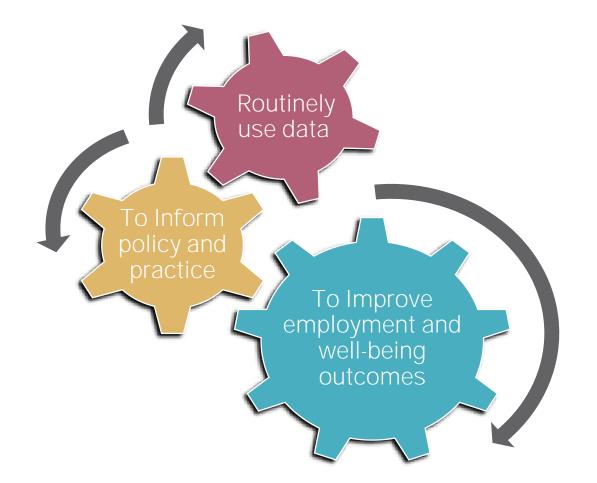
# **COLERIDGE** INITIATIVE



An Office of the Administration for Children & Families



# TANF Data Collaborative supports TANF agencies' efforts to:



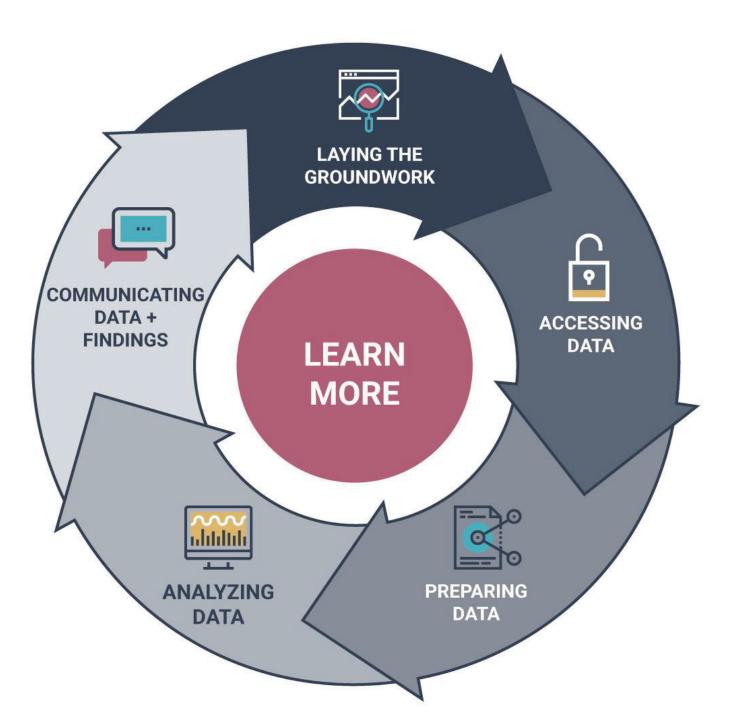
# TDC is funded by: **\_\_\_OPRE**



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# THE TDC FRAMEWORK

Visit tanfdata.org



# UI DATA INTEGRATION TOOLKIT (AISP)

- Team is developing a toolkit which will help state and local TANF agencies link TANF and wage data to answer highpriority policy and program questions about TANF and employment
- Toolkit will address a variety of common challenges on this topic, from accessing these data and building a governance structure, to figuring out data linkage, to analyzing the linked data to produce actionable insights.



## **PREPARING DATA**



## **ACCESSING DATA**





# What we heard from TANF Agencies





JUNE 2021

Robert M. Goerge Emily R. Wiegand Leah Gjertson

CHAPIN HALL AT THE UNIVERSITY OF CHICAGO

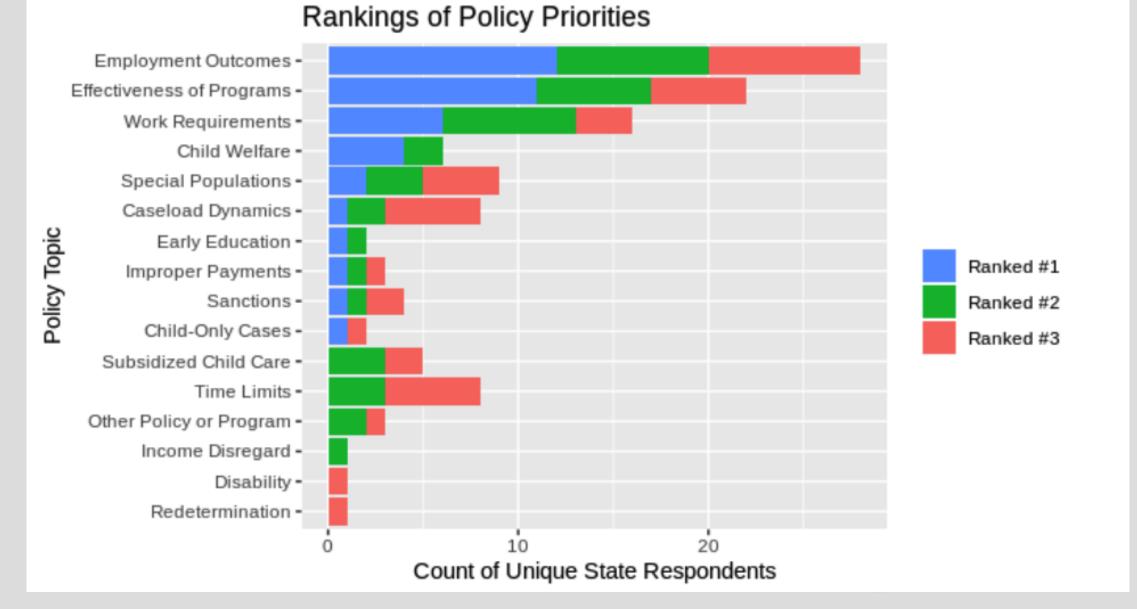
# Unpacking Data Use in State TANF Agencies

Insights from the TANF Data Innovation Needs

Assessment



#### Figure 1. TANF Leadership Top Policy Priorities









### Applied Data Analytics Course



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Free tools and trainings at TANFdata.org



TDC Needs Assessment Survey: Primary Barriers to Data and Analysis



 $\checkmark$ 

TDC Pilots

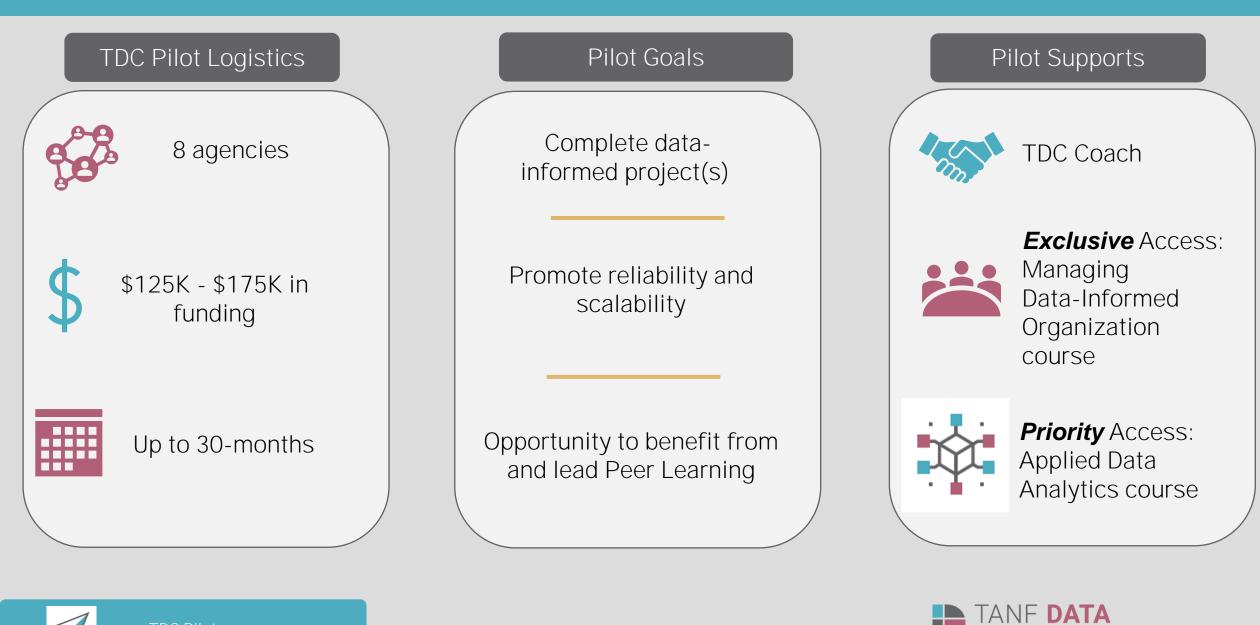
Source: TANF Data Use and Opportunities survey module (generally completed by TANF agency director; reporting results from 43 states



# TDC Pilot Initiative Goal

Promote sustained data use and support a culture of data informed decision making

# **TDC Pilots**



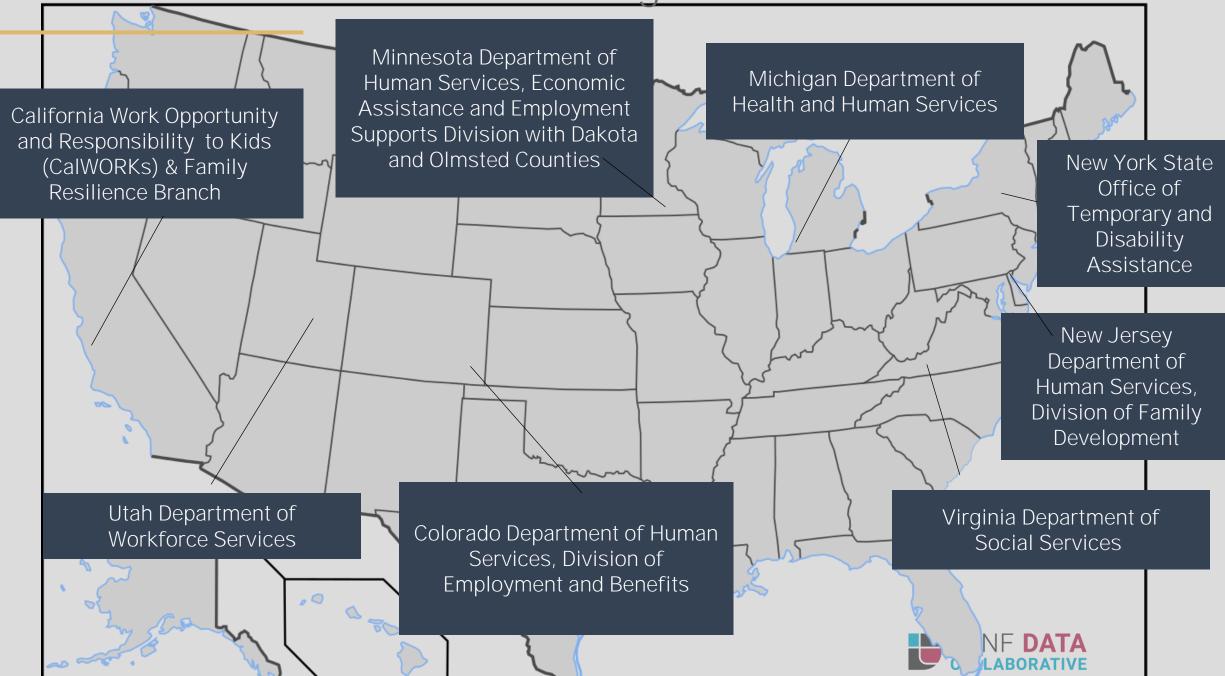
TDC Pilots

# WHAT A YEAR IT HAS BEEN (KICKOFF MARCH 8, 2020)

-

TDC Pilot Kickoff

### TDC Pilot Agencies



# EXAMPLE PILOT PROJECTS

Measuring employment and other outcomes among the customers who leave the TANF program

Identifying which, where, and when TANF customers tend to have difficulty finding stable jobs

Understanding how long TANF customers remain involved in the TANF program and who they are

Understanding which TANF customers receive Emergency Assistance and for how long







#### Using Longitudinal Data to Promote Success of TANF Participants



#### **Related Questions**

- What are the types of families served?
- ?
- What are typical benefit and service usage patterns before and after leaving?
  - What combination of demographic
- characteristics are related to patterns of program use?

What are the patterns of enrollment and re-

enrollment, as they relate to employment and other "success" indicators?

# Methods and Approaches Data discovery and acquisition

- ldentity resolution
- Matching within and across programs and time
- Classification based on household and individual characteristics

 $\hfill\square$  Machine learning approaches



#### **Potential Results**



A **tool to help case workers** identify specific combinations of programs and services that work best for different family types to achieve self-sufficiency



# TDC DATA INCLUSION GOALS

Bridge	Empower	Encourage	Learn
Bridge the gap between data staff and program staff.	Empower program staff to ask questions about data practices.	Encourage data staff to include insights from program work in data methods and strategies.	Create opportunities for peer-to-peer learning exchanges between staff with different roles.



# APPROACH TO DATA INCLUSION

- $\rightarrow$  Include all pilot staff roles in conversations around data practices.
- → Highlight importance and advantages of regular communication between data staff and program staff.
- → Memos & notebooks offer a common ground and serve as a bridge to discuss the data. Inclusion around analysis improves likelihood that assumptions are tested and are anchored in the truth.
- → All pilot staff, regardless of technical background, included in all data analytics trainings.



# APPROACH TO DATA INCLUSION

For example...



- All Pilot staff included
- Workshops

   differentiated to meet
   different learning goals





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# TANF Employment Project

Improve use of state-reported TANF case/ characteristics data

Learn more about employment of TANF recipients and leavers

Create files and code notebooks to facilitate future research



# TEP Guiding Principles

# Privacy Protections/ Secure Access

ACF analysts, TDI team members, and potentially states must be able to access data for reporting and research while properly protecting the privacy of individuals

# Reproducible Research

Code transforming raw data to analysis file(s), and any analytic code will be designed for reproducibility. Transparent documentation, including code, will be delivered to ACF (open source when feasible)

Management Improvement Good management at the federal, state, and local levels is essential for translating data into action. Example analyses include: identifying data quality issues; contributing to the TANF annual report; and experimenting with alternative measures of state program success.

Opportunities for Evidence Building

TANF longitudinal benefits/characteristics file and TANF/NDNH matched data file provide opportunities for research, analysis, and evidence building



# TANF DATA COLLABORATIVE

Using data to improve family outcomes

www.tanfdata.org

# A TOOLKIT FOR LINKING TANF AND EMPLOYMENT DATA FOR ANALYSIS

- Guidance for TANF agencies on accessing, linking, and analyzing employment data
- Based on expert input from state and local TANF agencies, policy and research experts, federal partners, MDRC and AISP
- Other audiences who may benefit:
  - State DOLs
  - Legislators
  - Advocates
  - Providers
  - Anyone interested in practical solutions to data access challenges, key methods for linking data, and benefits of using data to improve human service programs
- Expected public release: Fall 2022

## WHAT YOU'LL FIND IN THE TOOLKIT:

Common Barriers to Data Access, Linkage, and Analysis

Solutions for Overcoming Barriers

Key Methods for Linking TANF and Wage Data

Preparing UI Data for Analysis

Appendices: governance, legal, technical, and data security resources

# DISCUSSION: BARRIERS AND SOLUTIONS

# • WHAT BARRIERS HAVE YOU ENCOUNTERED IN...

- accessing UI data for research, evaluation, and planning purposes?
- linking TANF and UI data?
- analyzing linked TANF and UI data?
- Have you found any solutions that helped you overcome these barriers?
- What do you wish you knew when you started that you know now about data sharing and linking?

# SOLUTIONS HIGHLIGHTED IN THE TOOLKIT

- Cultivate cross-agency partnership and trust
- Align priorities and goals for data sharing
- Develop cross-agency data governance
- Develop a legal framework
- Develop a data security plan
- Document the historical, legal, and technical milestones
- Approach data sharing in phases
- Build and document a thoughtful data model
- Build staff capacity and expertise
- Leverage your data linkage method



# KEY LINKAGE METHODS

- One-way data sharing: TANF agency shares TANF data with DOL for analysis.
- Two-way data sharing: TANF agency shares identifiers to request UI records for specific individuals and DOL shares back wage, UI, or similar records.
- Sharing with a third party for analysis: TANF agency and DOL both share their data with a researcher or other outside party who conducts analysis.
- Sharing in a data linkage center: TANF agency and DOL both share their data in a centralized system that has a governance, legal, and technical framework for securely and ethically linking and analyzing the data.
- Group matches: DOL shares aggregate wage records and other summary statistics for pre-specified groups of individuals with a TANF agency for analysis.
- Emerging approaches:
  - Remote access for submitting queries, often via VPN with user authentication including biometrics.
  - Secure multiparty computing encrypted data linked only for analysis purposes and are encrypted at point of computation, which protects against sharing of identifying information of the other data sharing parties.



# SNAPSHOT: KEY LINKAGE METHODS

	Two-way data sharing	Sharing in a data linkage center or integrated data system (IDS)
Pros	Maximum analytic flexibility If regularly updated, enables routine use	Creates a governance framework to assure data security and access issues are addressed while enabling easier routine access
		May allow access to real-time data
Cons	Time associated with getting data sharing agreement	Must address fears about physical location of data being outside direct physical control of labor department
		Establishing governance procedures to satisfy all concerns is a large investment of time and agency commitment
Uses	Limited to the two agencies involved	Specific questions are as yet unspecified (which is an advantage of this approach), but scope of future projects can be limited by the data-contributing agencies at a project level
Legal considerations	MOU between two agencies required that meets the security, access, and analytics standards	An MOU sets the policies and procedures for data access and use, but individual projects are subject to DUAs
Ease of access	Generally time-consuming to put in place Each agreement is typically renegotiated and time- consuming, unless an SOP (standard operating procedure) put in place	Greatly eases access and reduces time associated with approving and executing projects
Security considerations	Host agency must meet security requirements of contributing agency	The MOU would generally specify security requirements, sometimes done as an appendix that can be updated to meet current standards



## DISCUSSION: WHAT ARE YOUR DATA LINKAGE METHODS?

- What linkage methods are you using?
- What would you like to use?
- What are your top priorities/considerations for choosing a linkage method?



# BEFORE WE GO...

What is one goal you have for sharing, linking, or analyzing data in the next year?

What is one key insight from today that you plan to take back to your team?

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