

Workforce Data Task Force Public Meeting October-18, 2018

Members

1. Director of Office of Economic Opportunity or director's designee (chair)
2. Director of Department of Economic Security or director's designee
3. Superintendent of Public Instruction or superintendent's designee
4. President of Board of Regents or president's designee
5. A representative of a community college district or representative's designee

Agenda

- A. CALL TO ORDER
- B. DISCUSSION: INTRODUCTION OF THE INFORMAL RESEARCH WORK GROUP
- C. DISCUSSION: INTRODUCTION OF AN ALTERNATIVE DATA INTEGRATION ARCHITECTURE
- D. DISCUSSION & POSSIBLE ACTION: FUND DES PROJECT TO MATCH UI, WIOA, TANF & SNAP DATA
- E. DISCUSSION & POSSIBLE ACTION: APPROVE ANNUAL REPORT ON TASK FORCE ACTIVITIES
- F. ADJOURNMENT

Research Work Group (1 of 2)

Purpose:

- Develop research topics and data products.
- Understand data disclosure, data use, data sharing.

Members:

- Shawn Neidorf (Arizona Commerce Authority)
- Kerry Mitchell (Maricopa County Community College District)
- Nic Richmond (Pima County Community College District)
- Doug Walls (Office of Economic Opportunity)

Research Work Group (2 of 2)

Business Glossary:

- Using Common Education Data Standards (CEDDS)
 - An initiative of the National Center for Education Statistics (NCES)
 - For use in education-workforce statewide longitudinal data systems (SLDS)
 - Provides a *data model*
 - Provides a *normalized data schema*

Alternative Data Integration Model

Previous model:

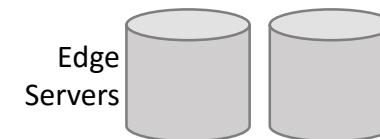
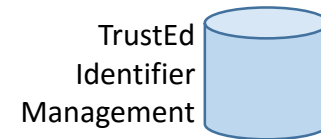
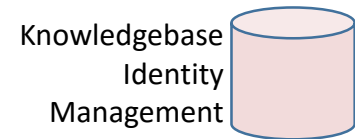
- Similar to recommendation by Commission for Evidence-Based Policymaking
 - Temporary linkages
- Use of privacy-preserving data matching

Proposed model:

- Similar to Arkansas TrustEd framework

TrustEd Arkansas (1 of 4)

3 Parts:



2 Processes: Matching & Research

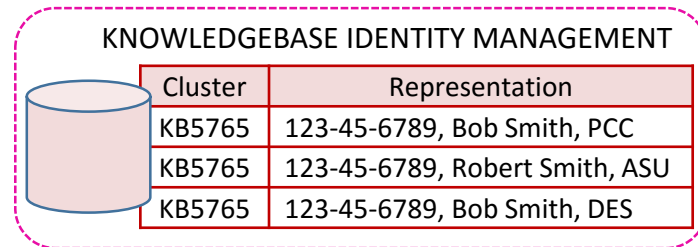
TrustEd Arkansas—Matching (2 of 4)

SSN	Name	Gender	GPA	CIP
111-11-1111	Jane Smith	F	3.5	110201
222-22-2222	Dmitri Shalnov	M	3.0	130201
333-33-3333	Hilda Mensah	F	3.8	420101

Step 1: Source data gets record ID assigned

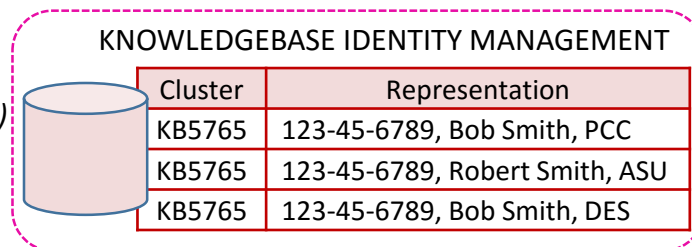
Record ID	SSN	Name	Gender	GPA	CIP
1	111-11-1111	Jane Smith	F	3.5	110201
2	222-22-2222	Dmitri Shalnov	M	3.0	130201
3	333-33-3333	Hilda Mensah	F	3.8	420101

Step 2: Data Matching using Master Index



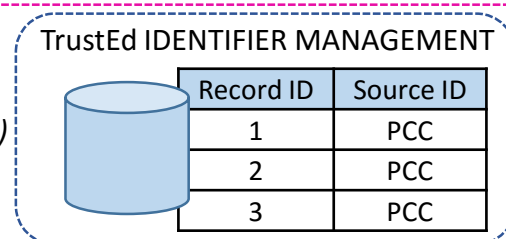
Record ID	Cluster	SSN	Name	Gender	GPA	CIP
1	KB3998	111-11-1111	Jane Smith	F	3.5	110201
2	KB9899	222-22-2222	Dmitri Shalnov	M	3.0	130201
3	KB0157	333-33-3333	Hilda Mensah	F	3.8	420101

Step 3: Generate KIMID=encrypt(Cluster ID) and return with data and no PII



Record ID	KIMID	Gender	GPA	CIP
1	***	F	3.5	110201
2	***	M	3.0	130201
3	***	F	3.8	420101

Step 4: Generate TIMID=encrypt(KIMID+Agency ID) and load edge server

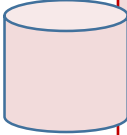


Edge Server

Record ID	TIMID	Gender	GPA	CIP
*	C**	F	3.5	110201
*	C**	M	3.0	130201
*	C**	F	3.8	420101

TrustEd Arkansas—Match Result (3 of 4)


KNOWLEDGEBASE IDENTITY MANAGEMENT



Cluster	Representation
KB5765	123-45-6789, Bob Smith, PCC
KB5765	123-45-6789, Robert Smith, ASU
KB5765	123-45-6789, Bob Smith, DES

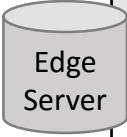
* PII is separate from system with research data

TrustEd IDENTIFIER MANAGEMENT

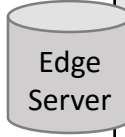


Record ID	Source ID
1	PCC
2	PCC
3	PCC

* No PII
* No direct links between one agency's data and any other agency's data



Record ID	TIMID	Gender	GPA	CIP
*	C**	F	3.5	110201
*	C**	M	3.0	130201
*	C**	F	3.8	420101



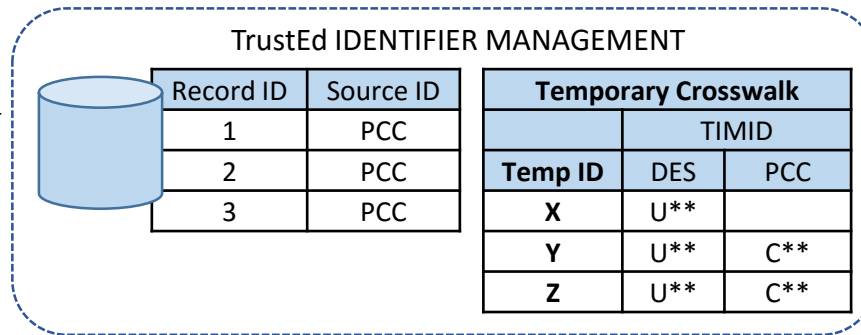
Record ID	TIMID	Year-Qtr	Wages	Industry
*	U**	2001q1	9500	323111
*	U**	2001q1	7850	811211
*	U**	2001q1	987	921130

TrustEd Arkansas—Cross-program Research (4 of 4)

Edge Server	Record ID	TIMID	Gender	GPA	CIP
	*	C**	F	3.5	110201
	*	C**	M	3.0	130201
	*	C**	F	3.8	420101

Edge Server	Record ID	TIMID	Year-Qtr	Wages	Industry
	*	U**	2001q1	9500	323111
	*	U**	2001q1	7850	811211
	*	U**	2001q1	987	921130

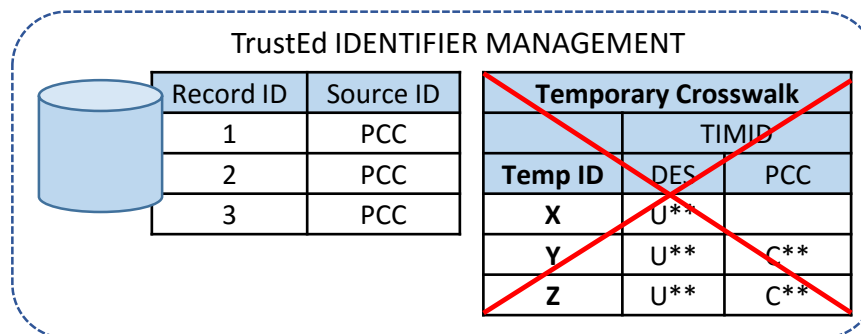
Step 1: Build a cross walk



Step 2: Create cross-agency research database with unique identifier

Temp ID	Gender	GPA	CIP	Year-Qtr	Wages	Industry
***	F	3.5	110201	2001q1	9500	323111
***	M	3.0	130201	2001q1	7850	811211
***	F	3.8	420101	2001q1	987	921130

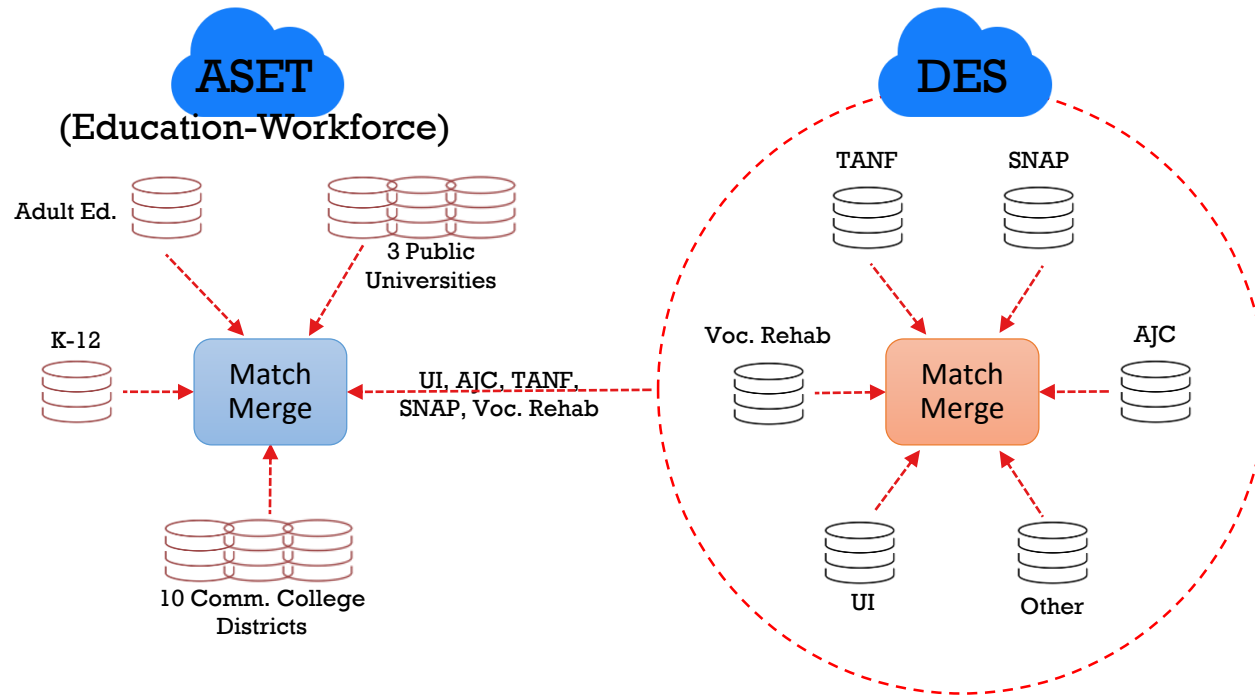
Step 3: Delete the crosswalk



DES Data Layer in Azure Cloud

- 360° view of service recipients
 - Identifying overlap of services
 - Improved reporting
 - Descriptive statistics
 - Predictive analytics
- Cleanse and link records across 4 divisions:
 - DAAS
 - DDD
 - DERS (UI, AJC, Voc. Rehab)
 - DBME (TANF, SNAP)

The big picture



- Workforce linkages are to be done in DES
- Education-Workforce linkages are to be done in a separate platform
- Single version of truth:
 - Workforce-only studies in both platforms should agree

Funding for DES initiative

- Recent HHS grant to the Division of Aging & Adult Services (DAAS) in DES: ~\$300,000
- Task Force to consider providing up to \$400,000 of OEO operations fund to augment the HHS grant
- Under Interagency Service Agreement, DES would agree, ***to the extent permitted by Federal & State laws***, to:
 - provide the “system of linked records” from DERS-DBME programs for use in the State Workforce Evaluation Data System
 - provide additional information necessary for matching records from DERS-DBME programs with other administrative records (e.g. postsecondary, K-12 etc.)