Arkansas Data & Transparency Panel

MARCH 28, 2024 10AM-12PM



Agenda

- Introductions
- Background & History of the Data and Transparency Panel
- Overview of the Arkansas Statewide Longitudinal Data System and the Arkansas Data Hub
- CiviForm Service Discovery ad Common Intake
- Initial Discussion Around Al
- Wrap-Up and Action Items



Introductions

- Name
- Organization Represented
- Role
- Personal/Organization Goal for the Data & Transparency Panel



Background and History of the DTP



Key Legislation and Studies

- •Act 1282 of 2015 Established the Open Data and Transparency Task Force to determine the best practices to achieve the most efficient systems for maintaining and delivering the state's public records and data.
- •Findings & Recommendations Report of the Open Data and Transparency Task Force (December 2016)
- •Act 912 of 2017
 - Created the positions of the Chief Data Officer (CDO) and Chief Privacy Officer (CPO)
 - Established the Data and Transparency Panel (DTP)
 - Required completion of a feasibility and cost study on the development of a statewide data warehouse program
- Data-Sharing and Data-Driven Decision-Making Task Force & Subcommittee
- Act 936 of 2019 Required Statewide Longitudinal Data System
- Act 634 of 2023 Required Shared Services Data Hub and Public Portal



Act 1282 of 2015 (Goals)

- (A) State agencies contain great amounts of valuable information and reports on all aspects of life for the citizens of this state, including without limitation health, business, public safety, labor, and transportation data;
- (B) The tremendous amount of data maintained by state agencies can result in duplication of efforts, data, records, and parts of data and records that may result in the maintenance of inconsistent data and records concerning the same citizen;
- (C) The lack of a quick and efficient delivery system to respond to legislative and executive branch inquiries is harmful to the policy-making process and ultimately costs taxpayers money;
- (D) Progressive states have evolved to become data-driven governments that use data as a strategic asset to improve the delivery of services to the state's citizens and to become more efficient stewards of citizens' data;
- (E) Ensuring the quality and consistency of public data is essential to maintaining the data's value and utility;
- (F) New information technology has fundamentally changed the way people search for and expect to find information and can aggregate large quantities of data to allow the state to provide better information to citizens with increasing efficiency and thoroughness; and
- (G) The state should:
- (i) Evaluate ways to appropriately, efficiently, and securely share data between and within state agencies to allow for quicker, more impactful cross-agency analysis to allow policymakers to make quicker, more informed decisions; and
- (ii) Use the innovations in information technology to **enhance public access to public data** to make the state more transparent and to promote public trust while **eliminating waste**, **fraud**, **and abuse in the execution and delivery of government services**.



Act 912 of 2014 (CDO Responsibilities)

- Master data management
- Data architecture management
- Data quality management
- Data governance
- Data asset management & stewardship
- Open data exchanges
- Standardized access to data within, between, or outside systems or agencies
- Data cataloging
- Business intelligence
- Data warehousing



Act 936 of 2019 (Longitudinal Data)

(7) Develop a unified longitudinal system that links existing siloed agency information for education and workforce outcomes to continuously conduct a business systems assessment to:

(A)Help the leaders of this state and service providers develop an improved understanding of individual outcomes resulting from education and workforce pipelines in Arkansas;

(B)Identify opportunities for improvement by using real-time information; and

(C)Continuously align programs and resources to the evolving economy of this state.



Act 634 of 2023 (Data Hub)

- Develop a shared services data hub for statewide data sharing
- Establish and maintain a program to make government information available
 to executive state agencies, political subdivisions, educational institutions,
 researchers, nongovernmental organizations, and the general public subject
 to applicable security, privacy, compliance, governance, and confidentiality
 laws and best practices.
- Establish privacy and quality policy for government information that complies with all applicable Arkansas and federal laws, rules, and policies
- Establish and maintain a program to ensure the security of government information
- Establish a public portal that will provide Arkansans with easy access to data



Overview of the Arkansas Statewide Longitudinal Data System and the Arkansas Data Hub



Data Warehouse Study Goals

- •Enable openness, transparency, and pervasive, self-service data access and delivery
- Share data to enhance its value while enforcing privacy and security
- •Support data-driven decision making and analytic maturity through development and support of analytic skills and shared services
- •Integrate data for improved cross-agency analysis and reduced duplication of data and efforts
- •Enable real-time assessment, support, alignment, and automation of decisions, programs, and resources
- Manage enterprise data as a state asset



Data Warehouse Study Approaches

- •Pervasive Business Intelligence, web, mobile, and Application Programming Interfaces for data access
- •Compliant, secure data sharing, via a layered approach of authorized role and organization-based access to identified data and broader access to deidentified aggregate data
- Analytic tools and training for increased value from existing data and more data-driven decision making
- •Integration of cross-agency data via a Data Hub approach leveraging centralized Master Data Management
- Real-time data access supported as needed via data federation
- •Self-service, agency-level Data Quality Management, Master Data Management, and Stewardship at the source
- Comprehensive Data Governance for standards, security, privacy, compliance, and change management



Data Hub Approach

Enable openness, transparency, and pervasive, selfservice data access and delivery

Share data to enhance its value while enforcing privacy and security

Support data-driven decision making and analytic maturity through development and support of analytic skills and shared services

Integrate data for improved cross-agency analysis and reduced duplication of data and efforts

Enable real-time assessment, support, alignment, and automation of decisions, programs, and resources

Manage enterprise data as a state asset

Data Consumers

Access and Delivery Layer

(Business Intelligence, APIs, Web / Mobile)

Security and Compliance Layer

(Authorization, Compliance Views)

Analytics Layer

(Analytic Tools, Big Data Processing, Predictive, Machine Learning, Spatial)

Data Integration Layer

(Data Integration, Data Warehouse, Data Lake, Master Data Management)

Federation Layer

(Federation, Streaming)

Data Quality Layer

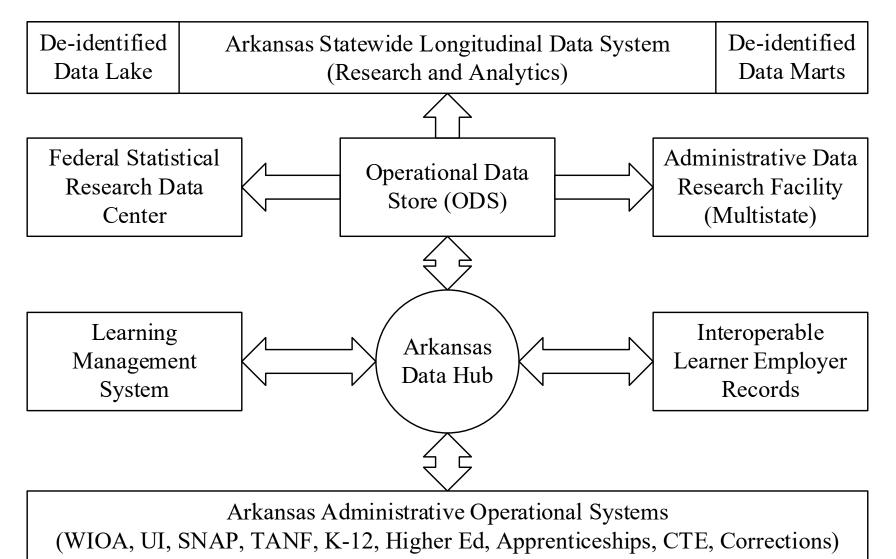
(Data Catalog, Data Quality, Stewardship, Agency-Level Master Data Management)

Data Providers

Data Governance



Extended for Research & Multistate

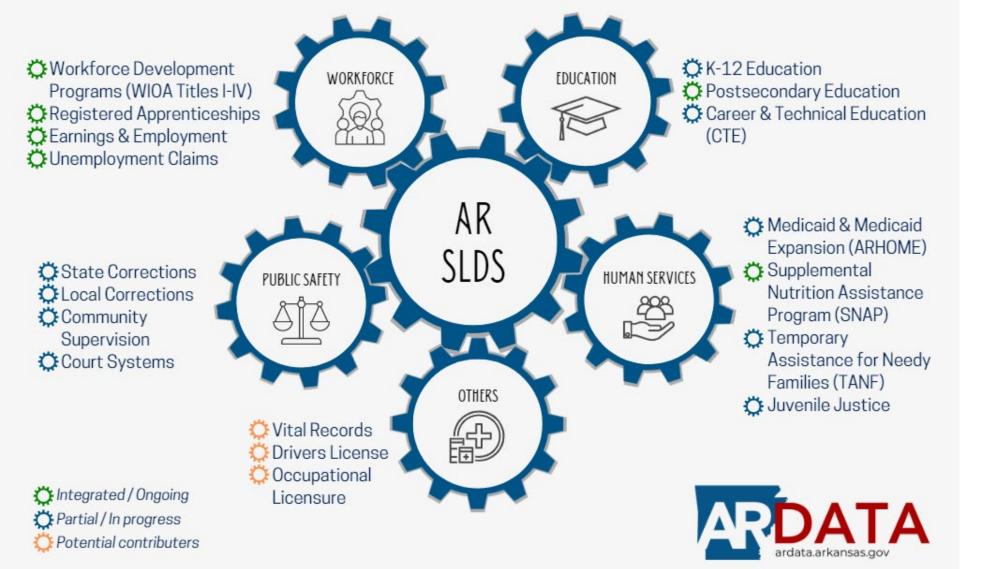




ARKANSAS STATEWIDE LONGITUDINAL DATA SYSTEM (AR SLDS)

Links state data across sources and over time to answer critical questions about education, workforce, social programs, and the economy

PRIVATE | SECURE | COMPLIANT | EQUITABLE



What other data would be relevant?

Multistate and Cross-Sector Coverage

- •Working towards more timely and complete signaling of demand from employers through several efforts with the U.S. Chamber of Commerce Foundation.
- Working towards multistate coverage of employment and earnings.
- •Working towards coverage of non-UI occupations through the IRS Secure Query Service (SQS).
- •Working to reduce the impact of record linkage bias (particularly for foreign-born students) through R&D for the National Science Foundation.
- •Working with federal agencies on increased sharing of military learning and employment data.
- •Arkansas has joined the Longitudinal Employer Household Dynamics (LEHD) program with the U.S. Census Bureau.



Arkansas Research Environment

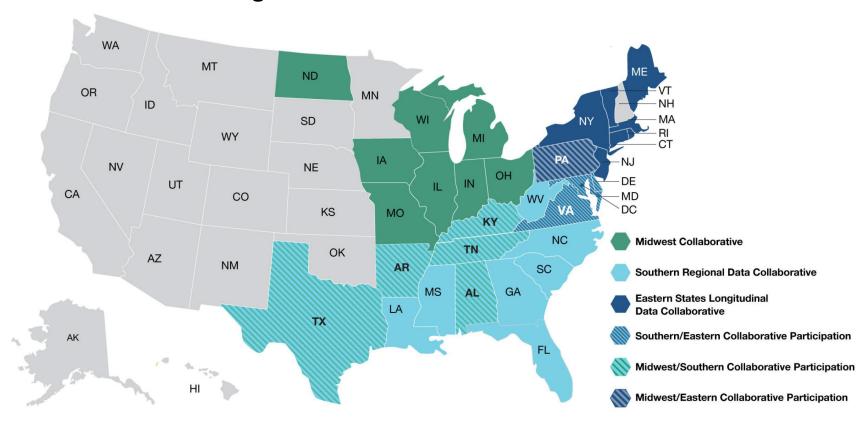
• The Arkansas Research Environment is a cloud-based data enclave for facilitating secure, compliant, and efficient access to linked longitudinal data.

• It is supported by the <u>Administrative Data Research Facility</u> (ADRF), which is used by many federal agencies and a growing number of states.

It also supports sharing of products and methodologies and collaborative research and

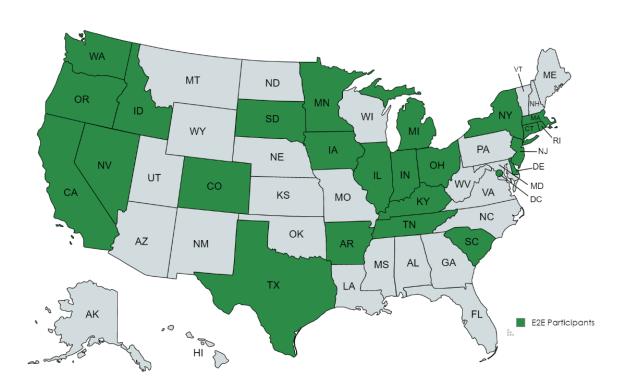
development.

 The ADRF is governed by the <u>Multi-State Data</u>
 Collaboratives.



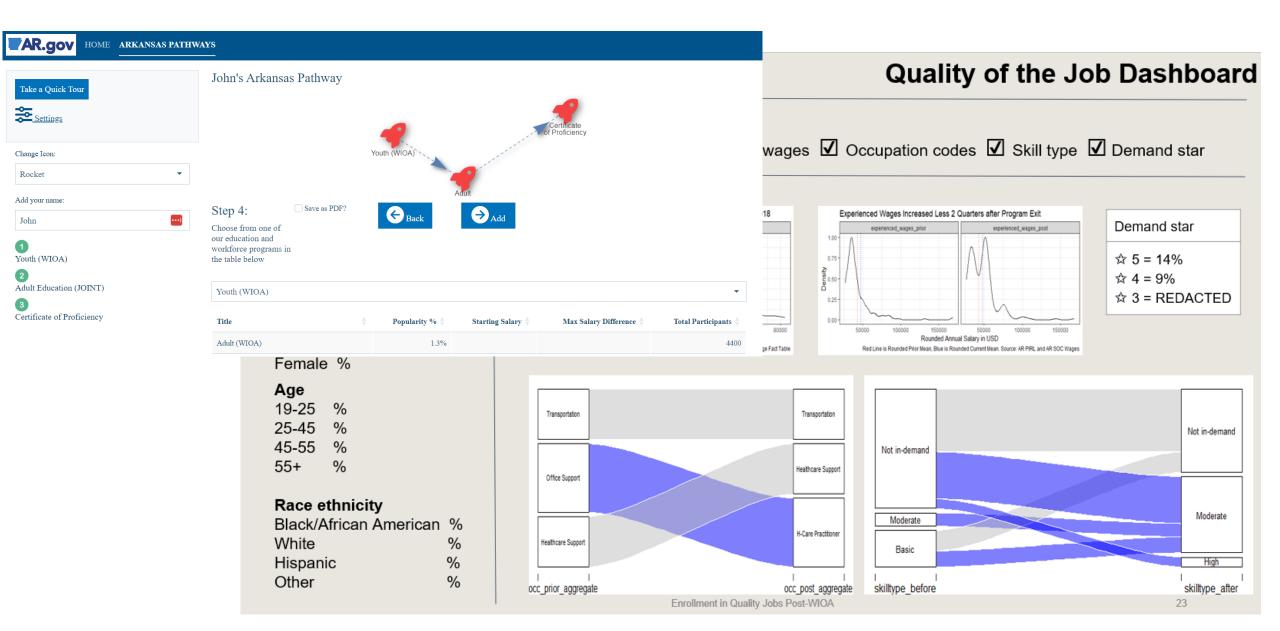
Applied Data Analytics Training Programs

- To build analytic capacity and a trained community of practice, <u>Applied Data Analytics (ADA) training programs</u> are available to build data literacy, data science, and evaluation and research skills.
- Interdepartmental, multistate, and cross-sector teams work together to serve real needs.
- The current AR-developed program "Evaluating Enrollment to Employment Pathways" (E2E) has participants from 25 states resulting in numerous projects and products for Arkansas.



Project Title	State(s)	Program(s)
Stayers, Stutterers, and Leavers, Oh My! - Analyzing		
Arkansas SNAP Spells	AR	SNAP
Effectiveness of Adult Educational Programs on		
Workforce Outcomes	AR	Adult Ed
Your Arkansas Pathway		WIOA, Adult Ed,
	CT, AR	Postsecondary
Factors Influencing Apprenticeship Completion in		
Arkansas	СТ	RAPS
Role of Demographics on Apprenticeship		
Completion Status	DC	RAPS
Enrollment in Quality John Bost WIGA Participation		
Enrollment in Quality Jobs Post-WIOA Participation	DE, MA	WIOA
Co-Enrollment: Retention and Wages Over Time		
Co-Enrollment. Retention and wages over Time	МО	WIOA
Employment Outcomes of SNAP Recipients in 2017		
	NJ	SNAP
Better Together? SNAP and WIOA	ОН	SNAP, WIOA

Sample Products Developed by Applied Data Analytics Program Students



CiviForm Service Discovery and Common Intake



Common Intake Under WIOA

§ 679.130 What are the functions of the State Workforce Development Board?

Under WIOA sec. 101(d), the State WDB must assist the Governor in the:

(h) Development of strategies for aligning technology and data systems across one-stop partner programs to enhance service delivery and improve efficiencies in reporting on performance accountability measures, including design implementation of common intake, data collection, case management information, and performance accountability measurement and reporting processes and the incorporation of local input into such design and implementation to improve coordination of services across one-stop partner programs;



Arkansas WIOA State Plan Objectives

Strategic Goal 2: Enhance service delivery to employers and jobseekers.

- 1. a. Develop a common intake process for jobseekers and businesses that will efficiently connect them with services available from all workforce development partner programs and identify any barriers to employment that need to be addressed.
- b. Develop an integrated data system that will enable the sharing of information between partner agencies to more efficiently service both employers and jobseekers.
- j. Explore data sharing opportunities with non-governmental organizations that are committed partners to the state's workforce center system that will <u>lead to improved intake, referral, and case management for customers served by multiple agencies</u> (both public and private).



Google.Org CiviForm

- •Google.Org is a philanthropic organization through which Google employees can serve on six-month, pro-bono fellowships in the public sector and develop open-source products for public benefit
- •Google.Org fellows worked with the City of Seattle to develop the CiviForm platform for unified discovery and application to programs, which has now been adopted my multiple other cities
- •Google fellows have been working with Arkansas for 18 months to modify CiviForm for statewide use
- •Arkansas will be the first to leverage CiviForm statewide, with other states showing interest in adoption and one preparing agreements
- •All civic entities benefit from continuous, collective innovation to the platform, which is owned and led by a public sector governance board





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Program details 🗹

Start with 12 quick questions

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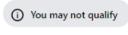
Benefits pre-screener summary

Note: Fields marked with a * are required.

Date of Birth (mm/dd/yyyy) *	Previously answered on 2023-09-2
01/01/2004	
Are you a veteran or active duty service member or their spouse? *	Previously answered on 2023-09-2
None of the Above	
Are you an American Indian, Alaskan Native, Native Hawaiian, or Othe Pacific Islander? *	r Previously answered o
No.	🧷 Edi
Do you have a disability that impacts any of your major life activities?	(Work, Previously answered of 2023-09-2
School, Activities of Daily Living, etc.) * No	⊘ Edi
Do you have a job? *	Previously answered on 2023-09-2
I don't have a job, but I want a job.	⊘ Edi
Are you currently enrolled in school? *	Previously answered on 2023-09-2
No, and I dropped out of high school and don't have a high school diploma or GED.	⊘ Edi
What was the last grade you finished in school? *	Previously answered on 2023-09-2
10th Grade	⊘ Edi
Do you need help with your English, reading, writing, math, or other academic skills? *	Previously answered on 2023 09-2
Yes	⊘ Edi
Are you or your family low-income? *	Previously answered on 2023-09-2
Yes	
Do you or your family move around for farm work or seasonal work? *	Previously answered on 2023-0
No.	⊘ Ed
Are you currently or have you in the past been involved with the crimin	nal justice Previous
system? (Arrested, convicted, in prison or jail, on parole or probation,	etc.) * answered c
No	/ Ed
Do you need help getting into or completing an education or training	Previously answered o
program, or getting or keeping a job? *	2023-09-2
Yes	🥒 Edi

Submit



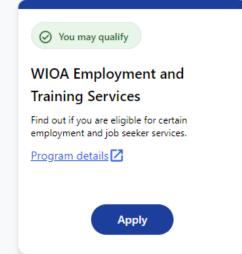


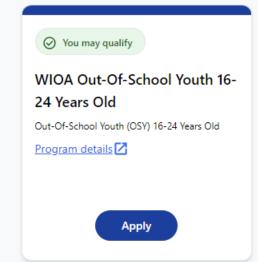
WIOA In-School Youth 14-21 Years Old

In-School Youth (ISY) 14-21 Years Old

1 details 🔼

Apply





Benefits you may qualify for

Adult Education Services Intake

Adult education's mission is to provide adult learners with the tools to improve and refine their academic skills, attain the General Educational Development® Credential, and the life skills that prepare the citizen for self-sufficiency and improvement in the quality of life. Free Services Include: -Adult Basic Education (ABE) from 0.0 grade level to 8.9 -Adult Secondary Education (ASE) from 9.0 grade level to 12.9 -English to Speakers of Other Languages (ESOL) -Workplace Education -Correctional/Institutional Education (C&I) -Workforce Alliance for Growth in the EconomyTM (WAGE) -Learning Disabilities Screening -GED Testing Services -Arkansas Adult Learning Resource Center (AALRC) -Family Literacy

WIOA Employment and Training Services

Find out if you are eligible for certain employment and job seeker services.

WIOA Out-Of-School Youth 16-24 Years Old

Out-Of-School Youth (OSY) 16-24 Years Old

You may be able to get these benefits if you apply through the online application by clicking 'Apply to programs'.

Create an account or sign in

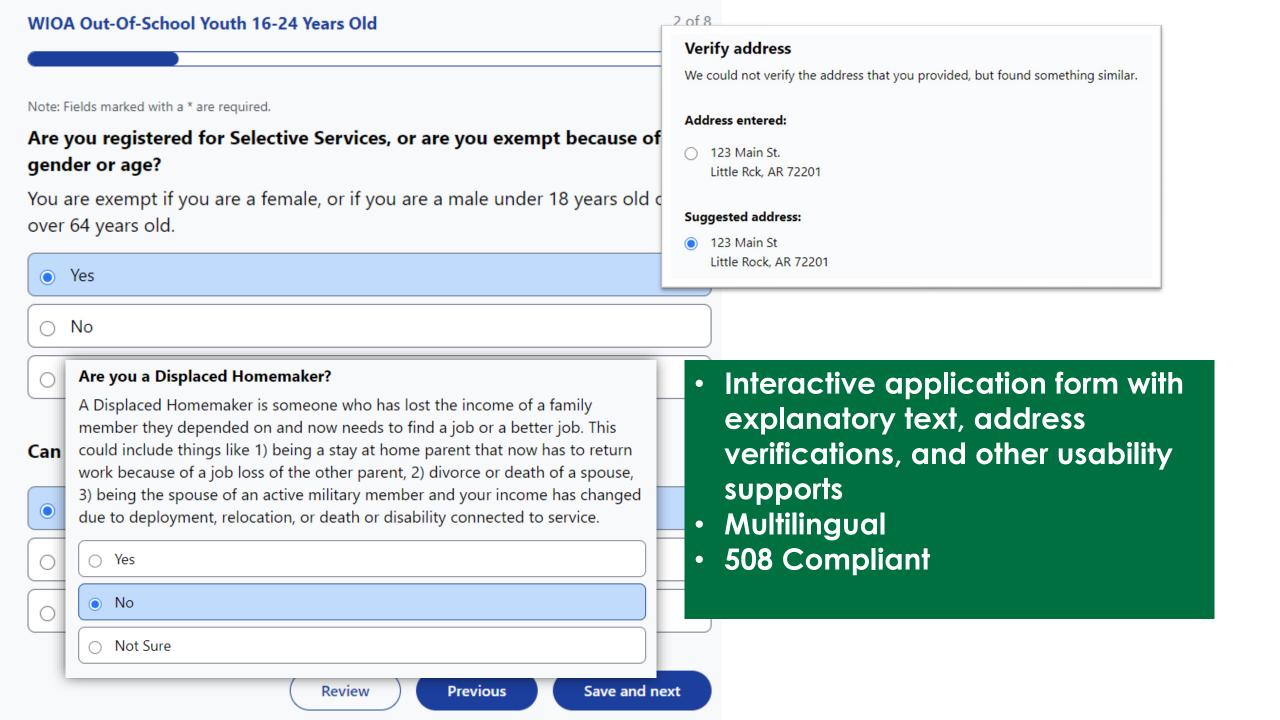
Log in to your Login.gov account or create an account to have your information saved. You'll be able to return at any time to complete future applications. If you do not already have an account, the login page will allow you to sign up and you won't lose any data you've already entered.

Apply to programs

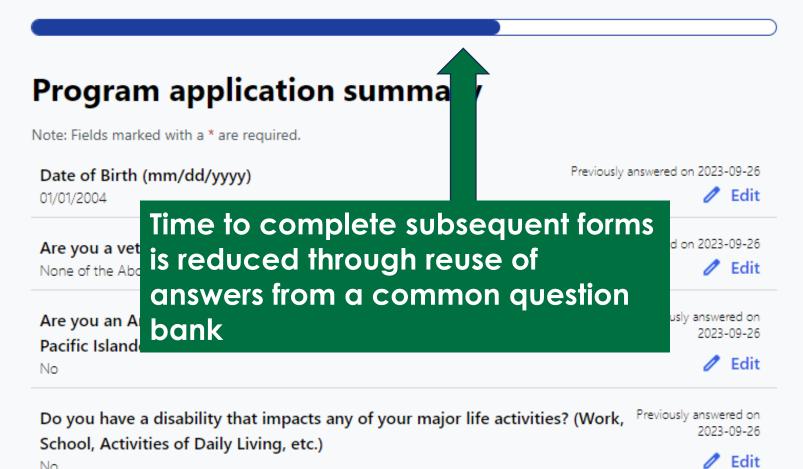
Log in

Create account

- Quickly identify and apply to potentially relevant programs and services
- Visual indicators of potential qualification
- Nudges when new potentially relevant programs are added
- Apply as a guest or sign in with Login.Gov



WIOA Employment and Training Services



Do you have a job?

No

I don't have a job, but I want a job.

Previously answered on 2023-09-26



Other Features

- Quick, no-code form creation and management from a shared question bank
- Community-based organizations and other trusted intermediaries can help residents apply through a dedicated interface
- Program administrators can manage application status and export information for processing or reporting
- •Arkansas programs with dedicated case management systems have data sent to referral or intake through API integrations
- Seattle has found CiviForm a great option for secure document submission



Part of Integrated Service Delivery

- Strategy
- Discovery and Intake
- Assessment
- Individualized Planning and Navigation
- Referrals and Co-Enrollment
- Shared Case Management
- Digital Records of Completion, Credentials, and Experience
- Common Exit
- Outcomes Reporting
- Continuous Improvement



Initial Discussion Around Al



Al Taxonomy

- •Artificial Intelligence (AI) is a broad term referring to the simulation of human intelligence by machines to automate or augment tasks normally performed by humans. Two key subsets of relevance are:
 - Machine Learning (ML) A mature subset of AI that focuses on the development of models that enable computers to learn from data to predict outcomes, make decisions, identify patterns, simulate scenarios, and prescribe actions most likely to yield optimal results.
 - **Generative AI** A specialized area within machine learning that involves the use of "generative models" to learn from existing data to create new, original content generate new content, such as text, images, or videos.
 - While a small and emerging subset of the entire AI space, Generative AI has seen a substantial increase in awareness and interest since November 2022 due to broad accessibility through tools such as ChapGPT that require no specialized knowledge or skills to use.



Potential Benefits and Applications

- •Increased Productivity: Effective use of AI has the potential to greatly improve workforce productivity by automating routine tasks and augmenting human workers in the execution of complex tasks. This can reduce operating costs and increase the economic output of the available labor force.
- •Improved Decision-Making: All can analyze large amounts of data quickly, identify patterns, enable proactive actions, support decisions, and inform optimized resource allocation and service delivery.
- •Fraud Detection and Cybersecurity: AI can quickly identify potential fraud and security incidents.



Potential Risks and Considerations

- •Changes to Job Skills As AI adoption rises, many jobs are likely to see a change in the skills required to perform effectively. It will be essential for the Arkansas workforce to have the skills required to remain economically competitive.
- •Security and Privacy Users may unintentionally expose sensitive information to AI services that are not secure or are not intended to be used with confidential information.
- •Overreliance on AI Some users may become over-reliant on the use of AI without fully understanding the limitations of AI or the data on which it was trained.
- •Data Availability and Quality AI requires large volumes of high-quality data for training.



DTP AI Subcommittee?

- •The DTP has previously leveraged subcommittees that meet more frequently and with broader participation to address specific areas of need or interest. Prior subcommittees have guided the development of the Arkansas Data Sharing Agreement (ADSA) and the SLDS approach.
- •An AI subcommittee could be leveraged to inform the responsible and effective adoption of AI in Arkansas through establishment of policies and guidance, consideration of workforce implications, and the review and governance of AI models.
- •The subcommittee could include a diverse set of stakeholders with a combination of technical and domain expertise on data, artificial intelligence, workforce, security, privacy, and policy.



Wrap-Up and Action Items



Wrap-Up and Action Items

- Next Meeting Thursday, June 27th 10AM-12PM
 - Agenda will include efforts under the Arkansas Workforce Strategy
 - Other topics of interest?
- Selection of Vice Chair
- Action Items
- Closing Thoughts
- Adjournment

