

**02/05/15  
PRESENTATION:  
ANSWERS (ALASKA  
NAVIGATOR:  
STATEWIDE  
WORKFORCE AND  
EDUCATION-  
RELATED  
STATISTICS)**

<TARGET><BILL></BILL><SUBJECT>02-05-15 PRESENTATION  
ANSWERS (ALASKA NAVIGATOR STATEWIDE WORKFORCE AND  
EDUCATION-RELATED  
STATISTICS)</SUBJECT><COMM>SEDC29</COMM></TARGET>

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# SENATE EDUCATION COMMITTEE

February 5, 2015

## **ANSWERS Project Overview - Alaska's P-20W SLDS**

Mission: Deliver outcomes information to Alaska stakeholders to assess, evaluate, and improve the state's education and career development spectrum



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*ANSWERS is a collaboration of the Alaska Commission on Postsecondary Education, the University of Alaska, Alaska Department of Education & Early Development, and Alaska Department of Labor and Workforce Development.*

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**[ACPE.ALASKA.GOV/ANSWERS](http://ACPE.ALASKA.GOV/ANSWERS)**

# OVERVIEW

- ★ **ANSWERS – Alaska Navigator: Statewide Workforce and Education-Related Statistics**
- ★ **P-20W SLDS: early learning through the workforce statewide longitudinal data system**
- ★ **Federal grant - \$4 million over 3 years (July 2012 – June 2015)**
- ★ **Collaboration of Alaska Commission on Postsecondary Education (ACPE), University of Alaska (UA), Department of Education & Early Development (DEED), and Department of Labor & Workforce Development (DOLWD)**



## WHY ACPE?

- ★ Keen interest in capacity building specific to assessing impacts of ACPE programs and services and providing analytical resource to other education/training stakeholders
- ★ Pursuant to AS 14.42.030. Functions, duties, and powers of commission. (4) contract with or use existing institutions of postsecondary education or other individuals or organizations to make studies, conduct surveys, submit recommendations, or otherwise contribute to the work of the commission
- ★ Relevant to ACPE mission: Promoting access to and success in postsecondary education and training for Alaskans and in Alaska



## ALASKA'S NEED FOR CROSS SECTOR P-20W LONGITUDINAL DATA

ANSWERS will equip state leadership with Alaska data to make informed policy and funding decisions based upon effectively evaluating immediate and the longer-term **outcomes** of programs and policies, and to clearly measure the state's return on investment

*ANSWERS will:*

- ★ Make evaluations which cut across multiple sectors easier and more cost effective, efficient, informative, flexible, and secure
- ★ Be a reliable source of cross-sector information from which policy makers can better identify program results
- ★ Increase agencies' capacity to comprehensively respond to inquiries

## PRIVACY AND SECURITY APPROACH

- ★ Emphasis on protecting individual privacy and security throughout planning, development, and implementation of ANSWERS
  - ★ Conservative design approach
  - ★ Partnership and collaboration with partner organizations
  - ★ Strong data security and privacy protections
  - ★ Operating practices and data use protocols

## PROJECT PLAN AND TIMELINE

1. Planning and Preparation – July 2012 to June 2013
2. Infrastructure – July 2013 to March 2015
3. Development – January 2014 to March 2015
4. Data Reporting – May 2014 to April 2015
5. Training and Professional Development – March 2015 to June 2015
6. Sustainability – July 2014 to June 2015

## OBJECTIVES AND OPERATING PRINCIPLES

- ★ Link cross-sector data—transparently and securely
- ★ Maintain data with protocols ensuring data sharing the privacy of individual unit records
- ★ Protection of individuals' privacy is an overarching priority

## OPERATING PRINCIPLES - CONTINUED

- ★ Data contributors own their data and are expert at understanding and explaining their data
- ★ Data value is increased through common understanding and use
- ★ Ongoing ANSWERS system design and maintenance centers on system agility, flexibility and scalability

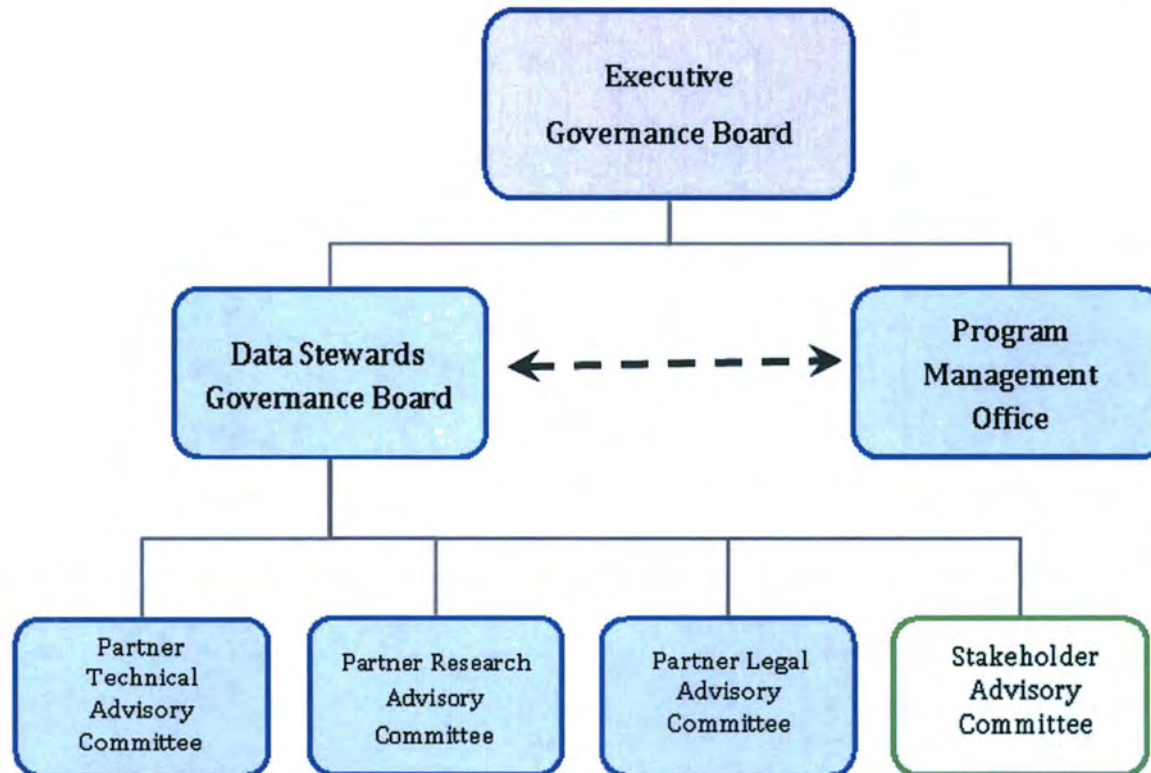
## PARAMETERS

- ★ Data is de-identified and aggregated
- ★ Does not replace or usurp existing data systems
- ★ Uses subsets of data from various partners' data systems as appropriate to answer critical questions and use cases
- ★ Based on multi-agency governance structure requiring input, review and agreement by four founding partner organizations
- ★ Addresses cross-sector queries that cannot be answered by individual partners
- ★ Output is based on best practices and individual privacy protections

# GOVERNANCE

- ★ Multi-tiered governance structure:
  - ★ Executive Governance Board: ACPE Executive Director, EED and DOLWD Commissioners, UA President
  - ★ Data Stewards: Data/project managers from each partner organization
  - ★ Implementation team and committees: four partner agencies' project managers, research and IT staff, legal staff, and program directors
  - ★ Stakeholder committees and advisors

# GOVERNANCE FLOW DIAGRAM



## ROLES OF THE POLICY QUESTIONS

- ★ Policy questions – *see handout*
  - ★ Developed in 2009 and revised in 2012
  - ★ Designed to identify high-level information needs, not currently available without linked data
  - ★ Identify stakeholder needs, interests and project scope
  - ★ Determine which data elements are appropriate to link
  - ★ Require Executive Governance Board Approval to change

## PRIVACY AND SECURITY

- ★ Protecting individual privacy and security throughout planning, development, implementation and over time is fundamental
  - ★ Alaska's conservative approach to P-20W SLDS
  - ★ No individual evaluation possible; only de-identified and aggregated data produced
  - ★ Multiple levels for accessing ANSWERS information

## PRIVACY AND SECURITY PROTOCOLS

ANSWERS is designed to separate identifying information from incoming data so it cannot be exposed, derived by users, or identify individuals

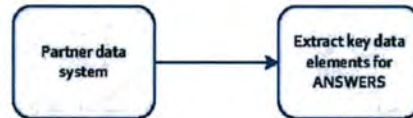
Design considerations include:

- ★ Data de-identification
- ★ Data encryption
- ★ Data compartmentalization
- ★ System access logging and auditing
- ★ Role-based access

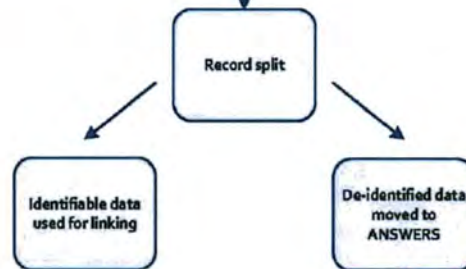
*Information outputs are aggregated and conform to best practices and federal and state privacy laws*

# PRIVACY AND SECURITY DIAGRAM

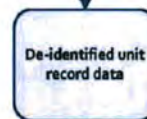
Data Source File Preparation  
Raw data collected by state agency



System 1 – Restricted Access\*  
Process of de-identification and linking



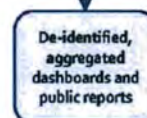
System 2 – Restricted Access\*  
Information stored in ANSWERS



System 3 – Restricted Access\*  
Information used to respond to queries



System 4 – Public Access  
Information displayed to public



\*All restricted access systems are encrypted

*See handout for full size image*

## DIFFERENT STATE APPROACHES

- ★ States' P-20W SLDS approaches vary
  1. Central database contains identifiable information with strong information security controls
  2. Central database that maintains de-identified data for research and analysis (*like ANSWERS*)
  3. Federated data system in which data queries draw from source systems and records based on specific data request
- ★ Mississippi and Arkansas were identified as having a similar system model to Alaska in terms of privacy and security



## EXAMPLE FROM MISSISSIPPI

- ★ Mississippi's SLDS public website LifeTracks has the ability to use an interactive tool to drill down in four target areas: Early Childhood, Pre-K-12<sup>th</sup> Grade, Community College/Public University, and Workforce.
  
- ★ Within the four areas you can select:
  - ★ Historical trends
  - ★ Demographics
  - ★ Average student participation, progress, and success

For more information on Mississippi's SLDS visit <https://lifetracks.ms.gov/SitePages/Home.aspx>

## EXAMPLE FROM ARKANSAS

- ★ The Arkansas Research Center (ARC) has developed software and processes to integrate and anonymize data, allowing for rigorous research and evaluation of program outcomes while keeping individual privacy at the center of the process.
- ★ Ongoing evaluation of the Pre-K program, which measures the impact of early childhood education on academic success in K-12.
- ★ ARC also regularly publishes Arkansas' Education to Employment Report, which outlines average wages and industries of employment by education. [http://arc.arkansas.gov/arc\\_web/resources/publications/AEER2013.pdf](http://arc.arkansas.gov/arc_web/resources/publications/AEER2013.pdf)
- ★ Another key mission of Arkansas' SLDS is to reduce burden on agency staff for reporting and to keep individual privacy at the center.

*For more information on Arkansas's SLDS visit <http://arc.arkansas.gov/>*

# SUSTAINABILITY

- ★ ANSWERS Program Management Office (PMO) – system administration and maintenance post-grant project
  - ★ Reports to Executive Governance Board
  - ★ Ensures ANSWERS adheres to all applicable privacy and security practices, governance protocols, etc.
  - ★ With partners, coordinates responses to cross-sector information requests
  - ★ Develops and updates public reports, identifies emerging stakeholder needs, and proposes new information products

## SUSTAINABILITY - CONTINUED

- ★ ASLC source of interim funding within ACPE operating budget
- ★ Annual program costs estimated at \$1.2M
- ★ Information demand will inform longer-term planning
- ★ Funding model to be revisited after initial three-year operational period

# COMMENTS AND QUESTIONS

## Contact ANSWERS Project Leaders:

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★ Stephanie Butler

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★ 465-6743



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# ANSWERS

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Fax: 907-465-3293  
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## ANSWERS – Alaska Navigator: Statewide Workforce and Education-Related Statistics

**Mission:** Deliver outcomes information to Alaska stakeholders to assess, evaluate and improve the state's education and career development spectrum

**Purpose:** To provide critical information to Alaska's policymakers, educators, and general public about Alaska's education and workforce spectrum, including:

- ★ Student transitions, such as high school to postsecondary education, postsecondary education to the workforce, etc.
- ★ Performance in education and workforce systems, and evaluation of education program outcomes
- ★ Return on investment, enhancing ability to measure program costs as related to outcomes

### ANSWERS Project Overview

- ★ Federal grant - \$4 million over three years (July 2012 to June 2015)
- ★ Alaska's P-20W SLDS (early learning through the workforce statewide longitudinal data systems) grant-funded project to link existing K-12, postsecondary and workforce data

### Project Deliverables and Timeline

- ★ Planning and Preparation – Complete as of June 2013
- ★ Infrastructure – July 2013 to March 2015
- ★ Development – March 2014 to March 2015
- ★ Data Reporting – May 2014 to April 2015
- ★ Training & Professional Development – January 2015 to June 2015
- ★ Sustainability – July 2014 to June 2015

### Project Progress

- ★ Completion of Outcome 1 – Project Planning and Preparation (Complete)
  - Established and implemented governance structure
  - Completed analysis of existing data systems
  - Created stakeholder engagement and communications plan
  - Developed business and technical requirements
  - Partner agreement on system design, platform, and processes
  - Gathered stakeholder input and issued proof-of-concept reports
- ★ Commencement of Outcomes 2 and 3 – Infrastructure and Development
  - Contract established to design and develop ANSWERS software
  - Functional and technical requirements defined to inform design
  - Testing began in July 2014 and is ongoing
- ★ Commencement of Outcome 4 – Data Reporting
  - Contracts are in place to bring research and data visualization expertise to Alaska's project
  - Stakeholder survey to be sent in December to ask for input on content and features of ANSWERS first reports
- ★ Commencement of Outcome 6 – Sustainability
  - Sustainability and Program Management Office (PMO) plan development is underway



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[ACPE.ALASKA.GOV/ANSWERS](http://ACPE.ALASKA.GOV/ANSWERS)

December 2014

# ANSWERS

## Policy Questions

1. How many and which students or student subgroups are progressing through an education program/system to complete college or workforce training, and what is their subsequent employment or higher education enrollment status?
2. What are the migration patterns and outcomes for Alaskans attending postsecondary programs outside of Alaska and subsequently returning to Alaska?
3. What is the current enrollment and/or workforce and income status of those Alaskans, or specific populations of Alaskans, who participated in and exited Alaska secondary or postsecondary institutions with and without credentials?
4. Of those Alaskans who receive education services from Alaska secondary and postsecondary institutions, how many and which remain in the state and contribute to the economy?
5. What are the impacts of financial aid on college access and success and what are the specific outcomes by subgroups of interest?
6. How effective are, and what is the specific return-on-investment for, specific interventions and strategies to increase the rate at which students/citizens, particularly those from low-income families or other underrepresented populations, progress through an education program/system to complete college or workforce training?
7. How do Alaska's postsecondary institutions' educational program productivity and capacity align with Alaska's current and anticipated workforce needs?
8. What is the private/public return on private/public investment in education?
9. How does Alaska recruit and retain teachers or other professionals identified as critical to Alaska's economic or societal well-being and for which there is a statewide shortage or mal-distribution?
10. Why do educational and employment outcomes differ among subgroups?



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Revised 8/2/13

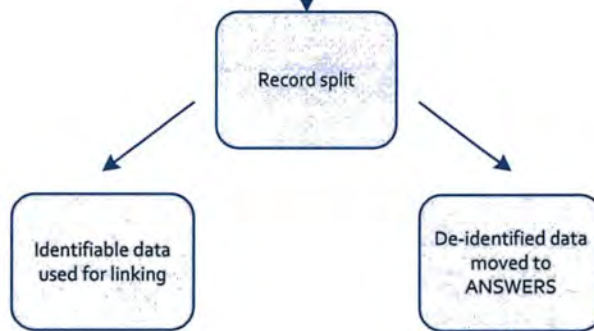
# ANSWERS

## Privacy and Security

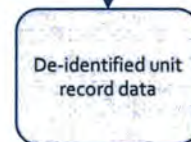
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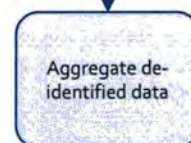
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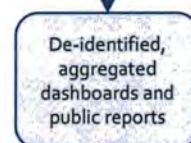
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# ANSWERS

## Alaska Navigator: Statewide Workforce and Education-Related Statistics

### Mission statement

*Deliver outcomes information to Alaska stakeholders to assess, evaluate and improve the state's education and career development spectrum.*

- ★ ANSWERS will link existing K-12 and postsecondary education with career training and workforce information to illuminate and enhance the work of education and training practitioners and policymakers, as well as informing the public.
- ★ ANSWERS products and reports will improve Alaska's capacity to analyze education and workforce outcomes and projections, identify gaps in available training and participation compared to state needs, and support economic development plans.



[ACPE.ALASKA.GOV/ANSWERS](https://acpe.alaska.gov/answers)



# ANSWERS

## Alaska Navigator: Statewide Workforce and Education-Related Statistics

★ In 2012, the State of Alaska, Department of Education & Early Development, received a three-year, \$4 million federal grant to develop ANSWERS, Alaska's P-20W Statewide Longitudinal Data System (SLDS).

★ ANSWERS is not a new data collection; rather, it links existing data collections to provide information about various student cohorts and sub-groups as they move through the education continuum and into the workforce.

Year one of the grant was devoted to project analysis and planning. Year two focus is infrastructure design and system development, with report creation and user training scheduled for year three. Sustainability will be a primary consideration in all these phases. ANSWERS is scheduled for full implementation in 2015.



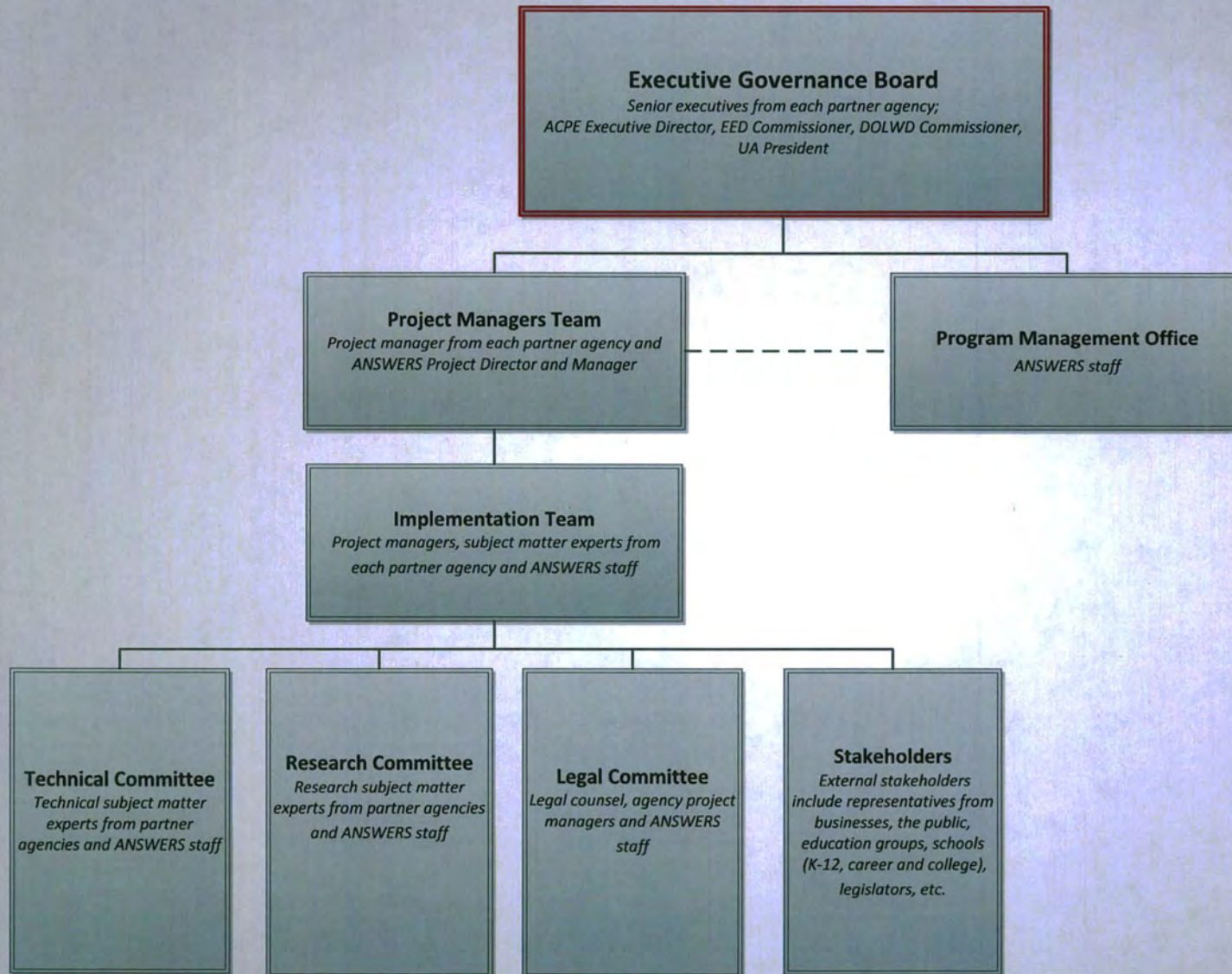
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# ANSWERS ORGANIZATIONAL CHART



# ANSWERS

Alaska Navigator: Statewide Workforce and  
Education-Related Statistics

In 2012, the State of Alaska, Department of Education & Early Development, received a three-year, \$4 million federal grant to develop ANSWERS, Alaska's P-20W Statewide Longitudinal Data System (early learning through the workforce SLDS).

ANSWERS is not a new data collection; rather, it links existing data collections to provide information about what happens to various student cohorts and sub-groups as they transition through the education continuum and into the workforce.

Year one of the grant was devoted to project analysis and planning. Infrastructure design and system development is in progress through 2014, with report creation, public data mart implementation, and user training scheduled for completion in 2015. ANSWERS is scheduled for full implementation in mid-2015.



ANSWERS

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to sign up for periodic ANSWERS updates

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ANSWERS products and reports will transform Alaska's capacity to analyze education and workforce outcomes and projections, identify gaps in available training and participation compared to state needs, and target resources to maximize their impact in preparing citizens for economic success.



ANSWERS

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