



# Digging Into SLEDS: Using the data to inform institutional policy and practice

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AIRUM 2017

# What is SLEDS?

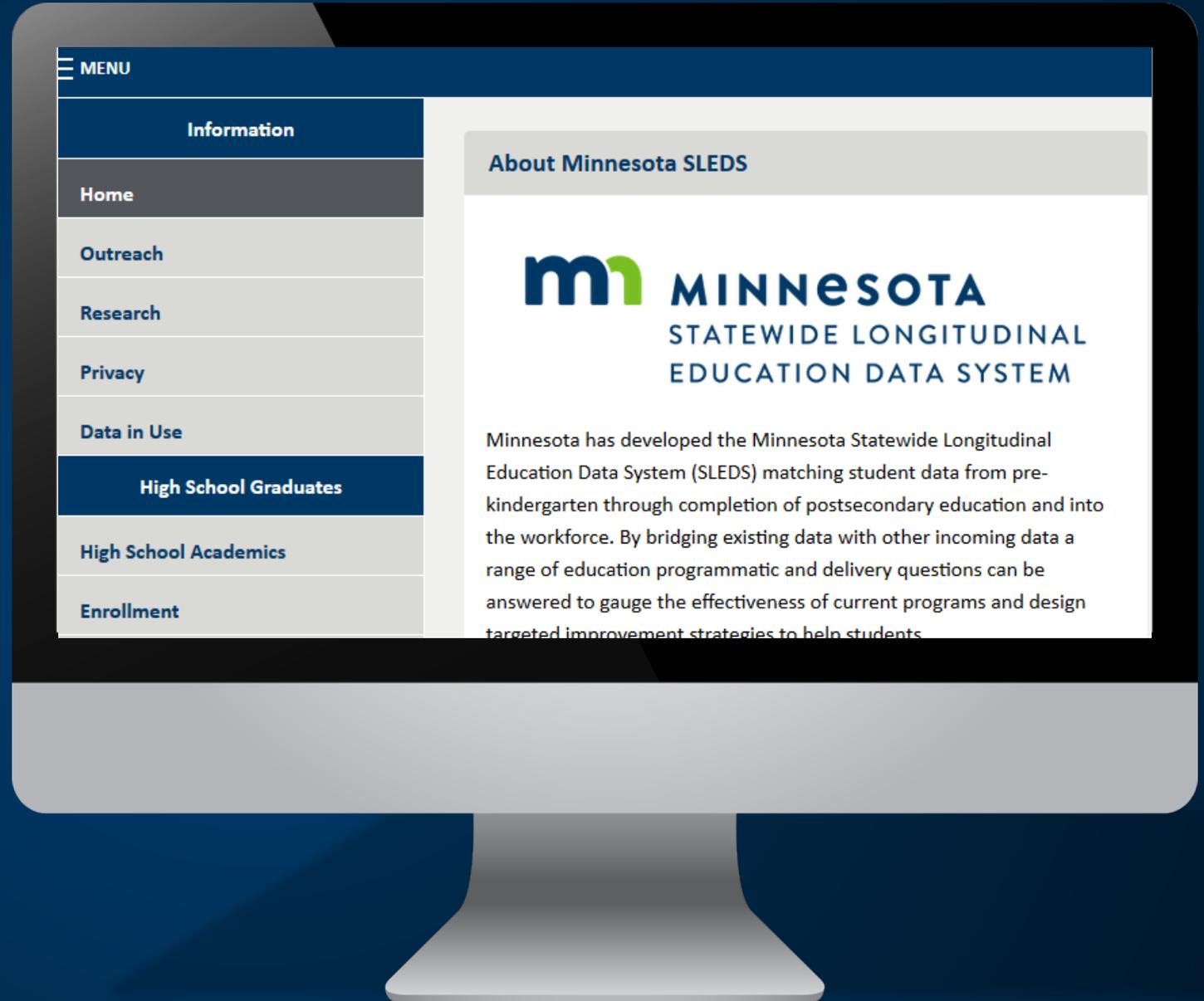
sleds.mn.gov

PK-12

Higher Ed



Workforce



The background of the slide is a photograph of a person's hands using a laptop. The person is sitting at a wooden desk, and their hands are visible on the keyboard and a white mouse. The laptop screen is open, and the background is slightly blurred. A dark blue semi-transparent overlay covers the left side of the image, containing the text.

# SLEDS Goals

- Created to assist in identifying the most viable pathways for individuals in achieving successful outcomes in education and work
- Helps to gauge effectiveness of current programs
- Guides development of targeted improvement strategies to help students



# Where Does the Data Come From?

- Research tab

Data Source Matrix of Available Years of Data

Data Sources	Agency	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
CIP	DEED		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Employment	DEED					X	X	X	X	X	X	X	X	X	X	X	X	X	X
Employment Organization	DEED					X	X	X	X	X	X	X	X	X	X	X	X	X	X
Workforce Training	DEED					X	X	X	X	X	X	X	X	X	X	X	X	X	X
ACT	MDE							X	X	X	X	X	X	X	X	X	X	X	X
Adult Basic Education (ABE)	MDE	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Advanced Placement	MDE								X	X	X	X	X	X	X	X	X	X	X
Career and Technical Education (CTE)	MDE									X	X	X	X	X	X	X	X	X	X
GED Recipients	MDE	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
International Baccalaureate	MDE										X	X	X	X	X	X	X	X	X
K-12 Assessment	MDE								X	X	X	X	X	X	X	X	X	X	X
K-12 Child Count	MDE							X	X	X	X	X	X	X	X	X	X	X	X
K-12 Enrollment	MDE							X	X	X	X	X	X	X	X	X	X	X	X
MDE Organization	MDE							X	X	X	X	X	X	X	X	X	X	X	X
Minnesota Common Course Catalogue (MCCC)	MDE													X	X	X	X	X	X
National Student Clearinghouse	MDE								X	X	X	X	X	X	X	X	X	X	X

<http://sleds.mn.gov/#research>

Information
Home
Outreach
Research
Privacy
Data in Use
High School Graduates
High School Academics
Enrollment
Completing College
Developmental Education
Course Taking
Electives to ACT Results
College Students
New Student Demographics
New Student Enrollment
College Graduates
Employment

## About Minnesota SLEDS

Minnesota has developed the Minnesota Statewide Longitudinal Education Data System (SLEDS)



matching student data from pre-kindergarten through completion of postsecondary education and into the workforce. By bridging existing data with other incoming data a range of education programmatic and delivery questions can be answered to gauge the effectiveness of current programs and design targeted improvement strategies to help students.

### SLEDS brings together data from education and workforce to:

- Identify the most viable pathways for individuals in achieving successful outcomes in education and work;
- Inform decisions to support and improve education and workforce policy and practice, and
- Assist in creating a more seamless education and workforce system for all Minnesotans.

The Minnesota P-20 Education Partnership governs the SLEDS system. The project is managed jointly by the [Minnesota Office of Higher Education \(OHE\)](#), [Minnesota Departments of Education \(MDE\)](#), and [Employment and Economic Development \(DEED\)](#)

#### Email Updates

To sign up for updates or to access your subscriber preferences, please enter your contact information below.

Subscription Type

\* Email Address (Required)



## Contact Us

If you have comments, questions, or suggestions, do not hesitate to send us a message at [sleds.support@state.mn.us](mailto:sleds.support@state.mn.us).

### Meredith Fergus

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### Rachel Vilsack

Agency Performance Manager | SLEDS Coordinator

Minnesota Department of Employment and Economic Development  
332 Minnesota Street - Suite E200  
St. Paul, MN 55101  
651-259-7403  
[rachel.vilsack@state.mn.us](mailto:rachel.vilsack@state.mn.us)

### Kara Arzamendia

Data Analytics Supervisor | SLEDS Coordinator

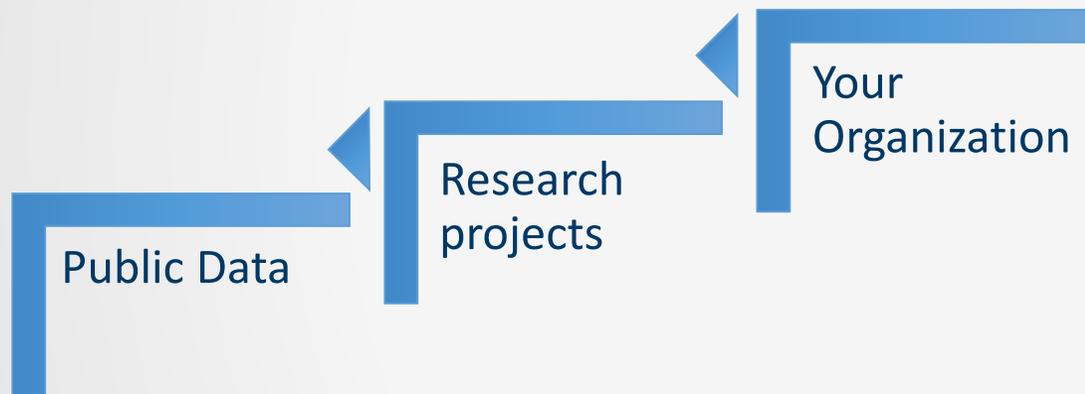
Minnesota Department of Education  
1500 Highway 36 West  
Roseville, MN 55113  
651-582-8599  
[kara.arzamendia@state.mn.us](mailto:kara.arzamendia@state.mn.us)

### Feedback

Please provide SLEDS with your feedback, [take our survey](#).

<http://sleds.mn.gov/>

# Accessing SLEDS Data



- Your **organization** can request access to your data.
- If you need access to individual level data for a specific **research** project, you can request that through SLEDS.
  - Six-month wait time
- The **public** site is available to everyone!

# Post-Secondary Research Data Mart

## Secure Reports

The Statewide Longitudinal Education Data System (SLEDS) Secure Reports site contains student level de-identified data from K-12 and postsecondary education. Data are linked at the individual student level from K-12 to postsecondary but no identifying information is included. SLEDS was developed to match student data from pre-kindergarten through completion of postsecondary education and into the workforce. By bridging existing data with other incoming data a range of education, programmatic, and delivery questions can be answered to gauge the effectiveness of current programs and design targeted improvement strategies to help students.

### K-12 Secure Reports

This data is provided to LEAs around the state to answer questions specific to their student populations so that data can be used to drive decision-making and program improvement. These reports can be customized and opened directly in Excel. The starting cohort includes public high school graduates and drop outs (starting in 9th grade). The columns are labeled with definitions for each variable but users can refer to the attachment of [data element descriptions](#) or the [SLEDS Data Dictionary](#) located on the [SLEDS analytics website](#) for further information.

For LEAs who would like to gain access to the K-12 Secure Report for their district and schools, please see the [data sharing agreement document](#). Once filled out and signed, it should be scanned and e-mailed to Kara Arzamendia at [kara.arzamendia@state.mn.us](mailto:kara.arzamendia@state.mn.us).

### Postsecondary Secure Reports

This data is provided to postsecondary institutions around the state to answer questions specific to their student populations. The data can be used to drive decision-making and program improvement. These reports can be customized and are available as text files. The starting cohort includes students enrolled in a postsecondary institution starting in 2003 or completing a certificate or degree starting in 2007 and continues to the present enrollment class. The columns are labeled with definitions for each variable but users can refer to the attachment of [data element descriptions](#) or the [SLEDS Data Dictionary](#) located on the [SLEDS analytics website](#) for further information.

For institutions who would like to gain access to the Postsecondary Secure Report for their institution, please see the [data sharing agreement document](#). Once filled out and signed, it should be scanned and e-mailed to Meredith Fergus at [meredith.fergus@state.mn.us](mailto:meredith.fergus@state.mn.us).

#### SLEDS Secure Reports

[K-12 Research Data Marts](#)

[Postsecondary Research Data Mart](#)

[Workforce Training Data Mart](#)



# Enrolled Students

- 1 record /enrolled student /FY selected per college

# Completers

- 1 record/ award/ completer/ FY selected per college

The screenshot shows a web browser window displaying the "Postsecondary Research Data Mart" interface. The page title is "Postsecondary Research Data Mart" and it is signed in as a user. The main content area contains a descriptive paragraph about the data files and a set of filters. The filters include: System (University of Minnesota), Year (2015), Format (CSV), College (All), and Status (Enrolled). A "Download File" button is located to the right of the filters. Below the filters are three sections for selecting attributes: "K-12 Attributes" (listing High School State Accountability Test Math, Reading, Science, and ACT), "PS Enrollment Attributes" (listing OHE Code, Student Level, Race, and Gender), and "PS Completers Attributes" (listing First, Second, and Third Completion). Each section has a list of attributes on the left and a selection area on the right with navigation arrows.

## Student-level Data for Colleges

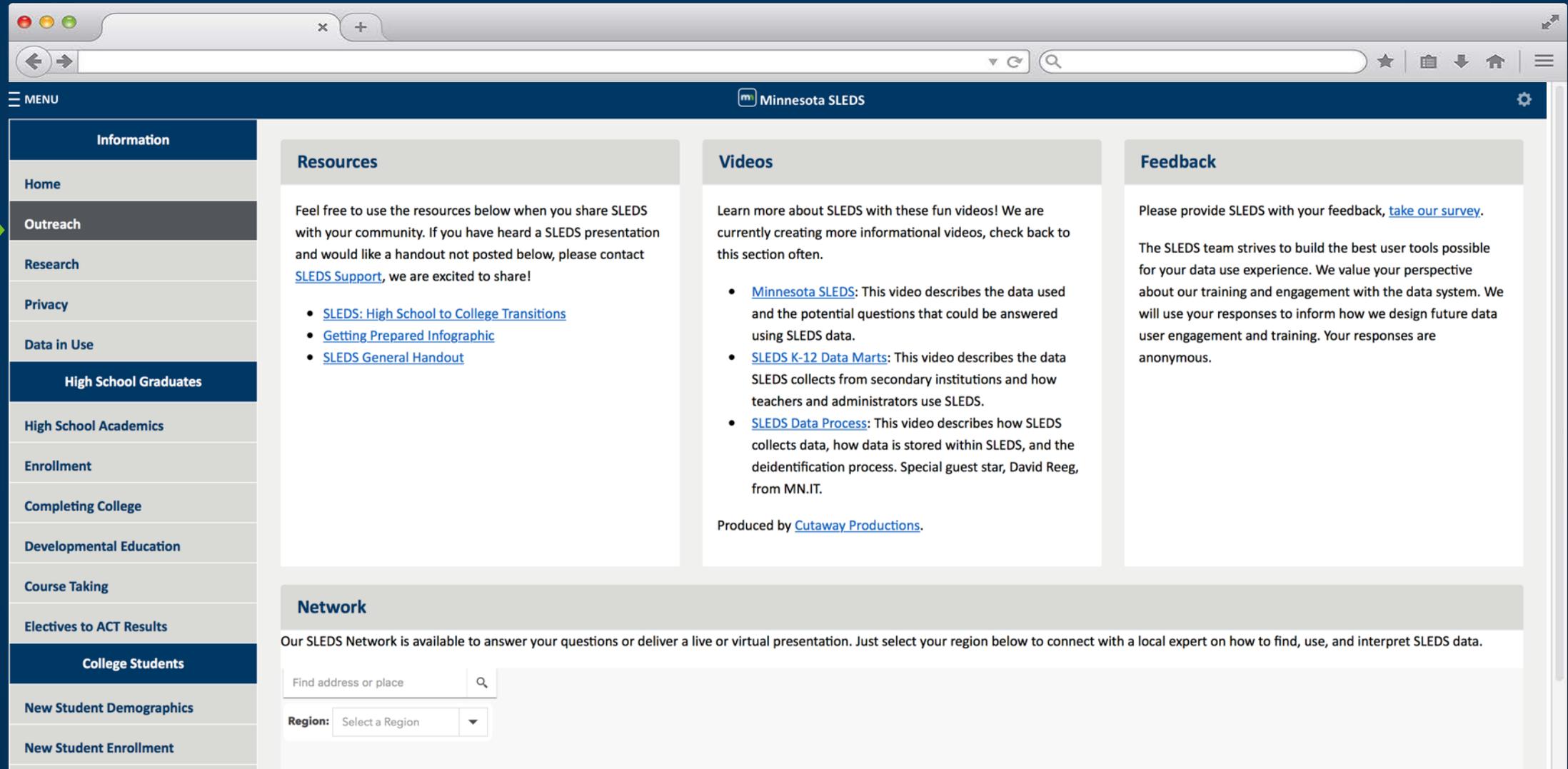
- Data:
- De-identified student level records
- SLEDS ID matches across files (91% accuracy)
- Population limited (e.g. current or former students)
- Data Suppression
- Format:
- CSV or Excel

# When Is SLEDS Data Uploaded?

- Twice a year (June and November).
- Data typically lags by about a year (12 months)
- 2016 HS grads are available June of 2017
- Students enrolling in college in the Fall of 2016 are loaded in November of 2017



# SLEDS Resources



The screenshot shows the Minnesota SLEDS website interface. The browser window title is "Minnesota SLEDS". The page layout includes a left sidebar menu, a main content area with three columns, and a footer section.

**Left Sidebar Menu:**

- Information
  - Home
  - Outreach**
  - Research
  - Privacy
  - Data in Use
- High School Graduates
  - High School Academics
  - Enrollment
  - Completing College
  - Developmental Education
  - Course Taking
  - Electives to ACT Results
- College Students
  - New Student Demographics
  - New Student Enrollment

**Main Content Area:**

- Resources:** Feel free to use the resources below when you share SLEDS with your community. If you have heard a SLEDS presentation and would like a handout not posted below, please contact [SLEDS Support](#), we are excited to share!
  - [SLEDS: High School to College Transitions](#)
  - [Getting Prepared Infographic](#)
  - [SLEDS General Handout](#)
- Videos:** Learn more about SLEDS with these fun videos! We are currently creating more informational videos, check back to this section often.
  - [Minnesota SLEDS](#): This video describes the data used and the potential questions that could be answered using SLEDS data.
  - [SLEDS K-12 Data Marts](#): This video describes the data SLEDS collects from secondary institutions and how teachers and administrators use SLEDS.
  - [SLEDS Data Process](#): This video describes how SLEDS collects data, how data is stored within SLEDS, and the deidentification process. Special guest star, David Reeg, from MN.IT.Produced by [Cutaway Productions](#).
- Feedback:** Please provide SLEDS with your feedback, [take our survey](#).  
The SLEDS team strives to build the best user tools possible for your data use experience. We value your perspective about our training and engagement with the data system. We will use your responses to inform how we design future data user engagement and training. Your responses are anonymous.

**Network:** Our SLEDS Network is available to answer your questions or deliver a live or virtual presentation. Just select your region below to connect with a local expert on how to find, use, and interpret SLEDS data.

Find address or place

Region:



# Research Tab: Data Dictionary & Data Interpretation Guide



The screenshot shows a web browser window displaying the Minnesota SLEDS website. The browser's address bar is empty, and the page title is "Minnesota SLEDS". The website has a dark blue header with the "Minnesota SLEDS" logo. A left-hand navigation menu is visible, with the "Research" tab highlighted. The main content area is divided into three columns: "Governance", "Data Access and Use", and "SLEDS Re...". The "Governance" column contains text about the Minnesota P-20 Education Partnership and a list of bullet points. The "Data Access and Use" column contains text about interpreting and using the data, a list of links for data access, and a link to the "Data Dictionary". A green arrow points from the "Research" tab in the menu to the "Data Dictionary" link in the "Data Access and Use" column. Another green arrow points from the "Data Interpretation Guide" link in the "Data Access and Use" column to the "Data Dictionary" link. A third green arrow points from the "Data Dictionary" link to a button labeled "Data Dictionary" at the bottom of the "Data Access and Use" column. The "SLEDS Re..." column contains a list of links for "Minnesota" and "National R...".

**MENU**

- Information
- Home
- Outreach
- Research**
- Privacy
- Data in Use
- High School Graduates
- High School Academics
- Enrollment
- Completing College
- Developmental Education
- Course Taking

**Minnesota SLEDS**

### Governance

The Minnesota P-20 Education Partnership governs the SLEDS system. On April 14, 2010, the Minnesota P-20 Education Partnership adopted the following governance structure for the SLEDS system:

- The SLEDS Governance Committee will oversee all work with the data system.
- The SLEDS Research and Data Advisory Committee will review and develop research and evaluation proposals, provide technical expertise on data structure and linkages, and make recommendations to the Governance Committee.
- The SLEDS Coordinators and SLEDS IT staff will coordinate work of the committees and report to the Governance Committee on the research, evaluation and technical operations of SLEDS.

[Access full data governance information](#)

### Data Access and Use

For information about interpreting and using the data in SLEDS reports and on the SLEDS website, please see the [Data Interpretation Guide](#).

The following information is required for access to SLEDS data:

- [Data Access Management Policy](#)
- [SLEDS Data Access Request](#)
- [Data Access Request Process and Timeline](#)
- [Scoring Template and Rubric](#)

[Instructions to access to SLEDS Secured Reports](#)

To search variables within SLEDS data, please use the data dictionary.

[Data Dictionary](#)

### SLEDS Re...

#### Minnesota

- [Getting](#)
- [Gradua](#)
- [College Clearing](#)
- [Minnes College](#)
- [Minnes](#)

#### National R...

- [Statewide L...](#)
- [U.S. Depart...](#)
- [Workforce D...](#)
- [Data Quality](#)

A person wearing a blue long-sleeved shirt is shown from the chest up. They are holding a white coffee cup with a black lid in their left hand and a gold smartphone in their right hand. A black strap is visible across their chest. A dark blue circular overlay is positioned on the right side of the image, containing white text. The background is a blurred outdoor setting with green foliage.

Post-  
Secondary  
Mobile  
Analytics

# SLEDS College Students Reports (1)

## New Student Demographics

### Statewide

Entering Year : 2015



- + Freshmen or Transfer *i*
- + New Enrollment by Race/Ethnicity *i*
- + New Enrollment by Gender
- + New Enrollment by Age
- + New Enrollment by State of Residence
- + Top Ten Minnesota Counties
- + More Information

## New Student Enrollment

### Statewide

Entering Year : 2015



- + Awards Sought *i*
- + Top Ten Majors *i*
- + Time Since High School Graduation *i*
- + Credits Taken in First Term *i*
- + Transfer Credits at Entry *i*
- + More Information

# SLEDS College Students Reports (2)

## College Graduates

Statewide



+ New Graduates by Race/Ethnicity



+ New Graduates by Gender



+ New Graduates by Age



+ Awards



+ Top Ten Majors



+ More Information

## Employment

Statewide

Graduation Year : 2013 Award : All Awards



+ Hourly Wage Trends



+ Annual Wages and Employment



+ More Information

A man in a blue striped shirt and tie is speaking in a meeting. He is gesturing with his hands. In the foreground, the back of another person's head and shoulders is visible. A dark blue circle is overlaid on the left side of the image, containing white text.

Graduate  
Employment  
Outcomes  
Data Tools

# Graduate Employment Outcomes (GEO): Post-Secondary

The screenshot shows a web browser window displaying the Minnesota Employment and Economic Development website. The page title is "GRADUATE EMPLOYMENT OUTCOMES IN MINNESOTA". The navigation bar includes "Labor Market Information", "Data Home", and "GEO Home". The main content area features several filters and buttons:

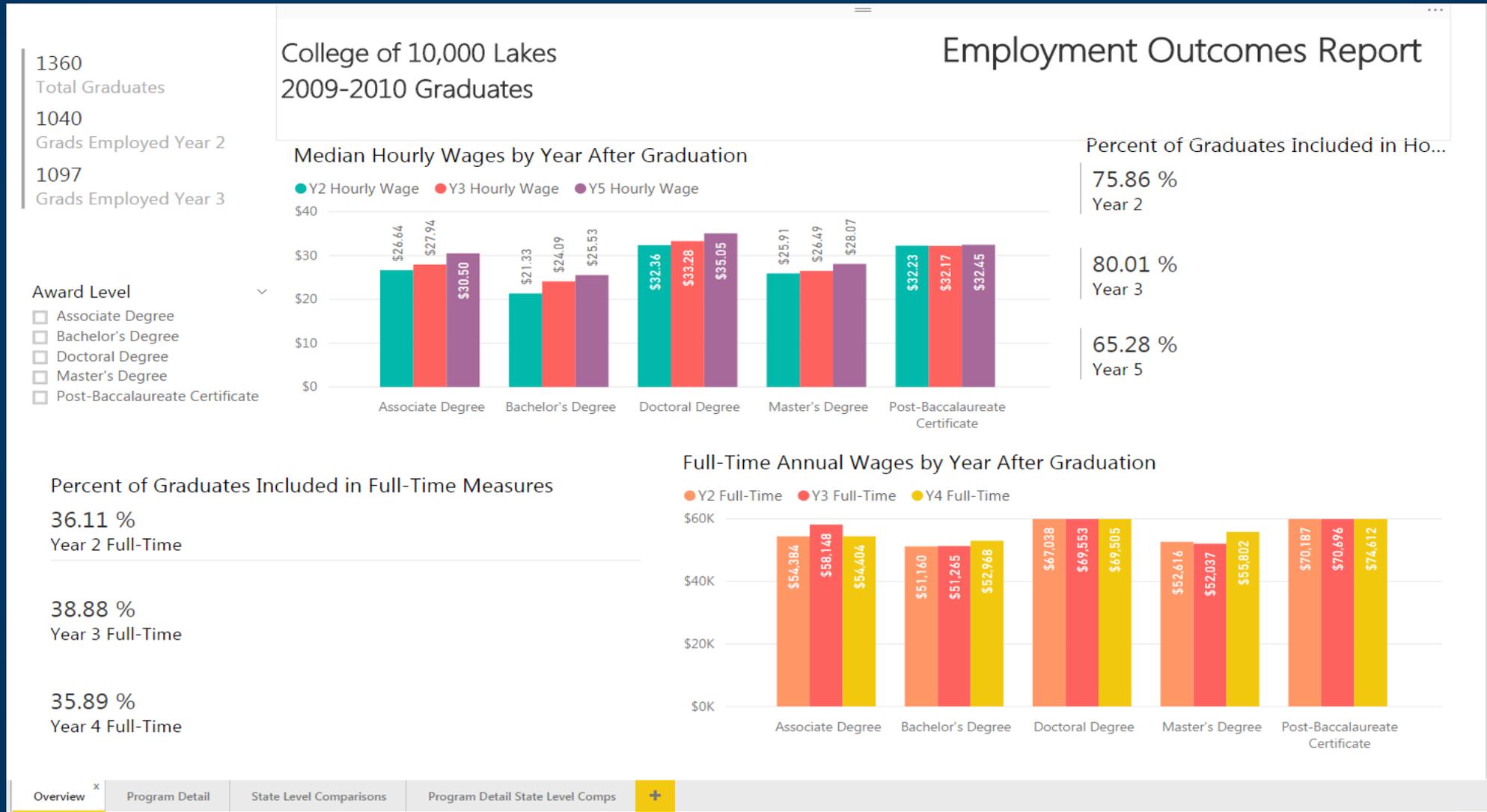
- Buttons: "Graduate Employment Outcomes Home", "Report Interpretation And Methodology", "Glossary"
- Graduation Year: July 2013-June 2014 (dropdown)
- School Location: Minnesota Statewide (dropdown)
- Award Type:  Certificates (less than Bachelor's Degrees),  Associate Degree,  Bachelor's Degree,  Graduate (Certificates and Degrees),  All Awards
- Institution Type: All Institution Types (dropdown)
- School: All Schools (dropdown)
- Instructional Program: All Programs, Grand Total (dropdown menu with options: All Programs, Subtotals, Agriculture, agriculture operations, and related sciences, Architecture and related services, Area, ethnic, cultural, gender, and group studies, Biological and biomedical sciences)
- OR Program Keyword: (text input field)

# Demo on Using the PS Data Mart

We  
created an  
Employment  
Outcomes  
Dashboard!

- Utilizes a Power BI platform
- Data tables from 4 sources:
  - SLEDS PS Data Mart for the College
  - GEO website downloads
  - CIP table
  - Award level table

# Demo: Employment Outcomes 1



# Demo: Employment Outcomes 2

College of 10,000 Lakes  
2009-2010 Graduates

## Employment Outcomes - Program Detail

Award Level

- Associate Degree
- Bachelor's Degree
- Doctoral Degree
- Master's Degree
- Post-Baccalaureate Certificate

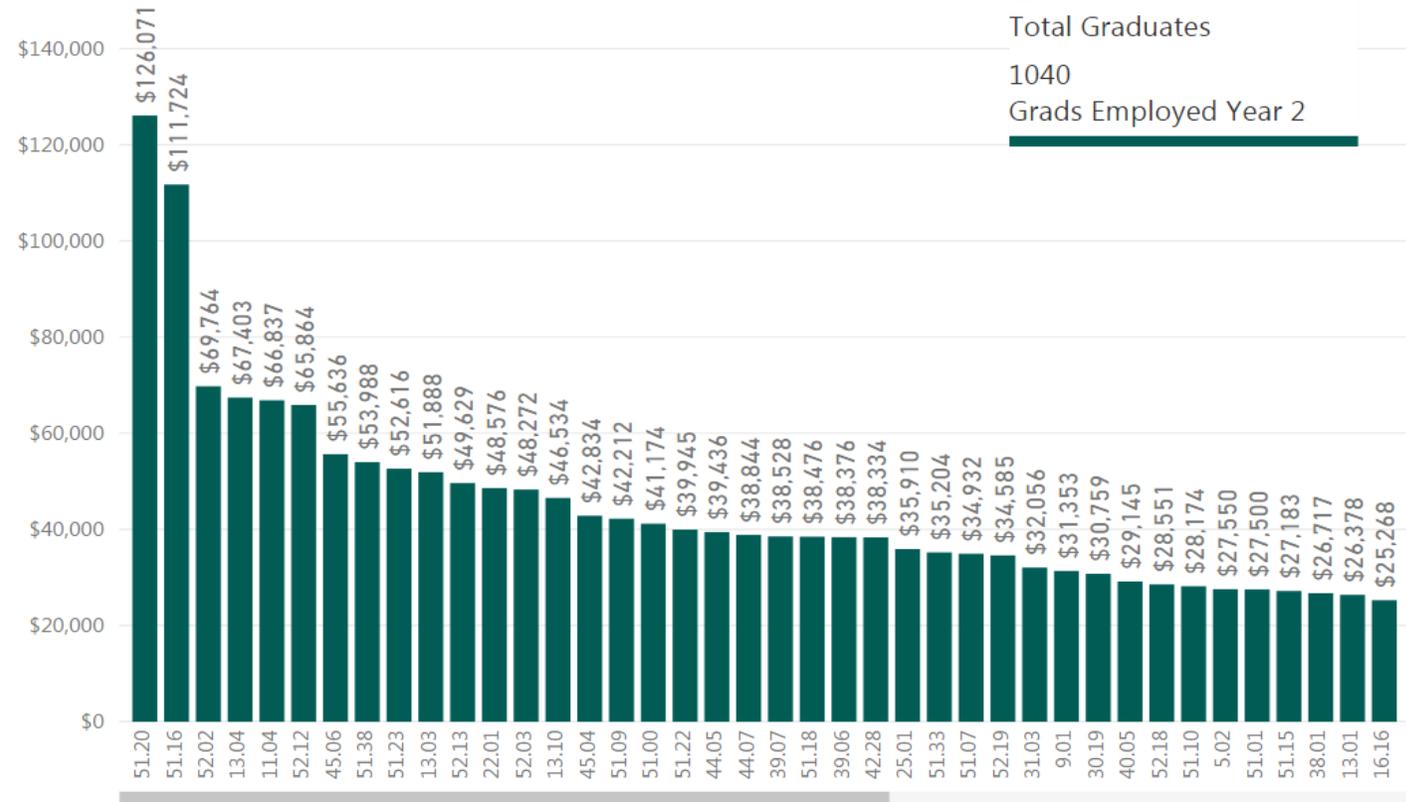
2 Digit CIP Code

- 1
- 3
- 4
- 5
- 9
- 10
- 11
- 12

Major Family (2 Digit CIP Code)

- AGRICULTURE, AGRICULTURE OPERATIONS, AND...
- ARCHITECTURE AND RELATED SERVICES.
- AREA, ETHNIC, CULTURAL, GENDER, AND GROUP...
- BASIC SKILLS AND DEVELOPMENTAL/REMEDIAL ...
- BIOLOGICAL AND BIOMEDICAL SCIENCES.
- BUSINESS, MANAGEMENT, MARKETING, AND RE...
- CITIZENSHIP ACTIVITIES.
- COMMUNICATION, JOURNALISM, AND RELATED ...
- COMMUNICATIONS TECHNOLOGIES/TECHNICIA...
- COMPUTER AND INFORMATION SCIENCES AND ...

Median Year 2 Annual Wages by 4 Digit CIP Code



1360

Total Graduates

1040

Grads Employed Year 2

# Demo: Employment Outcomes 3

College of 10,000 Lakes  
2009-2010 Graduates

Comparing College Level Employment Outcomes to State Outcomes  
Median Hourly Wages by Year After Graduation  
by the Student's Highest Award Obtained

Highest Level Award

- Associate Degree
- Bachelor's Degree
- Graduate Award

College

● Y2 Hourly Wage ● Y3 Hourly Wage ● Y5 Hourly Wage



College Percent of Graduates Included

AwardLevelText	Year 2	Year 3	Year 5
Associate Degree	82.12 %	88.74 %	79.47 %
Bachelor's Degree	76.33 %	81.84 %	66.53 %
Graduate Award	74.25 %	76.99 %	61.51 %

Statewide

● Y2 Hourly Wage ● Y3 Hourly Wage ● Y5 Hourly Wage



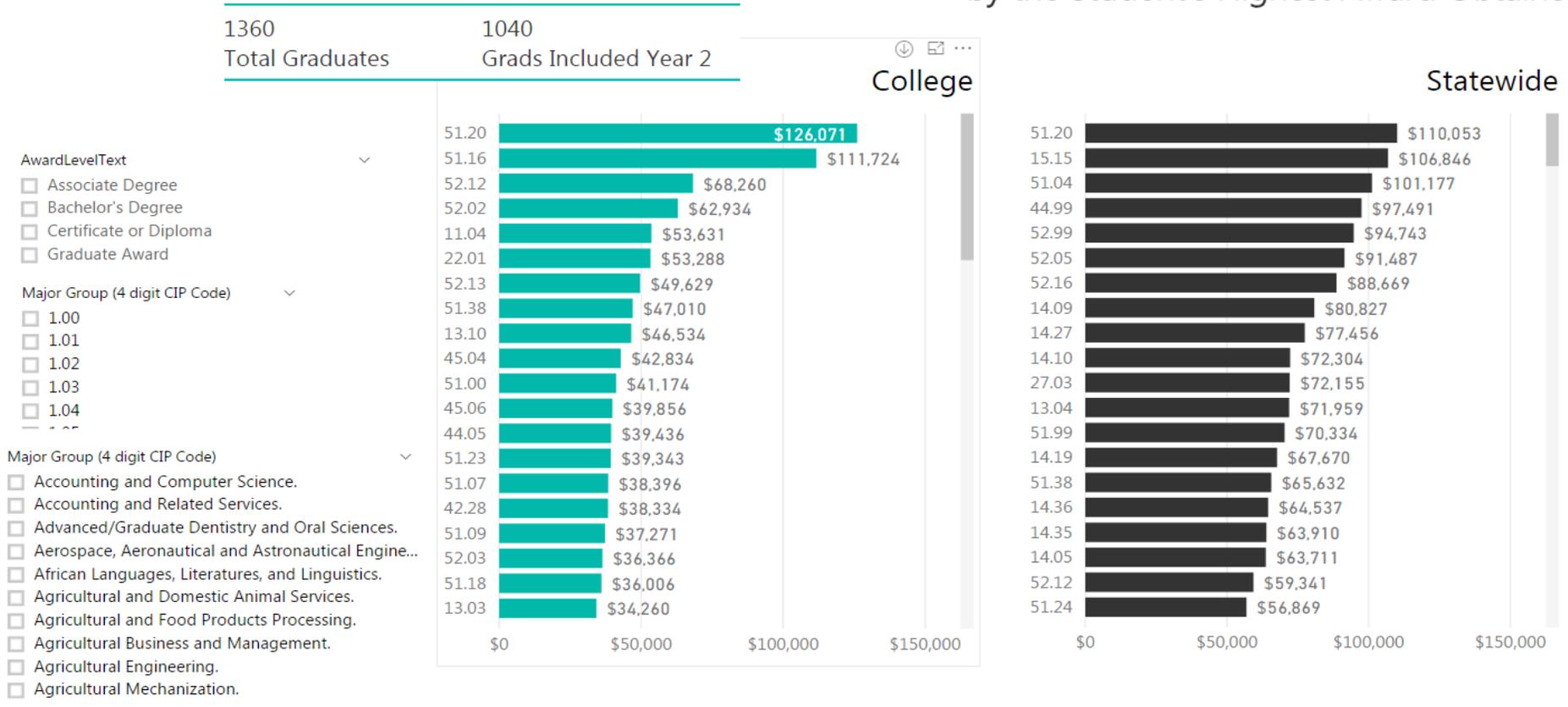
Statewide Percent of Graduates Included

AwardLevelText	Year 2	Year 3	Year 5
Associate Degree	72.45 %	72.35 %	69.27 %
Bachelor's Degree	64.00 %	62.33 %	58.15 %
Graduate Award	64.73 %	63.42 %	57.25 %

# Demo: Employment Outcomes 4

College of 10,000 Lakes  
2009-2010 Graduates

Comparing College Level Employment Outcomes to State Outcomes  
Median Year 2 Annual Wages by 4 Digit CIP Code  
by the Student's Highest Award Obtained



We  
created a  
High School  
to College  
Dashboard!

- Utilizes a Power BI platform
- Data tables from 2 sources:
  - Special file created by Meredith
  - MDE website downloads

# Demo: High School to College 1

HS Graduation Year

2013

Economic Development R...

- 01
- 02
- 03
- 04

District Name

- A.C.G.C. PUBLIC SCHOOL DISTRICT
- ADA-BORUP PUBLIC SCHOOL DISTRI...
- ADRIAN PUBLIC SCHOOL DISTRICT
- AFSA HIGH SCHOOL
- AITKIN PUBLIC SCHOOL DISTRICT
- ALBANY PUBLIC SCHOOL DISTRICT
- ALBERT LEA PUBLIC SCHOOL DISTRICT
- ALDEN-CONGER PUBLIC SCHOOL DI...
- ALEXANDRIA PUBLIC SCHOOL DISTR...
- ANNANDALE PUBLIC SCHOOL DISTR...

School Name

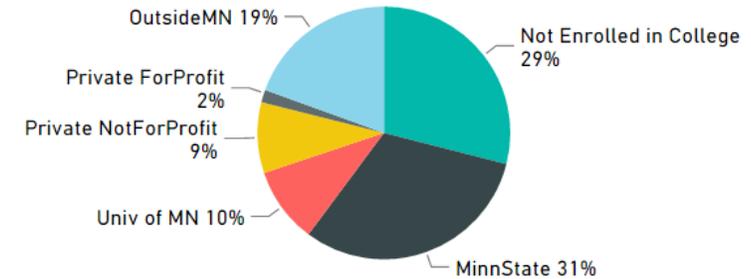
- 917 TRANSITIONAL EDUCATION SERV ...
- A. G. A. P. E. TEEN PARENT
- A.C.G.C. SECONDARY
- ABE DIPLOMA PROGRAM
- ACCESS
- ADA-BORUP SECONDARY
- ADRIAN SECONDARY
- AFSA HIGH SCHOOL
- AITKIN SECONDARY SCHOOL
- ALBANY SENIOR HIGH
- ALBERT LEA AREA LEARNING CENTER

## Distribution of High School Graduates by Destination College

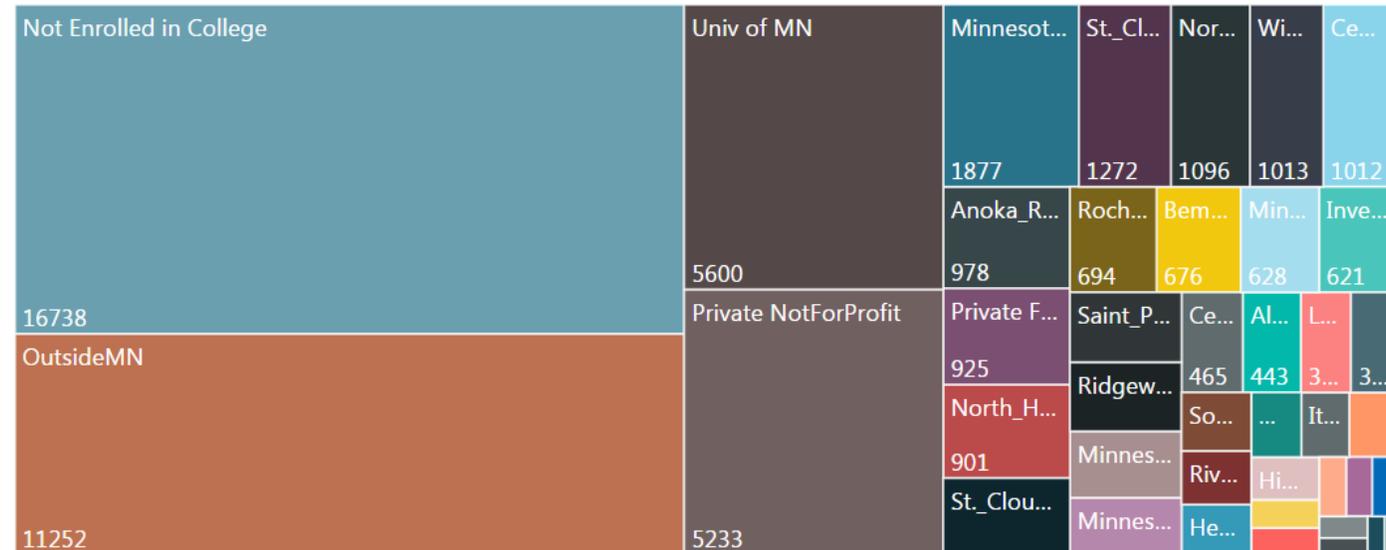
57,781

HS Grads

Share of Graduates by Sector



Count of Graduates by Destination College



# Demo: High School to College 2

## Profile of Upcoming High School Graduates, 2016-2017 Enrollees

EconomicDevelopmentRegion

- 01
- 02
- 03
- 04

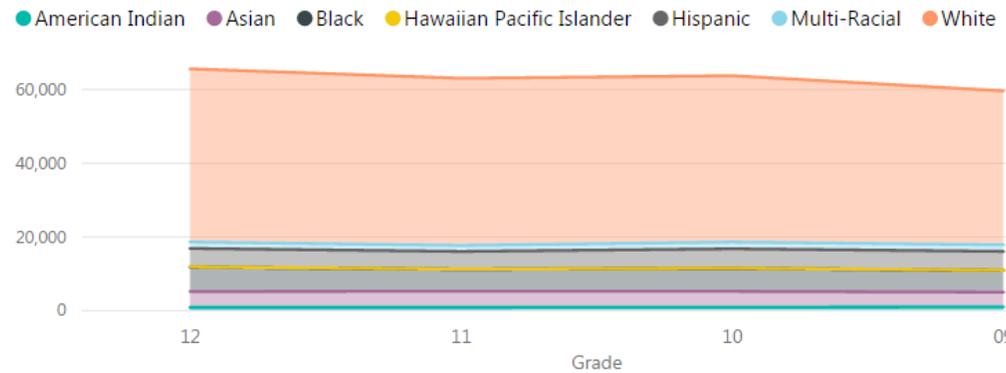
DistrictName

- A.C.G.C. PUBLIC SCHOOL DISTRICT
- ADA-BORUP PUBLIC SCHOOL DISTRICT
- ADRIAN PUBLIC SCHOOL DISTRICT
- AFSA HIGH SCHOOL
- AITKIN PUBLIC SCHOOL DISTRICT
- ALBANY PUBLIC SCHOOL DISTRICT

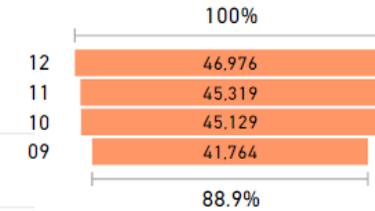
SchoolName

- 917 TRANSITIONAL EDUCATION SERV ALT
- A. G. A. P. E. TEEN PARENT
- A.C.G.C. SECONDARY
- ABE DIPLOMA PROGRAM
- ACCESS
- ADA-BORUP SECONDARY
- ADRIAN SECONDARY
- AFSA HIGH SCHOOL
- AITKIN SECONDARY SCHOOL
- ALBANY SENIOR HIGH
- ALBERT LEA AREA LEARNING CENTER
- ALBERT LEA SENIOR HIGH
- ALC EVENING HIGH SCHOOL
- ALC EXTENDED DAY
- ALC INDEPENDENT STUDY

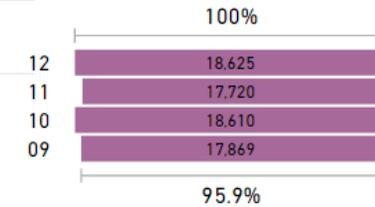
Enrollment by Race and Grade, 2016-2017 Academic Year



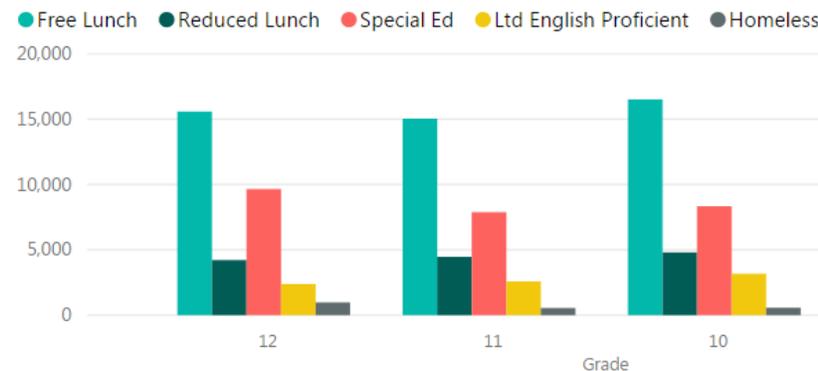
White Students by Grade



Students of Color by Grade



Enrollment by Special Population and Grade, 2016-2017 Academic Year



Free or Reduced Lunch by Grade





SLEDS  
Technical  
Assistance  
Network

# SLEDS Technical Assistance Network

- Provide training and support to SLEDS users
- The regional experts awarded grants are:
  - Southwest West Central Service Cooperative (SWWC)
  - Lakes Country Service Cooperative (LCSC)
  - Century College
  - Center for Applied Research and Educational Improvement (CAREI)





# SLEDS Technical Assistance Network

- Local technical assistance
  - Support in accessing SLEDS data
  - Support in understanding SLEDS data
  - Support using SLEDS data for your own institution
- Local research
  - Support using SLEDS data for your own institution
- Local partnerships across K-12, post-secondary, and workforce
  - Partner with other local institutions to address shared questions, needs, etc.
  - Regional research and analyses



# SLEDS Technical Assistance Network

- SLEDS Experts can work with local organizations to use SLEDS Data
  - **CAREI:** Rochester Cradle to Career: workforce patterns of high school graduates
  - **Lakes Country:** The impact of gender disparities in postsecondary enrollment/completion for NW Minnesota
  - **Southwest:** Brain Drain/Migration patterns of high school graduates
  - **Century College:** Assisting colleges in using SLEDS data for institutional planning, evaluation and research
- Data coaching: Facilitate access for users, etc.

# Thank you!

**Megan Peterson**

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University of Minnesota / SLEDS Network  
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