

# Wisconsin's Longitudinal Data System



## AN OVERVIEW



# What is a Longitudinal Data System?



- A longitudinal data system for education is one that
  - Collects and maintains detailed, high-quality student- and staff-level data
  - Links these data to one another across entities (collections or data warehouses) over time
  - Enables the data to be accessible through reporting and analysis tools

# What is a Longitudinal Data System?



- A longitudinal data system has many different layers and key components.
  - Data warehouse storing student and school data from a variety of sources
  - A unique student-level identifier
  - Reporting tools (web-based)
    - Secured: MDAT, SAFE
    - Public: WINSS, School Performance Report
  - Security Applications
    - Application Security Manager
  - Professional Development

# In Sum, a Longitudinal Data System...



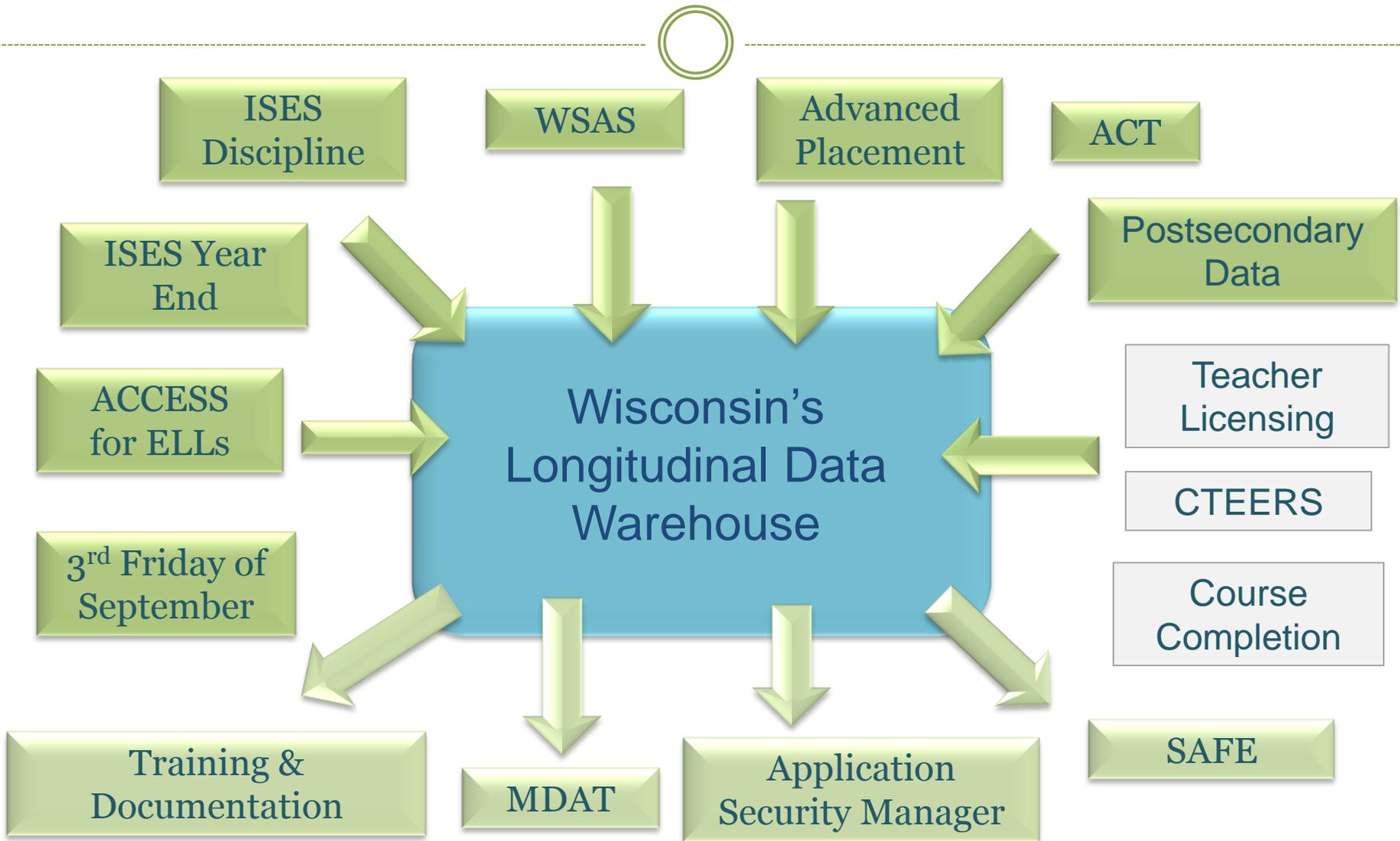
- Brings data together AT THE STUDENT –LEVEL for granular analysis and comparisons at multiple levels (to cohort, school, district, state)
- Includes
  - Data collections beyond test scores that create a more COMPLETE PICTURE of student performance
  - Reporting and analysis tools that take advantage of longitudinal data with multiple measures and multiple years.
  - Security Applications that ensure the data are secure and available only to appropriate personnel

# Wisconsin's Longitudinal Data System



- **Current key components of Wisconsin's LDS include:**
  - A data warehouse storing student and school data
  - A security application
    - Application Security Manager
  - Secured Reporting Tools (web-based)
    - MDAT, multi-dimensional analytic tool
    - SAFE, secure access file exchange
    - WISEdash, wisconsin's information system for education dashboard
  - Public Reporting
    - WINSS
    - School District Performance Reports
  - Professional Development

# Wisconsin's Longitudinal Data System



# MDAT: Overview



- MDAT is a flexible, web-based application tool that allows authorized users to...
  - Select variables and filters to answer questions of their choice.
  - Access specific data and variables based on their User Role.
  - Use charts and graphs to analyze school and student progress over time.

# MDAT Data



- **Data Sources:**
  - WKCE scores from WKCE results
  - Other data from WSAS and/or ISES
    - ✦ Count Date
    - ✦ Year End
    - ✦ Discipline Collection
- **Application uses four years of WKCE data**
  - Shows longitudinal cohort growth from one school year to the following school year.
  - Example: change from 2007-2008 school year (November test) to 2008-2009 school year (November test)

# LDS Application Security Manager: A Security Solution



- MDAT allows school district officials identified by their school board as having a legitimate educational need to drill down to confidential student-level information
- Federal and Wisconsin laws protect student privacy
  - Wisconsin Statute 118.125
  - Family Educational Rights and Privacy Act (FERPA—34 CFR Part 99)
  - Privacy and Wisconsin's Longitudinal Data System
- DPI's solution to safeguard confidential data: a security tool called Application Security Manager

# LDS Application Security Manager: Overview



- Application Security Manager is a tool of the LDS, one that manages...
  - Who can control access to secure applications
    - ✦ i.e., who else can use Application Security Manager
  - Who has access to secure applications
    - ✦ i.e., who can use MDAT or SAFE
  - What a user can see/do within an application (roles)
    - ✦ Which groups of student data the user can access
- For more information on all components of our security model, please visit [http://wise.dpi.wi.gov/wise\\_securehomeinfo](http://wise.dpi.wi.gov/wise_securehomeinfo)

# Looking Ahead



- The future of reporting in Wisconsin: Business Intelligence
  - A reporting system that will allow users to access dashboards, reports, and guided analysis tools on a variety of topics
  - Will provide secure (district access, requiring a log in) and public (eventually replacing WINSS) reports
  - For more information: [http://wise.dpi.wi.gov/wise\\_dashhome](http://wise.dpi.wi.gov/wise_dashhome)
- In the future, the LDS will include:
  - Course completion data
  - Postsecondary data
  - Growth reports
  - CTEERS (Career and Technical Education) data

# For help, more information...



- LDS Help
  - [Footprints Help Desk Tool](#)
- DPI LDS Website
  - <http://wise.dpi.wi.gov>
- To find out more information on our current grant visit this page:
  - [http://wise.dpi.wi.gov/wise\\_wildsgrant2](http://wise.dpi.wi.gov/wise_wildsgrant2)