



Minnesota Early Childhood Longitudinal Data System (ECLDS)

Data Guide

Approved by the ECLDS Governing Body

March 19, 2019

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Purpose and Overview

The purpose of this guide is to promote understanding of the integrated data contained in the Early Childhood Longitudinal Data System (ECLDS) by describing how data are to be used, accessed, kept secure, and to define important terms used in the system.

Important Note: *Content in this guide is similar to content presented in the Data Access & Management Policy guide for the Statewide Longitudinal Education Data System (SLEDS) due to the technical structures shared by these two projects. Although funded under different sources over different time periods and while containing different data, ECLDS, and SLEDS share IT resources. This requires a set of agreed upon standards to promote efficiency. Where content is shared with SLEDS, sections are indicated with “[Aligns with SLEDS].”*

The ECLDS integrates existing data on young children and families participating in publicly-funded programs from the Minnesota departments of Education, Health, Head Start, and Human Services. Data are reported publicly at an aggregated (grouped) level and individual children are not identified. ECLDS data is available to the public while protecting privacy. These data are integrated so that Minnesota can have a better understanding of children’s growth, achievement, and well-being in relation to their participation in a variety of educational and social programs over time. The ECLDS was built with federal Race to the Top Early Learning Challenge grant funds. More recent enhancements to the site were paid for by SLDS-IES grant dollars issued by the federal Department of Education.¹

The ECLDS is helpful to Minnesotans in a variety of ways. Research shows that the early years of life are extremely important and it is vital to know whether the programs that we invest in are effective, both individually and collectively.

P20W and Statewide Longitudinal Education Data System (SLEDS) Tools

The ECLDS is part of larger work related to integrating data to study a variety of outcomes for publicly-funded programs in Minnesota. This larger work is referred to as P20W, or systems that integrate data across the lifespan: “P” refers to early childhood and prekindergarten; “20” represents K-12 education and higher education; and “W” for wages and workforce. Minnesota’s first integrated data system was the Statewide Longitudinal Education Data System, or SLEDS. SLEDS allows for the matching of student data through completion of postsecondary education. SLEDS brings together data from education and workforce to:

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

¹ [Abstract](#): Engaging Communities Through Data: Minnesota’s P20W Linkages, Literacy, and Use (R372A150004)

Authority

State agencies are able to integrate existing data through allowable use articulated under the following authorities:

- 34 C.F.R. Chapter 303 for early intervention program for infants and toddlers with disabilities;
- FERPA, the Family Education Rights and Privacy Act, 20 U.S.C. 1232g;
- Minnesota Statutes (M.S.) 125B.07, requirement to maintain data on students;
- Minnesota Data Practices Act, Minnesota Statutes (M.S.) 13.3805 and 13.3806; and
- Minnesota Statutes (M.S.) 13.46, on welfare system data.

There are also additional federal authorities around the construction of longitudinal data systems that support this project.

Recommended Citation for Use

Users of ECLDS data products are encouraged to use the following citation:

[Chart Title], [Year] by [Geographic Level]. Minnesota Early Childhood Longitudinal Data System [Date Printed]. This citation format is provided to users who choose to download a PDF of a chart or graph created on the ECLDS.

For more information email ECLDS.Support@state.mn.us

Governance of the ECLDS

Decisions about the ECLDS are made through a two-part governance structure. The two bodies are comprised of individuals representing the state and local agencies contributing data to the ECLDS as well as from professional associations from education, health, and human services practice communities. The following is a brief description of how the governance process works.

ECLDS Governing Body

The purpose of the Governing Body is to articulate the specific parameters for the Minnesota ECLDS.

Specific duties include:

1. Approve requests for new data elements to be included in the system,
2. Approve data security protocols,
3. Appoint Research and Data Committee members,
4. Approve requests for accessing data,
5. Ensure data access within data privacy laws, and
6. Approve designs for analytics and portal access.

ECLDS Research and Data Committee

The Research and Data Committee is comprised of program experts, research experts, and data experts knowledgeable about each of the interagency data sets included in ECLDS. The ECLDS Research and Data Committee reports to the ECLDS Governing Body. Duties of the committee include:

1. Advise in the development of and recommend protocols for access to the data system adhering to state and federal laws;
2. Develop, review and approve proposals for research and/or evaluation questions;
3. Provide technical expertise and consultation on research methodologies;
4. Develop, refine, and test new analytics, reports and information features launched on the site;
5. Develop protocols for maximizing validity and reliability of ECLDS data; and
6. Provide technical expertise and consultation on data structure and data linkages for existing and new data.

Members serve three-year terms and decisions are made using consensus methods. A full description of the entire governance process, members, and its decision-making history is maintained in the ECLDS Governance Document, available upon request.

ECLDS Contact Information

The Minnesota Department of Education (MDE) has administrative oversight of the ECLDS.

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Using the ECLDS

Children's early environments, their families, and communities are complex. Even for children who participate in early care and education programs, their experiences can be widely divergent. The ECLDS has begun to integrate existing information about publicly-funded programs that support children and families. We are working towards inclusion of additional data sources in the ECLDS that will help to build a more comprehensive view of children's developmental experiences. When evaluating information from the ECLDS, it is important to acknowledge the limitations of the data available.

Considerations and Cautions

The early education and development environment in Minnesota is multi-faceted. Families can use many types of care for their infants and preschoolers and sometimes use more than one form of care simultaneously and over time.

Before the ECLDS was built, understanding of children's participation in and use of early care and development programs was limited to specific programs that were studied through research projects or time-intensive, small-scale studies. This left many gaps in our knowledge about prekindergarten experiences.

With the ECLDS we are starting to fill these gaps in knowledge by linking data on early care and development participation to kindergarten records and by linking data from these early care and development programs to one another at the child level. ***In spite of this, there will likely always be some gaps.*** In particular, the ECLDS does not contain data on children who:

- Participated in private-pay child care and preschool arrangements.
- Go on to attend private or parochial K-12 schools.
- Participated in programs for which data are not committed and integrated into the ECLDS (see [Sources](#), page 23).
- The ECLDS has limited information on children who:
 - Were not born in Minnesota.
 - Were born in Minnesota but leave.

Local Contexts

Trends over single year/single site situations

Trends continuing over multiple years and/or multiple sites may reflect broader issues and influences than single year or single site findings. As a result, users are encouraged to interpret results within a single site or single year with caution. For example, a federal grant beginning or ending that influences local services or participation might distort local trends.

Small Sample Size

When building charts and graphs on the ECLDS site, the number of selections used may create very small groupings at certain levels of geography. This is an important consideration when using results. While it is true that the smaller the population size the more useful the information may be locally for informing planning and program development, it may not be possible to release that information legally because it risks violating privacy. For example, the number of children in a racial or ethnic group may be reportable at the state level, but when examined by a lower level of geography with a smaller population, the counts will be too small to report. Users with local knowledge may be able to identify individual children if counts are too small.

Another important factor in small sample sizes is trends that are unique to that grouping may not be shared by other areas or the entire state. Small sample sizes may distort multi-year or population-wide trends, similar to trends over single-year/single-site situations above. Users are recommended to seek out multiple people and local experts (e.g. human and health services providers, educators, program directors in school-based programs, etc.) to assist in interpreting results for small sample sizes.

Know Local Context

Many early learning programs and interventions are undertaken at the local level. These local initiatives likely impact local results and can drive trends that are different from regional or state level trends. Whenever possible, users of ECLDS data should have an understanding of the local early childhood context in a given community when querying and using data for that area. For example, if a region has access to a local funder that has provided significant planning or implementation support, their results may be affected by this investment. Some areas may also experience shifts in trends due to changing industry or employment patterns. A future goal of the system is to add contact information for individual local jurisdictions.

Understanding and Talking about ECLDS Data

ECLDS Glossary

Through the construction of the ECLDS it was necessary to define important terminology used throughout the site. Some terms are specific to only one system or program. Others are shared across systems and programs and--in this instance--work groups and ECLDS governance came to agreement on these definitions. The following list will help ECLDS users understand terms when they encounter them on the site or in graphs or reports. While every effort was made to come to agreement on definitions, some definitions may vary by state agency and program.

- **3rd Grade Proficiency (MCAs):** Proficiency of students exhibited on the annual Minnesota Comprehensive Assessment (MCA) in Reading, Mathematics, and Science. Proficient results indicate that the student has met state standards.
- **Accredited:** A setting is considered “accredited” if it has earned accreditation through a nationally recognized accrediting body and that accreditation is current. Accreditation has a start and end date. A list of approved accreditations can be found on the [DHS Child Care website](#).

- **Capacity:** The number of children a care setting is legally allowed to serve at one time. Capacity is an estimate of the size (number of children served) of each setting. DHS licensing determines the legal capacity for a licensed setting.
- **CCAP:** Minnesota's Child Care Assistance Program (CCAP) provides financial assistance (subsidies) to help families who have low incomes and/or have recently received assistance through the Minnesota Family Investment Program (MFIP) to pay for child care. Child care costs can be subsidized so that parents may pursue employment or education leading to employment, and so their children are well cared for and prepared to enter school ready to learn. A family may select any licensed or legally non-licensed child care provider. A family and child remain eligible for assistance as long as they continue to meet program requirements. The length of eligibility periods vary. The program serves children 12 or younger or up to age 15 if the child has special needs. Most families pay a portion of their child care costs. In some counties there is a waitlist for child care assistance, for families who have not participated in MFIP in the past year.
- **Children:** Counts of children participating in public early care and education programs.
- **Child Count:** See E-12 Child Count below.
- **(ECSE) Child Outcomes Survey:** Survey administered by the Early Childhood Special Education program at MDE to understand the status of children at entry to and exit from ECSE. This survey meets federally required obligations through the Office of Special Education Programs.
- **Child Welfare:** Child protection involvement means the identified child was in a family where a child protection response was completed after an allegation of child abuse (child maltreatment) by parents/caretakers. The situation is determined to meet statutory guidelines for a child protection response and a family assessment or a family investigation was conducted. Child Protection intervenes with families, according to Minnesota State Statute and the [Minnesota Child Maltreatment Screening Guidelines](#), to address family functioning issues and ensure that child victims of maltreatment are safe.
- **CLASS:** The Classroom Assessment Scoring System (CLASS) is an observational instrument designed to assess the quality of classroom interactions. The CLASS is scored as three dimension scores, each dimension receiving a score ranging from 1-7. More information can be found on the [Teachstone website](#).
- **Counts:** Number of children.
- **County:** County jurisdiction within the state of Minnesota. Often refers to county of residence of family or child. May refer to county of school of enrollment (see School County).
- **CTSTR:** An abbreviation for Counts Too Small to Report used to prevent the disclosure of potentially identifying information when dealing with small cell sizes on charts, graphs, or tables. CTSTR suppression rules are customized for each chart in the ECLDS. A full list of these rules is available on pages 19-20.
- **Develop:** A multipurpose data system operated by the Minnesota Department of Human Services (DHS). It contains data about the average education level of teaching staff in certain early learning organizations and also data about quality ratings issued by Parent Aware (Minnesota's Quality Rating & Improvement System). More information can be found on the [Develop website](#).
- **DHS:** Minnesota Department of Human Services (DHS) is the state department responsible for human services programs in Minnesota.

- **District:** School district in state of Minnesota.
- **Disability Type:** Disability type as identified in Minnesota's K-12 public school system. For kindergarten cohort analyses in the ECLDS, disability type originates in MDE data.
- **Dosage:** Related to program participation: Intensity x Duration = Dosage.
- **Duplicated:** Refers to counts across programs in which a child participating in multiple programs is counted in each of those programs for reporting purposes.
- **Duration:** Period of time over which services were received or a child or family participated according to program definitions (e.g. end date minus start date.) Intensity x Duration = Dosage.
- **Early Childhood Screening (ECS):** A free program required for all children prior to kindergarten. Required screening components include: developmental screening (cognitive, fine and gross motor skills, speech and language, and social-emotional development); vision; hearing; immunization review; height and weight; health care coverage; identification of risk factors which may influence learning; a summary interview with the parent or guardian and referrals and follow-up for assessment; and diagnosis and treatment when potential needs are identified.
- **E-12 Child Count:** The child count report is collected each year and represents a count of Minnesota children and youth, ages birth through 21, who are eligible for and receiving special education and related services. (ECSE data is included in this as well.)
- **Early Care and Education (ECE):** Publicly-funded program or service for young children and their families.
- **Early Learning Scholarships:** State funding that increases access to high-quality early childhood programs for three- and four-year-old children with the highest needs, in order to improve school readiness for all young children.
- **ECFE:** Early Childhood Family Education (ECFE) works to strengthen families, and its goal is to enhance the ability of all parents and other family members to provide the best possible environment for their child's learning and growth. The family provides a child's first and most significant learning environment and parents are a child's first and most important teachers.
- **ECLDS:** The Early Childhood Longitudinal Data System (ECLDS) is an information tool that links existing data to create a broader picture of children than is possible using just one data source.
- **ECSE:** Early Childhood Special Education (ECSE), also referred to as Part B or Part C, as part of the Individuals with Disabilities Education Act (IDEA) is a program that provides supports and services to infants, toddlers, and preschool children with disabilities and their families.
- **EE Student:** The Early Education Student (EE Student) system is a mechanism to identify children participating in Early Childhood Family Education, Early Head Start, Head Start, and School Readiness to better understand experiences prior to kindergarten across multiple public funding streams. Children entered into this system are assigned a unique identification number through MDE. Data submissions occur annually from public school districts and Head Start agencies.
- **EHDI:** Early Hearing Detection and Intervention (EHDI) program. Private data on Minnesota newborns, infants, and children with a hearing loss created, collected, received, or maintained by MDH for purposes of the EHDI program.
- **English Learner:** Child or student learning English, and for whom English is not their first language. This designation begins at kindergarten in K-12 data systems.

- **Factors:** Groupings of various elements from the data sources that could potentially influence or contribute to an educational outcome or could be associated to a child protection occurrence. Factors noted by research that, prior to grade three, are associated with negative outcomes.
 - **Instability:**
 - **Homeless:** Students flagged as homeless using the [McKinney-Vento definition](#) anytime in kindergarten through grade 3.
 - **Education Instability:** Includes children who switch schools more than once.
 - **Language:**
 - **English Learner:** A classification for a student whose home language is other than English or American Sign Language and who has been assessed as needing additional English language instruction anytime in kindergarten through grade 3.
 - **Home Language:** A 3rd grade cohort utilizes MDE home language types as defined in the MDE K-12 data set. ECLDS provides the home language types containing 10 or more children.
 - **Low Income:**
 - **MFIP/DWP:** Minnesota Family Investment Program (MFIP), Minnesota’s Temporary Assistance to Needy Families (TANF) program, helps families and pregnant women who have low income go to work and move toward financial stability. Counts include children receiving MFIP anytime.
 - **SNAP:** Supplemental Nutrition Assistance Program (SNAP), formerly known as Food Stamps, helps Minnesotans with low income get the food they need for nutritious and well-balanced meals. Counts include children receiving SNAP anytime.
 - **Free/Reduced Priced Lunch:** Food program offered through public schools for low-income children. Family income must be at 100% of Federal Poverty Guidelines (FPG) or lower for Free Lunch and between 101% and 185% FPG for Reduced Price Lunch. Students may have participated in the program anytime in kindergarten through 3rd grade.
 - **CCAP:** The Child Care Assistance Program (CCAP) helps make quality child care affordable by providing financial assistance to help families with low incomes pay for child care.
 - **Scholarships:** Early learning scholarships are awarded to eligible three- and four-year-old children to support access to quality early education and care programs for Minnesota’s low income children by bridging funding gaps and decreasing barriers. Scholarships may be used in eligible Parent Aware-rated early learning programs.
 - **Parent Characteristics:**
 - **Maternal Education is Less than High School:** A mother having less than a high school education at the time of the child’s birth. Data is obtained from the child’s birth record.
 - **Teen Mom:** Includes all mothers under the age of 20 at the time of the child’s birth. Data is obtained from the child’s birth record.

- **Absence of Father on Birth Record:** The name for the father on the child's birth record was either missing or listed as Unknown. A woman can be listed in the father section.
 - **Late or No PNC:** A birth that occurs to mothers who reported receiving prenatal care only in the third trimester of their pregnancy or reported receiving no prenatal care. Data is obtained from the child's birth record.
- **Special Health Needs:**
 - **ECSE:** Early Childhood Special Education (ECSE) provides supports and services to infants, toddlers, and preschool children with disabilities and their families.
 - **K-3 Special Education:** Kindergarten through Grade 3 Special Education.
 - **Very Low Birth Weight:** An infant who is born weighing less than 1,500g. Data is obtained from the child's birth record.
 - **Deaf/Hard of Hearing:** A child with some degree of hearing loss ranging from mild to profound. Data obtained from the MDH Early Hearing Detection Intervention (EHDI) data.
 - **Parental Refusal of Special Education Services:** Students were evaluated and need special education services but parents declined the services.
- **Family Home Visiting:** Family home visiting (FHV) is a voluntary, home-based service ideally delivered prenatally through the early years of a child's life. It provides social, emotional, health-related, and parenting support and information to families, and links them to appropriate resources.
- **(ECSE) Family Outcomes Survey:** Survey administered by the Early Childhood Special Education program to understand child outcomes in the family context. The goals of the program are that families know their rights, they can effectively communicate their children's needs, and they can help their child develop and learn.
- **Fiscal School Year, State Fiscal Year, or State School Year:** Time period that runs from July 1 of a given year through June 30 of the following year. The exact timeframe may vary by program.
- **Food Assistance:** Program providing supplemental food and/or nutrition. In ECLDS charts, food assistance pertains to SNAP, the Supplemental Nutrition Program, or the Free and Reduced Price Lunch program.
- **Free Lunch:** Food program offered through public schools for low-income children. Family income must be at 130% of Federal Poverty Guidelines (FPG) or lower. This program begins in pre-K for ECSE students.
- **Gender:** Sex: male, female. For kindergarten cohort analytics, gender comes from K-12 enrollment data source (MDE).
- **Head Start:** Head Start supports the comprehensive development of children from birth to age 5 to promote school readiness for young children from low-income families. Head Start services include early learning, health, and family well-being.
- **High Quality:** The Race to the Top grant defines "high quality" as programs with 3 or 4 stars in Parent Aware (Minnesota's Quality Rating and Improvement System).

- **Highest Education Level:** For teachers, the average Career Lattice level of the teachers who lead groups or classrooms within a setting. The Minnesota Center for Professional Development has defined a Career Lattice that puts professional development for early educators on a scale from 0 to 12. Using that scale, it is possible to mathematically average Career Lattice levels. Additional information about the Career Lattice can be found on the [Achieve website](#).
- **Home Language:** Home language types as defined in the MDE K-12 enrollment record. ECLDS provides the home language types containing 10 or more children.
- **IDEA:** The Individuals with Disabilities Education Act (IDEA) is a federal law that ensures services for children with disabilities throughout the nation.
- **Intensity:** Amount of service received over a defined period of time. Definition of “amount” may be different for different programs (hours, MTSS, dollars, etc.). Intensity x Duration = Dosage.
- **K-12 Assessment:** General term referring to any number of a variety of assessments of learning in the public school system in Minnesota.
- **K-12 Enrollment:** Data source containing information on students enrolled in public education programming under MDE oversight.
- **Kindergarten Cohort:** A group of children who participated in public kindergarten in a given school year.
- **Licensed Child Care Center:** Licensed child care centers care for infants, toddlers, preschoolers, and school-age children in a care center, community centers, or place of worship. State law regulates the number of children who may attend based on the number of staff working at the center. Children are typically cared for in groups divided by age.
- **Licensed Family Child Care:** Licensed family child care providers may care for infants, toddlers, preschoolers, and school-age children in their homes. State law limits the number of children a care provider may look after.
- **Low Birth Weight:** An infant who is born weighing less than 2,500g. Data comes from the child’s birth record.
- **MARSS:** Minnesota’s Automated Reporting Student System (MARSS) includes a unique number for each student, assigned to student records in Minnesota’s education system.
- **MAXIS:** An automated public assistance computer system used by county and local agency staff to determine public assistance program eligibility and benefit levels and make payments throughout the state of Minnesota. The MAXIS data system is the source of information on the Minnesota Family Investment Program (MFIP), Diversionary Work Program (DWP), and Supplemental Nutrition and Assistance Program (SNAP).
- **MCCC:** The Minnesota Common Course Catalogue (MCCC) is a course classification and data collection system intended to provide uniform information about courses that are taught in Minnesota schools.
- **MDE:** The Minnesota Department of Education (MDE) is the state department responsible for education in Minnesota.
- **MDH:** The Minnesota Department of Health is the state department responsible for health programs in Minnesota.

- **MEC²:** Minnesota Electronic Child Care System (MEC²) is a web-based system used by county and local agency staff to determine Child Care Assistance Program (CCAP) eligibility and make payments to child care providers. The MEC² data system is the source of information on CCAP.
- **MFIP/DWP:** The Minnesota Family Investment Program (MFIP) and Diversionary Work Program (DWP) provide income assistance to help families with low incomes move to financial stability through work. MFIP is Minnesota’s Temporary Assistance to Needy Families (TANF) program. The DWP is a short-term economic and employment assistance program for low-income families and pregnant women. The goal is to help parents quickly find work and avoid going onto the MFIP.
- **Minnesota District Preschool:** Districts provide preschool services in a number of formats for children ages three to five years old. School Readiness is one major funding source for these services.
- **MN.IT:** Minnesota IT Services (MN.IT) is the state department responsible for information technology services to state agencies in Minnesota.
- **No ECE Data Available:** Data are not available for a specific category or attribute of a chart, graph, or report for the early care and education experiences of a group of children. This may be due to the fact that a data source is not committed to the ECLDS or the data do not exist.
- **Outcomes:** Status of children along a variety of measures over time. Can vary by data source.
- **Parent Aware:** Parent Aware, Minnesota’s Quality Rating and Improvement System, offers tools and resources to help families find quality child care and early education, improve child care program practices, and prepare children for school and life. Parent Aware is administered by the Minnesota Department of Human Services (DHS).
- **Participation:** Child meets program-specific requirements to be considered engaged or participating in the target public early care and education program.
- **Percentage:** Number of children in relation to a denominator. Some denominators will vary and some will be universal.
- **Premature:** An infant who is born before 37 weeks gestational age as calculated from the imputed (estimated) gestational age based on mother’s last menstrual period from the child’s birth record.
- **Program:** The programmatic funding stream or “umbrella” program under which a service is administered and paid—typically a public funding source with eligibility criteria—targeted to young children.
- **Publicly-funded:** Program or service funded all, or in part, by tax dollars.
- **Public Schools:** Schools in Minnesota that are funded with public dollars. This includes charter schools.
- **Quality:** The extent to which the setting has demonstrated use of kindergarten-readiness best practices, as defined by Parent Aware (Minnesota’s Quality Rating and Improvement System).
- **Quality Rating:** Designation given to programs through Parent Aware. Programs that participate in Parent Aware submit evidence of their use of kindergarten-readiness best practices. Evidence is reviewed and programs earn a Star Rating of One, Two, Three, or Four Stars. For more information, visit the [Parent Aware website](#).

- **Race/Ethnicity:** Race or ethnic identification present in a given data source.
- **Reduced Price Lunch:** Food program offered through public schools for moderately low-income children. Family income must be between 131% and 185% Federal Poverty Guidelines (FPG). Eligibility can begin before kindergarten.
- **Resiliency Factors:** Protective factors noted by research that, prior to grade 3, are associated with positive outcomes for children with high needs.
- **School-based Pre-K:** See Minnesota District Preschool.
- **School County:** County of the location of public school of enrollment.
- **School Year:** Period of time that covers July 1 of one year through June 30 of the following year.
- **Setting or Site:** Location (physical address) where early learning is provided (or smaller unit when multiple programs operate at one location).
- **Small cell size:** Refers to a very small count of children in a given table or graph. Small cell sizes are usually suppressed in some way to prevent the identity of an individual to be discernible. See rules on Counts Too Small to Report (CTSTR) on pages 19-20.
- **SNAP:** Supplemental Nutrition Assistance Program (SNAP) formerly known as Food Stamps. Helps Minnesotans with low incomes get the food they need for nutritious and well-balanced meals. The program provides financial assistance to purchase food as a supplement to a household food budget for families with incomes up to 165% of Federal Poverty Guidelines (FPG).
- **Staff:** Individuals working in programs to provide early care and education to children.
- **WIC:** Women, Infants and Children (WIC) provides federal grants to states for supplemental foods, health care referrals, and nutrition education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children who are found to be at nutritional risk.

ECLDS Data Sources (*as of March 2019*)

The following information provides details on which data sources are included in the ECLDS and over which time periods. For the most up-to-date view of data sources, see the [data source matrix](#) on the ECLDS website.

Birth Records

Description: Birth certificate data.

Data System: Minnesota Center for Health Statistics (MCHS) maintains a research file of birth records for all births occurring in Minnesota as well as births occurring out-of-state to Minnesota residents. Computerized records are available from 1980 to present and paper records are available back to 1900. The birth record includes information on the mother and father (e.g. age, race, and education), medical information on the mother prenatally and at delivery (e.g. risk factors, prenatal care usage, characteristics of labor), and medical description of the infant (e.g. gestational age, birth weight, congenital anomalies). In March of 2011, the birth record went through a significant overhaul including expanding race categories, changing education, and adding mother's height and weight pre-pregnancy and at delivery.

Previous year's birth data are available about 9 months after the beginning of the next year (e.g. 2013 birth data was ready in September 2014).

Provided By: MDH

Beginning Year: 1999

Information: Updated annually.

Child Care Assistance Program (CCAP)

Description: Program providing financial assistance (subsidies) to help families who have low incomes and/or have recently received assistance through the Minnesota Family Investment Program (MFIP) to pay for child care.

Data System: MEC²

Provided By: DHS

Beginning Year: 2009

Information: Daily information is aggregated at the monthly level and submitted to ECLDS semi-annually.

Child Outcomes

Description: The ECSE Child Outcomes data source collects survey data from the child care professionals who serve children with special needs. Data is collected at the starting and ending periods of the child's involvement in the ECSE program where they enrolled.

Data System: Collected throughout the ECSE Outcomes portal on the MDE website.

Provided By: MDE

Beginning Year: 2011

Information: Updated annually.

Child Welfare

Description: Child Welfare (CW) denotes the continuum of intervention with children and families due to concerns of child maltreatment; also commonly referred to as Child Protection. This includes service provision to children and families in which a child or children are alleged victims of child maltreatment as well as children who have been placed in out-of-home care. CW provides case management services to families to address family functioning issues and ensures that determined child victims of maltreatment are safe. These services may include out-of-home-placement when placement is necessary to ensure safety. For children who cannot return safely to their parent/caretaker, CW ensures that these children find an alternative permanency family, through adoption or a Transfer of Permanent Legal and Physical Custody (TPLPC) to a relative.

Data System: SSIS

Provided By: DHS

Beginning Year: 2013

Information: Updated twice annually.

Develop – Parent Aware

Description: A multipurpose data system that contains data about the average education level of teaching staff in certain early learning organizations, and also data about Quality Ratings issued by Parent Aware.

Data System: Develop

Provided By: DHS

Beginning Year: 2012

Information: Updated annually.

E-12 Child Count

Description: Special Education children are reported to the federal government once each year. MARSS data changes during the school year as children go on and off special education services after the Dec. 2nd reporting date. The Child Count accounts for all students officially reported to the federal government as participating.

Data System: MARSS

Provided By: MDE

Beginning Year: 2005

Information: Updated annually.

Early Childhood Screening

Description: Early Childhood Screening is offered by school districts to children aged three to the start of kindergarten. It is used to identify potential health or developmental problems in children who may need a health, mental health, or educational evaluation. Screening supports children's readiness for kindergarten and promotes healthy development by providing referrals to families. Screening links families to Head Start, ECFE, prekindergarten programs, Early Learning Scholarships, home visiting programs, WIC, and other resources.

Data System: MARSS

Provided By: MDE

Beginning Year: Yet to be Determined, in planning.

Information: Data loaded into ECLDS annually.

Early Education

Description: Early Education records information on children and families registering for classes set to meet six or more times during the school year for either ECFE and/or School Readiness. This information allows us to understand more about program participation prior to the kindergarten year.

Data System: EE Student

Provided By: MDE

Beginning Year: 2014

Information: Updated throughout the year, summarized annually.

Early Hearing Detection and Intervention

Description: Early Hearing Detection and Intervention (EHDI) works to improve access to and quality of services for children who are deaf or hard of hearing. The EHDI program works with birth hospitals and midwives to make sure that all newborns have access to hearing screening. It also helps families of children who are deaf or hard of hearing connect with educational, social, and community resources.

Data System: MEDSS

Provided By: MDH

Beginning Year: 2007

Information: Data loaded into ECLDS annually.

Early Learning Scholarship

Description: The Early Learning Scholarship program supports access to high-quality early learning programs by bridging funding gaps and decreasing barriers for young children with the highest needs.

Data System: ELSA

Provided By: MDE

Beginning Year: 2016

Information: Updated every six months, or twice annually.

Family Home Visiting

Description: Family home visiting (FHV) is a voluntary, home-based service for pregnant and parenting families. FHV provides social, emotional, health-related and parenting support and information to families, and links them to appropriate resources. Depending on the goals identified by a family and based on developmental and risk assessments, a family may work with a home visitor from the prenatal period through age three; some FHV programs extend to age five. FHV in Minnesota is provided by local public agencies, non-profit agencies, and tribal governments. Data are only available from Saint Paul-Ramsey County Public Health (SPRCPH) at this time.

Data System: SPRCPH uses an electronic health record for data collection and visit documentation.

Provided By: Saint Paul-Ramsey County Public Health

Beginning Year: 2019

Information: Updated semi-annually.

Family Outcomes Survey

Description: The ECSE Family Outcomes data source collects survey data from families who have a child with special needs, were served in a program at a district, and the child has now turned three. The district gives the family a survey to complete and return to MDE.

Data System: Survey responses from families are either emailed or postal-mailed back to MDE. Results are entered into a centralized database.

Provided By: MDE

Beginning Year: 2011

Information: Updated annually.

Head Start/Early Head Start

Description: Head Start/Early Head Start supports the comprehensive development of children from birth to age 5 to promote school readiness for young children from low-income families. Head Start services include early learning, health, and family well-being.

Data System: Locally determined

Provided By: Individual Head Start agencies

Beginning Year: Yet to be Determined, in planning.

Information: Data loaded into ECLDS annually.

K-12 Assessment

Description: Standardized assessment data from students attending publicly-funded schools. Includes ACCESS for English Learners, MCA, and spans grades kindergarten through grade 12. Includes selected pre-K information.

Data System: Data source includes multiple tables

Provided By: MDE

Beginning Year: 2006

Information: Updated annually.

K-12 Enrollment

Description: Enrollment records of students attending publicly-funded schools, including charter schools, in grades kindergarten through 12th grade. Includes selected pre-K information.

Data System: MARSS

Provided By: MDE

Beginning Year: 2005

Information: Updated annually.

MDE-ORG

Description: MDE-Org is a data source that tracks the organizations used to educate children in Minnesota and accept payments from MDE. This collection tracks changes over time for some data versus the old OrgUnit which created yearly records for each organization and school. It is the Client Relationship Management Tool for MDE to track its districts, schools, and other related organizations.

Data System: ORG

Provided By: MDE

Beginning Year: 2005

Information: Updated annually.

MFIP/DWP

Description: Minnesota Family Investment Program/Diversionsary Work Program data, the state's income assistance program for families.

Data System: MAXIS

Provided By: DHS

Beginning Year: 2002

Information: Daily information is aggregated at the monthly level and submitted to ECLDS.

Post-secondary Completer

Description: The Degrees and Other Awards Conferred Database contains data and other formal awards (diplomas or certificates) conferred to students upon successful completion of a program of study from Minnesota private and public postsecondary institutions participating in state student financial aid programs.

Data System: Degrees and Other Awards Conferred Database

Provided By: OHE

Beginning Year: 2007

Information: Records updated during academic year using the twelve-month period that begins July 1 through June 30.

SNAP

Description: Data on families receiving Supplemental Nutrition Assistance Program benefits.

Data System: MAXIS

Provided By: DHS

Beginning Year: 2002

Information: Daily information is aggregated at the monthly level and submitted to ECLDS.

STAR

Description: Staff Automated Reporting (STAR) is a web-based system used by school districts to report employment and assignment information to MDE. This system is also used by districts to access the licensure/assignment discrepancy report and to complete "highly qualified" reporting.

Data System: STAR

Provided By: MDE

Beginning Year: 2010

Information: Updated annually.

Definitions

The following definitions are used commonly throughout the ECLDS site and its documentation. Definitions that are shared with SLEDS are notated with "[Aligns with SLEDS]". Shared definitions on some terminology are an efficiency intended to support technical staff as the projects share infrastructure.

Analytics: The charts, graphs, and reports that come from data in the ECLDS.

Contributing state agencies: Refers to the agencies contributing data to the ECLDS. [Similar to "Partner Data Providers" in SLEDS.]

Counts Too Small to Report (CTSTR) Rules (see also Suppression Rules): The following rules are employed on the ECLDS site to prevent the disclosure of identity on interactive charts. Rules are applied to

specific chart groups displayed on the ECLDS site. Application of specific rules in relation to specific charts available upon request.

- **CTS1.** When counts range from 0-9.
- **CTS2.** Do not show CTSTR in percent area.
- **CTS3.** Small counts okay to show and not use CTSTR.
- **CTS4.** If CTSTR appears in a row, the row total must change to CTSTR.
- **CTS5.** If one cell in a chart is CTSTR, mask the next smallest cell also as CTSTR to avoid calculating the number (pie charts see CTS8).
- **CTS6.** If everything in the chart is under 10, do not use CTSTR, use message: “The selected criteria results in counts too small to report.”
- **CTS7.** If counts are too large to report (total percent more than 95%), use CTLTR and display the percent as “>95%.” [This rule is not applied in the current release and is withheld until further notice.]
- **CTS8.** Pie chart: If one section is CTSTR, apply CTSTR to the next smallest section and display message CTSTR for each section keeping sections visible. Hover over pie slices displays label only and no counts or percentages. Table sections will show CTSTR.
- **CTS9.** If chart results in no data at all, display “no data available.”
- **CTS10.** If one section is CTSTR include the Unknown category (age/education) as CTSTR and display message CTSTR for each section keeping sections visible. Hover over pie slices displays label only and no counts or percentages. Table sections will show CTSTR.

Data: Categories of ECLDS data are listed here from most, to least sensitive.

- **Individual-Level Data:** Data on unique individuals. [Aligns with SLEDS.]
- **Identifiable Linked data:** Original data from the contributing state agencies or partner data providers which are linked using personally identifiable information. [Aligns with SLEDS.]
- **Personally Identifiable Information (PII):** Data that identifies the individual. For the purpose of education records, PII is defined by federal law as information that includes, but is not limited to a student’s name; the name of the student’s parent or other family members; the address of the student or student’s family; a personal identifier, such as the student’s Social Security Number, student number, or biometric record; other indirect identifiers, such as the student’s date of birth, place of birth, and mother’s maiden name; other information that, alone or in combination, is linked or linkable to a specific student that would allow a reasonable person in the community, who does not have personal knowledge of the relevant circumstances, to identify the student with reasonable certainty; and information requested by a person who the educational agency or institution reasonably believes knows the identity of the student to whom the education record relates. [Aligns with SLEDS.]
- **De-identified Data:** Individual-level data that have enough personally identifiable information removed or obscured so that the remaining information does not identify an individual and there is no reasonable basis to believe that the information can be used to identify the individual. [Aligns with SLEDS.]

- **Anonymized Data:** Anonymized data are individual-level data that have been de-identified and cannot be linked back to the original record system or other data. [Aligns with SLEDS.]
- **Summary Data:** Statistical records and reports aggregated from data on individuals in a way that individuals are not identified and from which neither their identities nor any other characteristic that could uniquely identify an individual is ascertainable. [Aligns with SLEDS.]

Data Mart: Prepackaged data sets and reports that are more efficient than working directly with the entire warehouse for running analytics (charts and graphs). [Aligns with SLEDS.]

Data Sharing Agreement: Statement signed by the contributing state agencies seeking to share data that outlines the purposes of the data sharing, legal restrictions, and violations. [Aligns with SLEDS.]

Data Usage Agreement: (Also referred to as Data Sharing Agreement.) Statement outlining the appropriate uses of the data, which requires each user with access to the ECLDS data to accept the conditions of use before being granted access. [Aligns with SLEDS.]

Directory Information: For the purposes of education records, federal law defines directory information as information contained in an education record of a student that would not generally be considered harmful or an invasion of privacy if disclosed. Directory information includes, but is not limited to, the student's name; address; telephone listing; electronic mail address; photograph; date and place of birth; major field of study; grade level; enrollment status (e.g. undergraduate or graduate, full-time or part-time); dates of attendance; participation in officially recognized activities and sports; weight and height of members of athletic teams; degrees; honors and awards received; and the most recent educational agency or institution attended. [Aligns with SLEDS.]

Education Records: Records that are (1) directly related to a student and (2) maintained by an educational agency or institution or by a party acting for the agency or institution. [Aligns with SLEDS.]

MARSS number: Minnesota Automated Reporting Student System, the unique K-12 identification number assigned by MDE to each K-12 student. [Aligns with SLEDS.]

MN.IT Services: The state agency responsible for setting information technology (IT) direction, standards and policies for the state of Minnesota, managing oversight and compliance of those standards, and providing IT services to all Minnesota state agencies. [Aligns with SLEDS.]

P20W: Refers to the overarching IT system of linked data serving Minnesota's three data initiatives including Early Childhood Longitudinal Data System (ECLDS), Statewide Longitudinal Education Data System (SLEDS), and Workforce Data Quality Initiative (WDQI). [Aligns with SLEDS.]

SLEDS: Statewide Longitudinal Education Data System, the data system specifically using linked data from P20W about prekindergarten (limited to Kindergarten Entry Profile, or KEP) to K-12 education to higher education to workforce for informing education and workforce policy. [Aligns with SLEDS.]

Source System ID: Refers to the ID used on individual person records by the data provider, contributing state agency, or state agency when submitting data to P20 systems.

Suppression Rules: Analytic techniques used for appropriately protecting private or confidential data. Methods involve removing data (e.g. from a cell or row in a table) to prevent the identification of individuals in small groups or those with unique characteristics. This method may result in very little data being produced for small populations, and it usually requires additional suppression of non-sensitive data to ensure adequate protection of personally identifiable information. Suppression rules may apply to all summary reports or may apply to specific reports based on the combination of data elements included. The ECLDS and SLEDS Research and Data Advisory Committees have agreed that suppression of cell sizes less than 10 individuals be used for public reporting. Best practices for data suppression for the purposes of appropriately protecting private or confidential data were issues by the U.S. Department of Education in 2011 (NCES 2011-603) and are referred to in reporting work. [Aligns with SLEDS due to shared analytic tools and rules.]

Maintaining Privacy

There are multiple methods to ensuring the privacy of individual-level data in ECLDS.

MN.IT Services uses various procedures and security measures to ensure the confidentiality of an individual's records collected and maintained by ECLDS, including but not limited to:

- Assigning a unique ECLDS identification number to each individual;
- Managing levels of access that limit who may have access to data and for what purposes;
- Masking data to ensure that the confidentiality of personally identifiable information (PII) from individual records is maintained in all public reporting;
- Developing and maintaining a list of personnel who have access to personally identifiable child and student information through authentication and internal links;
- Implementing and maintaining appropriate administrative, technical, and physical safeguards that prevent any collection, use or disclosure of, or access to electronically maintained or transmitted individual records in SLEDS; and
- Ensuring that all staff with access to ECLDS data understand the sensitivity and classification of the data and follow all requirements to protect the data from unwanted disclosure. [Aligns with SLEDS.]

Contributing state agencies use various procedures and security measures to ensure the confidentiality of an individual's records collected and maintained by ECLDS including but not limited to:

- Training of any state agency and affiliated MN.IT personnel collecting and/or using personally identifiable information about the proper use of that information in accordance with this policy, Minnesota Government Data Practices Act (MGDPA), Family Educational Rights and Protection Act (FERPA), and all applicable state and federal laws and policies;
- Enforcing a code of conduct for state employees; and
- Overseeing and managing all ECLDS-related work, policies and procedures to ensure compliance with data security standards, best practices, and federal and state laws. [Aligns with SLEDS.]

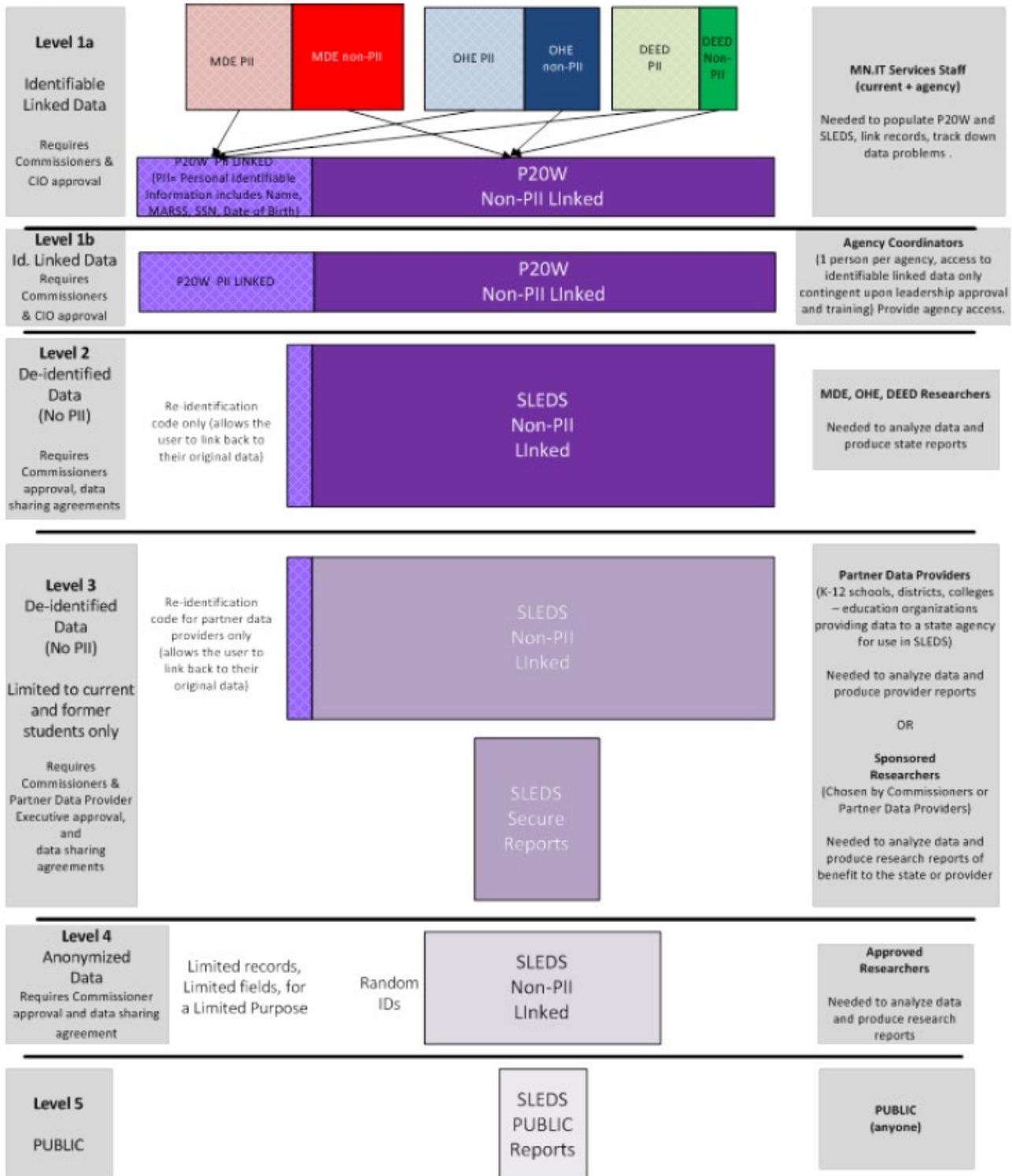
Levels of Access

ECLDS data must be consistently protected in a manner commensurate with its sensitivity and critical nature. The following levels of access describe the data available and have been developed to protect the

privacy of individuals. A complete list of individuals with access to ECLDS data by level will be maintained by MN.IT services and the contributing state agencies. Access is approved by appropriate leadership as defined for each access level. For each access level, approved staff must fulfill training requirements established by MN.IT and the ECLDS Governing Body. The access levels listed below are in the order of the most restrictive to the least restrictive. Note that some access levels do not pertain to the ECLDS: Levels 1B, 3, and 4.

- **Level 1A** – allows specific MN.IT staff, including those housed at contributing state agencies, to read and write to all records and fields in the P20W database. This access level is only permitted to a minimal number of authorized staff members who operate or manage the ECLDS data system or are responsible for maintaining the accuracy and security of the data in the performance of their duties. Approval of access is granted by the appropriate contributing state agency commissioner or his/her designee and the MDE Chief Information Officer upon signing the appropriate data sharing agreements. [Aligns with SLEDS.]
- **Level 1B** – [DOES NOT APPLY TO THE ECLDS] allows one agency staff person (non MN.IT) access to all records and fields within the identifiable linked data in order to manage the P20W data system, manage reporting from the data system or maintain the accuracy and security of the data in the performance of their duties. The agency agency’s commissioner or designee approves access for the designated individual and signs the appropriate data sharing agreements before access is granted. Approval by the MDE Chief Information Officer is also required. [Aligns with SLEDS.]
- **Level 2** – allows a minimal number of authorized contributing state agency staff to access all records and fields of the ECLDS de-identified data. The requesting agency’s commissioner or designee approves access for designated individuals and signs the appropriate data sharing agreements before access is granted. [Aligns with SLEDS.]
- **Level 3** – [DOES NOT APPLY TO THE ECLDS] allows access for designated staff to de-identified data and secured reports consistent with best practices, state and federal law. For approved research projects (partner data provider and sponsored researchers) access to data will be provided by data marts. Approval of access is granted by the contributing state agencies upon recommendation of the governance research group. Staff from partner data providers must also have approval from their organization’s executive and sign the appropriate data sharing agreements before access is granted. Suppression rules must be utilized by the researcher in production of public reports. [Aligns with SLEDS.]
- **Level 4** – [DOES NOT APPLY TO THE ECLDS] allows for access to anonymized data in data marts to produce public reports. Suppression rules will be utilized with the use of data marts so that information is not revealed about individuals in a particular group. Approval of access is granted by the contributing state agencies upon recommendation of the governance research group. Users must be approved by the contributing state agencies and sign a data sharing agreement or data usage agreement before access is granted. Suppression rules must also be utilized by the researcher in production of summary level reports. [Aligns with SLEDS.]
- **Level 5** – allows access to the general public for viewing standard summary ECLDS data. Requests for new public reports move through the ECLDS governance process. [Aligns with SLEDS.]

Figure 1. Levels of Access Diagram



Record of Access

Data security standards and requirements of state and federal law mandate that contributing state agencies maintain a record of each request to and each disclosure of personally identifiable information from ECLDS. Such records must be maintained as long as the data are maintained, include the parties who have requested or received the information, and include the legitimate interests of the parties in receiving the information. [Aligns with SLEDS.]

Unauthorized Access

A state agency that collects, creates, receives, maintains, or disseminates private or confidential data on individuals must disclose any breach of the security of the data following discovery or notification of the breach.

A “Breach of the Security of the Data” means unauthorized acquisition of data maintained by ECLDS. Good faith acquisition of government data by an employee, contractor, or agent of a state agency for the purposes of the state agency is not a Break of the Security of the Data, if the government data are not provided to an unauthorized person.

“Unauthorized acquisition” means that a person has obtained data without the informed consent of the individuals who are subjects of the data or statutory authority and with the intent to use the data for nongovernmental purposes.

In the event of a “Breach of the Security of the Data” or possible “Breach of the Security of the Data” involving individual records or aggregate and distributional reporting of individual records disclosed for purposes of ECLDS, contributing state agencies will notify MN.IT Services as described in the standard (Enterprise Information Security Incident Management Standard 2010-01); notify the duly authorized representative of state agencies; notify the ECLDS Governing Body; and notify any individual whose private or confidential information was, or is reasonably believed to have been, acquired by an unauthorized individual as required by Minn. Stat. §13.055. The contributing state agencies and MN.IT will work together to monitor and respond to privacy and security incidents that do not rise to the level of a breach of security, in order to improve systems and prevent breaches. [Aligns with SLEDS.]

Rights of Subjects of Data to Inspect and Review Data and Records

In compliance with state law, an individual who is the subject of stored private or public data on individuals may request to be shown the data without any charge and, if desired, be informed of the content and meaning of that data. In compliance with federal law, parents and eligible students have the rights to inspect and review education records. All records within ECLDS are managed by MDE, MDH, Head Start grantee agencies, and DHS and as such those agencies are jointly responsible for developing a policy for responding to all requests for access to data and records in accordance with federal and state law. [Aligns with SLEDS.]

Requesting Access to ECLDS Data

Current Data Share Agreements between the state agencies prohibit researcher or others access or access to individual student level records at this time.

References and Resources

Minnesota Departments of Education, Health, and Human Services. (2012). Minnesota Race to the Top Early Learning Data Linkage Charter. Government document.

SLEDS Governance. (2014). Minnesota Statewide Longitudinal Education Data System (SLEDS) Data Access and Management Policy. Government document.

SLEDS. (2014). SLEDS Data Interpretation Guide. Available at <http://sleds.mn.gov/#research>.