

Iowa Data Drive User's Manual

Version 3.2

January 2024



Iowa's Integrated Data System for Decision-Making
I2D2 | IOWA STATE UNIVERSITY

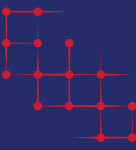
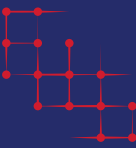


Table of Contents

What is IA Data Drive?	2
Homepage	2
Sidebar Menu	3
Statewide Indicators	4
Flip Boxes	4
County Level Data	5
Select Indicator	5
Dashboard Panels	6
Select County	8
Map	8
Select Year	9
Show Outline of Selected Counties	9
Add Labels to Map	9
Chose Color Palette for Map	9
Download PNG	9
Trend Chart	9
Select Year	9
Include Statewide Data	9
Add Value Labels to Plot	10
Download PNG	10
Select Levels	10
Data	11
Annual Reports	12
Select Geography	12
Select Location	12
Select Report Year	12
Download Report	12
Appendix A: Early Childhood Iowa (ECI) Indicators	13
Appendix B: Indicator Description	14
Appendix C: Data Retrieval Process	21



What is IA Data Drive?

IA Data Drive is a free online interface developed by I2D2 at Iowa State University with a goal to improve understanding and provide support for decision-making relevant to early childhood programs in Iowa. In a nutshell, it provides information about key indicators at state and county levels for a period often covering more than one decade. IA Data Drive enables users to see both local and global trends and compare indicators for a specific county against other Iowa counties and/or statewide values.

IA Data Drive uses publicly available administrative data together with I2D2 data holdings to compute Early Childhood Iowa (ECI) approved indicators (see [Appendix A](#)) along with a few additional ones. Currently there are 28 indicators for evaluating improvement in the quality of life of young children and their families, covering topics such as education, child health, available services, and others (see [Appendix B](#)). Additionally, IA Data Drive provides demographics by age for all Iowa counties.

IA Data Drive includes tools allowing users to interact with maps and charts, explore data tables, and download figures and underlying data for further use or integration. It also provides accurate descriptions of the indicators, references to the data sources, and other important details.

This manual is intended to assist users navigate IA Data Drive, efficiently utilize its tools, and obtain data of interest. It explains the general structure of the interface, shows the main elements and their functionality, and highlights key features of the web-tool.

Homepage

The IA Data Drive home page displays general information about the web-tool. From here, users can navigate the system using the sidebar menu positioned on the left.

DRIVE CHANGE WITH RELIABLE DATA

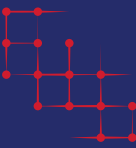
I2D2's interactive "IA Data Drive" dashboard is here to empower decision-makers with accessible data in an easy-to-use format. What in the past may have been visits to dozens of different websites is now just a click away – early childhood trends, local vs. state data comparisons, and more. IA Data Drive provides an assortment of indicators aligned with [the most recent statewide annual report from ECI](#).

You need to make decisions quickly, but you want to make them in an informed way. I2D2's unique dashboard will let you do both and drive forward with confidence.

NOTE

Early Childhood Iowa (ECI) indicators were computed for this dashboard using the same data sources specified in the descriptions of the indicators. Notes have been added if an indicator was computed using alternative data source (due to inaccessibility of the original data) or different method. Definitions for ECI indicators were adopted from [ECI Indicators and Data Dictionary 2022](#).

The dashboard might look slightly different depending on the user's environment (screen size and resolution of a device, as well as its orientation). For the best experience it is recommended to interact with the tool using PC or tablet.



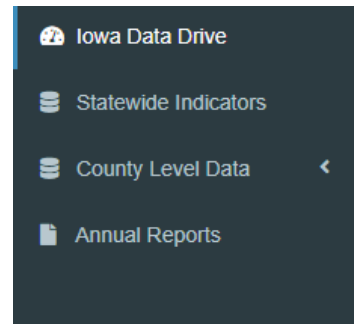
Sidebar Menu

The sidebar menu is a primary way to navigate across main parts of IA Data Drive. This menu contains three options: “Iowa Data Drive”, “Statewide Indicators”, and “County Level Data”.

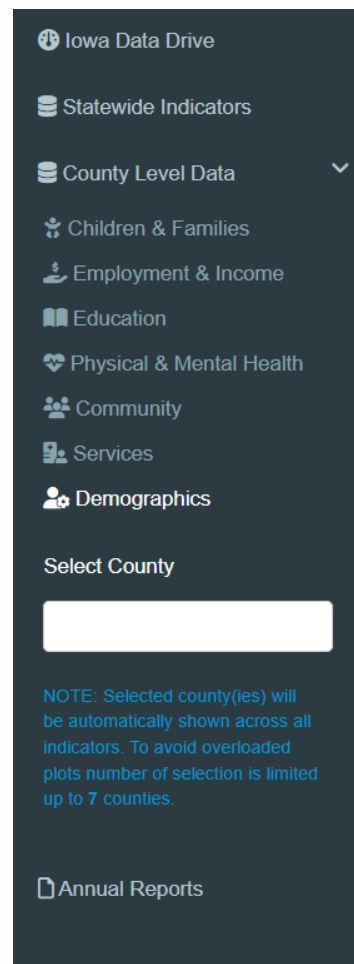
“Iowa Data Drive” takes users to the homepage that shows general information about the tool.

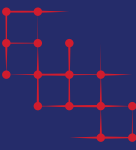
“Statewide Indicators” is used to go to a dashboard that summarizes statewide values for all indicators.

“County Level Data” is used to unfold suboptions for navigating county level data and selecting counties of interest (to avoid clutter during visualization, selection is limited to 7 counties). Users can show or hide subitems by clicking on them. Currently “County Level Data” contains seven subitems that groups the indicators and demographics data as follows:



- **Children & Families**
 - Teenage Mother
 - Unmarried Mother
 - Incidence of Child Abuse
 - Domestic Violence
 - Domestic Violence Children Present
- **Employment & Income**
 - Poverty at Birth
 - Children in Poverty
 - All People in Poverty
 - Working Parents
 - Unemployment
 - Homelessness
- **Education**
 - Low Maternal Education
 - Educational Attainment of Mothers
 - Early Literacy Skills
 - Preschool Enrollment
- **Physical & Mental Health**
 - Immunized Children
 - Infant Mortality
 - Inadequate Prenatal Care
 - Prenatal Tobacco Exposure
 - Preterm or Low Birth Weight
 - Preterm Birth
 - Low Birth Weight
- **Community**
 - Cumulative Birth Risks
 - Serious Crime





- Juvenile Arrests
- **Services**
 - Dental Services
 - Children with Health Coverage
 - Availability of Child Care
- **Demographics**
 - Population by Age

For detailed description of each indicator see [Appendix B](#).

Statewide Indicators

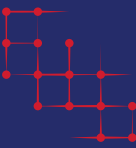
“Statewide Indicators” provides at-a-glance views of the most recent statewide values of the indicators. It should be noted that the most recent year can be different for each indicator and depends on the latest available year for the relevant data.

Children & Families	
Birth to Unmarried Mother	35.6%
Year: 2022	
Source: Iowa's Integrated Data System for Decision-Making (I2D2), Iowa Birth Records	
Birth to Teenage Mother	3.8%
Year: 2022	
Source: Iowa's Integrated Data System for Decision-Making (I2D2), Iowa Birth Records	
Incidence of Child Abuse	22
Year: 2022	
Source: Iowa Department of Health and Human Services (IHDHS), Child Abuse Statistics	
Domestic Violence	186
Year: 2022	
Source: Iowa Department of Public Safety (IDPS), Iowa Uniform Crime Reporting (IUCR) Program	
Domestic Violence Children Present (children not present)	63.7%
Domestic Violence Children Present (children present, harmed)	2.0%

Flip Boxes

Information about indicators is shown in the boxes that flip when users hover over them, thus revealing additional details about the indicator. The boxes are organized based on their belonging to the seven data categories (described in Sidebar Menu) and color-coded accordingly (only the front side).

Following details can be found in the boxes:



- Front Side
 - Name of the indicator
 - Statewide value
 - Year the measurement corresponds to
 - Data source (of the numerator)

Percentage of children born to mothers unmarried at the time of delivery.

- Back Side
 - Description of the indicator adopted from the ECI Indicators and Data Dictionary.

Several boxes also include additional information specifying level pertinent to an indicator if applicable. For example, Educational Attainment of Mothers is individually reported for different levels of maternal education. Those levels are shown on the front side of the box right under the name of the indicator.

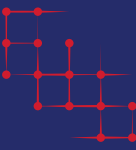
County Level Data

“County Level Data” provides in-depth views of all indicators both at state-wide and county levels. The data are grouped under six categories that can be accessed via the left sidebar (see Sidebar Menu). There are different numbers of indicators under each data category, currently varying from 1 to 3. Nevertheless, dashboards for individual indicators are designed and set similarly, providing identical tools for uniform user experience.

Select Indicator

In order to display the dashboard for an indicator, a user should:

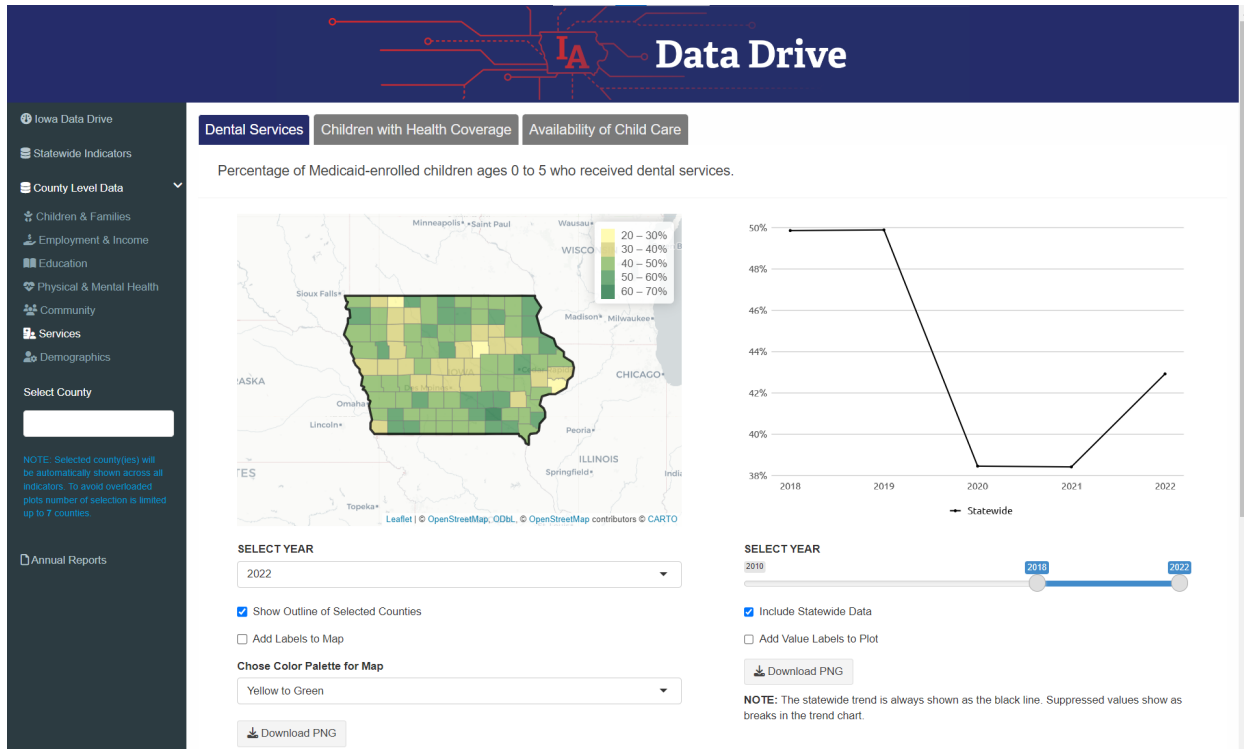
- **Unfold the “County Level Data”** by clicking on the corresponding text (or small white arrow) in the left sidebar, if it’s not already expanded.
- **Click on the data category containing the indicator of interest** (see Sidebar Menu for grouping of indicators). This will reveal a page with map, trend chart, drop-down selectors and other



elements for the first (default) indicator affiliated with that data category. The name of the active indicator and its description can be found above the map. Names of other indicators belonging to the same data category (if there are more than one) can be found next to the active indicator's name.

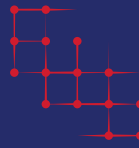
- **Click on the name of the indicator of interest.** The tab for the selected indicator will change to blue, while the others will be shown in gray.

To see an indicator affiliated with another data category, users should repeat the last two steps explained above.



Dashboard Panels

The dashboard consist of three main panels: map, trend chart and data table. Each panel allows users to explore data in interactive ways via its own set of web-elements (drop-down menu, check-boxes, slider selector, and search field). It should be noted that the panels are independent and interact only with its own web-elements, hence filtering or clicking on one will not affect the other in any way. Furthermore, the panels are independent across indicators, i.e. changes applied to one indicator will not propagate to others. Only exception is “Select County” located at the bottom of the sidebar menu. Counties selected via “Select County” will apply to all indicators and affect their maps and trend charts (data table is not altered by county selection).



IA Data Drive

Iowa Data Drive

Statewide Indicators

County Level Data

Children & Families

Employment & Income

Education

Physical & Mental Health

Community

Services

Demographics

Select County

Adair Clinton Jasper
Lyon Webster

Annual Reports

NOTE: Selected county(ies) will be automatically shown across all indicators. To avoid overloaded plots number of selection is limited up to 7 counties.

Dental Services
Children with Health Coverage
Availability of Child Care

Percentage of Medicaid-enrolled children ages 0 to 5 who received dental services.

SELECT YEAR

2022

Show Outline of Selected Counties

Add Labels to Map

Chose Color Palette for Map

Yellow to Green

Download PNG

SELECT YEAR

2010 2018 2022

Include Statewide Data

Add Value Labels to Plot

Download PNG

NOTE: The statewide trend is always shown as the black line. Suppressed values show as breaks in the trend chart.

DATA

DESCRIPTION: Percentage of Medicaid-enrolled children ages 0 to 5 who received dental services.

NUMERATOR: Number of Iowa children age 0 to 5 who received an Iowa Medicaid reimbursed dental and/or oral health service. Iowa Department of Health and Human Services (HHS) [Iowa Public Health Tracking Portal](#)

DENOMINATOR: Total number of Iowa children age 0 to 5 who have been enrolled in Iowa Medicaid with dental coverage.

AVAILABLE YEARS: 2010 - 2022

UPDATED: Annually

DATA OBTAINED: 10/02/2023

NOTE:

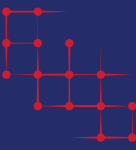
Download CSV Download Excel

VIEW THE DATA

Show 10 entries Search:

Variable Name	FIPS Code	County Name	Year	Value	Variable Type
1 Percent of Children Who Received Dental Services	19001	Adair	2010	0.56	percent
2 Percent of Children Who Received Dental Services	19003	Adams	2010	0.493	percent
3 Percent of Children Who Received Dental Services	19005	Allamakee	2010	0.732	percent
4 Percent of Children Who Received Dental Services	19007	Appanoose	2010	0.317	percent
5 Percent of Children Who Received Dental Services	19009	Audubon	2010	0.483	percent
6 Percent of Children Who Received Dental Services	19011	Benton	2010	0.502	percent
7 Percent of Children Who Received Dental Services	19013	Black Hawk	2010	0.403	percent
8 Percent of Children Who Received Dental Services	19015	Boone	2010	0.593	percent
9 Percent of Children Who Received Dental Services	19017	Bremer	2010	0.344	percent
10 Percent of Children Who Received Dental Services	19019	Buchanan	2010	0.456	percent

Showing 1 to 10 of 1,300 entries Previous 1 2 3 4 5 ... 130 Next



Select County

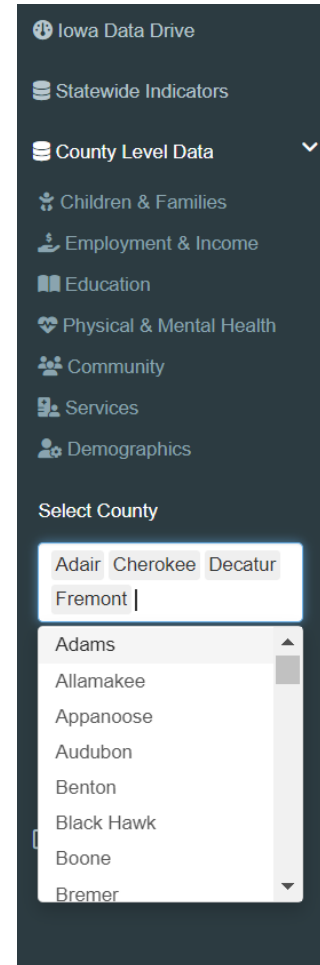
“Select County” located in the sidebar menu allows users to select counties of interest. Selected counties will be outlined on the map and trends for corresponding counties will be added to the trend chart. Please note that to avoid clutter in the graphs, selection is limited up to 7 counties.

To select counties, a user should:

- **Click on the input box under “Select County” in the left sidebar.** This will reveal a drop-down menu with names of Iowa counties.
- **Select a county or counties of interest from drop-down list by clicking on it.** Selected counties will disappear from the drop-down list and will be added to the box above.
- **A County can also be selected by typing its name in the input box then pressing enter or clicking on its name in the drop-down list.** As you type the drop-down list will automatically update displaying counties that partially match the entered string. This can be used to provisionally limit the options of drop-down list when looking for a county.

To remove selected county, a user should:

- **Click on the name of the county in the input box then press delete or backspace key.** The name of the county will disappear from the input box and will be added back to the drop-down list.



Map

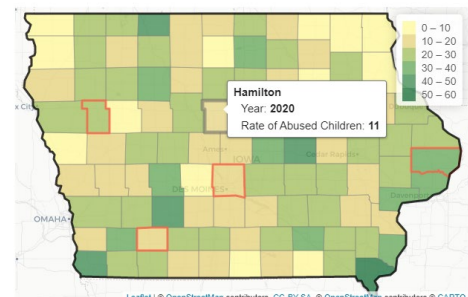
Map is a highly effective web-tool that allows users to explore data in interactive ways. It is used to demonstrate spatial variation of an indicator across Iowa for a specific year (by default the most recent year is selected). Note that any county selected via “Select County” will be outlined on the map.

The first way to interact with the map is to hover over it and observe the content of the tooltip (text box next to a pointer). Hovering over a county will display following information for that county:

- Name of the county
- Year the data corresponds to
- Metric of the indicator and its value

Under the map there is a set of tools that allows users to interact with it. Each tool and its functionality are explained below.

Child abuse incidence rate per 1,000 for children 5 years and under.



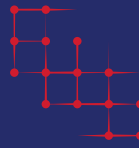
SELECT YEAR
2020

Show Outline of Selected Counties

Add Labels to Map

Chose Color Palette for Map
Yellow to Green

[Download PNG](#)



Select Year

“SELECT YEAR” allows users to switch between years. The drop-down list will show all available years for that specific indicator. By default, the most recent year is selected.

Show Outline of Selected Counties

“Show Outline of Selected Counties” allows users to show or hide outlines for selected counties. By default, the checkbox is checked.

Add Labels to Map

“Add Labels to Map” allows users to display names of all Iowa counties on the map. By default, the checkbox is unchecked.

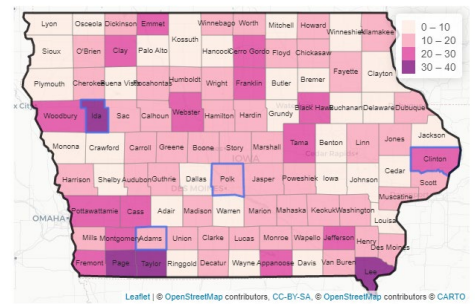
Chose Color Palette for Map

“Chose Color Palette for Map” allows users to switch between four different color palettes. By default, “Yellow to Green” color palette is selected.

Download PNG

“Download PNG” button allows users to download a static image of the map as a .png file. Options selected above (year, outline, labels, color palette) will be held for the downloaded map. In addition, the map will include details such as a title with name of the corresponding indicator and measurement year, and caption specifying data source and crediting IA Data Drive.

Child abuse incidence rate per 1,000 for children 5 years and under.



Trend Chart

Trend chart is another web-tool that allows users to explore and compare data in interactive ways. It is used to illustrate the change of an indicator over time for the entire state and/or for individual counties (if selected).

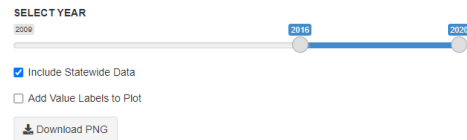
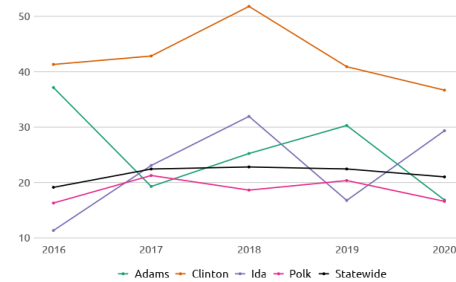
Like the map, under the trend chart there is a set of tools that allows users to interact with it. Each tool and its functionality are explained below.

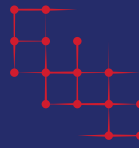
Select Year

The top element of the trend chart is a “SELECT YEAR” slider selector. It allows users to select data between the lower bound and the upper bound. The bounds will change based on available years for that specific indicator. By default, the sliders have selected the last 5 years of data.

Include Statewide Data

“Include Statewide Data” allows users to show or hide the trend line for statewide values of the indicator. By default, the checkbox is checked.



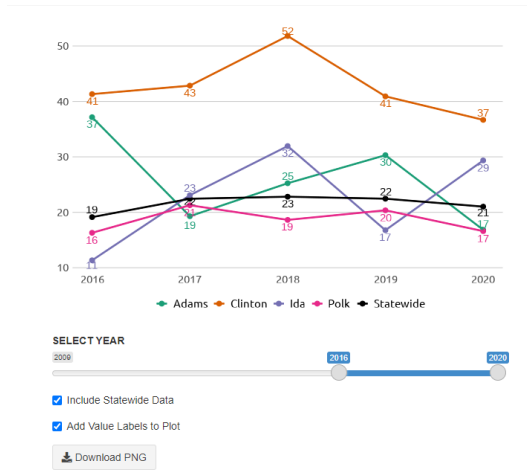


Add Value Labels to Plot

“Add Value Labels to Plot” allows users to display numeric values of plotted lines. By default, the checkbox is unchecked.

Download PNG

“Download PNG” button allows users to download a static image of the trend chart as a .png file. Options selected above (years, statewide data, value labels) will be held for the downloaded figure. In addition, the trend chart will include details such as title with name of the corresponding indicator and measurement years, and caption specifying data source and crediting IA Data Drive.



Select Levels

Several indicators provide data at higher granularity. For example, Educational Attainment of Mothers is individually reported for different levels of maternal education. In order to allow users to select specific levels for an applicable indicator, a drop-down menu is added above the visualizations. Both the map and the trend chart will automatically update as the user switches from one level to another. The name of the level is added under the title for downloaded figures.

Low Maternal Education | **Educational Attainment of Mothers** | Early Literacy Skills | Preschool Enrollment

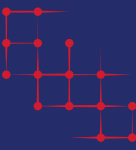
Percentage of women age 15-50 with a birth in the past 12 months by educational attainment.
NOTE: The original Early Childhood Iowa (ECI) indicator is reported as count of mothers instead of percentage. At county level total counts might be misleading and hard to compare across. Therefore, we reported the indicator as percentage of mothers with corresponding education level.

Select Education Level
Less than High School Graduate

Map Legend: 0 - 20%, 20 - 40%, 40 - 60%, 60 - 80%

Trend Chart Data (2018-2022):

Year	Cerro Gordo	Decatur	Polk	Cherokee	Dubuque	Statewide
2018	10%	25%	13%	17%	10%	10%
2019	14%	30%	14%	8%	8%	10%
2020	12%	15%	12%	10%	6%	10%
2021	21%	14%	11%	3%	3%	10%
2022	25%	19%	11%	2%	2%	10%



Data

Finally, IA Data Drive allows users to explore and download underlying data for each indicator separately by going to the Data panel under the visualizations. This section provides:

- Detailed information about the current indicator (metadata),
- Options to download underlying data as .csv or Excel file, and
- An interactive data table.

In order to reveal the data table, a user should click on the plus sign on the right side of the blue ribbon with the title “VIEW THE DATA”. The user can change the number of entries shown by selecting one of the preset values in the upper left corner of the table (by default it shows only the first 10 entries), and filter the data using the search option in the upper right corner of the table.

The search engine of the data table allows users to filter out all the elements using one or more criteria. The table will be automatically updated to match the user’s criteria. If there is no match a blank row stating “No matching records found” will be returned. Note that when more than one criterion is used (for example, county name and year) they should be separated by space.

To download the data as .csv or Excel file a user should click on “Download CSV” or “Download Excel” buttons, respectively.

It should be noted that the data table, as well as downloadable, files will contain data for the current indicator for all available years and geographic areas (i.e., all counties and statewide values).

DATA

DESCRIPTION: Percentage of women age 15-50 with a birth in the past 12 months by educational attainment.

NUMERATOR: Number of women age 15-50 with a birth in the past 12 months reporting the following educational attainment levels: less than high school, high school graduation, some college, bachelor's degree or higher. United States Census Bureau *American Community Survey (ACS) 5-Year Estimates, Table B13014*

DENOMINATOR: Total number of women age 15-50 with a birth in the past 12 months.

AVAILABLE YEARS: 2010 - 2022

UPDATED: Annually

DATA OBTAINED: 12/07/2023

NOTE: The original Early Childhood Iowa (ECI) indicator is reported as count of mothers instead of percentage. At county level total counts might be misleading and hard to compare across. Therefore, we reported the indicator as percentage of mothers with corresponding education level.

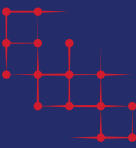
[Download CSV](#)
[Download Excel](#)

VIEW THE DATA

Show entries
Search:

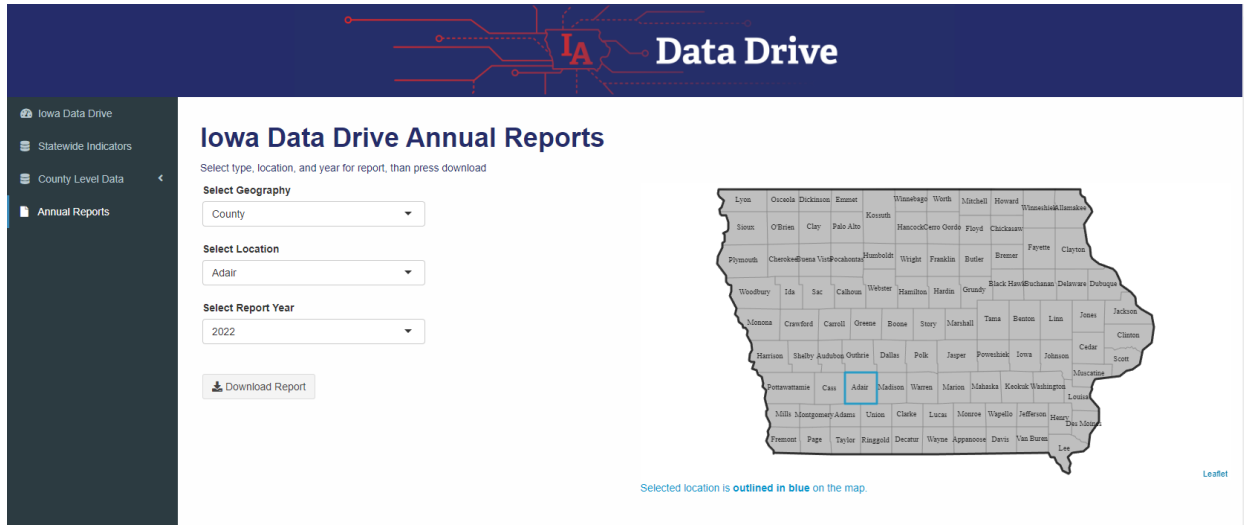
Variable Name	FIPS Code	County Name	Year	Education Level	Value	Variable Type
1208 Percent of Mothers Who Attained	19015	Boone	2022	Less than High School Graduate	0.087	percent
2508 Percent of Mothers Who Attained	19015	Boone	2022	High School Graduate	0.07	percent
3808 Percent of Mothers Who Attained	19015	Boone	2022	Some College or Associate's Degree	0.449	percent
5108 Percent of Mothers Who Attained	19015	Boone	2022	Bachelor's Degree	0.315	percent
6408 Percent of Mothers Who Attained	19015	Boone	2022	Graduate or Professional Degree	0.079	percent

Showing 1 to 5 of 5 entries (filtered from 6,500 total entries) Previous Next



Annual Reports

“Annual Reports” provides an interface to acquire IA Data Drive annual reports for different geographies. A left panel of the interface allows users to select and download reports of interest, while a right panel highlights selected location on Iowa map.



Select Geography

The first element in the left panel is a “Select Geography” drop-down selector. It allows users to choose between county, ECI area, and statewide reports. By default, county is selected.

Select Location

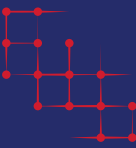
“Select Location” allows users to select specific ECI area or Iowa county. The list of locations will change according to selected geography. The Iowa map on the right panel will outline the selected location (in blue). By default, Adair County is selected.

Select Report Year

“Select Report Year” allows users to choose the year a report was published. By default, the last available year is selected.

Download Report

“Download Report” button allows users to download a pdf file of the selected report.



Appendix A: Early Childhood Iowa (ECI) Indicators

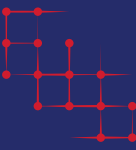
The Early Childhood Iowa (ECI) provides resources and tools to help every community in the state with developing capacity to meet ECI's vision that "every child, beginning at birth, will be healthy and successful." Among these tools are data indicators to support local area boards in their data informed decision making and to monitor progress across five legislatively mandated result areas:

- Healthy children,
- Children ready to succeed in school,
- Safe and supportive communities,
- Secure and nurturing families, and
- Secure and nurturing early learning environments.

Taken together, these indicators provide a useful overview of the multiple dimensions of child wellbeing that may impact quality of life for Iowa's young children and their families.



Most of the recommended indicators came from the 2010 Title V MIECHV Home Visiting Assessment produced by the Iowa Department of Public Health and the 2019 National Center for Children in Poverty Report: Iowa Demographics of Young, Poor Children. The ECI State Board regularly reviews and approves an updated list of indicators. Indicator and Data Dictionary Tool includes detailed information on the type, quality, availability, and frequency of assessment for community-wide measures used in official ECI reports.



Appendix B: Indicator Description

All People in Poverty

Description	Percentage of people who live in families with incomes below 100 percent of the U.S. poverty threshold, as defined by the U.S. Office of Management and Budget.
Numerator	Number of people living in poverty.
Source	Total number of people.
URL	United States Census Bureau; American Community Survey (ACS) 5-Year Estimates, Table B17020 https://www.census.gov/programs-surveys/acs/data.html

Availability of Child Care

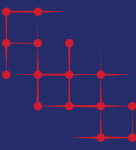
Description	Number of slots (spaces) potentially available for a child in a licensed or registered setting.
Numerator	Number of child care slots in HHS licensed centers/preschools and registered child development homes.
Source	Iowa Department of Health and Human Services (HHS); KinderTrack
URL	https://ccmis.dhs.state.ia.us/providerportal/

Birth to Teenage Mother

Description	Percentage of children born to mothers under age 20.
Numerator	Number of children whose mothers were younger than 20 years at time of birth.
Denominator	Total number of live births.
Source	Iowa's Integrated Data System for Decision-Making (I2D2); Iowa Birth Records

Birth to Unmarried Mother

Description	Percentage of children born to mothers unmarried at the time of delivery.
Numerator	Number of children whose mothers were not married at pregnancy.
Denominator	Total number of live births.
Source	Iowa's Integrated Data System for Decision-Making (I2D2); Iowa Birth Records



Children in Poverty

Description	Percentage of children, under 6, who live in families with incomes below 100 percent of the U.S. poverty threshold, as defined by the U.S. Office of Management and Budget.
Numerator	Number of children under six years of age living in poverty.
Denominator	Total number of Iowa children under 6 years of age.
Source	United States Census Bureau; American Community Survey (ACS) 5-Year Estimates, Table B17020
URL	https://www.census.gov/programs-surveys/acs/data.html

Children with Health Coverage

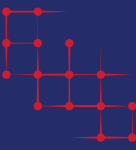
Description	Percentage of minor children with health coverage by poverty level.
Numerator	Number of minor children with health coverage by poverty level.
Denominator	Total number of minor children.
Source	United States Census Bureau Small Area Health Insurance Estimates (SAHIE)
URL	https://www.census.gov/data-tools/demo/sahie/

Cumulative Birth Risks

Description	Percentage of children with 0, 1, 2 or more, or 3 or more risk factors.
Numerator	Number of children with 0, 1, 2 or more, or 3 or more risk factors.
Denominator	Total number of live births.
Source	Iowa's Integrated Data System for Decision-Making (I2D2); Iowa Birth Records

Dental Services

Description	Percentage of Medicaid-enrolled children ages 0 to 5 who received dental services.
Numerator	Number of Iowa children age 0 to 5 who received an Iowa Medicaid reimbursed dental and/or oral health service.
Denominator	Total number of Iowa children age 0 to 5 who have been enrolled in Iowa Medicaid with dental coverage.
Source	Iowa Department of Health and Human Services (HHS); Iowa Public Health Tracking Portal
URL	https://tracking.idph.iowa.gov/Health/Oral-Health/Child-Dental-Services-Medicaid-Data



Domestic Violence

Description	Rate of domestic abuse per 100,000 population.
Numerator	Total number of domestic abuse victims.
Denominator	Total population of the area.
Source	Iowa Department of Public Safety (IDPS); Iowa Uniform Crime Reporting (UCR)
URL	https://icrime.dps.state.ia.us/CrimeInIowa/Report/DomesticAbuseSummaryReport

Domestic Violence Children Present

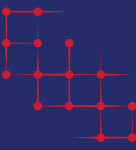
Description	Percentage of domestic abuse incidents where children were present.
Numerator	Total number of domestic abuse incidents where children were present.
Denominator	Total number of domestic abuse incidents.
Source	Iowa Department of Public Safety (IDPS); Iowa Uniform Crime Reporting (UCR)
URL	https://icrime.dps.state.ia.us/CrimeInIowa/Report/DomesticAbuseSummaryReport

Early Literacy Skills

Description	Percentage of kindergartners meeting the fall benchmark for the early literacy universal screening measure requirements.
Numerator	Number of Iowa kindergarten children who performed at or above a level indicating a high probability of success on an end-of-year general outcome measure of literacy based on Formative Assessment System for Teachers (FAST).
Denominator	Total number of Iowa kindergarten children tested using Formative Assessment System for Teachers (FAST).
Source	Early Childhood Iowa (ECI); Kindergarten Assessment Tables
URL	https://earlychildhood.iowa.gov/document/kindergarten-assessment-tables

Educational Attainment of Mothers

Description	Percentage of women age 15-50 with a birth in the past 12 months by educational attainment.
Numerator	Number of women age 15-50 with a birth in the past 12 months reporting the following educational attainment levels: less than high school, high school graduation, some college, bachelor's degree or higher.
Denominator	Total number of women age 15-50 with a birth in the past 12 months.
Source	United States Census Bureau; American Community Survey (ACS) 5-Year Estimates, Table B13014
URL	https://www.census.gov/programs-surveys/acs/data.html



Homelessness

Description	Point in Time counts of sheltered and unsheltered homeless individuals per 10,000 population.
Numerator	Point in Time counts of sheltered and unsheltered homeless individuals.
Denominator	Total population of the area.
Source	Institute for Community Alliances (ICA), Iowa Institute for Community Alliances
URL	https://icalliances.org/pit

Immunized Children

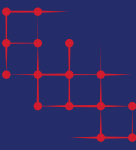
Description	Percentage of children immunized by age 2.
Numerator	Number of Iowa children of 2 years old who are fully immunized according to the CDC Child and Adolescent Immunization Schedule (4:3:1:3:3:1:4 series) recorded by the Immunization Registry Information System (IRIS).
Denominator	Total number of 2-year-old patient records in IRIS.
Source	Iowa Department of Health and Human Services (HHS); Iowa Public Health Tracking Portal
URL	https://tracking.idph.iowa.gov/Health/Immunization/Childhood-Immunizations/Childhood-Immunization-Data

Inadequate Prenatal Care

Description	Percentage of children born to mothers who received no prenatal care during the first trimester or who had fewer than four prenatal visits in total.
Numerator	Number of children whose mothers did not receive prenatal care during their first trimester or had fewer than four prenatal visits throughout their pregnancy.
Denominator	Total number of live births.
Source	Iowa's Integrated Data System for Decision-Making (I2D2); Iowa Birth Records

Incidence of Child Abuse

Description	Child abuse incidence rate per 1,000 for children 5 years and under.
Numerator	Number of Iowa children age 0 to 5 whose abuse has been confirmed/founded by the Department of Human Services.
Denominator	Total number of Iowa children age 0 to 5 based on ACS 5-Year Estimates.
Source	Iowa Department of Health and Human Services (HHS); Child Abuse Statistics
URL	https://hhs.iowa.gov/reports/child-abuse-statistics



Infant Mortality

Description	Rate of infant mortality per 1,000 live births.
Numerator	Number of deaths in the first year of life.
Denominator	Total number of live births.
Source	Iowa Department of Health and Human Services (HHS); Iowa Public Health Tracking Portal
URL	https://tracking.idph.iowa.gov/People-Community/Reproduction-and-Birth/Infant-Mortality/Infant-Mortality-Data

Juvenile Arrests

Description	Rate of juvenile arrests per 100,000 estimated juvenile population.
Numerator	Number of arrests of persons 18 years or under for any offense.
Denominator	Total population of persons 18 years or under.
Source	Iowa Department of Public Safety (IDPS); Iowa Uniform Crime Reporting (UCR)
URL	https://icrime.dps.state.ia.us/CrimeInIowa/ReportsIndex/List

Low Birth Weight

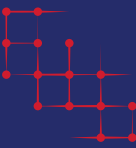
Description	Percentage of children born less than 2500 grams.
Numerator	Number of children born weighing less than 2500 grams (5 lbs. 9 oz).
Denominator	Total number of live births.
Source	Iowa's Integrated Data System for Decision-Making (I2D2); Iowa Birth Records

Low Maternal Education at Birth

Description	Percentage of children born to mothers over the age of 19 with less than a high school degree (i.e., less than 12 years of school).
Numerator	Number of children whose mothers were 20 year old or older and had completed less than a high school education.
Denominator	Total number of live births.
Source	Iowa's Integrated Data System for Decision-Making (I2D2); Iowa Birth Records

Population by Age

Description	Number of people by age.
Numerator	Number of people in specific age group.



Source	United States Census Bureau; American Community Survey (ACS) 5-Year Estimates, Tables B01001 and B09001
URL	https://www.census.gov/programs-surveys/acs/data.html

Poverty at Birth

Description	Percentage of children whose mothers were receiving WIC or Medicaid at the time of birth.
Numerator	Number of children whose mothers received WIC or used Medicaid as primary source of payment for delivery.
Denominator	Total number of live births.
Source	Iowa's Integrated Data System for Decision-Making (I2D2); Iowa Birth Records

Prenatal Tobacco Exposure

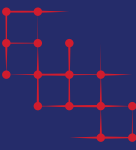
Description	Percentage of children born to mothers who used tobacco in the three months prior to pregnancy or at any time during pregnancy.
Numerator	Number of children whose mothers were smoking tobacco during pregnancy and/or three months prior to becoming pregnant.
Denominator	Total number of live births.
Source	Iowa's Integrated Data System for Decision-Making (I2D2); Iowa Birth Records

Preschool Enrollment

Description	Percentage of children enrolled in preschool the year before going to kindergarten
Numerator	Number of unduplicated Iowa children enrolled in preschool the year before going to kindergarten.
Denominator	Total number of pre-kindergarten children.
Source	Iowa's Integrated Data System for Decision-Making (I2D2); All County Needs Assessment 2019
URL	https://i2d2.iastate.edu/wp-content/uploads/2021/02/I2D2-All-County-Report_200209hr.pdf

Preterm Birth

Description	Percentage of children born prior to 36 weeks gestation.
Numerator	Number of children born preterm (prior to 36 weeks gestation).
Denominator	Total number of live births.
Source	Iowa's Integrated Data System for Decision-Making (I2D2); Iowa Birth Records



Preterm or Low Birth Weight

Description	Percentage of children born prior to 36 weeks gestation or less than 2500 grams at birth.
Numerator	Number of children born preterm or weighing less than 2500 grams at birth.
Denominator	Total number of live births.
Source	Iowa's Integrated Data System for Decision-Making (I2D2); Iowa Birth Records

Serious Crime

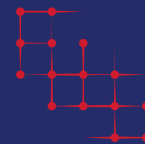
Description	Rate of serious crime per 100,000 population.
Numerator	Number of offenses that contribute to serious crime (homicide, rape, robbery, aggravated-assault, burglary, larceny, motor-vehicle-theft, arson).
Denominator	Total population of area.
Source	Iowa Department of Public Safety (IDPS); Iowa Uniform Crime Reporting (UCR)
URL	https://icrime.dps.state.ia.us/CrimeInIowa/ReportsIndex/List

Unemployment

Description	Percentage of unemployed persons.
Numerator	Number of persons 16 years and older who are unemployed.
Denominator	Total number of persons 16 years and older employed and unemployed.
Source	Iowa Workforce Development; Local Area Unemployment Statistics
URL	https://www.iowalmi.gov/local-area-unemployment-statistics

Working Parents

Description	Percentage of children under 6 years with all parents in the labor force.
Numerator	Number of children under 6 years of age in families and subfamilies with all parents in the labor force.
Denominator	Total number of children under 6 years of age in families and subfamilies.
Source	United States Census Bureau; American Community Survey (ACS) 5-Year Estimates, Table B23008
URL	https://www.census.gov/programs-surveys/acs/data.html



Appendix C: Data Retrieval Process

The early childhood and other data items collected for IA Data Drive have come from a variety of publicly available data sources. The descriptions of these sources, including provider agency, dataset name, and website from which data were retrieved, can be found in [Appendix B](#).

The data were downloaded as provided by the various websites and agencies as comma separated variable (.csv) files, Microsoft Excel files, or PDF files. Data from Microsoft Excel and PDF files were extracted and converted to .csv files.

Most items were obtained at the county level of geography. The exception is FAST (Formative Assessment System for Teachers) data used for computing Early Literacy Skills indicator. Prior to 2017, these data were provided by ECI Area rather than at the county level. For those years counties that are in the same ECI Area were assigned the value corresponding to the area.

Data Suppression

For most items, the providing agency did not indicate that there had been data suppression. There are exceptions to this, however. There may be suppression in some items from the American Community Survey data provided by the U.S. Census Bureau. These suppressed items will be missing in the data file. See the Census Bureau website for additional information on suppression in the American Community Survey (<https://www.census.gov/programs-surveys/acs/technical-documentation/data-suppression.html>).

Another site for which data may be suppressed is the Iowa Department of Health and Human Services (HHS). In general, for the public health data items, those with counts of five or fewer cases were suppressed. The suppressed items downloaded as asterisks (*) in the data files and are missing in the files (See HHS data tracking portal for more information on data suppression; <https://tracking.idph.iowa.gov/>).

Data was also suppressed for FAST outcomes in ECI Kindergarten Assessment Tables. Data for districts with less than 30 students tested were suppressed in the reports, therefore those school districts were not taken into account when computing county or statewide values.

Data from the American Community Survey

Many of the indicators were computed from data provided through the U.S. Census Bureau the American Community Survey (ACS) 5-year estimates (<https://www.census.gov/programs-surveys/acs/>). The 5-year period represents 60 months of collected data that are pooled together to create more precise multi-year estimates. Because many of Iowa's counties have relatively small populations, the 5-year set of pooled data is the only type of ACS estimates that are available to use across all 99 counties. See the American Community Survey Handbook for Users for more information on pooled, 5-year estimates (<https://www.census.gov/programs-surveys/acs/library/handbooks.html>).

All the data items for which the source is noted as "ACS 5-Year Estimates" were retrieved using the U.S. Census Bureau's API via R package `censusapi`.