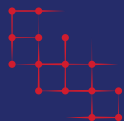


IA Data Drive User's Manual

Version 3.0

April 2023



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

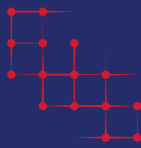


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What is IA Data Drive?

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.

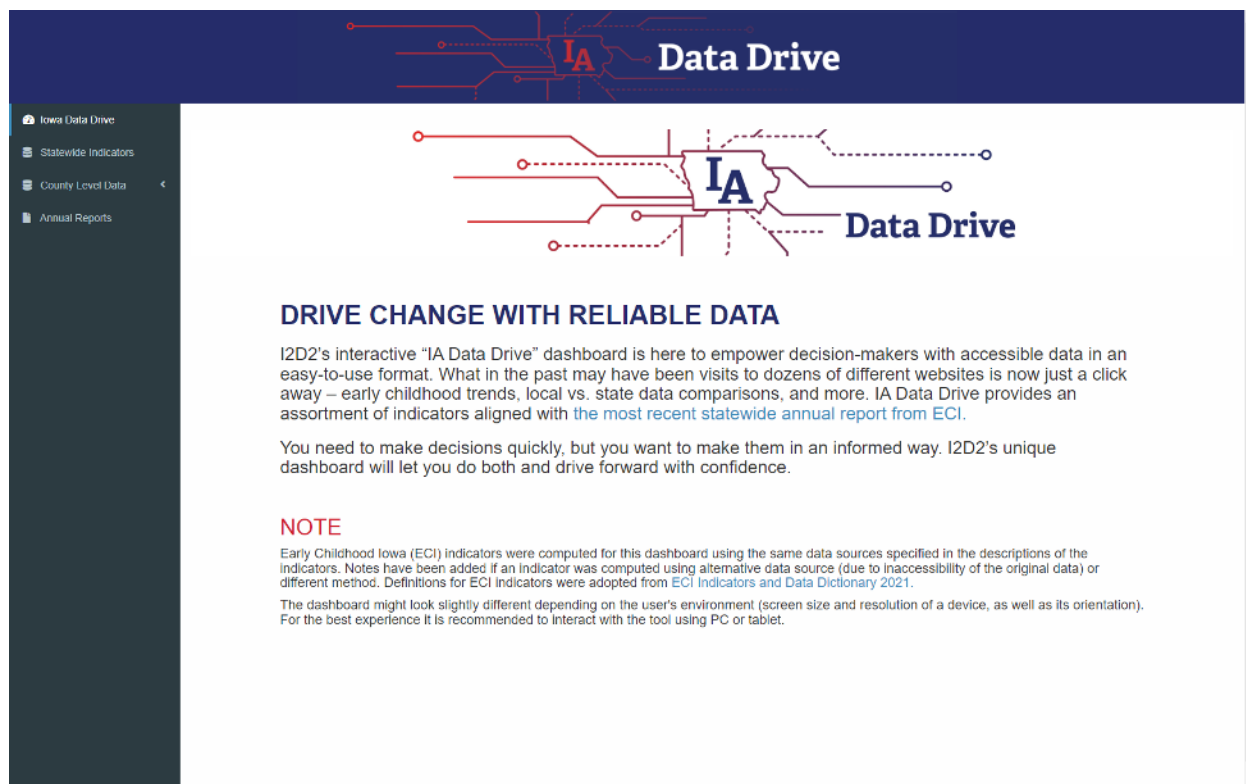
IA Data Drive uses publicly available administrative data along with I2D2 data holdings to compute Early Childhood Iowa (ECI) approved indicators (see [Appendix A](#)). Currently there are 22 indicators for evaluating improvement in the quality of life of young children and their families, covering topics such as education, child health, available services, and others (see [Appendix B](#)).

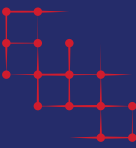
IA Data Drive includes tools allowing users to interact with maps and charts, explore data tables, and download figures and underlying data for further use or integration. It also provides accurate descriptions of the indicators, references to the data sources, and other important details.

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 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.





Sidebar Menu

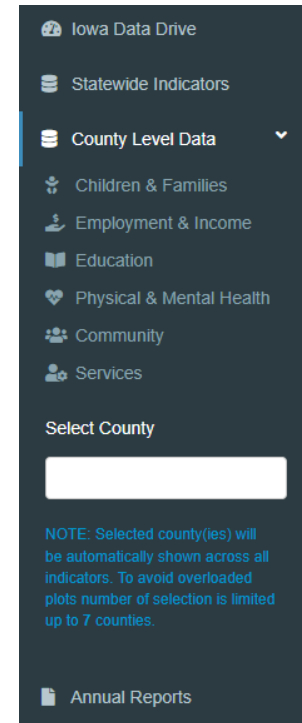
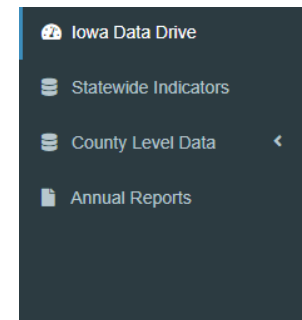
The sidebar menu is a primary way to navigate across main parts of IA Data Drive. This menu contains three options: “Iowa Data Drive”, “Statewide Indicators”, and “County Level Data”.

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

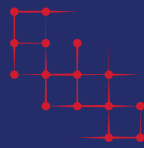
“Statewide Indicators” is used to go to a dashboard that summarizes statewide values for all indicators.

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

- “Children & Families”:
 - Incidence of Child Abuse
 - Teen Births
 - Domestic Violence
 - Domestic Abuse Incident Characteristics
- “Employment & Income”:
 - Children in Poverty
 - All People in Poverty
 - Working Parents
 - Unemployment
 - Homelessness Count
- “Education”:
 - Educational Attainment of Mothers
 - Early Literacy Skills
 - Preschool Enrollment
- “Physical & Mental Health”:
 - Immunized Children
 - Low Birth Weight
 - Infant Mortality
- “Community”:
 - Individual Birth Risks
 - Cumulative Birth Risks
 - Serious Crime
 - Juvenile Arrests
- “Services”:
 - Dental Services
 - Children with Health Coverage
 - Availability of Child Care

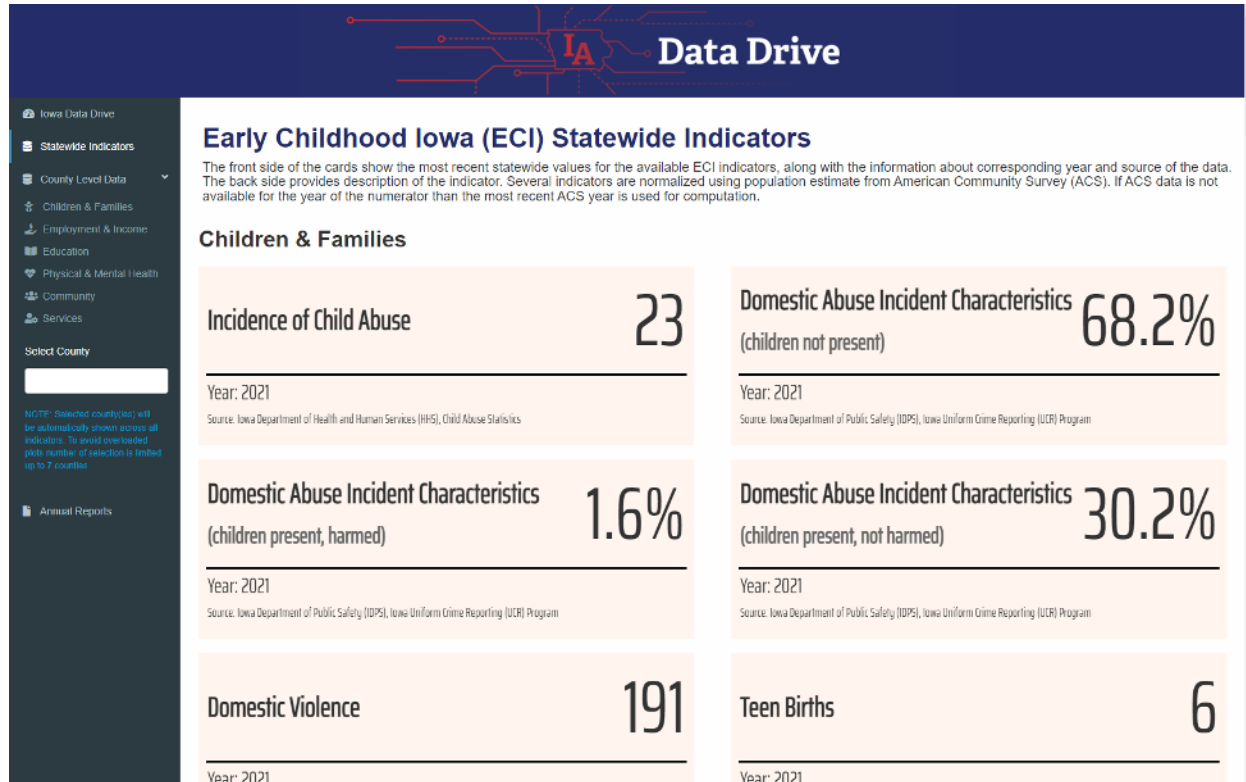


For detailed description of each indicator see [Appendix B](#).



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.



Flip Boxes

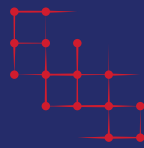
Information about indicators is shown in the boxes that flip when users hover over them, thus revealing additional details about the indicator. The boxes are organized based on their belonging to the seven data categories (described in Sidebar Menu) and color-coded accordingly (only the front side).

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

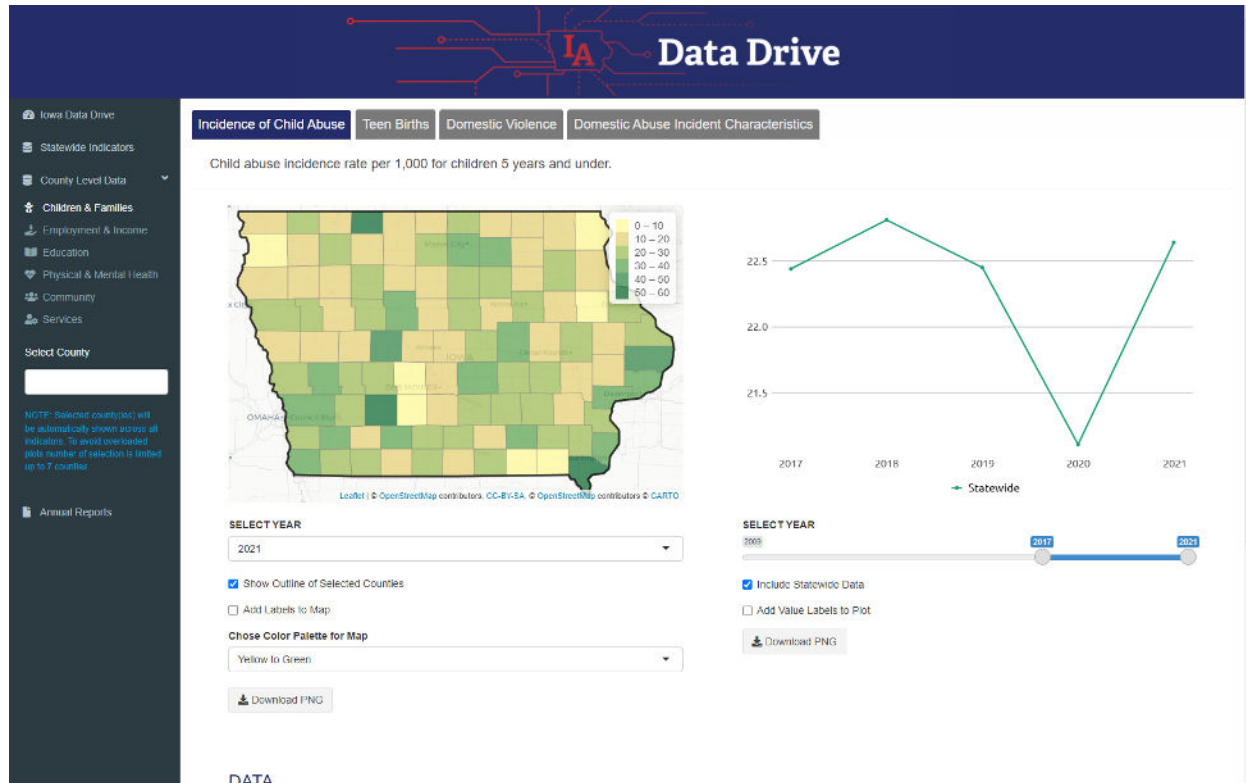


Several boxes also include additional information specifying level pertinent to an indicator if applicable. For example, Educational Attainment of Mothers is individually reported for different levels of maternal education. Those levels are shown in the front side of the box right under the name of the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

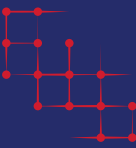


Select Indicator

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

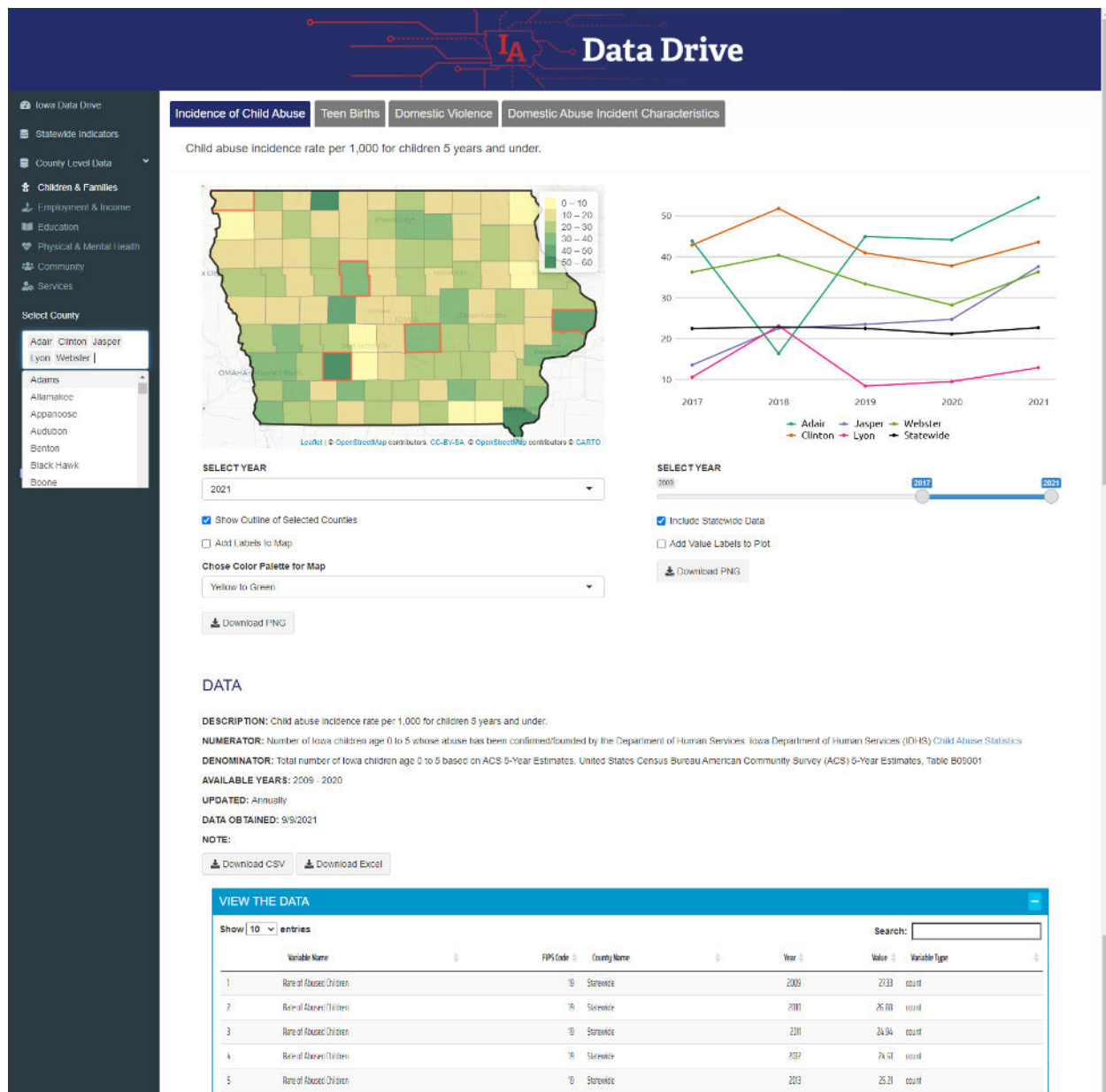
- **Unfold the “County Level Data”** by clicking on the corresponding text (or small white arrow) in the left sidebar, if it’s not already expanded.
- **Click on the data category containing the indicator of interest** (see Sidebar Menu for grouping of indicators). This will reveal a page with map, trend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

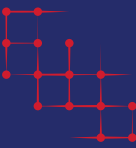
To see an indicator affiliated with another data category, users should repeat the last two steps explained above.



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).





Select County

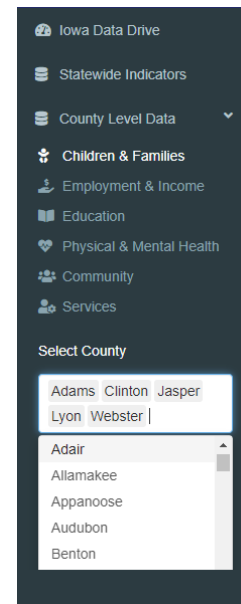
“Select County” located in the sidebar menu allows users to select counties of interest. Selected counties will be outlined on the map and trends for corresponding counties will be added to the trend chart. Please note that in order to avoid clutter in the graphs, selection is limited up to 7 counties.

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.



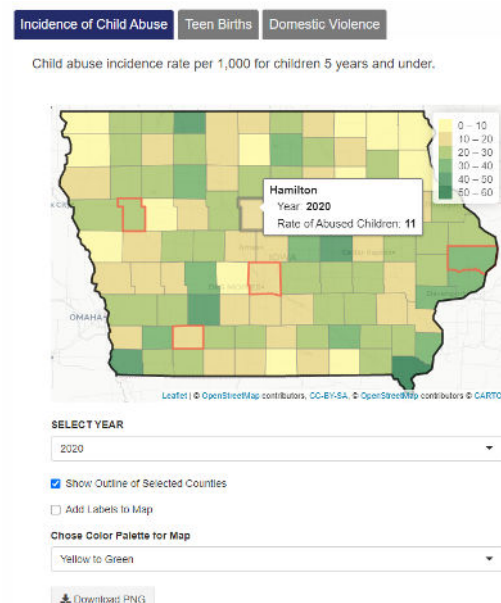
Map

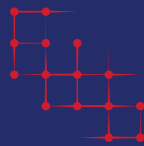
Map is a very effective web-tool that allows users to explore data in interactive ways. It is used to demonstrate spatial variation of an indicator across Iowa for a specific year (by default the most recent year is selected). Note that any county selected via “Select County” will be outlined on the 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 the tools that allows users to interact with it. Each tool and its functionality is explained below.





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 outline for selected counties. By default the checkbox is checked.

Add Labels to Map

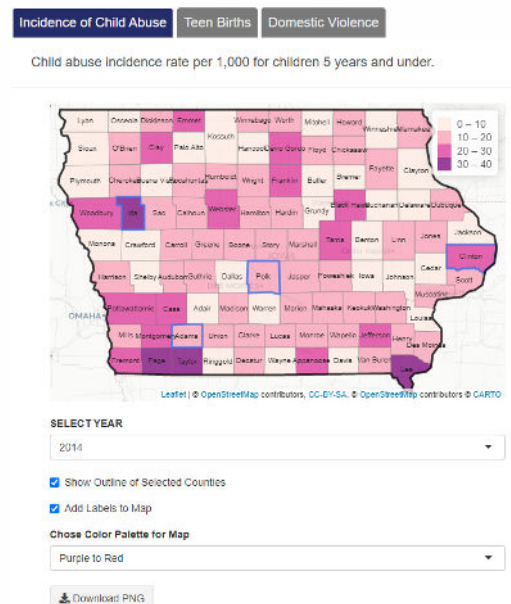
“Add Labels to Map” allows users to display names of all Iowa counties on the map. By default the checkbox is unchecked.

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 hold for the downloaded map. In addition, the map will include details such as title with name of the corresponding indicator and measurement year, and caption specifying data source and crediting IA Data Drive.



Trend Chart

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

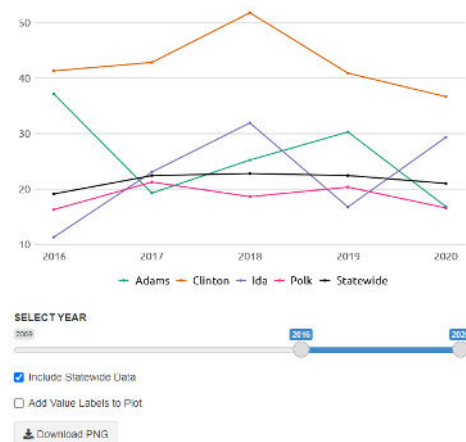
Like the map, under the trend chart there is a set of tools that allows users to interact with it. Each tool and its functionality is explained below.

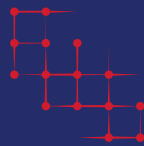
Select Year

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.



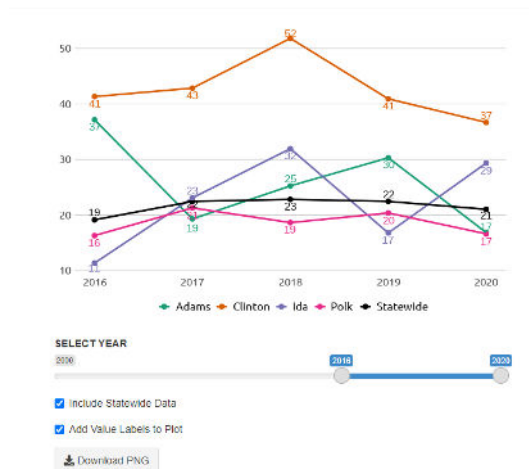


Add Value Labels to Plot

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

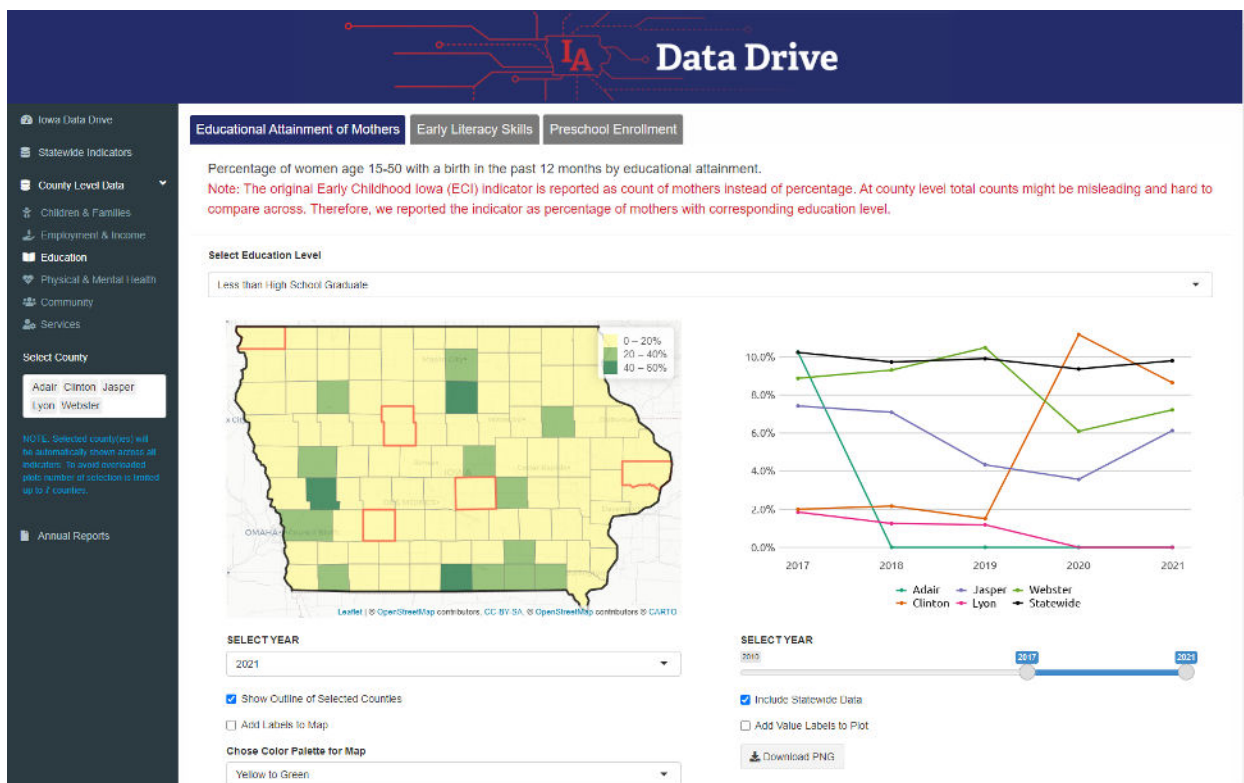
Download PNG

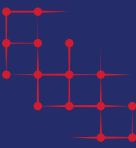
“Download PNG” button allows users to download a static image of the trend chart as a .png file. Options selected above (years, statewide data, value labels) will hold for the downloaded figure. In addition, the trend chart will include details such as title with name of the corresponding indicator and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





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 in the right side of the blue ribbon with the title “VIEW THE DATA”. The user can change 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 not match a blank row stating “No matching records found” will be returned. Note that when more than one criteria 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: 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, Iowa Department of Human Services (IDHS) Child Abuse Statistics

DENOMINATOR: Total number of Iowa children age 0 to 5 based on ACS 5-Year Estimates, United States Census Bureau American Community Survey (ACS) 5-Year Estimates, Table B05001

AVAILABLE YEARS: 2004 - 2021

UPDATED: Annually

DATA OBTAINED: 7/20/2022

NOTE:

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

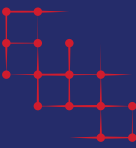
VIEW THE DATA

Show **10** entries Search: **2019 io**

Variable Name	FIPS Code	County Name	Year	Value	Variable Type
E15 Rate of Abused Children	19195	Iowa	2019	22.32	count
E15 Rate of Abused Children	19025	Marion	2019	19.23	count
E15 Rate of Abused Children	19107	Sevier	2019	6.96	count
E15 Rate of Abused Children	19075	Union	2019	31.57	count

Showing 1 to 4 of 4 entries (filtered from 1,300 total entries)

Previous **1** 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 and ECI area reports. By default county is selected.

Select Location

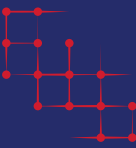
“Select Location” allows users to select specific ECI area or Iowa county. The list of locations will change according to selected geography. Iowa map on the right panel will outline selected location (in blue). By default Adair county is selected.

Select Report Year

“Select Report Year” allows users to choose 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

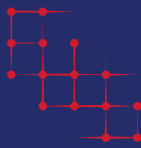
The Early Childhood Iowa (ECI) provides resources and tools to help every community in the state with developing capacity to meet ECI's vision that "every child, beginning at birth, will be healthy and successful". Among these tools are data indicators to support local area boards in their data informed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



The majority 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 review and approve 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

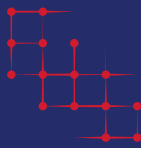
Description	Number of slots (spaces) potentially available for a child in a licensed or registered setting.
Numerator	Number of child care slots in DHS licensed centers/preschools and registered child development homes.
Source	Child Care Resource & Referral (CCR&R); CCR&R data sheets
URL	https://iowaccrr.org/data/

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

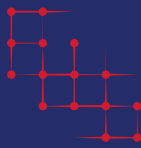
Description	Percentage of Medicaid-enrolled children ages 0 to 5 who received dental services.
Numerator	Number of Iowa children age 0 to 5 who received an Iowa Medicaid reimbursed dental and/or oral health service.
Denominator	Total number of Iowa children age 0 to 5 who have been enrolled in Iowa Medicaid 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 Abuse Incident Characteristics

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) Program
URL	https://icrime.dps.state.ia.us/CrimeInIowa/Report/DomesticAbuseSummaryReport

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) Program
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

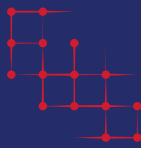
Description	Percentage of women age 15-50 with a birth in the past 12 months by educational attainment.
Numerator	Number of women age 15-50 with a birth in the past 12 months reporting the following educational attainment levels: less than high school, high school graduation, some college, bachelor's 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 Count

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

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

Individual Birth Risks

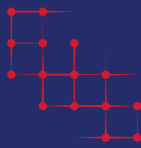
Description	Percentage of children with a specific birth risk factor.
Numerator	Number of children with a specific birth risk factor.
Denominator	Total number of live births.
Source	Iowa's Integrated Data System for Decision-Making (I2D2); Iowa Birth Records

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	Federal Bureau of Investigation (FBI); National Incident-Based Reporting System (NIBRS)
URL	https://crime-data-explorer.app.cloud.gov/pages/home



Low Birth Weight

Description	Percentage of babies born who weigh under 2,500grams.
Numerator	Number of live singleton births with a weight less than 2,500 grams that occur at full term.
Denominator	Total number of live full term singleton 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/Low-Birthweight/Low-Birthweight-Births-Among-Full-Term-Births

Preschool Enrollment

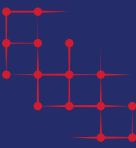
Description	Percentage of children enrolled in preschool the year before going to kindergarten
Numerator	Number of unduplicated Iowa children enrolled in preschool the year before going to kindergarten.
Denominator	Total number of pre-kindergarten children.
Source	Iowa's Integrated Data System for Decision-Making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

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	Federal Bureau of Investigation (FBI); National Incident-Based Reporting System (NIBRS)
URL	https://crime-data-explorer.app.cloud.gov/pages/home

Teen Births

Description	Rate of live births born to women aged 15 to 19 per 1,000 women in this age range.
Numerator	Number of live births born to women aged 15 to 19.
Denominator	Total number of women aged 15 to 19.
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/Birth-Rate-Mothers-Under-20>

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

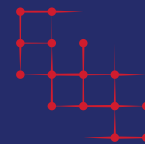
Description Percentage of children under 6 years with all parents in the labor force.

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 exceptions 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 some 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 5 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`.