

## Child Care Data Dashboard User Guide

This user guide includes of three sections, (1) a Power BI user guide to familiarize users with Power BI dashboard features and functions, (2) a Vacancies Dashboard to review its visualizations, figures, and filters, and (3) a Supply and Demand Dashboard to review its visualizations, figures, and filters.

The Child Care Data Dashboards powered by Iowa Child Care Connect are found at <https://childcareconnect.iowa.gov>.

**Welcome to Iowa Child Care Connect**

Iowa Child Care Connect (C3) uses data to help Iowans find child care where and when they need it.

Child Care Search	Vacancy Dashboard	Supply & Demand Dashboard
<p>Enables families to search and filter for available child care using a mapping function that shows care by geography or along a designated route.</p>	<p>Provides real-time data about current child care openings by age, geography, and quality.</p>	<p>Provides interactive information about estimated demand for child care and known supply of providers across the state.</p>

# Contents

- Child Care Data Dashboard User Guide ..... 1
  - Power BI User Guide ..... 2
    - Navigating Dashboards ..... 2
    - Making Visuals Larger ..... 3
    - Expand & Screenshot Mode..... 4
    - Using Visual Hover-Overs..... 5
    - Using Tooltips..... 5
    - Using Filters..... 6
    - Cross-Filtering Visuals ..... 7
- Vacancies Dashboard User Guide ..... 8
  - Key Terms..... 8
  - Vacancies Page..... 9
  - Vacancies by County Map Page ..... 11
- Supply and Demand Dashboard User Guide..... 13
  - Key Terms..... 13
  - Supply Page ..... 14
  - Demand Page ..... 16
  - Supply and Demand Page ..... 18

## Power BI User Guide

The Child Care Data Dashboards are built using Power BI, which offers a flexible way to browse data and customize your view to gain the insights you need.

This guide offers an overview of key features of Power BI for users to make the most of the dashboards.

### Navigating Dashboards

The Child Care Data Dashboards have multiple pages that display different aspects of similar data. The Vacancies Dashboard has two pages, and the Supply and Demand Dashboard has three.

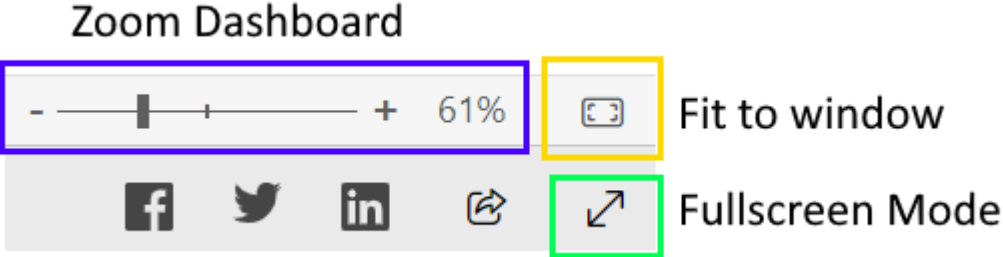
Users have two options to navigate through the dashboards – either click on a page name at the top of the screen (as seen below) to navigate directly there or click on the Next Page/Previous Page arrow buttons in the bottom center of the screen.



### Making Visuals Larger

In Power BI, making the dashboard or any visual larger is an easy process to enhance readability or to focus on specific data. There are multiple options to increase the size of visuals or the dashboard as a whole, explained below.

On any screen of the dashboard, the following icons and tools display at the bottom right.



### Fullscreen Mode

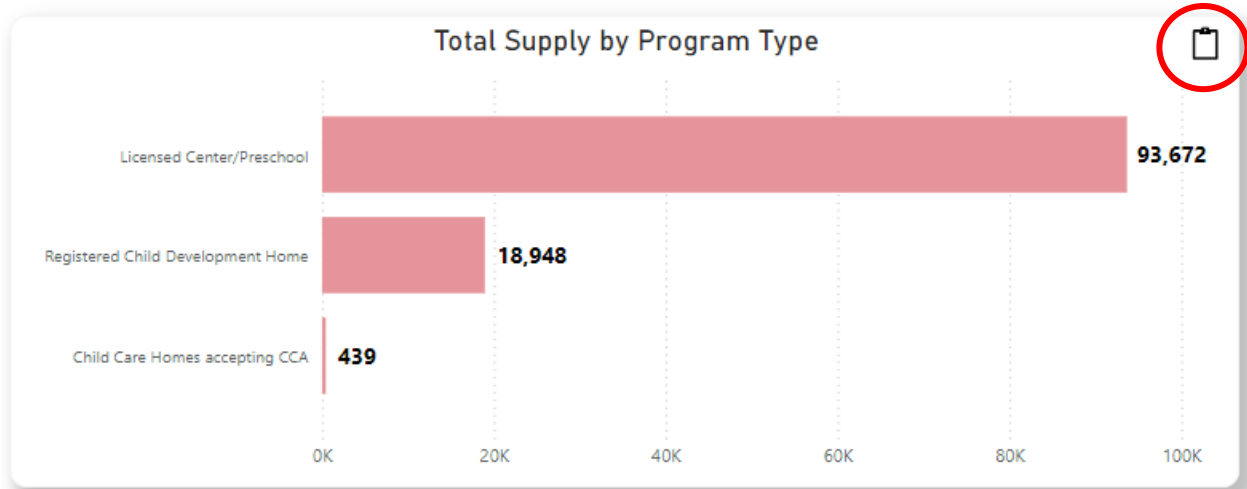
Users can maximize the dashboard to their screen space by clicking on the Fullscreen button at the bottom right of your screen, highlighted in green in the screenshot above. Press the Escape key to exit from Fullscreen mode.

### Zooming the Dashboard

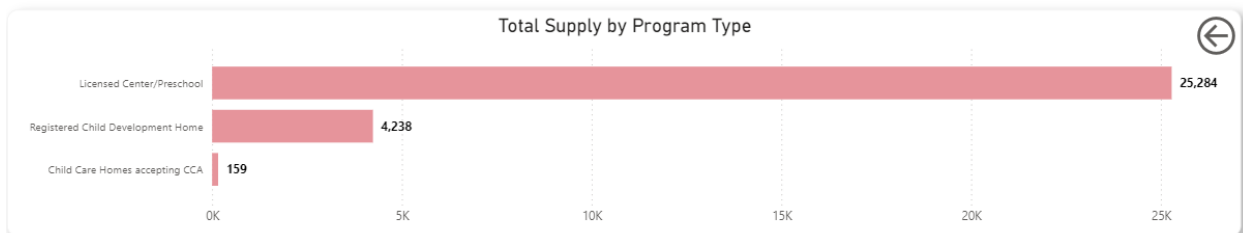
Users can make the entire dashboard larger by using the zoom bar in the bottom right of the Power BI window, highlighted in blue above. Click the Fit to Window button (highlighted in yellow above) to maximize the zoom level to your screen without cutting off any of the visuals.

## Expand & Screenshot Mode

To expand and focus on a particular visual, click the clipboard icon in the top right of the visual - circled in the screenshot below.



The following screen offers a focused view of the visual with additional metadata details listed underneath.



Source: C3, Supply Dashboard, Data Refreshed on 8/6/2024 11:17:57 AM

Filtered Data: Program Type (Child Care Homes accepting CCA, Licensed Center/Preschool, Registered Child Development Home) | Age Group (All Age Groups) | Counties (2 of 99; Dallas County, Polk County) | Cities (24 of 24; All Cities Selected)

The text below the visual provides the metadata for the focused visual, specifically the date and time of the latest data refresh and which filters were active when the clipboard button was pressed.

## Take A Screenshot

To save this view for later, take a screenshot and save it to your computer.

### PC:

1. Press the Windows + Shift + S keys to open the Snipping tool.
2. After the tool opens, click and drag a rectangle around the visual and metadata.
3. After releasing the click, the screenshot automatically saves to your computer.

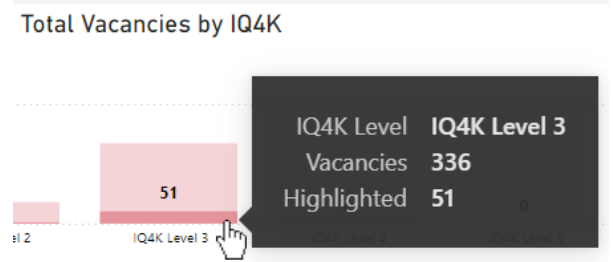
### Mac

1. Press Shift + Command + 4 keys to open to screenshot tool.
2. After the tool opens, click and drag a rectangle around the visual and metadata.
3. After releasing the click, the screenshot automatically saves to your computer.

## Using Visual Hover-Overs

**Hover-overs** in Power BI are designed to provide immediate, contextual information as you move your cursor over different elements of a graph. When you hover over parts of a graph, such as bars in a bar chart or points in a line graph, a small tooltip appears directly above or near the cursor.

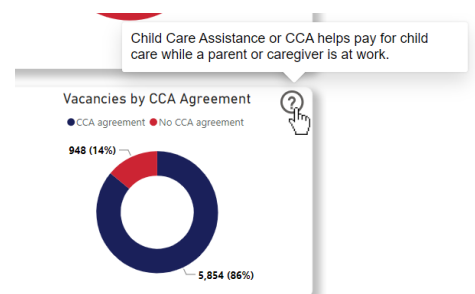
Hover-overs provide quick insights or summarized data without the need to click on anything or navigate away from the current view. In the example to the right, hovering over a bar shows the data label, the total vacancies (Vacancies) and the number of vacancies highlighted by the selected filters.



## Using Tooltips

The Child Care Data Dashboards also have tooltips that provide additional details about some visuals. The tooltips may provide definitions, context, or additional instructions for the visual or filter.

To activate the tooltips, hover over the ? icon in the corner of visuals, such as in the screenshot to the right.



Users can click on some tooltips to navigate to another page or website for additional information.

## Using Filters

Power BI Dashboards feature filters that allow users to refine and segment data based on specific criteria. Setting filters will adjust the dashboard's calculations and visuals to display the selected data.

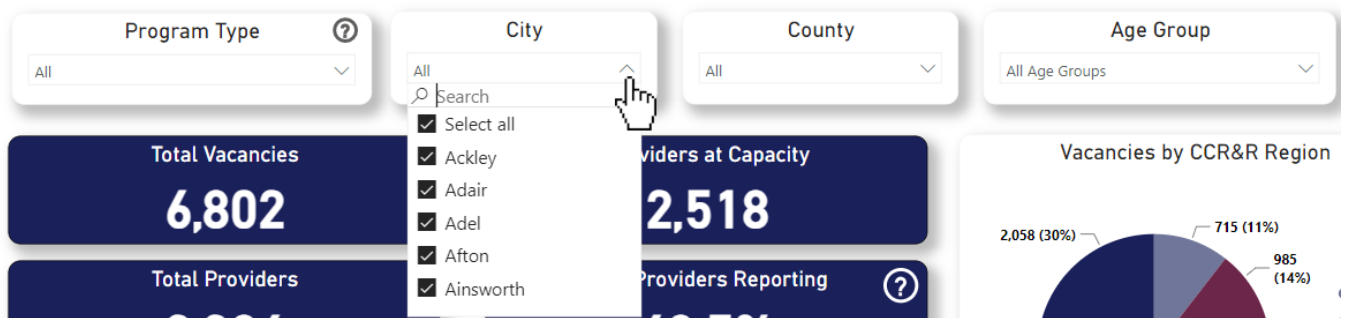
Users can set multiple filter categories at once for complete control of the dashboard's calculations and visuals.

If you select filter criteria and receive a "BLANK" message on the dashboard, this indicates there are no providers that meet the selected criteria. Remove one or more filters to repopulate the dashboard.

### Setting Filters

Click on the dropdown to see the filter options. Typically filters default to showing all available data, and all options are selected. Clicking a selected option will de-select it and remove that data from the connected visuals and calculations.

To quickly de-select all options, click the "Select all" option - this will allow you to easily select only the options you wish to select for the filter. For the City and County filters, users can type the name of the city or county in the Search field and select the correct city or county.



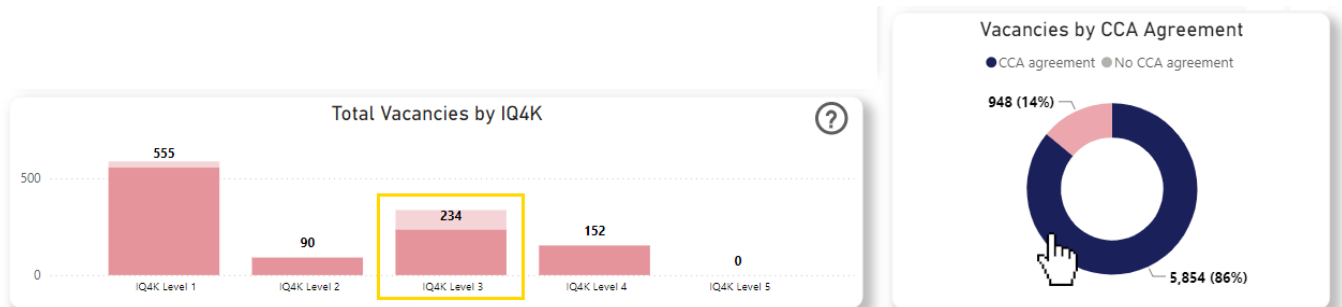
### Reset Filters

To reset filters to their default selections, click on the "Reset Filters" button in the top right of the dashboard. NOTE: If the user typed information in the Search field in the City or County filter, the user must also delete the information in this field to display all the cities and counties in the filter.

## Cross-Filtering Visuals

**Cross-filtering** is a powerful feature that allows you to select elements in one visual to filter data in other visuals on the same report page.

- **How It Works:** By clicking on a data point in one graph, other charts and graphs in the report automatically adjust to reflect only the data related to the selected element. For example, clicking the blue CCA Agreement slice on the visual on the right cross-filters the data in the Total Vacancies by IQ4K<sup>®</sup> visual on the left. See the highlighted yellow bar for an example of cross-filtered data.



- **Resetting Filters:** To reset filters, either click the element again, or click the “Reset Filters” button in the top right of the dashboard.

## Vacancies Dashboard User Guide

The Vacancies Dashboard provides a clear look into the child care slots available across Iowa with both current and historic information and is refreshed twice daily at 6AM and 1PM.

### Key Terms

**Vacancy:** A vacancy is defined as an available slot at a child care provider not currently occupied by a child. Vacancies at providers who haven't updated their records within the past two months, and whose total openings are greater than their licensed, registered, or non-registered capacity are excluded from this data. [Note: **ONLY** Child Care Home (non-registered) providers with an active Child Care Assistance Provider Agreement are included in the dashboard data.]

**Reporting Provider:** Providers are counted as “reporting” if they have updated their capacity and vacancy records within the last 60 days.

**IQ4K® Level:** Iowa Quality for Kids (IQ4K®) is a voluntary quality rating and improvement system. IQ4K® guides child care programs to assess and enhance their quality through continuous quality improvement. [More information is available here.](#)

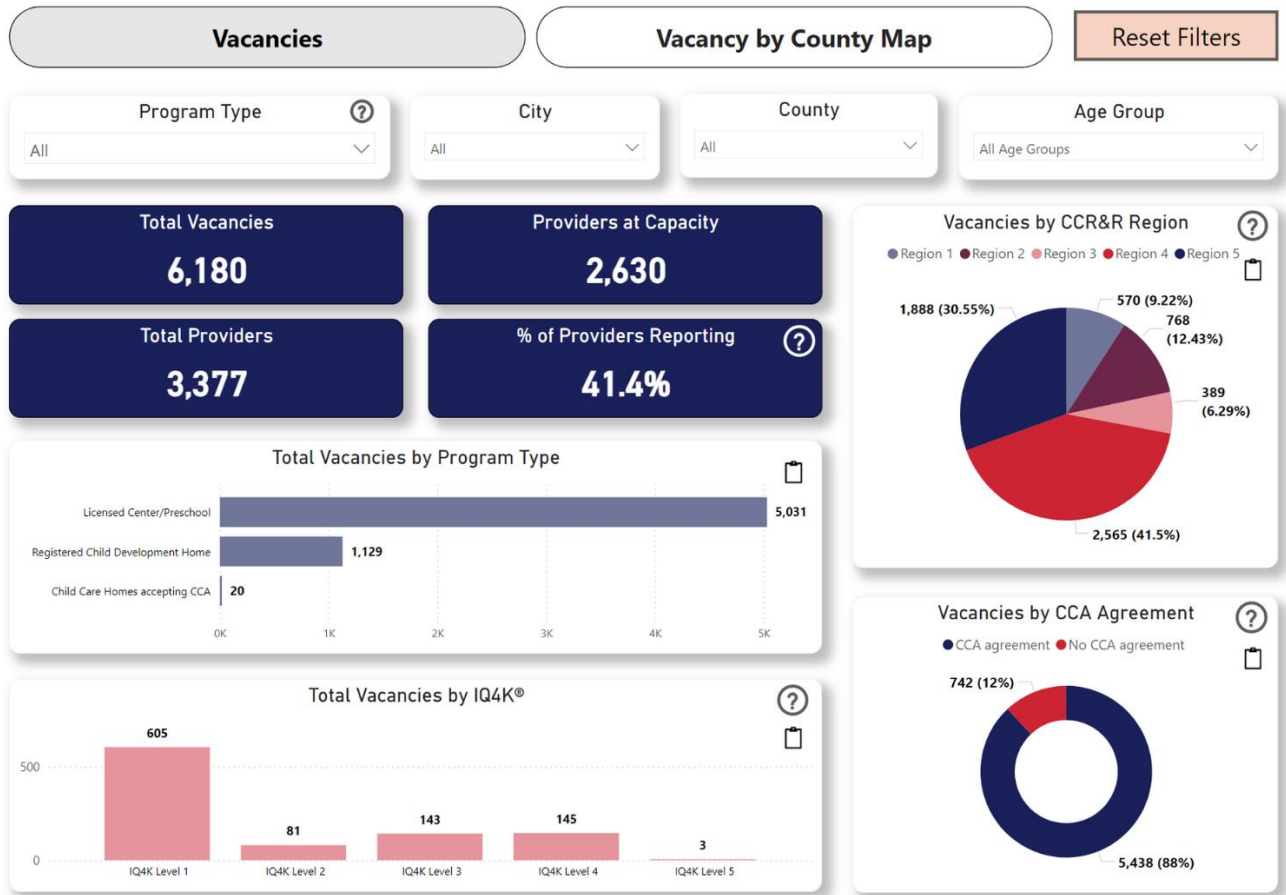
**CCA:** Iowa’s Child Care Assistance (CCA) program – Providers with a CCA Provider Agreement can accept children approved for CCA and receive CCA payments from the state. [More information is available here.](#)

**CCR&R Region:** Iowa Child Care Resource & Referral (CCR&R) provides resources, education and advocacy to support quality child care. [More information is available here.](#)



## Vacancies Page

This page provides an overview of vacancies across the state of Iowa, with more detailed information about the types and characteristics of reported vacancies.



### Filters

Filters on the Vacancies page of this dashboard are located at the top of the dashboard, under the navigation buttons.



- **Program Type**
  - Filter to one or more Program Types: Child Care Homes Accepting CCA, Licensed Center/Preschool, and Registered Child Development Home.
  - Hover over the ? icon in the top right corner of this filter box for additional details about the types of programs.
- **City**: View vacancies in a specific city or cities.
- **County**: View vacancies in a specific county or counties.
- **Age Group**: View All Age Groups (Total Vacancies) or a specific age group.

## Reset Filters

The “Reset Filters” button in the top right will revert all filters to the default selections.

If you select filter criteria and receive a “BLANK” message on the dashboard, this indicates there are no providers that meet the selected criteria. Remove one or more filters to repopulate the dashboard.

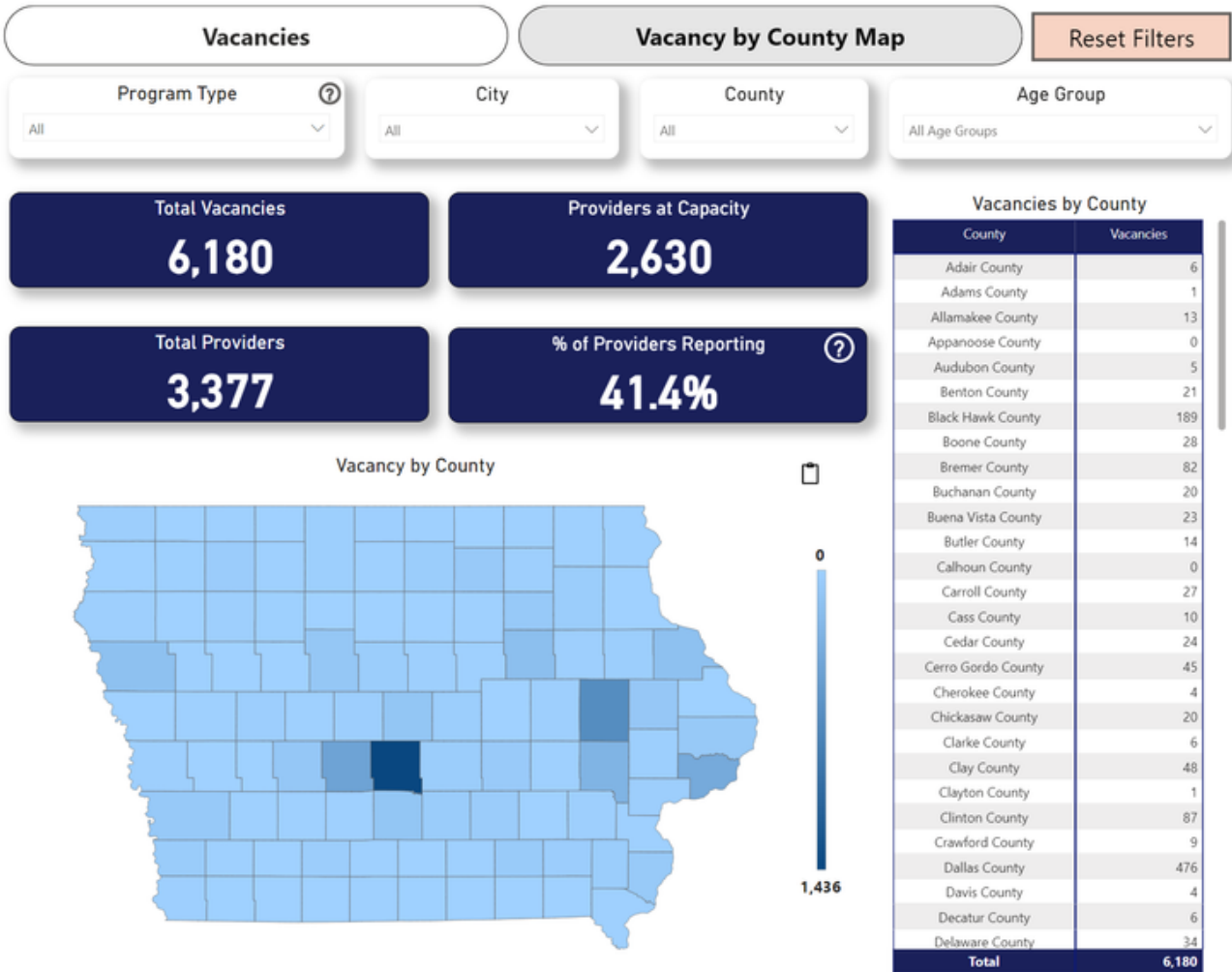
## Interactivity

- Hover over any  icon in the top right of some graphics or figures to see more information about the metric or term.
- Click the  Clipboard icon in the top right of the visuals listed below to maximize it and view additional metadata details for a screenshot.

This dashboard supports cross-filtering, which enables visuals in a report to affect each other's displayed data based on user interactions, (See PowerBI Dashboard User Guide for information on [Cross-Filtering](#)) on the following visualizations:

- Total Vacancies by Program Type Visualization
  - Click on a program type bar in this visualization to filter data in the Total Vacancies by IQ4K<sup>®</sup>, Vacancies by CCR&R Region, and Vacancies by CCA Agreement visualizations, along with the Total Vacancies, Providers at Capacity, Total Providers, and % of Providers Reporting figures.
- Total Vacancies by IQ4K<sup>®</sup> Visualization
  - Click on an IQ4K<sup>®</sup> level bar to filter data in the Total Vacancies by Program Type, Vacancies by CCR&R Region, and Vacancies by CCA Agreement visualizations, along with the Total Vacancies, Providers at Capacity, Total Providers, and % of Providers Reporting figures.
- Vacancies by CCA Agreement Visualization
  - Click on a slice of this visualization to filter data in the Total Vacancies by Program Type, Total Vacancies by IQ4K<sup>®</sup>, and Vacancies by CCR&R Region visualizations, along with the Total Vacancies, Providers at Capacity, Total Providers, and % of Providers Reporting figures.
- Vacancies by CCR&R Region Visualization
  - Click on a region slice in this visualization to filter data in the Total Vacancies by Program Type, Vacancies by CCA Agreement, and Total Vacancies by IQ4K<sup>®</sup> visualizations, along with the Total Vacancies, Providers at Capacity, Total Providers, and % of Providers Reporting figures.

## Vacancies by County Map Page



This page provides an overview of vacancies across the state of Iowa, with more detailed information about vacancies in each county.

### Filters

Filters on the Vacancy by County Map page of this dashboard are located at the top of the dashboard, under the navigation buttons.


- **Program Type**
  - Filter to one or more Program Types: Child Care Homes Accepting CCA, Licensed Center/Preschool, and Registered Child Development Home.
  - Hover over the ? icon for additional details about these types.
- **City**: View vacancies in a specific city or cities.
- **County**: View vacancies in a specific county or counties.
- **Age Group**: View All Age Groups (Total Vacancies) or a specific age group.

## Reset Filters

The “Reset Filters” button in the top right will revert all filters to the default selections.

If you select filter criteria and receive a “BLANK” message on the dashboard, this indicates there are no providers that meet the selected criteria. Remove one or more filters to repopulate the dashboard.

## Interactivity

- Hover over any ? icon to see more information about the metric or term. Vacancies by County Table
  - Scroll within this table to find a particular county.
  - Click the County or Vacancies column headers to sort rows by county name or vacancy amounts (ascending or descending)
  - Click on a county name to focus the Vacancy by County map and filter the Total Vacancies, Providers at Capacity, Total Providers, and % of Providers Reporting figures to the selected county. To select multiple counties, press and hold the Control key and select the names of counties to include.
    - Click the county name in the table again to de-select it or click on the “Reset Filters” button in the top right.
- Vacancy by County Map
  - Click the  Clipboard icon in the top right of this visual to maximize it and view additional metadata details for a screenshot.
  - Darker-colored counties on the map have more vacancies, and lighter-colored counties have fewer.
  - Hover over a county on the map to see the current number of vacancies.
  - Click on any county to filter all other visualizations and figures to the selected county. To select multiple counties, press and hold the Control key and select the counties to include.
    - Click the county again to de-select it or click on the “Reset Filters” button in the top right.

## Supply and Demand Dashboard User Guide

The Supply and Demand Dashboard provides users with information about the number of child care slots available, slots filled, and child care needs across Iowa, and is refreshed twice daily at 6AM and 1PM.

### Key Terms

**Supply:** A slot (vacant or occupied) at a child care provider.

**Supply Level:** The total number of available child care slots at all providers, based on their licensed, registered, or non-registered capacity or their self-reported operational capacity (which may be lower). [Note: **ONLY** Child Care Home (non-registered) providers with an active Child Care Assistance Provider Agreement are included in the dashboard data.]

**Demand Level:** Total number of children in need of child care based on different estimates.

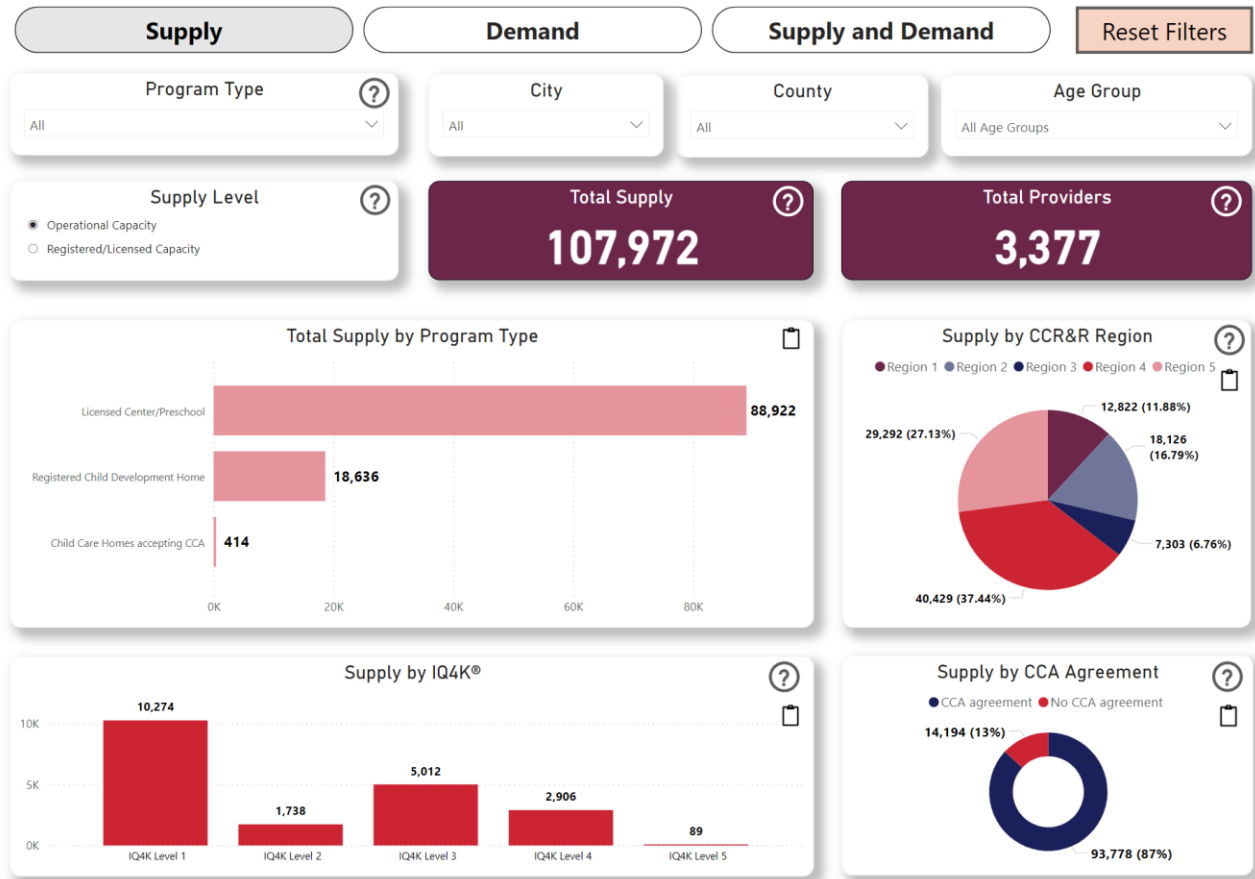
**IQ4K Level:** Iowa Quality for Kids (IQ4K®) is a voluntary quality rating and improvement system. IQ4K® guides child care programs to assess and enhance their quality through continuous quality improvement. [More information is available here.](#)

**CCA:** Iowa's Child Care Assistance (CCA) program - Providers with a CCA Provider Agreement can accept children approved for CCA and receive CCA payments from the state. [More information is available here.](#)

**CCR&R Region:** Iowa Child Care Resource & Referral (CCR&R) provides resources, education and advocacy to support quality child care. [More information is available here.](#)

The dashboard also details the program types, age group, location, quality, and other characteristics for child care.

## Supply Page



This page provides in-depth information about the supply of child care throughout Iowa.

### Filters

Filters on this page of the dashboard are located at the top, under the navigation buttons. The Supply Level filter is directly under the Program Type filter.

This page of the dashboard has the following filters to narrow data by one or more characteristics:



- Program Type
  - Filter to one or more Program Types: Child Care Homes Accepting CCA, Licensed Center/Preschool, and Registered Child Development Home.
  - Hover over the ? icon for additional details about these types.

- Supply Level: Supply is calculated using different methods:
  - Operational Capacity: Provider reported number that captures the number of children they can care for considering total number of staff, ages of children (younger children = less in care), and other factors. *If the provider does not report the number of children they can care for, the provider's registered/licensed capacity assigned by the Iowa Department of Health and Human Services (HHS) is identified as the provider's operational capacity.*
  - Registered/Licensed Capacity: Maximum number of children providers can legally care for at any one time. This number is assigned by HHS. NOTE: Registered/Licensed Capacity supply level data is ONLY available when 'All Age Groups' in the Age Group filter is selected. If the user selects 'Registered/Licensed Capacity' in Supply Level and a specific age group category in Age Group, no data metrics or visualizations display.
- City: View supply in a specific city or cities.
- County: View supply in a specific county or counties.
- Age Group: View All Age Groups (Total Supply) or a specific age group.

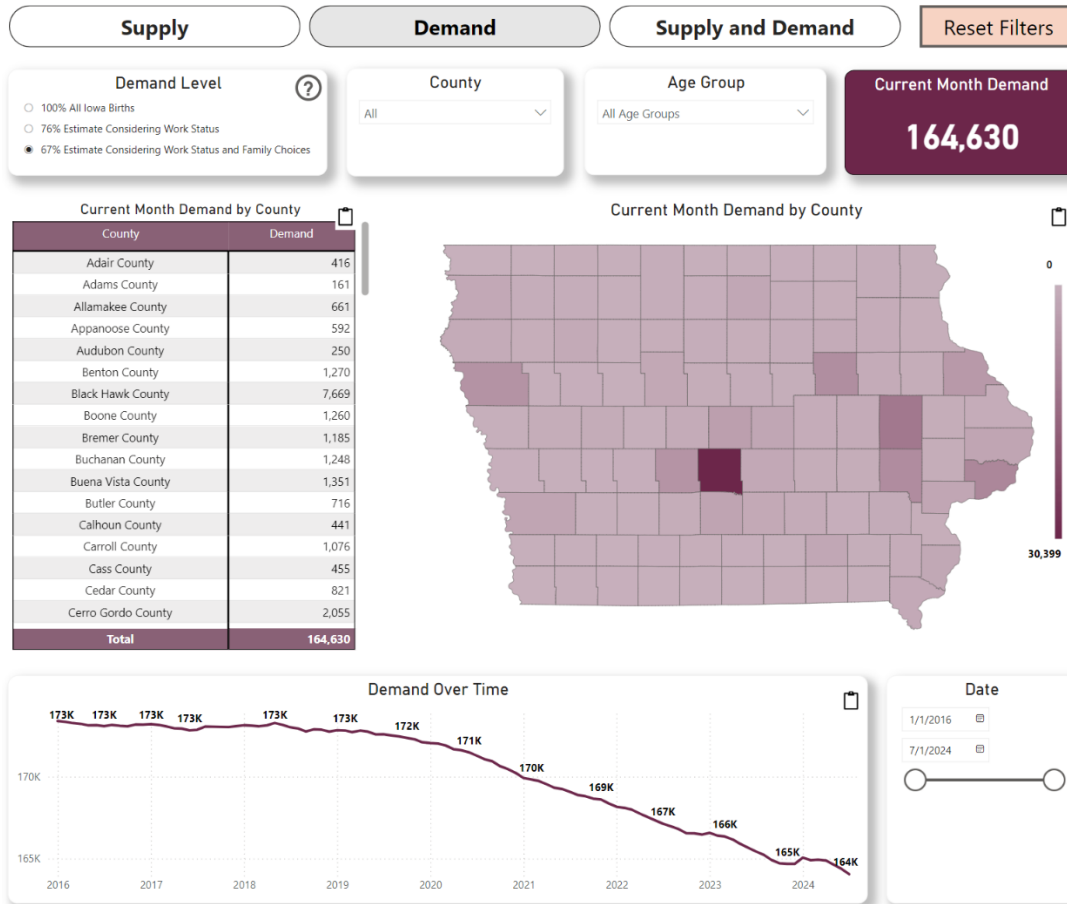
### [Reset Filters](#)

The "Reset Filters" button in the top right will revert all filters to the default selections.

### [Interactivity](#)

- Hover over any  icon in the top right of visuals and filters to see more information about the metric or term.
- Click the  Clipboard icon in the top right of the visuals to maximize it and view additional metadata details for a screenshot.
- Click on a bar in the Total Supply by Program Type graph to see only that program type's numbers in other visualizations and total counts.
- Click on a bar in the Supply by IQ4K® graph to see only the selected quality level's supply in other visualizations and total counts.
- Click on a CCR&R Region slice in the Supply by CCR&R Region graph to see other visualizations and total counts filtered to only that region.
- Click on a slice in the Supply by CCA Agreement graph to filter other visualizations and total counts by providers that do or do not have a CCA Provider Agreement.

## Demand Page



This page displays in-depth information about child care demand throughout Iowa.

### Filters

Filters on this page of the dashboard are at the top, under the navigation buttons.

This page of the dashboard has the following filters to narrow data by one or more characteristics.

- **Demand Level:** The demand for child care is estimated from birth records, using the county of residence at time of birth. Demand is calculated at different percentages to provide users with different estimates to consider. Use this filter to select demand based on:
  - 100% - Total number of children. (all birth records used)
  - 76% - Households with children under the age of six with all parents in the household in the labor force. (Source: United States Census Bureau, American Community Survey (ACS) 5-Year Estimates, Table B23008)




- 67% - Children with caregivers in the workforce or other needs. (Source: Urban Institute State Snapshots of Demand for Child Care 2021)
- County: View Demand in a specific county or counties.
- Age Group: View all Age Groups (Total Demand) or a specific age group.


### Reset Filters

The “Reset Filters” button in the top right will revert all filters to the default selections.


### Interactivity

- Hover over any ? icon in the top right of some graphics or figures to see more information about the metric or term.
- Current Month Demand by County Map
  - Click the  Clipboard icon in the top right of this visual to maximize it and view additional metadata details for a screenshot.
  - In this map graphic, hover over any county to display the county name and current month’s number of child care slots needed (demand).
  - Click on any county to update the Current Month Demand figure and the Current Month Demand by County table to the selected county. To select multiple counties, press and hold the Control key and select the counties to include. NOTE: This does not update the Demand Over Time data visualization.

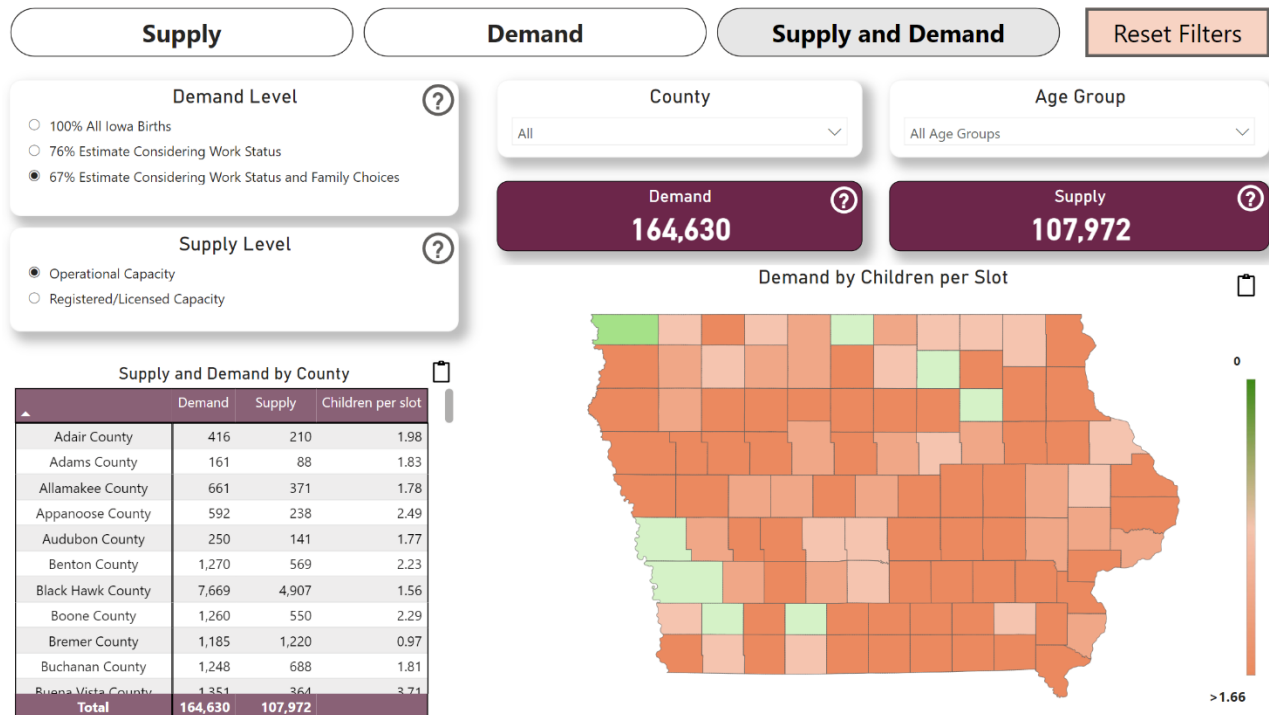
Click the county again to clear your selection.

- Current Month Demand by County Table
  - Click the  Clipboard icon in the top right of this visual to maximize it and view additional metadata details for a screenshot.
  - This table displays the current month’s number of child care slots needed (demand) in each county.
  - Click on the Demand column header to sort counties by demand (ascending or descending).
  - Click on a county name to focus the Current Month Demand by County map and update the Current Month Demand figure. To select multiple counties, press and hold the Control key and select the names of counties to include. NOTE: This does not update the Demand Over Time data visualization.

Click on the county again to clear your selection.

- Demand Over Time Graphic
  - Click the  Clipboard icon in the top right of this visual to maximize it and view additional metadata details for a screenshot.
  - Use the Date filter to set the start and end date for the data that displays in the Demand Over Time graphic.
  - This graphic provides statewide data and users can filter by Age Group.

## Supply and Demand Page




### Filters

Filters on this page of the dashboard are at the top of the dashboard, under the navigation buttons. The Supply Level filter is directly under the Demand Level filter.

- Demand Level: The demand for child care is estimated from birth records, using the county of residence at time of birth. Demand is calculated at different percentages to provide users with different estimates to consider. Use this filter to select demand based on:
  - 100% - Total number of children. (all birth records used)


- 76% - Households with children under the age of six with all parents in the household in the labor force. (Source: United States Census Bureau, American Community Survey (ACS) 5-Year Estimates, Table B23008)
- 67% - Children with caregivers in the workforce or other needs. (Source: Urban Institute State Snapshots of Demand for Child Care 2021)
- **Supply Level**: Supply is calculated using different methods:
  - Operational Capacity: Provider reported number that captures the number of children they can care for considering total number of staff, ages of children (younger children = less in care), and other factors. *If the provider does not report the number of children they care for, the provider's registered/licensed capacity assigned by HHS is identified as the provider's operational capacity.*
  - Registered/Licensed Capacity: Maximum number of children providers can legally care for at any one time. This number is assigned by the HHS.
- **County**: View child care demand and supply data for a specific county or counties.
- **Age Group**: View All Age Groups (total demand and supply) or a specific age group. NOTE: When filtering by Registered/Licensed Capacity in the **Supply Level** filter, **Demand** and **Supply** data is ONLY available when the user selects 'All Age Groups' in the **Age Group** filter. If the user selects 'Registered/Licensed Capacity' in **Supply Level** and a specific age group category in **Age Group**, no data metrics or visualizations display.

### Interactivity

- Hover over any ? icon in the top right of some graphics or figures to see more information about the metric or term.
- **Supply and Demand by County** Table
  - Click the  Clipboard icon in the top right of this visual to maximize it and view additional metadata details for a screenshot.
  - This table displays each county's current child care supply, demand, and the ratio of children per child care slot (as defined by the **Demand Level** filter).
  - Click on either the Supply, Demand, or Children per slot column header to sort the counties by that metric (ascending or descending).
  - Click on a county name to focus the **Demand by Children per Slot** map and update the **Demand** and **Supply** figures. To select multiple counties, press and hold the Control key and select the names of counties to include.

Click on the county again to clear your selection.

- Demand by Children per Slot Map

- Click the  Clipboard icon in the top right of this visual to maximize it and view additional metadata for a screenshot.
- In this map graphic, lighter/green-colored counties are currently more able to meet the demand for child care, while darker/orange-colored counties have a higher number of children per child care slot.
- Hover over any county to display the county name and current supply, demand, and ratio of children per child care slot.
- Click on any county to update the Demand and Supply figures, and the Supply and Demand by County table. To select multiple counties, press and hold the Control key and select the counties to include.

Click the county again to clear your selection.