



# Minnesota Early Childhood Risk & Reach Report

## *Key Indicators of Early Childhood Development in Minnesota, County by County*

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# Summary and implications

## Purpose

Researchers across domains agree. The physical, social, and economic health and well-being of adults and society are strongly influenced by both positive and negative experiences in early childhood. The most cost-efficient time to build foundational skills, to assure the healthy development of all young children, to break the cycle of disadvantage for vulnerable children, and to prevent achievement and health inequities is in the very early stages of development.

The 2015 Minnesota Early Childhood Risk & Reach report was produced by Wilder Research in partnership with the University of Minnesota (Harris Training Programs in the Center for Early Education and Development) and the Minnesota Departments of Education (MDE), Health (MDH), and Human Services (DHS). The report describes potential risks to the healthy development of young children and the extent of coverage of publicly-funded services to meet their early learning, health, and basic needs.

The report was inspired in large part by efforts in Louisiana and other states to take stock of indicators of early childhood well-being and the availability and accessibility of key services from a county-level perspective. It is intended to be a resource for all early childhood stakeholders in order to guide and inform resource allocation and policy. One benefit of compiling data in such a format is that these indicators can be periodically assessed for continuity, change, and integration over time.

## Methodology

For every **risk indicator**, each county was assigned to one of four risk categories, based on comparisons to the statewide average. These comparisons were based on z-scores, which represent the number of standard deviations that an individual county-level indicator falls above or below the statewide average. Each county also has a **composite risk score**, which sums the z-scores for each county across all indicators, calculates the average and standard deviation, and then assigns each county another z-score. This composite score was then used to assign counties to one of the four risk categories.

**Indicators of reach** measure the proportion of eligible children served by eight publicly-funded programs in Minnesota. Similar to the risk indicators, each county was assigned to one of four reach categories, based on comparisons to the statewide average for every reach indicator. In addition to being reported in tables, the reach indicators are also

mapped onto the composite risk score map to provide readers with a sense of each program's coverage in relation to the overall level of risk or need.

This report is the first attempt in Minnesota to describe indicators of early childhood development county by county. Differences and disparities by income and race/ethnicity, highlighted in other state level reports, however, are not available for every Minnesota county. The Introduction section of this report describes the methods in more detail, including limitations, and recommends possible improvements for future reports.

## Findings: Risk indicators

### *Economic risks*

- Eight percent of births in 2012 were to mothers with less than a high school degree. Nine of Minnesota's counties fall in the high risk category on this indicator, all of which are located in greater Minnesota. Mahnomon County has the highest share (24%).
- Statewide, about 3 percent of children have no working parent, ranging from 25 percent in Wadena County to 2 percent in Sherburne County.
- Almost 17 percent of children are living in poverty in Minnesota (poverty level is about \$19,000 per year for a family of three and about \$23,000 for a family of four). Fourteen counties spread throughout the state fall in the highest risk category on this indicator.

### *Health risks*

- The teen birth rate in Minnesota is 20 births per 1,000 girls age 15 to 19. Seven counties are high risk. Mahnomon, Nobles, and Beltrami counties have the highest rates at 96, 55, and 50 births per 1,000 teen girls, respectively.
- In 2012, an estimated 22 percent of births in Minnesota lacked adequate prenatal care. Most counties are low to moderate risk on this indicator. The 13 high-risk counties are scattered throughout the state, including multiple counties in the southwest and northwest regions.
- In 2013, almost 5 percent of births were low-weight births (under 5.5 pounds). The thirteen counties in the high risk category are spread throughout the state.
- The Minnesota infant mortality rate is 5 deaths per 1,000 births. The rate in Mahnomon County is the highest, 13.5 per 1,000, reflecting the county's high concentration of American Indian children and mortality rates among American Indian babies that are double the rates of white babies in Minnesota.

- About 6 percent of children in Minnesota under age 6 lacked health care coverage (2008-2012), with the range stretching from 2 percent in Lyon and Pennington counties to a high of 16 percent in Mahnommen and Todd.
- About 37 percent of 2-year-old children (age 24 through 35 months) lacked the recommended childhood immunizations in 2013. Immunization levels range from 32 percent in Chisago County to 88 percent in Lyon County. The 16 high-risk counties include all seven Twin Cities metro region counties, except Carver, which falls in the moderate to high risk category.

### ***Family stability risks***

- Nineteen percent of children under age 5 changed residences at least once in the past year (2008-2012). Eleven counties fall in the high risk category, including the state's two most populous counties, Hennepin and Ramsey. Yellow Medicine County features the highest share of children who moved in the last year (27%), and Sherburne County has the lowest share (9%).
- In 2013, 25 in 1,000 children under age 5 statewide had a maltreatment report filed. Mille Lacs County has the state's highest rate, at 75 per 1,000 children. Anoka, Dakota, and Washington counties are among the lowest-risk counties.
- In 2013, about 8 in 1,000 children under age 6 statewide were in foster care. The state's highest rates of foster care placements are all in six northern counties. Beltrami has the state's highest rate, at 45 per 1,000 children.

### ***Overall risk status***

Each county was assigned to one of the four risk categories, based on its average score across all indicators relative to other counties. This single score is meant to focus attention and begin conversations about where counties fall along the continuum of risk, which counties are in greatest need, and what we might learn from counties with the lowest-risk environments for young children.

Minnesota has an estimated 436,000 children age 5 and younger living in 87 counties.<sup>1</sup>

- About 80,000 children live in 12 counties categorized as low-risk counties. The counties with the most indicators at low risk levels are Carver, Scott, Washington, Sherburne, Red Lake, and Wright.

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<sup>1</sup> 4 counties with about 1,000 children under age 6 lack sufficient data to assess overall risk.

- About 155,000 children live in 37 low-to-moderate risk counties.
- About 132,000 children live in 19 moderate-to-high risk counties, including Hennepin County.
- About 68,000 children live in 15 high-risk counties, including Ramsey County. The counties with the most indicators at high risk levels are Mahnommen, Becker, Beltrami, and Cass.

## Findings: Reach indicators

### *Reach of health programs*

- Seventy percent of eligible children under age 6 are served by the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). In general, greater Minnesota counties have higher levels of reach than counties in the metro area.
- The Family Home Visiting Program reaches 8 percent of the targeted low-income families (at or below 185% of poverty level) with children under age 5. In general, high-reach counties tend to be in greater Minnesota.

### *Reach of human services*

- A third of children under age 6 in low-income families (at or below 125% of poverty level) are covered by Minnesota Family Investment Program. The coverage ranges from 11 percent in Red Lake County to 91 percent in Beltrami County. In the Twin Cities metro area, Anoka, Hennepin, and Ramsey counties have high reach levels (65%).
- Thirteen percent of children under age 6 in low-income families (at or below 200% of poverty level) are served by the Child Care Assistance Program. The participation ranges from 3 percent in Todd County to 23 percent in Dodge County. Counties in southeast Minnesota near Rochester have high levels of CCAP reach, and counties in the northwest have lower levels.
- Statewide, 40 children per 1,000 children under age 6 enrolled in Minnesota Health Care Programs were assessed and treated for mental health issues in 2013. Ramsey County is among the 12 low-reach counties scattered across Minnesota.

## *Reach of education programs*

- About a third of children age 3 received developmental screenings by the Early Childhood Screening Program in 2013. The reach ranges from 8 percent in Mahanomen County to about 75 percent in Douglas, Lac qui Parle, Pipestone, and Red Lake counties. In the metro area, Hennepin (25%) and Ramsey (22%) counties have low reach levels.
- About a quarter of children under age 6 living in poverty are served by Head Start and Early Head Start. In general, greater Minnesota counties have higher levels of reach than counties in the metro area. The coverage ranges from 10 percent or below in Carver and Dakota counties in the metro area and Benton, Dodge, Le Sueur, Mower, Murray, Rock, Sherburne, and Sibley counties in greater Minnesota to 80 percent or higher in Clearwater, Douglas, Freeborn, Lincoln, Roseau, and Swift counties.
- In 2014, about 4 percent of children under age 5 were served by early intervention or early childhood special education services statewide, ranging from 1 to 11 percent of children per county.

## Conclusions and implications

Nearly 200,000 children in Minnesota live in moderate-to-high or high-risk counties, representing 46 percent of all children under age 6 in Minnesota with potential risks to healthy development.

County-by-county comparisons of risks show that Ramsey County, which is the most racially diverse county in the metro area, is more similar to many greater Minnesota counties than to the rest of the metro counties. Eight of the 15 high-risk counties (including Ramsey County) are high risk for children living in poverty, and six of them have high proportions of American Indian children.

The reach of publicly funded early childhood programs in Minnesota varies by county and ranges from about 4 percent to about 70 percent of eligible children. In some counties the greater availability of services may contribute to a lower risk level; in other counties, a greater level of services may have resulted from efforts to target the higher risk levels that are present in the county.

The racial disparities with regard to developmental risks and state population projections suggest that over the next 10 to 20 years the whole metro region will look a lot like Ramsey County does today. Throughout Minnesota, but especially in the metro region, developmental risk levels are likely to rise without concerted effort to rectify income

inequality and racial inequities and to improve the reach of early childhood education, health, and family support programs.

Although every early childhood risk factor is a concern, no single risk factor determines a child's developmental trajectory. Development is probabilistic, not deterministic. Nevertheless, cumulative risk has been found to be the most predictive of adverse outcomes in childhood and across the lifespan. Transactional developmental models and concepts of vulnerability and resilience suggest that child development is a product of continuous, dynamic, and bidirectional interactions between the child and his or her environment, including relationships within families, culture, and social systems. Importantly, each of these models emphasizes the importance of stable and nurturing early relationships in the developmental process. Supporting and restoring fundamental adaptive relationships and systems for human development are top priorities for promoting competence and resilience in young children and their families. These theories imply that the opportunities for intervention are as numerous as the consequences of cumulative risk. There is no threshold at which intervention is futile.<sup>1-7</sup>

Finally, this report is a good first step in developing a tool useful to describe and compare indicators of early childhood development at the county level. A comprehensive, cross-agency, integrated early childhood data system would make these and other related data more accessible and more useful for assessing cumulative early childhood risk and the relationship between risk and reach over time.

# Introduction

Minnesota has about 436,000 children age 5 and younger. This report describes the potential risks to their healthy development and the extent of coverage of publicly-funded services to meet their early learning, health, and basic needs. The report was produced by Wilder Research in partnership with the University of Minnesota (Harris Training Programs in the Center for Early Education and Development) and the Minnesota Departments of Education (MDE), Health (MDH), and Human Services (DHS). The report was inspired by a similar report for Louisiana published in 2012, co-sponsored by Tulane University and Louisiana State University and led by Geoffrey Nagle.

## Purpose

The report is intended to provide useful county-level information about the development of young children in Minnesota to counties, agencies, and other stakeholders so that they can strategically work together for the benefit of children and families. By identifying and comparing indicators of risk and access to services to support children and families at risk county by county, the report also intends to highlight regions of greatest need and opportunities for collaboration and integration of services across departments and geographic areas.

## Background and context

Researchers across domains agree. The physical, social, and economic health and well-being of adults and society are strongly influenced by experiences in early childhood that form the foundation for the development of effective cognitive and social skills. Children who experience adverse events or prolonged toxic stress associated with poverty, child abuse and neglect, and other negative life events, as well as those with developmental delays, often require interventions to build the foundational skills necessary to reach their potential and to become productive citizens. The most cost-efficient time to assure the healthy development of all young children, to break the cycle of disadvantage for vulnerable children, and to prevent educational and health inequities is in the very early stages of development.<sup>8-11</sup>

In Minnesota, most information on the experiences of young children has been reported only at the statewide level. Disparities based on geography, income, and race/ethnicity are noted when data are available, but data have usually been limited or dichotomized, for example, comparing the Twin Cities metro area to the rest of Minnesota and comparing

families at or below federal poverty level incomes to those with incomes above the poverty level. Recent examples include:

In 2009, Wilder Research and the Project for Babies produced *Babies in Minnesota*, which provided a snapshot of how young children and their parents in Minnesota were faring, presenting indicators and trends with regard to births, newborns, infants, and toddlers as well as family strengths and stressors. The report found that most of the 286,580 children age 3 and younger in Minnesota were healthy, but a sizeable number (at least 15-20%) were vulnerable, as evidenced by inequities in access to services and in well-being. Moreover, young children of color were among the most vulnerable. The report also noted that incomplete data and the lack of an integrated early childhood data system left many questions unanswered about the well-being of children and access to needed services.

In 2011, MDH released the findings from a first ever statewide survey regarding adverse or traumatic childhood experiences (ACEs), which have been linked to poor physical and mental health and chronic disease in adulthood. Adult survey respondents were asked to recall if they had experienced nine types of adversity before the age of 18. More than half (55%) had one or more adverse childhood experience, with adversity more common among those adults who did not graduate from high school, who were unmarried, or who were unemployed. The most common ACEs were verbal abuse (28%), alcoholic or substance-abusing parent (24%), mental illness (17%), and physical abuse (16%).

In 2011, Wilder Research prepared the *School Readiness Report Card* for the Minnesota Office of Early Learning, with many of the same indicators as this report but only at the state level. The *Report Card* noted that nearly one in five children under age 6 in Minnesota lived in poverty, and 61 percent of children under age 6 living in poverty were children of color, who also suffered disparity after disparity in indicators of educational, health, and social well-being and access to resources, particularly American Indian and black children.

An April 2015 report from Minnesota DHS provides insights into the living conditions of Minnesota children living in poverty. *How prevalent are family risk factors among Minnesota children who receive Medical Assistance or MinnesotaCare?* uses administrative data to describe parent, family, and environmental risk factors (not child-level factors) experienced by children enrolled in Minnesota Health Care Programs. The risk factors were selected because they are associated with negative health outcomes. For example, about 13 percent of the nearly 400,000 children age 17 and younger have a parent with a diagnosed serious mental illness, 10 percent have a parent with a chemical health diagnosis, and a third live in areas of concentrated poverty. Three-quarters receive food stamps.

This report is an initial attempt to describe indicators of early childhood development county by county. Differences and disparities by income and race/ethnicity, which have been highlighted in other reports, however, are not available at the county level.

Reporting information on the experiences of young children at the county level in Minnesota is useful because our state is one of 13 states that deliver services through a “state-supervised and county-administered” system. That is, state agencies set the rules, distribute state and federal funds through competitive or formula grants, and monitor county performance. The 87 Minnesota counties are responsible for delivering social services, public health, and other services. Counties also raise additional revenue through property taxes, sales taxes, and fees. In counties with low property values, high levels of poverty, and limited economic activity, less revenue is available for service delivery, which contributes to uneven availability of programs and services across the state.

## Methodology

### *Risk indicators*

The 12 risk indicators included in this report measure several dimensions of the potential risk to the well-being and quality of life for young children. The selected economic, family stability, and health indicators, chosen in consultation with the advisory committee for this report, are available at the county level and updated on an annual basis. The full list is on page 12. Specific notes on each indicator, including reasons each was chosen, are included in their respective sections.

Each risk indicator is presented as a standardized measure to allow county-by-county comparisons. For example, counties are not compared on the number of children living in poverty; instead they are compared based on the rate of poverty among children. County-specific data are provided in the accompanying tables, along with national and state averages when available. The specific sources for each indicator are noted in each section. Some data were not available for certain counties, as noted in the tables by \*.

We have also developed maps showing a “risk level” based on each of these indicators. Level of risk is based on a comparison of counties within Minnesota only. For every indicator, each county was assigned to one of four risk categories, based on comparisons to the statewide average. These comparisons were based on z-scores, which represent the number of standard deviations that an individual county-level indicator falls above or below the statewide average. Risk category assignments were made as follows:

- Low risk: z-score of less than -1: (more than 1 standard deviation below the mean)
- Low to moderate risk: z-score of -1 or more and less than 0 (less than 1 standard deviation below the mean)

- Moderate to high risk: z-score of 0 to less than 1 (less than 1 standard deviation above the mean)
- High risk: z-score of 1 or higher (more than 1 standard deviation above the mean)

### ***Composite risk***

Finally, we also developed a composite or overall risk score for each county, which combines information on all of the risk indicators. (Four counties lacking data on four or more risk indicators are excluded). The composite sums the z-scores for each county across all individual risk indicators, calculates the average and standard deviation, and then assigns each county a new z-score based on this composite. Based on this composite score, counties were assigned to one of the four overall risk categories. Counties averaging at least one standard deviation above the mean on all indicators were assigned to the high risk category, and those averaging at least one standard deviation below the statewide average were assigned to the low risk category.

### ***Reach indicators***

Indicators of reach measure the proportion of eligible or potentially eligible children served by eight publicly-funded programs in Minnesota. Data for the reach indicators come from the Minnesota Departments of Education, Health, and Human Services. The full list of programs is on page 52. Specific notes on each indicator, including the benefits and eligibility of each program, and the details of how we calculated the extent of each reach indicator, are included in their respective sections.

Similar to the risk indicators, each county was assigned to one of four reach categories, based on comparisons to the statewide average for every reach indicator. In addition to being reported in tables, the reach indicators are also mapped onto the composite risk score map to provide readers with a sense of each program's coverage in relation to the overall level of risk or need.

### ***Limitations***

Risk and reach indicators are limited to data available at the county level. The lack of an integrated statewide data system and standards for data collection and reporting limits the reporting to individual risk and program indicators without the ability to assess cumulative risk and the comprehensiveness of service reach.

Calculating the number of children eligible to receive services (the denominators in the reach equations) is challenging because program eligibility requirements vary and are usually based on different levels of household income as well as other factors of need and

circumstances, and county populations and income levels are based on multi-year samples. The results, while inexact, are still useful for comparisons across counties.

The data provided by the state agencies are not always inclusive of all services or all populations served. For example, the Minnesota Family Investment Program does not include extended cases with caregivers with mental illness, developmental disabilities, and chemical health issues; the screening data are limited to education services and do not include developmental screening by health care providers. Tribal data, moreover, are not always included within state agency data.

Finally, data are not routinely collected or available at the county level regarding potential protective factors for children, such as the extent to which they have secure attachment and nurturing relationships within their families.

### ***Future reports***

This report is an initial attempt to present indicators of early childhood development at the county level. Report partners hope that this preliminary project will lead to future reports with additional and new indicators to better inform policy and practice in Minnesota counties. Possible enhancements include, for example, improved data on child mobility, the social and mental health needs of parents and families, access to social and economic supports and combinations of services, father involvement in child well-being, and family strengths and assets. Future reports should also strive to address racial/ethnic disparities, to highlight school district boundaries or sub-regions within counties, and to focus on prenatal to age 3 experiences that provide the foundation for development.

# Risk indicators

In the pages that follow you will find a description, map, and table for 12 indicators of risk for Minnesota's youngest children. These risks are grouped into three categories:

## **Economic risks**

- Births to mothers with less than a high school degree
- Children under age 18 with no working parent
- Children under age 6 living in poverty

## **Health risks**

- Teen birth rate
- Inadequate prenatal care
- Low-weight births
- Infant mortality rate
- Children under age 6 without health care coverage
- Lack of immunizations

## **Family stability risks**

- Child mobility
- Maltreatment reports filed
- Children under age 6 in foster care

This section concludes with a composite risk score that consolidates the various risk factors and helps to contextualize the reach factors, which are shown in the next section of the report.

## Economic risk indicators

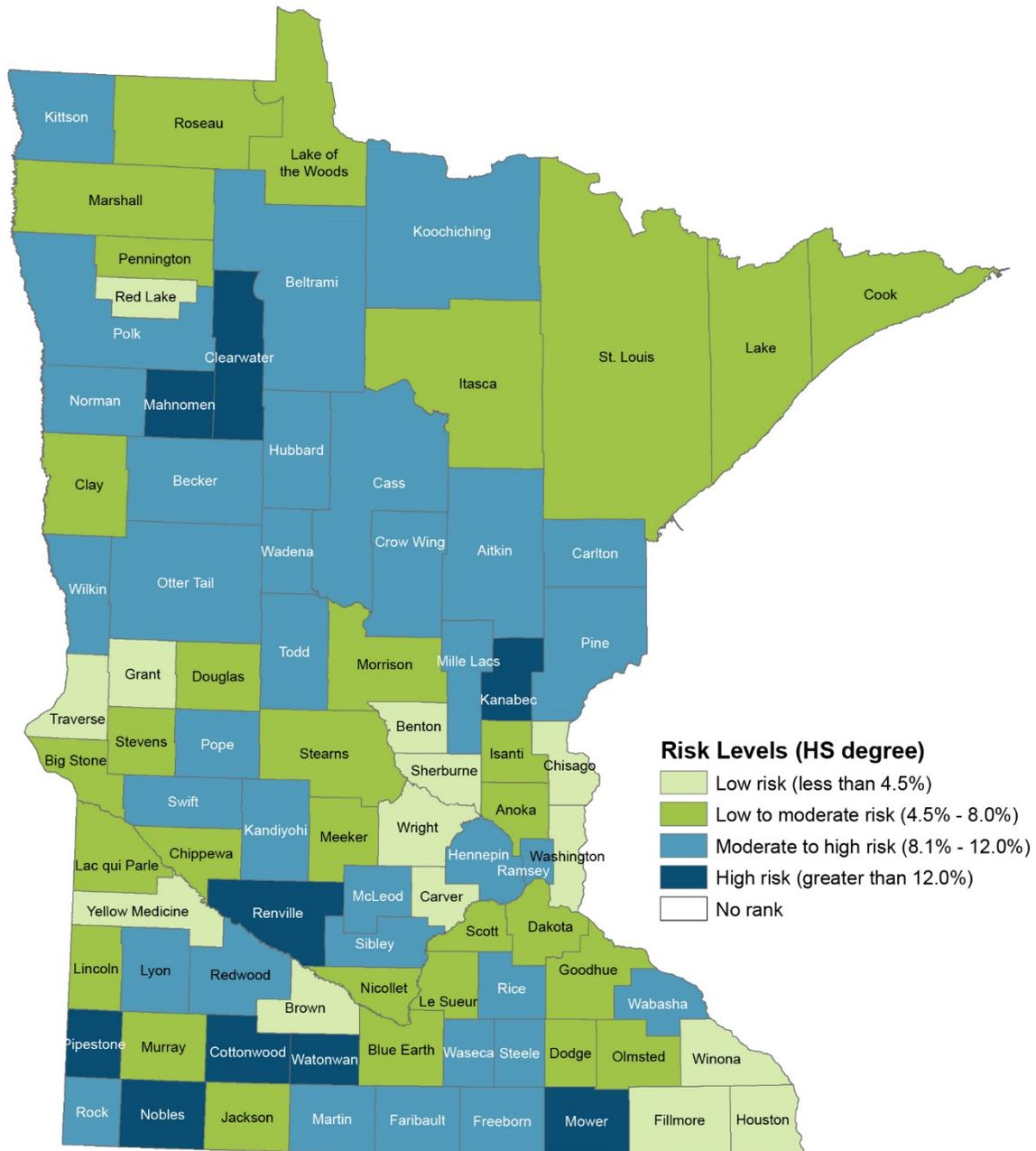
### *Births to mothers with less than a high school degree*

Maternal education is one of the strongest predictors of disparities in child health, behavioral, and cognitive outcomes in the first two years of life. Children of mothers with more education are more likely to be up-to-date on their immunizations, and greater maternal education is associated with lower infant mortality. Mothers with less than a high school degree often experience financial strain, which can affect their mental health, level of stress, and parenting quality. These factors have been linked to child behavior problems and lower performance on standardized tests related to school readiness.<sup>12-16</sup>

In 2012, nearly 8 percent of all births in the state were to mothers with less than a high school degree.

Nine of Minnesota's counties fall in the high risk category on this indicator, all of which are located in greater Minnesota. Mahnomon County, located in the northwest part of the state, has the highest share of babies born to mothers with less than a high school degree (24%), and Grant County has the lowest share (2%). Fourteen counties fall in the low risk category on this measure, including five surrounding the Twin Cities and a cluster of three counties in the southeast corner of the state.

**1a. Births to mothers with less than a high school degree, mapped by county (2012)**



Source: Wilder Research analysis of data from Minnesota Department of Health.

## 1b. Births to mothers with less than a high school degree, by county (2012)

	%	Risk Level		%	Risk Level		%	Risk Level
			Hubbard	10.8%	3	Pipestone	15.7%	4
Minnesota	7.9%	--	Isanti	6.3%	2	Polk	9.0%	3
Aitkin	11.7%	3	Itasca	7.2%	2	Pope	8.1%	3
Anoka	6.7%	2	Jackson	6.6%	2	Ramsey	11.2%	3
Becker	9.5%	3	Kanabec	13.5%	4	Red Lake	3.0%	1
Beltrami	10.2%	3	Kandiyohi	11.4%	3	Redwood	10.3%	3
Benton	3.4%	1	Kittson	11.1%	3	Renville	13.6%	4
Big Stone	6.5%	2	Koochiching	10.5%	3	Rice	9.1%	3
Blue Earth	4.9%	2	Lac qui Parle	6.2%	2	Rock	9.2%	3
Brown	3.6%	1	Lake	4.9%	2	Roseau	4.6%	2
Carlton	8.3%	3	Lake of the Woods	7.1%	2	Scott	4.6%	2
Carver	3.1%	1	Le Sueur	7.4%	2	Sherburne	3.9%	1
Cass	10.5%	3	Lincoln	4.8%	2	Sibley	11.0%	3
Chippewa	6.3%	2	Lyon	9.0%	3	St. Louis	7.1%	2
Chisago	3.2%	1	Mahnomen	24.1%	4	Stearns	6.0%	2
Clay	7.9%	2	Marshall	4.8%	2	Steele	9.7%	3
Clearwater	13.7%	4	Martin	9.3%	3	Stevens	5.6%	2
Cook	7.3%	2	McLeod	9.0%	3	Swift	8.9%	3
Cottonwood	15.6%	4	Meeker	4.6%	2	Todd	11.1%	3
Crow Wing	8.9%	3	Mille Lacs	9.9%	3	Traverse	4.2%	1
Dakota	5.8%	2	Morrison	5.3%	2	Wabasha	8.3%	3
Dodge	7.7%	2	Mower	12.8%	4	Wadena	11.5%	3
Douglas	5.5%	2	Murray	7.4%	2	Waseca	8.5%	3
Faribault	10.0%	3	Nicollet	4.7%	2	Washington	3.0%	1
Fillmore	4.2%	1	Nobles	17.3%	4	Watonwan	15.8%	4
Freeborn	10.9%	3	Norman	9.5%	3	Wilkin	8.6%	3
Goodhue	4.9%	2	Olmsted	6.4%	2	Winona	3.4%	1
Grant	1.7%	1	Otter Tail	8.5%	3	Wright	4.1%	1
Hennepin	9.6%	3	Pennington	5.9%	2	Yellow Medicine	3.4%	1
Houston	3.6%	1	Pine	10.5%	3			

Source: Minnesota Department of Health.

Note: Level 1 = low risk (less than 4.5%), level 2 = low to moderate risk (4.5% - 8.0%), level 3 = moderate to high risk (8.1% - 12.0%), level 4 = high risk (greater than 12.0%).

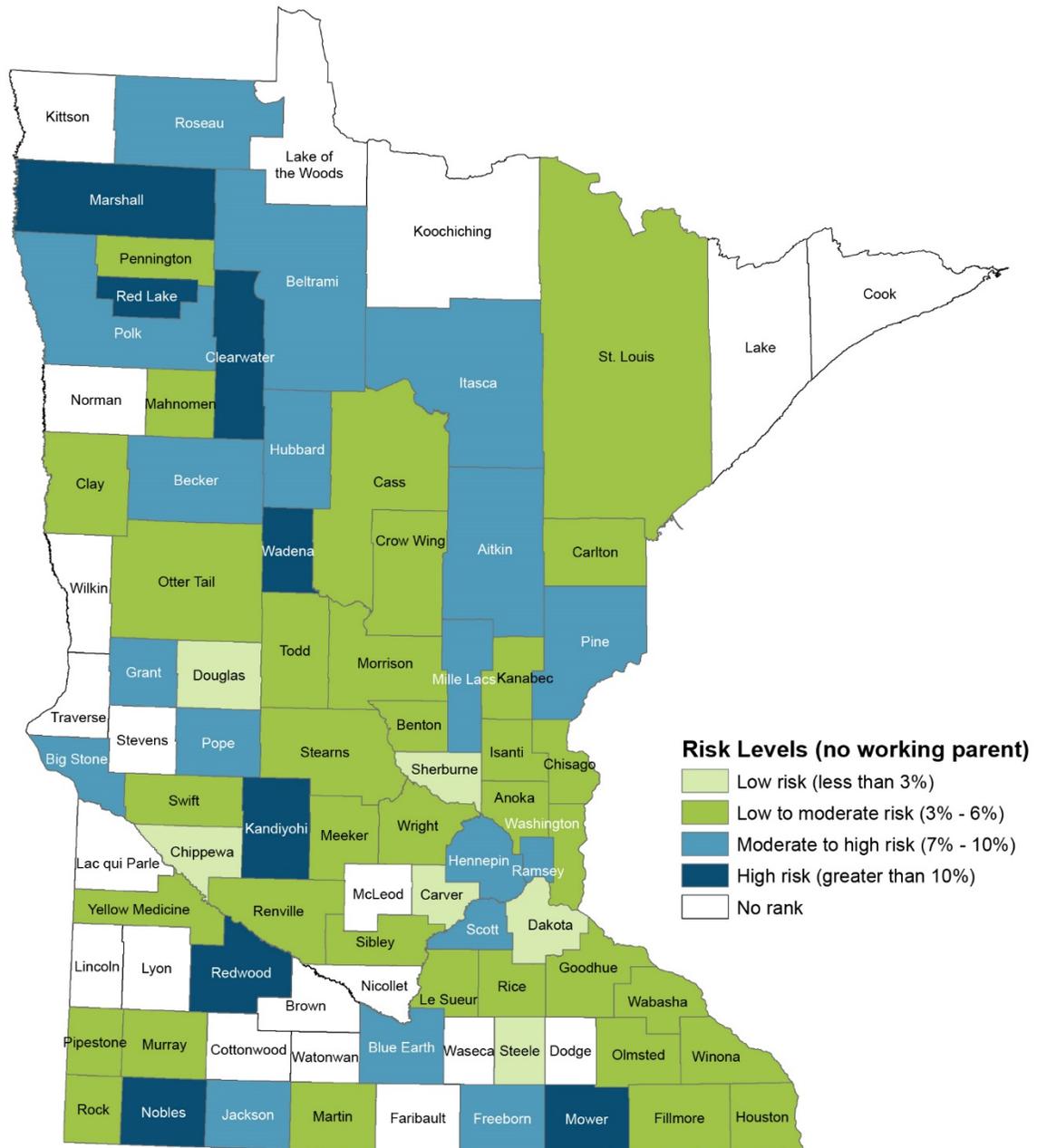
### *Children under age 18 with no working parent*

Parental unemployment is associated with stress, anxiety, and depression in the unemployed adult, which can lead to an increase in family stress and contribute to a host of negative outcomes for children, including low birth weight, child abuse, low academic achievement, and behavior problems. Further, families with no working parent are much more likely to be below the poverty line, which in itself poses a risk, particularly for young children.<sup>17-21</sup>

Minnesota generally has a high level of workforce participation, and Minnesota's parents are no exception. Statewide, the proportion of all children under 18 with the risk factor of lacking a working parent is 3.4 percent, well below the national rate of 5.5 percent. (Data are not available in the census for younger age groupings.)

However, 38 of Minnesota's 87 counties have rates of non-working parents that are higher than the national average, including the eight counties that fall in the high risk category. Wadena County, located in the north-central part of the state, features the highest share of children living with no working parent (25%). Sherburne County, located just north of the Twin Cities metro region, has the lowest share (2%). Data for 20 out of 87 counties were not reported due to large margins of error.

**2a. Children under age 18 with no working parent, mapped by county (2008-2012)**



*Source:* Wilder Research analysis of data from U.S. Census Bureau, American Community Survey, 2008-2012.

*Note:* Counties lacking data for this indicator were categorized as "no rank."

## 2b. Children under age 18 with no working parent, by county (2008-2012)

	%	Risk Level		%	Risk Level		%	Risk Level
<b>US</b>	<b>5.5%</b>	<b>--</b>	Hubbard	10%	3	Pipestone	4%	2
<b>Minnesota</b>	<b>3.4%</b>	<b>--</b>	Isanti	6%	2	Polk	8%	3
Aitkin	7%	3	Itasca	7%	3	Pope	9%	3
Anoka	3%	2	Jackson	7%	3	Ramsey	10%	3
Becker	7%	3	Kanabec	5%	2	Red Lake	12%	4
Beltrami	9%	3	Kandiyohi	12%	4	Redwood	12%	4
Benton	4%	2	Kittson	*		Renville	6%	2
Big Stone	9%	3	Koochiching	*		Rice	5%	2
Blue Earth	8%	3	Lac qui Parle	*		Rock	7%	2
Brown	*		Lake	*		Roseau	8%	3
Carlton	4%	2	Lake of the Woods	*		Scott	7%	3
Carver	2%	1	Le Sueur	3%	2	Sherburne	2%	1
Cass	6%	2	Lincoln	*		Sibley	4%	2
Chippewa		1	Lyon	*		St. Louis	6%	2
Chisago	5%	2	Mahnomen	5%	2	Stearns	5%	2
Clay	5%	2	Marshall	16%	4	Steele	3%	1
Clearwater	12%	4	Martin	5%	2	Stevens	*	
Cook	*		McLeod	*		Swift	7%	2
Cottonwood	*		Meeker	4%	2	Todd	6%	2
Crow Wing	5%	2	Mille Lacs	8%	3	Traverse	*	
Dakota	3%	1	Morrison	5%	2	Wabasha	5%	2
Dodge	*		Mower	11%	4	Wadena	25%	4
Douglas	3%	1	Murray	6%	2	Waseca	*	
Faribault	*		Nicollet	*		Washington	3%	2
Fillmore	6%	2	Nobles	12%	4	Watsonwan	*	
Freeborn	9%	3	Norman	*		Wilkin	*	
Goodhue	7%	2	Olmsted	5%	2	Winona	5%	2
Grant	9%	3	Otter Tail	4%	2	Wright	4%	2
Hennepin	7%	3	Pennington	6%	2	Yellow Medicine	6%	2
Houston	5%	2	Pine	8%	3			

Source: Wilder Research analysis of data from U.S. Census Bureau, American Community Survey, 2008-2012.

Note: Starred counties (\*) lacked data for this indicator. Level 1 = low risk (less than 3%), level 2 = low to moderate risk (3% – 6%), level 3 = moderate to high risk (7% - 10%), level 4 = high risk (greater than 10%). Some counties may display identical values but different risk levels due to rounding.

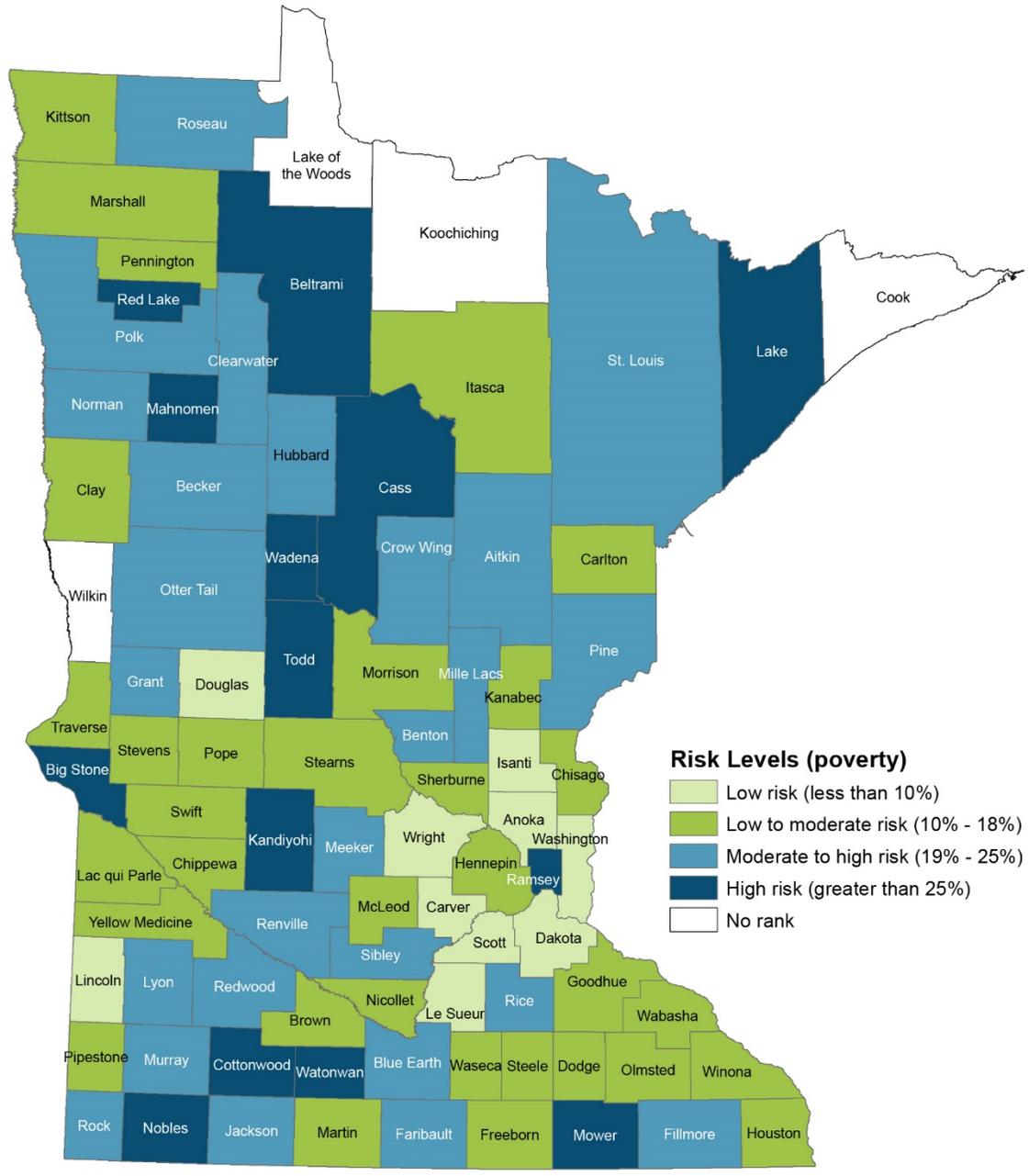
### *Children under age 6 living in poverty*

Poverty can have profound and enduring effects across nearly all domains of children's well-being. Poverty early in life has been associated with poorer outcomes in early language and cognitive development, as well as later academic achievement and educational attainment. The stressors associated with living in impoverished conditions can affect children's emotional, mental, behavioral, and physical health through chronic physiological stress responses. Children who are raised in poverty are more likely to remain below the poverty line in adulthood. The effects of poverty on parental mental health and stress also are associated with negative impacts on children. Finally, income is almost as strongly related to achievement in childhood as parental education.<sup>22-24</sup>

In 2012, the federal poverty level was about \$19,000 for a family of three and about \$23,000 for a family of four. One in six young children in Minnesota is living in poverty.

Fourteen counties have the highest rates of poverty, exceeding the national rate of one in four, including two counties exceeding one in every three children. These high-risk counties are spread throughout the state. On the other hand, ten counties fall in the low risk category for this indicator, each of which has an early childhood poverty rate of about one in ten (11%) or less.

**3a. Children under age 6 living in poverty, mapped by county (2008-2012)**



*Source: Wilder Research analysis of data from U.S. Census Bureau, American Community Survey, 2008-2012.*

*Note: Counties lacking data for this indicator were categorized as "no rank."*

### 3b. Children under age 6 living in poverty, by county (2008-2012)

	%	Risk Level		%	Risk Level		%	Risk Level
<b>US</b>	<b>23.8%</b>	<b>--</b>	Hubbard	19%	3	Pipestone	16%	2
<b>Minnesota</b>	<b>16.7%</b>	<b>--</b>	Isanti	10%	1	Polk	24%	3
Aitkin	19%	3	Itasca	18%	2	Pope	13%	2
Anoka	9%	1	Jackson	21%	3	Ramsey	28%	4
Becker	23%	3	Kanabec	15%	2	Red Lake	26%	4
Beltrami	32%	4	Kandiyohi	29%	4	Redwood	19%	3
Benton	22%	3	Kittson	13%	2	Renville	19%	3
Big Stone	29%	4	Koochiching	*		Rice	25%	3
Blue Earth	20%	3	Lac qui Parle	13%	2	Rock	20%	3
Brown	15%	2	Lake	31%	4	Roseau	19%	3
Carlton	17%	2	Lake of the Woods	*		Scott	5%	1
Carver	5%	1	Le Sueur	11%	1	Sherburne	12%	2
Cass	30%	4	Lincoln	6%	1	Sibley	25%	3
Chippewa	12%	2	Lyon	20%	3	St. Louis	25%	3
Chisago	12%	2	Mahnomen	46%	4	Stearns	14%	2
Clay	16%	2	Marshall	13%	2	Steele	13%	2
Clearwater	24%	3	Martin	17%	2	Stevens	15%	2
Cook	*		McLeod	13%	2	Swift	15%	2
Cottonwood	26%	4	Meeker	19%	3	Todd	33%	4
Crow Wing	21%	3	Mille Lacs	19%	3	Traverse	11%	2
Dakota	10%	1	Morrison	17%	2	Wabasha	12%	2
Dodge	13%	2	Mower	32%	4	Wadena	36%	4
Douglas	9%	1	Murray	21%	3	Waseca	12%	2
Faribault	23%	3	Nicollet	16%	2	Washington	8%	1
Fillmore	21%	3	Nobles	32%	4	Watonwan	28%	4
Freeborn	16%	2	Norman	22%	3	Wilkin	*	
Goodhue	12%	2	Olmsted	11%	2	Winona	15%	2
Grant	19%	3	Otter Tail	19%	3	Wright	9%	1
Hennepin	18%	2	Pennington	16%	2	Yellow Medicine	18%	2
Houston	12%	2	Pine	19%	3			

Source: Wilder Research analysis of data from U.S. Census Bureau, American Community Survey, 2008-2012.

Note: Starred counties (\*) lacked data for this indicator. Level 1 = low risk (less than 10%), level 2 = low to moderate risk (10% - 18%), level 3 = moderate to high risk (19% - 25%), level 4 = high risk (greater than 25%). Some counties may display identical values but different risk levels due to rounding.

## Health risk indicators

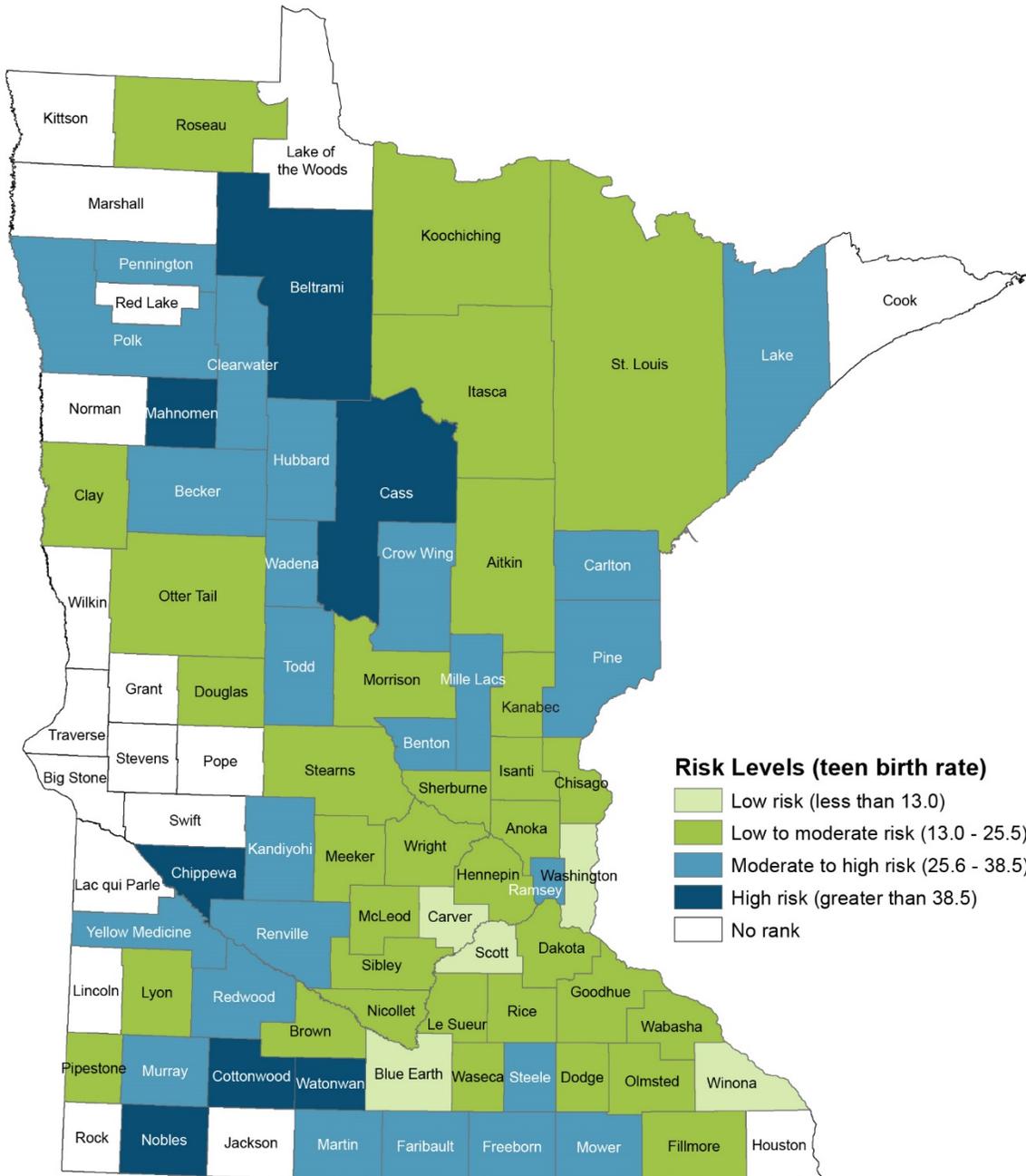
### *Teen birth rate*

Parenting during the teenage years can have adverse effects for both parent and child. Because teen mothers' educational and career opportunities are often hindered by the need to care for a child, they are 40 percent less likely to obtain a high school diploma by age 22. Children of teen mothers are more likely to experience poor outcomes in areas such as academic achievement and behavioral problems such as inattention and hyperactivity. Such early adjustment problems, in turn, have been associated with intergenerational patterns of risk, including school dropout, unemployment, and early parenthood.<sup>25-28</sup>

At 20 births per every 1,000 girls age 15 through 19 in Minnesota, the state's teen birth rate is 75 percent of that of the U.S. overall (27 births per 1,000). Both the state and the nation have seen improvement on this measure; Minnesota's rate was actually higher than the current national rate as recently as 2005 to 2007.

The seven high-risk counties on this measure are clustered in the state's northwest and southwest regions, with Mahnomon, Nobles, and Beltrami counties at the high end with 96, 55, and 50 per 1,000 teens, respectively. Three of the low-risk counties – Scott, Carver, and Washington – are in the Twin Cities metro area, with the two remaining low-risk counties – Blue Earth and Winona – both located in southern Minnesota.

**4a. Teen birth rate, mapped by county (2010-2012)**



*Source:* Wilder Research analysis of data from the Minnesota Department of Health.

*Note:* The Minnesota Department of Health does not provide rates for counties with fewer than 20 events.

#### 4b. Teen birth rate, by county (2010-2012)

	Rate	Risk Level		Rate	Risk Level		Rate	Risk Level
<b>US</b>	<b>26.6</b>	<b>--</b>	Hubbard	28.1	3	Pipestone	22.1	2
<b>Minnesota</b>	<b>20.1</b>	<b>--</b>	Isanti	23.3	2	Polk	27.1	3
Aitkin	25.2	2	Itasca	25.5	2	Pope	*	
Anoka	14.9	2	Jackson	*		Ramsey	29.4	3
Becker	33.0	3	Kanabec	23.5	2	Red Lake	*	
Beltrami	50.0	4	Kandiyohi	37.0	3	Redwood	27.4	3
Benton	26.3	3	Kittson	*		Renville	38.5	3
Big Stone	*		Koochiching	25.4	2	Rice	16.7	2
Blue Earth	10.8	1	Lac Qui Parle	*		Rock	*	
Brown	18.0	2	Lake	35.4	3	Roseau	22.8	2
Carlton	26.3	3	Lake of the Woods	*		St. Louis	17.8	2
Carver	8.2	1	Le Sueur	20.5	2	Scott	12.3	1
Cass	45.9	4	Lincoln	*		Sherburne	16.5	2
Chippewa	44.0	4	Lyon	20.1	2	Sibley	19.9	2
Chisago	16.6	2	McLeod	22.6	2	Stearns	15.0	2
Clay	13.0	2	Mahnomen	95.5	4	Steele	27.4	3
Clearwater	32.1	3	Marshall	*		Stevens	*	
Cook	*		Martin	26.4	3	Swift	*	
Cottonwood	42.0	4	Meeker	16.9	2	Todd	26.9	3
Crow Wing	30.1	3	Mille Lacs	38.5	3	Traverse	*	
Dakota	13.3	2	Morrison	18.9	2	Wabasha	15.7	2
Dodge	18.8	2	Mower	32.1	3	Wadena	36.0	3
Douglas	17.6	2	Murray	26.8	3	Waseca	24.9	2
Faribault	27.3	3	Nicollet	13.2	2	Washington	10.0	1
Fillmore	14.9	2	Nobles	55.1	4	Watonwan	47.0	4
Freeborn	31.3	3	Norman	*		Wilkin	*	
Goodhue	20.0	2	Olmsted	17.7	2	Winona	7.1	1
Grant	*		Otter Tail	22.4	2	Wright	15.0	2
Hennepin	21.1	2	Pennington	28.0	3	Yellow Medicine	30.6	3
Houston	*		Pine	27.7	3			

**Source:** Wilder Research analysis of data from the Minnesota Department of Health. U.S. data from National Center for Health Statistics (2013).

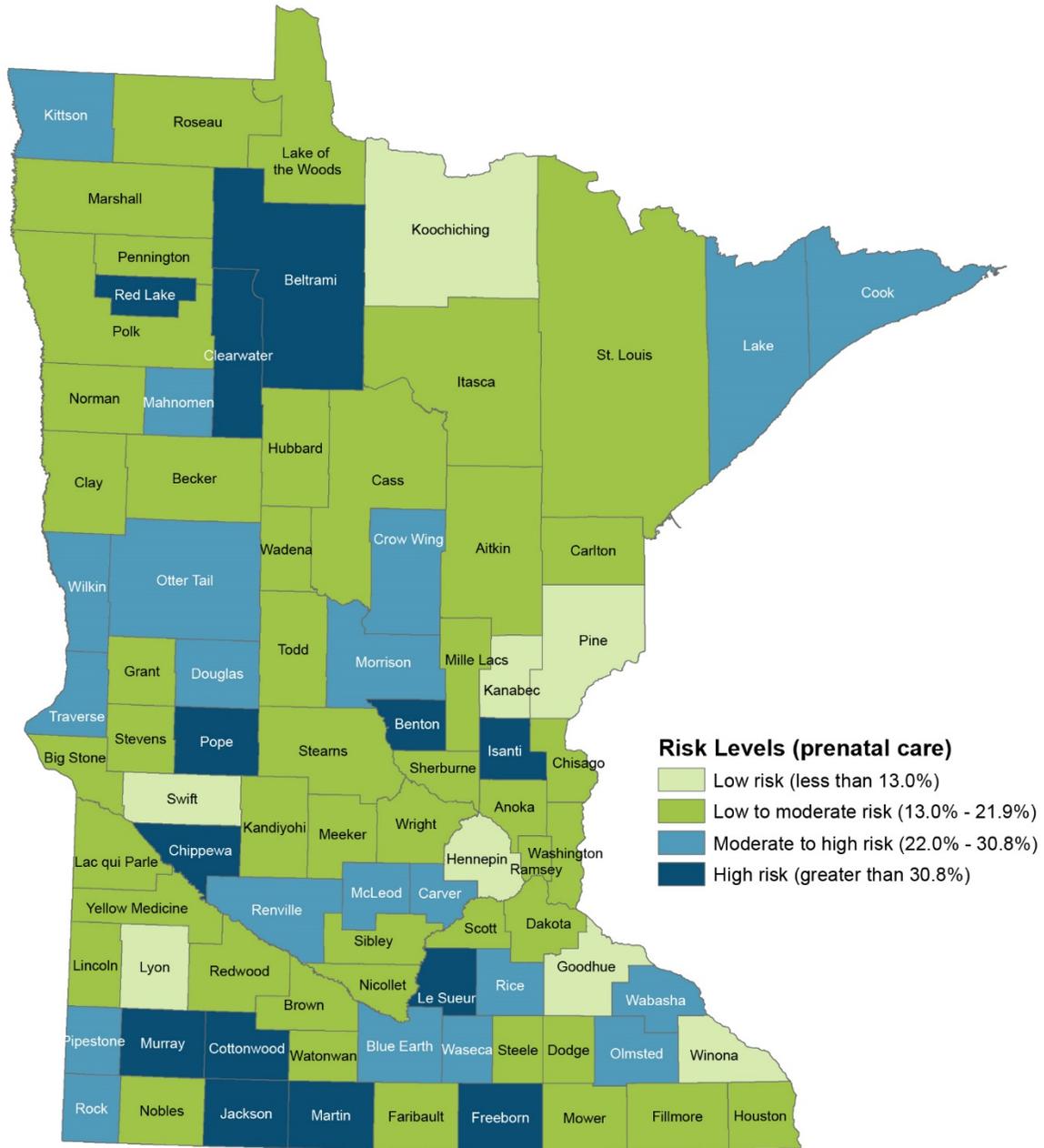
**Note:** The teen birth rate is the number of live births to females age 15 through 19, standardized as births per 1,000. Starred counties (\*) lacked data for this indicator, the Minnesota Department of Health does not provide rates for counties with fewer than 20 events. Level 1 = low risk (less than 13.0), level 2 = low to moderate risk (13.0 – 25.5), level 3 = moderate to high risk (25.6 -38.5), level 4 = high risk (greater than 38.5).

### *Inadequate prenatal care*

Prenatal care comprises a combination of preventive measures, primarily offered during ongoing appointments with a health care provider throughout pregnancy. These appointments provide an opportunity for the provider to educate the expectant mother about anything that might alter the normal development of her fetus, leading to a decrease in substance use in mothers with adequate prenatal care. Further, prenatal supervision facilitates early detection of potentially harmful complications in both mother and offspring, such as high blood pressure or fetal abnormalities. Inadequate prenatal care, therefore, poses risks for both mother and child and has been linked to increased rates of infant morbidity and mortality. Nationally, American Indian women are less likely to receive adequate prenatal care.<sup>29-31</sup>

In 2012, an estimated 22 percent of births in Minnesota lacked adequate prenatal care, placing those infants at higher health risk. The largest share of counties is low-to-moderate risk. The 13 high-risk counties are scattered throughout the state, including clusters in the southwest and northwest regions.

**5a. Inadequate prenatal care (all births), mapped by county (2012)**



Source: Wilder Research analysis of data from the Minnesota Department of Health.

## 5b. Inadequate prenatal care (all births), by county (2012)

	%	Risk Level		%	Risk Level		%	Risk Level
Minnesota	22%	--	Hubbard	20%	2	Pipestone	23%	3
Aitkin	22%	2	Isanti	37%	4	Polk	21%	2
Anoka	20%	2	Itasca	15%	2	Pope	44%	4
Becker	19%	2	Jackson	34%	4	Ramsey	20%	2
Beltrami	32%	4	Kanabec	10%	1	Red Lake	32%	4
Benton	32%	4	Kandiyohi	18%	2	Redwood	15%	2
Big Stone	16%	2	Kittson	29%	3	Renville	25%	3
Blue Earth	25%	3	Koochiching	12%	1	Rice	26%	3
Brown	20%	2	Lac qui Parle	20%	2	Rock	23%	3
Carlton	14%	2	Lake	24%	3	Roseau	20%	2
Carver	23%	3	Lake of the Woods	19%	2	Scott	20%	2
Cass	16%	2	Le Sueur	33%	4	Sherburne	19%	2
Chippewa	34%	4	Lincoln	20%	2	Sibley	16%	2
Chisago	20%	2	Lyon	6%	1	St. Louis	18%	2
Clay	17%	2	Mahnomen	27%	3	Stearns	20%	2
Clearwater	48%	4	Marshall	16%	2	Steele	15%	2
Cook	30%	3	Martin	60%	4	Stevens	20%	2
Cottonwood	32%	4	McLeod	28%	3	Swift	13%	1
Crow Wing	22%	3	Meeker	17%	2	Todd	22%	2
Dakota	21%	2	Mille Lacs	19%	2	Traverse	28%	3
Dodge	20%	2	Morrison	25%	3	Wabasha	31%	3
Douglas	24%	3	Mower	16%	2	Wadena	19%	2
Faribault	15%	2	Murray	34%	4	Waseca	28%	3
Fillmore	19%	2	Nicollet	15%	2	Washington	19%	2
Freeborn	36%	4	Nobles	18%	2	Watonwan	17%	2
Goodhue	8%	1	Norman	20%	2	Wilkin	29%	3
Grant	19%	2	Olmsted	30%	3	Winona	10%	1
Hennepin	9%	1	Otter Tail	27%	3	Wright	16%	2
Houston	21%	2	Pennington	19%	2	Yellow Medicine	17%	2
			Pine	11%	1			

Source: Wilder Research analysis of data from the Minnesota Department of Health.

Note: Inadequate includes no or intermediate care. Risk level 1 = low risk (less than 13.0%), level 2 = low to moderate risk (13.0 - 21.9%), level 3 = moderate to high risk (22.0% - 30.8%), level 4 = high risk (greater than 30.8%).

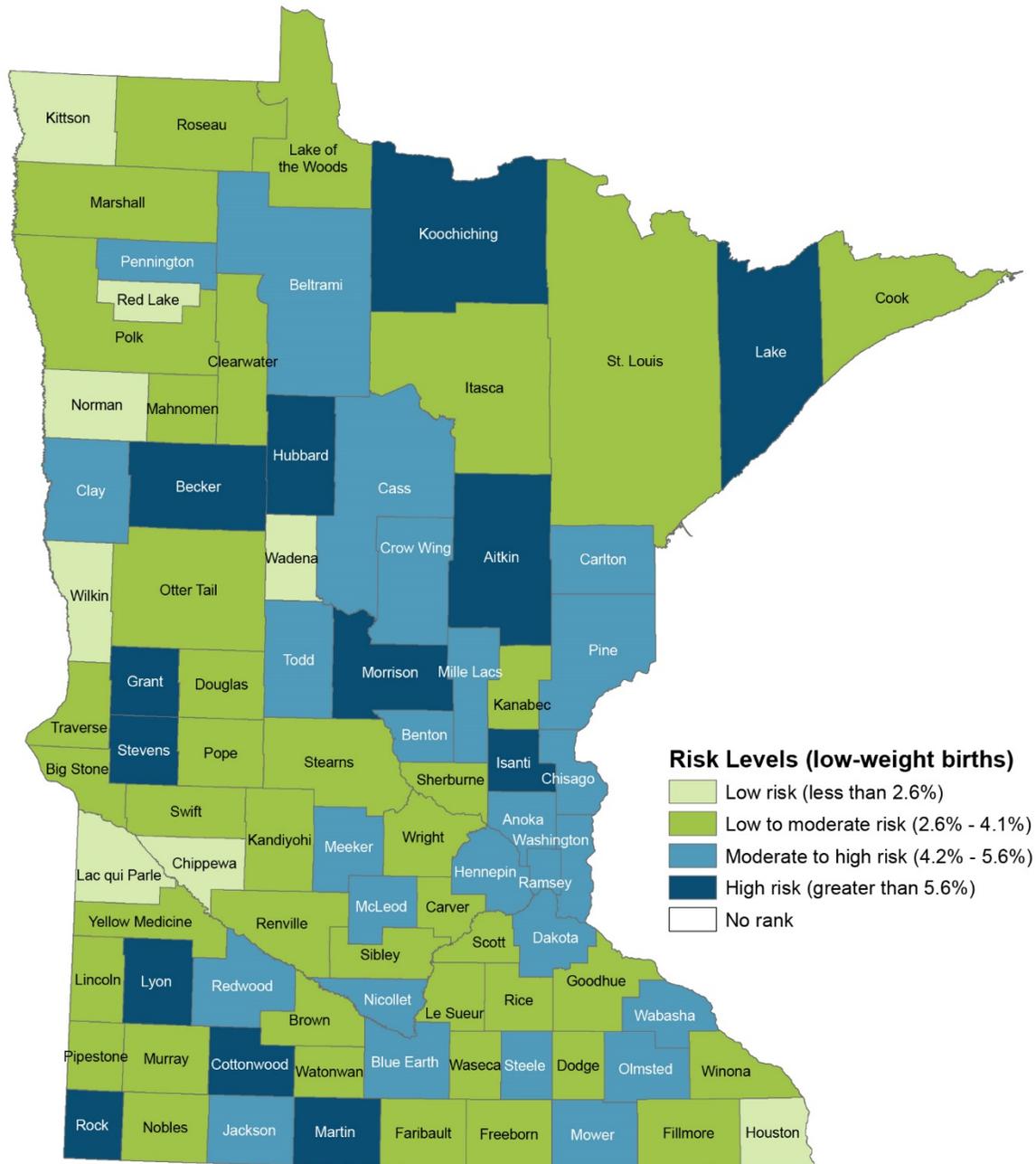
### ***Low-weight births***

Infants born weighing less than 2,500 grams (5 pounds, 5 ounces) are considered Low Birth Weight (LBW). Birth weight is an important predictor of health outcomes. In recent decades, survival rates for LBW infants have increased, but these children are still 20 times more likely to succumb to infant mortality than normal weight babies. Additionally, LBW babies are at a higher risk for negative outcomes, including medical, cognitive, and psychological problems, which may persist throughout the lifespan.<sup>32-34</sup>

In comparison to the nation as a whole, low-weight births are relatively rare in Minnesota. In fact, according to Minnesota Compass, Minnesota is among the ten states with the fewest low-weight births.

Thirteen counties in the high risk category are scattered throughout the state. Six of the 8 counties in the low risk category on this measure fall along the state's western edge, including Lac qui Parle, which had zero low-weight births in 2013 among the 67 singletons born to mothers residing in the county.

**6a. Low-weight births, mapped by county (2013)**



*Source: Wilder Research analysis of data from Minnesota Department of Health.*

*Note: Includes only single-child births. Low birth weight is defined as less than 5.5 pounds.*

## 6b. Low-weight births, by county (2013)

	%	Risk Level		%	Risk Level		%	Risk Level
<b>US</b>	<b>6.3%</b>	<b>--</b>	Hubbard	7.3%	4	Pipestone	3.1%	2
<b>Minnesota</b>	<b>4.7%</b>	<b>--</b>	Isanti	5.7%	4	Polk	4.0%	2
Aitkin	6.4%	4	Itasca	4.1%	2	Pope	3.4%	2
Anoka	4.4%	3	Jackson	4.5%	3	Ramsey	5.5%	3
Becker	6.1%	4	Kanabec	4.1%	2	Red Lake	0.0%	1
Beltrami	4.4%	3	Kandiyohi	3.8%	2	Redwood	5.3%	3
Benton	5.6%	3	Kittson	0.0%	1	Renville	3.2%	2
Big Stone	3.6%	2	Koochiching	7.0%	4	Rice	4.1%	2
Blue Earth	4.5%	3	Lac qui Parle	0.0%	1	Rock	6.1%	4
Brown	4.1%	2	Lake	6.4%	4	Roseau	3.0%	2
Carlton	5.5%	3	Lake of the Woods	2.9%	2	Scott	3.6%	2
Carver	3.8%	2	Le Sueur	3.2%	2	Sherburne	3.8%	2
Cass	5.2%	3	Lincoln	2.8%	2	Sibley	3.8%	2
Chippewa	1.4%	1	Lyon	5.9%	4	St. Louis	4.0%	2
Chisago	4.5%	3	Mahnomen	2.9%	2	Stearns	4.0%	2
Clay	5.1%	3	Marshall	3.3%	2	Steele	5.4%	3
Clearwater	3.8%	2	Martin	6.8%	4	Stevens	6.6%	4
Cook	2.9%	2	McLeod	4.2%	3	Swift	3.8%	2
Cottonwood	6.2%	4	Meeker	4.4%	3	Todd	4.7%	3
Crow Wing	4.3%	3	Mille Lacs	5.3%	3	Traverse	2.9%	2
Dakota	4.4%	3	Morrison	6.3%	4	Wabasha	5.2%	3
Dodge	3.8%	2	Mower	4.6%	3	Wadena	2.5%	1
Douglas	2.9%	2	Murray	2.7%	2	Waseca	3.6%	2
Faribault	3.8%	2	Nicollet	5.0%	3	Washington	4.9%	3
Fillmore	3.9%	2	Nobles	3.6%	2	Watonwan	3.1%	2
Freeborn	3.4%	2	Norman	1.4%	1	Wilkin	1.5%	1
Goodhue	2.9%	2	Olmsted	4.7%	3	Winona	3.1%	2
Grant	6.3%	4	Otter Tail	3.4%	2	Wright	4.0%	2
Hennepin	5.5%	3	Pennington	4.4%	3	Yellow Medicine	3.5%	2
Houston	2.2%	1	Pine	5.1%	3			

*Source:* Wilder Research analysis of data from the Minnesota Department of Health. U.S. data are from the National Center for Health Statistics (2012).

*Note:* Includes only single-child births. Low birth weight is defined as less than 5.5 pounds. Level 1 = low risk (less than 2.6%), level 2 = low to moderate risk (2.6% – 4.1%), level 3 = moderate to high risk (4.2% - 5.6%), level 4 = high risk (greater than 5.6%).

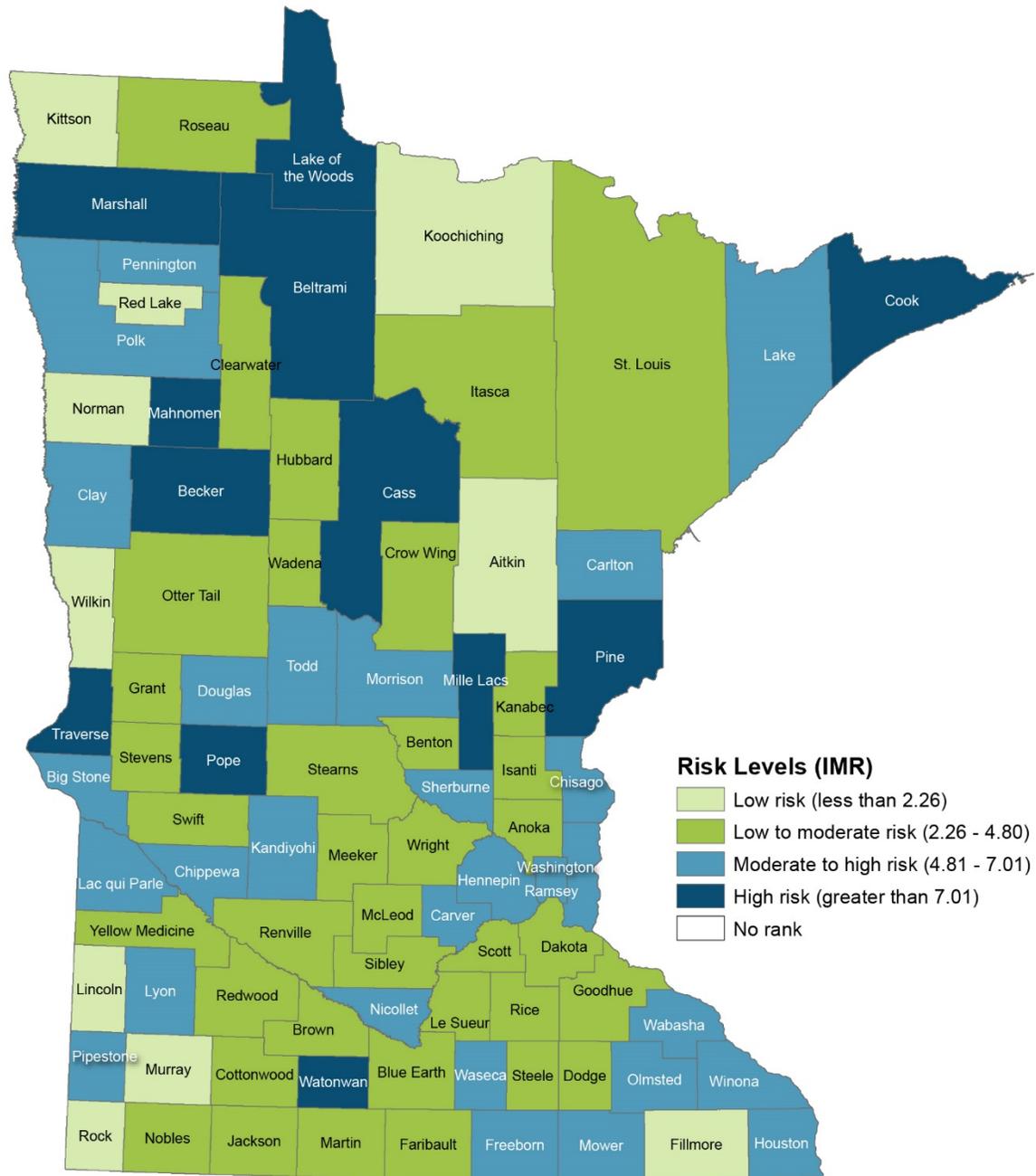
### *Infant mortality rate*

Infant mortality is defined as the number of infant deaths per 1,000 live births. Nationally, although infant mortality decreased by about 45 percent in the last two decades of the 20<sup>th</sup> century, it remains a salient public health issue. During that period of decline, rates fell more steeply for whites than for blacks, with black infants succumbing to infant mortality at 2.4 times the rate for non-Hispanic whites. American Indians have 1.6 times the infant mortality rate as non-Hispanic whites.<sup>35,36</sup>

While the Minnesota infant mortality rate of 5 deaths per 1,000 births approximates the nationwide rate of 6 per 1,000, the rates among American Indian and African American babies are double the rates of white babies in Minnesota.

Mahnomen County has the state's highest rate of risk, 13.5 per 1,000. On the other hand, six Minnesota counties reported no infant mortality over the most recent five year span (2007-2011).

**7a. Infant mortality rate, mapped by county (2007-2011)**



Source: Wilder Research analysis of data from the Minnesota Department of Health.

## 7b. Infant mortality rate, by county (2007-2011)

	Rate	Risk Level		Rate	Risk Level		Rate	Risk Level
<b>US</b>	<b>6.0</b>	<b>--</b>	Hubbard	4.4	2	Pipestone	4.8	3
<b>Minnesota</b>	<b>5.0</b>	<b>--</b>	Isanti	3.2	2	Polk	5.1	3
Aitkin	1.5	1	Itasca	3.8	2	Pope	9.6	4
Anoka	4.7	2	Jackson	3.8	2	Ramsey	6.4	3
Becker	7.4	4	Kanabec	2.3	2	Red Lake	0.0	1
Beltrami	9.6	4	Kandiyohi	5.2	3	Redwood	3.0	2
Benton	3.7	2	Kittson	0.0	1	Renville	3.3	2
Big Stone	6.4	3	Koochiching	1.7	1	Rice	3.4	2
Blue Earth	4.6	2	Lac Qui Parle	5.7	3	Rock	1.6	1
Brown	3.5	2	Lake	5.1	3	Roseau	4.1	2
Carlton	5.9	3	Lake of the Woods	10.8	4	St. Louis	4.5	2
Carver	4.8	3	Le Sueur	2.3	2	Scott	4.6	2
Cass	7.6	4	Lincoln	0.0	1	Sherburne	5.2	3
Chippewa	5.0	3	Lyon	7.0	3	Sibley	3.1	2
Chisago	6.2	3	McLeod	2.6	2	Stearns	4.5	2
Clay	6.2	3	Mahnomen	13.5	4	Steele	3.1	2
Clearwater	3.5	2	Marshall	7.5	4	Stevens	3.4	2
Cook	8.1	4	Martin	3.5	2	Swift	3.6	2
Cottonwood	4.3	2	Meeker	4.6	2	Todd	6.1	3
Crow Wing	3.6	2	Mille Lacs	7.5	4	Traverse	10.9	4
Dakota	3.3	2	Morrison	6.1	3	Wabasha	5.4	3
Dodge	4.4	2	Mower	5.7	3	Wadena	4.4	2
Douglas	4.9	3	Murray	0.0	1	Waseca	6.2	3
Faribault	3.9	2	Nicollet	6.9	3	Washington	4.8	3
Fillmore	2.2	1	Nobles	4.4	2	Watonwan	8.8	4
Freeborn	5.5	3	Norman	0.0	1	Wilkin	0.0	1
Goodhue	4.6	2	Olmsted	6.9	3	Winona	5.2	3
Grant	3.0	2	Otter Tail	2.3	2	Wright	4.4	2
Hennepin	5.4	3	Pennington	5.4	3	Yellow Medicine	3.3	2
Houston	6.1	3	Pine	10.0	4			

*Source:* Wilder Research analysis of data from the Minnesota Department of Health. U.S. data from National Center on Health Statistics (2013).

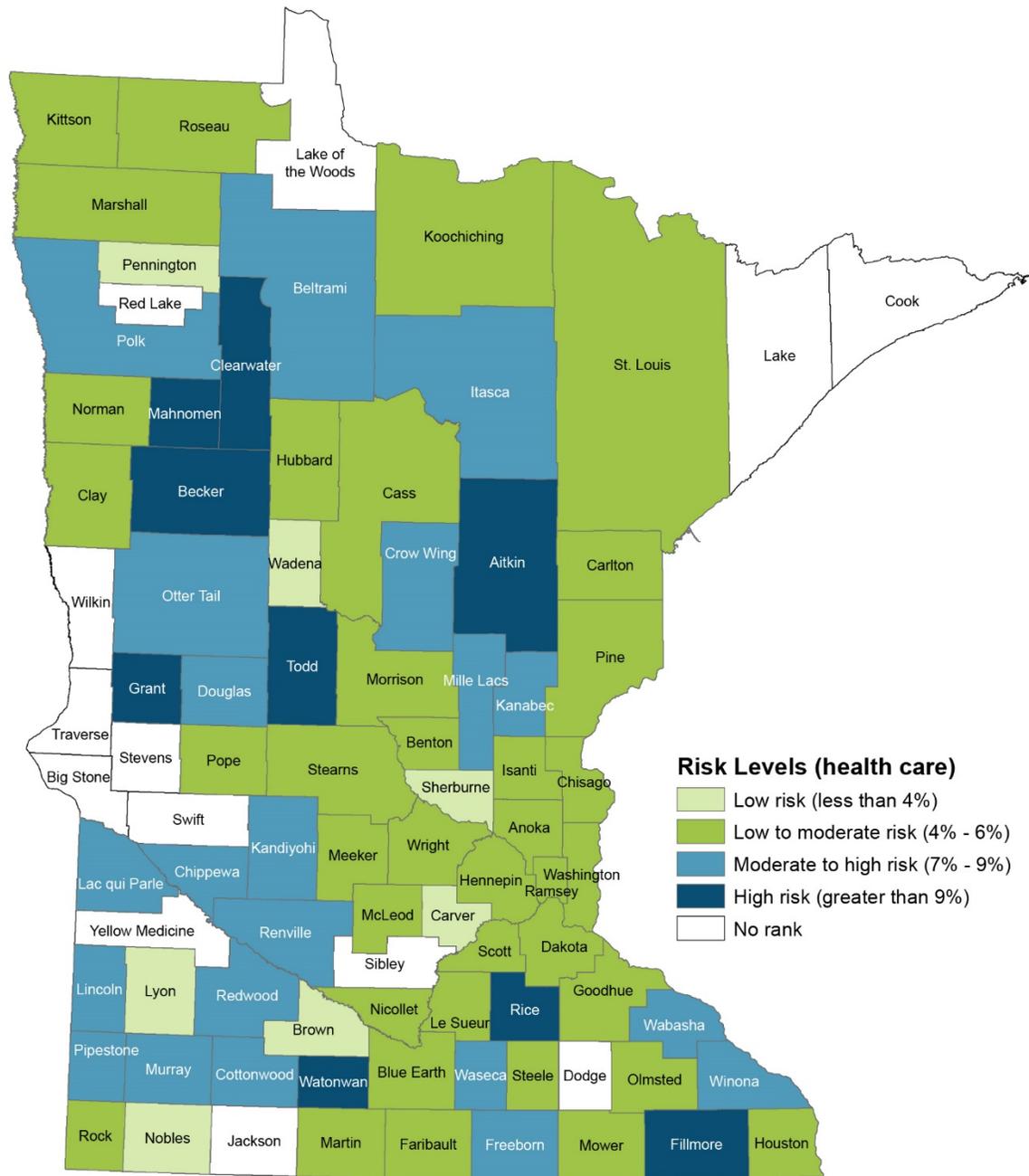
*Note:* Infant mortality rates represent deaths to children less than one year old per 1,000 births. Level 1 = low risk (less than 2.26), level 2 = low to moderate risk (2.26 - 4.80), level 3 = moderate to high risk (4.81 - 7.01), level 4 = high risk (greater than 7.01).

### *Children under age 6 without health care coverage*

Young children's health is essential to their overall development, well-being, and school readiness. Young children's health status has been closely tied to access to health care coverage and related services, including prenatal care; preventive screening and well-child visits; and continuous, comprehensive, coordinated care (i.e., a medical home). Uninsured children are less likely than insured children to receive medical care for common childhood conditions and, when hospitalized, are at greatest risk for increased morbidity and mortality. Untreated health problems and a lack of preventive care contribute to higher rates of serious illness, absenteeism in preschool, physical and emotional distress, and long-term disability.<sup>37,38</sup>

Health care coverage has been in a rapid transition since the passage of the Affordable Care Act in 2010. For a county-by-county look at coverage among younger children, we used data collected over the 2008-2012 time period. During that time, 5.5 percent of children in Minnesota under age 6 lacked health care coverage, with the range spanning from 2 percent in Lyon and Pennington counties to a high of 16 percent in Mahnomon and Todd.

**8a. Children under age 6 without health care coverage, mapped by county (2008-2012)**



Source: Wilder Research analysis of data from U.S. Census Bureau, American Community Survey, 2008-2012.

## 8b. Children under age 6 without health care coverage, by county (2008-2012)

	%	Risk Level		%	Risk Level		%	Risk Level
<b>US</b>	<b>6.5%</b>	<b>--</b>	Hubbard	4%	2	Pipestone	9%	3
<b>Minnesota</b>	<b>5.5%</b>	<b>--</b>	Isanti	5%	2	Polk	9%	3
Aitkin	10%	4	Itasca	9%	3	Pope	4%	2
Anoka	5%	2	Jackson	*		Ramsey	5%	2
Becker	10%	4	Kanabec	8%	3	Red Lake	*	
Beltrami	9%	3	Kandiyohi	8%	3	Redwood	9%	3
Benton	5%	2	Kittson	4%	2	Renville	9%	3
Big Stone	*		Koochiching	5%	2	Rice	10%	4
Blue Earth	4%	2	Lac qui Parle	9%	3	Rock	5%	2
Brown	3%	1	Lake	*		Roseau	6%	2
Carlton	5%	2	Lake of the Woods	*		Scott	5%	2
Carver	3%	1	Le Sueur	5%	2	Sherburne	3%	1
Cass	6%	2	Lincoln	7%	3	Sibley	*	
Chippewa	9%	3	Lyon	2%	1	St. Louis	5%	2
Chisago	6%	2	Mahnomen	16%	4	Stearns	4%	2
Clay	4%	2	Marshall	5%	2	Steele	4%	2
Clearwater	14%	4	Martin	4%	2	Stevens	*	
Cook	*		McLeod	6%	2	Swift	*	
Cottonwood	6%	3	Meeker	5%	2	Todd	16%	4
Crow Wing	8%	3	Mille Lacs	9%	3	Traverse	*	
Dakota	5%	2	Morrison	5%	2	Wabasha	8%	3
Dodge	*		Mower	5%	2	Wadena	3%	1
Douglas	7%	3	Murray	8%	3	Waseca	8%	3
Faribault	6%	2	Nicollet	4%	2	Washington	5%	2
Fillmore	13%	4	Nobles	3%	1	Watonwan	14%	4
Freeborn	8%	3	Norman	4%	2	Wilkin	*	
Goodhue	6%	2	Olmsted	4%	2	Winona	7%	3
Grant	10%	4	Otter Tail	7%	3	Wright	4%	2
Hennepin	6%	2	Pennington	2%	1	Yellow Medicine	*	
Houston	4%	2	Pine	5%	2			

Source: Wilder Research analysis of data from U.S. Census Bureau, American Community Survey, 2008-2012.

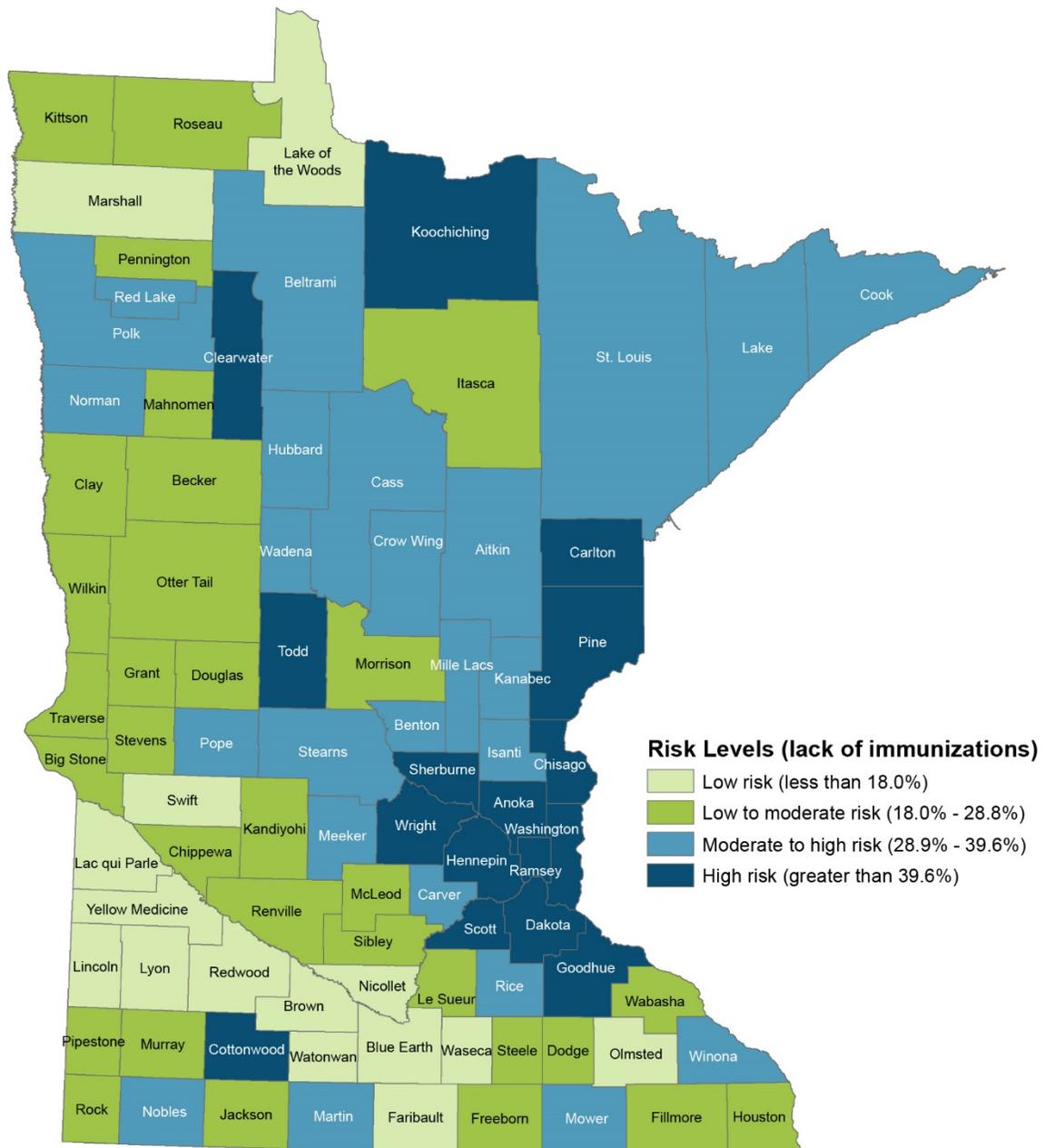
Note: Starred counties (\*) lacked data for this indicator. Level 1 = low risk (less than 4%), level 2 = low to moderate risk (4% - 6%), level 3 = moderate to high risk (7% - 9%), level 4 = high risk (greater than 9%). Some counties may display identical values but different risk levels due to rounding.

### *Lack of immunizations*

Immunizations are important, particularly in light of recent increases in outbreaks of preventable communicable disease, such as measles. Outbreaks of this kind can be prevented by “herd” immunity. If outbreaks do occur, they may be fatal for children who are too young to be immunized and for those who are immuno-compromised. Lack of immunizations is also an indicator of irregular medical care.<sup>39,40</sup>

In Minnesota, 37 percent of 2-year-old children (age 24 through 35 months) were not up to date on the recommended childhood immunizations in 2013. Immunization levels range from 32 percent in Chisago County to 88 percent in Lyon County. The 16 high-risk counties include all seven Twin Cities metro region counties, except Carver, which falls in the moderate to high risk category. Six of the 15 low-risk counties border the Minnesota River in the southwestern part of the state.

**9a. Children age 24 through 35 months who are lacking full series of immunizations, mapped by county (2013)**



*Source: Wilder Research analysis of data from the Minnesota Department of Health.*

*Note: Includes children age 24 through 35 months.*

**9b. Children age 24 through 35 months who are lacking full series of immunizations, by county (2013)**

	%	Risk Level		%	Risk Level		%	Risk Level
<b>Minnesota</b>	<b>37.1%</b>	<b>--</b>	Hubbard	29.1	3	Pipestone	21.4	2
Aitkin	31.6	3	Isanti	38.7	3	Polk	31.3	3
Anoka	40.8	4	Itasca	25.4	2	Pope	35.8	3
Becker	23.9	2	Jackson	26.7	2	Ramsey	48.8	4
Beltrami	33.7	3	Kanabec	34.4	3	Red Lake	31.4	3
Benton	30.6	3	Kandiyohi	18.6	2	Redwood	13.5	1
Big Stone	20.8	2	Kittson	26.9	2	Renville	19.4	2
Blue Earth	13.3	1	Koochiching	44.5	4	Rice	33.6	3
Brown	15.1	1	Lac qui Parle	15.6	1	Rock	23.6	2
Carlton	44.1	4	Lake	37.6	3	Roseau	27.4	2
Carver	32.8	3	Lake of the Woods	17.6	1	Scott	40.6	4
Cass	30.1	3	Le Sueur	24.1	2	Sherburne	42.4	4
Chippewa	18.4	2	Lincoln	17.6	1	Sibley	24.7	2
Chisago	68.1	4	Lyon	12.0	1	St. Louis	36.4	3
Clay	23.0	2	Mahnomen	22.6	2	Stearns	37.1	3
Clearwater	42.6	4	Marshall	14.5	1	Steele	20.1	2
Cook	31.7	3	Martin	35.3	3	Stevens	22.1	2
Cottonwood	45.8	4	McLeod	24.5	2	Swift	16.7	1
Crow Wing	30.2	3	Meeker	32.6	3	Todd	39.8	4
Dakota	40.4	4	Mille Lacs	39.6	3	Traverse	18.5	2
Dodge	18.9	2	Morrison	21.6	2	Wabasha	24.6	2
Douglas	27.4	2	Mower	35.8	3	Wadena	36.2	3
Faribault	17.7	1	Murray	19.5	2	Waseca	14.4	1
Fillmore	26.1	2	Nicollet	14.8	1	Washington	46.2	4
Freeborn	19.3	2	Nobles	29.8	3	Watsonwan	16.3	1
Goodhue	46.0	4	Norman	33.9	3	Wilkin	24.0	2
Grant	18.6	2	Olmsted	17.8	1	Winona	30.9	3
Hennepin	40.4	4	Otter Tail	27.8	2	Wright	50.1	4
Houston	18.0	2	Pennington	24.9	2	Yellow Medicine	17.8	1
			Pine	49.0	4			

Source: Wilder Research analysis of data from the Minnesota Department of Health.

Note: Includes children age 24 through 35 months. Level 1 = low risk (less than 18.0%), level 2 = low to moderate risk (18.0% - 28.8%), level 3 = moderate to high risk (28.9% - 39.6%), level 4 = high risk (greater than 39.6%).

## Family stability risk indicators

### *Child mobility*

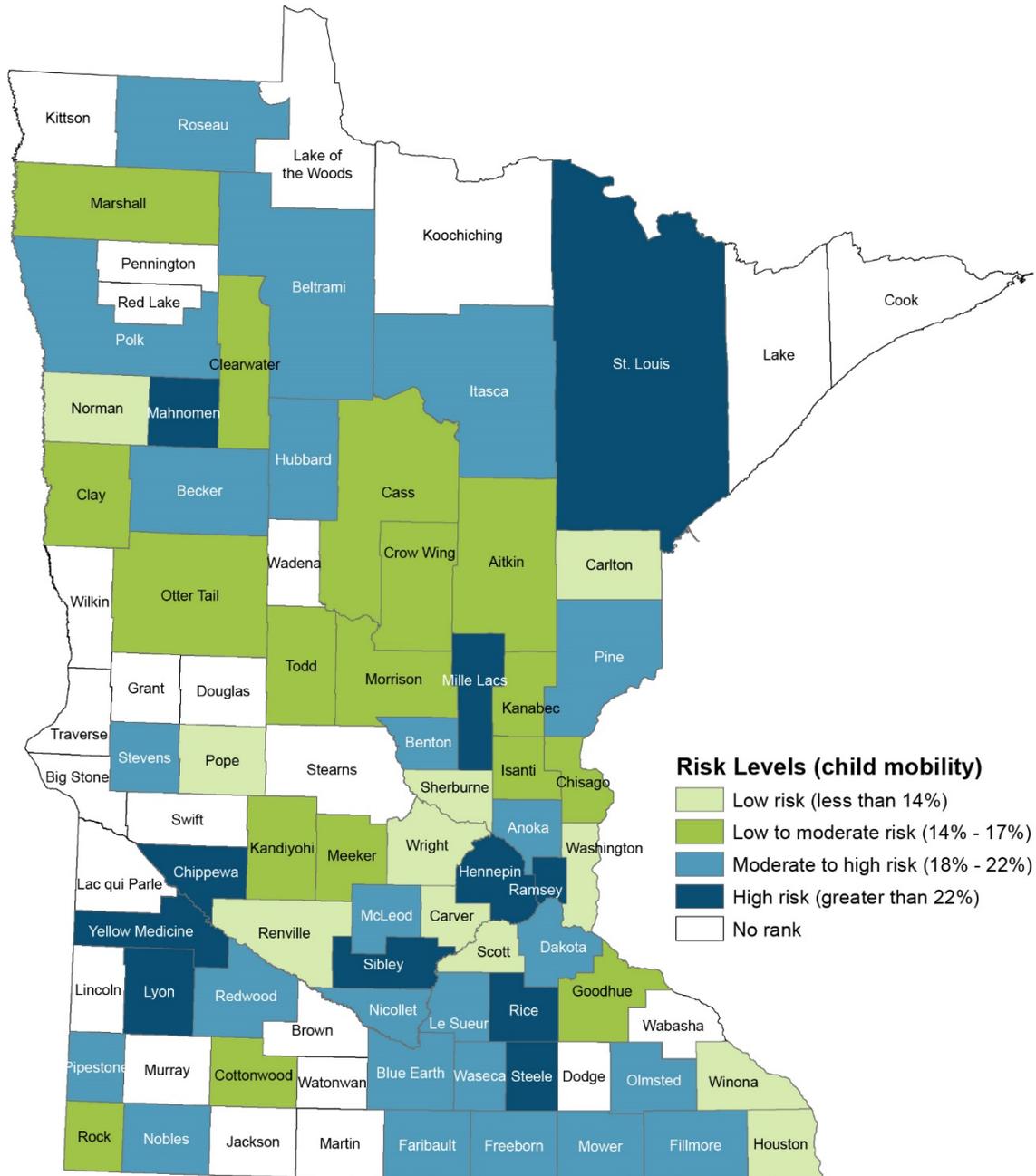
Residential instability poses a considerable risk for children across domains of functioning. There are several potential explanations for this connection. Aside from the adverse effects of poverty, which often coincides with high mobility, the demands of adaptation to frequently changing contexts can independently be a severe stressor for a child. Rising mobility rates, particularly for low-income children, are cause for concern, as the lack of a stable residence has been found to hinder children’s academic, socio-emotional, and behavioral development.<sup>41-43</sup>

Minnesota’s rate of child mobility (19%), measured as the proportion of all children under age 5 who have moved in the prior year, is similar to the national rate (21%).

On a county-by-county basis, 11 counties fall in the high risk category, including the state’s two most populous counties, Hennepin and Ramsey. Yellow Medicine County and Chippewa County, located in the southwest part of the state, feature the highest share of children who moved in the last year (27%). Sherburne County, in central Minnesota, has the lowest share of children who moved in the last year (9%). Data for 24 of the state’s 87 counties were suppressed due to large margins of error.

This measure does not include migrant groups and is not the same as “highly mobile,” used to characterize homeless groups. Future reports will refine this measure to more accurately depict housing instability and the number of moves associated with higher risk.

**10a. Child mobility (children under age 5 who have moved residences at least once in the past year), mapped by county (2008-2012)**



Source: Wilder Research analysis of data from U.S. Census Bureau, American Community Survey, 2008-2012.

Note: Counties lacking data for this indicator were categorized as "no rank."

**10b. Child mobility (children under age 5 who have moved residences at least once in the past year), by county (2008-2012)**

	%	Risk Level		%	Risk Level		%	Risk Level
<b>US</b>	<b>20.7%</b>	<b>--</b>	Hubbard	21%	3	Pipestone	22%	3
<b>Minnesota</b>	<b>19.0%</b>	<b>--</b>	Isanti	16%	2	Polk	18%	3
Aitkin	17%	2	Itasca	19%	3	Pope	10%	1
Anoka	21%	3	Jackson	*		Ramsey	24%	4
Becker	19%	3	Kanabec	17%	2	Red Lake	*	
Beltrami	19%	3	Kandiyohi	16%	2	Redwood	19%	3
Benton	22%	3	Kittson	*		Renville	13%	1
Big Stone	*		Koochiching	*		Rice	23%	4
Blue Earth	19%	3	Lac qui Parle	*		Rock	18%	2
Brown	*		Lake	*		Roseau	19%	3
Carlton	13%	1	Lake of the Woods	*		Scott	12%	1
Carver	13%	1	Le Sueur	18%	3	Sherburne	9%	1
Cass	15%	2	Lincoln	*		Sibley	25%	4
Chippewa	27%	4	Lyon	23%	4	St. Louis	24%	4
Chisago	17%	2	Mahnomen	23%	4	Stearns	*	
Clay	16%	2	Marshall	15%	2	Steele	26%	4
Clearwater	16%	2	Martin	*		Stevens	21%	3
Cook	*		McLeod	20%	3	Swift	*	
Cottonwood	14%	2	Meeker	15%	2	Todd	15%	2
Crow Wing	18%	2	Mille Lacs	22%	4	Traverse	*	
Dakota	19%	3	Morrison	15%	2	Wabasha	*	
Dodge	*		Mower	20%	3	Wadena	*	
Douglas	*		Murray	*		Waseca	21%	3
Faribault	22%	3	Nicollet	19%	3	Washington	12%	1
Fillmore	19%	3	Nobles	21%	3	Watsonwan	*	
Freeborn	19%	3	Norman	11%	1	Wilkin	*	
Goodhue	16%	2	Olmsted	19%	3	Winona	13%	1
Grant	*		Otter Tail	17%	2	Wright	12%	1
Hennepin	23%	4	Pennington	*		Yellow Medicine	27%	4
Houston	12%	1	Pine	20%	3			

Source: Wilder Research analysis of data from U.S. Census Bureau, American Community Survey, 2008-2012.

Note: Starred counties (\*) lacked data for this indicator. Level 1 = low risk (less than 14%), level 2 = low to moderate risk (14% - 17%), level 3 = moderate to high risk (18% - 22%), level 4 = high risk (greater than 22%). Some counties may display identical values but different risk levels due to rounding.

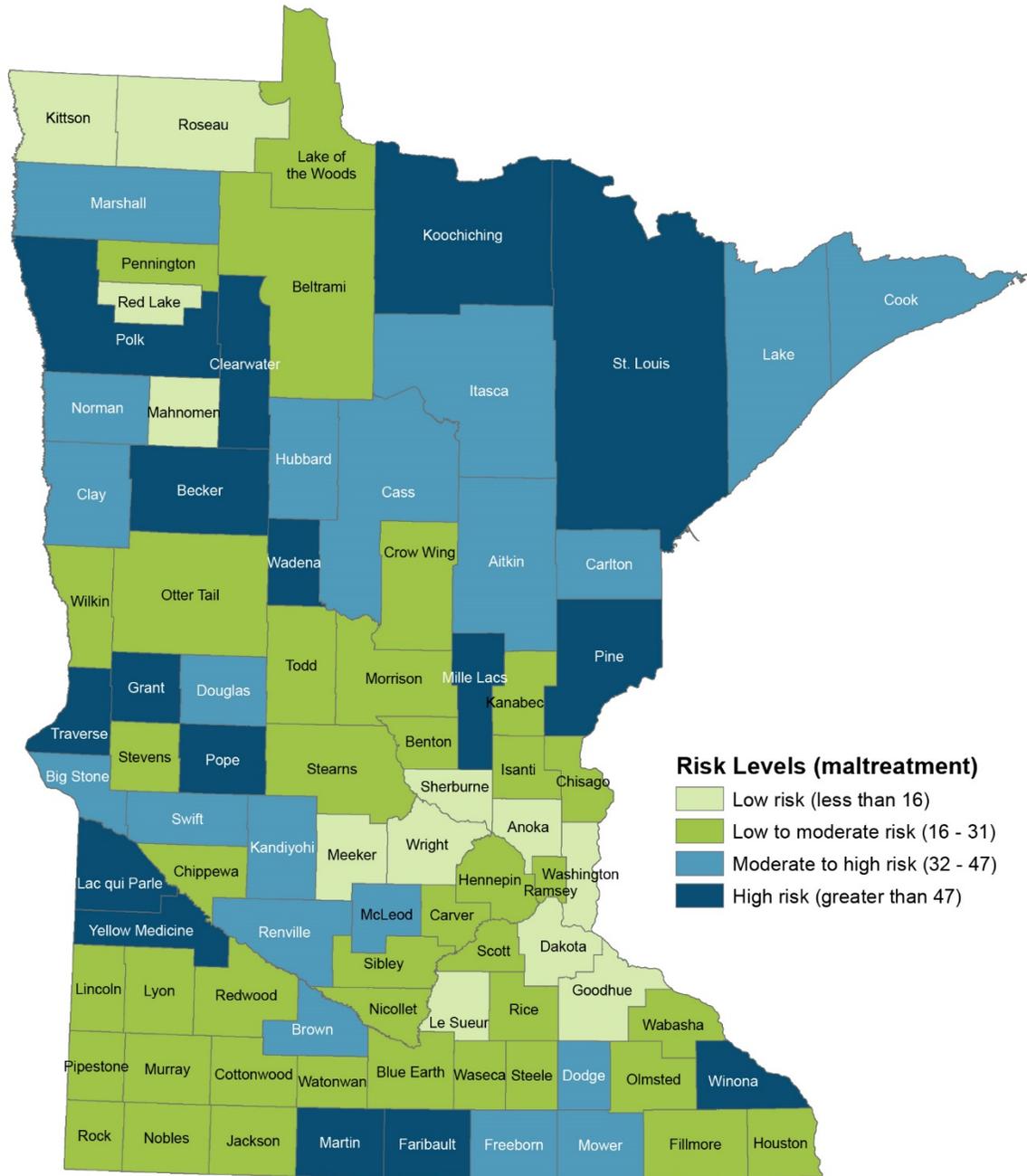
### *Maltreatment reports filed*

Child maltreatment includes physical, emotional, and sexual abuse as well as neglect by a parent, caregiver, or another person in a custodial position. Although children of all ages can be victims of maltreatment, infants and young children are particularly vulnerable. Children under age 4 years are at greatest risk for severe injury and death from abuse, and disproportionately experience extreme neglect compared with older children.

Child maltreatment can have negative effects on health due to severe injury. In addition, extreme stress related to various forms of trauma can disrupt early development of the brain as well as nervous and immune systems, placing children at risk for poor physical and mental health outcomes across the lifespan.<sup>44-46</sup>

In 2013, 25 in 1,000 children under age 5 statewide had a maltreatment report filed during the year, including family assessments, family investigations, and facility investigations. Mille Lacs County has the state's highest rate, at 75 per 1,000 children. Anoka, Dakota, and Washington Counties are among the counties with the lowest rates.

**11a. Rate of children under age 5 with filed maltreatment report during the year, mapped by county (2013)**



Source: Wilder Research analysis of Maltreatment Report data from the Minnesota Department of Human Services. Rate per 1,000 children under age 5 by county during 2013.

## 11b. Rate of children under age 5 with filed maltreatment report during the year, by county (2013)

	Rate	Risk Level		Rate	Risk Level		Rate	Risk Level
			Hubbard	43	3	Pipestone	30	2
<b>Minnesota</b>	<b>25</b>	<b>--</b>	Isanti	30	2	Polk	48	4
Aitkin	47	3	Itasca	45	3	Pope	57	4
Anoka	14	1	Jackson	23	2	Ramsey	17	2
Becker	57	4	Kanabec	16	2	Red Lake	7	1
Beltrami	28	2	Kandiyohi	46	3	Redwood	30	2
Benton	19	2	Kittson	4	1	Renville	42	3
Big Stone	34	3	Koochiching	48	4	Rice	27	2
Blue Earth	21	2	Lac qui Parle	66	4	Rock	30	2
Brown	35	3	Lake	40	3	Roseau	15	1
Carlton	37	3	Lake of the Woods	16	2	Scott	19	2
Carver	18	2	Le Sueur	12	1	Sherburne	15	1
Cass	33	3	Lincoln	30	2	Sibley	29	2
Chippewa	17	2	Lyon	30	2	St. Louis	56	4
Chisago	19	2	Mahnomen	7	1	Stearns	24	2
Clay	40	3	Marshall	35	3	Steele	19	2
Clearwater	66	4	Martin	49	4	Stevens	19	2
Cook	45	3	McLeod	38	3	Swift	37	3
Cottonwood	23	2	Meeker	7	1	Todd	24	2
Crow Wing	28	2	Mille Lacs	75	4	Traverse	66	4
Dakota	15	1	Morrison	27	2	Wabasha	26	2
Dodge	33	3	Mower	34	3	Wadena	64	4
Douglas	34	3	Murray	30	2	Waseca	25	2
Faribault	49	4	Nicollet	16	2	Washington	13	1
Fillmore	22	2	Nobles	22	2	Watonwan	26	2
Freeborn	35	3	Norman	47	3	Wilkin	20	2
Goodhue	14	1	Olmsted	23	2	Winona	51	4
Grant	53	4	Otter Tail	31	2	Wright	14	1
Hennepin	28	2	Pennington	20	2	Yellow Medicine	54	4
Houston	22	2	Pine	52	4			

*Source:* Wilder Research analysis of Maltreatment Report data from the Minnesota Department of Human Services. Rate per 1,000 children under age 5 by county.

*Notes:* Maltreatment Reports include all family assessments, family investigations, and facility investigations. American Indian Child Welfare Initiative data from Leech Lake and White Earth Bands of Ojibwe are not included. Des Moines Valley HHS allocated to Cottonwood and Jackson Counties. Southwest HHS allocated to Lincoln, Lyon, Murray, Rock, Pipestone, and Redwood Counties. Level 1 = low risk (less than 16), level 2 = low to moderate risk (16-31), level 3 = moderate to high risk (32-47), level 4 = high risk (greater than 47).

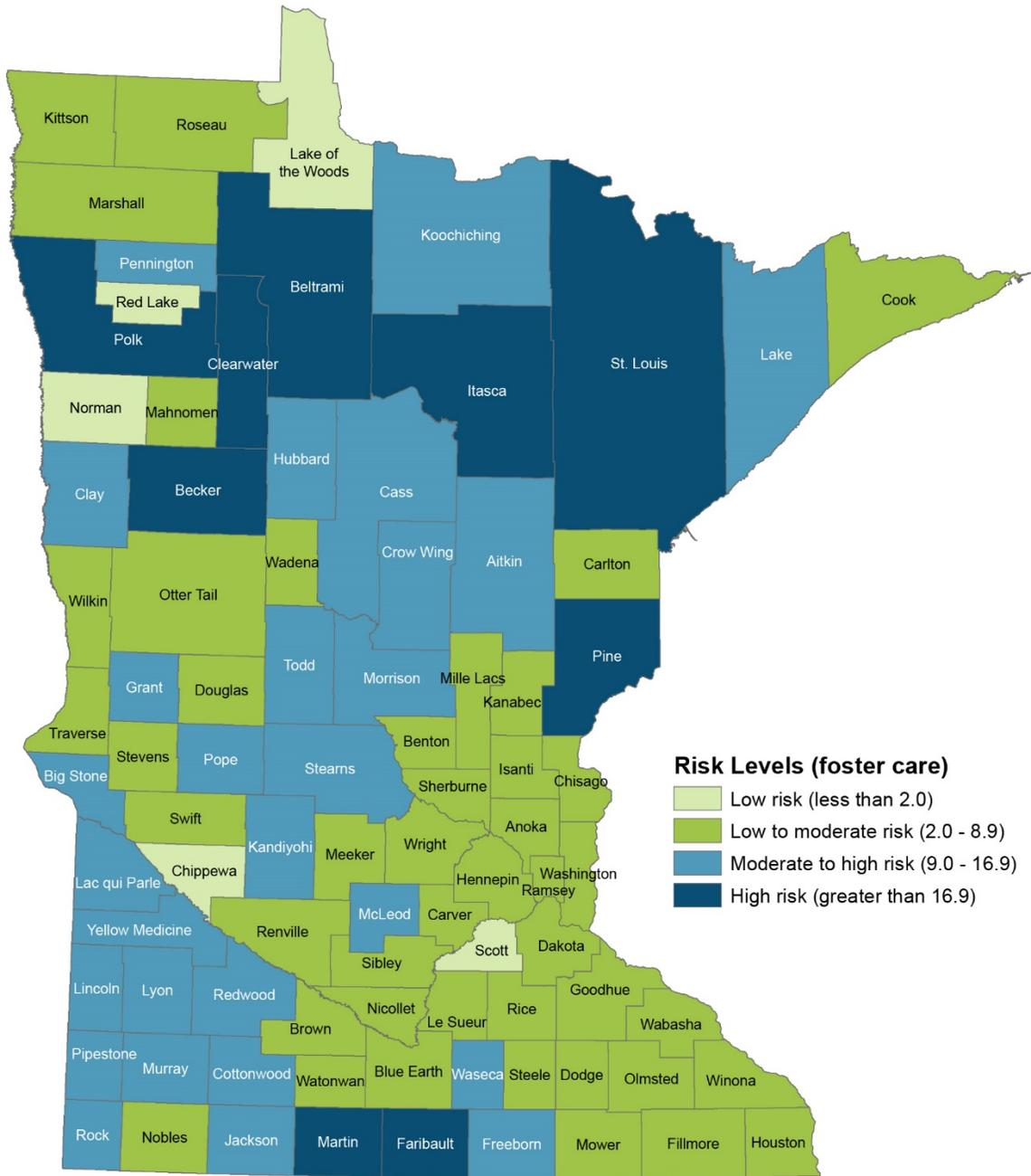
### *Children under age 6 in foster care*

Foster care, also called out-of-home care, is the placement of children away from their parents, due to concern that they are at risk of significant harm or in need of temporary care due to special needs of the child or parental unavailability or needs.

Placement in the child welfare system, particularly when there is a lack of a stable foster home, is a clear risk indicator for young children. Children in foster care often enter the system with existing vulnerabilities. Two-thirds of children placed in foster homes experience a placement change in the first two years, with nearly half of all children experiencing a placement change in the first 6 months. The instability that accompanies placement changes can exacerbate the already existing vulnerabilities, placing children at increased risk for inadequate medical care, as well as adverse psychosocial and neurobiological outcomes including attachment disturbances and both internalizing and externalizing behaviors.<sup>47-52</sup>

In 2013, about 8 in 1,000 children under age 6 statewide were in foster care. Notably, the state's highest rates of foster care placements are all in a contiguous band of six counties across northern Minnesota, from Polk to St. Louis County. Beltrami has the state's highest rate, at 45 per 1,000 children. Only five counties are included in the low risk category, significantly below the statewide average. Among those five counties, Lake of the Woods, Norman, and Red Lake reported no children under 6 in foster care in 2013.

**12a. Children under age 6 in foster care (rate per 1,000), mapped by county (2013)**



Source: Wilder Research analysis of data from Minnesota Department of Human Services.

## 12b. Children under age 6 in foster care (rate per 1,000), by county (2013)

	Rate	Risk Level		Rate	Risk Level		Rate	Risk Level
			Hubbard	14.6	3	Pipestone	10.4	3
<b>Minnesota</b>	<b>8.3</b>	<b>--</b>	Isanti	5.7	2	Polk	17.8	4
Aitkin	15.1	3	Itasca	17.0	4	Pope	10.5	3
Anoka	5.7	2	Jackson	11.3	3	Ramsey	8.8	2
Becker	27.2	4	Kanabec	2.0	2	Red Lake	0.0	1
Beltrami	44.6	4	Kandiyohi	9.9	3	Redwood	10.4	3
Benton	8.0	2	Kittson	3.6	2	Renville	5.6	2
Big Stone	11.4	3	Koochiching	14.6	3	Rice	6.8	2
Blue Earth	8.8	2	Lac qui Parle	15.2	3	Rock	10.4	3
Brown	3.4	2	Lake	10.4	3	Roseau	3.5	2
Carlton	8.3	2	Lake of the Woods	0.0	1	Scott	1.4	1
Carver	3.8	2	Le Sueur	3.8	2	Sherburne	3.2	2
Cass	13.7	3	Lincoln	10.4	3	Sibley	5.3	2
Chippewa	1.1	1	Lyon	10.4	3	St. Louis	26.8	4
Chisago	6.7	2	Mahnomen	4.3	2	Stearns	9.0	3
Clay	10.9	3	Marshall	3.0	2	Steele	4.6	2
Clearwater	18.4	4	Martin	17.9	4	Stevens	3.1	2
Cook	7.0	2	McLeod	9.5	3	Swift	7.2	2
Cottonwood	11.3	3	Meeker	4.4	2	Todd	9.7	3
Crow Wing	14.9	3	Mille Lacs	5.6	2	Traverse	8.8	2
Dakota	2.6	2	Morrison	9.9	3	Wabasha	7.8	2
Dodge	5.4	2	Mower	7.8	2	Wadena	8.2	2
Douglas	4.1	2	Murray	10.4	3	Waseca	13.8	3
Faribault	17.9	4	Nicollet	4.1	2	Washington	2.1	2
Fillmore	8.0	2	Nobles	7.8	2	Watonwan	4.5	2
Freeborn	11.1	3	Norman	0.0	1	Wilkin	2.1	2
Goodhue	4.9	2	Olmsted	5.2	2	Winona	3.2	2
Grant	11.8	3	Otter Tail	4.5	2	Wright	3.4	2
Hennepin	7.5	2	Pennington	13.9	3	Yellow Medicine	9.4	3
Houston	3.5	2	Pine	23.7	4			

Source: Wilder Research analysis of data from Minnesota Department of Human Services.

Note: Starred counties (\*) lacked data for this indicator. Level 1 = low risk (less than 2.0), level 2 = low to moderate risk (2.0 – 8.9), level 3 = moderate to high risk (9.0 – 16.9), level 4 = high risk (greater than 16.9).

## Overall risk status

The overall risk composite score assigns each county to one of the four risk categories, based on their average score across all indicators relative to other counties. This single score is meant to focus attention and start conversations about where counties fall along the continuum of risk, the availability and accessibility of resources in high-risk counties, and what we can learn from counties that provide the lowest-risk environments for young children.

Fifteen counties fall in the high risk category, including Ramsey County, which is the most racially diverse county in the metro area. Eight of these high-risk counties (including Ramsey County) are also high risk for children living in poverty, and 6 have high proportions of children who are American Indian. For details see the Appendix, which has maps depicting the overall risk status relative to the racial composition of each county.

In addition, 19 counties scored in the moderate-to-high risk category, including Hennepin County. Thirty-seven counties are considered low-to-moderate risk, and 12 are low risk.



### 13b. Overall risk status (1 is lowest risk and 4 is highest risk), by county (2014)

	Risk Level		Risk Level		Risk Level
Aitkin	3	Isanti	2	Pipestone	3
Anoka	2	Itasca	3	Polk	3
Becker	4	Jackson	2	Pope	2
Beltrami	4	Kanabec	2	Ramsey	4
Benton	2	Kandiyohi	3	Red Lake	1
Big Stone	3	Kittson	1	Redwood	3
Blue Earth	2	Koochiching	3	Renville	2
Brown	1	Lac qui Parle	2	Rice	3
Carlton	3	Lake	3	Rock	2
Carver	1	Lake of the Woods	*	Roseau	2
Cass	4	Le Sueur	1	Scott	1
Chippewa	2	Lincoln	1	Sherburne	1
Chisago	2	Lyon	3	Sibley	3
Clay	2	Mahnomen	4	St. Louis	4
Clearwater	4	Marshall	2	Stearns	2
Cook	*	Martin	2	Steele	2
Cottonwood	3	McLeod	2	Stevens	2
Crow Wing	3	Meeker	2	Swift	2
Dakota	2	Mille Lacs	4	Todd	4
Dodge	2	Morrison	2	Traverse	*
Douglas	1	Mower	4	Wabasha	2
Faribault	3	Murray	2	Wadena	4
Fillmore	2	Nicollet	2	Waseca	2
Freeborn	2	Nobles	4	Washington	1
Goodhue	2	Norman	2	Watonwan	4
Grant	3	Olmsted	2	Wilkin	*
Hennepin	3	Otter Tail	2	Winona	2
Houston	1	Pennington	2	Wright	1
Hubbard	4	Pine	4	Yellow Medicine	3

*Note:* Starred counties (\*) lacked data for this indicator (lacked data on 4 or more risk indicators that contribute to this composite). Level 1= low risk, level 2= low to moderate risk, level 3 = moderate to high risk, level 4 = high risk.

# Reach indicators

This next section shows the extent of coverage by county of publicly funded programs to meet the early learning, health, and basic needs of children and families eligible to receive services based on income and other criteria. These indicators of the “reach” of services relevant to early childhood development grouped by department are:

## **Health Programs**

- Enrollment in Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)
- Family Home Visiting Program participation

## **Human Services**

- Minnesota Family Investment Program coverage
- Child Care Assistance Program participation
- Mental health treatment within Minnesota Health Care Programs

## **Education Programs**

- Early Childhood Screening
- Early Head Start and Head Start enrollment
- Enrollment in early intervention and early childhood special education services

In addition to being reported in tables, the reach indicators are mapped onto the composite risk score map, to provide a sense of each program’s coverage in relation to the overall level of risk or need in each county.

## Health programs

### ***Enrollment in Special Supplemental Nutrition Program for Women, Infants, and Children***

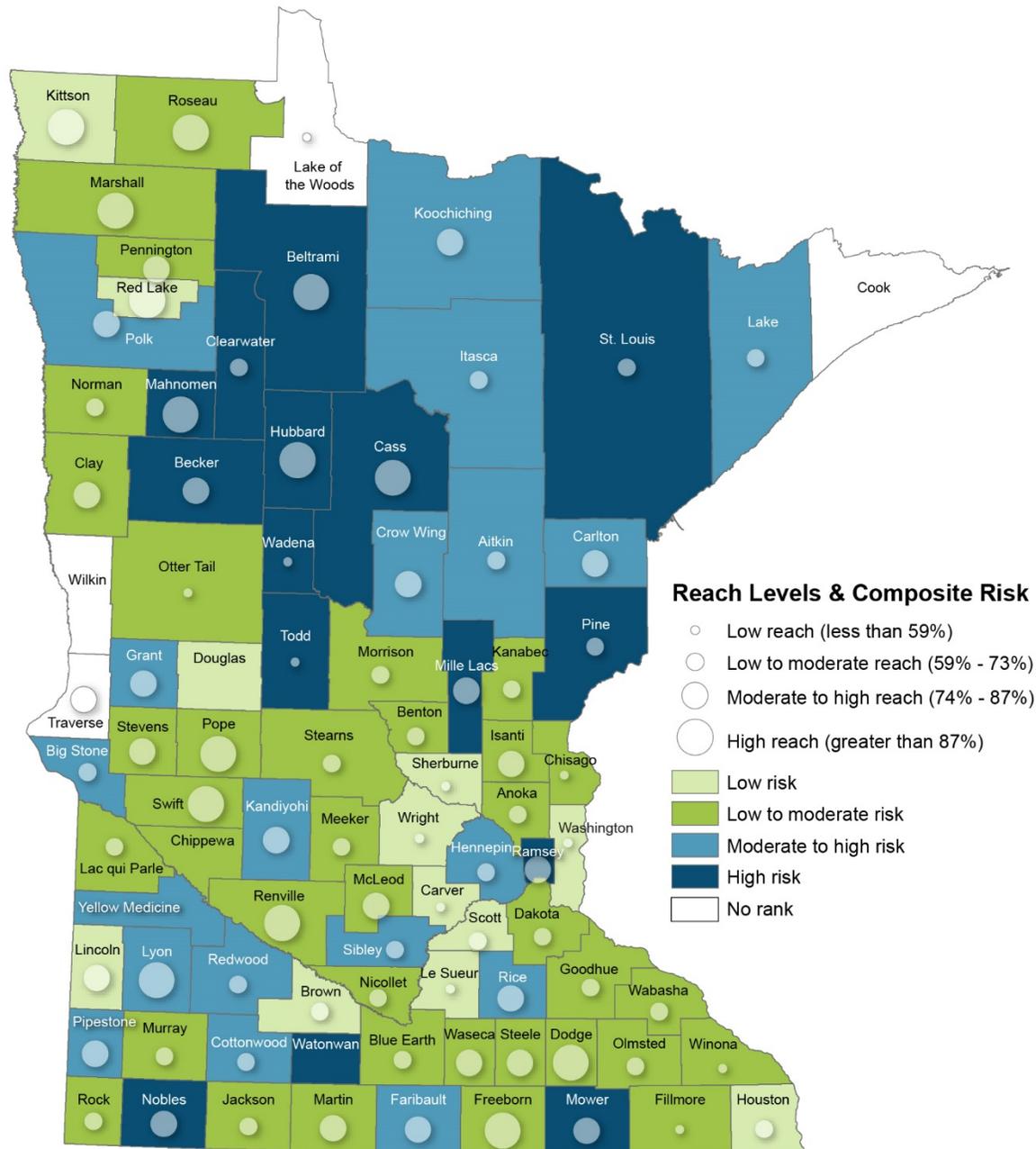
The Special Supplemental Nutrition Program for Women, Infants and Children (WIC) is a federal program that provides low-income pregnant, breastfeeding, and postpartum women and infants and children up to age 5 with nutrient-rich foods, health care and social service referrals, and nutrition counseling and education. Eligible families have incomes at or below 185 percent of federal poverty levels or are Medicaid eligible.

Seventy percent of eligible children under age 6 are served by WIC. All counties in Minnesota have WIC enrollment. In general, greater Minnesota counties have higher levels of WIC reach than counties in the metro area.<sup>2</sup>

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<sup>2</sup> These enrollment figures should be interpreted with caution because, according to MDH, the number of eligible children is likely higher than estimated due to census under-counting of Hispanic and American Indian populations in some counties.

**14a. Children under age 6 living in households below 185% of Federal Poverty Level (FPL) enrolled in the Special Supplemental Nutrition Program for Women, Infants, and Children, mapped by county (2013)**



*Source: Wilder Research analysis of data from the Minnesota Department of Health and US DHHS, Centers for Disease Control and Prevention & National Center for Health Statistics Bridged Race Estimates, 2013.*

**14b. Children under age 6 living in households below 185% FPL enrolled in the Special Supplemental Nutrition Program for Women, Infants, and Children, by county (2013)**

	%	Reach Level		%	Reach Level		%	Reach Level
<b>Minnesota</b>	<b>70%</b>		Hubbard	94%	4	Pipestone	83%	3
			Isanti	78%	3	Polk	79%	3
Aitkin	64%	2	Itasca	69%	2	Pope	98%	4
Anoka	63%	2	Jackson	70%	2	Ramsey	82%	3
Becker	80%	3	Kanabec	71%	2	Red Lake	91%	4
Beltrami	93%	4	Kandiyohi	85%	3	Redwood	67%	2
Benton	61%	2	Kittson	94%	4	Renville	99%	4
Big Stone	61%	2	Koochiching	75%	3	Rice	76%	3
Blue Earth	63%	2	Lac qui Parle	70%	2	Rock	72%	2
Brown	71%	2	Lake	62%	2	Roseau	99%	4
Carlton	80%	3	Lake of the Woods	56%	1	Scott	65%	2
Carver	45%	1	Le Sueur	57%	1	Sherburne	59%	1
Cass	87%	4	Lincoln	78%	3	Sibley	70%	2
Chippewa	*		Lyon	96%	4	St. Louis	62%	2
Chisago	54%	1	Mahnomen	96%	4	Stearns	68%	2
Clay	76%	3	Marshall	97%	4	Steele	80%	3
Clearwater	64%	2	Martin	83%	3	Stevens	87%	3
Cook	*		McLeod	78%	3	Swift	98%	4
Cottonwood	71%	2	Meeker	63%	2	Todd	56%	1
Crow Wing	75%	3	Mille Lacs	82%	3	Traverse	83%	3
Dakota	60%	2	Morrison	73%	2	Wabasha	68%	2
Dodge	89%	4	Mower	76%	3	Wadena	47%	1
Douglas	*		Murray	70%	2	Waseca	78%	3
Faribault	78%	3	Nicollet	65%	2	Washington	57%	1
Fillmore	49%	1	Nobles	80%	3	Watsonwan	*	
Freeborn	98%	4	Norman	73%	2	Wilkin	*	
Goodhue	63%	2	Olmsted	72%	2	Winona	58%	1
Grant	77%	3	Otter Tail	58%	1	Wright	55%	1
Hennepin	68%	2	Pennington	77%	3	Yellow Medicine	*	
Houston	65%	2	Pine	67%	2			

*Source:* Wilder Research analysis of data from the Minnesota Department of Health and US DHHS, Centers for Disease Control and Prevention & National Center for Health Statistics Bridged Race Estimates, 2013.

Level 1 = low reach (less than 59%), level 2 = low to moderate reach (59 - 73%), level 3 = moderate to high reach (74% - 87%), level 4 = high reach (greater than 87%). Some counties may display identical values but different risk levels due to rounding. Starred counties (\*) lacked data for this indicator.

**Note:** The USDA estimates that 18.2% of children under 6 are WIC eligible above 185% FPL. In keeping with USDA methodology (<http://www.fns.usda.gov/sites/default/files/WICEligibles2011Volume2.pdf>), this denominator includes children under 6 living in households below 185% FPL, plus an additional 18.2% of all children under 6 living in the county.

### ***Family Home Visiting Program participation***

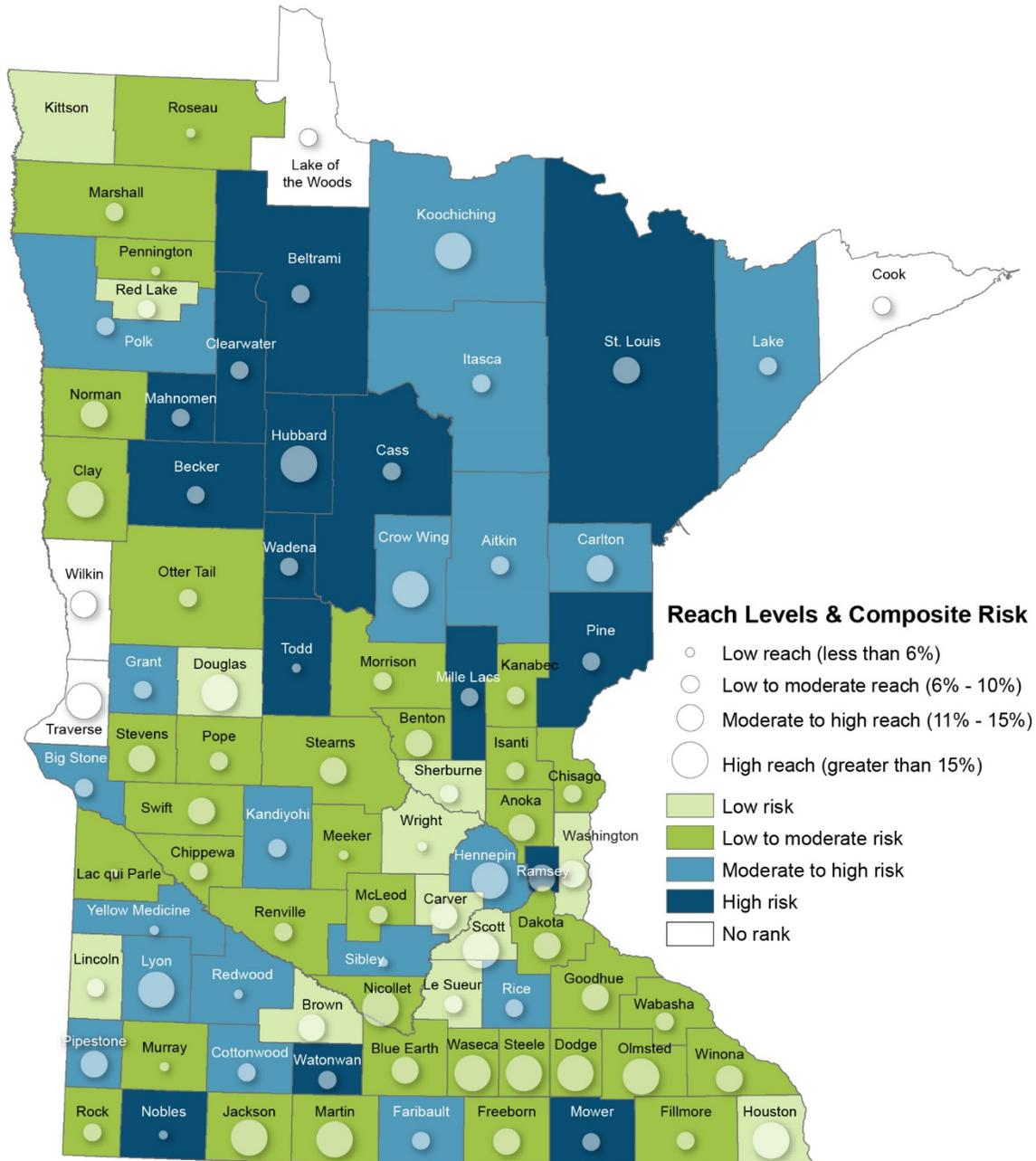
Home visiting supports healthy parent-child relationships and child growth and development. Home visiting has been shown to be effective in helping families improve health status; achieve economic self-sufficiency; improve positive parenting; reduce child maltreatment; achieve goals such as child spacing, education, and employment; and establish links to community resources.

This section reports only the availability of the Family Home Visiting Program implemented at the local level by local public health departments and tribal governments provided through TANF funding and does not include family home visiting programs offered by other public and private nonprofit agencies.

The Family Home Visiting Program works with families at or below 185 percent of federal poverty guidelines who are experiencing a variety of risk factors, including poverty, history of alcohol or other drug use, history of violence or at risk for child abuse or neglect, or adolescent parents. The home visits begin prenatally when possible. Initial assessments are carried out by a public health nurse. Ongoing visits are provided by public health nurses and/or trained home visitors.

Overall, the Family Home Visiting Program reaches 8 percent of the targeted families with children under age 5. All counties in Minnesota have family home visiting services. In general, high-reach counties on this indicator tend to be in greater Minnesota.

**15a. Percentage of families with children under age 5 living below 185% FPL served by the Family Home Visiting Program, mapped by county (2013)**



Source: Wilder Research analysis of Community Health Board data from the Minnesota Department of Health and U.S. Census Bureau, American Community Survey, 2009-2013.

**15b. Percentage of families with children under age 5 living below 185% FPL served by the Family Home Visiting Program, by county (2013)**

	%	Reach Level		%	Reach Level		%	Reach Level
<b>Minnesota</b>	<b>8%</b>		Hubbard	5%	2	Pipestone	3%	2
			Isanti	11%	3	Polk	5%	2
Aitkin	20%	4	Itasca	20%	4	Pope	7%	2
Anoka	6%	2	Jackson	4%	2	Ramsey	11%	3
Becker	7%	3	Kanabec	6%	2	Red Lake	6%	2
Beltrami	4%	2	Kandiyohi	3%	2	Redwood	3%	2
Benton	2%	1	Kittson	6%	2	Renville	3%	2
Big Stone	3%	2	Koochiching	20%	4	Rice	7%	3
Blue Earth	2%	2	Lac qui Parle	3%	2	Rock	3%	2
Brown	10%	3	Lake	7%	2	Roseau	6%	2
Carlton	7%	2	Lake of the Woods	*		Scott	11%	3
Carver	19%	4	Le Sueur	5%	2	Sherburne	4%	2
Cass	1%	1	Lincoln	3%	2	Sibley	3%	2
Chippewa	3%	2	Lyon	3%	2	St. Louis	7%	2
Chisago	10%	3	Mahnomen	5%	2	Stearns	2%	2
Clay	7%	2	Marshall	6%	2	Steele	11%	3
Clearwater	4%	2	Martin	9%	3	Stevens	7%	2
Cook	*		McLeod	3%	2	Swift	3%	2
Cottonwood	24%	4	Meeker	3%	2	Todd	10%	3
Crow Wing	2%	2	Mille Lacs	11%	3	Traverse	7%	2
Dakota	2%	1	Morrison	10%	3	Wabasha	14%	4
Dodge	11%	3	Mower	1%	1	Wadena	10%	3
Douglas	7%	2	Murray	3%	2	Waseca	5%	2
Faribault	9%	3	Nicollet	10%	3	Washington	8%	3
Fillmore	18%	4	Nobles	8%	3	Watsonwan	3%	2
Freeborn	16%	4	Norman	5%	2	Wilkin	7%	2
Goodhue	15%	4	Olmsted	14%	4	Winona	5%	2
Grant	7%	2	Otter Tail	7%	2	Wright	3%	2
Hennepin	10%	3	Pennington	6%	2	Yellow Medicine	3%	2
Houston	18%	4	Pine	6%	2			

*Source:* Wilder Research analysis of Community Health Board data from the Minnesota Department of Health and U.S. Census Bureau, American Community Survey, 2009-2013.

*Notes:* Includes only services received through TANF. For Community Health Boards serving multiple counties, the number of families served by TANF was allocated according to the weighted distribution of families living below 185% FPL with children under 5 by county.

Level 1 = low reach (less than 2%), level 2 = low to moderate reach (2 - 7%), level 3 = moderate to high reach (8% - 11%), level 4 = high reach (greater than 11%). Some counties may display identical values but different risk levels due to rounding. Starred counties (\*) lacked data for this indicator.

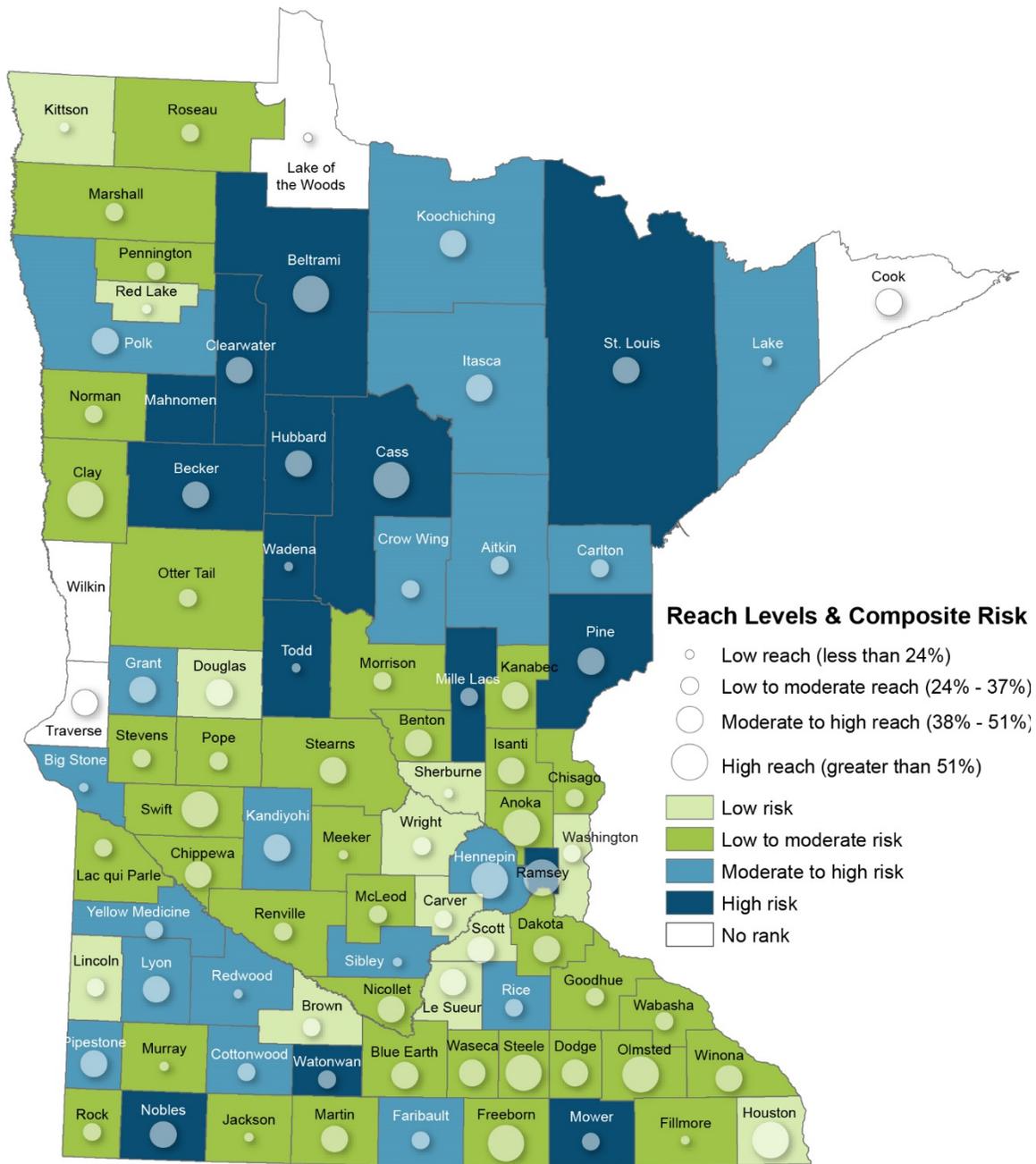
## Human Services

### ***Minnesota Family Investment Program coverage***

The Minnesota Family Investment Program (MFIP) is the state's version of the federal Temporary Assistance for Needy Families program. It supports low-income families with children and aims to help those families move toward financial stability through work. Parents are supported through cash and food assistance, as well as employment services.

Statewide, a third of children under age 6 in low-income families are covered by MFIP, calculated as the percentage of all children under age 6 in families with incomes at or below 125 percent of the poverty level. The coverage ranges from 11 percent in Red Lake County to 91 percent in Beltrami County. In the Twin Cities metro area, Anoka, Hennepin, and Ramsey Counties have high coverage levels (65%).

**16a. Children under age 6 living at or below 125% FPL covered by Minnesota Family Investment Program, mapped by county (2013)**



*Source: Wilder Research analysis of data from the Minnesota Department of Human Services and U.S. Census Bureau, American Community Survey, 2008-2012.*

**16b. Children under age 6 living at or below 125% FPL covered by Minnesota Family Investment Program, by county (2013)**

	%	Reach Level		%	Reach Level		%	Reach Level
<b>Minnesota</b>	<b>33%</b>		Hubbard	45%	3	Pipestone	38%	3
			Isanti	42%	3	Polk	50%	3
Aitkin	31%	2	Itasca	51%	3	Pope	32%	2
Anoka	65%	4	Jackson	24%	1	Ramsey	65%	4
Becker	43%	3	Kanabec	48%	3	Red Lake	11%	1
Beltrami	91%	4	Kandiyohi	44%	3	Redwood	18%	1
Benton	44%	3	Kittson	22%	1	Renville	30%	2
Big Stone	22%	1	Koochiching	46%	3	Rice	33%	2
Blue Earth	42%	3	Lac qui Parle	34%	2	Rock	31%	2
Brown	24%	2	Lake	15%	1	Roseau	27%	2
Carlton	37%	2	Lake of the Woods	18%	1	Scott	46%	3
Carver	27%	2	Le Sueur	41%	3	Sherburne	24%	1
Cass	57%	4	Lincoln	36%	2	Sibley	21%	1
Chippewa	47%	3	Lyon	41%	3	St. Louis	49%	3
Chisago	25%	2	Mahnomen	*		Stearns	46%	3
Clay	52%	4	Marshall	25%	2	Steele	56%	4
Clearwater	40%	3	Martin	50%	3	Stevens	31%	2
Cook	41%	3	McLeod	34%	2	Swift	52%	4
Cottonwood	33%	2	Meeker	17%	1	Todd	15%	1
Crow Wing	34%	2	Mille Lacs	37%	2	Traverse	46%	3
Dakota	44%	3	Morrison	28%	2	Wabasha	36%	2
Dodge	45%	3	Mower	37%	2	Wadena	23%	1
Douglas	41%	3	Murray	14%	1	Waseca	51%	3
Faribault	31%	2	Nicollet	48%	3	Washington	35%	2
Fillmore	17%	1	Nobles	40%	3	Watonwan	24%	2
Freeborn	67%	4	Norman	37%	2	Wilkin	*	
Goodhue	37%	2	Olmsted	55%	4	Winona	43%	3
Grant	38%	3	Otter Tail	25%	2	Wright	27%	2
Hennepin	65%	4	Pennington	27%	2	Yellow Medicine	26%	2
Houston	54%	4	Pine	46%	3			

Source: Wilder Research analysis of data from the Minnesota Department of Human Services and U.S. Census Bureau, American Community Survey, 2008-2012.

Note: Level 1 = low reach (less than 24%), level 2 = low to moderate reach (24% - 37%), level 3 = moderate to high reach (38% - 51%), level 4 = high reach (greater than 51%). Some counties may display identical values but different reach levels due to rounding. Starred counties (\*) lacked data for this indicator.

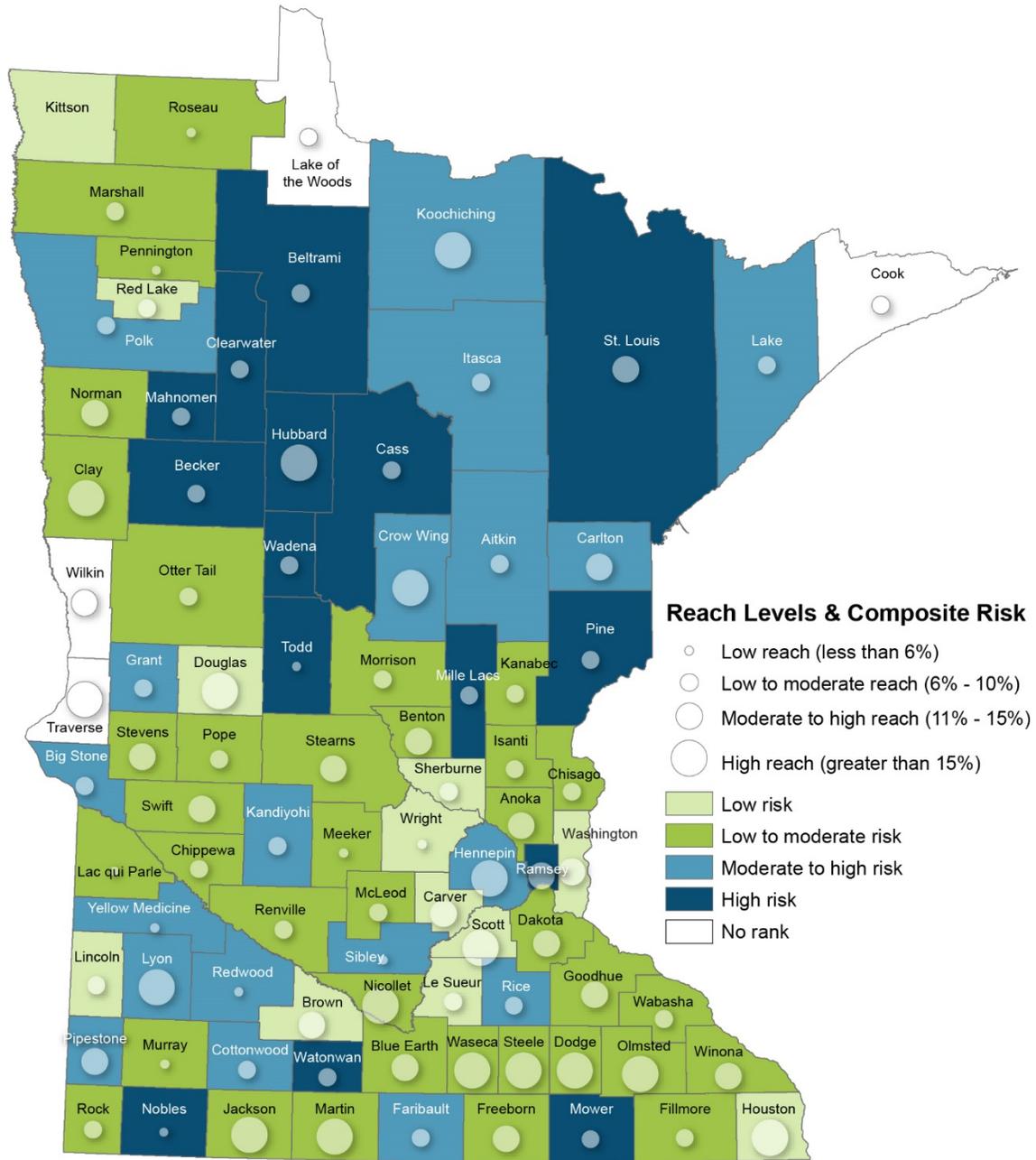
### *Child Care Assistance Program participation*

Subsidies through the Child Care Assistance Program (CCAP) help parents attain and retain employment and education. When used to pay for care that is in safe, stimulating, and developmentally appropriate homes and center-based programs, CCAP subsidies also contribute to healthy child development. Receipt of child care subsidies and continuity of care are dependent upon parental work schedules. In addition, in some counties, wait lists for CCAP subsidies are long. The continuity of child care also may be disrupted for some children if parents do not comply with program requirements.

CCAP is available to families participating in the Minnesota Family Investment Program (MFIP), families that had an MFIP case close within the last 12 months, and low-income families that may be eligible for the Basic Sliding Fee program.

Statewide, 13 percent of children under age 6 in low-income families are served by CCAP, calculated as the percentage of all children under age 6 in families with incomes at or below 200 percent of the poverty level. The coverage ranges from 3 percent in Todd County to 23 percent in Dodge County. Counties in the southeast of the state near Rochester have high levels of CCAP reach, while counties in the northwest have lower levels.

**17a. Percentage of children under age 6 living in households below 200% FPL served by the Child Care Assistance Program, mapped by county (2014)**



Source: Wilder Research analysis of data from the Minnesota Department of Human Services, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention & National Center for Health Statistics (Bridged Race Estimates, 2013).

**17b. Percentage of children under age 6 living in households below 200% FPL served by the Child Care Assistance Program, by county (2014)**

	%	Reach Level		%	Reach Level		%	Reach Level
<b>Minnesota</b>	<b>13%</b>		Hubbard	17%	4	Pipestone	12%	3
			Isanti	9%	2	Polk	10%	2
Aitkin	9%	2	Itasca	8%	2	Pope	7%	2
Anoka	15%	3	Jackson	17%	4	Ramsey	13%	3
Becker	8%	2	Kanabec	8%	2	Red Lake	7%	2
Beltrami	11%	2	Kandiyohi	8%	2	Redwood	6%	1
Benton	14%	3	Kittson	*		Renville	9%	2
Big Stone	7%	2	Koochiching	19%	4	Rice	8%	2
Blue Earth	14%	3	Lac qui Parle	5%	1	Rock	8%	2
Brown	14%	3	Lake	9%	2	Roseau	5%	1
Carlton	11%	3	Lake of the Woods	7%	2	Scott	19%	4
Carver	11%	3	Le Sueur	6%	2	Sherburne	6%	2
Cass	9%	2	Lincoln	6%	2	Sibley	6%	1
Chippewa	8%	2	Lyon	21%	4	St. Louis	14%	3
Chisago	7%	2	Mahnomen	6%	2	Stearns	12%	3
Clay	16%	4	Marshall	8%	2	Steele	17%	4
Clearwater	9%	2	Martin	18%	4	Stevens	14%	3
Cook	7%	2	McLeod	7%	2	Swift	13%	3
Cottonwood	6%	2	Meeker	4%	1	Todd	3%	1
Crow Wing	17%	4	Mille Lacs	8%	2	Traverse	15%	4
Dakota	14%	3	Morrison	6%	2	Wabasha	7%	2
Dodge	23%	4	Mower	10%	2	Wadena	7%	2
Douglas	21%	4	Murray	4%	1	Waseca	17%	4
Faribault	10%	2	Nicollet	18%	4	Washington	11%	3
Fillmore	8%	2	Nobles	5%	1	Watsonwan	10%	2
Freeborn	12%	3	Norman	11%	3	Wilkin	14%	3
Goodhue	12%	3	Olmsted	20%	4	Winona	11%	3
Grant	8%	2	Otter Tail	6%	2	Wright	5%	1
Hennepin	16%	4	Pennington	4%	1	Yellow Medicine	4%	1
Houston	16%	4	Pine	9%	2			

*Source:* Wilder Research analysis of Child Care Assistance Program data from the Minnesota Department of Human Services and U.S. Census Bureau, American Community Survey, 2008-2012.

*Notes:* CCAP data represents average monthly count of children under age 6 served in SFY14 by case residence county.

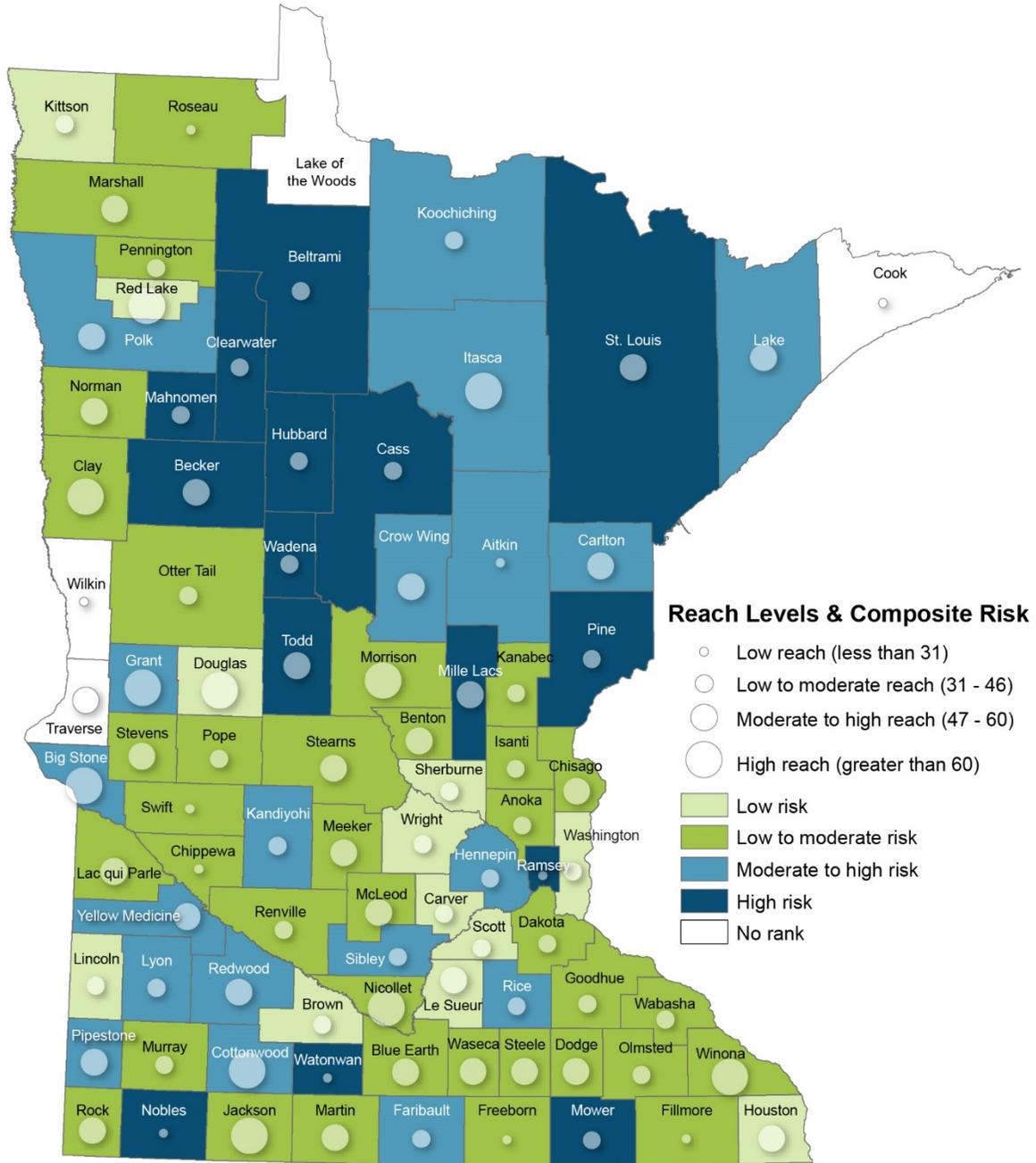
Starred counties (\*) lacked data for this indicator. The Minnesota Department of Human Services does not provide rates for counties with fewer than 7 events. Level 1 = low reach (less than 6%), level 2 = low to moderate reach (6% - 10%), level 3 = moderate to high reach (11% - 15%), level 4 = high reach (greater than 15%). Some counties may display identical values but different reach levels due to rounding. Starred counties (\*) lacked data for this indicator.

### ***Mental health treatment within Minnesota Health Care Programs***

Infants and young children develop within multiple contexts, including internal contexts of genetics and biology and external environments of parents, families, culture, and socioeconomic class. Early mental health intervention enhances child development by reducing risk factors and increasing protective influences, when possible, within these contexts. Assessment and mental health intervention are focused on the primary caregiving relationship(s), which are of central importance to the young child and influenced by all other contexts. Science suggests that intervention in the very early stages of development both capitalizes on normative developmental processes and is cost effective.<sup>53</sup>

In 2013, statewide, 40 children per 1,000 children under age 6 enrolled in Minnesota Health Care Programs (MinnesotaCare and Medical Assistance) were assessed and treated for mental health issues. Ramsey County is among the 12 low-reach counties scattered across Minnesota.

**18a. Rate of mental health treatment among children under age 6 enrolled in Minnesota Health Care Programs, mapped by county (2013)**



*Source: Wilder Research analysis of data from the Minnesota Department of Human Services.*

*Note: Rate per 1,000 children under age 6. Includes only mental health treatment received through Medicaid and MinnesotaCare.*

**18b. Rate of mental health treatment among children under age 6 enrolled in Minnesota Health Care Programs, mapped by county (2013)**

	Rate	Reach Level		Rate	Reach Level		Rate	Reach Level
<b>Minnesota</b>	<b>40</b>		Hubbard	43	2	Pipestone	53	3
			Isanti	46	2	Polk	59	3
Aitkin	17	1	Itasca	81	4	Pope	41	2
Anoka	41	2	Jackson	89	4	Ramsey	30	1
Becker	50	3	Kanabec	42	2	Red Lake	63	4
Beltrami	34	2	Kandiyohi	34	2	Redwood	55	3
Benton	60	3	Kittson	31	2	Renville	37	2
Big Stone	94	4	Koochiching	38	2	Rice	35	2
Blue Earth	59	3	Lac Qui Parle	58	3	Rock	49	3
Brown	34	2	Lake	47	3	Roseau	10	1
Carlton	58	3	Lake of the Woods	*		Scott	33	2
Carver	43	2	Le Sueur	59	3	Sherburne	44	2
Cass	44	2	Lincoln	36	2	Sibley	34	2
Chippewa	30	1	Lyon	46	2	St. Louis	55	3
Chisago	50	3	Mahnomen	40	2	Stearns	46	3
Clay	65	4	Marshall	56	3	Steele	50	3
Clearwater	44	2	Martin	48	3	Stevens	52	3
Cook	19	1	McLeod	50	3	Swift	19	1
Cottonwood	99	4	Meeker	55	3	Todd	52	3
Crow Wing	47	3	Mille Lacs	51	3	Traverse	51	3
Dakota	35	2	Morrison	71	4	Wabasha	35	2
Dodge	48	3	Mower	34	2	Wadena	37	2
Douglas	64	4	Murray	40	2	Waseca	55	3
Faribault	37	2	Nicollet	71	4	Washington	46	2
Fillmore	26	1	Nobles	24	1	Watonwan	22	1
Freeborn	25	1	Norman	60	3	Wilkin	25	1
Goodhue	36	2	Olmsted	30	1	Winona	67	4
Grant	65	4	Otter Tail	36	2	Wright	40	2
Hennepin	32	2	Pennington	43	2	Yellow Medicine	58	3
Houston	57	3	Pine	43	2			

*Source:* Wilder Research analysis of data from the Minnesota Department of Human Services.

*Note:* Rate per 1,000 MA and MinnesotaCare enrollees under age 6. Includes only mental health diagnoses received through Medicaid. Starred counties (\*) lacked data for this indicator. Level 1 = low reach (less than 31), level 2 = low to moderate reach (31 - 46), level 3 = moderate to high reach (47 - 60), level 4 = high reach (greater than 60). Some counties may display identical values but different reach levels due to rounding.

## Education programs

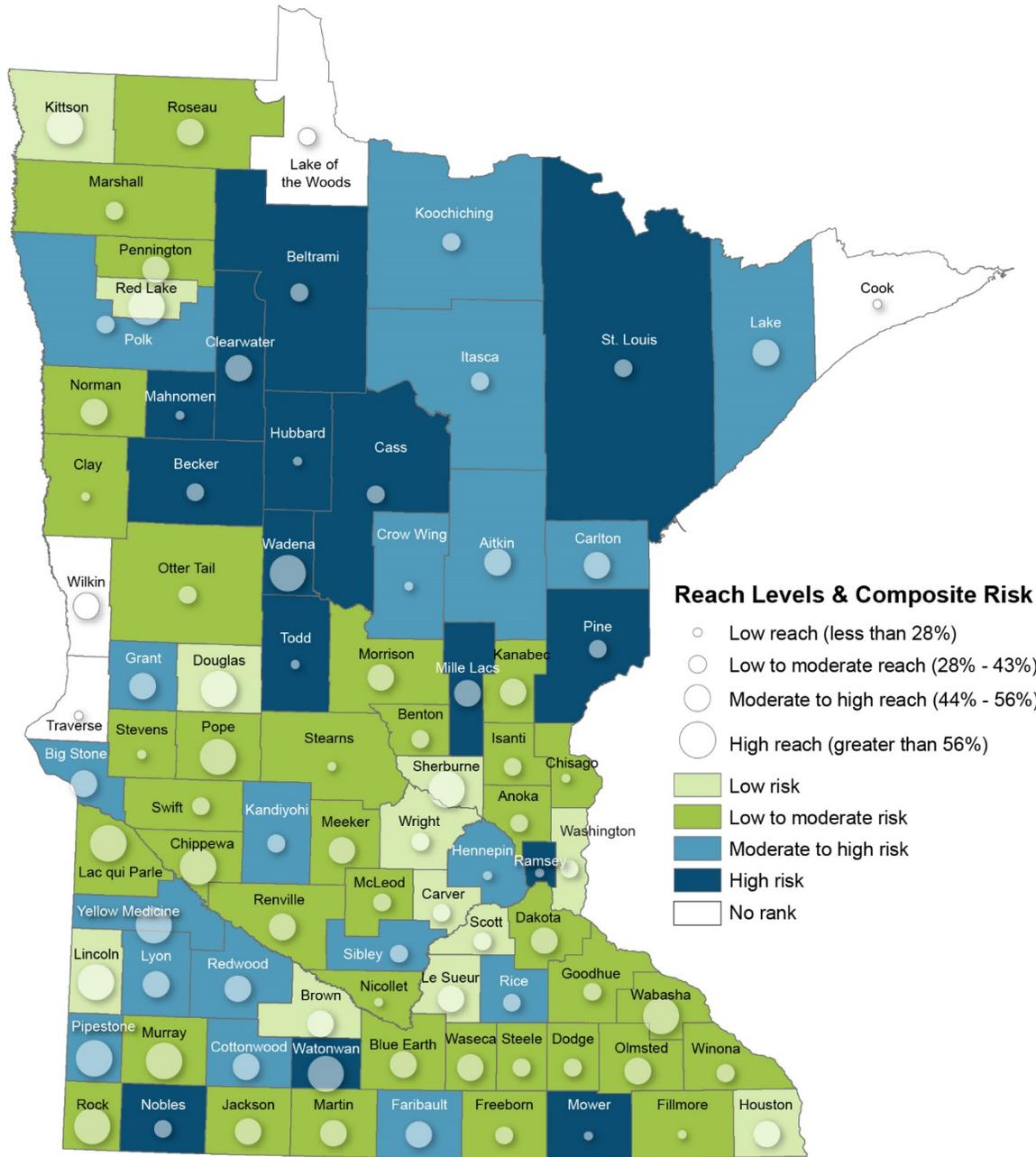
### *Early childhood screening*

Early childhood screening evaluates young children's hearing, vision, immunizations, coordination, speech, and cognitive development, as well as social and emotional skills. Through the screening process, families are connected with specific resources to help them address potential concerns.

Early Childhood Screening is offered throughout the year by local school districts as well as by others such as Head Start, Child and Teen Checkups, and health care providers. Screening is required by state law within 30 days of enrollment in kindergarten and recommended prior to kindergarten. Screening earlier at age 3 provides an opportunity to intervene for better readiness at school entry.

In 2013, about a third of children age 3 were screened in Minnesota. The reach ranges from 8 percent in Mahnommen County to about 75 percent in Douglas, Lac qui Parle, Pipestone, and Red Lake counties. In the metro area, Hennepin (25%) and Ramsey (22%) counties have low reach levels.

**19a. Children age 3 who received early childhood screening, mapped by county (2013)**



Source: Wilder Research analysis of data from the Minnesota Department of Education.

## 19b. Children age 3 who received early childhood screening, by county (2013)

	%	Reach Level		%	Reach Level		%	Reach Level
<b>Minnesota</b>	<b>35%</b>		Hubbard	26%	1	Pipestone	73%	4
Aitkin	56%	3	Isanti	39%	2	Polk	38%	2
Anoka	36%	2	Itasca	38%	2	Pope	65%	4
Becker	36%	2	Jackson	46%	3	Ramsey	22%	1
Beltrami	28%	2	Kanabec	54%	3	Red Lake	74%	4
Benton	32%	2	Kandiyohi	37%	2	Redwood	48%	3
Big Stone	44%	3	Kittson	69%	4	Renville	49%	3
Blue Earth	46%	3	Koochiching	38%	2	Rice	30%	2
Brown	56%	3	Lac qui Parle	73%	4	Rock	58%	4
Carlton	44%	3	Lake	51%	3	Roseau	51%	3
Carver	38%	2	Lake of the Woods	32%	2	Scott	39%	2
Cass	36%	2	Le Sueur	45%	3	Sherburne	69%	4
Chippewa	67%	4	Lincoln	69%	4	Sibley	37%	2
Chisago	23%	1	Lyon	46%	3	St. Louis	35%	2
Clay	22%	1	Mahnomen	8%	1	Stearns	24%	1
Clearwater	50%	3	Marshall	36%	2	Steele	32%	2
Cook	17%	1	Martin	50%	3	Stevens	27%	1
Cottonwood	46%	3	McLeod	31%	2	Swift	35%	2
Crow Wing	25%	1	Meeker	51%	3	Todd	19%	1
Dakota	48%	3	Mille Lacs	53%	3	Traverse	25%	1
Dodge	43%	2	Morrison	47%	3	Wabasha	58%	4
Douglas	75%	4	Mower	28%	1	Wadena	63%	4
Faribault	52%	3	Murray	61%	4	Waseca	47%	3
Fillmore	19%	1	Nicollet	18%	1	Washington	38%	2
Freeborn	31%	2	Nobles	39%	2	Watsonwan	58%	4
Goodhue	38%	2	Norman	48%	3	Wilkin	46%	3
Grant	47%	3	Olmsted	51%	3	Winona	34%	2
Hennepin	25%	1	Otter Tail	35%	2	Wright	40%	2
			Pennington	53%	3	Yellow Medicine	58%	4
			Pine	34%	2			

*Source:* Wilder Research analysis of data from the Minnesota Department of Education & National Center for Health Statistics Bridged Race Estimates, 2013.

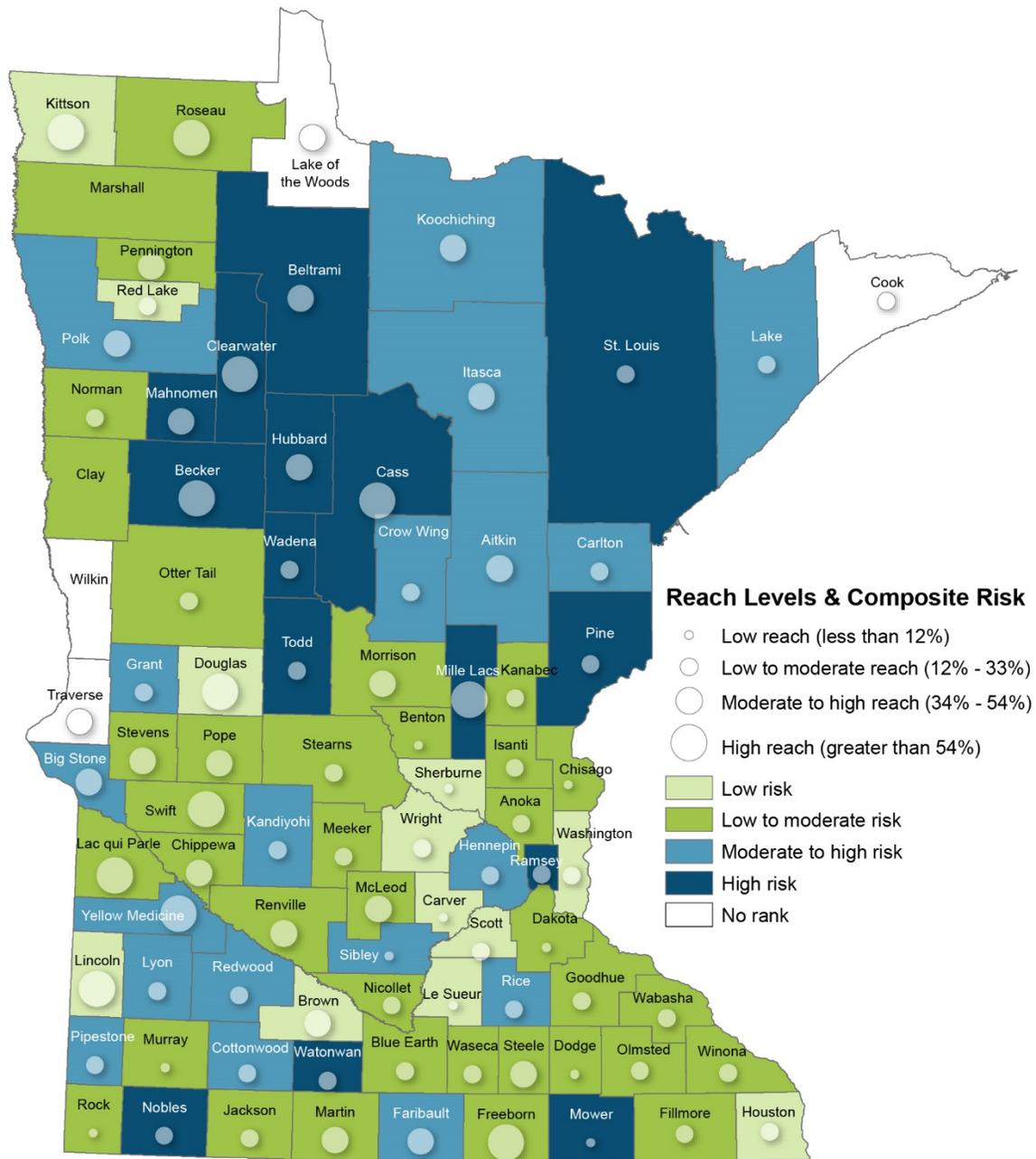
*Note:* Level 1 = low reach (less than 28%), level 2 = low to moderate reach (28% - 43%), level 3 = moderate to high reach (44% - 56%), level 4 = high reach (greater than 56%). Some counties may display identical values but different reach levels due to rounding.

### ***Early Head Start and Head Start enrollment***

Early Head Start and Head Start are comprehensive child development, health, and social service programs for children and families with poverty-level incomes, children with special needs, or children with negative family circumstances such as homelessness. Early Head Start offers home-based services beginning prenatally to nurture child development and parenting skills. For children age 6 weeks to 5 years, options include home visits and full-day, half-day, therapeutic, and inclusion center-based classrooms.

Statewide, about a quarter of eligible children under age 6 living in poverty are served by Head Start and Early Head Start, calculated as the percentage of all children under age 6 in families with incomes at or below poverty level. In general, greater Minnesota counties have higher levels of reach than counties in the metro area. The coverage ranges from 10 percent or below in Carver and Dakota counties in the metro area and Benton, Dodge, Le Sueur, Mower, Murray, Rock, Sherburne, and Sibley counties in greater Minnesota to 80 percent or higher in Clearwater, Douglas, Freeborn, Lincoln, Roseau, and Swift counties.

**20a. Children under age 6 living in poverty enrolled in Early Head Start and Head Start, mapped by county (2014)**



*Source: Wilder Research analysis of data from the Minnesota Department of Education, Head Start Association, and U.S. Census Bureau, American Community Survey, 2008-2012.*

**20b. Children under age 6 living in poverty enrolled in Early Head Start and Head Start, by county (2014)**

	%	Reach Level		%	Reach Level		%	Reach Level
<b>Minnesota</b>	<b>23%</b>		Hubbard	54%	3	Pipestone	29%	2
			Isanti	25%	2	Polk	54%	3
Aitkin	37%	3	Itasca	53%	3	Pope	38%	3
Anoka	27%	2	Jackson	20%	2	Ramsey	15%	2
Becker	59%	4	Kanabec	21%	2	Red Lake	25%	2
Beltrami	36%	3	Kandiyohi	20%	2	Redwood	14%	2
Benton	10%	1	Kittson	78%	4	Renville	43%	3
Big Stone	46%	3	Koochiching	52%	3	Rice	14%	2
Blue Earth	25%	2	Lac qui Parle	67%	4	Rock	7%	1
Brown	37%	3	Lake	12%	2	Roseau	90%	4
Carlton	16%	2	Lake of the Woods	54%	3	Scott	28%	2
Carver	8%	1	Le Sueur	9%	1	Sherburne	4%	1
Cass	69%	4	Lincoln	83%	4	Sibley	9%	1
Chippewa	41%	3	Lyon	30%	2	St. Louis	30%	2
Chisago	11%	1	Mahnomen	44%	3	Stearns	23%	2
Clay	*		Marshall	*		Steele	36%	3
Clearwater	86%	4	Martin	37%	3	Stevens	35%	3
Cook	20%	2	McLeod	38%	3	Swift	80%	4
Cottonwood	23%	2	Meeker	19%	2	Todd	25%	2
Crow Wing	33%	2	Mille Lacs	66%	4	Traverse	48%	3
Dakota	10%	1	Morrison	51%	3	Wabasha	12%	2
Dodge	9%	1	Mower	10%	1	Wadena	12%	2
Douglas	81%	4	Murray	10%	1	Waseca	27%	2
Faribault	42%	3	Nicollet	15%	2	Washington	13%	2
Fillmore	13%	2	Nobles	26%	2	Watsonwan	21%	2
Freeborn	95%	4	Norman	25%	2	Wilkin	*	
Goodhue	15%	2	Olmsted	23%	2	Winona	16%	2
Grant	22%	2	Otter Tail	24%	2	Wright	27%	2
Hennepin	18%	2	Pennington	44%	3	Yellow Medicine	64%	4
Houston	27%	2	Pine	29%	2			

Source: Wilder Research analysis of data from the Minnesota Department of Education, Head Start Association, and U.S. Census Bureau, American Community Survey, 2008-2012.

Notes: Level 1 = low reach (less than 12%), level 2 = low to moderate reach (12% - 33%), level 3 = moderate to high reach (34% - 54%), level 4 = high reach (greater than 54%). Some counties may display identical values but different reach levels due to rounding. Starred counties (\*) lacked data for this indicator.

### ***Enrollment in early intervention and early childhood special education services***

The Individuals with Disabilities Education Act (IDEA) is a national law ensuring that early intervention, special education, and related services are provided to children with disabilities. The data presented here are limited to pre-kindergarten children and reflect county location of the programs' district office rather than child's residence.

Under Part C of the Individuals with Disabilities Education Act (IDEA), early intervention services and supports are available in "natural environments" for families and their children age 2 and younger with developmental delays or with certain diagnosed physical or mental disabilities, conditions, or disorders. These include children with low birth weight and children with hearing or vision impairment.

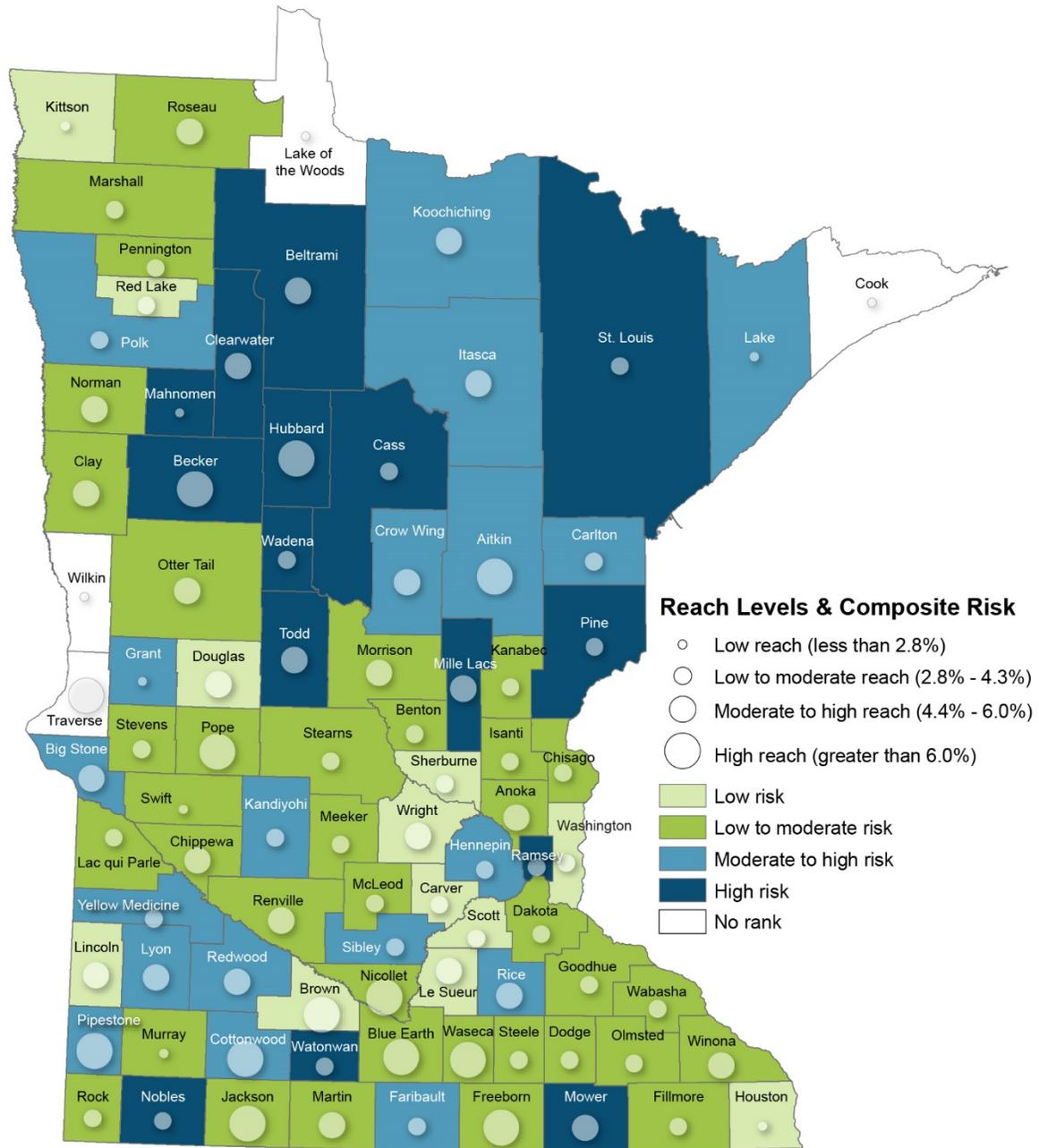
Under Part B of IDEA, children with developmental delays or other disabilities and who are experiencing challenges in their learning and development from age 3 until they begin kindergarten can receive special education services in their home, child care setting, or school, whichever is the least restrictive environment.

Services under Parts C and B include specialized instruction, parent training, and service coordination to help children and their families succeed.

An estimated 15 to 17 percent of Minnesota children under age 6 have developmental disabilities and could benefit from early intervention and special education.

In 2014, four percent of all children under age 5 were served by early intervention and early childhood special education services. These services are offered in every county, reaching from 1 to 11 percent of children per county. Lack of early screening and detection and eligibility requirements to receive the services may limit participation.

**21a. Children under age 5 enrolled in early intervention and early childhood special education services through Individuals with Disabilities Education Act (IDEA) Parts B and C, mapped by county (2014)**



*Source:* Wilder Research analysis of data from Minnesota Department of Education and Minnesota Department of Education Early Childhood Family Education census data, 2013-14.

*Note:* Includes only services received through Individuals with Disabilities Education Act (IDEA) Parts B and C.

**21b. Children under age 5 enrolled in early intervention and early childhood special education services through Individuals with Disabilities Education Act (IDEA) Parts B and C, by county (2014)**

	%	Reach Level		%	Reach Level		%	Reach Level
<b>Minnesota</b>	<b>4.0%</b>		Hubbard	6.6%	4	Pipestone	8.7%	4
			Isanti	3.7%	2	Polk	3.2%	2
Aitkin	7.5%	4	Itasca	4.9%	3	Pope	7.3%	4
Anoka	4.4%	3	Jackson	6.1%	4	Ramsey	3.8%	2
Becker	7.6%	4	Kanabec	3.7%	2	Red Lake	3.0%	2
Beltrami	4.4%	3	Kandiyohi	3.2%	2	Redwood	4.9%	3
Benton	2.9%	2	Kittson	2.6%	1	Renville	5.0%	3
Big Stone	4.4%	3	Koochiching	4.7%	3	Rice	5.0%	3
Blue Earth	6.9%	4	Lac qui Parle	3.8%	2	Rock	4.3%	2
Brown	6.2%	4	Lake	2.3%	1	Roseau	4.9%	3
Carlton	3.5%	2	Lake of the Woods	1.5%	1	Scott	3.1%	2
Carver	3.4%	2	Le Sueur	4.5%	3	Sherburne	3.7%	2
Cass	3.4%	2	Lincoln	5.3%	3	Sibley	2.8%	2
Chippewa	5.9%	3	Lyon	5.7%	3	St. Louis	3.8%	2
Chisago	3.4%	2	Mahnomen	1.4%	1	Stearns	3.7%	2
Clay	5.8%	3	Marshall	4.0%	2	Steele	4.4%	2
Clearwater	5.2%	3	Martin	5.9%	3	Stevens	4.3%	2
Cook	1.0%	1	McLeod	3.7%	2	Swift	2.6%	1
Cottonwood	6.3%	4	Meeker	3.4%	2	Todd	5.4%	3
Crow Wing	5.2%	3	Mille Lacs	5.1%	3	Traverse	6.5%	4
Dakota	4.2%	2	Morrison	5.0%	3	Wabasha	3.4%	2
Dodge	3.2%	2	Mower	4.7%	3	Wadena	3.8%	2
Douglas	5.6%	3	Murray	2.3%	1	Waseca	7.2%	4
Faribault	2.8%	2	Nicollet	11.0%	4	Washington	4.1%	2
Fillmore	3.6%	2	Nobles	3.1%	2	Watonwan	3.8%	2
Freeborn	6.6%	4	Norman	6.0%	3	Wilkin	1.3%	1
Goodhue	3.1%	2	Olmsted	4.1%	2	Winona	5.9%	3
Grant	1.6%	1	Otter Tail	5.0%	3	Wright	4.4%	3
Hennepin	3.3%	2	Pennington	4.2%	2	Yellow Medicine	4.3%	2
Houston	2.7%	1	Pine	3.2%	2			

*Source:* Wilder Research analysis of data from Minnesota Department of Education and Minnesota Department of Education Early Childhood Family Education census data, 2013-14.

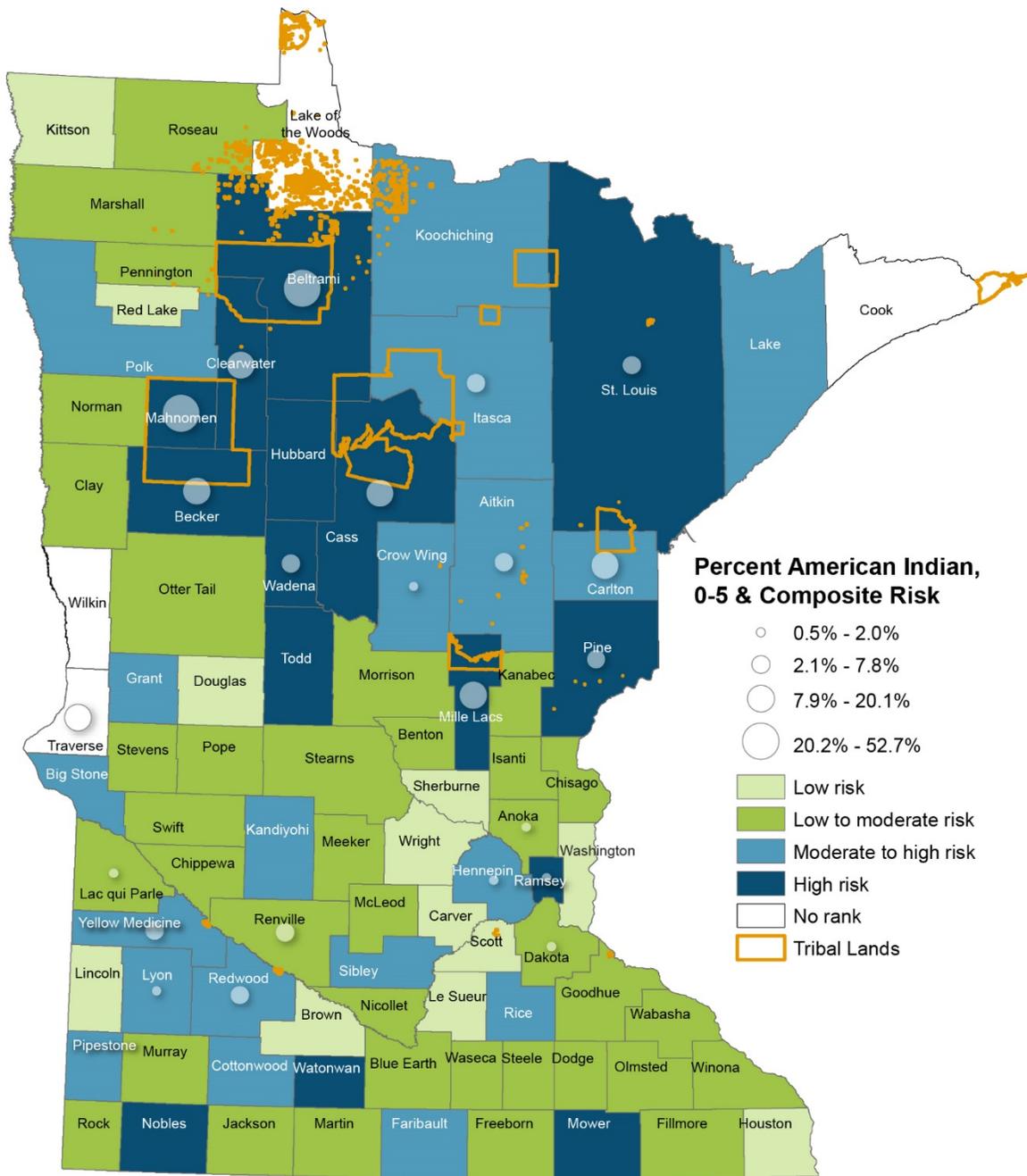
*Note:* Includes only services received through Individuals with Disabilities Education Act (IDEA) Parts B and C.

Level 1 = low reach (less than 2.8%), level 2 = low to moderate reach (2.8% - 4.3%), level 3 = moderate to high reach (4.4% - 6.0%), level 4 = high reach (greater than 6.0%). Some counties may display identical values but different reach levels due to rounding.

# Appendix

This Appendix includes maps depicting the overall risk status relative to the racial composition of each county. Counties with \* indicate the survey sample of children under age 6 is too small to produce reliable estimates.

**A1a. Percentage of children under age 6 who are American Indian compared with overall risk status, mapped by county and Reservation boundaries (in gold)**



*Source: Wilder Research analysis of data from U.S. Census Bureau, American Community Survey, 2008-2012.*

*Note: In Minnesota, there are seven Anishinaabe (Chippewa, Ojibwe) reservations and four Dakota (Sioux) communities. The Anishinaabe reservations are Grand Portage located in the northeast corner of the state; Bois Forte located in extreme northern Minnesota; Red Lake located in extreme northern Minnesota west of Bois Forte; White Earth located in northwestern Minnesota; Leech Lake located in the north central portion of the state; Fond du Lac located in northeast Minnesota west of the city of Duluth; and Mille Lacs located in the central part of the state, south and east of Brainerd. The Dakota communities are Shakopee Mdewakanton located south of the Twin Cities near Prior Lake; Prairie Island located near Red Wing; Lower Sioux located near Redwood Falls; and Upper Sioux whose lands are near the city of Granite Falls.*

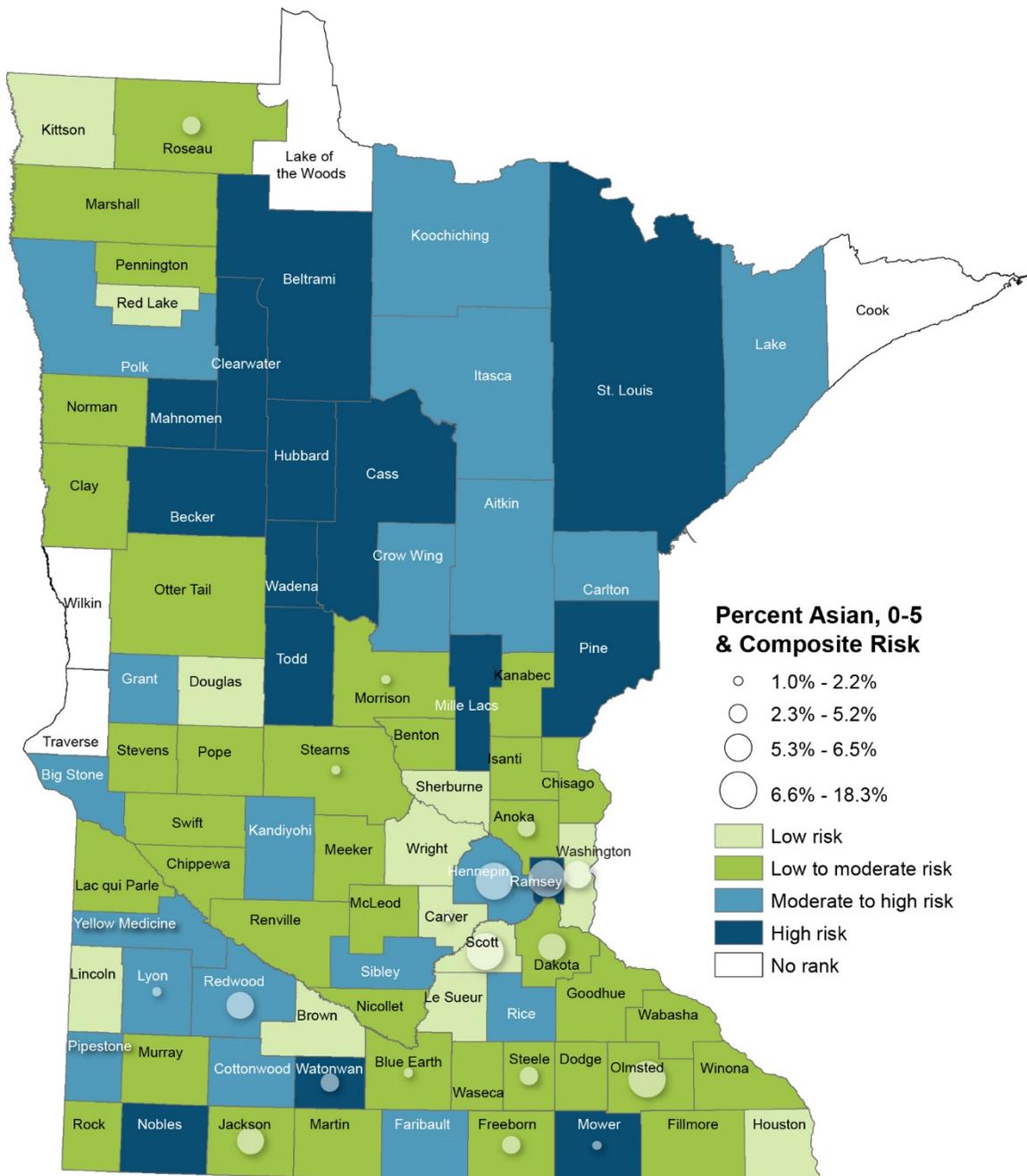
**A1b. Percentage of children under age 6 who are American Indian, by county (2008-2012)**

	%		%		%
		Hubbard	*	Pipestone	*
<b>Minnesota</b>	1.5%	Isanti	*	Polk	*
Aitkin	5.0%	Itasca	3.4%	Pope	*
Anoka	0.7%	Jackson	*	Ramsey	0.7%
Becker	11.3%	Kanabec	*	Red Lake	*
Beltrami	31.4%	Kandiyohi	*	Redwood	5.8%
Benton	*	Kittson	*	Renville	3.7%
Big Stone	*	Koochiching	*	Rice	*
Blue Earth	*	Lac qui Parle	1.8%	Rock	*
Brown	*	Lake	*	Roseau	*
Carlton	9.5%	Lake of the Woods	*	Scott	*
Carver	*	Le Sueur	*	Sherburne	*
Cass	20.1%	Lincoln	*	Sibley	*
Chippewa	*	Lyon	1.8%	St. Louis	5.0%
Chisago	*	Mahnomen	52.7%	Stearns	*
Clay	*	Marshall	*	Steele	*
Clearwater	15.1%	Martin	*	Stevens	*
Cook	*	McLeod	*	Swift	*
Cottonwood	*	Meeker	*	Todd	*
Crow Wing	2.0%	Mille Lacs	10.4%	Traverse	10.5%
Dakota	0.5%	Morrison	*	Wabasha	*
Dodge	*	Mower	*	Wadena	7.8%
Douglas	*	Murray	*	Waseca	*
Faribault	*	Nicollet	*	Washington	*
Fillmore	*	Nobles	*	Watonwan	*
Freeborn	*	Norman	*	Wilkin	*
Goodhue	*	Olmsted	*	Winona	*
Grant	*	Otter Tail	*	Wright	*
Hennepin	1.0%	Pennington	*	Yellow Medicine	5.0%
Houston	*	Pine	4.4%		

Source: Wilder Research analysis of data from U.S. Census Bureau, American Community Survey, 2008-2012.

Note: Starred counties (\*) indicate the survey sample of children under age 6 is too small to produce reliable estimates.

**A2a. Percentage of children under age 6 who are Asian compared with overall risk status, mapped by county (2008-2012)**



Source: Wilder Research analysis of data from U.S. Census Bureau, American Community Survey, 2008-2012.

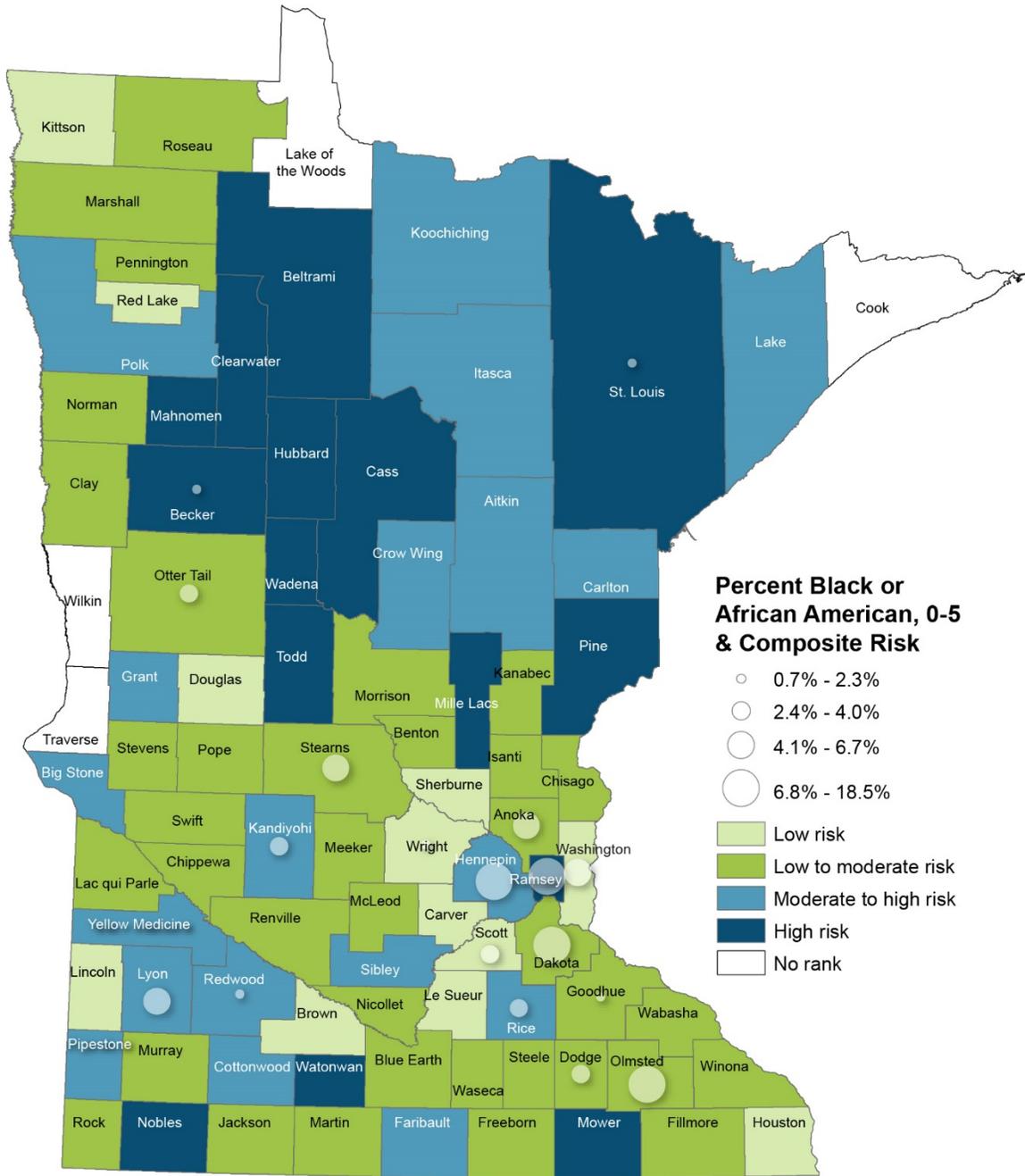
## A2b. Percentage of children under age 6 who are Asian, by county (2008-2012)

	%		%		%
		Hubbard	*	Pipestone	*
<b>Minnesota</b>	5.3%	Isanti	*	Polk	*
Aitkin	*	Itasca	*	Pope	*
Anoka	5.2%	Jackson	5.9%	Ramsey	18.3%
Becker	*	Kanabec	*	Red Lake	*
Beltrami	*	Kandiyohi	*	Redwood	5.9%
Benton	*	Kittson	*	Renville	*
Big Stone	*	Koochiching	*	Rice	*
Blue Earth	1.0%	Lac qui Parle	*	Rock	*
Brown	*	Lake	*	Roseau	4.0%
Carlton	*	Lake of the Woods	*	Scott	6.8%
Carver	1.9%	Le Sueur	*	Sherburne	*
Cass	*	Lincoln	*	Sibley	*
Chippewa	*	Lyon	2.2%	St. Louis	*
Chisago	*	Mahnomen	*	Stearns	1.3%
Clay	*	Marshall	*	Steele	2.7%
Clearwater	*	Martin	*	Stevens	*
Cook	*	McLeod	*	Swift	*
Cottonwood	*	Meeker	*	Todd	*
Crow Wing	*	Mille Lacs	*	Traverse	*
Dakota	5.5%	Morrison	1.4%	Wabasha	*
Dodge	*	Mower	2.2%	Wadena	*
Douglas	*	Murray	*	Waseca	*
Faribault	*	Nicollet	*	Washington	6.5%
Fillmore	*	Nobles	*	Watonwan	3.8%
Freeborn	3.8%	Norman	*	Wilkin	*
Goodhue	*	Olmsted	7.0%	Winona	*
Grant	*	Otter Tail	*	Wright	*
Hennepin	7.7%	Pennington	*	Yellow Medicine	*
Houston	*	Pine	*		

Source: Wilder Research analysis of data from U.S. Census Bureau, American Community Survey, 2008-2012.

Note: Starred counties (\*) indicate the survey sample of children under age 6 is too small to produce reliable estimates.

**A3a. Percentage of children under age 6 who are black or African American compared with overall risk status, mapped by county (2008-2012)**



Source: Wilder Research analysis of data from U.S. Census Bureau, American Community Survey, 2008-2012.

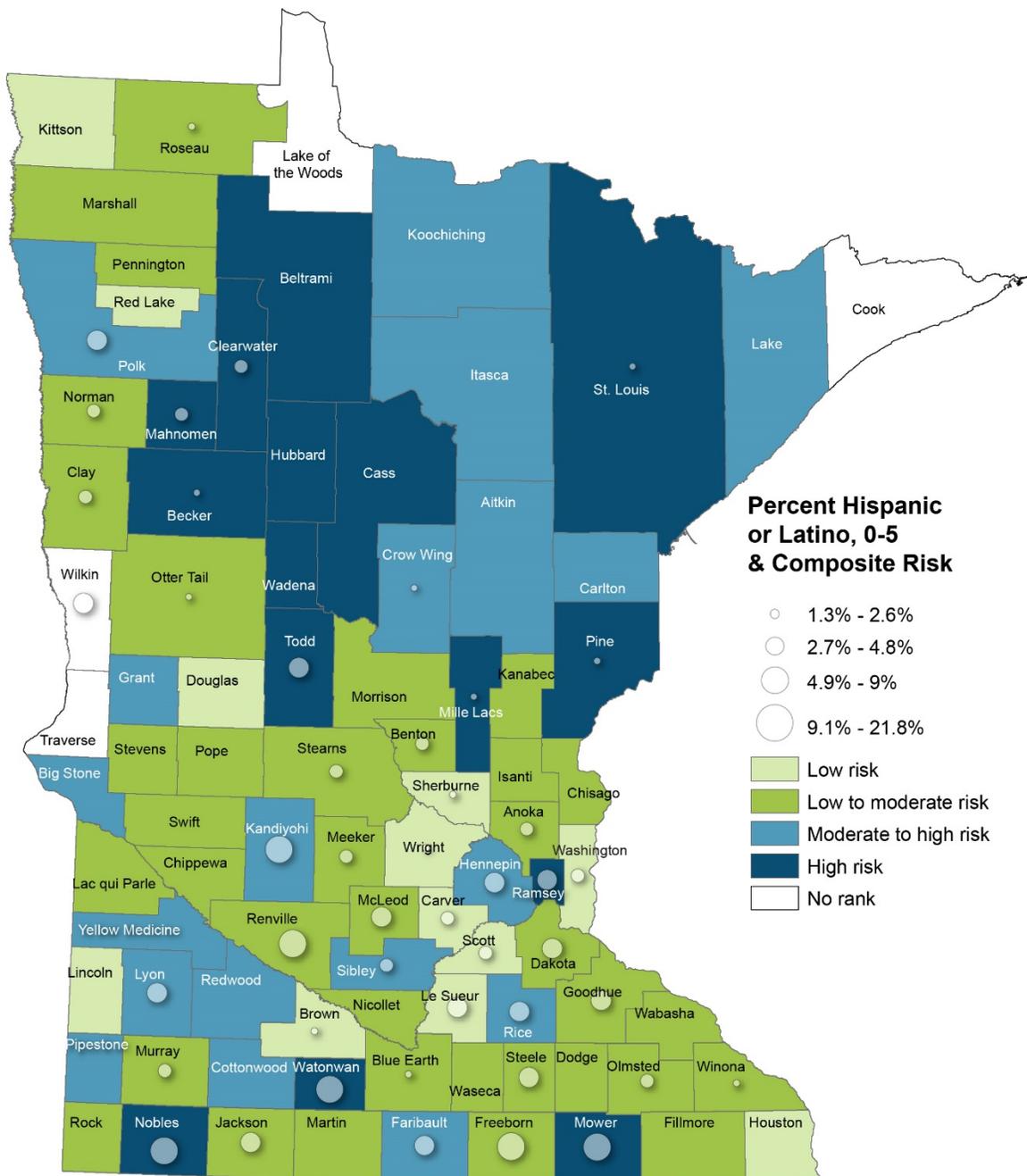
**A3b. Percentage of children under age 6 who are black or African American, by county (2008-2012)**

	%		%		%
		Hubbard	*	Pipestone	*
<b>Minnesota</b>	8.2%	Isanti	*	Polk	*
Aitkin	*	Itasca	*	Pope	*
Anoka	6.7%	Jackson	*	Ramsey	17.2%
Becker	0.7%	Kanabec	*	Red Lake	*
Beltrami	*	Kandiyohi	2.4%	Redwood	1.7%
Benton	*	Kittson	*	Renville	*
Big Stone	*	Koochiching	*	Rice	2.7%
Blue Earth	*	Lac qui Parle	*	Rock	*
Brown	*	Lake	*	Roseau	*
Carlton	*	Lake of the Woods	*	Scott	3.4%
Carver	*	Le Sueur	*	Sherburne	*
Cass	*	Lincoln	*	Sibley	*
Chippewa	*	Lyon	4.1%	St. Louis	1.8%
Chisago	*	Mahnomen	*	Stearns	6.3%
Clay	*	Marshall	*	Steele	*
Clearwater	*	Martin	*	Stevens	*
Cook	*	McLeod	*	Swift	*
Cottonwood	*	Meeker	*	Todd	*
Crow Wing	*	Mille Lacs	*	Traverse	*
Dakota	8.8%	Morrison	*	Wabasha	*
Dodge	4.0%	Mower	*	Wadena	*
Douglas	*	Murray	*	Waseca	*
Faribault	*	Nicollet	*	Washington	5.4%
Fillmore	*	Nobles	*	Watonwan	*
Freeborn	*	Norman	*	Wilkin	*
Goodhue	2.3%	Olmsted	8.1%	Winona	*
Grant	*	Otter Tail	2.5%	Wright	1.5%
Hennepin	18.5%	Pennington	*	Yellow Medicine	*
Houston	*	Pine	*		

Source: Wilder Research analysis of data from U.S. Census Bureau, American Community Survey, 2008-2012.

Note: Starred counties (\*) indicate the survey sample of children under age 6 is too small to produce reliable estimates.

**A4a. Percentage of children under age 6 who are Hispanic or Latino compared with overall risk status, mapped by county (2008-2012)**



Source: Wilder Research analysis of data from U.S. Census Bureau, American Community Survey, 2008-2012.

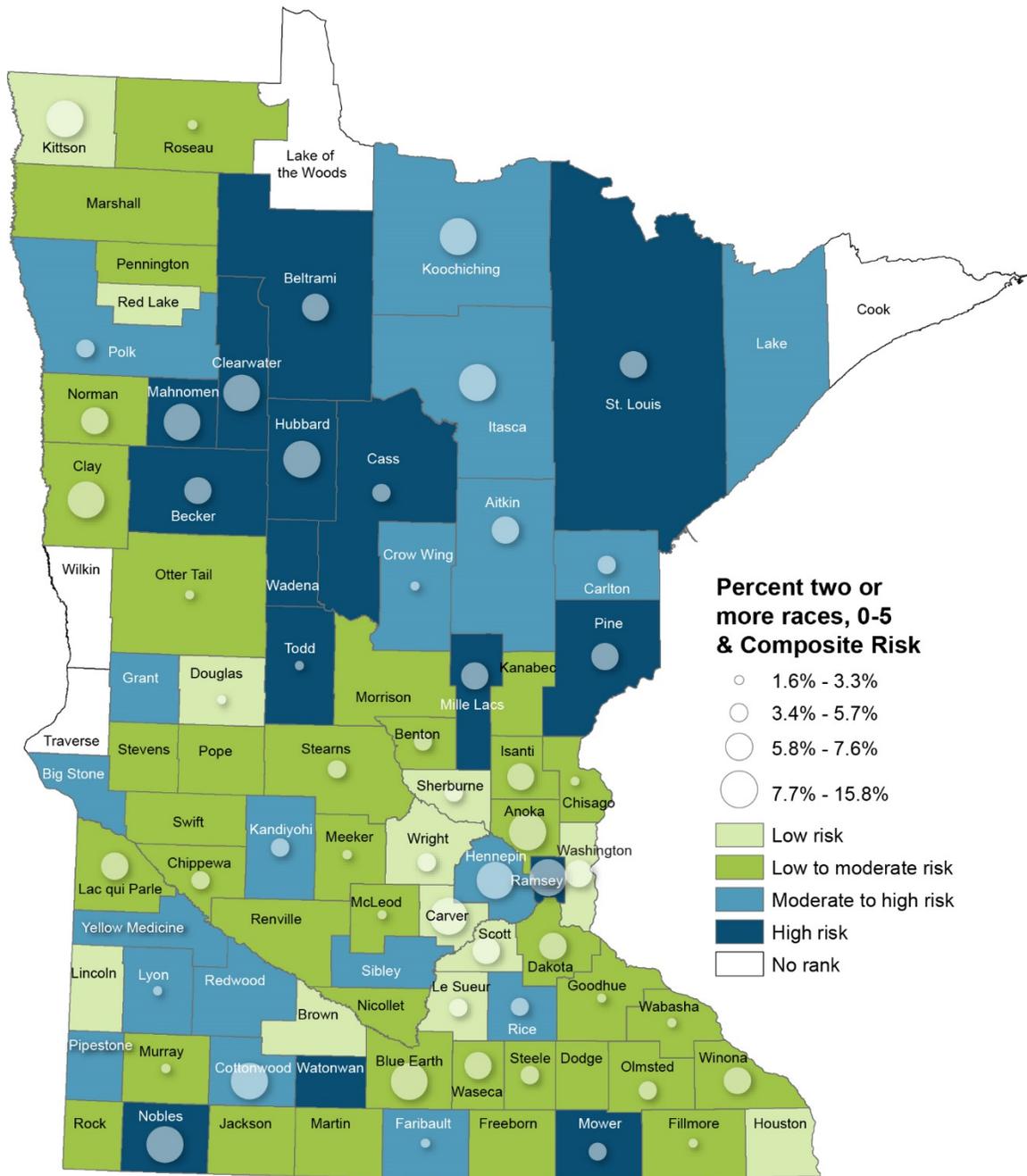
**A4b. Percentage of children under age 6 who are Hispanic or Latino, by county (2008-2012)**

	%		%		%
		Hubbard	*	Pipestone	*
<b>Minnesota</b>	9.4%	Isanti	*	Polk	5.8%
Aitkin	3.6%	Itasca	*	Pope	*
Anoka	1.5%	Jackson	5.5%	Ramsey	6.8%
Becker	*	Kanabec	*	Red Lake	*
Beltrami	4.7%	Kandiyohi	11.8%	Redwood	*
Benton	*	Kittson	*	Renville	12.1%
Big Stone	1.9%	Koochiching	*	Rice	8.8%
Blue Earth	2.6%	Lac qui Parle	*	Rock	*
Brown	*	Lake	*	Roseau	1.9%
Carlton	3.4%	Lake of the Woods	*	Scott	1.4%
Carver	*	Le Sueur	5.6%	Sherburne	3.6%
Cass	*	Lincoln	*	Sibley	1.9%
Chippewa	*	Lyon	7.2%	St. Louis	4.8%
Chisago	3.7%	Mahnomen	6.1%	Stearns	3.1%
Clay	3.0%	Marshall	3.7%	Steele	6.4%
Clearwater	*	Martin	*	Stevens	*
Cook	*	McLeod	*	Swift	*
Cottonwood	1.5%	Meeker	2.8%	Todd	6.7%
Crow Wing	5.6%	Mille Lacs	1.3%	Traverse	*
Dakota	*	Morrison	*	Wabasha	*
Dodge	*	Mower	11.7%	Wadena	*
Douglas	5.5%	Murray	3.4%	Waseca	*
Faribault	*	Nicollet	*	Washington	3.3%
Fillmore	14.4%	Nobles	21.8%	Watsonwan	17.7%
Freeborn	5.3%	Norman	4.3%	Wilkin	9.0%
Goodhue	*	Olmsted	4.2%	Winona	1.9%
Grant	6.9%	Otter Tail	2.6%	Wright	1.8%
Hennepin	*	Pennington	*	Yellow Medicine	*
Houston	*	Pine	1.5%		

Source: Wilder Research analysis of data from U.S. Census Bureau, American Community Survey, 2008-2012.

Note: Starred counties (\*) indicate the survey sample of children under age 6 is too small to produce reliable estimates.

**A5a. Percentage of children under age 6 who are two or more races compared with overall risk status, mapped by county (2008-2012)**



Source: Wilder Research analysis of data from U.S. Census Bureau, American Community Survey, 2008-2012.

**A5b. Percentage of children under age 6 who are two or more races, by county (2008-2012)**

	%		%		%
		Hubbard	9.6%	Pipestone	*
<b>Minnesota</b>	6.9%	Isanti	6.9%	Polk	5.1%
Aitkin	6.3%	Itasca	8.5%	Pope	*
Anoka	7.7%	Jackson	*	Ramsey	9.4%
Becker	7.6%	Kanabec	*	Red Lake	*
Beltrami	7.2%	Kandiyohi	5.6%	Redwood	*
Benton	3.7%	Kittson	7.7%	Renville	*
Big Stone	*	Koochiching	14.7%	Rice	5.4%
Blue Earth	8.4%	Lac qui Parle	5.9%	Rock	*
Brown	*	Lake	*	Roseau	2.7%
Carlton	4.2%	Lake of the Woods	*	Scott	7.2%
Carver	8.3%	Le Sueur	3.7%	Sherburne	4.2%
Cass	5.7%	Lincoln	*	Sibley	*
Chippewa	5.6%	Lyon	1.6%	St. Louis	6.0%
Chisago	3.2%	Mahnomen	15.8%	Stearns	4.7%
Clay	8.6%	Marshall	*	Steele	5.6%
Clearwater	8.4%	Martin	*	Stevens	*
Cook	*	McLeod	2.1%	Swift	*
Cottonwood	11.2%	Meeker	2.4%	Todd	2.9%
Crow Wing	2.7%	Mille Lacs	6.1%	Traverse	*
Dakota	7.4%	Morrison	*	Wabasha	2.1%
Dodge	*	Mower	3.5%	Wadena	*
Douglas	2.5%	Murray	2.4%	Waseca	6.6%
Faribault	1.8%	Nicollet	*	Washington	7.5%
Fillmore	2.5%	Nobles	11.9%	Watonwan	*
Freeborn	*	Norman	7.3%	Wilkin	*
Goodhue	3.3%	Olmsted	5.3%	Winona	6.3%
Grant	*	Otter Tail	3.3%	Wright	4.9%
Hennepin	9.3%	Pennington	*	Yellow Medicine	*
Houston	*	Pine	6.1%		

Source: Wilder Research analysis of data from U.S. Census Bureau, American Community Survey, 2008-2012.

Note: Starred counties (\*) indicate the survey sample of children under age 6 is too small to produce reliable estimates.

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