



HEALTH DISTRICT

MATERNAL HEALTH REPORT 2024

PREPARED BY

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OVERVIEW

In 2022, Portage County Health District and University Hospitals embarked on a Community Health Assessment (CHA) process, engaging over 35 community partners, including Mental Health & Recovery Board of Portage County, Kent City Health Department, Family and Community Services, Townhall II, PARTA, and Portage County School Districts.

Following the CHA, these community stakeholders participated in the community health improvement process using CHA data to determine community priorities with accompanying strategies. Family, Pregnancy, Infant, & Child Health was determined to be a priority in the 2023-2025 Portage County Community Health Improvement Plan (CHIP), along with Chronic Disease and Mental Health, Substance Use, and Addiction.

Portage County Health District, in collaboration with community partners, collects and reports local data related to pregnancy, maternal and child health. The data in this report was retrieved from the DataOhio.gov data portal. The data was published by the Ohio Department of Health Vital Statistics Bureau.

The goal of this report is to inform Portage County stakeholders about positive outcomes and areas of potential improvement pertaining to various aspects of pregnancy, prenatal monitoring, delivery, and post-partum health behaviors. Stakeholders might include, but are not limited to, community agencies, healthcare providers, and Portage County residents. Any questions about this report or its contents can be directed to Olivia Card, Portage County Health District Epidemiologist, via phone.



WIC PROGRAM

WIC stands for Women, Infants and Children, and it is a program that provides free, healthy foods, personalized nutrition education, breastfeeding support and referrals to other services. Portage County WIC and Columbiana County WIC are both part of the Portage County Health District. Portage County WIC is located in the Health District building at 999 East Main Streets in Ravenna next to Marcs.

In order to be eligible for WIC you must:

- Be pregnant, breastfeeding or have had a pregnancy end less than six months ago **OR**
- Be the caregiver of an infant or child who is under five years old **AND**
- Live in Ohio **AND**
- Meet WIC income guidelines

A prescreening tool to help figure out if you are eligible is available, and is linked on our website: portagehealth.net. To apply for WIC, make an appointment at our WIC clinic by calling 330-297-9422 (Portage County) or 330-424-7293 (Columbiana County).

You'll need to bring some things to your appointment, including:

- Proof of household income
- ID for all family members applying
- Proof of address
- If pregnant, proof of pregnancy with due date

Thank you for letting us serve you!



2024 SUMMARY

In 2024, 1,327 Portage County gave birth. Of those, 1,324 had complete data available. These three individuals and their babies have been excluded from maternal estimates reported here, in addition to any other exclusions noted for a given figure or table. There were 1,352 babies born to Portage County mothers in 2024, 48 of which were twins.

There was not a single Portage County resident death in 2024 that was related to or aggravated by the pregnancy, childbirth or by the puerperium (maternal causes or obstetric causes). Sadly, five newborns passed away in 2024. All were born very prematurely, before 28 weeks gestation. Under those conditions, survival is unfortunately quite variable, even with significant medical intervention.

Two potential areas of improve for Portage County's community agencies to note are (1) while the Centers for Disease Control and Prevention recommends exclusive breastfeeding for the first six months of a child's life, the percentage of Portage County mothers exclusively breastfeeding their newborns is only 57% and (2) 21% of Portage County women that gave birth in 2024 presented with risk factors for gestational diabetes.

However, there are several very encouraging metrics reported below. First, pregnancies under the age of 18 were very rare in 2024. Additionally, despite the closure of the UH Portage Labor and Delivery Unit late in 2022, complications during delivery, spontaneous home births, or births en route to the hospital all remain at extremely low levels. Furthermore, most babies are born at a healthy weight, at or after 32 weeks gestation, and have good APGAR scores. Moreover, reported alcohol use by mothers during pregnancy is very rare. Overall, Portage County pregnancies and births had positive outcomes during 2024.



Maternal Demographics	Percent of Moms
Married	64.73%
Non-English Primary Language	3.25%
On WIC	23.87%
Single Race, White	85.80%
Single Race, Black/African-American	5.06%
Multiracial	4.00%
Single Race, Asian	3.85%
Other/Unknown Race	1.06%
Single Race, Native Hawaiian/Pacific Islander	< 1.00%
Single Race, American Indian/Alaskan Native	< 1.00%

Table 1. Most of the Portage County mothers that gave birth in 2024 were white, with English as their primary language. At the time of birth, a majority of mothers were married, but many were not. While marriage is not a necessity for a two-parent household, some unmarried moms are also single moms. Furthermore, almost 24% of mothers were receiving WIC at the time of birth. This table serves as a reminder that some new mothers might be unable to afford and access prenatal care, housing, childcare, adequate nutrition, and post-partum medical care for themselves and their babies. Connecting them with necessary services will benefit the health of our whole community.

Maternal Age

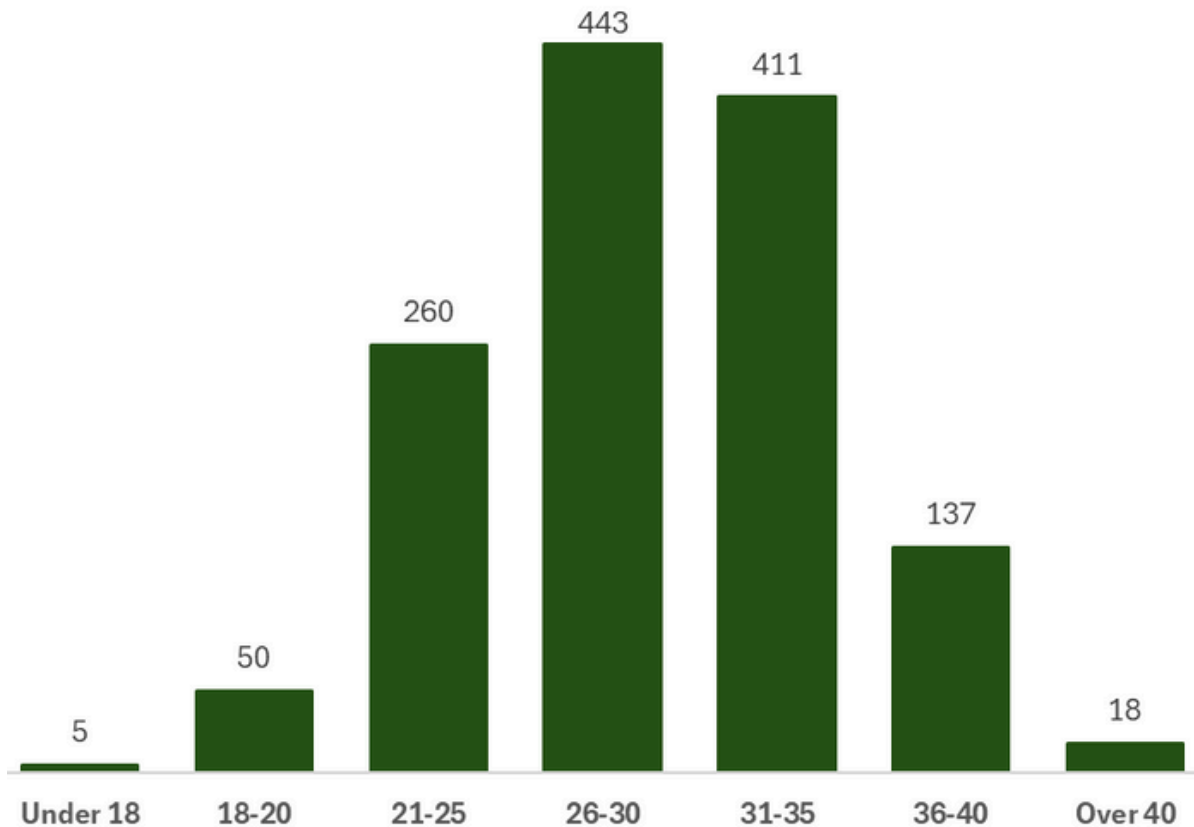


Figure 1. Most Portage County women who gave birth in 2024 were between 21 and 35 years old. Pregnancies in minors were extremely rare, with only 5 occurring in 2024. Furthermore, all five of the pregnant minors were 17 years old. UNICEF defines adolescent pregnancy as a pregnancy of someone 15-19 years old. The UNICEF website states the following:

“Adolescent girls, especially those in early adolescence, are particularly vulnerable to the health consequences of pregnancy and delivery as their bodies may not be physically ready. Obstetric fistula, eclampsia, puerperal endometritis and systemic infections are just some of the serious conditions that they may face in the short- and long-term. Globally, maternal conditions are among the top causes of disability-adjusted life years and death among girls aged 15–19.”

Therefore, the low number of adolescent pregnancies in Portage County in 2024 is encouraging.

Maternal Education Level

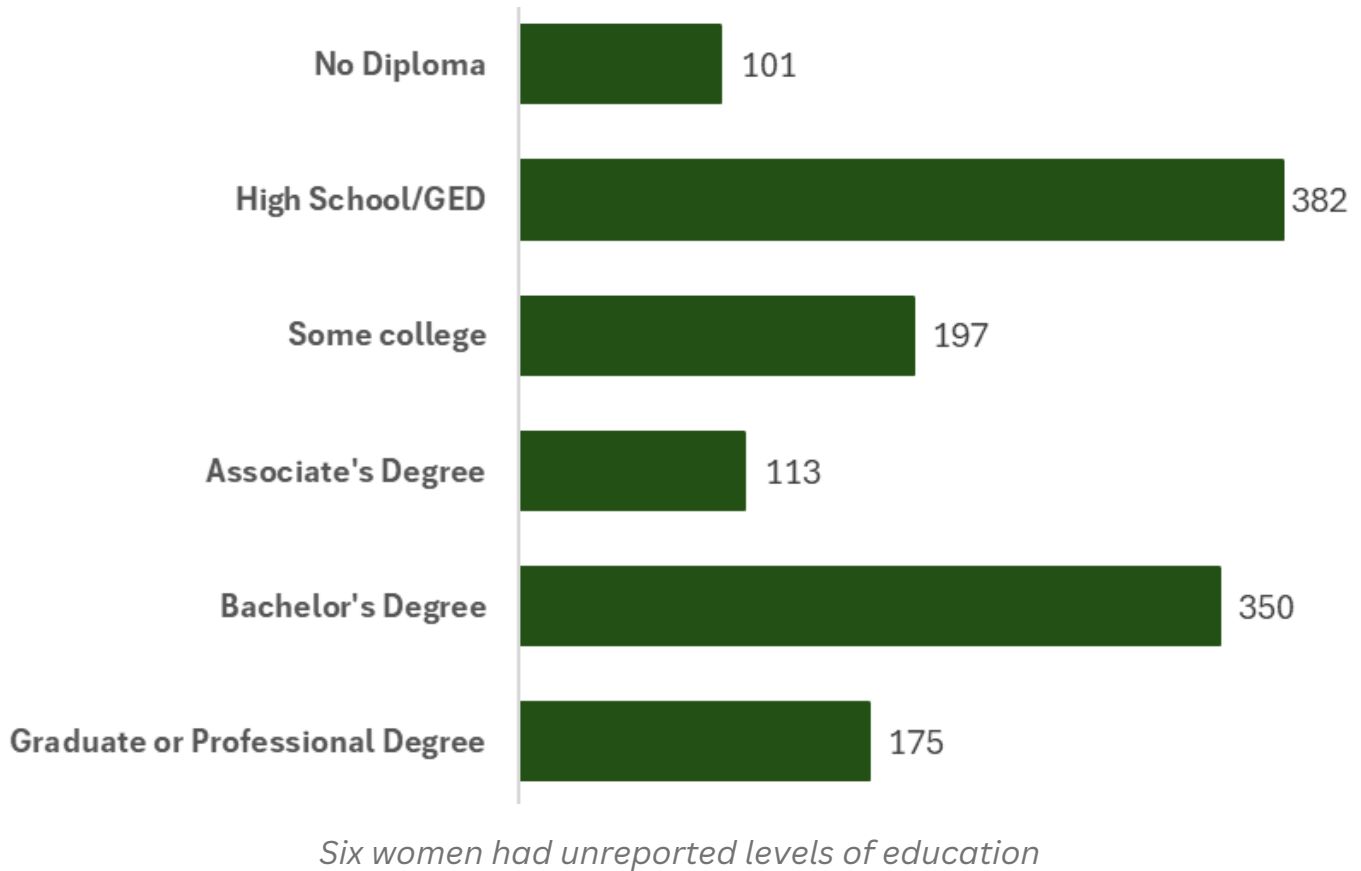


Figure 2. Education can be directly correlated with positive pregnancy outcomes. From 1990 to 2015, the maternal mortality rate in Peru declined by over 70%. Dr. Abigail Weitzman (University of Michigan) examined the connection between this decline and compulsory schooling laws, which were implemented in 1993. These laws increased the required number of years of primary school from six years to 11. The author compared mothers who had received six years of primary schooling with mothers that received 11 years using statistical modeling. Ultimately the study found that extending women's years of schooling reduced the probability of several maternal health complications at last pregnancy/birth, sometimes by as much as 29%. Most Portage County women who gave birth in 2024 had at least a high school diploma or GED, and almost as many held Bachelor's degrees. Less than 10% had held no diploma at all. Ohio requires schooling from ages 5-16, so all of the women who gave birth in Portage County in 2024 received 10-11 years of primary school. This is likely a contributing factor to the county's maternal mortality rate of zero in 2024.

Characteristics of birth	Percent of Moms
Spontaneous Vaginal Birth	65.94%
Cesarean Section (No Attempted Vaginal Birth)	19.64%
Cesarean Section (Attempted Vaginal Birth)	10.20%
Vacuum-Assisted Vaginal Birth	3.55%
Forceps-Assisted Vaginal Birth	< 1.00%
Unknown Route of Birth	< 1.00%
Multiple Births (Twins)	1.81%

Table 2. Most births in 2024 were completed vaginally, with no assistance. Approximately 30% of births were Cesarean section (C-section), however a third of those were completed after attempting a vaginal birth first. Only 24 sets of twins (just under 2% of births) were born to Portage County mothers in 2024.

Type of Complication	Percent of Moms
Gestational Hypertension Risk Factors	21.00%
Gestational Diabetes Risk Factors	8.53%
Perineal Laceration	1.89%
Blood Transfusion Needed	1.06%
Uterine Rupture	< 1.00%
Admitted to Intensive Care Unit	< 1.00%
Infant Death	< 1.00%
Unplanned Hysterotomy	0

Table 3. In 2024, most complications occurred during pregnancy as opposed to occurring during birth. 21% of pregnant women had risk factors for gestational diabetes, and almost 9% had risk factors for gestational hypertension (high blood pressure), including pre-eclampsia. Complications during birth were relatively uncommon. For example, less than 1% of women were admitted to the Intensive Care Unit after giving birth. Though rare, there were unfortunately some infant deaths that occurred in 2024. Overall, most Portage County women experienced complication-free pregnancies and births in 2024.

Prenatal Substance Use Behavior	Percent of Moms
First Trimester Drinking	< 1.00%
Second Trimester Drinking	< 1.00%
Third Trimester Drinking	< 1.00%
Pre-pregnancy Smoking	7.10%
First Trimester Smoking	5.51%
Second Trimester Smoking	4.76%
Third Trimester Smoking	4.46%

Table 4. Prenatal alcohol consumption and smoking are not very common for Portage County women. In fact, this table shows that of the women who gave birth in 2024, and smoked before becoming pregnant, several quit over the course of their pregnancy. However, this is an incomplete dataset. Information regarding the use of smokeless tobacco, e-cigarettes/vapes, marijuana, or illicit substances is not available.

Number of Prenatal Visits

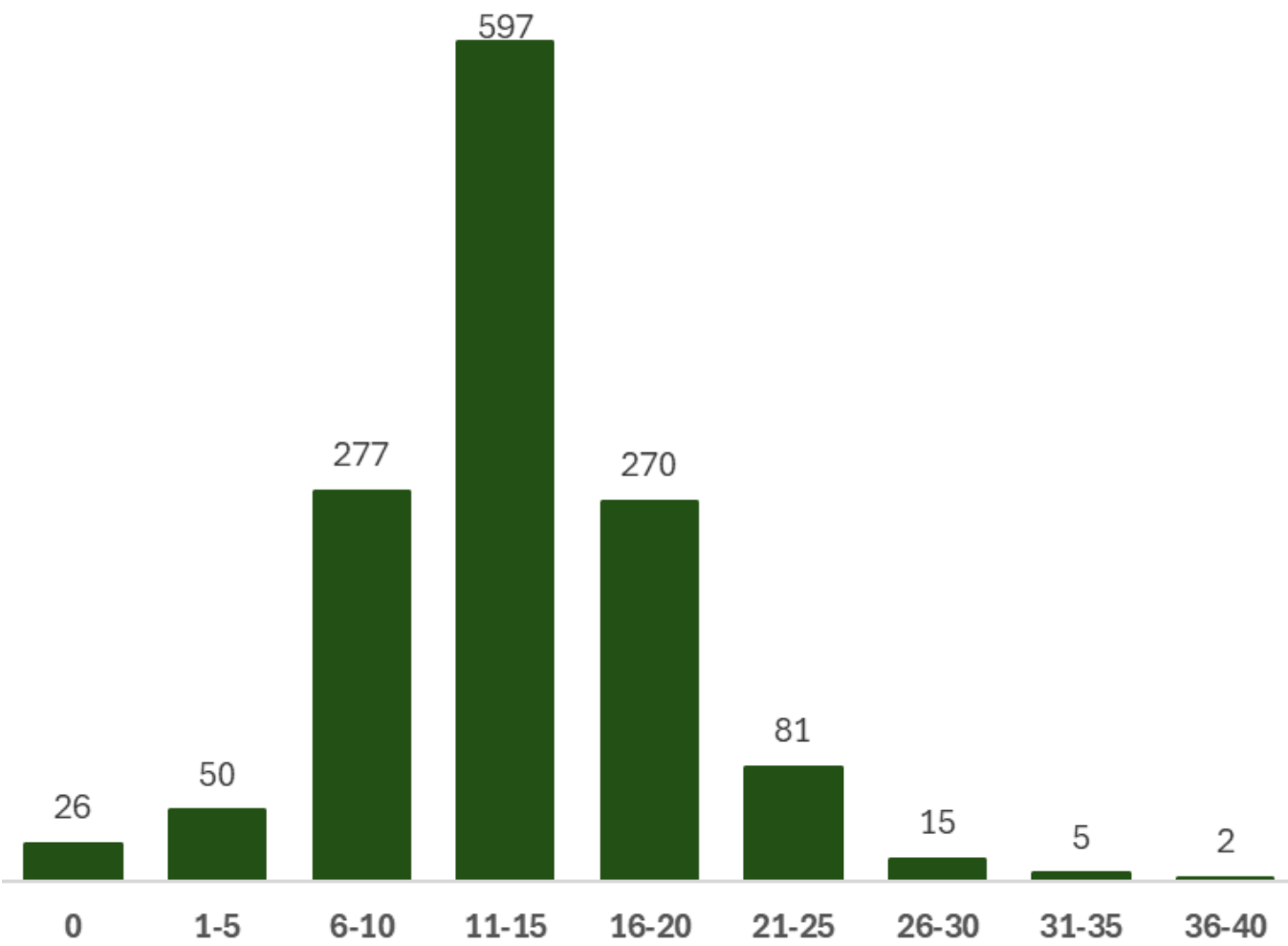


Figure 3. Most Portage County women who delivered in 2024 had 11-15 prenatal care appointments before giving birth in 2024. If a mother approximately followed a typical prenatal care schedule, she would have appointments at weeks 8, 12, 16, 20, 24, 28, 30, 32, 34, 36, 37, 38, 39 and 40. This is 14 appointments. Fewer prenatal care appointments might be warranted if a woman discovers she is pregnant well into the first trimester or delivers early. Additionally, some appointments may be missed, and not made up. It is also possible the provider or mother incorrectly recalled the number of appointments when filling out the birth certificate.

Adequate Prenatal Care

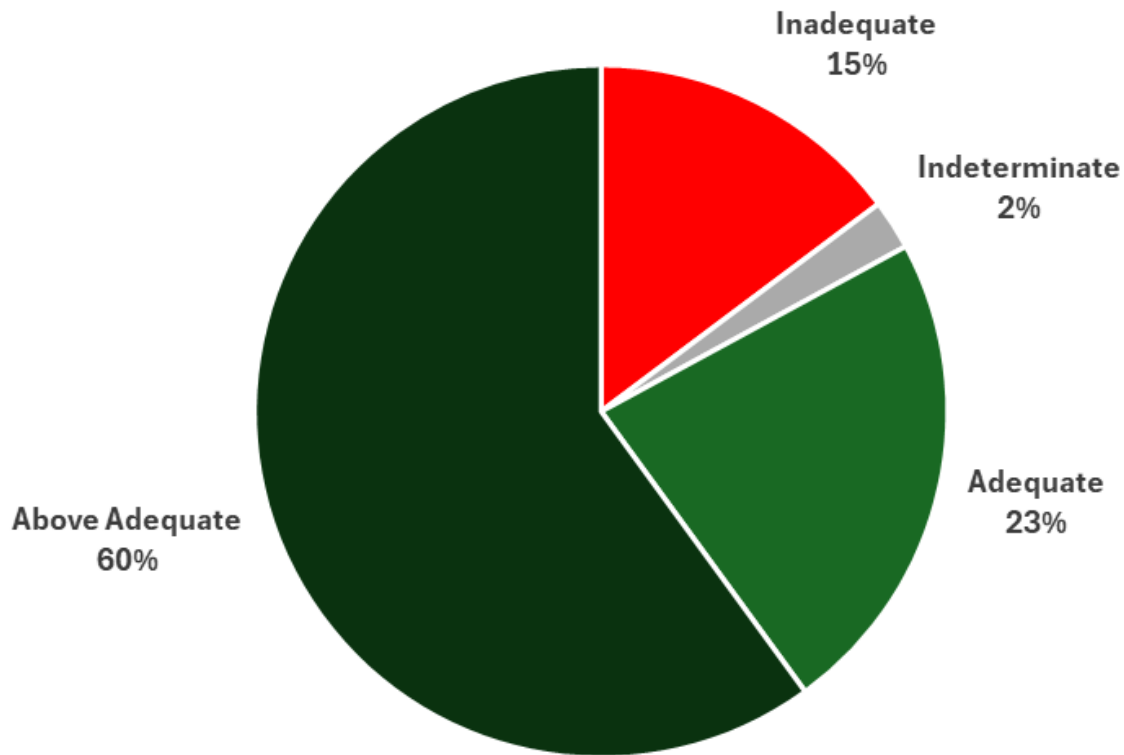


Figure 4. The pie chart shows the proportion of Portage County moms that received prenatal care in each category: inadequate (shown above in red), indeterminate (shown above in grey), adequate (shown above in light green) and above adequate (shown above in dark green). The categories displayed on the pie chart were assigned on birth certificates by providers using the Kotelchuck Index. This index was not reported for 31 Portage County moms in 2024. About 80% of Portage County moms that gave birth in 2024 got adequate or above adequate prenatal care. Most of the moms receiving inadequate prenatal care were living in Kent, Ravenna, Garrettsville and Streetsboro. The two metrics used to calculate the index are when prenatal care began (initiation) and the number of prenatal visits from when prenatal care began until delivery (received services). It should be noted that this index does not measure the quality of prenatal care, and it depends on the accuracy of the patient or health care provider's memory.

Birth Weights

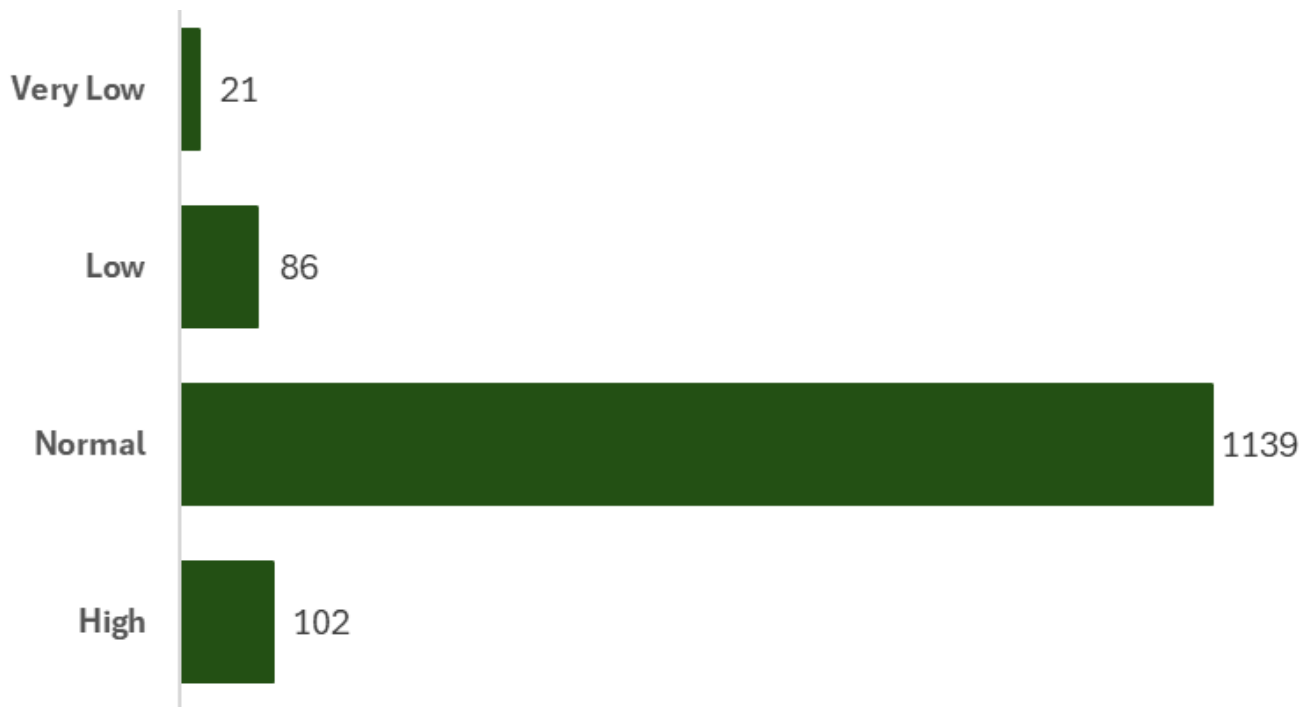


Figure 5. The chart shows the number of babies in each birthweight category that were born to Portage County moms in 2024. Very low birthweight is less than 3lbs 5oz, low birthweight is 3lbs 5oz - 5lbs 7oz, normal birthweight is 5lbs 8oz - 8lbs 13 oz, and high birthweight is over 8lbs 13 oz. Less than 2% of babies born in 2024 had very low birthweight. Approximately 6% of babies were in the low birthweight category. In total, less than 1 in 10 Portage County babies were below normal birthweight. This is approximately on par with the national measurement of 8.6% of babies being born with low or very low birthweight in the United States in 2024. Having a healthy birthweight is important for the health of a newborn. According to the Cleveland Clinic, “[Low birthweight babies] may have difficulty eating, gaining weight and fighting infection. In addition, babies with low birth weight frequently have trouble staying warm because they have so little body fat.”

Gestational Age at Birth

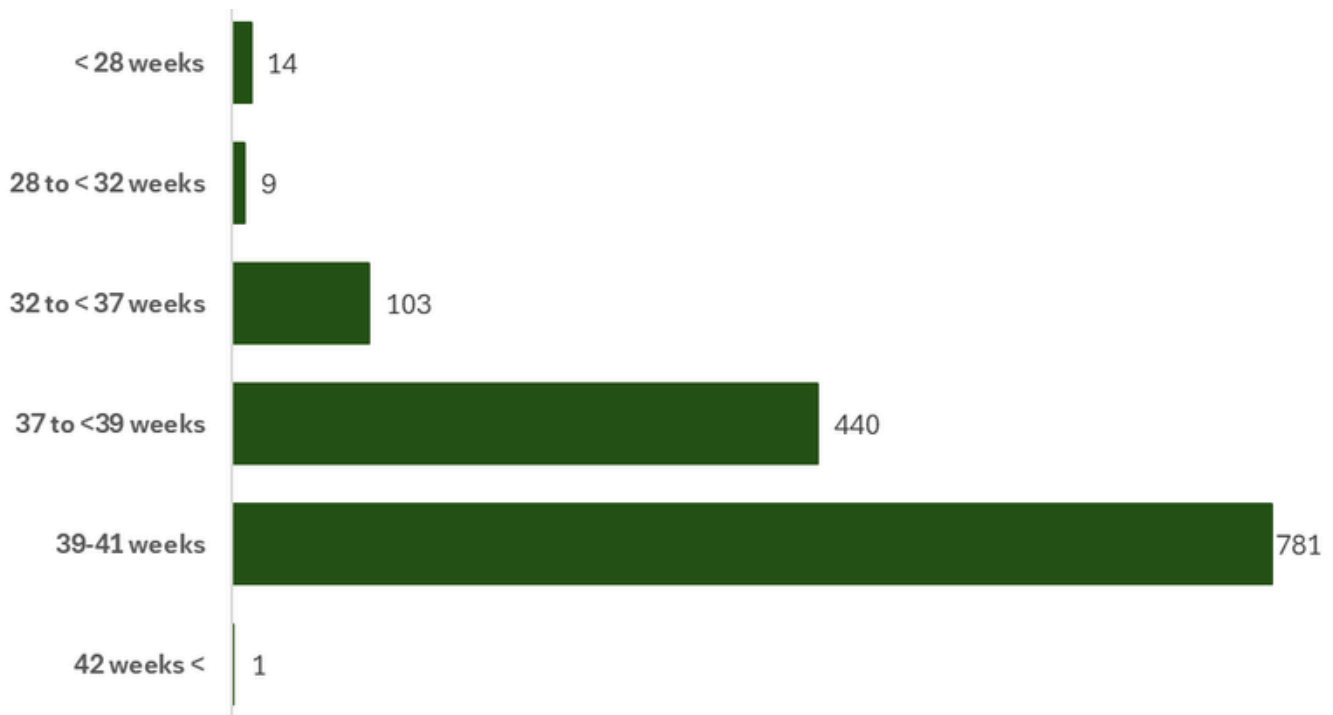


Figure 6. The chart above shows that only 23 babies were born before 32 weeks in 2024. 12 of these were twins, which are more likely to be born premature due to limited space in the mother's body to grow. Babies at a gestational age of 32 weeks or greater are considered moderately pre-term. According to the University of Utah, babies born at 32 weeks have a 95% chance of survival. Premature babies can have a variety of short- and long-term complications including anemia, heart and lung defects, jaundice, cerebral palsy, vision or hearing defects, and learning disabilities. Mothers can experience negative impacts to their mental health as a result of their babies being born early. According to the Cleveland Clinic, some things that can help prevent pre-term birth are avoiding alcohol and other drugs while pregnant, eating a balanced diet, starting prenatal care as early as a possible, minimize stress and try to leave at least 18 months between pregnancies.

Five Minute APGAR Scores

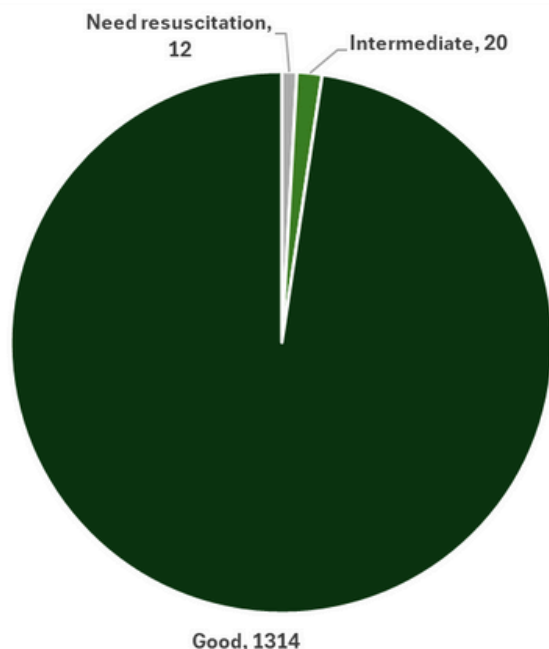


Figure 7. This pie chart shows the five-minute APGAR scores of all babies born to Portage County moms last year. Two newborns did not have APGAR scores reported. APGAR tests are used to determine how a baby is doing immediately after birth, and scores range from 0 to 10. There are five signs that are monitored to develop an APGAR score, and each sign is scored 0, 1 or 2 (see the table below for more details). Once the scores of each sign are added up, a total APGAR score is determined. An APGAR score of 1-3 indicates a baby needs resuscitation

(shown above in grey). An APGAR score of 4-6 is intermediate, and the baby might need some extra monitoring (shown above in light green). An APGAR score of 7-10 is good, and the baby is considered healthy (shown above in dark green). As shown above, only 32 babies born in Portage County had low APGAR scores five minutes after birth. The large majority of babies born in Portage County in 2024 were healthy immediately after being born.

SIGN	0	1	2
Appearance	Blue and pale	Body pink, limbs blue	All pink
Pulse	Absent	Less than <100	More than >100
Grimace	No response	Grimace	Coughing and crying
Activity	Limp	Weak	Strong
Respiration	Absent	Irregular, slow	Good, crying

Table source: Cleveland Clinic

Breastfeeding

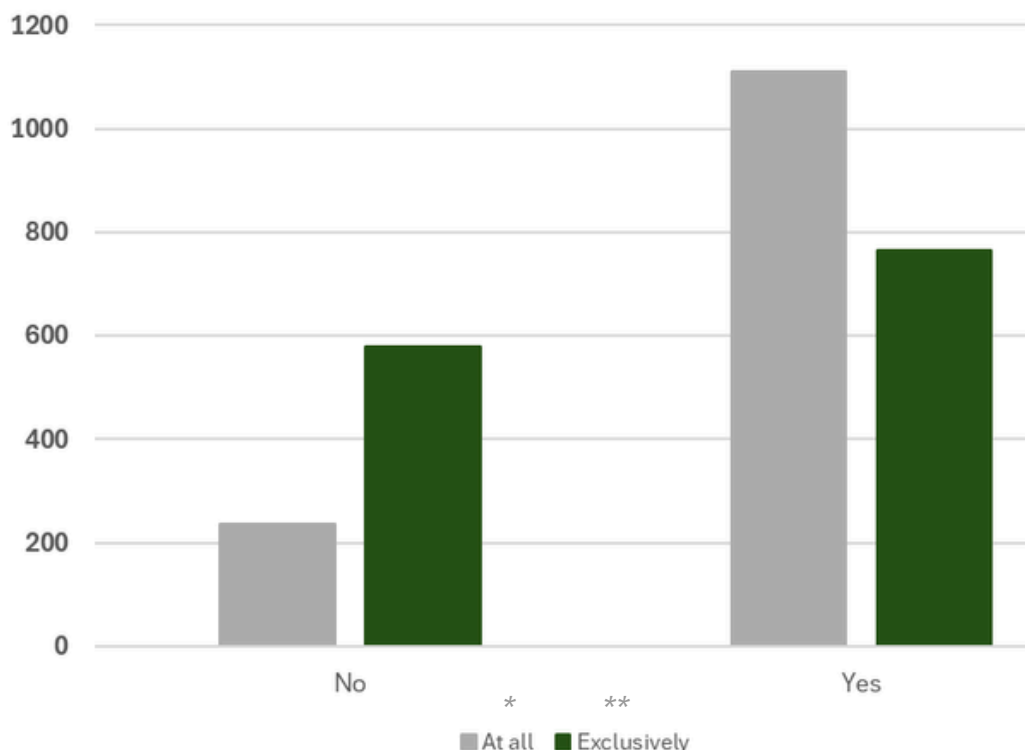


Figure 8. This chart shows the number of mothers that were breastfeeding their newborns at all after birth (shown above in grey), and the number of mothers that were exclusively breastfeeding (no formula) their newborns after birth (shown above in dark green). Many women in Portage County are breastfeeding their newborns at least sometimes, which is very beneficial. According to the Centers for Disease Control and Prevention, there are many benefits of breastfeeding for mom and baby:

- Breastfed babies have a lower risk of asthma, obesity, type 1 diabetes, and sudden infant death syndrome (SIDS)
- Breastfed babies are also less likely to have ear infections and stomach bugs
- Breastfeeding gives babies “antibodies” from mom to help them develop a strong immune system and protect them from illnesses
- Breastfeeding can reduce the mother's risk of breast and ovarian cancer, type 2 diabetes, and high blood pressure.

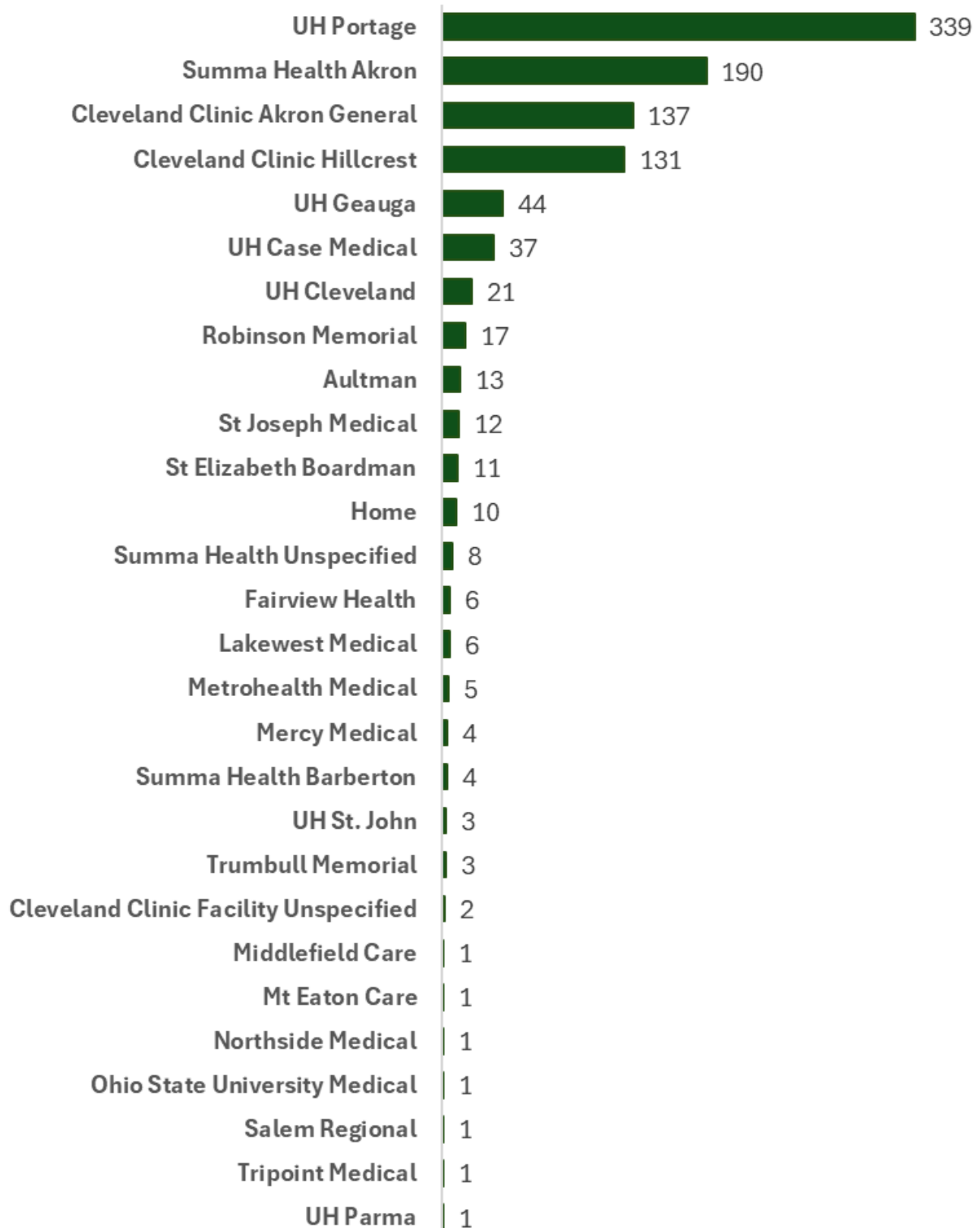
LABOR AND DELIVERY UNIT CLOSURE

In November, 2022, the Labor and Delivery Unit at University Hospitals Portage Medical Center (UH Portage) was closed. The following charts, tables and maps are a study on how delivery locations for Portage County women have been impacted by this closure. Birth data for 2018 and 2024 are summarized below.

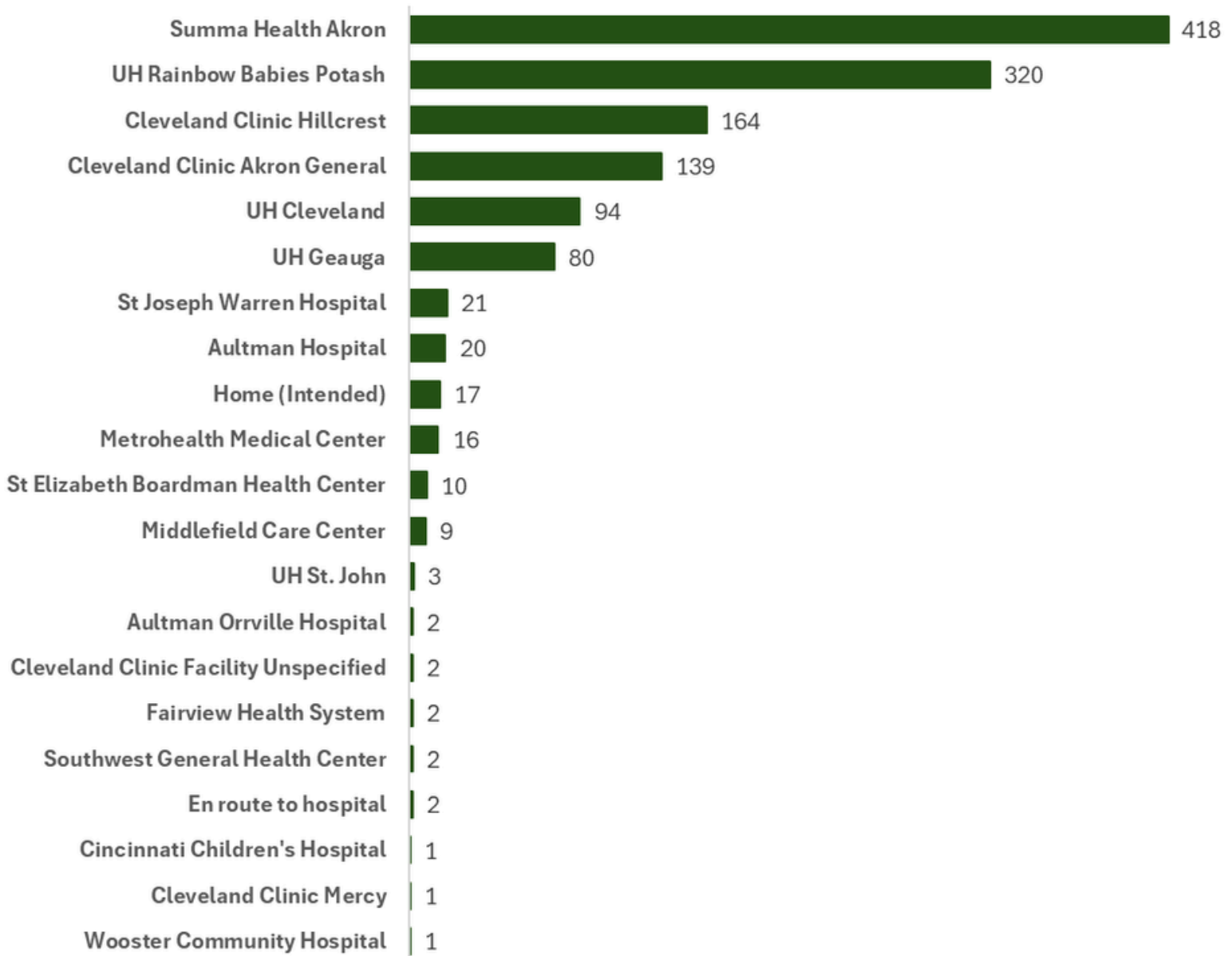
In 2018, the cities/townships for which UH Portage was the most common delivery location were Deerfield, Hiram, Mantua, Newton Falls (Portage County portion), Ravenna, Rootstown and Windham. Residents of the most highly populated areas of Portage County, specifically Aurora, Kent and Streetsboro, were using other delivery locations more frequently than UH Portage. Overall, UH Portage was the most commonly used delivery location for Portage County moms by a large margin.

In 2024, the most common delivery location for residents of Mantua, Ravenna and Windham was UH Rainbow Babies Potash Birthing Center in Ahuja Medical Center in Beachwood. For residents of Hiram, UH Geauga has become the primary birthing center. Residents of Deerfield and Rootstown most commonly delivered at Summa Health Akron. Newton Falls residents are split between hospitals to the east and west for their deliveries. Summa Health Akron is now the predominant delivery location for Portage County residents followed closely by UH Rainbow Babies Potash.

Before UH Portage Unit Closure



After UH Portage Unit Closure



Before UH Portage Unit Closure

City/Township	Total Births	Most Common Birth Facility	Births at Facility
Atwater	38	Summa Health Akron, UH Case Medical	Both 11
Aurora	85	Cleveland Clinic Hillcrest	48
Brimfield	2	Summa Health Akron	2
Deerfield	25	UH Portage	10
Diamond	12	St Elizabeth Boardman	4
Garrettsville	54	UH Geauga	22
Hartville	3	Summa Health Akron	2
Hiram	19	UH Portage	7
Kent	225	Summa Health Akron	71
Lake Milton	1	Cleveland Clinic Hillcrest	1
Mantua	47	UH Portage	21
Mogadore	62	Summa Health Akron	27

Newton Falls	4	UH Portage	2
North Benton	1	Cleveland Clinic Akron General	1
Randolph	2	Cleveland Clinic Akron General, Summa Health Akron	Both 1
Ravenna	236	UH Portage	121
Reminderville	3	Cleveland Clinic Hillcrest	2
Rootstown	39	UH portage	18
Streetsboro	129	Cleveland Clinic Hillcrest	43
Suffield	1	Summa Health Akron	1
Tallmadge	1	Cleveland Clinic Akron General	1
Windham	20	UH Portage	15

After UH Portage Unit Closure

City/Township	Total Births	Most Common Birth Facility	Births at Facility
Atwater	66	Summa Health Akron	35
Aurora	111	Cleveland Clinic Hillcrest	62
Brimfield	2	Cleveland Clinic Akron General	1
Deerfield	15	Summa Health Akron	5
Diamond	18	Summa Health Akron, UH Rainbow Babies Potash	Both 5
Freedom	2	Cleveland Clinic Hillcrest, UH Cleveland	Both 1
Garrettsville	95	UH Geauga	33
Hartville	7	Summa Health Akron	4
Hiram	27	UH Geauga	14
Kent	311	Summa Health Akron	161
Lake Milton	1	Cleveland Clinic Akron General	1
Mantua	52	UH Rainbow Babies Potash	20

Mogadore	77	Summa Health Akron	55
Newton Falls	7	Cleveland Clinic Hillcrest, St. Elizabeth Boardman	Both 2
North Benton	3	Cincinnati Children's, Summa Health Akron, UH Rainbow Babies Potash	All 1
Palmyra	1	Home	1
Randolph	3	Home	2
Ravenna	287	UH Rainbow Babies Potash	106
Rootstown	33	Summa Health Akron	18
Southington	1	St. Joseph Warren	1
Streetsboro	156	UH Rainbow Babies Potash	49
Suffield	1	Summa Health Akron	1
Tallmadge	2	Summa Health Akron	2
Wayland	1	UH Rainbow babies Potash	1
West Farmington	3	St. Joseph Warren	2
Windham	38	UH Rainbow Babies Potash	15

MAPPING DELIVERY LOCATIONS

The maps below show the top five Portage County cities/townships delivering at selected birthing locations in 2018 and 2024. The only birthing locations referenced here are ones in which 50 or more Portage County moms gave birth in a given year.

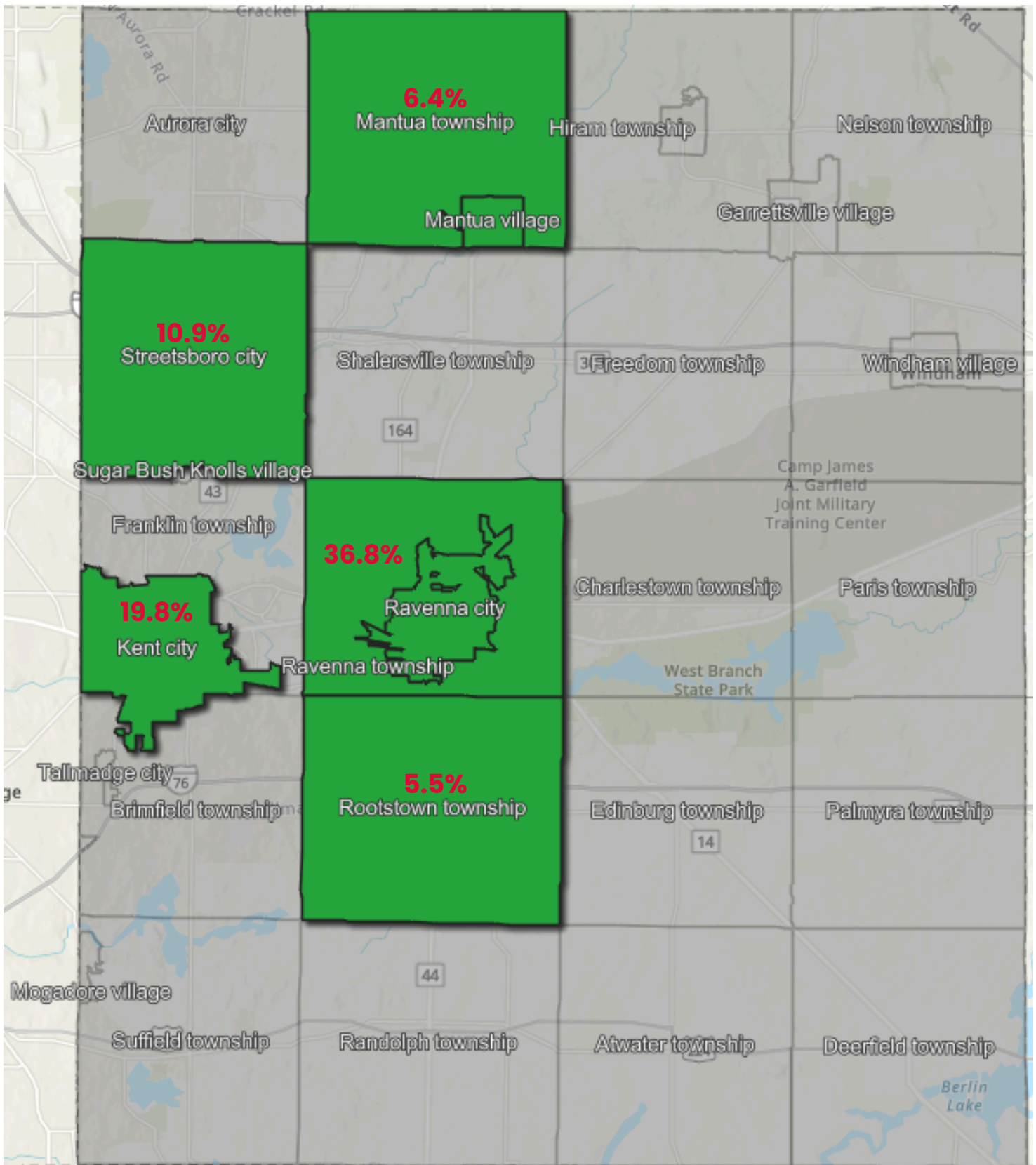
In 2018, that included UH Portage, Summa Health Akron, Cleveland Clinic Akron General, and Cleveland Clinic Hillcrest. In 2024, that included Summa Health Akron, UH Rainbow Babies Potash, Cleveland Clinic Hillcrest, Cleveland Clinic Akron General, UH Cleveland, and UH Geauga.

For each of the maps, a red percentage accompanies the top five cities/townships using each birthing center. This is NOT the percentage of that city/town that gave birth at that location. Rather, it is the percentage of deliveries at the birthing center by moms living in the given locations.

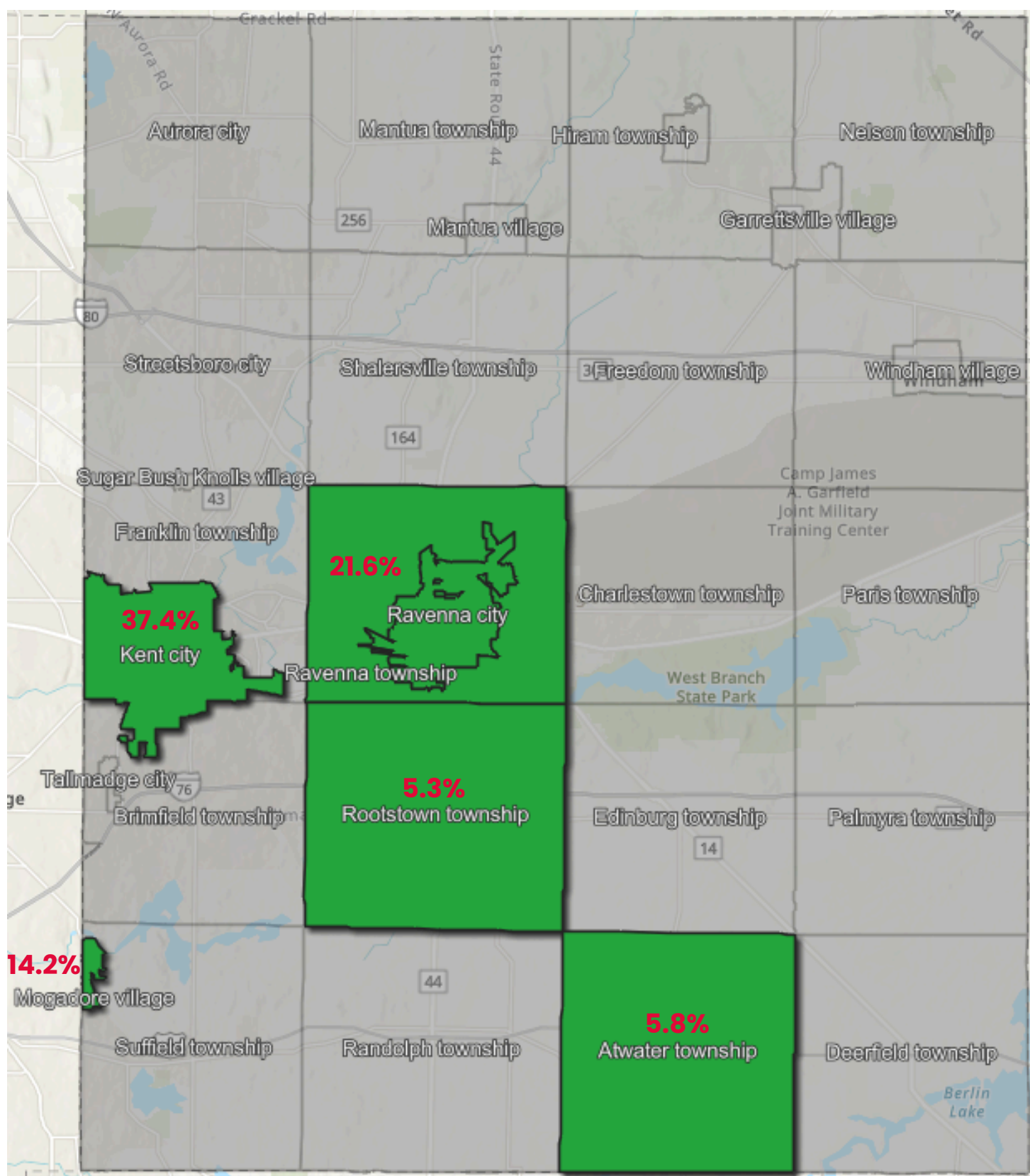
For example, shown on the next page are the top five Portage County areas that delivered at UH Portage in 2018. There is a red “36.8%” over Ravenna Township. This indicates that of the 2018 deliveries at UH Portage, 36.8% of moms lived in Ravenna Township or City.

Finally, please note that in the maps below, “Kent” addresses are only shown as Kent City, but could include the neighboring areas of Franklin and Brimfield Townships.

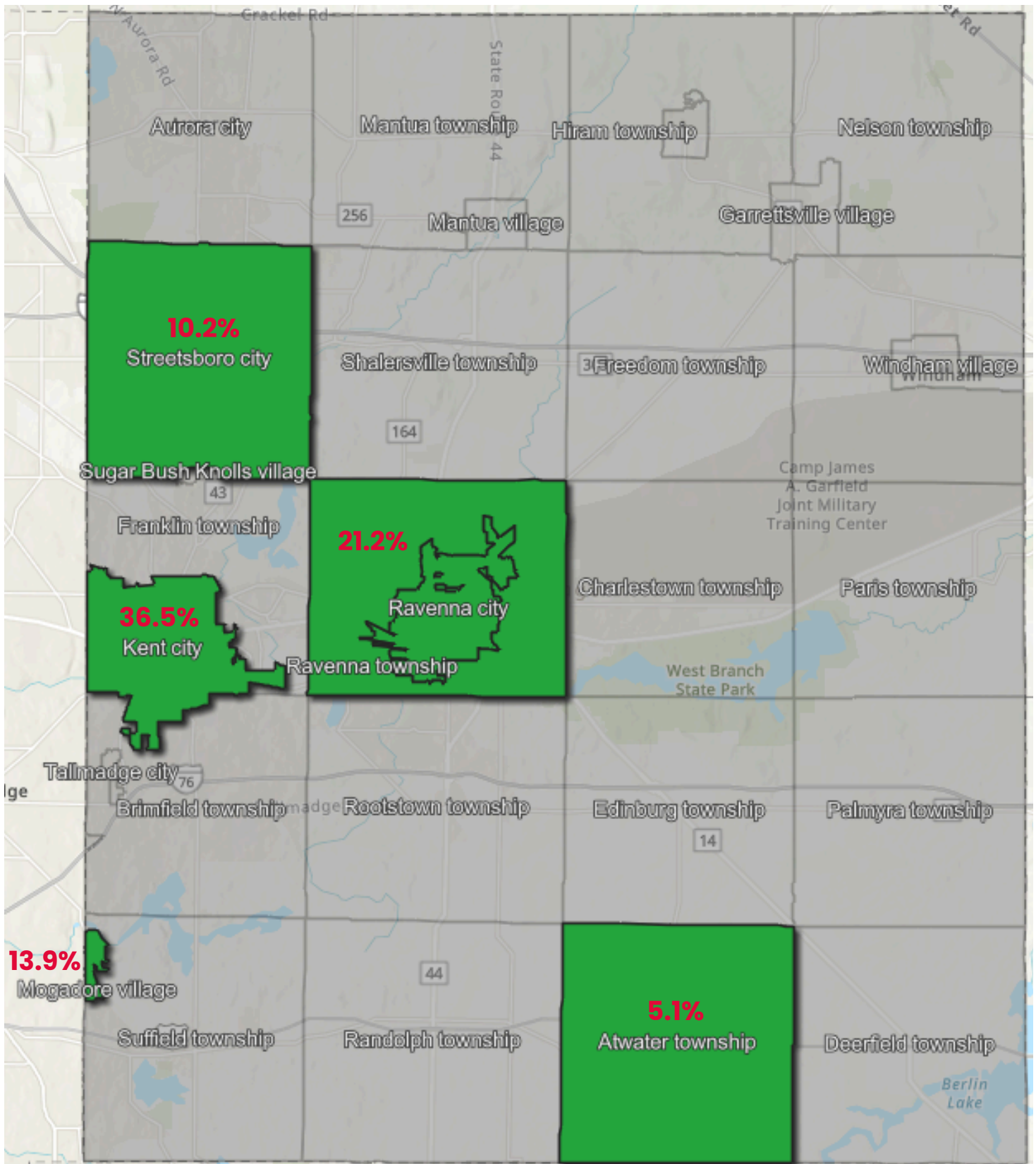
UH Portage Births 2018



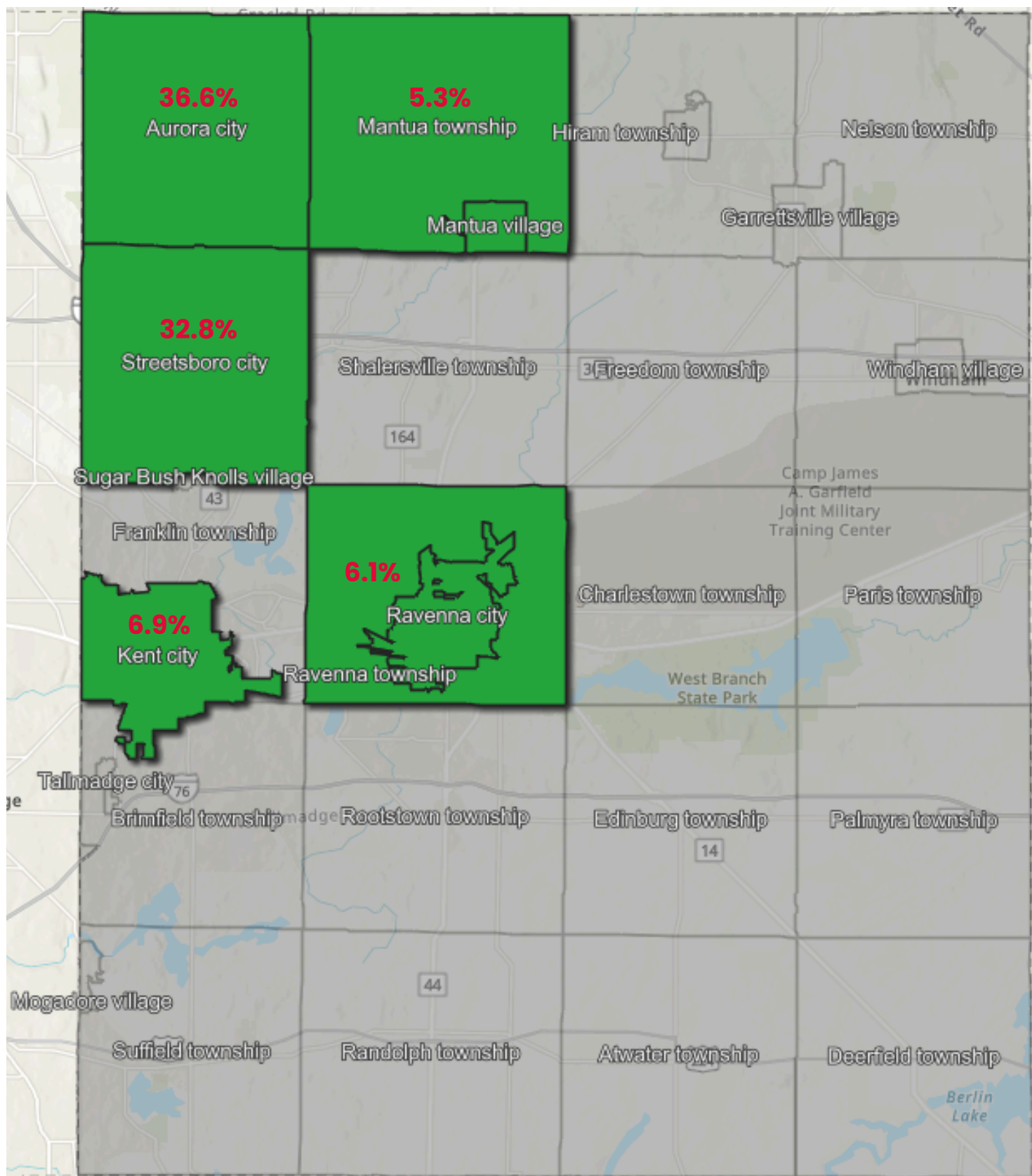
Summa Health Akron Births 2018



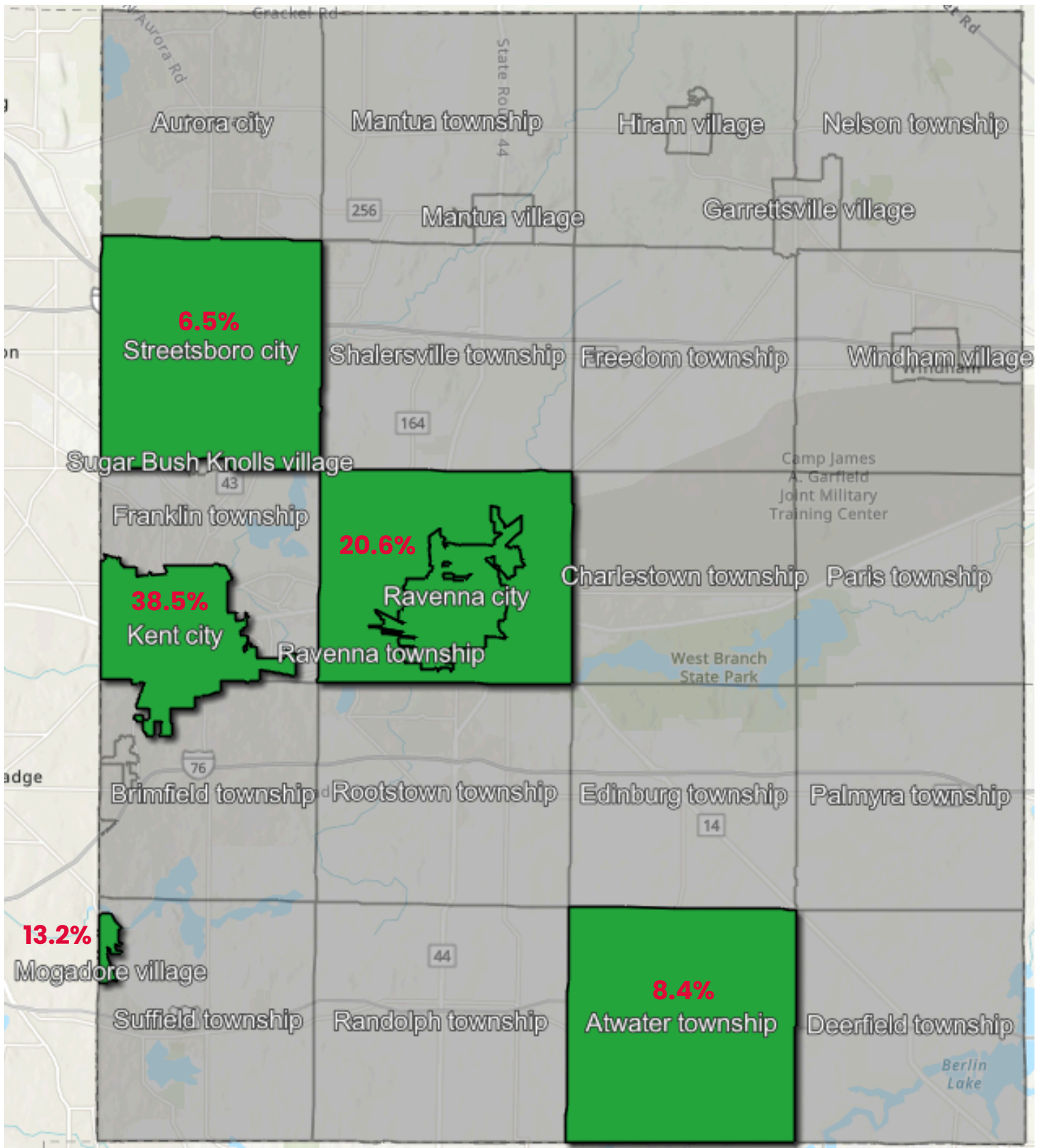
Cleveland Clinic Akron General Births 2018



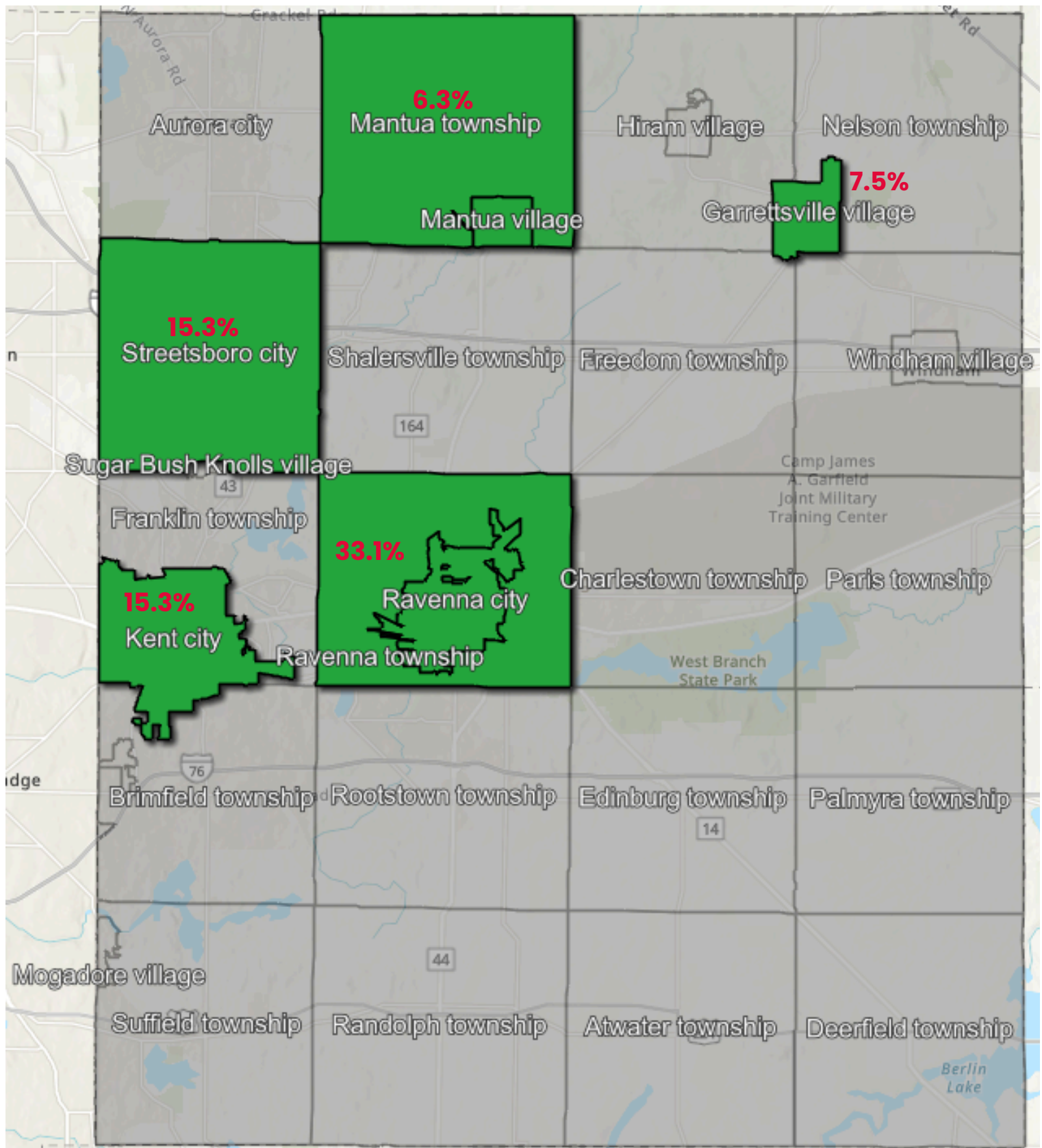
Cleveland Clinic Hillcrest Births 2018



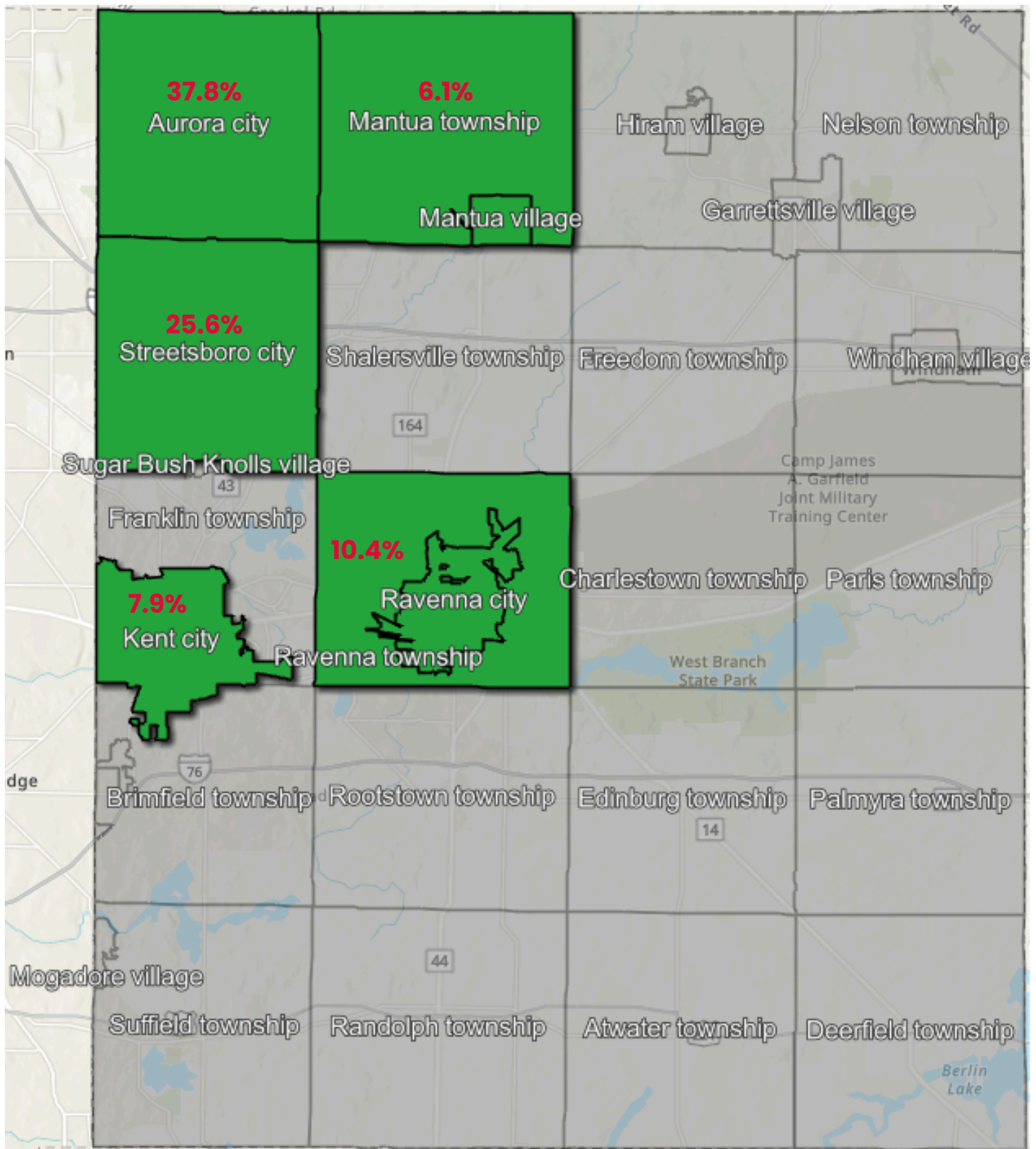
Summa Health Akron Births 2024



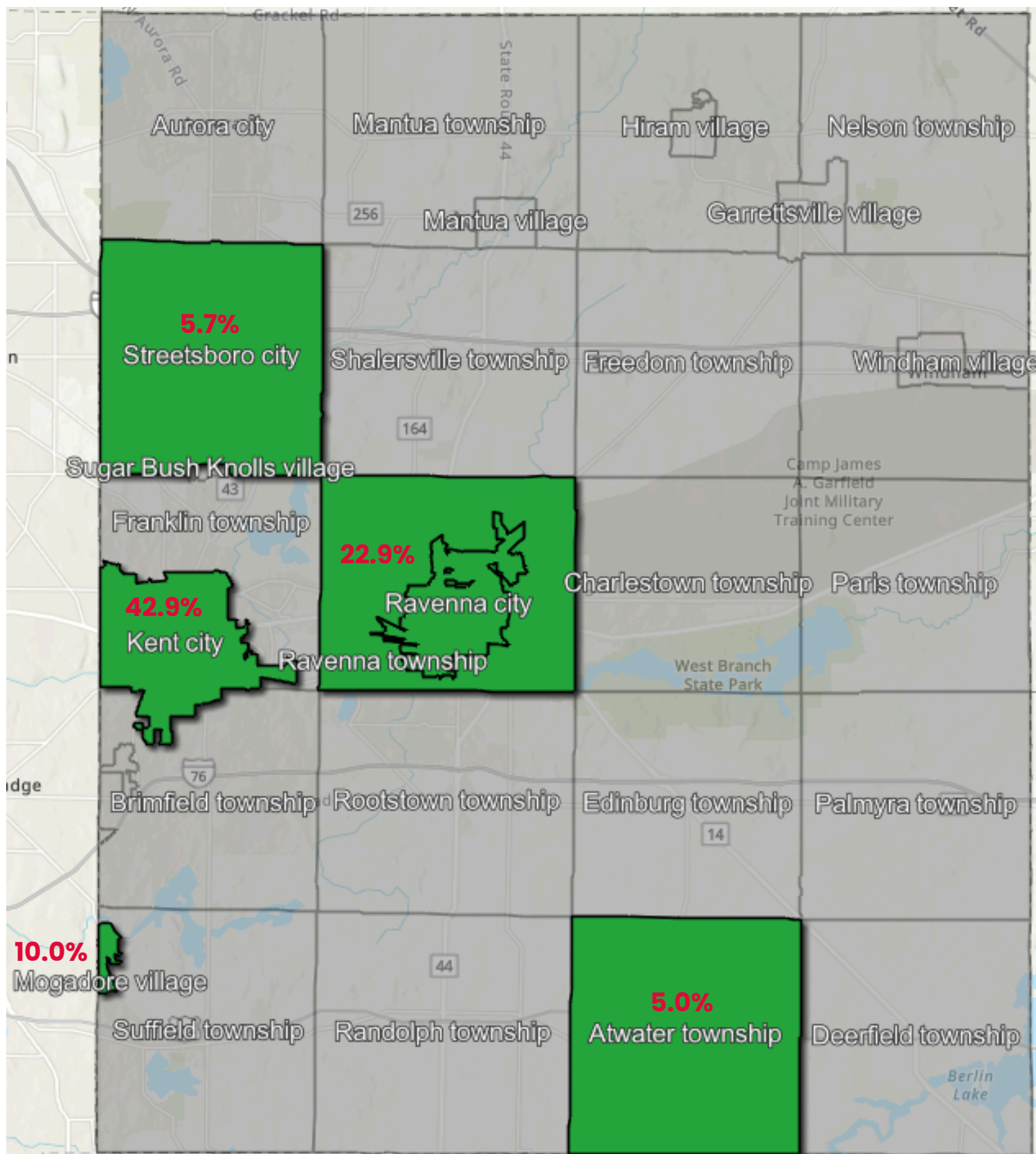
UH Rainbow Babies Potash Births 2024



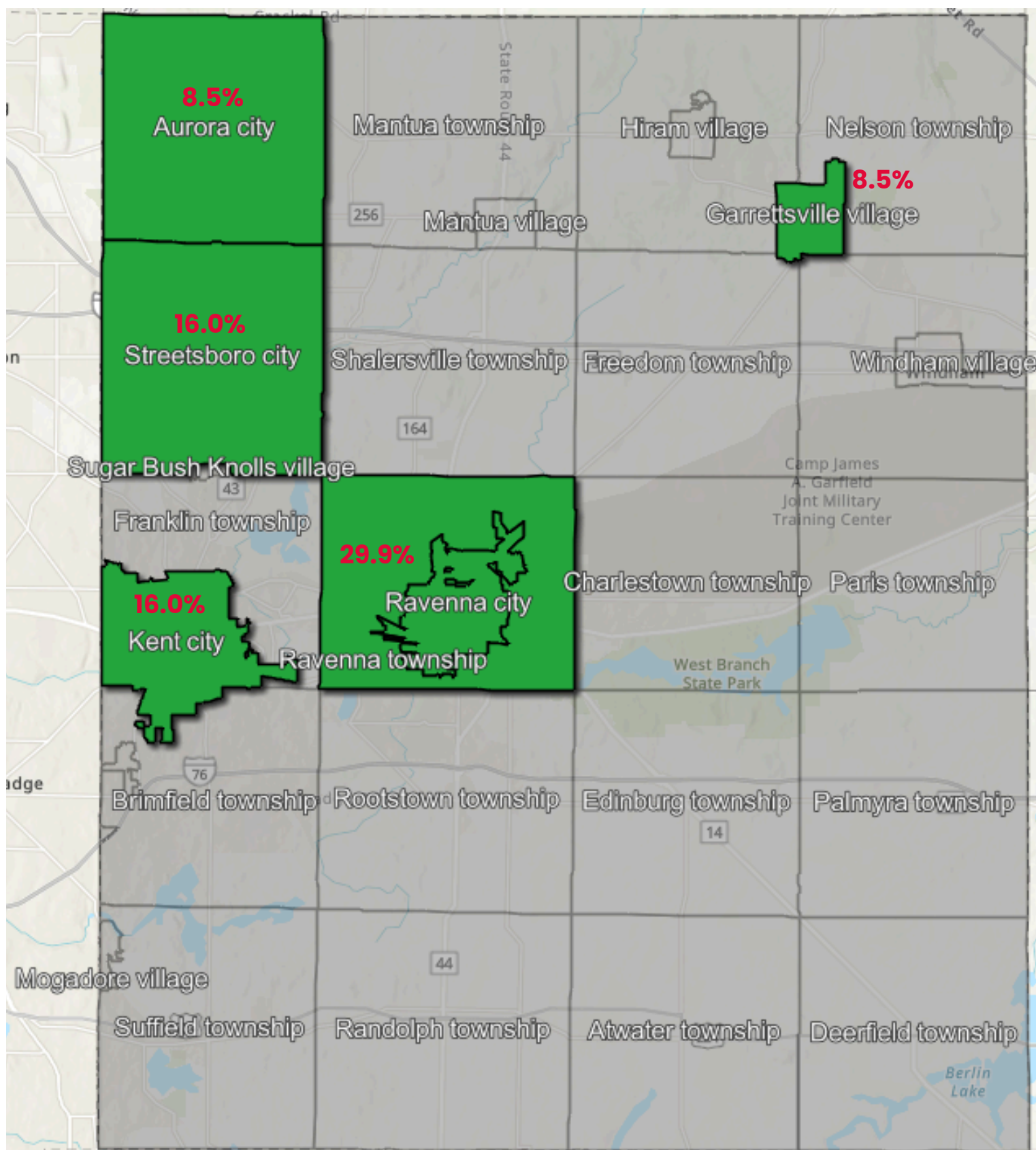
Cleveland Clinic Hillcrest Births 2024



Cleveland Clinic Akron General Births 2024



UH Cleveland Births 2024



UH Geauga Births 2024

