

SOLON CONNECTS

ACTIVE TRANSPORTATION PLAN

APPENDIX | June 18th 2021



Section 05 | Appendix

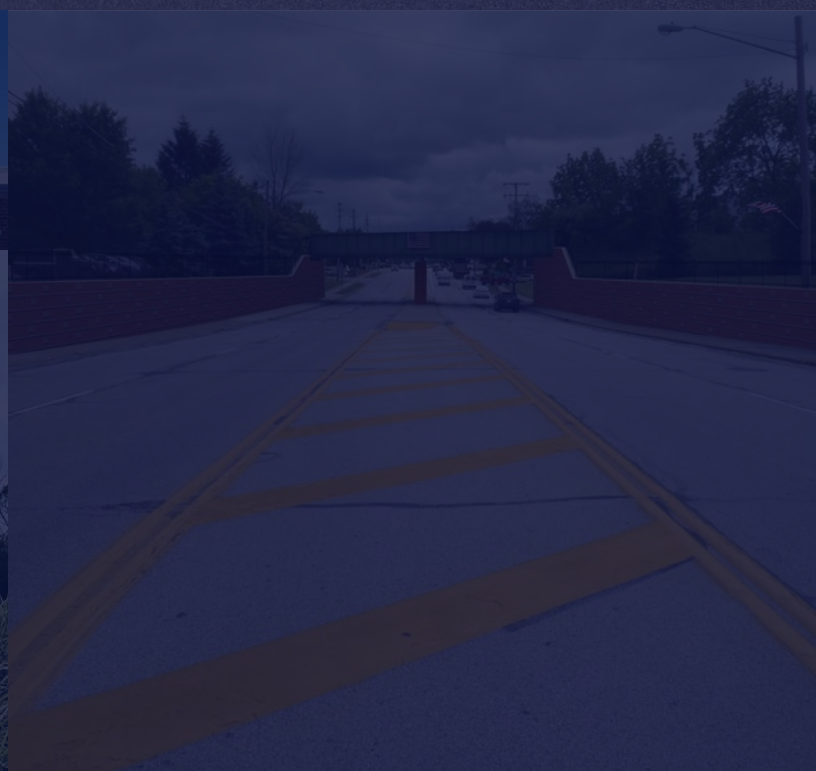


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05.1

Land Use & Development

Citywide Context

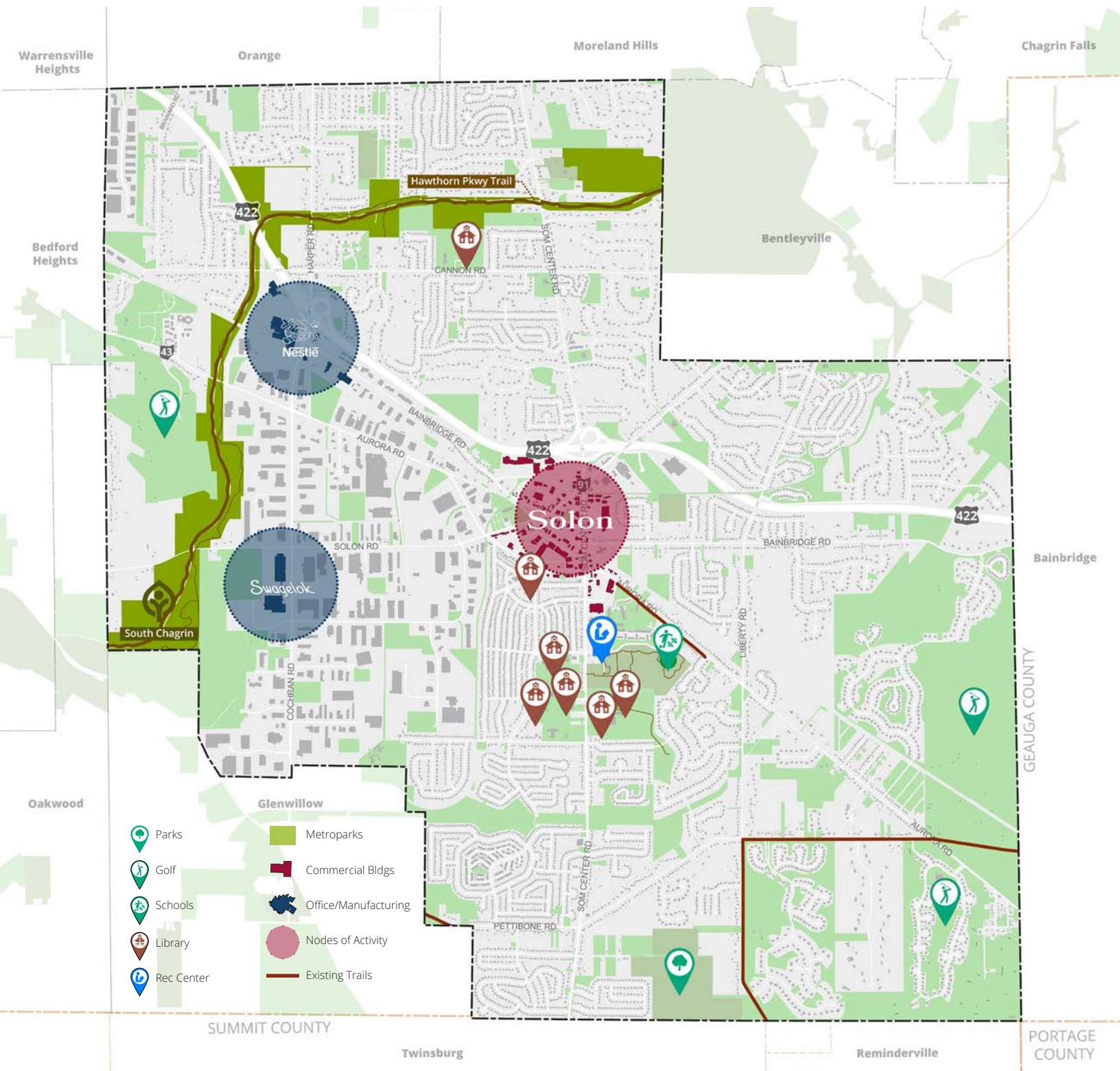
Development patterns in Solon vary depending on location, land use, and year built. The current buildings represent a variety of land uses, architectural styles, features, locations, and urban form. Consideration of existing context, assets, land use, and zoning is important since each category can have both positive and negative influences on the transportation network surrounding it.

This section will evaluate existing land uses, zoning, employment, character, and other features throughout Solon to establish any underlying patterns or impacts to the city's existing transportation network. It also identifies building locations, zoning, uses, frontage characteristics, access, and parking change as one moved around the City. Understanding what exists today can help provide recommendations for future developments and possibly reduce barriers to creating a more walkable, healthy, and multi-modal network that serves users of all ages and abilities.

The City of Solon contains a diverse array of commercial, social, entertainment, and community services located within its boundaries. It still maintains its somewhat traditional New England style plan, having been laid out like similar neighboring townships with established public squares in their town centers. This location, near the intersections of SOM Center Road with Bainbridge and Aurora Roads, still functions as the community's commercial and entertainment hub with several shops, restaurants, and other community gathering spaces. Unfortunately, the Route 422 corridor does cut off some areas of Solon from this "town center", creating a visual, physical, and possibly psychological barrier between the northern and southern halves of Solon. In addition to have numerous community and entertainment services, Solon maintains a strong business and manufacturing community base located mainly to the west of its 'town center district'. The 'Solon Connects' plan provides a great opportunity to enhance links between these and other key features like school, parks, and trails, connecting Solon residents to its distinct history, assets, and each other in a safe and healthy manner.



MAP 1: COMMUNITY ASSETS 



Source: County Planning

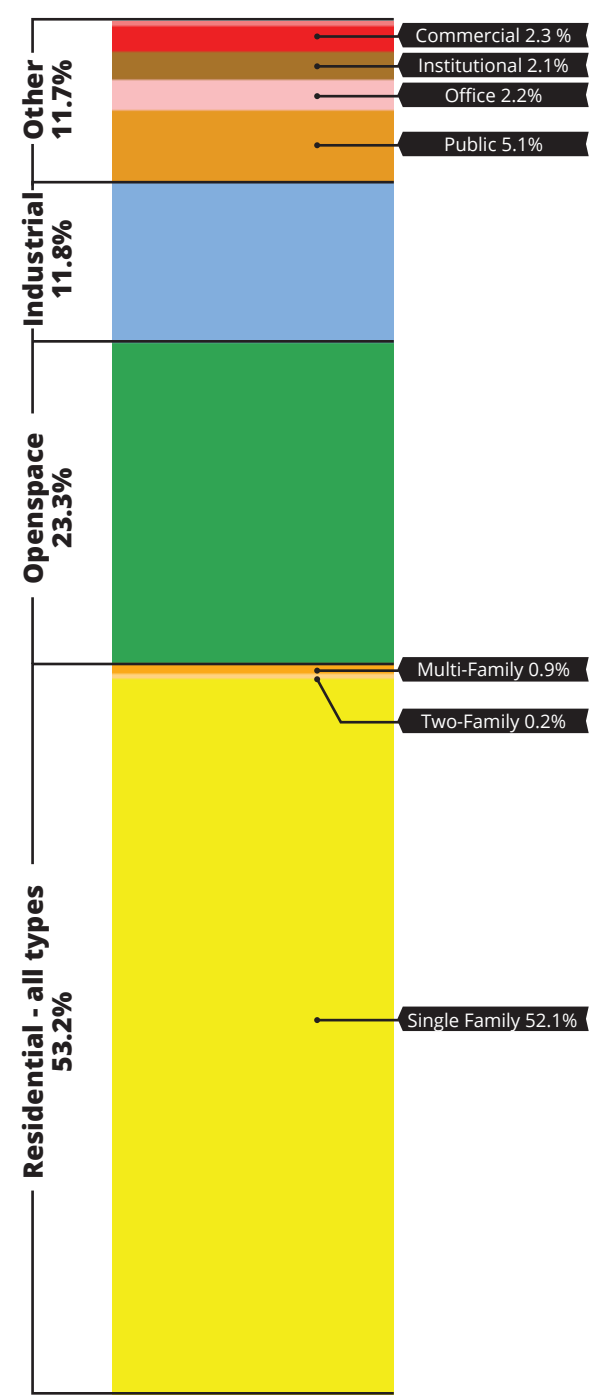
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Land Use

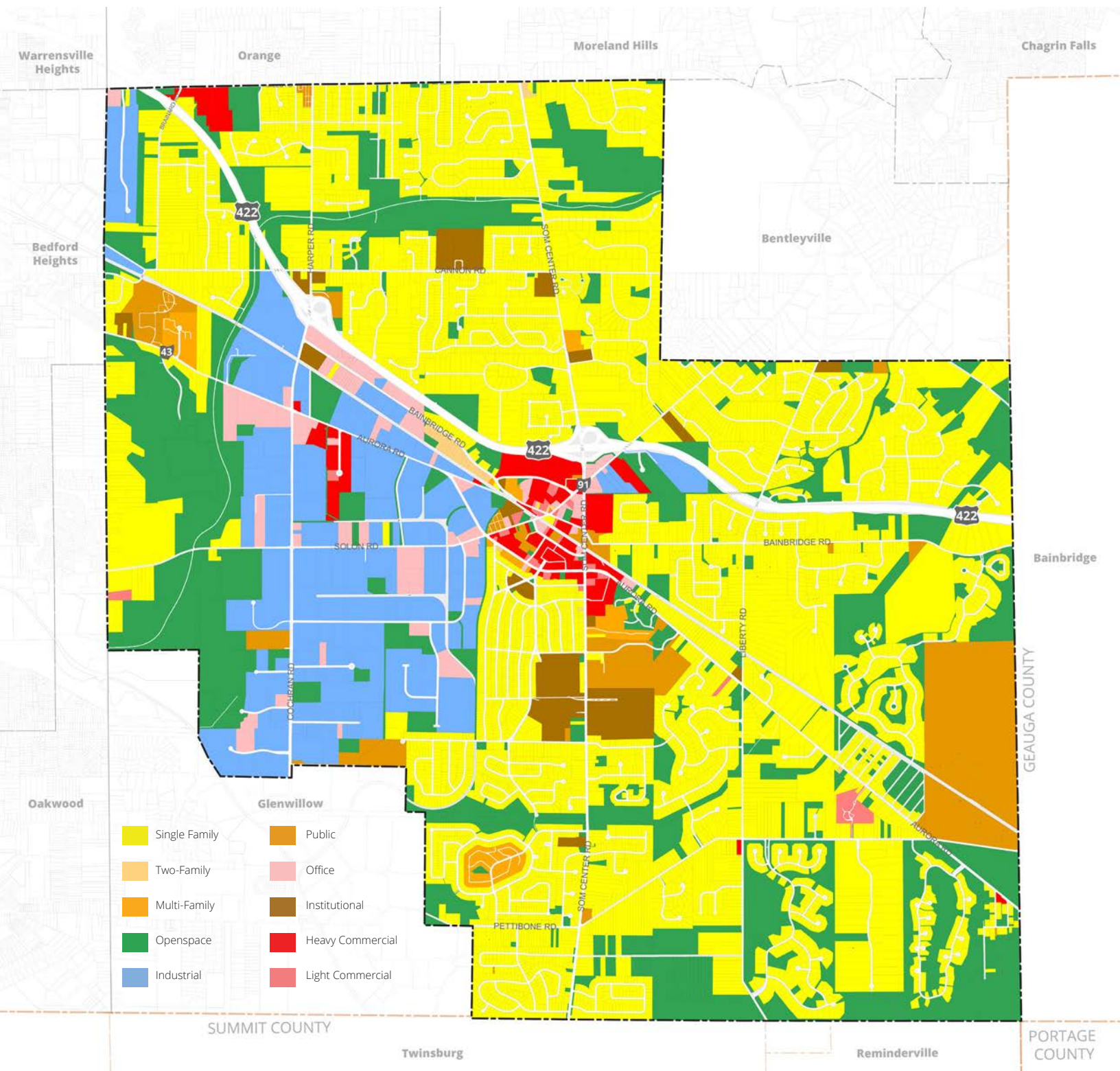
Land use is a term used to describe how land is physically be utilized, which is typically defined by the types of structures on a site and the uses within those structures.

Currently, the City of Solon is primarily a community comprised of single-family detached residential dwellings and open space, which combined account for 76.5% of all land within the City. However, Solon is also a community with a densely packed industrial core located just to the west of downtown Solon, and with two smaller pockets both to the northwest and to the east of downtown Solon. Overall, industrial land uses account for 11.8% of land within the community. The remaining 11.7% of land uses within the City of Solon are a combination of public uses (5.1%), commercial (2.3%), office (2.2%), and institutional (2.1%).

FIGURE 1: % OF LAND USE BY TYPE



MAP 2: LAND USE 



Source: City of Solon

05.1

Population & Density

The City of Solon is over 20 square miles in size and ranks among the highest in the County for total population, but among the lowest in terms of population density. This indicates a relatively sprawling community where access to a personal vehicle is a necessity to residents and for performing daily tasks.

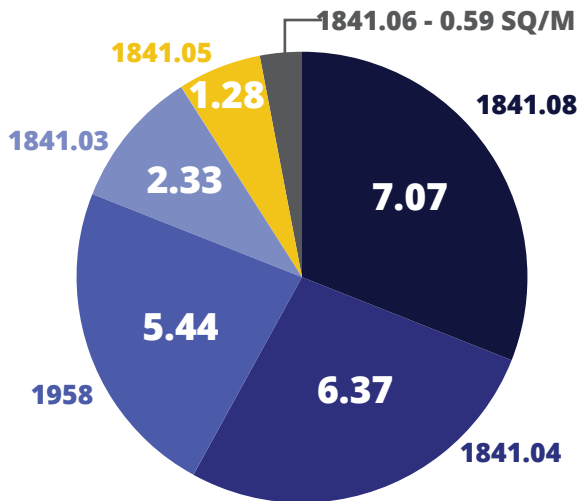
12th **Most Populated City in Cuyahoga County**
(~23,038 Residents)

Source: US Census Bureau - ACS, 2018



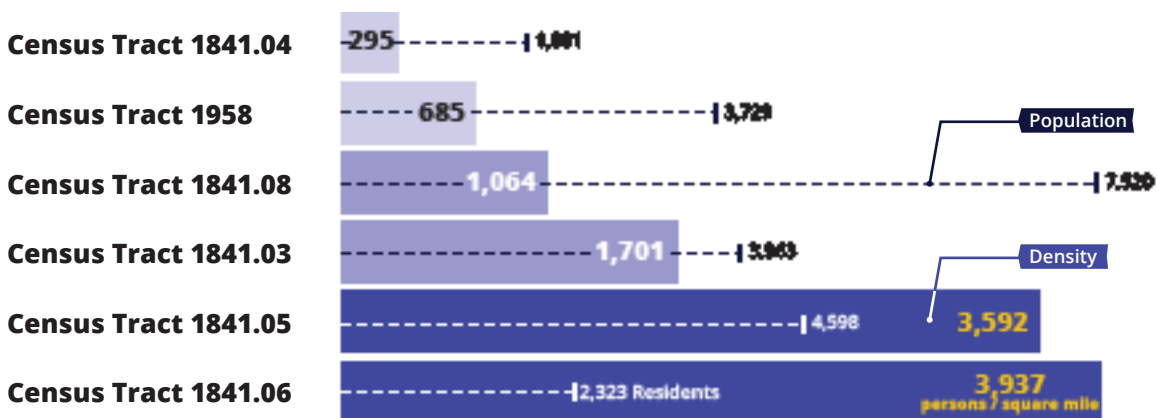
42nd **in Population Density**
(1,146 persons per sq/m)

FIGURE 2: SIZE OF TRACT IN SQUARE MILES



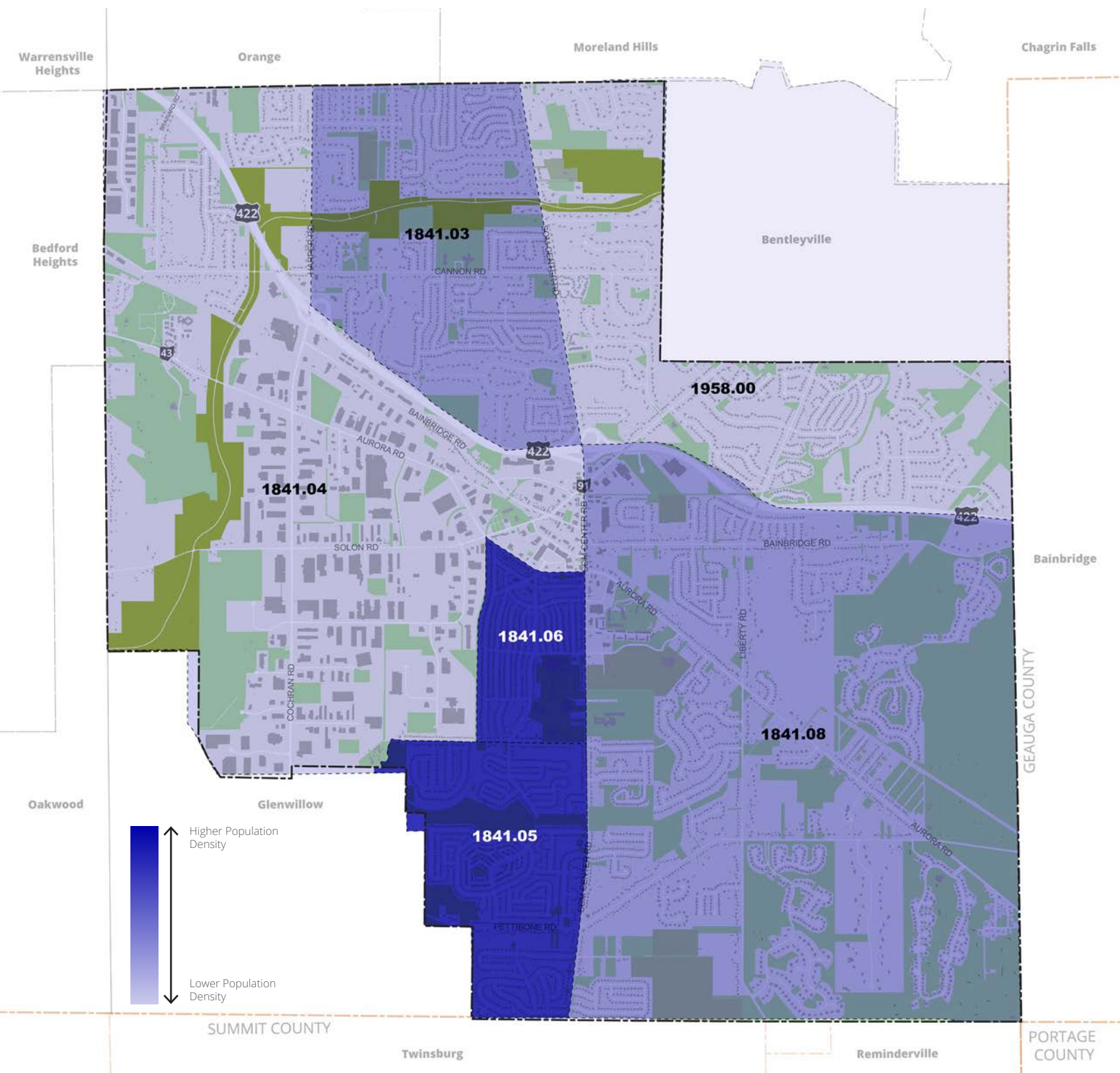
Source: US Census Bureau - ACS, 2018

FIGURE 3: POPULATION & DENSITY BY TRACT



Source: US Census Bureau - ACS, 2018

MAP 3: POPULATION DENSITY 



Source: US Census Bureau - ACS, 2018

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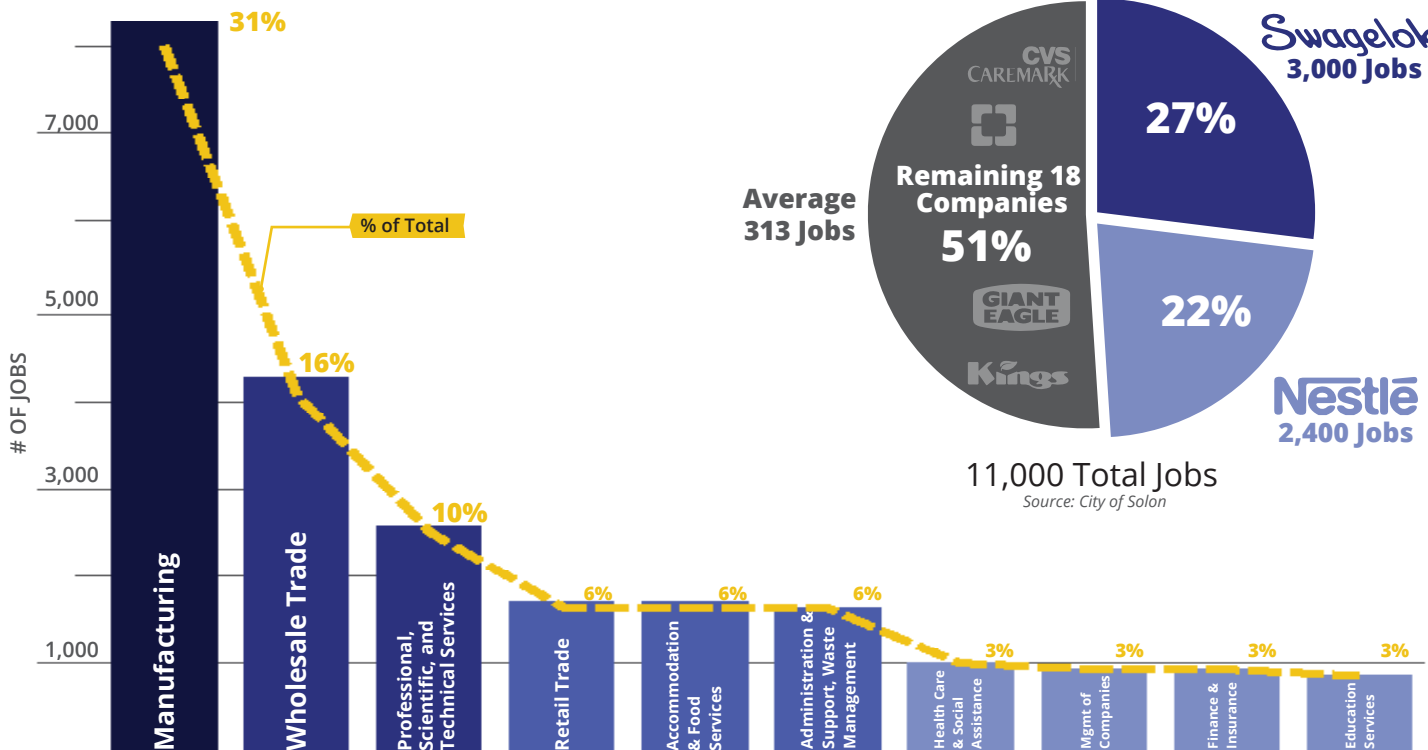
Employment

The City of Solon not only has great access to jobs for its residents, the community itself is a major job hub. A large portion of jobs within the City are located within industrialized areas just to the west of downtown Solon. Many of the City's top employers, such as Swagelok and Nestle, have facilities in this area and account for nearly 50% of all jobs within the community. Additionally, manufacturing, wholesale trade, and professional, scientific, and technical services account for 57% of all jobs within the City. This makes these industrialized areas an important component of the City's economic base

#2 *After Cleveland Solon is in Jobs in the County*
~26,739 Jobs

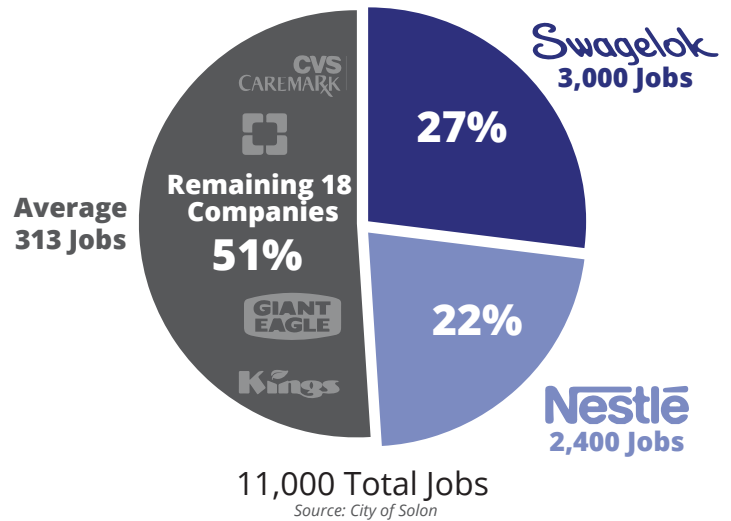
Source: US Census Bureau - On the Map, 2017

FIGURE 4: TOP 10 JOBS BY SECTOR



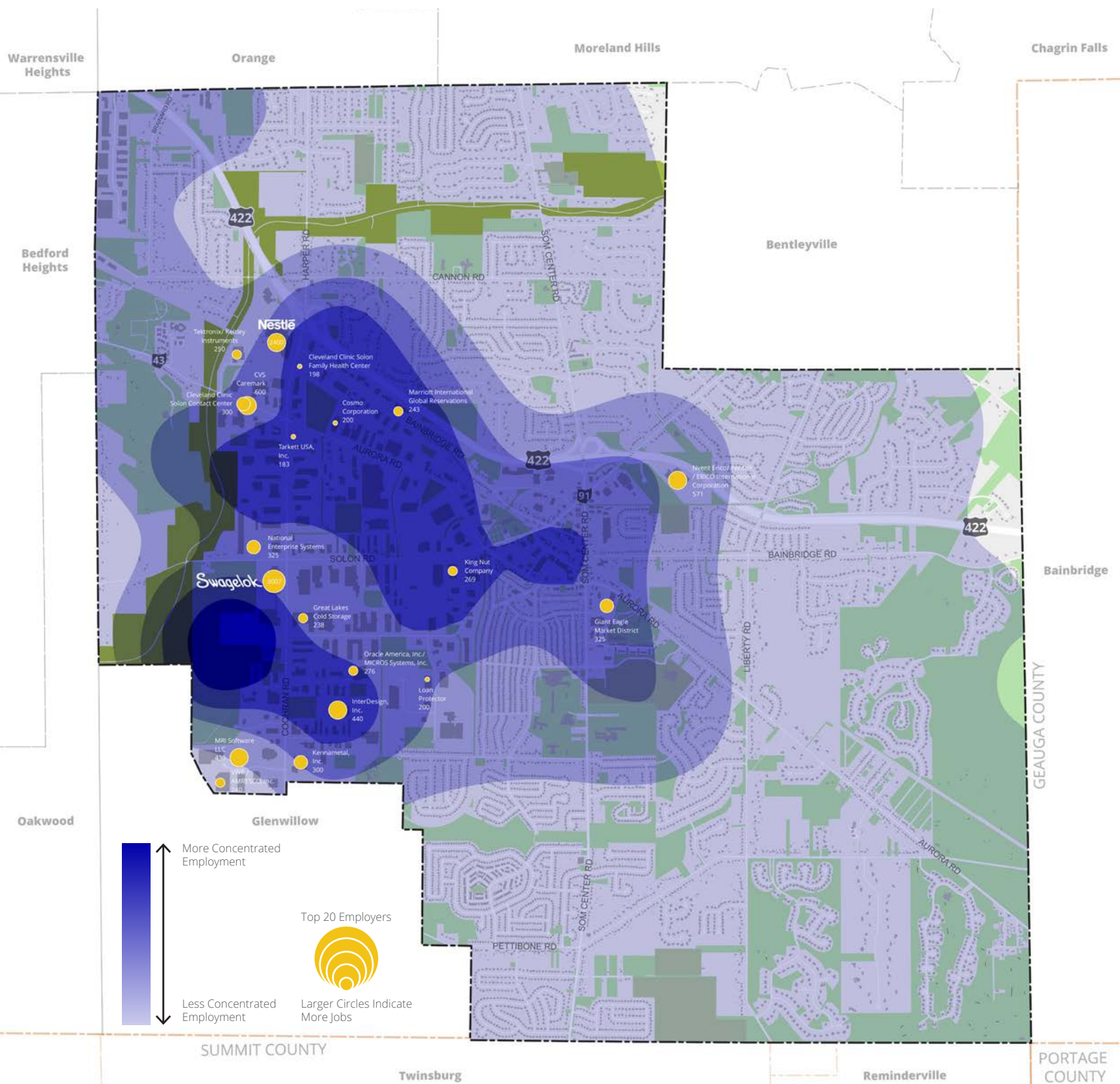
Source: US Census Bureau - On the Map, 2017

FIGURE 5: TOP 20 EMPLOYERS



Source: City of Solon

MAP 4: EMPLOYMENT CENTERS



Source: US Census Bureau - On the Map, 2017 & City of Solon

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Zoning

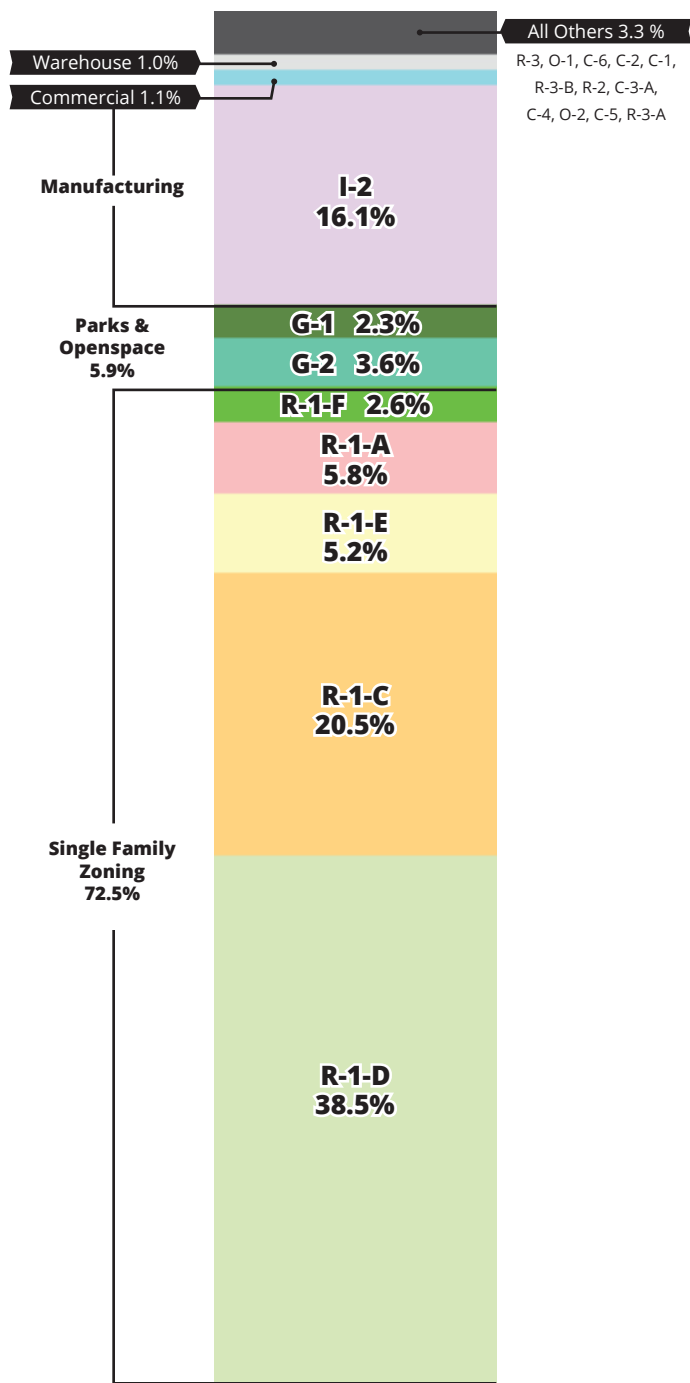
Zoning is a tool that helps plan for how land can and cannot be used in certain areas of the community, and it helps reduce land use conflicts from incompatible uses, such as neighborhoods adjacent to heavy manufacturing.

Currently, the City of Solon has 24 individual zoning districts and is predominantly a community comprised of residential neighborhoods and single-family homes. As seen in the graph to the right, 72.5% of all land within the community is zoned for one of the City's five, Single-family zoning districts. Each of these zoning districts, while very similar, generally differ in permitted minimum lot sizes. Lot sizes can range from the smallest minimum lot size for a single-family home at 15,000 square feet (R-1-F district), up to the largest minimum lot size of five acres (R-1-E).

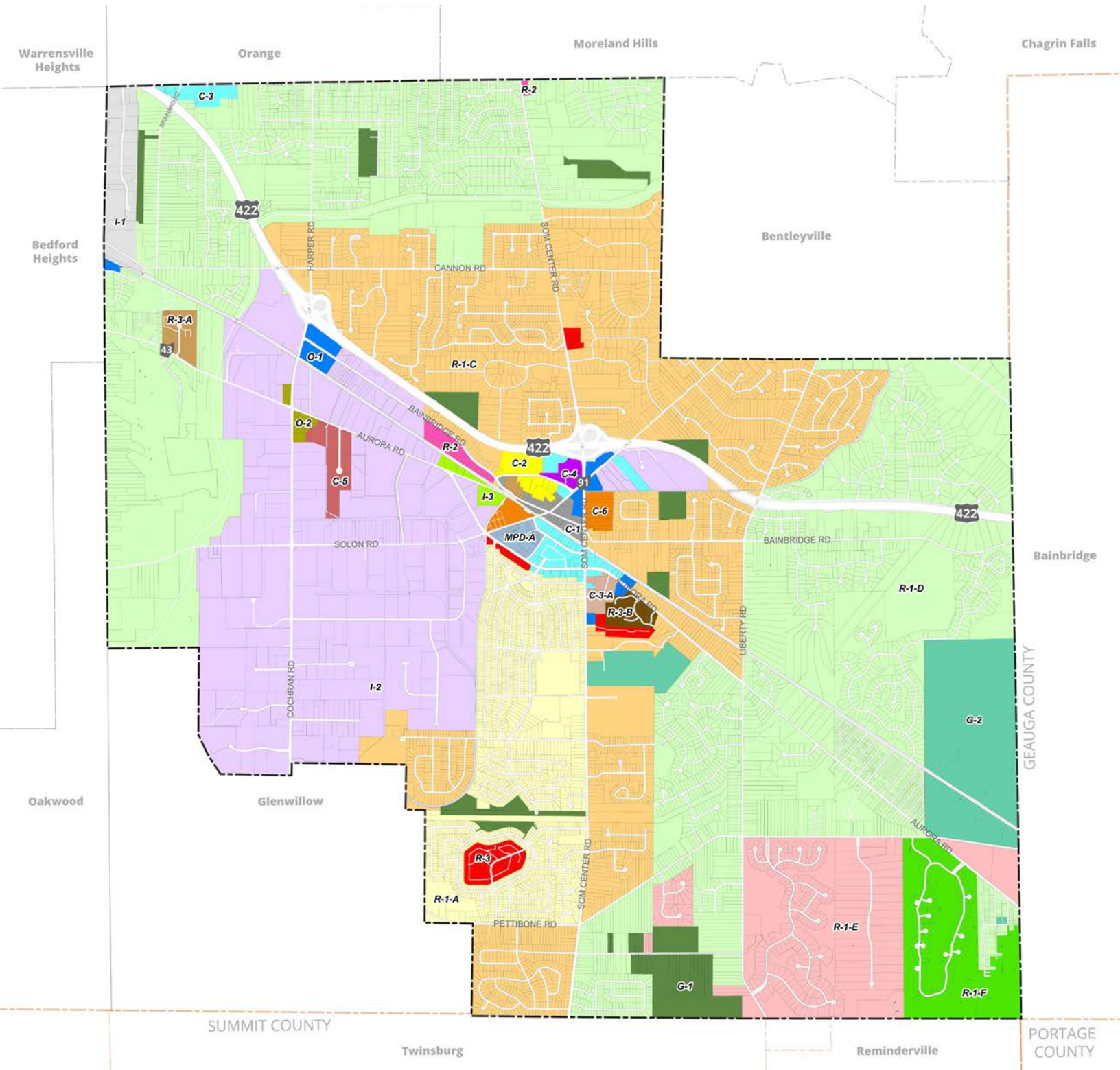
Following Single-family zoning districts, the most used zoning classification is Industrial Manufacturing (I-2), which accounts for 16.1% of all land within the community. The purpose of this district is to provide a concentrated located to moderate the intensity of heavier uses within the community. Identified as light purple within the map on the next page, the largest Industrial Manufacturing zoning district is just to the west of downtown Solon. This area includes such businesses as Swagelok Company, King Nut Company, and Nestle Stouffer's.

The remaining 12.4% of land is zoned for a variety of uses. Parks and open space (G-1, G-2) only accounts for 5.9% of zoning within the City, which includes the Grantwood Golf Course and Solon Community Park. The Commercial (C-3) district accounts for 1.1% of land and warehousing accounts for an additional 1.0%. The remaining 3.3% of zoning in the City is a combination of high density residential districts and senior care (R-2, R-3, R-3-A, R-3-B) and specialized commercial and office districts (O-1, O-2, C-1, C-2, C-3-A, C-4, C-5, C-6).connecting Solon residents to its distinct history, assets, and each other in a safe and healthy manner.

FIGURE 6: % OF ZONING DISTRICTS BY TYPE



MAP 5: ZONING



Source: City of Solon

05.1

Vacant Land & Opportunities

The City of Solon is nearing full build out with minimal land remaining for large-scale development. Much of the vacant land within the community is City owned and is considered open space in conjunction with a primary use, such as schools, the City's civic campus, and Grantwood Golf Course. Additionally, Solon also has a number of large subdivisions that are controlled through a Homeowners Association (HOA). This land is typically reserved open space and acts as a buffer from neighboring developments or as a location for passive recreation. There are large contiguous sections of HOA land in the southeast portion of the community, where connections could tie together a much larger pedestrian and bicycle network.

In addition to vacant land and HOA owned properties, the City of Solon also has a number of vacated rail corridors and overhead powerline corridors. Many of these types of corridors are located in the southeastern portion of the community and could also be candidates for further enhancing connectivity within the City and the region through Rails-to-Trails developments and other initiatives.



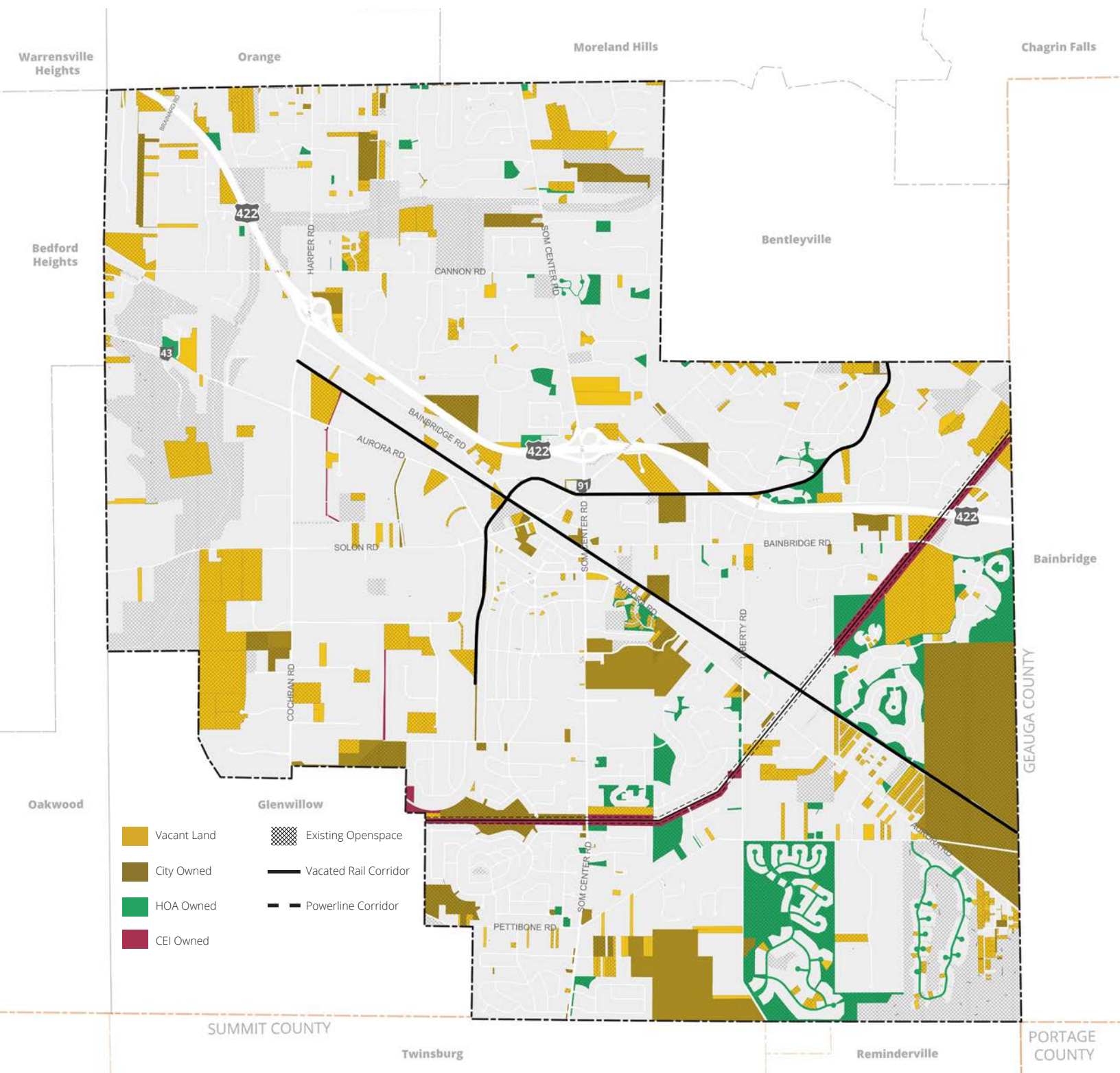
rails-to-trails
conservancy



**Industrial
Heartland
Trails**
COALITION



MAP 6: VACANT LAND & OPPORTUNITIES 



Source: County Planning & County Fiscal

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Parks & Openspace

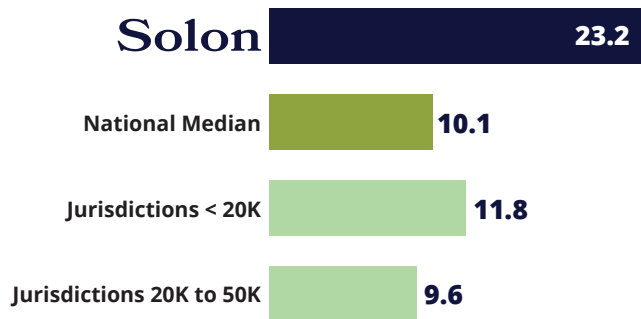
Second only to residential land, open space accounts for nearly 25% of all land within the community. However, only 4% of that land is used for public parks, which does not include Grantwood Golf Course and Timberlake Park in Chagrin Falls. The City of Solon falls short of the national median for park spaces, which is typically 15% of land within a community. Additionally, of the 519 acres of parks within the City of Solon, 366 acres are occupied by the Grantwood Golf Course. This accounts for 70% of all park space within the community. Another 446 acres are located within the Cleveland Metroparks and an additional 214 acres are devoted to greenspace. Overall, public park spaces in Solon are isolated and have limited access from adjacent neighborhoods

Only 4% of land in Solon is used for Public Parks*
 (*Grantwood & Timberlake not included)
 Source: City of Solon & Trust for Public Land



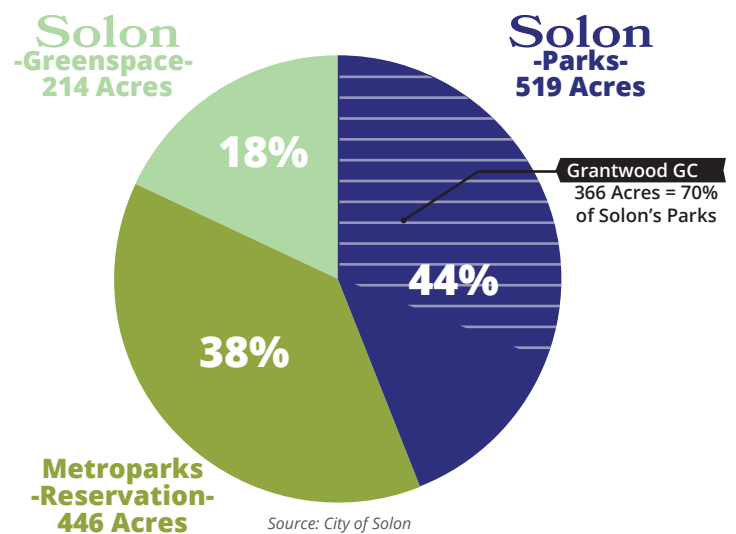
The National Median is 15%
 Source: Trust for Public Land

FIGURE 7: ACRES OF PARK* PER 1,000 RESIDENTS
 *Grantwood & Timberlake not included




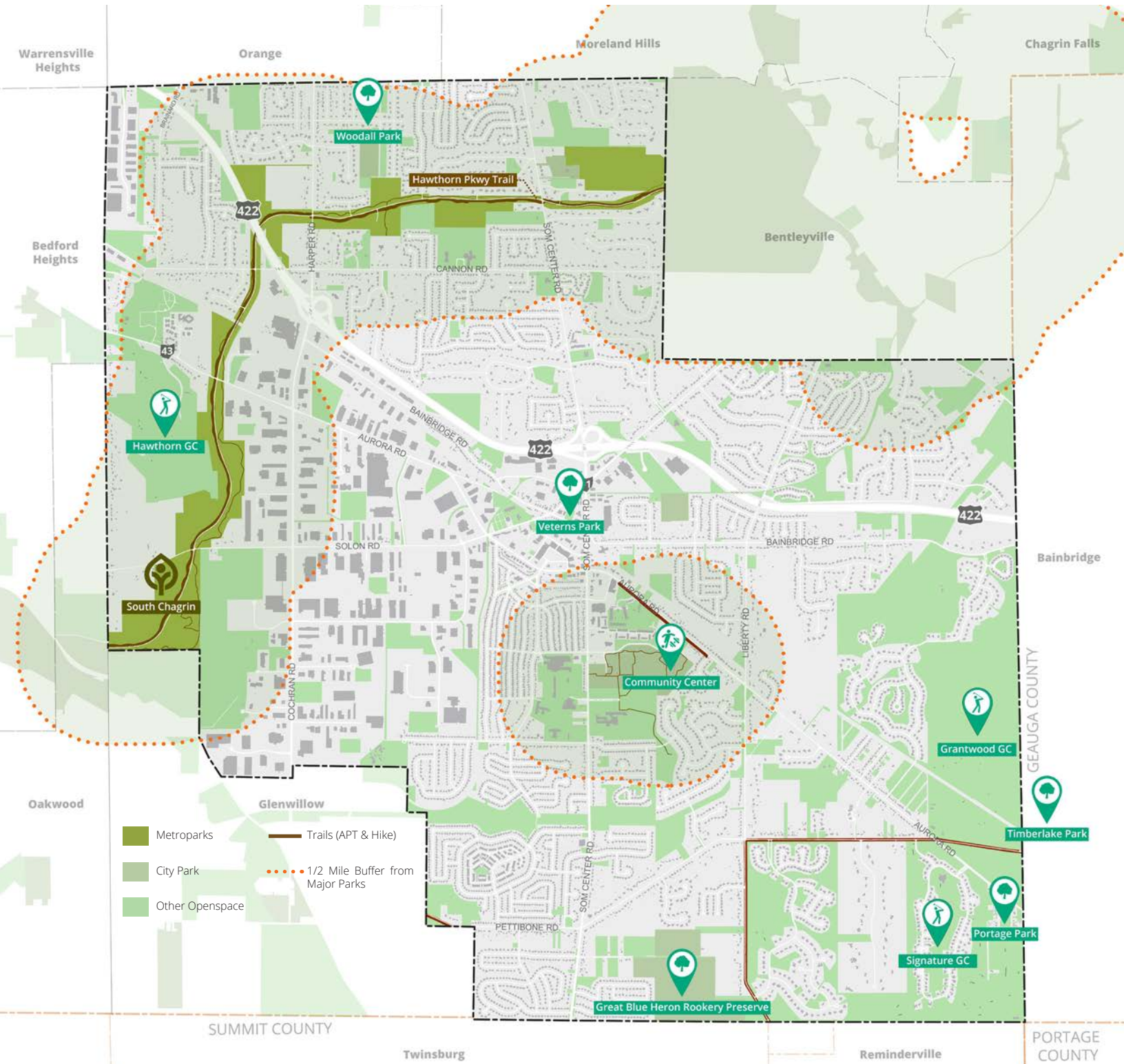
Source: City of Solon & National Recreation and Parks Association

FIGURE 8: SHARE OF PARKS BY TYPE



Source: City of Solon

MAP 7: PARKS & OPENSPACE 

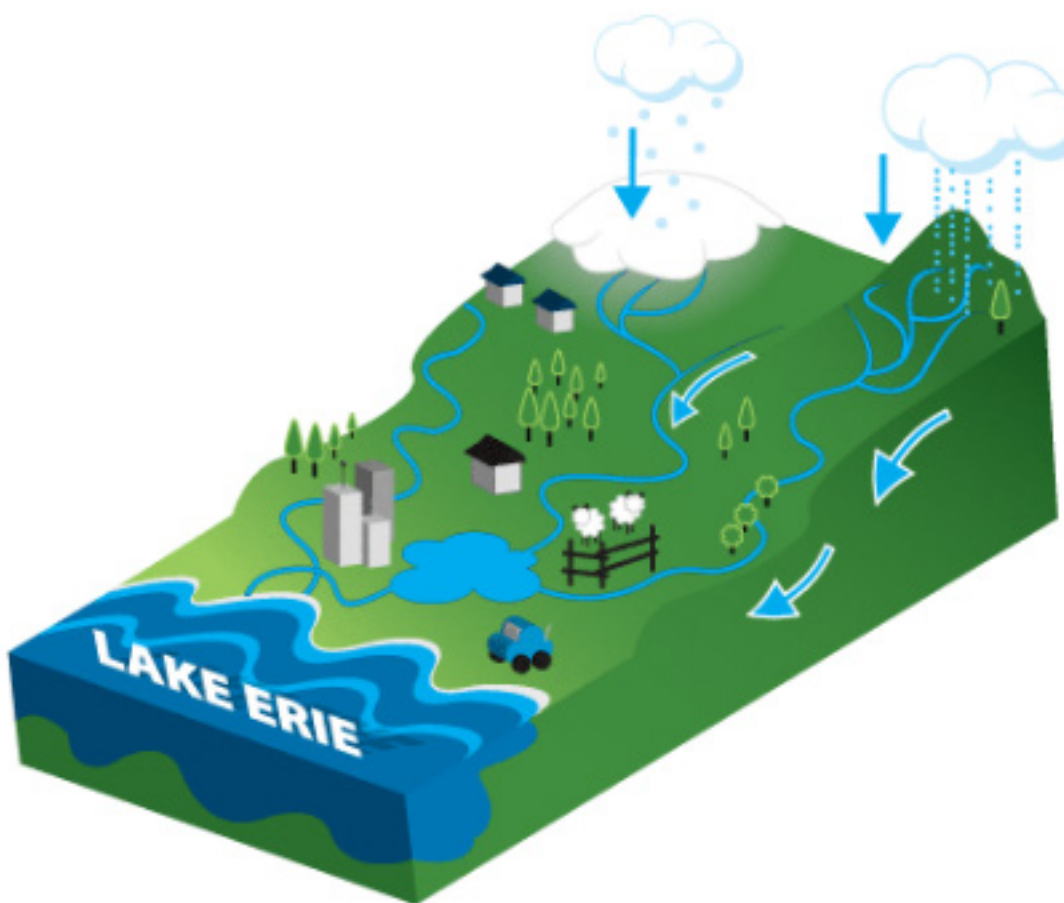


Source: County Planning

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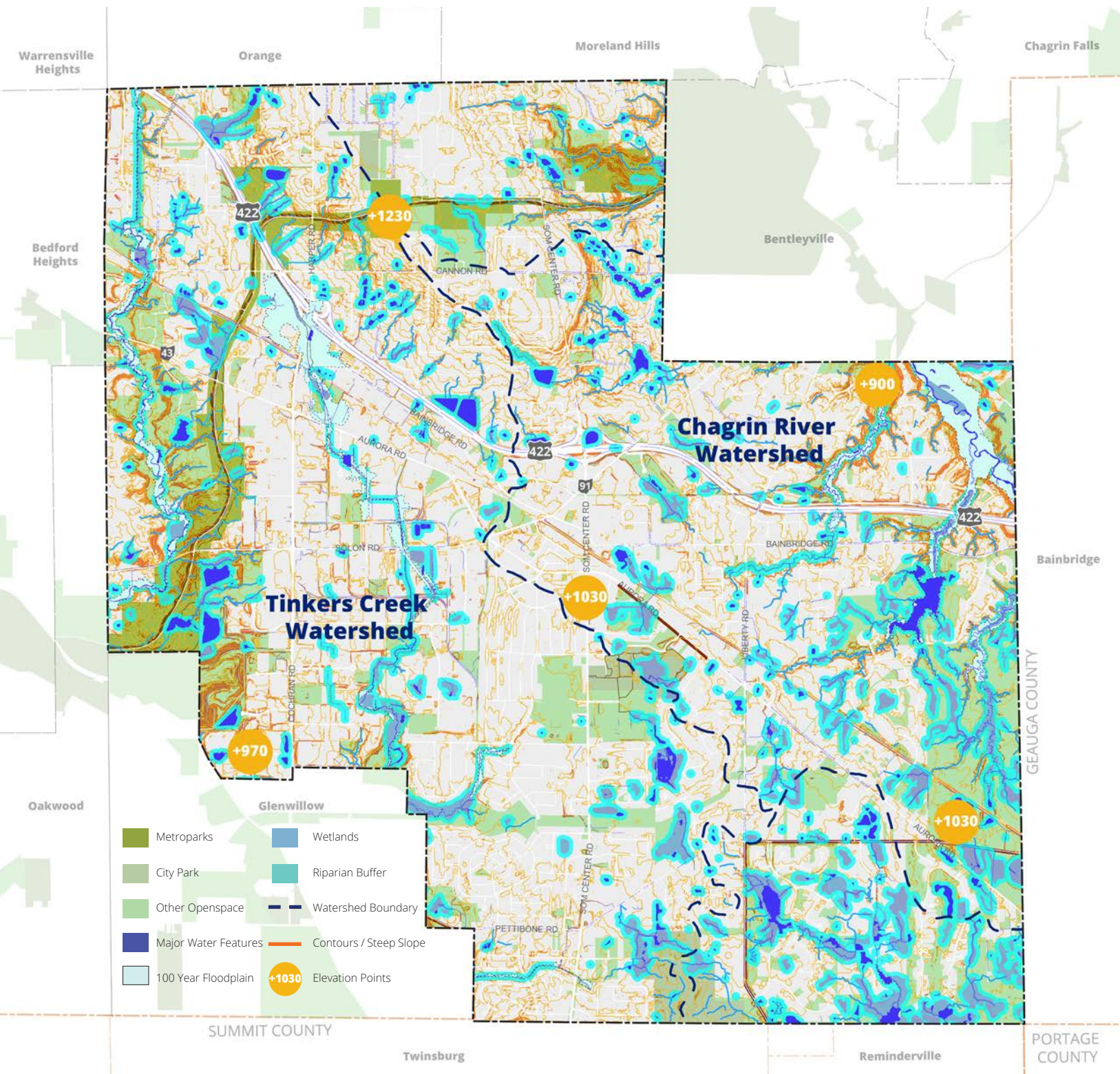
Environmental Features

The City of Solon is located in the southeastern portion of Cuyahoga County and has a number of topographical and environmental challenges. While a large portion of central Solon has few areas with steep slopes (>12%) or large water features, the southeastern portion of the community has significant wetlands, streams, and riparian corridors. These types of environmental features can pose challenges to development, which in turn can have adverse effects on the environment. The City of Solon is also located within a number of watersheds, including the Tinkers Creek Watershed and the Chagrin River Watershed. These prominent watersheds have an impact on water quality as stormwater and runoff enter nearby streams and ultimately into Lake Erie.



Source: NEORS

MAP 8: ENVIRONMENTAL FEATURES 



Source: County Planning

05.1

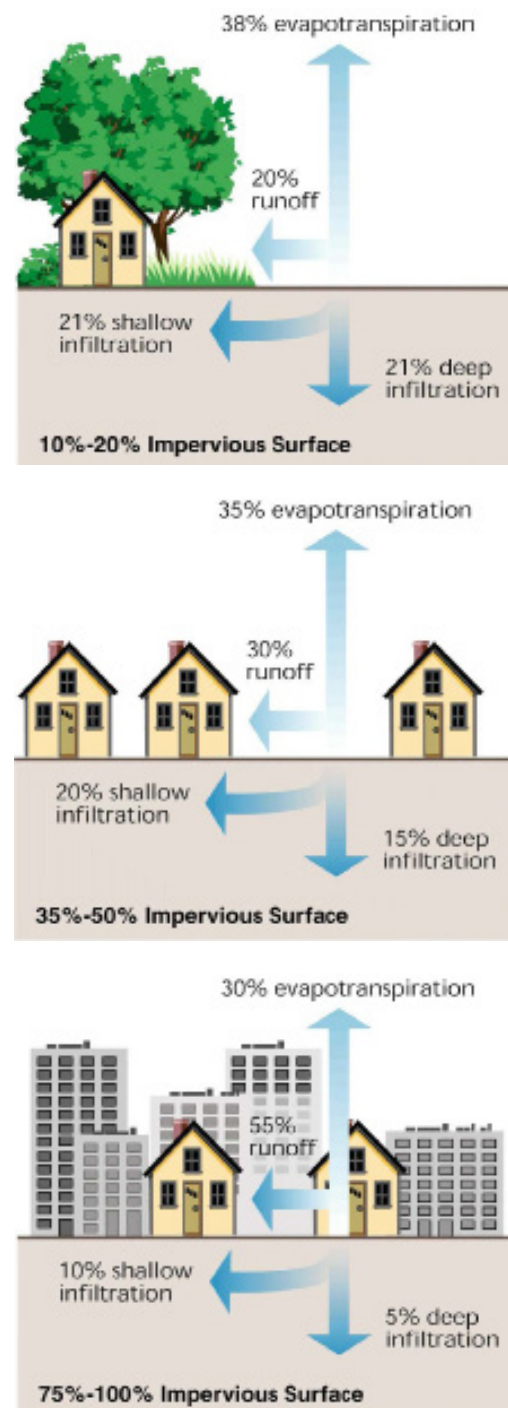
Land Cover

The City of Solon is a well-treed community with an ample and leafy canopy. When viewed from above, 77% of the community is covered by trees, shrubs, or grass, 1% is covered by above ground water features, and an additional 1% is covered by bare land. The remaining 21% of land is covered by impervious surfaces, such as buildings, roads, and surface parking lots.

The area of impervious surfaces within a community can have a direct impact on water quality, erosion, bank failures, and flooding. As seen in the images to the right, the City of Solon falls closest to the 10-20% impervious surfaces model. In this situation during a heavy rain event, 38% of the water re-enters the atmosphere through evapotranspiration, 21% enters the ground through shallow infiltration, and an additional 21% of water enters the ground through deep infiltration. The remaining 20% of water then becomes surface runoff.

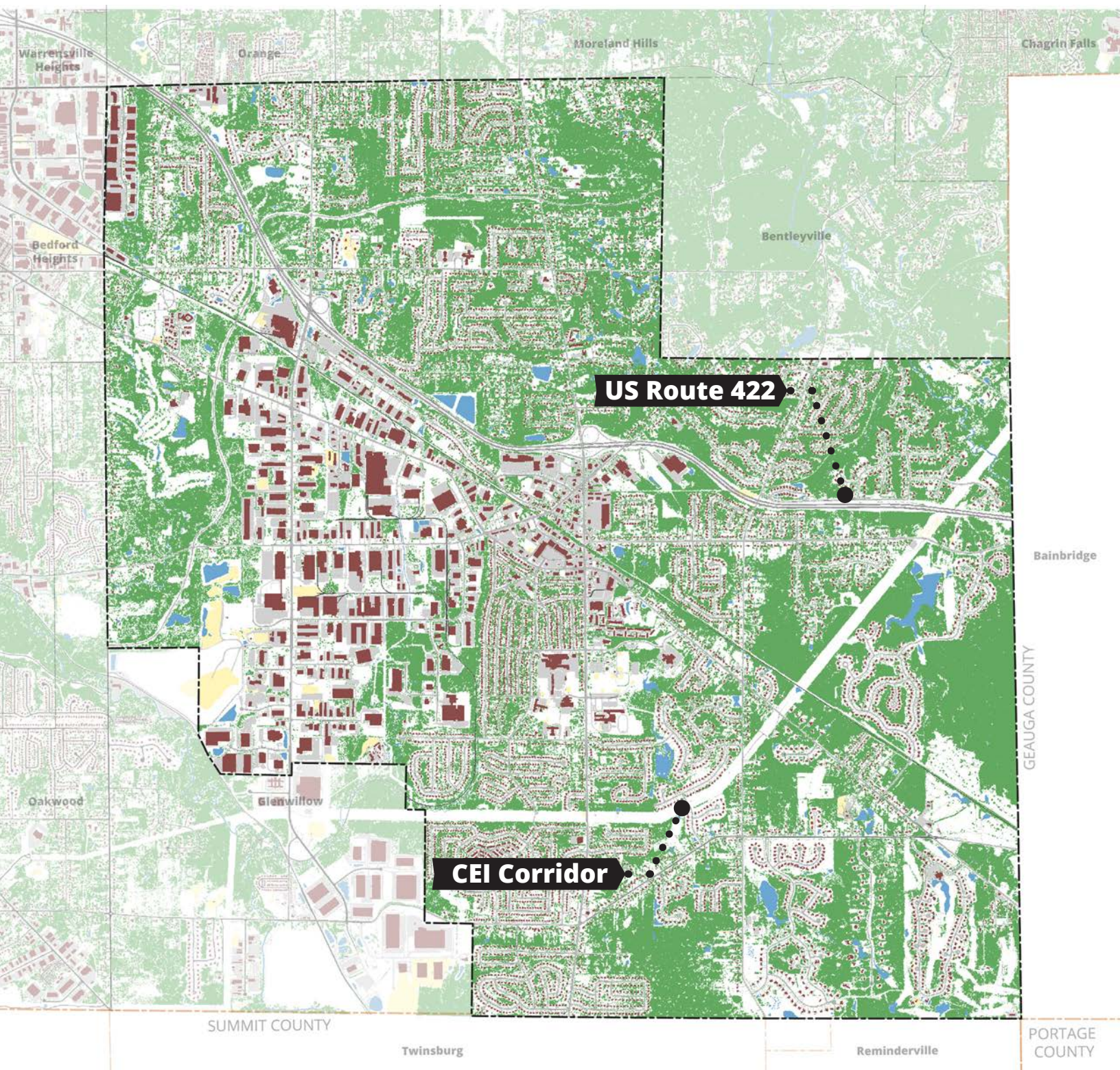
As more and more impervious surfaces are added, less water can be absorbed naturally and as a result there is an increase in surface runoff. This has the potential to overwhelm storm sewers, especially during heavy rain events, and can cause community-wide flooding. It is important to strike a balance between development and preserved greenspaces to help offset the need for efficient and environmentally friendly drainage solutions.

FIGURE 9: SURFACE IMPACT ON STORMWATER



Source: FSIRWG

MAP 9: LAND COVER 



Source: County Planning

05.1

Tree Canopy Cover

The City of Solon ranks 20th out of Cuyahoga County's 59 municipalities in terms of tree canopy coverage. From 2011 to 2017, Solon lost roughly 1% of its tree canopy, and reduced the total coverage from 41% coverage down to 40%. The majority of the City's most dense tree canopy coverage can be found in residential areas, Grantwood Golf Course, and the Cleveland Metroparks. The lowest concentrations of tree canopy coverage is located within the City's downtown area and industrialized areas just to the west of downtown Solon.

Less tree canopy coverage and more impervious surfaces (especially surface parking lots) can create a "heat island" effect. A heat island occurs in large, developed areas. On a hot, sunny day, the sun can heat dry, exposed impervious surfaces, such as roofs and pavement, to temperatures 50–90°F above air temperatures, while shaded or moist surfaces remain close to air temperatures. Dark colored buildings materials like brick, asphalt, and steel absorb and trap heat, which can compound the heat island effect. Many urbanized areas are exploring new techniques to combat the heat island effect by planting more trees, using lighter colored building finishes, and installing pervious surfaces to help naturally absorb and retain water. The City of Solon has about 38% of its land coverage that could be re-purposed for planting areas for additional trees as a means to help increase its canopy coverage and reduce the heat island effect in industrialized areas.

FIGURE 10: RESIDENTIAL AS % TREE CANOPY

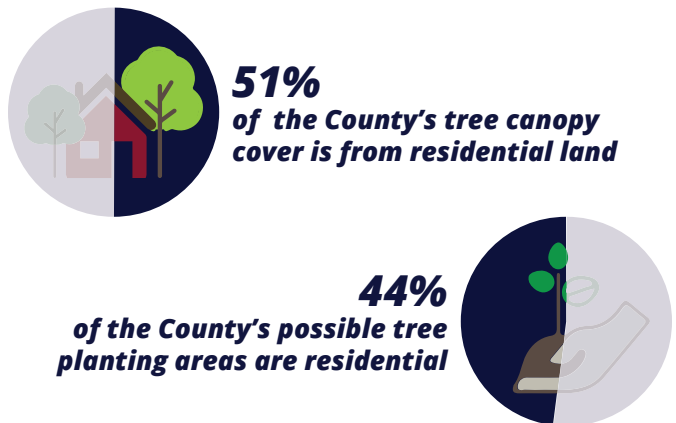
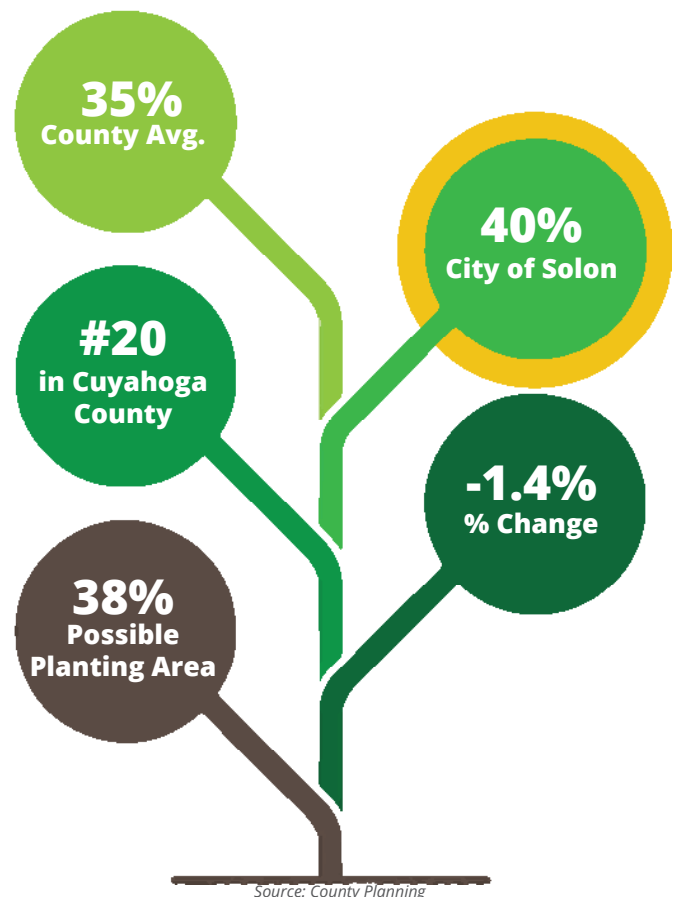
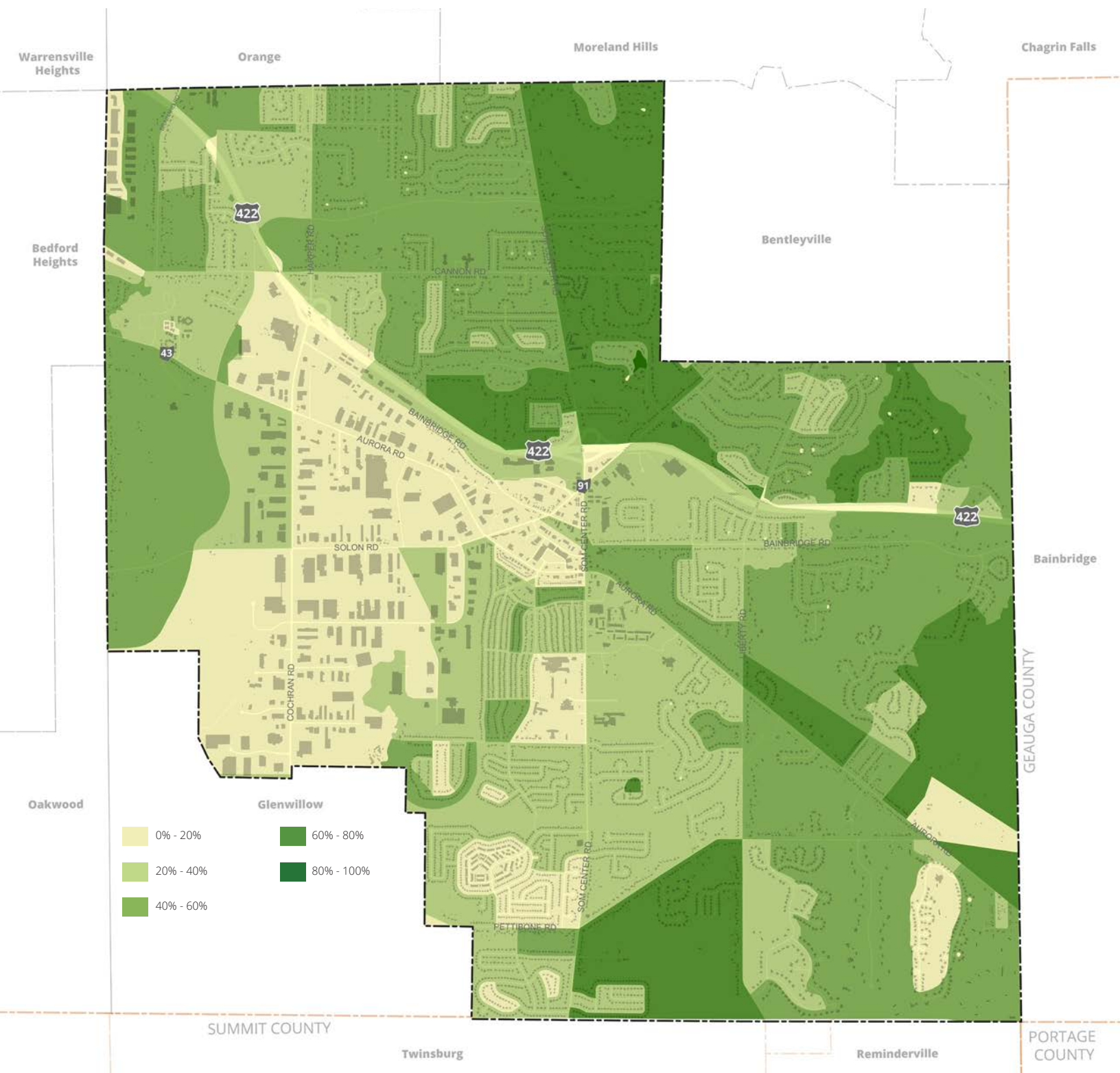


FIGURE 11: SOLON TREE CANOPY COVER DATA



MAP 10: TREE CANOPY COVER 



Source: County Planning

05.1

Streetscapes

While the City of Solon has 40% tree canopy coverage, the vast majority of the community's road rights-of-way typically have less than 20% coverage. The streets with the highest tree canopy coverage are located within newer, residential subdivisions, such as the southeastern portion of the community near the Grantwood Golf Course. Additionally, older, more established neighborhoods just to the north and south of the downtown area also have a higher concentration of trees within their rights-of-way as these trees have had decades to mature and grow.

FIGURE 12: ROW AS % LAND AREA

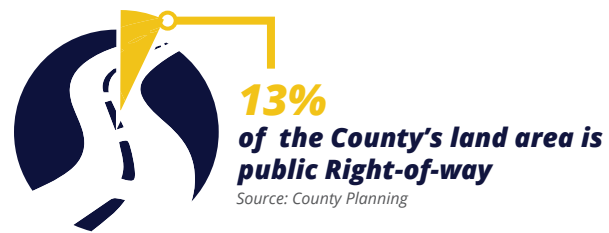
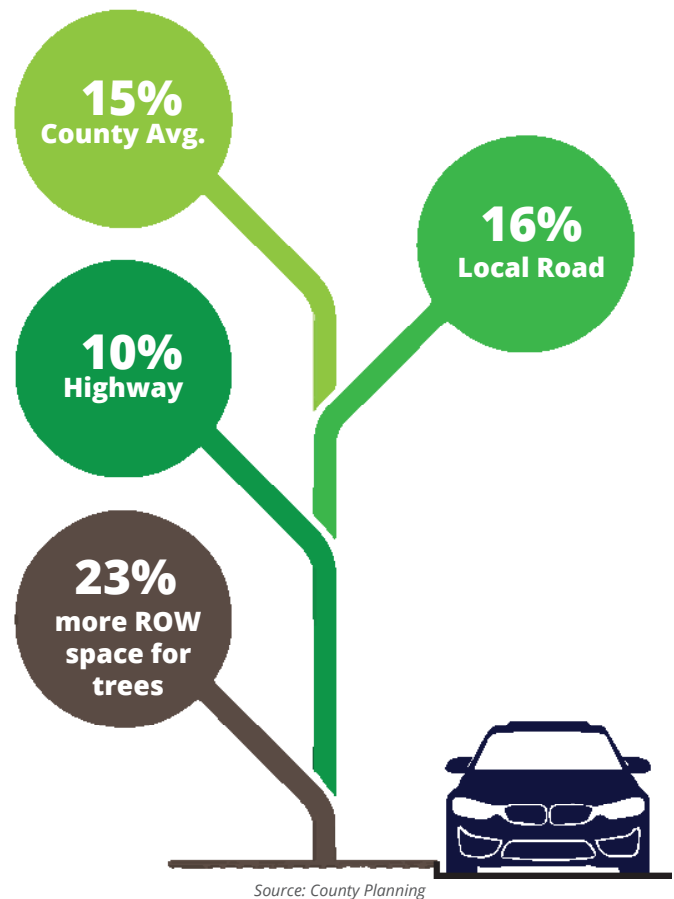


FIGURE 13: COUNTY ROW TREE CANOPY DATA



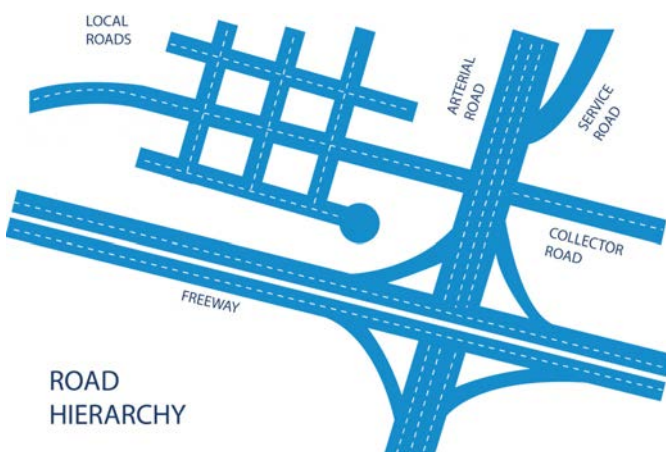
"Put street trees almost anywhere, there is no better use of public funds"
- Jeff Speck, Walkable City Rules

Roadway Network

The City of Solon has number of roadways types that move vehicles throughout the community. Given the use of cars and trucks to transport goods, link to services, and commute to jobs in Solon, access to highways can be an important metric for current and future residents, business, and users. Solon is well positioned in terms of highway access. The construction of US 422 combined with other highway projects with the I-271 corridor has given Solon more high-speed access to Cleveland and other locations north, south, east, and west. With two interchanges located within its borders, the City is only 30 minutes from various regional amenities including Downtown Cleveland and Hopkins International Airport.

The Northeast Ohio Areawide Coordinating Agency (NOACA) classifies streets throughout our local five-county region into seven Functional Classes from FC1 Interstate Highways to FC7 Local Roads. Functional Classes are used as a management tool in transportation planning. SOM Center Road and a portion of Aurora Road are Principal Arterial roadways and are considered larger and faster roadways on which to move more cars, and with a strict focus on mobility. Smaller, slower roadways focus on land access, such as shopping. Solon has numerous arterial and collector roadways, which need a careful balance between both mobility and land access.

FIGURE 14: TYPICAL ROAD HIERARCHY IN US



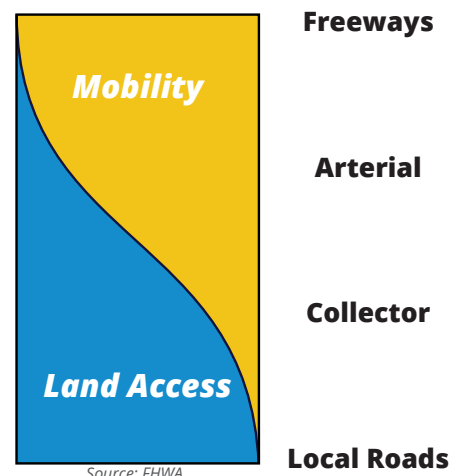
Freeway lane miles grew 28% from '93 to '17 in the Cleveland Metro
Source: Transportation for America

During this Period drivers travel delays increased 84%

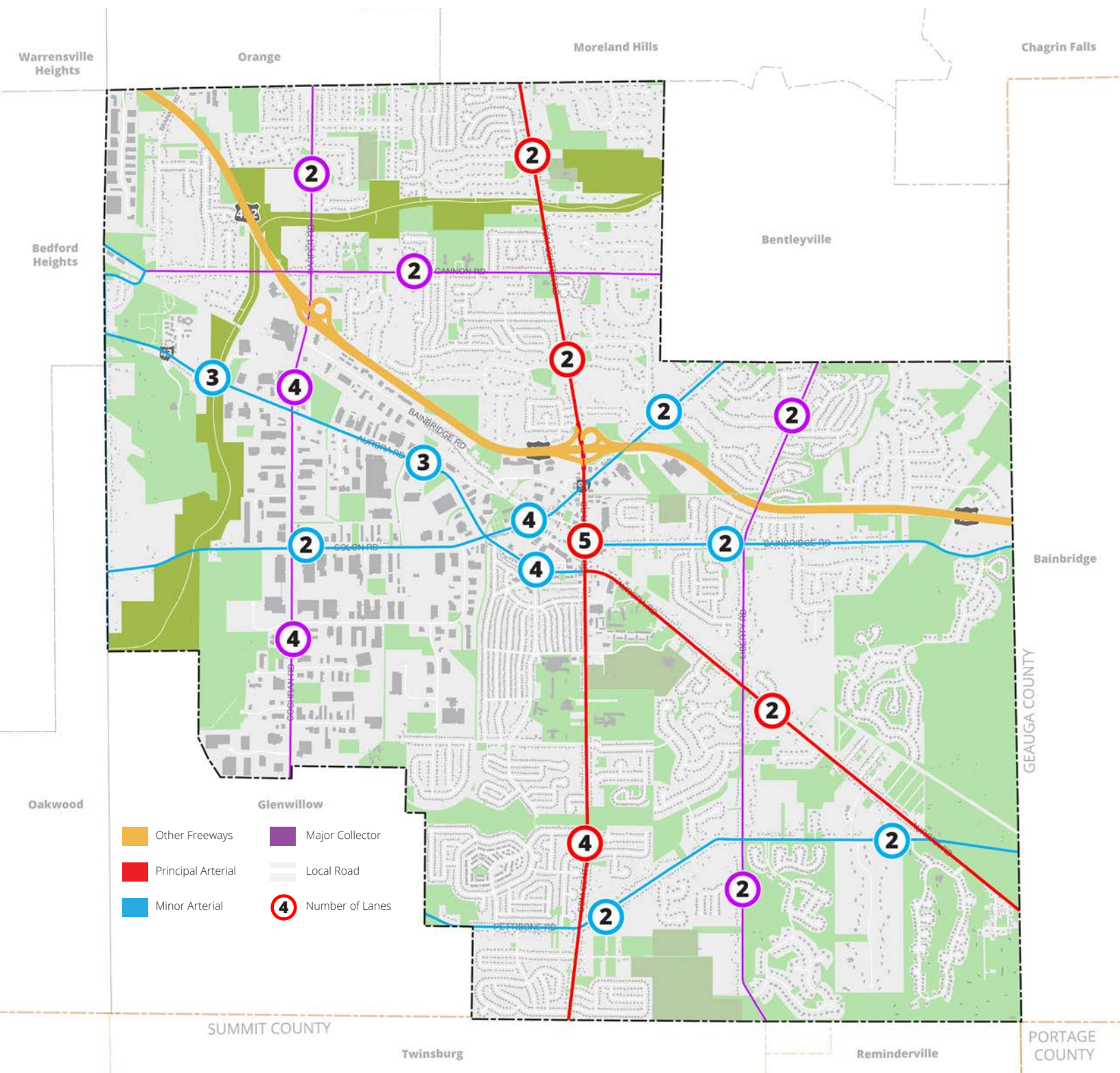


The areas population grew 0%

FIGURE 15: PROPORTION OF SERVICE



MAP 12: ROADWAY NETWORK 



Source: NOACA

05.2

Traffic Counts

The City of Solon has tremendous access within the region. Aurora Road, SOM Center Road, and US 422 all bisect the community and help move thousands of vehicles every day. With an Annual Average Daily Traffic (AADT) count of 55,000 vehicles, US 422 is the most heavily trafficked roadway in Solon. However, the majority of this traffic is west of the SOM Center Road interchange. East of SOM Center Road, traffic counts drop off to roughly 33,000 vehicles per day. Additionally, there are high daily traffic counts on Aurora Road leading to the SOM Center Road interchange, and on Harper and Cochran Roads leading to the US 422 interchange. Traffic counts and Annual Average Daily Traffic are important metrics because they can help determine if volumes on roadways are low enough to support implementation of a road diet.

**In Addition to Vehicles
Solon has Plenty of
Truck Traffic**



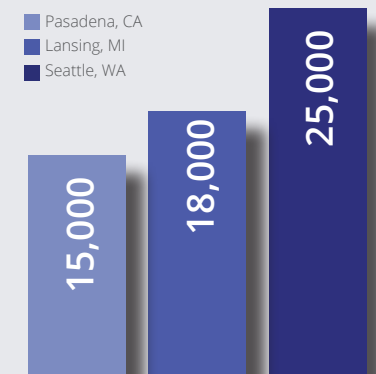
**State Route 43 is a
Federally Designated
Truck Route**

Source: ODOT

FIGURE 16: WHAT IS A ROAD DIET?

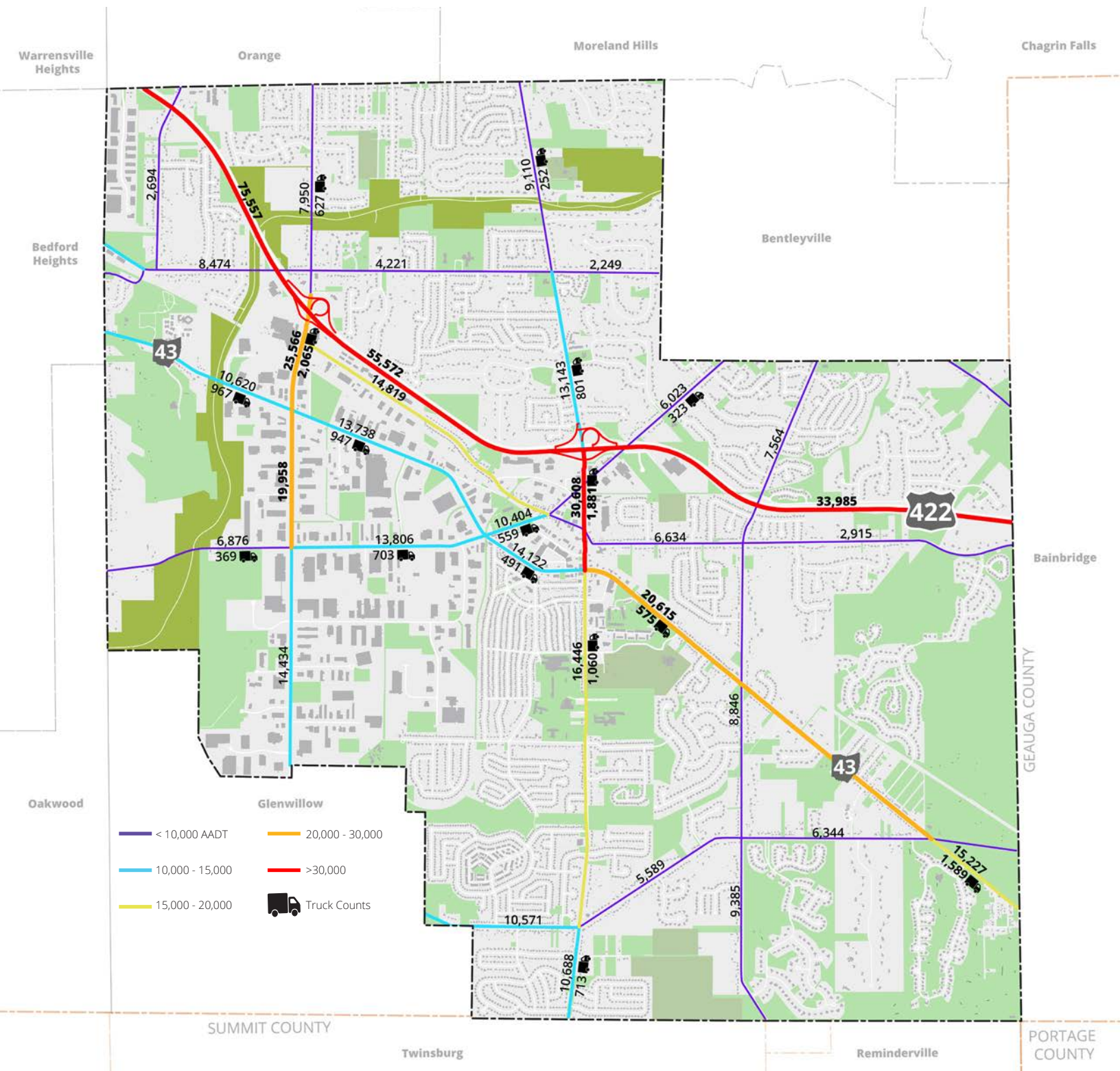


FIGURE 17: AADT LEVELS FOR ROAD DIETS



Road Diets are the reconfiguration of one or travel lanes to calm traffic and provide space for bicycle lanes, turn lanes, streetscapes, wider sidewalks, and other purposes. Road diets are pursued to make more efficient use of the roadway. Many streets have excess capacity as they were designed based on over-forecasted traffic volumes that were never realized due to incorrect estimation or unforeseen changes. Streets are also designed to accommodate peak intervals of traffic flow to relieve rush hour congestion but may fail to provide a safe and attractive environment during other portions of the day when traffic flow is less. The result is an expansive roadway environment that encourages high speeds and careless driving behavior and discourages other modes of transportation. A road diet can make a street more welcoming throughout the day for all users with minimum inconvenience during peak hours by making more efficient use of the excess capacity.

MAP 13: TRAFFIC COUNTS



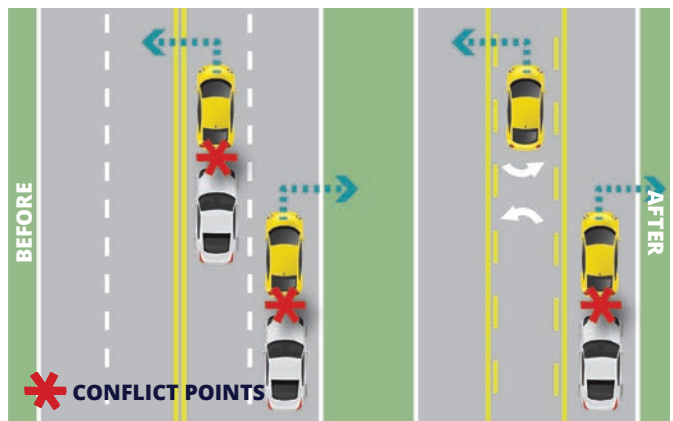
Source: ODOT

05.2

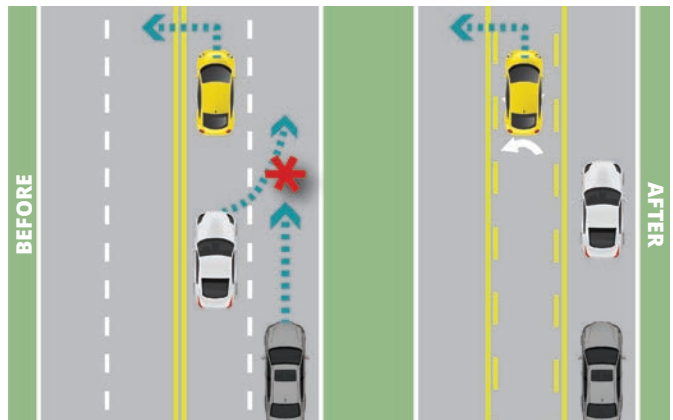
Crashes

Crashes are a key component of transportation and connectivity, fewer crashes and less traffic can make streets feel safer for drivers and pedestrians. From 2017 to 2019 Solon recorded 1,597 total automobile accidents, with two fatalities. Of those accidents only 10 involved pedestrians and one included a bicyclist, equaling only .7% of the total crashes in the city during this time. The most common crash type in Solon was Rear-End accounting for 50% of all crashes in the City. Some of these common crash types (rear-end, left-turn, and side-swipe) can be potentially reduced with roadway designs including road diets in some sections. Route 43 (Aurora Road) and Route 91 (SOM Center) saw the most crashes in the city over this period. In fact, 42% of all crashes in the city occurred on these two roads. On SOM, street design may be a significant factor since most crashes occurred within the 4-lane 25mph speed zone. On Aurora Road, crashes might be the result of increased speeds, with the majority of incidents transpiring in 2-lane and 35mph zones. The impacts of speed can be seen not only in the severity of crashes but also in the frequency, occurring at almost a 2:1 ratio in comparison in 25mph marked streets.

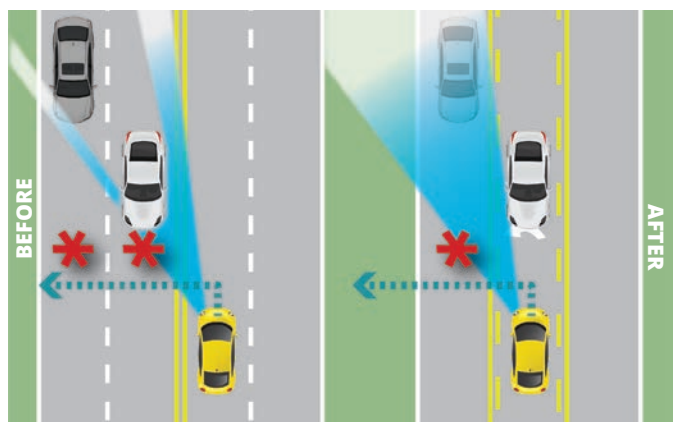
FIGURE 18: REDUCING CONFLICT WITH DESIGN



REAR END - #1 Crash Type (50%)



SIDE SWIPE - #2 Crash Type (12%)



LEFT TURN - #4 Crash Type (8%)

MAP 14: AUTOMOBILE CRASHES FROM 2017 - 2019



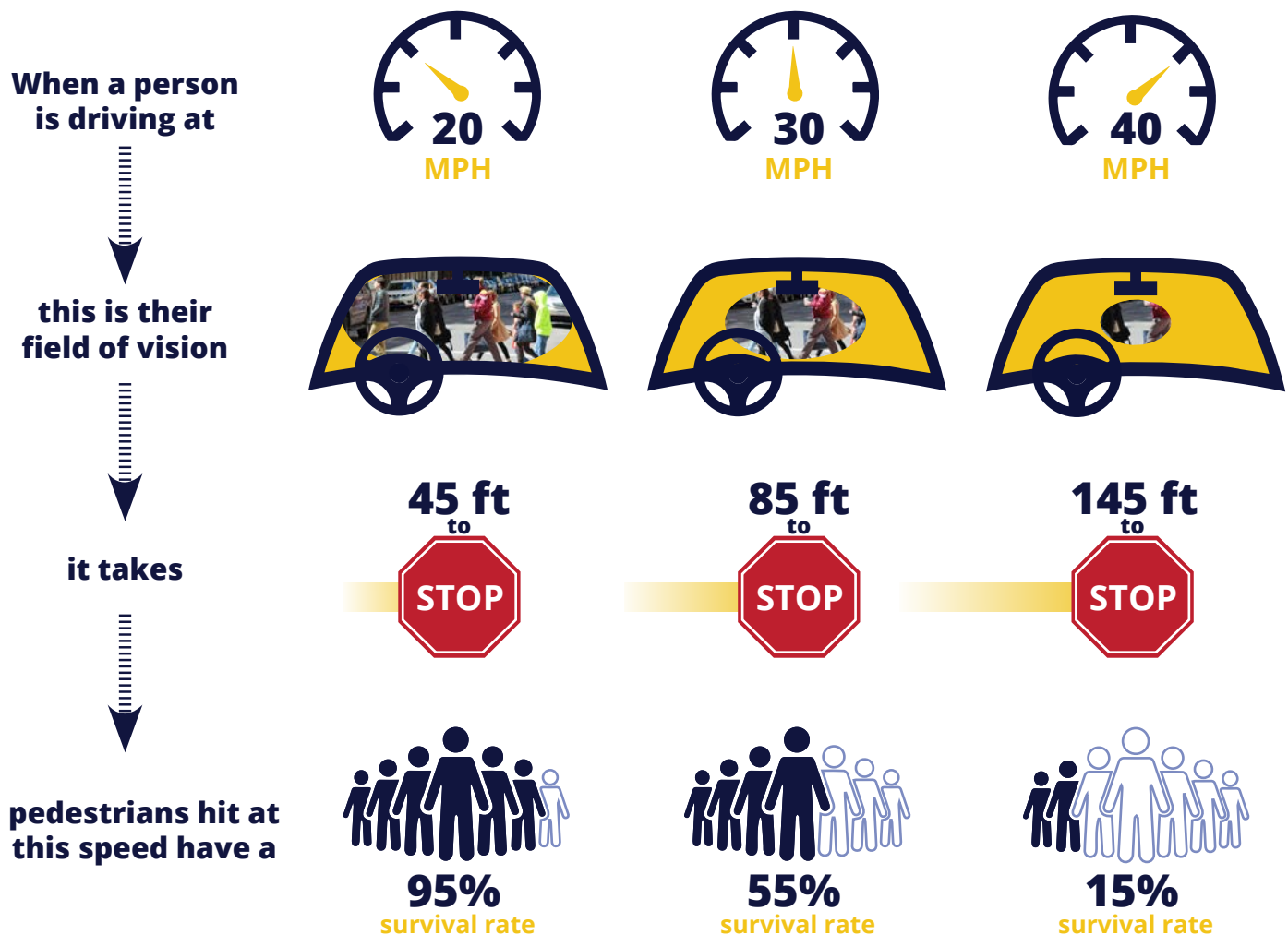
05.2

Speed

Solon is predominantly a community of neighborhoods; local streets have posted speed limits of 25 mph, while collector roadways are posted at 35 mph. School zones are concentrated just south of the downtown area, with the exception of Lewis Elementary School on Cannon Road. The Cleveland Metroparks has a large section of Hawthorn Parkway in the northwest portion of the City with a posted speed limit of 30 mph. The fastest roadway within the community is US 422, which can see speeds far exceeding the posted speed limit of 55 mph.

Speed is an important factor because the faster a vehicle is traveling, the smaller the driver's field of vision becomes. Additionally, the faster someone is driving, the less likely a pedestrian would survive a collision. Lower speed limits reduce the distance it takes to stop a vehicle and increases the overall field of vision for the driver.

FIGURE 19: WHY SPEED MATTERS



Source: County Planning; Virginia Safe Routes to Schools, Virginia DOT

MAP 15: SPEED 



05.2

Commute Patterns

The vast majority of Solon residents commute to work by driving alone and over 39% of those workers travel less than 10 miles to their place of employment. In 2017, there were nearly 10,000 residents that commuted out of the City for their jobs on a daily basis, while 1,729 resident both lived and worked in Solon. However, over 25,000 workers entered the community on a daily basis for their jobs. With a total population around 23,000 residents, Solon's daytime population more than doubles as workers enter the community. Additionally, the largest portion of Solon's workforce live in the City of Cleveland (8.8%), but the second largest place that workers live is the City of Solon itself--with 6.5% of the workforce living within the community. The majority of these workers that live in Solon are concentrated just to the southwest of the downtown and east of the industrialized area, which has one of the highest concentration of jobs in the City.



**87% of workers
in Solon commute to
work by driving alone**

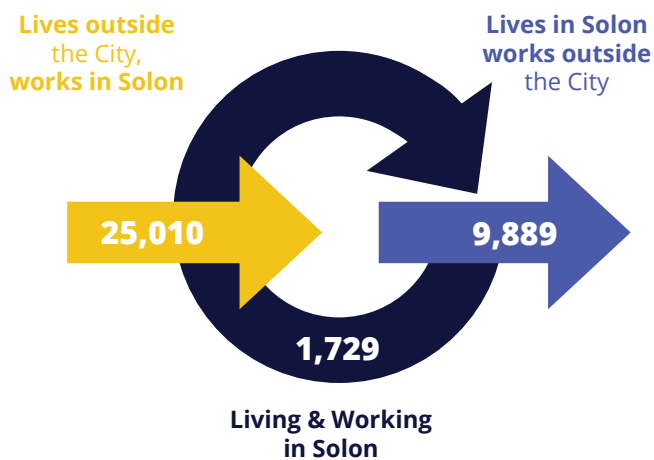
Source: US Census Bureau - ACS, 2018



**39% of workers (10,605)
in Solon commute
< 10 miles to work**

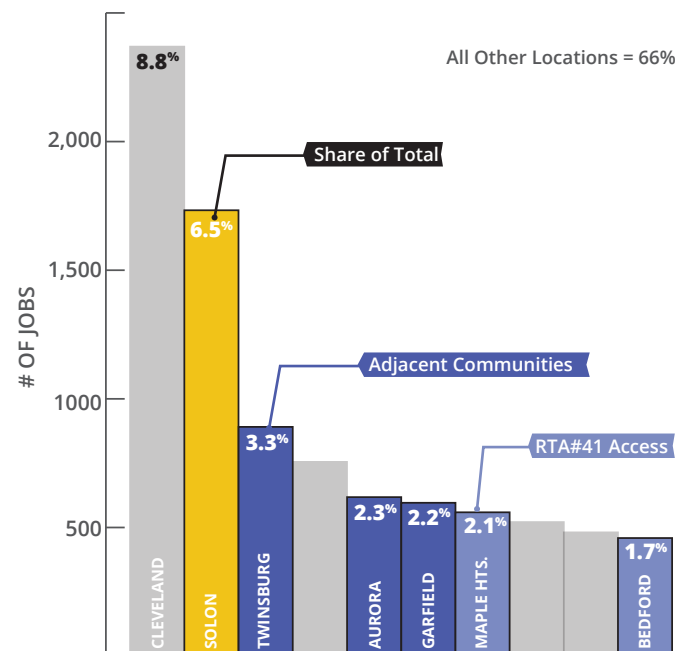
Source: US Census Bureau - On the Map, 2017

FIGURE 20: INFLOW VS. OUTFLOW PATTERNS



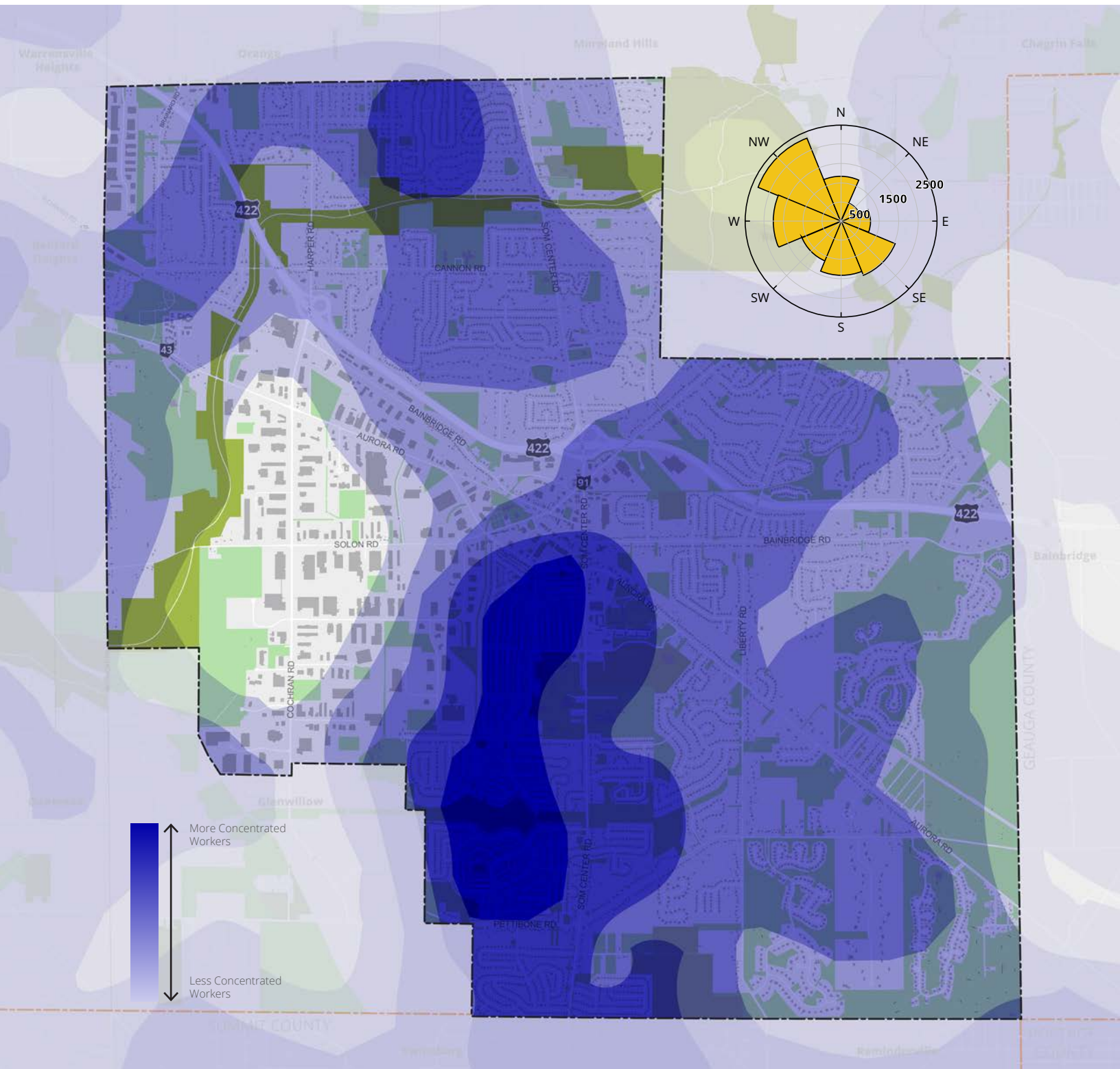
Source: US Census Bureau - On the Map, 2017

FIGURE 21: TOP PLACES WHERE WORKERS LIVE



Source: US Census Bureau - On the Map, 2017

MAP 16: HOME LOCATION & TRAVEL DIRECTION FOR WORKERS WHO TRAVEL <10 MILES 



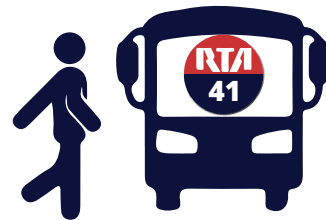
Source: US Census Bureau - On the Map, 2017

05.2

Transit

The City of Solon has access to one of the most well-used Greater Cleveland Regional Transit Authority (GCRTA) routes within the region. Bus Routes 41 and 41F connect the communities of East Cleveland, Shaker Heights, and Warrensville Heights, to Bedford, Solon, and Glenwillow. The 41 and 41F Routes provide direct access to dozens of other RTA Bus Routes as well as the Rapid through the Southgate Transit Center, Warrensville-Van Aken Rapid Station, and the Louis Stokes-Windermere Rapid Station in East Cleveland. In the City of Solon, these routes directly serve the community's industrial core. A number of the City's largest employers, such as Swagelok and Nestle, are located directly on this line with easy access for those employees who utilize public transit.

4th Ranked Route in RTA Network



1,164,613 riders in 2019

Source: RTA

MAP 17: RTA 41 & 41F



>80% of workers who use Public Transit have Access to 0 or 1 Vehicles

Source: US Census Bureau - ACS, 2018



Only 2 Companies take part in RTA's Commuter Advantage Program

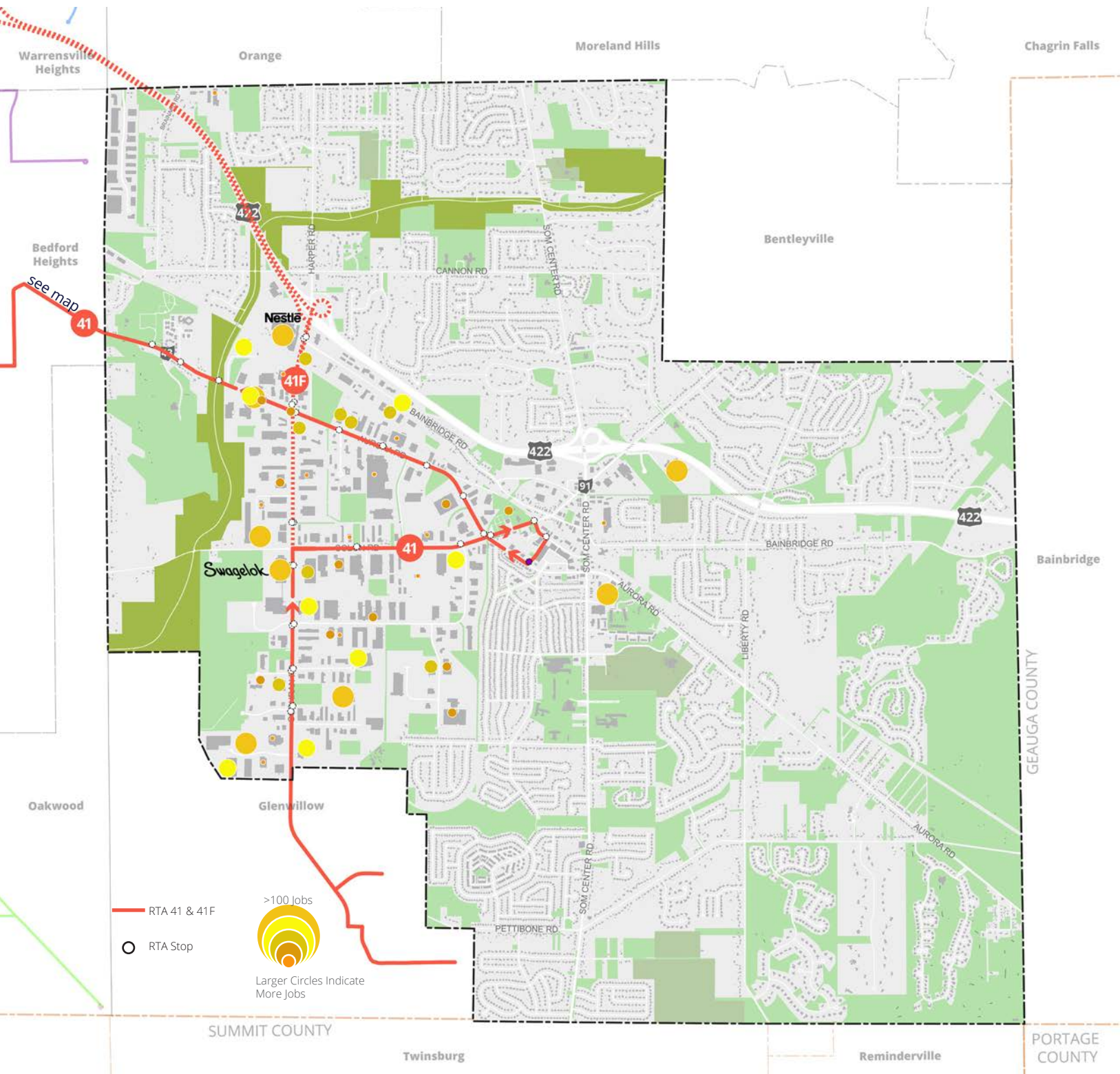
Source: RTA

<1%

Residents Commute via Public Transit

Source: US Census Bureau - ACS, 2018

MAP 18: TRANSIT ROUTES & ALL BUSINESSES WITH >100 EMPLOYEES



Source: RTA & City of Solon

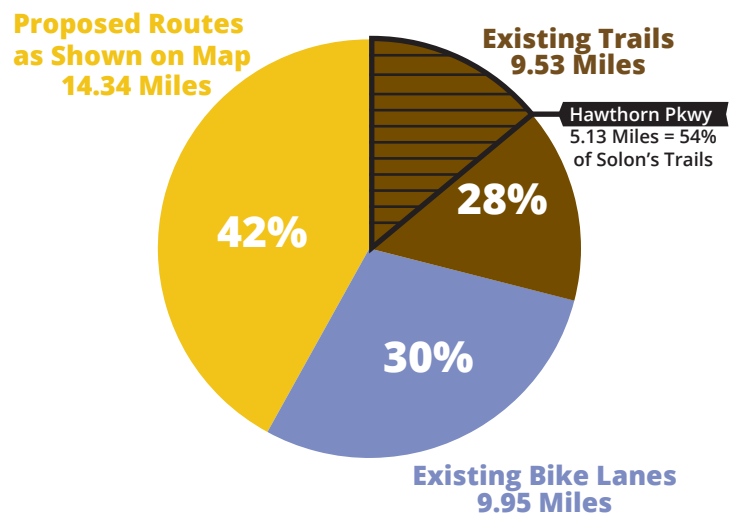
05.2

Bike & Trail Network

The City of Solon has immense potential for becoming a key nexus for bicycle travel. While 54% of existing trails within the community are located along Hawthorn Parkway within the Cleveland Metroparks, there are nearly 15 miles of proposed trails that would connect residents to an expansive regional network. Additionally, there is a Cuyahoga Greenways Critical Gap located just to the west of Solon, along the border of Oakwood and Glenwillow. This small trail section is roughly a quarter mile in length and would provide users access to hundreds of miles of trails within northeast Ohio and beyond.

In addition to all-purpose trails, the City of Solon also has nearly 10 miles of bike lanes within the community. These bike lanes can be found along Aurora, Bainbridge, Liberty, Brainard, and Harper Roads. These ultimately connect to both all-purpose trails and bicycle friendly roadways in immediately adjacent communities

FIGURE 22: MILES OF TRAILS & BIKE LANES



Source: County Planning / NOACA



MAP 19: BIKE & TRAIL NETWORK

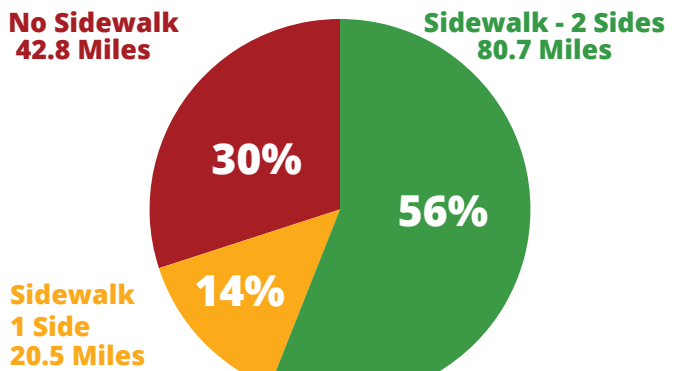


05.2

Sidewalks

Many of the residential subdivisions within the City of Solon have sidewalks available on both sides of the street. However, many of these neighborhoods are isolated from each other and sidewalks are limited outside of residential areas. Main thoroughfares, such as Aurora, Solon, Cannon, and SOM Center Roads are key connectors into and out of the community but have a largely incomplete sidewalk facilities. Small sections of these roadways do have sidewalks on both sides, but primarily do not have sidewalks on either side of the street or just one side. Additionally, Hawthorn Parkway is a key recreational asset within the community. However, the majority of roadways that cross its path do not have sidewalks to get users safely from their homes onto the trail.

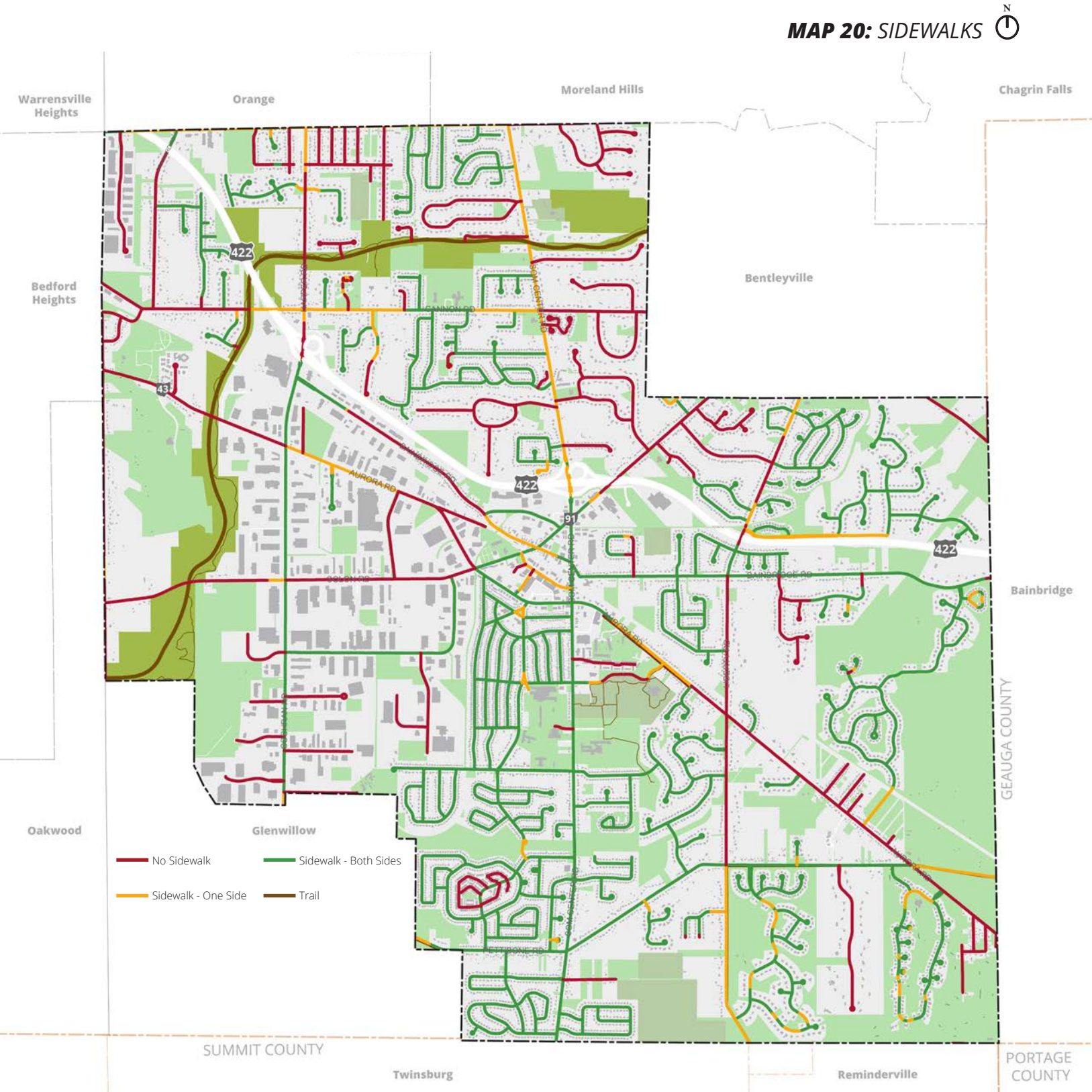
FIGURE 23: MILES OF SIDEWALKS IN SOLON



Source: County Planning



MAP 20: SIDEWALKS 

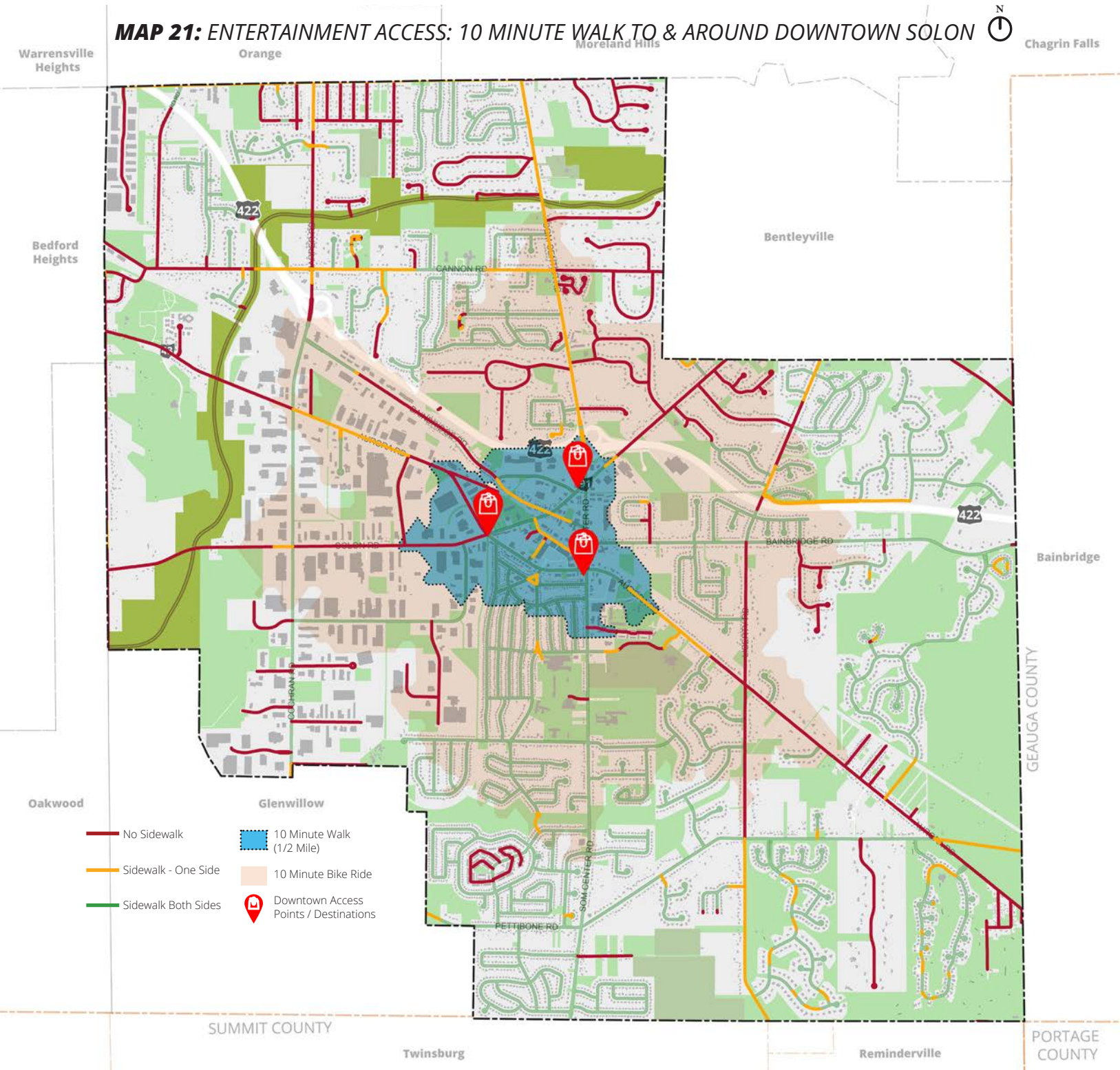


Source: County Planning

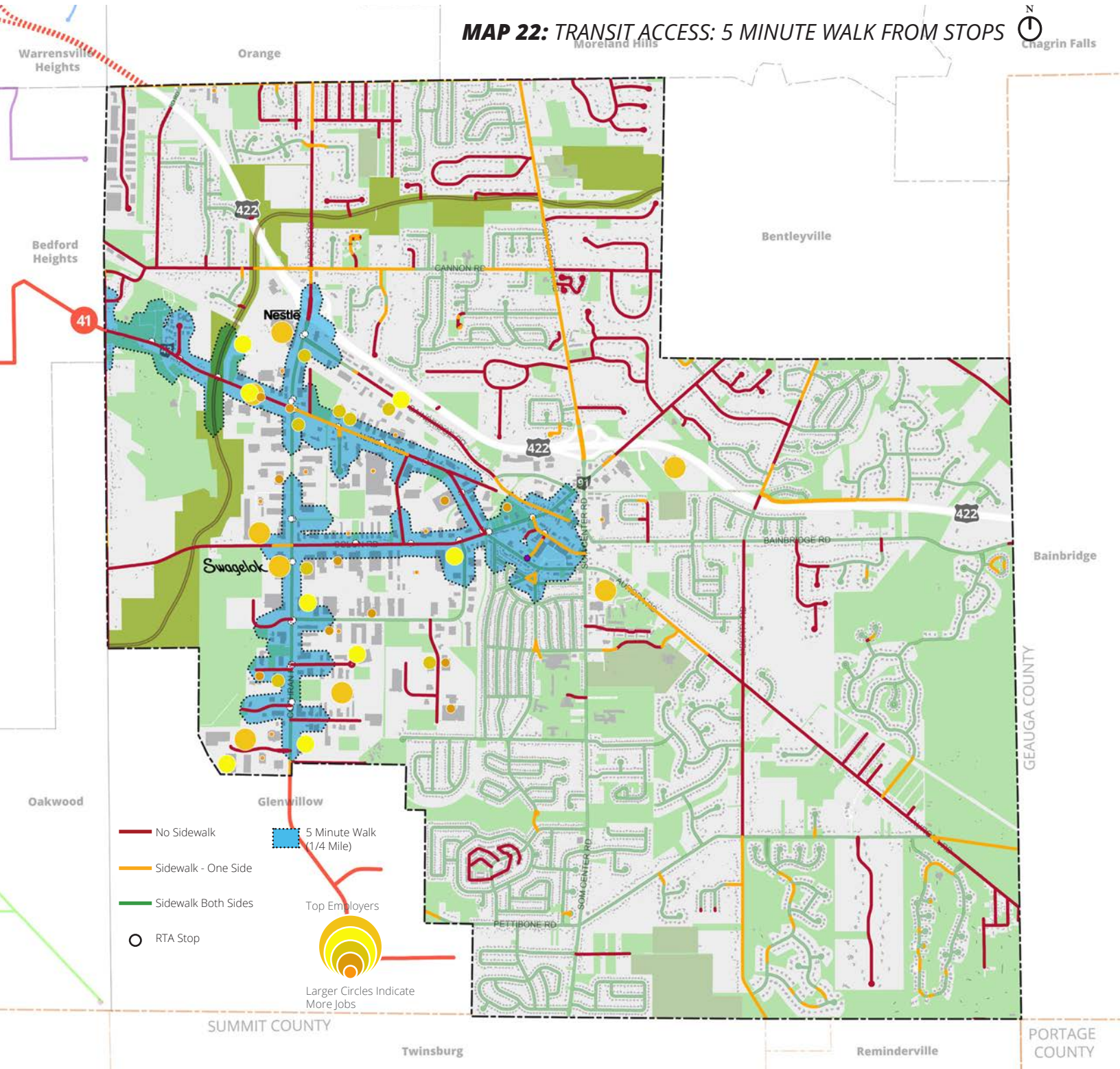
05.3

Connectivity

MAP 21: ENTERTAINMENT ACCESS: 10 MINUTE WALK TO & AROUND DOWNTOWN SOLON



MAP 22: TRANSIT ACCESS: 5 MINUTE WALK FROM STOPS



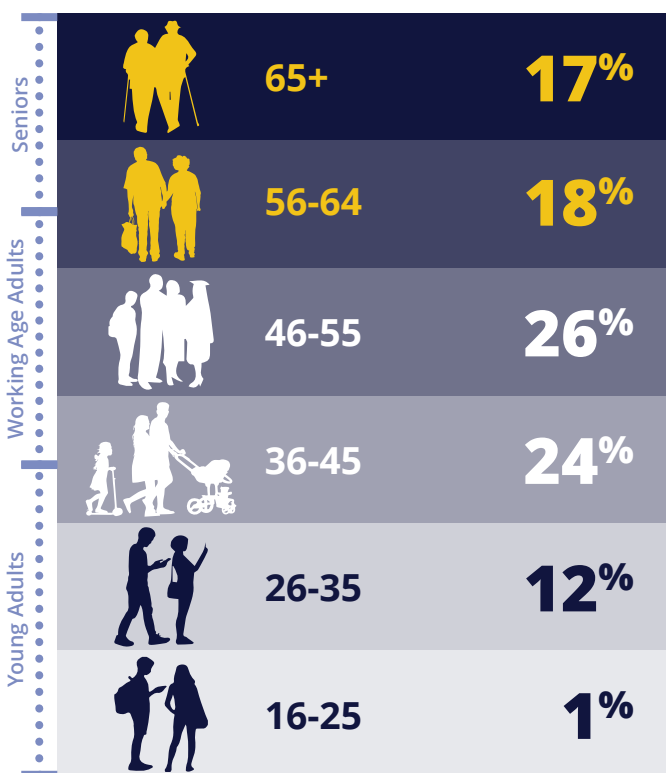
05.4

Survey #1 Results

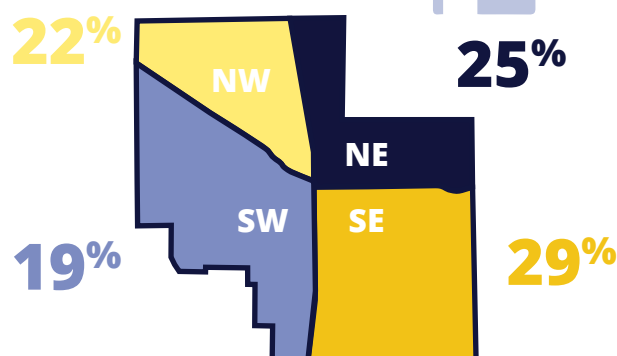
756 total number of survey respondents



How old are respondents?

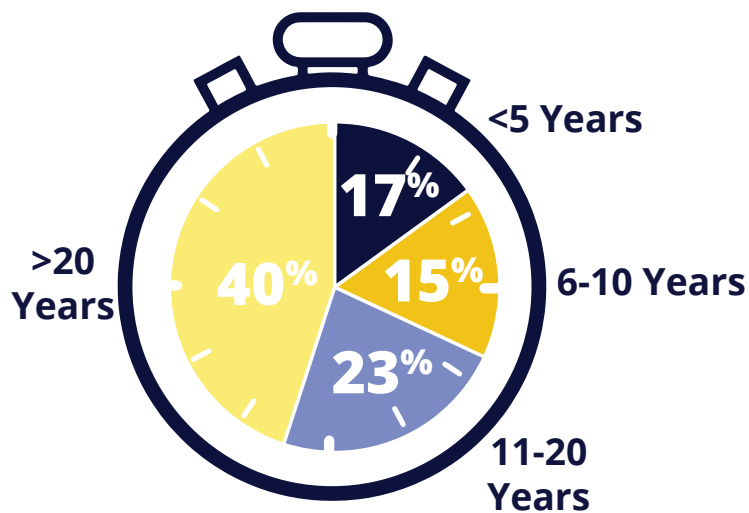


Where do they live?



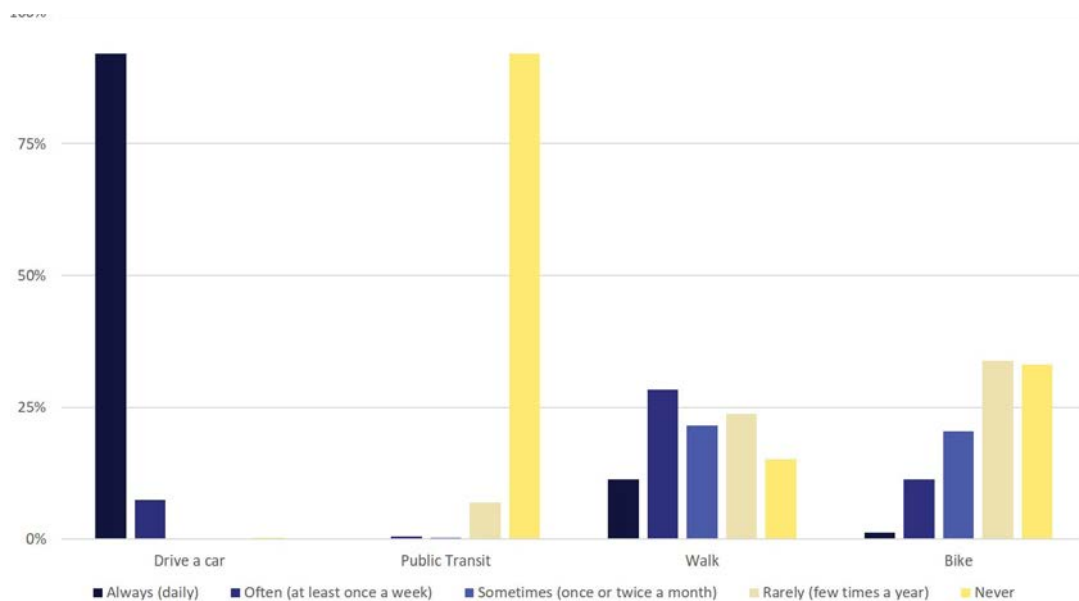
*5% said they do not live in Solon

How long have they lived there?

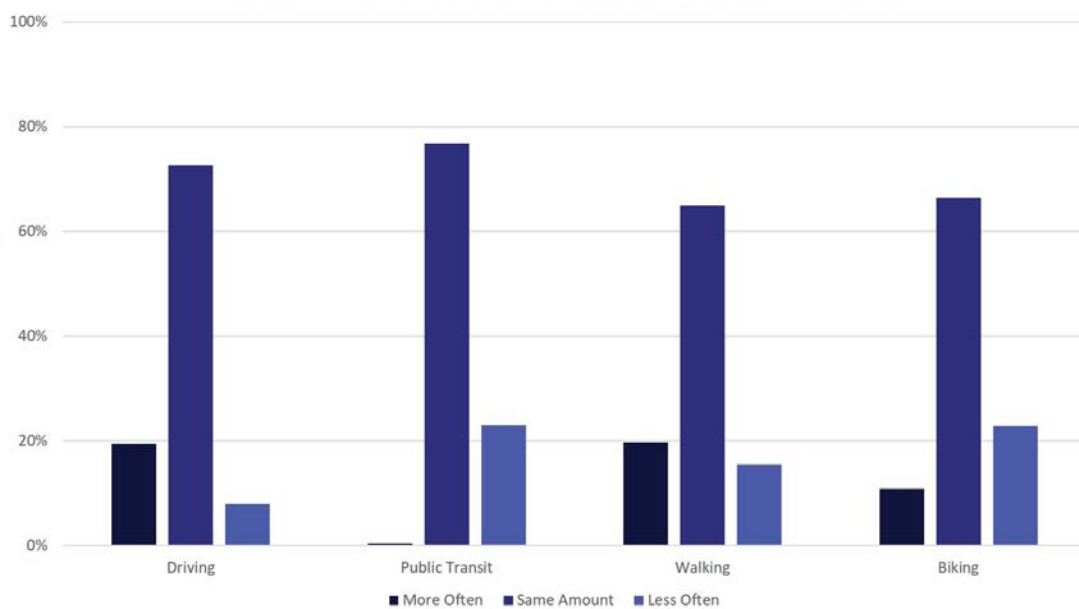


05.4

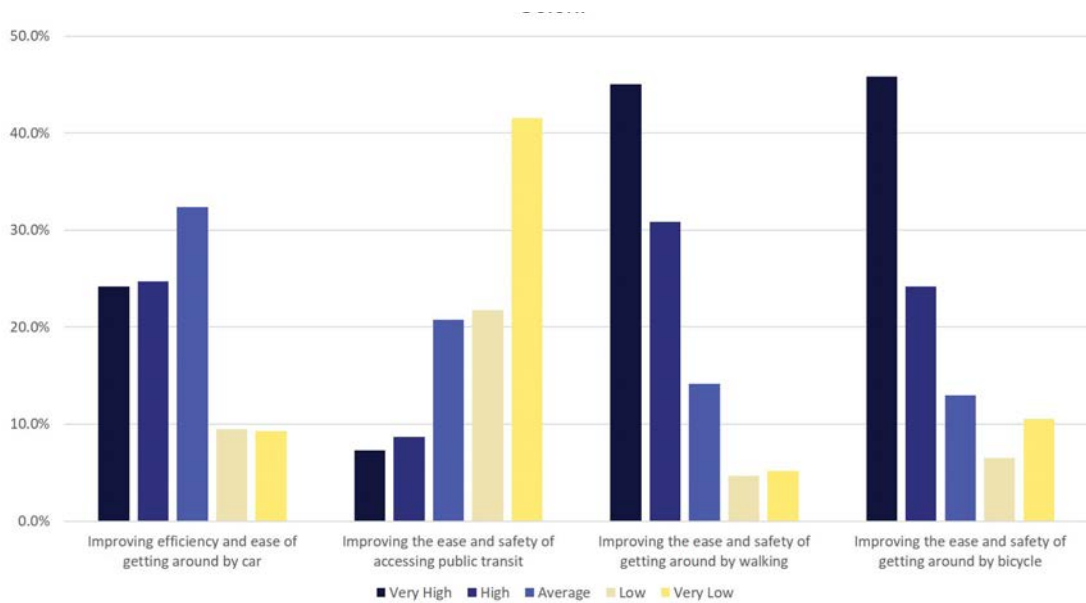
HOW OFTEN DO YOU CHOOSE THE FOLLOWING TRANSPORTATION OPTIONS IN SOLON?



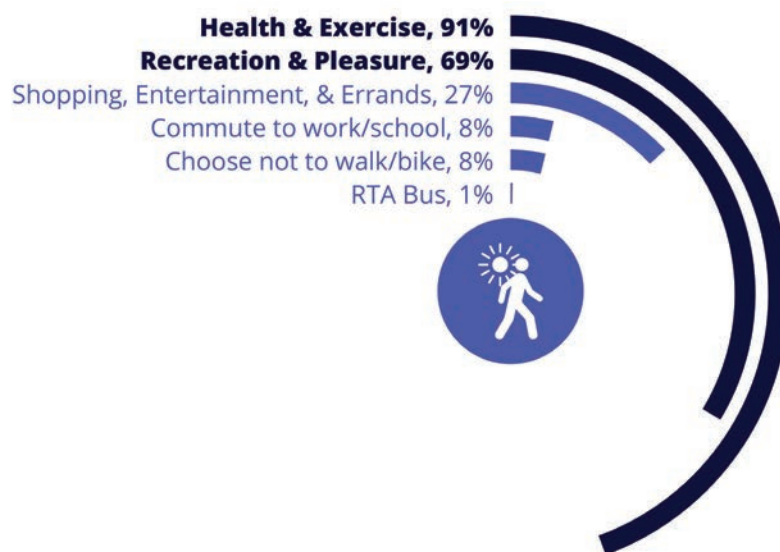
COMPARED TO PREVIOUS YEARS, WOULD YOU SAY THAT YOU ARE NOW?



PLEASE INDICATE YOUR PRIORITY FOR THE FOLLOWING IMPROVEMENTS IN THE CITY OF SOLON?



PRIMARY PURPOSES FOR WALKING & BIKING?



05.4

REASONS FOR ***NOT*** WALKING & BIKING?



65% Safety concerns



36% Weather conditions



31% Unpleasant experience or inadequate facilities



17% Don't need to/want to (prefer to drive)

REASONS FOR FEELING ***UNSAFE***?



65% Poor infrastructure



48% Cars too fast or roads too busy



40% Safety at intersections



21% Do not feel unsafe

WHAT TYPES OF ***CHANGES OR FACILITIES*** YOU WANT TO SEE IN SOLON?

75%



Multi-use paths and trails

63%



Add or improve sidewalks

57%



Add bike lanes or paths

57%



Pedestrian friendly developments

50%



Add more amenities

40%



Add or improve crosswalks

DO YOU **AGREE OR DISAGREE** WITH THE FOLLOWING STATEMENTS?

"I can easily access destinations without the use of a car"

70% disagree



"I feel safe letting my child(ren) walk or bike to school"

55% disagree



"It is important Solon focus on being a bike/pedestrian friendly community"

77% agree



"I support longer car trips if roads were safer and more pedestrian friendly"

64% agree



"I am satisfied with Solon's existing facilities for walking and bicycling as an alternative transportation choice"

74% disagree



If Solon added sidewalks, trails, and bike lanes I (or my family) would walk & bike more in the community.

70% agree



IF NEW FACILITIES WERE ADDED **HOW FAR/LONG** WOULD YOU BE WILLING TO WALK OR BIKE?

A few blocks - 3%

1/2 mile or less - 4%

1/2 mile to 1 mile - 14%

1 mile to 2 miles - 29%

2 miles or more - 41%



5% wouldn't walk/bike - 4% might go even farther

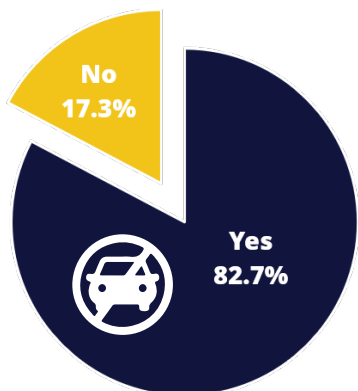
05.4

Survey #2 & Online Map Results

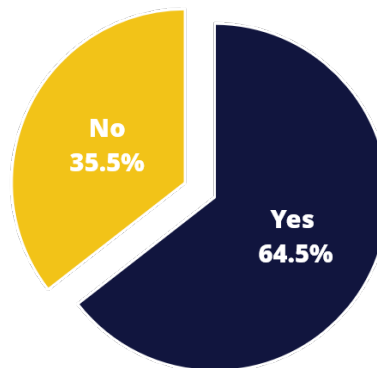
225 total number of
survey respondents



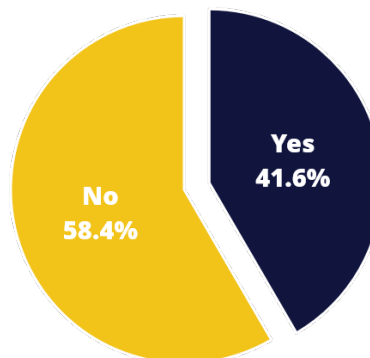
**"If you had limited access to an car
would significantly impact your
quality of life in Solon?"**



**"Do you have access to a facility
directly from your home/office?"**



**"Do the facilities available provide
you with access to destinations?"**



USE **ONE WORD** YOU WOULD LIKE TO SEE USED TO DESCRIBE WALKING AND BIKING IN THE **FUTURE?**

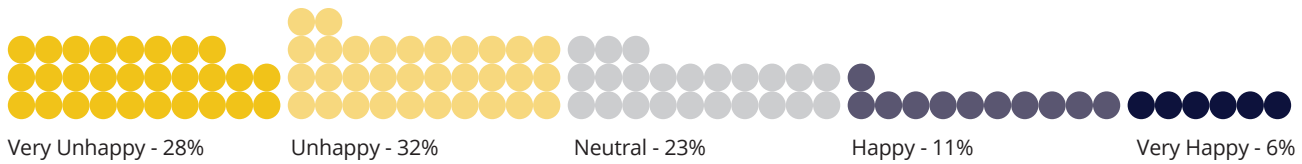


05.4

HAPPY WITH THE EXISTING FACILITIES AVAILABLE THROUGHOUT SOLON?

60% Unhappy

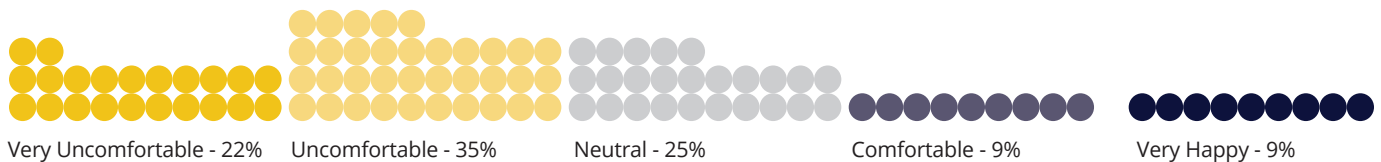
17% Happy



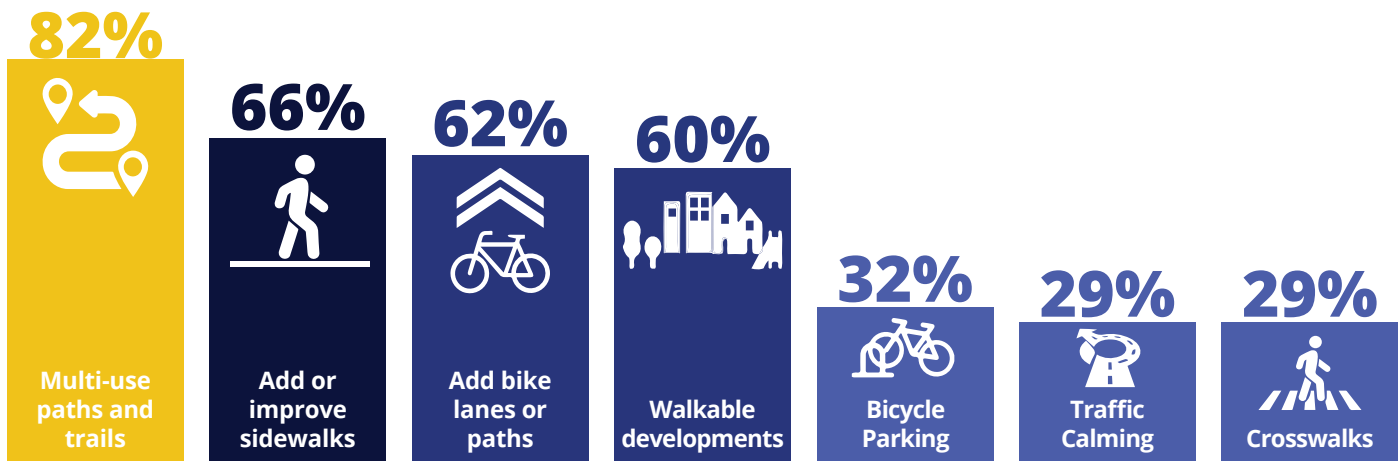
COMFORTABLE USING THE EXISTING FACILITIES AVAILABLE TO REACH DESTINATIONS?

57% Uncomfortable

18% Comfortable

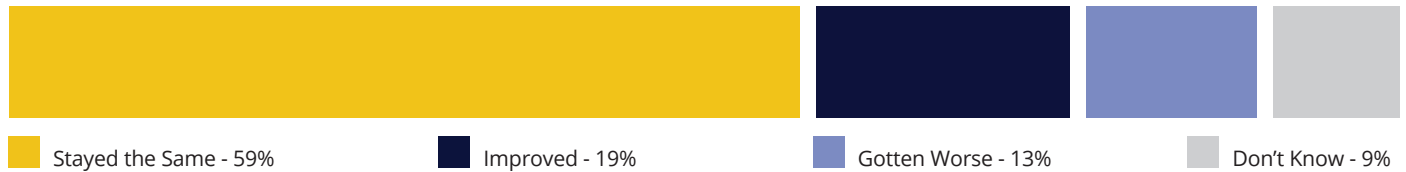


WHAT TYPE OF IMPROVEMENTS DO YOU THINK THIS PLAN SHOULD IMPLEMENT?



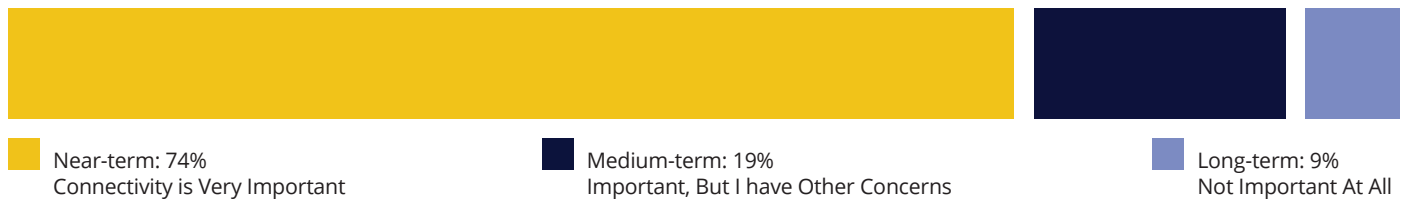
IN THE PAST 5-10 YEARS WALKING AND BIKING INFRASTRUCTURE IN SOLON HAS?

59% Stayed the Same

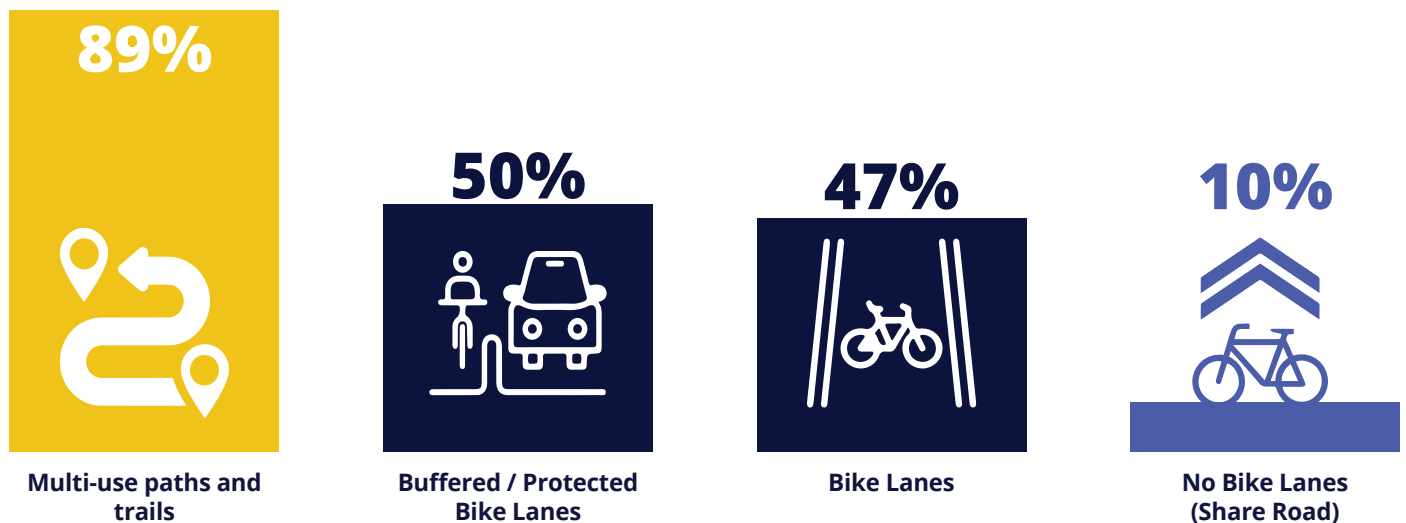


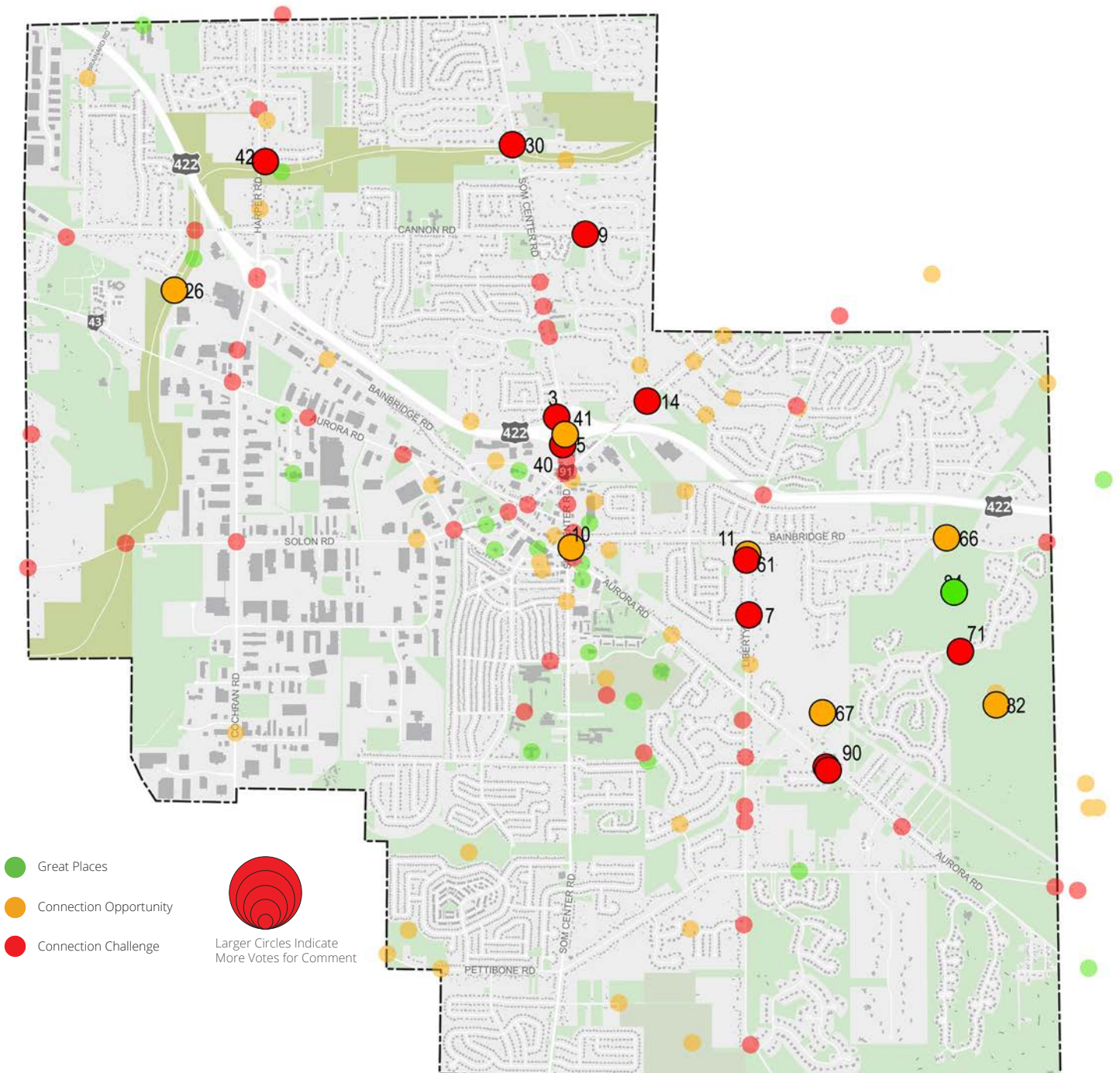
HOW QUICKLY SHOULD SOLON BEGIN WORK ON RECOMMENDED CONNECTIVITY IMPROVEMENTS?

74% Connectivity is Very Important



WHICH TYPE OF FACILITY WOULD YOU BE COMFORTABLE USING?



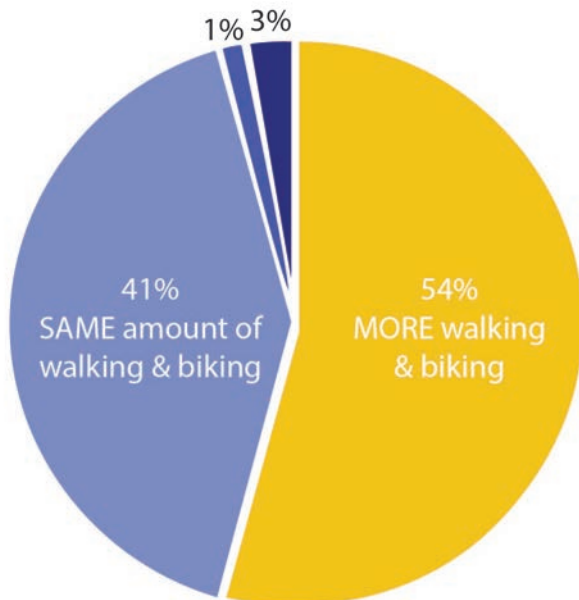


Survey #3 & Online Map Results

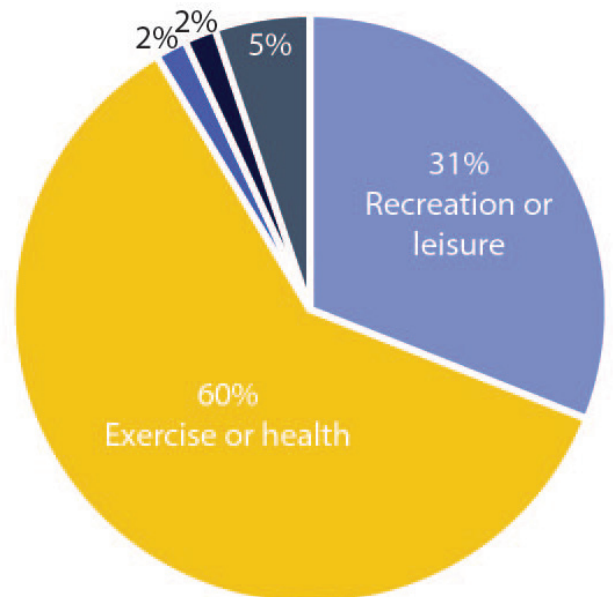
220 total number of
survey respondents



“How has COVID-19 impacted your walking and/or biking habits?”



“What type of trip do you normally take walking or biking?”



05.4

HOW IMPORTANT IS THE DEVELOPMENT OF A COMPLETE STREETS POLICY?

55% Street Safety is Important for all Users



HOW IMPORTANT IS IT FOR SOLON TO FILL GAPS IN THE EXISTING SIDEWALK NETWORK?

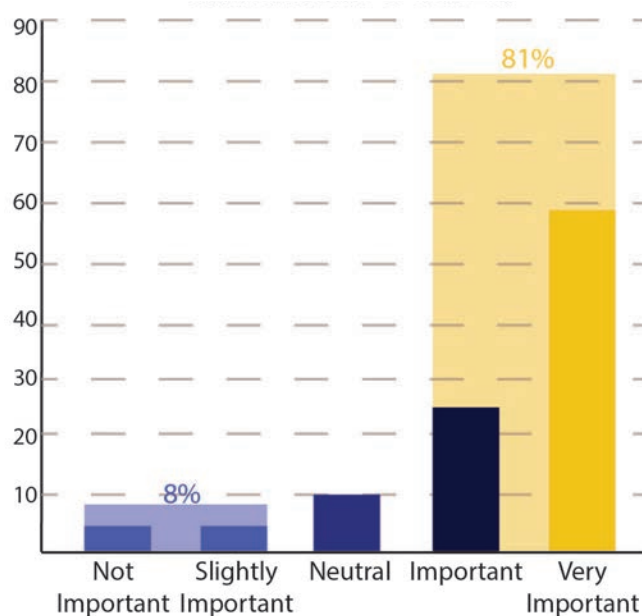
49 % Sidewalks Need Improvement



HOW IMPORTANT IS IT FOR SOLON TO IMPLEMENT A SAFE ROUTES TO SCHOOL PROGRAM?

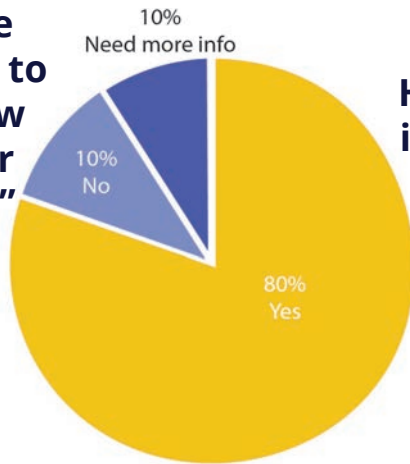
81% Safe Routes to School is Important

SafeRoutes

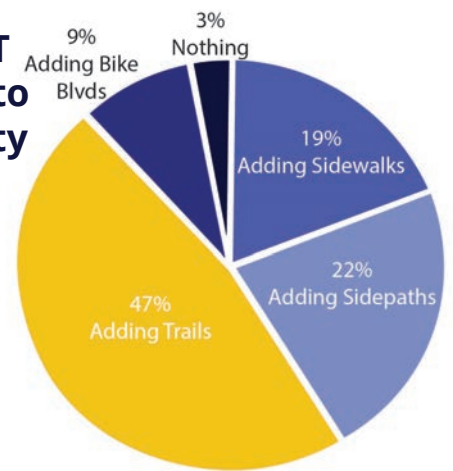


CONNECTIVITY IN SOLON

“Would you like increased access to existing and new trails from your neighborhood?”

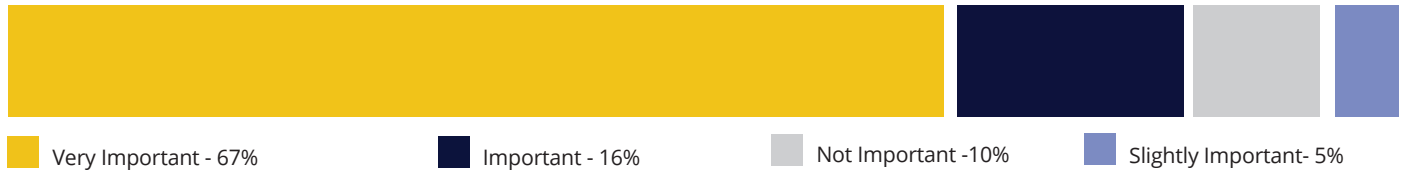


“Which facility would be the MOST HELPFUL approach to improve connectivity in Solon?”

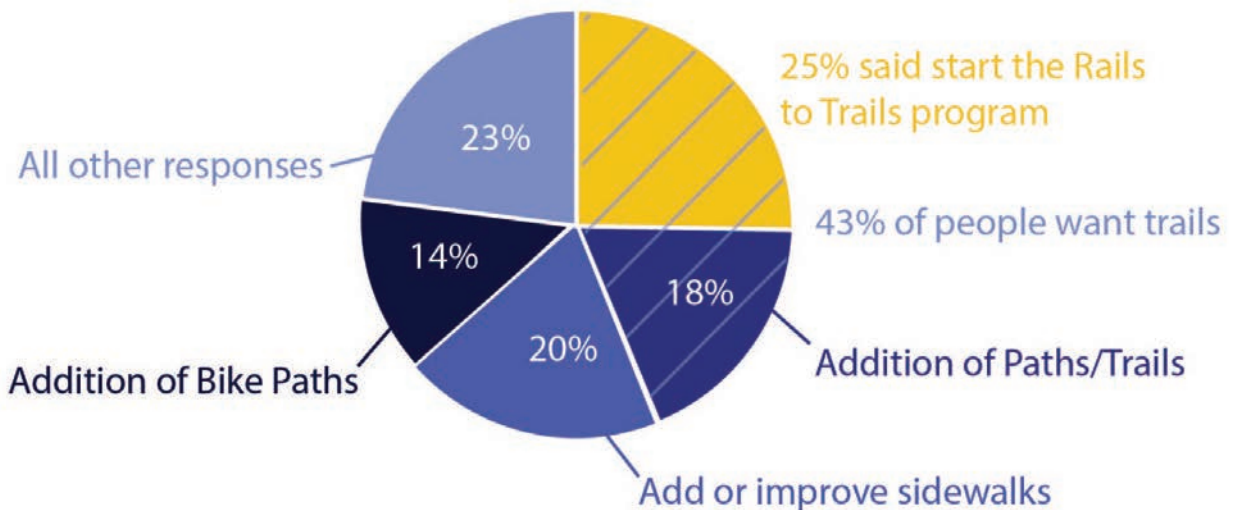


HOW IMPORTANT IS THE ADDITION OF SECONDARY LINKAGES AND NEW MULTI-USE TRAILS?

67% Trails are Very Important



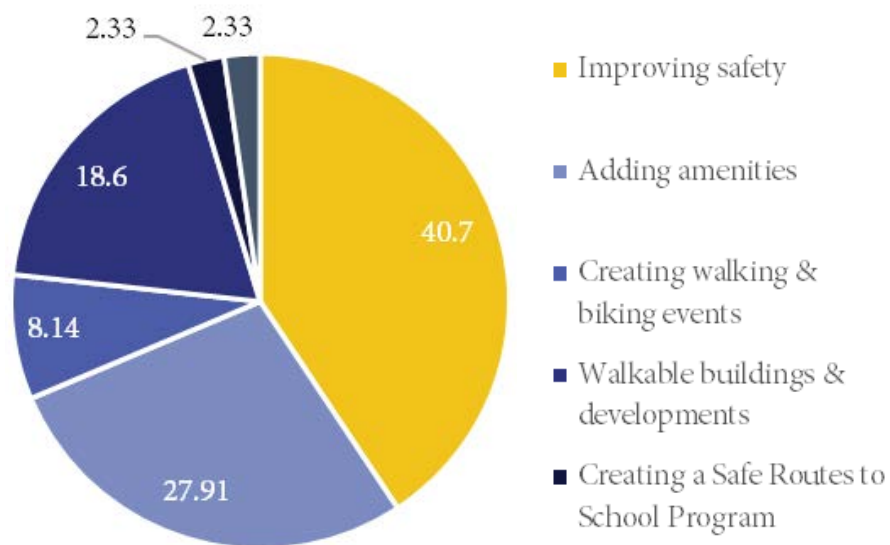
PICK ONE POSSIBLE WALKING OR BIKING PROJECT TO BE IMPLEMENTED NOW WOULD IT BE?



05.4

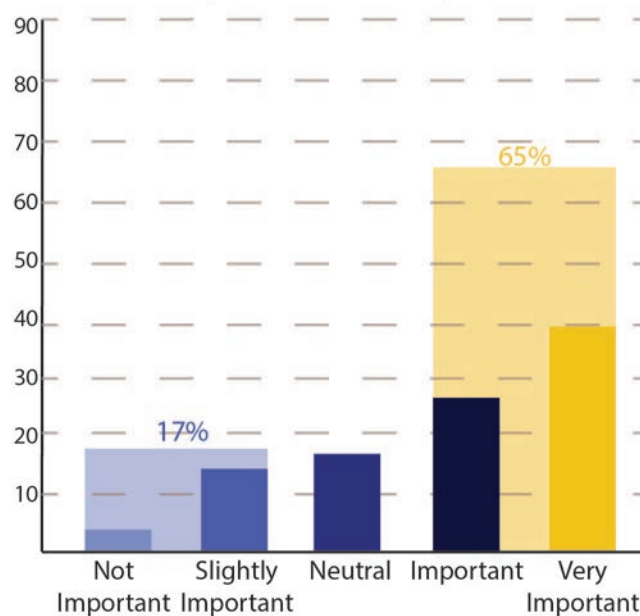
WHICH RECOMMENDATION WOULD BE THE MOST HELPFUL APPROACH TO IMPROVE CONNECTIVITY?

40% Think Safety is Important



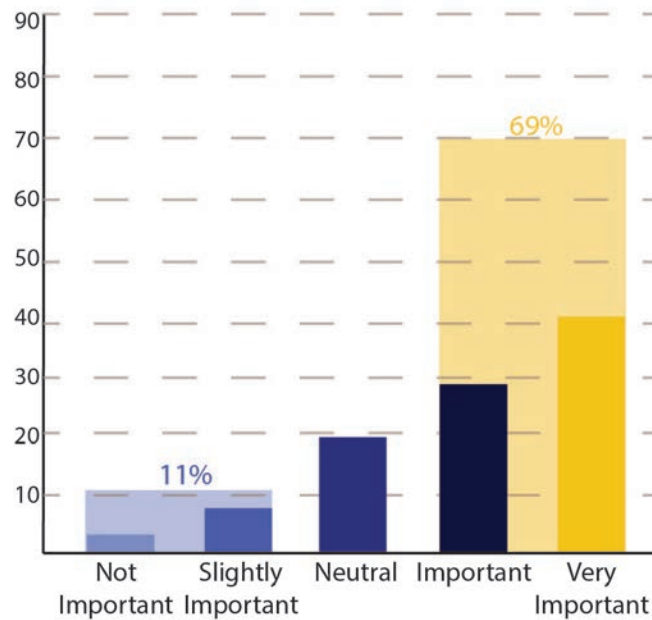
HOW IMPORTANT IS IT TO REDUCE SPEED LIMITS ON STREETS TO INCREASE SAFETY AND LIVABILITY?

Traffic Calming Measures are Divided



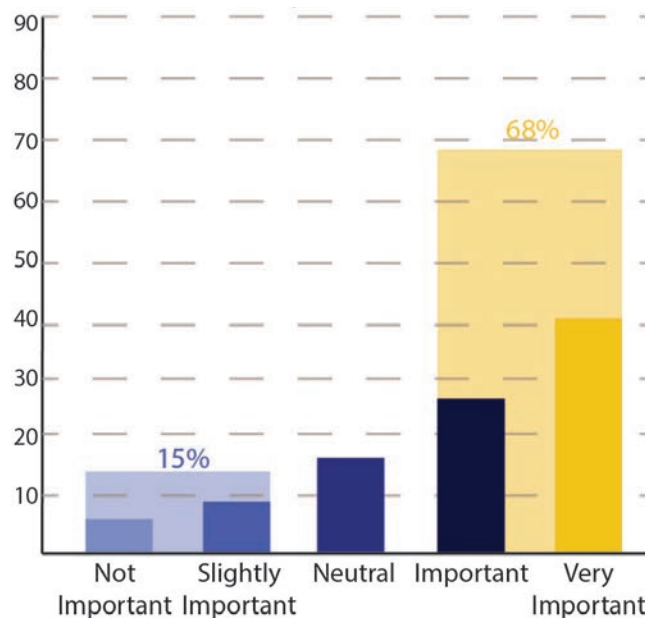
HOW IMPORTANT IS IT FOR SOLON TO INSTALL BIKE BOULEVARDS ON ROADWAYS?

69% Bike Boulevards are Important



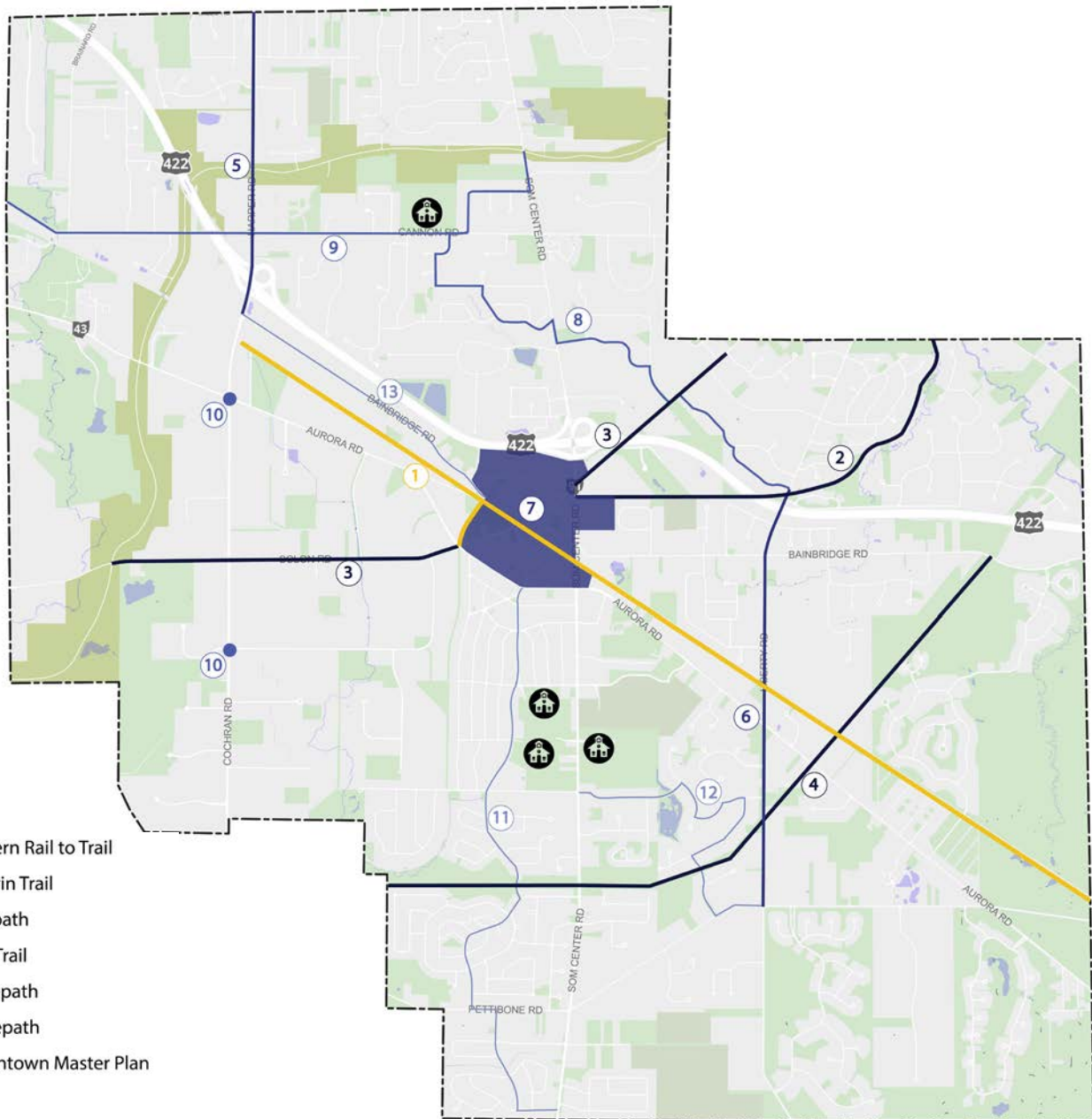
HOW IMPORTANT DO YOU THINK IT IS FOR SOLON TO CREATE A BIKE/PEDESTRIAN ADVISORY GROUP?

68% Bike/Pedestrian Advocacy is Important



05.4

MAP 24: CITIZEN COMMENTS MAP



- 1 Norfolk Southern Rail to Trail
- 2 Solon to Chagrin Trail
- 3 Solon Rd Sidepath
- 4 CEI Powerline Trail
- 5 Harper Rd Sidepath
- 6 Liberty Rd Sidepath
- 7 Walkable Downtown Master Plan
- 8 Bike Blvd B
- 9 Cannon Rd Sidepath
- 10 New Bus Shelters
- 11 Bike Blvd A
- 12 Bike Blvd C
- 13 Bainbridge Rd Sidepath



County Planning

FOR OUR COMMUNITY
FOR OUR REGION
FOR OUR FUTURE

