



July 2016

# 2016 | BIKE PLAN



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Bicycling is an important component of the Greater Akron transportation system with the potential to have a significant impact on the future economic, health and sustainability of the region. Creating a safe and connected bicycle network encourages people to drive less, helping to reduce congestion, parking, air quality impacts and other costs associated with driving. Bicycling is a low-cost alternative to driving which can improve access and mobility, especially for low-income persons and students, support a healthy community and promote economic development.

The Akron Metropolitan Area Transportation Study, AMATS, is the regional planning agency that plans for and funds transportation projects in Summit and Portage counties and Chippewa Township in Wayne County. AMATS produces the long-range transportation plan which recommends projects for funding. Priorities recommended in the 2016 Bike Plan will be considered for inclusion in AMATS 2040 Regional Transportation Plan (RTP). The 2040 RTP sets policy and project priorities for transportation funding in Summit and Portage counties and a portion of Wayne County. Projects specifically recommended in the 2040 RTP will receive additional points in the funding program selection. AMATS funds approximately one million dollars in bicycle and pedestrian infrastructure each year.

The 2012 Bike Plan was a significant step towards creating a regional bicycle network. The 2012 Bike Plan was the first AMATS plan to tackle how analyze and prioritize on-road bike facilities. Since then AMATS has continued to expand data collection and analysis, interactive community outreach and discussions with local leaders and elected officials to better understand and prioritize the region's bicycle needs.

The 2016 AMATS Bike Plan will continue to work toward the vision of creating a safe, connected regional bicycle network in the greater Akron area. The report will examine the existing infrastructure and regional needs to establish priorities for shared-use paths and on-road facilities. Making the Greater Akron area more bicycle friendly will connect people and places, promote a healthy lifestyle and stimulate positive economic impacts.

## PURPOSE

Since the 1950's, automobiles have been prioritized from moving cars as fast as possible to creating ample parking at the expense of bicyclists, pedestrians and public transit. While the area has continued to slowly increase bicycle infrastructure, amenities and programs, it remains critical that communities, elected officials and government agencies intentionally work to become more bicycle friendly through planning and funding. Creating a bike friendly region that is safe and encouraging for cyclists of all ages and abilities will not happen without being intentional about what and where the regional wants to be.

If AMATS intention is to increase the number of bicyclists throughout greater Akron, the planning, policies and funding guidelines must follow. The purpose of the 2016 AMATS Bike Plan is to create a framework to increase bicycle safety, connectivity and friendliness to guide AMATS and local communities. It focused on who is bicycling and how to encourage more people to ride, where there are infrastructure gaps and how to prioritize them and how to create a bike friendly region.



**GOALS**  
SAFETY  
CONNECTIVITY  
FRIENDLY



# EXISTING CONDITIONS

The regional bike network continues to grow at a slow, but steady pace. Over 108 miles of shared-use paths throughout greater Akron, including the Ohio and Erie Towpath Trail, provide a strong framework for the regional bicycle network. On-road facilities, such as bike lanes, are beginning to catch up helping to fill in the gaps and connect people to places.

Since 2000, over 28 miles of shared-used paths have been developed. The Ohio and Erie Towpath Trail makes up 41 miles north to south through Summit County. The Summit Metro Parks Bike and Hike Trail and Portage Hike and Bike are other regional shared-use paths. There are also 34.6 miles of bike lanes in Greater Akron; up from 24 miles in 2012.

The expansion of the Freedom Trail through Tallmadge and Akron is part of the growing number of bicycle facilities helping to promote alternative transportation. The Freedom Trail, which is nearing completion, will connect Downtown Akron to Downtown Kent via the Portage Bike and Hike Trail. Connecting shared-use paths such as the Freedom Trail to destinations like downtowns is a great way to encourage biking for commuting and recreation. These paths provide great opportunities to promote bicycling to all types of cyclists from 8 to 80.

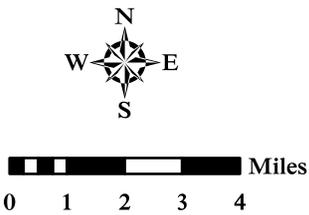
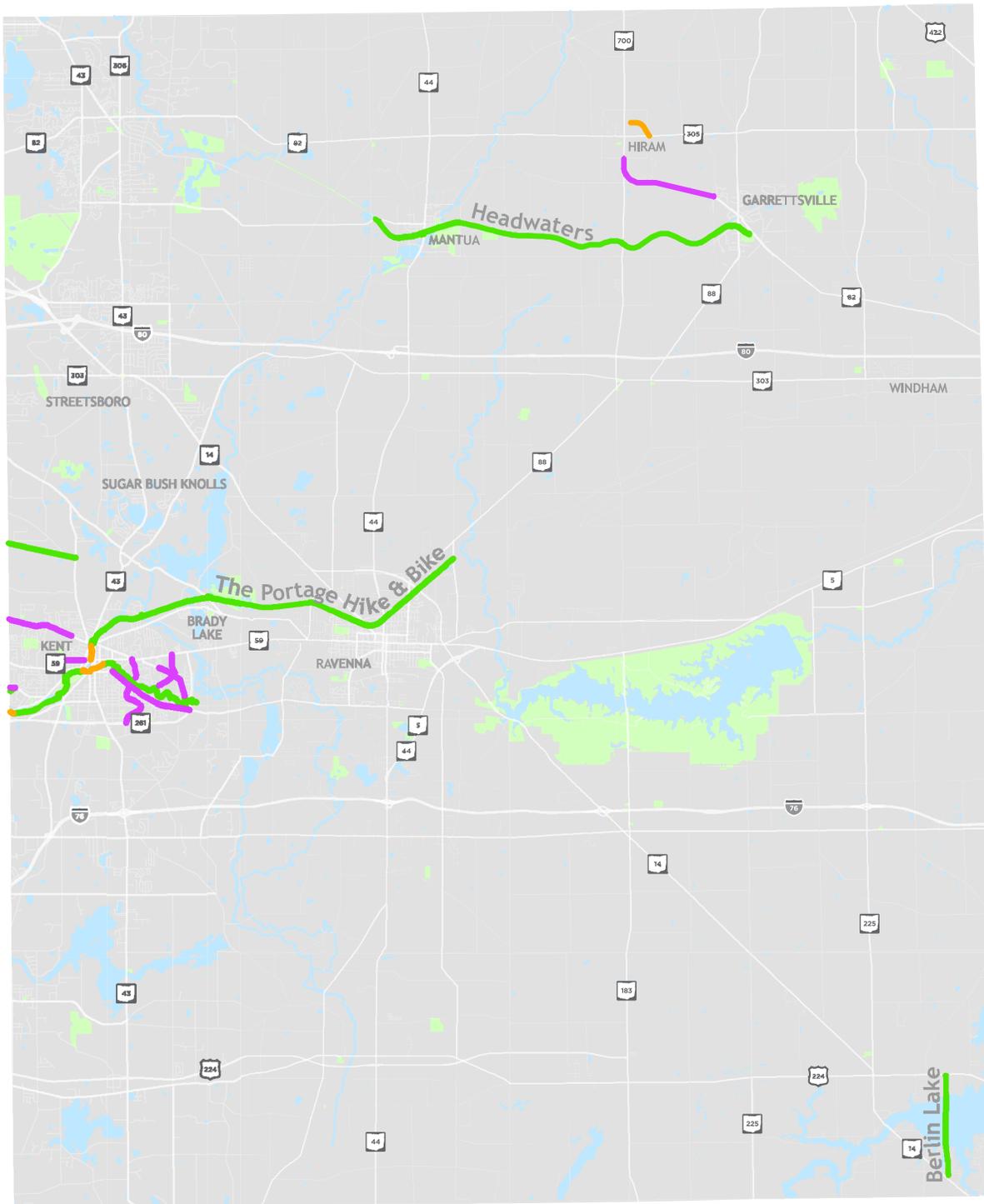
Shared-use paths throughout greater Akron provide a strong framework for a regional bicycle network. Continuing to expand the shared-use paths and on-road infrastructure and the linkages between them to create a bicycle network is critical to increasing people utilizing transportation alternatives.

## MOUNTAIN BIKING

Mountain biking is also increasing in popularity in the region. It is an activity that consists of off-road bicycling, often over rough terrain and obstacles using specially designed mountain bikes. As the demand for mountain bike trails grows, additional trails are being constructed and planned.

West Branch State Park in Portage County has 12 miles of mountain biking trails. The Cuyahoga Valley National Park is working on the East Rim Trail project designed to follow the natural topography of the valley. Currently 2.3 miles are open with the next section of seven miles opening in 2016-17. Summit Metro Parks has also added approximately three miles of trails at varying skill levels at Hampton Hills Metro Park.





- Bike Lanes
- Existing Trails
- Funded Trails

## BICYCLE CRASHES

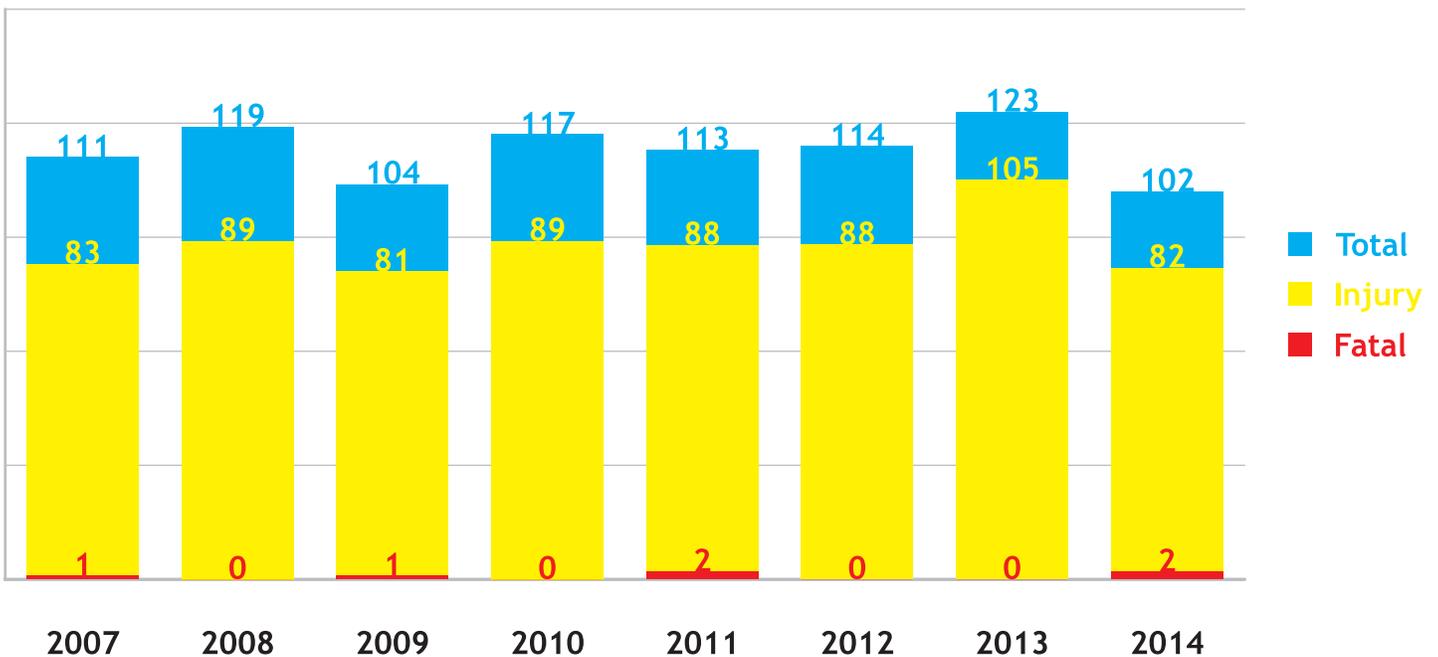
As biking becomes a more popular and viable means of transportation, there is growing concern about the safety of bike riders. Determining how and where these incidents occur can help plan for future bike lanes, lighting and educational outreach. Bike related crashes tend to happen more randomly and usually do not have the characteristic of being concentrated at specific locations like other vehicular crashes. Because of this it is sometimes more practical to make improvements system wide or to a corridor rather than to a specific location.

The Ohio Revised Code considers a bicycle a slow moving vehicle and generally speaking is subject to the same laws and responsibilities as a motor vehicle. Bike riders can be issued a citation if they are guilty of breaking laws. Local governments have the ability to make some of their own rules and laws which may be inconsistent between communities. Education is an important tool to help curb bike related crashes. Many bike riders, especially those under the driving age, may not be aware of the rules that they must observe.

The bicycle crash records were extracted from the Ohio Department of Public Safety between 2012 and 2014. A complete police report was downloaded for each crash. The police report was important because it showed a crash diagram and description of what happened. Data from the police reports was compiled and used to identify trends and patterns.

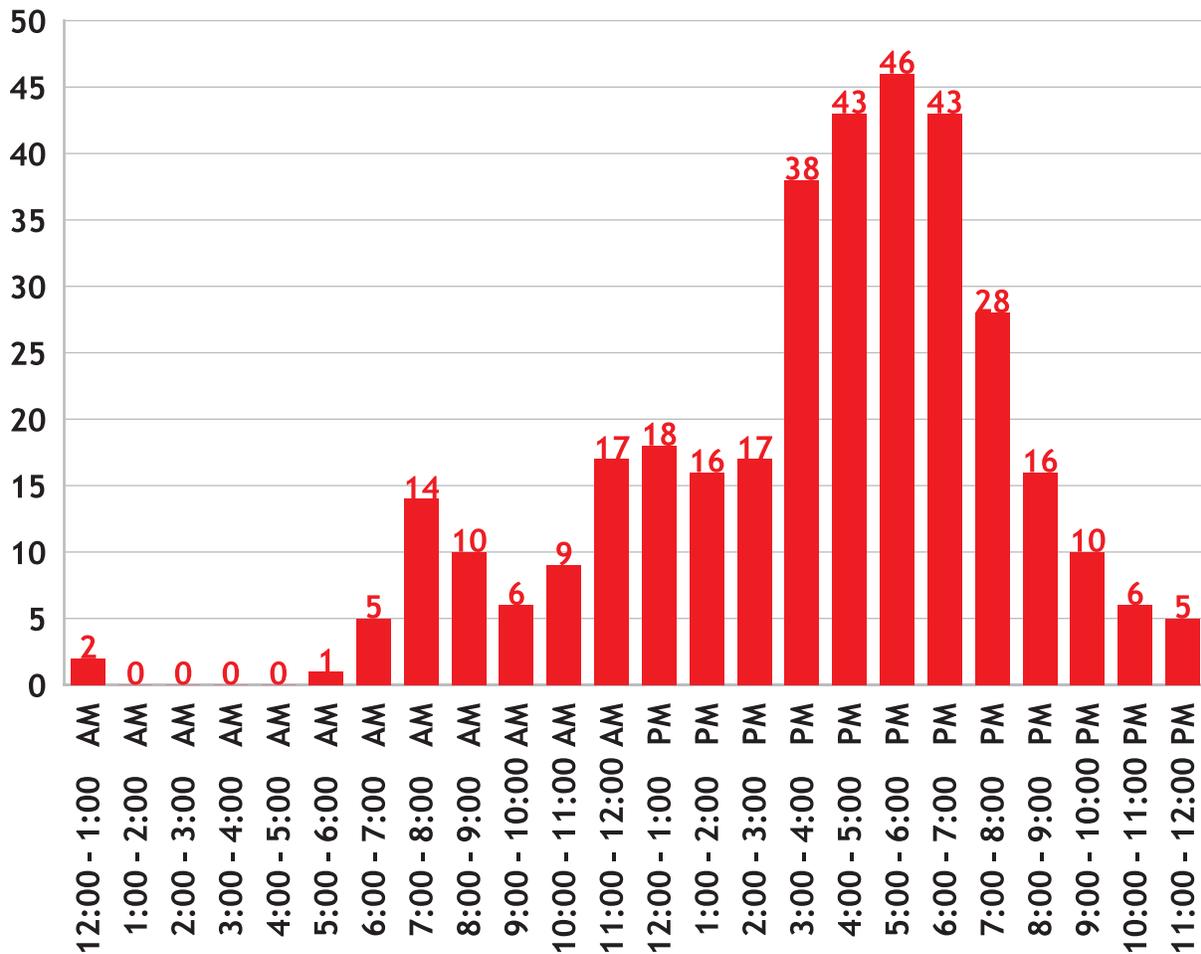
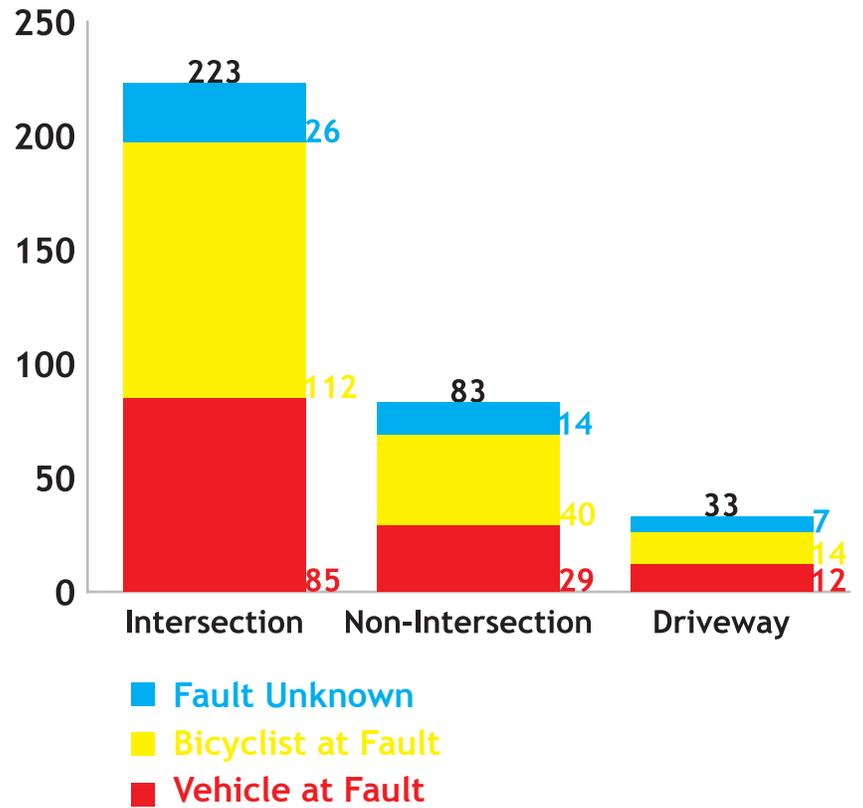
Bike related crashes have a high percentage of injuries. Out of the 339 bicycle related crashes that occurred between 2012 and 2014, 275 or 81% of them resulted in an injury and two of them in a fatality. The 9-18 year old range was involved in the most incidents. They accounted for 126 or 37% of all the bicycle related crashes. A closer look reveals that 12 year olds were involved in the most incidents (16). A smaller secondary peak occurred in the late forties age range.

Bicycle Related Crashes by Year

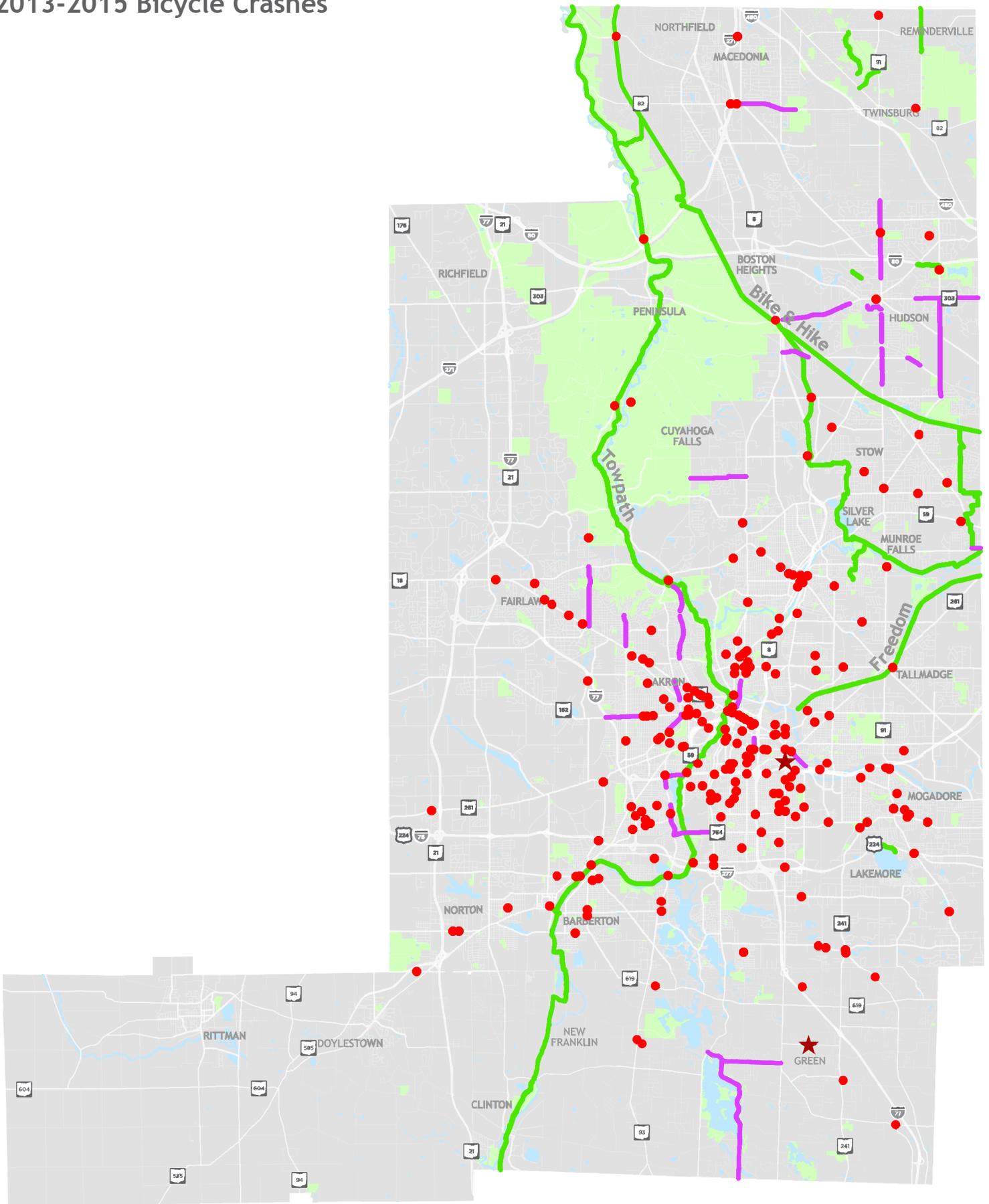


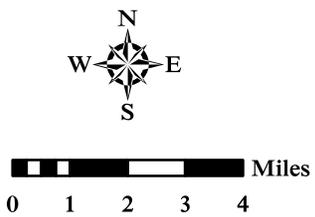
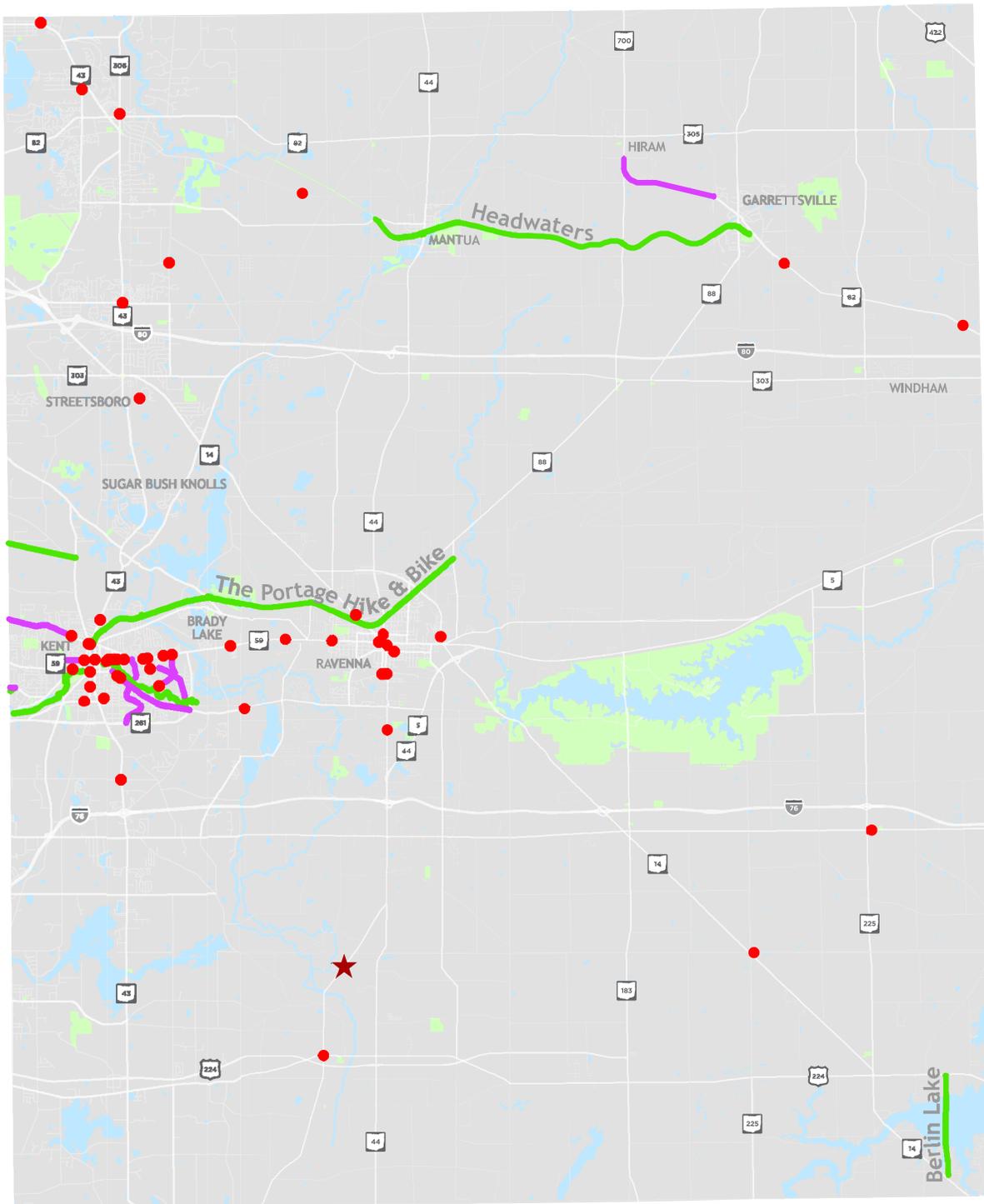
The graph to the right shows where bicycle crashes occur and who is at fault. Most bicycle related crashes occur at intersections (nearly 66%). Many times bicycle riders, especially younger ones, do not obey stop signs and traffic signals. Often a vehicle does not see a bicycle and turns into it or pulls in front of it. Regardless of fault, two actions that contributed to many of the bike related crashes were riding against traffic (88 crashes) and riding on the sidewalk (85 crashes).

The chart below shows the time of day that bicycle accidents happen. There is a spike from late afternoon to early evening.

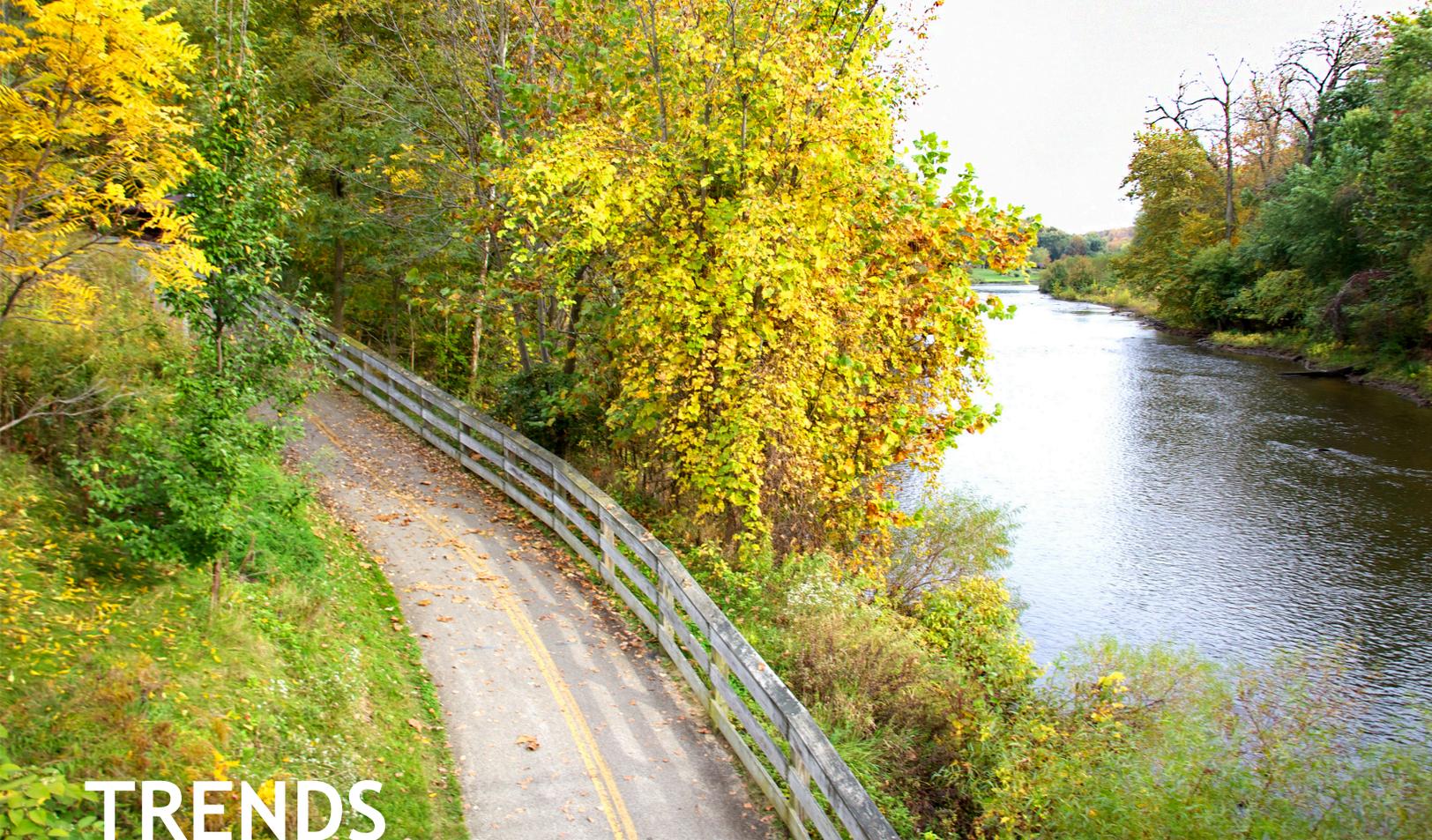


# 2013-2015 Bicycle Crashes





- Bike Lanes
- Existing Trails
- ★ Fatal Crash
- Non-Fatal Crash



# TRENDS

While biking continues to increase in popularity, the region continues to see a very small amount of people bicycling for transportation. Over and over again anecdotally and in surveys, the number one reason people do not bicycle is fear from vehicle traffic. If greater Akron is going to increase the number of people cycling for transportation, it is critical to create a safe environment for them to do so. Amenities, such as bike signage and bike racks, are important, but shifting the bicycle mode split will take a commitment from local communities, agencies and residents.

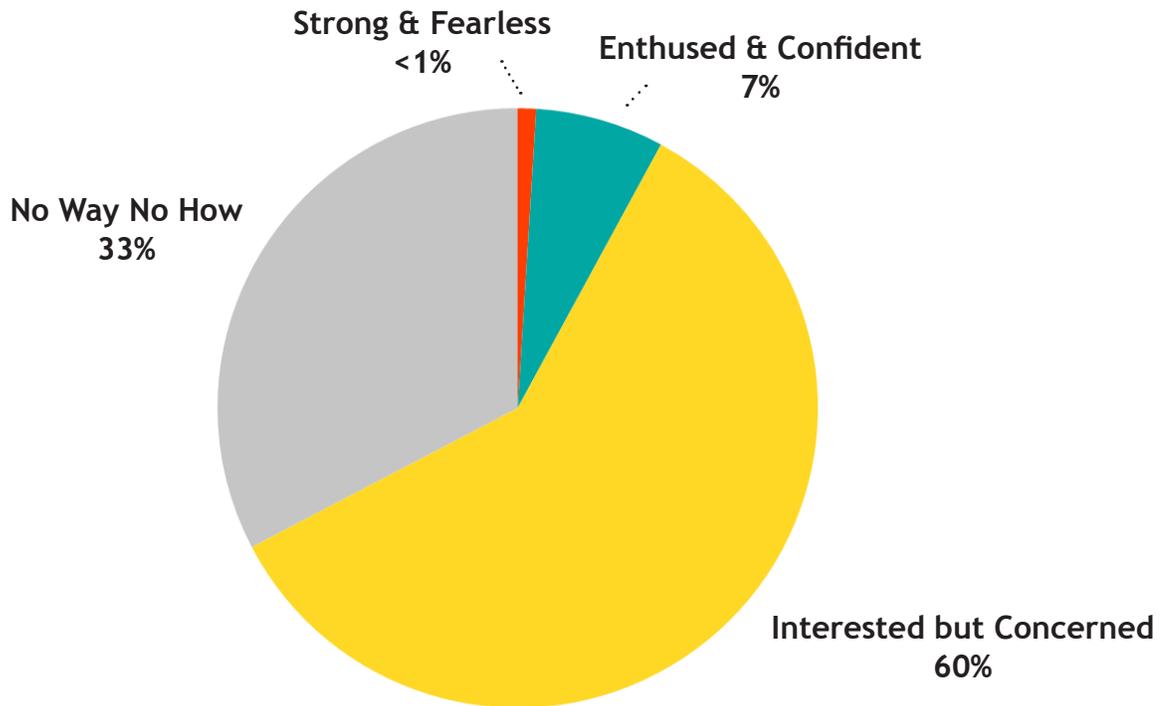
In 2006, Roger Geller Bicycle Coordinator for the Portland Office of Transportation developed a bicyclist typology that has continued to be supported today and is being used as a key part in bicycle planning across the country. Geller thought it was critical to understand who would potentially ride bicycles and what it would take to encourage them to ride a bicycle for transportation.

**“It is fundamental to understanding the market for increasing bicycle transportation and what needs to be undertaken to cater to them” (Roger Geller).**

Geller categorized cyclist into four general categories: Strong and the Fearless, Enthused and Confident, Interested but Concerned, and No Way No How. These categories are intended to apply to all adults. Geller credits the Enthused and Confident group as the primary reason why bicycling commuting doubled in Portland between 1990 and 2000 (Geller 2006). In 2012, another study was completed by Portland State University testing these four types of cyclists. The study found that almost all of the sampled population fit clearly into one of the four categories and reflected similar percentages in each category (Dill, McNeil 2012).

It is important to look at the whole population when looking at how to expand the market for cycling. Geller’s typology examined the pool of existing and potential cyclists. To expand cyclists in the AMATS area we have to look at the whole population and understand who the potential cyclists are and what it takes to encourage them to ride. The Interested but Concerned category is typically thought to be the key target market for increasing cycling for transportation.

## TYPES OF CYCLISTS



### Strong and the Fearless

- Will ride regardless of facilities
- Trip distance is not an issue

### Enthused and Confident

- Comfortable in traffic with appropriate facilities
- Prefer shorter trip distances

### Interested but Concerned

- Not attracted by bicycle lanes
- Not comfortable in traffic
- Will ride in low-volume, low-speed conditions (boulevards, off-street)

### No Way No How

- Not interested in bicycling at all

## TYPES OF CYCLISTS

How we name and define types of bicycle infrastructure is important to the perception and function of the facility. The 2012 Bike Plan separated bike facilities into two primary categories, on-road and off-road. Off-road were defined as off-road multi-purpose trails that these “trails” are mainly for recreational use, while on-road infrastructure, such as bike lanes, are for commuting. In reality some of our best regional bikeways are shared-use (multi-purpose) paths which connect several communities and can be used for commuting and recreation. These facilities are often associated with park like settings but can also be alongside, but separated from, roadways. These types of facilities are the most comfortable for all levels of bicyclists and therefore the best at encouraging greater bicycle trips in the region.

### Shared-Use Paths

A shared-use path means a multi-use trail or other path, physically separated from motorized vehicular traffic by an open space or barrier, either within a highway right-of-way or within an independent right-of-way, and usable for transportation purposes. Shared use paths may be used by pedestrians, bicyclists, skaters, equestrians, and other non-motorized users. FHWA.

### Cycle Track Lane

A cycle track is an exclusive bike facility that combines the user experience of a separated path with the on-street infrastructure of a conventional bike lane. A cycle track is physically separated from motor traffic and distinct from the sidewalk. - Urban Bikeway Design Guide

### Bicycle Lane

A Bike Lane is defined as a portion of the roadway that has been designated by striping, signage, and pavement markings for the preferential or exclusive use of bicyclists. - Urban Bikeway Design Guide  
- Conventional, buffered, contra-flow,

### Bicycle Boulevard

Bicycle boulevards are streets with low motorized traffic volumes and speeds, designated and designed to give bicycle travel priority. Bicycle Boulevards use signs, pavement markings, and speed and volume management measures to discourage through trips by motor vehicles and create safe, convenient bicycle crossings of busy arterial streets. - Urban Bikeway Design Guide

### Sharrow

Road marking used to indicate a shared lane environment for bicycles and vehicles. - Urban Bikeway Design Guide



**Shared-Use Path**



**Cycle Track**

**Bicycle Lane**



**Bicycle Boulevard**

**Sharrow**



# STRATEGIES

There are three overall goals for the region’s bicycle network which guide the strategies and recommendations presented in this Bicycle Plan. They are to create a safe, connected and friendly bicycle network throughout the AMATS area. Providing infrastructure that is safe and connects people to destinations and activity centers is critical in creating a bikeable community. Creating places that are pedestrian friendly and inviting are also key components.

The following pages are strategies and examples of ways to make the region more bikeable through creating safe, connected and friendly bicycle facilities.

AMATS recognizes that appropriate bicycle practices will vary greatly in a region as diverse as ours. A practice suited for densely populated, highly urban downtown Akron probably won’t work in many of the rural townships throughout the Greater Akron area. What makes a good bicycle environment depends on community context.

# GOALS

SAFETY

CONNECTIVITY

FRIENDLY

Safety is consistently one of the primary reasons why more people don't bicycle for transportation or recreation. Out of the 339 bicycle related crashes that occurred between 2012 and 2014, 275 or 81% of them resulted in an injury and two of them in a fatality. The data also shows that the majority of crashes happen in the late afternoon and evening and disproportionately affect younger riders. Creating safe facilities through planning, engineering and other programs can promote bicycle safety increase usage throughout the region. Among those include shared-use paths, road diets and HAWK signals.

**“Riding a bicycle should not require bravery. Yet, all too often, that is the perception among cyclists and non-cyclists alike (Roger Geller)”.**

## HAWK Signal

A **HAWK**, or **H**igh-intensity **A**ctivated cross**W**alk, is a unique crosswalk signal which helps bicyclists and pedestrians safely cross roadways. When a trail user activates the signal, drivers will first see a single flashing yellow light, followed by a solid yellow, and then two solid red lights to indicate “Stop.” At that time, the “Walk” signal will appear for trail users. After a brief interval, the red lights will begin alternately flashing and then go dark. Vehicular traffic may start moving when the crosswalk is clear.

The first HAWK signal in Greater Akron was installed in 2015 where Summit Metro Parks shared-use Freedom Trail intersects with the four-lane Brittain Road in Akron. The HAWK system is more efficient in this location than a traditional traffic signal since it is only activated when needed. It is also solar powered and requires no electricity.



## Road Diet

A road diet is a traffic-calming strategy that reduces the amount of space for motor vehicles either through eliminating lanes or shrinking the width of lanes. The reclaimed space from a road diet is then reallocated for other uses such as bike lanes, bus lanes, parking, pedestrian refuge islands, or more sidewalk space. Road diets have been used successfully across the nation and the process is endorsed by the Federal Highway Administration (FHWA) to promote safety. A recent example of a road diet can be found on Copley Road in Akron shown in the before and after picture below.



**Before**



**After**

Our agency compiled the AMATS Road Diet Analysis, which identifies 60 candidates for road diets across the Greater Akron area. The analysis is a useful planning resource that:

- Defines and provides a visual explanation of the road diet concept.
- Identifies pre-existing road diet locations in the AMATS area.
- Develops a methodology to identify potential road diet locations with declining traffic volumes and excess capacity.

Potential roadway segments in the AMATS Road Diet Report were identified and sorted by Average Daily Traffic (ADT). In general, lower ADT's make a more suitable candidate for a road diet. The following were identified as potential roadway segments in AMATS Road Diet Report.



**Wolf Ledges Pkwy, Akron**  
**8,400 ADT**



**2nd St SW, Barberton**  
**3,650 ADT**



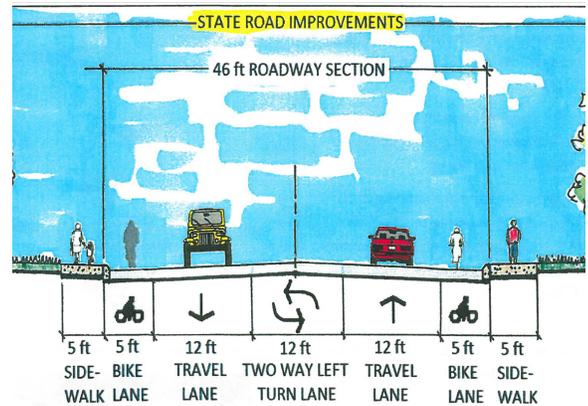
**E Howe Rd, Tallmadge**  
**8,440 ADT**

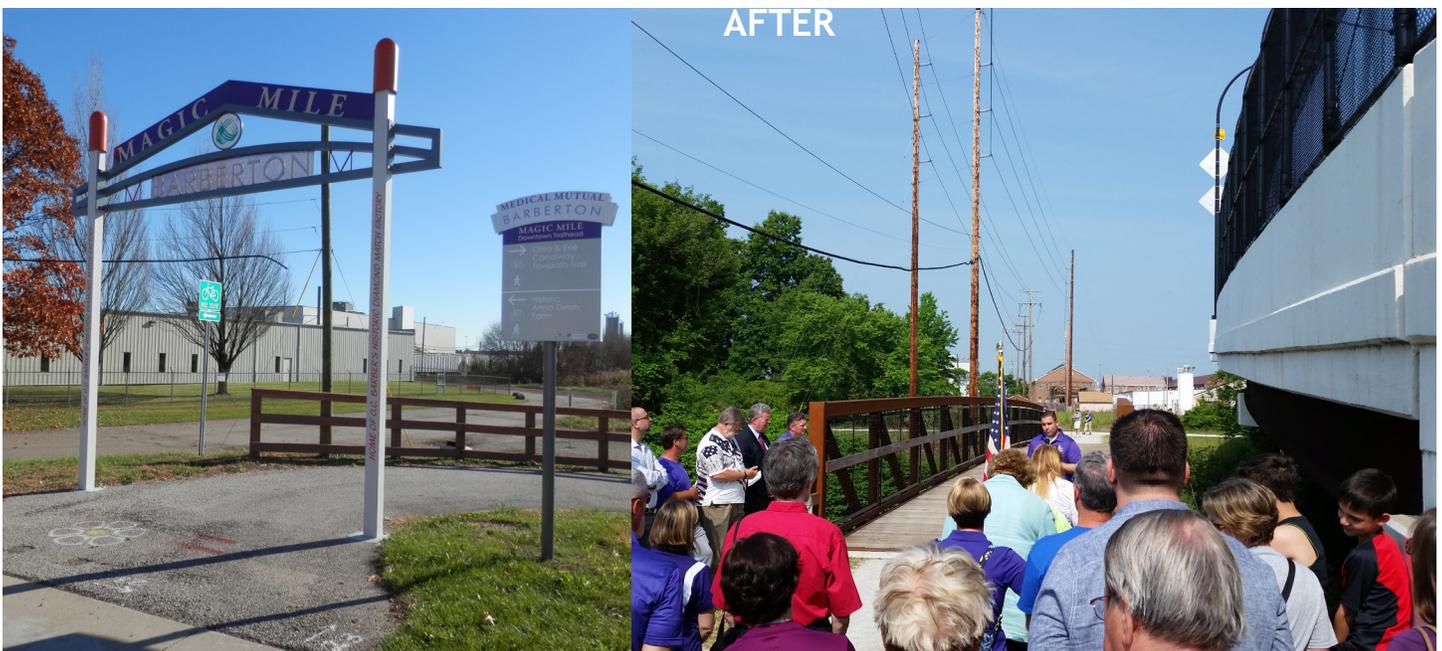
# CONNECTIVITY

Connectivity refers to the degree to which transportation networks such as streets, sidewalks, and trails link people to their destinations. Since the late 1950s, the land use patterns and practices of Greater Akron area communities have tended to focus on vehicular travel. An unintended consequence of this focus has been a failure of the region to create a connected bicycle network both on- and off-road.

Direct convenient connections to destinations encourage bicyclists to grab their bike rather than their car keys. Completing the shared-use path (trail) connections has long been a regional goal. Paths along roads and other types of on-road bicycle facilities are equally important in creating a grid type network which allows bicyclists of all ages and abilities to feel comfortable.

State Road in Cuyahoga Falls is a great example of a local community re-purposing a roadway when it was being reconstructed. The images below show the old State Road without any bicycle or pedestrian facilities, the basic design to reuse the roadway and the finished project with bike lanes and a sidewalk. These bicycle lanes provide connections to area neighborhoods, retail and businesses, including the newly developed Portage Crossing area.





While having a shared-use path or other bicycle facility in a community is a great asset, being able to use that as a means for people to travel to destinations, such as downtowns, schools, parks or community centers, encourages more trips to be made by bicycle.

The City of Barberton recently completed a connection which allows Ohio and Erie Canal Towpath users' access to downtown. Previously the Towpath was in between the Tuscarawas River and the canal. A new bridge, along with signs and wayfinding, provide a great connection for residents and trail users to access downtown Barberton and other neighborhoods.

Downtown Kent and Kent State University were once separated by a high-speed divided highway with a complementary chain link fence blocking off downtown. This highly discouraged biking or walking between downtown and campus and made a short trip much longer.

As part of a downtown redevelopment project, the Esplanade multi-purpose path through campus was extended to downtown creating space for people to walk, bike and relax. Future connections are being developed to further connect to the regional shared-use trail network.

Connections like the City of Barberton and the City of Kent are critical in encouraging bicycling as a viable transportation choice. Providing safe, connected bicycle paths which connect to destinations make bicycling a convenient option.



# FRIENDLY

Being a bicycle friendly community is more than just having a bike lane and getting somewhere safely. It should also be about having amenities that make it easier and more enjoyable to get to and explore a destination.

Being able to easily find your destination off of a trail, fix your bike or having a designated place to park your bike, make bicycling more enjoyable and easier to choose for transportation. It also is more welcoming, as these are signs that a community values and prioritizes bicycles. The following are among a few bicycle-friendly strategies which Greater Akron area communities should consider:

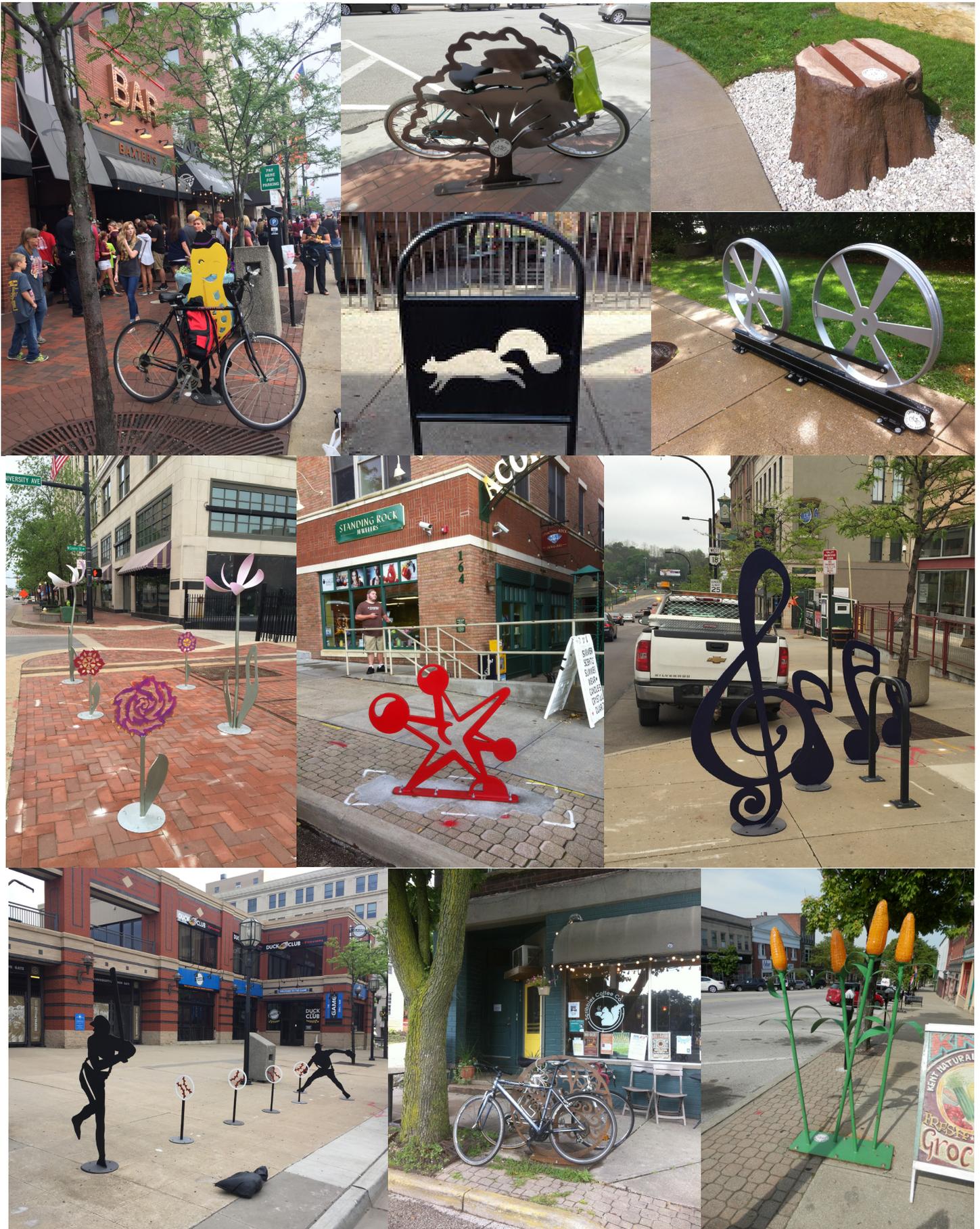
### ***Bicycle Parking & Service Stations***

Bicycle parking is an important strategy for promoting bicycling as transportation, encouraging people to replace some of their car trips with bicycle trips. Recreational riders also need bike racks along trail destinations, such as restaurants. Bike racks and lockers near public spaces such as the workplace, storefronts, bike shops and parks can promote more bicycle use by providing a secure location to store a bike.

There are bicycle lockers along Carroll Street near the University of Akron and also at the Kent Central Gateway multimodal facility in Downtown Kent. The City of Akron and the City of Kent have also installed artistic bicycle racks. In addition to providing secure bicycle parking, artistic bicycle racks also serve as public art when not in use. They are also used to highlight the unique nature of local businesses nearby.

Bicycle service stations are another amenity that helps encourage biking. Knowing that you can fill a tire or have access to tools if needed along a ride helps provide peace of mind. Service stations are currently in Kent and Akron along shared-use paths and near the downtowns and the universities.







**Wayfinding Signage**

Wayfinding signage provides an excellent means of assisting bicyclists who are unfamiliar with a particular area. Signage should be able to be viewed from a bicycle, and can range from arrows pointing in the direction of an attraction, to a full area map in larger areas, or where there are many potential destinations of interest.

Wayfinding signage serves purposes beyond providing a sense of direction. Distinctive, decorative signage is useful in the identification of a particular district or neighborhood. Sign design can complement area architecture or can reflect the artistic flair of a particular area.

Although wayfinding signage is commonly found in downtown or town center planning areas, it by no means must be limited to these locations. Wayfinding signage is highly effective in areas of transitioning land use. An example would be where the Ohio & Erie Towpath Trail transitions from the wilderness of the Cuyahoga Valley National Park to the quaint Village of Peninsula, with its various shops, restaurants and other attractions.



# RECOMMENDATIONS

The purpose of the *2016 Bike Plan* is to promote bicycling in the AMATS region as a viable transportation option and for recreation. Creating a safe, connected and friendly bicycle network requires specific project recommendations, as well as general planning approaches, which encourage bicycle planning throughout the region. The following recommendations are separated into broader policy and programming recommendations and specific project recommendations (p. 28-29).

The following recommendations are intended to provide general guidance when planning for and funding bicycle infrastructure, policies and programs.

**1. Consider creating local bike plans.**

The *2016 Bike Plan* examines and recommends bike improvements at the regional level. Local communities should create local bike plans that complement the regional plan, but that is uniquely suited to specific local needs. Having a bicycle plan in place is important to creating a connected network and prioritizing projects.

**2. Prioritize school areas and Safe Routes to Schools (SRTS) School Travel Plans.**

Communities should place a special emphasis on providing high-quality, safe bicycle infrastructure near schools. The Ohio SRTS program supports projects and programs that enable and encourage walking and bicycling to and from school. A School Travel Plan is a document outlining a community's plans for engaging students in active transportation.

**3. Special emphasis on multi-modal areas.**

Communities should place special emphasis on providing high-quality, well-maintained bicycle infrastructure in multi-modal areas, which are places where multiple modes of transportation converge. Examples of such areas include transit stops, trailheads, Cuyahoga Valley Scenic Railway stations, and similar locations. Protected bicycle lanes, bicycle racks, and ample lighting are examples of the amenities that should be provided in these locations.

**4. Consider bicycle improvements and road diets during resurfacing projects.**

The AMATS Resurfacing Program is tremendously popular with local communities. The resurfacing process is an excellent time for communities to consider improvements in their local pedestrian infrastructure network. Prior to restriping a newly surfaced roadway, communities should consider a road diet, bike lane or wide shoulders.

**5. Incorporate high-quality bicycle facility design**

Incorporating high-quality bicycle design standards, which meet or exceed the AASHTO Guide for the Development of Bicycle Facilities and NACTO Urban Bikeway Design Guide will encourage bicycling for transportation by provide safe, comfortable bicycle infrastructure. There are various types of on- and off-street facilities that are context sensitive to density, vehicle traffic and congestions which can improve safety for people of all ages and abilities.

**6. Create a minimum grid.**

Coined by international walking and bicycling advocate, Gil Penalosa, a minimum grid is the concept of creating a fully connected grid of protected bike infrastructure on busy streets and bicycle boulevards through neighborhood streets. While the Ohio and Erie Towpath Trail is often referred to as the spine of the region's bicycle system, continuing to build and connect between other shared-use paths and creating other connected, protected bike infrastructure will help make biking a viable transportation choice.

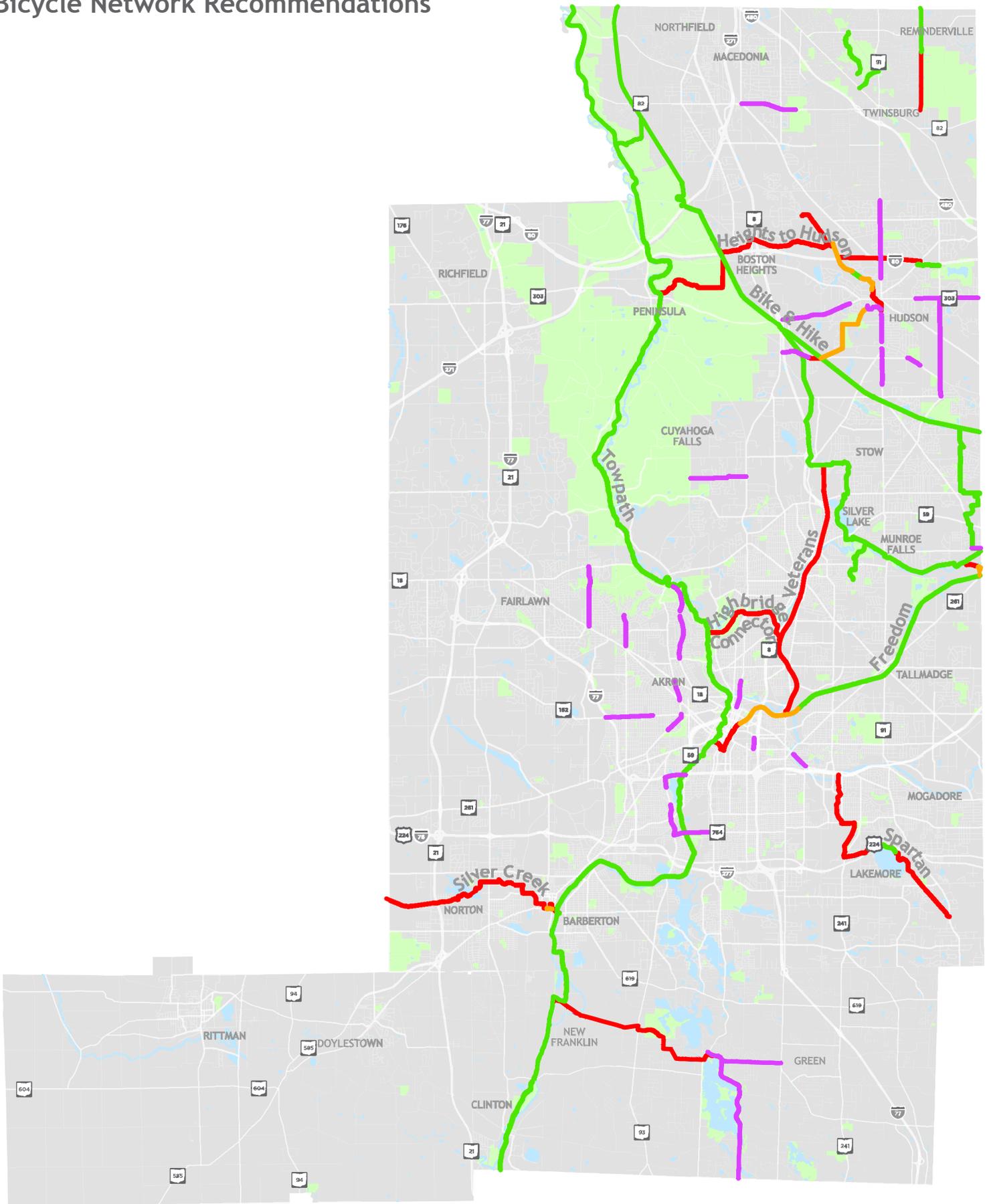
**7. Consider becoming a Bicycle Friendly Community**

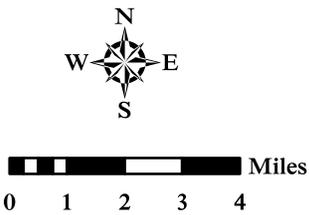
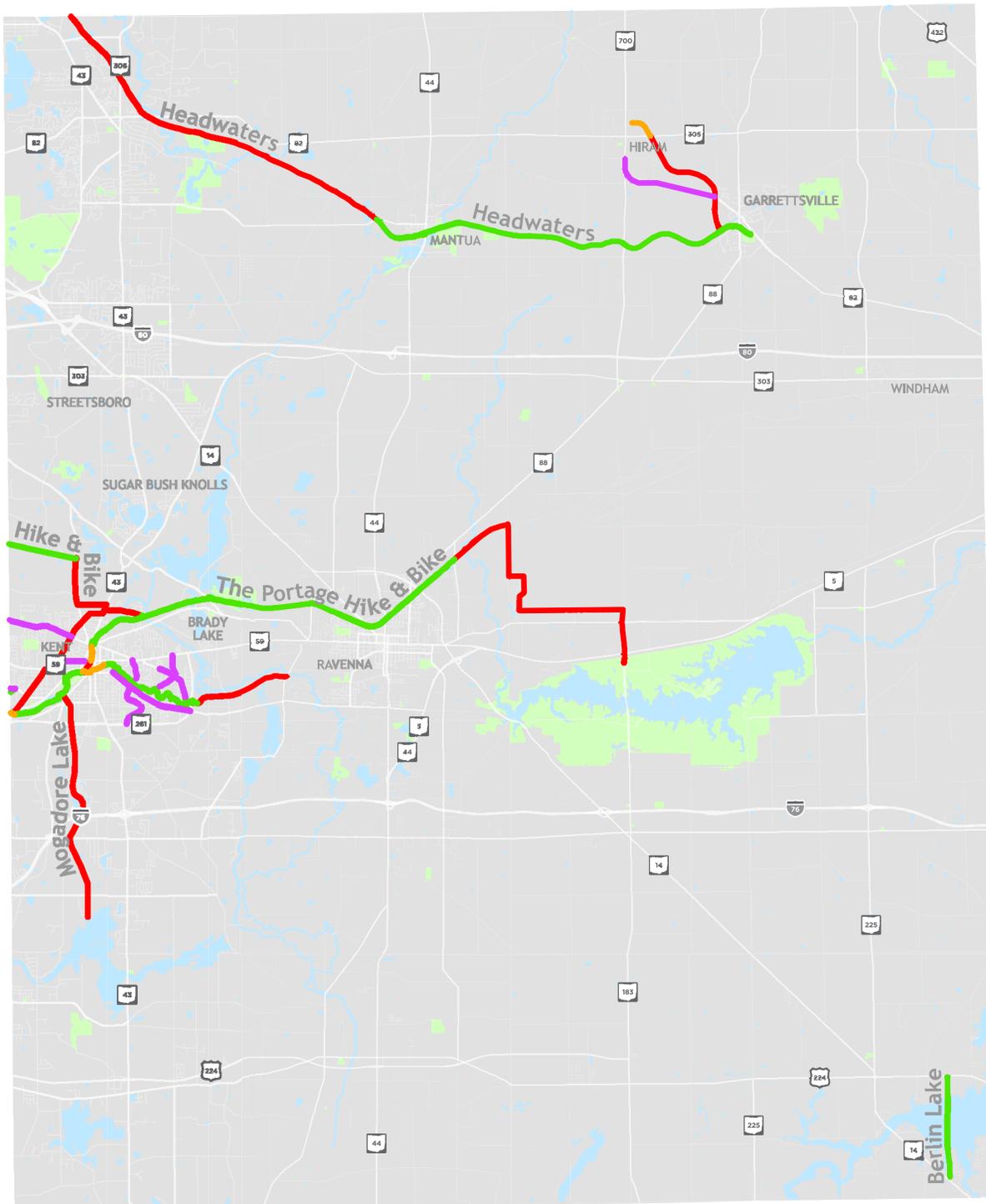
The League of American Bicyclists Bike Friendly Community program provides guidance to improve bicycle conditions. Communities can earn a Bronze, Silver, Gold or Platinum designation. A Bicycle Friendly Community welcomes bicyclists by providing safe accommodations for bicycling and encouraging people to bike for transportation and recreation. A bicycle-friendly place makes bicycling safe, comfortable, and convenient for people of all ages and abilities.

**8. Consider creating a Bicycle Advisory Committee**

A Bicycle Advisory Committee can help advise a community on local bicycling conditions and priorities, as well as advocate and educate for bicycling. It can also give input on bicycle transportation projects and policies to local boards, commissions and other agencies.

# Bicycle Network Recommendations





- Bike Lanes
- Existing Trails
- Funded Trails
- Recommended Trails

# IMPLEMENTATION

Implementation of the recommendations must be accompanied by other policy changes and programming to achieve a safe, connected bicycle network and bicycle friendly region. The following strategies are potential ways that communities can develop, promote and fund bicycle infrastructure.

## Complete Streets

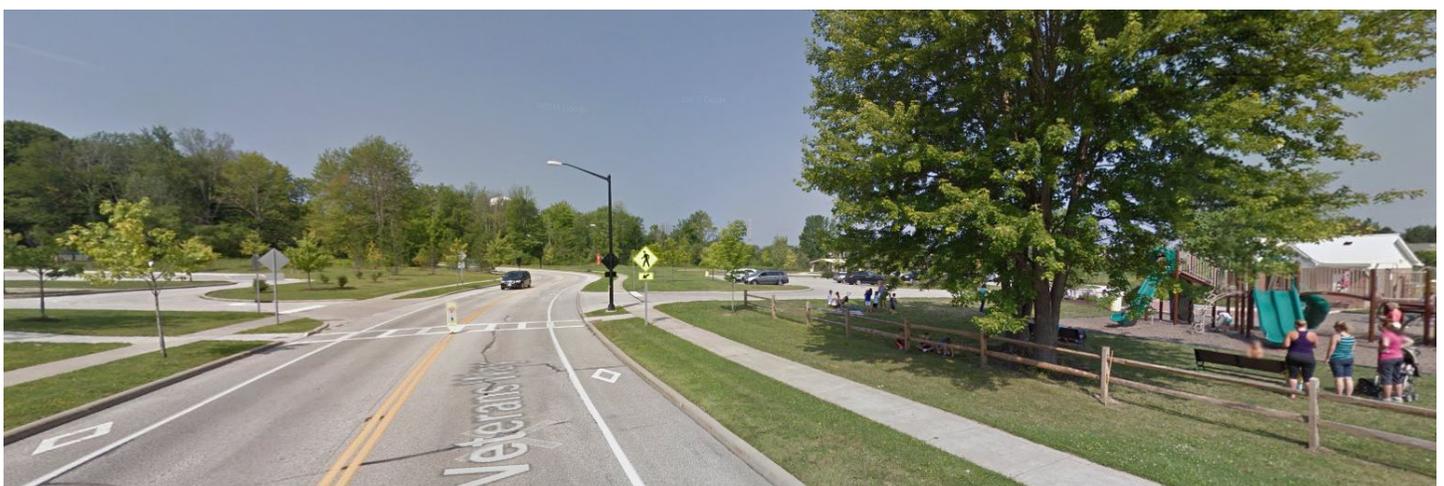
Complete Streets is a transportation approach that ensures all future street projects will take into account the needs of all travelers, regardless of age, ability, or mode of transportation. Although supporters work diligently and thoughtfully to craft supportive policies, it is only after adoption that the work truly begins. If all goes well, Complete Streets becomes a compass as a community changes its day-to-day transportation planning, design, operation, and maintenance practices.

Complete Streets is not concerned only with travel mode whether it's foot, bike, bus or car, but also the traveler. Older adults, people with disabilities, children, people with lower incomes, and those with limited access to transportation have unique needs that should be considered during system design. These populations are an important part of the conversation about a new way of approaching transportation planning. The most successful Complete Streets efforts result not only in better projects, but also in a better process in which transportation agencies are actively seeking ways to create a safer and more multi-modal transportation system.

The onus of developing appropriate community-level Complete Streets policies rests with the Greater Akron area communities themselves. Given the disparate natures and needs of the many villages, townships and cities within the AMATS region, the communities therein should consider appointing committees of various stakeholders to begin comprehensive analyses of their respective pedestrian systems. A recent example of this practice in action is the city of Akron's creation of a Complete Streets Committee to address such issues. Complete Streets analyses should provide candid assessments of present and future pedestrian needs and provide recommendations that balance sound planning principles with fiscal realities while meeting identified needs.

Public outreach by communities should be a key component in the development of an effective Complete Streets policy. An engaged citizenry that is actively involved throughout the planning process, from the identification of pedestrian needs to proposing potential solutions, will not only aid in the development of an effective Complete Streets policy, but also in its implementation.

The compilation of these community-level policies will eventually impact which area bicycle projects are ultimately pursued by project sponsors and selected for funding by the AMATS Policy Committee.



## Bike-N-Brainstorm

The Akron Metropolitan Area Transportation Study (AMATS) developed Bike-N-Brainstorm in 2012 to serve as a tool for public outreach by engaging bicyclists in a chosen bike route to improve biking conditions in a local community. More than 450 bicyclists have participated in twelve Bike-N-Brainstorm events from 2012-2015. AMATS continues to partner with other communities toward encouraging bicycle infrastructure in making it a viable and safe active transportation option. Below is a summary of Bike-N-Brainstorm events that have taken place in the Greater Akron area.



### 2012

May 17	Market St	16 bicyclists
Sept. 6	Downtown Akron	16 bicyclists

### 2013

April 20	Kent	58 bicyclists
June 22	Green	32 bicyclists
Sept. 7	Barberton	60 bicyclists

### 2014

June 26	Downtown Akron (AMATS Switching Gears Conference)	45 bicyclists
Oct. 11	Ward 1 Community Bike Ride Highland Square	55 bicyclists

### 2015

April 14	Kent at GreenTown Conference	35 bicyclists
April 25	Highland Square Bike Earth Day	56 bicyclists
May 9	Hudson	30 bicyclists
July 11	Village of Mantua	34 bicyclists
Oct. 19	Springfield Twp. – Summit County Trails Forum	15 bicyclists

# Switching Gears

Switching Gears is sponsored by AMATS to promote cycling throughout the region. Since its launch several years ago, the program includes a web site - [Switching-Gears.org](http://Switching-Gears.org) - devoted to advocacy and information regarding regional cycling. The program has also created a Bike User Map detailing various area bike routes and their levels of difficulty and has hosted numerous events, such as its popular Bike-N-Brainstorms, which are group rides that allow participants to share their insights on how to improve the cycling experience through a given community.

AMATS is helping to advocate, educate and provide information for bicycling in the region through [Switching-Gears.org](http://Switching-Gears.org). [Switching-Gears.org](http://Switching-Gears.org) provides community and event information, interactive maps and information on area bicycle facilities. It also provides a way to receive feedback on AMATS initiatives and provide information on regional bicycle planning and projects.



The screenshot shows the Switching Gears website interface. At the top is the logo and navigation menu (ABOUT, INFORMATION, BIKER USER MAP, INITIATIVES, COMPREHENSIVE PLANNING, DATA, TRAILS, EVENTS, NEWS). Below is a featured article titled 'NEXT BIKE-N-BRAINSTORM // April 14, 10:00 am // READ MORE' with a photo of a group of cyclists. A 'Upcoming Events' section lists several events:

- #BikeThursday** (Mar 19, 5:00 pm): A weekly bicycle ride that takes place on the Alton campus. We meet gathering near Old Taps on Paul Williams St around 5pm and ride the route between 5:30-6:00. Distance can vary based on the group but we need to go south on the campus and turn around at the roadblock in Barbours which is about 7 miles each way. [Event Link](#)
- ABC Botum Trailhead** (Mar 24, 9:00 am): Botum Trailhead is on Botum Road south of Both Road and south of South Road. This is an outdoor trail of the Cuyahoga Valley National Park. This is a 4.5 mile trail. We ride the route on road bikes but sometimes the roughness may increase on cross bikes. We also encourage taking that 15 min. road ride on the Cuyahoga Valley to understand challenging with many possible obstacles for more casual riders. The route is generally good but may vary with the seasons, and usually there is bike traffic. We suggest often, if you may ride at your own pace. You can be left behind Barbours and Lighten Required. [Event Link](#)
- #BikeThursday** (Mar 26, 5:00 pm): A weekly bicycle ride that takes place on the Alton campus. We meet gathering near Old Taps on Paul Williams St around 5pm and ride the route between 5:30-6:00. Distance can vary based on the group but we need to go south on the campus and turn around at the roadblock in Barbours which is about 7 miles each way. [Event Link](#)
- ABC Botum Trailhead** (Mar 31, 9:00 am): Botum Trailhead is on Botum Road south of Both Road and south of South Road. This is an outdoor trail of the Cuyahoga Valley National Park. This is a 4.5 mile trail. We ride the route on road bikes but sometimes the roughness may increase on cross bikes. We also encourage taking that 15 min. road ride on the Cuyahoga Valley to understand challenging with many possible obstacles for more casual riders. The route is generally good but may vary with the seasons, and usually there is bike traffic. We suggest often, if you may ride at your own pace. You can be left behind Barbours and Lighten Required. [Event Link](#)
- #BikeThursday** (Apr 02, 5:00 pm): A weekly bicycle ride that takes place on the Alton campus. We meet gathering near Old Taps on Paul Williams St around 5pm and ride the route between 5:30-6:00. Distance can vary based on the group but we need to go south on the campus and turn around at the roadblock in Barbours which is about 7 miles each way. [Event Link](#)
- ABC Botum Trailhead** (Apr 07, 9:00 am): Botum Trailhead is on Botum Road south of Both Road and south of South Road. This is an outdoor trail of the Cuyahoga Valley National Park. This is a 4.5 mile trail. We ride the route on road bikes but sometimes the roughness may increase on cross bikes. We also encourage taking that 15 min. road ride on the Cuyahoga Valley to understand challenging with many possible obstacles for more casual riders. The route is generally good but may vary with the seasons, and usually there is bike traffic. We suggest often, if you may ride at your own pace. You can be left behind Barbours and Lighten Required. [Event Link](#)
- #BikeThursday** (Apr 09, 5:00 pm): A weekly bicycle ride that takes place on the Alton campus. We meet gathering near Old Taps on Paul Williams St around 5pm and ride the route between 5:30-6:00. Distance can vary based on the group but we need to go south on the campus and turn around at the roadblock in Barbours which is about 7 miles each way. [Event Link](#)
- ABC Botum Trailhead** (Apr 14, 9:00 am): Botum Trailhead is on Botum Road south of Both Road and south of South Road. This is an outdoor trail of the Cuyahoga Valley National Park. This is a 4.5 mile trail. We ride the route on road bikes but sometimes the roughness may increase on cross bikes. We also encourage taking that 15 min. road ride on the Cuyahoga Valley to understand challenging with many possible obstacles for more casual riders. The route is generally good but may vary with the seasons, and usually there is bike traffic. We suggest often, if you may ride at your own pace. You can be left behind Barbours and Lighten Required. [Event Link](#)
- #BikeThursday** (Apr 16, 5:00 pm): A weekly bicycle ride that takes place on the Alton campus. We meet gathering near Old Taps on Paul Williams St around 5pm and ride the route between 5:30-6:00. Distance can vary based on the group but we need to go south on the campus and turn around at the roadblock in Barbours which is about 7 miles each way. [Event Link](#)

On the right side, there is a 'Cycling News' section with articles like 'JAMES WALK COMING TO GREATER ALTON AREA MAY 1-3' and 'MAYOR PLOQUILLIC ENDORSES ACTIVE TRANSPORTATION COMMITTEE'. A 'Follow us on Twitter' section is also present.

## Switching Gears - Active Transportation Conference

On June 26, 2014 over 135 attendees gathered for the Switching Gears Active Transportation Conference in downtown Akron. Hosted by AMATS with funding from the John S. and James L. Knight foundation, the conference was part of AMATS efforts to promote alternative transportation in the region. The conference highlighted successful policy and implementation strategies, as well as grassroots efforts to create more bikeable and walkable communities to increase transportat

ion options.

Jason Roberts of The Better Block project and Dave Cieslewicz, executive director of Wisconsin Bike Fed and former mayor of Madison, Wisconsin were the two keynote speakers. Roberts explained how Better Block, a DIY prototyping street makeover can influence city policies and lead to rapid changes. Cieslewicz describe how Madison became a top bike-friendly community through changing the system from the inside. He discussed Madison's success with Open Streets, an initiative which temporarily closes streets to vehicle traffic, so that people can use them for biking, walking, socializing and playing.

The conference also included breakout sessions on bike sharing, active transportation and a Better Block workshop. Attendees were encouraged to ride their bike to the conference where a pop-up bike valet provided bike parking and a post conference Bike-N-Brainstorm showed people around downtown Akron.



## Connecting Communities

Connecting Communities is an AMATS-sponsored initiative that promotes a sustainable balance between environmental, social and economic concerns by improving coordination between land use and transportation throughout the Greater Akron area. Connecting Communities utilizes regional planning processes to: explore strategies to increase transportation choices and accessibility; help communities make collaborative, informed decisions to coordinate development; reduce environmental impacts; and improve regional connectivity.

The intent of this initiative is to create more vibrant livable communities through the coordination of resources, partners and stakeholders. Connecting Communities is a proactive approach by the agency to promote regional collaboration and address how transportation funding, project selection and planning can complement land uses that encourage investment and revitalization of established neighborhoods.

Connecting Communities urges improvements to bicycle planning and facilities through targeted investments based on comprehensive analyses. Since its launch in 2010, the initiative's Connecting Communities Planning Grant Program has sponsored studies in the Montrose area and in the communities of Akron, Barberton, Boston Heights, Kent, Ravenna and Richfield. Many of the recommendations of these studies are being pursued by AMATS and their respective community sponsors. This initiative will continue to be a resource available to the region for the foreseeable future.

## Transportation Alternatives Program

The AMATS-administered Transportation Alternatives Program (TAP) is a tremendous resource available to Greater Akron area communities. This program provides funding for the development of pedestrian facilities throughout the region. Currently, the TAP provides funding for several categories of pedestrian improvement-type projects including:

- On-Road and Off-Road Trail Facilities - Funds the planning, design and construction of pedestrian and bike infrastructure.
- Safe Routes for Non-Drivers - Funds pedestrian and bicycle infrastructure for children, older adults and those with disabilities.
- Abandoned Railroad Corridors for Trails - Funds the conversion of old railroad corridors into useful trails for pedestrians and cyclists.
- Community Improvement Activities - Right-of-way improvements, including billboard issues, historical preservation and vegetation management and erosion control, i.e., landscaping.

All TAP projects must relate to surface transportation and address a transportation need, use or benefit. Preliminary engineering, right-of-way and construction are eligible project costs. Planning is an eligible project phase only for Safe Routes to School (SRTS) District Travel Plans provided that the sponsor has first pursued and secured funding from the Ohio Department of Transportation SRTS Program. The TAP project scoring criteria can be found in Appendix F.

According to the Federal Highway Administration (FHWA), road diets are among the FHWA's Proven Safety Countermeasures. If work to benefit eligible TAP activities would cause impacts to a highway, requiring reconstruction resulting in a road diet, then TAP funds may cover most costs of a road diet.

Streetscaping and corridor landscaping projects may be eligible for TAP funds under the program's "community improvement activities" category if sponsored by an eligible entity and selected through the required competitive process. Lighting for pedestrian facilities may also be eligible if they are a component of other eligible TAP categories. Project sponsors are urged to consider energy-efficient methods and options that reduce light pollution.

## Safe Routes to School

The Ohio Safe Routes to School (SRTS) Program is funded by the Federal Highway Administration (FHWA) and administered by the Ohio Department of Transportation (ODOT). The program supports projects and programs that enable and encourage walking and bicycling to and from school. A School Travel Plan (STP) is the written document that outlines a community's intentions for enabling students to engage in active transportation, i.e., walking or bicycling, as they travel to and from school. STPs are required for funding requests made through the ODOT SRTS program. The STP is created by a team and involves key community stakeholders in identifying both barriers to active transportation and a set of solutions to address them.

In 2013, AMATS joined representatives from the Akron Public Schools, the city of Akron, and various other local organizations in an SRTS Planning Team, which was responsible for preparing an STP for Akron. Other Greater Akron area communities with active SRTS Programs include Aurora, Barberton, Hudson, Stow-Munroe Falls and Streetsboro. Along with establishing educational programs, many of these communities are pursuing connectivity improvements.

For more information about the Ohio Safe Routes to School Program, visit the program web site at <http://www.dot.state.oh.us/Divisions/Planning/ProgramManagement/HighwaySafety/ActiveTransportation/Pages/SRTS.aspx>.

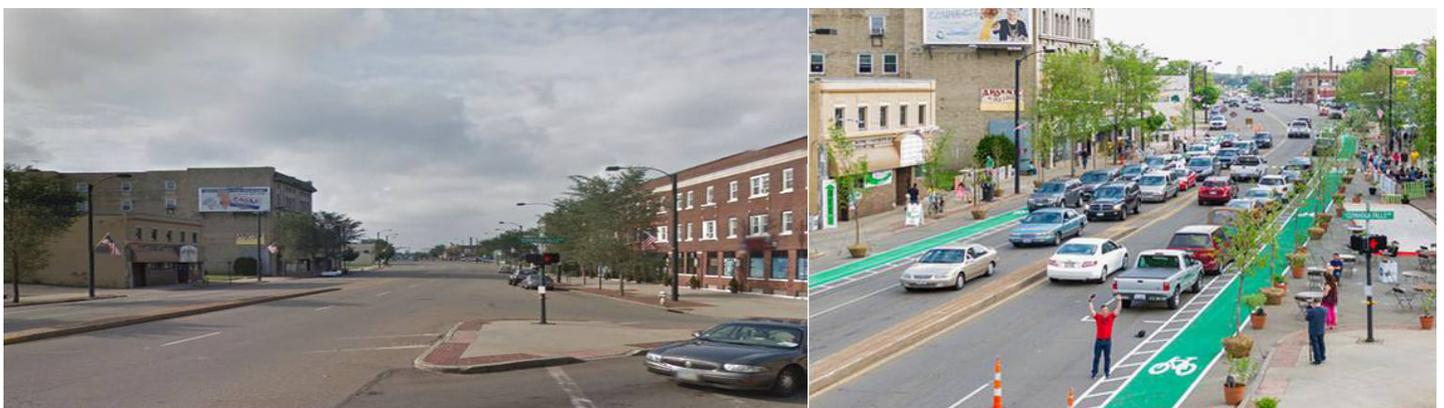


## Better Block

A demonstration tool that rebuilds an area using grassroots efforts to show the potential to create a great bikeable, vibrant neighborhood center. Better Block projects are collaborative sessions in which groups develop solutions to design problems. These events allow communities to engage in the "complete streets" buildout process and provide feedback to community stakeholders in real time. Better Block projects show how communities can come together to transform blighted blocks into vibrant neighborhood destinations.

During Better Block projects, event organizers use available community resources to convert downtrodden locales into pedestrian-friendly and bike-friendly destinations for people of all ages. These projects typically involve establishing temporary facilities such as makeshift bike lanes, cafe seating, trees, plants, lighting, and pop-up businesses to show the potential for revitalized economic activity in an area. The before and after of the Akron North Hill Better Block is below.

Better Block events are gaining in popularity and help cities rapidly implement infrastructure and policy changes. For more information, visit the Better Block web site at [betterblock.org](http://betterblock.org) or contact the group via email at [info@teambetterblock.com](mailto:info@teambetterblock.com).



## BIKE USER MAP

To help cyclists plan rides in the region, based on their individual comfort level and ability, AMATS created a Bike User Map. The Bike User Map rates major area roadways and classifies them as suitable for a beginner, intermediate, advanced or expert rider. The Bike User Map is a tool to encourage cyclists of all abilities to ride on roadways that best suit their individual skill levels.

The map focuses on the existing conditions of major roadways, mainly arterials and collectors, and examines the bike-ability of roadways, which is an estimate of how comfortable it is to bike along a roadway.

Arterial roads play an important role in bicycle mobility because of the retail and attractions along them, yet are often the most stressful for the average bicyclist. The typical length of bicycle trips along arterial roads are about 2 to 6 miles. It is therefore appropriate for bicycle facilities to be located in areas where use can be maximized since bicyclists have the same origins and destinations as do motorists.

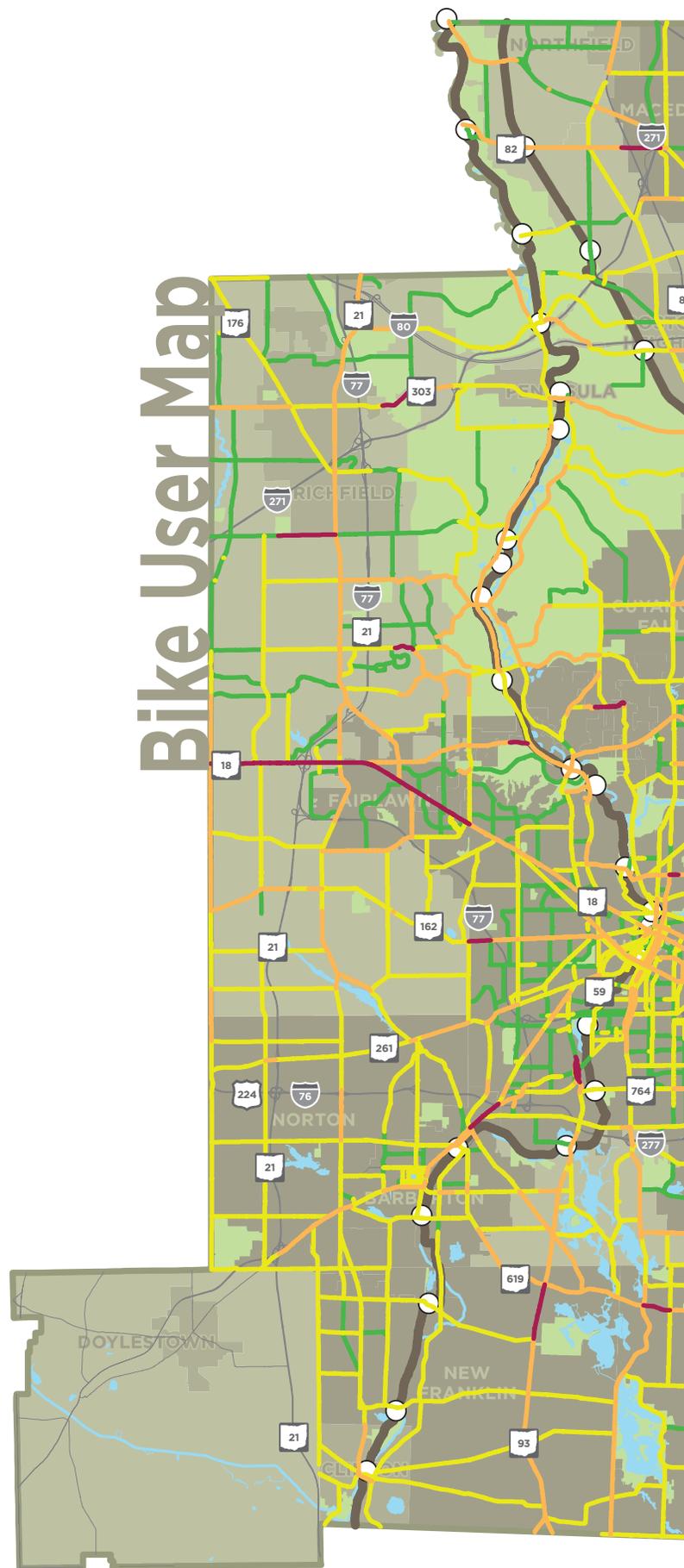
The Bike User Map ratings are based on the following five criteria and also from public input regarding their accuracy.

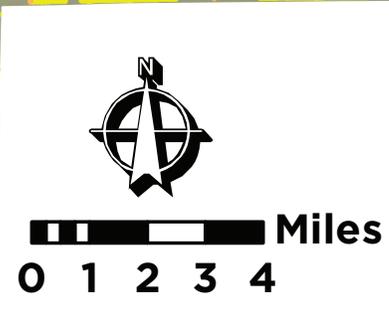
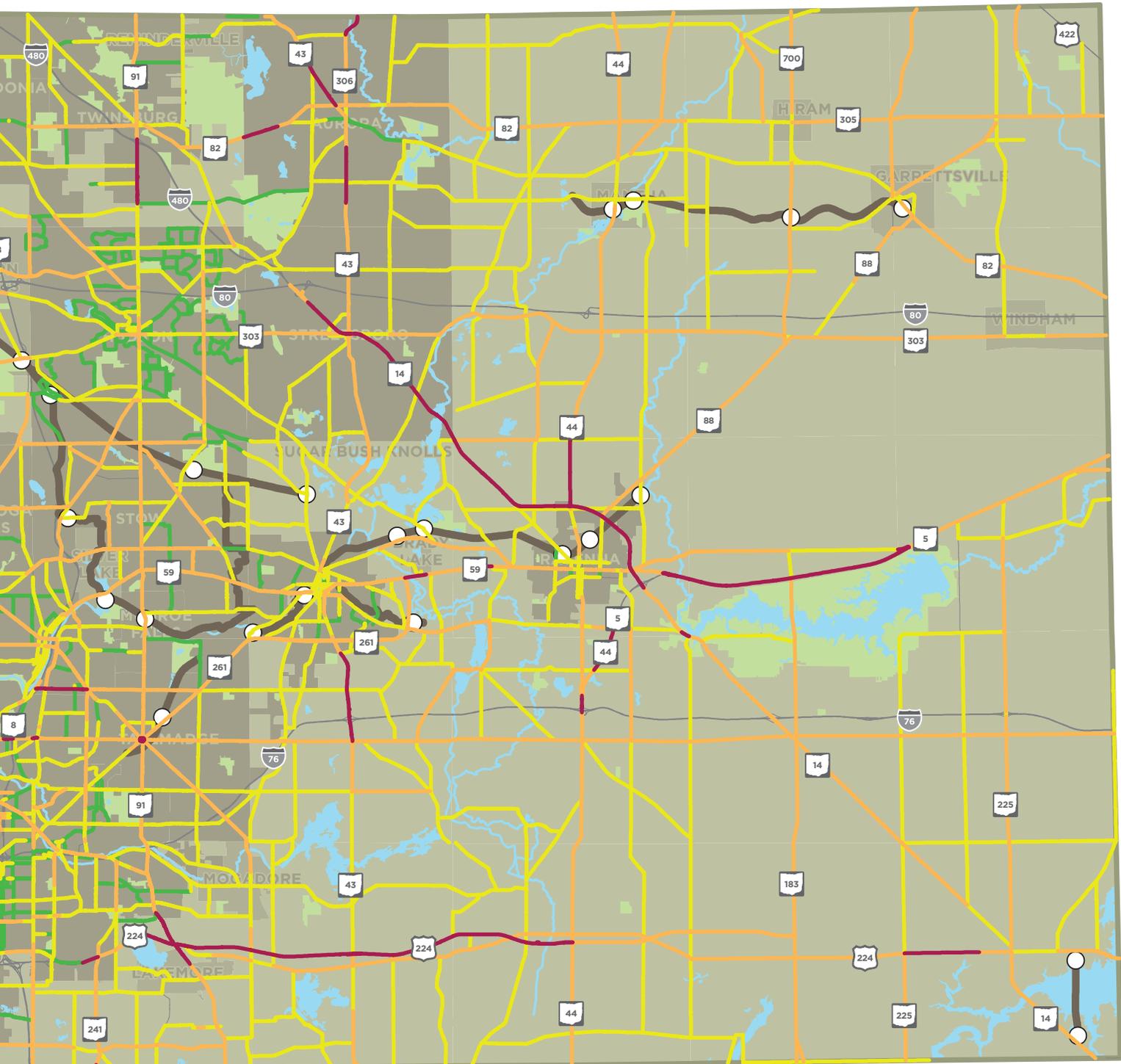
1. Daily car & truck volumes
2. Posted speed limits
3. Road width (mostly outside lane)
4. High vehicle crash locations
5. User comments and feedback

The map is user driven and will be adjusted periodically as input is received, based on user's experiences.

The four road ratings range from easy/beginner to very difficult/expert. The majority of roads in the region are rated intermediate and apply to bicyclists with moderate skill level (identified in yellow). This shows that roadway bicycle improvements are needed to encourage more people to ride on-road for commuter trips.

The Bike User Map is available online at [amatsplanning.org](http://amatsplanning.org) and is also linked to AMATS' bicycle website, [Switching-Gears.org](http://Switching-Gears.org).





**Suggested Rider Skill Ratings**

- Easy/Beginner
- Intermediate/Moderate
- Difficult/Advanced
- Very Difficult/Expert



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# Appendix A - TAP Scoring

## TRANSPORTATION ALTERNATIVES PROGRAM Project Evaluation Criteria

The following project types are eligible for TAP funding (includes PE, RW & CO):

<b>1. Facilities - <i>multipurpose trail, bike lane and sidewalk</i></b>	<b>Points</b>
Regional Trail (Towpath, Portage, Headwaters, Bike and Hike)	25
Secondary Trail/Sidewalk/Bike Lane	15
<b>2. Project Type / Logical Termini</b>	<b>Points</b>
Facility connects to two existing facilities or two activity centers	25
Facility connects to one existing facility or one activity center	20
Facility is a stand alone project (ex. new trail)	15
Trail project is an asphalt upgrade from limestone Activity Centers are considered retail plazas, office parks, schools, hospitals or recreation parks	5
<b>3. Level of Use</b>	<b>Points</b>
How much use is the facility projected to have? Considers density of population, existence of goat paths, popularity of trails	0 - 15
<b>4. Consistency with Plans</b>	<b>Points</b>
Project recommended in Connecting Communities Planning Grant	5
Project is specifically recommended in Transportation Outlook 2040	5
Project is recommended as part of Ohio SRTS Travel Plan	5
Project is on an existing transit line	5
Project area has a history of bicycle/pedestrian accidents	5
<b>5. Equitable Distribution of Funds</b>	<b>Points</b>
The Ratio of Funds Received (and Programmed) to a Target Budget Percentage	
0-50	10
51-100	8
101-150	6
151-200	4
201-250	2
Over 250	0
Fair Share Target Budget calculation is described under Program Administration	

## Appendix B - AMATS Planning Areas Defined

To better illustrate the differences in context found within the communities that comprise the region, AMATS described eight “Planning Areas” – categorizations for communities based on their dominant land use characteristics – in its 2010 *Connecting Communities* report. The eight categories are as follows:

### **Downtown**

The Downtown area is the hub of the regional transportation system. It supports high levels of public transportation and pedestrian activity. It is the central business district with dense, tall buildings and a mix of office, residential, government and cultural uses.

### **Suburban Center**

Suburban Centers are major business and retail hubs. They consist of a mix of shopping centers, big-box stores and office parks. Usually these areas are auto-dependent and do not support transit and pedestrian activity.

### **Town Center**

Town Centers are smaller hubs for business, retail, residential and government uses predominantly along main streets. These centers are pedestrian-friendly, transit-accessible and can consist of both business and office space.

### **Urban Core**

Urban Core areas consist of a grid block street pattern with high pedestrian activity and easy access to transit. They provide a dense mix of single and multi-family housing with businesses located along main streets and corner stores.

### **Urban**

Urban areas are mature, developed neighborhoods adjacent to the urban core area. They have both grid and curving street patterns with moderate levels of transit accessibility and pedestrian activity. They are predominantly single-family with retail along main streets and in small shopping centers.

### **Suburban**

Suburban areas (suburbs) are predominantly single-family housing units with retail and business located in shopping centers and office parks. Residential streets are predominantly curved and terminate in cul-de-sacs. Suburbs are auto-dependent with limited transit and pedestrian activity.

### **Exurban**

Exurban areas (exurbs) are predominantly low-density and single-family, with residential housing typically along country roads or detached subdivisions surrounded by agricultural and park land. They are auto-dependent, without sidewalks and transit is limited to individual door-to-door service.

### **Rural**

Rural areas consist of large tracts of agricultural, park or vacant land. Housing is predominantly along country roads and is very low-density and auto-dependent. There are no sidewalks and transit is limited to individual door-to-door service.

## Appendix C - Public Involvement

During the development of the 2016 Pedestrian Plan, AMATS utilized proactive outreach strategies to foster public dialogue regarding the aims and purposes of this item. The draft plan was available for public review and comment on the agency web site, [amatsplanning.org](http://amatsplanning.org), beginning July 6, 2016 through July 21, 2016. Additionally, the agency made use of social media, such as Twitter and Facebook, and e-mails were sent to all AMATS committee members and area media to solicit comments regarding the draft plan.

The 2016 Bike Plan was discussed at the January 21, 2016 Citizens Involvement Committee (CIC). The preliminary development of the Bike Plan was discussed, as well as, types of bicyclists and who should the plan be focused on. Connections between on- and off-road facilities with clearly marked lanes, the differences between recreational and commuter bicyclists and their respective needs, support for separate bicycle facilities from vehicles and potential use of various right-of-ways was discussed.

At the April 14, 2016 CIC meeting, the development of the Bike Plan and preliminary recommendations was discussed. Bicycle facility maintenance, trail connections in southern Summit County and creating a Complete Streets Policy was discussed. Both CIC meetings were advertised through the AMATS website, social media and in the Beacon Journal.

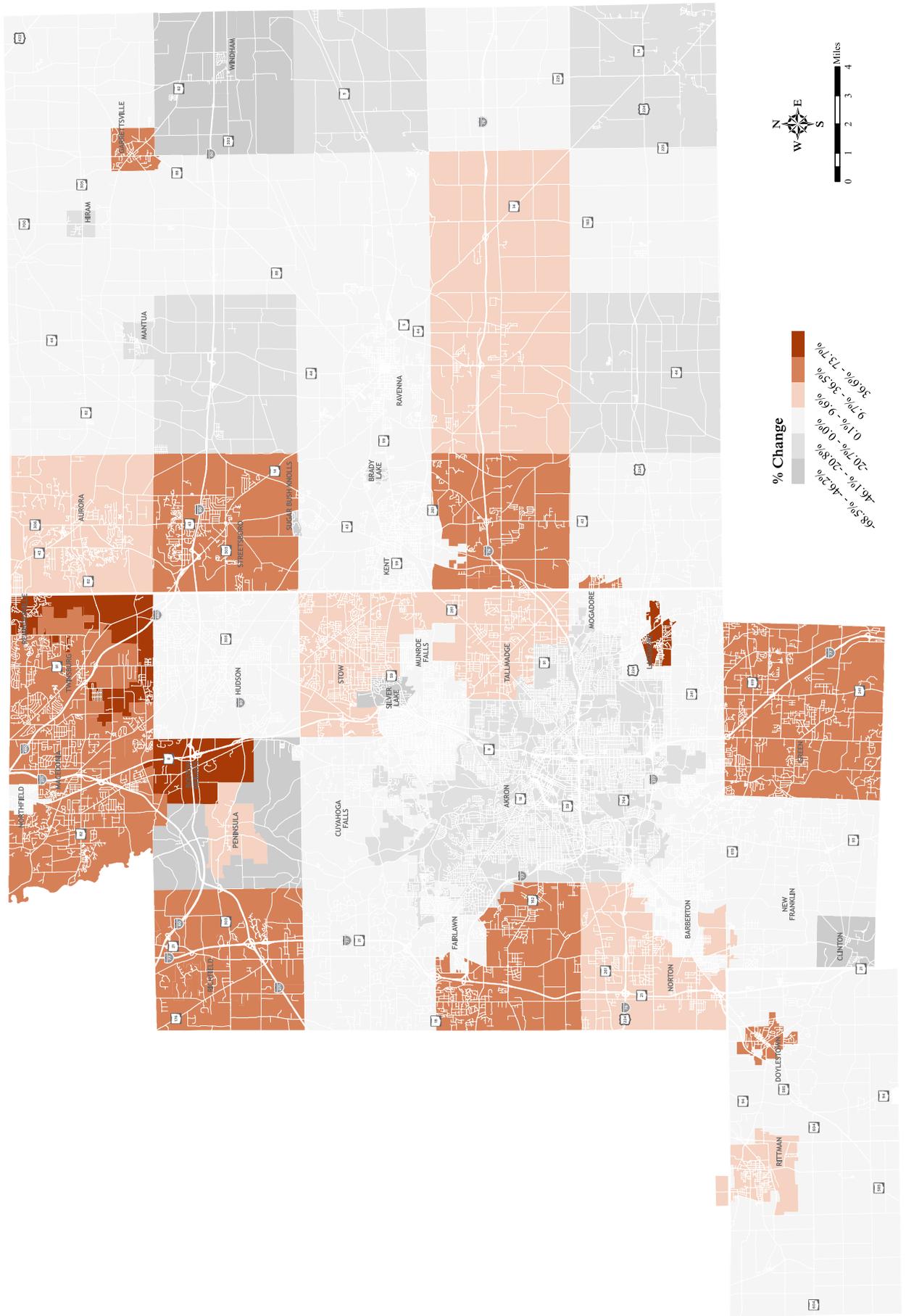
AMATS has also been working on innovative approaches to gathering public input on community needs and priorities prior to the 2016 Bike Plan development. AMATS partnered with communities to host five Bike-N-Brainstorms (p.33) in 2015 with 170 participants. Participants discuss bicycle related issues, needs and priorities with AMATS and local officials along a bicycle ride and discussion afterwards. Surveys are collected to document comments. Feedback from local communities and Bike-N-Brainstorm participants were used in the Bike Plan development.

## Appendix D - Maps & Demographics

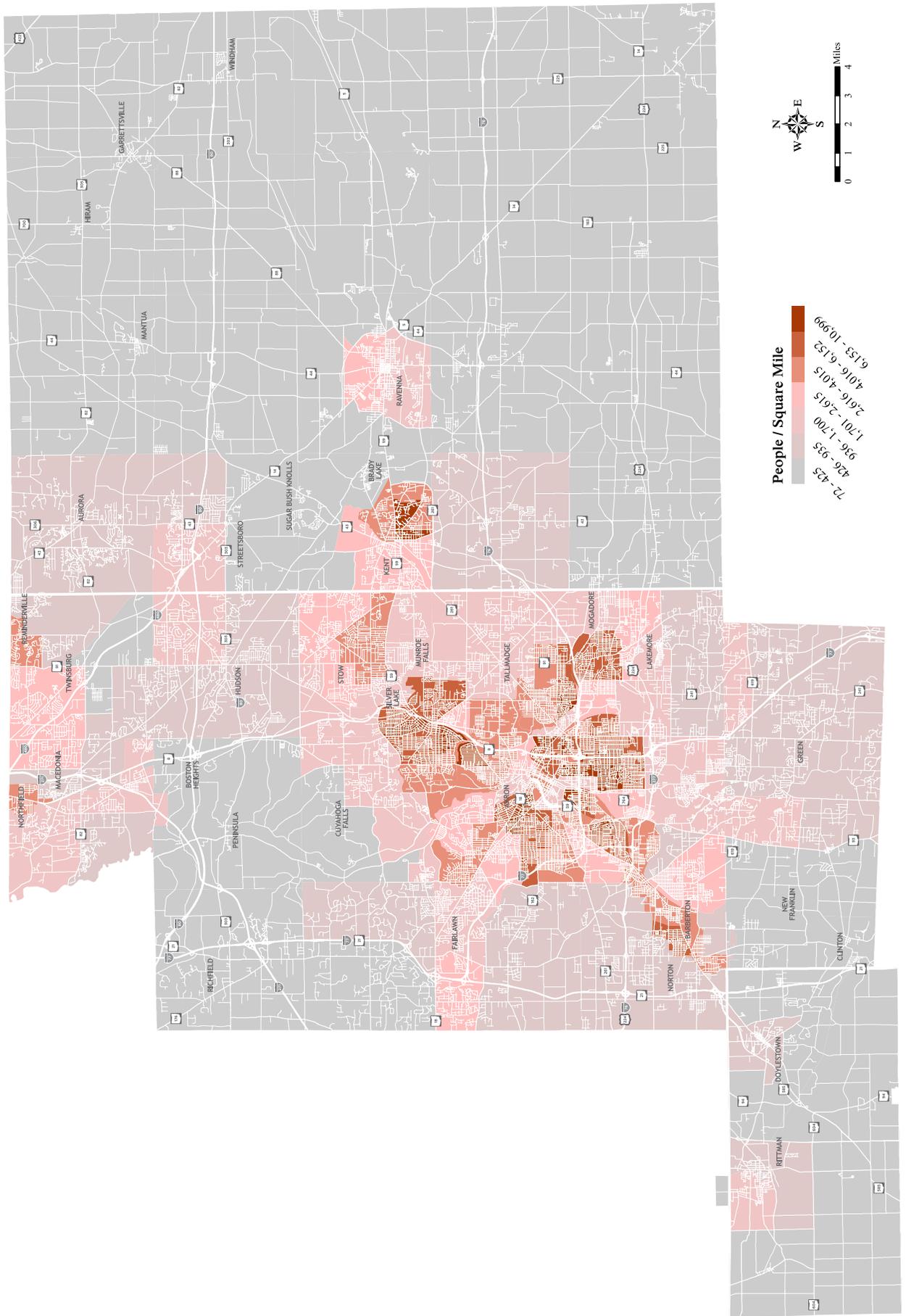
The following pages include maps depicting data that was used in the development of the Bike Plan and will continue to be used for implementation within projects throughout the years to come.

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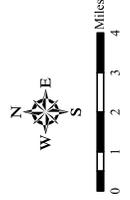
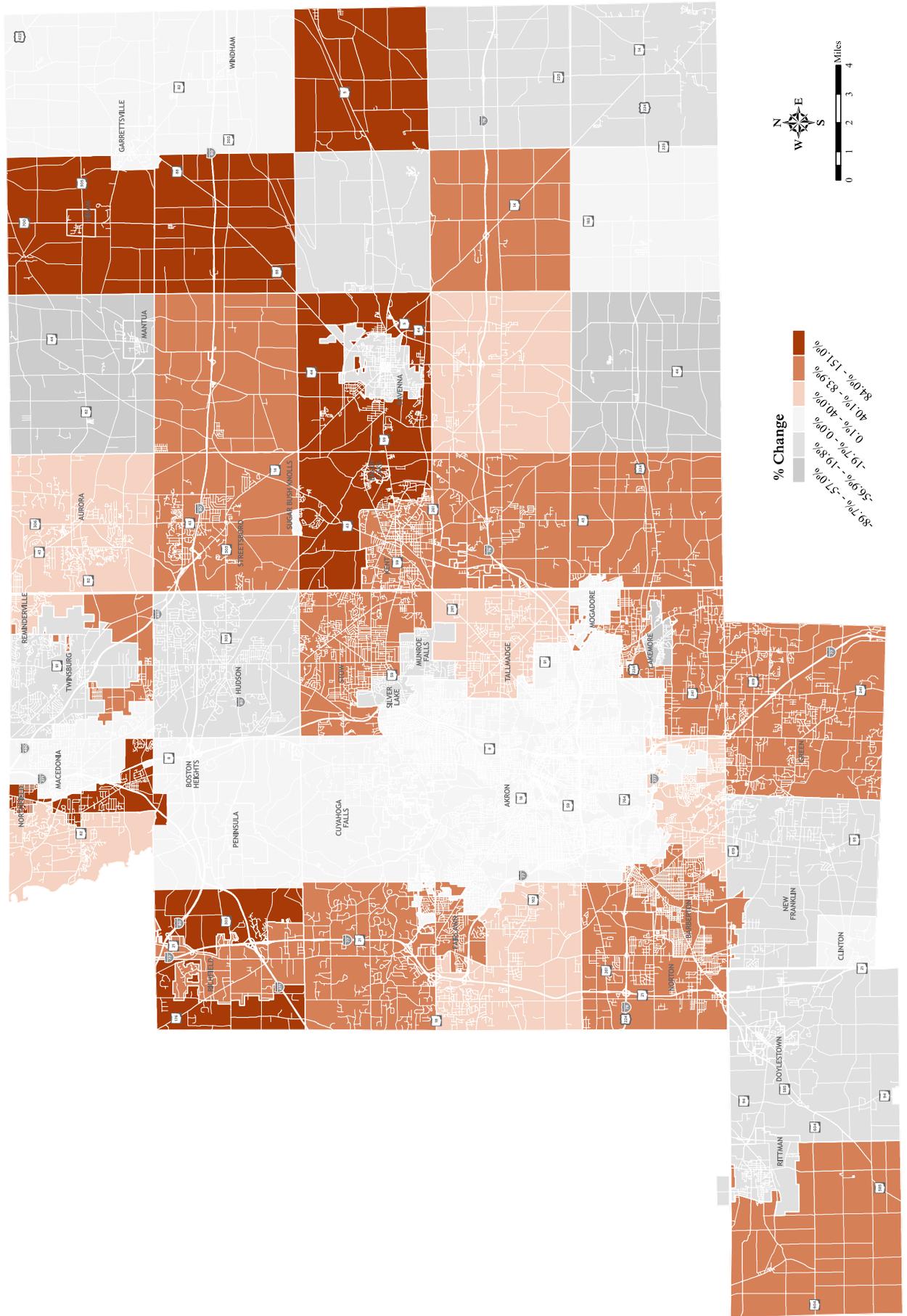
# AMATS Population Change 2010 - 2040



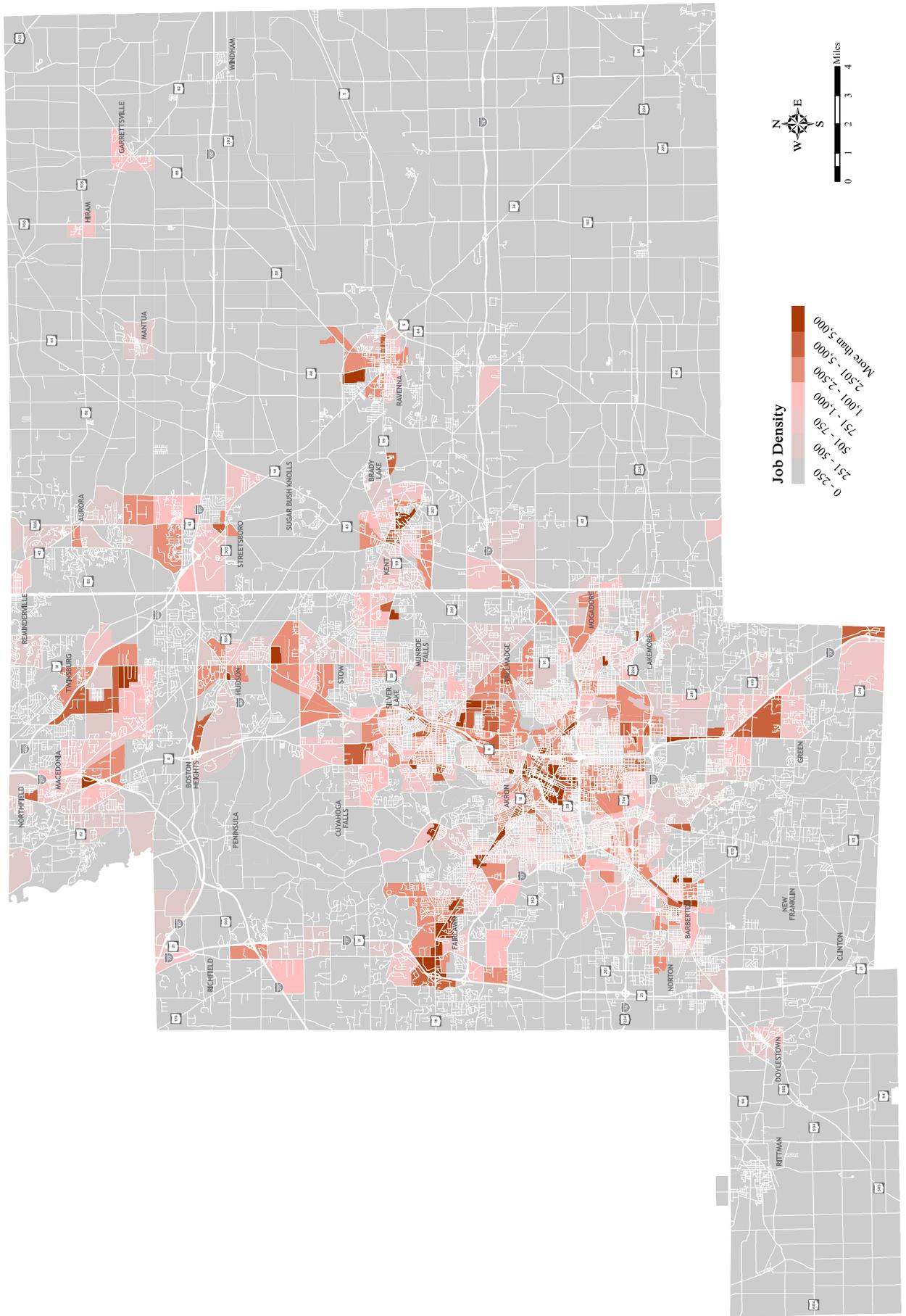
# Population Density by Census Tract

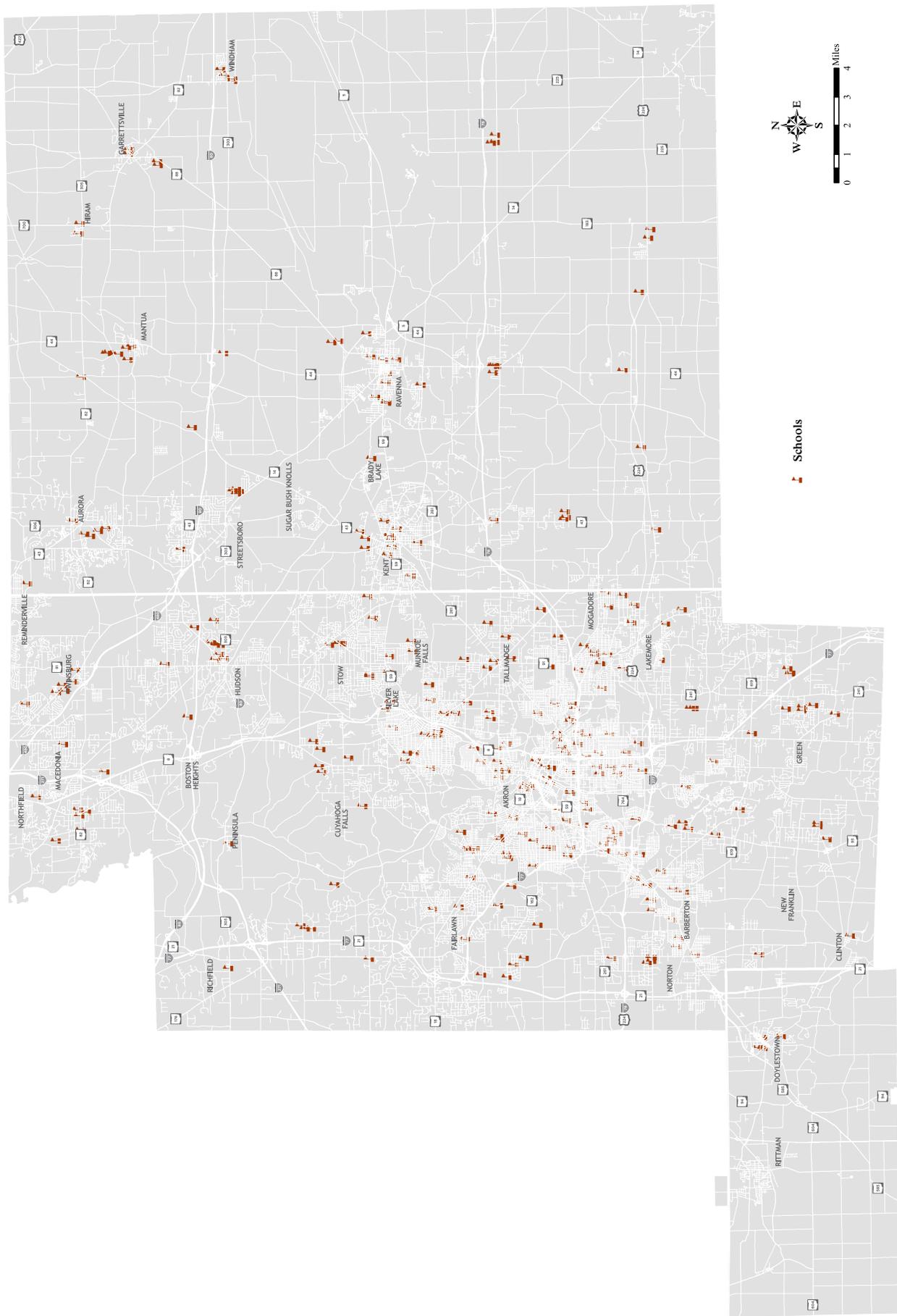


# AMATS Employment Change 2010 - 2040

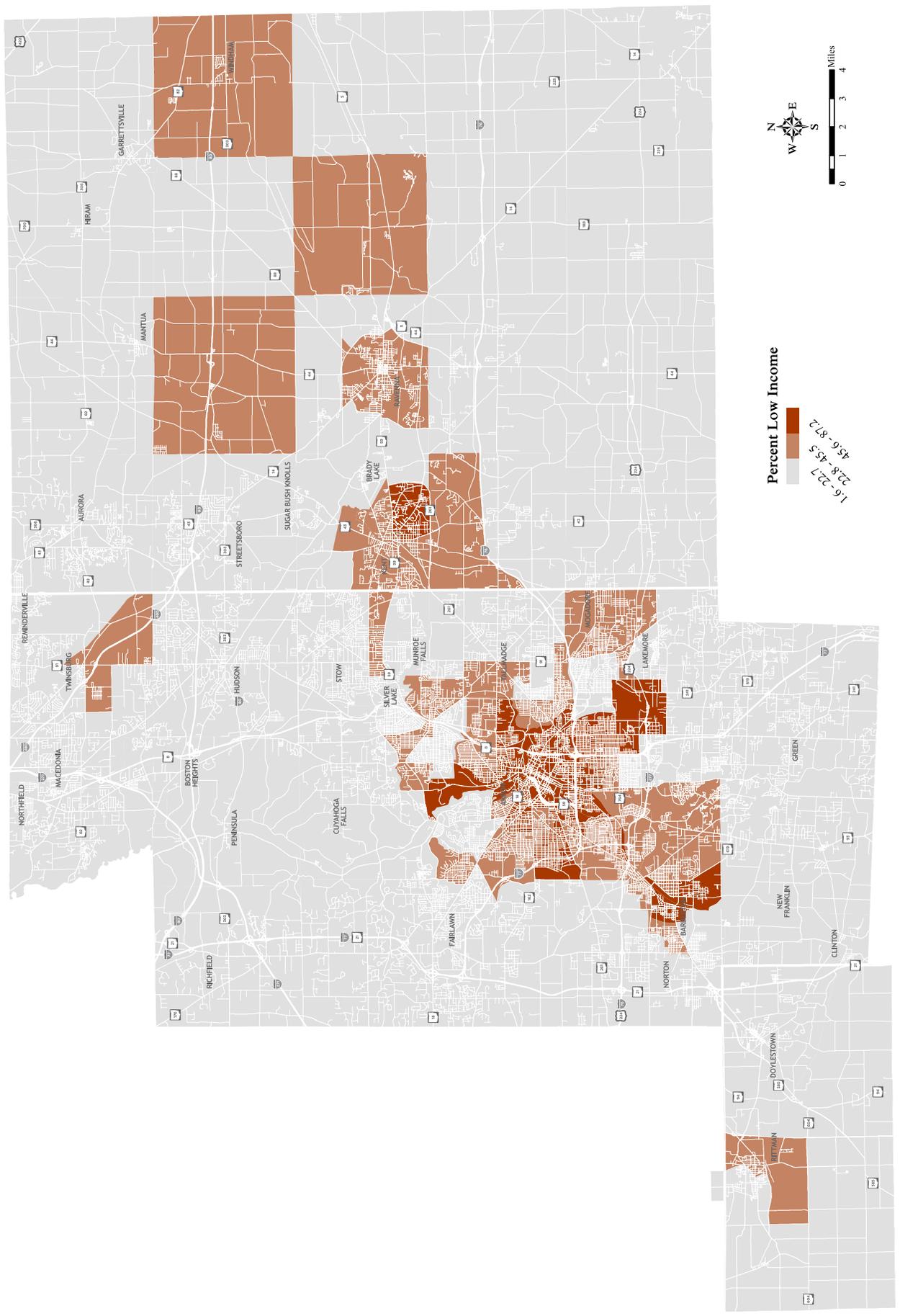


# 2010 Job Density





# Percent Low Income Population by Census Tract







This report was prepared by the Akron Metropolitan Area Transportation Study (AMATS) in cooperation with the U.S. Department of Transportation, the Ohio Department of Transportation, and the Village, City and County governments of Portage and Summit Counties and a portion of Wayne County. The contents of this report reflect the views of AMATS, which is responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official view and policies of the Ohio and/or U.S. Department of Transportation. This report does not constitute a standard, specification or regulation.



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