

What is MPOJC?

The Metropolitan Planning Organization of Johnson County (MPOJC) provides transportation planning services to the lowa City urbanized area, including lowa City, Coralville, North Liberty, University Heights, Tiffin, Johnson County, the lowa City Community School DistriCt and the University of Iowa. Federal legislation requires any urbanized area with a population over 50,000 to have a metropolitan planning organization (MPO) to ensure that existing and future expenditures of federal funding for transportation projects and programs are based on the continuing, cooperative, and comprehensive ("3-C") planning process. This helps to ensure that investments in transportation infrastructure contribute to a well-connected metro system.

MPOJC adopted the *Future Forward 2045 Long-Range Transportation Plan* (LRTP) in 2017. This long-range transportation plan is a requirement for securing state and federal funding for transportation projects and is intended to guide metropolitan area decision-making regarding transportation improvements and investments extending 25 years into the future. The plan considers all modes of transportation -- car, truck, freight, transit, pedestrian and bicycle -- and makes specific recommendations for transportation projects and funding sources.

The LRTP includes a set of guiding principles (see right) intended to influence the design and funding of transportation projects. These principles form the basis of scoring criteria that determine which road or trail projects receive federal funding through the Surface Transportation Block Grant Program and the Transportation Alternatives Program. Many of the facilities that serve bicyclists have been supported by these federal sources.

The LRTP includes a chapter specifically on bicycle and pedestrian infrastructure that articulates a vision to create an accessible, well-coordinated bicycle and pedestrian network that allows people to safely bike and walk to community destinations and to meet their daily needs. Strategies included in the Bicycle and Pedestrian Network chapter of the plan form the foundation of this update to the Metro Bicycle Master Plan (see appendix).

MPOJC Guiding Principles for Transportation

- **Economic Opportunity:** Support growth, innovation, job creation, and productivity.
- **Environment:** Preserve and protect our natural resources, including land, water, and air.
- Quality of Life: Enhance livability and create vibrant and appealing places that serve residents throughout their lives.
- **System Preservation:** Maintain existing facilities in good and reliable condition.
- **Choice:** Offer multi-modal transportation options that are affordable and accessible.
- Safety: A transportation network designed and maintained to enhance the safety and security of all users.
- Efficiency: Build a well-connected transportation network with coordinated land use patterns to reduce travel demand and delay, miles traveled and energy consumption.
- **Health:** Invite and enhance healthy and active lifestyles.
- **Equity:** Provide access and opportunity for all people and all neighborhoods.

You can view the MPO's Future Forward 2045 Long-Range Transportation Plan at www.mpojc.org/what-we-do/transportation-planning-division/long-range-transportation-plan)

REGIONAL TRAILS AND BICYCLING COMMITTEE

Sherri Proud, Coralville

Shelly Simpson, North Liberty

Doug Boldt, Tiffin

Louise From, University Heights

Jay Geissen, University of Iowa

Becky Soglin, Johnson County

Julie Seydel-Johnson, Iowa City

Bob Oppliger, Bicyclists of Iowa City

Liz Hubing, Think Bicycles of Johnson County

MPO STAFF

Kent Ralston, Executive Director

Emily Bothell, Senior Associate Transportation Planner

Brad Neumann, Associate Transportation Planner

Frank Waisath, Associate Transportation Planner

Sarah Walz, Associate Transportation Planner

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Introduction and Context

Now is an exciting time for bicycling in Johnson County. Since the adoption of the 2009 Metro Bicycle Plan, the lowa City Metro Area has added more than 60 miles of trails and sidepaths. With the extension of the off-street system, recreational bicycling in Johnson County has flourished and a number major projects are now nearing completion.

Within the next 5 years, a planned trail link will connect Coralville's Clear Creek Trail to Tiffin under the I-80/380 interchange and then from Tiffin's western city limits to Kent Park. Meanwhile the final segments of the Iowa River Trail will link Solon and the Hoover Trail connecting the Sugar Bottom Recreation Area north to the Cedar Valley Nature Trail in Linn County. With the completion of these projects, opportunities for bicycle tourism are greatly expanded. Additional future trail projects in the County will connect Iowa City to West Branch and Kent Park to the Amanas.

The benefits of bicycling as an economic development tool are now recognized by the lowa City Convention and Visitors Bureau and the lowa City Area Development Group, which organized a Johnson County Cycling Committee to promote bicycling as a resource for community development in 2018. Since 2009, the Metro Area has hosted four RAGBRAI overnight events (three in Coralville and one in lowa City) and is designated one of only three sites in North America to host a World Cup Cyclocross event (in 2019, lowa City will host the event for the third consecutive year). Within the city limits of Coralville, bicyclists can access 6 miles of single-track mountain bike trails and a cyclocross park with two miles of flow trail to be completed in 2020 (see page 17).

Numerous bicycle clubs and programs provide additional opportunities for all levels of riders from youth to seniors, including special efforts to engage immigrants, college students, women, and other under-represented groups (see page 31).

Coralville, Iowa City, and University Heights have each earned designations as Bicycle Friendly Communities from the League of American Bicyclists and Johnson County's administrative campus, Iowa City's Downtown campus, and the University of Iowa have also earned Bicycle Friendly designations.

This update to the Metro Area Bicycle Plan carries forward the vision and goals of the 2009 Metro Bicycle Plan to extend the network of bicycle facilities and to expand and enhance programs and policies that help encourage a culture of bicycling. While each community within the Metro has its own development patterns and vision for bicycle and pedestrian accommodations, the plan identifies best practices, and opportunities to coordinate efforts that enhance bicycle safety through education and outreach as well as policies to ensure consistency between communities in terms of regulation and way-finding. The goal is twofold: to ensure bicyclists can ride through the metro with a sense of safety and confidence and to build public acceptance of bicycling as a legitimate and preferred form of transportation.

As with the 2009 Metro Plan, the organizing framework for the update relies upon the League of American Bicyclists (LAB) 5 E's:

- Engineering,
- Education,
- Evaluation,
- Enforcement, and
- Encouragement.

Each element is addressed in its own chapter with a set of best practices. Although it has not been added to the League's official list of building blocks, "Equity" serves as a sixth "E", ensuring that our bicycle planning efforts and investments reach youth, women, people of color, non-English speakers, and low-income residents.

In 2017, Iowa City adopted its own Bicycle Master Plan with a goal of putting into place more on-street facilities. This approach makes particular sense for Iowa City with its higher density development, grid street network, and large student population. While Iowa City is not directly included in this planning effort, the Metro Plan Update does consider goals and objectives adopted in Iowa City's Plan as well as connections to Iowa City facilities identified in the Iowa City Bicycle Master Plan.

Progress since 2009

The MPO Metropolitan Bicycle Master Plan adopted in 2009 included a set of system-wide recommendations for the entire metro area as well as goals specific to each individual community/entity. What follows is a list of the recommendations included in the 2009 plan along with a summary of progress that has been made.

lowa City adopted its own bicycle master plan in 2017 and is, therefore, not part of this metro update. However, this summary of Metro-wide progress below includes lowa City contributions.

METRO-WIDE PROGRESS

Install on-street accommodations.

- ✓ Bike lanes were recommended in Iowa City and University Heights. By the close of 2019, Iowa City will have implemented 16 miles of bike lanes.
- ✓ Because most streets in Coralville and North Liberty are not wide enough to accommodate a 5-foot bike lane, sharrows were recommended along several main bicycle routes. Sharrows are now installed on Holiday Road, 10th and 12th Avenues, and 5th Street in Coralville.
- ✓ Striped shoulders exist on a number of county roadways and paved shoulders are now standard on county road projects.

Facilitate bicycle safety through: 1) Public service announcements targeted at young adults; 2) Driver's license education classes; and 3) elementary school education classes.

- ✓ Information on sharing the road and safe passing of bicycles is included in the Iowa DOT's Driver Manual.
- ✓ The lowa City Community School District includes bicycle safety in its physical education curriculum and most elementary schools host a bike rodeo in the spring. Some elementary schools are teaching children to ride bicycles in Physical Education classes.
- ✓ Youth bicycle programs are offered through the parks and recreation divisions of North Liberty, Coralville, and Iowa City as well as by the Neighborhood Centers of Johnson County and the Iowa City Bicycle Library.
- ✓ A number of bicycle shops and the Iowa City Bike Library offer adult classes or events aimed at encour-

- aging adults to ride.
- ✓ Johnson County offers a range of bicycle education classes for adults throughout the year.
- ✓ Iowa City's Cable Channel 4 produces "Bike Shorts" a bicycle education video series. The 60-second videos are shared on social media and cover topics ranging from trail etiquette, to hand signals, to how drivers can safely pass a bicyclist on the road.

Implement a coordinated way-finding system on trails and roadways across the urbanized area to assist route-finding.

- ✓ A metro-wide system of wayfinding signs was designed and installed along the bicycle network. The signs feature major destinations and distances.
- ✓ On- and off-street bike facilities along with primary and secondary bicycle routes are shown on the MPO's metro area trails map and are marked with "Share the Road" Signs.

Implement and publicize bike light enforcement program during the fall and offer discount bike lights to encourage safety.

The plan calls for enforcement of rules of the road and headlight and reflector requirements for bicyclists, especially during the fall when days are shorter and students are returning to campus. The MPO and member entities were encouraged to explore grant opportunities to offer discounted bike lights to qualifying residents. While blinking lights were distributed in the past, this promotion has been discontinued.

Achieve platinum "Bicycle Friendly Community" designation from the League of American Bicyclists.

✓ In order to receive outside evaluation, each community was encouraged to pursue a Bicycle Friendly Community designation. To date, lowa City (silver), University Heights (bronze), and Coralville (bronze) have earned Bicycle Friendly Community designations. The University of Iowa is designated as a Bicycle Friendly Campus (silver). Johnson County's downtown campus (gold) and Iowa City's downtown campus (silver) have earned Bicycle Friendly Business designations.

COMMUNITY / ENTITY PROGRESS

Coralville

Completed goals:

- ✓ Adopted a complete streets policy.
- ✓ Bicycle lockers and covered bicycle parking are offered at Coralville's multi-modal facility at the lowa River Landing.
- ✓ Bike to Work Week and Bike Month are promoted with a city proclamation and activities.
- ✓ Constructed a wide sidewalk adjacent to 1st Avenue north and south of Interstate 80.
- ✓ Constructed Clear Creek Trail connection between Coralville and the I-80/380 interchange. The remainder of the project, which will pass under the interchange and connect to Tiffin is designed and funded but is delayed due to re-construction of the interchange. The anticipated completion date is 2024.
- ✓ Located pedestrian/bicyclist push buttons on sidewalks where cyclists can access them without dismounting.
- ✓ Street sweeping and trail sweeping occur seasonally or as needed.

Incomplete or continuing goals:

 Adopt a bicycle ordinance that requires installation of bike racks for commercial and multi-family development.

North Liberty

Completed goals:

- ✓ Promotes Bike to Work Week and Bike Month with city proclamation and activities.
- ✓ Constructed North Dubuque Street Trail (wide sidewalk) within North Liberty.
- ✓ Constructed Cherry Street Trail (wide sidewalk).
- ✓ Located pedestrian/bicyclist push buttons on sidewalks where cyclists can access them without dismounting.

Incomplete or continuing goals:

- Adopt a complete streets policy.
- Adopt a bicycle ordinance that requires installation of bike racks for commercial and multi-family development.

University Heights

Completed goals:

- ✓ Promotes Bike to Work Week and Bike Month with city proclamation and activities.
- ✓ Constructed Melrose Avenue and Sunset Street wide sidewalks.

Incomplete or continuing goals:

- Adopt a complete streets policy.
- Adopt a bicycle ordinance that requires installation of bike racks for commercial and multi-family development.

Johnson County

Completed goals:

- ✓ Paved shoulders on all new road projects.
- ✓ Bike to Work Week and Bike Month are promoted with a proclamation and activities.
- ✓ Sugar Bottom, Reservoir Dam, and Hills loops are signed with wayfinding—destination and distances.
- ✓ Bicycle parking is installed at all public buildings within the urbanized area.
- ✓ Constructed the North Dubuque Street Trail from West Overlook to North Liberty city limits.
- ✓ Constructed paved shoulders from North Liberty to Solon to the Johnson/Linn county line.
- ✓ Ely connections from North Liberty to Sugar Bottom Recreation Area, Sugar Bottom to Solon, and from Solon city limits are being completed.
- ✓ Trail connection between Tiffin and Kent Park is programmed.

Incomplete or continuing goals:

• Consider adopting a complete streets policy for development contiguous to urbanized areas.

MPOJC

Completed goals:

- ✓ Analyze peak hour counts for bicycle commuting onstreet. Counting bicyclists and pedestrians is now a routine part of all intersection counts.
- ✓ Most MPO communities provide links through their website or phone app to report spot maintenance along trails and sidewalks. Reports can also be entered through the MPO's website and are referred to the appropriate community.
- ✓ Annual trail counts are recorded at key locations.
- ✓ The MPO helps to coordinate the promotion of Bike Week/Month events with Think Bicycles of Johnson County.
- ✓ Review the Metro Bicycle Master Plan annually to track progress toward the goals and recommendations in the plan.

Activities that have been discontinued:

- Distribute articles in local newspapers and newsletters regarding bicycle related events. These efforts are now more effectively disseminated through social media. Think Bicycles of Johnson County provides links to bicycle advocacy issues. The lowa City Area Convention and Visitors Bureau maintains on online presence of are rides and events.
- Provide educational materials on the MPO website, including local resources and services.
- Create an online trip maker/map that enables residents to enter their address and destination to identify a safe route to their destination. This is now available through various online tools such as Google mapping.
- Publish a bicycle commuter guide illustrating sheltered racks, bike lockers, and public shower facilities. This map was being published, but due to low usage has been discontinued.

Vision

While each MPO community has its own distinct development patterns, including road networks and land uses, all share the goal of creating a convenient and efficient transportation system where people can bike safely to destinations to meet their daily needs.

This plan builds upon the vision set forth in the 2009 Metro Bicycle Plan and the 2017 MPO *Future Forward 2045: Long-Range Transportation Plan* and is intended to outline the future development of bicycle facilities in the MPO's Urbanized Area, to further expand the established wayfinding system, and to encourage consistent bicycle regulations and policies across entities. The plan also considers the potential of bicycling as a contributor to economic development and tourism.

GUIDING PRINCIPLES

The following guiding principles are adapted from the 2009 Metro Bicycle Plan:

Principle 1: All Bicyclists' Abilities Differ

People bicycle for many different reasons, including commuting, running errands, recreation, exercise, and competitive sport. Among bicyclists, there is a continuum in skill level and comfort with different facility types. It is important to meet bicyclists where they are and to understand that as more people adopt bicycling as a form of transportation or recreation, the facilities required to meet their needs will evolve.

Principle 2: Anticipate Bicycles on All Streets

Bicyclists want to go to the same places motorists do and cyclists are allowed to ride on every street, except interstate highways. While the street network may not meet the comfort level of every bicyclist, and off-street facilities may provide alternative access to many destinations, communities should work to improve pedestrian and bicycle safety on all roadways.

Principle 3: It's More Than Just Getting There

Trails, sidepaths, and bicycle lanes alone will not advance bicycling as a legitimate form of transportation in the Metro Area. Support facilities, such as bicycle parking and wayfinding signage, and programs that encourage bicycling and educate both drivers and bicyclists are also critical components.



Source: 2018 online Metro Bicycle Survey. Based on 259 responses. Respondents were asked to classify their bicycling comfort level. This survey was a self-selecting, non-random survey offered to anyone in the community. It is, therefore, not statistically significant. While the results cannot be applied to the general population it does give some sense about how self-identified bicyclists view their own comfort level. In other words, even among individuals who have an interest in bicycling, less than half express confidence in their skills or comfort level.

Principle 4: Coordination is Essential

Each metro community will consider opportunities to expand infrastructure based on existing conditions and local development priorities. However, as arterial streets and trails are extended, MPO communities should ensure these facilities are connected and complementary across jurisdictions to allow for a seamless travel experience. Likewise, communities should work to ensure that bicycle ordinances do not conflict. Whenever possible, successful programs to educate bicyclists and drivers and policies that enhance bicycle safety and promote bicycling should be shared and replicated across the metro area.

Strategies

The following strategies for improving bicycle and pedestrian transportation were adopted by the MPO as part of the *Future Forward 2045: Long-Range Transportation Plan* and form the foundation of this plan.

Reduce obstacles for non-motorized transportation

- Ensure compliance with complete streets policies for all new and reconstructed road projects seeking federal funding.
- Continue to expand and enhance bicycle and pedestrian facilities, including the trail network.
- Prioritize ADA transition plans to bring all streets, sidewalks, and bus stops into compliance.
- Ensure routine maintenance and prompt repair to bicycle and pedestrian facilities.

Improve bicycle and pedestrian safety

- Design on-street facilities according to AASHTO and NACTO guidelines.
- Increase participation in Safe Routes to Schools and similar programs that encourage children to travel by foot or bicycle.
- Develop educational programs to promote safe bicycling and walking.
- Evaluate intersections and corridors with high pedestrian or bicycle collision rates and develop a mitigation plan.
- Raise awareness of the dangers of distracted drivers and pedestrians.

Maximize bicycle and pedestrian access

- Ensure safe bicycle/pedestrian access to commercial/employment areas, schools, and parks.
- Include connectivity as a criterion in land development processes.
- Adopt bicycle parking ordinances in all Metro Area municipalities.

Recognize and promote the economic benefits of bicycling

- Use bikability and walkability as tools to promote economic development and other investments.
- Expand participation in Bike-to-Work Week and Bike Month.
- Continue to pursue and promote "Bike Friendly" designations, include Bike Friendly Business designations.
- Ensure safe bicycle and pedestrian access to all commercial/employment areas.

Process

The Metro Bicycle Plan process got underway in October 2018, with an online survey. This survey built upon input gathered through recent bicycle and general transportation surveys completed as part of the MPO's *Future Forward 2045: Long-Range Transportation Plan* process (2016-2017). Both processes also included surveys that targeted youth riders through the junior high schools.

Two public open houses were held in February, 2019, and additional information was gathered from staff in Coral-ville and North Liberty. Information was provided online through the Spring of 2019 with opportunity for online feedback.

An Open House was held on November 20th at Van Allen Elementary School in North Liberty and additional input was taken until December 1, 2019.

MPO Communities are encouraged to adopt the Bicycle Master Plan.

Existing System

Facility Types

The scope of this inventory focuses on the urbanized area in Coralville, North Liberty, Tiffin, and University Heights, but also includes facilities that connect to the County and Iowa City. Facilities are broken into two categories: off-street trails and sidepaths and on-street facilities and routes.

Multi-use trails are paved facilities shared with pedestrians and other non-motorized users. Because they are completely separated from the roadway and have few road crossings or conflict points with motor vehicle traffic (cross streets and driveways), trails are the preferred facility for most bicyclists.

Multi-use trails are often located along waterways, creek and river floodplains, railroad rights-of-way, or utility easements as these spaces have limited development potential and offer an opportunity for a continuous, uninterrupted route. Local trails provide short connections to schools, parks, and employment areas.



Photo © Overdue Ride

EXAMPLES: Portions of the North Ridge and North Liberty Trail are located within railroad right-of-way; the Clear Creek Trail meanders through the Clear Creek floodplain.

	Mileage (approx.) by Community						
	Coralville	North Liberty	Tiffin	University Heights	lowa City	Johnson County within Metro Boundary*	METRO TOTALS
Trail	16.22	3.01	1.52		29.42	2.35	52.52
Local Tral	2.86	4.92	0.41		3.05		11.24
Sidepath	11.59	12.45	1.65		21.39	7.69	54.77
Wide sidewalk	9.96	1.41	1.25	0.94	21.71		35.27
Bike Lane					16.37		16.37
On-street Route			0.91	0.52	20.92	8.76	31.11
Sharrow	4.76				2.29		7.05
Paved Shoulder						23	23
TOTAL	45.4	21.69	5.75	1.46	115.15	18.88	231.33

^{*} Metro area includes portions of Johnson County within the growth area of any metro community
Sidepaths include only those "wide sidewalks" along which vehicle access (i.e. driveways) are restricted and where
bicycling legally permitted. Local trails are those that provide only short areas of access, such as links from cul de sacs or
links to parks or schools.



EXAMPLE: Paved shoulders along Old Highway 218 between lowa City and Oakcrest Hill Road were installed during the late summer (2019). Johnson County is adding paved shoulders with all new road construction projects.

Paved Shoulders are a proven safety feature for all road users, but are particularly beneficial in reducing conflicts between slower traffic and those vehicles traveling at typical highway speeds. Paved shoulders are a popular facility for long-distance commuters and experienced recreational riders as they function similar to a bike lane. However, shoulders are not for the exclusive use of bicyclists and may also accommodate stopped vehicles, emergency and delivery uses, agricultural vehicles, and pedestrians. Additional signage to alert motorists to the presence of bicyclists along popular routes is recommended.

NOTE: The presence, composition, and integrity of the shoulder surface can affect where a bicyclist chooses to ride. Many bicyclists prefer to use the shoulder when it is paved and well maintained. If a shoulder is not paved, it is more likely that bicyclists will ride in the travel lane, even when vehicles are passing them.

Bike lanes designate an exclusive space for bicyclists on the roadway through the use of pavement markings and signage. Conventional bike lanes are located adjacent to motor vehicle travel lanes and flow in the same direction as motor vehicle traffic.

For two-way travel, a street pavement width of at least 30 feet is necessary to provide a minimum 5-foot bicycle lane. It should be noted that most existing streets in Coralville, North Liberty, University Heights, and Tiffin do not meet this minimum width and thus cannot accommodate the recommended minimum of 5-foot bike lanes.

Sidepaths are paved facilities, 8-10 feet in width, located immediately adjacent and parallel to the roadway. As a result of the MPO and local community Complete Streets Policies, sidepaths (sometimes referred to as a wide sidewalks) are now provided along one side of most arterial streets.

Metro-wide, the network of sidepaths grows as arterial streets are extended or as roadways are reconstructed to urban standards. Access control policies limit the number or frequency of driveways that cross a sidepath. Such restrictions are vital to ensuring these sidepaths are safe and efficient for bicyclists.

Wide sidewalks: for the purpose of this plan, those facilities that do not have sufficient access control (limits on driveway interruption) will be designated as wide sidewalks as they are not appropriate for heavy bicycle usage.



NOTE: Although less experienced bicyclists often feel safer on sidewalks, these facilities have their own set of concerns. Bicyclists on sidewalks are often not as visible to motorists and thus conflicts can occur at intersections as motorists turn and do not see or anticipate the speed at which bicyclists are moving. Even when they have the right-of-way, bicyclists are vulnerable road users and should approach intersections and driveways with caution and be prepared to stop. As with trails, bicyclists should ride at a reasonable speed and yield the right-of-way to pedestrians and slower moving users.

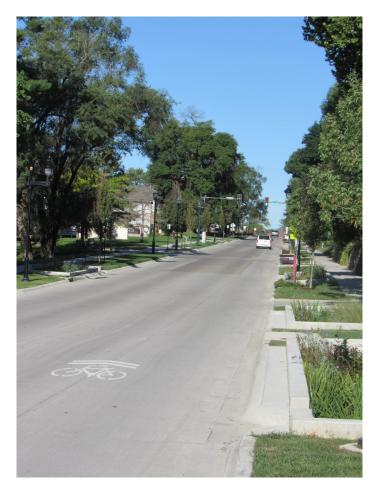
Shared lane markings or "sharrows" are pavement markings used to emphasize an environment (travel lane) shared by bicycles and automobiles. Roadways that provide convenient, low stress connections to important destinations or facilities but lack the pavement width for standard bicycle lanes may be appropriate for shared lane markings.

Sharrows can help reinforce the legitimacy of bicycle traffic on busy streets and may support a complete bicycle network in a number of other important ways, including:

- Assisting bicyclists with lateral positioning in travel lanes that are too narrow for a motor vehicle and bike to travel side-by-side in the same lane.
- Identifying a comfortable path for bicyclists through difficult situations, such as steep uphill or downhill sections, approaches to turns, roundabouts, etc.
- Calling attention to bikeway routes to all users.
- Providing a wayfinding element along bike routes or in gaps between bicycle facilities.
- Reducing the incidence of wrong-way bicycling.
- Reducing the incidence of sidewalk riding.

Routes identified for shared lane markings may be further enhanced as Bicycle Boulevards where other changes, such as traffic calming, wayfinding signage, and pedestrian accommodations should be considered.

Signed Routes: Lower volume urban streets often serve as convenient routes for bicycle commuting as well as recreational riding. Along many low-volume streets, bicyclists can comfortably share the travel lane with motor vehicles. Wayfinding or bike route signage is useful in raising awareness of the route among bicyclists and can help motorists anticipate the presence of bicyclists along the roadway. Directional signs with key destinations and distance information may also be present along these routes.

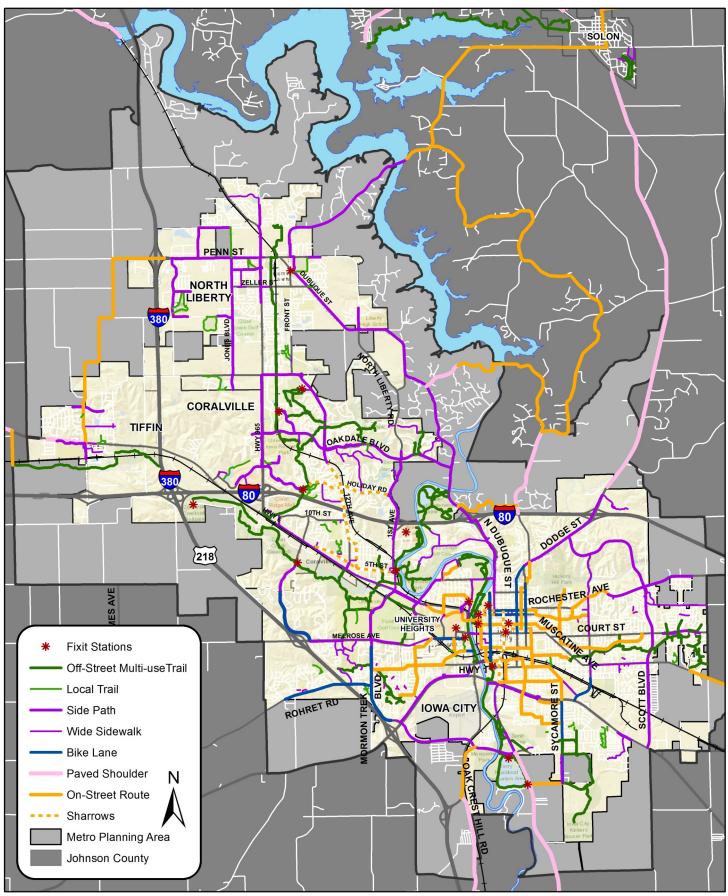




EXAMPLE: Signage along roadways and trails help bicyclists to navigate the bicycle network of on-and off street facilities and make all users more aware of the presence of bicyclists.



Existing Metro Bicycle Network





Creekside Cross Park in Coralville. Photo © Think Iowa City

Recreational Bicycling in Coralville

The City of Coralville has taken the lead in establishing recreational off-road bicycling facilities in the metro with two unique facilities, described below. Both parks are within Coralville City limits and accessible from the Clear Creek Trail. Once the extension of the Clear Creek is completed under the I-380 interchange, bicyclists

from all metro communities can reach these facilities by bike via the off-street trail system.

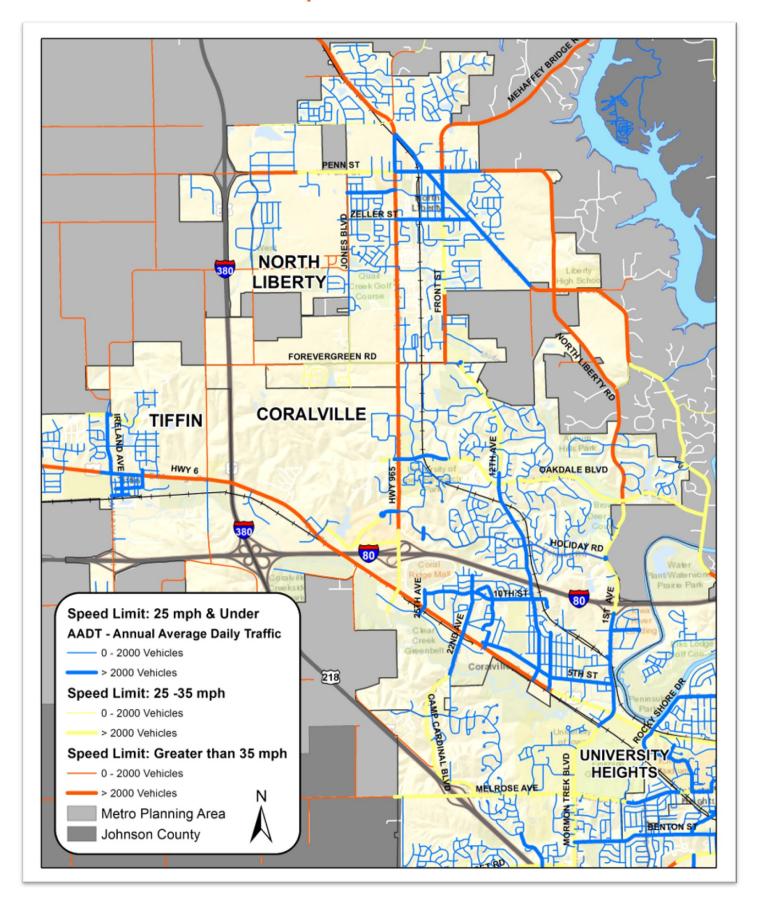
- → Opened in 2017, Coralville's Creekside Cross Park is the first, and only, permanent cyclocross course in the Johnson County area and just the third in Iowa. Located along the Clear Creek Trail, the park provides a 2.6-mile course with mowed paths and terraced switchbacks through hilly terrain. The idea for the park was conceived by local bicycle racing groups and it provides a practice facility for riders training for the annual Jingle Cross race in Iowa City. Clinics and local races are now featured at the park. Trails can also be used for hiking, running, and Nordic skiing. The City is in the process of adding a two-mile flow track to the park (to be completed in 2020).
- → Coralville also offers the only urban single-track trail within metro city limits. The Woodpecker Trail is located within the Clear Creek Greenway with a trailhead provided along Camp Cardinal Boulevard on the Clear Creek Trail. With the completion of a second loop in 2019, Coralville now has six miles of single track trail located on both sides of Camp Cardinal Boulevard with a connector passing under the street. Trails are designed for beginner through more advanced riders and include pump-track sections. In the winter, the trails are groomed for fat tire bicycling.



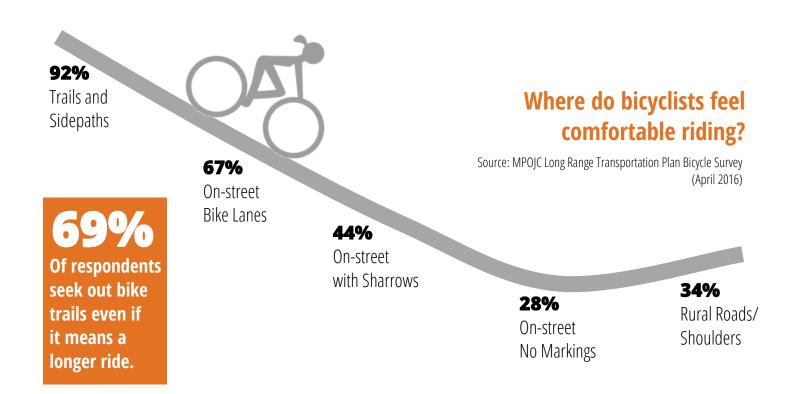
A pump track at the Woodpecker Trail in Coralville.

Photo © Think Iowa City

Arterial Street Volumes and Speeds



Bicycling Preferences and Behaviors



The choice to bicycle is heavily influenced by the stresses present on the roadway. When traffic volume and speeds are low, most people will feel comfortable sharing the roadway with cars. Where traffic speeds exceed 25 MPH or volumes exceed 1,000-2,000 vehicles per day, less confident bicyclists may be less likely to ride without a facility that designates a portion of the roadway for bicycle use or provides separation from vehicular traffic. (see map on page 18)

While the on-street bicycle system can provide suggested routes and facilities, it may not adequately serve every destination or satisfy every bicyclist's unique needs for convenience and comfort. Most arterial and collector streets in Coralville lack the minimum pavement width to provide bike lanes. Off-street facilities (sidepaths and trails) provide an option that most bicyclists prefer. While sidepaths provide separation from motor vehicle traffic on the street, these facilities are interrupted by street intersections and, potentially, driveways. In order for sidpaths to provide safe and efficient routes for a wide range of bicyclists, driveways should be restricted.

34.5% of respondents to the MPO's General Transportation Survey indicated that they would like to bicycle more often for transportation.

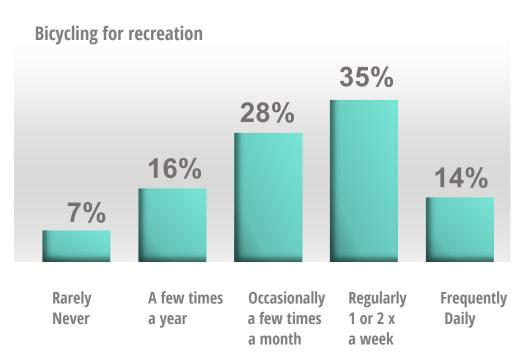
>78% indicated that travel time/ distance and convenience are the main reasons they do not use an alternative mode of transportation.

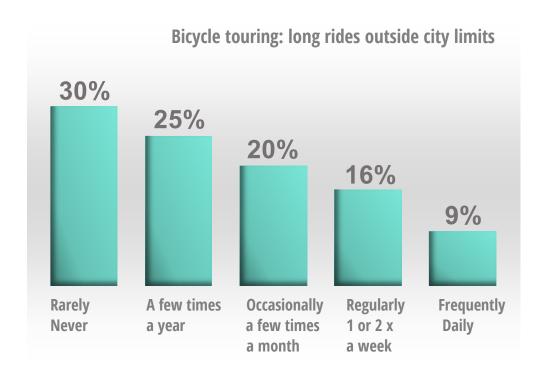
Source: MPOJC Long Range Transportation Plan General Transportation Survey (April 2016)

Bicycling for Recreation

Most respondents to the 2019 Metro Bicycle Survey* choose to ride bicycles for recreation on a regular basis:

- 49% ride weekly or daily; another 28% ride on a monthly basis.
- 25% of respondents take long rides outside city limits on a weekly or daily basis with another 45% doing so occasionally or a few times a year.
- * Based on responses to the 2019 Metro Bike Survey from individuals who live in or have a major daily destination in Coralville, North Liberty, Tiffin, or University Heights.





Source: MPO Long Range Transportation Plan Bicycle Survey (April 2016)

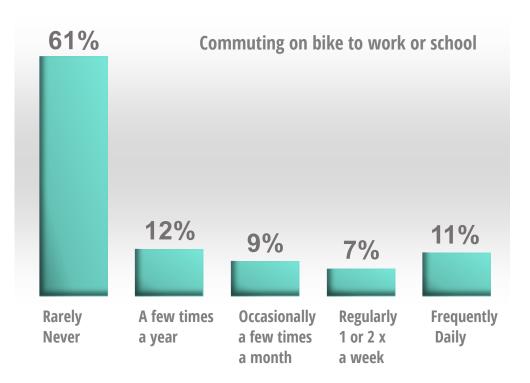
Bicycling for Transportation

Most respondents to the 2019 Metro Bike Survey* do not rely on bicycling as a regular form of transportation.

Only 18% of respondents indicate they commute by bicycle to work or school on a regular basis (weekly/daily).

Approximately 10% of respondents indicated they ride bicycles on a regular basis to shop or run errands.

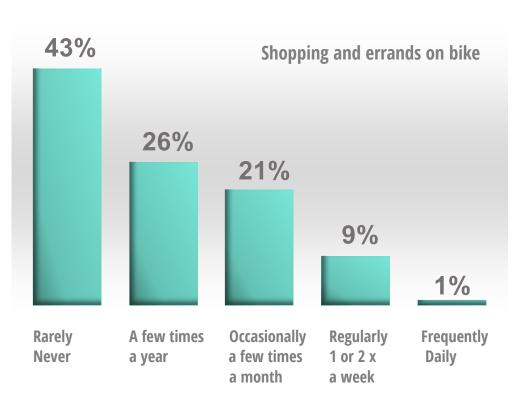
* Based on responses to the 2019 Metro Bike Survey from individuals who live in or indicated a major daily destination in Coralville, North Liberty, Tiffin, or University Heights.



Top 3 reasons respondents choose to commute by bike:

- Close to home/short ride.
- Faster and more convenient then other travel options.
- Bike facilities make it easy.

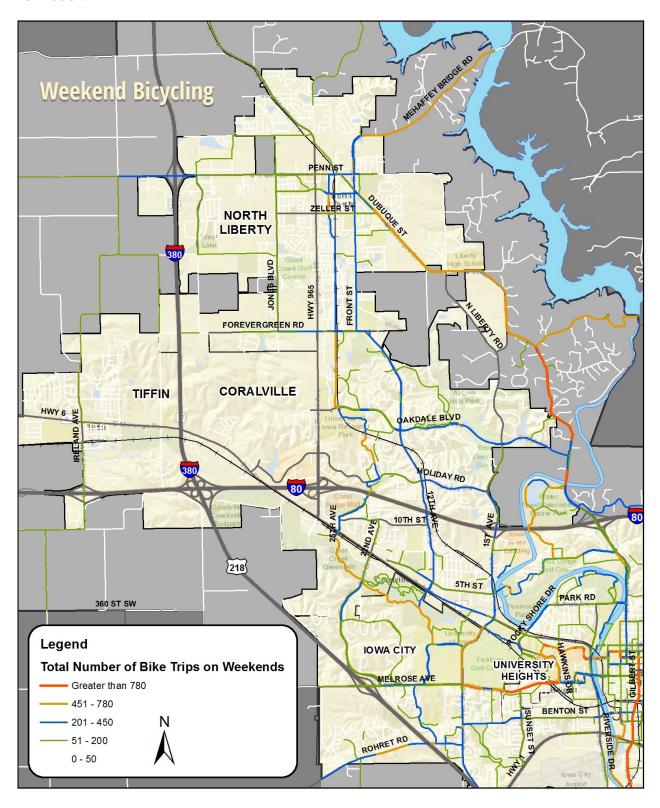
Bicycling as a preferred mode of transportation varies from community to community and even within communities. Proximity to the University of lowa and other employers as well as availability of low stress roadways or bicycle facilities are significant factors that influence people's decision whether to commute by bike.



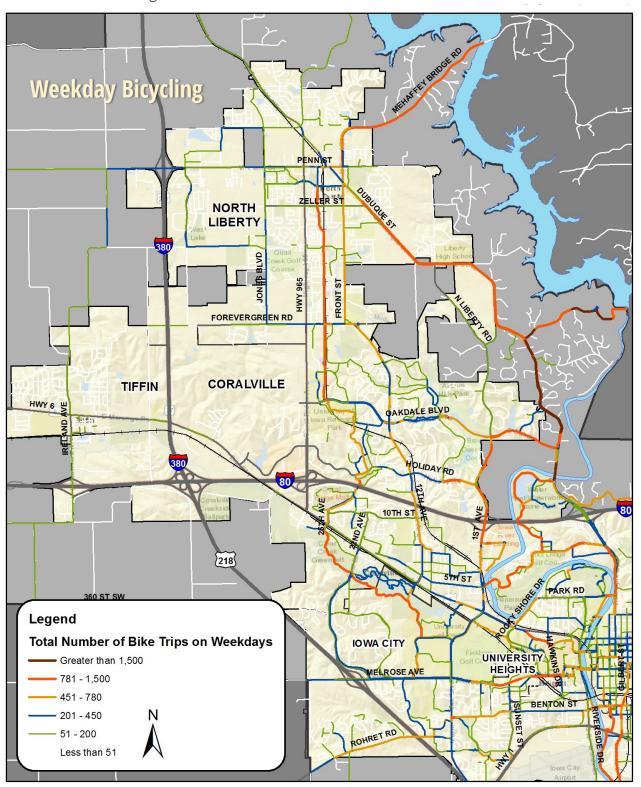
Source: MPO Long Range Transportation Plan Bicycle Survey (April 2016)

Where are bicyclists riding?

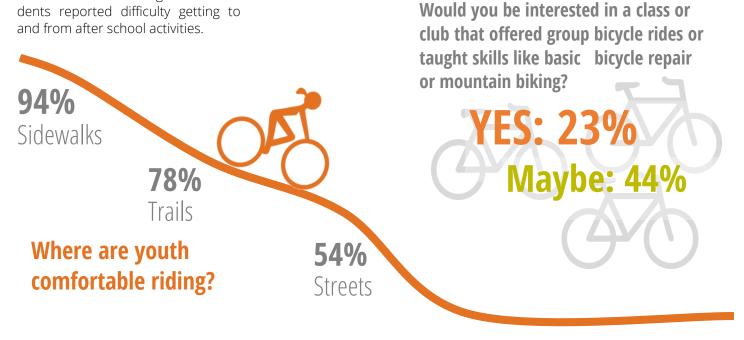
In 2016, the MPO purchased Strava Metro's suite of data services with funds provided by the Johnson County Trails Foundation. Strava is a website and mobile app used to track bicycling activities on a smartphone or GPS devise. Whether commuting to and from work or riding recreationally, users record their speed, route, and other information.



These maps provide an illustration of the total bicycling trips recorded by Strava riders between July 2015 and June 2016. While Strava data represents a distinct subset of bicyclists, (avid recreational and competitive bicyclists), the information can help planners determine where popular cycling routes exist and the relative level of use throughout the week.



Youth Behaviors and Preferences 6% Most days 5% Weekly Understanding youth bicycle prefer-**14%** Once in awhile ences is particularly relevant as Met-75% ro School Districts are growing and adding new school facilities. This How often do youth Never page presents the results of a Metro Bike Bicycle Plan survey of 435 junior bicycle to school? or almost never high and high school students in the ICCSD and Clear Creek Amana district (2018). A youth transportation survey con-41% do not know how ducted as part of the MPO's Future **90%** of respondents own a helmet. Forward 2045: Long Range Transportato use hand signals to **71%** report wearing a helmet all tion Plan (2017) found that while only indicate a turn. or most of the time when bicycling. 6% of respondents were riding their bikes to school, 25% of junior high students want to travel to school by bike. Among high school students, do not know how to ride a bicycle. only 1% indicated riding their bikes while 12% expressed a desire to travel by bike. Meanwhile, 13% of junior high students and 17% of high ... of those who do not own a bike, 68% said school students indicated they were they would be interested in a program that unable to participate in after shool do not activities due to difficulties with allowed them to earn a free or low-cost bike. transportation to and from school. own a Of those who do participate in afterbike. school activities, 23% of junior high students and 20% of high school stu-



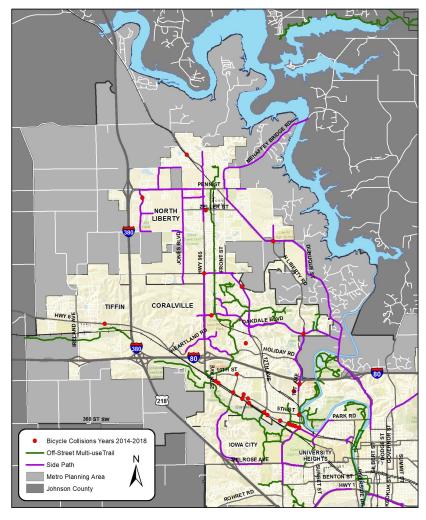
Safety

Metro Area Bicycle Collisions 2014-2018

Reported within Coralville, North Liberty, Tiffin, and University Heights

Bicycle collisions within the metro area were analyzed over the most recent five-year period (2014-2018). During this time there were 37 reported collisions involving bicyclists in North Liberty, Coralville, Tiffin and University Heights combined. These collisions occurred primarily at major intersections or along roadways where access control may be poor, resulting in conflicts with turning motorists.

While none of the reported collisions were fatal, 73% of collisions resulted in minor or serious injury. Of the four collisions resulting in serious injury, three occurred along 2nd Street in Coralville and one occurred along Hwy 6 in Tiffin. These major highways carry high volumes of traffic traveling at higher speeds. This highlights the need for visible, well-designed bicycle facilities and intersection treatments to allow for the safe passage of all modes.

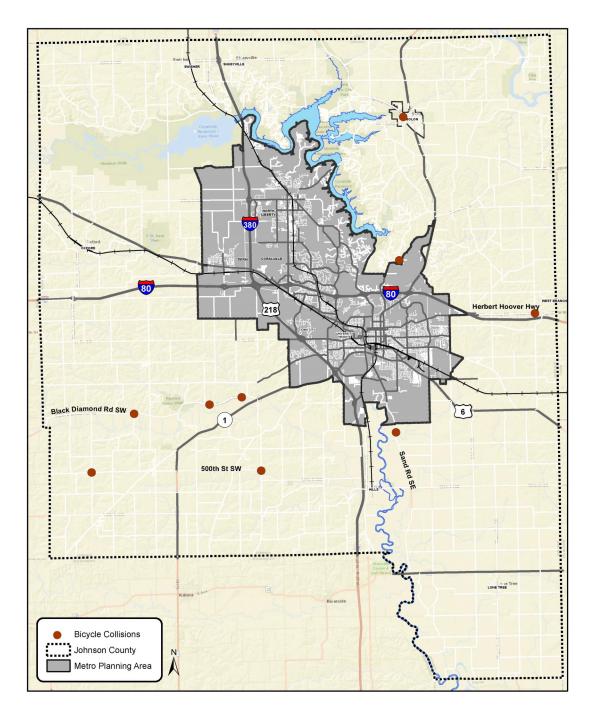


One point represents one collision. At some locations there may be multiple points stacked on top of each other. These maps are meant to provide a general overview of where collisions are occurring in comparison to existing bicycle infrastructure.

Bicycle Collision Statistics

- A majority of the collisions occurred in Coralville along the 2nd Street corridor. While there is a wide sidewalk along this corridor, the number of driveway and intersection interruptions make this corridor more difficult for a bicyclist to navigate.
- A majority of the collisions occurred at urban intersections in the metro.
- Four collisions resulted in serious injury.
- 60% of collisions involved males
- 22% of collisions involved drivers between 35 and 39
- 24% of collisions involved a driver failing to yield to the bicyclist

During the same time frame, there was one reported bicycle collision that occurred outside the urbanized communities but inside the MPO's planning area that resulted in a fatality. The collision occurred on Highway 965 NE, north of North Liberty city limits. This portion of Highway 965 NE currently does not have any bicycle facilities. Reducing these types of collisions is a shared responsibility between bicyclists and motorists. In May, 2019, a bicyclist was killed in the northbound lane on Old Highway 218 just outside lowa City. Paved shoulders were recently added to this section of roadway. The county is adding paved shoulders with all new road projects.



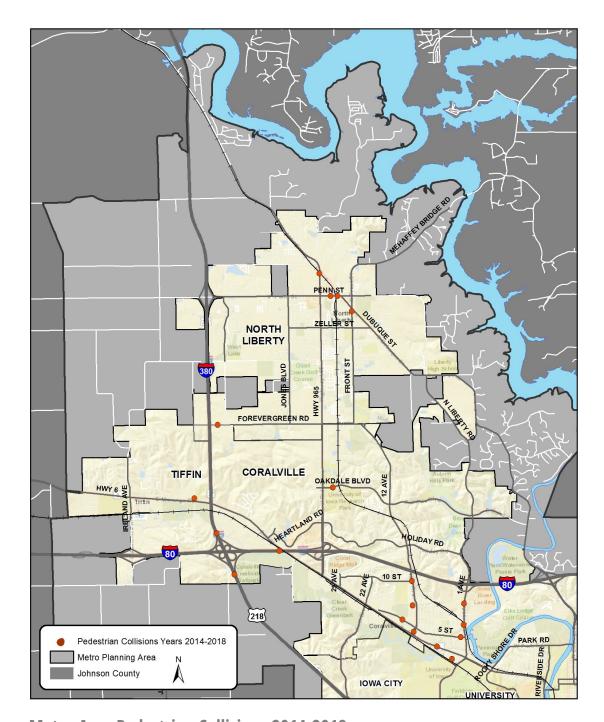
Johnson County Bicycle Collisions 2014-2018

Reported outside Metro Boundaries

While the Metro Bicycle Plan does not cover areas of the county outside the metropolitan planning boundary, it is worth considering the collision history on roadways in these areas where speeds are often higher and accommodations for bicycles and pedestrians many be lacking.

Between 2014 and 2018 there were nine reported bicycle collisions that occurred in Johnson County, outside the metro planning area. None of these collisions were fatal but seven resulted in serious injury. Almost all of the bicycle collisions occurred on two-lane roadways lacking bicycle facilities.

As interest in bicycling grows and electric assist bicycles extend the distances that bicyclists are able to ride, more bicyclists will venture beyond metro boundaries. Bicycle programs and policies implemented at the metro level, including educational outreach to drivers, could provide benefits that reach beyond the urbanized area.



Metro Area Pedestrian Collisions 2014-2018

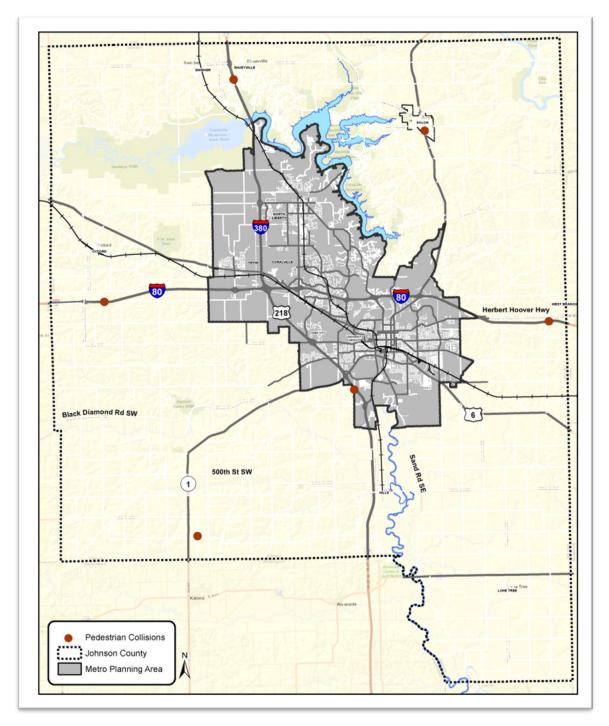
Reported Collisions within Coralville, North Liberty, Tiffin and University Heights

Pedestrian collisions were analyzed over the same five-year period (2014-2018) as bicycle collisions. During this time there were 20 collisions involving a pedestrian in North Liberty, Coralville, Tiffin and University Heights combined. This equates to four collisions per year. Of the 20 collisions, a majority were suspected serious or minor injury and one resulted in a fatality.

Statistics

- One collision along Highway218 resulted in a pedestrian fatality.
- Eight collisions resulted in serious injury

Between 2014 and 2018 there was one reported pedestrian collision that occurred outside the urbanized area resulting in a fatality. The collision occurred on Dane Road SW and was caused by a motorist swerving/taking evasive action.



Johnson County Pedestrian Collisions in the County 2014-2018

Reported Collisions outside Metro Boundaries

During this time frame, there were six pedestrian collisions with one resulting in a fatality. Almost all of the pedestrian collisions occurred on two-lane roadways lacking bicycle facilities.

Barriers and Gaps

Obstacles to bicycling can take many forms and, while some may not apply to all bicyclists, it is important to address them all carefully to help overcome the everyday barriers for those wishing to take advantage of the benefits of bicycling.

Heavy traffic volumes, high vehicle speeds, and busy intersections can create obstacles for bicyclists traveling throughout the metro area. Natural features like topography can also be a barrier for bicyclists, discouraging potential commuters.

Barriers

Intersections

Respondents to the 2019 Metro Bike Survey identified several major intersections (in Coralville & North Liberty) as 'uncomfortable' to cross as a bicyclist. While there are a limited number of bicycle collisions at these 'uncomfortable intersections' high traffic volumes and vehicle speeds may present enough of a barrier at these intersections to discourage many bicyclists from using these routes.

Feedback from the Public Open Houses regarding improvements to these intersections included a desire for enhanced intersection treatments such as pavement markings, bike lanes, or dedicated space for a bicyclist to navigate through an intersection. Other suggestions include improvements to visibility or signage to alert motorists to the presence of bikes and pedestrians.

Providing supplementary routes to avoid these locations may be suitable in some cases, though many bicyclists want to travel the same routes that vehicles do in order to reach their desired destinations.

Corridors

As noted in the descriptions of facility types (p.13), offstreet facilities such as wide sidewalks that have frequent interruptions and vehicle crossings are problematic for safe and efficient bicycling. Consolidating driveways where possible on existing streets and limiting the number or frequency of driveways on new roads will make these facilities more appropriate for increased bicycle usage.

Less experienced bicyclists may be less likely to approach riding on or near more heavily trafficked roads such as 12^{th} Avenue in Coralville. Unfortunately, it is one of the few north/south crossings over Interstate 80 in Coralville.

Gaps

Gaps between communities

Existing gaps within the metro bicycle network are present where development has yet to occur along key corridors and at obstacles such as major roadways (such as I-80 and I-380). A final connection of the Clear Creek Trail between Coralville and Tiffin will be constructed after the completion of the I-80/380 interchange project by the lowa DOT. This will fill a key gap between these communities and help increase accessibility for bicyclists.

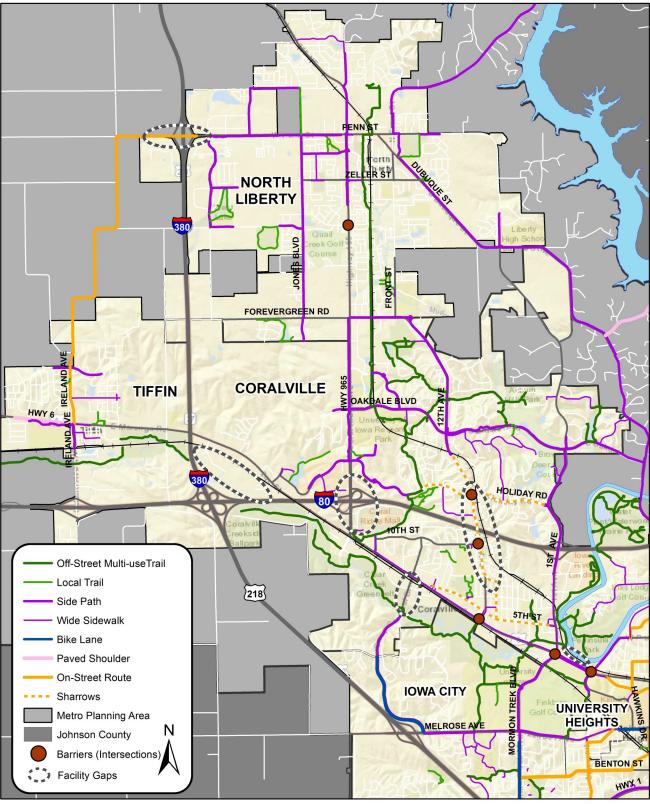
Replacing the off-street trail segment along the Iowa River between Crandic Park in Iowa City and the end of the Clear Creek Trail in Coralville will allow bicyclists to travel along a continuous separated facility and avoid crossing two 'uncomfortable' intersections on 2nd St / Hwy 6 in Coralville.

Gaps between existing facilities

Gaps between existing facilities may exist where physical constraints such as challenging slopes or the need for turn lanes on major roads prevent the implementation of dedicated bicycle facilities. Expanding and enhancing existing facilities where possible can reduce gaps within the metro area bicycle network. Even where facilities or accommodations exist, less experienced bicyclists may be hesitant to ride on busy roads (e.g. 12th Avenue sharrows in Coralville). Expanding the network of off-street or dedicated bicycle facilities may entice more bicyclists.

Barriers and Gaps Metro Area - 2019





Community Support for Bicycling

Creating a culture of bicycling and providing the encouragement and education to reach bicyclists of different abilities and comfort levels requires the support of the broader community. The goal of expanding bicycling as a preferred mode of transportation can only be accomplished with the active participation and grassroots support of many organizations and volunteers. As our bicycle network is extended, linking to Tiffin and Clear Creek Amana School District, there will be a need and opportunity for bicycle groups to extend their reach. Fortunately there are many partners within the metro who contribute to this effort.

Think Bicycles of Johnson County was organized through the collective efforts of the area's bicycle shops, Bicyclists of Iowa City, the Iowa City Bike Library, and other bicycle organizations. These businesses and organizations have come together under the Think Bicycles umbrella to promote bicycling as the preferred mode of transportation and to strengthen the bicycle culture in Johnson County. Think Bicycles serves as a central coordinator for Bike Month and Bike to Work Week and represents bicyclists and provides a unified source of bicycle advocacy in matters of bicycle policy and infrastructure in Johnson County. A representative of Think Bicycles serves on the MPOJC Regional Trails and Bicycling Committee. [thinkbicyles.org]

Iowa City Bike Library started in 2004 as a volunteerrun community bike project located in Iowa City with a mission of getting more people on bikes. The Bike Library repairs donated bikes and offers them to the public. The Bike Library is committed to building a culturally diverse bicycle community and hosts or co-sponsors events intended to expand bicycling. [icbikelibrary.org]

Bicyclists of lowa City (BIC) is a bicycling club with over 450 members from the lowa City area. BIC holds weekly rides, catering to beginners as well as intermediate and advanced riders. Rides include trail riding, road bicycling, and regional touring. BIC is also engaged in bicycle advocacy and education, including organizing annual Bicycle Rodeos at local elementary schools. A representative of BIC serves on the Regional Trails and Bicycling Committee. [bic.clubexpress.com]

Iowa Bicycle Coalition (IBC) is statewide organization with its home office in Coralville. IBC works to promote bicycling as a safe and enjoyable form of recreation and transportation. IBC manages a Safe Routes To School Program, providing training and support to schools statewide on encouragement and education programs that help increase bicycling and walking. The Coalition works towards improving the safety of cyclists through safety education, community improvement, and encouragement activities as well as promoting bike laws. [iowabicyclecoalition.org]

Iowa Coalition of Off-Road Riders (ICORR) is a volunteer -based, non-profit organization formed to promote, preserve, and improve mountain bike trail access in Iowa. ICORR is dedicated to building and maintaining sustainable mountain biking trails at Sugar Bottom Recreation Area and surrounding areas, including Coralville's Woodpecker Trail. [icorrmtb.org]

lowa City/Coralville Area Convention and Visitors Bureau and lowa City Area Development are currently working together to help promote bicycling in Johnson County in order to foster tourism, economic development, and quality of life. The Johnson County Bicycling Committee brings together bicycling advocates and businesses to share ideas and events that promote a culture of bicycling. [bikeiowacity.com]

BIKEIOWA is the number one interactive cycling site in lowa to keep bicyclists informed about rides, news advocacy and other events. The ability to post your own rides, news, classifieds and forum discussions make it a very interactive experience for cyclists. [bikeiowa.com]

Local bicycle retailers serve an important role in connecting bicyclists with bicycle groups and facilities in the metro and beyond. Bicycle shops distribute maps and announcement of bicycling events and many host their own rides and workshops and sponsor teams and events. Broken Spoke, Geoff's Bike and Ski, Sugar Bottom Bikes, and World of Bikes.

Bicycle racing groups provide training, mentoring, and a social outlet for the sport of bicycling as well as another outlet for information on new facilities and policies. There are several racing clubs in the metro area including the lowa City Cycling Club, Goosetown Racing, and lowa City Women's Cycling. The clubs sponsor events and rides and provide opportunities for riders to improve their skills on the road.



Ride Your Own Adventure

ROAD RIDE & PAVED TRAIL ADVENTURES	A GRAVEL RIDE ADVENTURES
OFF-ROAD ADVENTURES	
CYCLOCROSS ADVENTURES	SHARE YOUR ADVENTURE











Bicycle Friendly Makes Business Sense

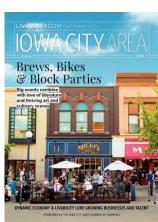
The Iowa City/Coralville Area Convention and Visitors Bureau (CVB) and Iowa City Area Development Group (ICAD) are currently working together to help promote bicycling in Johnson County in order to foster tourism, economic development, and quality of life. Together they have formed the Johnson County Bicycling Committee, which brings together bicycling advocates and businesses to share ideas and events that help promote a culture of bicycling.

Think Iowa City (a promotional arm of the CVB) provides assistance with events like UCI Cyclocross and the Big Rove ride. Most recently they designed and launched Bike lowa City, a comprehensive resource for visitors and residents who are interested in bicycling in Johnson County. The website includes resources for cyclists, cycling events, and suggested rides.

Iowa City Area Development (ICAD) works to support bicycling through its connections with area businesses (e.g. the League of American Bicylists' Bicycle Friendly Business program) as well as serving as a resource for businesses interested in becoming more bike friendly. In 2019, ICAD facilitated "Strategic Doing" sessions aimed at promoting bicycling in Johnson County and organizing events for the Bike Month and Bike to Work Week.

A broad range of businesses now look to bicycling and bicycle events to promote their business and see bicycling as an asset for attracting investment and building interest in neighborhoods and communities.







Each year Coralville, Iowa City, North Liberty, University Heights, and Johnson County recognize Bike to Work Week and Bike Month (May) and sponsor a number of events and activities to call attention to bicycling and to encourage residents to take up bicycling.

IOWA CITY | CORALVILLE | NORTH LIBERTY | UNIVERSITY HEIGHTS

Bicycling is a fun way to get to work, do errands, or get exercise. During May we celebrate our community of iovful cyclists. Come join us!

Wednesday, May 1

East Side Bike Night Longfellow School playground | 6 pm Family friendly slow ride to explore east side lowar City trails and parks. Suitable for kids of all ages!

Thursday, May 2

Iowa City Bike Library, 700 S. Dubuque St. | 7 pm Whether you're an experienced rider or just starting out, come join this weekly low-key ride to explore our community. No rider left behind.

Friday, May 3

First Friday Bike Month Kickoff North of Ul Main Library, Madison St. | 4 - 6:30 pm Refresh yourself and learn about bicycling opportunities in the area, sponsored by Bicyclists of Iowa City and Ulowa Bike Friends.

thinkbicycles.org

promoting cycling in Johnson County

The Think Bicycles Coalition of Johnson

and expand all aspects of bicycling in

County links cyclists and bicycling groups

with city, county and state officials to foster

Johnson County. The Think Bicycles Coali-

tion seeks to educate all roadway users, to

expand cycling infrastructure, to increase

access to transportation and recreational

trails, and to encourage community mem-

bers to ride bicycles.

Saturday, May 4

Move Naturally to the Market lowa City Farmers Market, Chauncey Swan Ramp 7:30 -11:30 am

eward yourself for walking or cycling, receive a \$2 coupon to spend at the IC Farmers Market. Yoga for Cyclists

lowa City Bike Library, 700 S. Dubuque St. 4 pm and 5:30 pm

Cyclist and yoga instructor Michelle Barker leads two classes in stretching and strengthening poses essential for any cyclist. Class size limited to 20 yogis per session

Sunday, May 5

Bike Shop Hop Choose your start: Iowa City Big Grove | 7:45 am OR Sugar Bottom Bikes, North Liberty | 9 am Progressive ride organized by Bicyclists of Iowa City. Get all 5 stops stamped on your special passport for a chance to win special prizes

Coffee Outside

College Green Park | 8:30 am Show off your fave coffee brewing technique or come ready to enjoy some joe at the #coffeeoutside meetup. BYOC (Bring Your Own Cup)

Wednesday, May 8 Bike 2 School's Cool!

North Liberty Community Center, 520 W. Cherry St. 6:45 am Pre-ride fun, 3 pm Post-ride party Encourage kids to ride safely to school organized by Iowa Safe Routes to School. Young riders are escorted to and from school and enjoy a post-ride party. Must be registered by May 1

Thursday, May 9

Saturday, May 11

Move Naturally to the Market—See May 4

Sunday, May 12

Trueblood "100" Family Ride

Trueblood Recreation Area | 1–6 pm Bring your posse to this new event. Choose one of four options—the more people, the fewer miles you'll ride! Options include: Century (100 miles), Metric Century 100km (62 miles), Half Century (50 miles), Half Metric Century 50km (31 miles)

Bike to Work Week May 13-19 Monday, May 13

Bike Commuter Fueling Station Corner of Linn and College streets | 7-9 am Bike Friendly Business Neumann Monso Architects serves up a tasty breakfast to fuel your

ride to work, school, or play Tuesday, May 14

Johnson County Bike Commuter Breakfast South of Johnson County Administration Building, 913 S. Dubuque St. | 7-9 am (Rain location is ramp north of the Health Human Services Building, 855 S. Dubuque St.) The County celebrates the cyclist community with breakfast.

Wednesday, May 15 U Heights - Geoff's Bike and Ski Breakfast University Heights Community Center, 1302 Melrose Áve. | 6:30-10 am

This dynamic duo salute another year of cycling in U Heights and beyond. Stop by on your way to work or school for a tasty breakfast.

Co-op to Co-op Community Ride Start: College Green Park, College and Johnson

streets, Iowa City | 5:30 pm End: New Pioneer Co-op, 1102 2nd St., Coralville

The community's most beloved biking event is back for more two-wheeled fun for the whole family. Cyclists ride together from College Green Park to Coralville for food, drinks, prizes and fun!

Thursday, May 16

Friday, May 17

lowa City Bike Library, 700 S. Dubuque St. | 5-9 pm Get duded up in your best party togs for a ride celebrating 15 years of the Bike Library.

Saturday, May 18

Move Naturally to the Market—See May 4 Bike Match Ride

North Ridge Park Shelter, Coralville | 8:30 am Want to bicycle around town but are unsure how to get started? This event pairs newbies and road warriors to learn riding routes. Fuel up first, choose your route, and ride!

Rike Rodeo & Slow Roll

North Liberty Community Center, 520 W. Cherry St., North Liberty | 11 a.m.-2 p.m Kids bring bikes for safety checks and ride the Family Slow Roll, organized by the North Liberty Optimist Club and NL Recreation Dept. Kids must be accompanied by an adult and all riders bring their own bikes and helmets.

Sunday, May 19 Coffee Outside—See May 5

Broken Spoke Treasure Hunt

Broken Spoke, 757 S. Gilbert St., IC | 1-4 pm There's no guarantee of pirates but you will find an adventure at this family-friendly event. Bring non-perishable donations for the Food Bank. www.thebrokenspoke.com

Tip to Tip Multimedia Show

Big Grove Brewery Iowa City, 1225 S. Gilbert St. |

Follow along an epic 20,000 mile self-supported bicycle journey from Alaska to Tierra del Fuego, in this multi-media presentation by Irene Schroeder.

Thursday, May 23

Overdue Ride—See May 2

Saturday, May 25

Sunday, May 26

Thursday, May 30

Overdue Ride—See May 2

These events have been made possible in part with grants from Think Bicycles of Johnson County. For more information about these or other events, visit our website: www.thinkbicycles.org, or Facebook page.

But, wait, there's more!

MERGE

136 S. Dubuque St. Iowa City Offering FREE coworking to anyone who rides a bike to MERGE from May 13–17.

Bike to Books

Between May 1- August 6, explore the Little Free Libraries of the South District Neighborhood. Pick up a booklet at southside schools, the Iowa City Public Library, and other sites. Collect rubbings from plaques and present completed booklet at South District National Night Out on August 6 for a chance to win! For more information, "like" us on Facebook: South District Neighborhood

Visit www.bicyclistsofiowacity.org for a listing of Bicyclists of Iowa City-organized road rides

Crandic Racing Club calendar of bicycling, www.crandicracing.com

Geoff's Rike and Ski 816 S. Gilbert St. Hosts weekly all-level Tuesday Night Townie Trails and Roadie Wednesday rides, both start at 6:15 pm. www.geoffsbikeandski.com

Gravel Scouts

World of Bikes, 723 S. Gilbert St. Monday night no-drop rides, 6:15 pm. www.worldofbikes.com

Roadside Repair, Iowa City Bike Library 700 S. Dubuque St. Fridays in May, 5 pm www.icbikelibrarv.org

Sugar Bottom Bikes 325 Dubuque St., North Liberty

Wednesdav Ride to Reds, 6 pr









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Moving Forward

Opportunities and Recommendations

As noted in the introduction to this plan, bicycle infrastructure alone will not advance bicycling as a legitimate form of transportation in the Metro Area. Support facilities, such as bike parking and wayfinding signage, as well as programs that encourage bicycling and educate both drivers and bicyclists are also critical to building an environment in which bicycling is a safe and preferred mode of transportation.

The following section covers planned and proposed facilities for creating a more complete and coordinated bicycle network. Many of these facilities have already been adopted into local community plans while others were identified through this planning process.

To further support each community's investments in physical infrastructure, the plan also outlines a set of opportunities, including education, encouragement, and enforcement. Evaluation and equity recommendations will help to ensure that the bicycle system is serving the needs of the community. This 6 E's framework is borrowed from the League of American Bicyclists (LAB) and is intended not only to guide communities in their individual efforts to support bicycling but should be useful to communities that choose to apply for Bicycle Friendly designations from the LAB. Under each opportunity, the plan attempts to identify at least one example of a best practice already in place or available in one or more MPO communities

Finally, the plan identifies a set of actions to support bicycling appropriate for each community. These "Community Summaries" are intended to serve as a sort of strategic plan for building (jump-starting) a more supportive culture for bicycling over the next 3-5 years.



Photo © Iowa City Bike Library W.E. Ride

Increasing youth ridership remains an important goal for Metro Area communities. Providing opportunities for young people to learn how and where to ride safely is essential to building a bicycle culture and can be supported not only through City-sponsored recreational programs but through schools, non-profits, and neighborhoods.

The above photo is from W.E. Ride program, which is sponsored by the lowa City Bike Library and the Neighborhood Centers of Johnson County. Elementary school girls learn to ride and lead weekly rides to school in the spring and fall.

Education

Giving people of all ages and abilities the skills and confidence to ride.

Education can be a powerful tool for changing behavior and improving safety skills. Bicyclists and motorists alike can benefit from educational tools, including public service announcements and social media posts, that remind them of the rules of the road and the rights and responsibilities of all road users.

Offering multiple opportunities for people to learn basic skills and safe behaviors is essential to increasing the number of people who bicycle as well as the acceptance of bicycling as a legitimate form of transportation. Education begins with young people learning to ride and being encouraged to travel by bike and continues through understanding various bicycle facilities, planning convenient routes to desired destinations, and mastering the basics of bicycle maintenance.

The 2009 Metro Bicycle Plan emphasized educating youth and young adult riders in terms of basic skills and rules of the road. A strong desire remains to continue a focus on youth cycling, especially to encourage young people to travel to school and extracurricular activities.

Expanding education to adult riders and diverse populations is also supported for the health, environmental, and economic benefits.

Opportunities for education

- 1. Support efforts to ensure that all school-age children learn to ride and have the safety skills to take to the road by junior high:
- Introduce basic bicycling skills as part of physical education in elementary school.
 - Example: A pilot project to teach basic bicycling skills at the elementary level will be implemented at Grant Wood Elementary during the 2019-20 school year. If successful, this program may be replicated at other schools throughout the district.
- Support programs offered through local non-profits to expand bicycle ridership among youth.
 - Example: The Iowa City Bicycle Library and the Neighborhood Centers of Johnson County teach beginning riders and more advanced off-road and bicycle racing.
- Continue to offer "Bike Rodeos" at elementary

Coralville's 2019 summer bicycle programming included the following classes and activities:

- ◆ For more than 20 years, Coralville's Trail Trekkers program has offered weeklong day camps throughout the summer. Students in 6th through 8th grade learn the rules of the road, how to navigate trails, and route planning to daily activities. In 2019, 210 youth, were enrolled in the Trail Trekkers program.
- National Bike to School Day on May 8 was promoted through the schools. Coralville Parks and Recreation staff were present at schools to greet, thank, cheer, and pass out light-up bracelets. They also entered kids for drawings to win helmets, bike lights, swim passes, and other fun gear.
- Bike Match Ride pairs experienced bicyclists with people interested in commuting or traveling by bike. (May 18, 2019)
- ➡ Bicycle Maintenance 101 taught adults the basics of maintaining a bike. (May 13 and June 30, 2019)

North Liberty's 2019 summer bicycle programming included the following classes and activities:

- National Bike to School Day on May 8 was planned for group rides to be led by North Liberty police officers to Penn, Garner, and Van Allen Elementary Schools. (Cancelled due to weather.)
- ◆ North Liberty Optimist Club and the Parks and Recreation Department hosted a bicycle rodeo and slow roll ride on North Liberty trails. (75 kids attended the rodeo; 20 went on the slow roll.)
- ◆ Knight Riders program is a weeklong day camp running throughout the summer. Kids in 6th through 9th grade learn the rules of the road, how to navigate trails, and route planning to daily activities. (Approximately 140 children participate.)

schools in the district and through various non-profits and neighborhood groups.

Example: In 2019 Bike Rodeos were held at the following locations: Wickam, Kirkwood, New Life Community Church (CV), North Liberty Recreation Center, Wetherby Park, Walmart (IC), Coralville Central, Alexander, Longfellow, Hoover, Twain, Wood, and Lincoln.

- Continue providing bike trail riding experience, route planning, and lessons on rules-of-the-road through parks and recreation programs in metro communities (see sidebar above for examples of 2019 programming in Coralville and North Liberty).
- Work to ensure that a bicycling component continues to be included in driver education and seek opportunities to expand efforts through youth driving programs.
 - Example: The lowa DOT includes information on how drivers should interact with bicycles in its Driver Handbook.
- 4. Expand opportunities for adults to learn bicycle skills and rules of the road, route planning, and bicycle maintenance.
 - Example: As part of Bike Month, the Coralville Recreation Department offered a basic bicycle maintenance program and a Bike Match Ride to pair experienced riders with adults interested in commuting by bike.
- 5. Consider implementing a Bicycle Friendly Driver program to help drivers understand the behaviors, rights, and responsibilities of bicyclists.
 - Example: Iowa City's Transit division implemented a "People Friendly Driver" program (Spring 2019) to educate transit drivers about Iowa City's new bicycle facilities, how to share the road with bicyclists, and areas of the road or driving maneuvers that place bicyclists at risk. Modeled on a successful program in Fort Collins, CO, the MPO should consider offering this program to its member entities, including the school district and the University of Iowa.
- 6. Support programming that serves the particular needs of women, seniors, families, and non-English speaking residents.
 - Example: The lowa City Bike Library with the Neighborhood Centers of Johnson County developed a program called W.E. Ride (Women Empowerment Rides) with the goal of empowering girls ages 8-14 to bike with confidence and build a passion for bicycling. The effort included a week-long bike skills training camp. Following the camp girls met each month to practice and lead rides to and from school.



North Liberty Optimists Bike Rodeo 2019 Photo courtesy North Liberty Parks Dept.

- 7. Consider providing printed bicycle information, such as basic rules of the road for bicyclists, in multiple languages: Spanish, French, Swahili, Arabic, Chinese.
 - EXAMPLE: The League of American Bicyclists publishes its cycling guides, including its Quick Guide, in English and Spanish. The Quick Guide is a pocket-size manual that outlines the basic rules of the road, components of a bicycle, and all of the information you need to ride a bike safely and confidently.
- 8. Design public campaigns to raise awareness of safe passing, hand signals, bike lights, and other skills, habits, and behaviors that enhance bicycle safety.
 - Example: The City of lowa City is now producing a series of bike safety and informational videos called "Bicycle Shorts." These 30- to 60-second videos are designed to be shared through social media. All metro communities and bike organizations should consider sharing them.
- 9. Create broader awareness of the bicycle network and programs through outreach efforts coordinated with community and business organizations.
 - Example: The Convention and Visitors Bureau along with lowa City Area Development Group formed a committee to coordinate and promote bicycling events and opportunities in the Metro Area. (See page 32.)

Encouragement

Creating a local bicycle culture that welcomes bicycling as a legitimate form of transportation.

A principal goal in the 2009 Metro Bike Plan was the implementation of a coordinated system of wayfinding signs across the urbanized area in order to assist route finding. More than 150 signs are now located along the metro trails and on-street routes. The signs, which were installed in 2012 with funding through the Transportation Enhancements program (now called the Transportation Alternatives Program), provide directions and distances to key destinations. Designating routes and providing directional signage not only helps bicyclists to navigate across the metro, but also directs riders to popular corridors where motorists learn to anticipate the presence of bicycles on the roadway. As our Metro communities continue to grow and trails and other bicycle facilities are constructed and expanded, this system of signs should be maintained and updated.

MPO communities, the school district, and local organizations and businesses all play a critical role in encouraging people to ride by offering a variety of opportunities and incentives to get on their bikes. What follows is a list of activities that will support and encourage bicycling in the metro.

- 1. Provide low-cost bicycle helmets for youth riders.

 Example: Coralville, Iowa City, and North Liberty all offer low-cost helmets through their recreation departments.

 In addition low-cost or free helmets are provided through other health care and non-profit organizations.
- 2. Provide bicycle repair stations at key locations such as trail heads, parks, recreation facilities, and multimodal sites.
 - Example: Coralville currently provides 7 fix-it stations located at various destinations and along trails throughout the community. Fix-it station locations are included on the Metro Area Trails Map published and distributed each year by the MPO.
- 3. Continue to provide free operational space to the lowa Bicycle Coalition (Coralville).
- 4. Provide bike racks on transit buses to extend the range and opportunity for bicycle commuters and provide education on how to use these carriers.
 - Example: Both Coralville and Iowa City provide bike racks on the front of all buses and instructional videos to

- promote the use of bus bike racks bike racks at www.coralville.org/153/Bike-Racks.
- 5. Designate May as "Bike Month" and fund and promote Bike-to-Work Week activities.
 - Example: Coralville, Iowa City, Johnson County, North Liberty, and University Heights all adopt May as Bike Month and participate and promote in activities associated with Bike Month and Bike to Work Week. See a list of activities on page 33 of this plan.
- 6. Work with bicycle organizations and the business community to host and promote bicycling events.
 - Example: Metro Area communities work with the Convention and Visitors Bureau and lowa City Area Development Group to promote a number of major events including RAGBRAI, Jingle Cross, and the Cyclocross World Cup Race as well as a number of local races and tours.
- 7. Brand the regional trail system and enhance trail head and wayfinding to promote bicycle tourism.
 - Opportunity: A metro wide or regional system of identification signs for trails could potentially be funded with grants, including the Transportation Alternative Program similar to the wayfinding program funded in 2012.
- 8. Provide timely updates on projects that impact bicyclists (e.g. trail extensions, closures, and detours) via e-notification, social media, text, or other readily accessible method.
- 9. Provide maps of local and regional trails and bicycle facilities.
 - Example: The MPO currently prints 10,000 Metro Area Trails Maps for free distribution by member entities and local area businesses and organizations. Trail maps include trail etiquette tips and other safety information. Maps are available at MPOJC.
- 10. Identify opportunities to coordinate efforts between communities, local organizations, and businesses groups, to promote bicycling as an economic development tool.
 - Example: The Convention and Visitors Bureau and lowa City Area Development have organized the Bike Johnson County Committee to promote bicycling. The Committee includes representatives from the bicycling and business community interested in promoting bicycling. (see page 32.)

Enforcement

Ensuring safe roadways for all users.

The laws and regulations that govern our roadways influence how various modes of transportation interact and help to ensure safety for all road users. While targeted enforcement may be used to address areas or situations where collision rates and other risks to safety have been identified, knowledge of the laws and an understanding of safe behaviors among all road users is essential for making bicyclists feel safe on the roads.

Because bicyclists move freely across municipal boundaries, a key consideration should be ensuring the laws that govern riding do not conflict from one community to the next. Reviewing and aligning bicycle ordinances across metro communities may help contribute to a better understanding of what to expect on the roadway.

In all MPO communities, bicyclists are granted all the rights and responsibility of motorists. Riding on sidewalks is allowed, except in certain business/commercial districts. All MPO communities require headlights and rear reflectors or rear lights on bicycles that are operated after the dark

In Tiffin and Coralville, bicyclists are prohibited from riding in the street if a path is provided adjacent to the roadway.

All but one MPO community allows bicyclists to ride up to two abreast within a traffic lane. Only University Heights requires bicyclists to ride single file.

Opportunities for enforcement:

1. All MPO communities should consider reviewing their local ordinances to ensure ordinances are consistent (or at least not in conflict) with other metro communities. Also, communities should consider the use of E-assist bicycles in their bicycle ordinances. Electric assist bicycles are already available at local bicycle shops and are operating on streets and trails.

Example: lowa City has updated its ordinance to define E-assist bikes and to allow them to operate wherever bicycles are allowed. MPO Communities should consider

The Iowa Bicycle Coalition provides model ordinance language and advocates for a number of laws to make bicycling safer. Two important areas are passing laws (the separation required when a car passes a bicycle); and changes to hand signal laws (allowing an outstretched right arm as a signal for a right turn). Metro communities may wish to advocate for such changes at the state level.

updating their local ordinances to ensure that this new technology is addressed in the law.

Enforce light and reflector laws for those who ride at night—consider including a bike light giveaway campaign.

Example: Metro communities used to have a program whereby bicyclists caught without a light could have a citation waived if they showed proof that they have acquired a bike light. This program could be revived.

- 3. Focus enforcement in areas where new facilities are established and at intersections identified as high collision locations.
- 4. Address distracted driving through enforcement and a public information campaign.

The League of American Bicyclists suggests a number of practical ways to encourage police interaction and outreach to the bicycle community that may be considered by metro communities.

- Having patrol officers on bicycles.
- Having an identified point person within the police department to assist with bicycling issues.
- Police assistance with bicycle events and rides.
- Police-led bicycle safety education.
- Police distributed bike safety information, including theft deterrence and bike lights or helmet giveaways.

Engineering

Creating safe and convenient places to ride and park.

Engineering includes all the physical facilities that bicyclists rely on for traveling through the community: low-volume streets, bicycle boulevards or shared lane markings, bicycle lanes, multi-use trails, and side paths as well as the maintenance of those facilities. End of trip facilities, including secure bicycle parking are also part of engineering.

Planned facilities are shown on page 41. A map showing both planned and proposed facilities are included in the map on page 43.

Opportunities for engineering

- 1. Ensure routine maintenance and prompt repair to bicycle facilities and routes. Prioritize snow removal for facilities that provide commuter/school routes.
 - Example: Most metro communities provide some level of snow removal along commuter or school routes.
- 2. Plan to connect facilities between communities, including sidepaths along arterial streets as these facilities cross metro boundaries.
 - Example: MPO communities proactively plan for the extension of sidepaths with arterial street projects.
- 3. Establish access control standards on arterial streets to reduce conflict points along roadways where sidepaths serve as bicycle infrastructure.
 - Example: Sidepath along Oakdale Boulevard in Coralville and Jones Boulevard, north of St. Andrews Drive, in North Liberty are good examples of this.
- 4. Establish minimum bicycle parking requirements and standards for installation and design of parking for commercial, multi-family, and institutional uses (e.g. schools, libraries)
 - Example: Coralville's Community Plan provides specific guidelines for the provision of bicycle parking for its West Land Use Area. Similar guidelines could be codified to apply to other areas of the community.
- 5. Provide advance notice and clearly marked detour routes to safely accommodate bicycles and pedestrians during road closures, including lane or sidewalk closures or trail repair.

Planned Facilities

The following facilities are currently part of an adopted plan by the metro communities (included in a local plan or submitted as part of the MPO Long-Range Transportation Plan).

NORTH LIBERTY

- 1. Highway 965 sidepath 1.4 miles
- 2. **Penn Street sidepath** from CRANDIC Railroad to Front Street **0.25 mile**
- 3. **North Liberty Road sidepath** from Penn Meadows Park to Liberty High School **1.85 miles**
- 4. **Cherry Street wide sidewalk** from Penn Meadows Park to CRANDIC Railroad **0.4 mile**
- 5. **West Zeller Street wide sidewalk** from Highway 965 to Jones Boulevard **0.15 mile**
- 6. I-380 Penn Street Overpass with Sidepath 0.2 mile
- 7. **Highway 965 wide sidewalk/sidepath** from Zeller Street to Forevergreen Road **1.2 miles**
- 8. **St. Andrews Drive sidepath** from Centennial Park to Kansas Avenue **1.0 mile**
- 9. **Kansas Avenue sidepath** from St. Andrews Drive to Forevergreen Road **1.1 mile**
- 10. **Forevergreen Road sidepath** from Highway 965 to I-380 **1.0 mile**

CORALVILLE

- 11. Clear Creek Trail connection under I-80/380 from Coralville to Tiffin 1.9 miles
- 12. **Iowa River Trail missing segment** CRANDIC Park to Clear Creek Trail **0.45 mile**
- 13. **North Park Road sidepath** from Forevergreen Road to I-80 **2.0 miles**

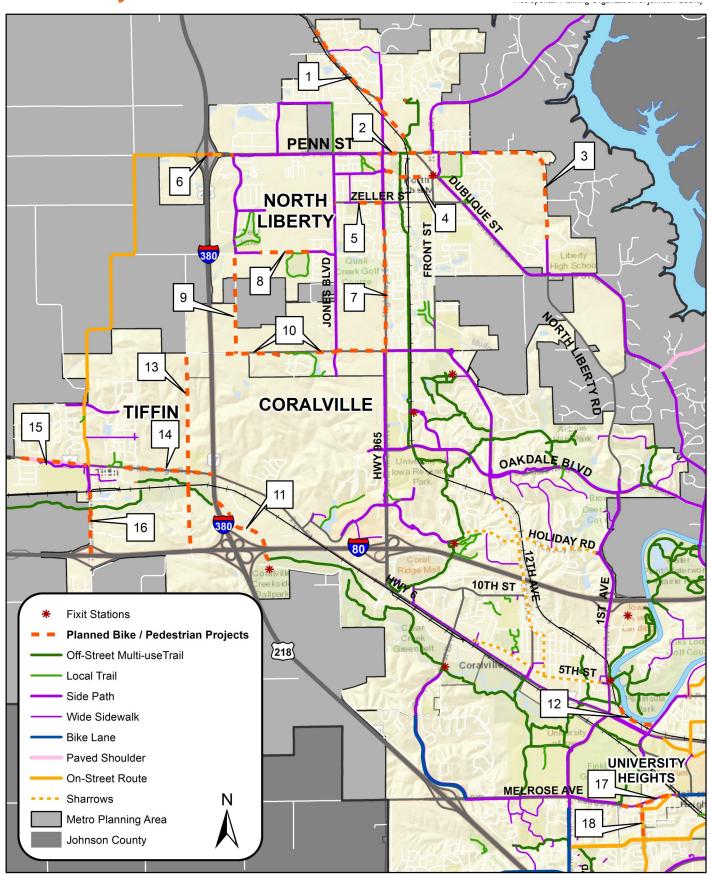
TIFFIN

- 14. **Highway 6 sidepath** from Stephens Street to I-80 **0.8 mile**
- 15. **Highway 6 sidepath** from Ireland Avenue to West City Limits **0.7 mile**
- 16. **Ireland Avenue trail connection** from lowa Interstate Railroad to the Clear Creek Trail **0.25 mile**

UNIVERSITY HEIGHTS

- 17. Melrose Avenue bike lanes 0.55 mile
- 18. Sunset Street bike lanes 0.35 mile

Planned Bicycle Facilities



Proposed Facilities

The following facilities are part of existing community plans or extend from existing or planned facilities. These projects were supported in feedback provided through the online survey and workshops.

1 1st Avenue/North Liberty Road (Oakdale Blvd. to N. Dubuque St.): This segment of 1st Avenue currently lacks any bicycle facilities. Extending a side path north of Oakdale Blvd would provide an additional north/south route for bicyclists between North Liberty and Coralville. This would provide a more direct route to and from the new high school in North Liberty and surrounding residential development. Because the speed limit is at least 45 mph throughout this corridor, a separated facility such as a side path would be the most preferred option in this location. 2.7 miles

2 Rustic Ridge Road (1st Ave. to N. Dubuque St.): With the addition of a side path or other bike facility on 1st Avenue/North Liberty Road, Rustic Ridge Road would provide a connection to the existing and well-used lowa River Trail along N Dubuque Street, expanding options for recreation and commuting. **0.3 miles**

3 7th Street to 10th Street (connecting Biscuit Creek Trail to 10th Street.): The 25-mph speed limit and lower traffic volumes on this set of streets offer an alternative route to get to the 12th Ave bridge over I-80. Even with shared lane markings, 12th Avenue can be a difficult street for most bicyclists. A quieter on-street route such as this may be a more enticing facility for a wider range of users. Weekday bicycling data collected from Strava Users shows that this route is regularly used, possibly by more experienced or knowledgeable bicyclists. Adding wayfinding signage along the route, combined with shared lane markings would increase its familiarity with more bicyclists.

1.1 miles

4 10th Street Bikeway (25th Avenue to CRANDIC Railroad): Establishing 10th Street as an on-street route would provide an east / west bikeway that connects to the existing trail system near Coral Ridge Mall and to proposed facilities on 22nd Avenue and 7th Avenue. Because 10th Street is not 30 feet in width for its entire length, there is not adequate space for bike lanes. However, it could be used as an on-street route, treated with pavement markings and signage to alert motorists of the presence of bicyclists.

1.2 miles

5 22nd Avenue (from Hwy 6 to 14th St.): 22nd Ave north of Hwy 6 is a collector street with the necessary pavement width to support on-street bike facilities such as bike lanes. Designating an exclusive space for bikes along this roadway would make it more appealing for many bicyclists. An on-street facility in this location would also provide a connection to bike facilities south of Hwy 6 (Clear Creek Trail). Wayfinding signage at the north end of 22nd Ave could direct bicyclists west to the nearby Coral Ridge Mall and North Ridge Trail and I-80 underpass. **0.6 miles**

6 Camp Cardinal Boulevard (Kennedy Pkwy. to Hwy 6): Striping bike lanes on this segment of Camp Cardinal Blvd would align with existing bike lanes on lowa City's portion of Camp Cardinal Blvd to the south, providing a consistent connection between communities. This segment also provides an additional link to the Clear Creek trail for

bicyclists and could be continued further north to 22nd

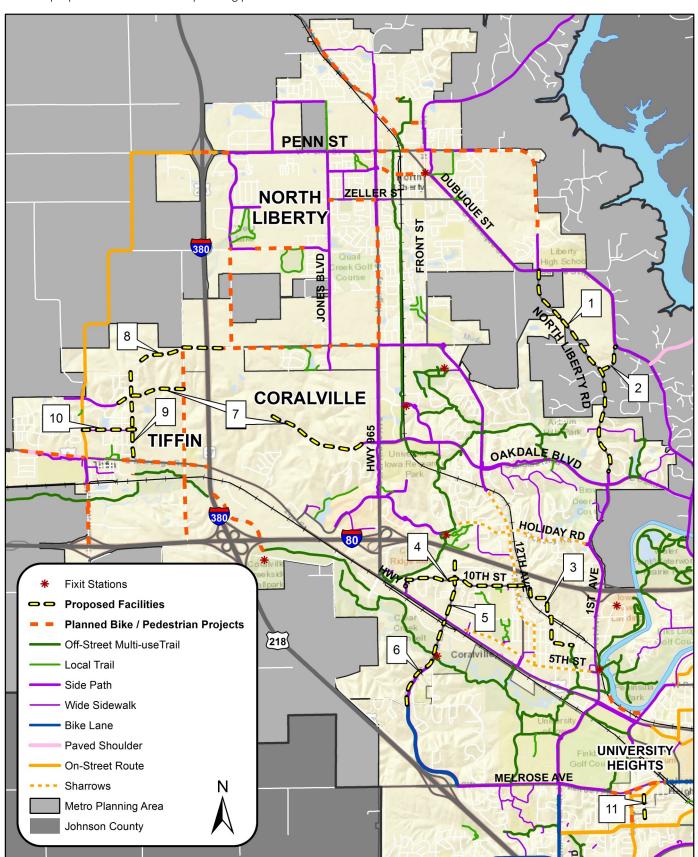
Avenue. 1.0 miles

7 Oakdale Boulevard (Jones Blvd. to N. Park Rd.): When the future extension of Oakdale Blvd from Jones Blvd in Coralville to N Park Road in Tiffin is complete, it will create a continuous connection between communities and expand the number of potential routes that bicyclists may take. Limiting the number of private and commercial driveways that take direct access on Oakdale Blvd will improve the safety and efficiency for bicyclists. 2.0 miles

As Forevergreen Road (Croell Avenue to Kansas Avenue): As Forevergreen Road develops into an urban arterial roadway with the completion of the I-380/Forevergreen Road interchange project, it will provide an essential connection for motorists, pedestrians and bicyclists. As with other arterial roads, Forevergreen Road should include a sidepath. For this to be a valuable and safe facility for users of all ability levels, sufficient access control must be considered to limit the number of interruptions from driveways and road crossings. Because Forevergreen Road crosses multiple jurisdictions, coordination will be essential to ensuring the development of a safe and consistent bicycle facility. **0.85 miles**

Planned and Proposed Bicycle Facilities

The map below shows all existing bicycle trails and sidepaths along with any facilities currently in an community's adopted plan and any facilities proposed as a result of this planning process.



9 Croell Avenue (Highway 6 to Oakdale Boulevard): Because Croell Avenue is at least 30 ft in width throughout its entire extent, it can reasonably accommodate an onstreet bicycle facility such as bike lanes. Croell Avenue is being developed primarily as a residential street (it is classified as local) allowing it to serve as a relatively low-stress facility compared to Ireland/Roberts Ferry Road and North Park Road, which run parallel to it but have higher vehicular traffic volumes. Special care should be taken to ensure visibility of bicyclists crossing Oakdale Boulevard and Forevergreen Road as development occurs near the I -380 interchange. A crossing at Highway 6 and a bit of planning could provide a link to the Clear Creek Trail.

1.0 miles

10 Goldfinch Drive (Roberts Ferry Road to Croell Avenue): Goldfinch Drive is a 30-foot wide local street in Tiffin with average daily traffic estimated below 2,000 vehicles. Goldfinch Drive runs east to west connecting several neighborhoods. On-street bicycle facilities could eventually be extended east to N. Park Road as Tiffin continues to develop. **0.5 miles**

11 George Street (Benton Street to Koser Avenue):
Because George Street is a low volume, low speed local street it can serve as a route for in-town commuters between east/west bike facilities on Benton Street and Melrose Avenue to the north.

0.3 miles

Equity

Ensuring that bicycling is safe, accessible, and welcoming for all people, especially those who face transportation challenges.

An equitable biking community provides many benefits—improved health and fitness; reduced household transportation expenses; increased access to employment, education, shopping, and recreation; enhanced social connection and quality of life. For this reason, bicycle infrastructure and programming should extend to those people for whom transportation or social connection may be the most difficult.

Opportunities to ensure equity

- 1. Prioritize bicycle facilities that serve areas of multifamily housing and other areas of higher density residential development.
 - Example: The MPOJC's scoring criteria for Transportation Alternatives and Surface Transportation Block Grant funding give additional points to those facilities that serve multi-family housing and mixed-use development.
- 2. Raise public awareness of Safe Routes to School. Example: The lowa Bicycle Coalition provides support for Safe Routes to School.
- 3. Provide opportunities for all children to learn to ride and have access to bicycles.
- 4. Design bicycle programs to meet the unique needs of women, families, children, seniors, immigrants, and low-income communities.
- 5. Provide educational outreach to non-native speakers to teach rules of the road and raise awareness of the bike network.
 - Example: A number of local organizations including the Neighborhood Centers of Johnson County, lowa City Bike Library, Think Bicycles, Bicyclists of lowa City, and the Optimist Club along with local bicycle retailers organize or sponsor annual events focused on educating children and adults in safe bicycling and providing equipment, such as helmets, bike lights, and low-cost or free bicycles.
- Plan bicycle and pedestrian access and bicycle parking to employment centers and bus routes.
- 7. Provide opportunities to gather input from underrepresented segments of the community, including youth, minorities, non-native speakers, etc.

Evaluation

Planning and monitoring to ensure a safe and convenient bicycle network.

The evaluation category summarizes how communities plan for future bicycle facilities, measures the amount of cycling taking place in the community, and those efforts to improve safety and expand ridership.

The 2009 Metro Bicycle Plan recommended that all MPO entities consider pursuing Bicycle Friendly Community designations from the League of American Bicyclists (LAB). To date, Iowa City, University Heights, Johnson County, and the University of Iowa have achieved designations.

The LAB's evaluation tools are useful in identifying areas where communities can make improvements—the 5 E'S. Ultimately the application process should be viewed as a way to measure progress and to identify opportunities to encourage bicycling that fit with each individual community's challenges and aspirations.

Opportunities for evaluation

- 1. Use the League of American Bicyclists' Bicycle Friendly application as a tool for evaluating progress.
- 2. Prioritize ADA transition plans to bring all streets, sidewalks, and bus stops into compliance with curb ramp standards.
- 3. Expand opportunities to listen and respond to input from bicyclists through the Regional Trails and Bicycling Committee or local departments or committees.



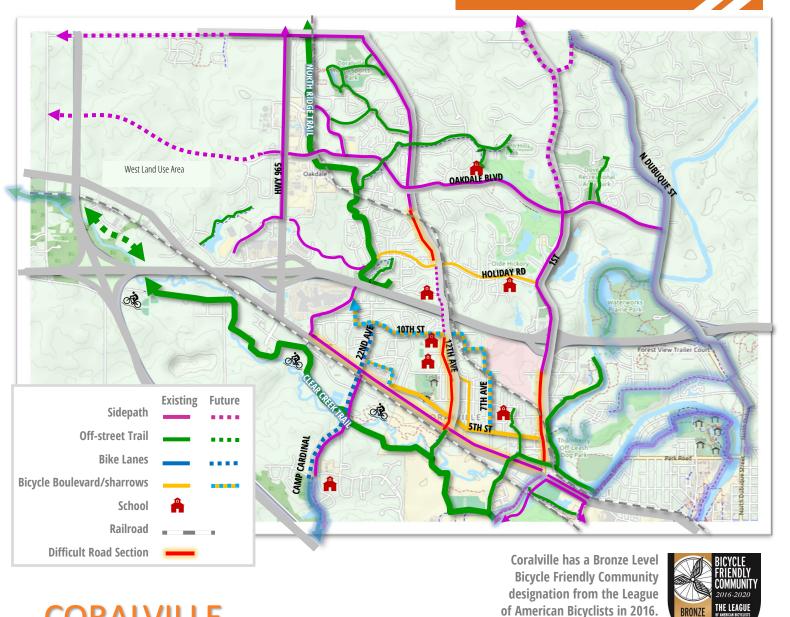
Photo © Coralville Parks and Recreation

MPOJC will continue to provide the following evaluation services to for all Metro entities:

- Conduct annual trail counts at select locations to monitor changes in trail usage.
- Conduct peak hour bicycle counts at select locations to monitor bicycle commuting.
- Conduct annual bicycle counts at public schools within the metro area.
- Assist with Bicycle Friendly Community applications.
- Provide bicycle-related research and data collection at the request of MPO communities.
- Providing collision analysis and reports and recommending countermeasures to improve safety.

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Community Summary



CORALVILLE

Approximately 20 miles of existing trail (local and regional), 12 miles of sidepath, and 4.76 miles of sharrow.

Opportunities

Coralville has a robust system of off-street and separated bike facilities, with 19+ miles of trails (local & primary) and approximately 12 miles of sidepaths and 6 miles of wide sidewalks. Major trails include the Clear Creek Trail, which connects to the University of Iowa Campus and Iowa City; and the North Ridge Trail, which connects to North Liberty and the Iowa River Trail, east of 1st Avenue.

Sidepaths along Oakdale Boulevard and First Avenue, north of Interstate 80, are popular among bicyclists. The provision of side paths along arterial streets, as they are extended, in addition to the completion of the Clear Creek Trail to Tiffin will connect new (and future) residential neighborhoods and major retail, commercial, and employment centers across communities.

The City of Coralville has identified nearly 40 additional miles of trails or sidepaths that will be part of future development and had prioritized pedestrian and bicycle transportation in new development areas (see West Land Use Area Map on page 50).

BRONZE

Education

- Continue to fund/organize summer bicycle programming for youth and consider expanding adult programming.
- Consider using lowa City Transit's "People Friendly Driver" Program to educate transit drivers and other public employees about bicycle facilities and best practices for sharing the road with bicyclists.
- Consider working with other metro communities and the Regional Trails and Bicycling Committee to provide basic bicycle safety information printed in multiple languages.

Encouragement

- Continue to support and coordinate with the lowa Bicycle Coalition, Convention and Visitors Bureau, lowa City Area Development, and other area groups to promote bicycling.
- Continue to designate May as "Bike Month" and to fund/promote annual activities.
- Continue to distribute Metro Area Trail maps.

Enforcement

- Consider reviewing Coralville's bicycle ordinance to ensure compatibility with adjacent communities and to designate where electric assist bikes may legally operate.
- Work with the Coralville Police Department to enforce light and reflector laws for those riding at night.
- As time permits, focus enforcement efforts at intersections or along streets with documented pedestrian and bicycle collisions.

Evaluation

- Communicate detour routes for pedestrians and bicyclists during road and trail closures and ensure that alternate routes are safe and clearly marked.
- Consider prioritizing the ADA transition plan to ensure curb cuts are in compliance.
- Use the League of American Bicyclists' Bicycle Friendly Community application as a tool for reviewing progress.

Equity

- Consider working with the Iowa Bicycle Coalition and the MPO to promote Safe Routes to Schools.
- Distribute bicycle information in multiple languages.

Engineering

- Consider snow removal along trails and sidepaths that serve as commuter and school routes.
- Restrict driveway crossings on rights-of-way where sidepaths are planned or constructed.
- Establish minimum bicycle parking requirements and standards for installation and design of parking for commercial and multi-family residential development.

Challenges

- 12th Avenue: Traffic volumes, hilly terrain, and narrow roadway width make for a stressful ride along this essential north-south route across the interstate. A sidepath on the section where driveways are infrequent, between Holiday Road and 10th Street, should be considered. Alternative routes along lower volume streets—following the 10th Avenue sharrows or a proposed 7th Street to 10th Street bike boulevard would allow bicyclists to avoid a busy section of 12th Avenue south of the Interstate.
- 1st Avenue: Traffic volumes and the frequency of commercial driveways make 1st Avenue, south of the interstate, a daunting route for most bicyclists. When complete, the lowa River Trail to the east will provide a low-stress alternative between Highway 6 and 9th Street. Wayfinding signs to guide bicyclists to the trail and to crossings at signalized intersections, including 9th Street and 1st Avenue, should be a priority.
- Highway 6/2nd Street: The wide sidewalk along Highway 6 is a popular bicycle route, but the number and frequency of commercial curb cuts require cyclists to use caution. As noted in the "Safety" section of this plan (page 25), this roadway experiences the greatest number of bicycle and pedestrian collisions. The Clear Creek Trail and the 5th Street bikeway provide alternative routes.
- Intersections of Highway 6 and 1st Avenue in Coralville and Rockyshore and Hawkins Drive in Iowa City. These intersections are convergence points for a number of important trails and sidepaths. Ensuring that bicyclists and pedestrians can cross safely and comfortably will make bicycle commuting between Coralville to Iowa City and the University Campus more appealing. The Iowa City Bicycle Master Plan called out this area for additional study. Collaboration between entities on wayfinding and other intersection improvements should be a priority.

Proposed Facilities

First Avenue (Oakdale Boulevard to N. Dubuque Street): This segment of First Avenue currently lacks any bicycle facilities. Extending a sidepath north of Oakdale Boulevard with future roadway improvement projects will offer an additional north/south route for bicyclists between North Liberty and Coralville. This also provides a route to and from Liberty High School and surrounding residential development. Based on speeds and traffic volumes, a separated facility such as a side path would be the most preferred option. **2.7 miles**

Rustic Ridge (First Avenue to N. Dubuque Street): A sidepath on Rustic Ridge Road would provide connection between 1st Avenue and North Dubuque Street, expanding options for recreation and commuting in northeast Coralville. **0.3 mile**

22nd Avenue (from Highway 6 to 14th Street): 22nd Avenue, north of Highway 6, is a collector street with the necessary pavement width to support on-street bike facilities such as bike lanes. Designating an exclusive space for bikes along this roadway would make it more appealing for many bicyclists. An on-street facility in this location would provide a connection to bike facilities south of Highway 6 (Clear Creek Trail). Wayfinding signage at the north end of 22nd Avenue could direct bicyclists west to the nearby Coral Ridge Mall and North Ridge Trail and I-80 underpass. **0.6 mile**

Camp Cardinal Boulevard (Kennedy Parkway to Highway 6) Existing edge striping on Camp Cardinal may be converted to bike lanes to align with existing bike lanes on lowa City's portion of the roadway to providing a consistent facility connecting the communities. This segment also provides an additional link to the Clear Creek trail for bicyclists and could be continued further north to 22nd Avenue. **1.0 mile**

7th Avenue (Biscuit Creek Trail to 7th Avenue): The 25-mph speed limit and lower vehicle volumes on this set of streets make this a low-stress alternative to 12th Avenue. A quieter on-street route such as this may invite more inexperienced bicyclists. Weekday bicycling data collected from Strava users shows that this route is already being used by some riders. Wayfinding signage combined with shared lane markings would increase its familiarity with more bicyclists. **1.1 miles**

10th Street Bikeway (25th Avenue to the CRANDIC Railroad): Because 10th Street is not 30 feet in width for its entire length, there is not adequate space for a dedicated bike lane. However, it could be used as an on-street route, treated with pavement markings and signage to alert motorists of the presence of bicyclists. An on-street route would provide an east-west bikeway connecting to the existing trail system near Coral Ridge Mall and between proposed facilities on 22nd Avenue and 7th Avenue. **1.2 miles**

Planned Facilities

Clear Creek Trail connection under I-80/380 from Coralville to Tiffin. This project has secured funding and is scheduled for completion in 2024. **1.9 miles**

North Park Road sidepath from Forevergreen Road to I-80. **2.0 miles**

Additional neighborhood trails and sidepaths as required in the development in the West Land Use Area Plan.

lowa River Trail missing segment CRANDIC Park to Clear Creek Trail **0.45 mile**

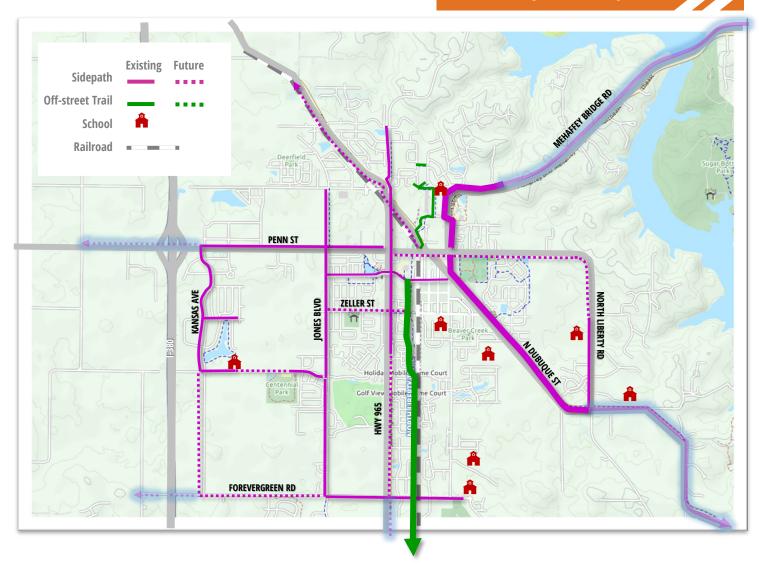


Coralville's Community Plan prioritizes pedestrian and non-motorized vehicle circulation for its West Land Use Area—a major area of planned growth located west of Highway 965 and east of I-380. The plan accounts for trails (shared-use paths) located within parks, open spaces, and greenways with connections from surrounding residential and commercial development as well as to Tiffin.

In order to promote and support the benefits of bicycling, the plan calls for bicycle parking and related support facilities to be included as part of all multi-family and commercial sites as follows:

- All retail and office uses are to provide on-site surface or in-building bicycle storage space or bike racks at a rate of 1 space for every 35 vehicle parking spaces with a minimum of 4 spaces per site.
- All multi-family developments must provide on-site surface on in-building bicycle storage space or bike racks at a rate of 1 space for every 15 dwelling units with a minimum of 4 spaces per development.
- Office uses are encouraged to provide in-building bicycle facilities, including bike lockers, repair and maintenance areas as well as shower or changing facilities.
- Exterior bicycle parking is to be located in a visible area close to the front entrance of the main building or buildings on a paved surface and connected to adjacent trails or parking lots by a paved access.
- The design of all bicycle facilities should consult and consider the guidelines of from the Association of Pedestrian and Bicycle Professionals (APBP)- Essentials of Bike Parking, Revision 1.0, September 2015.

Community Summary



NORTH LIBERTY

Approximately 8 miles of existing trail (local and regional) and 12.35 miles of sidepaths.

Opportunities

The majority of North Liberty's bicycle network consists of facilities within the street right-of-way— wide sidewalks (1.4 miles) and sidepaths (12 miles). North Liberty also has almost 8 miles of off-street trail, including local park trails and the North Ridge Trail, which extends south to Coralville and north to connect with the North Dubuque Street sidepath (lowa River Trail). In some locations the municipal system is supplemented by private neighborhood trails (not included in these mileage totals or on the map).

As commercial and residential areas develop, the city plans to fill gaps between existing bike facilities and expand the "trail" network to connect to new areas currently lacking bike facilities. Prioritizing access control and limiting the number of crossings and interruptions from driveways will improve safety for bicyclists using sidepaths.

Education

- Consider supporting programs offered through local non-profits to expand bicycle ridership and education.
- Continue to support current bicycle programming that teaches bicycle skills and offers group rides.
- Consider working with the MPO to provide outreach on bicycle safety for drivers.
- Consider working with other metro communities and the Regional Trails and Bicycling Committee to provide basic bicycle safety information printed in multiple languages.

Encouragement

- Continue to designate May as "Bike Month" and to fund/promote annual activities.
- Consider working with metro communities to brand the regional trail system and enhance way-finding signage.
- Continue distributing Metro Area Trail maps.

Enforcement

- Consider reviewing Coralville's bicycle ordinance to ensure compatibility with adjacent communities and to designate where electric assist bikes may legally operate.
- Work with the North Liberty Police Department to enforce light and reflector laws for those riding at night.

Evaluation

- Communicate detour routes for pedestrians and bicyclists during road and trail closures; ensure routes are safe and clearly marked.
- Continue to prioritize the ADA transition plan to ensure curb cuts are in compliance.
- Consider applying for Bicycle Friendly Community Status.

Equity

- Prioritize bicycle facilities serving multi-family housing and schools.
- Continue to work with the lowa Bicycle Coalition on safe routes to school.

Engineering

- Ensure routine maintenance and prompt repair to bicycle facilities and continue snow removal for commuter and school routes.
- Restrict driveway crossings along planned or constructed sidepaths (wide sidewalks).
- Continue to connect bicycle facilities between North Liberty and surrounding communities.
- Consider establishing minimum bicycle parking requirements and standards for installation and design of bike parking for new commercial and multi-family residential development.

Planned Facilities

The following facilities are part of an adopted plan (included in a community plan or the MPO Long-Range Transportation Plan).

Highway 965 sidepath 1.4 miles

Penn Street sidepath from CRANDIC Railroad to Front Street **0.25 mile**

North Liberty Road sidepath from Penn Meadows Park to Liberty High School **1.85 miles**

Cherry Street wide sidewalk from Penn Meadows Park to CRANDIC Railroad **0.4 mile**

West Zeller Street wide sidewalk from Highway 965 to Jones Boulevard **0.15 mile**

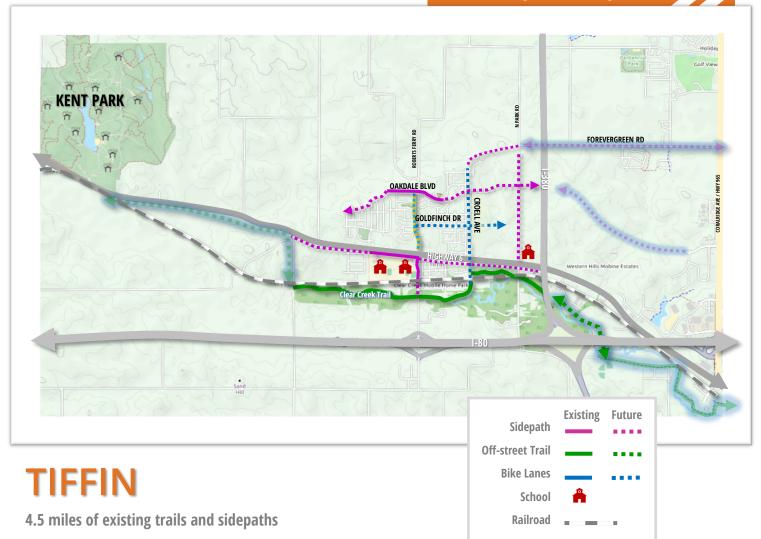
I-380 Penn Street Overpass with Sidepath 0.2 mile Highway 965 wide sidewalk/sidepath from Zeller Street to Forevergreen Road 1.2 miles

St. Andrews Drive sidepath from Centennial Park to Kansas Avenue **1.0 mile**

Forevergreen Road sidepath from Highway 965 to I-380 1.0 mile

Kansas Avenue sidepath from St. Andrews Drive to Forevergreen Road **1.1 mile**

Community Summary



Opportunities

The long-awaited completion of the Clear Creek Trail connection from Coralville (in 2025) will provide opportunities to increase bicycling both for recreation and commuting and will help make Tiffin a bicycling destination for the Metro Area. Meanwhile, the County's connection from Kent Park to Tiffin will add to the appeal of this route.

With its scenic qualities and access to the University of Iowa campus, the Clear Creek Trail will become a popular route for bicyclists, including those interested in Coralville's cyclocross and single-track parks. Working with Johnson County and other metro communities, Tiffin could capitalize on bicycle tourism and promote recreational assets and quality of life for its own residents.

Connecting school sites and the new commercial retail development along Park Road to neighborhoods, will encourage residents to bicycle or walk to these key destinations. This is especially important as the Clear Creek Amana School District extends to neighborhoods east of I-380 and Highway 965. Planning ahead for on-street facilities—bike lanes or shared lane markings—and restricting curb cuts along sidepaths, will help to ensure that bicyclists can travel safely and efficiently along these corridors.

Education

Expand bicycle ridership among youth in Tiffin. This
could take the form of bike rodeos offered at school
sites with support from metro area bicycle organizations.

Encouragement

- With the connection of the Clear Creek Trail between Tiffiin and Coralville, consider adopting May as Bike Month and partnering with other Metro Communities on a community bicycle ride along the length of the trail.
- Update wayfinding signage as new roads, sidepaths, and trails are constructed.
- Distribute Metro Area Trail maps.

Enforcement

Consider reviewing Tiffin's bicycle ordinance to ensure compatibility with adjacent communities and to designate where electric assist bikes may legally operate.

Evaluation

 Prioritize the ADA transition plan to ensure curb cuts are in compliance.

Equity

 Consider working with the Iowa Bicycle Coalition and the MPO to ensure safe routes to school.

Engineering

- Consider on-street facilities (proposed bike lanes or sharrows) on main routes where pavement width allows.
- Consider sidepaths with the extension of arterials streets and plan for sidepaths to connect between communities as roadways extend across municipal boundaries.
- Restrict driveway crossings on rights-of-way where sidepaths (wide sidewalks) are planned.

Proposed Facilities

The following facilities extend from existing or planned facilities.

Forevergreen Road (Croell Ave. to City Limits.): Forevergreen Road should include a sidepath along the newly constructed section of roadway. Access control should limit the number of interruptions from driveways and road crossings. **0.5 Miles within Tiffin**

Croell Avenue (Highway 6 to Oakdale Blvd.): Croell Avenue offers a relatively low-stress facility compared to Ireland Avenue/Roberts Ferry Road and N. Park Road. Special care should be taken to ensure visibility of bicyclists crossing Oakdale Boulevard and Forevergreen Road. **1.0 miles**

Goldfinch Drive (Roberts Ferry Rd. to Croell Ave.): Onstreet bike facilities could eventually be extended east to N Park Road. **0.5 miles**

Oakdale Boulevard (Jones Blvd. to N. Park Rd.): A future extension of Oakdale Blvd from Coralville to N. Park Road in Tiffin will create a continuous connection between communities and expand the number of potential routes that bicyclists may take. **0.25 miles within Tiffin.**

Planned Facilities

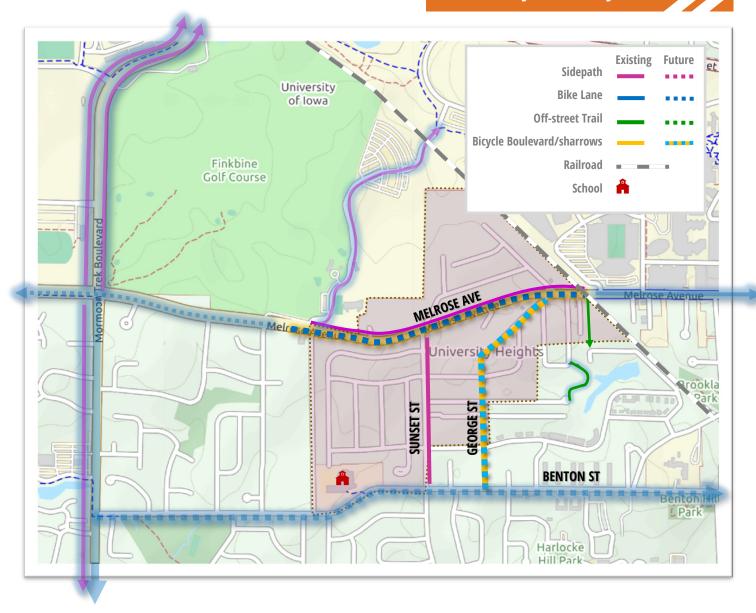
The following facilities are part of an adopted plan (included in a community plan or the MPO Long-Range Transportation Plan).

Highway 6 sidepath from Stephens Street to I-80. **0.8 mile**

Highway 6 sidepath from Ireland Avenue to West City Limits. **0.7 mile**

Ireland Avenue trail connection from Iowa Interstate Railroad to the Clear Creek Trail. **0.25 mile**

Community Summary



UNIVERSITY HEIGHTS

Approximately 1 mile of existing sidepath.



University Heights has the highest rates of pedestrian and bicycle commuting in the Metro Area with 21% of residents walking to work and 15% bicycling to work.

Opportunities

Planned upgrades to Melrose Avenue, including the addition of bike lanes, will enhance connections between communities, making it easier for University Heights residents to access the wider metro area trail system. Bike lanes will also help to reduce conflicts between bicyclists and pedestrians along the popular Melrose Avenue sidepath. The addition of bike etiquette signage along the Melrose Avenue and Sunset Street sidepath may also help to encourage bicyclists to share the path with pedestrians. Low-volume streets can be used as bikeways: George Street along with Koser Avenue could be enhanced with wayfinding and other elements to provide a north-south route.

Education

Expand bicycle ridership among youth and adults.
 Consider establishing an annual slow-roll ride to familiarize new or inexperienced riders with different bicycle facilities and to teach route planning.

Equity

 Consider working with other metro communities and the Regional Trails and Bicycling Committee to provide basic bicycle safety information printed in multiple languages.

Encouragement

- Consider establishing a bicycle repair station near the commercial uses at One University Place.
- Continue to designate May as "Bike Month" and to fund/promote the University Heights Breakfast.
- Continue to distribute Metro Area Trail maps.

Enforcement

- Consider reviewing University Heights' bicycle ordinance to ensure compatibility with adjacent communities and to designate where electric assist bikes may legally operate.
- Work with the University Heights Police Department to enforce light and reflector laws for those riding at night.

Evaluation

- Consider prioritizing the ADA transition plan to ensure curb cuts are in compliance.
- Use the League of American Bicyclists' Bicycle Friendly Community application as a tool for reviewing progress.

Engineering

 Connect bicycle facilities between University Heights, the University or Iowa, and Iowa City.

Planned Facilities

The following facilities are currently part of an adopted plan included in a local plan or submitted as part of the MPO Long-Range Transportation Plan.

Melrose Avenue bike lanes 0.55 mile Sunset Street bike lanes 0.35 mile

Proposed Facilities

George Street Bikeway from Benton St. to Koser Ave. **0.3 mile**

REGIONAL TRAILS AND BICYCLING COMMITTEE

The Regional Trails and Bicycling Committee (RTBC) is an advisory committee made up of representatives from each MPO community/entity (including the University of lowa) in addition to representatives of local bicycling groups. The RTBC may be ideally suited to work on projects or policies that require or benefit from coordination between communities. The following is a list of projects for which the RTBC may be uniquely suited to assist.

Education

- Coordinate the translation of basic bicycle safety information in multiple languages: Spanish, Chinese, Arabic, French, etc.
- Provide bike etiquette signs for placement along trails at the discretion of MPO entities. Signs would be intended for those trail sections that receive heavy use and where there may be conflicts between bicyclists and pedestrians.
- Introduce Iowa City's People Friendly Driver program to MPO entities for eventual use by area businesses and organizations.
- Provide public outreach on bike safety issues such as safe passing and Hand Signals through online media and other avenues

Encouragement

- Pursue a branding effort for our regional trail system to promote bicycle tourism.
- Review bicycle ordinances to ensure consistency across the metro. As part of this effort we would look at ordinances for electrical-assist bikes as well as passing laws and other recommendations of the lowa Bicycle Coalition and League of American Bicyclists. This review would involve local law enforcement.
- Encourage local bicycle groups to lead at least 1 ride for adults and 1 ride for families/children in each MPO community as well as at least 1 bicycle rodeo in each community.
- Plan a MPO/County official ride across metro/county lowa City to Tiffin; Coralville to Solon.

Enforcement

 Assist with identifying a funding source for purchase of tail lights and coordinate a metro-wide bike light promotion with local law enforcement.

Evaluation

 Help organize an annual listening session for the RTBC to hear from the public regarding the progress on the plan. Page intentionally left blank.

Appendix

The following strategies for improving Bicycle and Pedestrian transportation are included as part of the MPO's Future *Forward: 2045 Long Range Transportation Plan* (adopted by the MPO Board in 2017).

STRATEGIES:

IMPROVING BICYCLE AND PEDESTRIAN TRANSPORTATION



Reduce obstacles for non-motorized transportation

Ensure compliance with Complete Streets policies for all new and reconstructed road projects.

Continue to expand and enhance bicycle and pedestrian facilties, including the trail network.

Prioritize ADA transition plans to bring all streets, sidewalks, and bus stops into compliance.

Ensure routine maintenance and prompt repair to bicycle and pedestrian facilities.

Improve bicycle and pedestrian safety

Design on-street facilities according to AASHTO and NACTO guidelines.

Increase participation in Safe Routes to Schools programs.

Develop educational programs to promote safe bicycling and walking.

Evaluate intersections and corridors with high pedestrian or bicycle collision rates and develop a mitigation plan.

Raise awareness of the dangers of distracted driving and walking.

Maximize pedestrian and bike access



Ensure safe bicycle/pedestrian access to all commercial/employment areas, schools, and parks.

Include connectivity as a criterion in land development processes.

Adopt bicycle parking ordinances in all Metro Area municipalities.

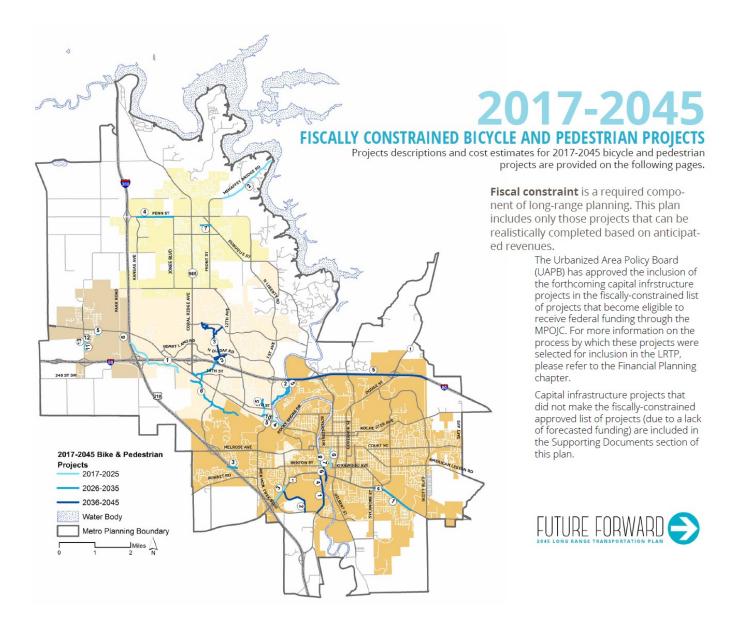
Recognize and promote the economic benefits of bicycling



Use bikability and walkability as tools to promote economic development and investment.

Expand participation in Bike-to-Work Week and Bike month.

Continue to pursue and promote "Bike Friendly" designations, including Bike Friendly Business designations.



Fiscally Constrained Bicycle & Pedestrian Projects 2017-2025							
ID	Project Title	Project Description	\$ Cost Estimate at Construction	Entity			
1	Clear Creek Trail Phase 6 and 7 (FY18)	1.9 mile extension of Clear Creek Trail west to I-380	\$1,726,534	Coralville			
2	Mehaffey Bridge Trail Extension (FY18)	Construct trail from North Liberty City Limits to USACE Mehaffey Bridge Boat Ramp (2 miles)	\$222,000	Johnson County			
3	Highway 1 Sidewalk/Trail (FY18)	Construct 10' trail adjacent to Highway 1 between Sunset Street and Mormon Trek Boulevard	\$873,480	lowa City			
4	lowa River Trail (FY20)	From Rocky Shore Drive northwest .50 miles to Clear Creek	\$1,019,640	Coralville			
5	Clear Creek Trail Phase 6 (FY19)	From Kimberite Street south .10 miles to Brown Street	\$245,920	Tiffin			
6	Clear Creek Trail (FY18)	Over Iowa Interstate Railroad	\$48,720	Tiffin			
7	Riverside Dr Streetscape	Streetscape improvements on Riverside Drive between Myrtle Avenue and Benton Street	\$87,000	Iowa City			
8	Riverside Dr Pedestrian Tunnel	Construct a tunnel through the railroad embankment on the west side of Riverside Drive south of Myrtle Avenue	\$1,803,468	lowa City			
9	Clinton St Streetscape	Improve Clinton Street Streetscape south of Burlington Street consistent with the Riverfront Crossings Plan. Minor pavement improvements and lane striping a part of project	\$1,740,000	lowa City			
10	Clear Creek Trail - 1st Ave to Biscuit Creek	0.25 mile extension of Clear Creek Trail from 1st Ave. to Biscuit Creek	\$290,000	Coralville			
11	Trail south on Ireland Ave (Clear Creek Trail to Villages Development)	Grade and Pave .50 trail extension along Ireland Ave to Villages Development	\$232,000	Tiffin			
12	Trailhead at Ireland	Grade and Pave Trailhead	\$34,800	Tiffin			
13	Trail south on Ireland Ave (Railroad to Clear Creek Trail)	Grade and Pave .25 mile trail extension along Ireland Ave to connect to Clear Creek Trail	\$116,000	Tiffin			
	highlighted in green have funding	Total Costs 2017- 2025	\$8,439,562				
prograr	nmed in the TIP.	Estimated Funding	\$9,645,474				
		Remaining	\$1,205,912				

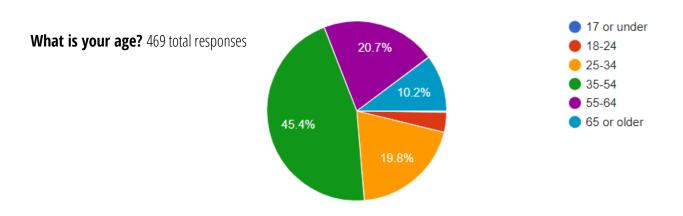
ID	Project Title	Project Description	\$ Cost Estimate at Construction	Entity
1	Highway 6 Trail - Sycamore to Heinz	Extend existing trail along Hwy 6 between Sycamore Street and Heinz Road.	\$2,887,878	Iowa City
2	Iowa Riverfront Pedestrian Bridge	New pedestrian bridge over lowa River just south of Interstate 80	\$3,325,000	Coralville
3	Willow Creek Trail - West	Connect Willow Creek Trail from its current west terminus via a tunnel under Highway 218, to connect with the trail in Hunters Run Park and further west.	\$4,277,280	Iowa City
4	Penn Street Trail	Jones Blvd to Kansas Ave. 10ft wide trail along ROW	\$845,120	North Liberty
5	Trail Construction - Coralville Zone 1	Reconstruction of trails in Zone 1. Zone 1 is located east of 12th Avenue and south of I-80. Total length: 1.5 miles.	\$802,560	Coralville
6	Trail Reconstruction - Coralville Zone 2	Reconstruction of trails in Zone 2. Zone 2 is located west of 12th Ave., south of I-80, and east of Coral Ridge Ave. Total length: 3.5 miles.	\$1,662,500	Coralville
7	Cherry Street Trail Corridor	Penn Meadows Park to CRANIC RR. 10ft wide sidewalk.	\$304,000	North Liberty
		Total Costs 2026 - 2035	\$14,104,338	
		Estimated Funding	\$14,227,998	
		Remaining	\$123,660	

Fiscally Constrained Bicycle & Pedestrian Projects 2036-2045							
ID	Project Title	Project Description	\$ Cost Estimate at Construction	Entity			
1	Old Highway 218 Trail/Wide Sidewalk	This project will construct an 8' wide sidewalk adjacent to Old Highway 218 between Sturgis Ferry Park and McCollister Boulevard.	\$1,056,000	Iowa City			
2	Willow Creek Trail - Phase III	Construct a trail from Willow Creek Drive, under Highway 1, around perimeter of airport, to connect with lowa River Corridor (IRC) Trail.	\$1,670,400	Iowa City			
3	Trail Reconstruction - Coralville Zone	Reconstruction of trails in Zone 3. Zone 3 is located west of 1st Ave., north of I-80, east of Coral Ridge Ave., and south of Oakdale Blvd. Total length: 2.7 miles.	\$1,620,000	Coralville			
4	Old Highway 218 Streetscape	Streetscape improvements on Old Hwy 218 entrance - Sturgis Ferry Park to US Hwy 6. This project includes landscaping, lighting and sidewalk improvements. The project should be coordinated with Sturgis Ferry Park upgrade and /or Riverside Drive Redevelopment project.	\$1,559,040	Iowa City			
5	Interstate 80 Aesthetics Improvements	Landscaping and aesthetic treatments in the Interstate 80 corridor. The objective of this project is to mitigate the visual impact of the addition of a third lane to I-80 and to provide cohesive and pleasing feel to the lowa City corridor.	\$576,000	Iowa City			
6	lowa River Trail - Benton to Sturgis Park	Extend the Iowa River Trail from Benton Street to Sturgis Park on the west side of the Iowa River.	\$2,619,280	Iowa City			
	•	Total Costs 2036 - 2045	\$9,100,720				
		Estimated Funding	\$17,923,582				
		Remaining	\$8,822,862				

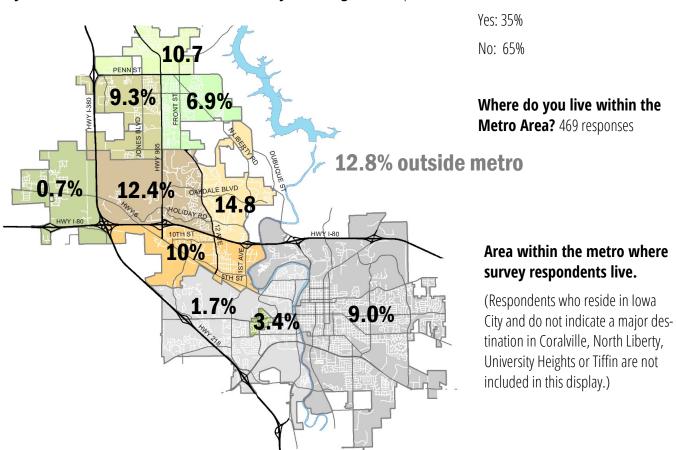
Metro Bike Plan Survey

As part of the Metro Bicycle Master Plan process, the MPO invited the public to participate in an online bicycle survey in November-December 2018. The survey generated responses from 469 individuals.

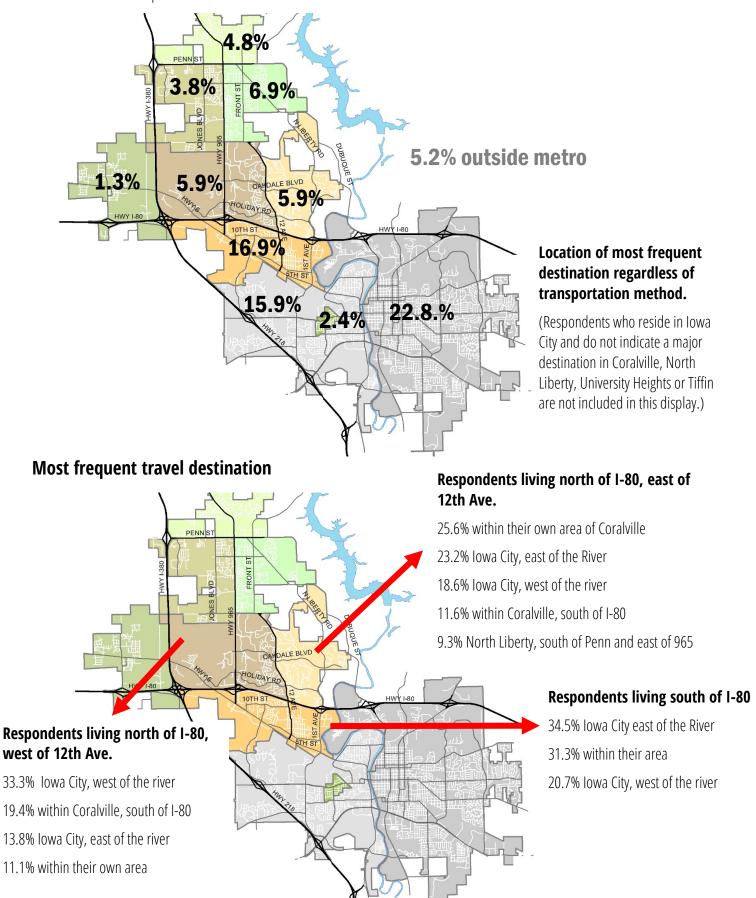
The following information represents selected results from the survey and does NOT represent a random sample. Respondents were self-identified as having some interest in bicycle transportation.



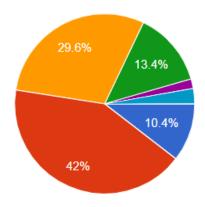
Does your household include children under 18 years of age? 468 responses



Please indicate the area where your most frequent destination is located regardless of your transportation method. 469 responses



How would you describe your bicycle comfort level? 469 responses



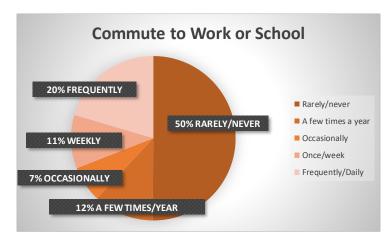
- FEARLESS: I will ride on just about any road and feel comfortable bicyc...
- CONFIDENT: I feel comfortable bicycling on most streets, but bike f...
- SOMEWHAT COMFORTABLE: I am comfortable on lower volume street...
- TRAIL RIDER MAINLY: I ride recreationally, but avoid riding on cit...
- INTERESTED BUT NOT COMFOR...
- NOT INTERESTED: I am not comfo...

Would any of the following programs be of interest to you or help you feel more comfortable riding a bike?

210 responses

- 12.4% In person classes on basic bicycle skills.
- 24.3% Short (e.g. 60-second) on-line videos covering rules of the road or other basic bicycling issues.
- 25.2% Neighborhood based rides with experienced bicyclists (e.g. slow rolls.) that focus on recreation and social aspects of riding.
- 26.7% Group based rides such as women's rides, family rides, or groups that support the particular needs of seniors, people of color, women, non-English speaking, etc.

How often do you ride your bike for the following purposes (in good weather)? 469 responses

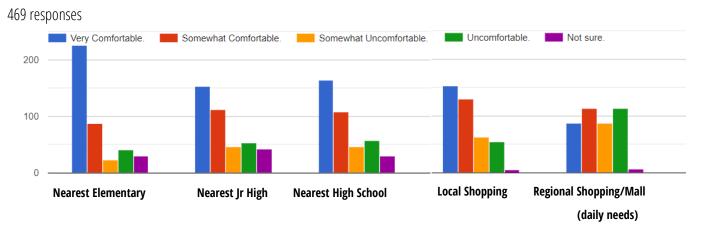


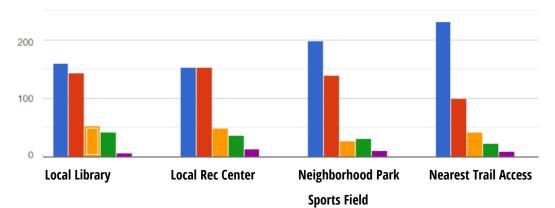






How comfortable/safe do you feel traveling by bicycle between your home and each of the following destinations?





List any specific locations (in Coralville, North Liberty, University Heights, or Tiffin) where bike racks are missing, inadequate, or in poor condition.

- Several grocery stores have inadequate bike parking. A lot of convenience stores have no bike parking whatsoever.
- West Music in Coralville
- Public Library
- Coralville strip: out side of Spartis broken; outisde entrances at all of Carver Hawkeye
- Penn Community Park, North Liberty, Southeast Junior High (inadequate), most Coralville businesses along Hwy 6. Beaver Creek Plaza in North Liberty.
- Beaver Kreek Center, North Liberty; Businesses along 25th Ave. Coralville (Pancheros, HuHot, Haveli, Coldstone); Culver's, corner Holiday Rd and 965 in Coralville
- North Liberty Penn Landing? The area where Molly's used to be and that coffee shop. Coralville IRL.
- North Liberty Recreation Center
- Centennial Park in North Liberty
- North Liberty City Council office does not have a bike rack.
- Perhaps by Target--maybe one closer to the doors?
- Most anyplace with racks i think could benefit from some sort of environmental shelter. Like many bus stops have.
- Along popular bike paths with viewing areas or extra walking trails so riders have the option to stop and enjoy the environment.
- The strip mall at 25th Ave and 2nd ST Coralville
- Anywhere along the Coralville Strip close to sidewalk
- Town Square area Coralville
- Anywhere in University Heights
- Aroma, the coffee shop. No bike parking at all.
- North Liberty Fareway
- Coralville Convention Center
- HyVee in Coralville
- Autozone in Coralville
- Baseball fields in North Liberty
- Garner elementary.
- North Liberty: practically every business location lacks bike racks.
- Fareway and other businesses in North Liberty; bike racks should be mandatory
- Iowa River Landing, city center Coralville
- Squire Point
- Gus', IRL

List up to 3 specific roadways or trails or wide sidewalks where you believe repair or improved maintenance is needed. Be as specific as possible. (Locations in Coralville, North Liberty, University Heights, or Tiffin.)

- Winter maintenance trails to Liberty High School and Iowa City along Dubuque St.
- Hawkins & 2nd St. Coralville.
- Sidewalk needed along Camp Cardinal Rd, from Hwy 6 to Tom Harkin Trailhead.
- 1st Avenue in Coralville.
- HYW 6 TIFFIN TO CORALVILLE
- Sandy Beach Rd, Curtis Bridge Rd.
- Mormon Trek (awful crossings on the trail).
- The trail along the lowa River that goes out to lowa River Landing was taken out due to the newly constructed apartments and road construction on 1st Ave. This has been an inconvenience.
- Melrose Avenue, Sunset Street (between Benton and Melrose)
- Melrose from UIHC out to Poor Farm.
- Complete the Coralville trail into Tiffin
- Linder Rd. NE, Prairie Du Chien Rd bridge over I80 is a nightmare for young kids and families, and Prairie Du Chien Rd NE all the way to the Coralville Dam & the camp grounds there.
- Hwy 965 between Swisher and North Liberty. That is the only road connecting those two towns. It needs to be made safe for cyclists.
- Highway 965 North maybe along existing RR bed so people don't get hit and killed on 965. Sad. Trail Connection from mall to NL trail so you don't have to ride on street. Better trail connectivity from CV IHOP to Big Grove southside of IC.
- Out flooded out area between Rocky Shore Drive and City Park in Iowa City--roads are poor and pitted.
- On the bike trail where it approaches gulf view from the north.
- Holiday Rd in Coralville.
- Coralville Strip.
- The wide sidewalk along 2nd St in Coralville is incredibly dangerous with all of the parking lot entrances, there should be increased visibility/signs to warn of bicycles crossing these entrances.
- North Liberty Trail between Coralville City Limits and Cherry Street.
- Coralville should clear trails of snow.
- 965 north of north liberty.
- Willow Creek Trail in Willow Creek park, east side of creek; Clear Creek trail snow clearance in winter.
- Linder road not only is it narrow, the road has many pot hole and a narrow/ non-existent shoulder.
- The trails that we have are fine. We just need more of them! The lack of safe ways to bike are killing us and we need to catch up with the times. Other cities are doing it and it is a major draw. Think of Minneapolis, Madison, Portland, etc... they have excellent bike trails and people are noticing.
- Along Highway 6.
- New Park Road bridge: sidewalk (what's taking so long to open that?).
- Coralville needs to plow all trails in winter.
- Finish the trail along Mehaffey Bridge road -- what a fiasco!
- 965 going north toward Cedar Rapids.
- Biking from Fareway to the bike trail by the railroad tracks. Forevergreen Road from the junior high to Jones.
- The trail behind the new Hy-vee on Crosspark road is pretty uneven from just south of Forevergreen road for about a block.
- South side of 2nd street between First Ave. and Hawkins Drive in Coralville.
- Perhaps better signage on the Coralville Strip letting motorists know bikers are on the bike/sidewalk. Everyone needs to be watching (for cars and bikes) at all of the turn-offs into businesses, like Wig and Pen.

- Trail/sidewalks along major roadways that are also along popular the side of popular businesses are I think hazardous as currently implemented in Coralville a long 2nd Ave. Poor visibility with hedges. Plus general issue with cars looking to make a quick turn into or out of the street and this paying high attention to oncoming street traffic and not to something moving along the sidewalk faster than a pedestrian. I personally prefer and feel safer on the road sharing a lane with cars in such conditions.
- It would be nice if they would clear all of the trails of snow in Coralville, not just some of them.
- The trails in Coralville are difficult to use in the winter. They should plow them.
- The trail behind the new Coralville HyVee, Linder Road.
- The railroad crossing on Forevergreen Road by the new HyVee. The yards by the 3-way stop at intersection of Front St and Forevergreen Road.
- Highway 6 from Scott Blvd to the east has nasty rumble strips.
- In general, Coralville does a poor job of clearing trails in the winter. Diminishes the usefulness of the trails.
- Coralville never plows connecting trails to IC and NL.
- North Westminster Street and blacktop path along south side of U of Iowa recreation fields (west of Mormon Trek all the way to paved bike path).
- Coralville sharrows are useless; links between lowa City and Coralville are all poor; wide sidewalk on C'ville Strip is extremely dangerous with frequent driveways and intersections where cars are moving quickly and "don't see" bicycles. Cars are also turning on and off strip in many directions, making crosswalk lights a waste.
- winter maintenance trails to Liberty High School and Iowa City along Dubuque ST
- The North Ridge Trail behind the new HyVee is almost unrideable. weeds are growing up through a big crack in the pavement on the Dubuque street trail as you approach Grace church from NL. Wider sidewalks along Penn Street through the old part of NL.
- Wide sidewalks along Hwy 6 between 1st Ave C-ville and Hawkins Dr. Hawkins Drive between Carver Arena and Riverside Dr
- uneven sidewalks along Melrose Ave from Finkbine to UIHC cause too many jolts and are too narrow to pass walkers easily, but there is too much traffic to want to ride in the street
- Clear debris off shoulder of I380 overpass on Penn St in N Liberty, pave shoulders of Ireland Ave going south to I80 in Tiffin
- Curb maintenance needed on SW corner of Dubuque and Breckenshire. Curb had been sticking out onto the bike path. I believe it's been filed down a bit, but still a danger of puncture if a tire hits it.
- Crossing area at 965 and Fairview Lane. Trying to cross the street even with the button is very dangerous. It turns green for us to cross and cars turn right or left so you never have a clear path.
- 12th Avenue from just south of I-80 to at least 10th Street or even 7th Street needs sidewalks assessed.
- In North Liberty on Cherry street between the main trail and the pedestrian underpass the sidewalk is too narrow
- Coralville, along Highway 6/2nd St, between 25th Ave and 21st Ave Coralville, along east side of 25th Ave, between 10th St and Trail to east
- Not strictly "maintenance" but blocking/parking on off-road trails and wide sidewalks by construction workers without "closing" the trail/posting detours is wildly out-of-control.
- NL trail is blacktop and in need of repairs throughout
- North Liberty Trail south of Forevergreen Road behind HyVee has a really rough section that needs replaced
- Dubuque St trail North of I-80 is poorly maintained. North Liberty Trail near Forever Green is blacktop surface and is pretty torn up in spots. Trail in Iowa City Park is also getting pretty beat up.
- The trail from North Liberty to Coralville is functional, but needs upgrading. The trail connecting Coralville from the road that goes south to UIHC, Kinnick, etc., should be more direct and less confusing rather than meandering through campus on wide sidewalk. Complete trail from Iowa City to Solon and Solon to Ely. Once that is done, there will be a great trail system from Iowa City to Waterloo. I don't know what the plan is from Lake McBride to Solon, but I think the plan is to use the wide shoulder on the highway. I much prefer a dedicated bike trail.

Suggest up to 3 specific locations where you think improvements are needed for bicycling. Suggested improvements could include trail extensions, bike lanes, intersection improvements, wayfinding signage, etc. (Locations in Coralville, North Liberty, University Heights, or Tiffin.

- Work with Linn Co. to link to Cedar Valley Nature Trail.
- 965 between North Liberty and Swisher/Shueyville; North of North Liberty on Mehaffey Bridge Rd toward Solon; UIHC campus overall between parking lots and main hospital campus.
- 965 going north toward Cedar Rapids.
- Hwy 1 widening the shoulder for dedicated bike lanes between lowa City & Solon (unrealistic due to cost, but it's a suggestion)
 Remove the train tracks that run from W. Court St to 1st Ave in Coralville and make then a "Rails to Trails" (unrealistic due to cost, but I've been in lowa City 15+ years and I've never seen a train on those tracks).
- Tickets issued by law enforcement for riding on streets.
- I'm an advocate for bike trails. They are healthy and productive for our community. I support the extension of our trail system for commuting purposes but also exercise/enjoyment.
- Finish/replace the trail from CRANDIC Park along the river crossing Clear Creek towards Iowa River Power. Wide sidewalk along 12th Ave Coralville from 2nd Street to Oakdale.
- There needs to be a bridge from the IRL to Iowa City (for biking and walking).
- The incomplete bridge from 1st Ave to Rocky Shore Drive (along the railroad). That would be nice to connect Coralville and Iowa City.
- Finish trail extension to Tiffin from Coralville.
- Eastern end of Clear Creek trail would benefit from connection to Tiffin Trails.
- Signage along 12th Ave. from 2nd St. to Holiday Rd.
- Penn St west of Kansas to James Ave to Tiffin.
- Forevergreen Rd from Jones to 965/bike trail by RR needs trail/wide sidewalk. North Liberty Road from Front to Dubuque st. needs trail
 - Trail from Broadmore neighborhood toward high school would be beneficial.
- Clear Creek Trail completion. Hoover Highway IC to W Branch (preferably by paving Lower West Branch Road). Highway 965 north from N Liberty to county line. (These are my nominees for the three most dangerous highly trafficked bicycle routes in Johnson County. Clear Creek Trail completion goes from the top of my list to the bottom of my list with the much appreciated paving of shoulders on highway 6 between Coralville and Tiffin.)
- Education for drivers. They are not watching for cyclists.
- Crossings over major roads are needed for cross-city travel in the metro area.
- Melrose avenue (wider sidewalks all the way along), Coralville routes on first avenue to Iowa River Landing (from north and south), Grand Avenue.
- Penn St bridge across I-380
- TIFFIN TO CORALVILLE OR TIFFIN TO AMANA
- Hwy 965 N of Penn St need wider bike lanes. Trail from NL to Tiffin would be nice.
- Along the street on the south side of North bend Elementary. Coralville connection to Tiffin. Hwy 1 from Hudson's Bar west to top of hill at McDonalds.

- Forevergreen Rd and Penn need dedicated on-road bike lanes to safely get to F28 and on to Oxford. South Gilbert needs a dedicated bike lane like Sand Road to safely get to Lone Tree and points south or southeast. Rochester needs a dedicated bike lane to safely get back from West Branch (and so does Hoover Highway).
- Penn street across interstate I-380.
- Penn Street over I380, Clear Creek Trail heading toward Tiffin.
- First Ave in Coralville, 12th Ave in Coralville from Holiday road all the way to 5th St.
- Connecting Tiffin to Coralville with wide trails will be great and riding safely from Coralville to IC farmers market would be very appreciated. Also, more restaurants and bars along the trails like in Ankeny would be fun.
- 1st Ave in Coralville. Through reservoir.
- Cross walk flashers on Forevegreen Rd west of 965 where trail crosses. Traffic between 4-6pm insane. Any major intersection for that matter.
- Wide sidewalk down Front Street.
- Coralville trails, coral ridge mall area, 2nd ave in Coralville.
- 965 and Fairview Lane.
- Hwy 965 between Swisher and North Liberty. That is the only road connecting those two towns. It needs to be made safe for cyclists.
- Expand Willow Creek Trail south of West High School across Highway 218. Better connect North Ridge Trail near Holiday Road. Wider sidewalks along Melrose Avenue.
- 965 heading north from North Liberty to the lowa River bridge. The fact that there is no paved shoulder on this road has already
 lead to death for bicyclists. I have noticed that this does not stop many bicyclists from riding on this road in traffic. More lives
 will be lost unless this is addressed.
- Connection between Iowa City and Coralville especially around Hwy 6.
- Crossing 965 in north liberty at Fairview and by Fairway. Crossing Penn st at Jones blvd. crossing Coralville strip near Olive Garden to access woodpecker trails.
- Trail behind the strip- you're so dangerous should I try to get from Coralville North to Iowa City!; Trail near the river behind Marriott to the strip(1st Ave is dangerous!); 12th Ave needs something (Dangerous to ride on and a connection to most of Coralville from the north).
- Coralville to Tiffin.
- Melrose and Sunset in University Heights.
- Clear debris off shoulder of I380 overpass on Penn St in N Liberty, pave shoulders of Ireland Ave going south to I80 in Tiffin.
- (1) The gravel shoulder on Hwy 965 between Swisher and North Liberty is littered with debris. I would never ride the paved road on Hwy 965, but the gravel shoulder is wide enough for hybrid and fat tire bike traffic. Except 50% of the times that I ride from Swisher to North Liberty, I have hit metal debris and blown tires. (2) Bike route(s) from North Liberty to Tiffin. I realize James Ave north of Tiffin has signage for bike riding. However, traffic patterns in just the past three years have exploded and there's so many vehicles flying on that road its now dangerous for cars, let alone bicycles. (3) Finish the Clear Creek trail from Coralville to Tiffin. I live in Swisher, but I use a car carrier bike rack to North Liberty. I can consent to ride the trail from North Liberty south to the Clear Creek trail south of Coral Ridge and go to Tiffin. Not sure if Forevergreen will be safe enough for biking on the street due to traffic density.
- Trail system, signage for sidewalks and trails, safe bike lanes/paths.
- Water, there are no fountains at the waterworks park Fix potholes/cracks in the road, the long inch wide cracks in pavement are super dangerous (road bike tires are only 1 inch wide) Improve bike access from James to Kansas Ave in North Liberty.

- I would love to be able to ride (safely) from Tiffin to Coralville. I feel unsafe along Highway 6, and there is no way I would let my 1st grade children ride the current route. I hope the Tiffin trail extension to the trail in Coralville is finished soon. Second, would be extending the trail from Tiffin to Kent Park.
- Coralville to Tiffin on Hywy 6; Hywy 965 north of North Liberty; 2nd Ave east of Newton
- The North Ridge Trail behind the new HyVee is almost un-rideable, weeds are growing up through a big crack in the pavement on the Dubuque street trail as you approach Grace church from NL. Wider sidewalks along Penn Street through the old part of North Liberty.
- "Downtown" Tiffin to Clear Creek Trail along Ireland Avenue. This very busy street is unnerving to travel down en route to the Clear Creek Trail. It would be greatly improved with a wide sidewalk leading from the center of town to the trail, especially since school students and sports teams utilize this narrow road to get to the trail.
- NL: Trail extension/bike path along RR X north of town to get bikes off of 965. It just isn't safe for riders of any age getting to/ from NL north of town.
- Wide sidewalks along Hwy 6 between 1st Ave Coralville and Hawkins Dr. Hawkins Drive between Carver Arena and Riverside Dr Hawkins Drive through the medical campus from Hwy 6 to Riverside Drive
- Would be nice to have a path over the river from Peninsula/Mackinaw Village to the Iowa River Landing
- The intersection of Ireland Avenue and Hwy 6 in Tiffin is an absolute nightmare. There NEEDS to be a stop light here, rather than 8 or 9 lanes taking turns to go. Without a crossing guard, it can be hard to cross, and even with a crossing guard it is challenging. Additionally, Hwy 6 east of Tiffin as you drive into Coralville could be improved with a wider shoulder or bike lane.
- The biggest problem by far for pedestrians and bikers in Coralville is 2nd. It has rare crossing opportunities and the few are all at lights with long wait times. I don't blame j walkers there one bit. It is shameful for the city to continue to ignore this problem. We need pedestrian bridges or underpasses like the one at lowa house. Or at least more frequent lighted cross walks.
- A trail loop out to Kent Park and then north to North Liberty, entering the town from the west--the loop could be a regional recreation destination.
- Johnson Co will be the start/finish of the soon to be completed CRVT. Is there a planned terminus for the trail where there would be parking, a park, tourist info for restaurants/lodging, etc? We need to encourage riders from the north to continue beyond the Sleeping Giant in Cedar Rapids and draw them south to lowa City something to make lowa City the destination. When complete, a mile marker system--like what is on the trail from Ely to CR--added to the Johnson County segment of the CVNT
- Melrose Ave wider sidewalks and more aids for crossing to opposite side; also wayfinding signage for the best way to cross the river from Melrose into downtown area. Both Melrose and 2nd Street in Coralville advance notice (in terms of both time and distance) when areas will be closed for construction. Perhaps lockers to stow gear during outdoor activities at Morrison Park.
- Think about a way to connect University Heights directly with Mormon Trek Hand-cart Park (beginning of Iowa Corridor Trail).
- IRL/1st Ave in Coralville (Iowa River Trail has been closed for over a year and the new wide sidewalks along the west side of 1st Ave have WAY too many driveways). There is a serious need for an off-road trail connection to the network reachable using Clear Creek Trail and IRL. The wide sidewalks along the rebuilt 1st Ave (at least on the west side) are not useful for biking. There are way too many driveways, the narrow curb cuts at intersections/driveways are choke points and frequently the sidewalk is closed for construction (see the development south of 5th St blocking the west sidewalk for weeks over the past year or the current development where the car wash was at 1st Ave and 6th St).
- Wider shoulders or bike lanes to Kent Park.
- Intersection of First Ave and Mormon Trek in Coralville is terrible.
- 12th Avenue/Holiday Road area, 1st Avenue/North Liberty RD, Penn ST North Liberty.
- The trail from Coralville to Tiffin.

- Hoping Clear Creek trail to Tiffin is open soon. Restore trail along river to IRL soon.
- Most of Coralville is bad. Improve 1st Ave, Coral Ridge Dr can't be biked or walked, 23rd Ave should be the route between 2nd St and N Ridge Park.
- Sidewalk in front of N Liberty Rec Center/Pool on Cherry Street should have width increased to trail width.
- Extend the trail from Rocky Shore Drive to Iowa River Landing. Way finding signs to Mehaffey Bridge/Sugar Bottom
- I would like to see improvements to enable safe riding to Tiffin and Kent Park. Trail would be fine, as would wide paved shoulders along roads
- Melrose Ave. from Sunset St to Camp Cardinal needs a bike lane (there isn't enough space to share with drivers and the side-walk is not wide enough). Oak Crest Hill Rd SE to Mormon Trek needs a wide paved shoulder. Prairie Du Chien Rd NE north of Newport Rd to the dam needs a wider shoulder. All pedestrian/bike crossings over HWY 1 or HWY 6 need wide, white, obvious pavement markings for drivers to see.
- 180 and Dubuque St is dangerous for bikers due to bikers having signal or ride and turning traffic having a green light at the same time. I would like to see bikers and pedestrians have a separate time to cross with no turning traffic.
- trail extensions, sidewalk expansion or proper use on road.
- I would love to ride from Coralville to downtown Iowa City, but traffic stops me.
- trail extension into Tiffin. re-open trail along river in Coralville 1st avenue is too dangerous.
- 12 ave, but not the worthless "sharrows". Roads and/or sidewalks need to be WIDER so cyclists aren't mixed with automotive traffic.
- Coralville, a way to bike to Post Office without riding on the street.
- Bike lanes up Melrose in U Heights, Construction on 1st Ave Coralville has cut the IRL off from bicyclists from IC, Access to the Cyclocross course in Coralville without having to ride on the strip.
- finish trail connection from Coralville to Tiffin; trail extension to Ely to connect with trail to Cedar Rapids.
- 5th Street in CV between 1st and 6th Avenues need a bike lane, not a sharrow. As it is, the road is too wide for 25mph, if you drive 25mph, people rage at you for driving too slow. Meanwhile there is just a sharrow which does nothing for cyclists.
- Finished trail route all the way from NL to Solon.
- University Heights has no bike lanes. Super dumb transition from bike lanes to (dangerous) wide sidewalks at IC to UH transition. Terrible for both pedestrians and bikers.
- better bike way/improved signage on Melrose through U Heights -signage/safety precautions for cyclists and drivers on Coralville Strip wide sidewalk-many driveway entrances make it very unsafe for cyclists -trail connection from downtown NL to new trail on Mehaffey Bridge-Front St/Mehaffey Bridge Rd intersection
- Trail extension between Tiffin and Coralville.
- Melrose Avenue from University heights west to city limit.
- North Liberty Rd from Penn St to the Dubuque St roundabout. There is not currently a sidewalk. A wide bike trail along the road would be very helpful.
- Clear creek trail connecting Coralville to Tiffin.
- Front street needs wide sidewalks for bike traffic to schools, St Andrews drive needs a bike route/wide sidewalk.
- More bike lanes in Coralville.
- Highway 6 corridor.

- 1. Connect Clear Creek trail to Tiffin trails. 2. Fix Rocky Short Drive railroad underpass (very narrow). 3. Widen bike lane along Mehaffey Bridge Road from Penn Street to the bridge.
- Plow in winter.
- At the new traffic lights/bridge on Dubuque need no right on red to protect crosswalks.
- general interconnection of trails, particularly court hill to iowa river trail. intersection improvement at 5th st and 1st ave coralville (i nearly get hit by motorists southbound on 1st ave turning onto 5th st while i'm crossing with the light multiple times a week). coralville strip- riding widened sidewalk crossed by every business entrance is very dangerous.
- Coralville along 12th Ave between Oakdale and downtown (both road and sidewalk are narrow), University Hts/IC along Melrose (sidewalk narrows, road is too busy w/ traffic).
- The intersections of 12th Ave and 9/10th St are impossible to cross during high traffic, maybe add a button-triggered pedestrian cross light?
- Bike lanes on C'ville Strip and 5th; finish C'ville part of trail to 1st Ave; stop thinking that wide sidewalks are appropriate for bicycles
- The trails and sidewalks shown as "Anticipated 2018" on the MPOJC map distributed this year, but which haven't been built/ completed (and which have also been shown on previous maps): (1) the connection between the Clear Creek Trails in Tiffin & Coralville, (2) the extension of the Hwy 1 W trail to Mormon Trek. I'd love an off-road trail on the south end of Riverside Drive, starting at Riverside Drive.
- Sugar Bottom Road, Gilbert street, Benton street.
- Why do bicyclers ride on the road instead of the nice wide paths already built? Such as Dubuque Street between Iowa River and North liberty.
- Along 2nd Street near the Coral Ridge mall, there is no sidewalk and no good way to get around on bicycle. Wayfinding and routes to the University Library when approaching from South of Burlington St. could be improved.
- Would be safer to have a sidewalk between Coral Ridge Mall and Walmart area
- Bike lanes on C'ville Strip and 5th; finish C'ville part of trail to 1st Ave; stop thinking that wide sidewalks are appropriate for bicycles.
- lowa River Power to IRL I brought this up to the City last spring and they told me they would be replacing the trail that they covered with 20ft of dirt by June of this year. What happened to that?! It is a death wish trying to bike on the side walk over or roads over there. Maybe the new road they're working on this will help? I don't know, but if you want people to be active and go to the IRL you need to provide them a safe way to do so. Also, 5th street in Coralville needs a bike lane all the way from IRP to Hyvee. Additionally, biking along the strip is also a death wish. We need to have a trail go behind the businesses from 1st street to the river. You'll have more people biking then. Also, Melrose!! Need a dedicated bike lane along that entire street. It's too busy to do it without and the sidewalks are like a foot wide.
- 1) Melrose Ave from the hospital to Mormon Trek. I would like to see a curb separation between bike lanes and traffic. Perhaps some signage, bright lines that separate the bike lane from the traffic, and/or lighting to make the bike trail more visible. I am hesitant to go east in the morning, or go west at dusk. 2) It would be great to have a bike trail on Jefferson and on Market (or perhaps one of the other, less-trafficked, east-west streets on the NE quadrant of town). I'd like it to link to the trail by Memorial Union or City Park and go east to at least Scott Blvd. 3) I'd love to see a connection from lowa City up to the trail in Ely (which goes all the way to Waterloo).
- Melrose bike lanes the whole length, wider sidewalks on south side.
- F28, Forevergreen Road
- A sidewalk/trail Hwy 965 south from NLiberty to Coraville Mall, under the interstate to that area, A connection between Dubuque and Prairie Du Chien Rd the Linder road is very dangerous and the only way to cut over to that side. A trail going north out of NLiberty along 965.
- Sugar Bottom Road.

- I like bike lanes. I find trails feel safer.
- sidewalk needed along Camp Cardinal Rd, from Hwy 6 to Tom Harkin Trailhead
- Bicycle traffic should be banned from James Ave NW between NL and Tiffin. The road is far to narrow and to many hills with curves.
- Complete the trail extension from Crandic Park across Clear Creek so we don't have to fight with cars leaving the parking areas along HWY 6. They do not look for cyclists.
- 12th Ave Coralville.
- Melrose Ave has a bike lane. As soon as you enter the "bicycle friendly" community of University Heights, it's gone. A bike lane from at the hospital to Camp Cardinal would be ideal. Prior to 2008 there was a trail from Coralville to lowa City along the river behind the strip. It wold be nice to get the trail back so you don't have to ride on the strip. 12th ave in Coralville has sharrows and a double yellow line down the middle. Shouldn't it be a dashed yellow line so vehicles can pass bicyclists?
- North of Coralville past Press Coffee all the way to the North Liberty High School. Sugar bottom road to warn drivers to share the road and same with Penn Street West of North Liberty going to Oxford and Tiffin.
- omplete paving of Herbert Hoover Nature Trail Herbert Hoover Highway between Iowa City and West Branch Could use bicycle lane/wide shoulder cars move fast with lots of hills.
- Strongly dislike the DBQ / I 80 intersection. Kills momentum to wait and cross 3 times (including street leading up to the Peninsula). Also dangerous. Going south I just ride the roadway. Coralville strip is super dangerous as cars just turn into driveways without looking. If riding on a path or sidewalk many curb cuts are skewed and not parallel to path of travel.
- Bike lanes on 12th Ave.
- Nice to have some sort of bike lane or wide shoulder along Penn street over I380. Its a "choke point" for getting on to an otherwise fairly quiet set of county roads west of North Liberty. Wide shoulder on road to Scales Bend would be nice. Full length bike lane or trail along Holiday rd.
- A stoplight for a crosswalk is necessary for 12th St & Forevergreen Rd. I have nearly hit kids at the NL junior high because there
 isn't a safe place for kids to cross (& buses are no longer offered). I work a few blocks from home and drive ONLY because there
 isn't a safe way to cross Forevergreen Rd.
- Expand trails to Tiffin from Coralville, bridge over Iowa river to rocky shore dr., trail along Ralston Creek, trail from N Dubuque to Forevergreen rd.
- Hiway 965 from forevergreen north and continuing to county line, especially north of 240th street.
- North Liberty to Solon could be further improved (NE of Mahaffey bridge could be done to improve safety.
- I think there needs to be ownership and conversation about both drivers and bicyclists obeying traffic laws. There are tensions between "share the road" and then bicyclists not obeying traffic laws (running read lights, passing in non passing zones, riding down wrong sidewalks).
- Connecting existing trails to each other.
- Finish the trail/bridge from Camp Cardinal Blvd. to Tiffin.
- 12th ave in Coralville, 1st ave in Coralville, 965 from Coralville to Penn Street in North Liberty.
- Would be nice to see any trails to Tiffin.
- The entire West side of North Liberty has limited options for biking to grocery stores, pharmacies, library, recreation center, post office, etc. Problems include few east-west streets, areas without sidewalks, extremely busy and dangerous streets. Suggest wide sidewalks along all of West Penn Street; finish St. Andrews Drive and add wide sidewalks; extend West Zeller Street to the west
- A trail along Cherry Street from Muddy Creek Trail to 965. All road crossings in North Liberty along Muddy Creek Trail could have better signage to encourage drivers to yield to cyclists and pedestrians on the trail. The sign at the trail crossing south of South Slope is faded.

- Linder Lane. Coralville reservoir Trail at Holiday Road. Find confused bikers in North Ridge park that can't make the connection. The path in the park is so close on a mobile phone map that they can't figure out where the trail connects and that they should have exited the park to connect to the trail going North.
- 12th ave from 5th street up to interstate.
- Coralville First Avenue.
- The under passes on 965 are great north of holiday road. Would be great to have a connecting bike path to get more directly to the businesses West of 965 between holiday and Oakdale. Ex: Daycare center, dentist, eye dr., bar & grill, etc.
- Jones Blvd to hwy 965- trail needs extended. Hwy 965 does not have safe trail all the way to Coralville.
- Connect Coralville trail to Tiffin.
- To the Coralville trail that crosses Camp Cardinal, from the North on Camp Cardinal.
- Hoover Highway needs a trail off road, Hawkins & 2nd Street needs to deter crossing at intersection (signage)-encourage bicycles to use Hawkins, or cross with northbound traffic to Rocky Shore, Downtown lowa City needs enforcement both drivers, but more importantly bicyclists that weave between sidewalk/road and through traffic; require compliance from bicycles.
- Plow snow off trails in Coralville.
- 12th Ave between Holiday Road and 2nd St.
- Extend trail along lowa River north of 2nd St west of 1st Ave.
- Biking along 1st Ave in Coralville, biking along 2nd St. in Coralville, biking the CRANDIC trail.
- 2nd Street/Highway 6 in Coralville; from Iowa City to Coral Ridge Mall; multiple driveways, turning points, and vehicles often blocking the way (reduce number of access points or add crosswalk paint or signage to not block the sidewalk). Forevergreen Road, Oakdale Blvd and Camp Cardinal Blvd crossings on North Ridge Trail and Clear Creek Trail (solar-powered blinking crossing signs activated by motion or touch button). Wayfinding bypass sign through N. Ridge Drive and Holiday Rd neighborhood (avoid taking the hill on the trail and just go take Parkway Dr).
- Camp Cardinal Blvd from Clear Creek to Lantern Park Shopping Center.
- HWY 965 ALONG CORAL RIDGE MALL ON BOTH EAST AND WEST SIDE OF ROAD. FOREVERGREEN ROAD TO JONES BLVD FINISH SIDE WALK.
- It is not clear all over the metro area where the trails exist and connect.
- Tiffin to Kent Park, MeHaffy Bridge to Solon, IRL to Peninsula Neighborhood.
- Dubuque Street between 965 and Penn Street in North Liberty would greatly benefit from a bike lane.
- The trail between Iowa Power Co and Marriott.
- bike trail needs to be finished between Coralville and Tiffin ASAP, a trail from Tiffin to North Liberty would be ideal (biking on the road is unsafe), a better connection from the Dubuque trail south of North Liberty to the new bike trail on Dubuque trail north of North Liberty is needed (i.e. wider sidewalks or a trail through town).
- Access from North Liberty into Tiffin should be a priority. The roadways over there are pretty sketchy to bicycle right now. Ultimately, access out to Kent Park would be great. Access towards Swisher and Amana would be another great stretch to add for bicyclists.
- 1st Ave Coralville north of Oakdale Blvd.
- Complete the clear creek trail.
- University Heights NEEDS a bike lane. Riding on the sidewalk is NOT the solution. Bikers need to be on the street in a designated bike lane!!!!!!

- Better bike racks and/or cameras for the UIHC and Westlawn areas. Bikes get stolen all the time and there is minimal security. Maybe a good option for bike lockers or at least some security cameras to detour theft?
- Expanded trails system in North Liberty.
- All of Melrose Ave west of Kinnick Stadium needs bike lanes. Sunset Ave in University Heights needs bike lanes. Trail from Tiffin to Coralville completion.
- Zeller St. from the Coralville trail east to Dbq trail, from the tunnel on 965 east to the trail on Cherry St., a connecting trail from Zeller St. to the New park off St. Andrews.
- Complete trail down First Ave in Coralville Oakdale Blvd all the way down to Clear Creek finish ped/bike bridge across Clear Creek and trail down to intersection with Grant Hawkins/Rocky Shore.
- A contiguous wide 10 foot sidewalk off of hwy 6 past uhaul and definitely to the walmart. I see many people walking and riding bikes on hwy 965 to Walmart in this area and its very unsafe.
- Also cant wait until i get the trail back that the 1st ave/arena project overtook.
- Coralville to Tiffin and Amana trail extension. A proper bike lane on 12th Ave. in Coralville. Wide sidewalks and a maintained (cleaned! (free of debris and sand)) bike lane on Benton St. around University Heights.
- Finish trail to Tiffin, trail access to go from Coralville to South Iowa City/Terry Trueblood area.
- A complete trail from Coralville to Kent Park.
- 12th Ave in Coralville between 8th Street and Holiday Road, particularly the bridge over i80 and just south of the interstate. Street there is busy, sidwalks are narrow. Looking forward to Coralville and Tiffin being connected via the Clear Creek trail once the i380 construction is done. The wider shoulders on Highway 6 between Tiffin and Coralville have been a HUGE help.
- Complete trial to Tiffin.
- More signage for bicycling from Coral Ridge Mall to Oakdale Campus with an emphasis to AVOID UNNECESSARY hills. That area
 is very hilly, but having a route which specifically goes up and over hills and stops for each street is unusable on my fixed-gear
 bicycle.
 - Intersection on 2nd St and 12th Ave Coralville. Improved signage for cyclists travelling on 12th to get to the Clear Creek Trail (which lane is the correct lane for going straight).
- Biscuit Creek Trail and 7th St; wayfinding signage for bicyclists on trail and signage on 7th to remind drivers that cyclists are likely to be on the road instead of a trail.
- (1) Extension of Clear Creek Trail past Lowe's (hopefully this is in the works now); (2) 12th Ave--it has sharrows but cars can't easily pass and get hostile.
- Continue extending the paved bike path between lowa City and Tiffin in a timely fashion. Continue to add flashing lights and/or cross walk paint on street for crossing areas for cyclists on pre-existing bike paths where they intersect w/ the roads so motorists are aware of potential cyclist crossing. The worst area in my opinion is the paved bike path leading from lowa City heading out on Dubuque St and the number of sketchy, life-threatening crosses that a cyclist has to make across high speed traffic (onramps and off-ramps for I-80) and as the bike path continues, it crosses again just before getting to the Coralville Dam turn off. For people to commute from N Liberty to Iowa City, especially kids, it's unsafe and only a matter of time before someone gets hit.
- Newton Rd. is almost unrideable, please fix the trails along the river in Coralville.
- Between North Liberty and Tiffin. On the trail from North Liberty to Coralridge mall south of Oakdale.
- A better marked route from the area N of Penn Ave in N Liberty to the Mehaffey Bridge road.
- Coralville to Tiffin.

- Add trail along Coral Ridge Ave south of Holiday Rd to the mall; 2. Add trail along Ranshaw Way south side of NL; 3. Add crossing of US 6 to get to Coralville's Creekside Park.
- The best thing would be connecting trails making it easier to get around town by bike (see Minneapolis for example).
- In IC Burlington, Court, Park, Gilbert, Riverside, Melrose, Muscatine and in Coralville 2nd st need a protected bike only lane.
- Penn crossing 380.
- I live in North Coralville and work at University Hospitals. Getting through the intersection of First Avenue and the Coralville Strip is challenging to say the least and a "deathwish" most evenings. Due to that I'll extend my trip home greatly to avoid that area.
- Signage and/or education is needed to make drivers more aware of the presence of bicycles at intersections. Many drivers turn right on red or do not yield to a bike that has a walk signal. The Highway 6/1st Ave. intersection in Coralville is an example of where this happens regularly, but there are other similar high traffic intersections in the area where it is a common occurrence.
- 12th Ave from Oakdale to the Coralville strip.
- Extend the Clear Creek Trail from Coralville to Tiffin.

Youth Metro Bike Plan Survey

As part of the Metro Bicycle Master Plan process, students at Northwest Junior High, North Central Junior High, and Clear Creek Amana High School were invited to participate in an online bicycle survey in November-December 2018. A total of 435 students responded to the survey: 66% Northwest; 8.7% North Central; 24.6% Clear Creek Amana High School. Their responses closely align with an identical Youth Bicycle Survey, completed by students from Southeast Junior High in 2016 as part of the lowa City Bicycle Master Plan process.

Do you know how to ride a bike? 435 total responses

Yes:93%

No: 7 %

For those answering "No":

Would you be interested in learning to ride is a class was offered through your school?

10 total responses)

No; 90%

Yes: 10%

Do you have a bike of your own? 405 total responses

Yes: 90%

No: 10%

For those answering "No."

Would you be interested in a program that would allow you to earn a free or low-cost bike?

38 total responses

Yes: 68%

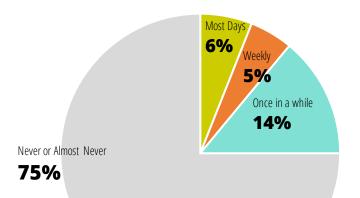
No: 32%



Do you know where the nearest bicycle trail is in your neighborhood? 405 total responses

Yes: 76%

No: 24%



How often do you ride your bike to school? (405 total responses)

What Bicycle Equipment do you own? 387 responses

Helmet: 88% Bike lock: 60% Bell: 26% Light: 51%

How often do you wear your helmet when riding?

405 responses Always: 47% Often: 24% Rarely: 15% Never: 14%

Do you have a secure place to store your bike when you are at home? (Examples: storage shed, garage, covered area, bike rack) 403 responses

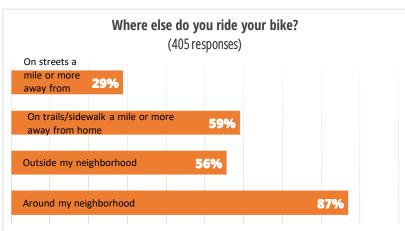
Yes: 97% No: 3%

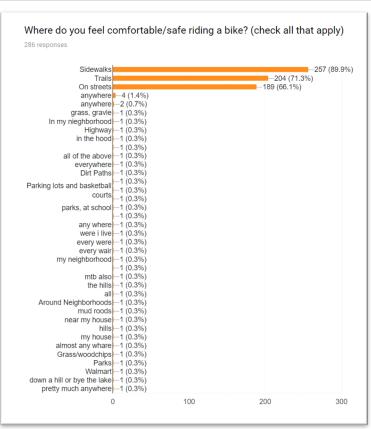
Do you know how to use hand signals to indicate when you are going to turn or stop while riding? 404 responses

Yes: 59% No: 41%

Do your parents think it is safe for you to ride your bike without adult supervision. (For example: are you allowed to ride more than a few blocks from home without an adult?) 405 total responses

Yes: 76% No: 6% Not sure: 18%



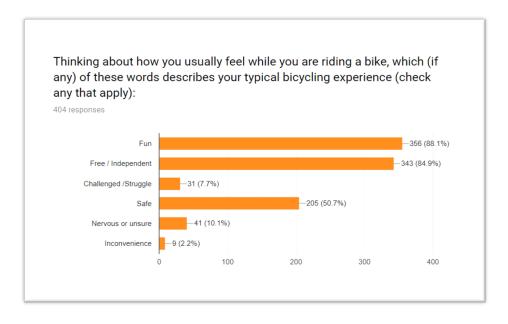


Would you be interested in a class or club that offered group bicycle rides or taught skills like mountain biking or basic bicycle repair? 402 responses.

Yes: 23%

No: 33%

Not sure: 44%



What would make bicycling better (easier or more appealing) to you?

A better bike.

If it didn't take forever to get out my bike.

Riding on the sidewalk.

One thing that would make it more appealing is if nobody had to worry about being hit by a car when cycling because someone who is completely irresponsible is looking at their phone while driving.

Not much just cheaper

More practice at home

Less hills

Down hill

To ride more

It's fine as it islf the weather was good year round

Riding more often

not cold weather

nothing it already is

sidewalk in my court

More time to bike around.

Nothing, I love it.

Doing it by yourself.

If it were self propelled.

Easier speed boost.

Nothing. I don't like bikes.

More safer places to ride my bike around.

When there's less/no car or people around when I'm riding a bike.

Not really anything, I already like doing it.

If they didn't break as often (tires or breaks)

A bell.

Less hills.

Having more bike lanes on roads and having drivers be more aware of bicyclists.

More paths around for a change of scenery.

Comfortable seat and soft and easy to grip.

A bike that can go off road.

If I could learn to do more tricks on it.

Biking in the winter.

More appealing.

I think bicycling is fine how it is right now. I already think it's appealing and if somehow people made so it was easier to ride a bike (so you don't fall off) I feel like that would be cheating, because if you never fall, you never learn. Falling is part of the experience.

Not having it hurt your legs if you ride for too long.

I already like it so nothing new.

If I could get my bike back, someone stole it a month ago and I haven't heard anything about it since I reported it to the police.

A cushioned seat and a better sized one.

If I could do it with someone.

Biking with others.

Kickstart of the ground and start peddling.

Doing it more.

It is already easy for me.

I wish I could ride more often, instead of limiting it to biking to/from school when the weather is warm enough.

If I was better at it.

A safer way for me to ride my bike to school.

Electronic bikes.

Bike with a friend more often.

I already enjoy biking although I would bike more, I have a lot of activities already.

Three wheels.

Maybe if the expenses were not so bad.

METRO BIKE SURVEY

How do you classify yourself as a bicyclist?

Experienced

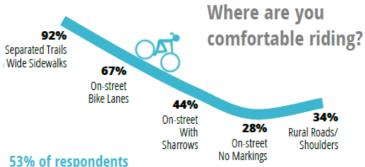
50%

Moderate

33%

Beginner

7%



seek out streets with bike lanes

and 69% seek out bike trails even if it means a longer ride.

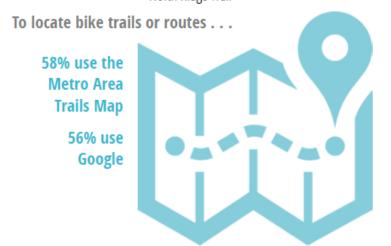
FAMILIARITY WITH AREA TRAILS

>70% >50%

>40%

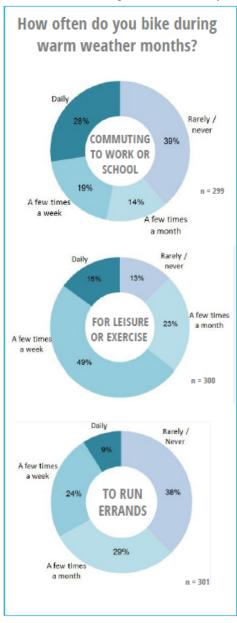
Iowa River Trail North Liberty Trail

Clear Creek Trail Highway 6 Trail Highway 1 Trail North Ridge Trail Sycamore Greenway Court Hill Trail



This information represents selected results from an on-line survey posted by the MPOJC (Feb-March 2016). This survey does NOT represent a random sample and the results should not be applied to the general public.

A total of 304 responses to the survey were received. Respondents were self-identified as having some interest in bicycle transportation.



Top 5 reasons respondents choose to commute by bike:

- 1 Close to home/short ride
- Faster & more convenient
- Bike facilities make it easy

Bicycle Parking

The following pages include information on short-term bicycle parking from the Association of Pedestrian and Bicycle Planners' *Essentials of Bike Parking*, which may be accessed on the internet at https://www.apbp.org/assets/docs/ EssentialsofBikeParking_FINA.pdf. The organization also publishes *Bicycle Parking Guidelines*, *which* is a comprehensive resource for best practices for bike parking, including information on minimum bicycle parking requirements and bicycle parking ordinances. See https://www.apbp.org/bicycle-parking-solutions.

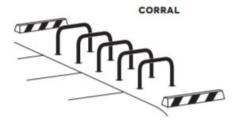
SHORT-TERM PARKING

Effective bike parking for short-term users depends on two main factors:
1) proximity to the destination and
2) ease of use.

Short-term parking is designed to meet the needs of people visiting businesses and institutions, and others with similar needs—typically lasting up to two hours. Short-term users may be infrequent visitors to a location, so the parking installation needs to be readily visible and self-explanatory.







SITE PLANNING

Location

Short-term bike parking should be visible from and close to the entrance it serves—50' or less is a good benchmark. Weather-protected parking makes bicycle transportation more viable for daily and year-round use, and it can reduce the motivation for users to bring wet bicycles into buildings. Area lighting is important for any location likely to see use outside of daylight hours.

Security

All racks must be sturdy and well-anchored, but location determines the security of short-term parking as much as any other factor. Users seek out parking that is visible to the public, and they particularly value racks that can be seen from within the destination. Areas with high incidence of bicycle theft may justify specific security features such as specialty racks, tamper-proof mounting techniques, or active surveillance.

Quantity

Many jurisdictions have ordinances governing bike parking quantity. APBP's full *Bicycle Parking Guidelines* offers complete recommendations for the amount and type of parking required in various contexts. In the absence of requirements, it's okay to start small—but bear in mind that perceived demand may be lower than the demand that develops once quality parking appears.

BIKE CORRALS

Some cities with limited sidewalk space and strong bicycle activity place bike parking in on-street "bike corrals" located in the street area adjacent to the curb. Bike corrals can sometimes make use of on-street areas that are unsuitable for auto parking. When replacing a single auto parking space, a corral can generally fit 8 to 12 bicycles. APBP's full *Bicycle Parking Guidelines* provides details about designing and siting bike corrals.

Apple.org

RACK STYLES

The majority of manufactured bike racks fall into one of the categories on pages 6-8. Within a given style, there is wide variation among specific racks, resulting in inconsistent usability and durability. APBP recommends testing a rack before committing broadly to it.

RACKS FOR ALL APPLICATIONS

When properly designed and installed, these rack styles typically meet all performance criteria and are appropriate for use in nearly any application.

INVERTED U

also called staple, loop



Common style appropriate for many uses; two points of ground contact. Can be installed in series on rails to create a free-standing parking area in variable quantities. Available in many variations.

POST & RING



Common style appropriate for many uses; one point of ground contact. Compared to inverted-U racks, these are less prone to unintended perpendicular parking. Products exist for converting unused parking meter posts.

WHEELWELL-SECURE



Includes an element that cradles one wheel. Design and performance vary by manufacturer; typically contains bikes well, which is desirable for long-term parking and in large-scale installations (e.g. campus); accommodates fewer bicycle types and attachments than the two styles above.

RACKS TO AVOID

Because of performance concerns, APBP recommends selecting other racks instead of these.

WAVE

also called undulating or serpentine



Not intuitive or user-friendly; real-world use of this style often falls short of expectations; supports bike frame at only one location when used as intended.

SCHOOLYARD

also called comb, grid



Does not allow locking of frame and can lead to wheel damage. Inappropriate for most public uses, but useful for temporary attended bike storage at events and in locations with no theft concerns. Sometimes preferred by recreational riders, who may travel without locks and tend to monitor their bikes while parked.

COATHANGER



This style has a top bar that limits the types of bikes it can accommodate.

WHEELWELL



Racks that cradle bicycles with only a wheelwell do not provide suitable security, pose a tripping hazard, and can lead to wheel damage.

BOLLARD



This style typically does not appropriately support a bike's frame at two separate locations.

SPIRAL



Despite possible aesthetic appeal, spiral racks have functional downsides related to access, real-world use, and the need to lift a wheel to park.

SWING ARM SECURED



These racks are intended to capture a bike's frame and both wheels with a pivoting arm. In practice, they accommodate only limited bike types and have moving parts that create unneeded complications.

PLACEMENT

The following minimum spacing requirements apply to some common installations of fixtures like inverted-U or post-and-ring racks that park one bicycle roughly centered on each side of the rack. Recommended clearances are given first, with minimums in parentheses where appropriate. In areas with tight clearances, consider wheelwell-secure racks (page 6), which can be placed closer to walls and constrain the bicycle footprint more reliably than inverted-U and post-and-ring racks. The footprint of a typical bicycle is approximately 6' x 2'. 96 Cargo bikes and bikes with trailers can extend to 10' (72" MIN) or longer. 16' MIN 60" (48" MIN) 96 (72" MIN) 48" (36" MIN) 24" MIN €36"→ 6 (24" MIN) 48" (36" MIN) When installing sidewalk racks, maintain 120" RECOMMENDED the pedestrian through zone. Racks should be placed in line with existing sidewalk obstructions to maintain a clear line of Sidewalk racks adjacent travel for all sidewalk users. to on-street auto parking should be placed between parking stalls to avoid conflicts with opening car doors. 96" RECOMMENDED **CROSSWALK** (36" PREFERRED WHEN ADJACENT TO AUTO PARKING) CROSSWALK

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