

**BLACK HAWK COUNTY METROPOLITAN AREA
TRANSPORTATION POLICY BOARD
MEETING NOTICE**

**INRCOG BOARD ROOM
229 EAST PARK AVENUE
WATERLOO, IA**

THURSDAY, SEPTEMBER 14, 2023, 10:00 AM

AGENDA

Actionable Items

1. Approval of the agenda.
2. Review and consider approval of the minutes for the August 10, 2023 meeting (pages 3-4).
3. Review and consider approval of a Letter of Support for Iowa to resume membership with the Midwest Interstate Passenger Rail Commission (MIPRC) (pages 5-7).

Discussion Items

1. Review the draft Carbon Reduction Program Guidelines for the MPO (pages 8-21).
2. Review draft 2050 Long-Range Transportation Plan Chapters.
 - a. Chapter 4 – Passenger Transportation (pages 22-57)
 - b. Chapter 5 – Bicycle and Pedestrian (pages 58-87)
 - c. Chapter 10 – Public Involvement (pages 88-93)
3. Project updates.
 - a. City and county project updates (TAP and STBG)
 - b. MET Transit Study
 - c. Public Input Meetings – draft 2050 Long-Range Transportation Plan (pages 94-95)
4. General discussion.
5. Adjournment.

MPO meetings are open to all individuals. Any person requesting reasonable accommodation to participate in this meeting must contact INRCOG at (319) 235-0311 at least two (2) business days in advance of this meeting.

Policy Board Members

Representing	Name	Title	MPO Membership
City of Cedar Falls	Rob Green	Mayor	Member (Vice-Chair)
	Gil Schultz	Councilperson	1 st Alternate
	Simon Harding	Councilperson, Mayor Pro Tem	2 nd Alternate
City of Elk Run Heights	Lisa Smock	Mayor	Member
	Heather Sallis	Councilperson	1 st Alternate
			2 nd Alternate
City of Evansdale	DeAnne Kobliska	Mayor	Member (Chair)
	Justin Smock	Councilperson, Mayor Pro Tem	1 st Alternate
	Jeff Bergman	Councilperson	2 nd Alternate
City of Gilbertville	Mark Thome	Mayor	Member
	Scott Becker	Councilperson, Mayor Pro Tem	1 st Alternate
			2 nd Alternate
City of Hudson	George Wessel	Mayor	Member
	Gail Bunz	Councilperson, Mayor Pro Tem	1 st Alternate
			2 nd Alternate
City of Raymond	Gary Vick	Mayor	Member
			1 st Alternate
			2 nd Alternate
City of Waterloo	Quentin Hart	Mayor	Member
	Noel Anderson	Com. Planning & Dev. Director	1 st Alternate
	Aric Schroeder	City Planner	2 nd Alternate
Black Hawk County	Daniel Trelka	Supervisor	Member
	Tavis Hall	Supervisor	1 st Alternate
			2 nd Alternate
MET Transit Board	Rosalyn Middleton	Board Member	Member
	Bob Seymour	Chair	1 st Alternate
	Sharon Droste	Vice-Chair	2 nd Alternate
Waterloo Regional Airport Board	Scott Voight	Chair	Member
	Keith Kaspari	Director of Aviation	1 st Alternate
			2 nd Alternate

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BLACK HAWK COUNTY METROPOLITAN AREA TRANSPORTATION POLICY BOARD

THURSDAY, AUGUST 10, 2023

MINUTES

Vice Chair Green called the meeting of the Black Hawk County Metropolitan Area Transportation Policy Board to order at 10:02 AM.

Meeting Attendees:

Name	Title	Representing	Role
Rob Green	Mayor	City of Cedar Falls	Policy Board Member (Vice-Chair)
Lisa Smock	Mayor	City of Elk Run Heights	Policy Board Member
Scott Becker	Councilperson	City of Gilbertville	Policy Board 1 st Alternate
George Wessel	Mayor	City of Hudson	Policy Board Member
Rosalyn Middleton	Board Member	MET Transit Board	Policy Board Member
Aric Schroeder	City Planner	City of Waterloo	Policy Board 2 nd Alternate
David Wicke	City Engineer	City of Cedar Falls	TTC Member
Rob Werner	Public Works Director	City of Gilbertville	TTC Member
David Sturch	General Manager	MET Transit	TTC Member
Doug Schindel	Engineer	AECOM	Attendee
Michelle Sweeney	Engineer	AECOM	Attendee
Aldina Dautović	Transportation Planner	INRCOG	MPO Staff (MPO Secretary)
Kyle Durant	Transportation Planner	INRCOG	MPO Staff
Nick Fratzke	Director of Transportation	INRCOG	MPO Staff

The first item was approval of the agenda. It was moved by Wessel, seconded by Schroeder to approve the agenda as presented. Motion carried unanimously.

Next was to review and consider approval of the minutes for the July 13, 2023 meeting. It was moved by Becker, seconded by Wessel to approve the minutes. Motion carried unanimously.

Next was Discussion Items:

1. Review draft 2050 Long-Range Transportation Plan Chapters

Staff provided a high-level overview of draft chapters 3, 7, 8, 9, and Appendix III. Draft chapters are posted on the MPO website and can be viewed at <https://bhcmmpo.org/lrtp/>.

2. Project Updates

a. City and county project updates (TAP & STBG)

Cedar Falls

Wicke said the Main Street project has started main line paving from 6th to 8th Street. 8th to 11th Street is preparing for paving next. Underground work for Seerley to 18th Street is continuing. The box culvert at Seerley Street is completed. Cedar Falls' remaining projects are in various stages: the Cedar Heights Drive project has punch list items remaining, the Lake Street project is in pre-audit, and Union Road Trail is wrapping up.

Waterloo

Schindel said the downtown bridge projects are ongoing. For Park Avenue, forty percent of the deck is poured, and the project will likely go into spring of next year. The Marina project

is near completion and has punch list items remaining. The docks won't go in until the dam is inflated next spring. La Porte Road Phase I from Shaulis Road to Bopp Street will be let this winter.

DOT

Schindel said the south leg of IA Hwy 58 is under construction. IA 58 and Greenhill Road is ongoing analysis with the DOT. There are four alternatives for the project. A single point interchange and dog bone interchange are currently being reviewed.

Elk Run

Smock said the city's trail project is closing out soon.

Gilbertville

Becker said asphalt was laid on Poyner Road this week. The opening for the project is soon.

b. MET Transit Study

Sturch said additional open house sessions will be held later this summer and in the fall for the transit study. There will also be a booth at the National Cattle Congress event to gather additional public input. The consultant is currently analyzing a zero-emission plan for MET Transit.

In general discussion, Durant said the Black Hawk County MPO was awarded \$60,000 in February to develop a comprehensive Safety Action Plan for the Safe Streets and Roads for All (SS4A) program. The plan will focus on the downtown Waterloo area. MPO staff wrote and submitted a funding agreement and are still awaiting review from the US DOT. Durant also noted that staff met with each jurisdiction regarding the Northeast Iowa Industrial Access NEPA Study. All jurisdictions agreed to pursue an environmental assessment. Staff will draft an RFP and anticipate going through a consultation process this fall. Vice Chair Green noted that the Cedar Falls Bike and Pedestrian Advisory Committee is going to become a formal commission. Green added that he is advocating for the commission to adopt a multi-modal focus.

There being no further business, it was moved by Smock, seconded by Wessel to adjourn the meeting. Motion carried unanimously. The meeting was adjourned at 10:47 AM.

Respectfully submitted,

Aldina Dautović
Secretary

Legislators, Senators,
Capitol
DSM, IA

Dear [Legislator's Name]:

As respective officials/organizational leaders/advocates who support passenger rail expansion across the Black Hawk County MPO region, we are writing to express our concern for the lack of representation by the State of Iowa in the Midwest Interstate Passenger Rail Commission (MIPRC). As beneficiaries of the opportunities that involvement in this consortium would afford our great state, we request that membership of an elected or appointed official from the State of Iowa be resumed with MIPRC, accordingly.

With the release of the Midwest Regional Rail Plan in 2021, the framework for fast, frequent, and affordable passenger rail service has never been stronger. Nationwide connectivity can either go through the State of Iowa, or around it. Our ability to harbor the benefits of greater connectivity and access to a sustainable transportation alternative is at a critical tipping point. Further denying involvement stops the State's potential for progress and accessibility in planning efforts beyond our borders. Collaboration for such a cause should be at the forefront in this effort.

Thanks to the passage of the Bipartisan Infrastructure Law, the time to invest in the future of passenger rail has never been greater. The success of these efforts, for generations to come, relies heavily on the decisions made today. We, as partner agencies, stand united in our commitment to lending our experience and expertise to build on the strengths of our communities and organizations, in order to leave a lasting, positive impact on those future leaders tasked with carrying the torches we pass to them.

Passenger rail has proven to be an efficient and sustainable mode of transportation in numerous states across the country. By rejoining the Midwest Interstate Passenger Rail Commission, Iowa can tap into these benefits and become part of a comprehensive regional transportation network. Here are some key points highlighting the advantages of passenger rail and the importance of Iowa's participation:

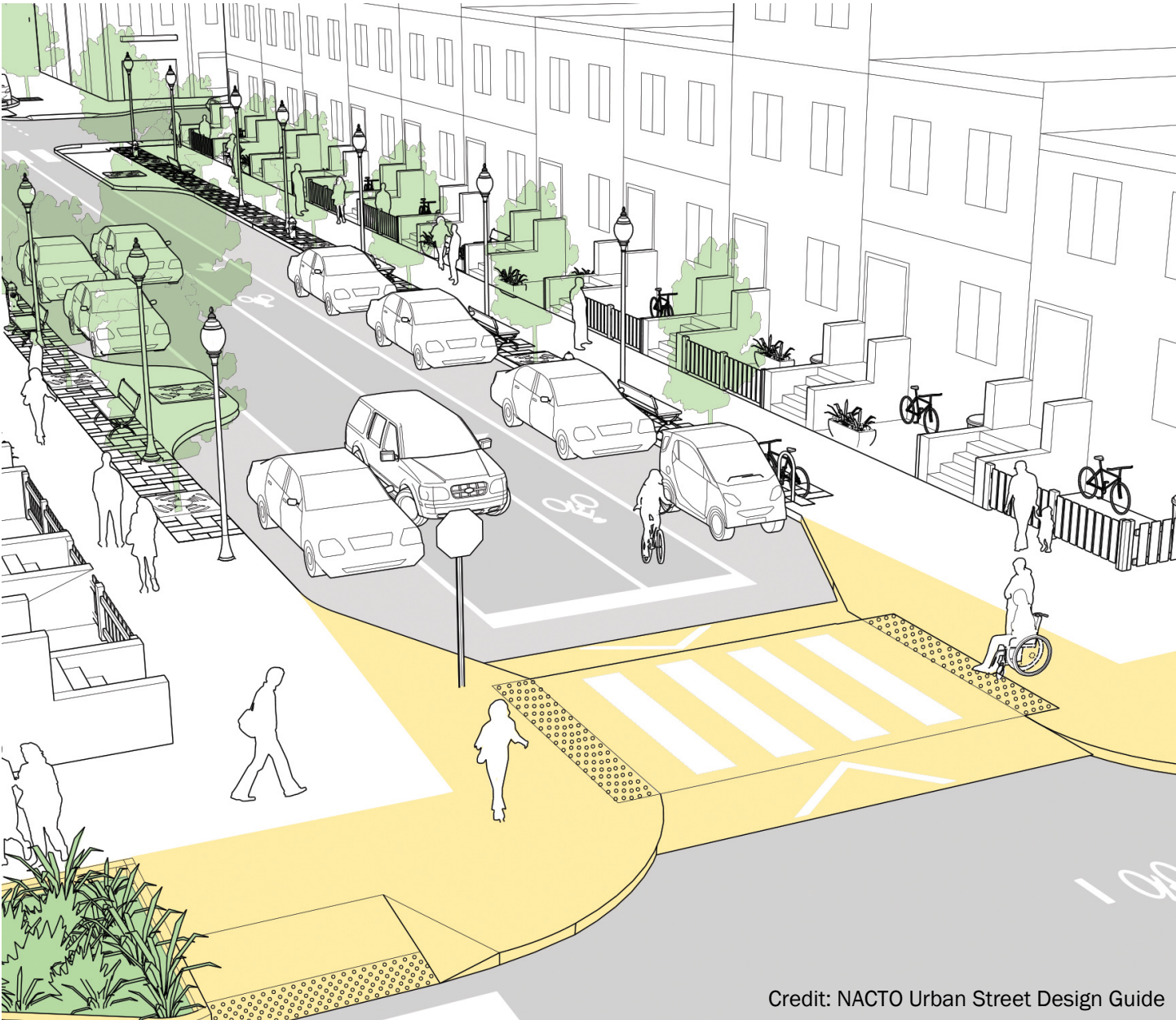
- **Economic Growth:** Investing in passenger rail infrastructure will create jobs and stimulate economic growth in Iowa. According to a study conducted by the American Public Transportation Association, every \$1 billion invested in public transportation projects generates approximately 50,000 jobs and \$3.7 billion in economic activity. By rejoining the commission, Iowa will have access to federal funds allocated for passenger rail projects, providing a boost to our local economy.
- **Enhanced Connectivity:** Passenger rail offers an efficient and convenient mode of travel, connecting cities, towns, and rural areas within the state and across state lines. By joining the commission, Iowa can collaborate with neighboring states to develop and expand a regional rail network, fostering better connections between communities and facilitating economic and cultural exchanges.

- **Environmental Sustainability:** Passenger rail is an environmentally friendly transportation option, significantly reducing greenhouse gas emissions compared to private vehicles and air travel. According to the Federal Railroad Administration, trains are 20-30 percent more energy-efficient than cars and emit 70 percent less carbon dioxide per passenger mile than airplanes. Reinvesting in passenger rail will help Iowa achieve its climate goals and contribute to a greener future.
- **Reduced Congestion:** Expanding passenger rail options can help alleviate congestion on our highways and reduce the wear and tear on our roads. By providing an alternative mode of transportation, we can encourage more people to leave their cars at home, leading to less traffic congestion, reduced travel times, and improved overall efficiency of our transportation system.
- **Tourism and Recreation:** Iowa is known for its beautiful landscapes, cultural heritage, and recreational opportunities. By reintroducing passenger rail services, we can attract more tourists to explore our state, boosting local businesses and promoting economic development in rural areas. Additionally, improved rail connections can enhance access to national parks, historical sites, and cultural destinations within and beyond Iowa, making it easier for residents to experience the diverse offerings of our region.
- **Increased Safety:** Passenger rail is statistically much safer than automotive transportation. In 2020, the Bureau of Transportation Statistics recorded 40,867 total deaths from travel, including air, automotive, and rail. By mode of transportation: Air: 349 deaths; Railroad: 746 deaths; Highway: 38,824 deaths. In 2020, there were more than 50 times more deaths on highways than on train tracks. Of those 746 railroad deaths across the country in 2020, the bulk were determined to have resulted from trespassing. In 2021, there were 2,148 train crashes resulting in 236 deaths, compared to tens of thousands as a result of automotive transportation.

I kindly urge you to support legislation that encourages Iowa's rejoining the Midwest Interstate Passenger Rail Commission. By doing so, you will demonstrate your commitment to fostering economic growth, environmental sustainability, and improved connectivity for the people of Iowa.

Thank you for your attention to this matter. The Black Hawk County MPO would appreciate the opportunity to discuss this further with you or your staff by contacting Nick Fratzke, Director of Transportation nfratzke@inrcog.org. I am confident that by embracing passenger rail, Iowa can unlock its full potential and advocate for a brighter future.

Sincerely,



Credit: NACTO Urban Street Design Guide

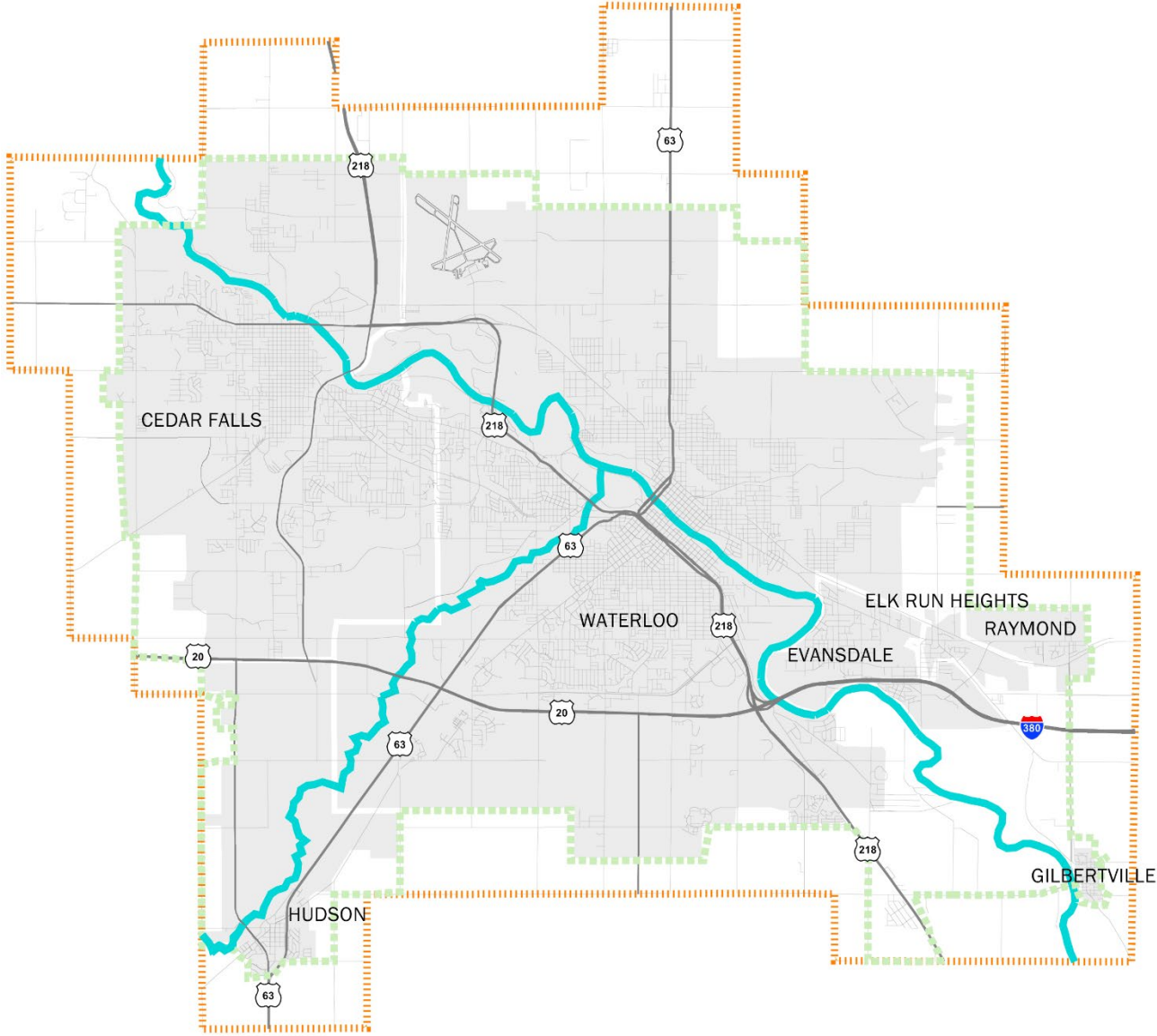
Carbon Reduction Program

Project Selection & Programming Guidelines

Schedule

	Application posted to the INRCOG website and Notice of Funding Availability emailed to all jurisdictions
	Carbon Reduction Program applications due by 3:30 p.m., including all required attachments
	Technical Committee meeting to rank projects and develop the draft Carbon Reduction Program
June 8, 2023	Draft FY 2024-2027 Transportation Improvement Program (TIP) reviewed by the Policy Board and Technical Committee
June 9, 2023	Draft FY 2024-2027 TIP submitted to the Iowa DOT, FHWA, and FTA
June 20-22, 2023	TIP Public Input Sessions
July 13, 2023	Final FY 2024-2027 TIP presented to the Policy Board for adoption
July 14, 2023	Final FY 2024-2027 TIP submitted to the Iowa DOT, FHWA, and FTA

Black Hawk County MPO Planning Area



Program Purpose and Priorities

- a. The purpose of the Carbon Reduction Program (CRP) is to reduce transportation emissions through the development of State carbon reduction strategies and by funding projects designed to reduce transportation emissions.
- b. Projects should align with administration priorities, including:
 - **Safety:** The US DOT and FHWA are committed to “taking substantial, comprehensive action to significantly reduce serious and fatal injuries on the Nation’s roadways,” in pursuit of the goal of achieving zero highway deaths. FHWA recognizes that zero is the only acceptable number of deaths on our roads and achieving that is our safety goal. The Safe System approach addresses the safety of all road users, including those who walk, bike, drive, ride transit, and travel by other modes.
 - **Complete Streets:** Section 11206 of the BIL defines Complete Streets standards or policies as 5 those which “ensure the safe and adequate accommodation of all users of the transportation system, including pedestrians, bicyclists, public transportation users, children, older individuals, individuals with disabilities, motorists, and freight vehicles.”
 - **Transit Flex:** Funds from CRP can be “flexed” to FTA to fund transit projects.
 - **ADA:** Recipients of Federal financial assistance are required to ensure the accessibility of pedestrian facilities in the public right-of-way, such as curb ramps, sidewalks, crosswalks, pedestrian signals, and transit stops in accordance with applicable regulations.
 - **Equity:** ensure consideration of using CRP funds for projects and inclusion of project elements that proactively address racial equity, workforce development, economic development, and remove barriers to opportunity, including automobile dependence in both rural and urban communities as a barrier to opportunity or to redress prior inequities and barriers to opportunity.
 - **Climate Change and Sustainability:** Projects under CRP to align with the President’s greenhouse gas reduction, climate resilience, and environmental justice commitments. Recipients should fund projects that reduce carbon dioxide emissions.

Eligible Activities and Requirements

- a. Establishing or operating a traffic monitoring, management, and control facility or program, including advanced truck stop electrification systems;
 - b. Public transportation projects including the construction of a bus rapid transit corridor or dedicated bus lanes;
 - c. Construction/implementation of on-road facilities for pedestrians, bicyclists, and other nonmotorized forms of transportation;
 - d. Advanced transportation and congestion management technologies;
 - e. Projects for the deployment of infrastructure-based intelligent transportation systems capital improvements and the installation of vehicle-to-infrastructure communications equipment;
 - f. Replacing street lighting and traffic control devices with energy-efficient alternatives;
 - g. Efforts to reduce the environmental and community impacts of freight movement;
 - h. Supporting deployment of alternative fuel vehicles, including:
 - Acquisition, installation, or operation of publicly accessible electric vehicle charging infrastructure or hydrogen, natural gas, or propane vehicle fueling infrastructure; and
 - The purchase or lease of zero-emission construction equipment and vehicles, including the acquisition, construction, or leasing of required supporting facilities;
 - i. Diesel engine retrofit project;
 - j. Certain types of projects to improve traffic flow that are eligible under the Congestion Mitigation and Air Quality (CMAQ) program, and that do not involve construction of new capacity.
-
- For additional details on Eligible Projects, visit the [Bipartisan Infrastructure Law Fact Sheet website](#).
 - Projects must be consistent with the *Iowa DOT Carbon Reduction Strategy* or the goals and objectives of the *MPO Long-Range Transportation Plan*.
 - Carbon Reduction Program projects are eligible for up to 80 percent of the total estimated eligible project cost.
 - Applications must include a copy of an executed resolution and detailed cost estimate. All information must be submitted by the application deadline.
 - Incomplete applications or late applications **will not be considered for funding**.
 - Projects submitted for consideration will be reviewed by MPO Staff for eligibility prior to the Technical Committee meeting.

Technical Resources

Applicants are expected to refer to the *Iowa DOT Carbon Reduction Strategy* and the most recent *MPO Long-Range Transportation Plan* while preparing the grant application. Links to these documents along with additional technical resources can be found below.

MPO 2050 Long-Range Transportation Plan

LINK

Iowa DOT Carbon Reduction Strategy

LINK

Iowa DOT 2022 State Freight Plan

<https://iowadot.gov/iowainmotion/files/SFP2022-State-Freight-Plan-Full-Document.pdf>

Iowa DOT Bicycle and Pedestrian Long-Range Plan

<https://iowadot.gov/iowainmotion/files/Bike-and-Pedestrian-Plan.pdf>

Iowa DOT 2022 State Transportation Plan

<https://iowadot.gov/iowainmotion/files/Iowa-in-Motion-2050-Full-Web-Version.pdf>

Project Application

- The Carbon Reduction Program application must be completed and submitted using the [Online Form](#).
- Each application must answer all applicable questions.
- A copy of an executed resolution from the City Council or Board of Supervisors must be emailed to MPO Staff by the application deadline. An example resolution can be found in *Appendix B*.
- In lieu of a resolution, applications from MET Transit must include a letter of support from the MET Transit Board; and applications from the Iowa DOT must include a letter of support from the Iowa DOT District 2 Office.
- Questions and application materials (copy of executed resolution, detailed cost estimate) should be directed to Aldina Dautović at adautovic@inrcog.org.

Project Ranking and Programming

- Projects will be ranked and recommended for funding by MPO staff
- MPO staff will rank projects by considering the ability to meet the MPO Long-Range Transportation Plan Goals, Objectives, and Performance Measures (see *Appendix A*).
- Projects will be ranked via a comparison process. All projects will be directly compared to each other, with a priority being chosen from each pair. Each time a project is chosen, it will receive a point. Points will be totaled, resulting in a ranked priority list for funding.
- MPO staff shall recommend projects for funding based upon the project rankings and funding constraints.
- MPO staff has the discretion to recommend the share of Carbon Reduction Program funds for each recommended project.
- Projects recommended for Carbon Reduction Program funds will be incorporated into the draft Transportation Improvement Program (TIP), distributed to the Policy Board for review, and taken out for public comment. The draft document will also be submitted to the Iowa DOT, FHWA, and FTA for review. Comments from these agencies and the public will be incorporated into the final document and presented to the Policy Board for adoption.
- The Policy Board has the ultimate decision-making authority. The Policy Board shall review and approve the allocation of all Carbon Reduction Program projects within the final TIP.
- Upon approval of the final TIP by the Policy Board, the MPO shall forward a *Carbon Reduction Program Award Letter* to the recipient. An example letter can be found in *Appendix C*.

Example Ranking

Tech Committee Member 1

Project A / Project B	Project A / Project C	Project A / Project D
Project B / Project C	Project B / Project D	
Project C / Project D		

A: 0 B: 3 C: 2 D: 1

Tech Committee Member 2

Project A / Project B	Project A / Project C	Project A / Project D
Project B / Project C	Project B / Project D	
Project C / Project D		

A: 3 B: 2 C: 1 D: 0

Tech Committee Member 3

Project A / Project B	Project A / Project C	Project A / Project D
Project B / Project C	Project B / Project D	
Project C / Project D		

A: 0 B: 2 C: 2 D: 2

Tech Committee Member 4

Project A / Project B	Project A / Project C	Project A / Project D
Project B / Project C	Project B / Project D	
Project C / Project D		

A: 3 B: 1 C: 1 D: 1

Tech Committee Member 5

Project A / Project B	Project A / Project C	Project A / Project D
Project B / Project C	Project B / Project D	
Project C / Project D		

A: 2 B: 2 C: 1 D: 1

Overall Ranking:

10 Points, Project B
 8 Points, Project A
 7 Points, Project C
 5 Points, Project D

Project Status Updates

- Project sponsors shall provide status updates at regularly scheduled MPO Policy Board meetings.
- Status updates include but are not limited to:
 - a. Letting schedule
 - b. Construction schedule
 - c. Changes in project scope
 - d. Construction progress

Application Checklist

- Carbon Reduction Program application fully completed and submitted online
- Copy of executed resolution (if applicable) submitted to MPO Staff
- Detailed cost estimate submitted to MPO Staff
- Letter of support submitted to MPO Staff (MET Transit and Iowa DOT only)

MPO Contact Information

Aldina Dautović
Transportation Planner
adautovic@inrcog.org



229 East Park Ave
Waterloo, IA 50703
(319) 235-0311
Monday–Friday, 8:00 AM – 4:00 PM
www.bhcmmpo.org

Appendix A: 2050 Long-Range Transportation Plan Goals, Objectives, and Performance Measures

Goal	Objective	Performance Measurement	2018-2022 Data
Increase the safety of the transportation system	1.1) Reduce the number of traffic fatalities	¹ Number of fatalities	6.6
	1.2) Reduce the rate of traffic fatalities	¹ Fatality rate (per 100 million VMT)	0.833
	1.3) Reduce the number of traffic serious injuries	¹ Number of serious injuries	35.0
	1.4) Reduce the rate of traffic serious injuries	¹ Serious injury rate (per 100 million VMT)	4.440
	1.5) Reduce the number of non-motorized fatalities and serious injuries	¹ Non-motorized fatalities and serious injuries	7.2
	1.6) Reduce the number of traffic accidents involving pedestrians and bicyclists	Crashes involving pedestrians and bicyclists	36.8
Strategically preserve the existing infrastructure	2.1) Preserve and maintain Interstate system pavement	¹ Percent of pavement in good condition ¹ Percent of pavement in poor condition	87.6% 0%
	2.2) Preserve and maintain non-Interstate National Highway System (NHS) pavement	¹ Percent of pavement in good condition ¹ Percent of pavement in poor condition	28.1% 5.9%
	2.3) Preserve and maintain state-owned pavement	Percent of pavement in good condition (IRI) Percent of pavement in poor condition (IRI)	46.9% 2.7%
	2.4) Preserve and maintain city and county road pavement conditions	Percent of pavement in good condition Percent of pavement in poor condition	40.8% 19.8%
	2.5) Preserve and maintain NHS bridges	¹ Percent of bridges in good condition (deck area) ¹ Percent of bridges in poor condition (deck area)	55.0% 0%
	2.6) Decrease the number of bridges that are posted or closed	Posted or closed bridges	12.0
	2.7) Decrease the number of bridges that are structurally deficient	Structurally deficient bridges	10.3
	2.8) Increase the average bridge sufficiency rating	Average bridge sufficiency rating in the metropolitan area	88.9
Support an efficient transportation system	3.1) Maintain the percent of person-miles traveled on the Interstate that are reliable	¹ Level of Travel Time Reliability (LOTTR)	100%
	3.2) Maintain the percent of the person-miles traveled on the non-Interstate NHS that are reliable	¹ Level of Travel Time Reliability (LOTTR)	99.0%
	3.3) Improve freight travel time reliability	¹ Truck Travel Time Reliability (TTTR) Index	1.25
	3.4) Reduce the total vehicle miles traveled	Vehicle miles per capita 5-year average	6,501
Provide a high degree of multimodal accessibility and mobility	4.1) Provide more on-road bicycle facilities	Miles of on-road bicycle accommodations	20.9
	4.4) A greater number of trips are made using public transit	Number of MET fixed route rides	272,907
	4.5) Decrease the percent of MET's vehicles that are beyond Useful Life Benchmark (ULB)	¹ Percent of revenue vehicles within an asset class that have met or exceeded ULB ¹ Percent of non-revenue vehicles that have met or exceeded ULB	45.8% 44.2%
	4.6) Transit facilities remain in good condition	¹ Percent of MET's facilities with a condition rating below 3.0 on FTA TERM Scale	29.2% 0%
	4.7) Increase the number of bus shelters in the metropolitan area	Bus shelters	13

¹Federally required performance measurement

Appendix A: Iowa DOT Carbon Reduction Strategies

Projects to reduce transportation emissions

Strategies (See Section 4.3 for full descriptions)	Alignment with CRP Guidance			Projects include but are not limited to
	Facilitate non-SOV trips	Vehicles/modes with lower emissions	Lower emission construction approaches	
Multimodal Transportation				
➤ Public transit	✓	✓	✓	<ul style="list-style-type: none"> ➤ Bus replacement ➤ Transit facility construction or replacement ➤ Expanded transit service area and/or hours ➤ New intermodal connections ➤ Construct on- or off-road facilities for bicyclists/pedestrians ➤ Safe routes to school programs or infrastructure ➤ Complete Streets implementation ➤ Carpool/vanpool programs ➤ Expanded micromobility options ➤ Advanced mobility, access, and on-demand transportation service technologies ➤ Planning efforts for passenger or commuter rail ➤ Passenger or commuter rail service
➤ Bicyclists and pedestrians	✓	✓		
➤ Complete Streets	✓	✓		
➤ Reduce single occupant vehicles	✓	✓		
➤ Passenger and commuter rail	✓	✓		
Operational Efficiency				
➤ Transportation Systems Management and Operations	✓	✓		<ul style="list-style-type: none"> ➤ Procure and utilize TSMO-related equipment or technology to improve flow ➤ Enhanced traffic signal responsiveness or coordination ➤ Enhanced traffic monitoring ➤ Advanced traveler information systems ➤ Advanced traffic management technologies ➤ Address bottleneck locations ➤ Projects that help avoid detours or delays ➤ Integrated corridor management systems ➤ Encourage shifting commute times ➤ Increase vehicle occupancy rate ➤ Enhanced ability to conduct business remotely
➤ State of good repair			✓	
➤ Travel Demand Management	✓	✓		

Projects to reduce transportation emissions

Strategies (See Section 4.3 for full descriptions)	Alignment with CRP Guidance			Projects include but are not limited to
	Facilitate non-SOV trips	Vehicles/modes with lower emissions	Lower emission construction approaches	
Alternative Fuels				
➤ Alternative and renewable fuel infrastructure	✓	✓	✓	<ul style="list-style-type: none"> ➤ Acquire, install, or operate alternative and renewable fuel infrastructure to support charging or fueling ➤ Purchase low/no emission transit vehicles ➤ Enhance coordination with other sectors to advance policies, equipment, and infrastructure associated with alternative and renewable fuels
➤ Vehicles that utilize alternative and renewable fuels		✓		
➤ Enhanced coordination		✓	✓	
Construction				
➤ Sustainable elements or construction practices		✓	✓	<ul style="list-style-type: none"> ➤ Use lower carbon materials ➤ Design infrastructure to have lower carbon emissions across its life cycle ➤ Purchase or lease zero-emission construction equipment and vehicles ➤ Use transportation right-of-way for energy infrastructure or generation ➤ Stage construction projects to minimize congestion, detours, and delay ➤ Utilize other modes to reduce demand in construction zones
➤ Cross-sector use of right-of-way			✓	
➤ Reduce carbon impacts during construction projects	✓		✓	
Other				
➤ Integrate transportation and land use planning	✓		✓	<ul style="list-style-type: none"> ➤ Enhance integration of transportation needs into development and redevelopment efforts ➤ Develop carbon reduction strategy ➤ Enhance freight intermodal connections ➤ Reduce emissions at port facilities ➤ Replace street lighting and traffic control devices with energy-efficient alternatives
➤ Improve freight efficiency		✓	✓	
➤ Other projects or programs			✓	

Appendix B: Example Resolution

A RESOLUTION OF THE **[MEMBER GOVERNMENT]** APPROVING AN APPLICATION TO THE BLACK HAWK COUNTY METROPOLITAN PLANNING ORGANIZATION (MPO) FOR CARBON REDUCTION PROGRAM FUNDING FOR THE **[PROJECT NAME]** PROJECT AND DIRECTING EXECUTION OF SAID APPLICATION BY THE **[GOVERNING BODY]**.

WHEREAS, the **[MEMBER GOVERNMENT]** is a full member in good standing of the Black Hawk County Metropolitan Planning Organization (MPO); and

WHEREAS, the MPO provides Carbon Reduction Program funds, on a competitive basis, for eligible projects to reduce transportation emissions, defined as carbon dioxide (CO2) emissions from on-road highway sources; and

WHEREAS, it is in the best interest of the **[MEMBER GOVERNMENT]** to avail itself of financial assistance through the Carbon Reduction Program as administered by the Black Hawk County MPO.

NOW, THEREFORE BE IT RESOLVED BY THE **[GOVERNING BODY]** OF THE **[MEMBER GOVERNMENT]** AS FOLLOWS:

- 1) The Carbon Reduction Program application for the **[PROJECT NAME]** project is hereby approved and endorsed by the **[GOVERNING BODY]**.
- 2) The improvements provided for in this application will be dedicated to public use and adequately maintained by the **[MEMBER GOVERNMENT]**.
- 3) The **[MEMBER GOVERNMENT]** assures the Black Hawk County Metropolitan Planning Organization that funds for the local match have been or will be committed to the Carbon Reduction Program project.
- 4) The **[DESIGNATED OFFICIAL]** is hereby designated as the official representative of the **[MEMBER GOVERNMENT]** and is further hereby directed and authorized to affix their signature to said application on behalf of the **[GOVERNING BODY]**.

PASSED AND ADOPTED THIS _____ day of _____, 20__.

ATTEST:

Appendix C: Example Award Letter



December 14, 2022

Name
Title
Community
Address
City, State ZIP

Dear Joe Example:

RE: Black Hawk County Metropolitan Planning Organization
Carbon Reduction Program Funding Award

This correspondence is to inform the City of Exemptown that the Black Hawk County Metropolitan Planning Organization (MPO) has awarded Carbon Reduction Program funds in the amount of \$500,000.00 for the 1st Ave Bike Lane project. Your project will be programmed into the MPO Fiscal Year 2024-2027 Transportation Improvement Program (TIP) in federal fiscal year 2025.

To receive Carbon Reduction Program funds, the City must work with the Iowa Department of Transportation. To initiate that process, project sponsors should contact the Iowa DOT Local Systems Bureau.

Please note the City does not yet have a funding commitment nor is it authorized to expend Carbon Reduction Program funds until the project has been authorized by the Federal Highway Administration (FHWA). Expenditures incurred prior to FHWA authorization will be ineligible for reimbursement. If you have questions, please contact me at (319) 235-0311 or kdurant@inrcog.org.

Sincerely,

Kyle Durant
Transportation Planner II

INRCOG | PARTNERS FOR PROGRESS

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Chapter 4 – Passenger Transportation



Overview

Public transit and passenger transportation play a crucial role within the transportation system by presenting individuals with travel alternatives that do not hinge on possessing personal vehicles. Numerous factors influence an individual's decision to utilize public transit or passenger transportation. Some rely on these services due to necessity, such as lacking a driver's license, lacking access to a vehicle, or facing physical disabilities that hinder their ability to drive. Others opt for alternative transportation methods as a deliberate lifestyle choice, driven by affordability, convenience, environmental concerns associated with solo car commuting, or limited driving experience. Moreover, the American Public Transportation Association approximates that an investment of \$1 billion in public transportation initiatives stimulates the creation of around 50,000 jobs and generates \$2.7 billion in economic activity.

Across Iowa, an intricate web of transportation systems spans urban, small urban, and rural areas, facilitating comprehensive coverage throughout the state. Within the MPO, public transit services are overseen by the Metropolitan Transit Authority (MET Transit). This authority functions as the designated transit provider, operating under the guidance of a 28E agreement established with Waterloo and Cedar Falls. MET Transit is responsible for offering both fixed route and paratransit services, catering to the diverse needs of the public.

METRO STATS

10

Year-round fixed routes¹

176,000

Fixed route rides per year¹

\$1.50

Regular fixed route fare¹

16,300

Air passenger enplanements per year²

56 years

Since passenger rail service was available (Land O' Corn)

Sources:

¹MET Transit

²FAA, CY 2022 Enplanements at Airports, Waterloo Regional Airport

Airline travel options to the area are facilitated by the Waterloo Regional Airport (ALO). As of November 2023, American Airlines operates two daily flights to and from O'Hare International Airport, providing convenient connections to a vast array of domestic and international destinations. This translates to direct and connecting flights to more than thirty prominent cities across the United States.

Passenger rail has gained interest, in recent years, as a viable alternative to passenger vehicle commutes for several reasons. Reduced congestion, enhanced connectivity, safer alternatives to automotive transportation, environmental sustainability, promotion of tourism and recreation, and economic growth each contribute to a growing sense of amenability for passenger rail service. According to the Federal Railroad Administration,

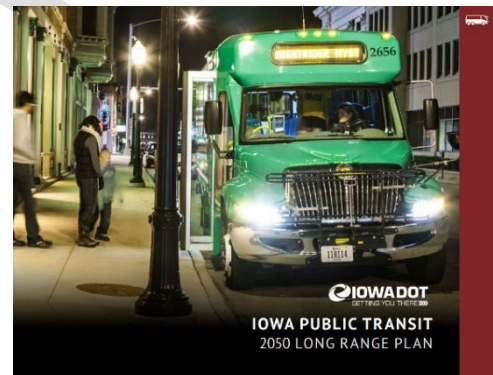


trains are 20-30% percent more energy-efficient than cars and emit 70% less carbon dioxide per passenger mile than airplanes. The National Highway Traffic Safety Administration (NHTSA) and the Federal Railroad Administration (FRA) have consistently reported that passenger rail travel has a significantly lower fatality rate per vehicle mile traveled (VMT) compared to automotive travel. In general, **fatalities in automotive accidents are several times higher than those in rail accidents per VMT.**

State Transit and Passenger Transportation Plans

Iowa Public Transit 2050 Long Range Plan

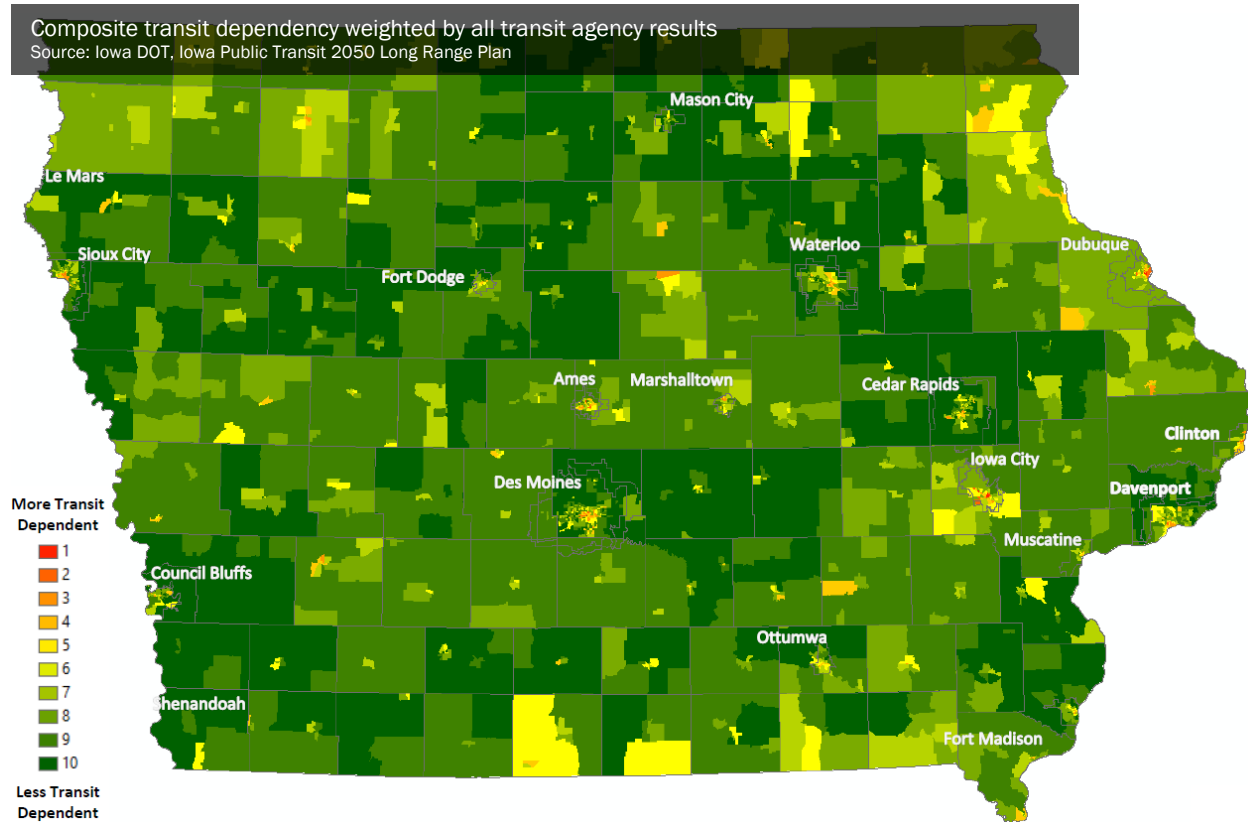
In 2020, the Iowa DOT adopted the Iowa Public Transit 2050 Long Range Plan. While the Iowa DOT has conducted specific planning efforts – Iowa Statewide Passenger Transportation Funding Study, Iowa Park and Ride System Plan – this Plan looks at the public transit system from a broader point of view. The Plan seeks to coordinate planning, programming, and technical assistance statewide to support transit operations at the local level. The goal is to provide specific strategies and improvements that can be implemented and revisited over time.



This Plan serves as a guide to assist the Iowa DOT in making informed public transit decisions for the state. The strategies and action items within the plan serve as the starting point for the implementation phases of the planning process. The transit plan will also be updated every five years to stay current with trends, forecasts, and factors that influence decision-making.

Included within the Plan is a Transit Dependency Analysis, aimed at anticipating and projecting the locations of focal points where the demand for, and reliance on, transit is most pronounced in Iowa. The analysis incorporates external factors contributing to transit dependency, encompassing aspects such as gas prices, median household income, households without vehicles, linguistic diversity, racial composition, college enrollment rates, and population density.

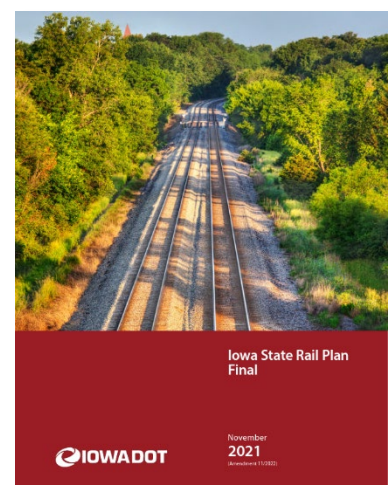
After collecting data for the various factors, it was processed using GIS. Each block group was assigned a score from one to ten for each of the seven distinct external factors employed in the analysis. Subsequently, these individual layers were combined to create an overarching composite layer, pinpointing the regions with the highest transit dependency as influenced by these seven factors. To determine the significance of each factor, input from Iowa's transit agencies was used to assign appropriate weights.



www.iowadot.gov/iowainmotion/Modal-Plans/Public-Transit-Plan

Iowa State Rail Plan 2021

This document is intended to guide the Iowa DOT in its activities of promoting access to rail transportation, helping to improve the freight railroad transportation system, expanding passenger rail service, and promoting improved safety both on the rail system and where the rail system interacts with people and other transportation modes. The State Rail Plan describes the state's existing rail network and rail-related economic and socioeconomic impacts. The document provides an overview of existing passenger rail service and outlines proposed passenger rail improvements and investments. Of particular interest is the intercity passenger rail initiative between Chicago and Omaha which was identified as one of several routes of the Midwest Regional Rail System. The Plan also identifies new potential passenger services reaching all regions of the state including a conceptual route from Dubuque to Sioux City with station stops in Waterloo and Fort Dodge. This potential route remains to be studied.



<https://iowadot.gov/iowainmotion/modal-plans/rail-transportation-plan>



Midwest Regional Rail System
 Source: Midwest Interstate Passenger Rail Commission



Existing and Potential Future Passenger Rail Routes in Iowa
 Source: Iowa DOT, Iowa State Rail Plan 2021

Transit Asset Management Plan

Transit Asset Management (TAM) Plans are comprehensive and strategic frameworks implemented by transit agencies to efficiently manage their transportation assets. These plans are vital for ensuring the long-term sustainability and optimal performance of transit systems. TAM plans involve the systematic inventory, assessment, and maintenance of various assets, such as buses and support facilities. By establishing data-driven processes and performance targets, TAM plans help transit agencies prioritize investments, allocate resources, and make informed decisions to extend the useful life of assets while minimizing operational disruptions. The goal is to enhance safety, reliability, and the overall quality of public transportation services for the benefit of passengers and the communities they serve.

Every transit agency is federally required to develop a TAM plan if it owns, operates, or manages capital assets used to provide public transportation and receives federal financial assistance under 49 USC Chapter 53 as a recipient or subrecipient. The most recent TAM Plan for MET Transit was adopted in September of 2022.

<https://bhcmppo.org/performance-measures/>

Transit Performance Management Plan

Public Transportation Agency Safety Plans (PTASP) are comprehensive frameworks that transit agencies develop and implement to enhance safety in public transportation systems. Mandated by the FTA, a PTASP is a proactive approach that focuses on identifying and mitigating safety risks to prevent accidents and incidents. These plans involve a thorough analysis of the agency's operations, infrastructure, equipment, and personnel to identify potential hazards and vulnerabilities. Based on this assessment, specific safety goals, objectives, and performance targets are established, along with strategies for achieving them. PTASP ensures that safety responsibilities and accountabilities are clearly defined across the organization and that employees are well-trained and equipped to handle potential safety-related situations. By promoting a culture of safety, fostering collaboration, and incorporating industry best practices, the PTASP aims to continually improve the safety of public transportation systems, providing passengers with confidence in the reliability and security of their travel experience.

<https://bhcmppo.org/performance-measures/>

Passenger Transportation Plan

The MPO coordinates the development of a Passenger Transportation Plan (PTP). The plan coordinates efforts between passenger transportation providers and human service agencies providing services in the INRCOG six-county region. The plan also recommends projects to improve passenger transportation. The purpose is to enhance transportation access throughout the community, minimize duplication of services, and facilitate the most appropriate cost-effective transportation possible with available resources

The PTP is a joint document between the MPO and its regional counterpart the Iowa Northland Regional Transportation Authority (RTA). A full update of the document is completed every five years. The most recent PTP update was adopted in April 2020 for the fiscal years 2021 to 2025.



As a result of this collaboration, INRCOG and MET Transit solicited consultant proposals in the spring of 2023 for a Comprehensive Transit Study for the Metropolitan Transit Authority of Black Hawk County with the goal of identifying opportunities to improve the system. Included in the study is a review of the previous route restructuring (undertaken prior to the COVID-19 pandemic), characterization of the service area, user and travel analysis, inventory of service productivity, determination of current service adequacy, and a fleet and facilities assessment. The study will include several opportunities for gathering public input, a crucial element in achieving the goal of further improving the services to the community and the overall functionality and efficiency of the system. Results of the study are anticipated to become available in early 2024.

https://bhcmmpo.files.wordpress.com/2022/11/ptp_fy2021-2025.pdf

Transit Advisory Committee

The transit planning process and development of the PTP is coordinated through the Transit Advisory Committee (TAC). The TAC consists of human service organizations, representatives of local government, transit users, and transportation providers. These entities work cooperatively to recognize current transit and passenger transportation shortfalls and identify the potential for new services and coordination possibilities in the region.

Some needs identified by the TAC over the past several years include the following:

- Providing service to the growing population of older adults
- Installation and maintenance of bus shelters
- Cashless fareboxes (alternatives to cash)
- Expanded service time and area
- Vanpools
- Educating new populations on bus service, particularly those with limited English proficiency
- Marketing and education on existing services

Transit Service

MET Transit operates 6 fixed routes in Waterloo, 1 route in Cedar Falls, and 2 routes between Waterloo and Cedar Falls year-round. Route 10 serves the University of Northern Iowa, the Hawkeye Community College main campus, and the Crossroads Mall during the academic year, and continues services between Hawkeye Community College and the Crossroads Mall area during the summer. Map 4.1 shows the location of MET Transit's fixed routes as of November 2023, and Table 4.1 outlines each route's operations and average annual ridership over the past five state fiscal years.



Map 4.1: MET Transit Fixed Routes

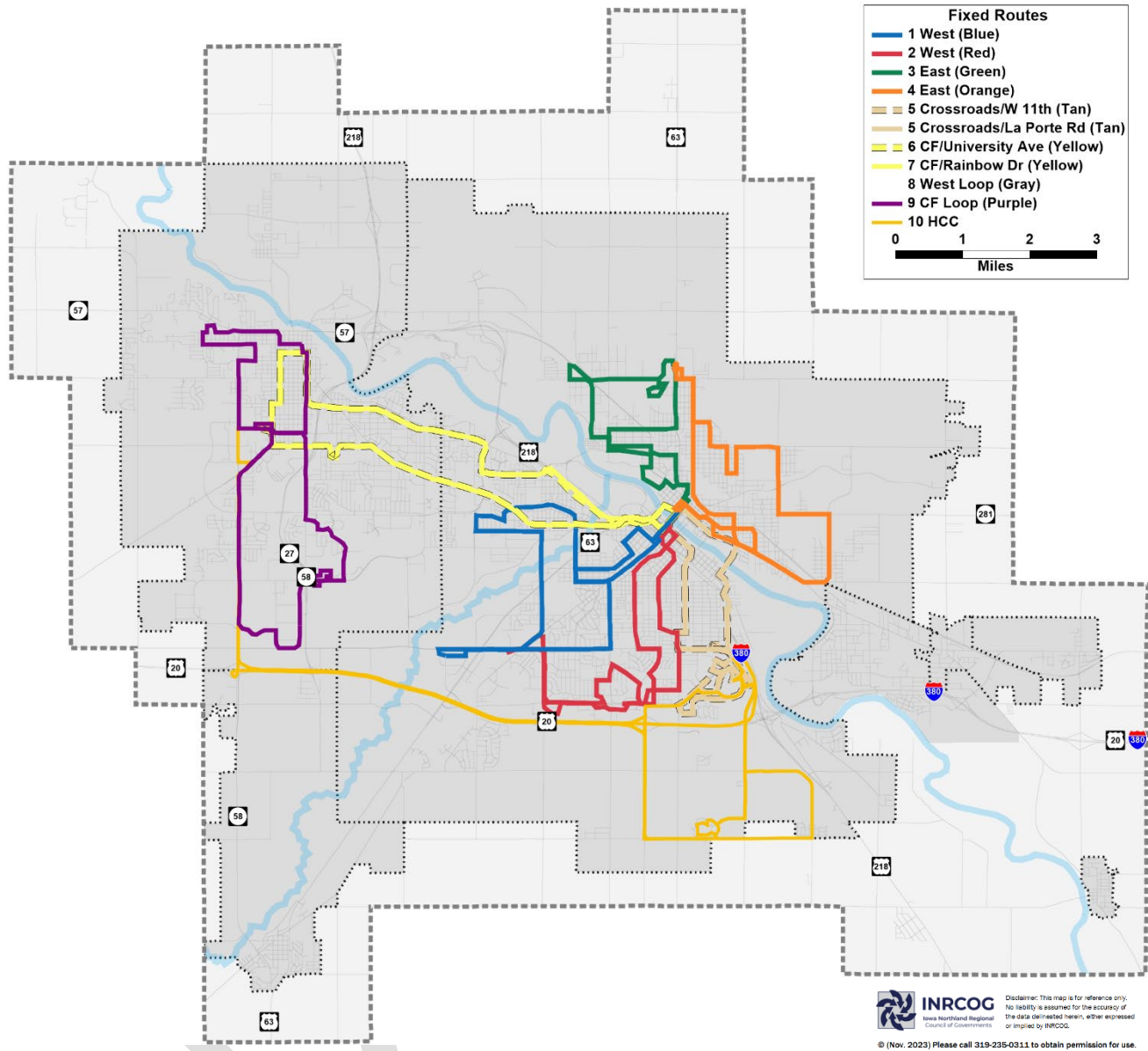


Table 4.1: MET Transit Fixed Routes

Route	Annual Operations	Daily Operations	Average Annual Rides SFY 2019-2023
1 West (Blue)	All year	All day	25,817
2 West (Red)	All year	All day	26,490
3 East (Green)	All year	All day	23,823
4 East (Orange)	All year	All day	24,280
5 Crossroads/W 11th (Tan)	All year	All day	37,963
5 Crossroads/La Porte Rd (Tan)	All year	All day	18,064
6 CF/University Ave (Yellow)	All year	All day	17,468
7 CF/Rainbow Dr (Yellow)	All year	All day	34,993
9 CF Loop (Purple)	All year	All day	10,579
10 HCC (Gold)	Reduced summer service	No mid-day service	3,589

MET Transit's fixed route and paratransit hours of operation are 5:45 a.m. to 6:15 p.m. from Monday to Friday, and 7:15 a.m. to 6:15 p.m. on Saturday. There is no service on Sunday. Regular fixed route fares have remained the same for well over a decade. Regular fares for adults are \$1.50 per ride, while fares for seniors, disabled, Medicare card holders, and students are \$0.75; the cost of a 30-day pass is \$50 and \$45 respectively. Riders can also purchase 11 ride tickets at once for the price of 10 tickets.

Paratransit service, which is also provided by MET Transit, provides transportation for people who are unable to use fixed route buses. To qualify for paratransit service, passengers must meet one of the following conditions established by the Americans with Disabilities Act (ADA):

- Inability to get on or off a bus
- Inability to get to or from a fixed route bus stop
- Inability to wait at a fixed route bus stop
- Inability to ride the fixed route buses or follow transit instructions because of a disability



ADA paratransit eligibility is based on a passenger's functional abilities rather than a medical diagnosis. MET Transit currently offers paratransit throughout Waterloo, Cedar Falls, and Evansdale, though it is only required to offer the service within 0.75 miles of fixed routes.

Transit Ridership

Figures 4.1 and 4.2 show the total number of rides for fixed routes and paratransit from state fiscal years 2019 to 2023. Over the past five years, MET Transit has witnessed a notable decline in transit ridership due to various factors, with the COVID-19 pandemic being one of the most significant contributors. The transit system was temporarily shut down due to the pandemic, and widespread restrictions and social distancing measures discouraged public gatherings, leading to a significant shift towards remote work for many individuals. This shift resulted in fewer people utilizing public transportation services, causing a considerable drop in MET Transit's ridership. Moreover, fluctuations in fuel prices and changes in demographic trends could have also played a role in the overall decline in transit ridership for MET Transit over the past five years.



Figure 4.1: Fixed Route Ridership by Month, SFY 2019-2023

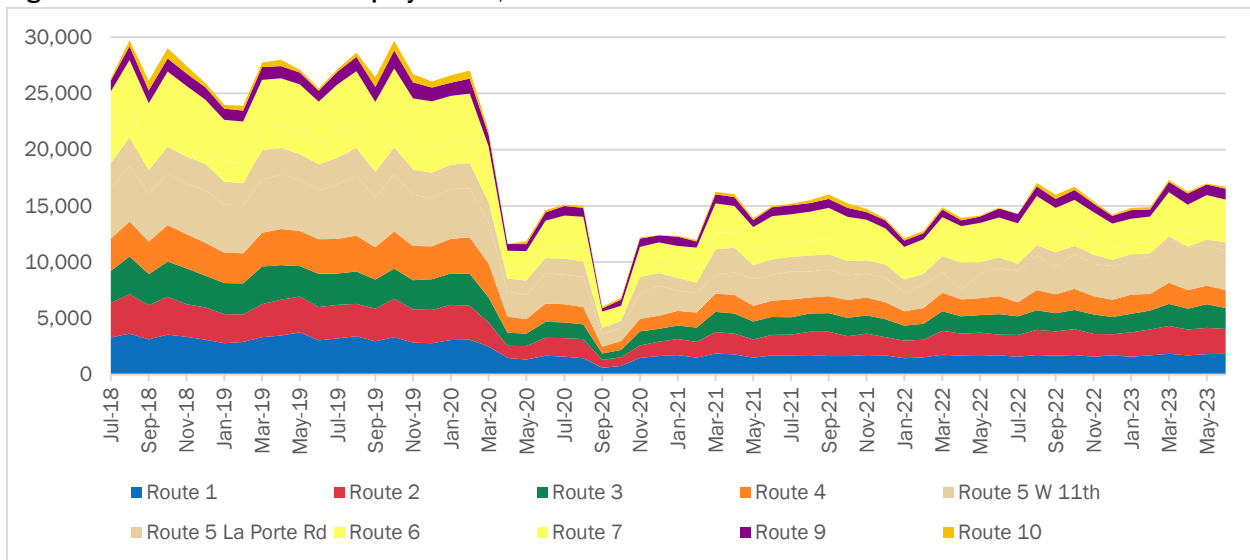
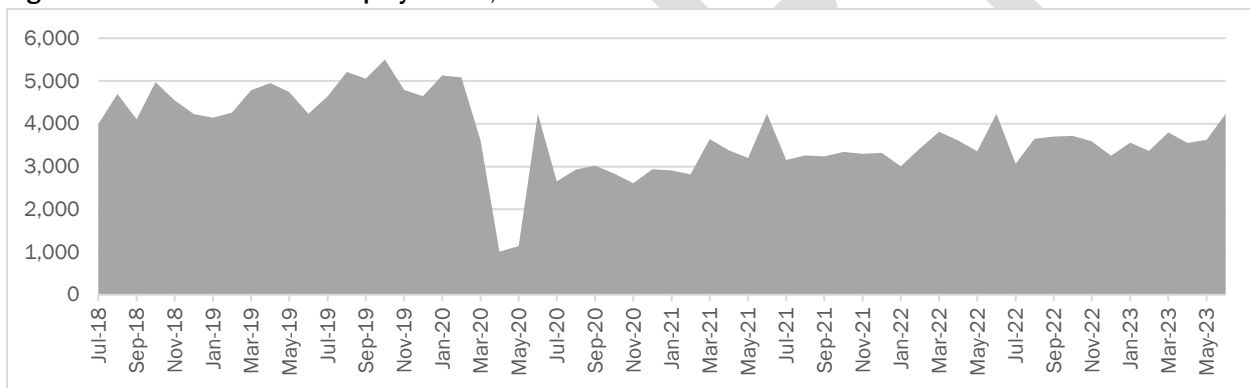


Figure 4.2: Paratransit Ridership by Month, SFY 2019-2023



Transit Ridership Forecasts

Predicting future transit ridership is a tough task due to uncertainties and factors involved. The challenge is foreseeing changes in urban settings caused by population shifts, economic changes, and altered land use patterns. This task is made harder by factors like technological advancements and new transportation choices. Unexpected events like pandemics can greatly disrupt travel patterns, making accurate predictions even tougher.

Using a power trendline for predicting transit ridership offers a range of valuable advantages in forecasting accuracy and insight. Unlike linear models, power trendlines can effectively capture non-linear trends inherent in transit ridership data, accommodating exponential growth or decay patterns. Moreover, power trendlines can adeptly identify periods of rapid growth followed by saturation, mirroring real-world scenarios in transit systems.

Figure 4.3 provides a power trendline projection based on annual ridership data from state fiscal years 2021 to 2023. Notably, the data from state fiscal years 2019 and 2020 have been excluded from this analysis. This omission is a result of the significant decline in ridership during these years, attributable to the widespread restrictions imposed in response to the COVID-19 pandemic. By focusing on the years that follow the

pandemic-related impact, the power trendline projection seeks to provide a clearer outlook for fixed route ridership, considering a context that is more aligned with regular travel patterns and conditions.

Relying solely on a power or linear trendline can be limiting, as transit ridership is influenced by various dynamic factors. More sophisticated forecasting methods, such as autoregressive integrated moving average models, can capture seasonality and cyclic patterns in ridership data. Additionally, conducting frequent surveys and engaging with the community to understand their changing needs and preferences can provide valuable insights for predicting future ridership.

Figure 4.3: Fixed Route Ridership Projection, Power Trendline

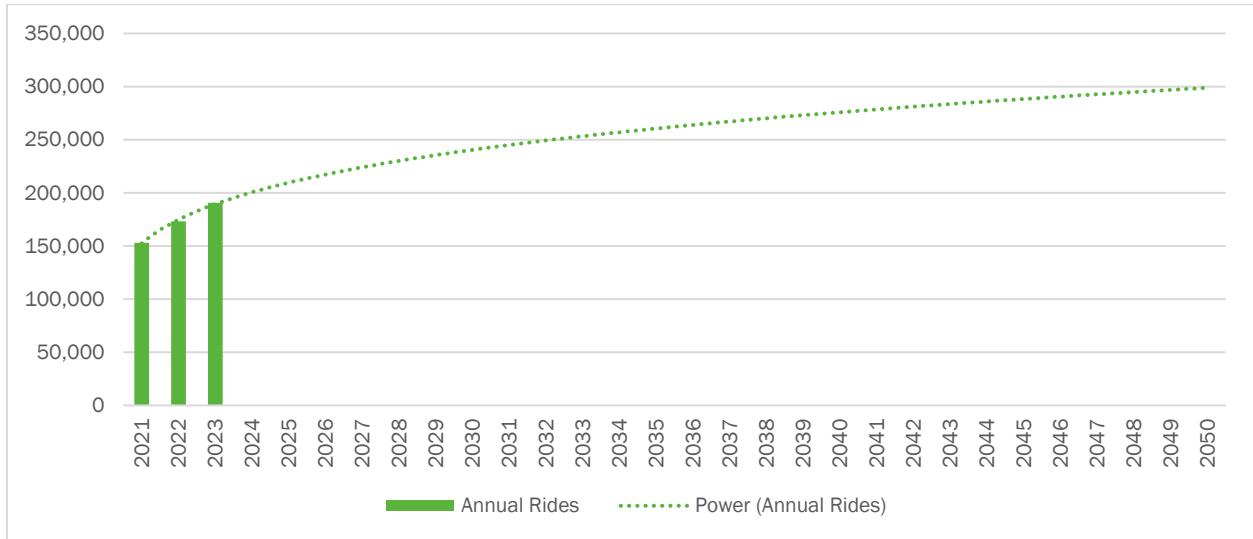
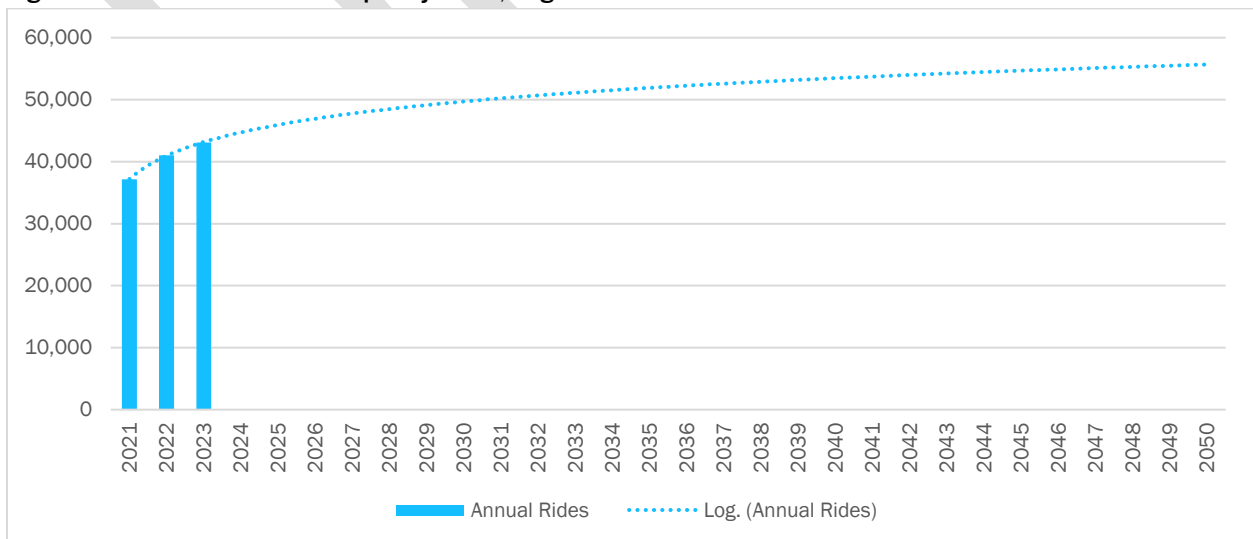


Figure 4.4 displays the ridership projection for MET Transit’s paratransit system, where a logarithmic trendline was employed instead of a linear one. The rationale behind this choice lies in the anticipation that ridership will plateau as the baby boomer generation ages and increasingly utilizes the paratransit service.

Figure 4.4: Paratransit Ridership Projection, Logarithmic Trendline



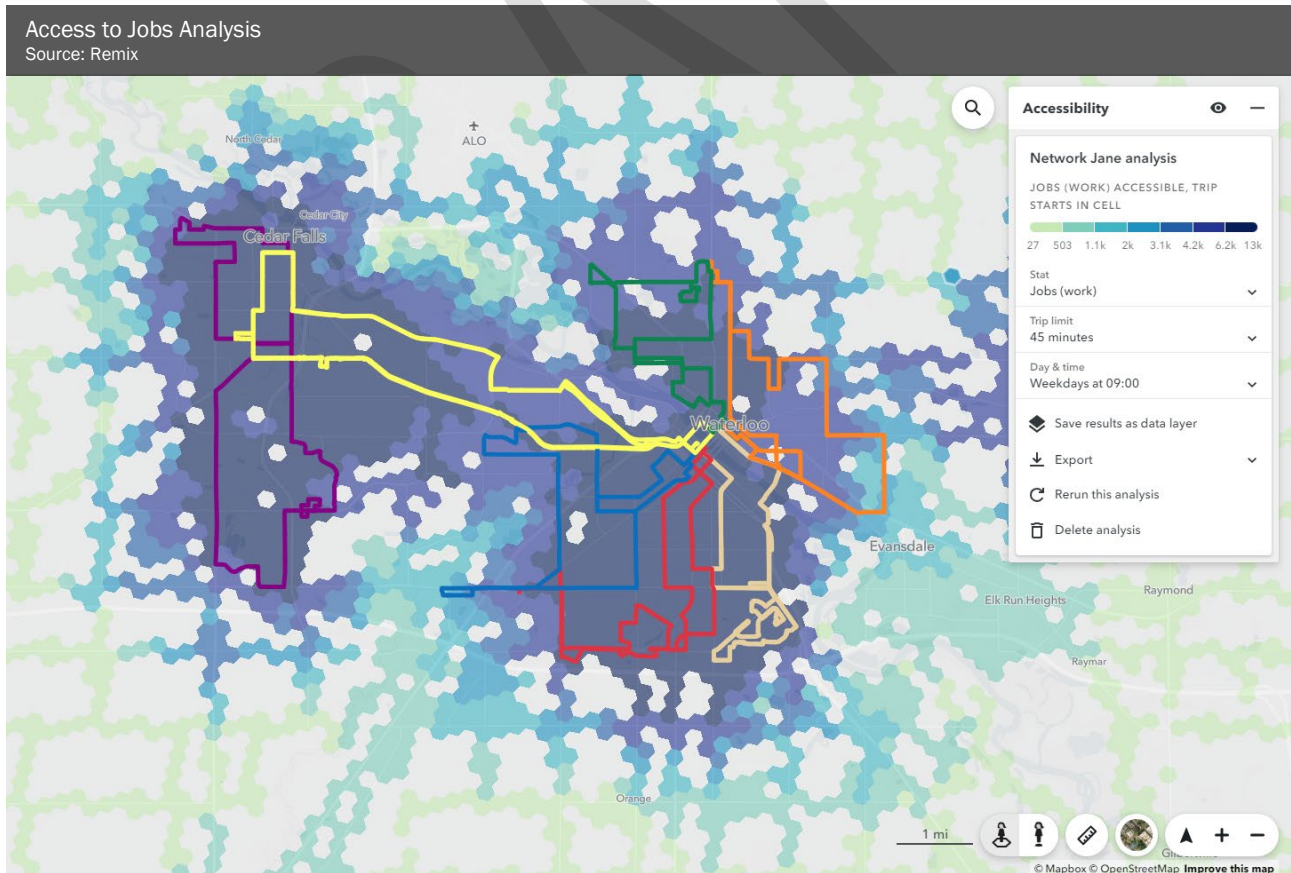
Transit Coverage

Maps 4.2 through 4.8 show the relationship between MET Transit’s fixed routes and several economic and demographic characteristics identified in Chapter 2 of this document. Reviewing these characteristics may help to show gaps in coverage that could be considered for future projects.

In 2017, the MET Transit Board voted to purchase a license for the transit planning software, Remix. MET Transit and MPO staff utilized this tool to determine the feasibility of long-term changes to the fixed route system. The software also enables overlaying existing routes with various demographic data. Table 4.2 shows various demographic data made available through Remix, based on a 0.25-mile radius of each fixed route.

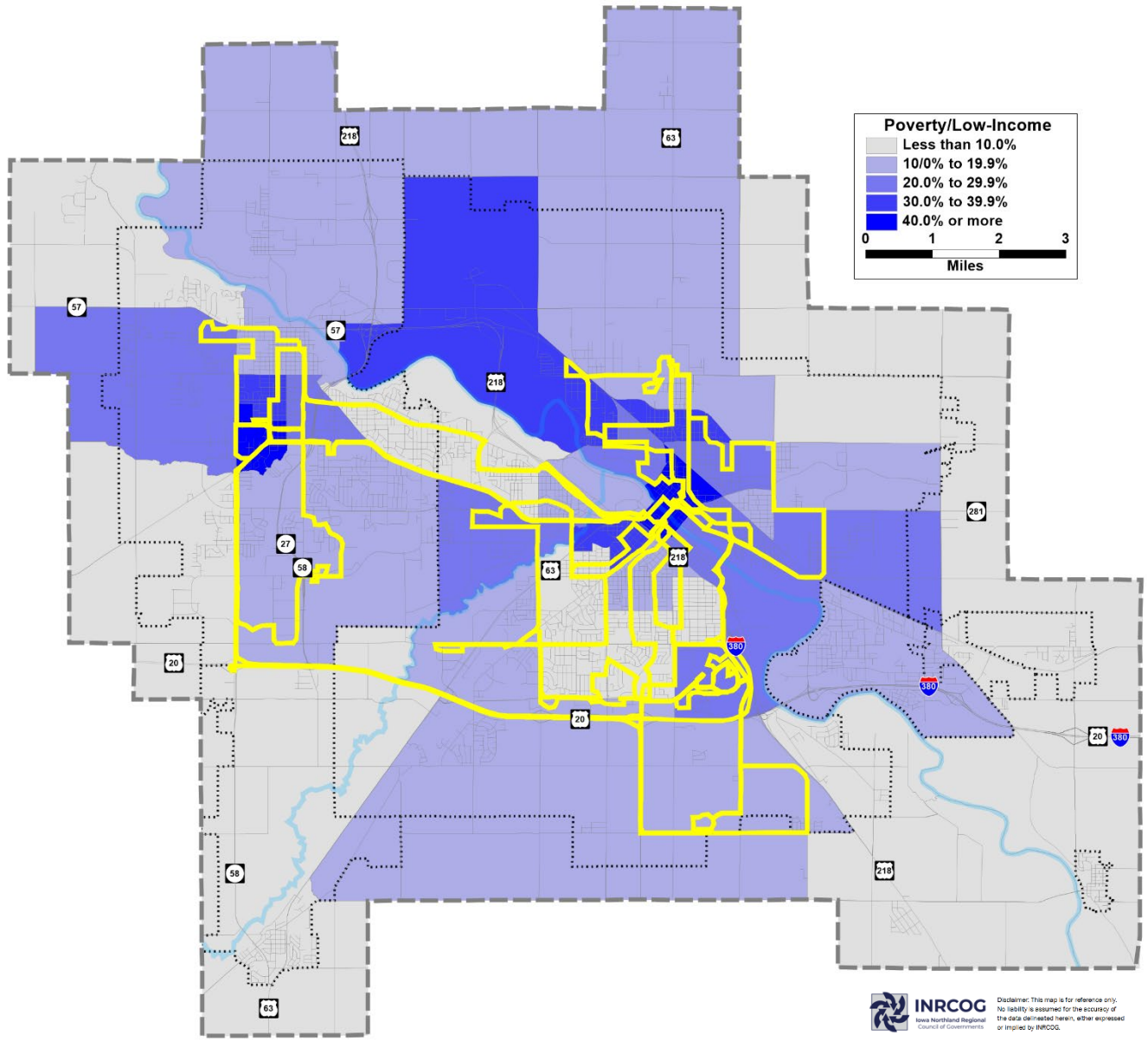
Table 4.2: Demographic Characteristics Within ¼ Mile of Fixed Routes (as of November 2023)

Route	Pop. (2020)	Jobs	Poverty	Non-White	Car Free Houses	Disability	Age 65+	Non-English
1 West (Blue)	14,200	4,800	18%	32%	12%	14%	15%	7%
2 West (Red)	17,300	7,800	12%	35%	10%	16%	17%	9%
3 East (Green)	6,300	4,400	31%	59%	26%	23%	15%	5%
4 East (Orange)	9,400	3,800	26%	61%	20%	23%	15%	7%
5 Crossroads/W 11th/La Porte Rd (Tan)	9,300	5,300	18%	38%	16%	17%	13%	15%
6 CF/University Ave (Yellow)	19,900	9,900	21%	18%	10%	12%	15%	2%
7 CF/Rainbow Dr (Yellow)	19,200	10,000	22%	18%	11%	12%	15%	2%
9 CF Loop (Purple)	13,200	8,500	25%	17%	6%	9%	10%	1%
10 HCC (Gold)	8,400	5,800	29%	21%	9%	12%	9%	3%



Map 4.2: Poverty/Low-Income by Census Tract

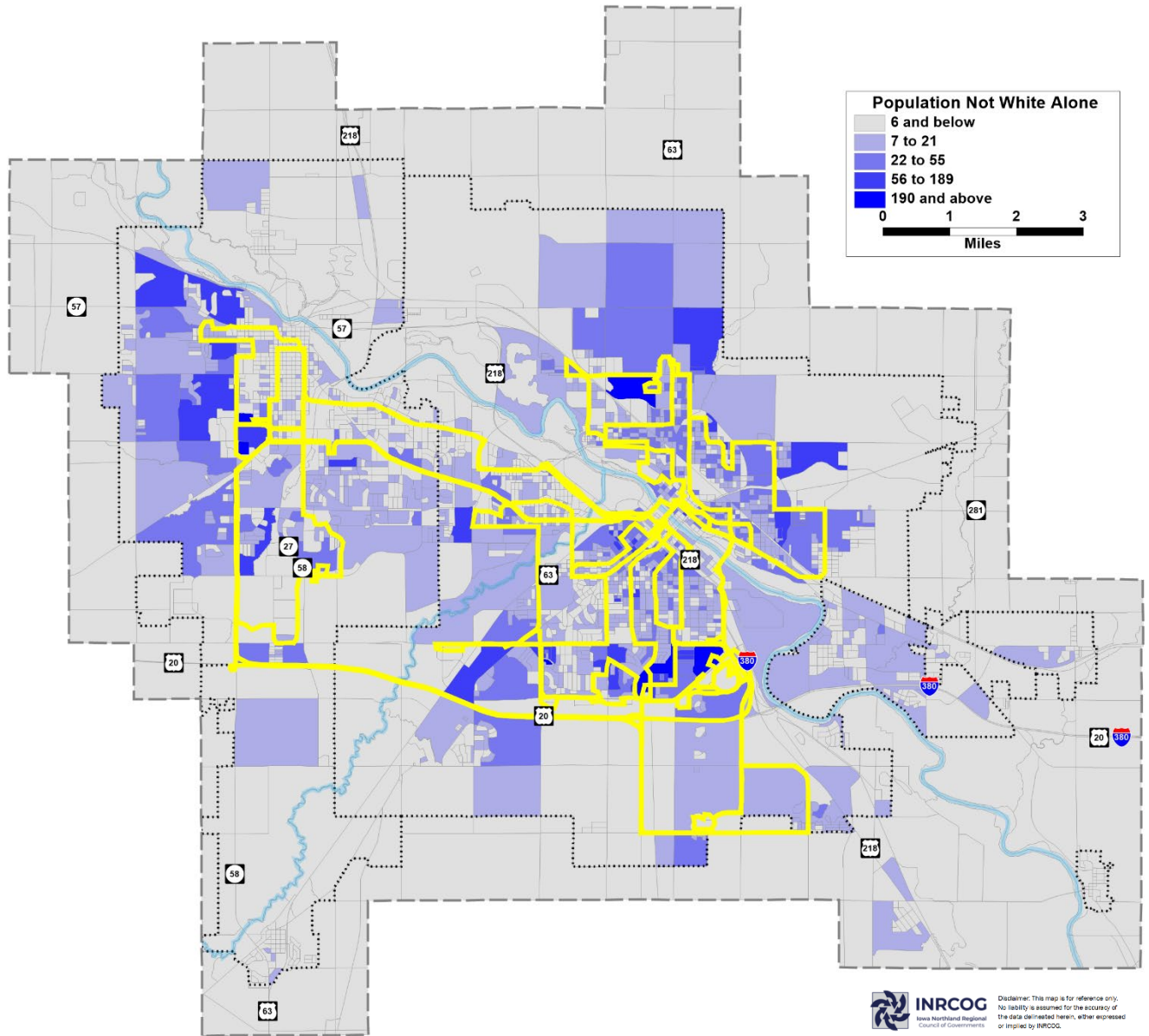
Source: U.S. Census Bureau, American Community Survey 5-year Estimates, 2021



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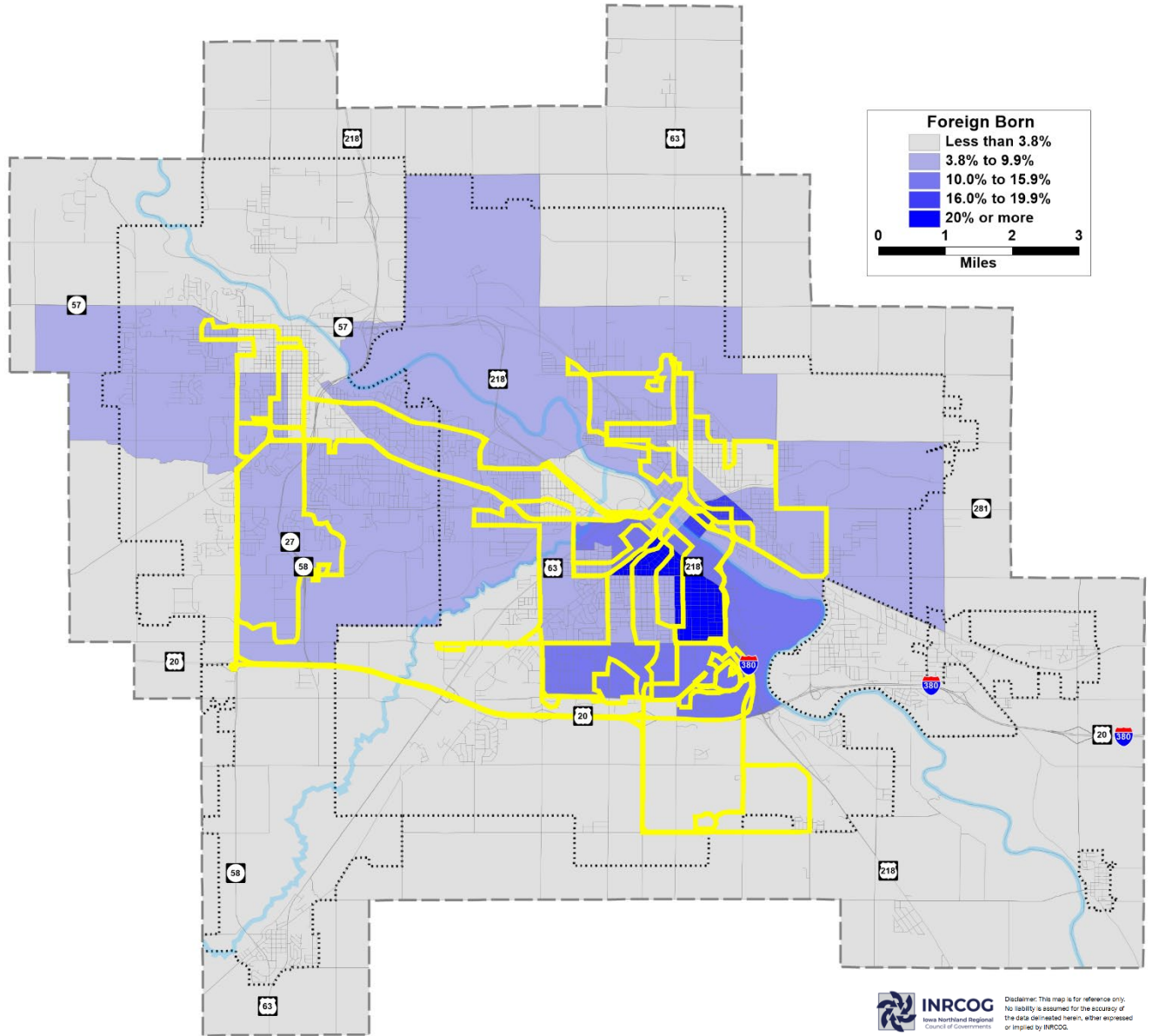
Map 4.3: Racial and Ethnic Minorities by Census Block

Source: U.S. Census Bureau, Decennial Census, 2020



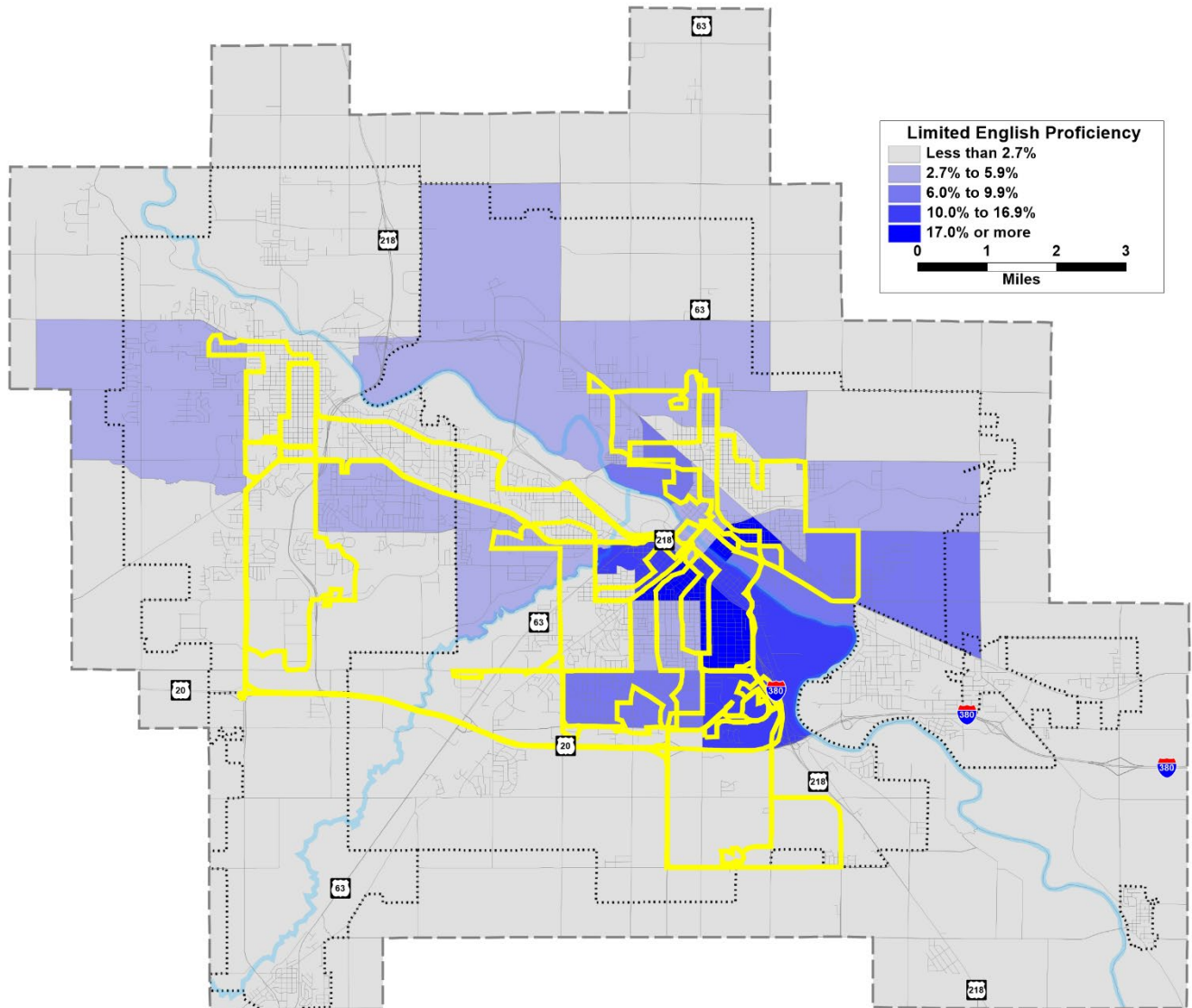
Map 4.4: Foreign Born Population by Census Tract

Source: U.S. Census Bureau, American Community Survey 5-year Estimates, 2021



Map 4.5: Limited English Proficiency by Census Tract

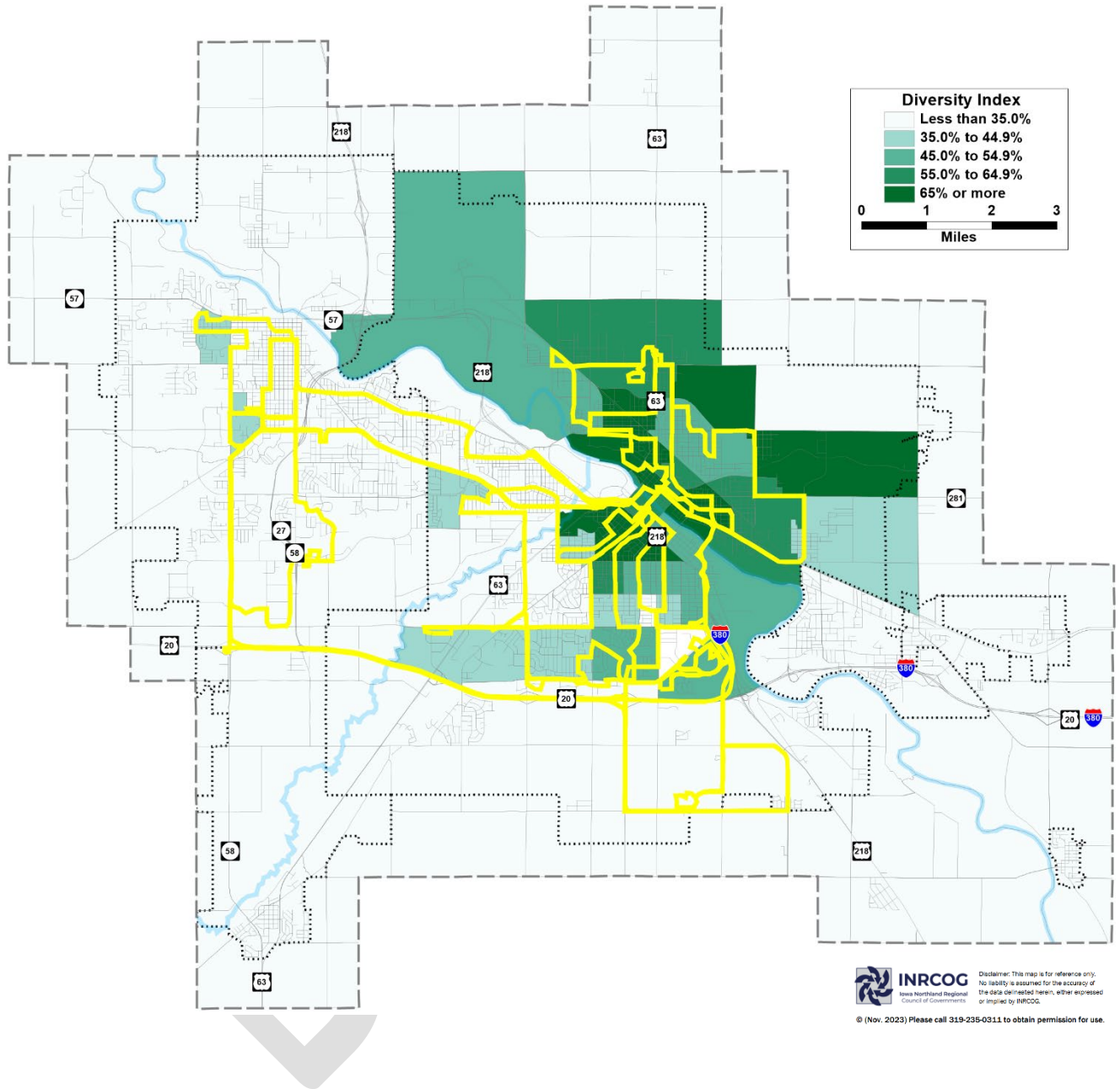
Source: U.S. Census Bureau, American Community Survey 5-year Estimates, 2021



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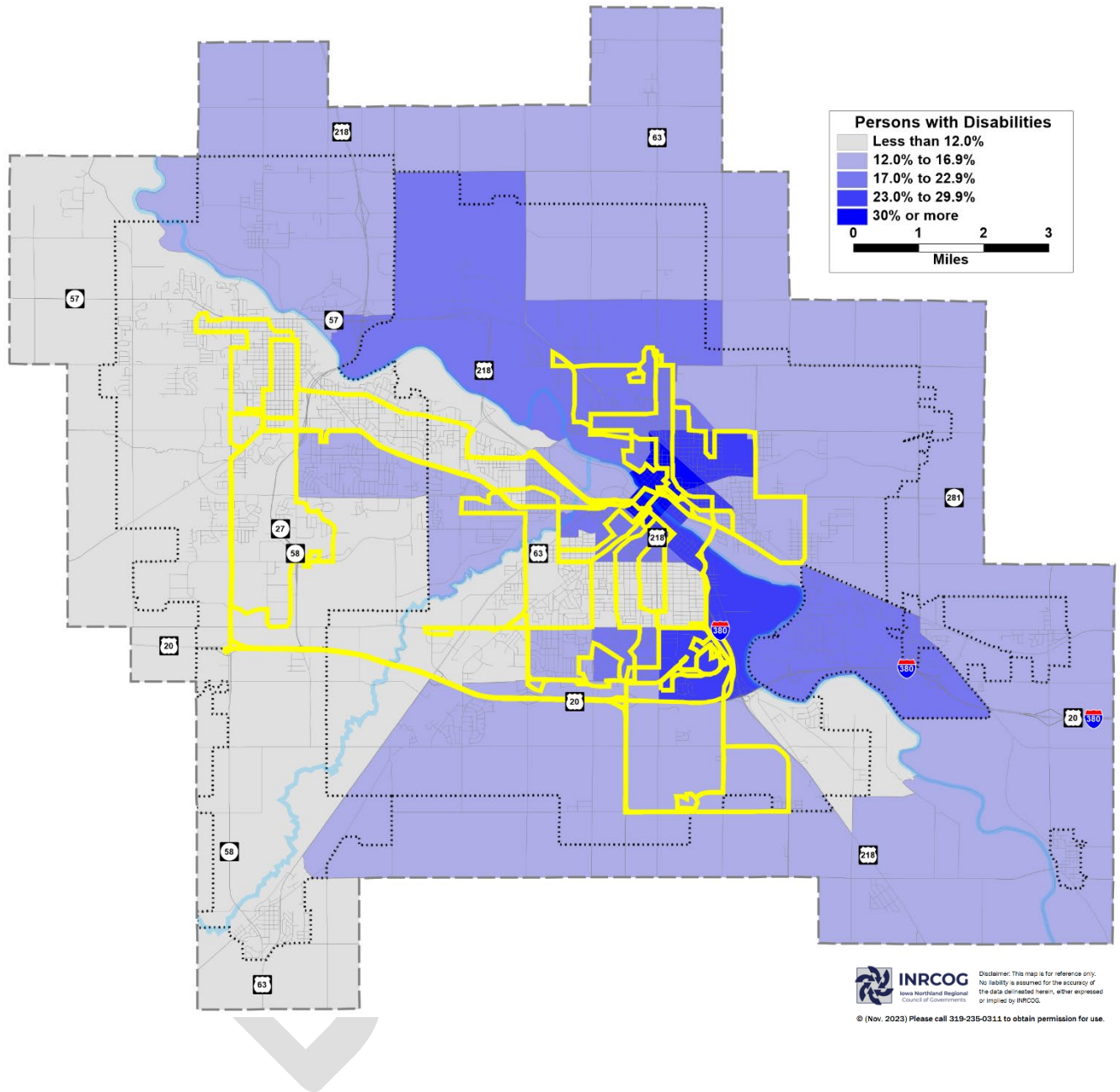
Map 4.6: Ethnic Diversity Index by Census Block Group

Source: U.S. Census Bureau, Decennial Census, 2020



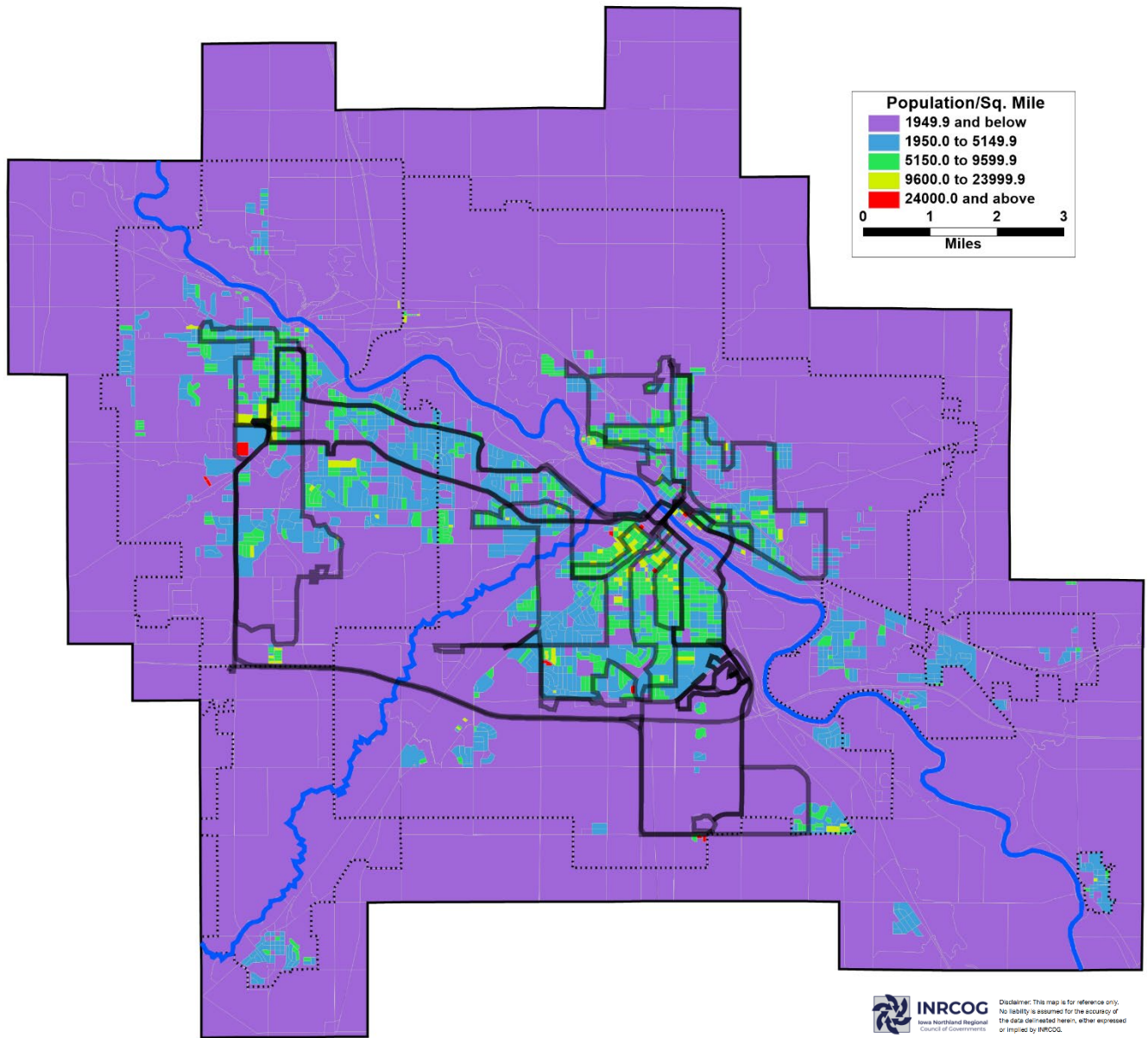
Map 4.7: Persons with Disabilities

Source: U.S. Census Bureau, American Community Survey 5-year Estimates, 2021



Map 4.8: Population Per Square Mile by Census Block

Source: U.S. Census Bureau, Decennial Census, 2020



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Inventory

MET Transit has a total of 39 vehicles in service, including 20 fixed route buses and 19 paratransit buses. Table 4.3 shows the fleet of vehicles and several characteristics.

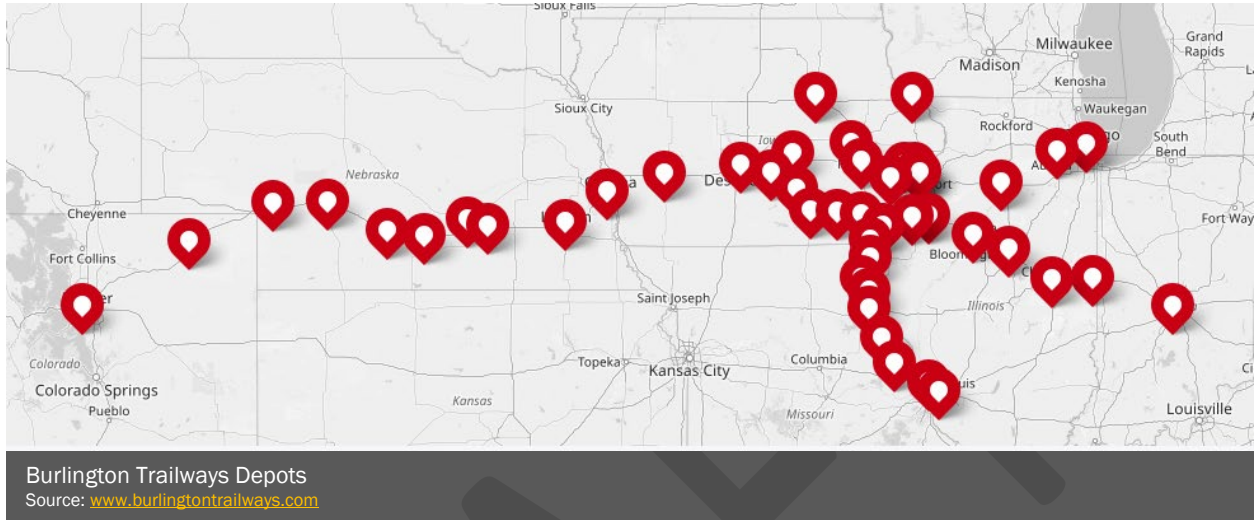
Table 4.3: MET Transit Vehicle Inventory (as of July 2023)

Bus ID	Service	Description	Seats/ Standing	Lock Downs	Date Acquired	Purchase Price	Condition	Mileage	Over ULB*
901	Fixed Route	2009 Gillig-30'	26/18	2	4/20/09	\$288,599	Fair	507,174	Y
902	Fixed Route	2009 Gillig-30'	26/18	2	4/20/09	\$288,599	Fair	495,511	Y
903	Fixed Route	2009 Gillig-35'	30/56	3	4/20/09	\$328,655	Fair	542,892	Y
110	Fixed Route	2010 Gillig-30'	26-40	2	8/23/10	\$345,787	Fair	405,826	Y
210	Fixed Route	2010 Gillig-30'	26-40	2	8/19/10	\$345,787	Fair	439,969	Y
310	Fixed Route	2010 Gillig-30'	26-40	2	8/19/10	\$345,787	Fair	471,510	Y
410	Fixed Route	2010 Gillig-35'	31-50	3	8/19/10	\$355,632	Fair	480,615	Y
510	Fixed Route	2010 Gillig-35'	31-50	3	8/30/10	\$355,632	Fair	405,295	Y
112	Fixed Route	2012 Gillig-30'	26-16	2	3/12/12	\$356,945	Good	451,023	Y
212	Fixed Route	2012 Gillig-30'	26-16	2	2/14/12	\$356,945	Good	405,446	Y
312	Fixed Route	2012 Gillig-30'	26-16	2	3/12/12	\$356,945	Good	441,256	Y
113	Fixed Route	2013 Gillig-30'	26-17	2	2/21/13	\$373,449	Good	460,688	Y
114	Fixed Route	2014 Gillig-30'	26-17	2	3/18/14	\$373,873	Good	361,898	
214	Fixed Route	2014 Gillig-30'	26-17	2	3/19/14	\$373,873	Good	435,086	
120	Fixed Route	2020 Ford Glaval-176"	16-0	4	1/23/20	\$92,995	Excellent	109,552	
220	Fixed Route	2020 Gillig-30'	26-17	4	9/26/20	\$439,801	Excellent	184,111	
820	Fixed Route	2020 Ford Glaval-176"	16-0	4	1/12/21	\$93,219	Excellent	90,965	
221	Fixed Route	2021 Gillig-30'	26-17	4	7/28/21	\$461,800	Excellent	82,719	
122	Fixed Route	2022 Gillig-30'	26-17	4	1/11/23	\$466,178	Excellent	24,795	
222	Fixed Route	2022 Gillig-30'	26-17	4	11/12/23	\$466,178	Excellent	20,726	
301	Paratransit	03 Bluebird-30'	24-18	10	8/21/03	\$154,393	Poor	268,657	Y
412	Paratransit	12 Glaval Titan-183"	16-0	5	10/8/12	\$81,203	Poor	160,013	Y
512	Paratransit	12 Glaval Con.-MD	10-0	7	12/17/12	\$155,674	Good	160,332	Y
115	Paratransit	15 Glaval Legacy-MD	18-0	7	5/1/15	\$136,786	Good	159,262	Y
215	Paratransit	15 Glaval Legacy-MD	18-0	7	5/1/15	\$136,786	Good	167,001	Y
315	Paratransit	15 Glaval Legacy-MD	18-0	7	7/28/15	\$135,186	Good	142,944	Y
415	Paratransit	16 Chev TurtleTop-176"	16-0	5	10/27/15	\$94,329	Good	135,331	Y
515	Paratransit	16 Chev TurtleTop-176"	16-0	5	10/27/15	\$94,329	Good	159,740	Y
615	Paratransit	16 Chev TurtleTop-176"	16-0	5	10/27/15	\$94,854	Good	143,402	Y
116	Paratransit	16 Chev TurtleTop-176"	16-0	5	12/7/16	\$95,806	Good	128,813	Y
216	Paratransit	16 Chev TurtleTop-176"	16-0	5	12/7/16	\$95,806	Good	141,631	Y
117	Paratransit	17 Glaval Legacy-MD	18-0	7	4/7/17	\$140,363	Excellent	113,417	
118	Paratransit	18 Glaval Uni-176"	16-0	5	6/13/18	\$81,318	Excellent	135,444	
218	Paratransit	18 Glaval Uni-176"	16-0	5	11/8/18	\$81,318	Excellent	126,330	
420	Paratransit	20 Glaval Uni-176"	16-0	5	1/12/21	\$93,219	Excellent	63,787	
520	Paratransit	20 Glaval Uni-176"	16-0	5	1/12/21	\$93,219	Excellent	64,928	
620	Paratransit	20 Glaval Uni-176"	16-0	5	1/12/21	\$93,219	Excellent	65,035	
720	Paratransit	20 Glaval Uni-176"	16-0	5	1/12/21	\$93,219	Excellent	70,763	
121	Paratransit	21 Glaval Uni-176"	16-0	5	8/6/21	\$84,270	Excellent	58,193	

*Useful Life Benchmark

Intercity Transit

Burlington Trailways provides intercity bus service throughout Iowa and the Midwest with routes extending as far as Indianapolis, St. Louis, and Denver. Burlington Trailways operates one private intercity bus route with a stop at Central Transfer in Waterloo. The Schedule 1492 bus departs Waterloo daily at 1:30 p.m. to Cedar Rapids, Iowa City, Davenport, and Chicago.



Transit Infrastructure

During the last five years, there has been a steady growth in transit-related infrastructure development within the metropolitan area. In 2018, the City of Waterloo initiated a project to replace its outdated bus benches with ADA-compliant bus stop landings. The previous benches were frequently located in grassy areas, making them inaccessible to individuals using wheelchairs, and their condition had significantly deteriorated over time. The newly installed landings align with existing bus routes, ensuring improved accessibility and convenience for all users.

As part of the University Avenue reconstruction projects in Waterloo and Cedar Falls, new bus shelters and benches have been introduced. These upgraded bus stops boast the distinction of being the first designated bus pull-outs in the metropolitan area. Additionally, plans are underway to implement similar shelters in Waterloo for the La Porte Rd reconstruction and enhancement project.



The University of Northern Iowa Multimodal Transportation Center, located at 1215 W 23rd St in Cedar Falls, was completed in the early 2010s, offering the metropolitan area an additional indoor temperature-controlled transfer facility. The facility's operations are under the supervision of the UNI Department of Public Safety. Bike lockers are provided in front of the facility and may be leased during the school year or over the summer.



Built in the 1980s, MET Transit's Central Transfer facility was established at its present location, situated on the corner of Sycamore St and E Park Ave in downtown Waterloo. The facility not only serves as the primary transfer point for fixed routes but also offers connections to intercity bus services operated by Burlington Trailways. Inside, passengers can find indoor seating, while unsheltered outdoor seating is also available. Additionally, there are restrooms and a staffed ticket booth. Since its original construction, the facility has not undergone any upgrades, making it ripe for improvement. Implementing enhancements like dynamic message signs and tickers, the introduction of greenery with trees and vegetation, installing pedestrian lighting, incorporating public art, and providing bicycle racks would significantly elevate the overall experience for riders.

Passenger Rail

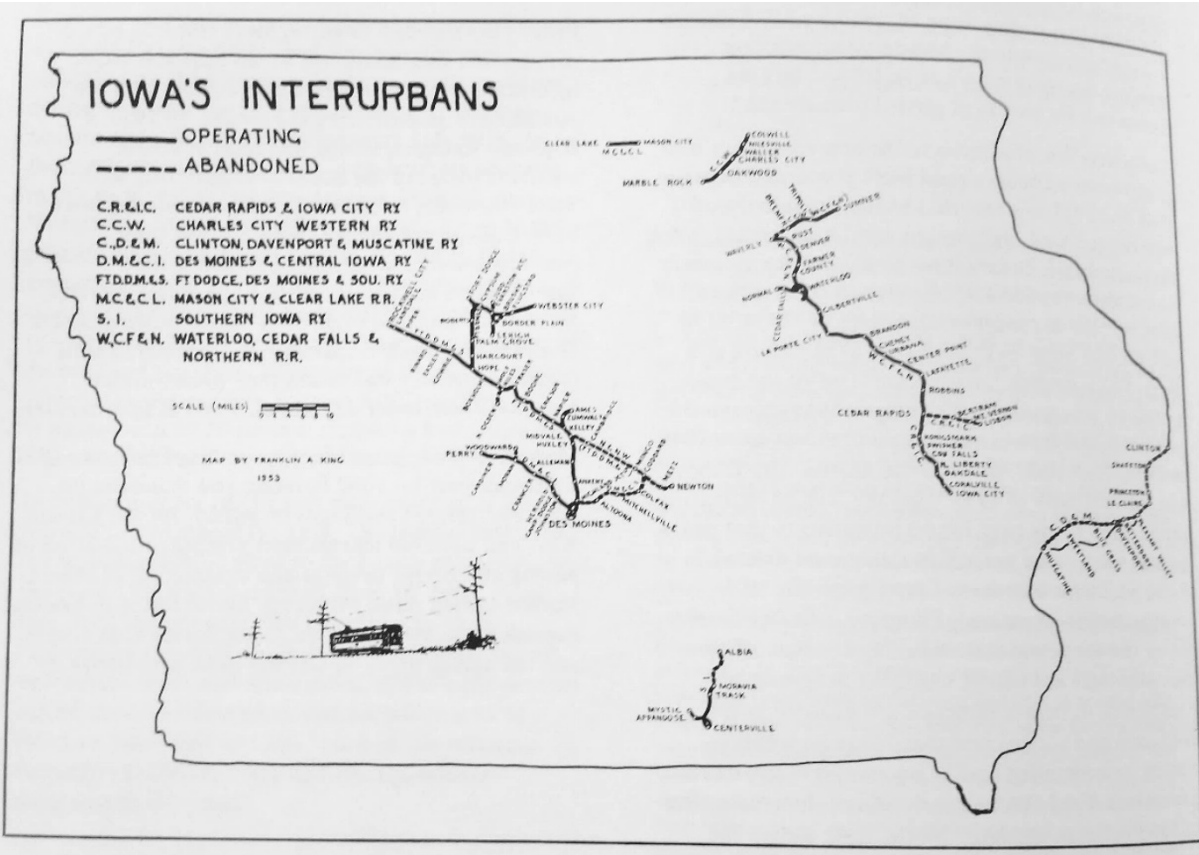
Black Hawk County possesses a rich heritage of passenger rail connectivity. Over numerous decades, the region proudly hosted one of the most expansive interurban rail networks within the state. During the early 1900s, a train journey spanning from Sumner to Waverly, traversing Black Hawk County, and extending onward to Cedar Rapids and Iowa City was entirely feasible. Additionally, passenger rail travel was possible from Waterloo to Chicago, facilitated by the esteemed Land O' Corn service.

Apart from the interurban lines, the city of Waterloo boasted an expansive array of streetcar lines. Among these were electric interurban lines that linked Waterloo with Cedar Falls, Waverly, and Cedar Rapids. Within the boundaries of Waterloo itself, a multitude of streetcar routes existed, namely Sans Souci, Litchfield, Galloway, Cottage, Highland, Linden, West Ninth Line, and Prospect. One remarkable advantage of Waterloo's streetcar



Streetcar at East 4th St & Mulberry St in Waterloo, 1943
Source: University of Iowa Libraries

system was its "Loop", which provided direct access to more than 20 industrial sites. However, by the year 1940, the streetcar service within Waterloo underwent a complete phase-out, being displaced by buses. During the 1950s, the interurban lines also succumbed to closure.



Iowa's Interurban Rail Lines, 1953
 Source: The Palimpsest Publication Vol. XXXV No. 5 by Frank P. Donovan Jr., May 1954

Since 1967, passenger rail services have been absent from the metro area, following the discontinuation of the Land O' Corn by Illinois Central. This passenger railway, which initially commenced operations in 1941, owed its existence largely to John W. Rath, a significant figure in both the Rath Packing Company and the Illinois Central's board of directors. Originally, the Land O' Corn completed its Waterloo-Chicago journey in 5.5 hours. By the mid-1960s, the travel time had extended to 6.5 hours. The train departed from Waterloo in the morning and returned in the evening, serving as a vital transportation link to the greater Chicago area. The Hawkeye served as a counterpart to the west, providing services from Waterloo to Sioux City.



Illinois Central Land O' Corn departing from Chicago to Waterloo, 1967
 Photo by Paul Enebach

Presently, Iowa's passenger rail services are provided by Amtrak through two prominent routes: the California Zephyr journeying from Chicago to Oakland, and the Southwestern Chief route from Chicago to Los Angeles. Throughout their respective journeys, these trains make several stops at various cities en route. Both services primarily cater to southern Iowa, with stops at Fort Madison, Burlington, Mount Pleasant, Ottumwa, Osceola, Creston, and Omaha.

The revival of passenger rail in Iowa and the reconnection of the Black Hawk County metropolitan area to Chicago through passenger rail is of utmost significance for multiple reasons. Firstly, the revitalization of passenger rail would enrich transportation choices. Rail travel offers an effective and eco-friendly alternative to driving or flying, enabling passengers to reach their destinations swiftly and comfortably while easing congestion and reducing carbon emissions. Furthermore, passenger rail has demonstrated its potential to drive economic development in other states that have embraced this mode of transportation. It invigorates local economies by generating job opportunities, attracting businesses, and fostering tourism. Moreover, investing in passenger rail demonstrates dedication to sustainability and environmental responsibility. Rail travel proves significantly more energy efficient than automobiles or airplanes, resulting in lower greenhouse gas emissions per passenger mile.

Illinois Central Railroad

Main Line of Mid-America

CONDENSED TIME-TABLES

CHICAGO, MEMPHIS, NEW ORLEANS, HOUSTON, SAN ANTONIO, LOS ANGELES AND SAN FRANCISCO.

No. 3 Daily The Louisiana		No. 5 Daily Panama Limited, New Or.		No. 25 Daily Southern Exp.		Table A. (Illinois Central)		No. 26 Daily Northern Exp.		No. 4 Daily The Panama Limited		No. 6 Daily Panama Limited, New Or.		No. 22 Daily New Or.	
7:05 P.M.	7:00 P.M.	7:00 A.M.	7:00 A.M.	12:30 A.M.	12:30 A.M.	12:30 A.M.	12:30 A.M.	12:30 A.M.	12:30 A.M.	12:30 A.M.	12:30 A.M.	12:30 A.M.	12:30 A.M.	12:30 A.M.	12:30 A.M.

No. 9 Daily Miami		Table B. (Illinois Central)		No. 10 Daily City of Miami	
5:10 P.M.	8:00 A.M.	Chicago (C.T.)	arr.	10:30 A.M.	10:55 P.M.

No. 11 Daily The New York		Table D. (Central Time)		No. 14 Daily Waterloo		No. 16 Daily Dubuque		No. 12 Daily St. Louis	
7:00 P.M.	8:00 A.M.	Chicago	arr.	12:15 P.M.	9:15 A.M.	7:40 P.M.	8:45 A.M.	4:45 P.M.	9:10 P.M.

No. 5 Daily Service		Table F. (Central Time)		No. 26 Daily Service	
5:00 P.M.	6:45 M.M.	Chicago, Ill.	arr.	5:50 A.M.	7:50 A.M.

No. 17 The Night Diamond		No. 21 The Green Diamond		Table C. Daily Service		No. 22 The Green Diamond		No. 20 The Daylight		No. 18 The Night Diamond	
11:50 P.M.	4:05 P.M.	Chicago (C.T.)	arr.	2:30 P.M.	10:15 P.M.	7:00 A.M.	3:45 A.M.	7:40 P.M.	3:45 A.M.	7:40 P.M.	3:45 A.M.

THE PANAMA LIMITED—Diesel-Electric Streamlined All Pullman Air-Conditioned Train—Only carries revenue passengers having Pullman accommodations.

SUNSET LIMITED—Extra fare from and to all points between New Orleans and Los Angeles. Coach and Pullman space reserved in advance.

Note A—Diesel De Luxe Streamlined Coach and Pullman Train. Stewards. Carries through passengers to Jackson, Tenn., and scheduled stops beyond. All space reserved in advance; special service charge for reserved coach seats.

NOTE—Connecting motor service provided by Illinois Central between North Cairo and Cairo.

Illinois Central Railroad Timetable, 1952
Source: www.american-rails.com/illinois



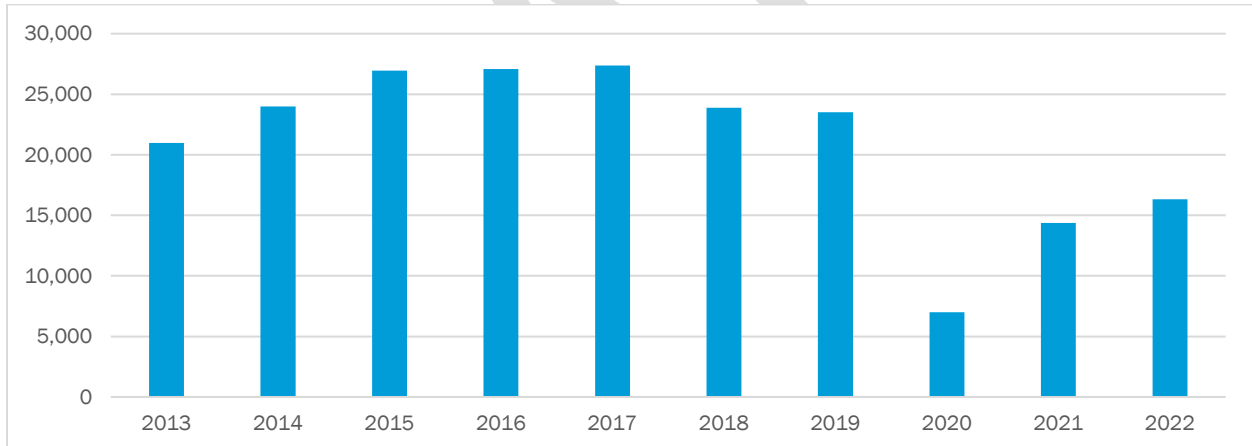
Commercial Air

The Waterloo Regional Airport (ALO) is located on Airport Boulevard immediately off U.S. 218 in the northwest corner of Waterloo. Transit service is not currently available to and from the airport. The facility is owned and operated by the City of Waterloo and overseen by a seven-member Airport Board appointed by the Mayor of Waterloo. The airport is classified as a non-hub primary commercial service airport, offering general aviation and commercial service.



ALO is served by American Airlines with two daily flights to and from Chicago. In 2022, American Airlines signed a two-year contract extension to continue providing twice daily flights through the federal Essential Air Service program. American Airlines, which has been the sole carrier for the Waterloo Regional Airport since 2012, provides flights on 50-seat regional jets operated through the regional brand American Eagle. Prior to the COVID-19 pandemic, the Waterloo Regional Airport was averaging 24,000 annual enplanements. Despite some recovery in air travel from 2020 to 2022, enplanements have not yet returned to pre-pandemic levels (Figure 4.5).

Figure 4.5: Calendar Year Annual Enplanements, Waterloo Regional Airport



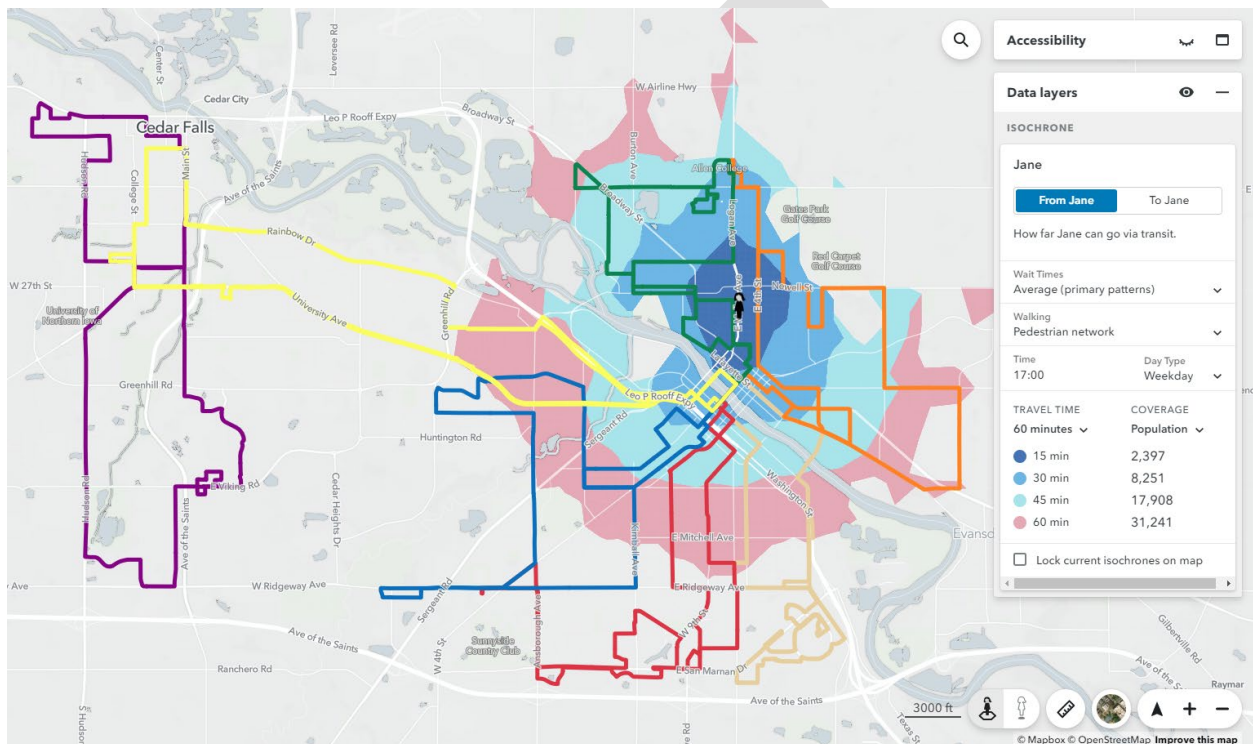
Source: Federal Aviation Administration, Passenger Boarding for U.S. Airports

**WATERLOO
REGIONAL
AIRPORT**

Current and Ongoing Projects & Initiatives

MET Transit Fixed Route Restructure

MPO staff collaborated with MET Transit in assessing the viability of substantial, long-term adjustments to the fixed route system. While minor modifications to individual bus routes have occurred periodically, the overall fixed route network has remained largely unchanged for over two decades. Moreover, the existing looping system for fixed routes prioritizes geographical coverage at the expense of operational efficiency, resulting in a reduction in the system's overall effectiveness. Through the utilization of Remix software, both MET Transit and MPO personnel have been able to meticulously analyze data, unveiling entirely new configurations for the fixed route network. These configurations have been analyzed to discern routes that optimize ridership, coverage, frequency, and cost efficiency. Such analyses have also been instrumental in identifying new transfer hubs, including hospitals and commercial centers, where converging routes from different directions intersect.



The restructured route framework underwent thorough evaluation as an integral component of the Comprehensive Study (as detailed below) and was subjected to public review and comment in 2023. MET Transit is poised to introduce the revamped fixed route system, anticipated to be operational by the conclusion of the 2023 calendar year.

MET Transit Study and Public Input

As many transportation providers experienced with the start of the global pandemic, ridership numbers for MET Transit decreased significantly. The current route structure, travel times, and service hours do not meet many riders' needs, leaving gaps for residents who do not have access to a car in a primarily auto-oriented community. As a solution, MET Transit hired a consultant in February of 2023 to undertake a thorough and systematic assessment of the current public transit system with the objective of identifying areas for enhancement, optimization, and strategic development. This in-depth study aims to provide a comprehensive understanding of the transit system's strengths, weaknesses, opportunities, and challenges. Key goals of the study include operational efficiency enhancement, ridership and accessibility improvement, service

optimization, innovation and technological integration, environmental and sustainability considerations, community engagement, and long-term planning and investment.

During May 2023, the consultant initiated an online survey to collect input and insights from the community. To ensure inclusivity, Black Hawk County Public Health staff played a pivotal role by translating the survey and public notice materials into Bosnian, French, Marshallese, and Spanish languages. In July, two public engagement sessions were held to further solicit initial feedback on the envisioned reconfiguration of fixed routes, service coverage, frequency, and prospective enhancements.



Overall, the comprehensive transit study for MET Transit will serve as a strategic blueprint for the future of public transit service in the metropolitan area, with the aim of creating a more efficient, accessible, and sustainable transit network that meets the evolving needs of the community. The study will empower and engage residents, stakeholders, and key partners in shaping the future of the public transit system. Ultimately, the community-led approach ensures that the resulting recommendations and decisions reflect the values and priorities of the people who rely on and benefit from the transit system, fostering a stronger sense of ownership, connectivity, and pride in the local transportation infrastructure.

Midwest Interstate Passenger Rail Commission

The Black Hawk County MPO is supportive of efforts to engage in planning for and establishing a more robust network of infrastructure conducive to passenger rail transportation across Iowa. Growing support across the Midwest has shown promise and the consensus is that the State of Iowa should have equal representation at the planning table. It is for this reason that in 2023, the Black Hawk County MPO drafted a Letter of Support encouraging congressional leaders to reestablish involvement in the Midwest Interstate Passenger Rail Commission (MIPRC). This regional interstate compact focuses on promoting and advocating for passenger rail service in the Midwest region. Established in 2000, MIPRC plays a crucial role in coordinating efforts among member states and fostering regional cooperation to enhance connectivity and mobility through passenger rail services. It is for these reasons that **the MPO is strongly urging Iowa Legislators to support legislation for Iowa's rejoining the MIPRC.**

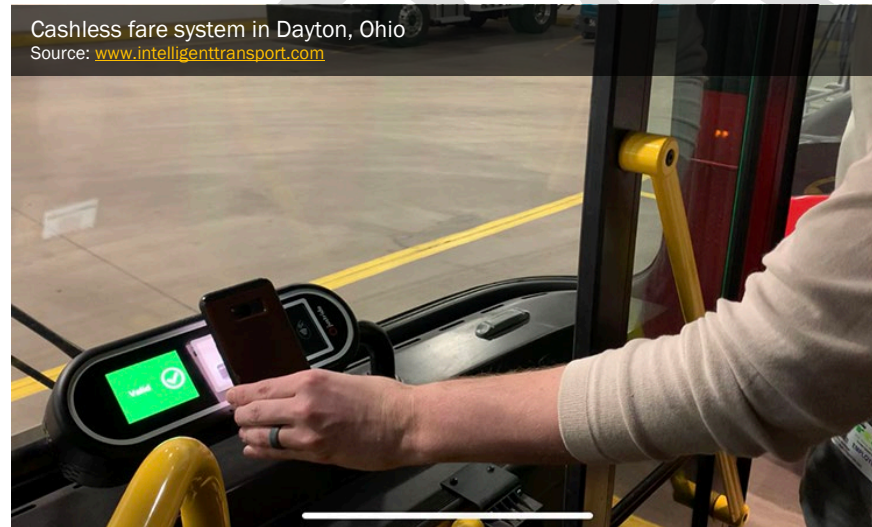
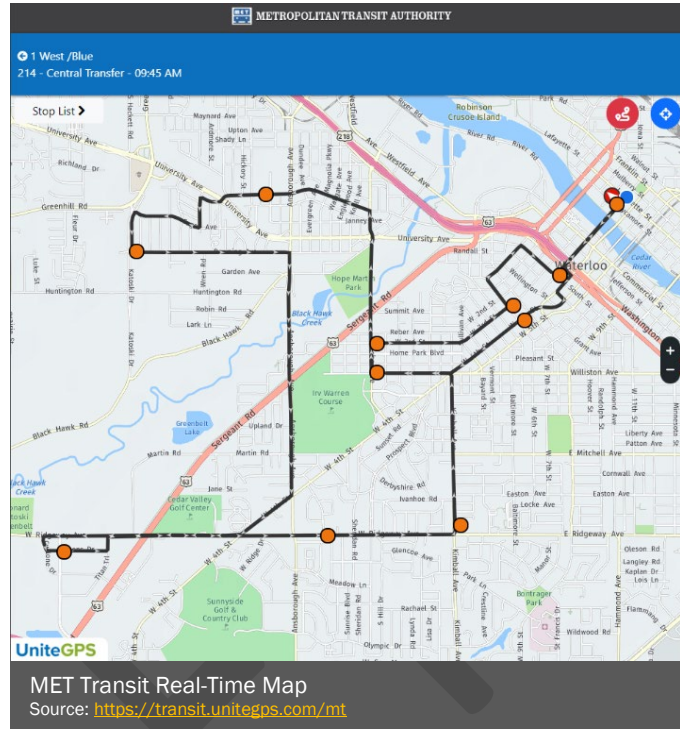


www.miprc.org

Technology

MET Transit has equipped all buses with GPS, enabling passengers to conveniently monitor bus locations through an interactive online map in real time. This cutting-edge GPS technology also opens avenues for displaying live updates on television screens or tickers at key central points, a feature that was previously unavailable. The prospect of these advancements has captured the attention of MET Transit. Furthermore, MET Transit could collaborate with external entities like hospitals and educational institutions, potentially playing a pivotal role in introducing this technology to more transfer points.

In the last decade, a range of technological advancements have been implemented, notably the integration of electronic fareboxes designed to accept both cash and traditional fare tickets. However, these fareboxes currently lack the capability to process electronic payment methods like contactless cards, mobile wallets, and digital apps. Furthermore, the coordination of paratransit service is efficiently managed through EchoLane, with each bus driver equipped with user-friendly tablets to ensure seamless operational processes.



Cashless fare system in Dayton, Ohio
Source: www.intelligenttransport.com

The integration of electronic payment methods on MET Transit buses would greatly enhance the passenger experience and operational efficiency. Firstly, electronic payment options would streamline the boarding process, reducing the time passengers spend while boarding and making transactions swift and hassle-free. This not only enhances overall rider satisfaction but also encourages greater public transportation usage by

catering to the preferences of modern, tech-savvy commuters. Additionally, the transition to electronic payment methods reduces the need for exact change, enhancing accessibility for riders from diverse backgrounds. The adoption of updated fareboxes with electronic payment options represents a pivotal step towards a more efficient, inclusive, and convenient public transportation system.

Ridesharing and Vanpooling

The emergence of Uber and Lyft services in Black Hawk County has introduced a transformative shift in the transportation landscape. These innovative platforms have swiftly gained prominence nationally as convenient alternatives to traditional modes of transit. By leveraging smartphone technology and digital interfaces, ridesharing services can offer residents an unprecedented level of flexibility and accessibility in commuting.



Despite their convenience, ridesharing services have certain downsides that warrant consideration. One notable drawback is limited availability in smaller urban areas. This can result in longer wait times or even unavailability of rides when needed. Additionally, the reliance on ridesharing services may contribute to increased traffic congestion and competition for road space, particularly in urban areas.

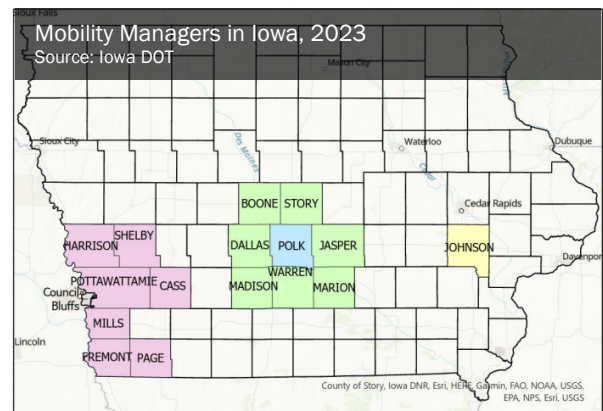


Vanpooling, exemplified by programs like Commute with Enterprise, offers a compelling solution to the challenges of commuting and limited transit availability by fostering a shared and efficient transportation arrangement. Commuters come together in a single van, typically organized and managed by a service provider like Enterprise, to collectively travel to and from work. Vanpooling offers participants cost savings compared to driving alone. Moreover, these programs often provide a valuable alternative for individuals who lack

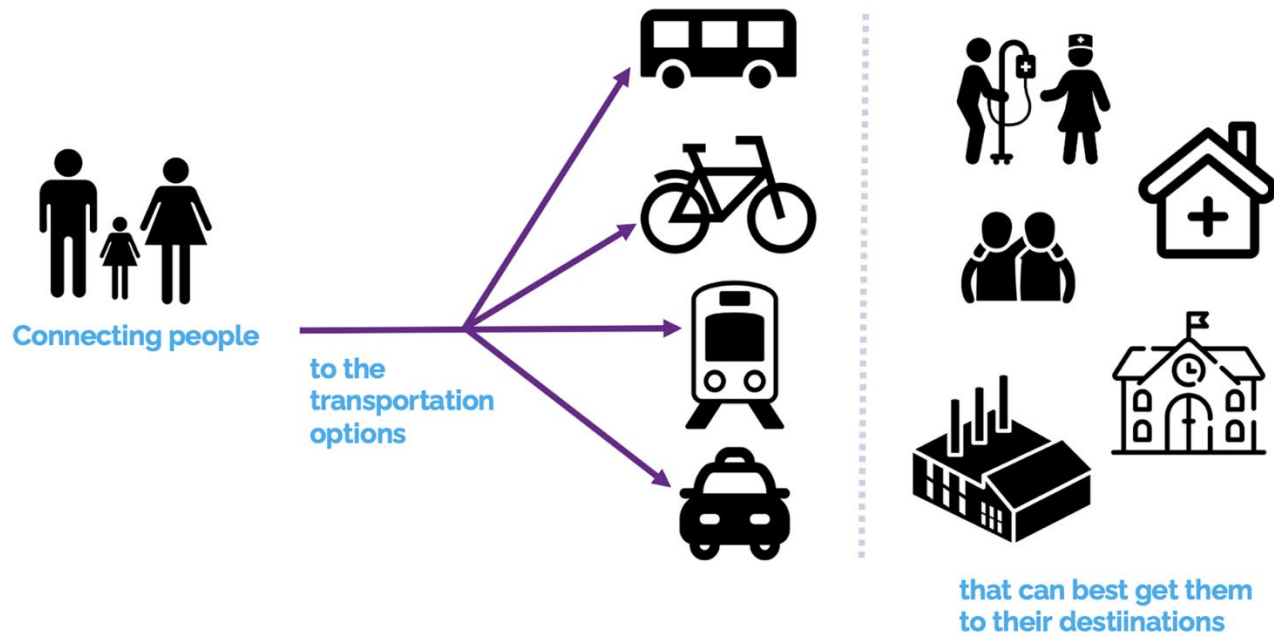
access to traditional public transportation options or face long commutes. Commute with Enterprise currently has operations established in Cedar Rapids, Des Moines, and the SIMPCO region in Sioux City. Both MET Transit and OnBoard Public Transit through INRCOG have demonstrated a keen interest in establishing a vanpool program and are actively investigating potential options and the viability of such an initiative.

Mobility Management

Mobility management has been a planning emphasis both nationally and in Iowa for well over a decade. The roles of a Mobility Manager (or Mobility Coordinator) offer a multitude of benefits that contribute to the efficient functioning and enhanced utilization of public transportation systems. A mobility manager serves as a pivotal link between various transportation agencies, local governments, and the community, working to develop comprehensive mobility solutions. This role fosters the integration of different modes of transportation, such as public transit, ridesharing, cycling, and walking, to create a seamless and sustainable mobility network. The mobility manager's emphasis on inclusivity ensures that transportation solutions cater to the diverse needs of the community, including individuals with disabilities and underserved populations.



What is Mobility Management?



www.nationalcenterformobilitymanagement.org/for-mobility-managers/

Presently, there is an absence of a designated mobility manager within Black Hawk County and the encompassing six-county region overseen by INRCOG. Collaborative discussions have taken place between MET Transit and OnBoard Public Transit regarding the shared recruitment of a mobility manager, a recognized necessity. The Iowa DOT has established a Statewide Mobility Manager who undertakes the crucial role of educating public transit agencies, planning entities, and other statewide organizations about the inherent advantages linked to effective mobility management practices.

Bus Replacement

MET Transit is currently confronted with the need to modernize its ageing fleet of buses. A considerable portion of MET Transit's bus fleet was procured under the stimulus package instituted in 2009, rendering them significantly aged. **By 2022, an alarming 58 percent of the standard buses and 65 percent of the mini-buses in MET Transit's possession have surpassed the federal Useful Life Benchmark (ULB).** This situation is not exclusive to MET Transit, as a notable 63 percent of buses across the state find themselves in a similar state of exceeding the ULB status, as reported by the Iowa Public Transit Association.

In the absence of an increase in state and federal transit assistance, MET Transit may find itself at a potential crossroads where difficult choices must be made to ensure the continued viability of operations. Limited state and federal funding could necessitate raising local revenues, scaling back on essential services, deferring necessary repairs and maintenance, thereby potentially exacerbating future costs, or navigating a complex balance of these alternatives. Each option presents its own set of implications. Opting to increase local revenues could strain Waterloo and Cedar Falls' budgets and place an additional burden on local taxpayers. Conversely, reducing services might undermine the agency's mission of providing accessible and efficient transit solutions, affecting the mobility and quality of life for residents who rely on these services. Delaying repairs and maintenance, while appearing to alleviate immediate budgetary pressures, could ultimately lead to higher costs down the road, jeopardizing the safety and reliability of the transit infrastructure. The interplay of these choices underscores the **critical need for enhanced state and federal support to ensure the sustainability and effectiveness of MET Transit's operations in serving its community.**

MET Transit Planned Projects

Table 4.4 provides a comprehensive overview of transit projects that have been incorporated into the MPO Transportation Improvement Program (TIP) for FY 2024-2027. While the table demonstrates a considerable number of buses slated for replacement, MET Transit is unlikely to replace all the listed vehicles. The Iowa DOT uses the Public Transit Management System to prioritize statewide vehicle replacements which are determined by factors like age and mileage. Buses are selected to be replaced based on the statewide ranking and funding available. Iowa has over 1,700 vehicles statewide, all competing for the same amount of limited dollars. As a result, only a small number of bus replacements are anticipated annually, at most. The amount of federal aid shown below for capital expenses is not guaranteed.

Funding Source	Expense Type	Unit #	Description	Fiscal Year	Total Cost	Federal Aid
5339	Capital	120	Light Duty Bus (176" WB)	2024	\$179,574	\$152,638
5339	Capital	218	Light Duty Bus (176" WB)	2024	\$171,338	\$145,638
5339	Capital	116	Light Duty Bus (176" WB)	2024	\$171,338	\$145,638
5339	Capital	216	Light Duty Bus (176" WB)	2024	\$171,338	\$145,638
5339	Capital	415	Light Duty Bus (176" WB)	2024	\$171,338	\$145,638
5339	Capital	515	Light Duty Bus (176" WB)	2024	\$171,338	\$145,638
5339	Capital	615	Light Duty Bus (176" WB)	2024	\$171,338	\$145,638
5339	Capital	115	Medium Duty Bus (to 28 ft.)	2024	\$265,612	\$225,770
5339	Capital	215	Medium Duty Bus (to 28 ft.)	2024	\$265,612	\$225,770
5339	Capital	315	Medium Duty Bus (to 28 ft.)	2024	\$265,612	\$225,270
5339	Capital	117	Medium Duty Bus (to 28 ft.)	2024	\$265,612	\$225,270
5339	Capital	512	Medium Duty Bus (to 28 ft.)	2024	\$265,612	\$225,270
5339	Capital	113	Heavy Duty Bus (30-34 ft.)	2024	\$660,795	\$561,676
5339	Capital	112	Heavy Duty Bus (30-34 ft.)	2024	\$660,795	\$561,676
5339	Capital	410	Heavy Duty Bus (35-39 ft.)	2024	\$671,453	\$570,735
5339	Capital	510D	Heavy Duty Bus (35-39 ft.)	2024	\$671,453	\$570,735
5339	Capital	210D	Heavy Duty Bus (30-34 ft.)	2024	\$660,795	\$561,676
5339	Capital	310D	Heavy Duty Bus (30-34 ft.)	2024	\$660,795	\$561,676
5339	Capital	903	Heavy Duty Bus (30-34 ft.)	2024	\$660,795	\$561,676
5339	Capital	110	Heavy Duty Bus (30-34 ft.)	2024	\$660,795	\$561,676
5339	Capital		Heavy Duty Bus (30-34 ft.)	2024	\$660,795	\$561,676
5339	Capital		Heavy Duty Bus (30-34 ft.)	2024	\$660,795	\$561,676
5307	Operations		Gen. Op./Maintenance/Admin./Planning	2024	\$4,640,000	\$2,320,000
5303	Planning		Transit Planning	2024	\$120,000	96,000
5310	Operations		Preventative Maint. & Mobility Coordinator	2024	\$130,000	\$104,000
5339	Capital	820	Light Duty Bus (176" WB)	2025	\$171,338	\$145,638
5339	Capital	212	Heavy Duty Bus (30-34 ft.)	2025	\$660,795	\$561,676
5339	Capital	312	Heavy Duty Bus (30-34 ft.)	2025	\$660,795	\$561,676
5339	Capital	114	Heavy Duty Bus (30-34 ft.)	2025	\$660,795	\$561,676
5339	Capital	214	Heavy Duty Bus (35-39 ft.)	2025	\$681,453	\$570,735
5307	Operations		Gen. Op./Maintenance/Admin./Planning	2025	\$4,640,000	\$2,320,000
5303	Planning		Transit Planning	2025	\$120,000	96,000
5310	Operations		Preventative Maint. & Mobility Coordinator	2025	\$130,000	\$104,000
5339	Capital	420	Light Duty Bus (176" WB)	2026	\$171,338	\$145,638
5339	Capital	520	Light Duty Bus (176" WB)	2026	\$171,338	\$145,638
5339	Capital	620	Light Duty Bus (176" WB)	2026	\$171,338	\$145,638
5339	Capital	720	Light Duty Bus (176" WB)	2026	\$171,338	\$145,638
5307	Operations		Gen. Op./Maintenance/Admin./Planning	2026	\$4,640,000	\$2,320,000
5303	Planning		Transit Planning	2026	\$120,000	96,000
5310	Operations		Preventative Maint. & Mobility Coordinator	2026	\$130,000	\$104,000
5339	Capital		Light Duty Bus (176" WB)	2027	\$171,338	\$145,638
5307	Operations		Gen. Op./Maintenance/Admin./Planning	2027	\$4,640,000	\$2,320,000
5303	Planning		Transit Planning	2027	\$120,000	96,000
5310	Operations		Preventative Maint. & Mobility Coordinator	2027	\$130,000	\$104,000

2022 Public Input Survey

In September 2022, the personnel of the MPO carried out a pair of internet-based surveys. These surveys were aimed at collecting feedback from residents within the jurisdictions of the MPO. The subsequent details provided here highlight survey responses that hold significance within the context of this chapter.

Figure 4.6: Public Input Survey, Rounds One and Two asking respondents how they would rate our public transit:

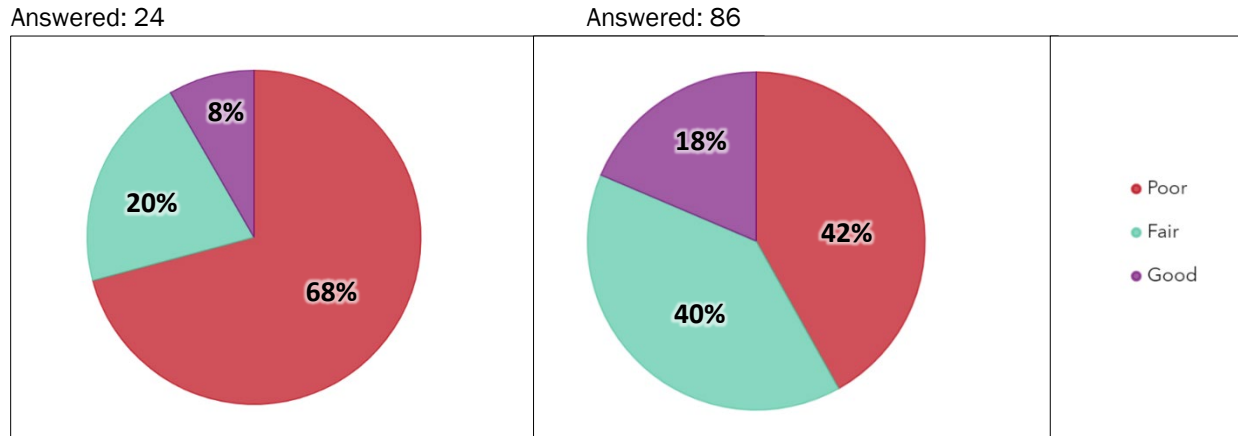


Figure 4.7: Public Input Survey, Rounds One and Two asking respondents how often they ride public transit:

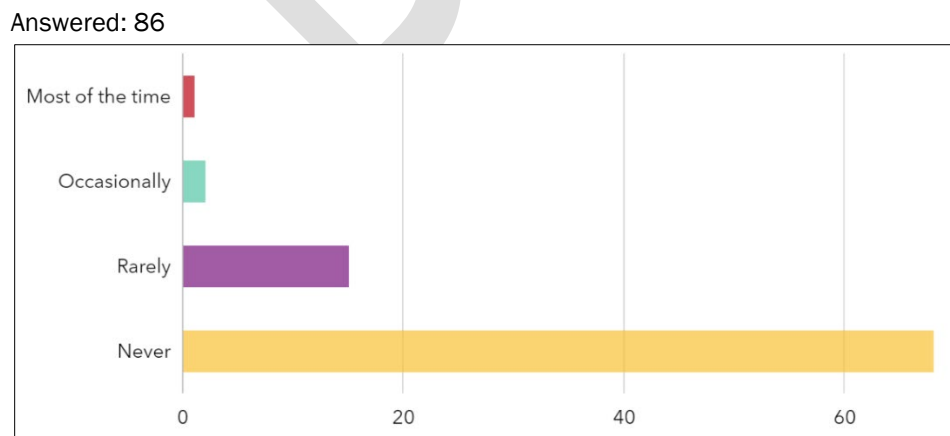
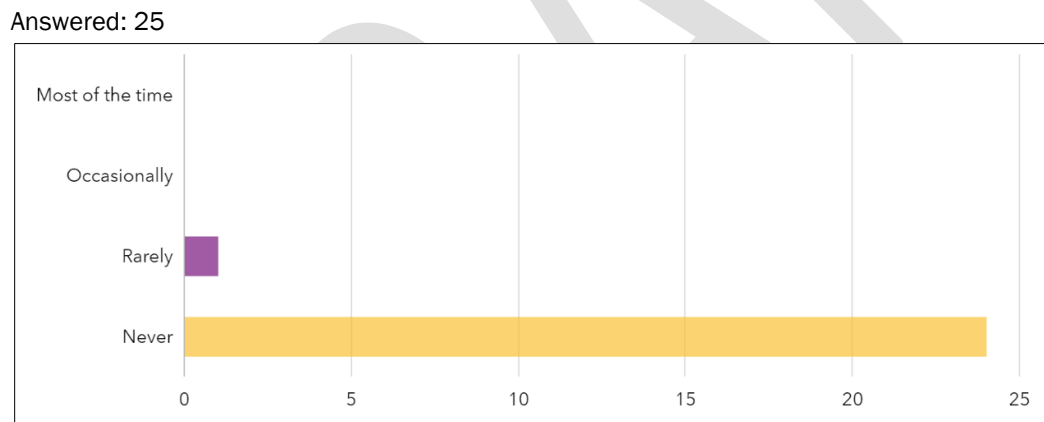


Figure 4.8: Public Input Survey, Rounds One and Two asking respondents how our public transit could be improved (e.g., availability, connectivity, efficiency, hours of operation, etc.):

Worded Responses (Round One):

- “Using smaller buses so it's cheaper to operate. Big buses drive around mostly empty. Buses are very important to have for people without a car, though.”
- “Transit to and from the airport, University and maybe some routes to the industrial park in Cedar Falls. Have a bike trail system that John Deere PEC and Engine Works.”
- “Not sure. I know with so many shopping areas out south of town, I wonder how accessible transit is to that area, the unity point /western home community, Uni campus, university avenue and downtown areas are to the most vulnerable who need those areas for health care, shopping, etc.”
- Include direct routes from residential facilities (men and women) for those not able to drive to get to bigger work such as Tyson, Bertch cabinets, foundries, Deeres, Hyvee, businesses over by cattle congress, omega cabinets, other larger businesses.”
- “I'm not sure I've ever seen the MET transportation here in Hudson”
- “As I don't typically ride the bus, I'm cautious providing my opinion addressing most of these issues. However, I've received feedback that the system is limited with staff currently - much like many other local businesses. I would love to see a successful public transit system.”
- “As far as I know, I would have to walk about 6 blocks to get to a bus. I think we should focus on driverless cars that can pick you up at your place.”
- “All of the examples would benefit our transit. A large problem is that most people don't know how to use it, the routes, or schedules. I have friends who didn't even know we have public transit. And with people who do know about it, many see it as an option that is only utilized by those who don't have a vehicle.”
- “*Provide more customer pickup stations. *Provide cover/shelter from the weather for inclement weather: Snow, rain, etc. People do not want to stand out in the rain/wind/snow. *Los Angeles uses some hydrogen cell buses-larger cities do too. Gov't grants are available to help with the cost of the hydrogen cell buses. *Better promotion of public service. Where can you find a schedule???? How easy is it to find out where/when to catch a bus??”

Worded Responses (Round Two):

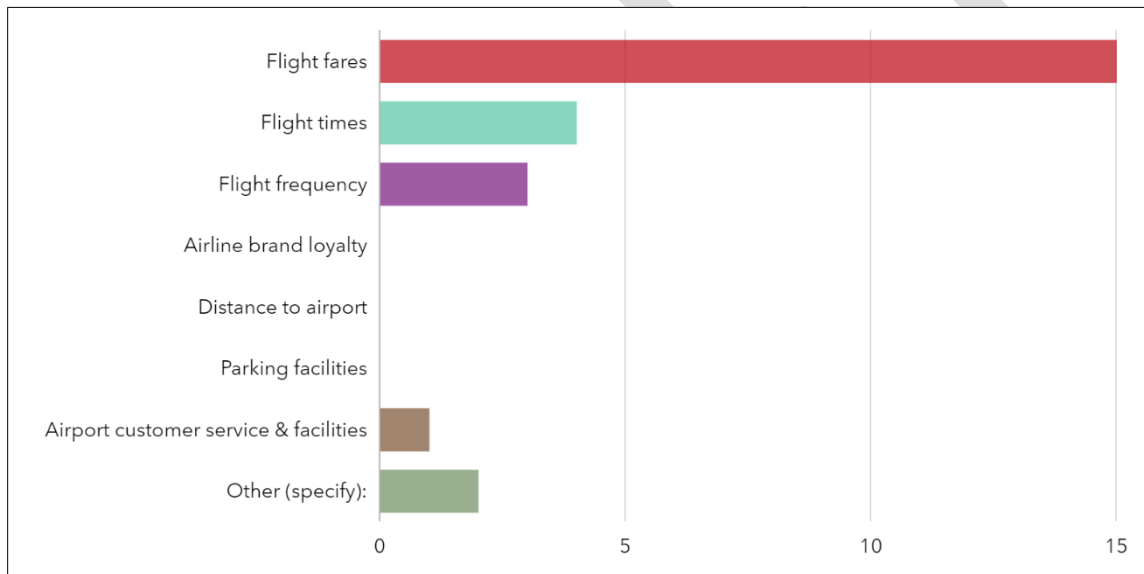
- “Connectivity.” (x3)
- “To be practical for a commuter they need to reach bus stops at a greater frequency. I understand this is a chicken and egg issue where ridership levels don't justify greater frequency, though ridership may not ever get up there unless frequency is high enough for a good amount of time for people to change their commuting paradigm. The City and Metro need to coordinate efforts to create more meaningful nodes where frequent bus stops are better justified by greater intensity development.”
- “They don't service my home area but there's not a need either.”
- “There needs to be bus routes to Tyson's. Tyson's hires many disadvantaged people who have no transportation. It's hard to get to and from Tysons to keep those jobs.”
- “Since I don't use it, it's hard for me to say, but I would imagine the hours that it's available need to be expanded, and perhaps smaller buses so they were more efficient-I doubt they are ever full.”
- “Seems to run fairly regular. Patrons need a better way to find out the routes in the city and which busses go where. Where do you even find the routes and bus stop sites? Online? Newspaper? Can brochures be left at area businesses?”
- “Public Transit is not hitting the populations of highest need such as low income housing complexes in Evansdale and Waterloo. How is low income person supposed to get home from work before transportation stops at 6pm?”
- “Public transit is needed to ensure all people can get to work and to appts.”
- “Provide reliable transportation with routes that serve the majority of the citizens.”
- “Pick up locations could be added. There are no routes to Raymond so it's really not viable for me to use public transit.”

- “Our residents would really like to have access to the MET system. Adding a couple strategic stops to Evansdale and Elk Run Heights would be a huge benefit to our communities.”
- “New buses, preferably electric. Better shelters. Anything to destigmatize public transit and make it both more pleasant for captive riders and more enticing to choice riders, This might increase ridership and make it possible to offer more routes, more frequently. I'm looking forward to the new routes since my return trip from work would be much faster. Also, train drivers to be less draconian about where to stand at bus stops (often poorly marked) or whether to drop people off between stops.”
- “Need public incentives to help promote more public transit.”
- “Need a loop system for workers and better connectivity, hours of operations, efficiency, etc.”
- “More! I never take public transport because it is not efficient and too limited.”
- “more signage along the routes to know when and where the bus stops more frequent pick up times.”
- “More routes, more stops.”
- “More routes that connect with destinations or connectivity. Redo the routes so they are shorter or greater efficiency from the riders' point of view.”
- “more riders are needed in order to justify more routes and more frequent runs.”
- “More busses, more visible stops, more routes that connect neighborhoods and destinations.”
- “Modernize and maintain! Our buses look old and dirty. Our bus stops - the few we have - look old and dirty. More bus stops with clearly marked schedules and routes that include centralized locations in residential areas. And again, MODERNIZE THE LOOK! We look like we're operating straight out of 1987. Aesthetic means a lot more than you might think.”
- “Marketing? public outreach? i rode in grade school coming from a very small town. it was confusing and intimidating.”
- “Make the scheduling of paratransit available online.”
- “Longer hours of operation to Hawkeye CC.”
- “It would have been nice to have a route to John Deere PEC/Engine Works when the snow was super deep.”
- “It does not work for me to get to work. I better off getting a bike to get to work.”
- “I understand the challenges to having public transportation in a community without the density to fully support options. I have live two other similar sized MPOs where one community only operated on a call a bus system. I think MET does a decent job considering the challenges it faces.”
- “I know it's a chicken and egg thing - need more riders to afford more connectivity/hours versus need more hours/connectivity to get more riders. I've seen smaller buses running and that seems like a good efficiency.”
- “I haven't utilized our public transit system so I feel inadequate to respond with the available options but in downtown Cedar Falls there needs to be better parking for events. I know there's discussion about a parking ramp but maybe for large events you can offer free parking at the UNI dome then shuttle people to downtown with public trans vehicles leaving every half hour or hour.”
- “I have never used public transit. The above is not applicable to me.”
- “I feel the routes and times are not efficient for employment opportunities for our residents.”
- “I don't use it enough to tell. I do believe that the number of stops between Wloo, CF and UNI has gone down since a few years ago.”
- “I am lucky enough to ride my bike.”
- “Hudson has NO form of transportation.”
- “How well does MET serve the UNI campus? I recall a route was dropped many years ago.”
- “Hours of operation. Need to run later at night for those who work at night.”
- “Get Trams/light rail.”
- “From what I hear, it takes a long time to get places using busses. There should be benches and enclosed areas (with trash cans) at bus stops, specifically in church row neighborhood.”
- “Frequency and hours of operation.”
- “Everything: increases to availability, connectivity, efficiency, hours, number of routes/buses. I've never taken public transit simply because it won't get me where I need to go at a time I need to go.”
- “Efficiency. I have looked into taking public transit to work before in order to reduce my gas emissions, but the bus would take me 1 hour and 45 minutes to get to my office. It takes 15 minutes when I drive. That huge time difference is much too big for me to reasonably take the bus.”

- “Efficiency.”
- “Consider use of electric busses where feasible.”
- “Better routes to underserved communities; better scheduling options with connectivity to areas where workers without individual transportation can get to and from work during peak shift changes hours.”
- “Availability, lower wait times between buses, better promotion of the service.”
- “Availability in terms of routes.”
- “All of the above; buses do not serve those who most need it. Needs overhaul.”
- “A comprehensive transit study needs to be done to identify needs, efficiencies, etc. The large transit vehicles currently used, seem to be a way to spend funds versus actually meeting the needs of the MPO.”
- “1) Go to locations that are actually needed, tyson, theme park, downtown wl and cf, john deere locations, UNI 2) Go at times that would, actually help people right now, the buses do not actually help the people that need to use the bus. 3) Cover the bus stops. We have a lot of ice and snow, COVER them so people are more inclined to use them.”

Figure 4.9: Public Input Survey, Rounds One and Two asking respondents what the biggest factor is that influences their decision on whether to fly from the Waterloo Regional Airport:

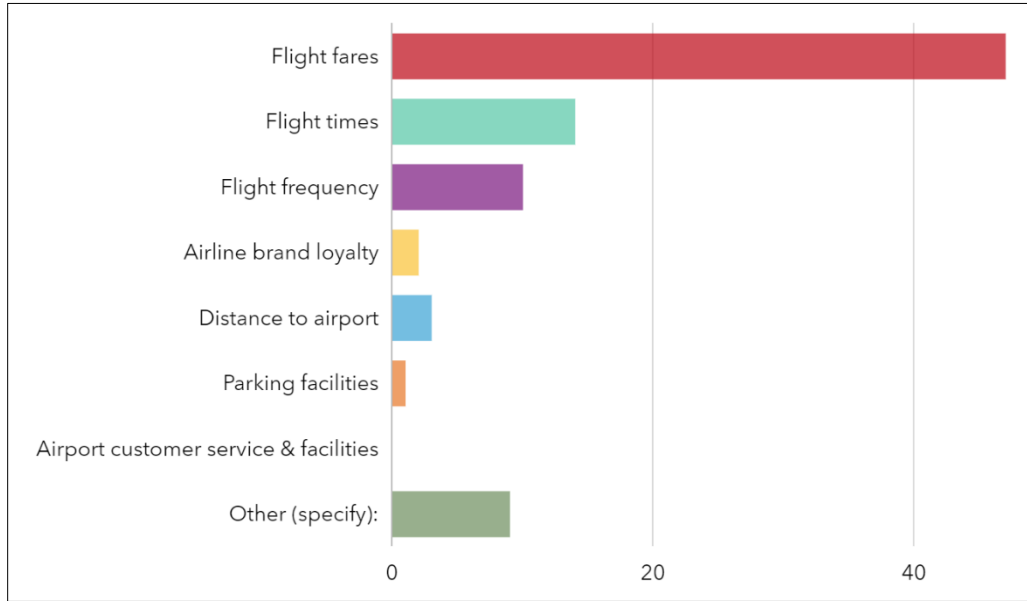
Answered: 25



Other (specify):

- “No one reason – might be the rates; might be the flight times; might be the airline brand; depends on where/what I am going.”
- “Destination and connection flights.”

Answered: 86



Other (specify):

- “No nonstop.”
- “I like direct flights.”
- “Flight options – direct flights to other airports than Chicago.”
- “Direct flights.”
- “Destination.”
- “Cost AND is the flight actually going to happen. So many times the Waterloo flight is canceled and then the last minute they want me to drive to Cedar Rapids, that isn’t always an option.”
- “Convenience of connections to other destinations.”
- “Connection delays or failures at Chicago O’Hare are a problem when flying from Waterloo.”
- “As of current, I have no experience flying- but if I did, it would likely come down to cost and convenience fares.”

Figure 4.10: Public Input Survey, Rounds One and Two asking respondents what their biggest transportation challenge is in the MPO:

Worded Responses (Round One):

- “We should try to get a second tenant airline at Waterloo Airport as AA does a poor job.”
- “Not enough Waterloo flights.”
- “No competitive price to depart from Waterloo. Not enough flights and the price is not competitive with Cedar Rapids or Des Moines.”
- “Lack of rail or more frequent air service to the Cedar Valley.”
- “I would love to have more flights to more destinations. Not a single hub. Not everyone want to fly through or to Chicago. And you don't want to be grounded if your single flight of the day is cancelled. (Which happens often.)”
- “I don’t feel challenged, but if the cycling infrastructure and public transit were better, it would increase our quality of life. We have been riding on unfriendly streets for a long time, but others who haven’t, would/do find it very intimidating.”
- “Airport is way too limited in flights.”

Worded Responses (Round Two):

- “Would really appreciate if Waterloo airport could provide more flights, more destinations and more reasonable prices.”
- “Waterloo lacks a decent airport due to lack of flights and hubs. One airline to one location is not an effective route. Close Waterloo and concentrate on Eastern Iowa Airport.”
- “Transportation in suburbs of Waterloo and Cedar Falls.”
- “Transportation for the older citizens to Waterloo/Cedar Falls who don't or can't drive.”
- “The lack of trains from this area to major metropolitan areas like Chicago and Minneapolis.”
- “The airport doesn't have enough flights and those flights are canceled on a whim.”
- “That everyone feels they have to use a car or vehicle to get around.”
- “Public Transportation options.”
- “Public transportation is very inadequate and non-existent in most neighborhoods.”
- “Need additional flights to other cities.”
- “Mass transit accessibility and scheduling.”
- “Limited bus service. Improvements might require raising fares for the first time in 20 years or so, which would mean working with social service agencies to distribute bus passes to people who need them. Employers like Best Western, HyVee, McDonalds etc. should also step up and help employees with bus fare.”
- “Lack of good public transit.”
- “Lack of flights. I always fly out of Cedar Rapids or Minneapolis.”
- “I would like to take more public transit but the efficiency and frequency of buses is not conducive with how quickly I need to get places.”
- “Flying.”
- “Bus service for low income people.”
- “Being able to get around without a car.”



Chapter 5 – Bicycle and Pedestrian

The majority of bicycle- and pedestrian trips in Black Hawk County are categorized as physical and leisurely activities. However, approximately 8 percent of households in Black Hawk County have no vehicles available, making bicycling and walking a vital mode of transportation for many community members.

The Importance of Bicycle and Pedestrian Infrastructure

Road construction projects in the U.S. have primarily been planned with the goal of moving automobiles and traffic through a corridor as quickly and efficiently as possible. This type of auto-centric planning typically leaves behind bicyclists and pedestrians as an afterthought, resulting in unfriendly, hazardous, and even deadly crossing points. Common issues include inefficient or aging infrastructure, a lack of ADA-compliance, and a lack of protective barriers for vulnerable road users against busy traffic and high-speed limits.



www.smartgrowthamerica.org/dangerous-by-design/

A Nationwide Shift

Transportation and urban planning in the U.S. have undergone a drastic shift towards comprehensive multimodal planning in recent years. Policy approaches and tactics such as Vision Zero and Complete Streets provide a framework that encourages safe, accessible, and convenient access to our nation's roads for all modes of transportation. This shift has also been highlighted by the 2021 Bipartisan Infrastructure Bill, which includes various funding sources dedicated to projects that implement multimodal inclusion. While Complete Streets approaches expand across the nation, it should be noted that they are not solely reserved for major cities; rather, they can be applied to any road where various types of road users commonly interact with each other.

METRO STATS

134.8

Miles of bike infrastructure

18,100

Miles walked daily by residents¹

6.8%

Of all trips are walking trips¹

9,167

Residents have bicycled in the past week on average¹

7

Non-motorized fatalities & serious injuries per year²

Sources:

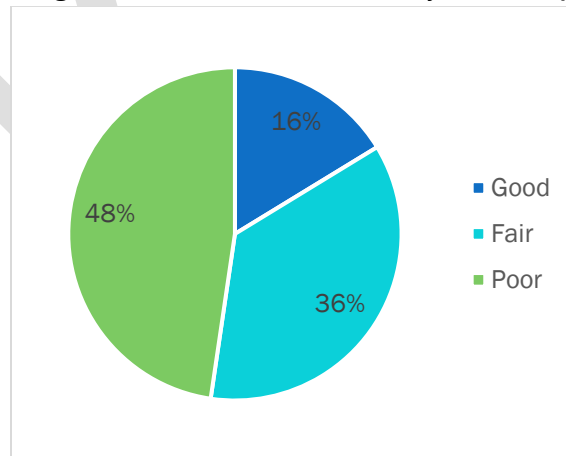
¹Estimates from 2017 NHTS Add-On

²Iowa DOT, Iowa Crash Analysis Tool, 2017-2022



The 2022 Public Input Survey asked Black Hawk County metropolitan residents to rate our streets based on the concept of Complete Streets, or how well our roads serve all road users. This includes automobile users, transit riders, bicyclists, and pedestrians alike. Most respondents rated our streets as “poor” in this regard. The bikeway network faces significant challenges due to its disconnected nature and limited on-road presence, making it challenging for cyclists to travel seamlessly and efficiently throughout the metro area. Cyclists often encounter discontinuities, where bike lanes or share lane facilities suddenly end or fail to connect to other parts of the network, forcing them to navigate through busy streets or unsafe roadways. Implementing Complete Street projects remains a substantial opportunity area for the Black Hawk County metropolitan area. Addressing these connectivity issues and investing in a cohesive and comprehensive bikeway network will not only improve safety and encourage active transportation but also enhance the overall accessibility and livability of the area. The later sections of this chapter detail the planning efforts and projects currently underway to expand the number of Complete Streets in Waterloo.

Figure 5.1: 2022 Public Input Survey, Round Two asking respondents how well our streets serve all road users, including vehicle users, transit riders, bicyclists, and pedestrians.



Overview of Bicycle and Pedestrian Facilities

To serve all road users effectively and efficiently, it is important to recognize the similarities and differences between each group and understand how they interact with the road. Both non-motorized and motorized modes of transportation share the same principles: improve safety, reduce delays, and maximize traffic flow. However, pedestrians and bicyclists have unique needs and interact with the transportation system in different ways than drivers do. Table 5.1 identifies how each facility type is used by non-motorized users.

Table 5.1: Bicycle and Pedestrian Facilities

Facility	Bicycles	Pedestrians	Example
Sidewalk (< 8 ft)	No	Yes	Rainbow Dr sidewalks
Paved Trail (≥ 8 ft*)	Yes	Yes	Greenhill Rd trail
Paved Shoulders	Yes	Not recommended	W 27th St shoulders
Bike lane	Yes	No	Park Ave bike lanes
Driving lane	Yes	No	Cedar Heights Dr

*The standard width for a paved trail is 10 feet

Which Facilities Work Best?

The decision of which facilities to include in a new construction or reconstruction project is determined by the respective jurisdiction. Sidewalks and paved trails accommodate pedestrian travel; while paved trails, bike lanes, paved shoulders, and driving lanes accommodate bicycle travel. However, not all facility types provide equal service for bicycles. While there are instances in which a paved trail is preferable to bike lanes, such as on roadways with high-speed limits or natural areas not situated alongside a roadway, these do not always meet a bicyclist's needs.



In more concentrated urban areas, a paved trail does not always serve as a connection point to another location, thus requiring on-road travel. Additionally, constructing a separate, paved trail into a new or existing project is costly and not a feasible alternative for every project. Since bicyclists and pedestrians are also roadway users, it is important to develop efficient connections for them just as we do for roadway users in vehicles. Furthermore, since pedestrians and bicyclists are the most vulnerable transportation group, it is crucial to plan for safety.

Roads with bike lanes provide the additional benefit of separating drivers and bicyclists who typically operate at different speeds. This makes bicycles feel safer and can reduce delay for drivers. Bicyclists also tend to face fewer delays on bike lanes than on paved trails, as they have priority at most intersections. The *Guide for the Development of Bicycle Facilities* by AASHTO lists 14 conflicts associated with paved trails or “side paths”, including the following:

- Bicyclists are often not seen by motorists turning left or right.
- Motorists may block crossings at intersections and driveways.
- Stop or yield signs along trails are generally ineffective.
- Fixed objects can constrain the usable width of a trail.

Sidewalks should not be considered a bicycle facility. While it varies by state and local ordinance, some cities prohibit sidewalk cycling entirely or in key areas, such as in Iowa City's downtown and commercial district. In addition to the conflicts listed above, there are other disadvantages of bicycling on a sidewalk:



- Conflicts with pedestrians are more likely.
- Motorists may not expect bicyclists to appear suddenly at crossings and driveways.
- Uneven sidewalk pavement can make riding less comfortable and increase delays.

While bicycling on sidewalks is allowed in most areas in the Black Hawk County MPO, sidewalks do not efficiently fulfill the needs of bicycle transportation and should not be considered a substitute for bicycling facilities.

Bicyclists may operate on most driving lanes in the MPO area in the same manner as automobile traffic. The only places where it is illegal for bicyclists to operate on-road are on Interstate highways and highways with a posted minimum speed limit. While the law allows bicycling on most driving lanes, in practice this can often be dangerous for bicyclists and frustrating for drivers. Any time a bicyclist avoids the most direct route because of perceived danger, it should be considered a delay for the bicyclist.

On the other hand, many local roads with low traffic volumes are suitable for bicycling as-is without the need for additional bike lanes or trails. These roads may be suitable to designate as “shared lanes” which can be defined with Share the Road signage, Bikes May Use Full Lane signage, Bike Route signage, or shared lane markings (or “sharrows”). Providing signage on these roads helps bicyclists identify a safe route and helps to spread additional awareness of a bicyclist’s presence on shared roadways. Many of these roads are included in the MPO Bikeway Plan shown as Map 5.2.

For pedestrians, the development of trails and sidewalks is more straightforward. Generally, sidewalks and trails offer equal accommodation for pedestrians, though sidewalks less than five feet wide are not suitable for pedestrians walking two abreast. Additional improvements for pedestrians involve site-specific treatments that reduce crossing distances, calm traffic, and provide a safe area to wait for traffic. Some of these treatments are included in the next section.

While much discussion about pedestrian planning relates to transportation improvements, land uses play an equal if not greater role in shaping the environment for walking. Large block sizes, setback distances, and parking lots can increase the distance pedestrians must travel and compel them to walk along informal routes. In addition, many businesses and civic buildings do not have a designated walkway to their front door, so pedestrians must walk through parking lots or grassy areas to reach their destination. For these reasons, discussions about pedestrian planning should not be limited to trails and sidewalks alone.

Site-Specific Bicycle and Pedestrian Treatments

A variety of site-specific treatments can be used in addition to each of the five facilities described prior. Currently, these treatments are employed sparingly in the MPO area, and some do not currently exist at all.

Table 5.2 describes some of the most common treatments. This is only an overview and is not intended to serve as an exhaustive list of treatments. All treatments presented on the next pages are eligible for Transportation Alternatives Program (TAP) and Surface Transportation Block Grant (STBG) funding.

Table 5.2: Site-Specific Bicycle and Pedestrian Treatments

 <p>New York City, nacto.org</p>	<p>Median refuge island Facility type: Sidewalks and Trails</p> <p>Description: A protected space in the middle of a road crossing, typically designed as part of a median, that allows pedestrians and bicyclists to cross one direction of traffic at a time</p> <p>Benefits: Reduces time spent waiting for traffic, and reduces exposure in the crosswalk</p>
 <p>Canada, Flickr user drdul</p>	<p>Curb extensions (or bulb-outs) Facility type: Sidewalks</p> <p>Description: Any lateral shift in the curb that narrows the width of the street</p> <p>Benefits: Improves visibility, reduces exposure in the crosswalk, and reduces travel speeds</p>
 <p>Waterloo, INRCOG</p>	<p>Vertical speed control Facility type: All</p> <p>Description: Raised pavement in driving lanes including speed humps, speed tables, and speed cushions</p> <p>Benefits: Reduces travel speeds</p>

 <p>Atlanta, nacto.org</p>	<p>Narrower driving lanes Facility type: All</p> <p>Description: Driving lanes no greater than 11 feet wide, and parking lanes no greater than nine feet wide</p> <p>Benefits: Reduces travel speeds, and reduces crossing distance</p>
 <p>Marion, INRCOG</p>	<p>Pedestrian alleys Facility type: N/A</p> <p>Description: An alley where vehicles are restricted, and installations are added to appeal to pedestrians</p> <p>Benefits: Eliminates conflicts with vehicles</p>
 <p>Des Moines, INRCOG</p>	<p>Buffers and delineators Facility type: Bike lanes</p> <p>Description: Additional separation between bike lanes and driving lanes by means of buffer markings and delineator posts</p> <p>Benefits: Reduces conflicts, and improves perceived safety</p>
 <p>St Paul, INRCOG</p>	<p>On-road wayfinding signs Facility type: Bike lanes and driving lanes</p> <p>Description: Signage that directs bicyclists to local destinations via bike lanes and designated bike routes</p> <p>Benefits: Improves operations, reduces delay</p>
 <p>Tampa, twitter</p>	<p>Bike boxes Facility type: Bike lanes and driving lanes</p> <p>Description: A designated area at signalized intersections for bicyclists to wait at the head of a traffic lane</p> <p>Benefits: Improves visibility, reduces conflicts, reduces traffic delays</p>



San Luis Obispo, nacto.org

Signal detection and actuation

Facility type: Bike lanes and driving lanes

Description: A marked location for bicycles to actuate detection at signalized intersections

Benefits: Improves traffic operations, and reduces delay



Waterloo, INRCOG

Bicycle signals

Facility type: Bike lanes

Description: A traffic control device for bicyclists to be used along with conventional signals

Benefits: Improves traffic operations, and reduces conflicts between bicyclists and other modes



Portland, nacto.org

Bike Boulevards

Facility type: Driving lanes

Description: A street with low traffic volumes designed to prioritize bicycles and restrict through movements by vehicles

Benefits: Reduces conflicts, maintains low travel speeds



National Guidance

U.S. Law

Above all, planning for bicycles and pedestrians is United States law. Section 217 in Title 23 of the U.S. Code addresses bicycle transportation and pedestrian walkways. Subsection (g) relates to planning and design:

(1) In general—

Bicyclists and pedestrians **shall** be given due consideration in the comprehensive transportation plans developed by each metropolitan planning organization and State in accordance with sections 134 and 135, respectively. Bicycle transportation facilities and pedestrian walkways **shall** be considered, where appropriate, in conjunction with all new construction and reconstruction of transportation facilities, except where bicycle and pedestrian use are not permitted.

(2) Safety considerations—

Transportation plans and projects **shall** provide due consideration for safety and contiguous routes for bicyclists and pedestrians. Safety considerations **shall** include the installation, where appropriate, and maintenance of audible traffic signals and audible signs at street crossings.

In 2010, the United States Department of Transportation (DOT) issued a Policy Statement on bicycle and pedestrian accommodation regulations and recommendations:

“The DOT policy is to incorporate safe and convenient walking and bicycling facilities into transportation projects. Every transportation agency, including DOT, has the responsibility to improve conditions and opportunities for walking and bicycling and to integrate walking and bicycling into their transportation systems. Because of the numerous individual and community benefits that walking and bicycling provide — including health, safety, environmental, transportation, and quality of life — transportation agencies are encouraged to go beyond minimum standards to provide safe and convenient facilities for these modes.”



The DOT encourages transportation agencies to adopt similar policy statements on bicycle and pedestrian accommodation and go beyond the minimum design standards and requirements to create safe, attractive, sustainable, accessible, and convenient bicycling and walking networks. Several recommended actions are included in the DOT Policy Statement:

- Considering walking and bicycling as equals with other transportation modes
- Ensuring that there are transportation choices for people of all ages and abilities, especially children
- Going beyond minimum design standards
- Integrating bicycle and pedestrian accommodation on new, rehabilitated, and limited-access bridges
- Collecting data on walking and biking trips
- Setting mode share targets for walking and bicycling and tracking them over time
- Removing snow from sidewalks and shared-use paths
- Improving non-motorized facilities during maintenance projects

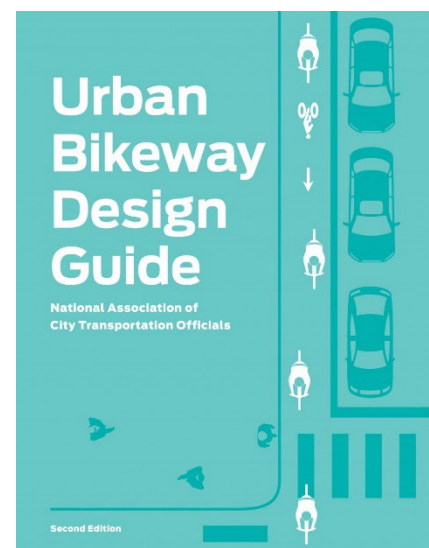
The Federal Highway Administration (FHWA) is a division of the DOT and issues the Manual on Uniform Traffic Control Devices (MUTCD), which has a significant impact on the design of bicycle facilities. The MUTCD sets the standards for traffic signage, signals, and pavement markings in the United States. The last update to the MUTCD was in 2009.

National Standards

In addition to federal policy, other organizations also influence transportation planning for bicycles and pedestrians. The American Association of State Highway and Transportation Officials (AASHTO) is the standards-setting body for the design and construction of highways and streets in the United States. AASHTO is an organization of State DOTs, not an entity of the federal government. However, the FHWA ultimately uses a formal rulemaking process to adopt AASHTO standards for application on the National Highway System.

Foremost is the AASHTO Green Book, *A Policy on Geometric Design of Highways and Streets*. The most recent edition of the Green Book, the 7th Edition, is more flexible, multimodal, and performance-based than in the past. In addition to the Green Book, AASHTO also publishes the *Guide for the Development of Bicycle Facilities* and the *Guide for the Planning, Design, and Operations of Pedestrian Facilities*.

Another notable organization is the National Association of City Transportation Officials (NACTO) which is an association of 96 major North American cities and transit agencies formed to exchange transportation ideas, insights, and practices and cooperatively approach national transportation issues. NACTO's mission is to build cities as places for people, with safe, sustainable, accessible, and equitable transportation choices that support a strong economy and vibrant quality of life. No cities in Iowa are members of NACTO. However, NACTO has been very influential in the advancement of bikeway and street design at a national level for the past several years. NACTO's *Urban Bikeway Design Guide* was released in 2011 and includes several treatments not yet adopted in the MUTCD or AASHTO manuals. In 2013, NACTO released the *Urban Street Design Guide* which focuses on the street as a whole and emphasizes pedestrian activity at intersections, sidewalks, and sitting areas, as well as traffic calming and streetscaping measures.



The League of American Bicyclists

National advances in bicycle planning have outpaced Iowa for many years. In 2011, Iowa was ranked as the 6th most bicycle friendly state according to The League of American Bicyclists. In 2017, Iowa ranked 30th. Most recently, in 2022, Iowa ranked 25th on a national basis, and 6th on a midwestern region basis. This ranking is a part of The League of American Bicyclists' 2022 national report, *State Leadership for Safer Streets*. In it is included a state-by-state report card based on bicycle-friendliness. The report considers a variety of factors, including infrastructure, education, traffic laws and practices, policies, and planning.

Figure 5.5: The League of American Bicyclists, Bicycle Friendly State Report Card



Among positive steps forward, the Bicycle Friendly State Report Card commends the state of Iowa for adopting a Complete Streets policy and the Iowa DOT for adopting rumble strip standards. As for opportunities to explore, the report card suggests Iowa implement a “dooring” law, which prohibits motorists from opening an automobile door unless it is safe to do so. The report states Iowa is one of only eleven states that has not yet adopted a dooring law. The report also suggests the state spend more federal transportation funds on bicycling and pedestrian improvements, as the state currently spends less than two percent on such projects.

Figure 5.6: The League of American Bicyclists, Bicycle Friendly State Report Card

Based on the information we obtained for Iowa, the League of American Bicyclists believes the following actions will improve the safety, comfort, and accessibility of bicycling in Iowa.

Adopt a safe passing law with a minimum distance of 3 feet to address bicyclist safety. Over the last two decades most states have adopted a safe passing law to protect people biking. Iowa is one of 11 states that has not.

Spend at least 2% of federal transportation funds on biking and walking improvements.

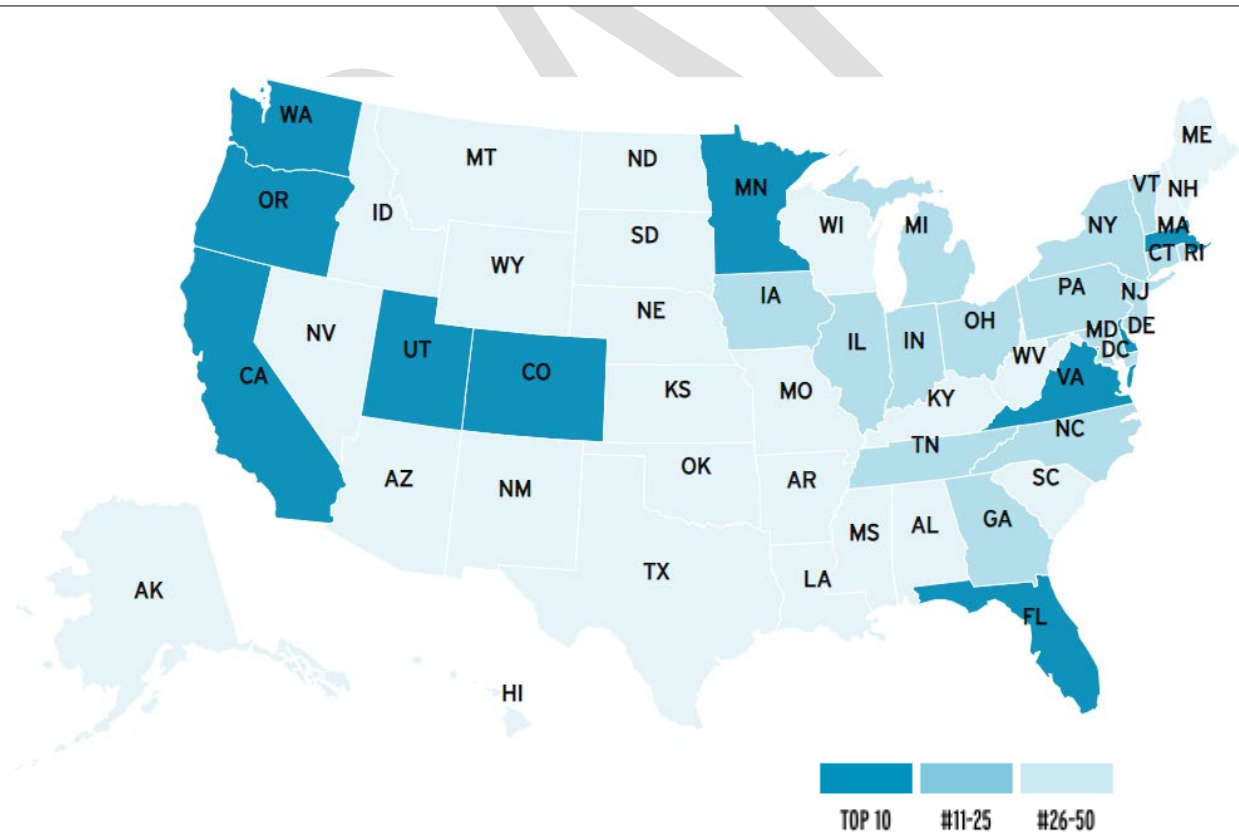
Adopt a law prohibiting a motorist from opening an automobile's door unless the motorist is able to do so safely. Iowa is one of only eight states that has not adopted this type of law to reduce "dooring."

Iowa has a recently adopted Complete Streets policy, which ensures that improvements for bicyclists are made during resurfacing, restoration and rehabilitation projects. This is often the most cost-effective time to make improvements.

In 2020 the Adventure Cycling Association found that Iowa was one of 18 states that failed to meet minimum rumble strip standards. The League is excited to congratulate the Iowa DOT for adopting rumble strip standards and creating a prioritization process for rumble strips and shoulders in its Complete Streets process. This is a great improvement and we hope other states learn from it as well.

Bicycle Friendly Actions	Progress?
Complete Streets Law / Policy	Yes-New/Updated
Safe Passing Law (3ft+)	No
Statewide bike plan last 10 years	Yes
2% or more federal funds on bike/ped	No
Bicycle Safety Emphasis Area	Yes

Federal Data on Biking		Rank
Ridership	0.41% of commuters biking to work	23/50
Safety	5.8 fatalities per 10K bike commuters	17/50
Spending	\$3.47 per capita FHWA spending on biking and walking	17/50



www.bikeleague.org/bfa/states/state-report-cards/

State Guidance

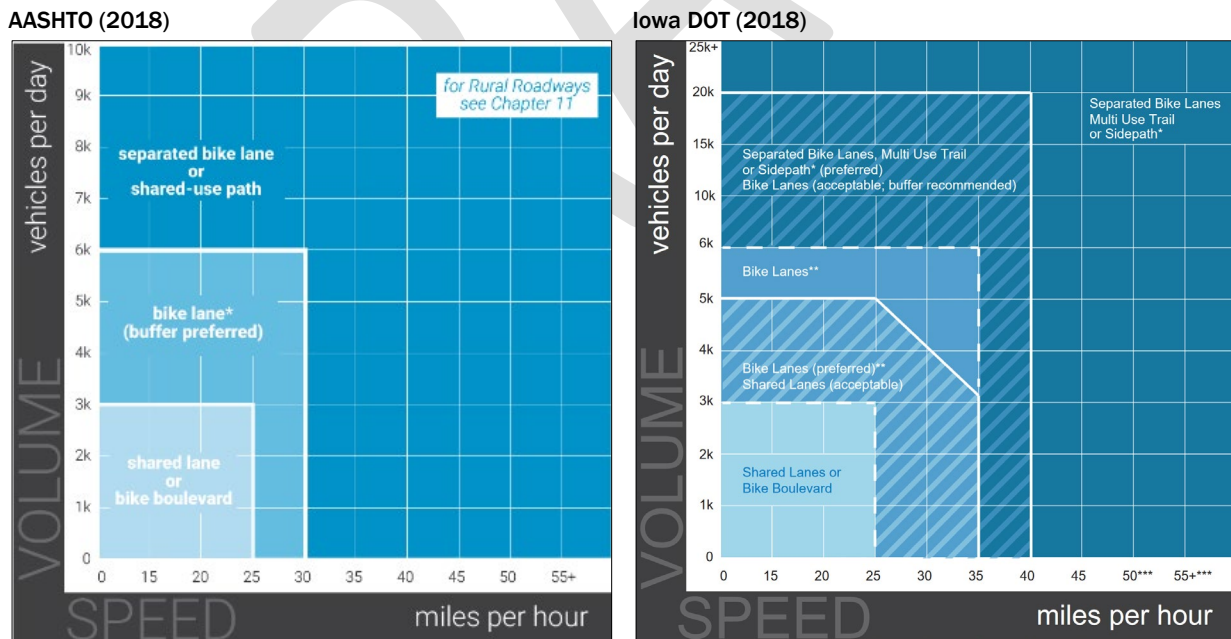
The *Iowa Bicycle and Pedestrian Long-Range Plan* was adopted by the Iowa DOT in 2018. The document includes a statewide Complete Streets policy which applies to all Iowa DOT projects. The policy outlines that bicycle and pedestrian accommodations will be considered in the design and scope for all transportation projects that involve new or improved facilities. Accommodations are to be implemented unless the additional cost would be excessively disproportionate to the need or probable use, or there is a demonstrated absence of future needs as determined by factors including current and future land use, current and projected user volumes, population density, and crash data.

The Iowa DOT also updated the state's *Design Manual* and *Bridge Design Manual* to reflect national best practices regarding bicycle and pedestrian facilities, particularly on-road facilities. These updates will be coordinated with the on-road bicycle section of the *Statewide Urban Design and Specifications (SUDAS) Manual*.

The *Iowa Bicycle and Pedestrian Long-Range Plan* includes basic design parameters for sidewalks, trails, curb ramps, crosswalks, refuge islands, and signals for pedestrians. For bicycles, the plan identifies basic design parameters for trails, paved shoulders, bike lanes, separated bike lanes, bike boulevards, shared lanes, wayfinding, and intersection treatments.

Numerous types and widths of bicycle facilities are available, and some are more appropriate than others for any given context. To help select an appropriate facility based on traffic volume and speed, the Plan includes a facility selection matrix for urban settings and another for rural settings (Figure 5.2). These matrices include preferred and acceptable values for each facility type.

Figure 5.2: Urban Bikeway Facility Selection Matrices



The second tool provided in the Plan is a table of context characteristics of common facility types, which summarizes various attributes of the primary bicycle and pedestrian facility types used in Iowa and provides additional guidance on facility selection. The table can be found on page 96 of the document.

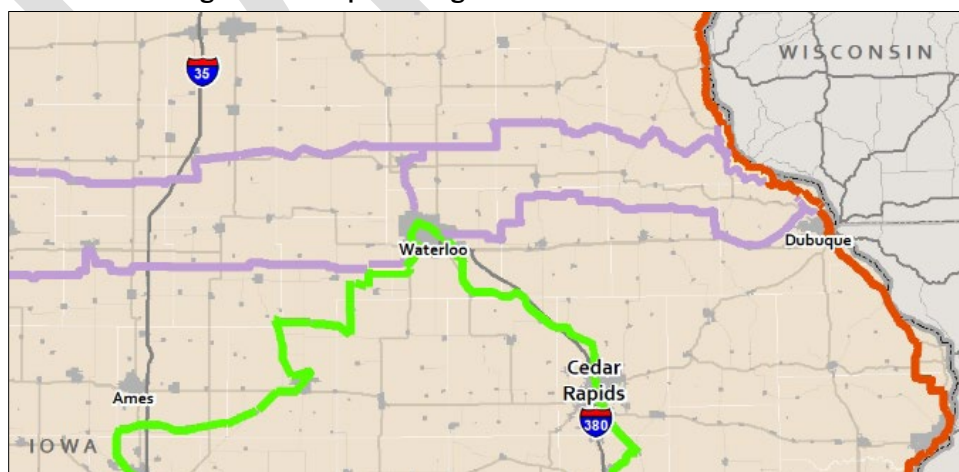
Planned statewide trails of significance to the MPO area include the Cedar Valley Nature Trail to Cedar Rapids, a trail north to Waverly, a trail east to Dubuque, and a combination of trails to the south and west toward the Des Moines metropolitan area. Figure 5.3 shows part of the Statewide Trails Vision relevant to the MPO:

Figure 5.3: Statewide Trails Vision around the MPO area



Also being planned at a statewide scale is the proposed United States Bike Routes (USBR). Of significance to the MPO area is USBR 36, a planned bike route from New York to Oregon with established segments in Pennsylvania and Indiana. Two alignments are proposed for this route. The northern route would bypass the MPO area, while the southern route would pass through the MPO area. Between the two alignments, the southern route has a greater share of on-road rural roads considered “good” for bicycling compared to the northern route (90 vs 75 percent), though the southern alignment has 35 more on-road miles altogether. Figure 5.4 shows the proposed routes for USBR 36 in purple, as well as the American Discovery Trail route in green.

Figure 5.4: Proposed alignments for US Bike Route 36



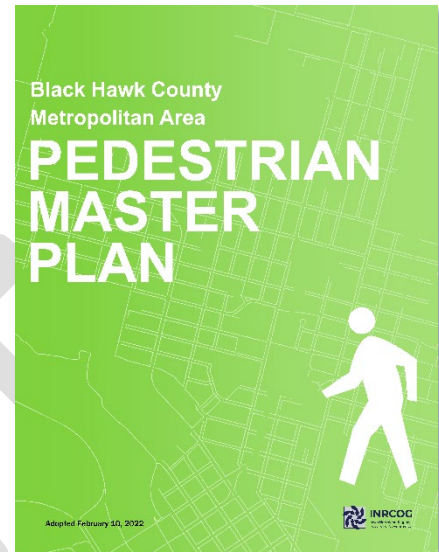
Local Guidance

Pedestrian Master Plan

The foremost planning effort related to pedestrians is the MPO Pedestrian Master Plan. Planning for the Pedestrian Master Plan began in 2014, and three public input surveys were developed specifically for the plan:

- 2015 Pedestrian Master Plan Mail-Out Survey, 344 responses
- 2015 Special Outreach Survey, 207 responses
- 2016 Public Input Meeting Survey, 92 responses

Recommendations from the Pedestrian Master Plan include various policies and procedures. Project recommendations are based in part on the results of the initial mail-out surveys. Respondents were asked to select one area they would improve for pedestrians, out of 24 areas total. The highest ranked areas were reviewed by MPO staff to determine the “focus areas” of the plan. In other words, these are the areas with the greatest demand for pedestrian improvements where new investments may have the greatest public benefit. In addition, the plan utilizes a significant amount of data from the 2017 National Household Travel Survey (NHTS) Add-on. The NHTS Add-on includes responses from 1,221 households representing 2,450 individuals in the MPO area. In addition to the survey responses, over 500 walking trips were also recorded.



Policy Recommendations in the Pedestrian Master Plan include:

1. Prioritize sidewalk construction and infill needs identified in Section 5 (of the Pedestrian Master Plan).
2. Establish an annual funding source for new sidewalk construction.
3. Establish an annual funding source for sidewalk maintenance.
4. Restructure and expand MET Transit Service.
5. Revise snow removal policies and enforcement practices.

Planning and Zoning Recommendations in the Pedestrian Master Plan include:

1. Encourage sidewalk connections in site planning for new development.
2. Update zoning and subdivision ordinances to prioritize street connectivity.
3. Encourage transit-oriented development.
4. Reduce minimum parking requirements.
5. Adopt pedestrian “through zones” on sidewalks in business districts.

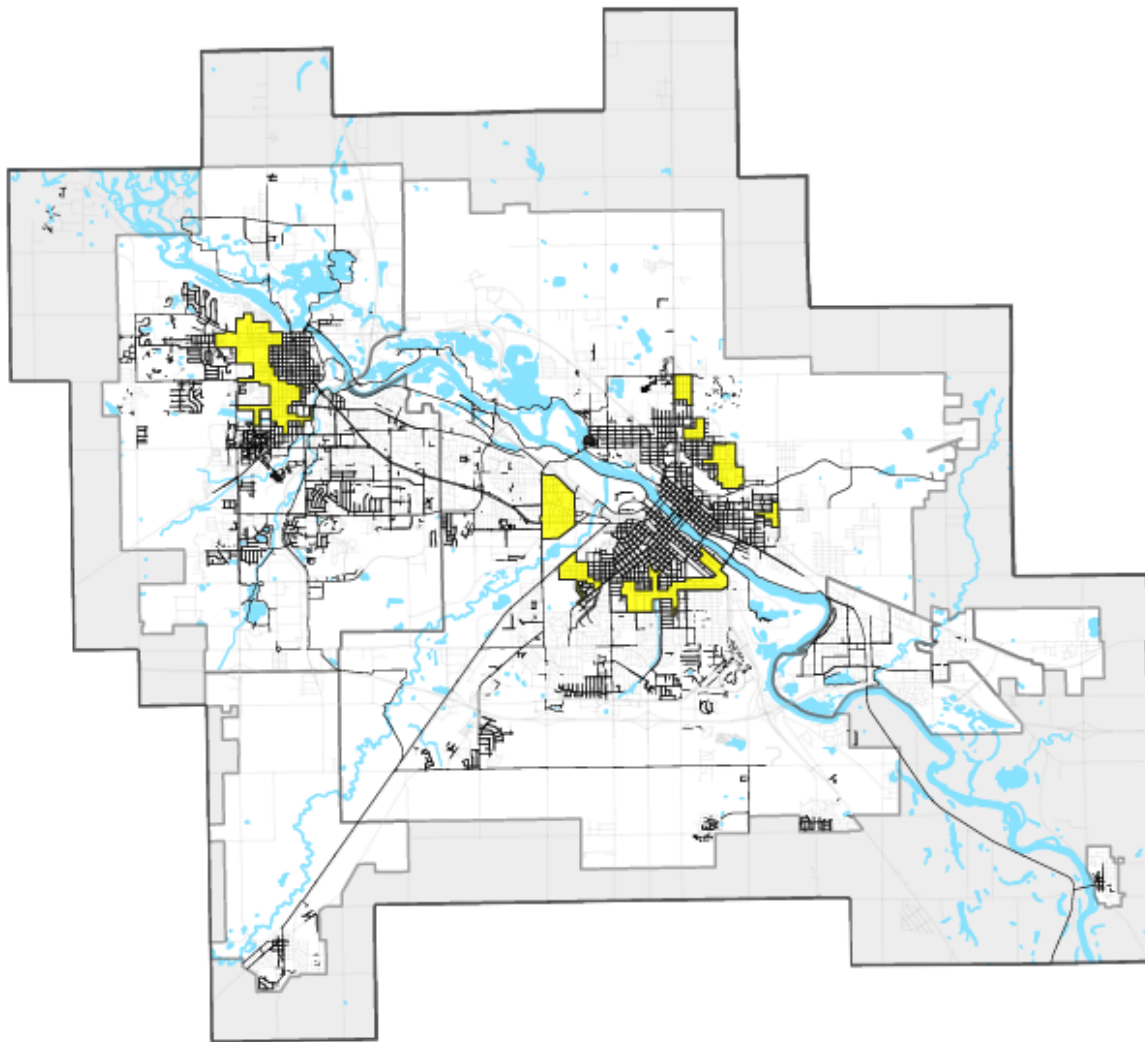
Engineering Recommendations in the Pedestrian Master Plan include:

1. Include routine inspection program.
2. Adopt street design standards to improve safety for all users.
3. Reduce design speeds along arterial and collector roads.
4. Install curb extensions along arterial and collector roads.
5. Support infrastructure for buses and bicycles.
6. Improve the design of pedestrian crossings.
7. Provide adequate pedestrian accommodation during construction.

Traffic Control Recommendations in the Pedestrian Master Plan include:

1. Adopt street design standards to improve safety for all users.
2. Phase out pedestrian actuated signals.
3. Support infrastructure for buses and bicycles.
4. Apply high visible markings (zebra, continental) at major crosswalks.

Some of these recommendations are actively being implemented or already have by the Waterloo Complete Streets Advisory Committee and Cedar Falls Bicycle and Pedestrian Advisory Committee, such as restructuring MET Transit Service and encouraging sidewalk connections for new development. Others, like encouraging transit-oriented development remain as opportunities to explore.



Priority Infill Areas in Waterloo and Cedar Falls

Local Advisory Committees

In 2013, the City of Waterloo and City of Cedar Falls both adopted Complete Streets resolutions consistent with the National Complete Streets Coalition guidance. Adopting a Complete Streets policy was a prerequisite of becoming a certified Blue Zones community, and both cities have since attained Blue Zones certification. The goal of Blue Zones is to improve the health and wellness of areas by encouraging citizens to take individual actions, and by efforts through employers, schools, restaurants, grocery stores, and city policy.

One outcome of these resolutions was the creation of an advisory committee in each city. These committees are the Waterloo Complete Streets Advisory Committee and the Cedar Falls Bicycle and Pedestrian Advisory Committee. MPO staff attend both meetings to provide input, seek input, and provide updates on related projects and initiatives. While both committees share a similar role, the makeup of their attendees is notably different. In Waterloo, the committee is chaired by a member of the community, but most attendees are affiliated with the City government. Conversely in Cedar Falls, many committee members are Cedar Falls residents, and only one or two City staff attend each meeting. Both committees address similar topics and face similar challenges.

The Waterloo Complete Streets Advisory Committee is chaired by a Waterloo resident and includes representation from a variety of City departments, community organizations, avid bicyclists, and interested individuals. City staff regularly provide updates on street reconstruction projects and commercial developments to identify opportunities for improving sidewalk connectivity. For larger projects, such as the University Avenue reconstruction project, engineering firms have attended meetings and presented project updates to allow the committee to provide input directly. The committee also had a hand in redesigning the Park Avenue bike lanes discussed later in this chapter. The committee chair provides updates to the Mayor and City Council and occasionally submits recommendations to City department heads. The committee actively works to increase representation from the broader community.

The Cedar Falls Bicycle and Pedestrian Advisory Committee is chaired by a Cedar Falls resident and includes representation from City planning, law enforcement, the school district, and several members of the community. From 2009 to 2027, Cedar Falls has been awarded the status as a Bronze Bicycle Friendly Community by the League of American Bicyclists, and the city and committee plan to actively retain its status through continued bicycle infrastructure planning. The committee occasionally makes recommendations to the City regarding specific projects and potential improvements for bicyclists. More predominantly, the committee engages in a variety of educational and community events including Bike Rodeos, Bike to School events, Pedal Fest, a Mayor's bike ride, and Bike Month activities in May. The committee also conducts outreach by submitting content to the city's quarterly newsletter, its Facebook page, and occasionally on local access television Channel 15. A small amount of funding is allotted to the committee by the City for education, and the committee can send a representative to relevant conferences including the Iowa Bicycle Summit. While this committee has significant community involvement, it currently lacks representation from City engineers and Council members.

COMPLETE STREETS WATERLOO



Existing Facilities

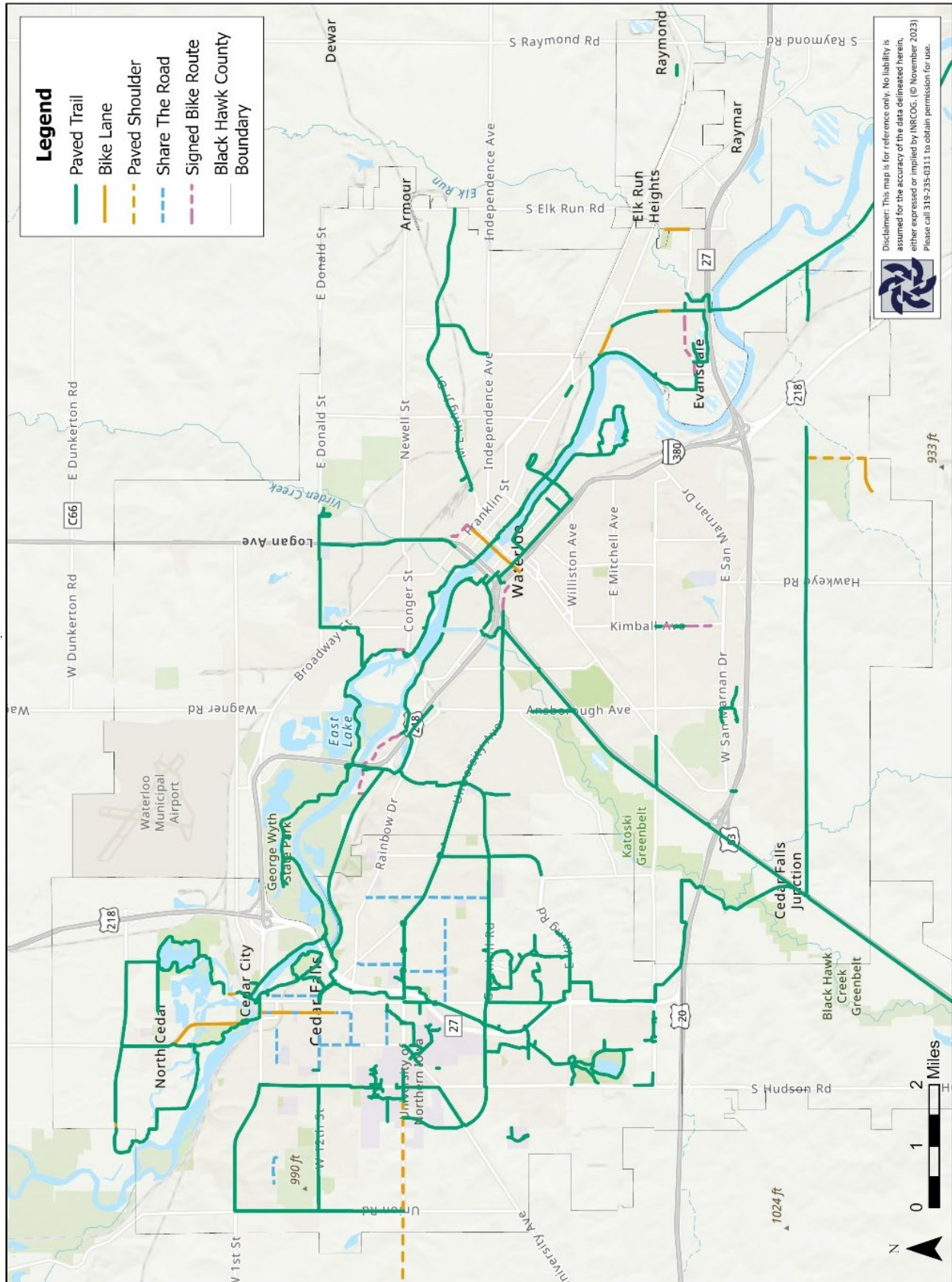
The MPO area has a variety of facilities for bicycles and pedestrians including over 115 miles of paved trails. However, the definition of a paved trail is inherently up to interpretation. Today's standard for new trail construction is 10 feet wide, and eight-foot-wide trails are acceptable in certain circumstances such as where low bicycle and pedestrian traffic is anticipated. Many trail segments in the MPO area were constructed before this standard was adopted and are only six to eight feet wide. Also, areas such as the University of Northern Iowa campus and Downtown Waterloo have several pedestrian facilities at least eight feet wide, though their function is not conducive for bicycle traffic. Existing trails presented in this document represent trails that are conducive for bicycle travel and are at least part of a predominantly eight to ten-foot-wide trail.

Currently, paved trails make up the vast majority of separated bicycle facilities in the MPO area. However, the MPO area also has bike lanes, paved shoulders, shared lane markings (or “sharrows”), and signed bike routes. Table 5.3 shows the total centerline length of each facility type in the MPO area. The term buffered bike lanes refers to a bike lane with a painted buffer as described previously and may or may not include vertical infrastructure such as delineator posts. The term on-road path refers to a segment of roadway that is designated for both bicycle and pedestrian travel, usually as part of a much longer paved trail.

The development of the first protected bike lanes in the MPO area began in 2017 along Park Avenue in Waterloo. The term protected refers to any sort of vertical protection between a bike lane and driving lane, such as delineator posts, planters, or parked cars. Development of the Park Avenue bike lanes was spearheaded by MPO staff and the Waterloo Complete Streets Committee. MPO staff helped facilitate discussions between multiple City departments and elected officials, and staff also helped develop the initial planning-level design of the protected bike lane concept. Six years later, in 2023, the Park Avenue bike lane project was revisited with the goal of redesigning, enhancing, and expanding them. More information can be found under the “Current and On-Going Projects” section.



Map 5.1: Existing Bicycle Facilities

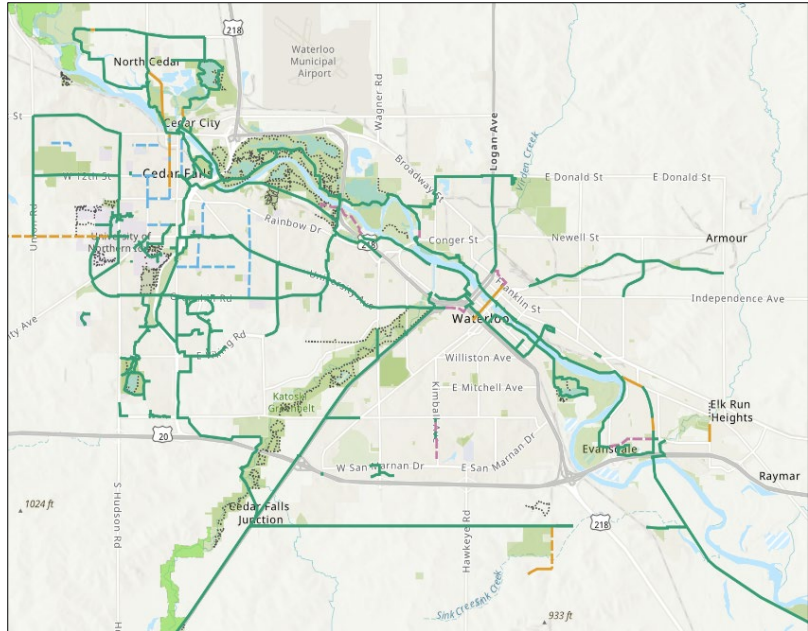


Current and Ongoing Projects

Interactive Cedar Valley Trails Map

Every couple of years, INRCOG updates the Cedar Valley Trail and Recreation paper guide which entails all the trails in the MPO region. In 2021, local nonprofit organizations asked INRCOG to create an online, interactive version of this map. The Interactive Cedar Valley Trail Map launched in May of 2022 and is frequently updated to include new features or expand upon current ones. The map currently shows over 125 miles of paved trails, as well as dirt trails, on-road bicycle infrastructure, local bike retailers, bird watching spots thanks to a collaboration with the Prairie Rapids Audubon Society, and much more.

The map utilizes a color-blind friendly color scheme and is currently being expanded to include INRCOG's six-county region. Visit the map at <https://arcg.is/vvGn>

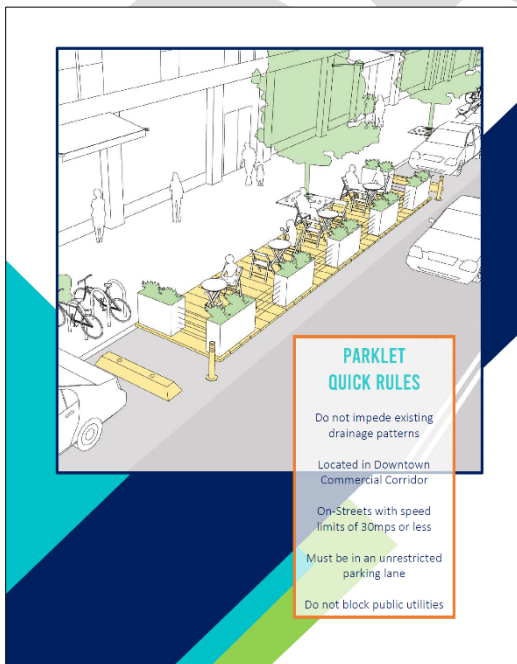


Interactive Cedar Valley Trails Map QR-Code Decals

Following the development of the interactive trail map, QR-code decals were created by MPO staff and funded by the Cedar Valley Trails Partnership. The jurisdictions of Waterloo, Cedar Falls, Evansdale, and Hudson, as well as Black Hawk County and George Wyth State Park, collaborated to install decals on over 170 Wayfinding signs throughout the MPO. The Wayfinding signage is a previous project also conducted by MPO staff. When the QR-code is scanned with a smartphone, it takes users to the interactive map to showcase the various amenities and recreational opportunities our trail system has to offer. The map also has a locator button, allowing users to locate themselves along the trail map if needed. Decals were distributed and installed in the Summer and Fall of 2023.

Park Avenue Bike Lanes Redesign

While the initial Park Avenue bike lanes in downtown Waterloo were a step in the right direction, the public had difficulty using them for several reasons. A confusing layout for both bicyclists and drivers, rough pavement conditions, an incomplete network, and a general lack of cyclist-right of way knowledge led to bike users avoiding Park Avenue entirely. In response, MPO staff developed a renewed concept design for bike lanes on Park Avenue, Commercial Street, and E 4th Street in May of 2023. Comprehensive solutions were identified through a meticulous process of researching nationwide best practices, as well as gathering valuable insights from dedicated stakeholder committees and public comments. Collaboration between MPO staff, Waterloo Complete Streets Advisory Committee, and the City of Waterloo Engineering led to a finalized design that simultaneously aligned with the Park Avenue bridge reconstruction project. This collaborative approach helped address concerns and ensured that the proposed solution would meet community needs. The improved and expanded bike lanes will provide a safer and more attractive bicycling environment, ultimately encouraging more cyclists to use them and visit Waterloo’s downtown area.



Waterloo Downtown Parklets

Main Street Waterloo, Waterloo Complete Streets Advisory Committee, and MPO Staff collaborated to develop a parklet program for downtown Waterloo. Together, a manual, guidelines, and application process were developed for downtown businesses. The overall goal of the parklet program is to enhance the livability, walkability, and beautification of downtown Waterloo. By using underutilized parking spaces, this program aims to create a lively public realm for community interaction while boosting local business support. The Parklet Program was presented to Waterloo City Council in August of 2023, and the parklet application process is anticipated to begin in 2024. The parklets themselves are meant to be a temporary structure that can be assembled and placed outside during the spring, summer, and fall months, then disassembled during the winter months. Applications will be accepted annually by the City of Waterloo.

Jurisdictional Projects

There are several ongoing bicycle and pedestrian infrastructure projects underway in the MPO area. The Park Avenue bridge reconstruction project in Waterloo will include shared use paths that connect to on-street bicycle lanes on Park Avenue. From there, the Park Avenue Bike Lane Redesign project could provide connections to Commercial Street and East 4th Street. The Main Street reconstruction project in Cedar Falls between Seerley Boulevard and 6th Street includes on-street bike lanes and sidewalks to enhance bicycle and pedestrian mobility. Other projects with bicycle/and or pedestrian facility expected include a trail along La Porte Rd and US 218 from Shaulis Rd to W 18th St, Lafayette Rd Trail and Elk Run Creek Levee Trail in Evansdale, and Sergeant Road Trail Bridge Replacements.

Projects completed between 2019 and 2023 that incorporated a standalone paved trail project include the following:

- Union Road Trail, Cedar Falls
- Cedar Heights Drive Trail Extension, Cedar Falls
- Lake Street Trail, Cedar Falls
- US 63 Pedestrian Underpass, Hudson
- University Avenue Trail, Waterloo
- US 63 Trail Extension, Waterloo
- Cedar Valley Lakes Trail Reconstruction and Widening, George Wyth State Park

2050 MPO Bikeway Plan

The term “bikeway” refers to a way of travel for bicycles. This was chosen as the name for this update because bicycle accommodations could refer to facilities such as bike racks and fix-it stations which this plan does not address. The 2050 Bikeway Plan builds off the 2045 Plan which provided detailed reviews of roadways to determine feasible planned facility types. Several factors were considered when making these determinations including each road’s right-of-way, trees, driveways, drainage areas, traffic volumes, and lane configurations. Connectivity to businesses and educational institutions was also a priority.

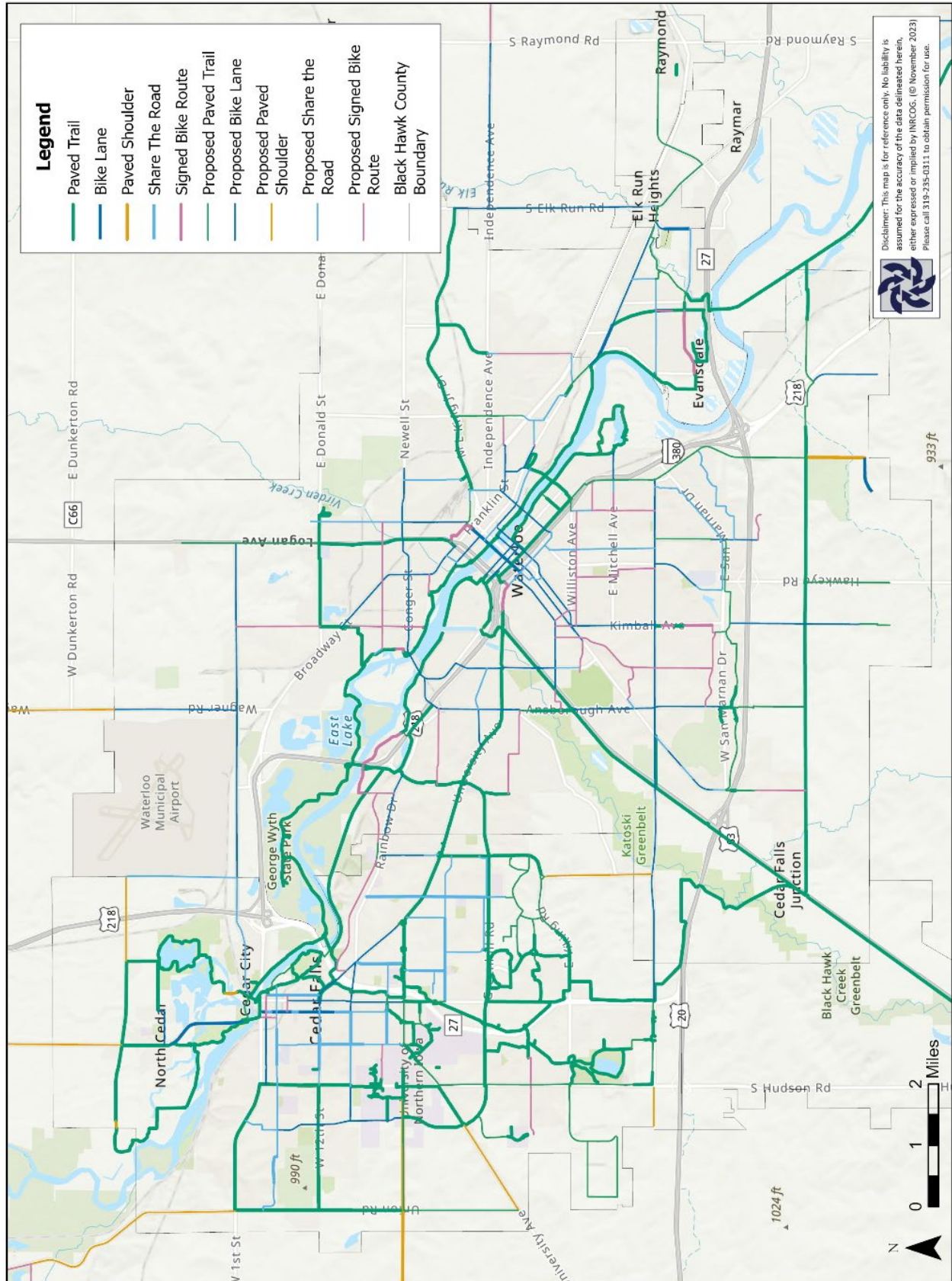
The 2050 Bikeway Plan also identifies low-volume residential streets that can be used by bicyclists without any additional treatments with the intent of connecting more separate bicycle facilities. In this respect, shared lanes for bicycles are analogous to collector streets for cars, while bike lanes and paved trails function as arterial roadways.

The MPO area currently has a variety of different bicycle facility types. Table 5.3 shows the existing mileage of each facility type, and the existing and planned mileage combined in the 2050 MPO Bikeway Plan. As noted above, a major emphasis of this plan is identifying low-volume roads suitable as part of a bicycle network, and the planned increase in signed on-road bike routes and shared lane markings reflects this.

Table 5.3: Existing and planned miles of bicycle facilities

Facility Type	Existing Miles	Planned Miles	Existing + Planned Miles
Bike lanes (including buffered and one-way)	3.4	53.8	57.2
Paved shoulders	5.3	22.7	28.0
Shared lane markings (i.e. sharrows)	7.0	35.0	42.0
Signed on-road bike routes	3.3	48.5	51.8
Paved trails (including on-road paths)	115.8	35.5	151.3
Total	134.8	195.5	320.3

Map 5.2: 2050 MPO Bikeway Plan



Notable Past Projects

Trail Wayfinding Signage

In 2016, the Cedar Valley Trails Partnership secured a grant from Principal Financial for wayfinding signs on the paved trails in the metropolitan area. The Partnership reached out to MPO staff for guidance, and the MPO agreed to plan the implementation of the new signs. These signs would be implemented in several jurisdictions and would effectively replace smaller wooden signs scattered along the trails. Meetings were held with representatives from the Partnership, each City, and George Wyth State Park.

MPO staff determined the location of each sign, the destinations displayed on each customized sign, and the optimal routes to each destination. The sign layout and design were developed as a committee, using graphic elements from the Cedar Valley Trails Partnership logo and Prairie Pathways interpretive panels.



Each sign also shows the distance to each destination, as well as the estimated time it would take by bicycle based on an average speed of 10 miles-per-hour. Each customized sign displays the closest destination first, followed by any other destination in the same direction, and then the next closest destination in a different direction.

Altogether, more than 170 customized wayfinding signs were installed throughout the MPO area, in addition to dozens of standard bike route sign assemblies. There was a total of three phases for the project to utilize all remaining grant funds. All signs have since been installed.

Bicycle Ordinance Updates

In 2018, the City of Hudson was the first city in Iowa to adopt an updated bicycle ordinance based on the Iowa Bicycle Coalition's model ordinance. The model ordinance is a template that includes 17 sections addressing a variety of topics including rules for lamps and reflectors, obedience to signals, and passing a bicyclist. In the MPO area, the last known updates to any city's ordinances related to bicycling were in the 1970s.

Waterloo and Cedar Falls have held discussions among staff to update their own ordinances. In Waterloo, the ordinance update is led by the city's Traffic Operations department. In Cedar Falls, discussions are led by the Bicycle and Pedestrian Advisory Committee with participation from the city's Planning and Police departments.

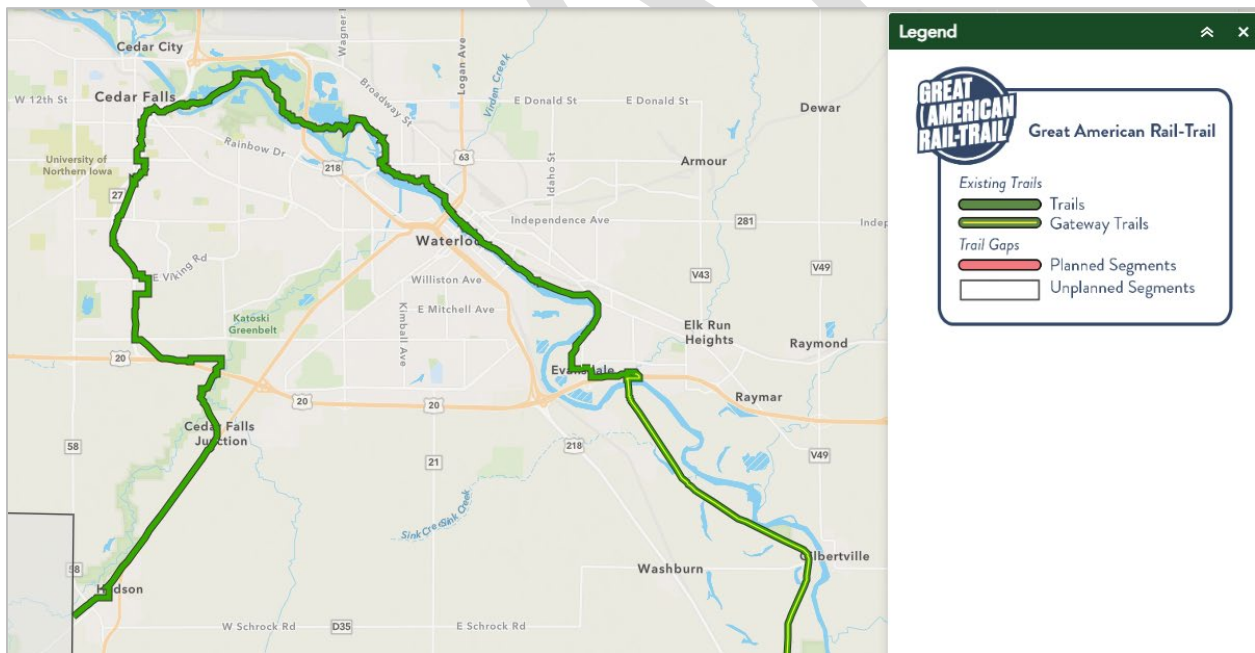
American Discovery Trail

The American Discovery Trail (ADT) is a designated east-west bicycle route extending from the East Coast to California. The ADT uses some paved trails, though it is predominantly designated along roadways. The official ADT route splits into a Northern Route and Southern Route between Ohio and Colorado, and the MPO area is situated along the northern route. In fact, the trail through George Wyth State Park is the northernmost point along the entire trail nationwide.

The ADT includes the Cedar Valley Nature Trail, the Evansdale Nature Trail, portions of the Cedar Valley Lakes Trail and South Riverside Trails, and the Cedar Prairie Trail. Locally, the route has been considered to include the entirety of the two riverfront trails between Pfeiffer Park in Cedar Falls and Downtown Waterloo. However, the official route as of 2016 is a single linear route, and it does not exclusively follow the existing riverfront trails. A sizable portion of the official route follows Commercial Street in Waterloo, even though there are now paved trails on both sides of the river parallel to the official route. It is a goal of the MPO to coordinate with the ADT Board to realign the official route through the MPO area to make optimal use of the existing paved trail network. Map 5.3 shows the official ADT route, other routes identified as part of the ADT in the past, and areas of the trail where a realignment will be possible or necessary.

Great American Rail-Trail

The vision of the Great American Rail-Trail, a project of the Trails-to-Trails Conservancy, is to be the first trail that will be entirely bikeable across the country and, when completed, separated from vehicle traffic. This trail would stretch more than 3,700 miles between Washington, D.C., and Washington State, connecting more than 125 existing rail-trails, greenways, and other multiuse paths. The designated path travels through Evansdale, Waterloo, Cedar Falls, Hudson, and George Wyth State Park.

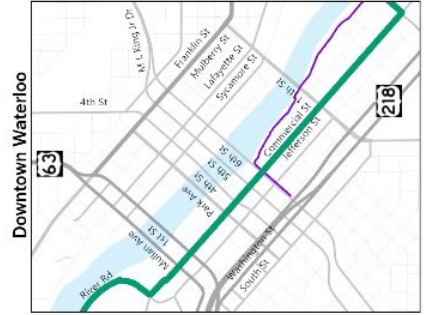


www.railstotrails.org/greatamericanrailtrail/

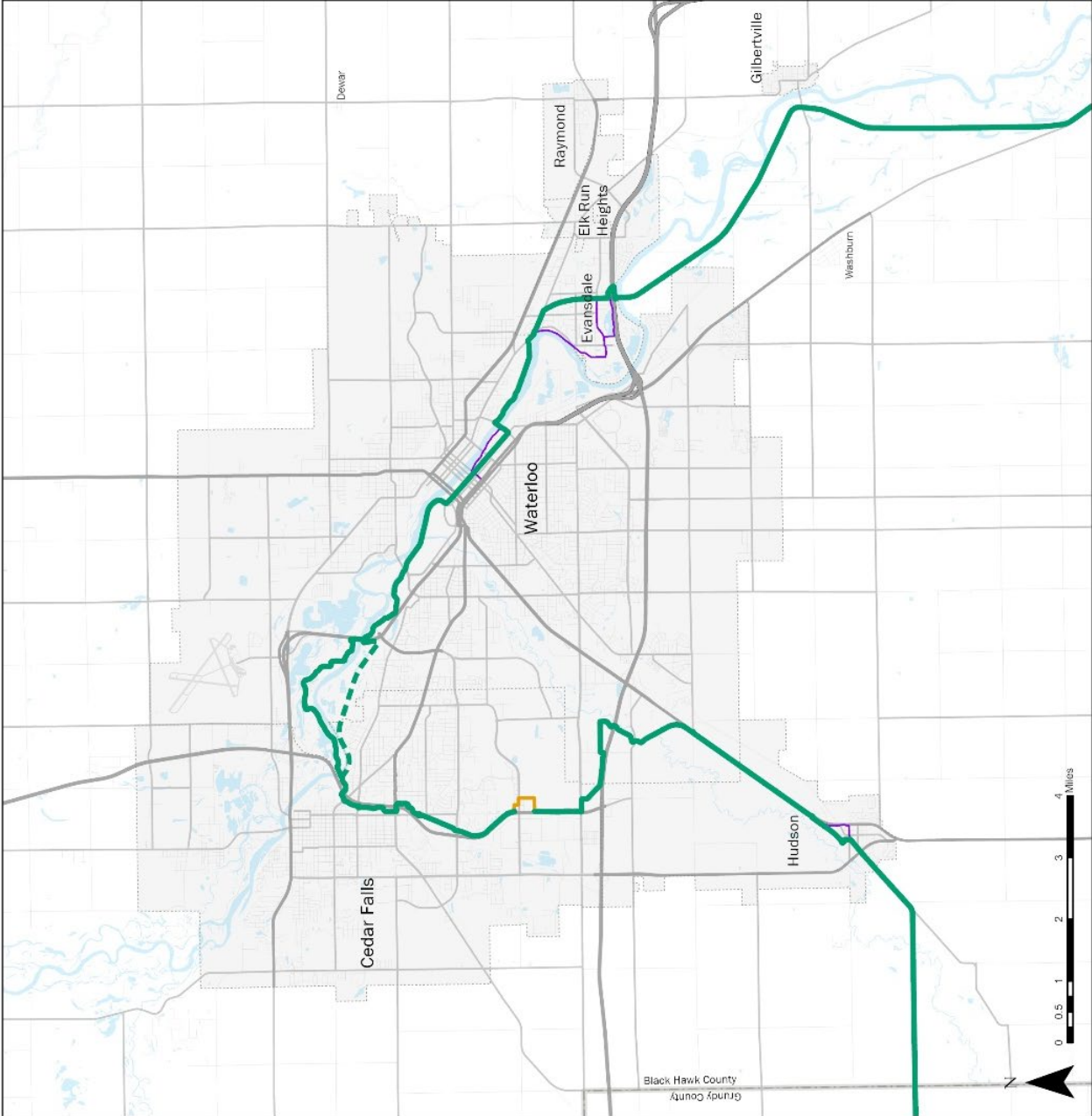
American Discovery Trail Map 5.3

Legend

-  Official Route
-  Official Alt. Route for High Water
-  Required Route Realignment
-  Potential Route Realignment



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Iowa Data Bike

In fall of 2022, MPO staff borrowed the Iowa Data Bike from the Des Moines Area MPO. The Iowa Data Bike is an electric assist bicycle that contains various equipment, including a 360-degree camera that uploads imagery to Google Street View, a smartphone that runs the “rRuf” app which measures roughness of trails, and a GoPro camera that takes photos of trail conditions. MPO staff borrowed the data bike for approximately one month and rode 97 of 128 miles of trails in the Cedar Valley. Regional and state significant trails were prioritized. Over 3,000 360-degree images were taken, and over 44,000 pavement photos were taken. The 360-degree images can be found on Google Street View on trails within the Black Hawk County MPO boundary. The data will help inform a long-term maintenance strategy for each jurisdiction’s trail network.

Iowa Data Bike

The Data Bike is a proof-of-concept initiative by the Des Moines Area Metropolitan Planning Organization in partnership with Iowa Department of Public Health and Iowa Natural Heritage Foundation. Using an app that senses the roughness of pavement, the Data Bike will generate data scoring the condition of trails. The Data Bike will also collect 360-degree imagery along trails for Google Street View.



Other Non-Motorized Projects

Water Trails Master Plan

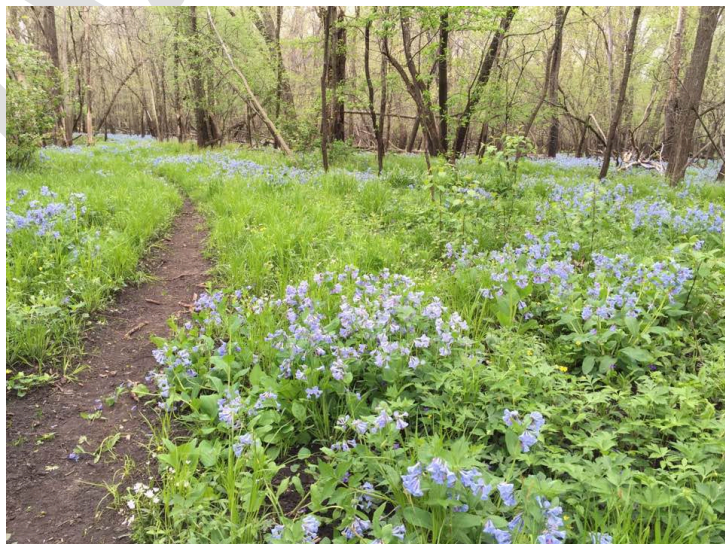
The Black Hawk County Water Trails were officially designated by the State of Iowa in September 2022. INRCOG worked to develop the Water Trails Master Plan for over seven years. This project was funded through the Iowa Department of Natural Resources (DNR) and identifies site-specific improvements to river access throughout the County, including about 20 sites in the MPO area. Many of these river accesses are situated near or along paved trails, creating multiple opportunities for “pedal paddle” trips. These are trips where a paddler drops off their bike at their take-out location, drives to the put-in location, paddles downstream, locks up their canoe or kayak, bicycles back to their vehicle, and returns with the vehicle to pick up their canoe or kayak.

Two public input meetings were held for the development of the Water Trails Master Plan. One was held in July, and another was held in August of 2018. 92 individuals completed surveys to help guide development of the water trails. The plan is available at the INRCOG office and at <https://cedarvalleywatertrails.wordpress.com/>.



Soft Trails

The MPO features a network of soft trails that provide hiking, bicycling, running, and skiing opportunities. There are over 40 miles of soft trails through the metropolitan area with the heaviest concentrations in George Wyth Memorial State Park and Hartman Reserve. The Cedar Valley Association for Soft Trails (CVAST) is a local group dedicated to promoting, maintaining, and building sustainable soft trails in the area. A variety of events are held throughout the year to encourage people to explore and enjoy the soft trails in the metro area. CVAST provides an online interactive map to identify tracks and the locations of parking, water, and restrooms. Visit their website at www.cvast.org.



Water Trails in Black Hawk County Map 5.4

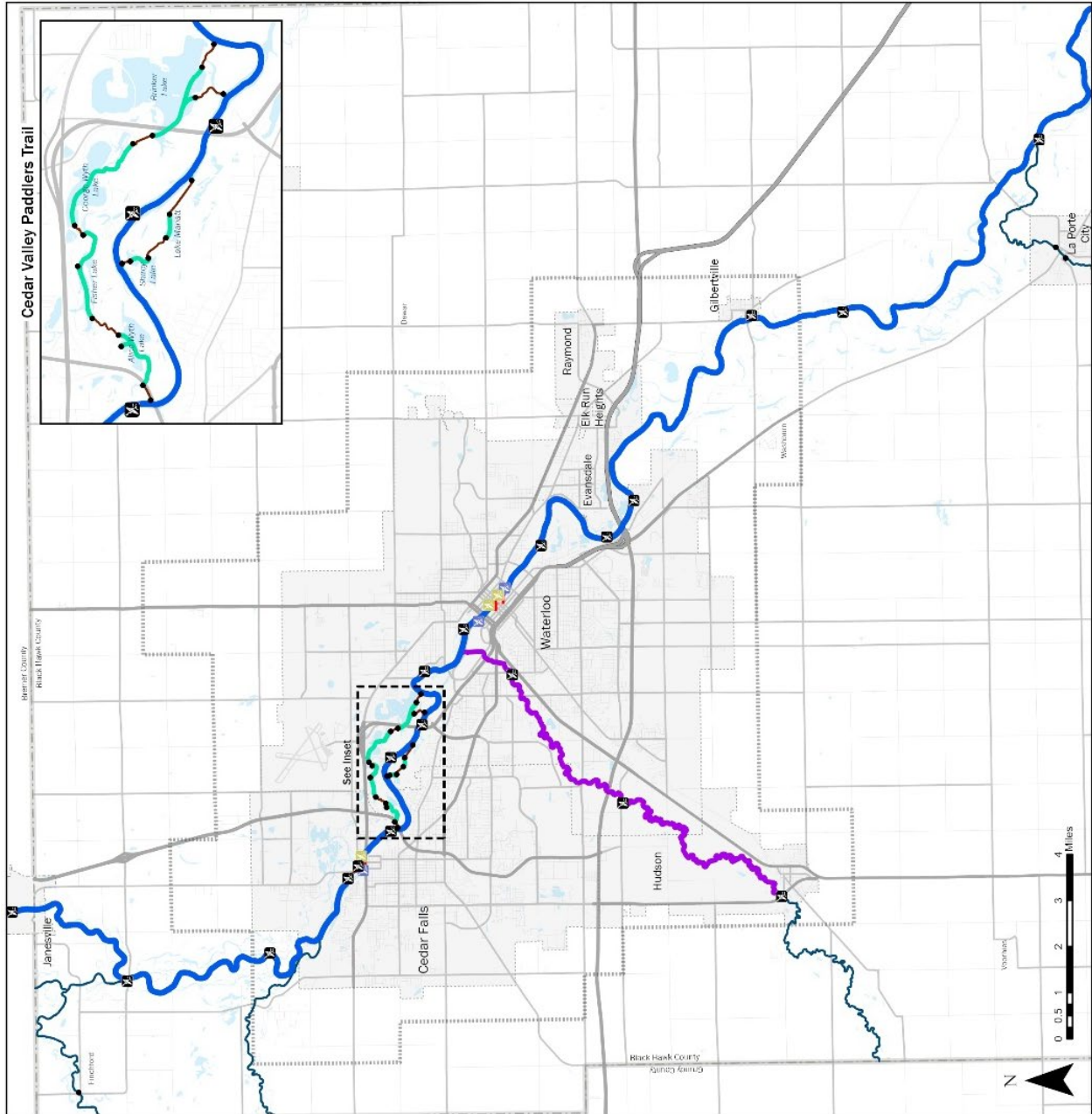
Legend

- MPO Boundary
- Cedar River Water Trail
- Black Hawk Creek Water Trail
- Cedar Valley Paddlers Trail
- Other Stream
- Portage
- River Access, Existing
- River Access, Potential
- River Access, Changes Planned Locally
- Other Access
- Dam

Downtown Cedar Falls

Downtown Waterloo

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Safe Routes to School

Safe Routes to School (SRTS) is a nationwide effort to promote children safely walking and bicycling to school through engineering, education, enforcement, encouragement, and evaluation (5-E's). SRTS projects are eligible under the Transportation Alternatives Program (TAP). INRCOG has been awarded Statewide TAP funding in multiple years to fund a staff person to coordinate a regional Safe Routes to School initiative in partnership with the Iowa Bicycle Coalition and Upper Explorerland Regional Planning Commission in Decorah. The goal of the program is to increase the number of students walking and bicycling to school with the ultimate goal of improving the overall health and well-being of the region's youth. To date, INRCOG has done the following:



Clarksville Library summer bike safety clinic, 2022

- Supported Safe Routes related education and encouragement programs at 38 elementary and middle schools for 22 districts in INRCOG's six-county area.
- Supported 28 community organizations and 8 daycares in hosting their own bike rodeos and safety events.
- Received grants from several area community foundations to distribute over 1,800 new bike helmets to those in need.
- Worked with schools and caregivers to start Walking School Bus programs encouraging physical activity and safety for over 75 students and continues to advocate to form new groups.
- Worked with 4 schools to host Walk, Bike and Roll to School Day events, encouraging all students to rethink their daily commute options.
- Overall outreach to 11,320 youth and 1,682 adult "roll" models in INRCOG's six-county area.
- Continuously attend area community wellness coalitions that emphasis on increasing physical activity, bike skills, and traffic safety awareness.
- Provide input for the development of statewide resources, curriculum, and guides.

Though there is no dedicated Safe Routes to School funding for infrastructure projects anymore, the MPO is committed to maintaining the Safe Routes to School Coordinator position to continue and grow these activities.



Grundy Center Middle School -Bike Skills Rodeo, 2022

2022 Public Input Survey

In September 2022, MPO staff carried out a pair of internet-based surveys. These surveys were aimed at collecting feedback from residents within the jurisdictions of the MPO. The subsequent details provided here highlight survey responses that hold significance within the context of this chapter.

Figure 5.7: 2022 Public Input Survey, Round Two results of where respondents are walking to:

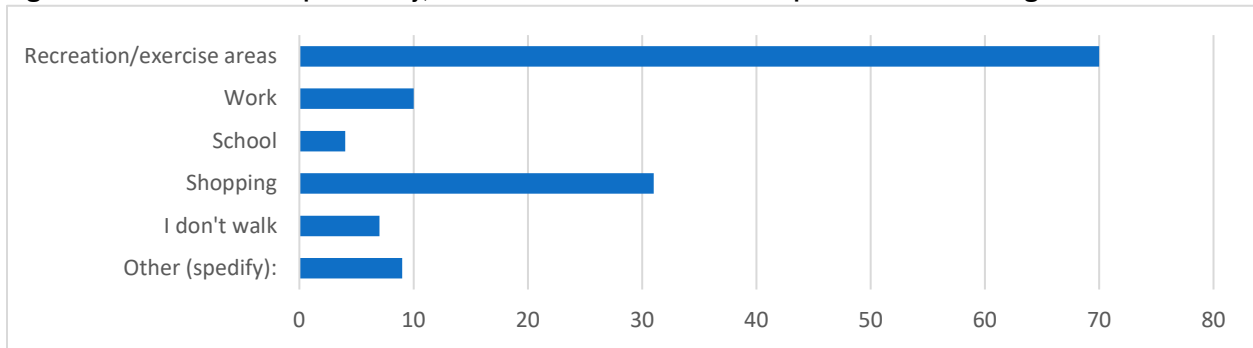
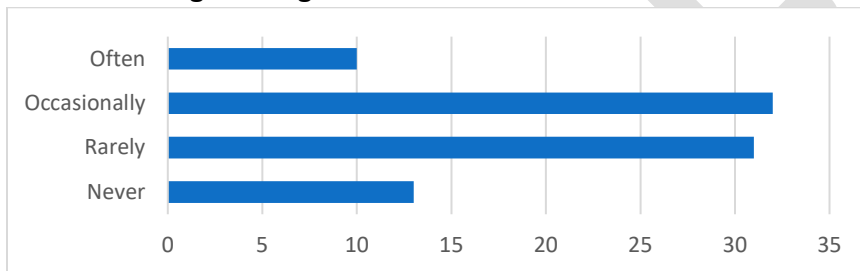
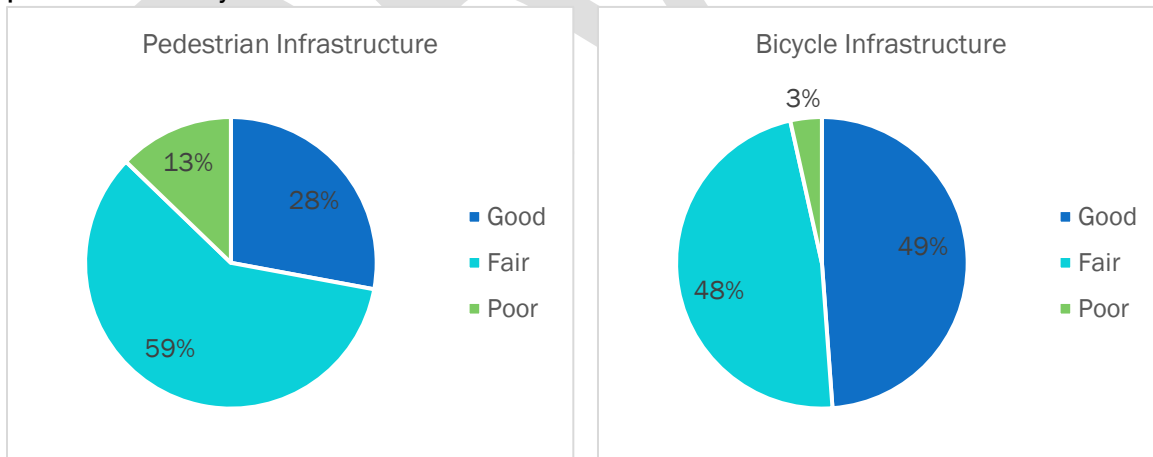


Figure 5.8: 2022 Public Input Survey, Round Two results of how often respondents walk to a destination instead of driving or taking a bus:



Figures 5.9 and 5.10: 2022 Public Input Survey, Round Two asking respondents how they rate MPO pedestrian and bicycle infrastructure:



In the second round of surveys, participants were asked about the road they would prioritize to improve pedestrian infrastructure. The most frequently mentioned roads for improvement include West 4th Street, San Marnan Drive, Kimball Avenue, Ridgeway Avenue, and Lafayette Road.

Chapter 10 – Public Participation

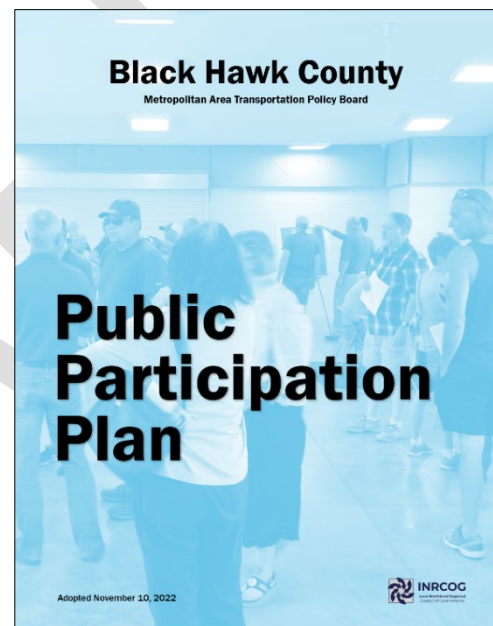
Public Participation and Why It Matters

Public Participation is a crucial and necessary step for all plans and projects administered by the MPO. Public participation provides opportunities for stakeholders to have a say in changes occurring in the community. Stakeholders include a wide array of people and groups who are involved in or impacted by a project. Stakeholders will vary based on a project, but typically include local community members, nearby business owners, local partnerships and organizations, planning agencies, and city staff. Black Hawk County MPO staff consistently strive to expand minority stakeholder involvement and overall community public participation. However, opportunities remain to shift the focus from merely *involving* the public to encouraging greater public *participation*.

Public Participation Plan

The Public Participation Plan (PPP) is updated every five years. The most recent plan was adopted November 2022. As detailed in the PPP, there are several federal and state requirements to ensure an open and transparent planning process. In addition, the MPO has several ongoing activities that form the basis of interaction with the public. These include:

- Monthly joint Policy Board and Transportation Technical Committee meetings which are open to the public.
- Work sessions, focus groups, open houses, public input meetings, and public hearings as applicable during the development of major transportation planning documents.
- Publication of transportation articles in the monthly INRCOG electronic newsletter *COG Connection*.
- Notices of opportunities for public input shared via MailChimp marketing program.
- Provision of information and interviews with area media as requested.
- Presentations to city councils, planning commissions, and county supervisors as needed.
- Information, transportation plans, and notices of opportunities for public input shared on the Black Hawk County MPO website, www.bhcmmpo.org, and the INRCOG Facebook page.



The public involvement process utilized for the development of the 2050 Long-Range Transportation Plan was guided by the PPP which sets minimum requirements for public involvement opportunities. Public involvement actions required include the following:

- Draft LRTP
 - The draft LRTP will be developed by INRCOG staff with further input from jurisdiction representatives and the Iowa DOT, and oversight by the Policy Board and Transportation Technical Committee.
 - Input will be sought from individuals, affected public agencies, representatives of public transportation employees, freight shippers, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle


- transportation facilities, representatives of the disabled, providers of freight transportation services, and other interested parties.
- Focus groups will be utilized to represent all pertinent modes of transportation and issues. Focus groups may include transit, highway and land use, bicycle and pedestrian, safety and security, and environmental resources. Focus groups will be tasked with identifying issues and potential solutions and reviewing draft chapters pertinent to their area of expertise.
 - The draft document will be made available at INRCOG, on the BHC MPO website, and upon request.
- Notices and Public Meetings
 - A minimum of two public input sessions will be held regarding the draft LRTP.
 - At least one public input session will be held in an area identified as a low-income or minority neighborhood.
 - All meetings will be held in accessible facilities.
 - Notices for public input sessions will be advertised through local media sources. Notices may be posted at governmental offices, public libraries, post offices, on transit buses, at the INRCOG Center, on the BHC MPO and INRCOG website, and the INRCOG Facebook page. Notices may also be sent to organizations serving traditionally underserved populations, such as minorities, low-income, and elderly populations.
 - Any person with special communication or accommodation needs (i.e., sight, reading, or language barriers, request for online or phone participation, etc.) can contact the MPO (minimum 48 hours prior to the meeting) and arrangements will be made.
 - Public Comment Period
 - Written and oral comments will be solicited during the public input sessions. The public will also have at least a 15-calendar-day comment period following the final public input session to submit comments via, letter, email, or in person.
 - A public hearing will be held at a regularly scheduled Policy Board meeting following the public input sessions to summarize public comments and responses. A notice of the public hearing will be published no more than twenty (20) calendar days and no less than four (4) calendar days before the date of the hearing.
 - Final LRTP
 - Following the public hearing, the Policy Board will adopt a final LRTP, including a summary of public comments and responses.
 - The final LRTP will be submitted to the Iowa DOT, FHWA, and FTA.
 - The final LRTP will be available on the BHC MPO website, at INRCOG, and upon request.
 - The public participation process associated with the LRTP will be evaluated and updated as needed.
 - Revisions
 - The LRTP may be revised between full document updates to reflect current project information.
 - Other amendments to the LRTP will be made as needed.
 - Amendments will require a public hearing to be held at a regularly scheduled Policy Board meeting. A notice of the public hearing will be published no more than twenty (20) calendar days and no less than four (4) calendar days before the date of the hearing.

Recent Public Participation Efforts

L RTP Statistically Significant Survey

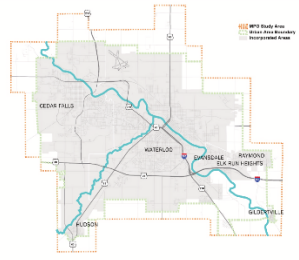
As part of the 2050 Long-Range Transportation Plan, MPO staff conducted a statistically significant transportation survey for Black Hawk County metro area residents. Survey questions were related to safety, transit, roads, bridges, and pedestrian and bicycle infrastructure. The purpose of the survey was to identify the community's transportation needs and priorities to help guide future transportation planning. For the first round of survey collection, MPO staff purchased 1,000 randomly selected addresses within the MPO area to send postcards to. Each postcard contained a QR code linked to an online survey. Information on how to access paper surveys was included on the postcard for those without internet access.

Materials from the 2022 Public Input Survey



IOWA NORTHLAND REGIONAL COUNCIL OF GOVERNMENTS
229 E Park Avenue | Waterloo Iowa 50703
(319) 235-0311 | www.inrcog.org


You've been selected to play a role in future transportation planning in your community!



Take the survey by October 28th!

Tell us your thoughts on:

- Safety
- Transit
- Roads & Bridges
- Pedestrian & Bicycle Infrastructure




How to take the survey: scan the QR code or visit <https://arcg.is/nuuT1>


We want to hear from you!
Survey Opportunity for Black Hawk County Metro Residents

Play a role in the future of transportation planning in your community! Answer questions related to roads, bridges, transit, bicycle and pedestrian infrastructure, and safety. Responses will be used to identify transportation needs and priorities for the next 25 years.

Scan me!



Closes December 9th.
Paper option available by request.



For more information, contact Aldina Dautovic at 319-235-0311 or adautovic@inrcog.org

Brief Background Information: What's an MPO?
Urbanized areas with populations greater than 50,000 require the formation of a Metropolitan Planning Organization (MPO). The Black Hawk County MPO is made up of the following:

BLACK HAWK COUNTY MPO

1 COUNTY
Black Hawk County

7 CITIES
Cedar Falls
Elk Run Heights
Evansdale
Gilbertville
Hudson
Raymond
Waterloo

2 TRANSPORTATION SERVICES
Metropolitan Transit Authority
Waterloo Regional Airport

What is your biggest transportation challenge in the Black Hawk County MPO area?*

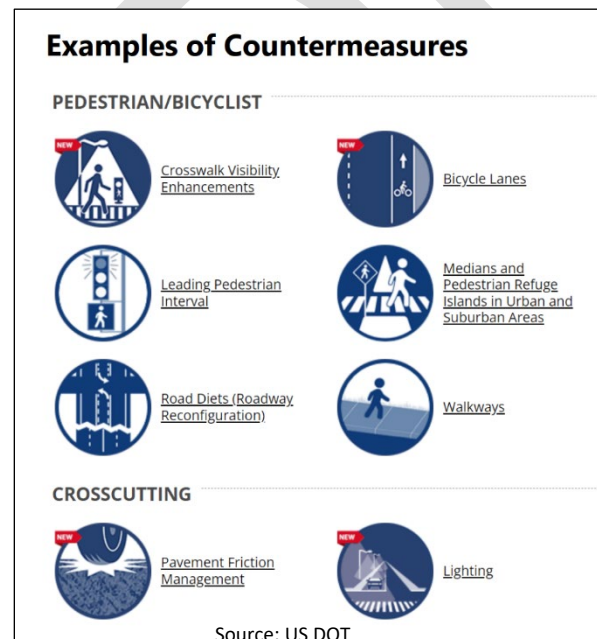
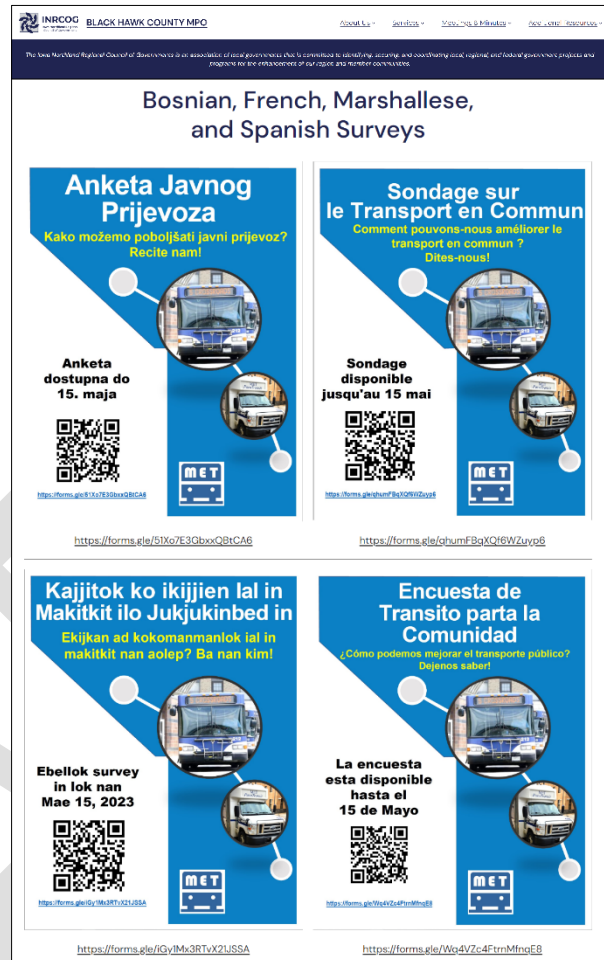
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Mayor's State of the City Address

A second round of the Long-Range Transportation Plan Survey was conducted and open to all Black Hawk County metropolitan area residents. MPO staff attended the 2022 Mayor's State of the City Address in Waterloo, Iowa to further promote the second round of the survey, as well as to educate the public about the full range of services provided by INRCOG. Various plans, documents, and reports were shared with attendees, including the flyer on the above. Paper survey options were provided for residents without access to the internet. MPO staff further promoted the second round of the survey through MPO meetings, emails, the BHC MPO website, e-newsletter, and the INRCOG Facebook page.

MET Transit Study

MET Transit, the primary mass transportation provider for Waterloo and Cedar Falls, signed a contract with SRF Consulting Group in March of 2023 to conduct a Comprehensive Transit Study. The current route structure, travel times, and service hours do not meet the community's needs, leaving gaps for residents who do not have access to a car in an auto-oriented metro area. In response, MPO staff and MET Transit collaborated to implement a route restructuring project that integrates efficient out-and-back routes instead of a loop system. MET Transit plans to simultaneously implement the restructured routes and conduct a comprehensive transit study to analyze new routes, hours of service, after-hours service, community needs, and overall efficiency. The MET Transit study began in Spring of 2023 and is expected to take one year. The first public engagement piece consisted of an online, public survey that received over 230 English responses. Since a portion of MET Transit riders are made up of underserved and minority populations, MPO staff collaborated with Black Hawk County Public Health to provide additional surveys in Bosnian, French, Marshallese, and Spanish. The surveys were housed on the Black Hawk County MPO website. Additional public input efforts will be conducted throughout the course of the transit study, in which MPO staff and Black Hawk County Public Health will continue to conduct additional outreach to gather input from underserved and non-English speaking populations.



SS4A

As part of the Bipartisan Infrastructure Law, the Safe Streets and Roads For All (SS4A) grant program aims to achieve the National Roadway Safety Strategy and the U.S. DOT's goal of achieving zero deaths and serious injuries on our nation's roadways. Using the Iowa Crash Analysis Tool (ICAT), MPO staff analyzed serious-crash and high fatality corridors within the metro area and noted downtown Waterloo area as an area of opportunity. After applying for SS4A funding in January of 2023, the MPO was awarded funding to develop a comprehensive Safety Action Plan. This plan will include a safety assessment of high fatality and serious injury corridors, implementation activities to enhance roadway and user safety, and community and stakeholder collaboration. In-depth public outreach efforts are anticipated to be conducted in 2024 as part of the project's community outreach efforts.

Downtown Waterloo Railyard Relocation Feasibility Study

Located in downtown Waterloo between E 4th Street and Martin Luther King Jr Drive is Canadian National Railway Company's (CN) largest railyard in Iowa. The railyard poses longstanding issues related to environmental justice, community connection, and public safety. Stopped trains cause extensively blocked crossings that inhibit residents, downtown employees, school students, and a historically, disproportionately disadvantaged community of color. Public frustration with frequently blocked crossings has led to numerous safety concerns and serious injuries to pedestrians and motorists resulting in civil lawsuits filed against CN. To address these issues, the City of Waterloo and MPO staff anticipate applying to the Reconnecting Communities Pilot Program by the U.S. Department of Transportation to conduct a Railyard Relocation Feasibility study. If awarded, the study will analyze the social, environmental, and public safety impacts of the railyard's location. A major focus of the study is community testimonials regarding how CN's rail yard location and stopped trains inhibit the community. Comprehensive community outreach efforts will be conducted as the project moves forward.

Downtown Waterloo Walkability and Bikeability

Every year, MPO staff are federally required to hold two public Transportation Improvement Program (TIP) Meetings. The TIPs identify transportation projects scheduled to receive federal funding in the next four federal fiscal years. MPO staff take steps to ensure meetings are convenient and accessible to the public by offering in-person and zoom options, as well as morning and evening meetings, though participation from the public is typically sparse. The June 2023 TIP meeting was joined by a resident who identifies as a "non-recreational biker". While they did not have input specific to transportation projects in the TIP, they shared valuable input and suggestions regarding bicycling infrastructure with an emphasis in Waterloo:

- *"Connect strategic places of interests such as the library, commercial districts, retail anchors, plaza, Lincoln Park, etc."*
- *"Establish efficient routes between providing connectivity to areas of interest and residential areas. Focus on long, efficient corridors to increase usage and connectivity."*
- *"Get feedback loops from bikers."*
- *"4th Street is the most desirable street [for bike infrastructure] where people actually want to experience due to high density of retail/restaurants, great pedestrian accommodations and slow/safe moving traffic that people actually respect."*
- *"Both Jefferson and Commercial are wide enough [for bike infrastructure] and have destinations people want to go."*

These comments were shared with MPO staff and with Waterloo Complete Streets. MPO staff strongly encourages and appreciates public feedback and actively work to incorporate it into existing and future project planning. Visit Current and **On-Going Projects – Park Avenue Bike Lanes Redesign** in Chapter 5 to see how these comments were incorporated into a project.

Website and Social Media

The Black Hawk County MPO website, www.bhcmmpo.org, is commonly used to notify the public of current and ongoing MPO efforts. Information can be found on the homepage under the “News and Highlights” section or under the “Public Participation” tab underneath “Services.” The Black Hawk County MPO website was also used throughout the development of this Plan. Draft chapters were posted on the website as they were completed, and staff contact information was provided to any person who wished to comment on draft materials. Other information on the transportation planning process and additional transportation documents are available on the website. The final LRTP will be posted online and will be available at the INRCOG office.

Long-Range Transportation Plan Public Input Meetings

In September 2023, two public input meetings were held for the draft 2050 Long-Range Transportation Plan. In an effort to be more inclusive and accommodating to various schedules, two public input meetings were held. The first meeting was held in the third-floor conference room at INRCOG, and the second one was held virtually. The meetings were advertised via a news release, flyers posted at public places, the MPO website, INRCOG Facebook page, and an email blast through MailChimp to the INRCOG mailing list. There were a variety of displays related to the LRTP available for review. Attendees were also given the opportunity to submit formal written comments.

External Stakeholder Consultation

Several Federal, State, Tribal, and local government agencies were notified when the draft LRTP document was available for review (see Chapter 8). Feedback on topics relevant to their field of expertise was requested and incorporated into this document.

Going Forward: How Can We Improve?

There is no single approach to gathering successful public participation. Nowadays, public participation can be difficult to obtain due to varying schedules, lifestyles, and opportunities. Successful public participation requires a creative combination of methods, locations, and platforms to not only receive a wide range of feedback, but to ensure minority representation. MPO staff practices a mixed-use approach for projects included in this plan, ranging from paper and online surveys, presentations, social media, to more active approaches such as open houses and public events. Multiple sessions, languages, and accommodations help to achieve a rich public participation process that the MPO strives for.

DRAFT 2050 Long-Range Transportation Plan (LRTP)

The MPO is required to update the LRTP every five years. Click the buttons below to view individual draft chapters. Chapters not listed are still under development.

The MPO Policy Board will consider adoption of the final Plan at the November 9th, 2023 meeting.

1 – Overview	2 – MPO Profile
3 – Roads & Bridges	4 – Passenger Transport
6 – Freight	7 – Safety & Security
8 – Environmental Review	9 – Financial Analysis
Appendix III – 2022 Public Input Survey	



Source: VectorStock



Opportunities for **Public Input** on the
2050 Update to the Black Hawk County MPO

Long-Range Transportation Plan (LRTP)

Tuesday, September 19th

12:00-1:30 p.m.

INRCOG Center

229 E Park Ave, Waterloo

Thursday, September 21st

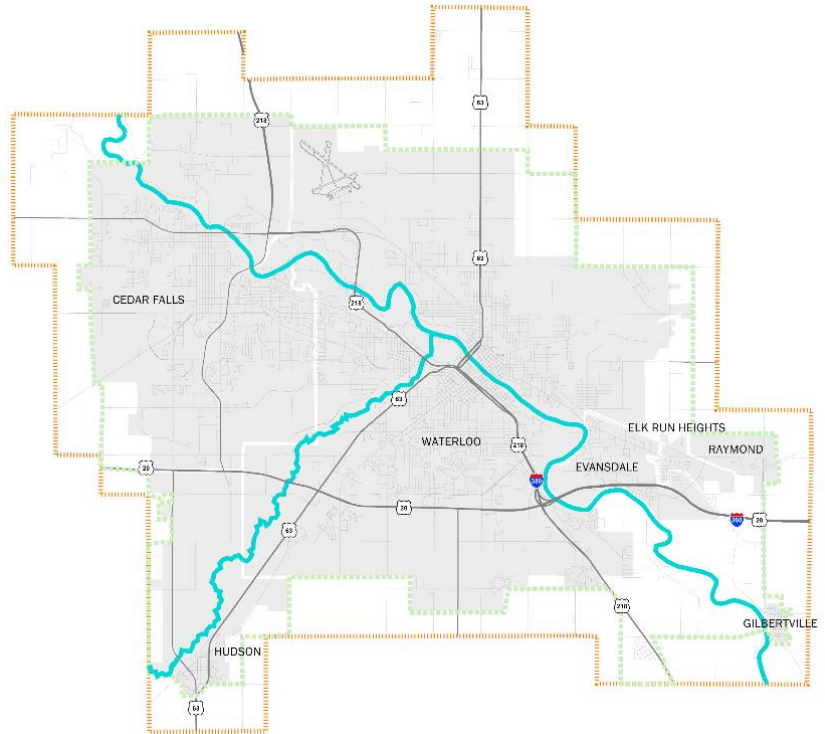
3:30-5:00 p.m.

Virtual Meeting

www.microsoft.com/en-us/microsoft-teams/join-a-meeting

Meeting ID: 244 553 423 402

Passcode: cFRd5k



The LRTP documents the present state of transportation patterns and infrastructure across all modes and provides a plan for the maintenance and improvement of each mode based on anticipated needs and revenues.

Visit www.bhcmpo.org/lrtp to view the Draft Chapters

Comments or questions can be directed to Kyle Durant, Transportation Planner II
kdurant@inrcog.org or (319) 235-0311

Las reuniones públicas se discuten en este folleto son las necesidades actuales y futuras del sistema de transporte en el ámbito de las condiciones de Black Hawk County. Llame (319) 235-0311 si usted tiene preguntas acerca de estas reuniones.



INRCOG
Iowa Northland Regional
Council of Governments

NEWS RELEASE

DATE: August 28, 2023

RE: Black Hawk County Metropolitan Planning Organization (MPO)
Draft 2050 Long-Range Transportation Plan

CONTACT: Nick Fratzke, Director of Transportation
nfratzke@inrcog.org
(319) 235-0311

The MPO will hold public input sessions on the draft 2050 Long-Range Transportation Plan (LRTP). The purpose of the LRTP is to document the present state of transportation patterns and infrastructure in the Black Hawk County metropolitan area across all modes, and to provide a plan for the maintenance and improvement of each mode based on anticipated needs and revenues. The MPO includes the cities of Cedar Falls, Elk Run Heights, Gilbertville, Hudson, Raymond, and Waterloo, and parts of unincorporated Black Hawk County. Draft chapters are available at www.bhcmpo.org/lrtp.

An in person public input session will be held September 19th from 12:00-1:30 p.m. at the INRCOG Center, and a virtual public input session September 21st from 3:30-5:00 p.m. using the meeting link and ID below. The sessions will be in an open house format with no formal presentation.

Comments will be accepted until the MPO holds a public hearing and considers adoption of a final version on Thursday, November 9th at 10:00 a.m. at INRCOG. Comments and questions can be directed to Kyle Durant, Transportation Planner II: kdurant@inrcog.org.

www.microsoft.com/en-us/microsoft-teams/join-a-meeting

Meeting ID: 244 553 423 402
Passcode: cFRd5k

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Developing Strong Local Government through Regional Cooperation