# Introduction

The purpose of this chapter is to help cities and counties, regional and state agencies, residents, and advocacy groups identify and coordinate future projects that will expand and enhance the bicycle and pedestrian network within the DMATS multimodal transportation system.

## *Topography*

The topography of the DMATS area ranges from gently rolling in the southwest, to hilly and steep in the north and east. Along the Mississippi River, the topography is very steep and rugged, with high limestone bluffs and outcrops. Much of the steep terrain is heavily wooded. The steep landscape presents challenges for the development of a bicycle and pedestrian network.

## *Transportation System*

The predominant surface transportation system in the DMATS area is a network of four US highways and other roads that carry vehicles. These roadways accommodate the travel needs of residents, area businesses, and travelers from outside the region. Transit services connect many regional residents to work, school, and other important activities in urban and rural areas. Freight railways line both sides of the Mississippi River, and an east-west freight railway generally follows the US Highway 20 corridor. Most regional bicycle and pedestrian facilities -- off-road trails, on-road routes, and sidewalks -- are found in cities, parks, and recreation areas.

## *Related Planning*

The 2023 Dubuque Regional Bicycle and Pedestrian Network Plan is a general strategy for future bike and pedestrian network development in the DMATS area and the remainder of Dubuque County, Iowa. It identifies goals, objectives, and specific projects to expand and enhance the existing network. This plan informs much of the Bike and Pedestrian Chapter. The plan is available online at https://www.eciatrans.org/bikepedestrianplan.php.

# Existing Facilities

Existing bicycle and pedestrian facilities in the DMATS area fall into 3 main categories: off-road trails, on-road routes, and pedestrian facilities.

## Off-Road Trails

Bicycle and pedestrian facilities that are physically separated from vehicle traffic by an open space or barrier.

## *Multi-Use Trails*

Also called shared use paths, multi-use trails accommodate both bicyclists and pedestrians and sometimes other users. They are suitable for most age groups and abilities. They typically are concrete, asphalt, or packed crushed rock and usually are 8 to 10 feet wide.  Multi-use trails can be in an independent right-of-way or within a highway right-of-way. They can be used for transportation and recreation. Urban examples are the Bee Branch Creek Greenway in Dubuque and the Althaus Pond Trail in Asbury.

The major rural example in the DMATS area is the Dubuque County Heritage Trail/ This crushed limestone muti-use trail stretches across Dubuque County from Dyersville to Dubuque along the 30-mile route of a former railroad. ___ miles lie within the DMATS area. It is one of the Upper Midwest's most scenic all-season trails. Figure 4.1 is a map of the Heritage Trail route.

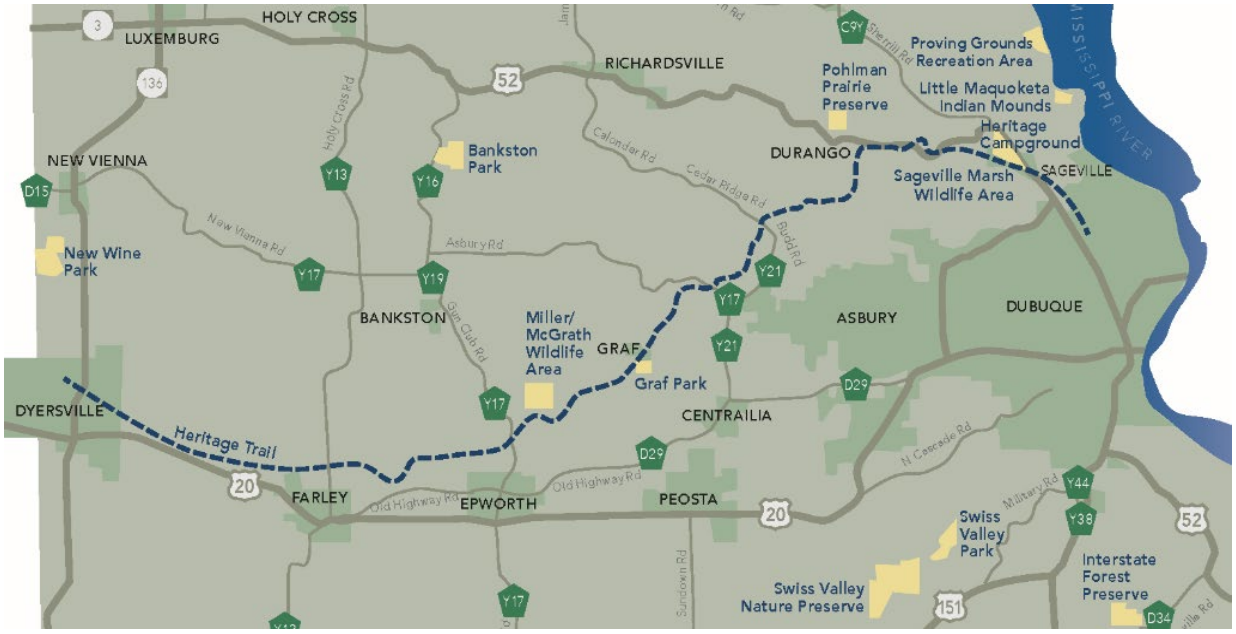



Figure 4.1 Map of Dubuque County Recreation Areas and Heritage Trail Route
*Source: Dubuque County Conservation website*

### *Sidepaths*

A "sidepath" is a multi-use trail along a roadway. While mostly separated from motor vehicle traffic, sidepaths can be high-stress trails for bicyclists depending on the design and number of driveway and street crossings per mile. A DMATS example is the Northwest Arterial Trail in Dubuque (see Figure 4.2).


Figure 4.2 Northwest Arterial Sidepath Trail in Dubuque
*Source: ECIA using Google Maps*

### *Recreational Trails*

These trails are geared to specific recreational uses such as the hiking trails in the Mines of Spain State Recreation Area, and the mountain biking trails in the Interstate Power Company Forest Preserve south of Dubuque. Usually unpaved, steeper, and narrower than a multi-use trail, these trails may require a relatively higher level of physical ability. They are local or regional destinations, not part of the transportation system.

## On-Road Routes

Bicyclists and sometimes pedestrians share the roadway with vehicle traffic.

### *Paved Shoulders*

Paved shoulders can provide a stable surface off the roadway for bicyclists, and sometimes for pedestrians when sidewalks are not provided. They need a minimum width of 4 feet adjacent to a road edge, in addition to a buffer or rumble strip (see Figure 4.3). Local examples are found in all 3 states and include the Mississippi River Trail (MRT):

- Iowa MRT Route/Dubuque-1 Bike Route along Sherill Road and Balltown Road
- US 52 from US 61-151 to Dubuque County line
- US 20 from 6th St to west of Camillus Drive in East Dubuque
- US 61-151 across Wisconsin Bridge to Grant County line

Figure 4.3 *Bicyclists using a 4-foot paved shoulder with a rumble strip*
*Source: FHWA Small Town Guide, p. 3-5*

## *Bike Lanes*

Bike lanes designate a space just for bicyclists using pavement markings and often signs in urban areas. A bike lane is generally 4 to 5 feet wide (not counting gutter) and located next to vehicle travel lanes. Bicyclists travel in the same direction as the vehicle traffic. Some places have contra-flow bike lanes going against traffic that are protected by a barrier. Bike lanes are not intended for use by pedestrians. Locally, bike lanes are provided along Radford Road from Asbury Road to Saratoga Road in the City of Asbury (see Figure 4.7).

## *Shared Lane Markings ("Sharrows")*

In cities, shared lanes on streets with moderate traffic may use shared lane markings called "sharrows" and often signs to show where bicyclists should ride, and to alert drivers to "share the road. Locally, sharrows were used as part of a Complete Streets project in Dubuque's Historic Millwork District (see Figure 4.4).

Figure 4.4 Sharrows in Dubuque's Millwork District
*Source: 2017 Imagine Dubuque Plan*

## *Signed On-Road Routes*

Roadways with bike route or wayfinding signs direct bicyclists along preferred routes to destinations in and across cities, counties, and the region. DMATS examples are the on-road portions of the Iowa MRT and the Dubuque-1 Bike Route in Dubuque County, and the Heritage Trail Riverfront System in the City of Dubuque. The Federal Highway Administration (FHWA), state Departments of Transportation (DOTs), and most cities use signs from the Manual of Uniform Traffic Control Devices (MUTCD). Examples of signs are shown in Figure 4.6.


Figure 4.5 MUTCD bike route and wayfinding signs guide bicyclists along Dubuque-1 Bike Route in Dubuque County
*Source: ECIA*

# Bridges and Tunnels

Depending on the design, bicyclists and pedestrians may share a space separated from vehicle traffic along the roadway, over the roadway, or under the roadway. There are several examples of each in the region; a few are highlighted here.

## *Separated Bridge Facilities*

When the City of Dubuque rebuilt the Fengler Street Bridge over the railroad tracks, sidewalks on each side of the new bridge were physically separated with a barrier wall from the vehicle traffic for the safety of bicyclists and pedestrians.

## *Bike and Pedestrian Bridges*

With construction of the US 61/151 Freeway Project through Downtown Dubuque, a physically separated bike and pedestrian bridge with ADA-accessible ramps on each end was built over the Locust Street Connector at Flat Iron Park.

## *Bike and Pedestrian Tunnels*

Tunnels under John Deere Road South connect the Dubuque County and City of Dubuque portions of the Heritage Trail. Tunnels under railroad tracks were constructed as part of the Bee Branch Creek Greenway (see Figure 4.6).

Figure 4.6 Bee Branch Creek Greenway Tunnel in Dubuque
*Source: City of Dubuque website*

# Pedestrian Facilities

Pedestrians are separated from vehicle traffic and sometimes bicyclists.

## *Sidewalks*

Sidewalks separate pedestrians from vehicle traffic, often with an open space or a barrier. Typically found in cities within the public right-of-way along one or both sides of streets (see Figure 4.9). Width can vary with surrounding land uses. Sidewalks in residential neighborhoods generally are narrower (4 to 5 feet) than in downtowns or at schools. Many streets in the region have sidewalks, but there are gaps in the sidewalk network. Rural areas generally do not have sidewalks, relying on paved shoulders or multi-use trails instead.

## *Crosswalks*

Streets throughout the region have unmarked and marked crosswalks. Marked crosswalks with bold striping patterns are more visible to drivers and improve pedestrian safety (see Figure 4.7). They typically are used in downtowns and at schools. They often are used with signs and/or pedestrian signals. State law requires drivers yield to pedestrians in crosswalks.


Figure 4.7 Bike Lanes, Sidewalks, Crosswalks, and Curb Ramps along Radford Road in Asbury
*Source: ECIA using Dubuque County GIS*

## *Curb Ramps*

Curb ramps serve as a transition from sidewalks to crosswalks (see Figure 4.7). Many streets in the region have curb ramps, but there are gaps in the sidewalk network. Also, some curb ramps may not comply with all current federal laws and state design standards to comply with Americans with Disabilities Act (ADA) requirements.

## *Other Crossing Improvements*

Other types of crossing improvements include pedestrian refuge or median islands, traffic controls signs, and pedestrian-activated crossing signals. These types of improvements have been made at various locations, often at school crossings.

## *Traffic Circles and Roundabouts*

Traffic circles are small islands in the middle of an intersection, like those on Washington Street in Dubuque. Roundabouts are larger circles that provide a one-way circular flow to an intersection (see Figure 4.8). Both will slow down through traffic and allows left-turning traffic to follow around the circle before turning.


Figure 4.8 Roundabout at University and Grandview Avenues in Dubuque
*Source: ECIA using Dubuque County GIS*

# Adopted Policies

## *Complete Streets*

Complete Streets serve pedestrians, bicyclists, public transit users, children, older adults, persons with disabilities, motorists, and freight vehicles. A Complete Street is safe, and feels safe, for all users. The FHWA supports transportation agencies to plan, implement and evaluate complete streets and networks that prioritize safety, comfort, and connectivity to destinations for all people who use the street network. Adoption of Complete Streets in the region: Complete Streets Law -- Illinois and Wisconsin, and Complete Streets Policy: Iowa, DMATS, and City of Dubuque.

## *Safe Routes to Schools*

The US DOT provides guidance and resources for Safe Routes to School (SRTS) Programs. This program promotes walking and bicycling to school through infrastructure improvements, enforcement, tools, safety education, and incentives to encourage walking and bicycling to school. Extensive resources are available through a national center, including an SRTS Guide, parent surveys and student tallies, and simple strategies. Adoption in DMATS: Dubuque Area SRTS Plan for Dubuque Community School District and Holy Family Catholic Schools.

# Inventory of Existing Facilities

Existing bicycle and pedestrian facilities in the DMATS area are classified as follows:

**Multi-Use Trail** (or shared use paths) – A paved or unpaved two-way facility physically separated from vehicle traffic and designed for multiple types of users.

**Paved Shoulder** – Paved space on the edge of a road for bicyclists, and sometimes pedestrians when no sidewalk is provided.

**Signed On-Road Route** – On-road bicycle routes that are designated by signage posted along the route.

**Hiking Trail** – Unpaved trail used for hiking.

**Mountain Bike Trail** – Unpaved trail used for mountain biking.

**Pedestrian Walkway** – Paved path designed primarily for pedestrians. *Not all sidewalks are included; only select facilities important for pedestrian mobility.*

**Bike Lane** – Paved and marked space on a paved roadway designated for bicyclists outside the vehicle travel lane.

**Complete Streets** – Improvements that support safe mobility for all users.

**Pedestrian Overpass** – Bridge space for pedestrian and sometimes bicycle use.

**Walking Path –** Unpaved path designed primarily for pedestrian use.

Figure 4.9 shows the breakdown of nearly 133 total miles of existing bike and pedestrian facilities by type in the DMATS area in 2023. Hiking and mountain bike trails are not part of the transportation system, but are important destinations.

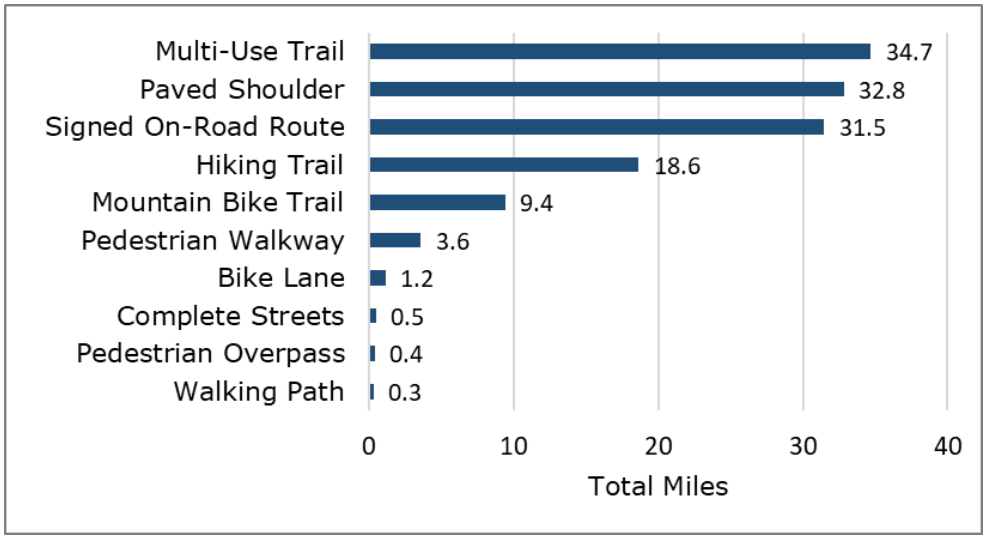



Figure 4.9 Existing DMATS Bike and Pedestrian Facilities, 2023
*Source: ECIA PLACEHOLDER: Need miles for Heritage Trail & 2025 system update*

*Note: ECIA staff are working with the various jurisdictions to update what projects have been completed, and to identify what future projects are planned. This collaboration includes updated mileages for existing bike and pedestrian facilities.*

Figure 4.10 is a map of the location and type of existing bicycle and pedestrian facilities in the Regional Planning Area in 2023.

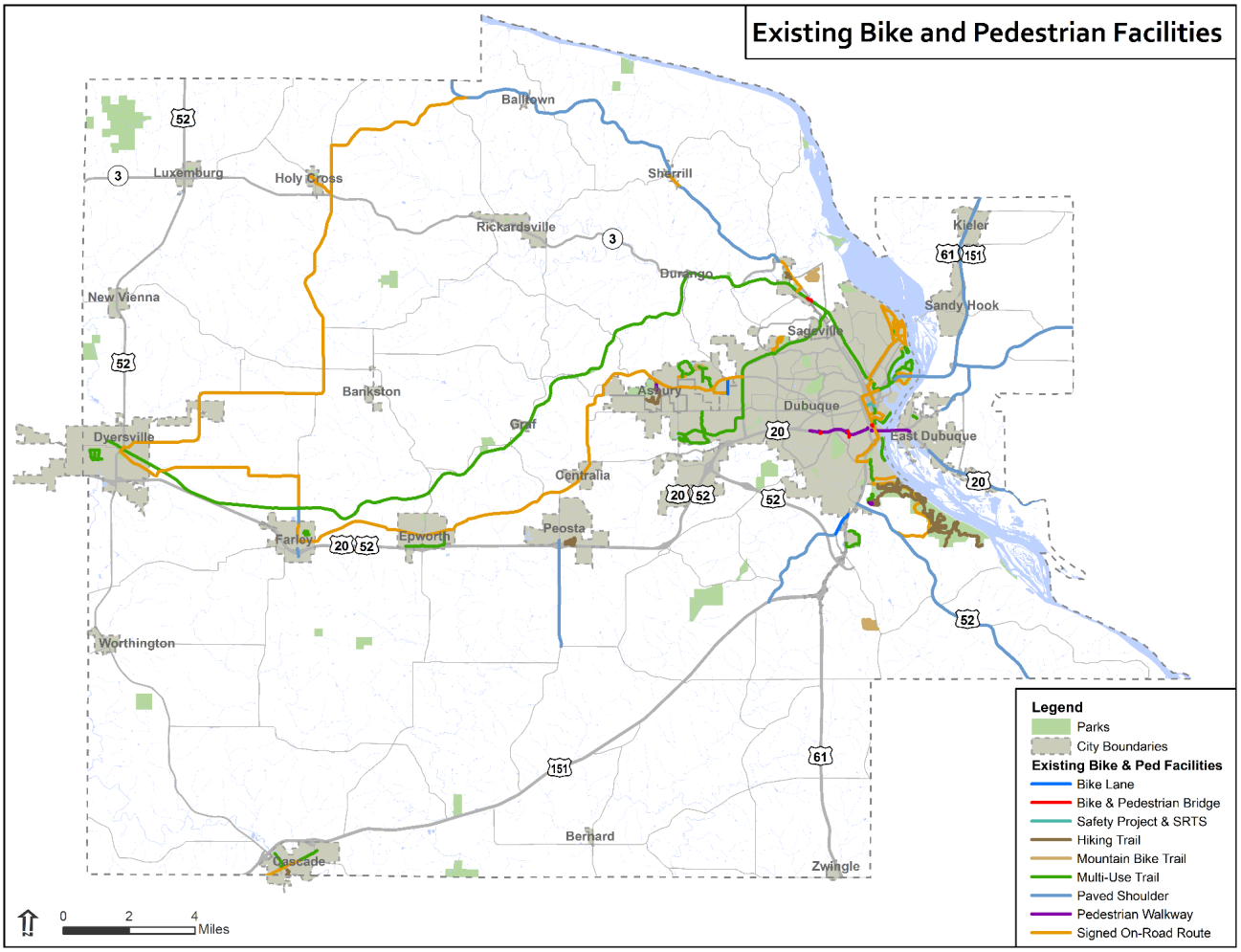
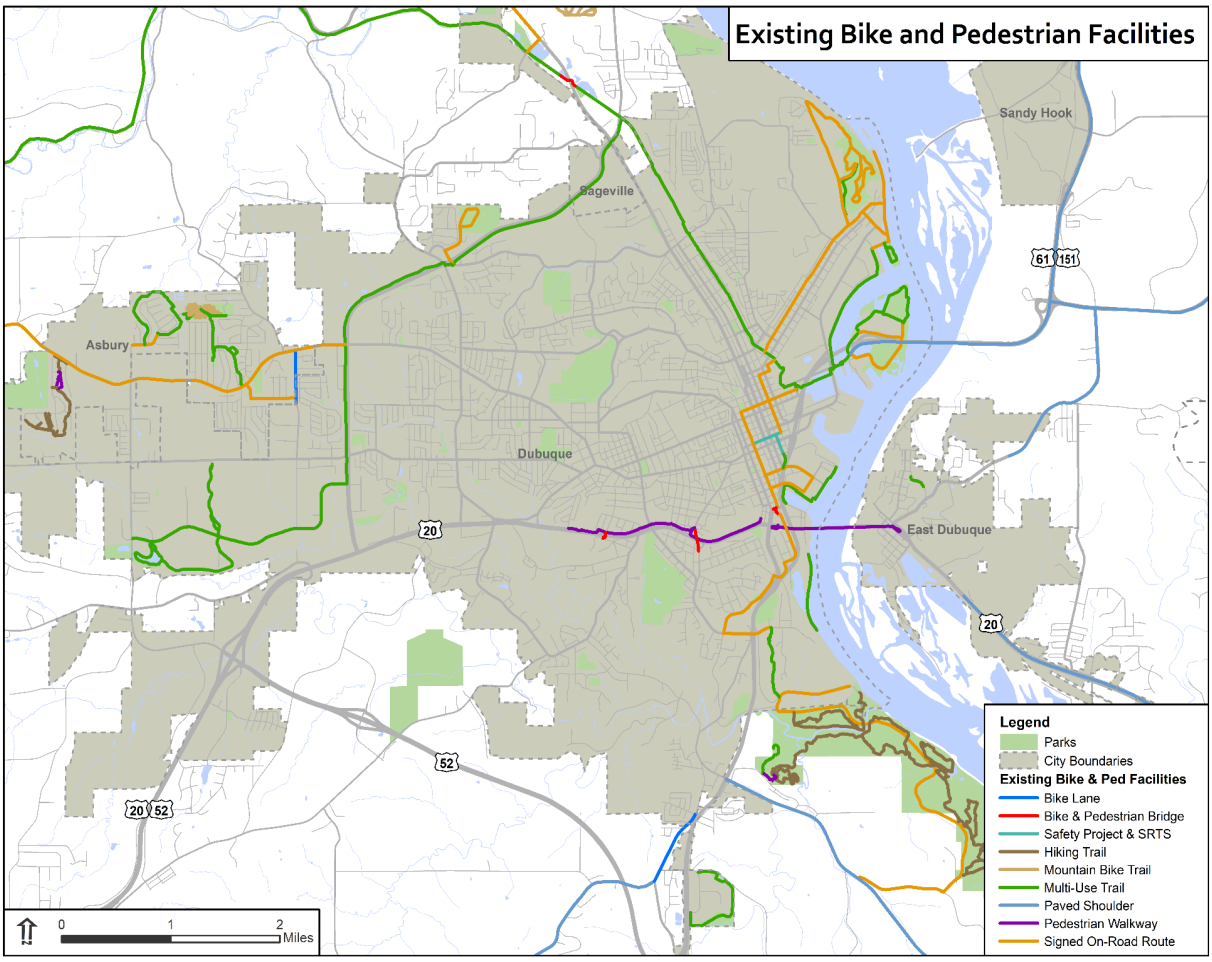



Figure 4.10 Existing Bike and Pedestrian Facilities in the Regional Planning Area, 2023
*Source: ECIA PLACEHOLDER: Need to add DMATS boundary, 2025 system update*

Figure 4.11 is a map of the location and type of existing bicycle and pedestrian facilities in the DMATS area in 2023. The large map shows the existing facilities in the Illinois and Wisconsin portions of the DMATS area; the cities of Asbury, Dubuque, and Sageville; and portions of Dubuque County, Iowa. The small map shows existing facilities in Centralia, Peosta, and other portions of Dubuque County.



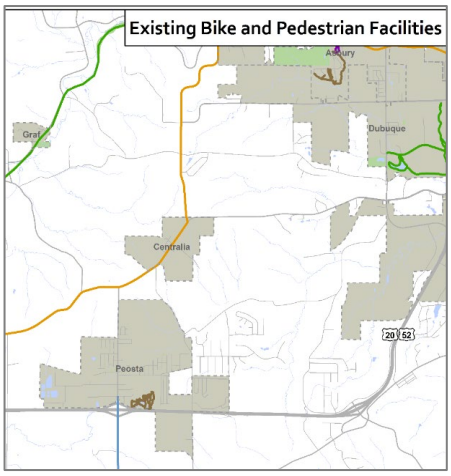




Figure 4.11 Existing Bike and Pedestrian Facilities in the DMATS Area, 2023

*Source: ECIA PLACEHOLDER: Need to expand to shows full DMATS boundary in one map, or create a large map with an inset map to show full DMATS boundary; also need to show Heritage Trail & 2025 system update*

Figure 4.12 is a map of the existing sidewalks in the City of Dubuque in 2023, which will help identify the City's Complete Streets inventory.

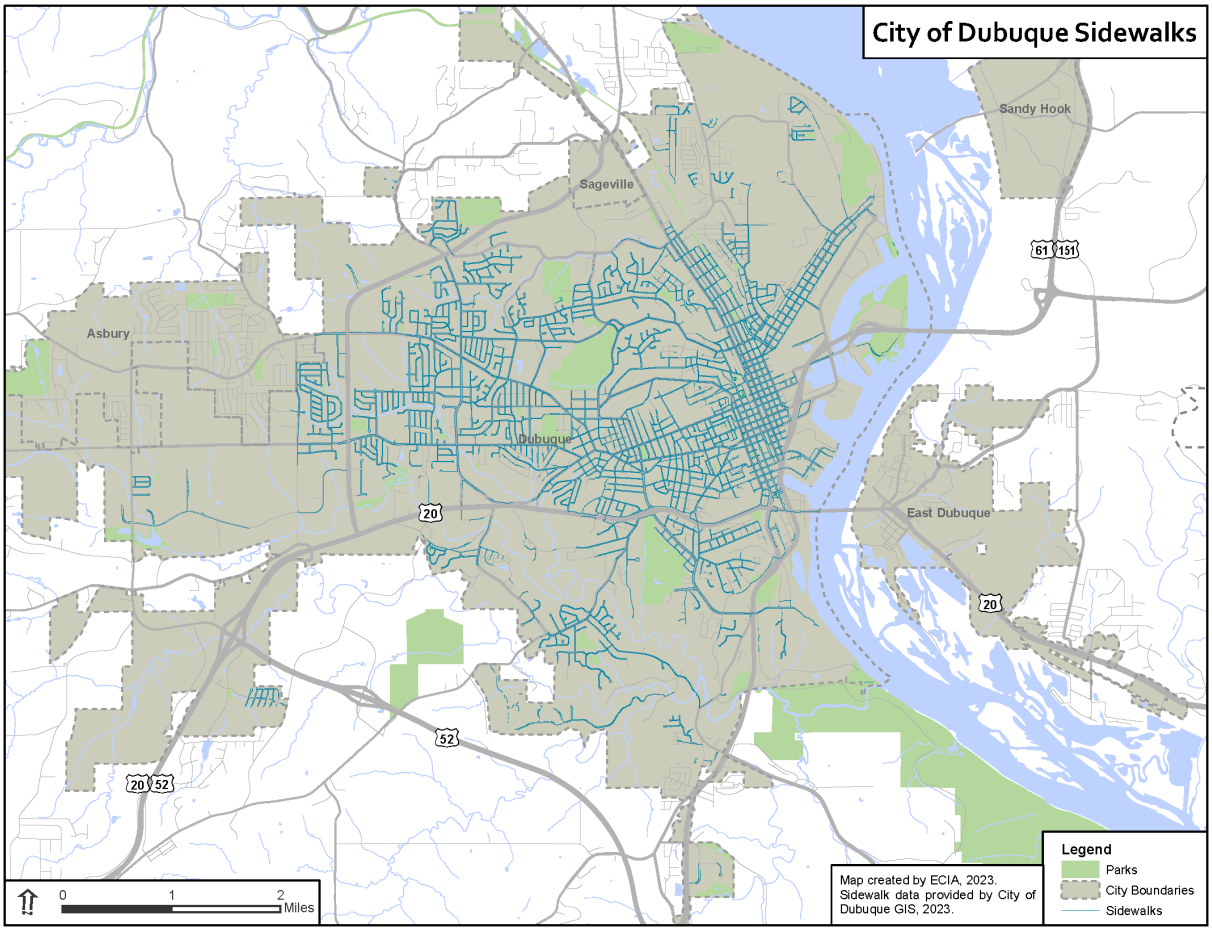



Figure 4.12 Map of City of Dubuque Existing Sidewalks, 2023
*Source: ECIA PLACEHOLDER: Need 2025 system update*

# Existing Conditions

In many parts of the DMATS area, the choice of travel is limited to driving due to land use patterns and topography. Even when destinations are nearby, a lack of pedestrian and bicycle facilities often makes walking and bicycling unsafe and undesirable.

# Common Challenges

Urban and rural communities in the DMATS area face common challenges in providing a safe, comfortable, equitable, and connected bicycle and pedestrian network for people of all ages and abilities.

## *Providing a Choice of Transportation Options*

Roadways often are designed only to be shared by cars, trucks, and vans – and do not easily accommodate transit bus stops, bicyclists, and pedestrians. The focus on vehicle traffic in the region results in a lack of transportation options that are safe and comfortable for bicyclists and pedestrians to use.

## *Providing Safe, Comfortable, and Equitable Access*

Designing a community for equitable access and opportunities requires addressing varied needs in walking, cycling, and other travel modes. The Federal Highway Administration (FHWA) emphasizes creating safe, interconnected facilities for people of all ages and abilities, which can be challenging, especially in communities with low existing pedestrian and bicycle use. Streets can become barriers that divide communities if crossings are not provided or are difficult to justify based on current usage.

## *Multi-Use Trails Come at a Price $$$*

Due to the expense of trail construction and maintenance, and difficulty in acquiring right-of-way for new trails, the multi-use trail system has gaps. While multi-use trails may be the most desirable option for transportation and recreational biking and walking, cost and available land will limit the ability to build a comprehensive network out of multi-use trails alone.

## *Sidewalks = Public Facility + Private Maintenance*

Sidewalks and on-road routes are important public facilities that can help fill the gaps in the bicycle and pedestrian network. Sidewalks provide necessary walking connections to homes, schools, businesses, transit services, and other activities. Unlike off-road trails or on-road bike routes, however, private property owners usually maintain sidewalks.  This can create challenges, as property owners can vary greatly in their ability or desire to maintain sidewalks.

## *Creating Multi-modal Connections*

Many communities in the DMATS area have invested in bicycle and pedestrian facilities. However, no communities have a complete multi-modal network that allows people to bike and walk throughout the community, to other communities, and to local and regional destinations.

For example, the City of Dubuque has invested in an extensive riverfront trail system and the Northwest Arterial Trail, but not in routes across the center of the community as shown on the City's Interactive Trails and Park Map in Figure 4.13.

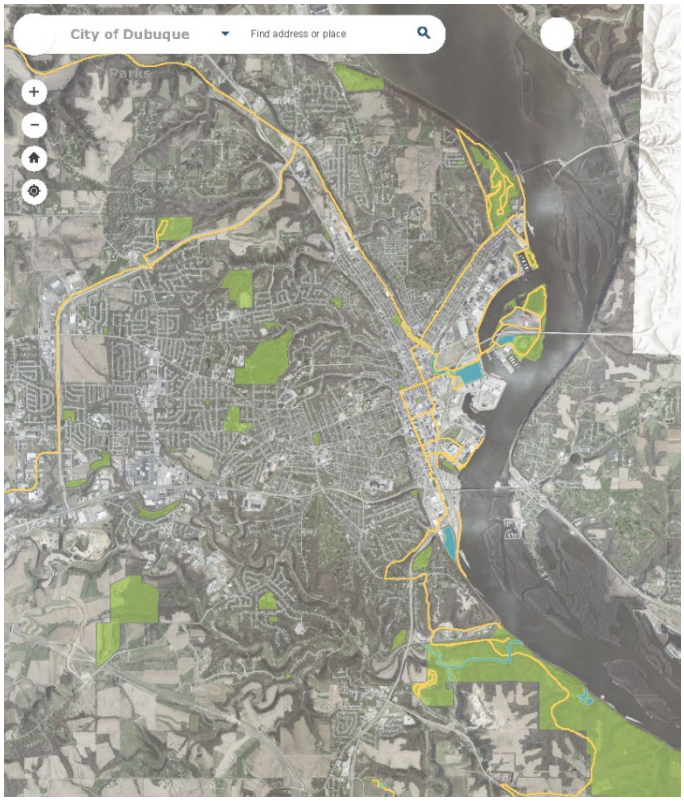



Figure 4.13 Interactive Trails and Parks Map
*Source: City of Dubuque website, October 2025*

## *Constrained by Terrain and Right-of-Way*

Terrain in the region ranges from gently rolling to hilly, steep, and wooded along the Mississippi River. This rugged landscape can impact the design and cost of providing bicycle and pedestrian facilities along city streets and rural roadways. Whether a road of any given traffic volume is suitable for biking also is impacted by width of pavement and right-of-way and how space is allocated - on-street parking, wide travel lanes, etc.

## *Constrained by Adjacent Land Use*

In addition to terrain, existing right-of-way, and pavement width, adjacent land use can impact the feasibility of adding bike lanes or paved shoulders on County roads. The cost to provide bike lanes or paved shoulders within existing right-of-way is substantially less than if the road must be regraded and private property must be acquired. These same principles can apply in the Dubuque metro area and in small towns.

Plans for bike lanes or paved shoulders must be realistic and prioritized to focus limited resources where they can reap the most benefit for this major portion of the regional network. In Figure 4.14, the Dubuque County Engineer's Office compared a typical road cross-section (top) and two examples to help explain the realities and impacts of providing bike lanes or paved shoulders within the right-of-way (center)

or when property acquisition, cutting, and filling are needed outside the right-of-way (bottom).

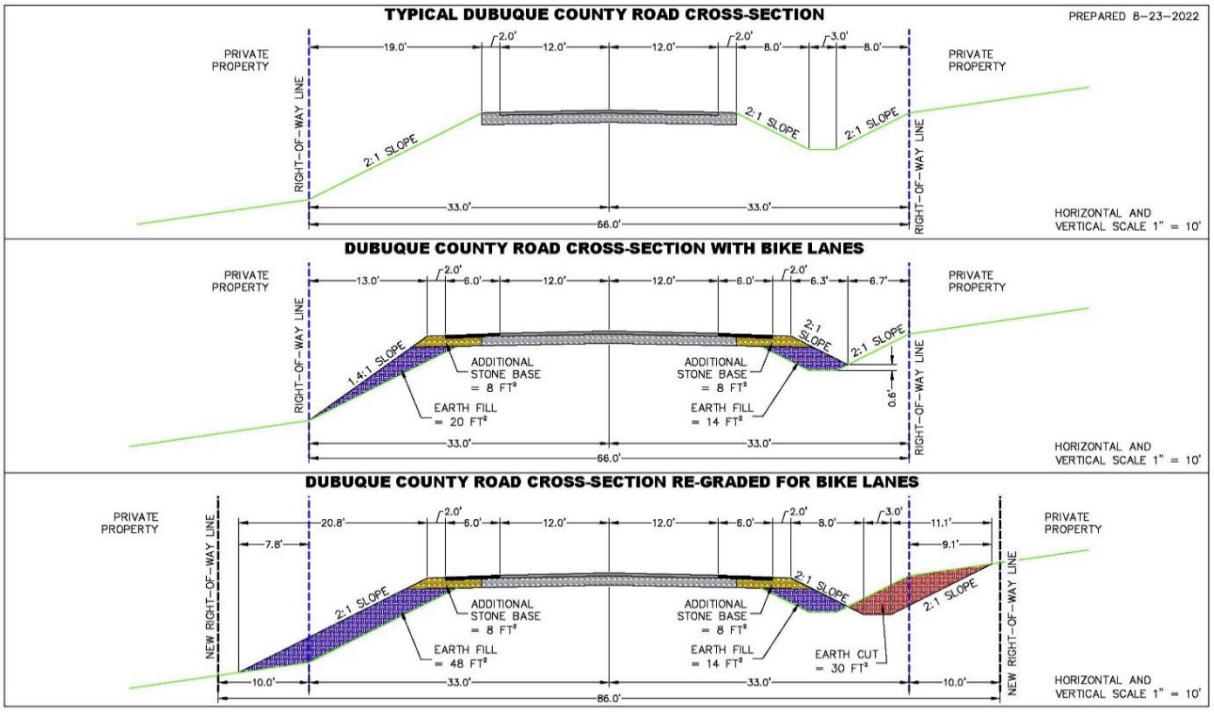



Figure 4.14 Typical County Road Cross-Sections: Bike Lanes (or Paved Shoulders)
*Source: Dubuque County Engineer's Office*

## *Connecting Schools*

Schools are key destinations in communities of all sizes. They serve as neighborhood or community centers for people of all ages and abilities. Yet many students do not have safe routes to walk or bike to school. Some areas have no sidewalks or paved shoulders to connect students to their schools. Table 4.1 provides a comparison of state laws for walking to school and teaching traffic safety, including pedestrian and bicycle safety, for the DMATS area.

Table 4.1 Comparison of State Laws: Walking to School and Teaching Traffic Safety

| State | Maximum Walking Distance | | Teaching traffic safety, including pedestrian and bicycle safety |
|---|---|---|---|
| | Elementary (grades K-6) | Secondary (grades 7-12) | |
| Illinois | 1.5 miles | 1.5 miles | Required for grades K-8 |
| Iowa | 2 miles | 3 miles | Required as part of physical education |
| Wisconsin | 2 miles | 2 miles | Not required, but schools are expected to educate students on traffic laws |

*Sources: ECIA using Illinois, Iowa, and Wisconsin state websites, October 2025*

# Bicyclist and Pedestrian Related Crashes

The number, severity, and location of pedestrian and bicyclist related crashes with vehicles can provide information on where safety improvements are needed in the DMATS area. ECIA staff researched available crash data for the tri-state region.

## *Crash Severity*

For the DMATS area in Illinois, ECIA staff used the Illinois DOT's Roadway Crash Data at https://idot.illinois.gov/transportation-system/transportation-safety/roadway-safety/illinois-roadway-crash-data.html. Data was for available for Jo Daviess County and East Dubuque for 2020-2023. There was no location data for these crashes, so only the East Dubuque data was used.

For the DMATS area in Wisconsin, ECIA staff used the Wisconsin DOT's Community Maps site at https://transportal.cee.wisc.edu/partners/community-maps/. Data was available for Grant County for 2020-2024. Maps of crash locations were used to determine if crashes occurred within the DMATS area.

For the DMATS area in Iowa, ECIA staff used the Iowa DOT's online Crash Analysis Tool (ICAT) at https://icat.iowadot.gov/. Data was available for Dubuque County, cities in Dubuque County, and the DMATS metropolitan area for 2020-2024.

Table 4.2 provides a comparison of crash severity data regarding fatal, injury, and property damage crashes in the DMATS area for 2020-2024 for Iowa and Wisconsin, and for 2020-2023 for Illinois, using the state DOT sources noted above.

Table 4.2 Tri-State DOT Crash Severity Data for DMATS Area, 2020-2024*

| Crash Severity | Crashes with Bicyclists | | | Crashes with Pedestrians | | |
|---|---|---|---|---|---|---|
| | Iowa | Illinois | Wisconsin | Iowa | Illinois | Wisconsin |
| Fatal | 1 | 1 | 0 | 3 | 0 | 0 |
| Injury | 54 | 1 | 0 | 86 | 1 | 0 |
| Property Damage | 1 | 0 | 0 | 3 | 0 | 0 |
| **Totals** | **56** | **2** | **0** | **92** | **1** | **0** |

*Sources: Illinois, Iowa, and Wisconsin DOT crash data accessed October 2025*
**Note: Illinois DOT data available for 2020-2023. PLACEHOLDER: Needs 2024 IL DOT data*

For the DMATS area in Iowa, ECIA staff used ICAT to compare crash severity data for bicyclists, pedestrians, and all vehicles for 2020-2024 (see Table 4.3). The combined total of 148 bicyclist and pedestrian crashes comprised 1.8% of all vehicle crashes during this timeframe. A disproportionate number of crashes involved bicyclists and pedestrians, however. One in 5 fatal crashes (21.1%) involved bicyclists and pedestrians, and 50.1% of all of crashes with fatalities or suspected injuries involved bicyclists and pedestrians.

| Table 4.3 ICAT Crash Severity Data for DMATS Area, 2020-2024 | | | | | |
|---|---|---|---|---|---|
| Crash Severity | Crashes Involving | | All Crashes | Bicyclists & Pedestrians | |
| | Bicyclists | Pedestrians | | Combined Crashes | Percent of All Crashes |
| Fatal | 1 | 3 | 19 | 4 | 21.1% |
| Suspected Serious Injury | 4 | 12 | 86 | 16 | 18.6% |
| Suspected Minor Injury | 21 | 49 | 671 | 70 | 10.4% |
| Possible/Unknown Injury | 29 | 25 | 1,252 | 54 | 4.3% |
| Property Damage Only | 1 | 3 | 6,228 | 4 | 0.1% |
| **Totals** | **56** | **92** | **8,256** | **148** | **1.8%** |
| *Source: ECIA using ICAT, October 2025* | | | | | |

## *Crash Characteristics*

For the DMATS area in Iowa, ECIA staff used ICAT to analyze characteristics of the crashes involving bicyclists and pedestrians for 2020-2024. Major findings were:

- Manner of crash was "non-collision" for 55 bicyclist and 81 pedestrian crashes, and one of these crashes involved striking a fixed object.
- Surface conditions were dry for 52 bicyclist and 83 pedestrian crashes.
- Most crashes were not drug/alcohol related (55 bicyclist and 89 pedestrian).
- Most bicyclist crashes occurred between 2 PM to 6 PM and most pedestrian crashes occurred between Noon to 8 PM and on Monday through Thursday.

Table 4.4 lists the ICAT major causes for bicyclist crashes in the DMATS Area for 2020-2024. Collectively, FTYROW, or failure to yield right-of-way, was the second highest major cause (17 crashes) after Other: No improper action (23 crashes).

| Table 4.4 ICAT Major Causes for Bicyclist Crashes in DMATS Area, 2020-2024 | | |
|---|---|---|
| Major Causes | Total: 56 | Percent of Total |
| Other: No improper action | 23 | 41% |
| FTYROW: To pedestrian | 7 | 13% |
| FTYROW: From stop sign | 6 | 11% |
| FTYROW: Making left turn | 3 | 5% |
| Driver Distraction: Other interior distraction | 3 | 5% |
| FTYROW: Making right turn on red signal | 1 | 2% |
| Made improper turn | 1 | 2% |
| Failed to keep in proper lane | 1 | 2% |
| Other: Vision obstructed | 1 | 2% |
| Passing: Other passing | 1 | 2% |
| Unknown | 1 | 2% |
| *Source: ECIA using ICAT, October 2025* | | |

Table 4.5 lists the ICAT major causes for pedestrian crashes in the DMATS Area for 2020-2024. Collectively, FTYROW, or failure to yield right-of-way, to pedestrians was the highest major cause (30 crashes), followed by Other: No improper action (22 crashes) and Other (9 crashes).

| Table 4.5 ICAT Major Cause for Pedestrian Crashes in DMATS Area, 2020-2024 | | |
|---|---|---|
| Major Causes | Total: 91 | Percent of Total |
| FTYROW: To pedestrian | 27 | 30% |
| Other: No improper action | 22 | 24% |
| Other | 9 | 10% |
| Lost control | 4 | 4% |
| Swerving/Evasive action | 4 | 4% |
| FTYROW: Making left turn | 3 | 3% |
| Aggressive driving/road rage | 3 | 3% |
| Ran stop sign | 2 | 2% |
| Illegally parked/unattended | 2 | 2% |
| Made improper turn | 2 | 2% |
| *Source: ECIA using ICAT, October 2025* | | |

For the DMATS area in Iowa, ECIA staff used ICAT to map crash severity data for bicyclists and pedestrians for 2020-2024. Most crashes occurred in the City of Dubuque, with a concentration in the downtown core (see Figure 4.15).

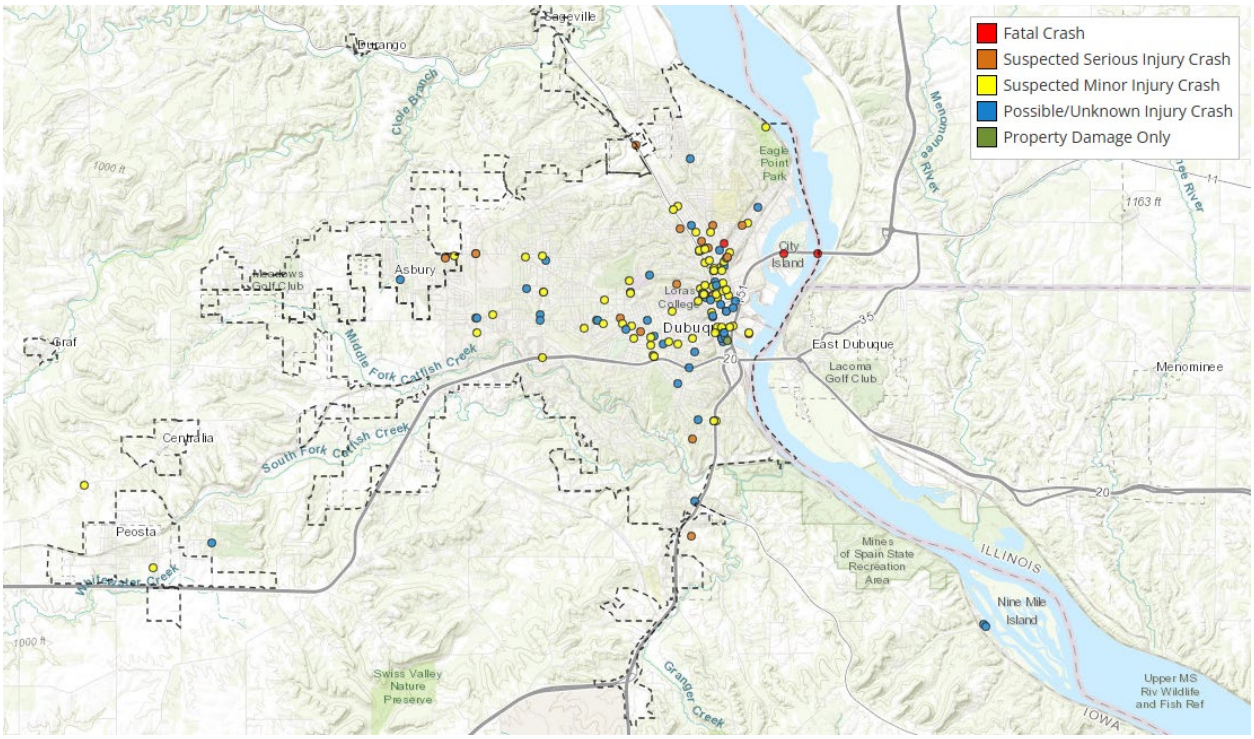



Figure 4.15 ICAT Map of Bicyclist and Pedestrian Crashes in DMATS Area, 2020-2024
*Source: ECIA using ICAT, October 2025 PLACEHOLDER: Needs DMATS Area Boundary*

# Future Bike and Pedestrian Projects

Communities in the DMATS area located high demand areas for bike and pedestrian facilities, and identified barriers to walking and biking. Each community developed a list of future projects to address safety issues, expand the bike and pedestrian network, and remove barriers to walking and biking.

Future bike and pedestrian facilities planned for the DMATS area expand upon the list of existing facilities. The combined existing and future facilities are classified as follows:

**Bike/Pedestrian Bridge**– Bridge dedicated for bicycle and pedestrian use.

**Bike/Pedestrian Overpass** – Bridge space for pedestrian and sometimes bicycle use.

**Walking Path –** Unpaved path designed primarily for pedestrian use.

**Safety Project & Safe Routes to School (SRTS)** – Streets where improvements have been made to support safe mobility for all users.

**Crossing Improvement** – Intersection where improvements are installed to enhance safety for bicyclists and pedestrians.

**Bike Lane or Paved Shoulder** – Roadway with pavement extending at least four feet outside the vehicle travel lane.

**Complete Streets** – Improvements that support safe mobility for all users.

**Bike Lane** – Paved and marked space on a paved roadway designated for bicyclists outside the vehicle travel lane.

**Paved Shoulder** – Paved space on the edge of a road for bicyclists, and sometimes pedestrians when no sidewalk is provided.

**Multi-Use Trail** – Paved or unpaved trail designed for multiple types of users. Typically, multi-use trails are at least ten feet wide, but may be as narrow as eight feet in some locations.

**Signed On-Road Route** – On-road bicycle routes that are designated by signage posted along the route.

**Pedestrian Walkway** – Paved path designed primarily for pedestrians. *Not all sidewalks are included; only select facilities important for pedestrian mobility.*

**Mountain Bike Trail** – Unpaved trail used for mountain biking.

**Hiking Trail** – Unpaved trail used for hiking.

# Existing and Future Facilities

Table 4.6 compares the miles of existing and future bike and pedestrian facilities by type of facility in the DMATS area for 2023.

| Table 4.6 Miles of DMATS Existing and Future Bike/Pedestrian Facilities, 2023 | | | |
|---|---|---|---|
| Facility Type | Existing | Future | Total |
| Bike/Pedestrian Bridge | 0.00 | 0.29 | 0.29 |
| Bike/Pedestrian Overpass | 0.42 | 0.42 | 0.84 |
| Walking Path | 0.33 | 0.73 | 1.06 |
| Safe Routes to School | 0.00 | 0.95 | 0.95 |
| Crossing Improvement | 0.00 | 2.38 | 2.38 |
| Complete Streets | 0.46 | 2.89 | 3.35 |
| Bike Lane | 1.18 | 13.03 | 14.21 |
| Paved Shoulder | 32.82 | 26.69 | 59.51 |
| Multi-Use Trail | 34.59 | 38.34 | 72.93 |
| Signed On-Road Route | 31.45 | 75.00 | 106.45 |
| Pedestrian Walkway | 3.58 | 0.00 | 3.58 |
| Mountain Bike Trail | 9.38 | 0.00 | 9.38 |
| Hiking Trail | 18.63 | 0.00 | 18.63 |
| **Grand Total** | **132.84** | **160.72** | **293.56** |
| *Source: ECIA PLACEHOLDER: Need miles for Heritage Trail and 2025 system update* | | | |

Full reconstruction of a street can take several years from planning to final construction, but a community may need to add safety improvements more quickly. Interim improvements use low cost, temporary materials to enable faster project delivery. The interim approach also allows the community to test the effectiveness of the improvement before committing to the full cost of reconstruction, such as with a pilot project.

## *Future Facilities*

The following maps show the existing and future bike and pedestrian facilities in the context of the Dubuque regional planning area and the DMATS planning area in 2023. Existing facilities are shown with solid lines and future facilities with dashed lines.

Figure 4.16 is a regional map of the DMATS existing and future bike and pedestrian facilities in 2023.

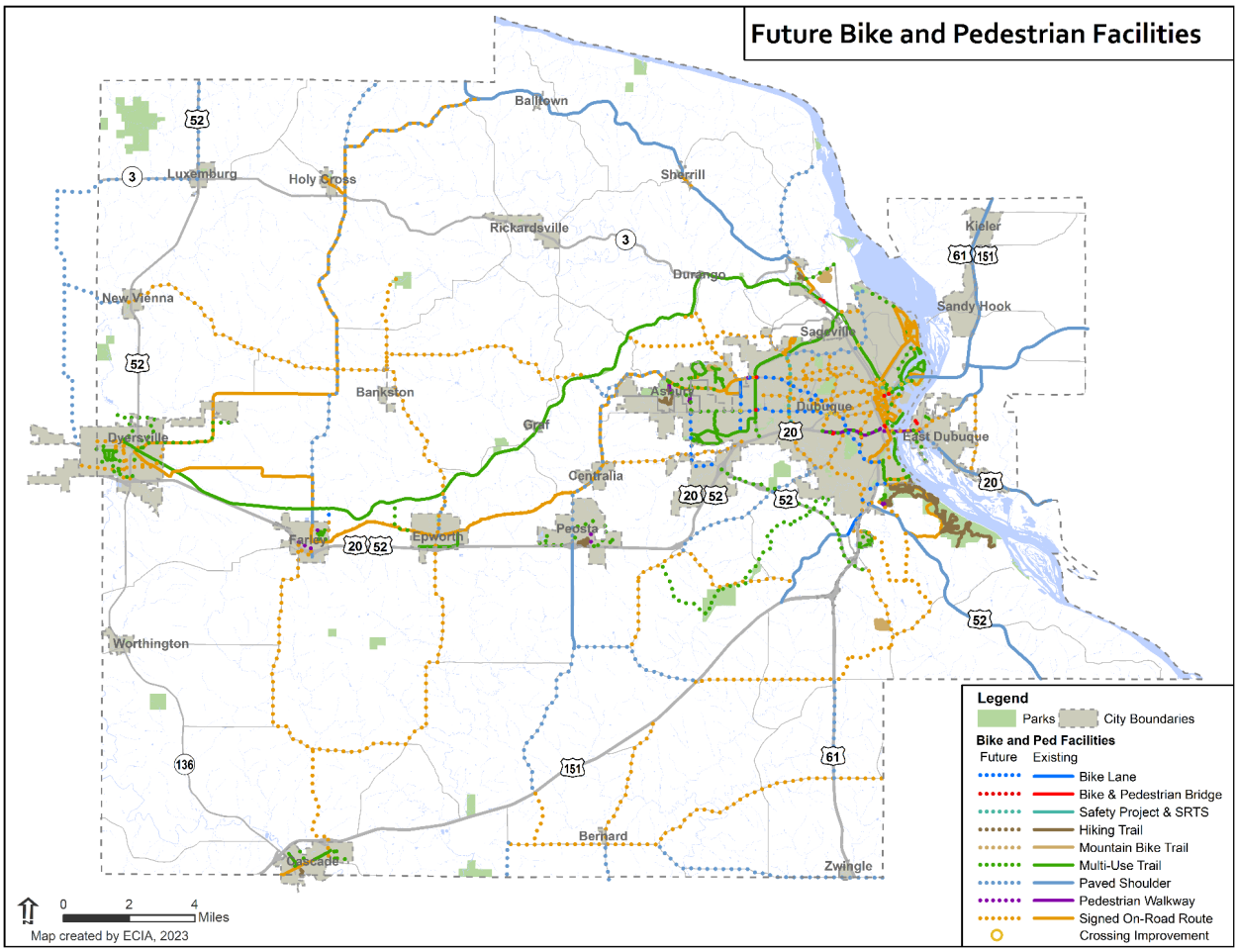
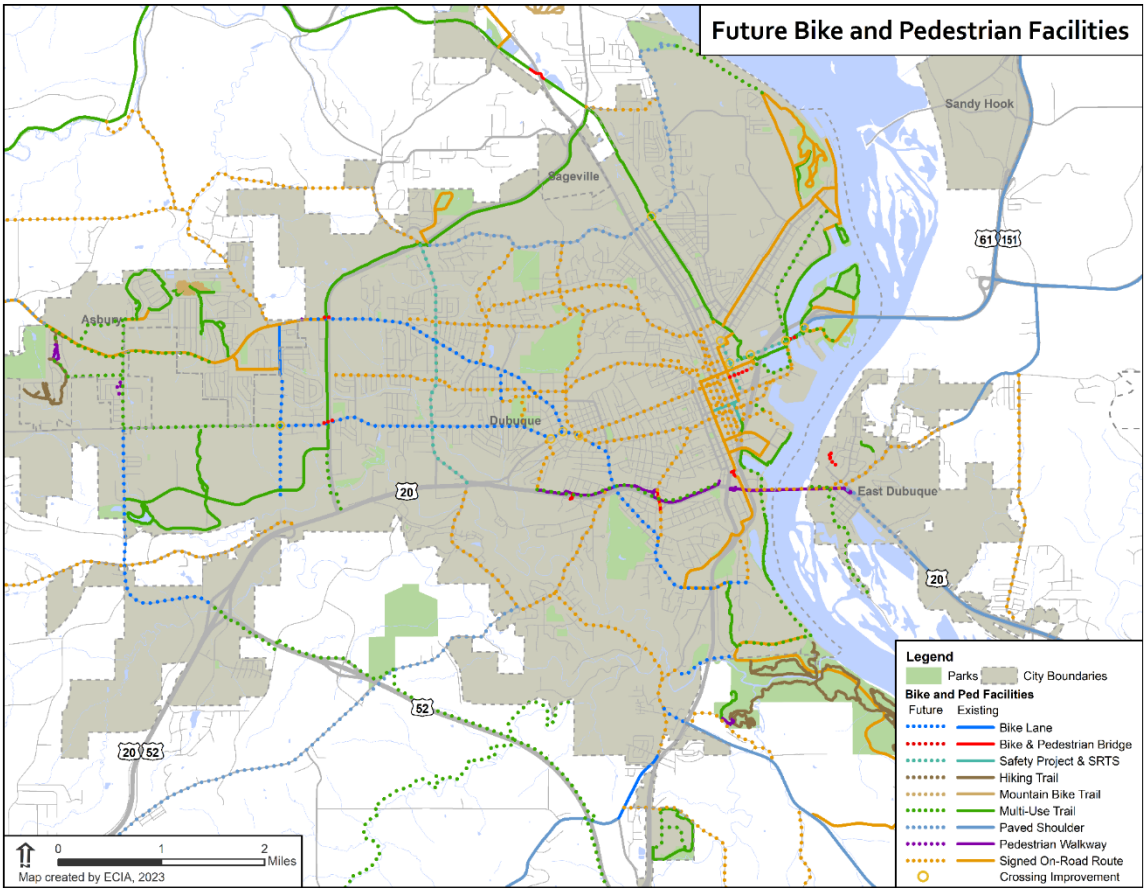



Figure 4.16 Regional Map of DMATS Existing & Future Bike/Pedestrian Facilities, 2023
*Source:* ECIA *PLACEHOLDER: Needs DMATS boundary & miles for Heritage Trail & 2025 system update*

Figure 4.17 is a map of the DMATS existing and future bike and pedestrian facilities in 2023. The large map shows the existing and future facilities in the Illinois and Wisconsin portions of the DMATS area, Asbury, Dubuque, Sageville, and portions of Dubuque County, Iowa. The small map shows existing and future facilities in Centralia, Peosta, and other portions of Dubuque County.



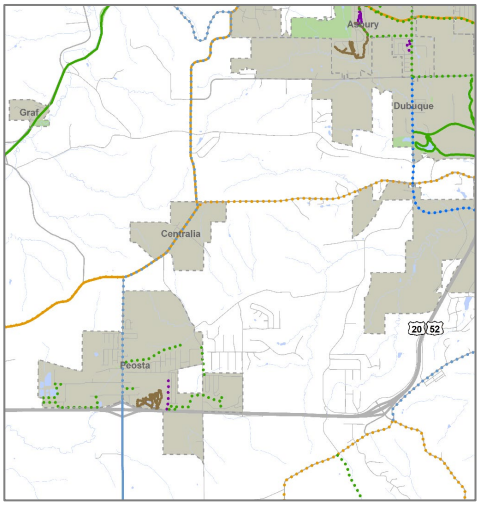




Figure 4.17 Map of DMATS Existing & Future Bike/Pedestrian Facilities, 2023

*Source:* ECIA *PLACEHOLDER: Need to expand to shows full DMATS boundary in one map, or create a large map with an inset map to show full DMATS boundary & miles for Heritage Trail & 2025 system update*

## *Priority Routes and Corridors*

Full reconstruction of a street can take several years from planning to final construction, but a community may need to add safety improvements more quickly. Interim improvements use low cost, temporary materials to enable faster project delivery. The interim approach also allows the community to test the effectiveness of the improvement before committing to the full cost of reconstruction, such as with a pilot project.

Due to the number of proposed projects, the 2023 Dubuque Regional Bike and Pedestrian Network Plan identified priority routes for the network that generally include those projects that are the easiest to implement and will have the greatest impact.

Figure 4.18 is a regional map of the DMATS priority bike and pedestrian routes by type of facility, showing existing and future bike and pedestrian facilities in 2023.

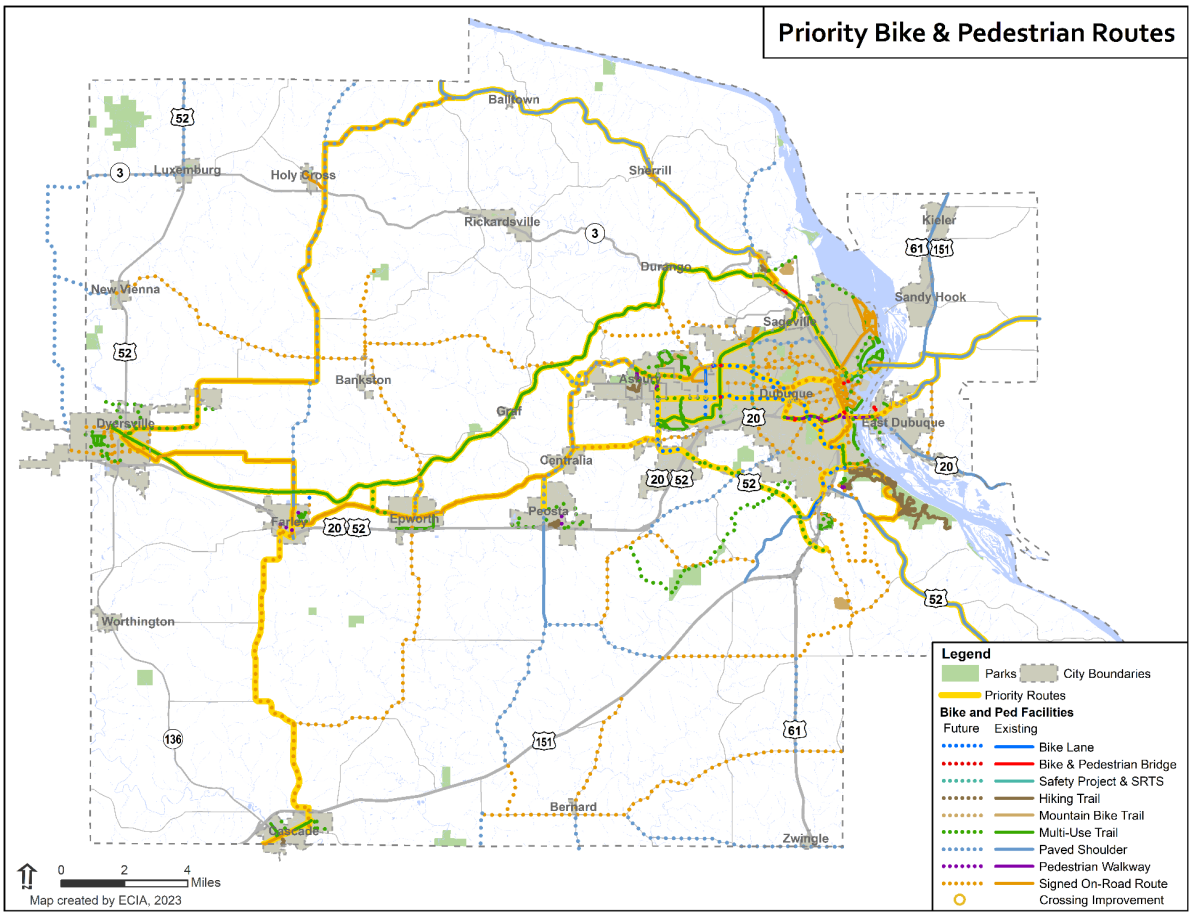



Figure 4.18 Regional Map of DMATS Priority Bike and Pedestrian Routes, 2023
*Source:* ECIA *PLACEHOLDER: Needs DMATS boundary & miles for Heritage Trail & 2025 system update*

Figure 4.19 is a regional map of the DMATS priority bike and pedestrian routes as priority corridors in 2023. The priority bike and pedestrian routes establish a network of multi-modal corridors. Consideration of priority routes as multi-modal corridors will allow the cities, counties, DMATS Technical and Policy Boards, Iowa DOT, Illinois DOT, and Wisconsin DOT to coordinate funding for surface transportation projects in a multi-modal approach in the DMATS area.

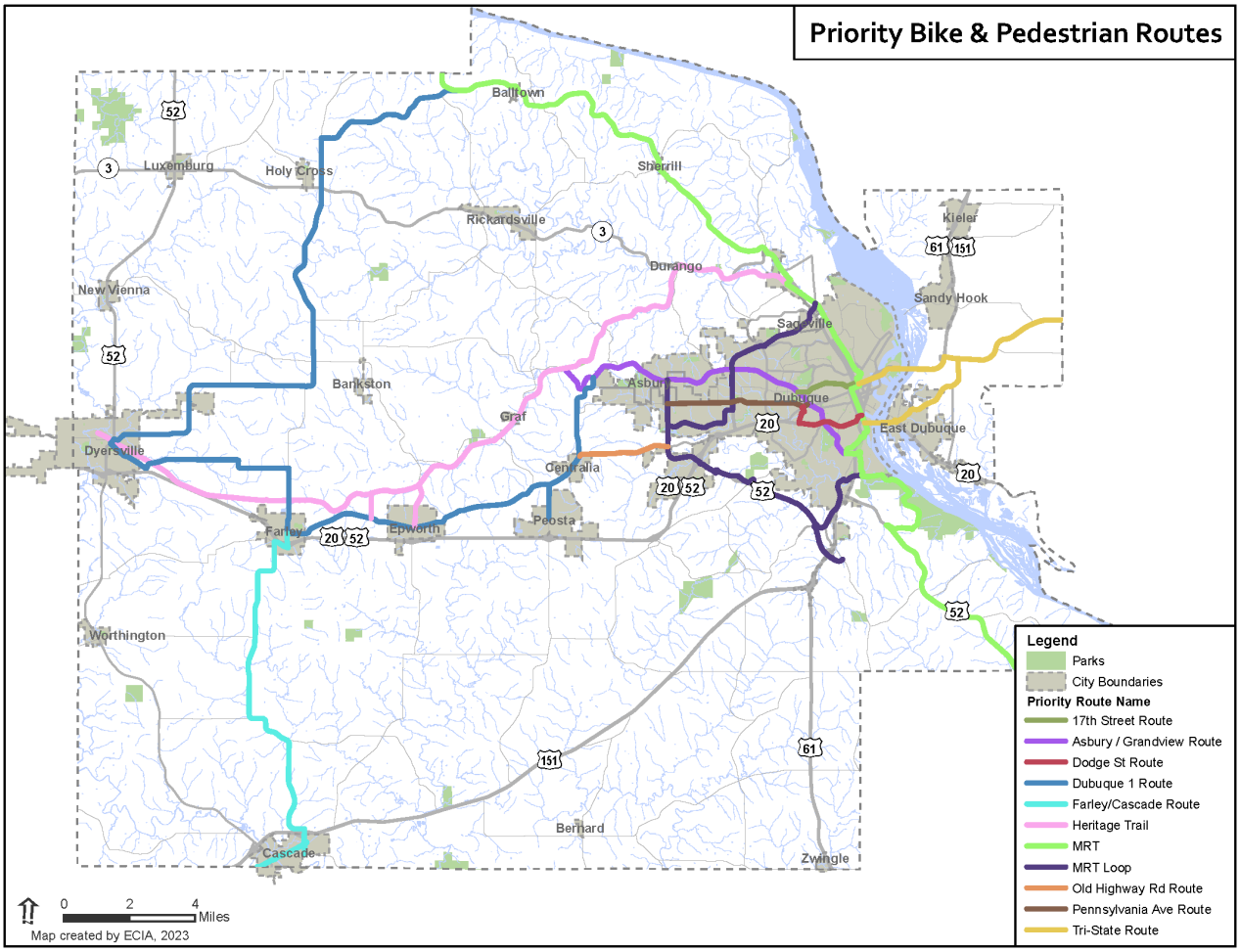



Figure 4.19 Regional Map of DMATS Priority Bike and Pedestrian Corridors, 2023
*Source:* ECIA *PLACEHOLDER: Needs DMATS boundary and 2025 system update; also change "Route" to ""Corridor" in map title and legend.*

## Project Cost Estimates

ECIA compiled projects from the regional communities to create the 2023 Dubuque Regional Bicycle and Pedestrian Plan. For projects without sponsor cost estimates, ECIA calculated planning level cost estimates using the 2018 Iowa DOT Plan's typical per mile cost estimates. Detailed information on projects and cost estimates is provided in the 2023 Dubuque Regional Bike and Pedestrian Plan.

The total estimated cost for the future bicycle and pedestrian facilities for 2023 is about $127 million, which includes construction costs of nearly $118 million and right-of-way acquisition of nearly $9.6 million. Table 7 provides a breakdown of costs by facility type for future bike and pedestrian projects planned for the DMATS area in 2023.

Table 4.7 Breakdown of Project Cost Estimates in DMATS Area in 2023

| Facility Type | Construction | Right-of-Way | Total Estimate |
|---|---|---|---|
| Bike Lanes | $52,079,020 | $5,338,536 | $57,417,556 |
| Bike/Pedestrian Bridge | $9,385,000 | | $9,385,000 |
| Safety Project & SRTS | $4,716,257 | | $4,716,257 |
| Crossing Improvements | $14,031,993 | $322,719 | $14,354,712 |
| Multi-Use Trail | $23,058,770 | $1,000,000 | $24,058,770 |
| Paved Shoulders | $12,185,000 | | $12,185,000 |
| Signed On-Road Route | $1,659,460 | $2,916,090 | $4,575,550 |
| Walking Path | $448,000 | | $448,000 |
| **Totals** | **$117,563,500** | **$9,577,345** | **$127,140,845** |

*Source: ECIA PLACEHOLDER: Need updated cost estimates for future projects*

*Note: ECIA staff are working with the various jurisdictions to update what projects have been completed, and to identify what future projects are planned. This collaboration includes preparation of updated cost estimates for bike and pedestrian facilities within transportation corridors.*