

Appendix B- Documentation of the Identification of Transportation Needs Process

Identifying Transportation Needs

The CORPO Transportation Plan adopted in 2018 underwent a major update in 2022 and 2023, set to be adopted in 2023. The update will account for changes in priorities because of recent growth and development as well as fluctuations in anticipated costs.

In August 2023 CORPO staff prepared and emailed a packet to subcommittee members in each CORPO county to assist them in the process of identifying and returning lists of their transportation needs. Counties returned copies of the completed lists included with the packet, which led to discussion at the subcommittee meetings, and resulted in the final project lists included in the 2023-2050 CTP.

This appendix includes the following documentation:

- A template copy of the informational packet that was provided to each county (the template county is Madison County).
- A template copy of the spreadsheet that was provided to each county to review their 2018-2040 listed projects, update information, and identify new needs (the template county is Madison County).



CORPO 2023-2050 Transportation Plan Update

Long-range transportation plans should be revisited and updated at least every five years. Initially adopted in 2018, the CORPO Transportation Plan (CTP) is currently undergoing an update that will be adopted by the CORPO committee in November 2023. Upon adoption, the updated CTP will cover the planning horizon of 2023-2050.

The information provided in this packet is intended to be a resource for Madison County to review and develop a list of transportation needs to be included as projects in the CTP update.

CTP Update Process

Below is an overview of the status of the CTP update process to date.

2021

• July- November- Review, update, and adopt public involvement plan (Complete)

2022

- January- May- Review, update, and adopt CTP goals and objectives (Complete)
- January- May- Develop performance measures (Complete)

2023

- August- Develop 2050 population and employment growth projections (Complete)
- August- Compile candidate strategies and transportation needs (We are here)
- August- September- Evaluate strategies and projects
- September- Full draft CTP document
- September- October- Public comment period for draft CTP
- November- CTP adoption

Identification of Transportation Needs

The next step in the CTP update process is to compile strategies and projects. This packet is intended to assist Madison County with identifying transportation needs and projects that will be included in the CTP update. The selected strategies and projects should help the region meet the vision, goals, performance measures, and objectives established at the beginning of the planning process.

Identifying Needs/Projects

To identify projects for potential inclusion in the CTP, review the information provided in this packet to help determine needs, gaps, or issue areas that should be addressed. For each recommended project to be included in the CTP, the following information should be included if available:

- Project Name
- Project Description
- Project Location

- Project Type
- Project Cost
- Desired Timeframe



In addition to including specific projects in the CTP, identified needs such as problem corridors or subareas recognized as needing further study prior to identifying a specific project can also be included in the CTP. Identified needs may also include policy or programmatic recommendations for other agencies.

Use the excel workbook provided with this packet to identify transportation needs- projects, studies, problem areas, subareas needing further study, policy, or programmatic recommendations, etc.- that should be evaluated for inclusion in the 2023-2050 CTP update.

2.1.1 Document Contents

The remainder of this document starts out with historical and projected population and job information followed by a section for each of the CTP goals and related objectives, performance measures, and relevant data concerning existing conditions and trends along with guiding questions to assist with identifying projects/needs. The last section includes the projects that were included int the 2018 CTP along with the projects in the current State Fiscal Year 24-27 Transportation Improvement Program. The previous CTP projects are included in the excel spreadsheet for review and update while the TIP projects are for reference only and will be included in the 2023-2050 CTP as appropriate.

Below is a list of the contents of the remaining sections of the document. Click a section to be taken to that section of the document.

2.1.1.1 REMAINING DOCUMENT SECTIONS

- 1. Population and Employment: Historical and Projections to 2050- page 3
 - 1.1. Existing Conditions and Trends- Population and Employment
 - 1.2. 2050 Projections- Populations, Households, and Jobs

2. CORPO Transportation Plan Goals and Objectives- page 10

- 2.1. Goal 1- Preserve and Maintain Existing Transportation System in Good Repair
 - 2.1.1. Related Performance Measures
- 2.2. Goal 2- A Safe Transportation System for All Users
 - 2.2.1. Related Performance Measures
- 2.3. Goal 3- Accessibility and mobility options for all users
 - 2.3.1. Related Existing Conditions
- 2.4. Goal 4- An integrated, connected, and coordinated transportation system
 - 2.4.1. Related Existing Conditions
- 2.5. Goal 5- A transportation system that supports a collaborative and focused approach to achieve economic vitality
 - 2.5.1. Related Existing Conditions
- 2.6. <u>Goal 6- Preserve and enhance environmental resources and sustainability through</u> the transportation system
 - 2.6.1. Related Existing Conditions

3. Reviewing & Updating Transportation Needs- page 22

3.1. <u>2018-2040 CORPO Transportation Plan and SFY 24-27 Transportation</u> Improvement Program Projections



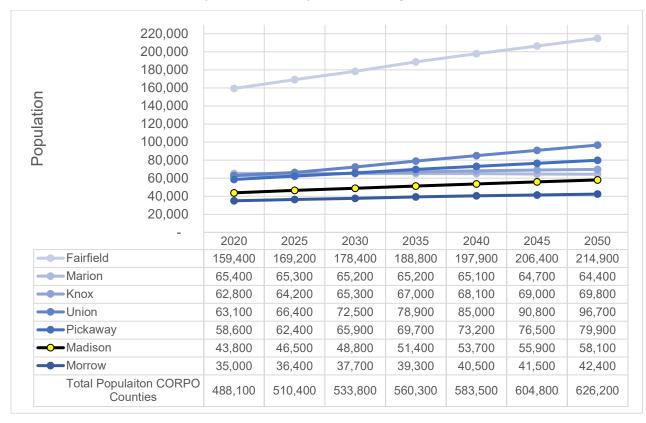
1. Population and Employment: Historical and Projections to 2050

Use this section to review existing demographic and employment conditions and trends and understand what population and employment growth is projected between now and 2050.

1.1. Existing Conditions and Trends- Population and Employment

The following chart and table provide historical population and employment data for the CORPO counties.

CORPO Counties, Historic Population and Population Change, 1980-2021



Data Source: Census Population Estimates Program

^{* 2021} Data Source: 5-Year ACS Estimates



CORPO Counties, Employment Change, 2011-2020

County	Employed/Hammloyed	2011 5-	Year Estimate*	2021 Estimate*		
County	Employed/Unemployed	# of persons	% of Labor Force	# of persons	% of Labor Force	
	Employed	68,779	92.42%	77,027	95.78%	
Fairfield	Unemployed	5,640	7.58%	3,397	4.22%	
	Total civilian labor force	74,419	100.00%	80,424	100.00%	
Marion	Employed	27,995	90.62%	26,078	93.74%	
	Unemployed	2,897	9.38%	1,742	6.26%	
	Total civilian labor force	30,892	100.00%	27,820	100.00%	
Knox	Employed	28,211	91.77%	29,141	95.68%	
	Unemployed	2,531	8.23%	1,315	4.32%	
	Total civilian labor force	30,742	100.00%	30,456	100.00%	
Union	Employed	24,033	94.09%	32,096	97.09%	
	Unemployed	1,510	5.91%	963	2.91%	
	Total civilian labor force	25,543	100.00%	33,059	100.00%	
Pickaway	Employed	23,156	92.35%	25,137	95.54%	
	Unemployed	1,918	7.65%	1,174	4.46%	
	Total civilian labor force	25,074	100.00%	26,311	100.00%	
Madison	Employed	19,219	93.99%	19,382	96.15%	
	Unemployed	1,228	6.01%	776	3.85%	
	Total civilian labor force	20,447	100.00%	20,158	100.00%	
Morrow	Employed	16,260	92.55%	17,633	97.23%	
	Unemployed	1,308	7.45%	503	2.77%	
	Total civilian labor force	17,568	100.00%	18,136	100.00%	

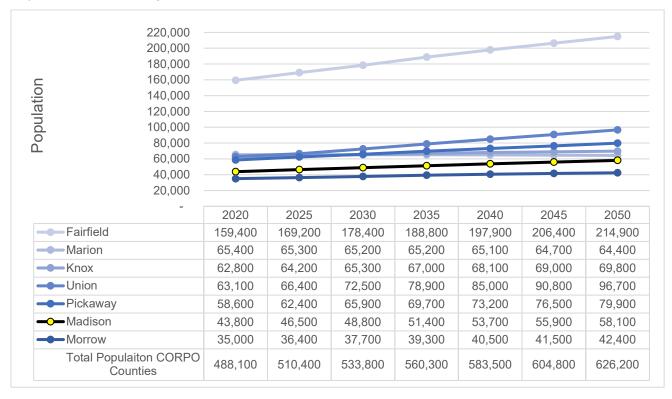
Data Source: * 2011 5-Year Estimate is sourced from ACS 5-Year Estimates, ** 2021 MORPC Estimate is sourced from MORPC 2021-2050 Projections



1.2. 2050 Projections- Population, Households and Jobs

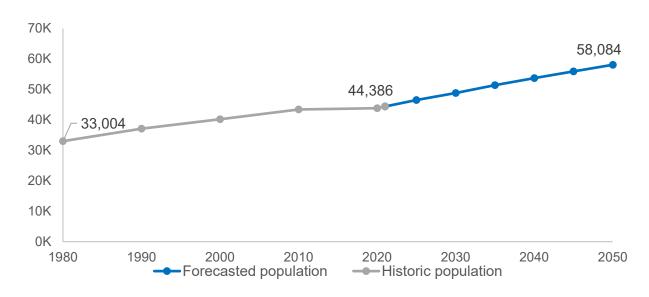
The following maps and charts provide household and job projections data for Madison County.

Population Growth Projection, CORPO Counties, 2020-2050



Data Source: MORPC 2021-2050 projections

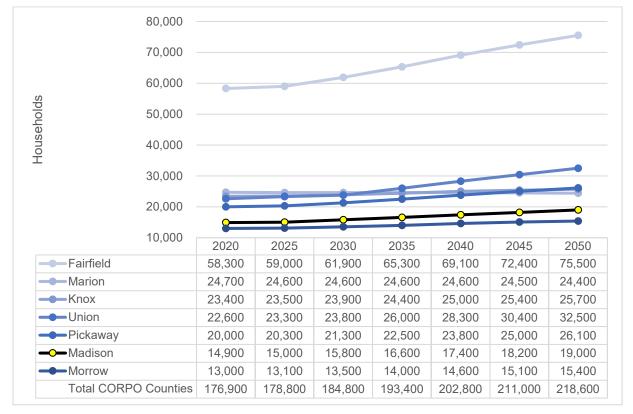
Historic Population and Population Growth Projection, Madison County, 1980-2050



Data Source: MORPC 2021-2050 projections



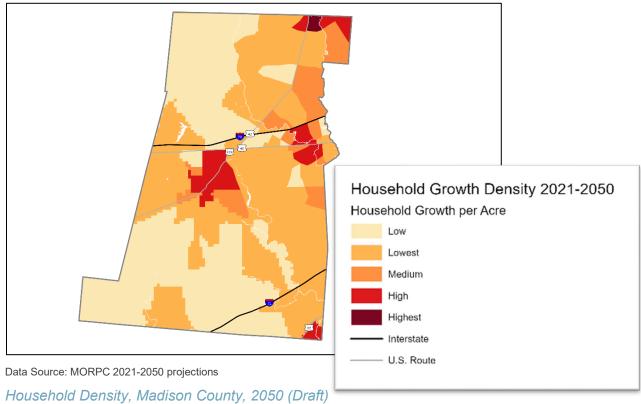
Household Growth Projection, CORPO Counties, 2020-2050

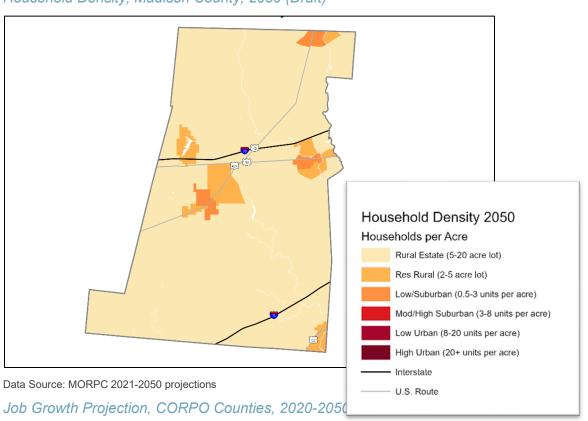


Data Source: MORPC 2021-2050 projections

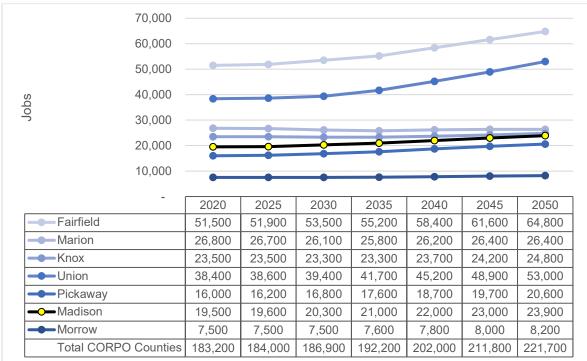


Household Growth Density, Madison County, 2021-2050 (Draft)



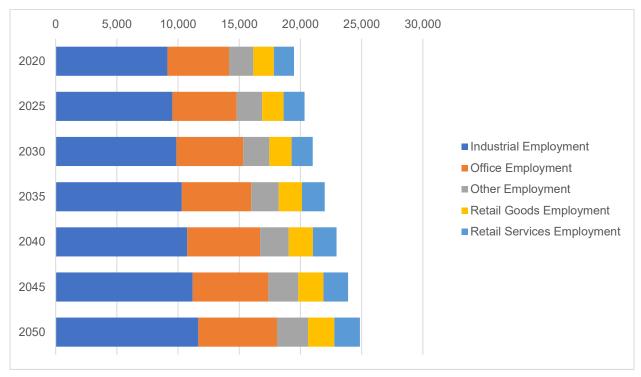






Data Source: MORPC 2021-2050 projections

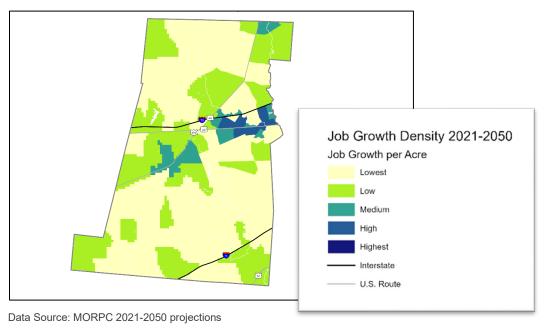
Jobs by Employment Type, Madison County, 2020-2050



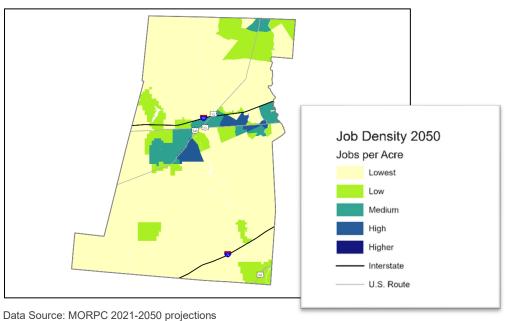
Data Source: MORPC 2021-2050 projections

Job Growth Density, Madison County, 2021-2050 (Draft)





Job Density, Madison County, 2050 (Draft)



Additional Resources on Mid-Ohio Open Data

<u>Mid-Ohio Open Data:</u> Mid-Ohio Open Data is a one-stop location for all MORPC publicly available datasets. Here you will find maps, downloadable GIS and tabular data, and more.

• <u>2020-2050 County Forecasts:</u> Use the menus on the right side of the page to select a variable and select a county to view current and forecasted demographics including population, households, jobs, and workforce.



2. CORPO Transportation Plan Goals and Objectives

The following provides the goals and objectives guiding the development of the 2023-2050 CORPO Transportation Plan. When available, additional data is included to further quantify the conditions of some objectives. Finally, there are guiding questions to consider when identifying transportation needs and projects to be included in the CTP.

2.1. Goal 1- Preserve and Maintain Existing Transportation System in Good Repair

2.1.1.2 RELATED OBJECTIVES	2.1.1.3 GUIDING QUESTIONS
 Minimize the number of bridges structurally deficient or functionally obsolete. Maximize the miles of pavement in acceptable condition. Maximize the miles of bike and pedestrian paths in acceptable condition. 	What facilities- bridges, pavement, bike/pedestrian paths- are deficient or functionally obsolete or are likely to become deficient or functionally obsolete before 2050?

2.1.2 2.1.1. Related Performance Measures

The following tables and maps reflect the current conditions related to the adopted performance measures in Madison County.

2.1.2.1.1 ALL CORPO COUNTIES, BRIDGE CONDITIONS, 2023

	NHS Bridge Condition										
County	Total	Good	Poor	% Good	% Poor						
Fairfield	35	26	0	74.29%	0.00%						
Knox	13	10	0	76.92%	0.00%						
Madison	35	25	0	71.43%	0.00%						
Marion	25	20	0	80.00%	0.00%						
Morrow	17	15	0	88.24%	0.00%						
Pickaway	22	16	1	72.73%	4.55%						
Union	48	30	0	62.50%	0.00%						
Total	195	142	1	72.82%	0.51%						

DATA SOURCE: 2023 BRIDGE DATA ODOT TIMS



2.1.2.1.2 ALL CORPO COUNTIES, PAVEMENT CONDITION RATINGS, 2023

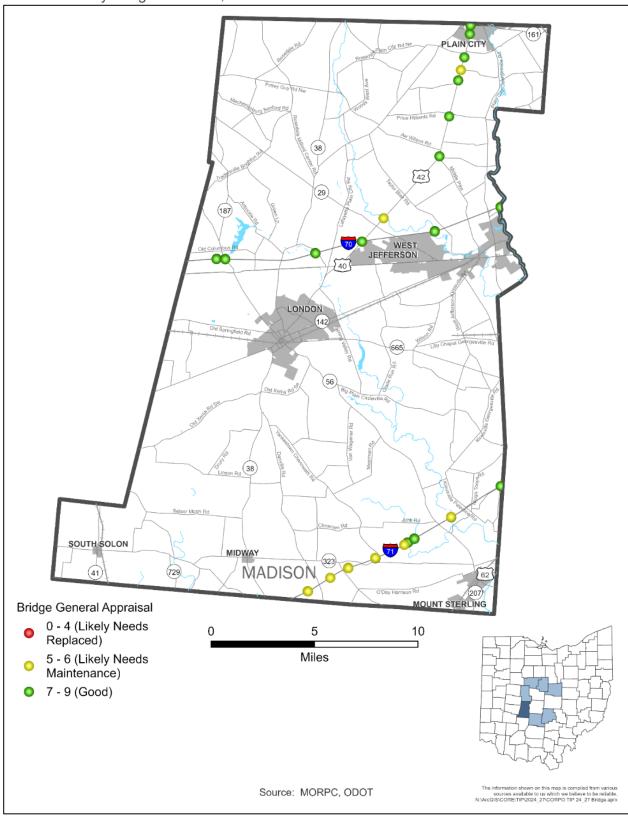
		Interstate			Non-Interstate NHS			Non-NHS					
County	Centerline Miles	Good	% Good	Poor	% Poor	Good	% Good	Poor	% Poor	Good	% Good	Poor	% Poor
Fairfield	338.86	0.00	0.00%	0	0	24.84	7.33%	0	0	238.32	70.33%	8.65	2.55%
Knox	231.18	0.00	0.00%	0	0	16.44	7.11%	0	0	133.02	57.54%	2.94	4.04%
Madison	225.57	24.93	11.05%	0	0	11.71	5.19%	0	0	133.56	59.21%	2.52	1.12%
Marion	290.055	0.00	0.00%	0	0	17.84	6.15%	0	0	213.02	73.44%	7.87	2.71%
Morrow	199.463	19.91	9.98%	0	0	0.00	0.00%	0	0	157.98	79.20%	4.25	2.13%
Pickaway	225.829	3.18	1.41%	0	0	22.76	10.08%	0	0	149.40	66.16%	2.56	1.13%
Union	284.468	0.00	0.00%	0	0	22.69	7.97%	0	0	185.92	65.36%	7.38	2.59%
Total	1795.425	48.03	2.68%	0	0	116.28	6.48%	0	0	1211.23	67.46%	36.17	2.01%
*	6 1 76 100												

*PCR Ratings: Good- 76-100, Poor- Below 56

DATA SOURCE: 2023 PCR DATA ODOT TIMS

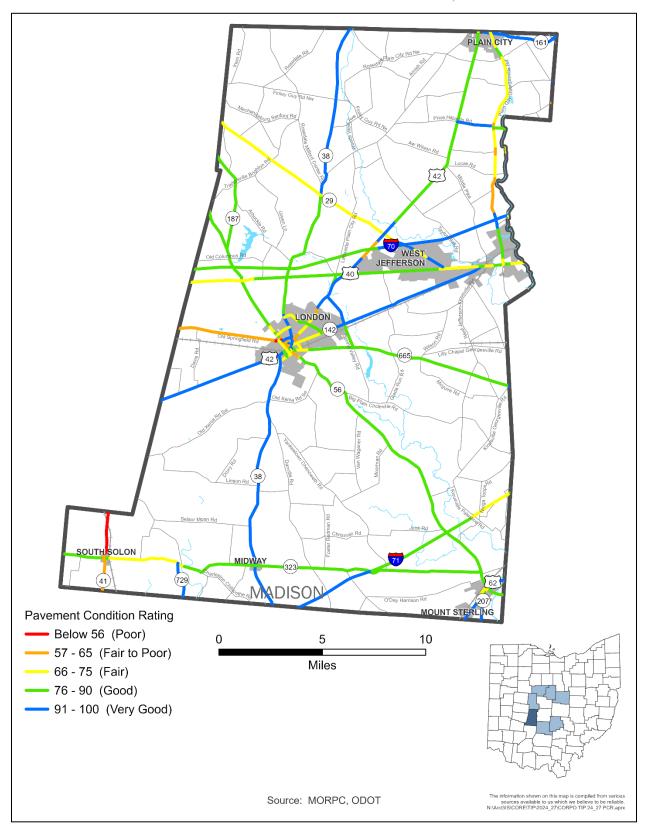


2.1.2.1.3 Madison County Bridge Condition, 2023





2.1.2.1.4 MADISON COUNTY PAVEMENT CONDITION RATINGS, 2023





2.2. Goal 2- A Safe Transportation System for All Users

2.1.2.2 RELATED OBJECTIVES	2.1.2.3 GUIDING QUESTIONS
 Minimize crashes including pedestrian and bicycle related crashes. Improve user education to minimize unsafe driving behaviors such as a lack of seatbelt use, distracted driving, impaired driving, and others. 	 Are there areas (intersections/corridors) with high concentrations of bike/pedestrian crashes that need to be addressed with safety modifications? Are there areas (intersections/corridors) with bike/pedestrian frequent near misses that need to be addressed with safety modifications? Are there activities that can address the safety of the transportation system by minimizing unsafe driving behaviors?

2.2.1. Related Performance Measures

The following tables and maps detail fatal and serious injury crashes and reflect the current conditions related to the adopted safety performance measures in Madison County.

2.1.2.3.1 MADISON COUNTY, FATAL AND SERIOUS INJURY CRASHES PERFORMANCE MEASURE, 2017-2021

	2017-2021	2	2025	2		
PERFORMANCE MEASURE	Average (Benchmark)	TARGET	ON TRACK FOR	TARGET	ON TRACK FOR	GRADE
Number of Fatalities	6.8	-8%	-100.0%	-27%	-100.0%	<
Number of Fatalities	0.8	N/A	0	N/A	0	'
Number of Serious	54.2	-8%	-44.3%	-27%	-100.0%	<
Injuries*	54.2	N/A	30	N/A	0	•
Non-Motorized Fatalities &	5.4	-8%	33.3%	-27%	172.2%	X
Serious Injuries	5.4	N/A	7.2	N/A	14.7	
	2021	MPO	MPO TARGET		MPO TARGET	
Rate of Fatalities / 100 MVMT	0.25	0.69		0.54		>
Rate of Serious Injuries / 100 MVMT	7.07	į	5.64		4.43	

DATA SOURCE: GCAT CRASHES 2017-2021



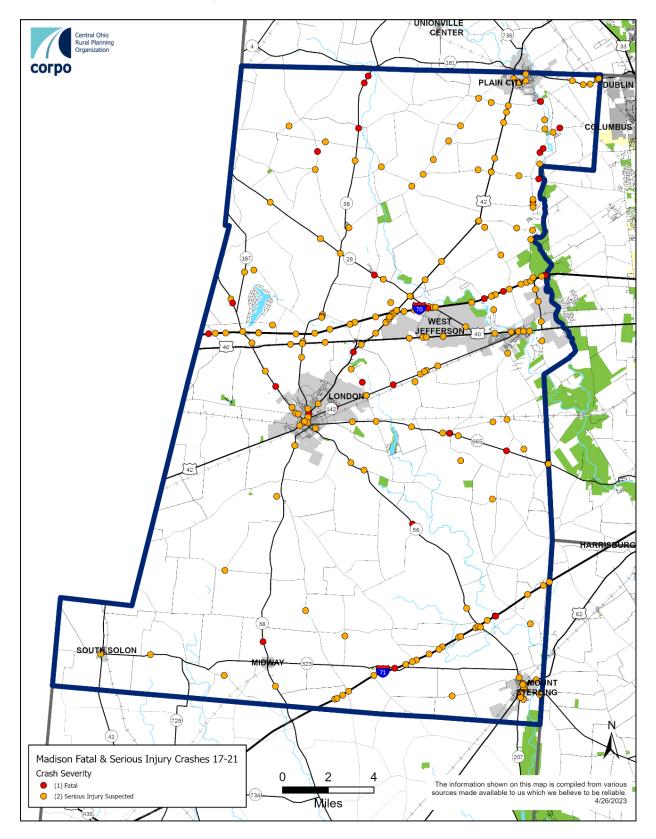
2.1.2.3.2 ALL CORPO COUNTIES, FATAL AND SERIOUS INJURY CRASHES PERFORMANCE MEASURE, 2017-2021

			Fatal	Serious	Serious	Non-Motorized		Non-Motorized	
County	Crashes	Fatal	Rate	Injury	Injury Rate	Fatality	NMF Rate	Serious Injury	NMSI Rate
Fairfield	14,073	70	0.50%	448	3.18%	7	0.05%	36	0.26%
Knox	5,659	36	0.64%	142	2.51%	0	0.00%	4	0.07%
Madison	5,259	32	0.61%	217	4.13%	2	0.04%	21	0.40%
Marion	8,045	50	0.62%	208	2.59%	4	0.05%	20	0.25%
Morrow	4,445	29	0.65%	137	3.08%	4	0.09%	9	0.20%
Pickaway	6,478	51	0.79%	236	3.64%	4	0.06%	12	0.19%
Union	6,220	26	0.42%	165	2.65%	3	0.05%	4	0.06%
Total	50,179	294	0.59%	1553	3.09%	24	0.05%	106	0.21%

DATA SOURCE: GCAT CRASHES 2017-2021

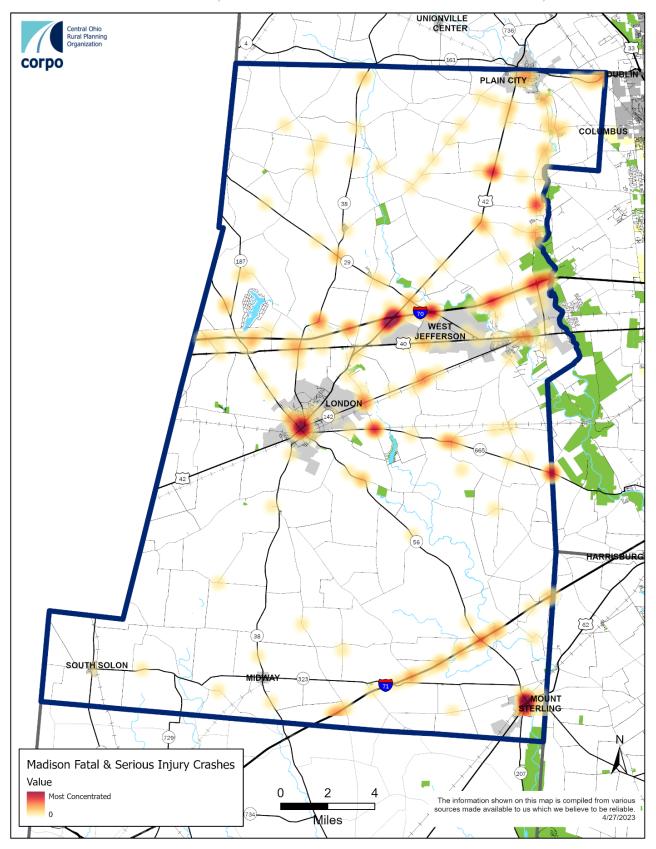


2.1.2.3.3 MADISON COUNTY, FATAL AND SERIOUS INJURY CRASHES 2017-2021





2.1.2.3.4 MADISON COUNTY, FATAL & SERIOUS INJURY CRASH HEATMAP, 2017-2021





2.3. Goal 3- Accessibility and mobility options for all users

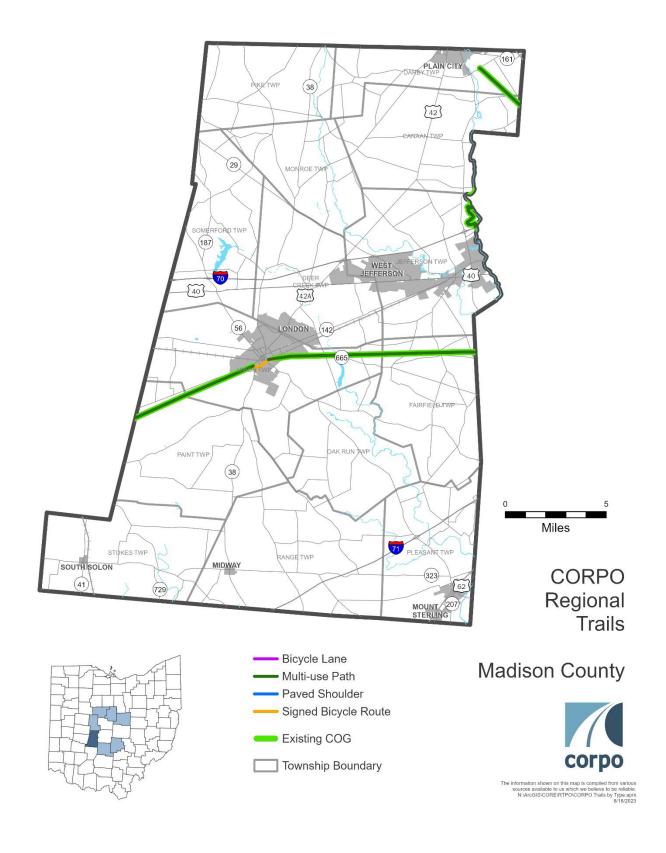
Related Objectives	Guiding Questions
 Increase mobility options to improve accessibility for all population groups. Expand bicycle and pedestrian networks. 	 Where are there gaps in the current bike/pedestrian network? Are the mobility options available meeting the needs of populations with transportation barriers such as carless households, veterans, older adults, and people with disabilities? What modifications/expansions are required to meet their mobility needs? Where is your county likely to experience growth between now and 2050 that would be good to target for expansion of the bike/pedestrian network?

2.3.1. Related Existing Conditions

The following maps and links provide information on current bicycle and pedestrian infrastructure and transit services in Madison County.



MADISON COUNTY REGIONAL TRAILS





2.1.2.4 REGIONAL MOBILITY PLAN

The Regional Mobility Plan identifies local and regional transportation needs of people with disabilities, older adults, and those with lower incomes. MORPC worked with nine Central Ohio counties to develop this transit coordinated plan for the ODOT Human Services Transportation Coordination Region 6. A link to the full plan is included below. Information on **Madison County** transit services, mobility needs, goals, and strategies are included in the plan, **pages 108-115.**

• Click here to see the Regional Mobility Plan



2.4. Goal 4- An integrated, connected, and coordinated transportation system

Related Objectives	Guiding Questions
 Better connect CORPO communities with each other Provide transportation facilities that enhance the transition between rural, urban, and other adjacent areas. Improve and expand modal connection locations. Increase outreach, coordination and collaboration among local governments, area residents, businesses and other community groups and organizations. 	 What gaps exist in the transportation network between your county and the region? Where are corridors or connections between your community and the region likely to experience increased pressure due to population and job growth in your area and/or adjacent areas before 2050? What improvements might be needed to accommodate or alleviate those pressures?

2.1.3 2.4.1 Related Existing Conditions, Trends, and Projections

<u>Click here</u> to be taken back to the households and jobs projections.



2.5. *Goal 5-* A transportation system that supports a collaborative and focused approach to achieve economic vitality

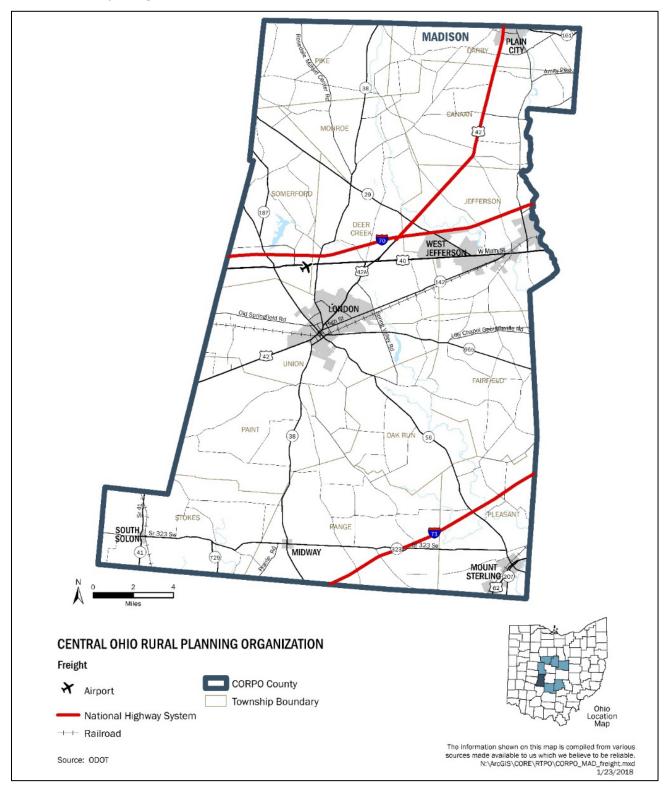
Related Objectives	Guiding Questions
 Improve strategic freight related facilities (e.g., highway, rail, intermodal, etc.). Increase access to employment areas and sites. Develop multipurpose corridors (e.g., utilities, water, broadband, fiber, etc.). 	 What gaps exist in the freight network in your county? Where does the freight network need improvement to maintain or advance efficiency and support industry? What areas should be/are being strategically targeted as multi-purpose corridors? What transportation infrastructure would be needed to support those multi-purpose corridors?

2.1.4 2.5.1 Related Existing Conditions, Trends, and Projections

<u>Click here</u> to go to be taken back to the household and jobs projections.



Madison County Freight Network





2.6. *Goal 6-* Preserve and enhance environmental resources and sustainability through the transportation system

Related Objectives	Guiding Questions
 Increase use of non-single occupant vehicles (local transit, intercity transit, ridesharing, biking, walking). Provide transportation facilities consistent with land use, environmental and sustainability plans. 	 What gaps exist in the transportation network that can be addressed to encourage modes other than single-occupant vehicles? (i.e., gaps in sidewalks, bike lanes, or transit routes) Where are environmentally sensitive areas that should be considered when planning future transportation projects? How can the multi-modal transportation network be planned to preserve or sustain the environmentally sensitive areas?

2.1.5 2.6.1 Related Existing Conditions

Click here to be taken back to the map of the current bike and pedestrian network.

3. Reviewing & Updating Transportation Needs

In addition to identifying and submitting new transportation needs, it's also important to revisit the projects included in the 2018-2040 CTP and update and re-prioritize them as needed.

The excel workbook provided with this packet also provides space to revisit the projects included for Madison County in the 2018-2040 CTP and add or update information for each, and then re-prioritize based on updated information and added projects. TIP projects are for reference only and will be included in the 2023-2050 CTP as appropriate.

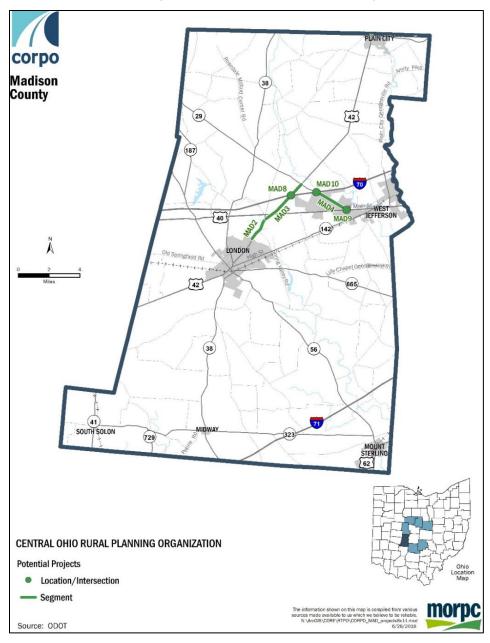
3.1. 2018-2040 CORPO Transportation Plan and SFY 24-27 Transportation Improvement Program Projects

The maps on the following pages show the projects identified for Madison County in the 2024-2027 TIP and the 2018-2040 CTP.



3.1.1. 2018-2040 CTP Madison County Identified Projects

Below is the map of projects identified in Madison County in the 2018-2040 CTP.



Below is a listing of projects identified in Madison County in the 2018-2040 CTP.

2018 - 2040 CORPO Transportation Plan Project Listing Mapped Projects - Sorted by County Cost (Millions) ID Project Description County Madison MAD 2 US 42 from CR 135 (Betty Wilson Road) to CR 104 (Simpson Road); Minor widening \$10-\$15 Madison MAD 3 US 42 from CR104 (Simpson Rd) to SR 29; Access Management \$2-\$3 Madison MAD 4 SR 29 from I-70 to north of Main St; Major widening \$13-\$16 Madison MAD $\underline{\text{8. US}}$ 42 / I-70 Expansion; Interchange modification \$14-\$16 Madison MAD 9_US 29 / US 40 Realignment; Intersection modification \$23 Madison MAD 10 ODOT Study of SR 29 / I-70 Interchange TBD

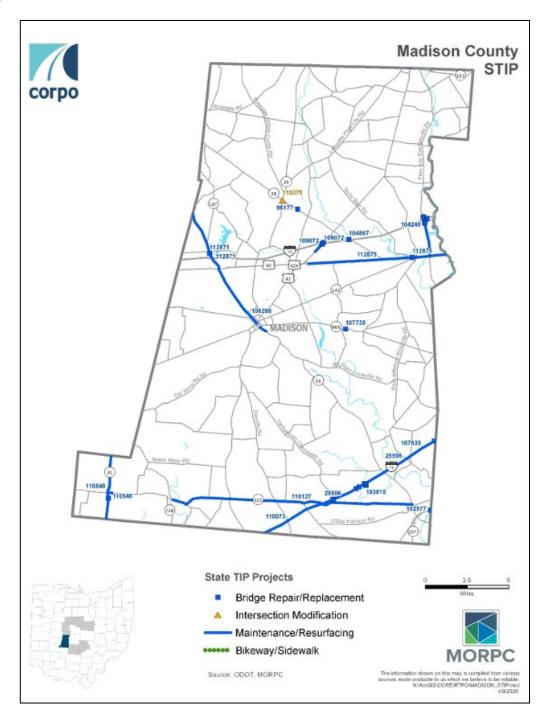


3.1.2. 2024-2027 Madison County TIP Projects

Click here to access the CORPO 2024-2027 TIP document.

<u>Click here</u> to access Appendix 3: County SY 2024-2027 TIP Summaries. The **Madison County** summary is **pages 23-33.**

Below is a map and summary of projects in Madison County included in the 2024-2027 COPRO TIP.





								33. P3
TIP ID	PID	Primary Project Type	AQ	Agency	CRS	Project Desc	LENGTH	Total Cost
94	115654	Bridge Preservation	E	Madison County	MAD-CR133- 0.15	Cheseldine Rd at Deer Creek, Bridge Preservation, 0 lanes, Structure Rehabilitation Madison CR 133A (Cheseldine Rd) over Deer Creek	0	\$312,000.00
95	115657	Bridge Preservation	E	Madison County	MAD-CR004- 3.05	Big Plain - Circleville Rd at Deer Creek, Bridge Preservation, 0 lanes, Structure Replacement Madison CR 4 (Big Plain - Circleville Rd) over Deer Creek	0	\$1,425,000.00
96	115660	Bridge Preservation	E	Madison County	MAD-CR010- 0.43	Middle Pike at Little Darby Creek, Bridge Preservation, 0 lanes, Structure Rehabilitation of Madison CR 10 (Middle Pike) SFN 4930207 over Little Darby Creek	0	\$1,449,000.00
106	116111	Traffic Control (Safety)	E	Madison County	MAD-VARCR GR-FY26	MAD-VAR CR GR-FY26 at Various routes throughout Madison County, Traffic Control (Safety), 0 lanes, CEAO safety funded (HSIP) project to upgrade existing guardrail on Various Madison County Roads. Local-let and administered by Madison County Engineer's off	0	\$387,428.00
108	116175	Traffic Control Maintenance	E	Madison County	MAD-VARCR RPM-FY26	MAD-VAR CR RPM-FY26 at Various county roads throughout Madison County., Traffic Control Maintenance, 0 lanes, CEAO safety funded (HSIP) project to install and replace raised pavement markers on various county roads throughout Madison County.Locallet proj	0	\$300,000.00
115	116876	Intersection Modification	E	Madison County	MAD-CR007- 9.85	MAD-CR7-9.85 at CR30/CR34, Intersection Modification, 0 lanes, Construct a roundabout at the intersection of CR7 (Plain City- Georgesville Road)/CR30 (Converse Huff Road)/CR 34 (Cemetery Pike).CEAO HSP funds in CONS phase. Local-let by Madison County Engine	0	\$104,000.00

