



Long Range Transportation Plan Virtual Public Participation Meeting

August 19, 2025

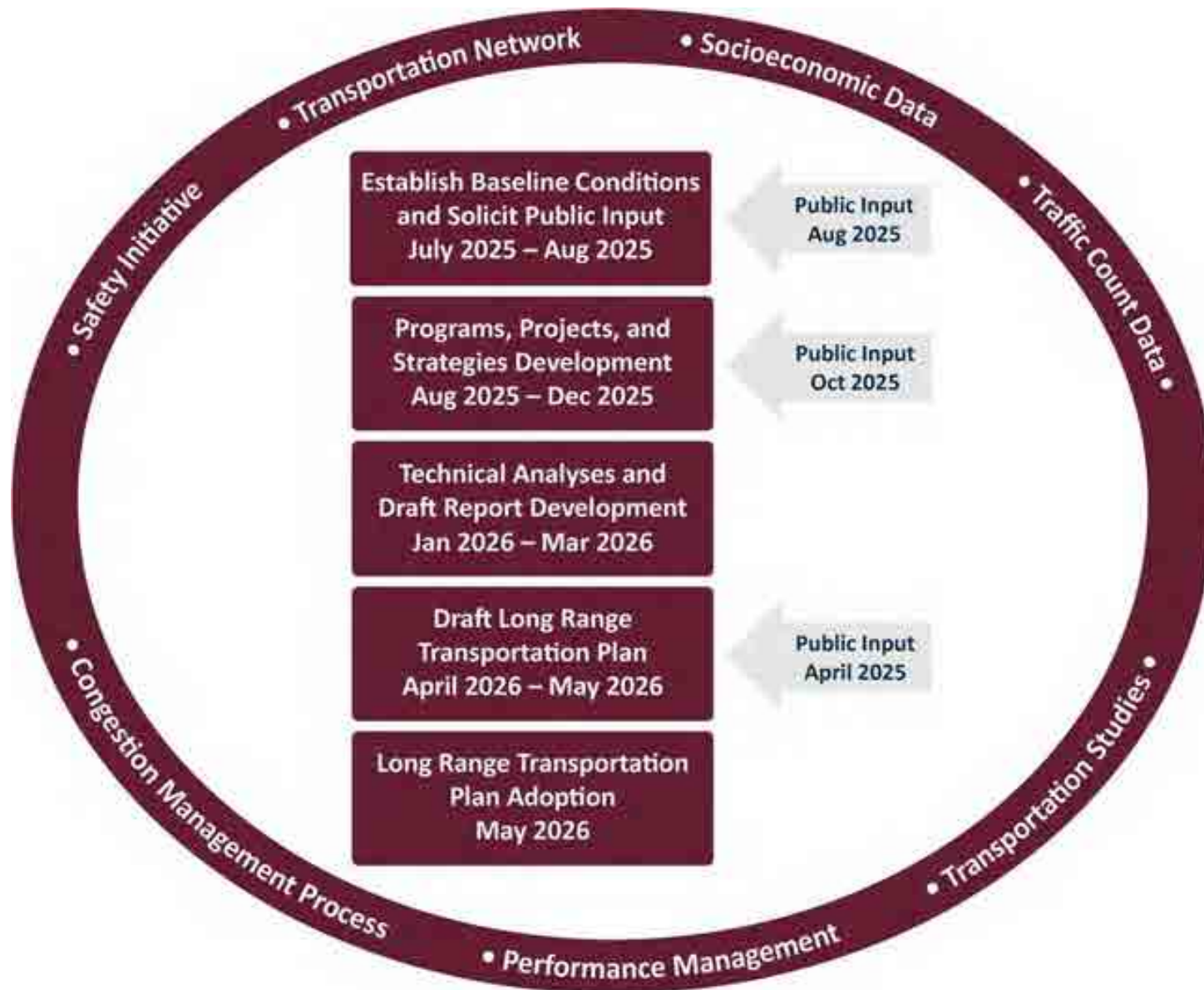
5-6 p.m.

Transportation Plan Update

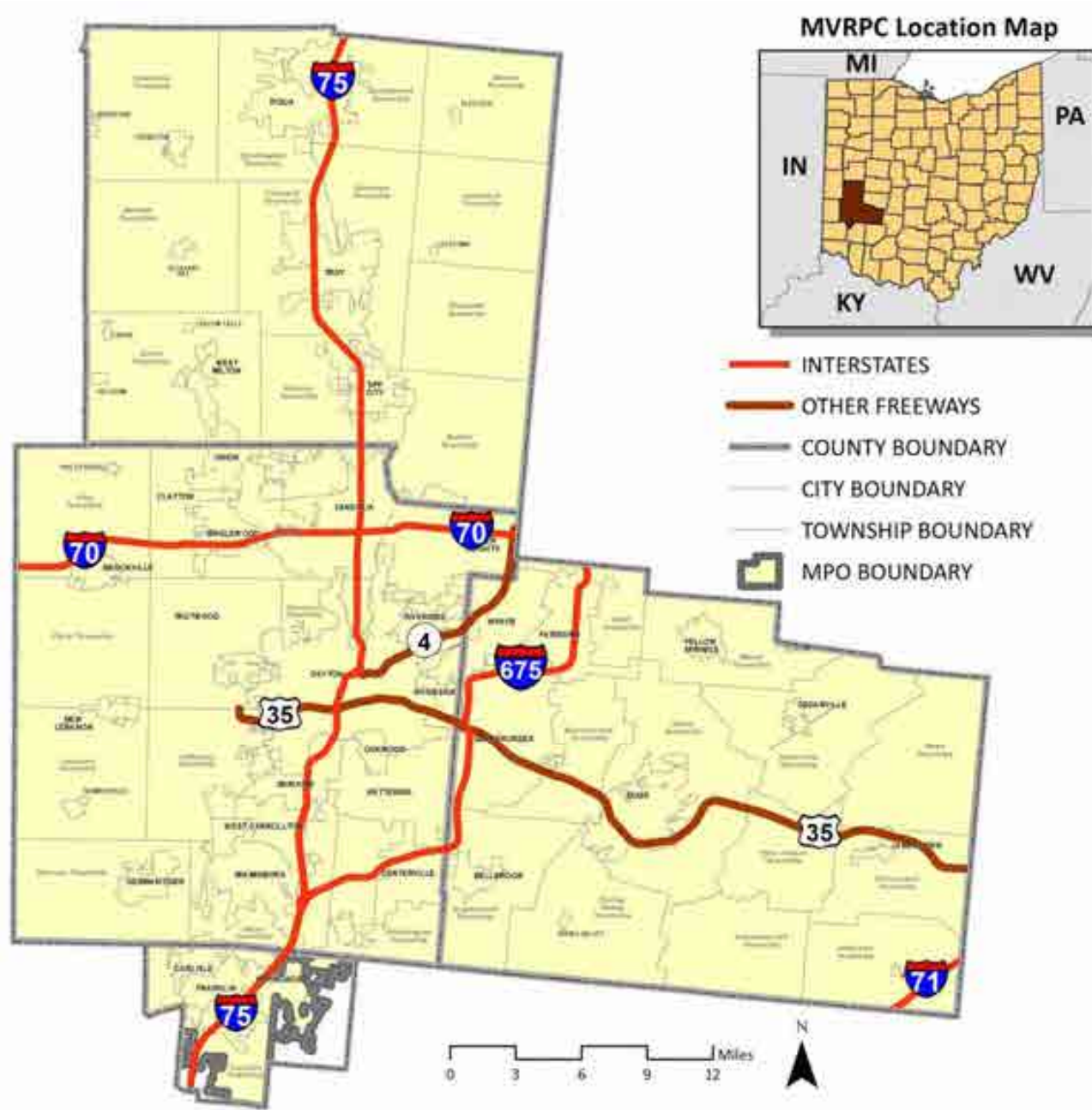
MVRPC is in the process of updating its Long Range Transportation Plan. The horizon year for the new Plan is 2050. The Plan Update identifies multimodal transportation development strategies and programs for the next 20+ years that will guide effective investment of public funds in the Region.

2050 Long Range Transportation Planning Process

The update process for the 2050 Long Range Transportation Plan started in July 2025 and is expected to finish in May 2026.



MVRPC MPO Boundary



Transportation Goals

Regional Stewardship

- Develop Regional Priorities — Continue to address regional transportation needs that further the shared social, economic, transportation, and environmental goals of the Region.

Vibrant Communities

- Transportation Choices — Encourage a stronger multi-modal network in the Region to ensure that people and goods reach their destination safely, efficiently, and conveniently.
- Transportation System Management — Continue to maintain and upgrade the regional transportation system by providing safety, security, aesthetic, and capacity improvements as needed.
- Transportation and Land Use — Incorporate regional land use strategies into the transportation policy and the investment decision making process.

Vigorous Economy

- Transportation — Continue to address regional transportation needs to enhance economic development in order to attract and retain businesses in the Region while improving the quality of life of its residents.

Mitigation Strategies

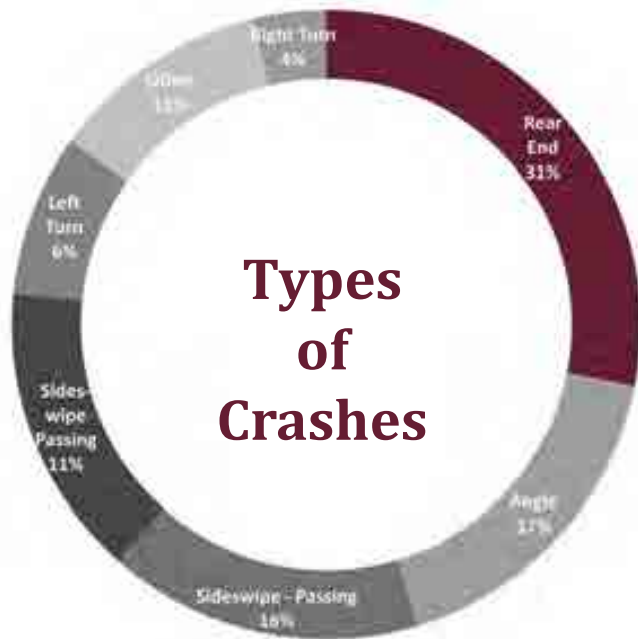
- Clean Air — Encourage the pursuit of alternative fuels and transportation to reduce emissions and our reliance on petroleum-based products.



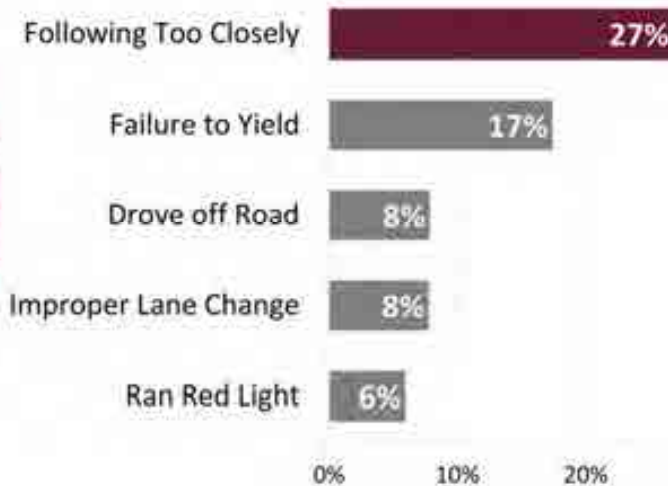
Safety, Transportation System and Congestion Analysis

Safety

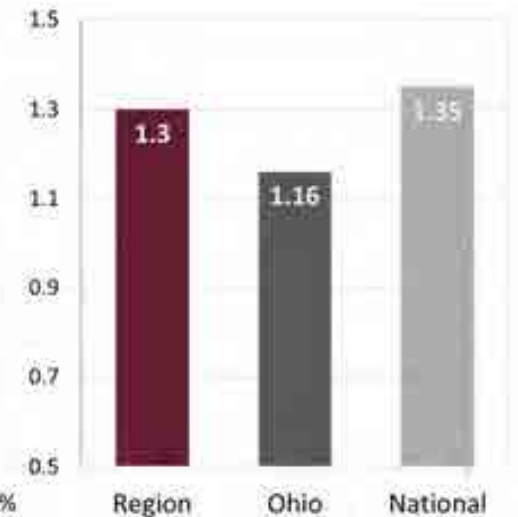
There were **55,776** total crashes reported on the regional roadway network from 2021 to 2023.



Top Contributing Factors

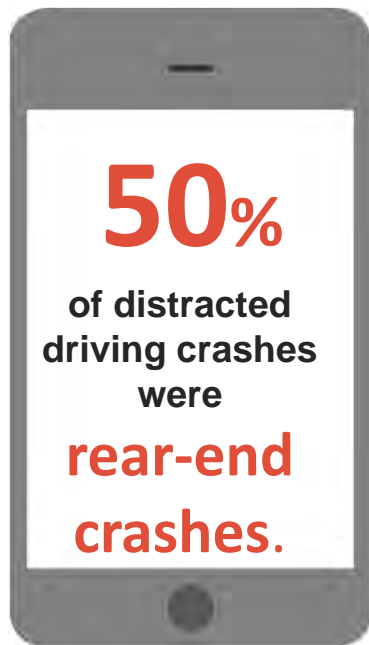


Average Fatality Rate (per 100 million vehicle miles traveled)

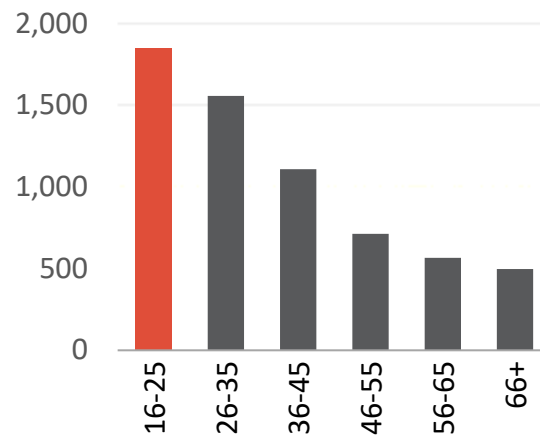


Distracted Driving Crashes

22% of distractions were a driver using a phone or texting.



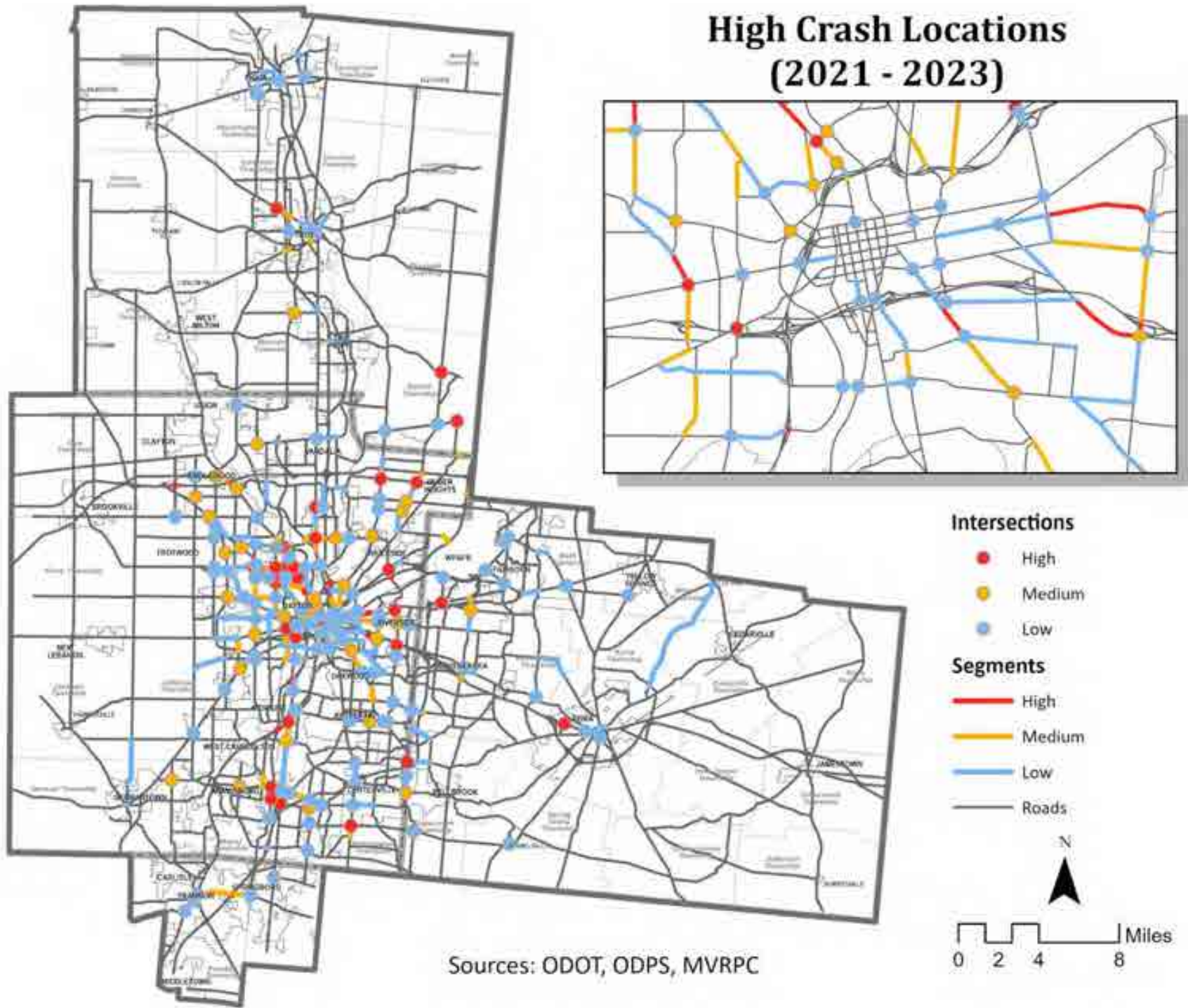
Age Group of Distracted Drivers



Bike & Pedestrian Crashes



High Crash Locations (2021 - 2023)



Congestion

MVRPC administers a congestion management process (CMP) to evaluate current transportation system conditions and outline strategies to manage congestion.



844,980

Annual Freeway
Vehicle Hours of
Delay

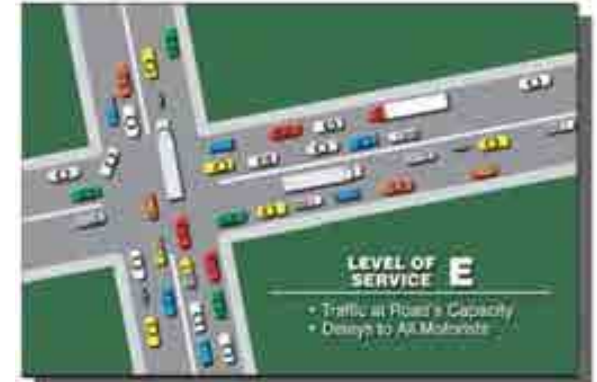
\$30 Million

Annual Cost of
Vehicle Delay on
Freeways

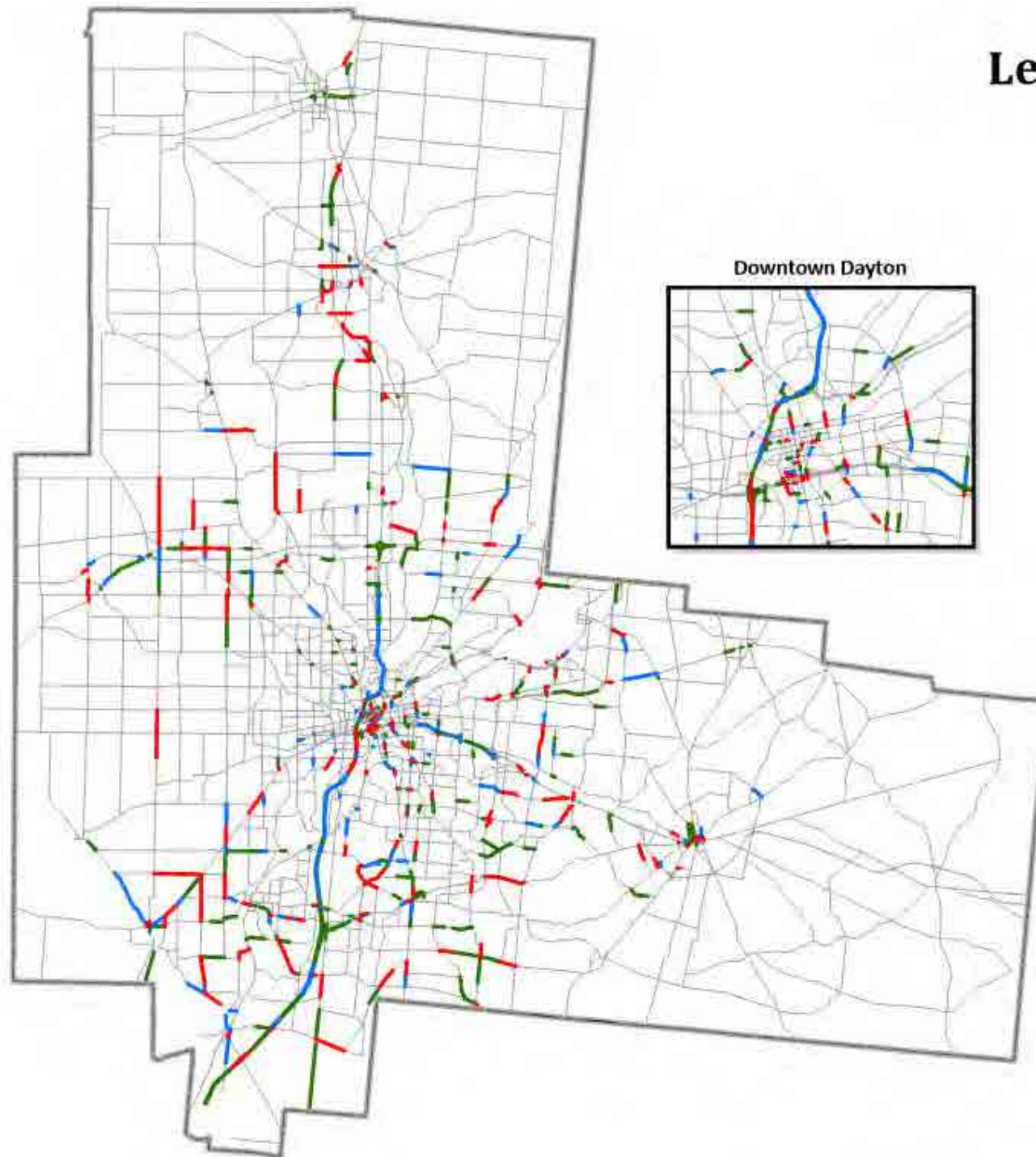
\$14 Million

Annual Cost of
Truck Delay on
Freeways

Level of Service Definition: A qualitative measure describing operational conditions within a traffic stream and their perception by motorists. **Level of Service A** represents free flow conditions while **Level of Service F** represents conditions where demand exceeds the capacity of a road. Roads where Level of Service is **D, E** or **F** are considered congested.



Level of Service 2020

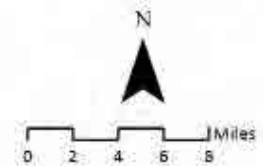


Downtown Dayton

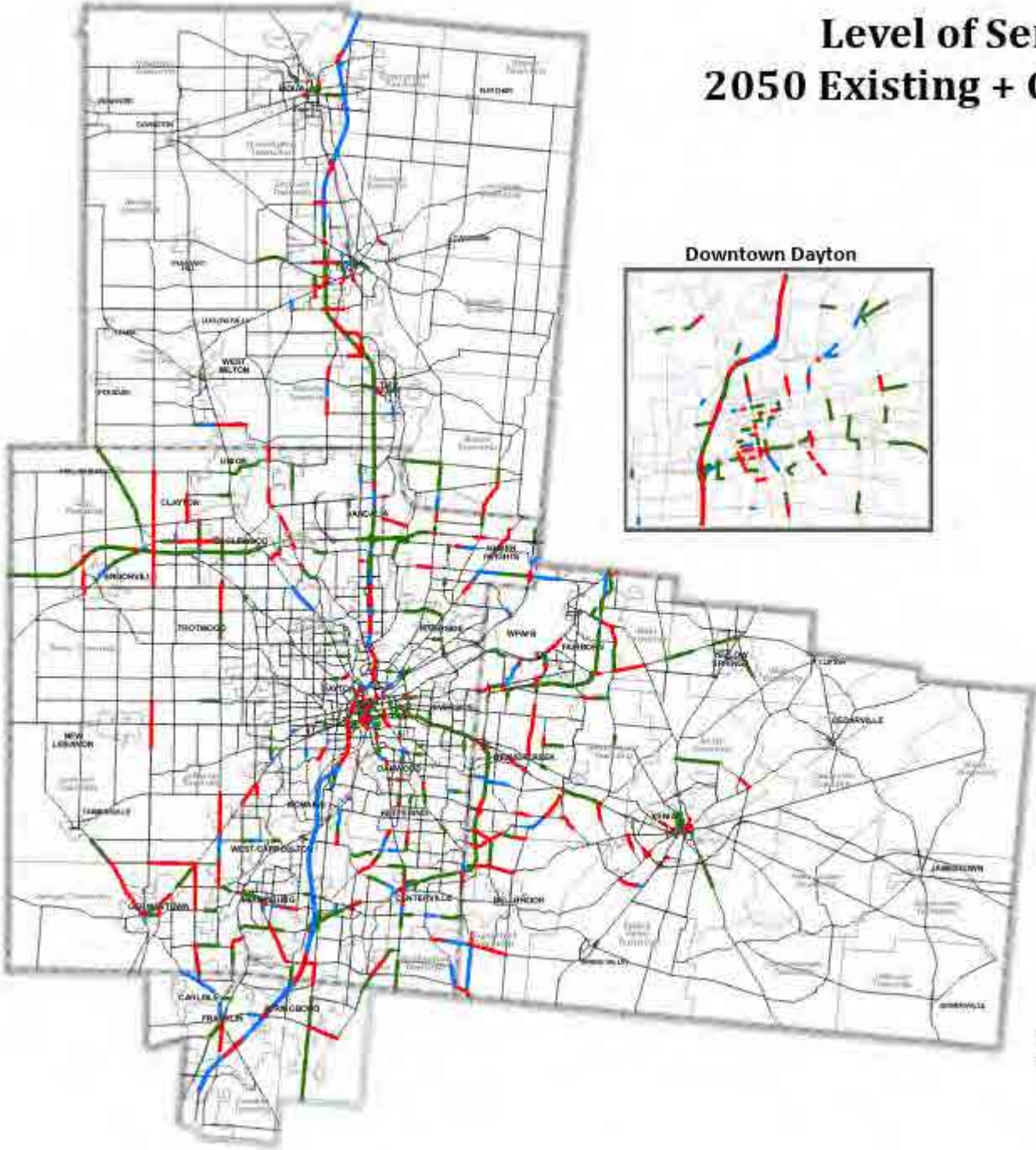
Level of Service

- D
- E
- F

Source: MVRPC
December 2024



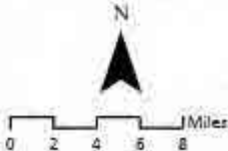
Level of Service 2050 Existing + Committed



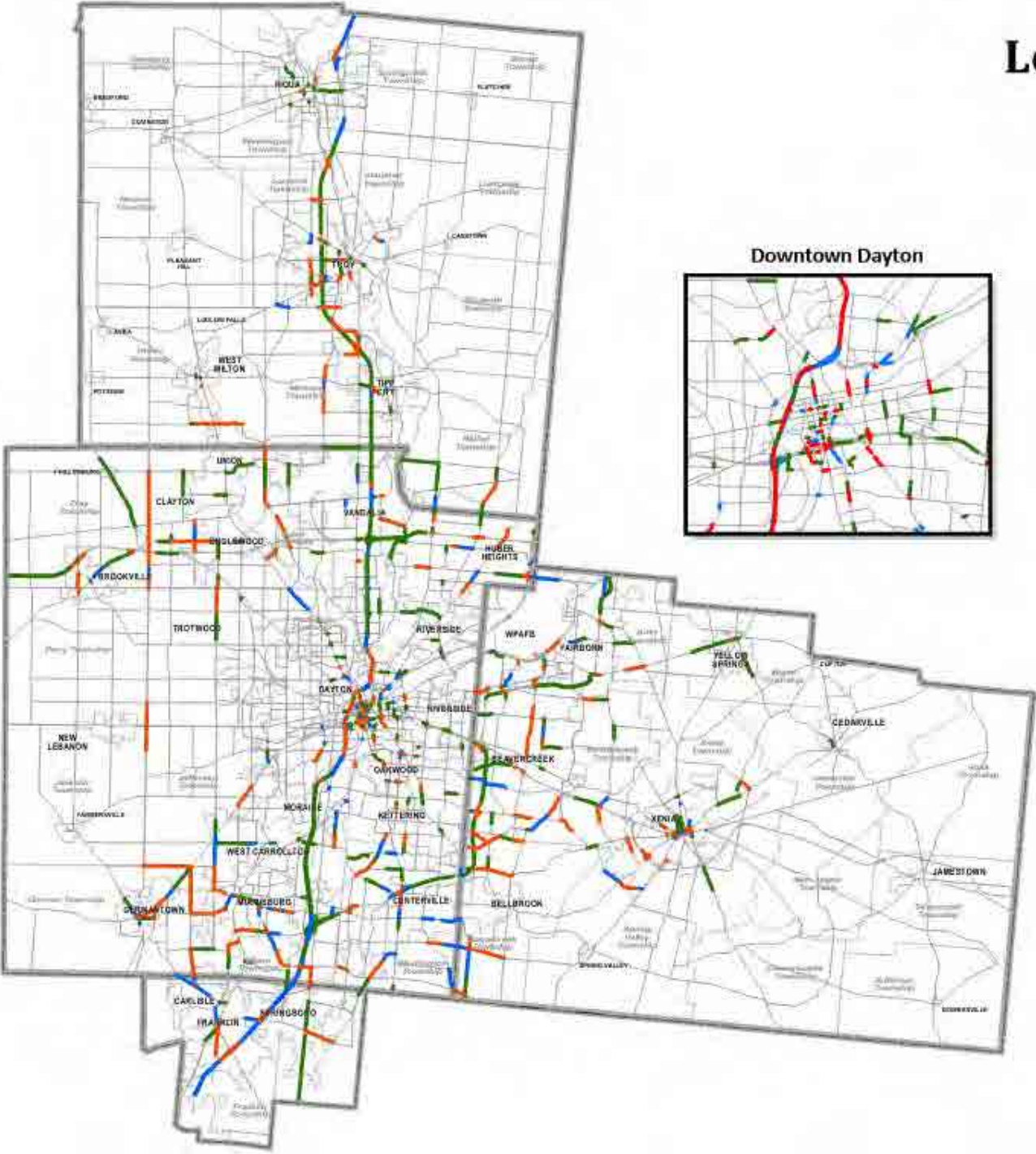
Downtown Dayton

- Level of Service
- D
 - E
 - F

Source: MVRPC
December 2024



Level of Service 2050 Plan



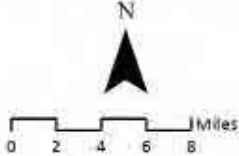
Downtown Dayton



Level of Service

- D
- E
- F

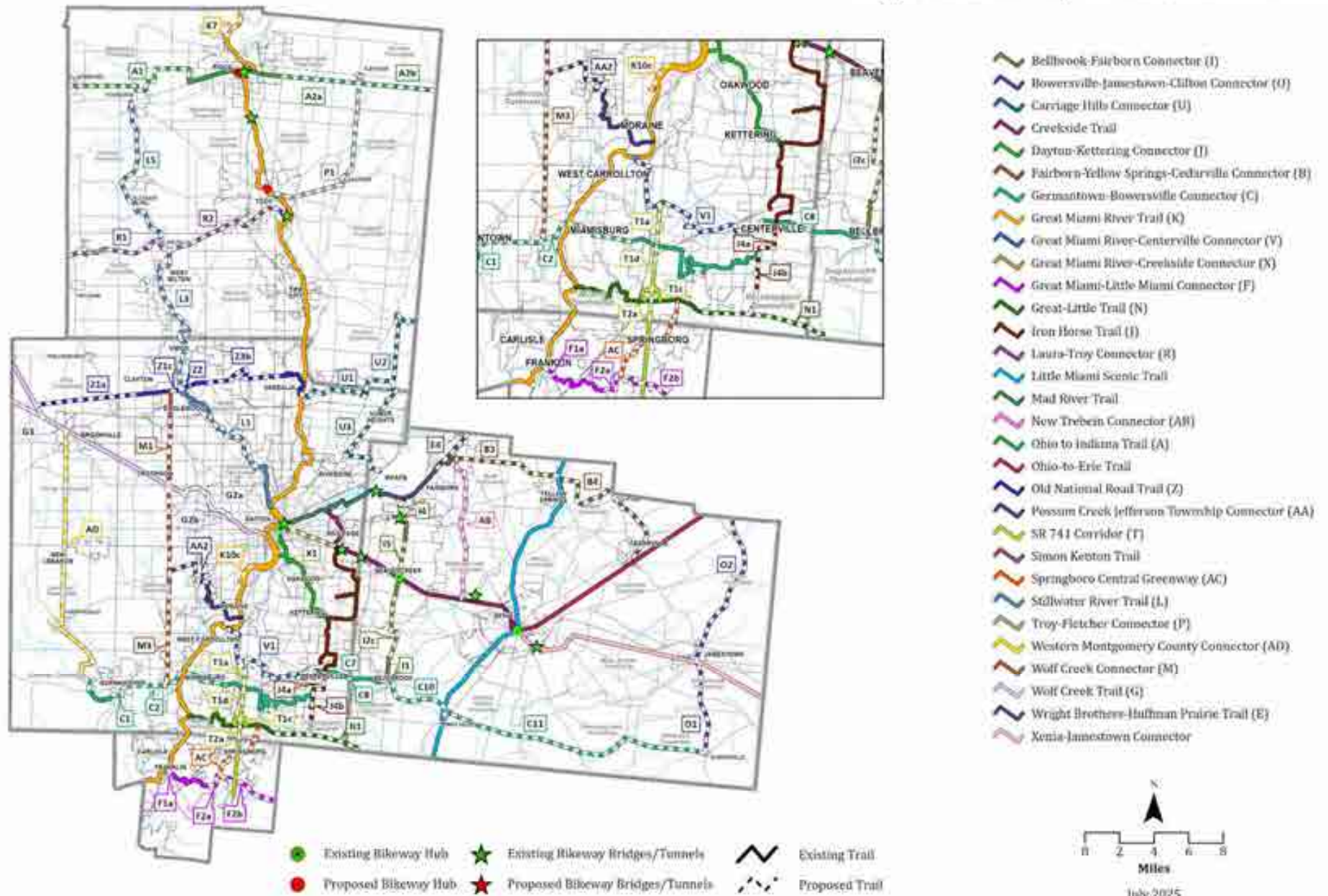
Source: MVRPC
December 2024



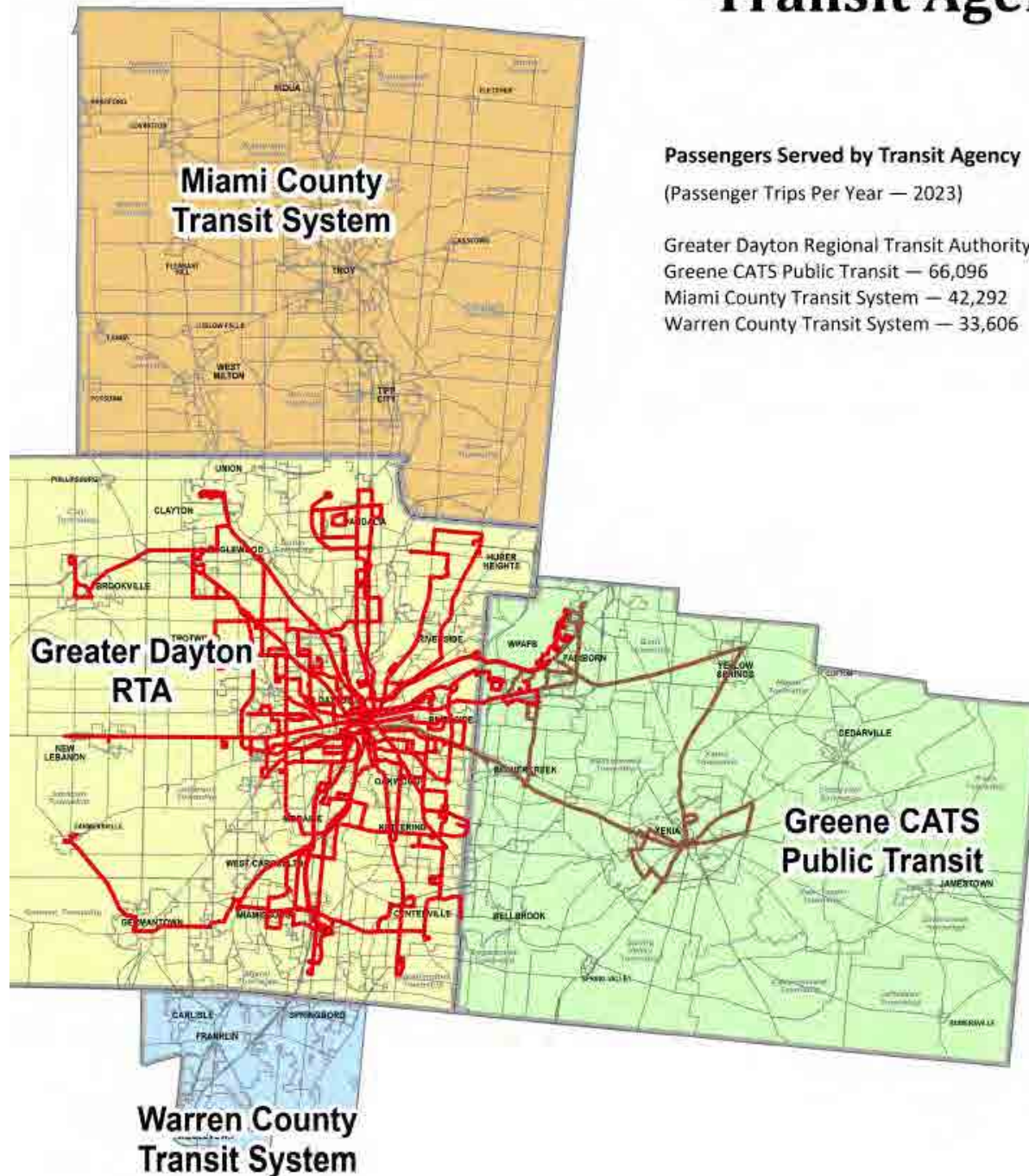


Alternative Transportation Modes (Passenger and Freight)

Regional Bikeway & Pedestrian Network



Transit Agency Service Areas

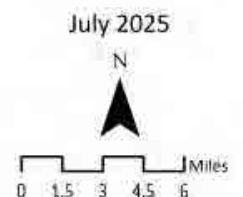


Passengers Served by Transit Agency (Passenger Trips Per Year — 2023)

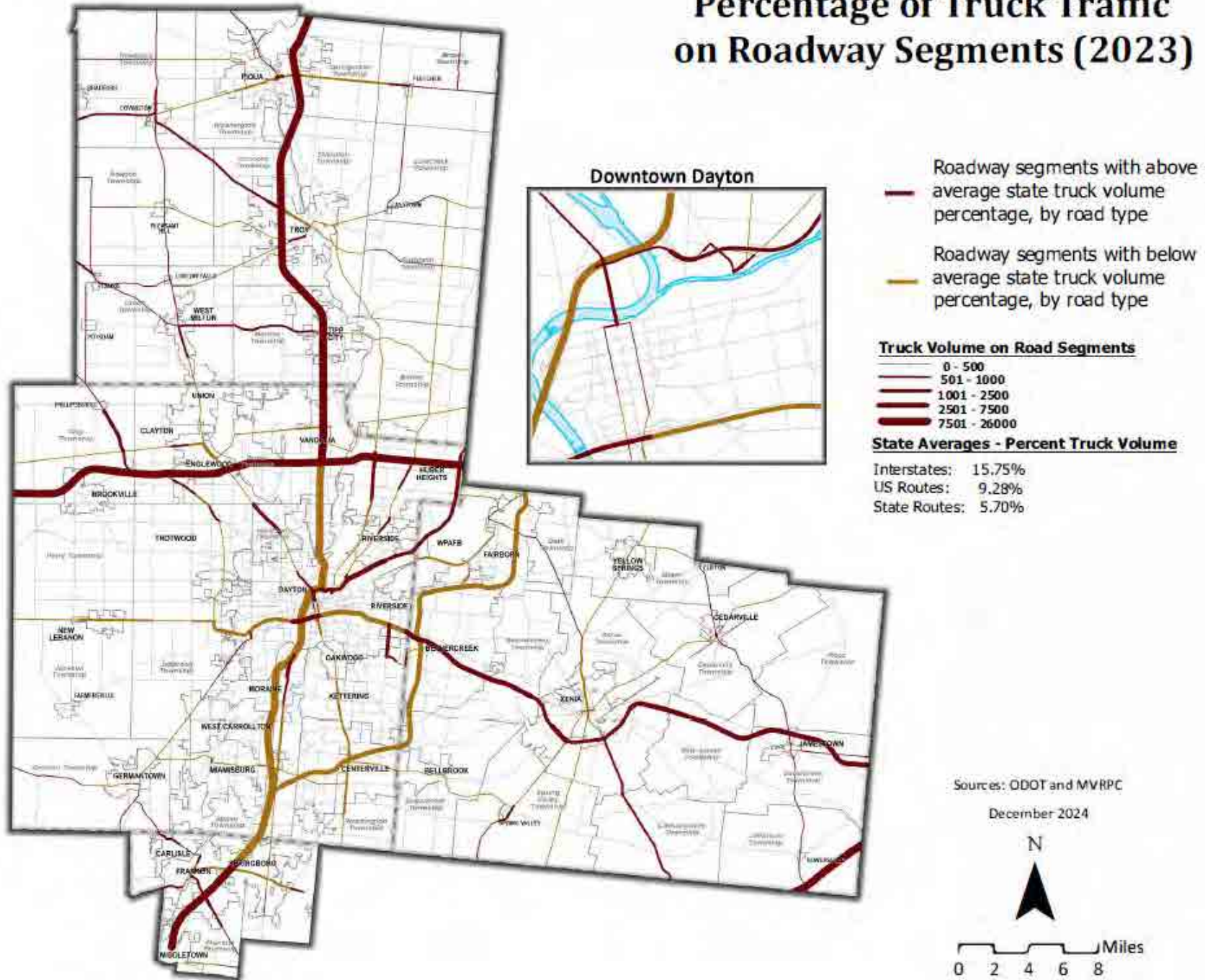
Greater Dayton Regional Transit Authority — 6,240,533
Greene CATS Public Transit — 66,096
Miami County Transit System — 42,292
Warren County Transit System — 33,606

- GDRTA Fixed Transit Routes
- Greene CATS Flex Routes
- Miami County Public Transit operates an on-demand service.

Source: GDRTA, Greene CATS, MCTS, and WCTS



Percentage of Truck Traffic on Roadway Segments (2023)



Community Impact Assessment

Overview

The goal of MVRPC's Community Impact Assessment is to consider the needs of vulnerable populations in the transportation planning process. This initiative entails various quantitative analyses using Geographic Information Systems (GIS). The Community Impact Assessment initiatives began in 2001, as part of the 2025 Long Range Transportation Plan, with data from the 1990 census. The most recent Community Impact Assessment incorporates the latest data from the 2020 Census and 2018-2022 American Community Survey.

MVRPC's Approach

In addition to racial and ethnic minorities and persons in poverty, MVRPC has traditionally expanded its definition of vulnerable populations to include other traditionally disadvantaged groups, including persons with disabilities, the elderly, and households without automobiles.

Distribution of Minority Population

Minority Population

- Above County Average
- Below County Average
- No Population/No Data

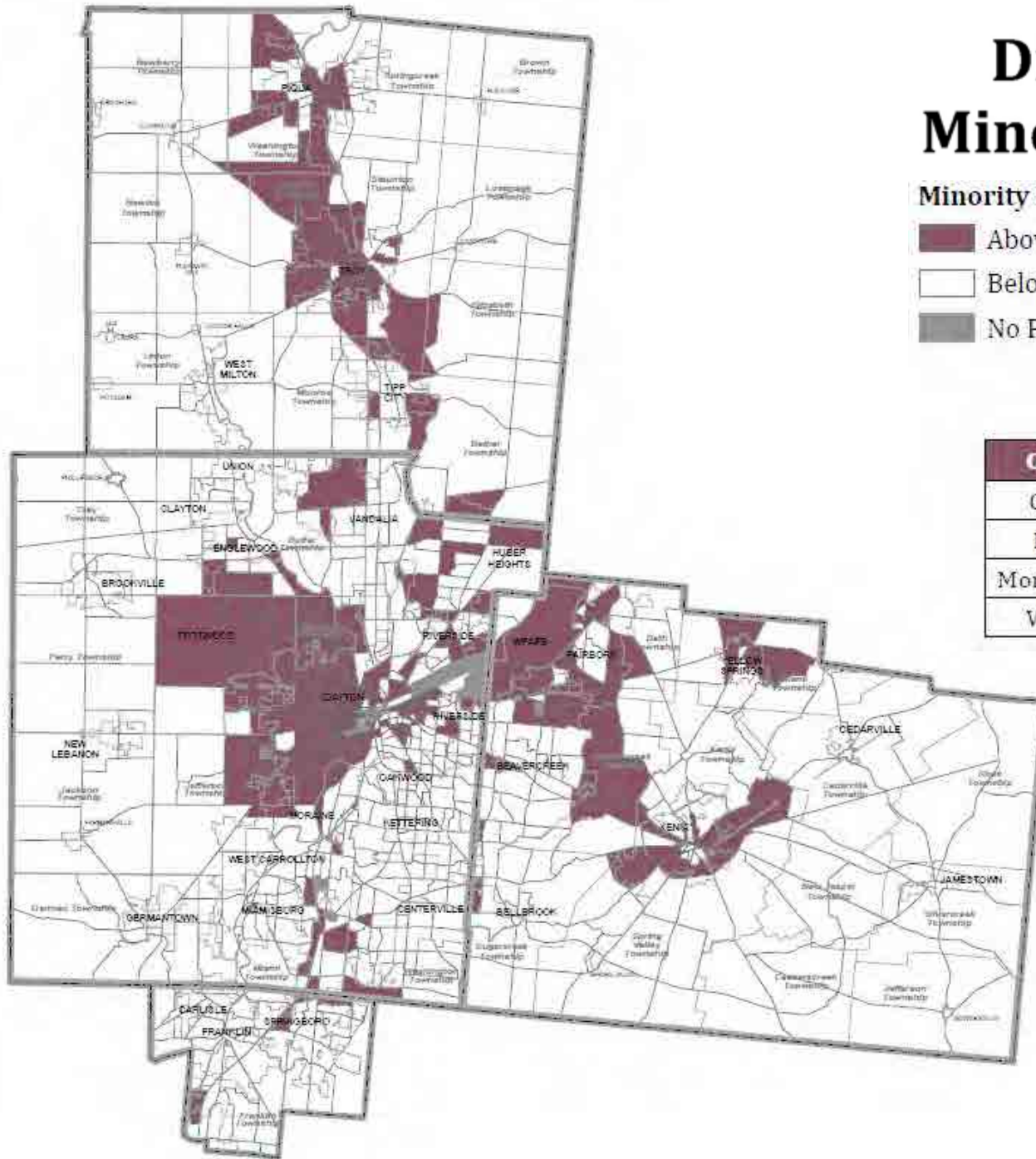
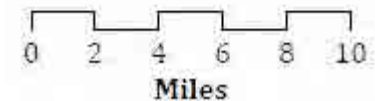
Boundaries

- County
- City
- Township
- TAZ

County	2020 County Average
Greene	18.35%
Miami	10.25%
Montgomery	32.05%
Warren	17.44%

Source: 2018-2022 ACS
and 2020 U.S. Census

August 2024



Distribution of Hispanic Population

Hispanic Population

- Above Average
- Below Average
- No Population/No Data

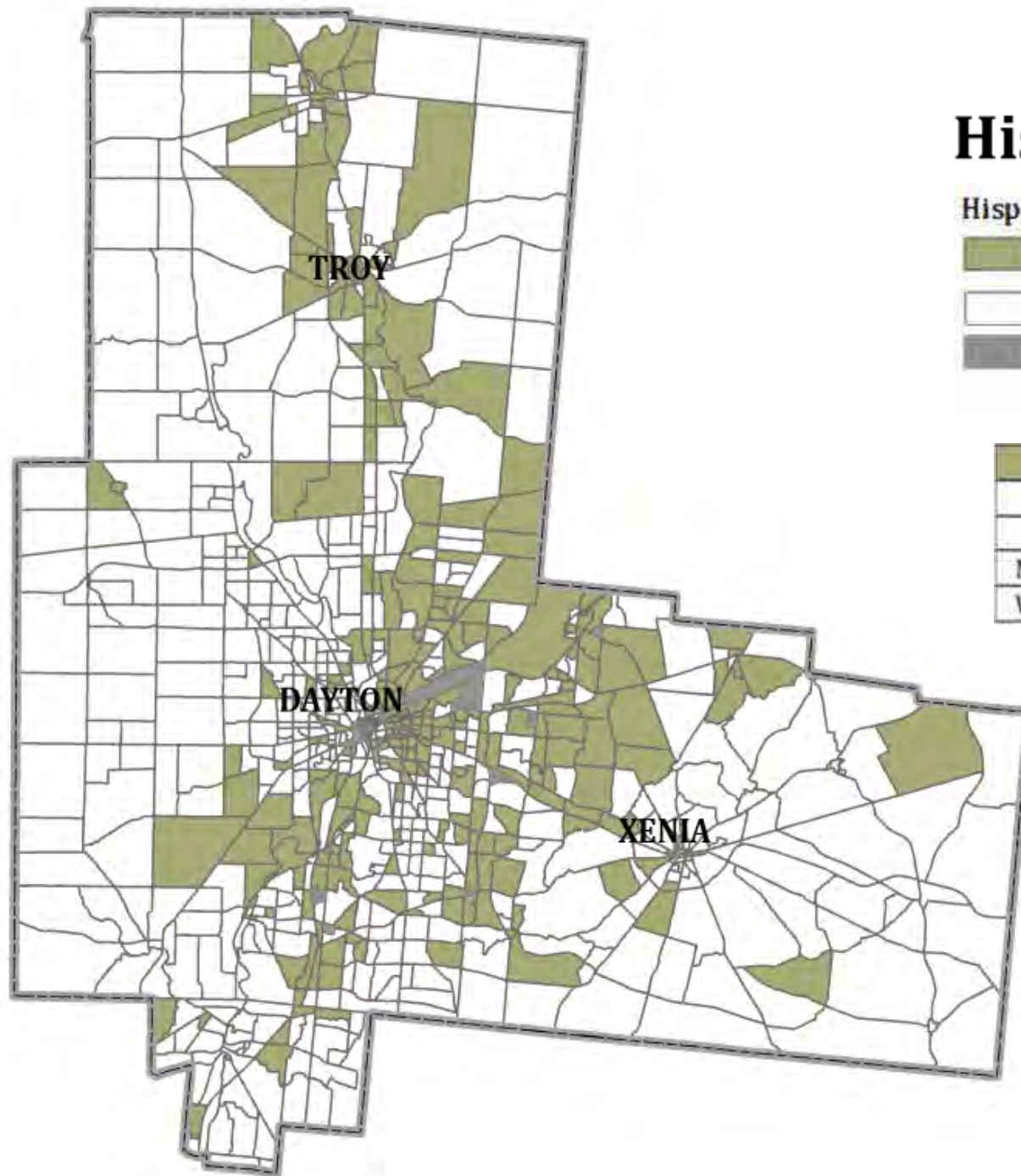
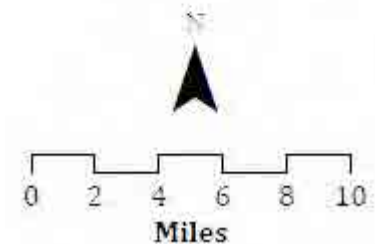
Boundaries

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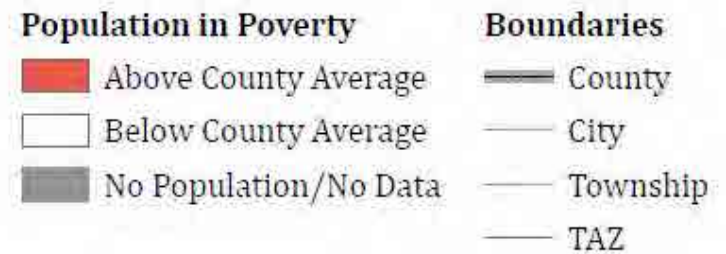
County	2020 County Average
Greene	3.11%
Miami	2.02%
Montgomery	3.94%
Warren (All)	3.19%

Source: 2018-2022 ACS
and 2020 U.S. Census

August 2024



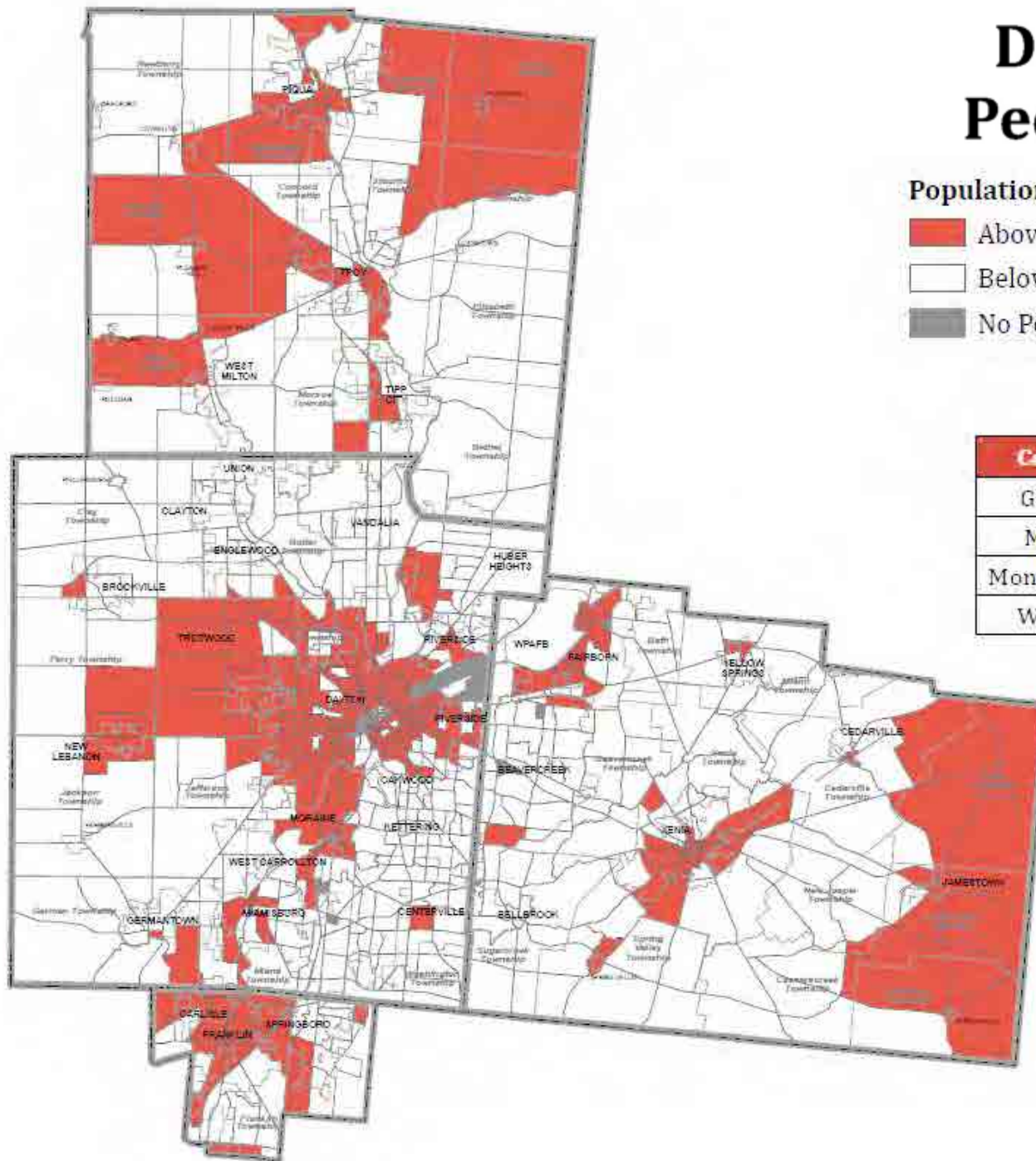
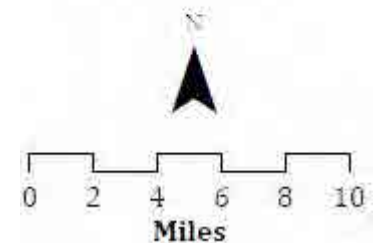
Distribution of People in Poverty



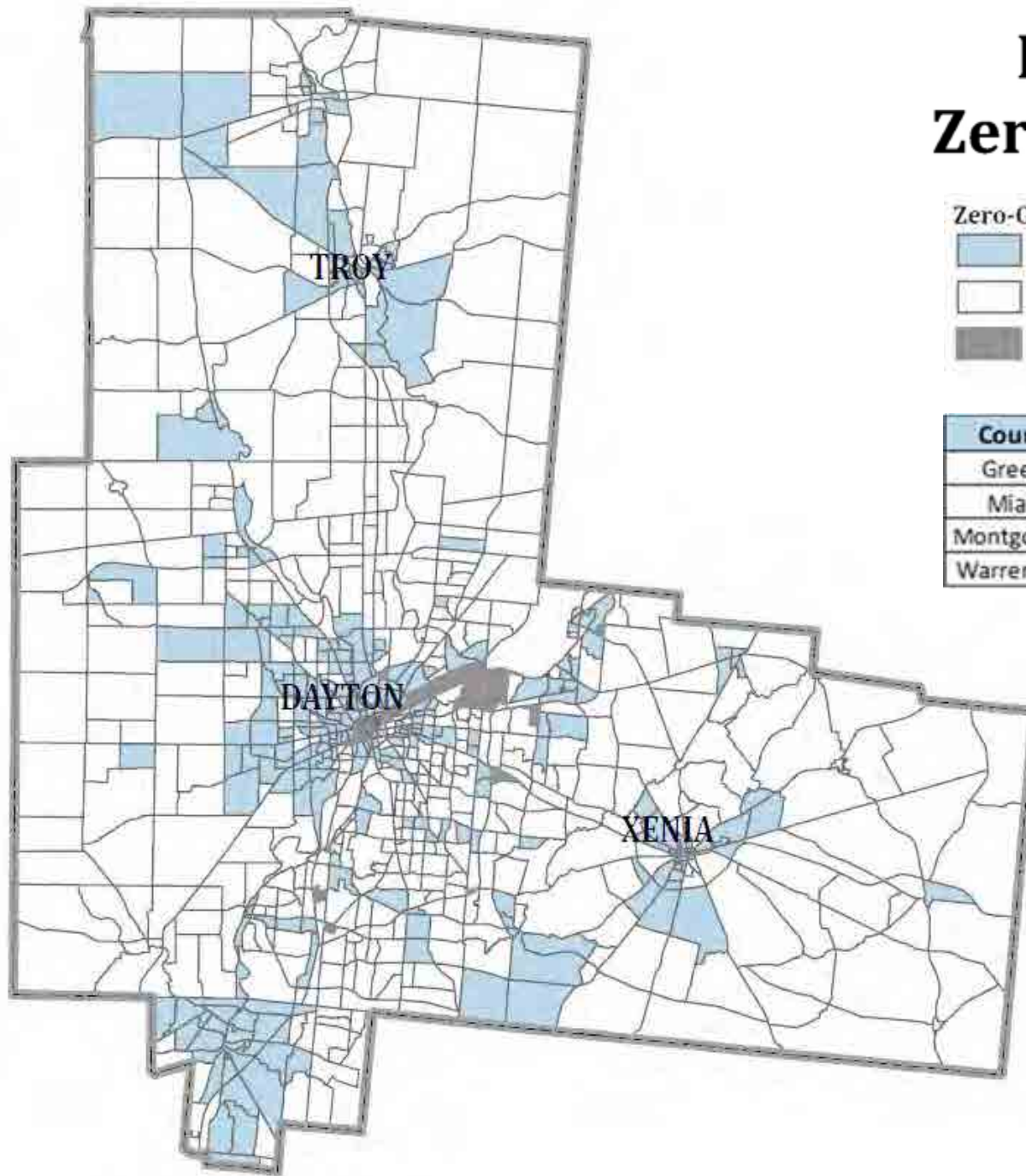
County	2020 County Average
Greene	10.65%
Miami	8.19%
Montgomery	15.57%
Warren	5.14%

Source: 2018-2022 ACS
and 2020 U.S. Census

August 2024



Distribution of Zero-Car Households



Zero-Car Households

- Above Average
- Below Average
- No Population/No Data

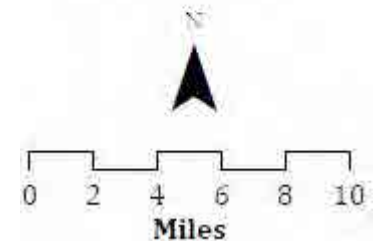
Boundaries

- County
- City
- Township
- TAZ

County	2020 County Average
Greene	4.37%
Miami	4.88%
Montgomery	9.04%
Warren (All)	2.69%

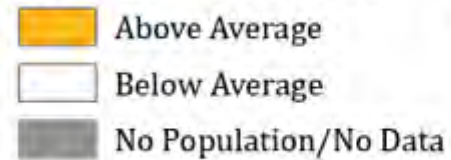
Source: 2018-2022 ACS
and 2020 U.S. Census

August 2024

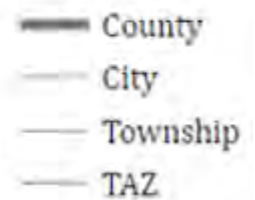


Distribution of Population At or Over 65

Population At or Over 65



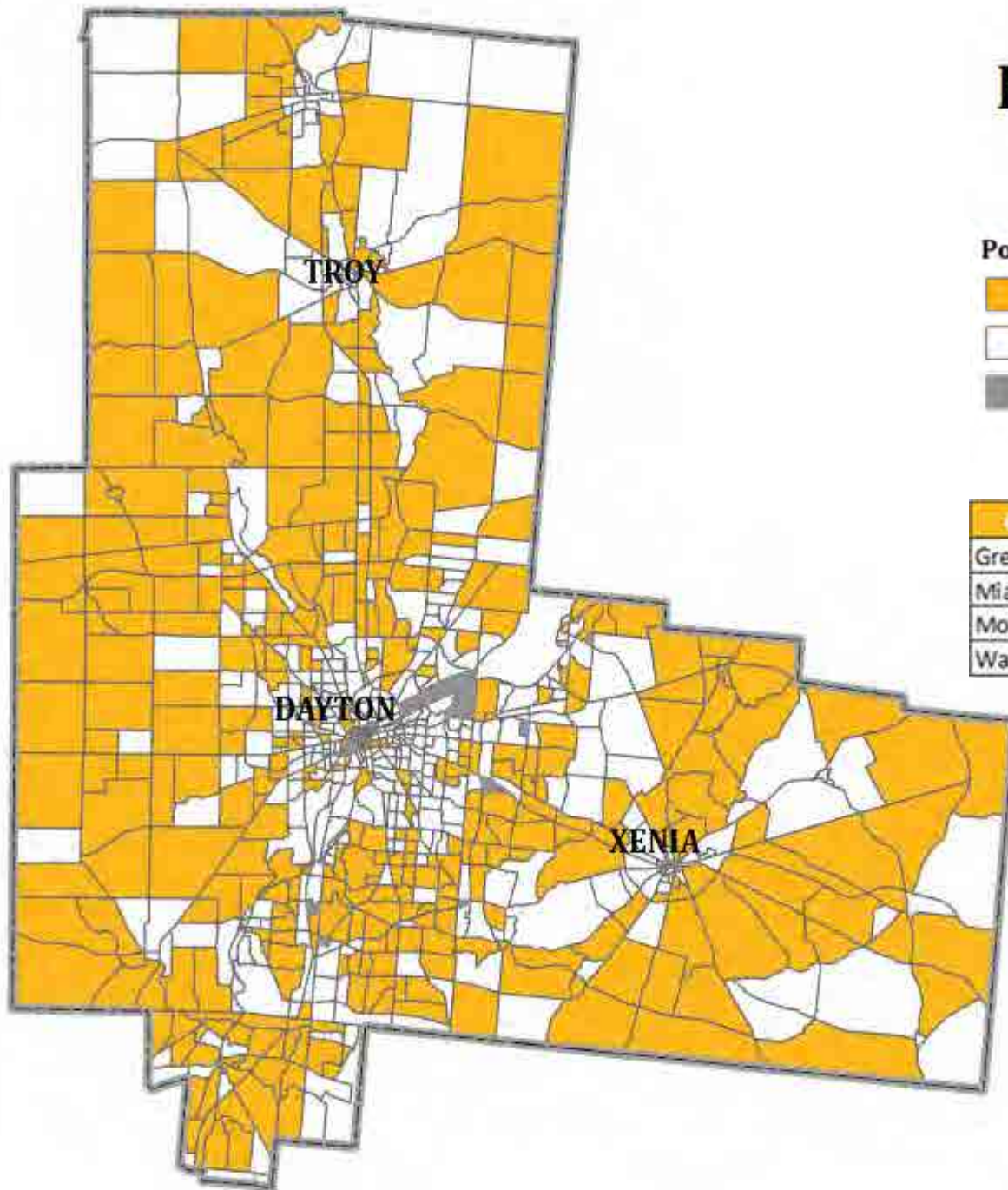
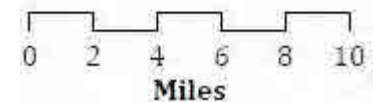
Boundaries



County	2020 County Average
Greene	17.91%
Miami	19.30%
Montgomery	18.51%
Warren (All)	15.46%

Source: 2018-2022 ACS
and 2020 U.S. Census

August 2024



Distribution of Population With a Disability

Population With a Disability

- Above Average
- Below Average
- No Population/No Data

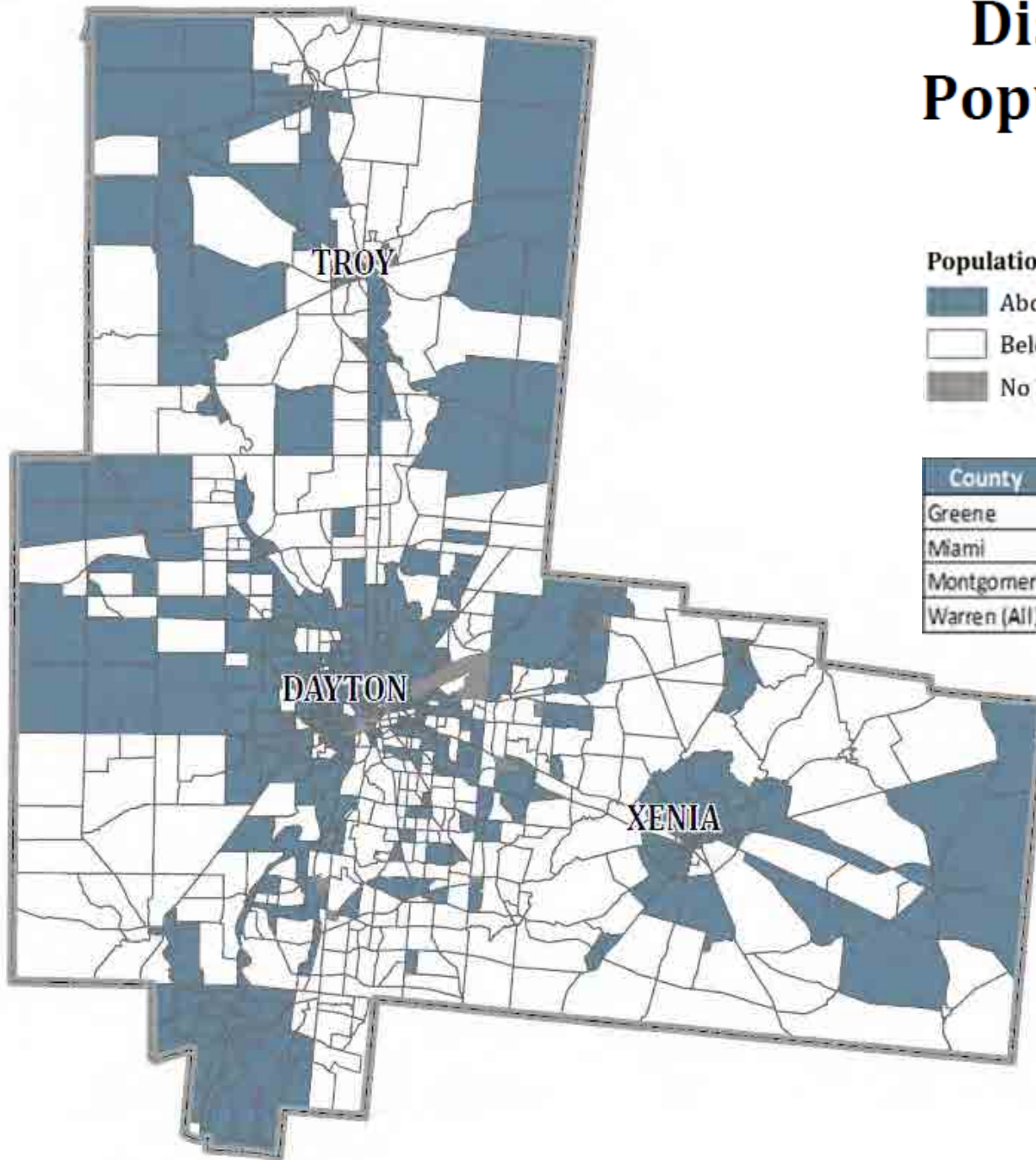
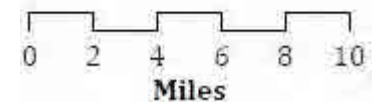
Boundaries

- County
- City
- Township
- TAZ

County	2020 County Average
Greene	16.23%
Miami	14.56%
Montgomery	18.39%
Warren (All)	14.05%

Source: 2018-2022 ACS
and 2020 U.S. Census

August 2024





Land Use & Socioeconomic Projections

Land Use






Land development throughout the Region has been largely concentrated along major highways, namely I-75, I-70, and I-675. As of 2018, over 60% of the Region's land was classified as agricultural or open space. Residential land constituted the next largest percentage (24.3%), followed by institutional and commercial land (3.6% and 3.4%, respectively).

Residential development throughout the Region is spread fairly even throughout the urbanized area, with high concentrations in eastern Montgomery County and western part of Greene County and along I-75 in Miami County.

Commercial development is spread somewhat less evenly, with concentrations around three suburban malls and in the Dayton CBD. Additional commercial areas are found along the major transportation routes. As a result, most parts of the Region are well served by retail and service facilities.

Industrial development in the Region generally follows the I-75 corridor, which parallels the Great Miami River and provides access to factories and office clusters stretching from the City of Piqua in northern Miami County down to southern Montgomery County. The most important concentration of employment outside of the I-75 corridor is located along the Greene/ Montgomery County border near the intersection of I-70 with SR 4 and along I-675.

Socioeconomic Changes 2010 to 2020

Population		1.9%	+
Households		3.6%	+
PPHH		-0.8%	-
Pop>65		26.4%	+++
Employment		7.1%	++

Socioeconomic Data Summary for the 2050 Long Range Transportation Plan

Population, Households, and Employment Projections

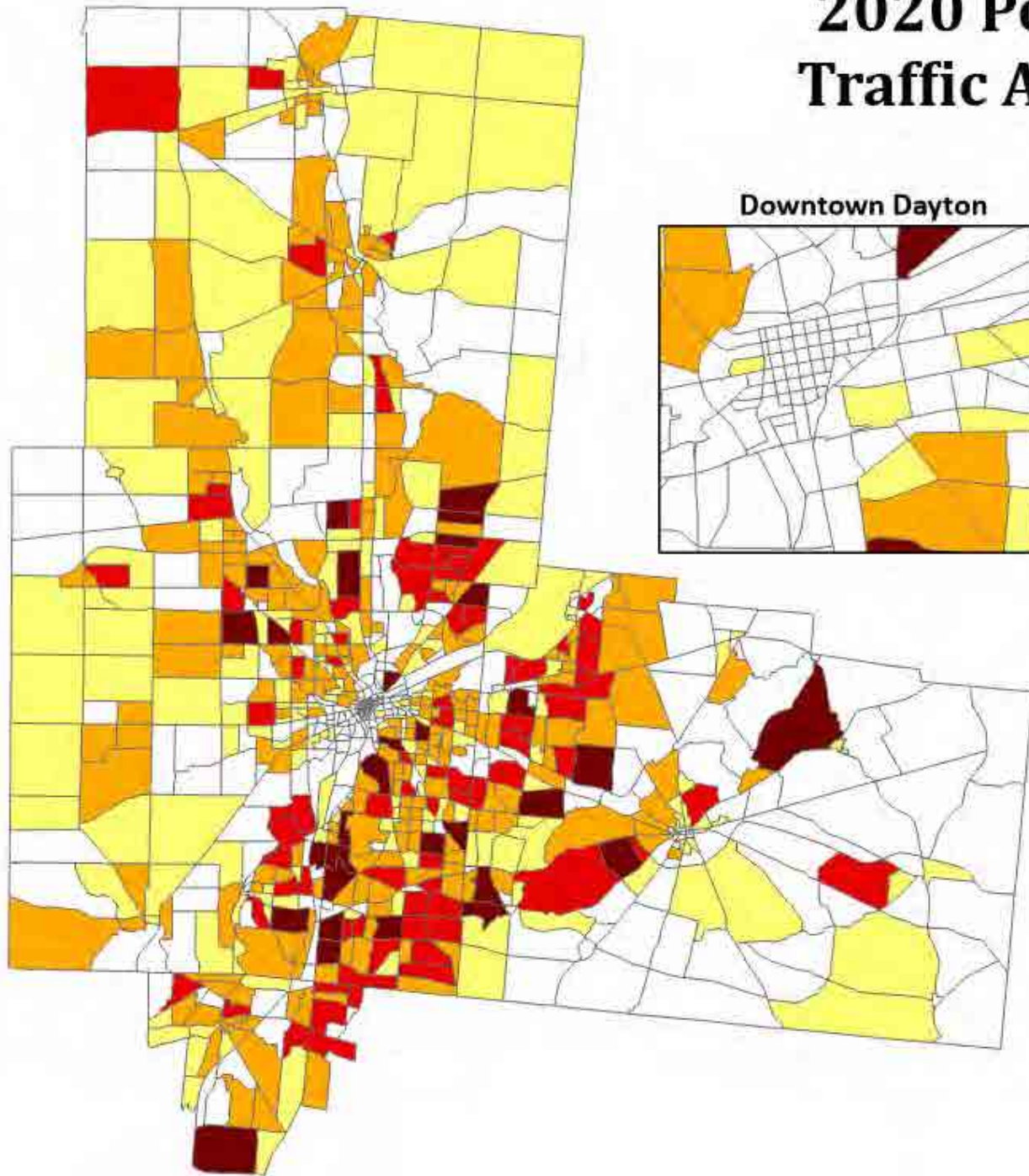
POPULATION	Census		MVRPC/OKI
County	2010	2020	2050
Greene	161,573	167,966	171,091
Miami	102,506	108,774	116,808
Montgomery	535,153	537,309	492,218
Warren	212,693	242,337	292,509
	1,011,925	1,056,386	1,072,626

HOUSEHOLDS	Census		MVRPC/OKI
County	2010	2020	2050
Greene	62,770	66,831	71,423
Miami	40,917	44,086	48,599
Montgomery	223,943	228,536	217,197
Warren	76,424	89,086	109,194
	404,054	428,539	446,413

EMPLOYMENT	MVRPC/OKI		
County	2010	2020	2050
Greene	97,406	108,884	134,078
Miami	49,607	54,109	65,242
Montgomery	298,018	313,766	338,279
Warren	77,414	95,691	131,697
	522,445	572,450	669,297

Source: U.S. Census, MVRPC, OKI

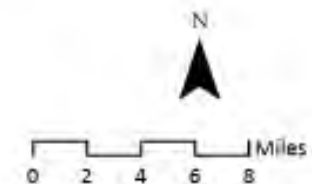
2020 Population by Traffic Analysis Zone



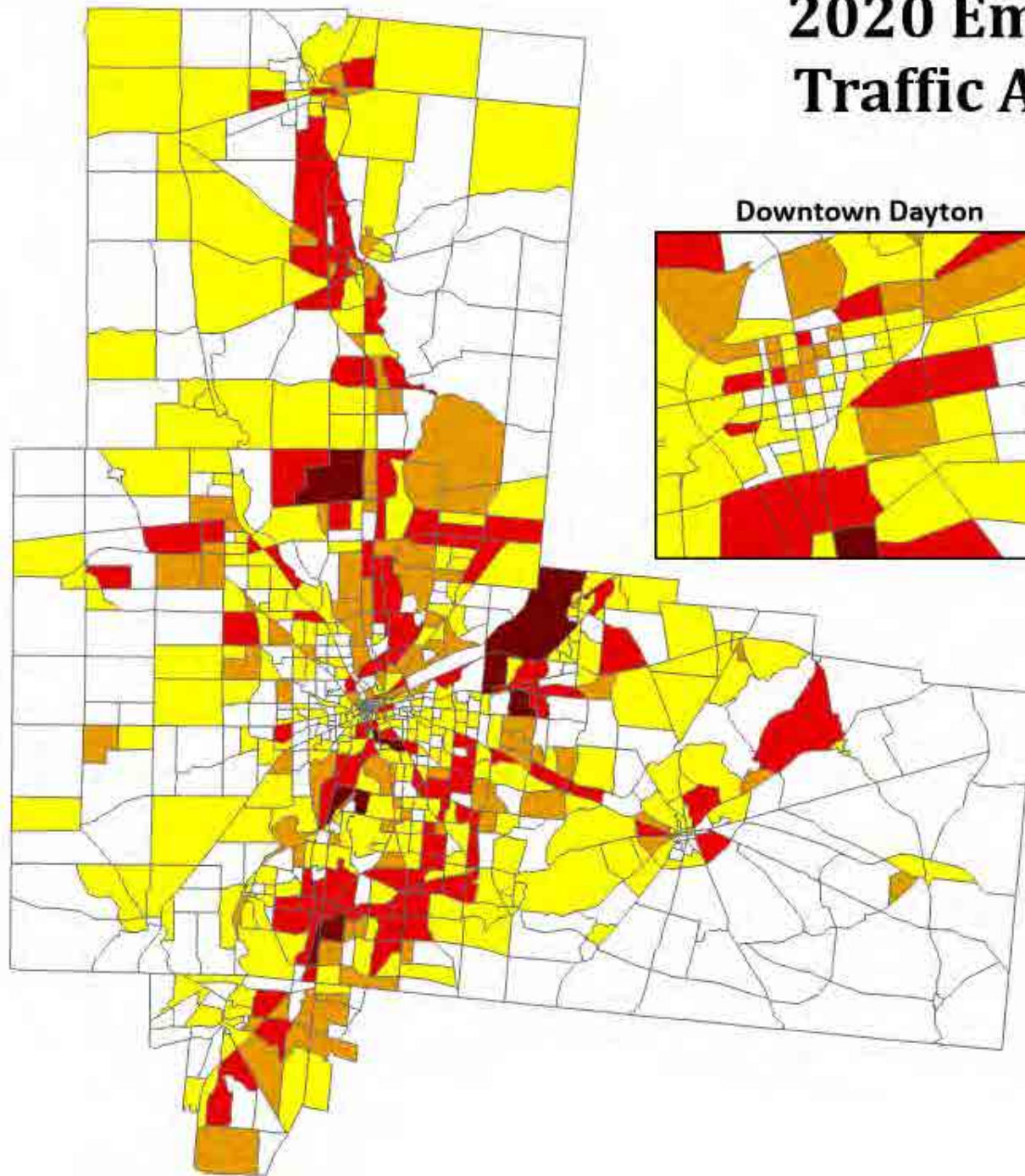
2020-2050 Population Change Projection by Traffic Analysis Zone



Source: Census 2020, MVRPC



2020 Employment by Traffic Analysis Zone

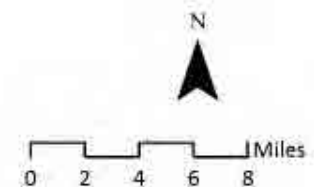


Downtown Dayton

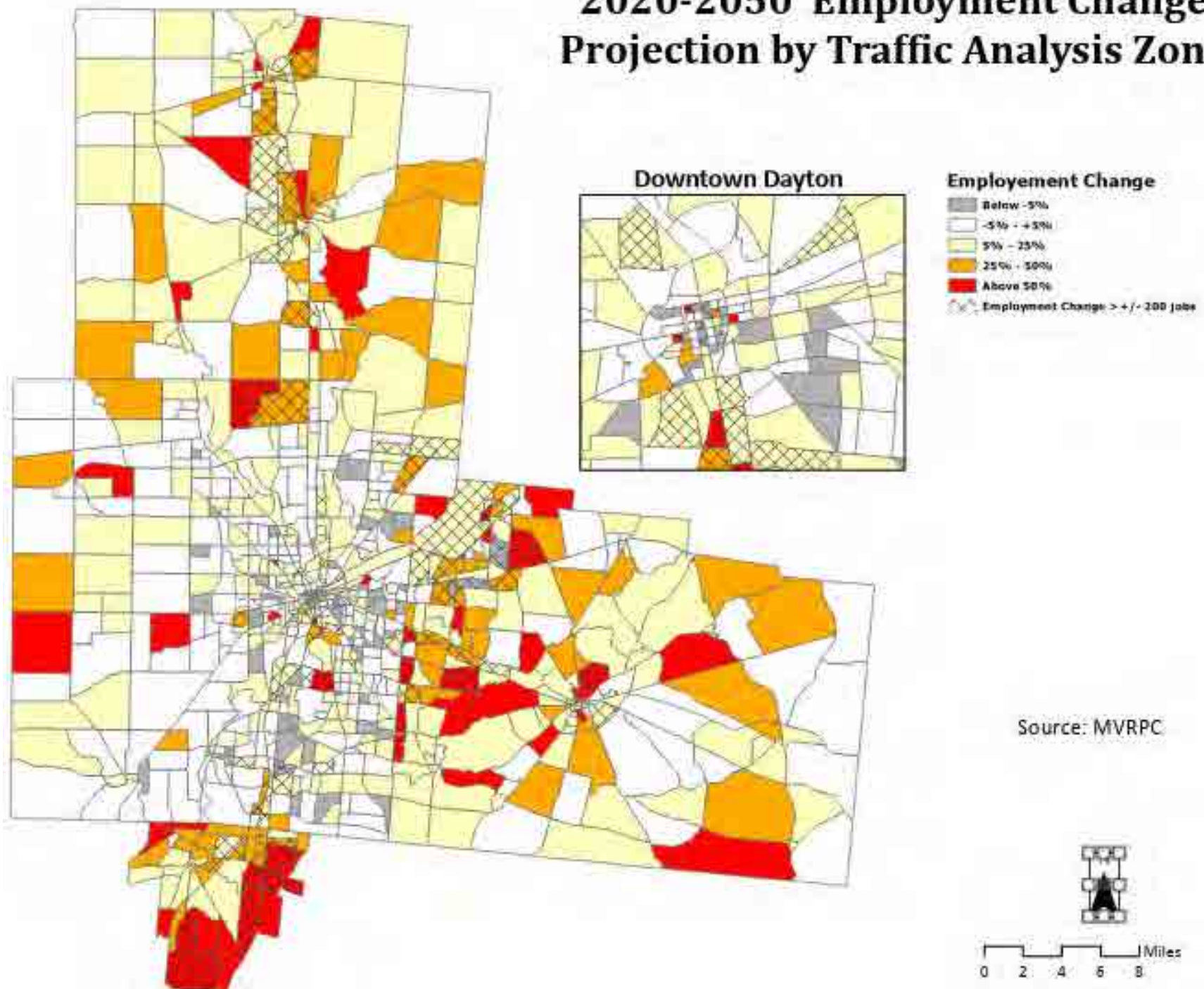
Total Employment



Source: MVRPC



2020-2050 Employment Change Projection by Traffic Analysis Zone





Transportation Performance Management

Performance Management Overview

- **Transportation Performance Management is a strategic approach that uses system information to make investment and policy decisions to achieve national performance goals.**
- **Performance targets are established by State DOTs, MPOs and transit agencies against specific measures for**
 - **Safety**
 - **Pavement and Bridge Conditions**
 - **Freight and Travel Time Reliability**
 - **CMAQ Emissions, non-SOV travel, Peak Hour Excessive Delay, and**
 - **Transit**



**Publication of Final Rule
by FHWA**

**State Target
Determination (1 year)**

**MPO Target
Determination (180 days)**

**Integrate Targets into
Planning Processes**

Transportation Performance Targets

Target Areas		Performance Measures	Network	Target Adoption Date*	Target Adopted	MVRPC/Transit Funded Projects	
						No. of Projects	Total Cost in millions
PM 1	Safety	Number of Fatalities	All Public Roads (Applicable to MPO)	December 2024	1,180	24	\$55.11
		Rate of Fatalities			1.08		
		Number of Serious Injuries			7,482		
		Rate of Serious Injuries			6.51		
		Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries			809		
PM 2	Pavement Condition	Percentage Interstate System Pavements in Good Condition	Interstate System (Applicable to MPO)	June 2022	55%	0	\$0.00
		Percentage Interstate System Pavements in Poor Condition			1%		
		Percentage non-Interstate System Pavements in Good Condition	NHS Non-Interstate (Applicable to MPO)	June 2022	40%	17	\$25.88
		Percentage non-Interstate System Pavements in Poor Condition			2%		
	Bridge Condition	Percentage of NHS bridges by deck area classified as in Good condition	NHS (Applicable to MPO)	June 2022	55%	0	\$0.00
		Percentage of NHS bridges by deck area classified as in Poor condition			3%		
PM 3	NHS Travel Time Reliability	Percent of Person-Miles Traveled on the Interstate System that are Reliable	Interstate System (Applicable to MPO)	June 2022	85%	0	\$0.00
		Percent of Person-Miles Traveled on the Non-Interstate System that are Reliable	NHS Non-Interstate (Applicable to MPO)	June 2022	80%	1	\$2.24
	Freight	Truck Travel Time Reliability (TTTR) Index: The sum of maximum TTTR for each segment, divided by total Interstate miles	Interstate System (Applicable to MPO)	June 2022	<1.5	0	\$0.00
	Total CMAQ Emissions	Total CMAQ Project Reductions for CO, VOC, NOx, PM _{2.5} & PM ₁₀	N/A (MVRPC and Specific MPOs)	June 2022	VOC: 60 kg/day NOx: 250 kg/day	24	\$53.08
	Peak Hour Excessive Delay	Annual Hours of Peak Hour Excessive Delay per capita	NHS (Applicable to Urbanized Areas)	June 2022	<7.2 hours	1	\$2.24

Transportation Performance Targets (continued)

Target Areas		Performance Measures	Network	Target Adoption Date*	Target Adopted	MVRPC/Transit Funded Projects	
						No. of Projects	Total Cost in millions
	Non-SOV Travel	Percent of Non-SOV Travel	N/A (Applicable to Urbanized Areas)	June 2022	>16.1%	31	\$68.83
TRANSIT	Transit Asset Management Plan	Transit -- Capital State of Good Repair	N/A	December 2022		31	\$165.30
	Public Transportation Agency Safety Plan	Fatalities	N/A	May 2020 **		8	\$41.00
		Injuries					
		Safety Events					
		System Reliability (State of Good Repair)					



















* To date MVRPC has chosen to support the State's and Regional Transit Agencies's targets for all measures.

** Each agency reviews the Agency Safety Plan annually and determines if updates are needed. GDRTA last updated their Plan in 2024.

Regional Report Card

	Measure	Description	Data		Goal	Actual	Trend
System Performance	Average Freeway Speed (mph)	Source: INRIX	63.1 (2018)	65.6 (2023)			5.4%
	Congested System	Congested Lane-Miles Source: Texas Transportation Institute (TTI)	8.4% (2017)	6.20% (2022)			-26.1%
	Annual Freeway Vehicle Hours of Delay	In hours; Source: INRIX	844,980 (2018)	872,960 (2023)			3.31%
	Annual Cost of Vehicle Delay on Freeways	In millions; Source: INRIX	\$30.14 (2018)	\$35.85 (2023)			18.9%
	Annual Cost of Truck Delay on Freeways	In millions; Source: INRIX	\$14.44 (2018)	\$14.91 (2023)			3.2%
Safety	Incident Response	Average duration of major freeway incidents In minutes; Source: INRIX	101.3 (2018)	148.6 (2023)			46.6%
	Mean Distance Between Calls	Miles between service calls Source: GDRTA	1,508 (2018)	5,224 (2024)			246.4%
	Rate of Fatalities	Total fatalities per 100 million Daily VMT Source: ODPS	1.00 (2017-19)	1.30 (2021-23)			30.0%
	Rate of Serious Injuries	Total incapacitating injuries per 100 MDVMT Source: ODPS	7.03 (2017-19)	7.06 (2021-23)			0.4%
	Transit Incidents	Transit incidents per 100,000 trips Source: NTD	0.47 (2016-18)	0.19 (2022-24)			-59.5%
	Bike/Pedestrian Safety	Number of Nonmotorized Fatalities and Serious Injuries Source: ODOT & ODPS	848.0 (2017-19)	894.0 (2021-23)			5.0%

Regional Report Card (continued)

System Conditions	Pavement Condition Rating (PCR)	% Road Mileage in Poor Condition based on PCR <i>Source: ODOT</i>	4.3% (2018)	7.8% (2023)			81.3%
	Bridge Rating	% of Bridges in Fair / Poor Condition <i>Source: ODOT</i>	13.4% (2018)	11.3% (2023)			-15.6%
Accessibility	Miles of Regional Bikeway	Additions to Regional Bikeway System <i>In miles; Source: MVRPC</i>	220 (2018)	238 (2025)			8.2%
	Population Served by Bikeway	Population within ½ mile of a Regional Bikeway <i>Source: U.S. Census, MVRPC¹</i>	32.3% (2018)	33.2% (2025)			2.8%
	Employment Served by Bikeway	Employment within ½ mile of a Regional Bikeway <i>Source: QCEW, MVRPC¹</i>	46.8% (2018)	47.5% (2025)			2.1%
	Population Served by Transit	Population within ½ mile of a GDRTA Bus Route <i>Source: U.S. Census, MVRPC, GDRTA¹</i>	83.0% (2018)	82.6% (2024)			■
	Employment Served by Transit	Employment within ½ mile of a GDRTA Bus Route <i>Source: QCEW, MVRPC, GDRTA¹</i>	89.5% (2018)	89.1% (2024)			■
	Work trips by Biking and Walking	Work trips in the Region by biking and walking <i>Source: ACS 2014-2018, ACS 2018-2023</i>	2.58% (2018)	2.59% (2023)			■
	Population Living in Mixed Land Use Districts	Population living in districts integrated with residential and employment land uses <i>Source: U.S. Census, QCEW, MVRPC</i>	26.5% (2010)	33% (2020)			24.5%

¹ Using 2010 populations and employment for previous period and 2020 population and employment for current period

Questions?

**plan2050.mvrpc.org/comments
or
plan2050@mvrpc.org**