Akron Metropolitan Area Transportation Study
Policy Committee
The Venue
10 Tallmadge Circle
Tallmadge, Ohio 44278

Thursday, December 12, 2024
1:30 p.m.

Agenda

1. **Call to Order**
   - A. Determination of a Quorum — Oral
   - B. Audience Participation

2. **Minutes**
   - A. September 26, 2024 Meeting – **Motion Required** — Attachment 2A

3. **Staff Reports**
   - A. Financial Progress Report – **Motion Required** — Attachment 3A
   - B. Technical Progress Report — Oral
   - C. AMATS Federal Funds Report — Attachment 3C

4. **Old Business**
   - A. *Congestion Management Process (CMP) Report*. – **Motion Requested** — Attachment 4A

5. **New Business**
   - A. *Traffic Crashes and Safety Performance Measures (2021-2023)*. – **Motion Required** — Attachment 5A
   - B. Update to the *AMATS Public Participation Plan – 3P*. – **Motion Requested** — Attachment 5B
   - C. Regional Discussion of Passenger Rail. – **Discussion Only** — Oral

6. **Resolutions**
   - A. **Resolution 2024-20** – To Add Ohio Workforce Mobility Program Funds for PARTA (FY 2024-2027 TIP Amendment #10). – **Motion Required** — Attachment 6A

7. **Other Business**
   - A. 2025 AMATS Meeting Calendar. – **Motion Requested** — Attachment 7A

8. **Adjournment**

Next Regular Meeting:
Thursday, February 13, 2025 - 1:30 PM
ODOT District 4
2088 S. Arlington Road
Akron, OH 44306

All mailout material is available on the AMATS Web Site at www.amatsplanning.org

Akron Metropolitan Area Transportation Study
Technical Advisory Committee
The Venue
10 Tallmadge Circle
Tallmadge, Ohio 44278

Thursday, December 5, 2024
1:30 p.m.

Agenda

1. **Call to Order**
   A. Determination of a Quorum — Oral

2. **Minutes**
   A. September 19, 2024 Meeting – **Motion Required** — Attachment 2A

3. **Staff Reports**
   A. Financial Progress Report – **Motion Required** — Attachment 3A
   B. Technical Progress Report — Oral
   C. AMATS Federal Funds Report — Attachment 3C

4. **Old Business**
   A. *Congestion Management Process (CMP) Report*. – **Motion Requested** — Attachment 4A

5. **New Business**
   A. *Traffic Crashes and Safety Performance Measures (2021-2023)*. – **Motion Required** — Attachment 5A

   B. Update to the *AMATS Public Participation Plan – 3P*. – **Motion Requested** — Attachment 5B

   C. Regional Discussion of Passenger Rail. – **Discussion Only** — Oral

6. **Resolutions**
   A. **Resolution 2024-20** – To Add Ohio Workforce Mobility Program Funds for PARTA (FY 2024-2027 TIP Amendment #10). – **Motion Required** — Attachment 6A

7. **Other Business**
   A. 2025 AMATS Meeting Calendar. – **Motion Requested** — Attachment 7A

8. **Adjournment**

Next Regular Meeting:
Thursday, February 6, 2025 - 1:30 PM
ODOT District 4
2088 S. Arlington Road
Akron, OH 44306

All mailout material is available on the AMATS Web Site at www.amatsplanning.org.

Akron Metropolitan Area Transportation Study
Citizens Involvement Committee
Virtual Meeting

Thursday, December 5, 2024
6:30 p.m.

Agenda

1. **Welcome**

2. **Introductions**

3. **Items**
   A. Discussion regarding Attachment 4A – *Congestion Management Process (CMP) Report*.

   B. Presentation of Attachment 5A – *Traffic Crashes and Safety Performance Measures (2021-2023)*.

   C. Discussion of Attachment 5B – Update to the *AMATS Public Participation Plan – 3P*.

   D. Presentation of Attachment 7A - 2025 AMATS Meeting Calendar.

4. **Open Discussion**

5. **Adjournment 7:45 P.M.**
   Next Regular Meeting:
   Thursday, February 6, 2025 - 6:30 p.m.

All mailout material is available on the AMATS Web Site at www.amatsplanning.org

Akron Metropolitan Area Transportation Study
Policy Committee
Thursday, September 26, 2024 – 1:30 p.m.

Minutes of Meeting

Recordings of AMATS committee meetings are available in the *Past Meetings* page of the agency web site at **https://www.amatsplanning.org/past-meetings**.

I. Call to Order

A. **Chairman Jenkins** called the meeting to order. The attending members constituted a quorum.

B. **Audience Participation**

None.

II. Minutes – Motion Required

A. **Approval of Minutes**

Members were asked to approve the minutes of the August 8, 2024 meeting.

Motion
Bobbie Beshara *made a motion to approve the minutes and it was seconded by* ***William B. Judge***. *The motion was approved by a voice vote.*

III. Staff Reports

A. **Financial Progress Report**

Curtis Baker presented Attachment 3A.

Motion
William B. Judge *made a motion to approve the Financial Progress Report and it was seconded by* ***Carol Siciliano-Kilway***. *The motion was approved by a voice vote.*

B. **Technical Progress Report**

Matt Stewart said that funding will soon be available through the ODOT Safety Program for smaller-scale, pedestrian-type projects.

Akron and Fairlawn were awarded funding from the SS4A Program.

The Staff has completed several input documents necessary for the update of the long-range regional transportation plan, *Transportation Outlook 2050* (*TO2050*).

The 2024 AMATS Annual Meeting is scheduled for Oct. 11. The registration deadline is Oct. 4.

C. AMATS Federal Funds Report

Amy Prater presented Attachment 3C.

Ms. Prater presented tables concerning STBG, CRP, CMAQ, and TASA Funding Program and Balances dated Sept. 10, 2024.

IV. Old Business

A. Final Draft *Congestion Management Process (CMP) Report*.

Mr. Baker presented Attachment 4A.

B. *Planning Data Forecast.*

Mr. Baker presented Attachment 4B.

Mayor Adamson asked why AMATS' population projections for the Greater Akron area differed from the Ohio Department of Development (ODOD). **Mr. Baker** explained that ODOD's estimates on based on "pivot" tables. **Mr. Baker** noted that neither set of estimates is objective and perhaps subjective in how data is tabulated. **Mr. Baker** said that actual future totals may be somewhere between the two totals.

Motion
Paul Adamson *made a motion to accept the Planning Data Forecast and it was seconded by* ***Joe Paradise****. The motion was approved.*

C. *2024 Freight Plan*.

Jeff Gardner presented Attachment 4C.

Motion
Bob Finney *made a motion to accept the 2024 Freight Plan and it was seconded by* ***Bobbie Beshara****. The motion was approved.*

D. *2024 Transit Plan*.

Matt Mullen presented Attachment 4D.

Motion
Jim Bowling *made a motion to accept the 2024 Transit Plan and it was seconded by* ***Carol Siciliano-Kilway****. The motion was approved.*

V. New Business

None.

VI. Resolutions

A. Resolution 2024-17 – Approving the FY 2024 Year End Completion Report.

Heather Davis Reidl presented Attachment 6A.

Motion
Paul Adamson *made a motion to approve Resolution 2024-17 and it was seconded by* ***Bobbie Beshara****. The motion was approved.*

B. Resolution 2024-18 – Approving Support for ODOT CY 2025 Safety Goals.

Mr. Gardner presented Attachment 6B.

Motion
Claudia Amrhein *made a motion to approve Resolution 2024-18 and it was seconded by* ***Carol Siciliano-Kilway****. The motion was approved.*

C. Resolution 2024-19 – CMAQ Performance Plan Mid-Period Progress Report.

Mr. Gardner presented Attachment 6C.

Motion
John Cieszkowski *made a motion to approve Resolution 2024-19 and it was seconded by* ***Bob Finney****. The motion was approved.*

VII. Other Business

A. **Mr. Baker** reminded the members that the AMATS Annual Meeting is scheduled for Friday, Oct. 11 and that registration ends Friday, Oct. 4.

VIII. Adjournment

A. ***Motion***
Bobbie Beshara *made a motion to adjourn the meeting and it was seconded by* ***Carol Siciliano-Kilway****. The motion was approved.*

The next regularly scheduled Policy Committee meeting is scheduled for **1:30 p.m**. on **Thursday, December 12, 2024**.

AMATS POLICY COMMITTEE
2024 ATTENDANCE

M Denotes Member Present **A Denotes Alternate Present**	**Jan 25**	**Mar 28**	**May 16**	**Aug 8**	**Sept 26**	**Dec 12**
AKRON – Mayor Shammas Malik (DiFiore) (Vollman)	A	A		A	A	
AURORA - Mayor Ann Womer Benjamin (Stark) (Januska)						
BARBERTON - Mayor William B. Judge (Teodecki) (Wearstler)	M	M		M	M	
BOSTON HEIGHTS – Mayor Ron Antal (Maccarone)						
CLINTON - Mayor William C. McDaniel						
CUYAHOGA FALLS - Mayor Don Walters (Zumbo)	A		A	M	A	
DOYLESTOWN - Mayor Terry Lindeman						
FAIRLAWN - Mayor Russell Sharnsky (Staten) (Visca)		A	A	A	A	
GARRETTSVILLE - Mayor Rick Patrick (Klamer)						
GREEN - Mayor Rocco Yeargin (Wax Carr)	M				A	
HIRAM - Mayor Ann Haynam (McGee)						
HUDSON – Thomas Sheridan (Comeriato)	M	M	M			
KENT – City Mgr. David Ruller (Baker) (Bowling)	A		A	A	A	
LAKEMORE – Mayor Richard Cole (Fast)	A					
MACEDONIA - Mayor Nick Molnar (Gigliotti) (Sheehy)						
MANTUA - Mayor Tammy Meyer (Klemm)						
METRO – Dawn Distler (Leppo)	M	A		M	M	
MOGADORE - Mayor Michael Rick						
MUNROE FALLS - Mayor Allen Mavrides (Bowery)	M					
NEW FRANKLIN - Mayor Paul Adamson (Ganoe) (Kepler)	M	M	M	M	M	
NORTHFIELD – Mayor Jenn Domzalski (Hipps)						
NORTON – Administrative Officer Dennis Loughry (Binsley)	A					
ODOT – Gery Noirot (Phillis) (Root)	M		A		M	
PARTA – Claudia Amrhein (Baba) (Forbes) (Proseus) (Schrader)	M	A	M	M	M	
PENINSULA - Mayor Daniel R. Schneider, Jr.						
PORTAGE COUNTY COMM. - Anthony J. Badalamenti (Mann)						
PORTAGE COUNTY COMM. – Mike Tinlin (Long)						
PORTAGE COUNTY COMM. - Sabrina Christian-Bennett (Hlad)		A		M		
PORTAGE COUNTY ENGINEER – Larry Jenkins (Steigerwald)	M	M	M	M	M	
RAVENNA - Mayor Frank Seman (Finney) (DiSalvo)	A	A	A	A	A	
REMINDERVILLE - Mayor Sam Alonso (Krock)						
RICHFIELD - Mayor Michael Wheeler (Frantz) (Waldemarson)	A		A		A	
RITTMAN – City Mgr. Bobbie Beshara (Robertson) (Neumeyer)		M	M	M	M	
SILVER LAKE – Mayor Therese Dunphy (Housley)						
STOW - Mayor John Pribonic (McCleary) (Jones)	A	A	A	A		
STREETSBORO - Mayor Glenn M. Broska (Cieszkowski) (Czekaj)	A	A	A	A	A	
SUGAR BUSH KNOLLS - Mayor Jeffrey A. Coffee						
SUMMIT COUNTY ENGINEER-Al Brubaker (Fulton) (Hauber) (Paradise)	A	A	A	A	A	
SUMMIT COUNTY EXECUTIVE - Ilene Shapiro (Tubbs)						
SUMMIT COUNTY COMM. & ECON. DEV. – Diane Miller-Dawson	M			M	M	
SUMMIT COUNTY COMM. & ECON. DEV. – Caitlin Elrad						
TALLMADGE - Mayor Carol Siciliano-Kilway (Kidder)	M	M	M	A	M	
TWINSBURG - Mayor Sam Scaffide (Mohr)	A	A	A	A		
WAYNE COUNTY COMM. BOARD - Dominic Oliverio (Broome)						
WAYNE COUNTY ENGINEER – Scott A. Miller (Jones)					M	
WINDHAM – Mayor Lawrence Cunningham, Jr.						

AMATS POLICY COMMITTEE
2024 ATTENDANCE

OBSERVERS AND STAFF MEMBERS PRESENT

NAME	REPRESENTING
Mr. Curtis Baker	AMATS
Mr. Seth Bush	AMATS
Mr. Jeff Gardner	AMATS
Mr. Matt Mullen	AMATS
Ms. Amy Prater	AMATS
Mr. Kerry Prater	AMATS
Ms. Heather Davis Reidl	AMATS
Mr. Matt Stewart	AMATS
Ms. Jennifer Conn	Signal Akron
Mr. Nate Leppo	METRO RTA
Mr. Joe Paradise	Summit County Engineer's office
Mr. Dave Pulay	EDG
Mr. Tony Urankar	MS Consultants, Inc.

Akron Metropolitan Area Transportation Study
Technical Advisory Committee
Thursday, September 19, 2024 – 1:30 p.m.

Minutes of Meeting

Recordings of AMATS committee meetings are available in the *Past Meetings* page of the agency web site at **https://www.amatsplanning.org/past-meetings**.

I. Call to Order

A. **Chairman Finney** called the meeting to order. The attending members constituted a quorum.

II. Minutes – Motion Required

A. Approval of Minutes

Members were asked to approve the minutes of the August 1, 2024 meeting.

Motion
Jim Bowling *made a motion to approve the minutes and it was seconded by* ***Amy Mohr****. The motion was approved by a voice vote.*

III. Staff Reports

A. Financial Progress Report

Curtis Baker presented Attachment 3A.

Motion
Jim Bowling *made a motion to approve the Financial Progress Report and it was seconded by* ***Tony Demasi****. The motion was approved by a voice vote.*

B. Technical Progress Report

Matt Stewart said that funding will soon be available through the ODOT Safety Program for smaller-scale, pedestrian-type projects.

Akron and Fairlawn were awarded funding from the SS4A Program.

The Staff has completed several input documents necessary for the update of the long-range regional transportation plan, *Transportation Outlook 2050* (*TO2050*).

The 2024 AMATS Annual Meeting is scheduled for Oct. 11. The registration deadline is Oct. 4.

C. AMATS Federal Funds Report

Amy Prater presented Attachment 3C.

Ms. Prater presented tables concerning STBG, CRP, CMAQ, and TASA Funding Program and Balances dated Sept. 10, 2024.

IV. Old Business

A. Final Draft *Congestion Management Process (CMP) Report.*

Mr. Baker presented Attachment 4A.

B. *Planning Data Forecast.*

Mr. Baker presented Attachment 4B.

Motion
Joe Paradise *made a motion to accept the Planning Data Forecast and it was seconded by* ***Jim McCleary****. The motion was approved.*

C. *2024 Freight Plan*.

Jeff Gardner presented Attachment 4C.

Motion
Jim Bowling *made a motion to accept the 2024 Freight Plan and it was seconded by* ***Bobbie Beshara****. The motion was approved.*

D. *2024 Transit Plan*.

Matt Mullen presented Attachment 4D.

Diane Miller-Dawson asked why transit ridership has been slow to recover back to pre-COVID 19 levels. **Mr. Mullen** suggested that various factors may account for a slow recovery such as people taking other employment opportunities or many opting to work from home. **Mr. Mullen** said that the coming months may show whether current ridership levels are the new norm for METRO and PARTA.

Motion
Jim Bowling *made a motion to accept the 2024 Transit Plan and it was seconded by* ***Amy Mohr****. The motion was approved.*

V. New Business

None.

VI. Resolutions

A. Resolution 2024-17 – Approving the FY 2024 Year End Completion Report.

Heather Davis Reidl presented Attachment 6A.

Motion
Wayne Wiethe *made a motion to approve Resolution 2024-17 and it was seconded by* ***Joe Paradise****. The motion was approved.*

B. Resolution 2024-18 – Approving Support for ODOT CY 2025 Safety Goals.

Mr. Gardner presented Attachment 6B.

Motion
Tony Demasi *made a motion to approve Resolution 2024-18 and it was seconded by* ***Mike Jones****. The motion was approved.*

C. Resolution 2024-19 – CMAQ Performance Plan Mid-Period Progress Report.

Mr. Gardner presented Attachment 6C.

Motion
Wayne Wiethe *made a motion to approve Resolution 2024-19 and it was seconded by* ***Jim Bowling****. The motion was approved.*

VII. Other Business

A. **Mr. Baker** reminded the members that the AMATS Annual Meeting is scheduled for Friday, Oct. 11 and that registration ends Friday, Oct. 4.

B. **Mr. Baker** said that AMATS will start developing recommendations for inclusion in *TO2050* soon. The Staff will contact the members regarding potential goals and long-range recommendations soon.

VIII. Adjournment

The next regularly scheduled TAC meeting will be at **1:30 p.m**. on **Thursday, December 5, 2024**.

There being no other business, the meeting was adjourned.

AMATS TECHNICAL ADVISORY COMMITTEE
2024 ATTENDANCE

M Denotes Member Present **A Denotes Alternate Present**	**Jan 18**	**Mar 21**	**May 9**	**Aug 1**	**Sept 19**	**Dec 5**
AKRON ENGINEERING BUREAU- Christine Jonke (Solomon)	A	A			M	
AKRON PLANNING DEPT. – Helen Tomic (Garritano)	A		A			
AKRON TRAFFIC ENGINEERING - Michael Lupica (Meyer)	M		M		M	
AURORA - Harry Stark (Cooper)	A				M	
BARBERTON – Mike Teodecki (Shreve)	M		M	M		
BARBERTON – Pete Wearstler		M				
CUYAHOGA FALLS – Rob Kurtz (Paul)	A		A	M	A	
CUYAHOGA FALLS - Tony V. Demasi (Kaser)	M			M	M	
DOYLESTOWN - Eng. Assoc. - Ronny Portz						
FAIRLAWN – Geary Visca (Staten)	A		A			
GREEN - Wayne Wiethe (Haring)	M	M			M	
GREEN - Paul Pickett (Ciocca)	M					
HUDSON – Nick Sugar (Hannan)	M	M	M	M	M	
HUDSON – Brad Kosco (Rapp)	M			M		
KENT - Jim Bowling	M	M	M	M	M	
KENT - Jon Giaquinto (Baker)						
LAKEMORE – Mayor Richard Cole, Jr. (Fast)	A		A		A	
MACEDONIA - Joseph Gigliotti (Sheehy)			M			
METRO – Nathan Leppo	A		M	M		
MOGADORE – Vacant						
MUNROE FALLS – Vacant						
NEFCO – Joseph Hadley, Jr. (Lautzenheiser)	M	A	M	M		
NEW FRANKLIN – Bryan Kepler (Ganoe)	M	M	A	A		
NORTHFIELD – Daniel J. Collins						
NORTON – Brian Binsley (Hess)	M	M	M	M		
ODOT – Chad Root (Bruner) (Phillis)	A	A	M	A	A	
PARTA – Claudia Amrhein (Baba) (Forbes) (Proseus) (Schrader)	A	A	A	A	A	
PORTAGE COUNTY ENGINEER – Mike Collins (Vermes)	M	M	M	M		
PORTAGE CO. REG. PLANNING COMM. – Gail Gifford (Peetz)	M		M			
PORTAGE COUNTY SMALL VILLAGES – Tom Hardesty						
PORTAGE COUNTY TOWNSHIP ASSOC – Jeff Derthick (Kovacich)		M	A	M		
RAVENNA - Robert Finney (DiSalvo)	M	M			M	
RICHFIELD – Scott Waldemarson (Frantz) (Neumeyer)	M		M		M	
RITTMAN – Bobbie Beshara (Neumeyer) (Robertson)	M	M			M	
SILVER LAKE – John Tutak						
STOW – Jim McCleary (Simpkins)	M			M	M	
STOW – Mike Jones (Cowan)	M		M		M	
STREETSBORO – John H. Cieszkowski, Jr. (Broska) (Czekaj)	M	M	M	A	A	
SUMMIT CO. COMM. & ECON. DEV. – Diane Miller-Dawson (Tubbs)		M		M	M	
SUMMIT COUNTY ENGINEER - Alan Brubaker (Fulton) (Hauber) (Paradise)	A	A	A	A	A	
SUMMIT COUNTY SMALL VILLAGES – Brian Gorog	M					
SUMMIT COUNTY TOWNSHIP ASSOC. - Richard Reville (Funk)			A		A	
TALLMADGE - Andrea Kidder (Rorar)	M	M			M	
TWINSBURG - Amy Mohr (Jeffers)	M	M		M	M	
WAYNE COUNTY ENGINEER – Scott A. Miller (Jones)						
WINDHAM – Deborah Blewitt (Brown)						

AMATS TECHNICAL ADVISORY COMMITTEE
2024 ATTENDANCE

M Denotes Member Present A Denotes Alternate Present	Jan 18	Mar 21	May 9	Aug 1	Sept 19	Dec 5
NON-VOTING MEMBERS						
AKRON CANTON AIRPORT - Renato Camacho						
AKRON REG. AIR QUALITY MGT. DIST. – Sam Rubens (Brown) (Vadas)						
AMATS - Curtis Baker	M	M	M	M	M	
CUYAHOGA VALLEY NATIONAL PARK – Vacant						
ENVIRONMENTAL COMMUNITY REP. - Kurt Princic						
GREATER AKRON CHAMBER - Gregg Cramer (Carpenter)						
GREATER AKRON CHAMBER – Dennis West						
OHIO TURNPIKE COMMISSION – Anthony Yacobucci						
PORTAGE COUNTY PORT AUTHORITY – Vacant						
PORTAGE PARK DISTRICT - Christine Craycroft						
PRIVATE TRANSPORTATION PROVIDER (CYC) - Mark Posten (Stolfo)	M					
RAILROAD INDUSTRY REP. - William A. Callison (Davis)						
SUMMIT METRO PARKS – Mark Szeremet (King) (Saunier)	M	M		M	M	
TRUCKING INDUSTRY – Vacant						

OBSERVERS AND STAFF MEMBERS PRESENT

NAME	REPRESENTING
Mr. Sara Cooper	City of Aurora
Mr. Chuck Hauber	Summit County Eningeer's office
Mr. Dave James	ODOT District 4
Mr. George Maki	E.L. Robinson Engineering
Ms. Cynthia Peck	American Structures, Inc.
Ms. Amy Proseus	PARTA
Mr. Robert Solomon	City of Akron

STAFF MEMBERS PRESENT

Mr. Seth Bush	AMATS
Ms. Heather Davis Reidl	AMATS
Mr. Jeff Gardner	AMATS
Mr. Matt Mullen	AMATS
Ms. Amy Prater	AMATS
Mr. Kerry Prater	AMATS
Mr. Matt Stewart	AMATS

Akron Metropolitan Area Transportation Study
Citizens Involvement Committee
Thursday, September 19, 2024 – 6:30 p.m.

Meeting Summary

Attendees:

William Maki
Austen Rau
Bill Sepe

Staff:

Curtis Baker, Director
Seth Bush, Geographic Information Systems (GIS) Coordinator
Heather Davis Reidl, Mobility Planner
Jeff Gardner, Transportation Planner
Matt Mullen, Transportation Planner
Matt Stewart, Planning Administrator

I. Welcome

Matt Stewart welcomed the AMATS Citizens Involvement Committee (CIC) meeting attendees.

II. Discussion Items

A. **Curtis Baker** presented Attachment 4A – Final Draft *Congestion Management Process (CMP) Report*.

Bill Sepe asked which governmental entity - the cities of Hudson and Stow or the Ohio Department of Transportation (ODOT) - is responsible for signal timing on the portions of state Route 91 that extend through those communities. **Mr. Baker** said that the communities are responsible for their respective state Route 91 portions, but noted that portions within Twinsburg Township are ODOT's responsibility.

The attendees discussed signal timing technologies and related issues.

B. **Mr. Baker** presented Attachment 4B – *Planning Data Forecast.*

William Maki said that it was possible that, in the future, Ohio could become a refuge for people fleeing climate-related events.

C. **Jeff Gardner** presented Attachment 4C – *2024 Freight Plan*.

Mr. Maki stated that he was surprised at how many high-congestion rail and road intersections were identified in the plan. **Mr. Maki** noted that the plan did not include project costs to improve high-congestion areas. **Mr. Baker** noted that areas

are identified in the plan and, if communities are interested in pursuing projects, then estimated project costs would be included in the upcoming long-range plan, *Transportation Outlook 2050* (*TO2050*).

D. **Matt Mullen** presented Attachment 4D – *2024 Transit Plan*.

Austen Rau asked Mr. Mullen to elaborate on the use of bike racks on buses as mentioned in the plan. **Mr. Mullen** said that large fixed-route buses operated by METRO of Summit County and the Portage Area Regional Transportation Authority (PARTA) have bus racks capable of carrying two bikes.

Mr. Rau asked if AMATS had information regarding the number of bike rack-equipped buses and shelters in the region. **Mr. Rau** asked if bike racks at bus shelters were installed by communities or the transit authorities. **Mr. Mullen** said that AMATS does not have such information and that it was likely that such facilities are funded jointly by communities and the authorities. **Mr. Rau** asked if AMATS could catalog such information in the future. **Mr. Mullen** said that he could ask METRO and PARTA if they track such amenities and that such information could be included in the next *Transit Plan* prepared by AMATS.

Mr. Rau asked for project details regarding the recent federal Safe Streets for All (SS4A) grants awarded to the city of Akron. **Mr. Stewart** said that Akron and Fairlawn each received roughly $300,000 in SS4A grants for ongoing safety planning demonstration projects. **Mr. Stewart** described the projects and their purposes.

Mr. Rau said that he and fellow Trail Advocates of Summit County (TASC) force member, Ron Brubaker, made a presentation in August before the Boston Heights Village Council regarding the proposed Heights-to-Hudson Trail. **Mr. Rau** asked if AMATS had any information regarding the status of the trail project. **Mr. Baker** said that he had no additional information regarding the project.

III. Adjournment

There being no other business, the meeting was adjourned.

The next meeting of the CIC is scheduled for **6:30 p.m.** on **Thursday, December 5, 2024**.

FINANCIAL PROGRESS REPORT
AKRON METROPOLITAN AREA TRANSPORTATION STUDY
October 31, 2024

	Description	Annual Budget	Year-to-Date Expenses	% Budget Expended	October Expenses
I.	**Short Range Planning**	**$546,500**	**$224,807**	**41%**	**$61,058**
	FY2024 Carryover	226,500	224,807		61,058
	FY2025	320,000	0		0
II.	**Transportation Improvement Program**	**$321,500**	**$37,625**	**12%**	**$9,201**
	FY2024 Carryover	71,500	37,625		9,201
	FY2025	250,000	0		0
III.	**Continuing Planning & Data Collection Transportation System Update**	**$464,500**	**$187,193**	**40%**	**$75,694**
	FY2024 Carryover	164,500	187,193		75,694
	FY2025	300,000	0		0
IV.	**Long Range Plan Activity**	**$602,500**	**$97,323**	**16%**	**$23,874**
	FY2024 Carryover	152,500	97,323		23,874
	FY2025	450,000	0		0
V.	**Service**	**$646,000**	**$138,813**	**21%**	**$39,232**
	FY2024 Carryover	196,000	138,813		39,232
	FY2025	450,000	0		0
VI.	**OhioRideshare and AQ Advocacy**	**$180,000**	**$46,245**	**26%**	**$2,000**
	FY2025 OhioRideshare	80,000	11,900		2,000
	FY205 Air Quality	100,000	34,345		0
VII.	**Local**	**$25,000**	**$16,510**	**66%**	**$15,982**
	AMATS local Costs	25,000	16,510		15,982
VIII.	**AMATS Transportation Quarterly**	**$86,029**	**$24,004**	**28%**	**$5,980**
	FY2024 Carryover	30,000	24,004		5,980
	FY2025	56,029	0		0
IX.	**GRAND TOTAL AMATS BUDGET**	**$2,872,029**	**$772,520**	**27%**	**$233,021**

Attachment 3C

AKRON METROPOLITAN AREA TRANSPORTATION STUDY

M E M O R A N D U M

TO: **Policy Committee**
Technical Advisory Committee
Citizens Involvement Committee

FROM: **AMATS Staff**

RE: **AMATS Federal Funds Report**

DATE: **December 12, 2024**

The second quarter of FY 2025 will end at the end of December and no projects have sold. The right-of-way phase of PID 116742 (Wyoga Lake Rd) in STBG and Air Quality and Rideshare of the CMAQ funds have encumbered. After the last project review meeting, a few projects are close to bidding and will probably sell by the end of this calendar year or the beginning of calendar 2025. AMATS expects most of the encumbrances to occur during the winter months.

AMATS gave PID 112026 (E. Main St) a $900,000 increase in a combination of CRP and CMAQ funds. This was less than the 15% allowable increase and will make sure the project is able to sell as estimates have continued to increase.

AMATS will probably be looking for loans for STBG, CMAQ, and TASA projects later this fiscal year as the current FY 2024 carryover did not cover all FY 2025 projects. Approximately $3.84 million of Carbon Reduction Program (CRP) funding from FY 2024 was carried forward into FY 2025, so now that funding program shows a positive balance. CRP funds are not capped for carryover like other funds and cannot be recalled.

AMATS TRANSPORTATION IMPROVEMENT PROGRAM

STBG Funding Program and Balances

November 26, 2024

ODOT PID	STBG PROJECT NAME	SPONSOR	PHASE	FY 2025	Quarter	FY 2026	Quarter	FY 2027	FY 2028	FY 2029	FY 2030	Orig. Amt
	Sold											
116742	**Wyoga Lake Rd**	**Cuyahoga Falls**	**R(C)**	**$461,000**	1							$461,000
	Pending											
116917	Arlington Rd Widening	Green	R(C)	$674,602	2							$674,602
113175	Ravenna Rd Part 2 Resurfacing	Summit Co	C	$600,000	2							$600,000
112716	N Main St Complete Streets	Akron	(R)C	$6,000,000	3							$6,000,000
102745	Darrow Rd Reconstruction	Stow	(R)C	$4,660,000	3							$4,660,000
113161	Highland & Valley View Improvements	Macedonia	(R)C	$302,051	3							$302,051
116929	SR 91/Terex Rd Turn lane Improvements	Hudson	C			$400,142	1					$400,142
116742	Wyoga Lake Rd	Cuyahoga Falls	(R)C			$5,639,000	3					$5,639,000
105213	SR 14/SR 43 Intersection Reconstruction	Streetsboro	C			$1,089,752	3					$1,089,752
116917	Arlington Rd Widening	Green	(R)C			$1,699,040	4					$1,699,040
116741	Hudson Dr Resurfacing	Cuyahoga Falls	C					$700,000				$700,000
116925	E Barlow Rd Resurfacing	Hudson	C					$439,744				$439,744
116703	Valley View Rd Resurfacing	Summit Co	C					$787,500				$787,500
116740	Bailey Rd Resurfacing	Cuyahoga Falls	C					$700,000				$700,000
117138	Cleveland Massillon Rd PH 3 Resurfacing	New Franklin	C					$700,000				$700,000
116620	Greenwich Rd Resurfacing	Norton	C					$787,500				$787,500
116855	Doylestown Rd/Portage St Resurfacing	Wayne Co	C					$508,829				$508,829
116557	S Main St Resurfacing	Summit Co	C					$787,500				$787,500
116505	Glenwood Dr Resurfacing	Twinsburg	C					$787,500				$787,500
116623	Graham Rd Resurfacing	Stow	C					$787,500				$787,500
116939	Cleveland/Diagonal/Ravenna Resurfacing	Portage Co	C					$935,966				$935,966
116556	Albrecht Ave Resurfacing	Mogadore/Summit Co	C					$787,500				$787,500
115359	Old Forge Rd Resurfacing	Portage Co	C					$628,362				$628,362
118500	SR 59 Alternative Transportation	Kent	C					3,212,000				3,212,000
121863	State Rd Widening	Cuyahoga Falls	R(C)					69,520				69,520
121863	State Rd Widening	Cuyahoga Falls	(R)C						6,030,480			6,030,480
121584	Munroe Falls Ave Resurfacing	Cuyahoga Falls	C						$855,000			$855,000
121203	S/N Main St Resurfacing	Rittman	C						$1,053,856			$1,053,856
121591	Eastern Rd & Portage St Resurfacing	Norton	C						$791,264			$791,264
121594	Tuscawaras Ave & Lake Ave Resurfacing	Barberton	C						$900,000			$900,000
121687	Eastwood Ave Resurfacing	Tallmadge	C						$582,120			$582,120
121572	Graybill Rd Resurfacing	Green	C						$774,000			$774,000
121688	Munroe Rd Resurfacing	Tallmadge	C						$889,850			$889,850
121889	Brecksville Rd Resurfacing	Richfield	C							$900,000		$900,000
121639	Fishcreek Rd Ph 1 Resurfacing	Stow	C							$900,000		$900,000
121204	CR 70 (Doylestown Rd) Resurfacing	Wayne Co	C							$900,000		$900,000
121118	Liberty Rd (south) Resurfacing	Twinsburg/Summit Co	C							$787,500		$787,500
121813	Chamberlain Rd & Mennonite Rd Resurfacing	Portage County	C							$900,000		$900,000
121824	S Main St Resurfacing	Akron	C							$800,000		$800,000
121745	White Pond Dr Resurfacing	Akron	C							$400,000		$400,000
121117	Liberty Rd (north) Resurfacing	Reminderville/Summit Co/Twinsburg	C							$615,600		$615,600
121069	Mogadore Rd Resurfacing	Mogadore	C							$632,727		$632,727
121904	South Turkeyfoot Rd Resurfacing	New Franklin	C							$633,391		$633,391
121290	Krumroy Rd Part 1 Resurfacing	Summit Co	C							$720,000		$720,000
121291	Krumroy Rd Part 2 Resurfacing	Summit Co	C							$720,000		$720,000
121292	Krumroy Rd Part 3 Resurfacing	Summit Co	C							$855,000		$855,000
121715	S Main St Reconstruction	Summit Co	R(C)							$200,000		$200,000
121715	S Main St Reconstruction	Summit Co	(R)C								$5,700,000	$5,700,000

		2025	2026	2027	2028	2029	2030
P = Engineering	**Annual STBG Expenditures**	**$12,767,848**	**$8,827,934**	**$12,619,421**	**$11,876,570**	**$9,964,218**	**$5,700,000**
R = Right-of-Way	Annual STBG Allocations	$10,721,671	$11,448,765	$11,448,765	$11,448,765	$11,448,765	$11,416,572
C = Construction	Balance	-$2,046,177	$2,620,831	-$1,170,656	-$427,805	$1,484,547	$5,716,572

AMATS TRANSPORTATION IMPROVEMENT PROGRAM

CRP Funding Program and Balances

November 26, 2024

ODOT PID	CRP PROJECT NAME	SPONSOR	PHASE	FY 2025	Quarter	FY 2026	Quarter	FY 2027	FY 2028	FY 2029	FY 2030	Orig. Amt
	Sold											
	Pending											
112026	SR 59-2.14 (E Main St)	Kent	C	$4,140,000	4							$4,140,000
116917	Arlington Rd Corridor Improvements	Green	C			$2,000,000	4					$2,000,000
121287	Killian Rd/Pickle Rd Roundabout	Summit Co	R(C)					$240,000				$240,000
121376	North Mantua St Improvements	Kent	C					$2,000,000				$2,000,000
121287	Killian Rd/Pickle Rd Roundabout	Summit Co	(R)C						$1,750,000			$1,750,000
121598	Wooster Rd/Hopocan Ave Roundabout	Barberton	R(C)						$274,400			$274,400
121598	Wooster Rd/Hopocan Ave Roundabout	Barberton	(R)C							$1,713,452		$1,713,452

		2025	2026	2027	2028	2029	2030
P = Engineering	**Annual CRP Expenditures**	**$4,140,000**	**$2,000,000**	**$2,240,000**	**$2,024,400**	**$1,713,452**	**$0**
R = Right-of-Way	Annual CRP Allocations	$4,955,418	$1,133,973	$1,133,973	$1,133,973	$1,133,973	$1,224,465
C = Construction	Balance	$815,418	-$866,027	-$1,106,027	-$890,427	-$579,479	$1,224,465

AMATS TRANSPORTATION IMPROVEMENT PROGRAM

CMAQ Funding Program and Balances

November 26, 2024

ODOT PID	CMAQ PROJECT NAME	SPONSOR	PHASE	FY 2025	Quarter	FY 2026	Quarter	FY 2027	FY 2028	FY 2029	FY 2030	Orig. Amt
	Sold											
118654	**Air Quality Advocacy Program**	**AMATS**		**$100,000**	**1**							$100,000
118657	**Rideshare Program**	**AMATS**		**$80,000**	**1**							$80,000
	Pending											
116917	Arlington Rd Roundabouts	Green	R(C)	$762,124	2							$762,124
113165	Ravenna & Shephard Improvements	Twinsburg	(R)C	$1,252,292	3							$1,252,292
112716	N Main St Complete Streets	Akron	C	$900,000	3							$900,000
116990	Kent Rd Signal Improvements	Stow	C	$1,520,145	3							$1,520,145
102745	Darrow Rd Signal Improvements	Stow	C	$1,197,690	3							$1,197,690
113161	Highland & Valley View Improvements	Macedonia	(R)C	$1,703,131	3							$1,703,131
112026	SR 59-2.14 (E Main St)	Kent	C	$5,661,065	4							$5,661,065
118655	Air Quality Advocacy Program	AMATS				$100,000	1					$100,000
118658	Rideshare Program	AMATS				$80,000	1					$80,000
117253	METRO 2 electric buses	METRO	C			$1,454,750						$1,464,750
116416	PARTA 3 clean diesel buses	PARTA	C			$1,600,000						$1,600,000
105213	SR 303/SR 14/Ranch Improvements	Streetsboro	C			$459,517	3					$459,517
116917	Arlington Rd Roundabouts	Green	(R)C			$3,305,666	4					$3,305,666
118656	Air Quality Advocacy Program	AMATS						$100,000				$100,000
118659	Rideshare Program	AMATS						$80,000				$80,000
121457	Graham Rd Signal Improvement	Stow	C					$2,860,000				$2,860,000
121067	Highland Rd Improvements	Macedonia	R(C)					$213,600				$213,600
112869	East Ave Ph 1	Tallamdge	C						$8,509,995			$8,509,995
121067	Highland Rd Improvements	Macedonia	(R)C						$2,006,400			$2,006,400
120949	SR 532 & Albrecht Ave Signal	Mogadore	(R)C						$260,890			$260,890
				2025		2026		2027	2028	2029	2030	
	P = Engineering	**Annual CMAQ Expenditures**		**$13,260,710**		**$6,999,933**		**$3,253,600**	**$10,777,285**	**$0**	**$0**	
	R = Right-of-Way	Annual CMAQ Allocations		$7,491,452		$6,315,121		$6,315,121	$6,315,121	$6,315,121	$6,335,950	
	C = Construction	Balance		-$5,769,258		-$684,812		$3,061,521	-$4,462,164	$6,315,121	$6,335,950	

AMATS TRANSPORTATION IMPROVEMENT PROGRAM

TASA Funding Program and Balances

November 26, 2024

ODOT PID	TASA PROJECT NAME	SPONSOR	PHASE	FY 2025	Quarter	FY 2026	Quarter	FY 2027	FY 2028	FY 2029	FY 2030	Orig. Amt
	Sold											
	Pending											
112788	Cleveland Massillon Rd sidewalk	Summit Co	(P)(R)C	$375,732	2							$375,732
105556	The Portage Trail - Ravenna Rd Bridge	Portage Co	(P)C	$313,600	2							$313,600
107930	Freedom Trail Phase 4	MetroParks	C	$700,000	2							$700,000
121755	Stow/Summit St Pedestrian Improvements	Portage Co	P	$200,000	2							$200,000
116464	Rubber City Heritage Trail PH 2	Akron	C	$700,000	3							$700,000
102745	Darrow Rd Sidewalks	Stow	(R)C	$617,818	3							$644,000
121747	Rubber City Heritage Trail Ph 3	Akron	P(R)(C)	$133,600	3							$133,600
112026	E Main St (SR 59) Improvements	Kent	C	$700,000	4							$700,000
116841	Heartland Trail, Phase 4A	Wayne Co	(P)C			$590,584	1					$590,583
113016	Stow Silver Lake Cuyahoga Falls Bike Connector	Stow	C					$700,000				$700,000
116868	Veteran's Trail Rails to Trails	Hudson	C					$700,000				$700,000
116457	Springside Dr Sidewalks	Summit Co	(P)C					$600,000				$600,000
121754	Headwaters Trail Phase IX	Portage Parks	C						$1,000,000			$1,000,000
121747	Rubber City Heritage Trail Ph 3	Akron	(P)R(C)						$45,200			$45,200
121747	Rubber City Heritage Trail Ph 3	Akron	(P)(R)C							$921,200		$921,200
				2025		2026		2027	2028	2029	2030	
	P = Engineering	**Annual TASA Expenditures**		**$3,763,403**		**$590,584**		**$2,000,000**	**$1,045,200**	**$921,200**	**$0**	
	R = Right-of-Way	Annual TASA Allocations		$2,351,663		$1,138,532		$1,138,532	$1,138,532	$1,138,532	$1,228,521	
	C = Construction	Balance		-$1,411,740		$547,948		-$861,468	$93,332	$217,332	$1,228,521	

AKRON METROPOLITAN AREA TRANSPORTATION STUDY

M E M O R A N D U M

TO: **Policy Committee**
Technical Advisory Committee
Citizens Involvement Committee

FROM: **AMATS Staff**

RE: **Congestion Management Process Report**

DATE: **November 27, 2024**

AMATS is tasked with ensuring that traffic congestion is identified and addressed appropriately and responsibly. To do this, AMATS develops a Congestion Management Process (CMP) every four years. The purpose of this CMP is to identify where there is congestion within the region, evaluate strategies for managing or mitigating congestion, recommend which strategies can be applied at specific locations, and analyze past projects for congestion impacts.

The CMP is a federally mandated process with specific guidelines that must be followed as part of its development. Each CMP is required to include the following criteria:

1. Methods to monitor and evaluate the performance of the multimodal transportation system
2. Definition of congestion management objectives and performance measures
3. Establishment of a coordinated program for data collection and system performance monitoring
4. Identification and evaluation of anticipated performance and expected benefits of congestion strategies
5. Identification of an implementation schedule, responsibilities and funding sources for each strategy
6. Implementation of process for periodic assessment of the effectiveness of implemented strategies

To monitor the transportation network, AMATS conducts annual scans of the network using cell phone data aggregated by the Streetlight and INRIX platforms. AMATS' latest network scan includes data from 2022. The network scans provide summary data on roadway segment free flow speed, average speed, free flow factor and congestion percentage. If a roadway has a peak period congestion of 35 percent or more, it is considered congested and included in the CMP recommendations.

AMATS has completed an analysis of the region's roadway system and identified congested arterial roadways and freeways. AMATS analysis includes 108 freeway and arterial segments where congestion exceeds the 35 percent threshold.

As part of the CMP process AMATS must also determine congestion mitigation strategies that would be appropriate for the greater Akron area. These strategies were presented to the AMATS committees in August and are categorized in the following five tiers:

- Tier 1: Demand management
- Tier 2: Traffic and roadway operational improvements
- Tier 3: Public Transportation and multi-model improvements
- Tier 4: ITS Strategies
- Tier 5: Capacity expansion

AMATS has developed strategy recommendations for each congested segment identified in the CMP. These draft strategy recommendations have the potential to be included in AMATS long range transportation plan, Transportation Outlook 2050.

The report concludes by assessing previously congested corridors that have been improved through recent projects, many of which have been funded by AMATS. An analysis found that every corridor with a recent project has reduced congestion since 2020, though it is important to note that travel behavior has significantly changed during this time. A brief description of recent projects and their congestion reduction components is provided.

The CMP was reviewed in August and September by the AMATS Committees. AMATS staff AMATS received no additional comments on the CMP since the September meetings. AMATS staff recommends approval of the Congestion Management Process Report.

AKRON METROPOLITAN AREA TRANSPORTATION STUDY

AMATS

2024 CONGESTION MANAGEMENT PROCESS

2024 CONGESTION MANAGEMENT PROCESS

September 2024

Akron Metropolitan Area Transportation Study
1 Cascade Plaza, Suite 1300
Akron, Ohio 44308

This report is the product of a study financed (in part) by the U.S. Department of Transportation's Federal Highway Administration, Federal Transit Administration and the Ohio Department of Transportation.

Cooperative transportation planning by the Village, City and County governments of Portage and Summit Counties and the Chippewa and Milton Township areas of Wayne County; in conjunction with the U.S. Department of Transportation and the Ohio Department of Transportation.

TABLE OF CONTENTS

1 **1 | INTRODUCTION**
2 **2 | CONGESTION MANAGEMENT PROCESS**
3 Map 2-1 | CMP Roadway Network
4 2.2 | Regional Objectives and Performance Measures
5 2.4 | Congestion Strategies
7 **3 | DEFINING CONGESTION**
7 3.1 | Components of Congestion
9 **4 | METHODOLOGY AND ANALYSIS**
9 4.1 | Roadway Methodology and Analysis
9 4.2 | Transit Methodology and Analysis
10 Table 4-1 | PARTA Route Performance
11 Table 4-2 | METRO Route Performance
12 Table 4-3 | PARTA's Most Used Bus Stop Locations Spring 2024
12 Table 4-4 | PARTA's Most Used Bus Stop Locations Summer 2024
12 Table 4-5 | METRO's Most Used Bus Stop Locations Summer 2024
13 4.3 | Freight Methodology and Analysis
16 Table 4-6 | Congested Locations Around Job Hubs
17 Table 4-7 | High-Volume At-Grade Rail Crossings
18 Map 2-2 | High Volume At-Grade Crossings
19 **5 | INCIDENT-RELATED CONGESTION**
19 5.1 | Freeways
19 5.2 | Arterials
19 5.3 | Intersections
21 Map 5-2 | Top 50 High Crash Road Sections
22 Table 5-1 | Top 50 High Crash Road Sections
26 Map 5-3 | Top 50 High Crash Intersections
27 Table 5-2 | Top 50 High Crash Intersections
30 **6 | PERFORMANCE MEASURES**
30 6.1 | Travel Time Reliability and Freight Movement Performance Measures
30 Table 6-2 | AMATS Travel Time Reliability
30 Table 6-1 | ODOT Travel Time Reliability Targets
31 Chart 6-1 | Akron Urbanized Area: Annual % Non-Single Occupancy Vehicle Use
31 Table 6-3 | Ohio Travel Time Reliability
31 Chart 6-2 | Cleveland Urbanized Area: Annual % Non-Single Occupancy Vehicle Use
32 Table 6-4 | Peak Hour Excessive Delay and Non-Single Occupancy Vehicle Travel
33 **7 | STRATEGIES AND ASSESSMENTS**
35 Table 7-1 | Congestion Management Strategies
37 **8 | RECOMMENDATIONS**
38 Table 8-1 | Freeway Recommendations
40 Table 8-2 | Arterial Recommendations
43 **9 | EVALUATING STRATEGY EFFECTIVENESS**
43 Table 9-1 | Freeway Strategy Evaluation Table
43 Table 9-2 | Arterial Strategy Evaluation Table
46 **10 | CONCLUSION**
47 **A | APPENDIX**
47 Table A-1 | StreetLight Congestion Analysis (25%-34.99% Congestion)

1 | INTRODUCTION

Traffic congestion can frustrate drivers, impact local economic activity and create safety issues on the highway system. It can also be very localized or very short in duration. Traffic congestion can occur around schools at the beginning and end of the day. It can occur before and after concerts and sporting events. It can occur during periods of roadway construction. A major challenge of planning for traffic congestion comes with understanding the costs of improvements and both the positive and negative impacts that can follow.

Many traffic congestion improvements can damage the surrounding environment for other transportation users like bicyclists and pedestrians. It can also destabilize the built environment. It can also lead to induced demand, attracting more vehicles to an improved roadway only to see traffic increase and congestion return.
However, not all improvements for traffic congestion are bad. It is imperative when recommending improvements for traffic congestion that local communities consider all transportation users, the land use around the project and the impacts to safety.

As the Metropolitan Planning Organization for the greater Akron, it is the Akron Metropolitan Area Transportation Study's (AMATS) responsibility to ensure that traffic congestion is identified and addressed, appropriately and responsibly. As part of its long-range transportation planning process, AMATS develops a Congestion Management Process (CMP) every four years. The purpose of this process is to identify congestion in the region, evaluate strategies for congested locations, recommend improvements, and analyze past projects for congestion impacts.

The *2024 Congestion Management Process* identifies existing congestion on our region's arterials and freeways. It examines public transit levels of service and freight needs. It also isolates and examines congestion related to traffic incidents. Later sections identify demand and supply-side strategies to manage regional congestion. The final section includes project recommendations to reduce traffic congestion.

2 | CONGESTION MANAGEMENT PROCESS

The Congestion Management Process (CMP) is a federally required effort for metropolitan areas that are designated as Transportation Management Areas (TMAs). A TMA is a Census Bureau designated urban area with more than 200,000 residents. The Federal Highway Administration (FHWA) defines a CMP as: "a systematic and regionally accepted approach for managing congestion that provides accurate, up to date information on transportation system performance and assesses alternative strategies for congestion management that meets state and local needs."

Each CMP is required to include the following criteria per the CFR 450.322(a):

1. Methods to monitor and evaluate the performance of the multimodal transportation system
2. Definition of congestion management objectives and performance measures
3. Establishment of a coordinated program for data collection and system performance monitoring
4. Identification and evaluation of anticipated performance and expected benefits of congestion strategies
5. Identification of an implementation schedule, responsibilities and funding sources for each strategy
6. Implementation of process for periodic assessment of the effectiveness of implemented strategies

The CMP integrates with the entire metropolitan planning process, working to achieve the goals and objectives outlined in the long-range transportation plan and supporting the prioritization and programming of projects for the short and medium-term.

The CMP also supports Transportation Performance Management that is required by MPOs in the Bipartisan Infrastructure Law (BIL) passed in November of 2021. Transportation Performance Management is defined as a strategic approach that uses system information to make investment and policy decisions to achieve national performance goals. Performance measures related to the CMP include Level of Travel Time Reliability (LOTTR) and Level of Truck Travel Time Reliability (LOTTTR), Peak Hour Excessive Delay (PHED) and Mode Share or Non-Single Occupancy Vehicle (Non-SOV) travel.

2.1 | Methods to Monitor and Evaluate Performance

The roadway network considered for the CMP analysis is made up of 540 miles of roadways in the Akron metropolitan area and is shown on Map 2-1 (page 3). The following roadways are included in the network for the CMP:

- All roadways included on the National Highway System
- All roadways classified as Principal Arterials in the Federal Functional Classification System
- Major intersections that experience high traffic volumes
- All roadways identified as potential congestion problems by the AMATS Policy Committee
- Other roadways to ensure a continuous CMP highway system

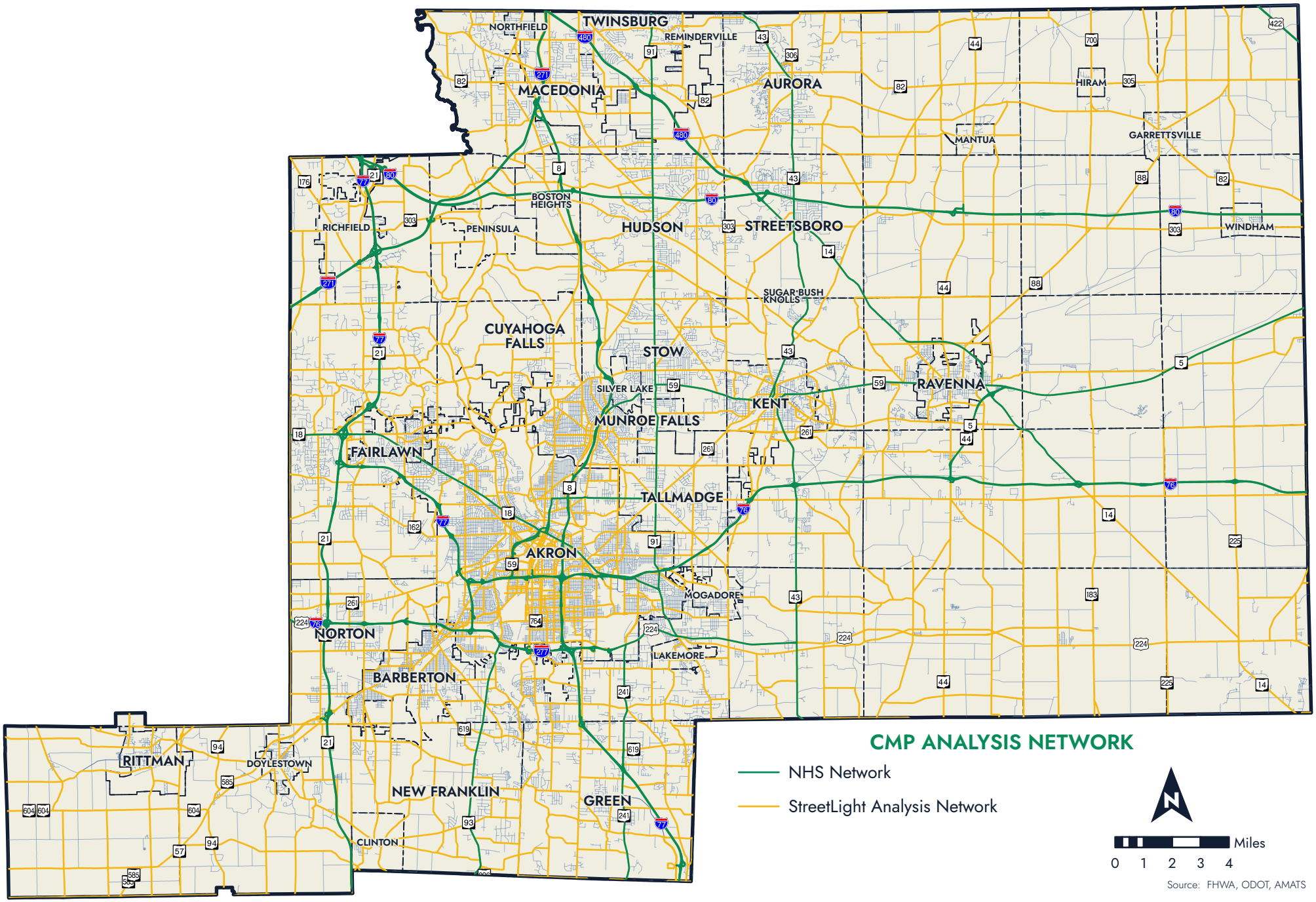
Although the CMP has traditionally focused primarily on the road network, the CMP network should consider the transit, bicycle, and pedestrian networks as well as their interface with the highway network. Doing so can help take advantage of strategies that rely upon the other modes to reduce single occupancy vehicle (SOV) travel. The AMATS area is served by two transit agencies, Portage Area Regional Transit Authority (PARTA) in Portage County and Metro Regional Transit Authority (METRO) in Summit County. The CMP reviews transit area on time data and headways as part of the analysis.

There are many types of data that can be used as part of the CMP process. The following list is not exhaustive but includes several common types of data that are used in the CMP.

2.1.1 | Traffic Volume Counts

It is necessary to collect traffic data to measure the performance of the transportation system. Traffic counts are taken on a regular basis on the roadway network. AMATS and ODOT coordinate traffic data collection efforts to make sure all necessary roadways are included. This data is then used as an input to model traffic congestion on the existing and future roadway network.

Map 2-1 | CMP Roadway Network



Source: FHWA, ODOT, AMATS

Public transit information was received from both public transit agencies (METRO RTA and PARTA) within the AMATS area. The CMP focuses on traffic congestion that is identified both at specific locations and at the system level.

2.1.2 | Electronic Traffic Datasets

Cell phone data collected by phone companies along highway corridors can be used to report travel speeds and origin-destination data. Cellular service providers and joint ventures with other private companies have begun to offer this service to some transportation agencies. This CMP report utilized data provided through INRIX and Streetlight.

2.1.3 | Transit Data

A wide range of transit data is available and gathered from transit agencies, including boarding and alighting statistics, total ridership, on-time performance, and transit vehicle capacity. Public transit information was received from both transit agencies (METRO RTA and PARTA) within the AMATS area.

2.1.4 | Bicycle / Pedestrian Data

Many MPOs collect data on the location and condition of bicycle/pedestrian facilities, such as sidewalks, bicycle lanes, and off-road paths. AMATS collects count information on the use of bicycle and pedestrian facilities, either manually or through the use of camera technology.

2.1.5 | Crash Data

AMATS publishes an annual report detailing traffic crashes in our region; the latest version being published in January 2024. *Traffic Crashes 2020-2022* analyzed traffic crashes for arterials and intersections between 2020 and 2022, utilizing crash records provided by the Ohio Department of Public Safety (ODPS) and the Ohio Department of Transportation (ODOT. This report is useful in determining locations where non-recurring congestion due to incidents is likely to occur .

In 2023, AMATS also produced its first *Safe Streets for All (SS4A) Action Plan*, which focuses more squarely on understanding and recommending strategies to reduce the most serious crashes, those that result in fatalities and serious injuries. Through the *SS4A Action Plan*, AMATS established a high-injury network of locations with the highest numbers of serious crashes. The *Action Plan* also included a detailed safety analysis of the region, recommended policy and process changes, and prioritized several project and strategy recommendations.

2.2 | Regional Objectives and Performance Measures

The objective of the CMP is to identify and minimize congestion and delay on the transportation system while ensuring project recommendations are safe, equitable and cost effective. Congestion management objectives define what the region wants to achieve regarding congestion management and are an essential part of an objectives-driven, performance-based approach to planning operations. Congestion management objectives should serve as one of the primary points of connection between the CMP and the upcoming long range transportation plan, Transportation Outlook 2050, and will serve as a basis for defining the direction of the CMP and performance measures that are used.

The development of congestion management objectives should rely heavily on stakeholder participation and an understanding of the needs and desires of the public related to congestion.

Regional objectives should ideally focus on outcomes – such as hours of delay, system reliability, and access to traveler information. However, they may also be written using output measures – such as incident clearance time or number of traffic signals retimed annually. In all cases, objectives should be stated in a way that meaningful performance measures can be derived from the objectives. An ideal objective should be SMART: Specific, Measurable, Agreed, Realistic, and Time restricted.

AMATS regional objectives were developed with the AMATS Policy and Technical Advisory Committee as well the general public through the AMATS CIC Committee. AMATS also reviewed these performance measures with interested public agencies and stakeholders in the region.

AMATS Regional Objectives Include:

1. To reduce the number of roadway segments identified as having long-term recurring congestion by five percent every four years as measured by percent congested (average speed/free flow speed) with congested roadways identified as being 35 percent congested or greater with a goal of reducing percent congested under 35 percent.
2. To reduce incident related congestion by prioritizing high crash roadways that also have identified congestion for infrastructure improvements with a goal of reducing crashes in those corridors by 2.0 percent per two-year period
3. To provide resources for communities to revise existing signal timings and coordinate with neighboring communities on signal timings with a goal of analyzing one corridor a year
4. To increase on-time performance of Metro RTA and PARTA transit routes with a goal of 80 percent on-time performance
5. To Increase GOhio Commute (Rideshare Program) users by two percent per year

2.3 | Established Program for Monitoring and Evaluation

AMATS collects and analyzes congestion data primarily using electronic traffic data from cell phones . This data is aggregated using the Streetlight and INRIX platforms to provide important traffic data. This data provides AMATS with the following:

- **Free Flow Speed** is equal to the Maximum Average Travel Speed that is observed in any one of the 24 hours of the day, averaged over all the days.
- **Average Travel Speed** for a segment, corridor, or network is the average of all speeds that are observed within the data period.
- The **Free Flow Factor** is calculated as the Average Travel Speed divided by the Free Flow Trip Speed. As the Average Travel Speed increases, Free Flow Factor increases and finally equals one, where Average Travel Trip Speed equals Free Flow Speed.
- **Congestion** is calculated as 1 minus the Free Flow Factor. If the Free Flow Factor is big, the congestion factor (1 - Free Flow Factor) will be small, indicating less congestion. If the Free Flow Factor is low, the congestion factor (1 - Free Flow Factor) will be high, indicating more congestion. There is no congestion when Free Flow Factor equals one.
- **Congested Network** represents all segments that has more than or equal to 25% congestion.

Through this data collection and analysis AMATS can identify and monitor segments with congestion as well as recommend strategies for congestion reduction.

For transit, AMATS reviews METRO RTA and PARTA on-time performance as well as headways. For safety analysis, AMATS analyzes congestion segments with its high crash locations identified in the *AMATS Traffic Crash Report*.

2.4 | Congestion Strategies

The identification and assessment of appropriate congestion mitigation strategies is a key component of the CMP. AMATS now needs to turn the data and analysis into a set of recommended solutions to effectively manage congestion and achieve congestion management objectives.

One size does not fit all, and congestion management strategies need to be designed according to the specific characteristics of the highway and adjacent area. These strategies are categorized into five tiers, ranked generally by efficacy of mitigating congestion:

Tier 1: Demand management
Tier 2: Traffic and roadway operational improvements
Tier 3: Public Transportation and multi-model improvements
Tier 4: ITS Strategies
Tier 5: Capacity expansion

2.4.1 | Congestion Strategy Recommendations

Implementation of CMP strategies occurs on three levels: system or regional, corridor, and project. Regional-level implementation of congestion management strategies occurs through inclusion of strategies in the fiscally constrained *Transportation Outlook 2050* and the *Transportation Improvement Program (TIP)*. At the corridor level, more specific strategies such as bicycle and pedestrian improvements and operational improvements can be assessed in studies and implemented using a variety of funding sources such

as Surface Transportation Block Grant (STBG) program and Congestion Mitigation and Air Quality (CMAQ) program. Scoring systems could treat projects differently based on location or strategy type according to congestion levels, or community goals. For instance, more points might be allotted to projects in very congested locations, or, specifically to certain types of projects in the urban core than to projects in areas where further development is not desired.

2.4.2 | Implementation and Assessment

Evaluation of strategy effectiveness can be seen as either a sequential step within the CMP process or as an on-going process. This is an essential, required element of the CMP that is often overlooked. The primary goal of this action is to ensure that implemented strategies are effective at addressing congestion as intended, and to make changes based on the findings as necessary. Two general approaches are used for this type of analysis:

- System-level performance evaluation - Regional analysis of historical trends to identify improvement or degradation in system performance, in relation to objectives; and
- Strategy effectiveness evaluation - Project-level or program-level analysis of conditions before and after the implementation of a congestion mitigation effort

Findings that show improvement in congested conditions due to specific implemented strategies can be used to encourage further implementation of these strategies, while negative findings may be useful for discouraging similar strategies in similar situations.

3 | DEFINING CONGESTION

One of the critical and complex tasks of the CMP is to define congestion. Studies have shown that congestion is a relative rather than an absolute condition. People "feel" roads are congested at different levels of operations.

Technically, congestion occurs when the number of vehicles on a facility exceeds the maximum number of vehicles that a roadway or intersection can accommodate at that point in time, whether because of the physical limitations of the facility or because an event (such as rain) has temporarily hindered vehicular movement.

Traffic congestion is characterized by slower speeds, longer trip times, vehicular queueing, travel time uncertainty, and increased traffic collisions.

3.1 | Components of Congestion

While it is difficult to use a single value to describe all individuals' concerns about congestion, there are four components that interact in a congested roadway or system. These components vary among and within urban areas – smaller urban areas, for example, typically have shorter durations of congestion than larger areas.

- **Duration** – this is how much time congestion affects the travel system.
- **Extent** – this is an estimate of the number of people or vehicles affected by congestion, and by the geographic distribution of congestion.
- **Intensity** – this is the severity of the congestion that affects travel. It is typically used to differentiate between levels of congestion on transportation systems and to define the total amount of congestion.
- **Reliability** – this is the variation in the other three elements. Reliability is a measure of the extent to which the traveler's experience matches their expectation. The variable is the impact of non-recurrent congestion on the transportation system.

3.2 | Recurring and Non-Recurring Congestion

Research into travelers' views of congestion has shown that predictable travel times are a primary concern. Having reliable travel time is a crucial factor affecting traveler behaviors, including choices of route, departure time, and mode. One commonly accepted definition of travel time reliability, given by the Federal Highway Administration, states that "Drivers are used to congestion and they expect and plan for some delay, but most travelers are less tolerant of unexpected delays. Travel time reliability measures the extent of this unexpected delay." Travelers and firms may account for the variability in their trips and transport of goods by building in time buffers as insurance against late arrival. This implies that the consequences of late arrivals are costly. Congestion is broadly categorized as either recurring (predictable) or non-recurring (unpredictable) congestion. Congestion, both recurring and nonrecurring, varies significantly depending on the season, day of the week, and even time of day. Furthermore, both recurring and nonrecurring congestion may occur at the same time, exacerbating any event.

Recurring congestion is congestion that occurs repeatedly at predictable times and locations, e.g. at bottlenecks or on corridors with poorly coordinated traffic signals, usually during the peak hour periods. Simply put, recurring congestion occurs because travel demand exceeds system capacity. There are many strategies available to mitigate this type of congestion through demand management, operational improvements, and multimodal strategies. Integration of land-use and transportation decisions enables agencies to coordinate efforts to address this demand side of congestion. Elimination of all recurring congestion may not be either feasible (due to physical and financial constraints) or desirable (in terms of the implications to community of unfettered vehicular travel). Recurring congestion is generally considered the least frustrating because its effects are known and can be planned for.

In contrast, non-recurring congestion incidents can occur at any time, including during non-peak travel times, and are often associated with traffic crashes, weather events, special events, work zones, and emergencies. This is the congestion that most often frustrates people. It is especially bad when a non-recurring incident magnifies the magnitude and extent of congestion during "normal" recurring congestion. Nonrecurring congestion is difficult to address without proper prior planning. The sources of non-recurring congestion are broad:

- Roadway debris
- Roadway construction and maintenance work zones
- Inclement weather

- Disabled vehicles
- Law enforcement activities
- Traffic crashes
- Special events

3.2.1 | Congestion Caused by Trucks

Trucks are often slower to get moving; therefore, they can add to the length of congestion time. Once slowed down a truck will take longer to get started than a passenger car. Roadways with high volumes of truck traffic might be more congested than those that are almost exclusively passenger cars. It is very important to recognize corridors with high percentages of trucks when analyzing congestion. Truck freight movement is very important to keep the economy thriving.

3.2.2 | Congestion Caused by Railroad Grade Crossings

An at-grade crossing is where a railway and roadway intersect. The AMATS area has a number of at-grade crossings with significant train and vehicle volumes. This source of congestion is often overlooked when addressing congestion. When a passing train delays traffic on a busy roadway it creates a large platoon of vehicles that cause problems throughout the roadway network. Ideally, highway-rail grade crossings would be separated if feasible.

4 | METHODOLOGY AND ANALYSIS

4.1 | Roadway Methodology and Analysis

AMATS obtains traffic data through the collection of cell phone and other GPS device location data. Traffic data collected in this manner is done over a period of months or years and is more representative than data collected over one or two days. Once collected this data is aggregated and analyzed to provide transportation analysis.

AMATS uses two providers for data collection and analysis of roadway congestion. The Ohio Department of Transportation (ODOT) contracts with both INRIX and Streetlight and shares access to this data with Ohio's MPOs, like AMATS. Streetlight data is used to evaluate the major arterial and lower federal functionally classified roads. INRIX data is used to analyze the freeway system. INRIX data is not available on roadways outside of the National Highway System (NHS), however Streetlight data is available for the entirety of AMATS system. Both INRIX and Streetlight have full year data for 2022. Therefore, AMATS CMP analysis year is 2022.

The congestion analyses focused on three time periods:

- Morning from 6:00 AM to 10:00 AM
- Mid-day from 10:00 AM to 4:00 PM
- Evening from 4:00 PM to 8:00 PM

The daily AM peak and the PM peak were derived from the morning and evening time periods. Some areas that have a high concentration of restaurants and retail businesses may also have a mid-day peak and these were also considered. Only weekdays were used since this is when most recurring congestion occurs. The roadway network considered for the CMP analysis is made up of 1200 miles of Federal Functional Classified (FFC) roadways in the greater Akron area.

The following roadways were included in the network for the CMP analysis:

- All roadways included on the National Highway System
- All roadways classified as Principal Arterials in the Federal Functional Classification System
- Major intersections that experience high traffic volumes
- All roadways identified as potential congestion problems by the AMATS Policy Committee
- Other roadways to ensure a continuous CMP highway system

To determine congestion, AMATS used the formula of 1 minus average speed/free flow speed. The free flow and average speed data were compiled in 1-hour periods and averaged over the entire year of 2022. If an event such as an accident or construction activity slowed traffic just temporarily the other days would average out that event. If the segment congestion was equal or greater than 25 percent, it was considered congested and included with appropriate strategies in the recommendation section of the CMP.

Based on the methodology described above, AMATS completed a roadway analysis. A comprehensive listing of all freeway segments, arterial segments, and intersections analyzed is listed in Appendix A. All congested roadways are listed in the recommendations chapter sorted from most to least congested. Recommendations for improving these congested segments are in Chapter 8 of this report.

4.2 | Transit Methodology and Analysis

The greater Akron area is served by two transit agencies, METRO RTA in Summit County and PARTA in Portage County. Transit can be a key component to reducing roadway congestion. It can be an effective strategy to reduce travel demand on roadways. Improving transit operations, improving access to transit, and expanding transit service can help reduce the number of vehicles on the road by making transit more attractive and accessible.

While transit congestion (passenger overcrowding) is not a general system-wide issue in the greater Akron area, on time performance and reliability are critical for an effective transit service. Transit on-time performance is affected by congestion on the roadway as well as passenger loading and unloading and payment to fare boxes. Congested transit routes

can lead to poor on time performance and unreliability of the transit network. This is an issue to those who rely on transit, especially vulnerable populations such as individuals and families living in poverty, older adults, and the disabled. When transit is efficient and reliable, it can provide an effective alternative to single occupancy vehicle travel and help reduce traffic congestion. The information gathered below is to examine the performance of the transit fixed route system lists 2023 ridership, current levels of headway timing, on-time performance (OTP), number of vehicles on each route during peak service hours and a list of the top ten most used bus stop locations for METRO and PARTA. We have two different groupings of bus stop locations for PARTA as their service greatly differs when Kent State University is in session during the winter, spring and fall months.

4.2.1 | Transit Route Performance

Table 4-1 | PARTA Route Performance

ROUTE	2023 RIDERSHIP	HEADWAY AM/PM	HEADWAY SATURDAY	OTP AVG.	PEAK VEHICLES
30 - Interurban West	77,195	30 min.	140 min.	82%	2
35 - Interurban East	138,096	30 min.	140 min.	68%	3
40 - Suburban North	23,425	45 min.	70 min.	77%	1
45 - Suburban South	19,260	45 min.	70 min.	86%	1
46 - Downtowner (Thur-Sat)	922	30 min.	30 min.	52%	1
51 - Campus Loop	165,657	14 min.	n/a	48%	2
55 - Allerton	56,245	11 min.	n/a	61%	1
57 - Stadium Loop	33,725	30 min.	30 min.	56%	1
58 - Summit East	288,338	9 min.	n/a	58%	4
59 - Night Shuttle	23,892	30 min.	30 min.	35%	1
70 - Windham / Garrettsville	5,095	105 min.	n/a	77%	1
80 - Raven West / 85 - Raven East	9,613	180 min.	n/a	77%	2
90 Akron Express	14,589	105 min. (average)	n/a	67%	1
100 - Cleveland Express	2,743	2 times per day	n/a	71%	1
Total	**858,795**	**52 min.**	**72 min.**	**65%**	**22**

Table 4-2 | METRO Route Performance					
ROUTE	2023 RIDERSHIP	HEADWAY AM/PM	HEADWAY AFTER 7PM	OTP AVG.	PEAK VEHICLES
1 - West Market	530,829	15 min.	30 min.	81%	12
2 - Arlington	538,347	15 min.	30 min.	81%	8
3 - Copley Road / Hawkins	300,580	30 min.	60 min.	79%	9
6 - East Exchange / Canton	205,227	30 min.	60 min.	82%	6
8 - Kenmore / Barberton	250,958	30 min.	60 min.	84%	5
9 - Vernon Odom Blvd	106,106	60 min.	60 min.	82%	3
10 - Howard / Portage	239,221	30 min.	60 min.	82%	5
13 - Grant / Firestone	171,658	15 min.	30 min.	86%	16
15 - Brown / Inman	78,762	30 min.	60 min.	84%	5
16 - Euclid / V. Odom	95,022	15 min.	30 min.	83%	8
19 - Eastland	137,141	30 min.	60 min.	83%	2
20 - Tallmadge / Brimfield	60,807	60 min.	60 min.	82%	1
22 - Howe / Stow-Kent	76,000	60 min.	60 min.	80%	2
23 - Goodyear Heights	60,180	60 min.	60 min.	83%	1
25 - Kelly / Triplett	36,648	60 min.	60 min.	82%	2
26 - W Exchange / Delia	65,444	60 min.	60 min.	86%	3
27 - W Exchange / Merriman	50,238	60 min.	60 min.	82%	2
29 - S Main / Manchester	62,374	60 min.	60 min.	82%	2
31 - C Falls / Macedonia	65,112	60 min.	60 min.	77%	2
32 - Hudson	66,113	60 min.	60 min.	78%	2
40 - Manchester / Thornton	25,469	60 min.	60 min.	91%	1
55 - UAkron	10,471	15 min.	20 min.	69%	3
61 - North Coast Express	22,714	5 Trips	5 Trips	63%	3
Zone Bus	9,261	n/a	n/a	n/a	0
300 - Grocery	2,743	n/a	n/a	n/a	0
Total	**3,266,848**	**42 min.**	**53 min.**	**81%**	**103**

4.2.2 | Bus Stop Usage

Table 4-3 | PARTA's Most Used Bus Stop Locations Spring 2024		
BUS STOP #	**LOCATION**	**# ROUTE(S)**
962	KENT Central Gateway	Multiple Routes
496	KSU Student Center	Multiple Routes
521	KSU Summit East	#57, #58
478	Ravenna Walmart	#35
523	Dix Stadium	#57, #58, #59
497	KSU Bowman Hall	#51, #57, #58
502	Moulton Hall	#35, #40, #51, #57
594	SR59 & PMHA West Bound	#35
425	Main & Parkway West Bound	#35, #80
190	UH Portage Medical Center	#35, #70, #80, #85

Table 4-4 | PARTA's Most Used Bus Stop Locations Summer 2024		
BUS STOP #	**LOCATION**	**# ROUTE(S)**
962	KENT Central Gateway	Multiple Routes
954	SR 59 & PMHA West Bound	#35
622	Stow Target	#30
752	Main & Holly Park East Bound	#35, #40
425	Main & Parkway West Bound	#35, #80
478	Ravenna Walmart	#35
190	UH Portage Medical Center	#35, #70, #80, #85
654	SR 59 & PMHA East Bound	#35
519	Summit & Whitehall Terrace West Bound	#57, #58, #59
644	Main & Sycamore West Bound	#35, #80

Table 4-5 | METRO's Most Used Bus Stop Locations Summer 2024		
BUS STOP #	**LOCATION & ROUTE #**	**# OF PASSENGERS**
1315	Waterloo Rd @ Giant Eagle - #13 & #15	11,461
186	S. Arlington St & Walmart - #2	10,638
15	S. Main St @ Main Library - #1 & #10	7,449
4002	Southgate Transit Center - #31 & #32	6,688
723	2nd St NW & W. Tuscarawas Ave - #3 & #8	6,442
23	W. Market @ Acme - #1	6,045
417	E. Market & Buchtel - #2	5,792
2689	Rothrock Rd & Montrose - #1	5,277
409	E. Market St @ City Hospital - #2	5,084
119	South Arlington & E. Exchange - #2	4,947

4.3 | Freight Methodology and Analysis

While congestion can be an inconvenience to the motoring public, it can also impact the local, regional and even national economy. The efficient movement of freight within and through a region is critically important to industry, retail commerce, agriculture, international trade and terminal operators. Metropolitan areas with air cargo airports, freight yards, trucking terminals, and shipping facilities, are especially affected by freight movement issues. Freight congestion can include delays at airports, water ports, rail facilities, and on highways. The CMP focuses on highway-based freight congestion and rail conflicts.

The AMATS Freight Report offers a detailed account of freight planning in the AMATS region. It was completed in September of 2024. The AMATS Freight Plan focuses on freight transportation concerns around regional job hubs. Job hubs are specific places of concentrated economic activity in a region. They are defined and identified based on the extent to which they exhibit the following four characteristics:

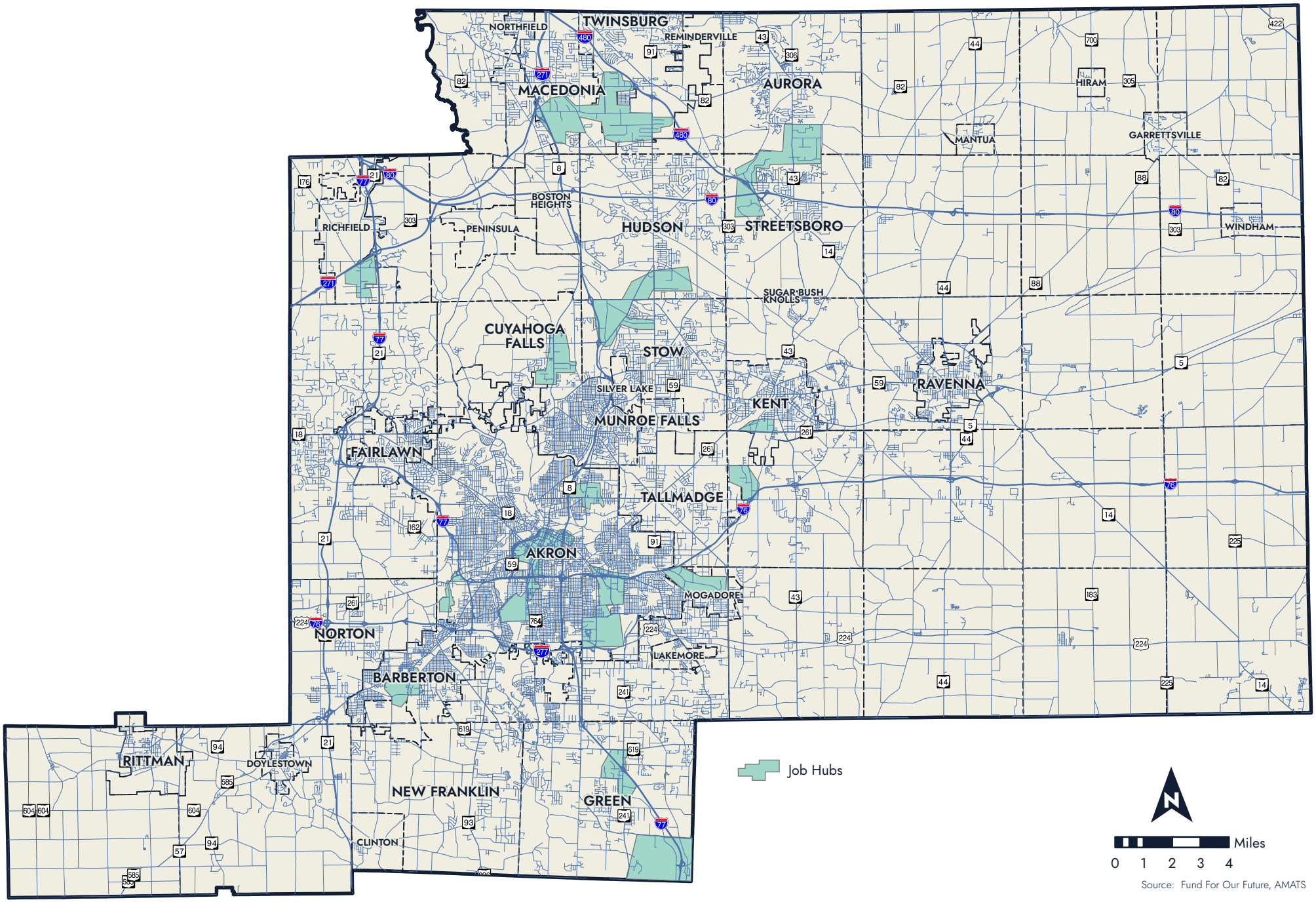
- A high concentration of traded sector jobs
- Multiple traded sector employers
- Alignment with local development patterns
- Alignment with civic priorities and economic development opportunities

The AMATS job hubs are distributed throughout the region and can be viewed on Map 4-1 on page 14

4.3.1 | Trucks

Freight movement, by way of trucks, is heavily concentrated on freeways and major state routes. In its 2024 Freight Plan, AMATS analyzed truck freight as it relates to key job hubs in the greater Akron area. AMATS overlayed the identified congested freeway and arterial segments to identify locations where congestion may have an impact on freight operations. The results are shown in Table 4-6 on page 16 and Map 4-2 on page 15.

Map 4-1 | AMATS Job Hubs



Source: Fund For Our Future, AMATS

Map 4-2 | Congestion in Relation to AMATS Job Hubs

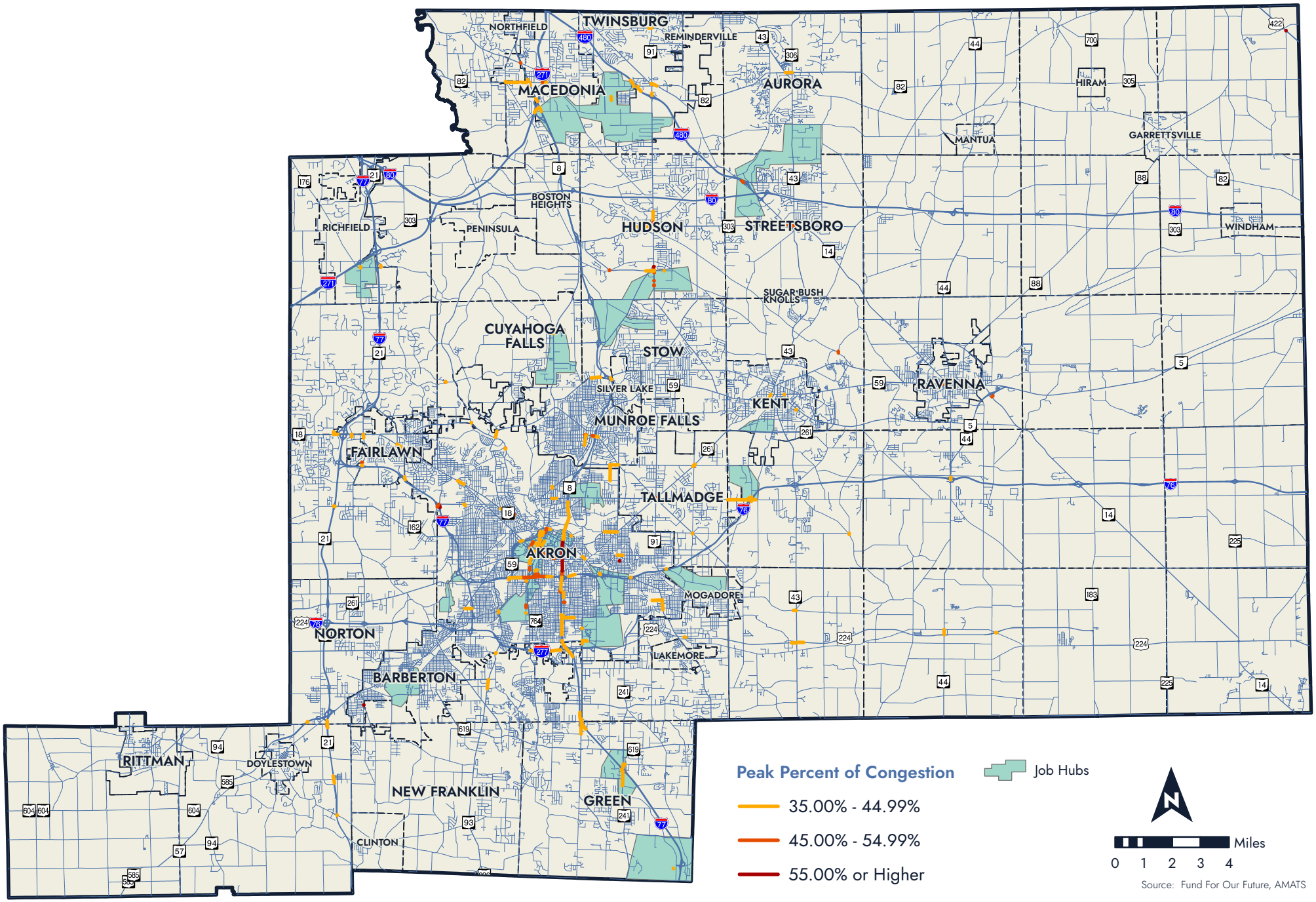


Table 4-6 | Congested Locations Around Job Hubs

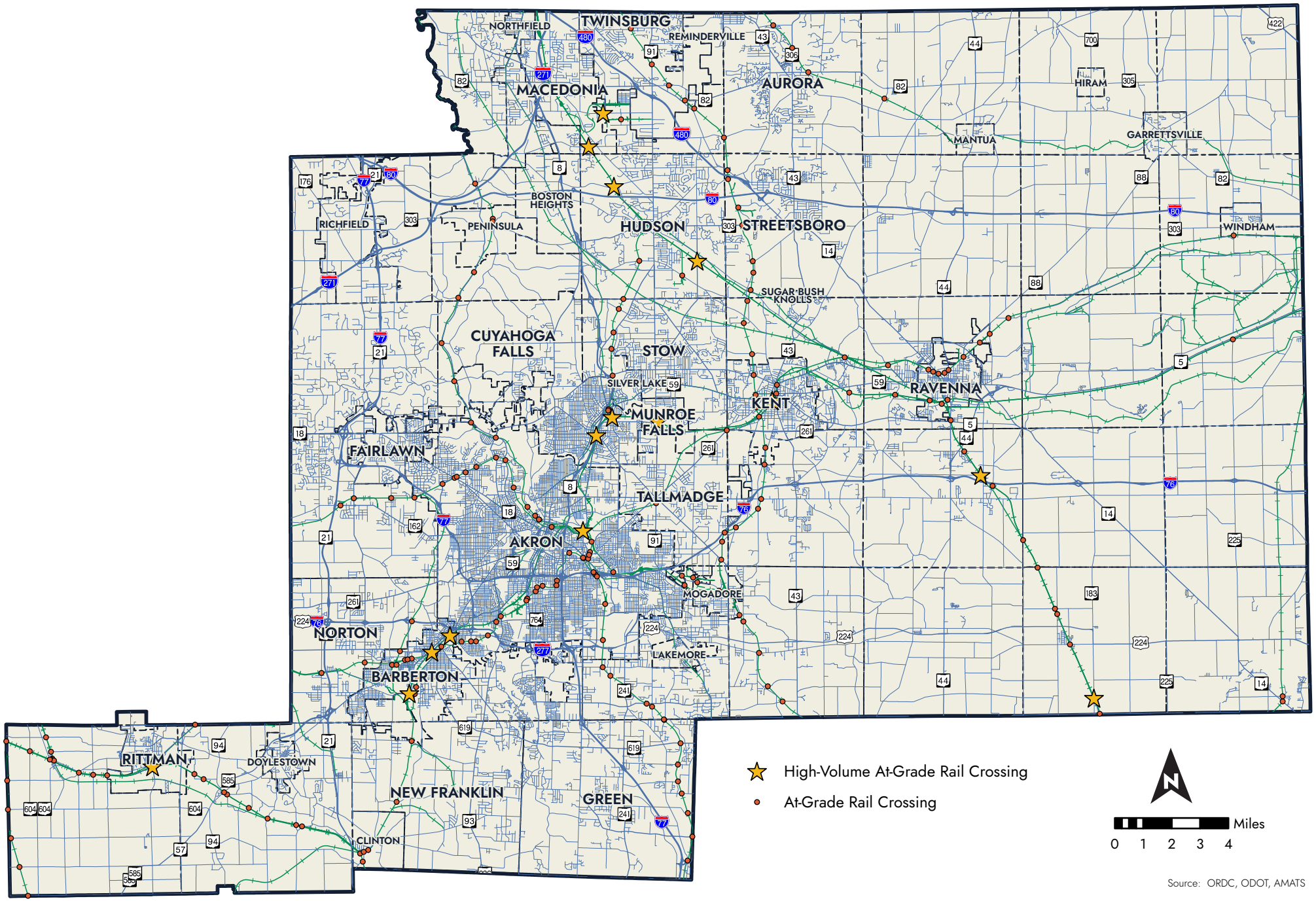
JOB HUB	LOCATION	NAME	MILES	PEAK PERIOD	TYPE	DIRECTION	% FREE FLOW
Downtown Akron	Akron	Arc Dr from Wolf Ledges Pkwy to E Exchange St	0.349	Peak AM / Mid-Day	Arterial	EB	50.18
Downtown Akron	Akron	W Bowery St from W Exchange St to W State St	0.177	Peak AM	Arterial	NB	51.19
Downtown Akron	Akron	S Main St from North of St. Mary's School to W Thornton St	0.079	Mid-Day	Arterial	SB	53.36
Green	Green	Massillon Rd (SR 241) from 0.068 Miles North of I-77 N Ramps to I-77 N Ramps	0.068	Peak PM	Arterial	SB	58.42
Green	Green	Massillon Rd (SR 241) from Boettler Rd to 0.03 Miles South of Sandy Knoll Dr	0.224	Mid-Day / Peak PM	Arterial	NB / SB	59.07
Green	Green	Massillon Rd (SR 241) from Graybill Rd to Boettler Rd	0.248	Mid-Day	Arterial	NB / SB	61.76
East Akron / Airport	Akron	Innovation Way (SR 241) from 3rd Ave to E Market St (SR 18)	0.067	Peak AM	Arterial	NB / SB	62.52
East Akron / Airport	Akron	E Waterloo Rd from 0.11 Miles East of Exeter Rd Merge to S Arlington St	0.178	Mid-Day	Arterial	WB	63.70
East Akron / Airport	Akron	S Arlington St from Arlington Circle to E Waterloo Rd	0.097	Mid-Day / Peak PM	Arterial	NB	64.10
Richfield	Richfield	Brecksville Rd from Broadview Rd / Wheatley Rd (SR 176) to 0.047 Miles North of SR 176	0.047	Peak PM	Arterial	NB / SB	64.99
Hudson / Stow	Hudson	Darrow Rd (SR 91) from 0.064 Miles South of Terex Rd to Terex Rd	0.064	Peak AM / Mid-Day	Arterial	NB	60.22

4.3.2 | Rail

There are approximately 393 at-grade crossings in the AMATS area (many are on abandoned or out of service rail lines). High volume crossings are prioritized by scoring the number of trains per day and the average daily traffic volume (ADT). Table 4-7 below lists locations that have scores greater than 100. The number of trains per day varies from year to year depending on the count locations provided by ORDC and PUCO. Ideally, highway-rail grade crossings would be separated if feasible. Grade separation projects eliminate safety and delay concerns by redirecting the vehicle, pedestrian and bicycle traffic above or below the railroad tracks. Construction of overpasses and underpasses are very costly, and not always feasible due to geographic configuration.

Table 4-7 | High-Volume At-Grade Rail Crossings

RANK	STREET	TRAINS PER DAY	VEHICLE ADT	SCORE
1	Stow Rd (Hudson)	45	10,257	462
2	N Main St (Munroe Falls)	27	15,580	421
3	Broad Blvd (Cuyahoga Falls)	32	12,872	412
3	Twinsburg Rd (Macedonia)	74	5,573	412
5	Bailey Rd (Cuyahoga Falls)	27	12,716	343
6	Hines Hill Rd (Hudson)	62	4,035	250
7	Summit St (Kent)	27	8,304	224
8	Fairview Ave (Barberton)	38	5,211	198
9	Snyder Ave (Barberton)	32	5,395	173
10	W Waterloo Rd (Barberton)	31	5,558	172
11	SR 183 (Atwater Twp)	45	3,800	171
12	N Arlington St (Akron)	27	5,838	158
13	Lynn Rd (Rootstown Twp)	62	2,328	144
14	E Highland Rd (Twinsburg Twp)	10	10,799	108
15	S Main St (Rittman)	27	3,851	104



Source: ORDC, ODOT, AMATS

5 | INCIDENT-RELATED CONGESTION

Incident-related traffic congestion is congestion that occurs due to a non-recurring incident. In most cases, this incident is a traffic crash. While crashes can happen anywhere at any time, some locations are more prone to crashes than others. Locations with both frequent crashes and recurrent congestion will be significantly more congested. Effective transportation planning requires that incident-related congestion be analyzed.

In order to analyze incident-related traffic congestion, traffic crash data must be reviewed. AMATS publishes an annual report detailing traffic crashes in our region; the latest version being published in January 2024. Traffic Crashes 2020-2022 analyzed traffic crashes for arterials and intersections between 2020 and 2022, utilizing crash records provided by the Ohio Department of Public Safety (ODPS) and the Ohio Department of Transportation (ODOT) for the years 2020, 2021 and 2022.

5.1 | Freeways

The analysis of freeway crashes in the AMATS area is done by the central office of the Ohio Department of Transportation (ODOT) in Columbus. ODOT's analysis of freeways is done using their own methodology which is derived from the Highway Safety Manual. The freeway system is divided into *rural* and *urban* and is analyzed by examining segments that are one-tenth of a mile long.

In an effort to make data-driven decisions and determine operationally sensitive corridors throughout the state, ODOT has developed the Traffic Operations Assessment Systems Tool (TOAST). In TOAST routes are segmented into the State Priority System with breaks at the urban area boundaries, interchange center points, and road functional class changes. Multiple data categories make up TOAST. For each category, data ranges were normalized into values of 0-10, then multiplied by a weighting factor. The total score for a route is calculated as a percent based on the score for each category divided by the total possible maximum score. In general, the higher the percent, the better the route is performing; whereas, the lower the percent, the more likely a route is to benefit from improvements. The data categories that make up TOAST are listed below:

- **Travel Time Performance -** Percent of time motorists can travel at or near (90%) of the reference speed (free-flow speed defined by data provider).
- **Bottlenecks -** A potential bottleneck is detected when speeds on a segment drop to 65% of reference speeds and cause at least a two-minute delay.
- **Incident Clearance -** The time from report of an incident until the entire scene is cleared.
- **Secondary Crashes -** Percent of crashes that occurred as a result of a previous incident.
- **Volume Per Lane -** Calculated based on a weighted average for each segment.
- **Freight Corridors -** Weighted average of percent trucks (average daily truck volume ÷ average daily total volume).
- **Safety Performance -** A route's potential for safety improvement by density based on its peer group.

TOAST scores for calculated routes within the AMATS area are shown on Map 5-1 (page 20).

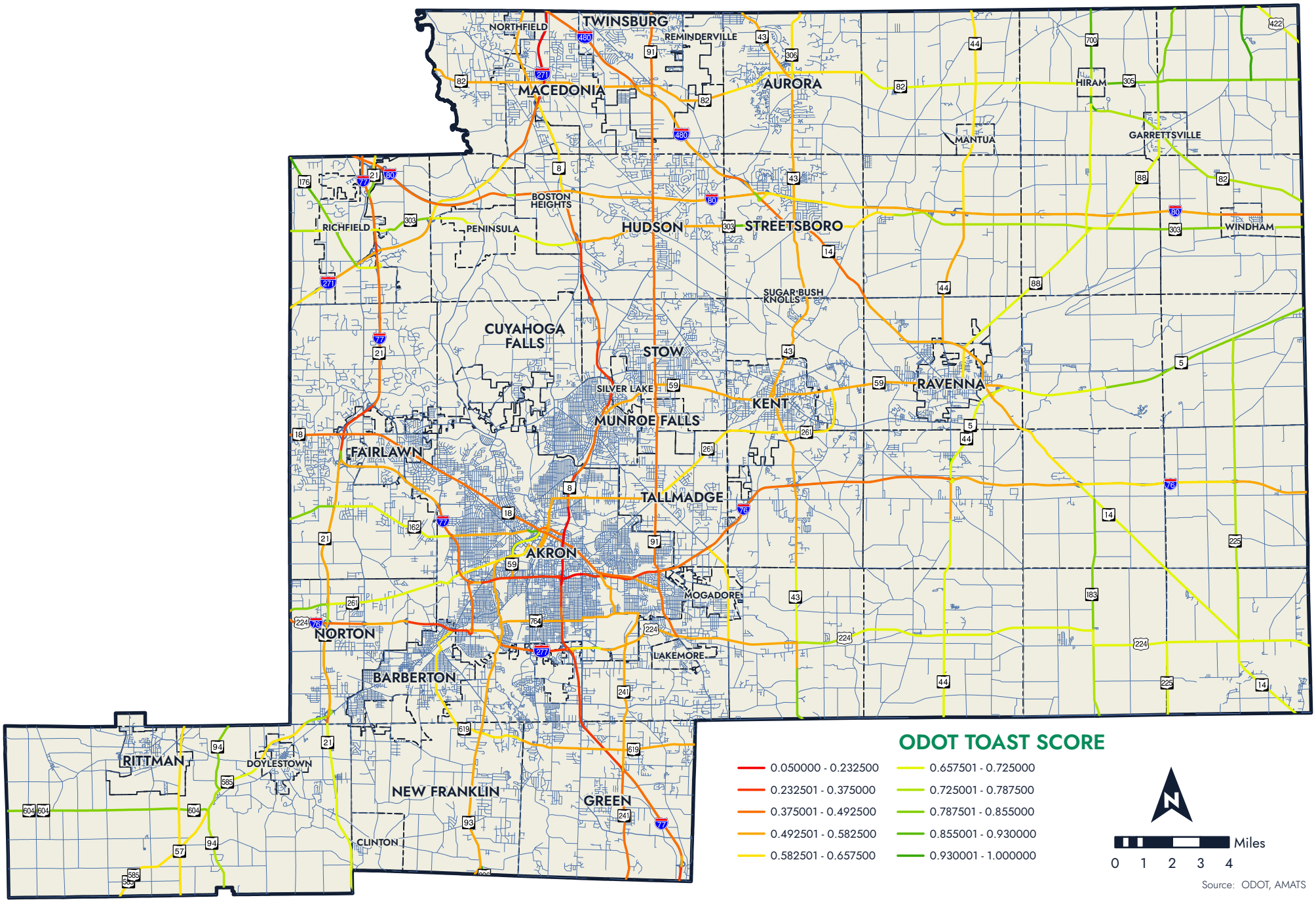
5.2 | Arterials

Areas of incident-related congestion are determined based on a composite score which considers both number of crashes and their severity to determine locations where incident-related congestion is most likely to occur. For a complete description of how the composite score is determined, please review the methodology in the AMATS *Traffic Crashes 2020-2022* report. Table 5-1 (page 22) and Map 5-2 (page 21) display the top 50 arterial locations.

5.3 | Intersections

Similar to arterial segments, areas of incident-related intersection congestion are determined based on composite score. The top 50 high crash intersections are listed on Table 5-2 (page 27), and displayed on Map 5-3 (page 26).

Map 5-1 | ODOT - TOAST



Source: ODOT, AMATS

Map 5-2 | Top 50 High Crash Road Sections

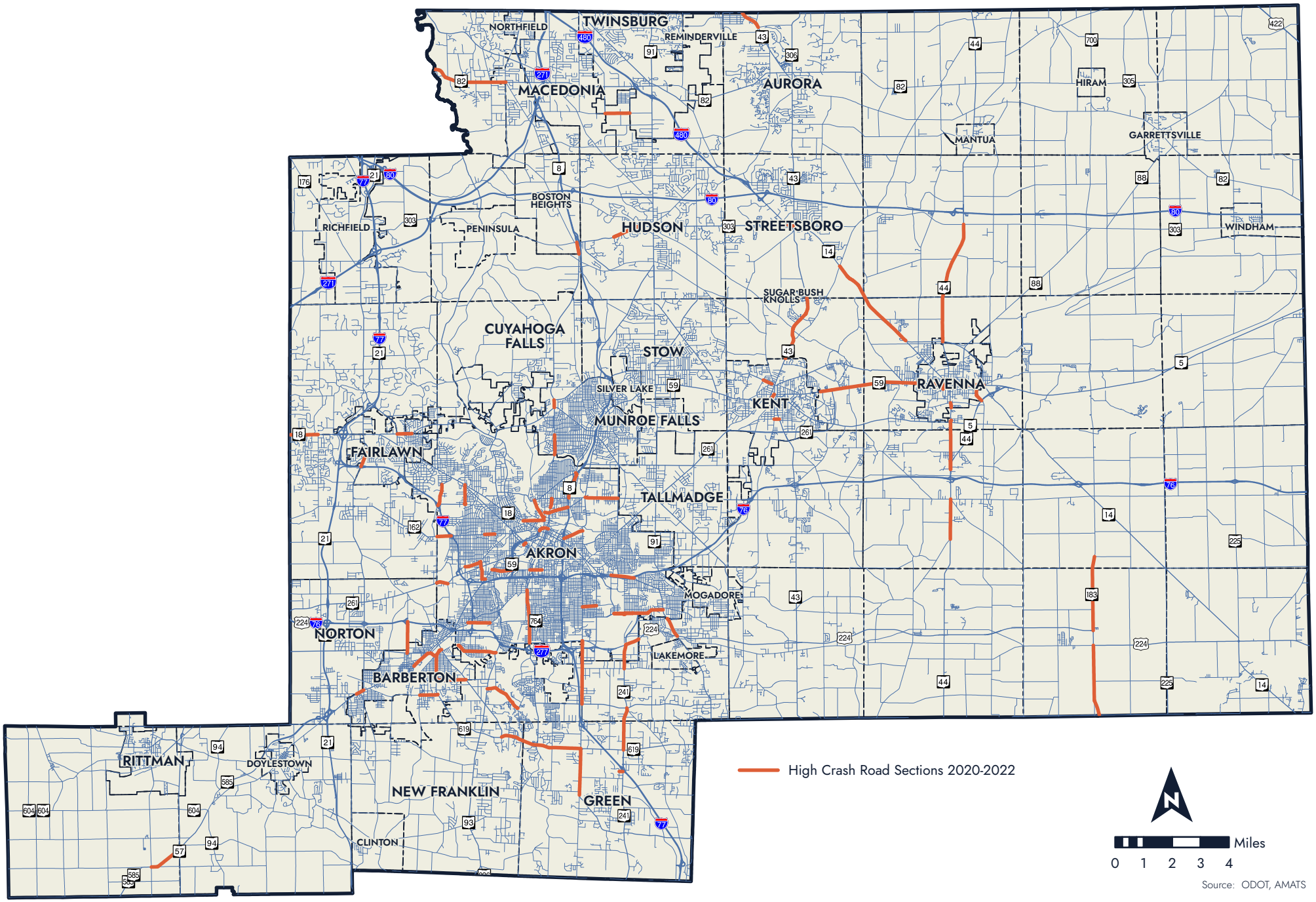


Table 5-1 | Top 50 High Crash Road Sections

Ranked by Score Based on Number of Crashes and Percent of Fatal and Injury Crashes 2020-2022

OVERALL RANK	ROADWAY SECTION	LENGTH (MILES)	TOTAL CRASHES	CRASHES PER MILE PER YEAR	CRASHES PER MILE PER YEAR RANK	FATAL & INJURY PERCENT	FATAL & INJURY RANK	TOTAL RANK SCORE	BIKE RELATED	PED RELATED	SS4A HIN	LOCATION
1	SR 59 from Alpha Dr to SR 261	0.41	15	12.20	21	0.600	3	24	0	0	No	Franklin Twp
2	Massillon Rd (SR241) from Krumroy Rd (CR 130) to Oakes Dr / Akron SCL	0.29	11	12.64	20	0.545	12	32	0	0	No	Springfield Twp
3	M.L. King Blvd (SR 59) from W Market St Overpass to N Broadway St	0.18	21	38.89	2	0.429	40	42	0	0	Yes	Akron
4	Copley Rd (SR 162) from Storer Ave to East Ave	0.36	29	26.85	5	0.414	47	52	1	0	Yes	Akron
5	Vernon Odom Blvd (SR 261) from Collier Rd / Akron Corp Line to Romig Rd	0.36	8	7.41	46	0.500	15	61	0	2	No	Akron
6	E Main St (SR 59) from Freedom St (SR 88) to SR 14/SR 44	0.75	44	19.56	8	0.386	59	67	0	0	No	Ravenna / Ravenna Twp
7	Copley Rd (SR 162) from Collier Rd to St Micheals	0.50	9	6.00	59	0.556	9	68	0	0	No	Akron / Copley Twp
8	Norton Ave/Fairview Ave from Wooster Rd N to 5th St NE (SR 619)	0.33	6	6.06	57	0.500	15	72	0	0	No	Barberton
8	E Turkeyfoot Lake Rd (SR 619) from S Main St to Arlington Rd	1.56	37	7.91	42	0.486	30	72	0	0	No	Green
10	State Rd from Cuyahoga Falls Corp Line to Broad Blvd	0.66	37	18.69	9	0.378	64	73	0	0	No	Cuyahoga Falls
11	Wooster Rd W from Johnson Rd to 31st St	0.29	7	8.05	40	0.429	40	80	0	0	No	Norton / Barberton
12	E Glenwood Ave from Howard St to SR 8	0.84	22	8.73	32	0.409	49	81	0	0	No	Akron
13	Massillon Rd/Geo Washington (SR 241) from Oaks Dr/Akron Corp Line to E Waterloo Rd (US 224)	0.55	18	10.91	24	0.389	58	82	0	0	No	Akron
13	Arlington Rd from Greensburg Rd to Turkeyfoot Lake Rd (SR 619)	1.68	35	6.94	48	0.457	34	82	0	0	No	Green
15	SR 43 from Kent North Corp Line to Streetsboro South Corp Line	2.40	61	8.47	38	0.410	48	86	0	0	Yes	Franklin Twp

Table 5-1 | Top 50 High Crash Road Sections Ranked by Score Based on Number of Crashes and Percent of Fatal and Injury Crashes 2020-2022												
OVERALL RANK	ROADWAY SECTION	LENGTH (MILES)	TOTAL CRASHES	CRASHES PER MILE PER YEAR	CRASHES PER MILE PER YEAR RANK	FATAL & INJURY PERCENT	FATAL & INJURY RANK	TOTAL RANK SCORE	BIKE RELATED	PED RELATED	SS4A HIN	LOCATION
16	E Thornton St from S Main St to Grant St	0.42	13	10.32	27	0.385	60	87	0	0	No	Akron
16	N Forge St from Fountain St to N Arlington St	0.70	13	6.19	54	0.462	33	87	0	0	No	Akron
18	Diagonal Rd from S Hawkins Ave to Superior Ave	0.59	11	6.21	53	0.455	35	88	0	0	No	Akron
18	Robinson Ave from 5th St (SR 619) to State St	1.05	28	8.89	31	0.393	57	88	0	0	No	Barberton
20	S Cleveland-Massillon Rd from I-77 to Rosemont Blvd/Elgin Dr	0.53	22	13.84	16	0.364	74	90	0	0	No	Copley Twp / Fairlawn
21	E Waterloo Rd (US 224) from Geo Washington Blvd (SR 241) to Akron Corp Line	0.51	16	10.46	26	0.375	65	91	0	0	No	Akron
22	Sandy Knoll Dr from Corporate Woods Pkwy to Massillon Rd (SR 241)	0.13	2	5.13	78	0.500	15	93	0	0	No	Green
22	W Turkeyfoot Lake Rd (SR 619) from Green West Corp Line to S Main St	0.50	13	8.67	33	0.385	60	93	0	1	No	Green
24	N Main St (SR 261) from Olive St (W) to E Tallmadge Ave	0.32	14	14.58	12	0.357	82	94	0	0	No	Akron
25	Snyder Ave from Van Buren Ave to 5th St SE	0.65	9	4.62	86	0.556	9	95	0	0	No	Barberton
25	Wooster Rd N from Hopocan Ave to Norton Ave	0.67	15	7.46	45	0.400	50	95	0	0	No	Barberton
27	New Milford Rd from SR 5/SR 44 to Ravenna South Corp Line	0.41	6	4.88	81	0.500	15	96	0	0	No	Ravenna / Ravenna Twp
28	Akron-Cleveland Rd from Boston Heights SCL to Streetsboro Rd (SR303)	0.40	5	4.17	95	0.600	3	98	1	0	No	Boston Heights
28	SR 59 from Brady Lake Rd (CR 162) to Ravenna West Corp Line	0.45	20	14.81	10	0.350	88	98	0	0	No	Ravenna Twp
30	Triplett Blvd from Hilbish Ave to Canton Rd (SR 91)	0.92	15	5.43	69	0.467	32	101	0	0	No	Akron
31	Canton Rd (SR 91) from Waterloo Rd (US224) to Akron SCL	0.72	22	10.19	28	0.364	74	102	0	2	Yes	Akron / Springfield Twp

Table 5-1 | Top 50 High Crash Road Sections Ranked by Score Based on Number of Crashes and Percent of Fatal and Injury Crashes 2020-2022												
OVERALL RANK	ROADWAY SECTION	LENGTH (MILES)	TOTAL CRASHES	CRASHES PER MILE PER YEAR	CRASHES PER MILE PER YEAR RANK	FATAL & INJURY PERCENT	FATAL & INJURY RANK	TOTAL RANK SCORE	BIKE RELATED	PED RELATED	SS4A HIN	LOCATION
31	SR 14 from Diagonal Rd to Streetsboro East Corp Line	1.30	25	6.41	52	0.400	50	102	0	0	Yes	Streetsboro
33	W Turkeyfoot Lake Rd (SR 619) from State St to New Franklin East Corp Line	0.81	15	6.17	55	0.400	50	105	0	0	No	New Franklin
34	Wabash Ave from W Cedar St to W Exchange St	0.09	1	3.70	107	1.000	1	108	0	0	No	Akron
34	Carnegie Ave from Sarlson Ave to Manchester Rd (SR 93)	1.41	18	4.26	93	0.500	15	108	0	0	No	Akron
34	Russell Ave/Superior Ave from East Ave to Diagonal Rd	0.74	19	8.56	36	0.368	72	108	0	0	No	Akron
34	Arlington Rd (CR 15) from Killian Rd (CR135) to Bruce Rd/Akron SCL	1.51	66	14.57	13	0.333	95	108	1	1	Yes	Coventry / Springfield Twp
38	W Thornton St from East Ave to Rhodes Ave	0.70	11	5.24	74	0.455	35	109	0	1	No	Akron
39	Prospect St (CR 74) from SR 5/44 to Hayes Rd (CR 138)	1.70	30	5.88	61	0.400	50	111	0	1	Yes	Rootstown / Ravenna Twp
40	W Main St (SR 59) from Diamond St to Sycamore St	0.37	15	13.51	18	0.333	95	113	0	0	No	Ravenna
41	W Streetsboro St (SR 303) from Nicholson Dr to Boston Mills Rd	0.79	16	6.75	51	0.375	65	116	0	0	No	Hudson
42	W Wilbeth Rd from Kenmore Blvd to Maryland Ave	0.77	11	4.76	82	0.455	35	117	0	0	No	Akron
42	Fairchild Ave from Majors Lane to Hudson Rd	0.33	12	12.12	22	0.333	95	117	0	0	No	Kent
44	Medina Rd (SR 18) from Medina Line Rd (CR 2) to S Hametown Rd (CR253)	1.00	29	9.67	29	0.345	92	121	0	0	No	Copley / Bath Twp
45	SR 44 from Hartville Rd (CR 69) to Tallmadge Rd (CR 18)	1.42	15	3.52	119	0.600	3	122	0	0	No	Rootstown Twp
45	Sycamore St from W Main St (SR 59) to Highland Ave	0.18	2	3.70	107	0.500	15	122	0	0	No	Ravenna
45	Sycamore St from Riddle Ave to W Main St (SR 59)	0.18	2	3.70	107	0.500	15	122	0	0	No	Ravenna

Table 5-1 | Top 50 High Crash Road Sections Ranked by Score Based on Number of Crashes and Percent of Fatal and Injury Crashes 2020-2022												
OVERALL RANK	ROADWAY SECTION	LENGTH (MILES)	TOTAL CRASHES	CRASHES PER MILE PER YEAR	CRASHES PER MILE PER YEAR RANK	FATAL & INJURY PERCENT	FATAL & INJURY RANK	TOTAL RANK SCORE	BIKE RELATED	PED RELATED	SS4A HIN	LOCATION
45	S Main St from Waterloo Rd to Wilbeth Rd (SR 764)	0.77	20	8.66	34	0.350	88	122	0	0	No	Akron
45	SR 14 from SR 303 (W) to SR 303 (E)	0.33	56	56.57	1	0.321	121	122	0	0	No	Streetsboro
50	Smith Rd from Ghent Rd to Owosso Ave	0.53	11	6.92	49	0.364	74	123	0	0	No	Akron / Bath Twp / Fairlawn

Map 5-3 | Top 50 High Crash Intersections

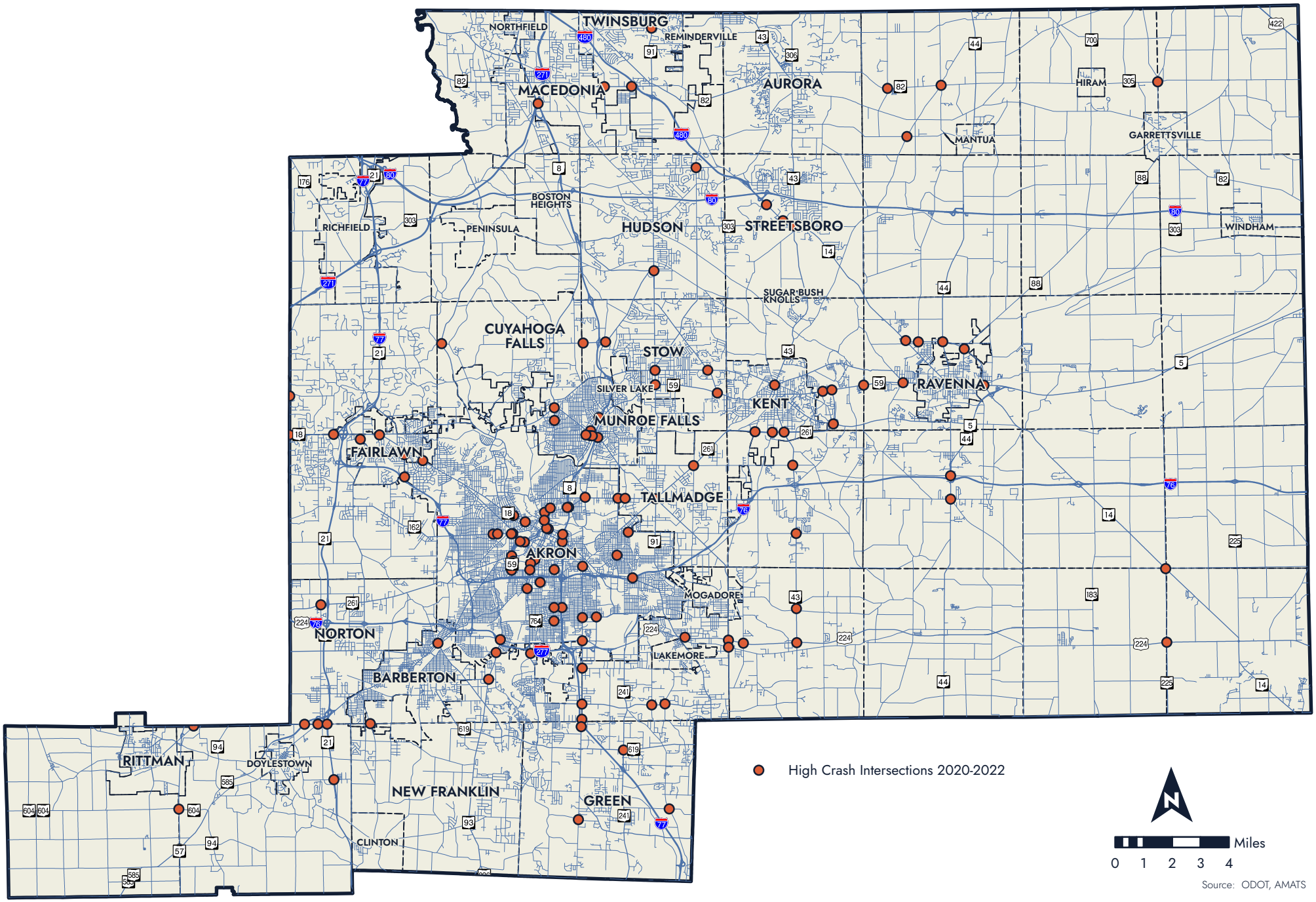


Table 5-2 | Top 50 High Crash Intersections

Ranked by Score Based on Number of Crashes and Percent of Fatal and Injury Crashes 2020-2022

OVERALL RANK	STREET AND INTERSECTING STREET	TOTAL CRASHES	TOTAL CRASHES RANK	FATAL & INJURY PERCENT	FATAL & INJURY RANK	TOTAL RANK SCORE	BIKE RELATED	PED RELATED	SS4A HIN	LOCATION
1	SR 14 and SR 44 / N Chestnut St	37	8	0.568	25	33	0	1	Yes	Ravenna Twp / Ravenna
2	Riverview Rd and Ira Rd	20	48	0.650	14	62	1	0	No	Cuyahoga Falls
3	Medina Rd (SR 18) and Medina Line Rd	26	27	0.500	36	63	0	0	Yes	Bath Twp / Copley Twp
3	N Howard St and Glenwood Ave	23	37	0.565	26	63	1	0	Yes	Akron
5	S Broadway St and Rosa Parks Dr	24	35	0.500	36	71	0	0	Yes	Akron
6	S High St and Bartges St	25	32	0.480	48	80	0	0	No	Akron
7	Wadsworth Rd (SR 57) and Easton Rd (SR 604)	15	80	0.800	3	83	0	0	No	Chippewa Twp / Milton Twp
8	SR 261 and Mogadore Rd	20	48	0.500	36	84	0	0	No	Kent
8	Cleveland Massillon Rd and Eastern Rd	20	48	0.500	36	84	0	0	No	Norton / New Franklin
10	US 224 and SR 225	23	37	0.478	49	86	0	0	No	Atwater Twp / Deerfield Twp
11	SR 14 and Alliance Rd	15	80	0.667	7	87	0	0	No	Atwater Twp / Deerfield Twp
11	Bartges St and Dart Ave	15	80	0.667	7	87	0	0	No	Akron
13	SR 59 and SR 261	24	35	0.458	55	90	0	0	No	Franklin Twp
14	S Arlington Rd and Chenoweth Rd / I-77 NB On-ramp	22	39	0.455	56	95	0	0	No	Coventry Twp / Springfield Twp
15	SR 261 and Summit Rd	18	63	0.500	36	99	0	1	No	Franklin Twp
15	SR 21 and Eastern Rd	18	63	0.500	36	99	0	1	Yes	Chippewa Twp / Norton
17	Perkins St (SR 59) and SR 8 SB Ramps / Goodkirk St	37	8	0.405	96	104	0	1	No	Akron
18	Brown St and Archwood Ave	19	57	0.474	50	107	0	0	Yes	Akron
19	S Arlington Rd and I-77 SB Ramps	35	11	0.400	97	108	0	0	No	Green
20	Waterloo Rd and Portage Line Rd	16	73	0.500	36	109	0	0	No	Springfield Twp / Suffield Twp
20	Killian Rd and Pressler Rd	14	94	0.643	15	109	0	0	No	Springfield Twp
22	Medina Line Rd and Granger Rd	15	80	0.533	33	113	0	0	No	Bath Twp

Table 5-2 | Top 50 High Crash Intersections

Ranked by Score Based on Number of Crashes and Percent of Fatal and Injury Crashes 2020-2022

OVERALL RANK	STREET AND INTERSECTING STREET	TOTAL CRASHES	TOTAL CRASHES RANK	FATAL & INJURY PERCENT	FATAL & INJURY RANK	TOTAL RANK SCORE	BIKE RELATED	PED RELATED	SS4A HIN	LOCATION
22	Copley Rd (SR 162) and Madison Ave	20	48	0.450	65	113	1	0	No	Akron
22	W Market St (SR 18) and Valley St	15	80	0.533	33	113	2	1	No	Akron
22	Eastern Rd and Rittman Rd	15	80	0.533	33	113	0	0	No	Chippewa Twp
26	SR 44 and Tallmadge Rd	14	94	0.571	23	117	0	0	No	Rootstown Twp
26	SR 57 and SR 585	14	94	0.571	23	117	0	0	Yes	Milton Twp / Chippewa Twp
28	S Main St and Thornton St	39	6	0.385	112	118	0	0	No	Akron
29	SR 82 and Mantua Center Rd	17	68	0.471	51	119	0	0	No	Mantua Twp
30	S Maple St (SR 162) and W Cedar St	27	26	0.407	95	121	0	2	Yes	Akron
31	W Market St (SR 18) and Rhodes Ave	21	43	0.429	81	124	0	2	No	Akron
31	W Market St (SR 18) and Revere Rd	21	43	0.429	81	124	0	0	No	Akron
33	S Arlington Rd and Krumroy Rd / Thierry Ave	13	106	0.615	19	125	0	0	No	Coventry Twp / Springfield Twp
33	Hudson Dr and Steels Corners Rd / Allen Rd	13	106	0.615	19	125	0	0	No	Stow
33	E Aurora Rd (SR 82) and Chamberlin Rd	13	106	0.615	19	125	0	0	No	Twinsburg
36	SR 261 and Franklin Ave / Sunnybrook Rd	12	124	0.750	5	129	0	1	Yes	Kent
36	S Arlington St and S Case Ave / Johnston St	31	18	0.387	111	129	0	1	No	Akron
36	Kent Rd (SR 59) and Fishcreek Rd	18	63	0.444	66	129	0	0	No	Stow
36	West Ave (SR 261) and Thomas Rd	18	63	0.444	66	129	0	1	No	Tallmadge
40	Myersville Rd and Killian Rd	14	94	0.500	36	130	0	0	No	Springfield Twp
41	US 224 and Martin Rd	12	124	0.667	7	131	0	0	No	Suffield Twp
42	Manchester Rd (SR 93) and Carnegie Ave	35	11	0.371	121	132	1	0	No	Akron
43	Rhodes Ave and W Thornton St	13	106	0.538	31	137	0	0	No	Akron
43	US 224 and E Waterloo Rd	13	106	0.538	31	137	0	0	No	Springfield Twp
45	SR 14/44 and N Freedom St (SR 88)	26	27	0.385	112	139	0	0	No	Ravenna
45	SR 5/44 and Lynn Rd	29	21	0.379	118	139	0	0	No	Rootstown Twp
47	SR 59 and Rhodes Rd/Ashton Ln	11	143	0.818	2	145	1	0	No	Franklin Twp

Table 5-2 | Top 50 High Crash Intersections										
Ranked by Score Based on Number of Crashes and Percent of Fatal and Injury Crashes 2020-2022										
OVERALL RANK	STREET AND INTERSECTING STREET	TOTAL CRASHES	TOTAL CRASHES RANK	FATAL & INJURY PERCENT	FATAL & INJURY RANK	TOTAL RANK SCORE	BIKE RELATED	PED RELATED	SS4A HIN	LOCATION
47	SR 14 and Infirmary Rd	20	48	0.400	97	145	0	0	No	Ravenna Twp
47	US 224 and Portage Line Rd (SR 532)	20	48	0.400	97	145	0	0	No	Springfield Twp / Suffield Twp
50	MLK Jr. Blvd (SR 59) and N High St (SR 261)	39	6	0.359	140	146	0	0	No	Akron

6 | PERFORMANCE MEASURES

Transportation Performance Management is required by MPOs as stated in the past three federal transportation bills. Transportation Performance Management is defined as a strategic approach that uses system information to make investment and policy decisions to achieve national performance goals. Within Transportation Performance Management, there are performance measures. Performance measures related to the CMP include Level of Travel Time Reliability (LOTTR) and Level of Truck Travel Time Reliability (LOTTTR), Peak Hour Excessive Delay (PHED) and Mode Share or Non-Single Occupancy Vehicle (Non-SOV) travel. Each of these performance measures have their own respective targets.

6.1 | Travel Time Reliability and Freight Movement Performance Measures

Federal rules 23 CFR 490.507 and 23 CFR 490.607 establish National Highway System (NHS) travel time reliability and Interstate System freight reliability measures. For both personal travel time reliability and freight travel time reliability measures, ODOT is required to establish 2-year and 4-year targets within a four-year performance period. The two current (2024) targets are listed in Table 6-1 to the right.

Table 6-1 | ODOT Travel Time Reliability Targets

LEVEL OF TRAVEL TIME RELIABILITY		
TRAVEL TIME RELIABILITY	**2-YEAR TARGET**	**4-YEAR TARGET**
Interstate Travel Time Reliability	> 85%	> 85%
Non-Interstate Travel Time Reliability	> 80%	> 80%
LEVEL OF TRUCK TRAVEL TIME RELIABILITY		
TRUCK TRAVEL TIME RELIABILITY	**2-YEAR TARGET**	**4-YEAR TARGET**
Interstate Truck Travel Time Reliability	< 1.50	< 1.50

Level of Travel Time Reliability (LOTTR) assesses the consistency or dependability of travel times from day to day or across different times of the day on the Interstate and Non-Interstate NHS systems. FHWA defines LOTTR as the percent of person-miles on the Interstate and NHS that are reliable. LOTTR is calculated as the ratio of the longer travel times (80th percentile) to a "normal" travel time (50th percentile), using data sourced from FHWA's National Performance Management Research Data Set (NPMRDS). ODOT is participating in FHWA's Performance Management Analytical Tool pooled fund where a contractor assists states in calculating NPMRDS travel time reliability metrics.

Data are collected in 15-minute segments during all time periods between 6 AM and 8 PM. Reliability measures are grouped into three weekday time periods (6-10 AM, 10 AM - 4 PM, 4- 8 PM) and one weekend time period (6 AM – 8 PM). Any roadway segment or corridor that has a reliability index of 1.5 or greater during any time period is considered to be unreliable. For example, a roadway segment with a freeflow speed of 60 mph where the observed average travel speed during one of the time study periods is 40 mph, would have a LOTTR value of 1.5.

Truck Travel Time Reliability (TTTR) is the ratio generated by dividing the 95th percentile travel time by the normal time (50th percentile) for each Interstate segment. The TTTR Index is established by multiplying each segment's largest ratio of five reporting periods by its length then dividing the sum of all length-weighted segments by the total length of Interstate. If the longer truck travel time is greater than or equal to 1.5, the roadway segment or corridor is considered unreliable. Data for TTTR are also collected in 15-minute segments during all time periods throughout the day and are grouped into the same time periods mentioned above.

The variability or change in congestion on a day-to-day basis provides a measure of reliability. Recurring congestion is generally predictable, regularly occurring, and typically caused by excess demand compared to the capacity of the system. Conversely, non-recurring congestion causes unreliable travel times and is caused by transient events such as traffic incidents, weather conditions, work zones, or special events. This form of congestion is often the most frustrating for travelers. National estimates indicate that nearly 50% of all congestion is non-recurring (FHWA, October 2023).

AMATS' actual performance is documented in Table 6-2.

Table 6-2 | AMATS Travel Time Reliability

LEVEL OF TRAVEL TIME RELIABILITY								
YEAR	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**AVERAGE**	**TARGET**
Interstate TTR	97.6%	98.6%	98.5%	98.8%	100.0%	100.0%	99.2%	> 85.0%
Non-Interstate NHS TTR	59.9%	89.3%	90.4%	89.3%	97.7%	93.8%	92.1%	> 80.0%
Interstate TTTR Index	1.31	1.27	1.27	1.30	1.13	1.19	1.23	< 1.50

AMATS meets the performance targets for travel time reliability on the interstate system and on truck travel time. The AMATS

non-interstate system currently meets the target. Overall state of Ohio performance is documented in table 6-3:

Table 6-3 | Ohio Travel Time Reliability

LEVEL OF TRAVEL TIME RELIABILITY								
YEAR	2016	2017	2018	2019	2020	2021	AVERAGE	TARGET
Interstate TTR	90.9%	91.2%	89.3%	89.8%	99.5%	98.4%	93.6%	> 85.0%
Non-Interstate NHS TTR	66.1%	89.9%	90.0%	92.6%	95.7%	95.5%	92.7%	> 80.0%
Interstate TTTR Index	1.40	1.33	1.37	1.36	1.17	1.19	1.28	< 1.50

6.1.1 | Peak Hour Excessive Delay (PHED)

Current AMATS area congestion-related targets (PM3) were approved with Policy Resolution 2022-14 (August 11, 2022). A full discussion of air quality-related performance measures can be found in the AMATS *CMAQ Performance Plan 2022-2026*. The purpose of the AMATS CMAQ Performance Plan was to develop an updated baseline of targets and discuss intended air quality improvement to be made over the next four years. Air quality related targets and progress are monitored on an on-going basis and tracked in relation to CMAQ funded projects. These activities are performed in coordination with AMATS' air quality partners in the area, along with ODOT. With a mid-performance period progress report, due October 1, 2024, four-year targets may be adjusted, and two-year condition/ performance will be reported as baselines.

Traffic congestion will be measured by the annual hours of peak hour excessive delay (PHED) per capita on the National Highway System (NHS). The threshold for excessive delay will be based on the travel time at 20 miles per hour or 60% of the posted speed limit travel time, whichever is greater, and will be measured in 15-minute intervals. Peak travel hours are defined as 6-10 am local time on weekday mornings and 3-7 pm on weekday afternoons, providing flexibility to state DOTs and MPOs. The total excessive delay metric will be weighted by vehicle volumes and occupancy.

AMATS is located in part of the Cleveland urbanized area (UZA). Consequently, ODOT, NOACA and AMATS coordinated the setting of targets for the Cleveland area using past data. The Akron and Cleveland urbanized area performance is documented in the Charts 6-1 and 6-2, respectively.

Chart 6-1 | Akron Urbanized Area:
Annual % Non-Single Occupancy Vehicle Use

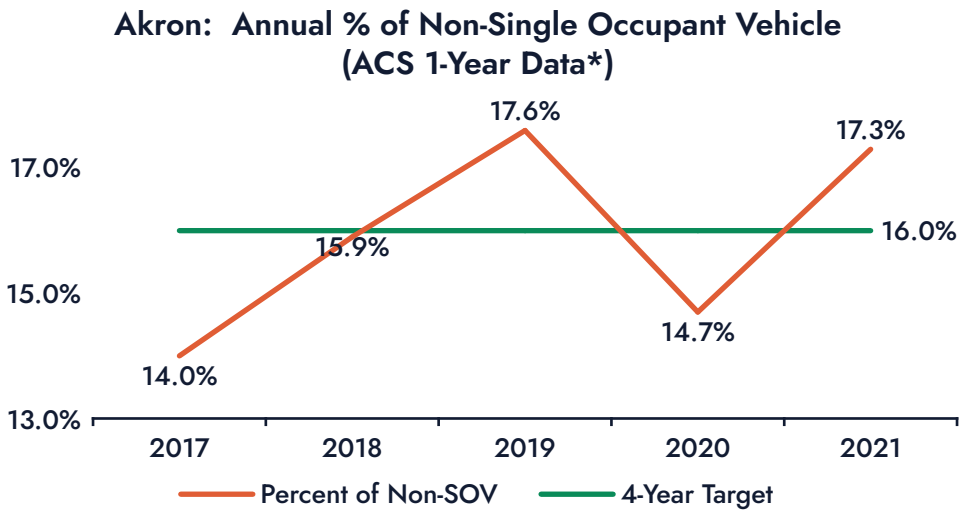
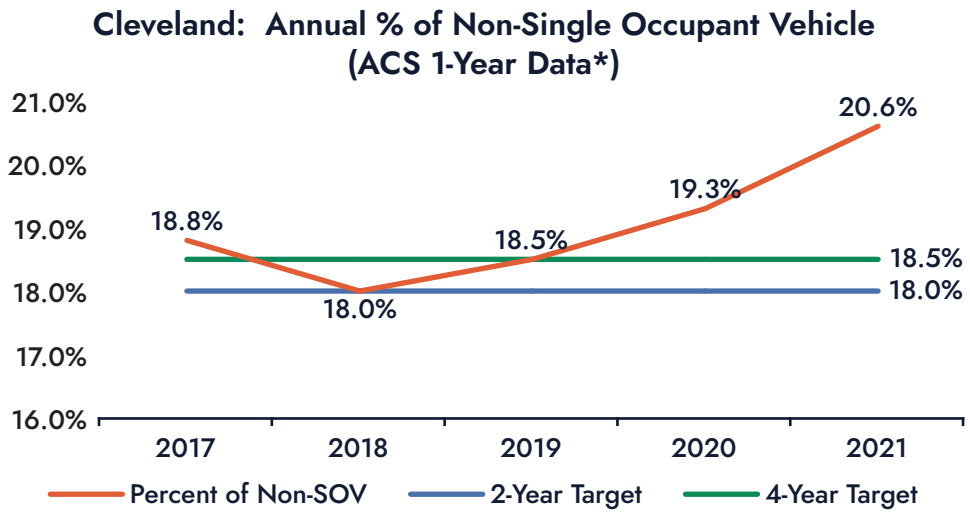


Chart 6-2 | Cleveland Urbanized Area:
Annual % Non-Single Occupancy Vehicle Use



6.1.2 | Mode Share (Non-SOV Travel)

Mode share is a measure of the percentage of each mode on all surface transportation occurring in the urbanized area. Modes of surface transportation include driving alone in a motorized vehicle (Single Occupancy Vehicle), car or van pooling, public transportation, commuter rail, walking, or bicycling as well as travel that is avoided by telecommuting. Non-SOV travel, defined by the FHWA, applies to any travel occurring on modes other than driving alone in a motorized vehicle. An analysis of mode share includes a calculation of the percent of Non-SOV travel within the urbanized area. This metric is derived from the U.S. Census Bureau's American Community Survey (ACS) data. Higher levels of Non-SOV travel can reduce an area's traffic congestion by removing additional vehicles from the roadways. The PHED and Non-SOV measures and targets for the Akron and Cleveland areas are listed in Table 6-4:

Table 6-4 | Peak Hour Excessive Delay and Non-Single Occupancy Vehicle Travel

Approved Targets: PHED and Non-SOV Travel (PM3) Peak Hour Excessive Delay / Non-Single Occupancy Vehicle Travel			
URBANIZED AREA / MPO	**MEASURE**	**2-YEAR TARGET**	**4-YEAR TARGET**
Akron (AMATS)	PHED	N/A	< 5.0
	Non-SOV Travel	> 16.0%	> 16.0%
Cleveland (NOACA)	PHED	N/A	< 8.0
	Non-SOV Travel	> 18.5%	> 19.0%

7 | STRATEGIES AND ASSESSMENTS

In order to reduce congestion, AMATS must develop a set of strategies that consider both the demand and supply of traffic. A strategy or combination of strategies that are appropriate for deficient corridors are selected based on the intensity of congestion and the other analyses completed in the CMP. Effectively managing congestion over time requires a multi-faceted approach. The strategies are categorized by type of congestion mitigation.

The tiers are:

- Tier 1: Demand management
- Tier 2: Traffic and roadway operational improvements
- Tier 3: Public Transportation improvements
- Tier 4: ITS Strategies
- Tier 5: Capacity expansion

7.1 | Tier 1: Demand Management

Demand-side strategies represent a forward-thinking approach to managing traffic congestion. Demand-side strategies include those that focus on reducing vehicles on the roadway either permanently or during the busiest times of the day. City rush-hours are an example of when demand exceeds supply. A highway that easily accommodates traffic throughout most of the day can be congested during morning and afternoon peak hours.

Demand-side management is any strategy that reduces the number of vehicles on the road at one time. Generally, demand-side congestion strategies cost significantly less than supply-side ones do. Below are examples of potential demand management strategies:

- **Telecommuting –** Telecommuting can directly reduce work-related trips during the peak hours of the day when most congestion occurs. Since the Covid-19 pandemic, the Akron region has seen telework become mainstream. This has reduced travel demand on the region's roadways. Another related benefit is an improvement in air quality.
- **Flexible/Alternative Work Hours –** Working outside the typical workweek and workday timeframe. It may not eliminate vehicles on the road but could reduce vehicles on the road during peak hours when congestion is typically worse.
- **Carpooling –** More than one person using a vehicle for a trip with similar origin or destination. Carpooling reduces SOV due to commuters sharing a ride with one or more people for trips. This reduces the number of vehicles on the road. Ohio is served by the GOhio Commute website which is an online portal for finding carpool matches. This software makes it easier to create carpools and vanpools by matching similar trip origins, destinations, and times.
- **Employer Incentive Program –** Incentives may be offered by employers to encourage carpooling or public transportation.
- **Encouraging a Shift to Alternative Modes of Transportation –** Transit, bicycling, walking, or other non-motorized travel can be used as an alternative to general travel and commuting. Bicycle and pedestrian modes may also include e-bikes, scooters, skateboards, mobility-assistance devices, etc. Though buses are vehicles on the road, they retain the capability to significantly reduce the total number of vehicle miles traveled by carrying many trips in one vehicle. Bicycling, walking, and other modes of alternative transportation can also eliminate vehicle miles traveled. However, these modes may not be feasible if trip lengths are too long. Typical trip length for a bicycle commute is up to four miles and up to one mile for a pedestrian.

7.2 | Tier 2: Traffic and Roadway Operational Improvements

Tier 2 strategies play an important role in congestion management. These strategies emphasize getting more out of the existing transportation system. The strategies include but are not limited to the following:

- **Intersection and street improvements by adding and extending exclusive turning lanes –** exclusive and safe space for vehicles waiting to turn left.
- **Access management –** reduces the number of ingress/egress points onto a roadway and more effectively channels traffic and improves safety by reducing conflict points.
- **Variable speed limits –** allows traffic to efficiently utilize capacity at a safe speed.

- **Variable message signs –** enables drivers to take alternative routes to avoid congestion.
- **Exclusive shoulder lanes for buses –** frequent stopping can occur outside of the flow of traffic.
- **Geometric improvements to road and intersections –** improves traffic flow and reduces incident related congestion by correcting geometric deficiencies.
- **Channelization –** facilitates the safe and orderly movement of traffic and defines the paths of traffic by physical separation.
- **Median barriers (moveable) to facilitate more capacity during peak periods –** more lanes for peak demand flow without adding more pavement.
- **Traveler information –** information given to travelers to help reduce uncertainty and stress. It also can help avoid congestion, improve safety and save time.
- **Complete Streets –** Designing streets to enable safe access for users of all ages and abilities, including pedestrians, bicyclists, motorists, and transit riders.
- **Overpasses or underpasses at congested intersections or railroads –** provides uninterrupted traffic flow by removing intersection conflict points.
- **Roundabouts to improve stop-controlled or signalized intersections –** typically reduces vehicle queuing at intersections and improves traffic flow.

7.3 | Tier 3: Public Transportation (Transit) Improvements

The public transportation improvement strategies focus on making public transportation more convenient and accessible in the AMATS region. It is worth mentioning that these strategies may be linked with tier 1 and tier 2 strategies. METRO and PARTA control the transit service strategies within the AMATS region with AMATS offering suggestions. The following strategies are included in this category:

- **Expanding transit services –** adds new vehicles to expand transit services.
- **Optimal control of headways by realigning transit service schedules and stop locations –** provides better accessibility to transit to a greater share of the population.
- **Providing real-time information on transit schedules and arrivals using various ITS strategies –** provides real-time information so potential transit riders can estimate wait time.
- **Universal transit fare cards and incentives –** may be offered to students, employees, or residents to help reduce the cost of transit to the user.
- **Bus Rapid Transit –** high-quality bus-service that utilizes dedicated lanes, busways, traffic signal priority, off-board fare collection and enhanced or elevated stations to make transit more efficient and reliable. These lines work best in dense urban areas.
- **Prioritizing transit vehicles at traffic signals –** gives transit vehicles priority at signals to help them run on schedule.

7.4 | Tier 4: ITS Strategies

These strategies are strongly linked with most of the congestion management strategies. The recommended ITS strategies in the AMATS region are listed below:

- **Traffic Signal Improvements –** Optimizing and coordinating the timing of traffic signals to improve traffic flow through a corridor or specific intersections.
- **Simulation models –** Although AMATS has established travel demand models for predicting and evaluating the traffic in the region, simulation models may be used to analyze and evaluate the impact of operational strategies.
- **Cars Connected to Cars / Cars Connected to Infrastructure –** When one vehicle can communicate to another vehicle nearby—in front, behind, etc. it's the core of autonomous driving technology. Sensors detect what's going on around the vehicle and additional technology can share that data with other vehicles on the road. The vehicle is also able to send and receive information about the infrastructure that can include physical things such as traffic signals and weather alert systems. The vehicle can send that data out while simultaneously the infrastructure can send important data back to it.
- **Real-time traffic feedback –** The real-time traffic data provides information about congestion throughout the region . Many cell phone applications exist to provide real time traffic data and provide routing guidance to avoid areas of congestion.

7.5 | Tier 5: Capacity Expansion

Capacity expansion in the greater Akron area is only considered feasible for the worst congested roadway segments. There is a limited amount of funding available for new road and lane construction. Construction and right-of-way costs for new roads are very expensive. New roads and adding additional through lanes is considered a last resort as system preservation is the main objective in the AMATS region. Financial restrictions, adverse environmental impacts, and project duration also make capacity improvements less attractive and feasible . In addition, traffic counts throughout the region, overall, are trending downward. As the region continues to struggle with maintaining population and the continued

presence of remote work, it is hard to project the level of traffic growth required to construct expansion projects.

Capacity expansion may be necessary on the busiest arterials and freeways as most other roadways are not congested enough to warrant such an improvement. These roadways may benefit from capacity expansion projects as it will improve flow of all vehicles including transit and freight vehicles, not just passenger vehicles. This could reduce emissions and fuel consumption, and increased productivity and economic development. However, typically constructing new lanes is followed with additional demand for the roadway as travel times improve. More vehicles begin to use the roadway which then begins to reduce travel times. This is referred to as induced demand. Adding capacity can also have adverse impacts on safety, alternative transportation modes and livability.

The capacity improvements include the following strategies:

- **Removing bottlenecks by constructing new lanes –** removes or corrects short, isolated, and temporary lane reductions and substandard design elements.
- **Adding travel lanes on major freeways** (including truck climbing lanes on grades)

7.6 | Evaluation of Strategies

Congestion management strategies were evaluated based upon their effectiveness and feasibility. The effectiveness was determined by how well each strategy would reduce congestion in the AMATS area. To make this determination, the strategies were reviewed by examining regional characteristics, previous local success of the strategies and examples from other urban areas. Decisions on the effectiveness of each strategy were made based on the data collected and staff input. Feasibility was rated by the degree to which the strategy could be realistically implemented in the region. Table 8-1 lists the strategies along with their corresponding effectiveness and feasibility.

Table 7-1 | Congestion Management Strategies

TIER	STRATEGY	BENEFITS	EFFECTIVENESS	FEASIBILITY
Tier 1: Demand Management	Telecommuting	Reduces traffic, especially during peak hours	Medium / High	Medium
	Flexible / Alternative Work Hours	Reduces traffic, especially during peak hours	Medium	Low / Medium
	Carpooling	Reduces traffic, especially during peak hours	Medium / High	Medium
	Employer Incentive Program	Reduces traffic, especially during peak hours	Medium / High	Low
	Alternative Modes of Transportation	Reduces traffic	Low / Medium	Low
Tier 2: Operational Improvements	Adding exclusive left turning lanes	Improves traffic flow / safety	Medium	Medium
	Access Management of roadway / driveways	Improves traffic flow / safety	Medium	Medium
	Variable speed limits	Improves traffic capacity / flow	Low / Medium	Low
	Variable message signs	Improves traffic flow and reduces additional congestion	Low / Medium	Medium
	Exclusive shoulder lanes for buses	Improves traffic flow / safety	Medium	Low
	Geometric improvements to road and intersections	Improves traffic flow / safety	Medium / High	High
	Channelization	Improves traffic flow / safety	Low / Medium	Medium
	Median barriers (moveable) to facilitate more capacity during peak period	Improves traffic capacity / flow	Medium / High	Low
	Traveler information	Improves traffic flow / safety	Low / Medium	High
	Complete Streets	Improves capacity for alternative modes of transportation	Low / Medium	Medium
	Overpasses or underpasses at congested intersections or railroads	Improves traffic capacity / flow	High	Low / Medium

Table 7-1 | Congestion Management Strategies

TIER	STRATEGY	BENEFITS	EFFECTIVENESS	FEASIBILITY
Tier 3: Public Transit Improvements	Expanding transit services	Encourages transit use / reduces SOV vehicles.	Medium	Low
	Optimal control of headways by realigning transit service schedules and stop locations	Makes transit easier to use / reduces SOV vehicles.	Medium	Medium
	Providing real-time information on transit schedules and arrivals using various ITS strategies	Makes transit easier to use / reduces SOV vehicles.	Low	Medium
	Universal transit fare cards and incentives	Makes transit easier to use / reduces SOV vehicles.	Low / Medium	High
	Bus Rapid Transit	Makes transit easier to use / reduces SOV vehicles.	High	Medium
	Prioritizing transit vehicles at traffic signals	Makes transit easier to use / reduces SOV vehicles.	Medium	Medium
Tier 4: ITS Strategies	Traffic Signal Improvements	Improves traffic flow / safety	Medium / High	High
	Simulation models	Helps determine and fund projects with the most impact	Medium / High	Medium
	Cars Connected to Cars/Cars Connected to Infrastructure	Improves traffic flow / safety	Medium / High	Low
	Real-time traffic feedback	Improves traffic flow and reduces additional congestion	Medium / High	High
Tier 5: Capacity Expansion	Removing bottlenecks by constructing new lanes	Improves traffic flow / safety	Medium	Low
	Closing gaps in the existing network	Improves traffic flow / safety	Medium	Low
	Add travel lanes on major freeways and streets (including truck climbing lanes on grades)	Improves traffic flow / safety	Medium	Low

8 | RECOMMENDATIONS

Using the 2022 congestion scan of the transportation network, AMATS identified 108 congested freeways and arterial segments. Each segment identified includes its peak congestion percentage, and the peak period of congestion. Appropriate strategies, i.e., tiers listed in Section 7.6, that should be considered for reducing congestion on the segment are listed in the recommendation column. It is noted when a corridor has a project planned or recently completed along with the recommendation to monitor this corridor.

8.1 | Freeways

The region's freeways are in the midst of a major overhaul, especially near Akron's downtown where many of the freeways converge. The Ohio Department of Transportation's Beltway project has included multiple ramp closures and detours over the last two years. The State Route 8 Bridge replacement project over the Cuyahoga Valley just north of Akron's downtown is also currently under construction. These large-scale construction projects that are ongoing make it difficult to recommend improvements for the region's congested segments. This is because projects under construction during the analysis year of 2022 would include detours and closures that impact the surrounding freeway traffic which could skew the analysis or projects that are now under construction include improvements that may alleviate some of the congestion identified in the 2022 scan. These concerns can be applied to every freeway segment AMATS identified in its 2022 scan. The segments were either impacted by current construction or impacted by improvements that will be constructed in the next few years.

Map 8-1 | Congested Freeway Recommmendations

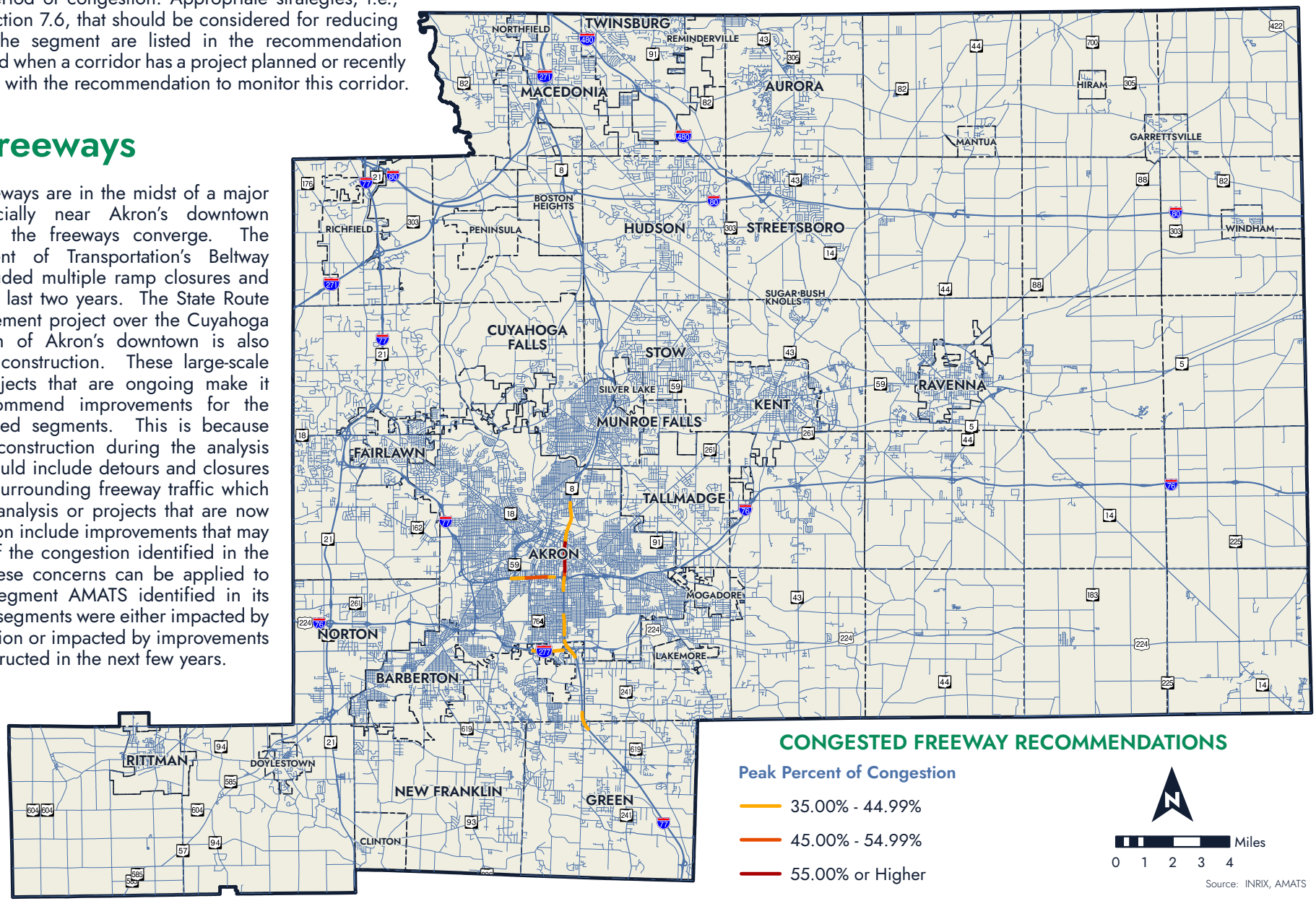


Table 8-1 | Freeway Recommendations

	SEGMENT NAME	DESCRIPTION	PEAK % CONG.	PEAK PERIOD	RECOMMENDATION
1	OH-8 (SB)	I-76 (Segment 1)	56.4	PM	Construction (continue to monitor)
2	I-76/I-77 (EB)	Wolf Ledges Pkwy/Exit 22 (Segment 2)	53.2	PM	Construction (continue to monitor)
3	I-76/I-77 (EB)	Wolf Ledges Pkwy/Exit 22 (Segment 1)	52.2	PM	Construction (continue to monitor)
4	OH-8 (SB)	OH-18/East Market Street (Segment 2)	51.4	PM	Construction (continue to monitor)
5	I-76/I-77 (EB)	Grant Street/Exit 22 (Segment 2)	50.8	PM	Construction (continue to monitor)
6	OH-8 (SB)	I-76 (Segment 2)	50.5	PM	Construction (continue to monitor)
7	I-76/I-77 (EB)	Main Street/South Broadway Street/Exit 22 (Segment 1)	50.3	PM	Construction (continue to monitor)
8	OH-8 (SB)	OH-18/East Market Street (Segment 1)	49.3	PM	Construction (continue to monitor)
9	I-76/I-77 (EB)	Grant Street/Exit 22 (Segment 1)	48.6	PM	Construction (continue to monitor)
10	OH-8 (SB)	OH-59/Perkins Street (Segment 2)	43.4	PM	Construction (continue to monitor)
11	I-76/I-77 (EB)	I-77/OH-8/Exit 23	42.1	PM	Construction (continue to monitor)
12	I-76/I-77 (EB)	Main Street/South Broadway Street/Exit 22 (Segment 2)	41.6	PM	Construction (continue to monitor)
13	I-76/I-77 (EB)	Dart Avenue/Exit 21 (Segment 1)	40.5	PM	Construction (continue to monitor)
14	I-77 (SB)	I-76/I-77/Exit 125	40.2	PM	Construction (continue to monitor)
15	I-277 (EB)	I-77/Exit 4	39.8	PM	Construction (continue to monitor)
16	I-76/I-77 (EB)	Dart Avenue/Exit 21 (Segment 2)	39.5	PM	Construction (continue to monitor)
17	I-77 (SB)	OH-764/Wilbeth Road/Exit 123	37.6	PM	Construction (continue to monitor)
18	I-77 (NB)	Arlington Road/Exit 120	37	AM	Construction (continue to monitor)
19	OH-8 (SB)	East Glenwood Avenue (Segment 2)	36.7	PM	Construction (continue to monitor)
20	OH-8 (SB)	OH-59/Perkins Street (Segment 1)	36.2	PM	Construction (continue to monitor)
21	I-77 (SB)	I-277/US-224/Exit 122 (Segment 2)	36	PM	Construction (continue to monitor)
22	I-77 (SB)	Waterloo Road/Exit 123	35.6	PM	Construction (continue to monitor)
23	OH-8 (SB)	East Glenwood Avenue (Segment 1)	35	PM	Construction (continue to monitor)
24	I-77 (SB)	I-277/US-224/Exit 122 (Segment 1)	35	PM	Construction (continue to monitor)

8.2 | Arterials

AMATS congestion analysis identified 84 congested segments on the arterial roadway network. None of the segments identified received a tier 5 recommendation for added capacity as none of the segments had congestion that would be appropriate for major widenings. As the roadway network continues to age, AMATS believes an prudent approach is to focus on travel demand, operational improvements, alternative modes of transportation and intelligent transportation strategies to reduce congestion.

Map 8-2 | Congested Arterial Recommmendations

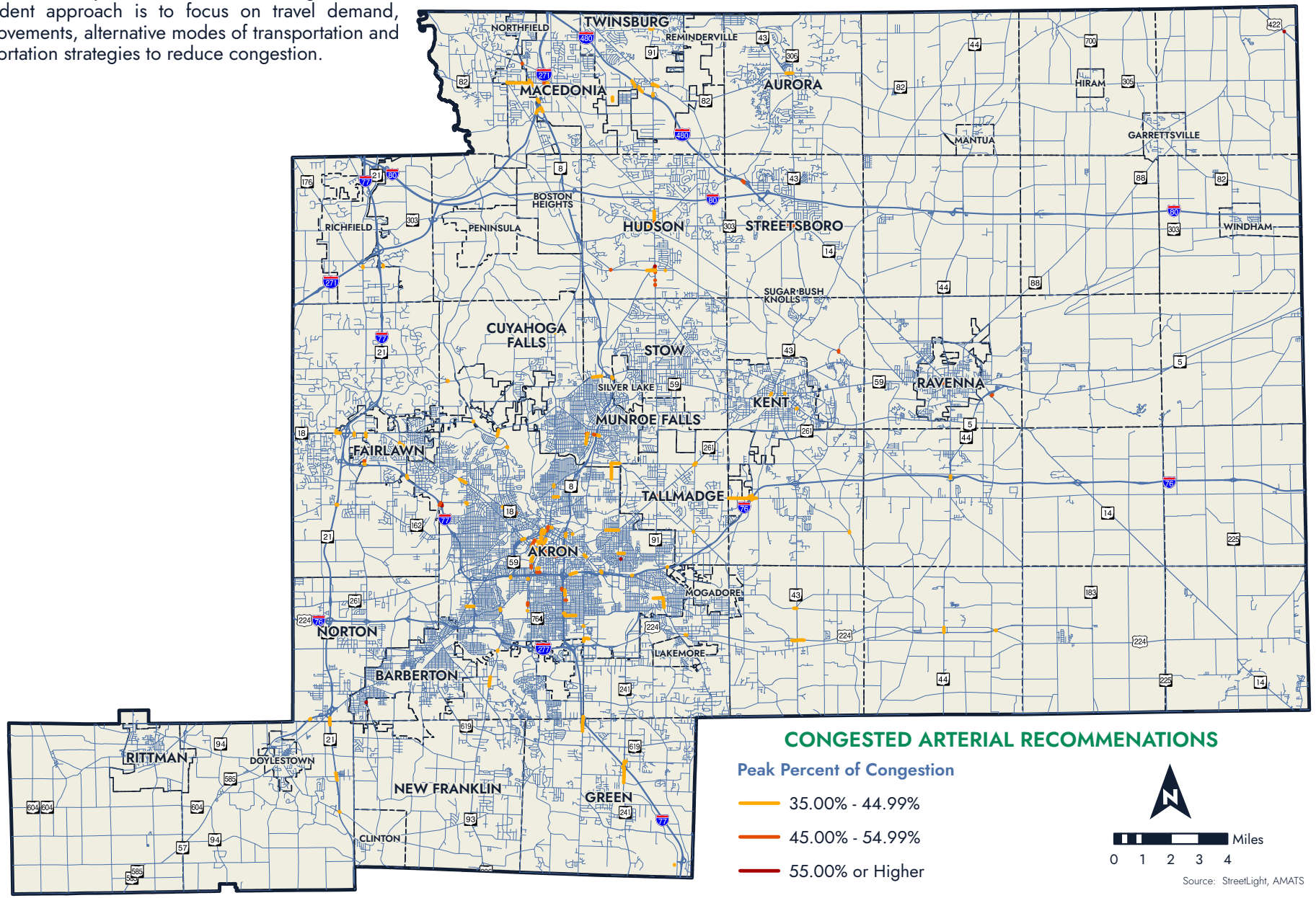


Table 8-2 | Arterial Recommendations

	SEGMENT NAME	DESCRIPTION	PEAK % CONG.	PEAK PERIOD	RECOMMENDATION
1	West Avenue (SR 261)	Heading into Tallmadge Circle	61.4	PM	2
2	Southwest Avenue	Heading into Tallmadge Circle	60.5	PM	2
3	Southeast Avenue	Heading into Tallmadge Circle	55.4	MD	2
4	Northwest Avenue	Heading into Tallmadge Circle	55.4	MD / PM	2
5	Northeast Avenue (SR 261)	Heading into Tallmadge Circle	53.5	MD / PM	2
6	Darrow Road (SR 91)	SB From Terex Road to Hudson Drive	53.2	AM / MD	Existing Project (116924,116929) - Monitor
7	East Avenue	Heading into Tallmadge Circle	52.2	MD	2
8	SR 8	SB at Valley View Intersection	51.0	AM / MD	2, 4
9	South Avenue (SR 91)	Heading into Tallmadge Circle	50.8	MD / PM	2
10	Broad Boulevard	WB from SR 8 to Front Street	50.3	MD	2, 3, 4
11	Arc Drive	NB at Exchange Street Intersection	49.8	AM / MD	4
12	White Pond Drive	At IR 77 Interchange	49.3	PM	2
13	West Bowery Street	West Exchange Street (SR 261) to West State Street	48.8	PM	3, 4
14	South Main Street	SB North of Thornton Street	46.6	MD	3, 4
15	North Main Street (SR 91)	SR 303 to Aurora Street	46.5	MD / PM	Existing Project (116924) - Monitor
16	East Exchange Street	Grant Street to Brown Street	46.3	MD	Existing Project (102701) - Monitor
17	North High Street	East Market Street (SR 18) to Perkins Street (SR 59)	45.9	AM / MD	3, 4
18	Cleveland East Liverpool Road (SR 14)	SR 303 to SR 43	45.2	PM	Existing Project (105213) - Monitor
19	West Main Street (SR 59)	Sycamore Street to Chestnut Street	45.1	MD	4
20	Broad Boulevard	SR 8 to Newberry Street	44.2	PM	3, 4, Rail Conflict
21	West Bowery Street	Quaker Street to Main Street	43.9	MD / PM	Building Construction - Monitor
22	Terex Road	EB start of divided highway to Hudson Drive	43.9	AM / PM	Existing Project (116924,116929) - Monitor
23	US 224	EB start of divided highway to SR 43	43.1	PM	2, 4
24	Howe Avenue	Buchholzer Boulevard to Barney's Busy Corners	43.1	PM	3, 4
25	East Aurora Road	Olde 8 to SR 8	42.9	PM	3, 4
26	Ravenna Road	SR 91 to SR 82	42.7	MD / PM	4
27	SR 5;SR 44	NB at the IR 76 Interchange	42.2	MD / PM	2, 4
28	US 224	WB start of divided highway to SR 43	41.7	PM	2, 4
29	South Broadway Street (SR 261)	University Avenue to Bowery Street	41.6	AM / MD	3, 4

Table 8-2 | Arterial Recommendations					
	SEGMENT NAME	DESCRIPTION	PEAK % CONG.	PEAK PERIOD	RECOMMENDATION
30	Massillon Road (SR 241)	SB from IR 77 to Raber Road	41.6	PM	Existing Project (90415) - Monitor
31	Tallmadge Road	Highway View Drive to Mogadore Road	41.4	MD / PM	Existing Project (112755) - Monitor
32	Broad Boulevard	Between SR 8 Ramps	41.1	PM	3, 4
33	SR 21	NB into Eastern Road	41.1	PM	4
34	Darrow Road (SR 91)	SB into Glenwood Drive Roundabout	41.0	PM	Monitor
35	Massillon Road (SR 241)	Boettler Road to IR 77	40.9	MD / PM	Existing Project (103172) - Monitor
36	Ghent Road	At West Market Street (SR 18)	40.8	PM	4
37	South Arlington Road	Moore Road to IR 77	40.8	PM	3, 4
38	Manchester Road (SR 93)	Portage Lakes Drive to Robinson Avenue	40.6	MD	2, 4
39	West Market Street (SR 18)	Ghent Road to Miller Road	40.4	MD	2, 3, 4
40	Northeast Avenue (SR 261)	NB into East Howe Road Roundabout	40.2	PM	Monitor
41	SR 8	SB IR 271 to Highland Road	40.1	AM	Existing Project (121067) - Monitor
42	SR 8	SB at Macedonia Commons Boulevard	40.1	MD	4
43	SR 8	NB at SR 82	40.0	AM / MD	4
44	Darrow Road (SR 91)	NB at Terex Road	39.8	AM / MD	Existing Project (116924,116929) - Monitor
45	South Arlington Road	NB at IR 77 Interchange	39.7	MD / PM	2, 4
46	SR 8	SB at SR 82	39.5	PM	4
47	Eastwood Avenue	Hazel Street to Brittain Road	39.3	PM	2, 4
48	Manchester Road (SR 93)	Towpath Trailhead to Carnegie Avenue	39.2	PM	2, 4
49	West Bowery Street	Cedar Street (SR 261) to Exchange Street (SR 261)	39.0	AM	4
50	Terex Road	Hudson Drive to Darrow Road (SR 91)	38.6	MD / PM	Existing Project (116924,116929) - Monitor
51	West Market Street (SR 18)	North Portage Path to Rhodes Avenue	38.4	PM	3, 4
52	Massillon Road (SR 241)	Graybill Road to Boettler Road	38.2	MD	Existing Project (103172) - Monitor
53	Martin Luther King Boulevard (SR 59)	Broadway Street (SR 261) to Summit Street	38.1	PM	4
54	South Cleveland Massillon Road	Brookwall Drive to SR 18	38.1	MD / PM	Existing Project (103293)
55	Darrow Road (SR 91)	SB Start of Divided Highway to IR 480	38.1	MD	3, 4
56	East Market Street (SR 18)	Arlington Street to Exchange Street	37.8	AM	Existing Project (116462) - Monitor
57	North Main Street	Cuyahoga Falls Avenue to Norman Street	37.7	PM	Existing Project (112716) - Monitor

Table 8-2 | Arterial Recommendations					
	SEGMENT NAME	DESCRIPTION	PEAK % CONG.	PEAK PERIOD	RECOMMENDATION
58	Innovation Way (SR 241)	3rd Street to East Market Street (SR 18)	37.5	AM	4
59	North Portage Path	Merriman Road to Portage Trail	37.5	PM	2, 3, 4
60	US 224	East Waterloo Road to Ewart Road	37.4	MD / PM	2, 4
61	South Hawkins Avenue	NB into Mull Avenue Traffic Circle	37.3	PM	Monitor
62	South Mantua Street (SR 43)	SR 59 to W Main Street	37.3	MD / PM	Monitor
63	South Arlington Road	SB from IR 77 to Chenoweth Road	37.2	PM	2, 3, 4
64	SR 8	NB IR 271 to Macedonia Commons Boulevard	37.1	MD / PM	2, 4
65	Tallmadge Road	Tallmadge Corp Line to Highway View Drive	37.1	MD / PM	2, 4
66	East Tallmadge Avenue (SR 261)	North Main Street (SR 261) to Dayton Street	36.9	PM	Existing Project (88556) - Monitor
67	Canton Road (SR 91)	Triplett Boulevard to Albrecht Avenue	36.9	PM	4
68	East Aurora Road (SR 82)	Macedonia Commons Boulevard to Freeway Drive	36.8	AM	1, 4
69	Northeast Avenue (SR 261)	SB into East Howe Road Roundabout	36.5	PM	Monitor
70	Canton Road (SR 91)	Albrecht Avenue to Wedgewood Drive	36.4	MD / PM	4
71	North Main Street (SR 91)	Aurora Street to Prospect Street	36.4	MD / PM	Existing Project (116924) - Monitor
72	West Garfield Road (SR 82)	Aurora Road (SR 43) to Chillicothe Road (SR 306)	36.3	MD / PM	Existing Project (107761) - Monitor
73	East Waterloo Road	South Arlington Street to end of divided highway	36.3	MD	4
74	SR 44	US 224 to Waterloo Road	36.2	PM	2, 4
75	South Arlington Street	Arlington Circle to Waterloo Road	35.9	MD / PM	4
76	Mull Avenue	EB into Hawkins Ave Traffic Circle	35.8	PM	Monitor
77	Broad Boulevard	EB from Second Street to SR 8 Ramps	35.8	PM	3, 4
78	Medina Road (SR 18)	Crystal Lake Road to IR 77	35.6	PM	1, 3, 4
79	West Market Street (SR 18)	Bryden Drive to Hawkins Avenue	35.5	PM	3, 4
80	Riverview Road	SB into Smith Road Roundabout	35.3	PM	Monitor
81	West Streetsboro Street (SR 303)	Boston Mills Road to North Main Street (SR 91)	35.2	PM	Existing Project (117269) - Monitor
82	SR 8	SB at SR 82 intersection	35.2	AM	1, 3, 4
83	Graham Road	Bailey Road to Hudson Drive	35.1	MD / PM	2, 3, 4
84	Brecksville Road	SB at Broadview Road/SR 176 Intersection	35.0	PM	1, 4

9 | EVALUATING STRATEGY EFFECTIVENESS

Understanding if congestion reduction strategies are effective post implementation can be challenging because projects are often constructed with another goal in mind. An example of this would be a complete street project that had a goal to improve the roadway for bicyclists, pedestrians and transit users. The roadway may be safer, but congestion may not have been alleviated.

It also is difficult to immediately determine strategy effectiveness because of the lag in data availability. Because the use of cellphone data is relatively new, it is difficult to evaluate projects that happened before the data was available. Additionally, because of data lag, AMATS might not have post implementation data for a few years after the project is completed.

These challenges aside, it is important to try to evaluate past projects to identify if certain strategies for congestion reduction work better than others in the greater Akron region.

Table 9-1 | Freeway Strategy Evaluation Table

SEGMENT NAME	DIRECTION	COMMUNITY	PEAK	2019 CONG. %	2022 CONG. %	EFFECTIVENESS	PROJECT
I-271 From SR 82 and I-480	NB	Macedonia	AM	68.0	5.1%	Significant Impact	Project 89548 complete, included adding through lanes

Table 9-2 | Arterial Strategy Evaluation Table

SEGMENT NAME	DIRECTION	COMMUNITY	PEAK	2019 CONG. %	2022 CONG. %	EFFECTIVENESS	PROJECT
Cedar St from Rand St to Dart Ave	EB	Akron	AM	56.5%	16.0%	Significant Impact	Project 88990 completed, included signal interconnect and bike lanes, Monitor
SR 14 from SR 303 W Jct to SR 303 E Jct	EB	Streetsboro	PM	56.0%	30.3%	Significant Impact	Project 99879 completed, included signal interconnect, Monitor
W Exchange St from Dart Ave to Rand St	WB	Akron	AM	46.4%	13.2%	Significant Impact	Project 88990 completed, included signal interconnect and bike lanes, Monitor
SR 14 from I-80 ramps to SR 43	EB	Streetsboro	PM	45.9%	18.0%	Significant Impact	Project 99879 completed, included signal interconnect; Monitor
SR 82 from SR 306 to SR 43	WB	Aurora	AM	45.6%	20.6%	Significant Impact	Project 107761 planned, includes signal interconnect; Monitor
Home Ave from Annapolis Ave to Howe Ave	NB	Akron/ Cuyahoga Falls	MD	42.6%	26.3%	Significant Impact	Project 93819 underway, includes extended turn lanes on Home Ave; Monitor
Ravenna Rd from Chamberlin Rd to Cuyahoga Co Line	NB	Twinsburg	AM	39.4%	22.5%	Significant Impact	Project 113165 planned, includes intersection improvements at Shephard; Monitor
Aurora Hudson Rd from I-480 SB Ramps to Frost Rd	EB	Streetsboro	AM	39.1%	19.5%	Significant Impact	Project 92561 completed, included signal interconnect, turn lanes, bridge widening; Monitor
SR 82 from SR 43 to SR 306	EB	Aurora	AM	38.5%	25.3%	Significant Impact	Project 107761 planned, includes signal interconnect; Monitor
Cleveland Massillon Rd from Bywood Ave to Elgin Dr	SB	Fairlawn	PM	36.8%	12.0%	Significant Impact	Project 103293 underway, includes widen to 5 lanes, roundabout, signal upgrade; Monitor
SR 91 North Ave from Howe Rd to Tallmadge Circle	SB	Tallmadge	PM	36.6%	12.0%	Significant Impact	Project 93444 completed, included reconstruction with turn lanes and sidewalks; Monitor

Table 9-2 | Arterial Strategy Evaluation Table

SEGMENT NAME	DIRECTION	COMMUNITY	PEAK	2019 CONG. %	2022 CONG. %	EFFECTIVENESS	PROJECT
SR 59 under the SR 18 Market St bridge	EB	Akron	AM	36.2%	1.3%	Significant Impact	Project 75436 completed, included SR 59 rerouting and intersection improvements at Howard/Main; Monitor
Cleveland Massillon Rd through Copley Circle	SB	Sum Co - Copley Twp	AM	42.7%	21.1%	Significant Impact	Project 103171 completed, included additional turn lanes; Monitor
SR 91 Canton Rd through the US 224 Intersection	NB	Sum Co - Springfield Twp	PM	38.7%	5.8%	Significant Impact	Project 89113 underway, includes concrete median and turn lanes; Monitor
Cleveland Massillon Rd through Copley Circle	NB	Sum Co - Copley Twp	AM	38.7%	16.8%	Significant Impact	Project 103171 completed, included additional turn lanes; Monitor
US 224 through the SR 91 intersection	EB	Sum Co - Springfield Twp	PM	38.4%	12.8%	Significant Impact	Project 89113 underway, includes concrete median and turn lanes; Monitor
SR 91 Canton Rd through the US 224 intersection	SB	Sum Co - Springfield Twp	PM	37.7%	17.3%	Significant Impact	Project 89113 underway, includes concrete median and turn lanes; Monitor
Cleveland Massillon Rd bet the Ridgewood Roads	NB	Fairlawn / Copley Twp	PM	36.6%	17.1%	Significant Impact	Project 108131 completed, included add turn lanes; Monitor
Waterloo Rd through the Arlington St intersection	EB	Akron	PM	36.0%	10.9%	Significant Impact	Project 96359 completed, included intersection improvements; Monitor
Cleveland Massillon Rd through Ghent Rd intersection	NB	Sum Co - Bath Twp	AM	35.9%	31.1%	Minor Impact	Project to realign intersection and add new right turn lane underway; Monitor

9.1 | Methodology

To evaluate past projects, AMATS ran corridor analyses on all 2019 congested locations that were identified as having projects either just completed or under construction in the *2020 Congestion Management Process*. AMATS used the most recent available full year data for project evaluations (2022) that were used for the CMP analysis. The corridor analyses AMATS ran provide the data necessary to calculate the congestion percentage in 2022 for each corridor. The congestion percentage from 2022 was then compared to the 2019 congestion percentage. If projects reduced congestion by more than 10 percent, it was considered a significant impact. If it was less than 10 percent but greater than zero it was considered a minor impact, and if it was a high level of congestion it was considered to have no impact.

9.2 | Project Evaluation

Overall AMATS saw a reduction in all past projects that were evaluated. While encouraging, it is also true that the latest full year data was collected toward the tail end of the COVID-19 Pandemic in 2022. The greater Akron area has seen a significant reduction in traffic throughout the area compared to pre-pandemic levels. While the projects evaluated as part of the CMP have improved corridor congestion, it is also safe to assume traffic volumes were lower in 2022 than they were in 2019.

Despite the pandemic's role in changing travel behavior, it is still important to highlight some of the projects that reduced congestion:

9.2.1 | Signal Projects

Several projects involving signal interconnect improvements were constructed prior to 2022, all of which yielded among the highest reductions in congestion for recent AMATS projects. The projects covered two corridors in Akron, two corridors in Aurora, and three corridors in Streetsboro. Averaged, they reduced congestion percentages by 26.4 points.

Signal interconnect projects are a relatively low-cost way to, in many cases, significantly improve traffic flow through a corridor. AMATS is completing its first-ever traffic signal inventory project. This project will help AMATS and its member communities better-understand the needs at the approximately 1,000 signalized intersections throughout the area. More importantly, it will help to prioritize which intersections may benefit most from signal upgrades.

9.2.2 | Roundabout and Lane Addition Project

The City of Fairlawn constructed a project along Cleveland-Massillon Road that included several improvements aimed at reducing congestion and improving safety. The roadway was widened to five lanes (from two-to-three lanes), a signal was improved, and a new roundabout was constructed. Although some of these improvements were beyond the congested segment's limits, this segment experienced a 24.8 point reduction in its congestion percentage.

Roundabouts have been widely demonstrated to improve traffic flow for most intersections because they typically reduce and can, in many cases, essentially eliminate the queueing of traffic approaching intersections. AMATS and ODOT have several funding sources that can fund roundabout projects (these are discussed in greater detail in Chapter 4 of AMATS' *Areawide Roundabout Study*).

While adding additional driving lanes can often reduce congestion, larger roads encourage more travel, and more traffic at higher speeds can increase safety concerns for vehicles and make travel difficult for non-motorized transportation. Such Tier 5 Congestion Management Strategies, as described previously, should be considered with significant caution.

9.2.3 | Access Management Project

Springfield Township improved the Canton Road corridor to provide improved access management by constructing median barriers, adding turn lanes, and implementing legal U-turns to reduce conflict points and improve the overall flow of traffic. Between 2019 and 2022, nearly all northbound congestion was eliminated, this direction of the corridor going from 38.7% to 5.8% congestion, a 32.9 point reduction. The southbound direction saw a 20.4 point decrease in congestion, and the eastbound leg of intersecting SR 224—which also saw similar improvements to access management—decreased by 25.6 points.

Access management projects provide significant benefits to congestion and safety. While these projects often involve significant coordination with property owners and have the potential to create controversy during the planning stages of project development, AMATS strongly encourages projects that help manage and channel access. Many of AMATS' past reports, including most of its past *Connecting Communities* planning studies, recommend access management directly or indirectly.

While all projects were shown to reduce congestion, some were less successful at reducing congestion. The only listed project with a minor impact to congestion was Bath Township's Cleveland Massillon Road and Ghent Road project. This project added a turn lane and re-configured turning movements at the intersection. While congestion was slightly reduced, the project goals also included improving safety.

The COVID-19 pandemic certainly played a role in the data analyzed for the project evaluations, it is still positive that post project these previously congested corridors all saw decreases in congestion.

The analysis supports that improvements like roundabouts, limited access and signal interconnects can help reduce congestion.

10 | CONCLUSION

As the Metropolitan Planning Organization for the greater Akron, it is the Akron Metropolitan Area Transportation Study's (AMATS) responsibility to ensure that traffic congestion is identified and addressed, appropriately and responsibly. Through the CMP analysis, it is clear that the greater Akron region's congestion is localized and many identified congested corridors are currently being addressed.

With the limited resources available to the region, it is critical that communities consider congestion improvements that can provide maximum benefit for the lowest cost, while balancing the safety of all users.

A | APPENDIX

Table A-1 below shows all arterial and collector roadway corridors within the AMATS planning area with between 25% and 34.99% congestion. While these roadways did not meet congestion thresholds of 35%, they still displayed some level of minor congestion. Over 2,700 corridors were analyzed in total, including those below 25% congestion. Any corridor congestion values not on this list, i.e. below 25%, are available upon request.

Table A-1 | StreetLight Congestion Analysis (25%-34.99% Congestion)

SEGMENT ID	SEGMENT NAME	FFC	LENGTH (MILES)	PEAK % CONGESTION	PEAK % FREE FLOW	DAY PART
1216344452	Howe Avenue / 19851300	4	0.028	34.97	65.03	Mid-Day / Peak PM
1220152326	Haymaker Parkway / 1382189	3	0.284	34.93	65.07	Peak PM
1216606612	Stow Road / 20819349	4	0.101	34.86	65.14	Peak PM
1221125862	Bailey Road / 13685005	5	0.079	34.78	65.22	Mid-Day / Peak PM
1216333049	State Road / 13569309	4	0.182	34.71	65.29	Peak PM
1216437802	South Water Street / 1380955	5	0.178	34.68	65.32	Peak PM
1220109801	West Market Street / 245288	3	0.756	34.62	65.38	Mid-Day
1216437298	East Main Street / 868560	3	0.086	34.46	65.54	Mid-Day / Peak PM
1220165526	Rock Spring Road / 22488760	5	0.125	34.45	65.55	Peak PM
1220464106	South Arlington Road / 18415115	4	0.070	34.33	65.67	Mid-Day / Peak PM
1216333084	Portage Trail / 17891867	3	0.149	34.17	65.83	Mid-Day
1216343666	North Main Street / 242931	5	0.150	34.09	65.91	Peak AM / Mid-Day
1216486544	SR 261 / 1380959	3	0.416	34.08	65.92	Peak PM
1216370285	East State Street / 22513765	5	0.070	34.01	65.99	Mid-Day / Peak PM
1216437243	North Freedom Street / 16612277	4	0.177	34.00	66.00	Mid-Day / Peak PM
1220919764	Copley Road / 893618	4	0.419	33.98	66.02	Peak PM
1216470633	Cleveland East Liverpool Road / 245866	3	1.944	33.96	66.04	Mid-Day
1220860734	Copley Road / 14988073	4	0.093	33.91	66.09	Mid-Day / Peak PM
1220152328	East Summit Street / 255026	4	0.356	33.78	66.22	Mid-Day / Peak PM
1216632475	East Howe Road / 14522140	4	0.060	33.77	66.23	Peak PM
1216333031	4th Street / 13933480	5	0.157	33.76	66.24	Peak AM / Peak PM
1221125721	Graham Road / 893789	4	0.149	33.75	66.25	Peak PM
1220078975	Medina Road / 18723947	3	0.019	33.72	66.28	Mid-Day / Peak PM
1216206845	East Wilbeth Road / 22766422	4	0.022	33.59	66.41	Mid-Day / Peak PM
1216363201	Rand Avenue / 21828804	5	0.186	33.55	66.45	Mid-Day / Peak PM
1216344491	East Tallmadge Avenue / 1381929	3	0.047	33.51	66.49	Peak AM / Mid-Day / Peak PM
1220860474	Copley Circle / 20906394	4	0.024	33.46	66.54	Peak AM / Mid-Day / Peak PM
1220977220	Steese Road / 20777167	5	0.024	33.45	66.55	Peak PM
1221078325	South Seiberling Street / 20488781	5	0.015	33.33	66.67	Peak AM / Mid-Day / Peak PM
1221143837	Darrow Road / 15817523	3	0.048	33.29	66.71	Peak PM
1216206199	South Main Street / 15745948	3	0.123	33.27	66.73	Mid-Day / Peak PM
1216333044	Broad Boulevard / 14259457	4	0.148	33.27	66.73	Mid-Day
1221122560	Terex Road / 19888548	4	0.140	33.26	66.74	Peak PM
1220977214	East Streetsboro Road / 21434447	5	0.079	33.25	66.75	Peak PM
1220490767	Great Lakes Boulevard / 14274707	3	0.124	33.24	66.76	Peak PM
1216223801	South Main Street / 22111628	3	0.225	33.18	66.82	Mid-Day
1220019949	Medina Road / 245539	3	0.398	33.12	66.88	Mid-Day
1216363357	Howe Avenue / 243252	4	0.121	33.05	66.95	Peak PM
1216608211	SR 303 / 19065624	4	0.270	33.03	66.97	Mid-Day / Peak PM
1220466224	Darrow Road / 14330101	3	0.043	33.01	66.99	Peak PM
1219638320	East Hines Hill Road / 18453500	5	0.060	32.96	67.04	Mid-Day / Peak PM
1216370129	South High Street / 893649	3	0.104	32.92	67.08	Mid-Day
1221431881	Cleveland East Liverpool Road / 20935347	3	0.184	32.89	67.11	Peak AM
1219866479	Southeast Avenue / 13750879	4	0.031	32.75	67.25	Mid-Day / Peak PM
1220014480	Merriman Road / 239669	3	0.515	32.75	67.25	Peak PM
1216437293	North Chestnut Street / 21366971	4	0.177	32.65	67.35	Mid-Day
1216216866	Copley Road / 18341518	4	0.150	32.60	67.40	Peak PM

Table A-1 | StreetLight Congestion Analysis (25%-34.99% Congestion)

SEGMENT ID	SEGMENT NAME	FFC	LENGTH (MILES)	PEAK % CONGESTION	PEAK % FREE FLOW	DAY PART
1220091024	Medina Road / 13878073	3	0.538	32.57	67.43	Peak PM
1216206057	South Main Street / 247144	4	0.165	32.55	67.45	Peak AM
1221090792	East Waterloo Road / 20490359	3	0.050	32.46	67.54	Peak PM
1220076440	Ghent Road / 17028524	4	0.246	32.44	67.56	Peak PM
1216486431	North Water Street / 242934	4	0.282	32.37	67.63	Peak PM
1216358772	East Highland Road / 21120141	5	0.086	32.25	67.75	Peak PM
1219638313	East Highland Road / 22314644	5	0.298	32.24	67.76	Peak PM
1216216197	Merriman Road / 21164636	4	0.088	32.23	67.77	Peak AM
1216217182	East Steels Corners Road / 255160	4	0.162	32.20	67.80	Peak PM
1221122360	Darrow Road / 15192754	3	0.059	32.18	67.82	Mid-Day / Peak PM
1220076333	West Market Street / 245538	3	0.524	32.18	67.82	Mid-Day
1216370327	University Avenue / 24135298	5	0.071	32.18	67.82	Mid-Day / Peak PM
1216356237	Mull Avenue / 22430122	5	0.029	32.14	67.86	Peak PM
1219667265	West Aurora Road / 19744193	4	0.514	32.13	67.87	Mid-Day
1221139819	Fishcreek Road / 16542696	4	0.256	32.12	67.88	Peak PM
1221134565	North Munroe Road / 15369121	5	0.031	32.07	67.93	Peak PM
1221134711	Darrow Road / 1380523	3	0.472	31.96	68.04	Mid-Day
1220921087	Norton Avenue / 21187972	4	0.145	31.95	68.05	Peak AM / Mid-Day
1216208147	Copley Road / 868303	4	1.411	31.83	68.17	Peak PM
1216342939	East Market Street / 22833116	3	0.065	31.69	68.31	Mid-Day
1221390095	SR 44 / 1382278	4	0.439	31.53	68.47	Mid-Day
1216369743	State Road / 243753	4	0.274	31.51	68.49	Mid-Day / Peak PM
1221146612	Seasons Road / 17956119	4	0.073	31.48	68.52	Peak PM
1216333093	Broad Boulevard / 16810916	4	0.040	31.47	68.53	Mid-Day
1220978376	East Market Street / 902663	3	0.112	31.46	68.54	Peak PM
1216468240	SR 59 / 17145176	3	0.024	31.40	68.60	Peak AM
1221431636	East Main Street / 20664517	4	0.030	31.40	68.60	Peak PM
1216216868	West Exchange Street / 251905	4	0.028	31.38	68.62	Mid-Day
1221091062	East Turkeyfoot Lake Road / 15874016	4	0.020	31.30	68.70	Peak PM
1216437416	SR 5 - SR 44 / 911345	3	0.220	31.29	68.71	Peak AM / Mid-Day / Peak PM
1216470418	Cleveland East Liverpool Road / 1381930	3	0.938	31.29	68.71	Mid-Day / Peak PM
1216342989	Martin Luther King Boulevard / 18073501	3	0.065	31.26	68.74	Peak PM
1221143923	Liberty Road / 24241919	5	0.026	31.25	68.75	Peak PM
1221090121	Tallmadge Road / 911341	4	0.956	31.21	68.79	Peak PM
1216486567	SR 261 / 247607	3	0.420	31.20	68.80	Mid-Day / Peak PM
1216356538	East Tallmadge Avenue / 16938879	4	0.223	31.15	68.85	Peak PM
1220846873	Graham Road / 23899981	4	0.135	31.14	68.86	Mid-Day
1219976889	East Cuyahoga Falls Avenue / 14559015	4	0.329	31.10	68.90	Peak PM
1220860871	Mull Avenue / 16752920	4	0.082	31.00	69.00	Peak AM
1216342836	East Market Street / 249757	3	0.066	30.98	69.02	Mid-Day
1216333069	Broad Boulevard / 15647877	4	0.074	30.97	69.03	Peak PM
1216344276	East Cuyahoga Falls Avenue / 16591404	4	0.021	30.96	69.04	Peak AM
1216205461	South Main Street / 17388452	4	0.409	30.94	69.06	Peak PM
1220860521	2nd Street Northwest / 866771	5	0.390	30.94	69.06	Peak AM / Mid-Day / Peak PM
1216629111	East Summit Street / 247478	4	0.257	30.93	69.07	Mid-Day
1216332384	Hudson Drive / 15953731	4	0.081	30.89	69.11	Mid-Day / Peak PM
1216628860	East Main Street / 242943	3	0.087	30.87	69.13	Mid-Day / Peak PM

Table A-1 | StreetLight Congestion Analysis (25%-34.99% Congestion)

SEGMENT ID	SEGMENT NAME	FFC	LENGTH (MILES)	PEAK % CONGESTION	PEAK % FREE FLOW	DAY PART
1220078928	Medina Road / 910665	3	0.054	30.78	69.22	Mid-Day / Peak PM
1216206354	East Exchange Street / 246122	4	0.169	30.76	69.24	Mid-Day
1221136095	Tallmadge Road / 19212263	4	0.144	30.74	69.26	Peak PM
1220844944	Massillon Road / 905490	3	0.075	30.71	69.29	Peak PM
1216370231	South Maple Street / 23038790	4	0.105	30.71	69.29	Peak AM
1216370238	East Bowery Street / 23650571	4	0.069	30.66	69.34	Mid-Day / Peak PM
1220846925	Graham Road / 15925039	4	0.188	30.66	69.34	Peak PM
1216338808	East Aurora Road / 18976147	4	0.145	30.58	69.42	Mid-Day
1221142860	East Steels Corners Road / 868794	4	0.769	30.52	69.48	Mid-Day / Peak PM
1216216900	West Exchange Street / 21293590	4	0.093	30.49	69.51	Peak PM
1216211334	East Exchange Street / 902712	4	0.102	30.49	69.51	Mid-Day
1216632183	Tallmadge Road / 22687765	4	0.144	30.44	69.56	Mid-Day / Peak PM
1216211313	Arc Drive / 15218652	4	0.027	30.43	69.57	Peak AM
1219978259	Bauer Boulevard / 13480186	5	0.147	30.42	69.58	Peak PM
1216363114	Manchester Road / 14714726	3	0.015	30.40	69.60	Mid-Day / Peak PM
1219866587	Southeast Avenue / 14233540	4	0.053	30.36	69.64	Peak PM
1221390555	State Route 14 / 1380394	4	0.176	30.30	69.70	Peak AM / Mid-Day
1220919728	Vernon Odom Boulevard / 15357103	4	0.055	30.20	69.80	Mid-Day / Peak PM
1216345511	Old South Main Street / 22526313	5	0.019	30.16	69.84	Mid-Day / Peak PM
1216370093	South Main Street / 17313815	5	0.068	30.03	69.97	Mid-Day / Peak PM
1216629223	South Lincoln Street / 249895	5	0.260	30.00	70.00	Mid-Day / Peak PM
1216378619	West Bartges Street / 867282	5	0.556	30.00	70.00	Peak PM
1221390077	SR 5;SR 44 / 23159562	3	0.047	29.97	70.03	Mid-Day / Peak PM
1216211419	South Main Street / 251912	5	0.083	29.94	70.06	Peak PM
1216678709	Stow Road / 15031653	4	0.225	29.94	70.06	Peak PM
1221122815	East Wilbeth Road / 867523	4	0.052	29.93	70.07	Mid-Day
1216357141	South Arlington Road / 14019587	4	0.007	29.88	70.12	Mid-Day / Peak PM
1216208031	Diagonal Road / 1369942	5	0.021	29.87	70.13	Peak PM
1220856512	Manchester Road / 17877065	3	0.242	29.87	70.13	Peak PM
1220013280	West Market Street / 21349979	3	0.581	29.73	70.27	Peak AM / Mid-Day
1216370141	tertiary / 22520325	5	0.021	29.73	70.27	Mid-Day / Peak PM
1220078932	Medina Road / 18723948	3	0.027	29.70	70.30	Mid-Day / Peak PM
1221123630	Darrow Road / 23823050	3	0.087	29.70	70.30	Peak PM
1221143670	Glenwood Drive / 15147811	5	0.038	29.69	70.31	Peak PM
1220467521	West Avenue / 893061	3	0.961	29.59	70.41	Mid-Day / Peak PM
1216370042	Dart Avenue / 14869111	5	0.180	29.56	70.44	Peak AM
1216332131	Ghent Road / 249369	4	0.077	29.49	70.51	Peak PM
1221391464	Ranfield Road / 15578178	5	0.050	29.35	70.65	Peak PM
1220977391	East Waterloo Road / 16696399	3	0.231	29.32	70.68	Peak PM
1216370927	East Market Street / 1380963	3	0.099	29.27	70.73	Mid-Day / Peak PM
1220019812	North Cleveland Massillon Road / 239771	4	0.431	29.26	70.74	Mid-Day / Peak PM
1220859247	West State Street / 16245960	5	0.123	29.23	70.77	Peak PM
1220978276	Mogadore Road / 14312938	5	0.029	29.22	70.78	Peak AM
1216363074	Manchester Road / 16070682	3	0.542	29.20	70.80	Mid-Day / Peak PM
1216342892	East Buchtel Avenue / 849915	4	0.176	29.19	70.81	Mid-Day
1216468328	Cleveland East Liverpool Road / 249906	3	0.310	29.13	70.87	Peak AM
1220860563	West Hopocan Avenue / 17130335	5	0.103	29.10	70.90	Mid-Day
1219668577	New Milford Road / 18126625	5	0.033	29.03	70.97	Mid-Day / Peak PM
1216361826	South Main Street / 22111643	3	0.297	29.01	70.99	Mid-Day
1221125627	Darrow Road / 14233444	3	0.505	29.01	70.99	Peak PM
1216222400	Chestnut Boulevard / 22001153	5	0.074	28.99	71.01	Peak PM
1220978145	North Main Street / 243258	3	0.396	28.97	71.03	Peak PM
1216380325	East Waterloo Road / 20748985	4	0.242	28.97	71.03	Peak PM
1221089883	Bailey Road / 240560	4	0.931	28.95	71.05	Mid-Day / Peak PM
1220882028	Akron Road / 13760229	3	0.223	28.95	71.05	Peak PM
1216360020	Martin Luther King Boulevard / 1381931	3	0.118	28.94	71.06	Peak AM / Peak PM
1221090079	Portage Trail / 21506525	3	0.103	28.93	71.07	Peak PM

Table A-1 | StreetLight Congestion Analysis (25%-34.99% Congestion)

SEGMENT ID	SEGMENT NAME	FFC	LENGTH (MILES)	PEAK % CONGESTION	PEAK % FREE FLOW	DAY PART
1216357653	South Arlington Road / 1382527	4	0.449	28.88	71.12	Mid-Day / Peak PM
1221090182	Howe Avenue / 250235	4	0.684	28.85	71.15	Peak PM
1216206761	South Main Street / 23071384	3	0.212	28.83	71.17	Peak PM
1221129814	Middleton Road Extended / 17295456	5	0.118	28.81	71.19	Peak AM
1216544489	State Route 43 / 892662	3	0.159	28.81	71.19	Peak AM
1220844265	Northwest Avenue / 21565901	4	0.317	28.78	71.22	Peak AM
1216211333	South High Street / 902710	3	0.083	28.77	71.23	Peak AM
1219668804	East Summit Street / 857052	4	0.144	28.76	71.24	Mid-Day
1216629232	South Water Street / 868552	3	0.476	28.73	71.27	Peak PM
1220156799	SR 44 / 16065721	4	0.159	28.71	71.29	Peak PM
1221132084	East Aurora Road / 855681	4	0.179	28.68	71.32	Peak PM
1216342948	North Union Street / 20043514	4	0.191	28.67	71.33	Mid-Day / Peak PM
1216333192	Portage Trail / 15167063	3	0.127	28.61	71.39	Mid-Day / Peak PM
1220860508	Wooster Road North / 893404	3	0.384	28.55	71.45	Mid-Day / Peak PM
1221090978	East Waterloo Road / 16166521	3	0.211	28.53	71.47	Mid-Day / Peak PM
1216356535	East Cuyahoga Falls Avenue / 16270007	4	0.272	28.48	71.52	Mid-Day / Peak PM
1219669061	Summit Road / 867516	4	0.077	28.47	71.53	Peak PM
1220046634	Ghent Road / 17028523	4	0.110	28.42	71.58	Mid-Day / Peak PM
1216211440	West Cedar Street / 16049586	4	0.105	28.41	71.59	Peak PM
1216223810	West Thornton Street / 22412601	5	0.077	28.40	71.60	Mid-Day
1216363170	Portage Lakes Drive / 15767303	5	0.307	28.39	71.61	Mid-Day
1216356989	South Arlington Road / 14019586	4	0.019	28.34	71.66	Mid-Day / Peak PM
1219950710	West High Street / 21512366	6	0.544	28.34	71.66	Mid-Day / Peak PM
1216606553	Barlow Road / 20122119	5	0.053	28.31	71.69	Peak PM
1216223769	South Main Street / 18875436	3	0.225	28.28	71.72	Mid-Day
1216342860	East Market Street / 1369908	3	0.281	28.24	71.76	Mid-Day
1220108993	Smith Road / 239765	3	0.953	28.23	71.77	Mid-Day / Peak PM
1216450369	Aurora Hudson Road / 250600	5	0.164	28.22	71.78	Peak PM
1220120314	Copley Circle / 20129419	4	0.013	28.21	71.79	Peak AM / Mid-Day
1221074609	5th Avenue / 23779055	5	0.262	28.18	71.82	Peak AM
1221078437	East Market Street / 13341598	3	0.204	28.17	71.83	Peak AM / Mid-Day
1216207725	East Buchtel Avenue / 242948	4	0.056	28.17	71.83	Peak AM
1221122674	Myersville Road / 23478844	5	0.030	28.14	71.86	Mid-Day / Peak PM
1221091067	East Turkeyfoot Lake Road / 257663	3	0.110	28.14	71.86	Mid-Day / Peak PM
1220152332	West Summit Street / 868548	5	0.104	28.09	71.91	Peak AM / Mid-Day / Peak PM
1220468468	4th Street Southwest / 1382250	4	0.174	28.08	71.92	Peak PM
1220469782	Wooster Road North / 23947992	3	0.029	28.04	71.96	Mid-Day / Peak PM
1216342947	South Broadway Street / 19678427	3	0.179	27.97	72.03	Peak AM / Peak PM
1220521358	Fulton Road / 23840961	6	0.038	27.95	72.05	AM Peak
1216437343	East Main Street / 867522	3	0.416	27.92	72.08	Mid-Day / Peak PM
1221122637	South Arlington Street / 1381924	4	0.111	27.91	72.09	Peak PM
1216207898	Perkins Street / 20182233	3	0.023	27.90	72.10	Peak AM
1220919772	Copley Road / 857003	4	0.121	27.90	72.10	Mid-Day / Peak PM
1219867884	East Waterloo Road / 14753374	5	0.055	27.88	72.12	Peak AM
1220012057	West Market Street / 245781	3	0.227	27.87	72.13	Peak PM
1216356829	West Market Street / 24189958	3	0.672	27.86	72.14	Peak PM
1216437824	North Water Street / 21865895	4	0.041	27.84	72.16	Peak AM / Mid-Day / Peak PM
1219978727	East Tallmadge Avenue / 23813537	3	0.055	27.81	72.19	Mid-Day
1221143663	East Waterloo Road / 15633148	3	0.245	27.79	72.21	Mid-Day / Peak PM
1221150230	Ravenna Road / 23149491	4	0.019	27.77	72.23	Peak AM / Mid-Day / Peak PM
1221132204	Darrow Road / 23203054	3	0.056	27.77	72.23	Mid-Day
1216206311	East Exchange Street / 15743248	4	0.098	27.76	72.24	Peak PM
1220859251	West State Street / 1369868	5	0.059	27.73	72.27	Peak AM / Peak PM
1220457857	Darrow Road / 13239358	3	0.378	27.72	72.28	Peak PM
1219977061	East Cuyahoga Falls Avenue / 855960	4	0.535	27.68	72.32	Peak PM
1216541755	Fishcreek Road / 857379	4	0.852	27.65	72.35	Peak PM
1220977324	Massillon Road / 867065	3	0.628	27.64	72.36	Peak PM

Table A-1 | StreetLight Congestion Analysis (25%-34.99% Congestion)

SEGMENT ID	SEGMENT NAME	FFC	LENGTH (MILES)	PEAK % CONGESTION	PEAK % FREE FLOW	DAY PART
1220978356	East Market Street / 15850408	3	0.126	27.63	72.37	Peak PM
1220152255	South Water Street / 1369943	3	0.077	27.62	72.38	Mid-Day / Peak PM
1216357072	West Tallmadge Avenue / 21460462	4	0.194	27.60	72.40	Peak AM
1221073478	Goodkirk Street / 17537652	5	0.192	27.55	72.45	Mid-Day / Peak PM
1216342984	South High Street / 19232398	3	0.191	27.53	72.47	Mid-Day / Peak PM
1220091026	Medina Road / 21692772	3	0.139	27.50	72.50	Peak PM
1216208122	Superior Avenue / 21543107	5	0.172	27.45	72.55	Mid-Day
1221091494	Massillon Road / 24286810	3	0.046	27.45	72.55	Mid-Day / Peak PM
1221376126	SR 8 / 23762183	4	0.190	27.45	72.55	Mid-Day / Peak PM
1221117180	Triplett Boulevard / 13818634	3	0.143	27.44	72.56	Peak PM
1219977573	Stow Road / 17551035	5	0.031	27.42	72.58	Peak AM / Mid-Day / Peak PM
1216211471	East Exchange Street / 22104887	4	0.071	27.39	72.61	Peak PM
1220900777	5th Street Southeast / 18707819	4	0.520	27.38	72.62	Mid-Day
1221396567	State Route 43 / 16525337	3	0.273	27.34	72.66	Peak AM
1216207826	North Forge Street / 23761467	5	0.111	27.33	72.67	Mid-Day
1219867780	Canton Road / 19637550	3	0.058	27.32	72.68	Mid-Day / Peak PM
1216362396	Manchester Road / 23471506	4	0.602	27.29	72.71	Mid-Day
1216206765	East Wilbeth Road / 13970438	4	0.184	27.29	72.71	Peak PM
1216370315	South Main Street / 13687723	5	0.097	27.27	72.73	Mid-Day / Peak PM
1216437704	East Main Street / 892865	4	0.238	27.27	72.73	Peak PM
1216350144	East Market Street / 14973371	3	0.060	27.20	72.80	Mid-Day
1221089999	Broad Boulevard / 24370521	4	0.012	27.20	72.80	Peak PM
1216216002	South Maple Street / 21360152	4	0.085	27.19	72.81	Mid-Day / Peak PM
1216516412	State Route 43 / 1381469	3	1.016	27.13	72.87	Mid-Day / Peak PM
1216345395	West State Street / 856997	5	0.113	27.09	72.91	Mid-Day
1216362185	East Wilbeth Road / 15328095	4	0.382	27.00	73.00	Peak PM
1221146445	East Hines Hill Road / 18453499	5	0.102	26.96	73.04	Peak PM
1221132226	Darrow Road / 893815	3	0.251	26.95	73.05	Mid-Day / Peak PM
1216467703	Cleveland Road / 17195922	4	0.023	26.93	73.07	Peak AM
1221074630	South Arlington Street / 17272119	4	0.211	26.92	73.08	Peak PM
1220045284	North Cleveland Massillon Road / 19868068	4	0.212	26.92	73.08	Peak PM
1221431853	State Route 43 / 247434	3	0.463	26.91	73.09	Peak PM
1216362383	North Portage Path / 902777	4	0.231	26.86	73.14	Peak PM
1216356214	South Hawkins Avenue / 245783	4	0.030	26.83	73.17	Mid-Day / Peak PM
1216368081	Olde Eight Road / 19894714	5	0.029	26.81	73.19	Peak AM / Mid-Day
1219866658	Eastwood Avenue / 23944135	5	0.033	26.81	73.19	Peak PM
1219659630	SR 8 / 14329164	4	0.023	26.81	73.19	Peak AM
1219977025	East Tallmadge Avenue / 246130	3	0.121	26.80	73.20	Mid-Day / Peak PM
1216358353	SR 8 / 16500997	4	0.024	26.77	73.23	Peak PM
1219597287	Brecksville Road / 16393137	4	0.033	26.74	73.26	Peak PM
1221136988	East Aurora Road / 911126	4	0.488	26.73	73.27	Mid-Day / Peak PM
1219640257	Wheatley Road / 14661840	5	0.051	26.65	73.35	Peak PM
1216211496	East Exchange Street / 857053	4	0.126	26.63	73.37	Mid-Day
1216370899	South Arlington Street / 902660	4	0.091	26.61	73.39	Peak AM / Mid-Day / Peak PM
1220469787	2nd Street Northwest / 19445273	5	0.096	26.61	73.39	Mid-Day / Peak PM
1216362041	East Archwood Avenue / 22604736	5	0.124	26.60	73.40	Peak AM
1216603366	State Route 43 / 892670	3	0.440	26.59	73.41	Mid-Day / Peak PM
1216211447	West Cedar Street / 15314637	4	0.016	26.58	73.42	Mid-Day / Peak PM
1221136967	Darrow Road / 23203053	3	0.024	26.51	73.49	Mid-Day / Peak PM
1216629016	Fairchild Avenue / 254764	4	0.077	26.51	73.49	Mid-Day / Peak PM
1216211367	East Exchange Street / 13526896	4	0.071	26.51	73.49	Peak AM / Mid-Day / Peak PM
1216363157	Monroe Street / 23247243	5	0.042	26.50	73.50	Mid-Day / Peak PM
1216370116	West Market Street / 22985224	3	0.411	26.48	73.52	Mid-Day
1216222644	East Streetsboro Road / 24182093	4	0.053	26.48	73.52	Peak PM
1221132037	Darrow Road / 254406	3	0.132	26.47	73.53	Peak PM
1219978293	Brittain Road / 24290504	4	0.821	26.40	73.60	Mid-Day / Peak PM
1216208223	South Hawkins Avenue / 17821855	4	0.215	26.37	73.63	Peak PM

Table A-1 | StreetLight Congestion Analysis (25%-34.99% Congestion)

SEGMENT ID	SEGMENT NAME	FFC	LENGTH (MILES)	PEAK % CONGESTION	PEAK % FREE FLOW	DAY PART
1219940701	North Aurora Road / 242557	3	0.277	26.35	73.65	Mid-Day / Peak PM
1216356557	North Main Street / 247116	4	0.065	26.34	73.66	Peak AM
1216207868	Perkins Street / 856498	3	0.066	26.34	73.66	Peak AM / Mid-Day / Peak PM
1216374613	South Arlington Road / 859697	4	0.594	26.33	73.67	Peak PM
1221122563	Darrow Road / 13688555	3	0.010	26.33	73.67	Peak AM / Mid-Day
1221136514	Triplett Boulevard / 13700357	4	0.261	26.33	73.67	Mid-Day / Peak PM
1220463026	State Road / 13569308	4	0.328	26.32	73.68	Peak PM
1216207763	Fountain Street / 22213173	5	0.166	26.31	73.69	Peak PM
1219866659	Southeast Avenue / 14785182	4	0.148	26.29	73.71	Peak PM
1221126154	East Aurora Road / 16818666	4	0.130	26.25	73.75	Mid-Day
1220472880	Mount Pleasant Street Northwest / 859377	5	0.268	26.22	73.78	Peak PM
1216369791	State Road / 893193	4	0.465	26.21	73.79	Mid-Day
1221088439	Kent Road / 893073	3	2.190	26.15	73.85	Mid-Day / Peak PM
1221012227	South Main Street / 247860	3	0.053	26.04	73.96	Peak PM
1221089990	East Portage Trail / 20510811	3	0.069	26.02	73.98	Peak PM
1221142498	Eastwood Avenue / 17964878	5	0.265	25.99	74.01	Peak AM
1221133656	Darrow Road / 23504723	3	0.143	25.93	74.07	Mid-Day
1221134683	Darrow Road / 250427	3	0.148	25.90	74.10	Peak AM / Mid-Day / Peak PM
1221143752	Liberty Road / 16101989	5	0.019	25.85	74.15	Peak PM
1216362033	South Main Street / 20178616	3	0.072	25.82	74.18	Peak PM
1220021903	South Hawkins Avenue / 20652294	4	0.454	25.81	74.19	Mid-Day
1220490760	Great Lakes Boulevard / 22208101	3	0.133	25.74	74.26	Peak PM
1216526983	West Main Street / 19561709	3	0.177	25.74	74.26	Mid-Day
1221088591	North Arlington Street / 17851713	4	0.296	25.74	74.26	Mid-Day / Peak PM
1220857400	Greenwich Road / 1369870	4	0.526	25.72	74.28	Peak AM
1220464087	South Arlington Road / 248964	4	0.511	25.70	74.30	Mid-Day / Peak PM
1220856659	Manchester Road / 15662822	3	0.094	25.69	74.31	Peak AM / Mid-Day / Peak PM
1220468529	Kenmore Boulevard / 911340	4	0.080	25.68	74.32	Peak PM
1216358151	Olde Eight Road / 251124	5	0.138	25.66	74.34	Peak PM
1220856538	Manchester Road / 1369876	3	0.580	25.62	74.38	Mid-Day
1216346338	West Exchange Street / 17880769	4	0.080	25.52	74.48	Peak AM
1220977208	East Streetsboro Road / 21434458	5	0.021	25.46	74.54	Peak PM
1221073521	East Exchange Street / 17319634	4	0.076	25.31	74.69	Peak AM / Mid-Day / Peak PM
1216370261	South Main Street / 13547802	5	0.034	25.31	74.69	Mid-Day
1216218005	Broadway Avenue / 14785412	4	0.024	25.29	74.71	PM Peak
1219803903	South Aurora Road / 901627	3	0.359	25.29	74.71	Mid-Day / Peak PM
1221431791	East Main Street / 251907	3	0.073	25.28	74.72	Mid-Day / Peak PM
1221090040	Broad Boulevard / 1370221	4	0.015	25.27	74.73	Peak PM
1216361299	South Arlington Street / 17272120	4	0.168	25.22	74.78	Mid-Day / Peak PM
1220120440	South Cleveland Massillon Road / 24244024	4	0.022	25.21	74.79	Peak PM
1216191728	State Road / 20540054	4	0.326	25.17	74.83	Mid-Day / Peak PM
1220467455	Brittain Road / 13222411	4	0.744	25.13	74.87	Peak PM
1216206631	Old South Main Street / 14324007	5	0.015	25.12	74.88	Mid-Day
1216370874	East Exchange Street / 14188692	4	0.674	25.04	74.96	Mid-Day / Peak PM
1216350290	North Broadway Street / 21945366	3	0.167	25.01	74.99	Peak PM

2024 CONGESTION MANAGEMENT PROCESS

AMATS

The *2024 Congestion Management Process* is published by:
Akron Metropolitan Area Transportation Study
1 Cascade Plaza, Suite 1300
Akron, Ohio 44308-1423
Editorial Comments are welcome.

Director: Curtis Baker

E-Mail: amats@akronohio.gov Please visit our website at: www.amatsplanning.org Phone: 330-375-2436

This report was prepared by the Akron Metropolitan Area Transportation Study (AMATS) in cooperation with the U.S. Department of Transportation, the Ohio Department of Transportation, and the Village, City and County governemtns of Portage and Summit Counties and a portion of Wayne County.

Attachment 5A

AKRON METROPOLITAN AREA TRANSPORTATION STUDY

M E M O R A N D U M

TO: **Policy Committee**
Technical Advisory Committee
Citizens Involvement Committee

FROM: **AMATS Staff**

RE: **Traffic Crashes 2021-2023 Technical Memorandum**

DATE: **November 27, 2024**

AMATS has completed its latest Traffic Crash Report covering years 2021, 2022 and 2023. This report is published annually and considers all crashes that occurred on non-freeway roadways in the AMATS study area over the three most recent years for which data is available.

Section One of this report identifies some of the tools available to assess safety issues, discusses proven approaches to improving safety, and summarizes various funding options available to help communities address the issues that exist.

Section Two investigates the areawide trends occurring to provide an understanding of where progress is being made and where trends are worsening. This section looks at overall crash numbers, crashes by level of severity, and looks specifically at bicycle and pedestrian-related crashes.

Section Three takes a deeper dive into specific locations. 47,638 crashes across the planning area were considered and checked for location accuracy. All the segments and intersections that meet the minimum criteria are ranked and listed in **Table 1** and **Table 2** within the report. **Map 1** and **Map 2** display the top 50 locations for section and intersection crashes, respectively. **Map 3** and **Map 4** show locations of bicycle and pedestrian crashes, respectively.

Finally, *Section Four* concludes the ACR by discussing the federal safety performance measure In this section base values and current values are compared using five years of data.

The Staff requests that the attached technical memorandum be approved by motion as documentation of work completed. Once this memorandum has been approved, local governments may use it as an initial step in the process of applying for Highway Safety Program funds through ODOT.

Traffic Crashes and Safety Performance Measures

AMATS Annual Crash Report

2021-2023

December 2024

AMATS

Akron Metropolitan Area Transportation Study
1 Cascade Plaza, Suite 1300, Akron, Ohio 44308

This report was prepared by the Akron Metropolitan Area Transportation Study (AMATS) in cooperation with the U.S. Department of Transportation, the Ohio Department of Transportation, and the Village, City and County governments of Portage and Summit Counties and Northeastern Wayne County. The contents of this report reflect the views of AMATS, which is responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official view and policies of the Ohio and/or U.S. Department of Transportation. This report does not constitute a standard, specification, or regulation.

Table of Contents

1 Section 1: Creating a Safer System

Introduction 1
Improving Safety 1
Funding 4

6 Section 2: Regional Trends

Overview 6
Crash Trends 6
Bicycle and Pedestrian Crash Trends 9
Travel Patterns 13

15 Section 3: Crash Locations

Overview 15
Methodology 15
High Crash Roadway Sections 16
Table 1: High Crash Roadway Sections 17
Map 1: Top 50 High Crash Sections 2021-2023 21
High Crash Intersections 22
Table 2: High Crash Intersections 23
Map 2: Top 50 High Crash Intersections 2021-2023 32
High Crash Freeway Locations 33
Bicycle and Pedestrian Crash Locations 33
Map 3: Bicycle Crashes in the AMATS Area 2021-2023 34
Map 4: Pedestrian Crashes in the AMATS Area 2021-2023 35

36 Section 4: Safety Performance Measures and Targets

Section 1: Creating a Safer System

Introduction

Profuse effort has gone into improving the safety of the transportation system. Safety has become a top priority of governmental transportation agencies from the federal, state, and local levels. New and creative methods, such as a programmatic focus on reducing severe crashes and implementing a *Safe System* approach that considers driver behavior and acknowledges human error have modernized the ways transportation officials work toward improving safety.

Major changes continue to occur on the industry side as well. New software platforms and other technology have enabled a data-rich environment that with increasing tools to help officials understand trends and work toward improvement. Technological advancements also extend to vehicle manufacturers, who continue to increase active and passive safety features in modern vehicles. Such advancements help to prevent crashes from occurring and better-protect vehicular occupants when a collision is unavoidable. Improvements even extend to how vehicles interact with more vulnerable road users such as pedestrians.

Measurable and significant progress has been made on so many fronts yet so many of the national safety trends demonstrate that the most serious crashes have *increased* in recent years. As this report demonstrates, these trends unfortunately extend to the local level. Serious injuries and fatalities are on the rise, and pedestrians and bicyclists appear to be significantly more susceptible to risk than even a decade ago, with collisions increasing for both of those modes of transportation.

There are myriad reasons for such disconcerting trends, all of which are of great concern to transportation officials and for agencies such as AMATS. Human behavior is ever evolving; distractions and risky behavior appear to be on the rise. Accordingly, officials must also evolve their approaches and strive to improve safety, no matter how disconcerting the trends may be.

This report, the latest in a long history of AMATS providing areawide crash trends and listing locations of specific concern, is an important starting point toward identifying issues and educating stakeholders on how to effectively improve safety within the Greater Akron area.

Section One of this report identifies some of the tools available to assess safety issues, discusses proven approaches to improving safety, and summarizes many options available to help communities address the issues that exist.

Section Two investigates the areawide trends occurring to provide an understanding of where progress is being made and where trends are worsening. This section looks at overall crash numbers, crashes by level of severity, and looks specifically at bicycle and pedestrian-related crashes.

Section Three takes a deeper dive into specific locations. This section outlines the process for ranking high crash locations within the Annual Crash Report (ACR) and then provides tables and maps demonstrating where the areas of greatest concern are throughout the region.

Finally, *Section Four* concludes the *Annual Crash Report* (ACR) by discussing the federal safety performance measure process and provides a report card of sorts for how the Greater Akron area is meeting or not meeting the goals set forth.

Improving Safety

Changes in Approach

The current federal transportation bill, the Bipartisan Infrastructure Law (BIL) has put increased focus and funding toward some pre-existing concepts. Within the past decade, as fatal and serious injury (FSI) crashes began to rise nationally, momentum began to build for a *Vision Zero* approach. The ultimate

goal of *Vision Zero* is that FSI crashes be eliminated and the central tenet is that one life lost or dramatically affected can never be ethically acceptable. Rather than road users bearing complete responsibility for their safety, *Vision Zero* emphasizes a shared responsibility between a road's users and the engineers and planners responsible for the transportation system's design. Although humans make mistakes that contribute to poor crash outcomes—speeding, not wearing safety belts, driving while intoxicated by drugs or alcohol, being distracted by phones or vehicles' infotainment systems—the way roadways and vehicles are designed also have significant effects on crash outcomes.

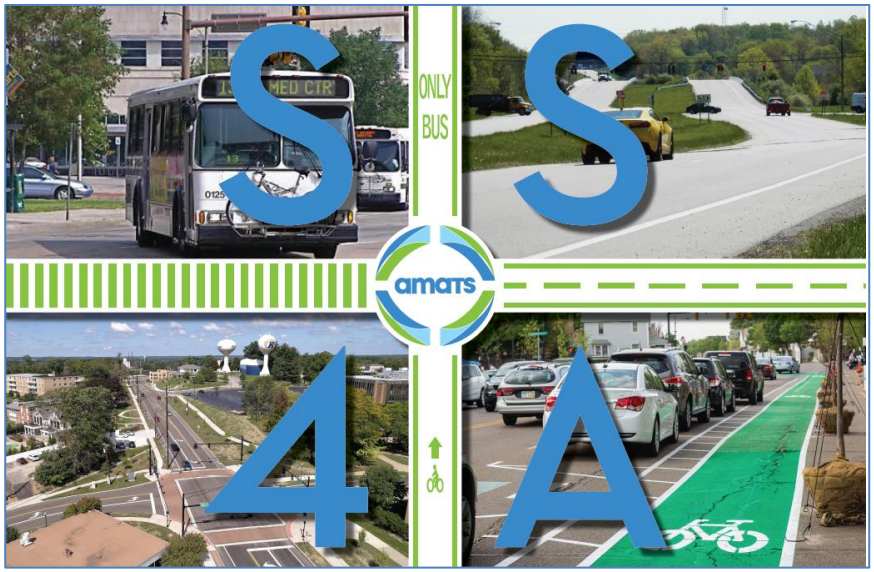
In a perfect world, people would not engage in risky behavior. But people do and will continue to. Designing roadways with safety as a primary consideration is therefore essential. This includes implementing proven safety countermeasures (see two sections ahead) and thoughtfully considering how roadways can reduce speeds, simplify design, and protect vulnerable road users such as pedestrians.

Annual Crash Reports and SS4A

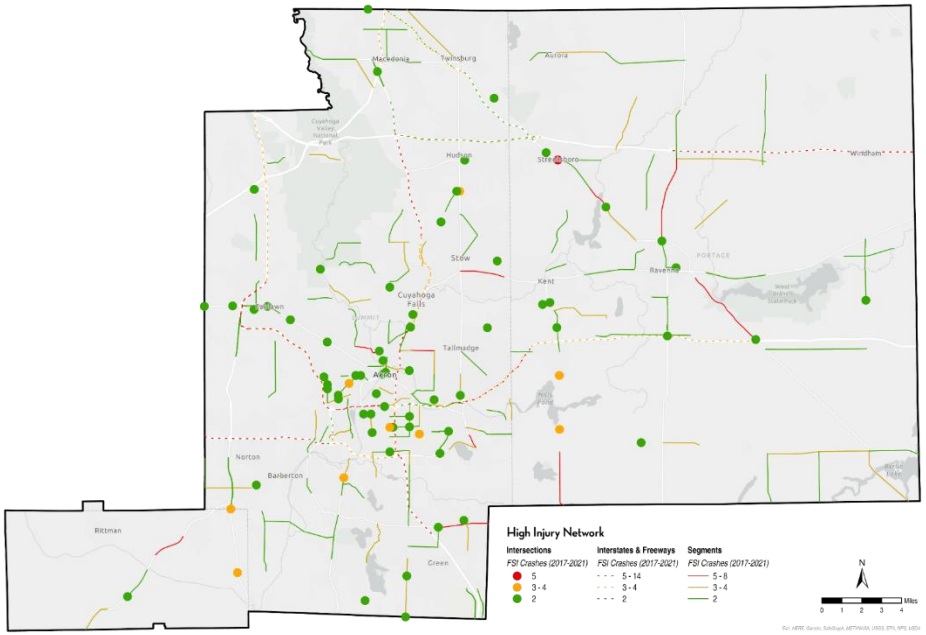
The importance of making the roadway system safe is of paramount concern for AMATS and, in fact, has been a central area of focus since its inception over 60 years ago. *Annual Crash Reports (ACRs)* like this one have been an important tool for the area's community leaders for multiple decades. These *ACRs* help decisionmakers understand where and why crashes occur and the annual ranking of its high-crash locations has direct impacts on funding availability. The agency's *Funding Policy Guidelines* have incentivized the improvement of numerous high-crash locations over the past two-plus decades.

AMATS' *ACRs* have evolved over time. The most dramatic change occurred about three years ago, when the methodology of ranking crash locations was altered to provide more weight to the area's most serious crashes. This is in line with changes made at the state level to emphasize Fatal and Serious Injury (FSI) crashes. Specifically, at least 30% of a specific location's crashes must be fatal or injury related to be included on a High Crash Section or Intersection list.

Complementing the trend of focusing on more serious crashes, AMATS completed its first *Safe Streets for All (SS4A) Action Plan* in May 2023. SS4A was a new funding source, established through the Bipartisan Infrastructure Law (BIL) aimed specifically at reducing FSI crashes.



Creating the *AMATS SS4A Action Plan* involved close collaboration with a taskforce comprised of AMATS members. The final action plan led to several new strategies to improve regional safety. Perhaps most notably, the Action Plan created a High Injury Network (HIN) that considers the locations of the area's highest FSI-crash locations. The *SS4A Action Plan* differs from this ACR by: (1.) focusing more heavily—almost exclusively—on the HIN and by (2.) considering a five-year reportable period for crashes versus the three-year period in an ACR. Having differing timetables allows AMATS and its partners to understand and compare trends over two timelines.



AMATS High Injury Network, from SS4A Action Plan

The *SS4A Action Plan* differed from the *ACR* in a few other significant ways. One of the most notable differences was the *SS4A Action Plan* contained a highly detailed safety analysis that showed and described data relating to how, where, when, and why crashes occurred throughout the region. The 2023 *SS4A Action Plan* also contained several prioritized lists of recommendations. These included project-based recommendations in short, medium, and long-term timeframes; strategy recommendations to improve behavior and reduce risks through a variety of initiatives; and transit-specific recommendations of various types.

The current (2023) AMATS *SS4A Action Plan* can be found at:
https://www.amatsplanning.org/sites/default/files/docs/SS4A-Action-Plan.pdf
The SS4A HIN webapp can be viewed at:
https://akrongis.maps.arcgis.com/apps/webappviewer/index.html?id=d3b866db810e470fb3de4b6a1ab81784

Certain aspects of the *SS4A Action Plan*, such as the data years for the HIN, are scheduled to be updated in 2025. Additional detail on this planned update can be found in the final chapter of the *SS4A Action Plan*.

The *ACR* and *SS4A Action Plan* should be considered as complementary tools that allow AMATS and its partners to comprehensively consider safety issues within the region. Both processes have their place within AMATS' safety planning and both reports should be consulted as regional communities and agencies consider how to improve safety at a given location or through larger geographic scale systemic improvements.

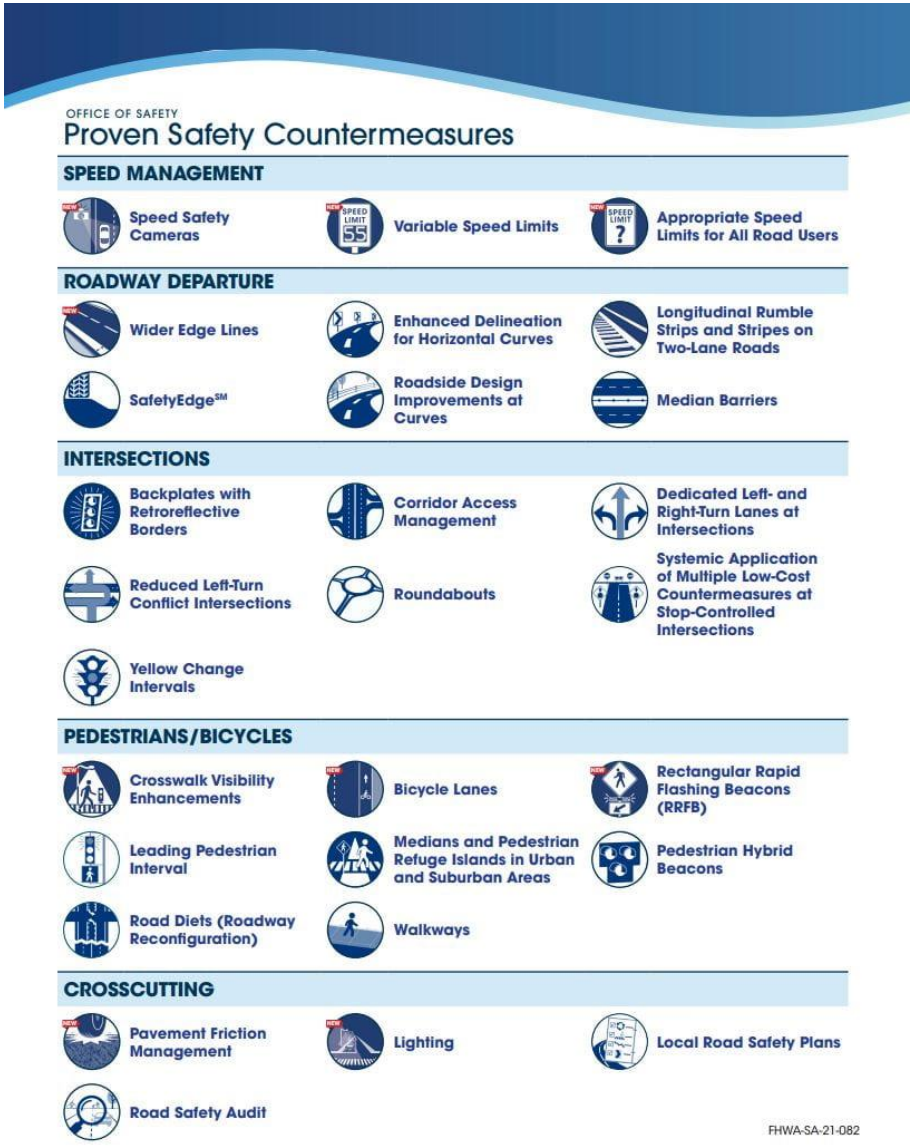
Proven Safety Countermeasures

Once a crash hotspot is identified in either or both the AMATS' *ACR* and *SS4A Action Plan*, community officials and other stakeholders often start thinking about how to alleviate safety issues at a given location. Effective solutions for any location will depend upon the unique characteristics of an intersection or section but deciding how to most effectively improve a location's safety can sometimes be a difficult or contentious process.

Fortunately, the Federal Highway Administration (FHWA) has conducted research to understand what approaches are most effective at improving safety. FHWA provides many data-driven strategies to improve safety, which it has listed as Proven Safety Countermeasures (PSCs). PSCs were first developed in 2008, but have been updated and refined several times since, most recently in 2021. All 28 PSCs are proven to provide significant, measurable safety benefits based on real-world case studies across the United States. PSCs are broken down into five categories:

- speed management
- pedestrian and bike
- roadway departure
- intersections
- crosscutting

AMATS strongly encourages communities to consider and incorporate PSCs into all roadway projects, regardless of the severity of safety issues. The implementation of PSCs is incentivized through many AMATS-controlled funding sources.



List of FHWA Proven Safety Countermeasures

Funding

After safety problems are demonstrated, and as stakeholders discuss possible ways to improve the problem(s), there are several federal and state funding sources that can help communities and agencies address safety issues. AMATS encourages project sponsors to discuss any safety issues they hope to address with AMATS and the Ohio Department of Transportation (ODOT).

HSIP Funding

The most popular funding source for safety-related transportation projects is through the federal Highway Safety Improvement Program (HSIP). In Ohio, this funding is managed and distributed through ODOT. Within the past few years, ODOT has made major changes to its statewide safety program, changes that directly align with a greater focus on reducing and eliminating FSI crashes.

Controlling HSIP through ODOT allows one centralized agency to target funds where they will be most effective at reducing FSI crashes. The competitive nature of these funds ensures that only the best projects are selected through a data-driven approach.

Approximately $185 million is dedicated annually to improve severe crash locations or locations with the potential for severe crashes. This includes about $100 million from the federal government through HSIP formula funds, some additional allocation from various general federal funding that ODOT receives, as well as some of the funds from the state gas tax. While most of this funding is federal, the additional investment and control via ODOT lead to it being one of the largest safety programs per capita of any state.

Distribution of these funds is divided into three sub-programs. Currently, ODOT also has a special solicitation open for pedestrian-and-bicycle-specific safety improvements. Details of each of these programs is listed on the following page.

- **HSIP Formal Safety program**—for higher-cost, more complex safety improvements that require a more detailed review. This program is meant to address locations with a history of fatal or injury crashes where low-cost safety improvements have failed to solve the problem.
- **HSIP Systemic Safety Funding program**—focused specifically on pedestrian-related and roadway departure-related crashes, systemic improvements are meant to be proactive and widely implemented across all or part of a community or region. The Systemic program incentivizes projects that would implement FHWA's Proven Safety Countermeasures.
- **HSIP Abbreviated Safety Funding program**—a simplified process to allow for a quicker review and funding of less expensive, less complex safety improvements at locations with safety concerns and a pattern of crashes.
- **Pedestrian & Bicycle Special Solicitation**—for projects that make walking and biking a safe, convenient, and accessible transportation option for everyone. There is an emphasis on projects that can begin construction before July 2026.

Safe Streets for All

The aforementioned SS4A program is a discretionary source that appropriates $5 billion over five years to reduce FSI crashes. Like many recent discretionary programs, a compliant plan (i.e. a SS4A Action Plan) must be in place by sponsoring agencies prior to receiving funding.

Because the AMATS has a SS4A Action Plan, communities and eligible agencies within the Greater Akron area can apply through FHWA for continued planning and demonstration grants (studying an area more-in depth or trying out innovative ideas prior to a large-scale project), and Implementation Grants used toward either larger, transformational projects or systemic improvements across a larger geographic area.

AMATS Sources of Funding

Two of AMATS' most popular funding programs award additional points to projects that will improve safety or that are in locations listed on either the SS4A HIN or on ACR high-crash lists. AMATS typically opens a call for funding on a biennial basis, typically held in the summer or autumn of odd-numbered years. These programs include the following:

- **Surface Transportation Block Grant (STBG)**—this is a versatile funding source for a wide variety of transportation projects on federally classified collector and arterial roadways. 25 out of 130 possible total points are directly related to safety, and up to 15 additional points can be awarded for implementing Complete Streets elements into the project's design.
- **Carbon Reduction Program (CRP)**—this is a newer funding source designed to fund projects that reduce carbon dioxide emissions from on-road highway sources. Roundabouts are the top-scoring project type, compared to other eligible activities. 10 out the 65 possible total points are directly related to safety.
- **Transportation Alternatives Set-Aside (TASA)**—this program provides funding toward bicycle and pedestrian facilities. Project applications that can demonstrate a history of bicycle or pedestrian crashes receive 5 additional points out of a total possible 115 points.

Section 2: Regional Trends

Overview

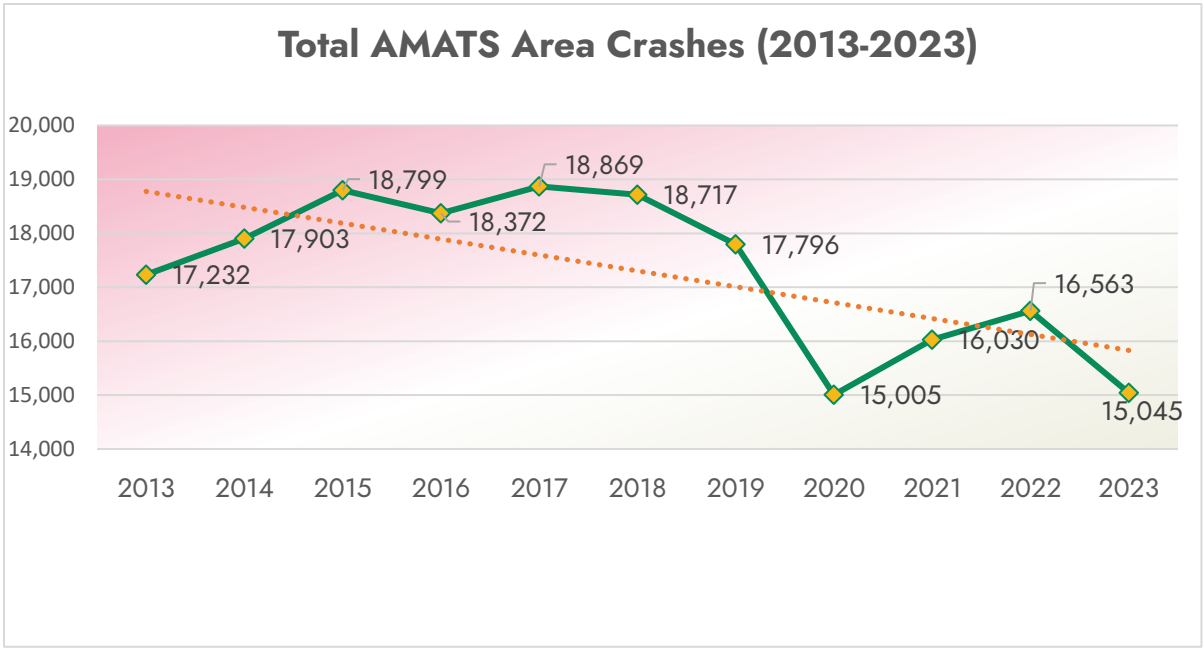
Over a three-year period (2021-2023), 47,638 crashes across the AMATS planning region covering Portage and Summit Counties and the northeastern portion of Wayne County were considered for this report. As will be further detailed in Section 3, animal crashes and construction zone crashes are not included in the analysis because they do not relate to the characteristics of the roadway.

Records of each crash were obtained from the Ohio Department of Transportation (ODOT) and were further analyzed as detailed in Section 3. The following charts and text detail the trends of crashes and traffic volumes over this three-year period. A more complete understanding of the AMATS region's crashes can be found in Chapter 4 of The AMATS Safe Streets for All Action Plan. Although the analysis years of this plan (currently 2017-2021) differ from this Annual Crash Report (ACR), the SS4A plan provides an overview of circumstances surrounding crashes in the region.

Crash Trends

Total Crashes

As shown in the graph to the right, the total number of crashes within the AMATS area has continued to trend downward over the past decade. 2023's number of reportable crashes within the AMATS planning area (15,045) is nearly as low as the 2020 level, which was an atypical time of lower travel and lower crashes due to the pandemic. Continuing, targeted funding toward improving the safety of the area's roadways, including the intentional implementation of *Proven Safety Countermeasures* to areas of known concern have likely helped to reduce the total number of areawide crashes. The increasing availability of crash prevention features on most newer vehicles almost certainly play an important role in this total reduction as well. Year-over-year change between 2022 and 2023 saw the number of crashes reduced by 1,518, or 9.2%.

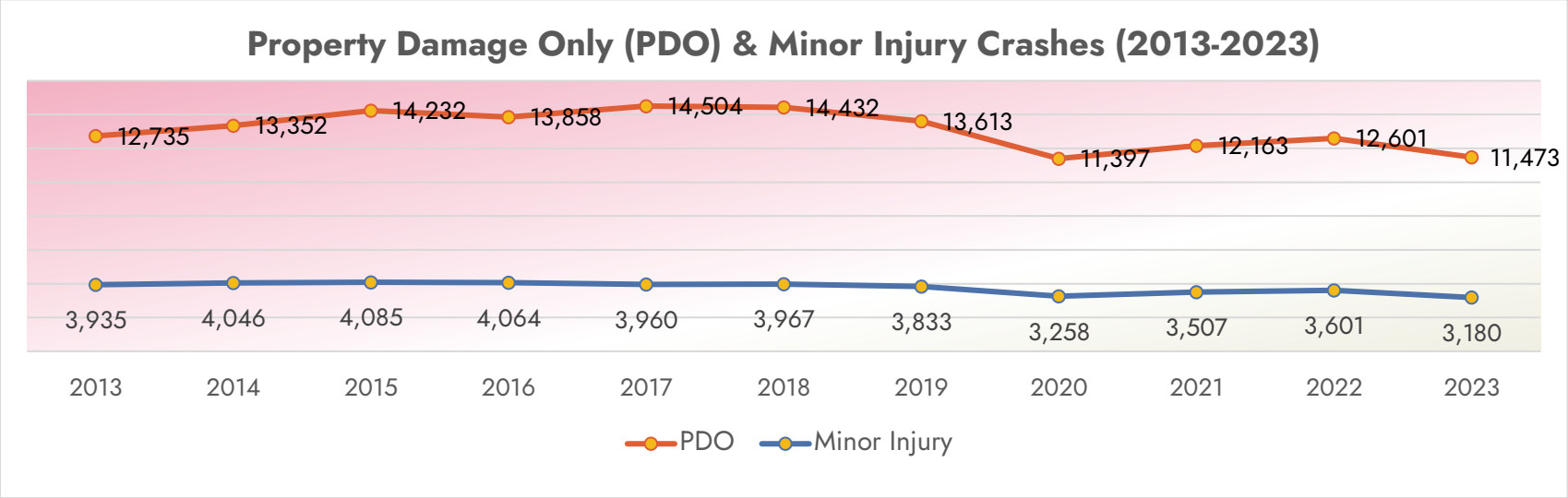


Crashes by Severity

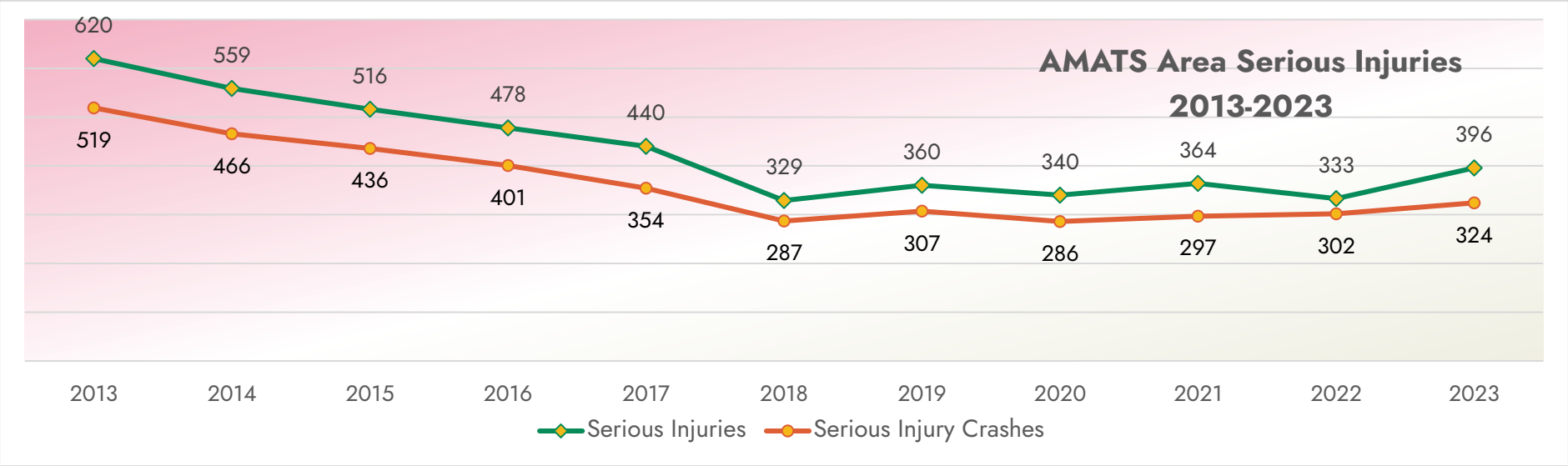
ODOT groups the severity of crashes into four categories. These are described below in increasing level of severity:

Level of Severity	Description
Property Damage Only (PDO)	A crash resulting in no injuries to those involved in the crash
Minor Injury (aka Injury or Possible/Potential Injury)	A crash either resulting in a non-incapacitating injury or a potential injury, e.g., the victim may be sore or plan to seek medical treatment
Serious Injury	A crash causing an incapacitating injury
Fatal	A crash resulting in a fatal injury

The two categories of less-severe crashes are shown in the graph below. Areawide, PDO crashes in 2023 decreased by 1,128 (-9.0%) and Minor Injury crashes decreased by 421 (-11.7%) from the prior year (2022).

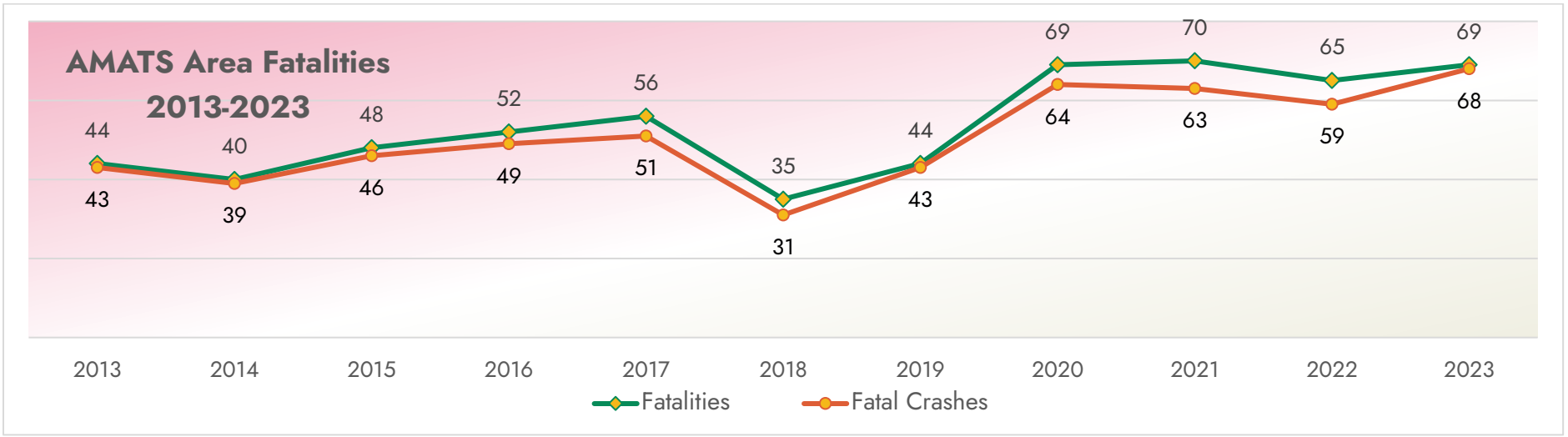


The number of serious injuries had been relatively steady since 2018, but 2023 saw numbers increase somewhat significantly for both the number and the number of serious injury crashes and the number if serious injuries. Serious injury crashes increased by 22 (7.3%) from 2022 to 2023, and serious injuries increased more dramatically—63 (18.9%)—in the same timeframe. Both metrics, however, show numbers significantly below pre-2018 figures. A graph containing serious injury crashes and serious injuries is shown on the following page.



The following graph shows the number of fatal crashes and the resulting fatalities between 2013 and 2023. A crash is one event, but it may involve multiple vehicles or multiple occupants and result in multiple fatalities or injuries. Fatal crashes have increased over the past decade, mirroring national trends. Locations with a higher percentage of fatal and injury crashes are a main focus of ODOT and their safety program.

The number of fatalities in 2020 went up significantly, remained high in 2021, and finally started to reduce in 2022. As shown below, fatal crashes went up by 9 (15.3% increase) and fatalities increased by 4 (6.2%) from 2022 to 2023. Although vehicles are becoming safer in both crash performance and prevention, distracted driving and other high-risk behaviors (such as alcohol and drug impairment) have increased both nationally and regionally.



Bicycle and Pedestrian Crash Trends

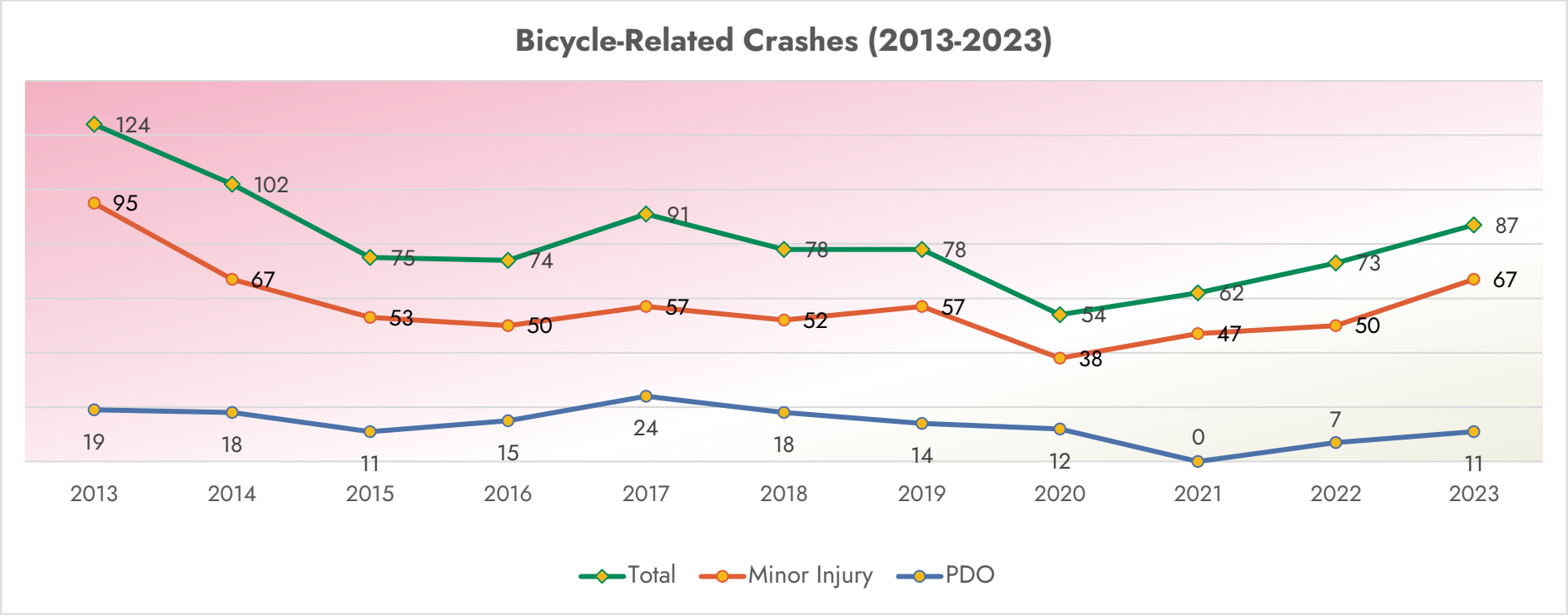
Overview

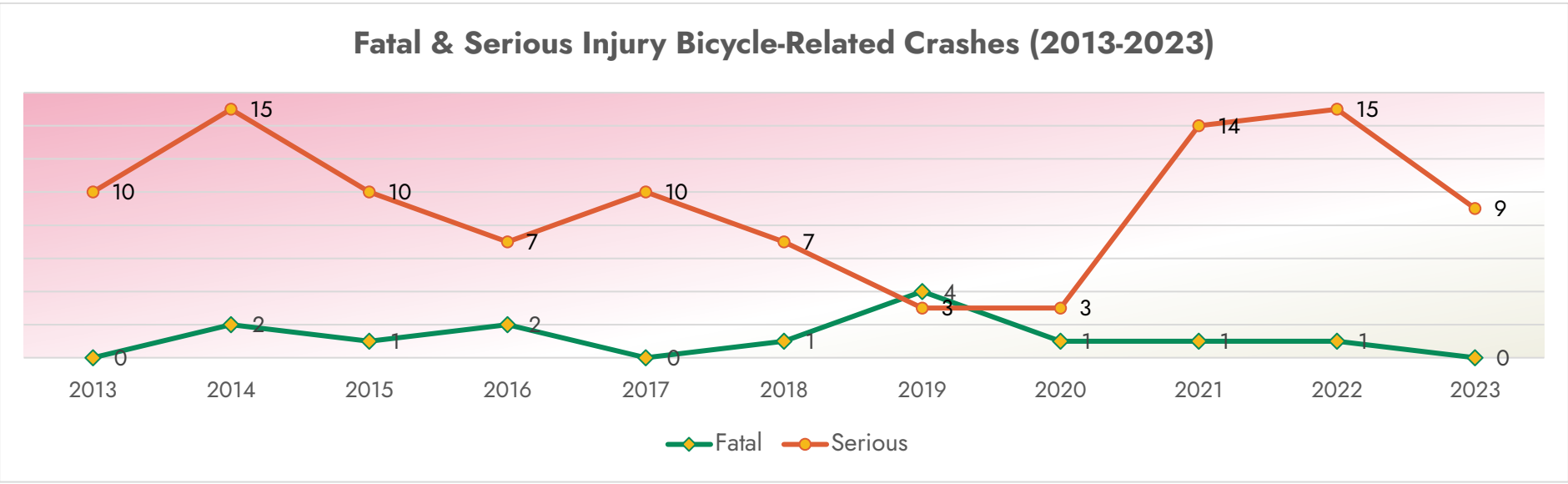
As biking and walking increase in popularity, there is growing concern about the safety of bicycle riders and pedestrians. Determining how and where these incidents occur can help plan for future bicycle lanes, sidewalks, lighting, and educational outreach. Bicycle and pedestrian-related crashes tend to happen more randomly and usually do not have the characteristic of being concentrated at specific locations to the same extent as vehicular crashes. A sound planning approach to counter this randomness is to pursue improvements along a corridor rather than a specific location.

Significant urgency to address bicycle and pedestrian safety exists because crashes involving these users result in a high percentage of injuries. Over the three-year period between 2021-2023, 91.9% of bicycle crashes and 96.5% of pedestrian crashes within the planning area resulted in some level of injury or a fatality.

Bicycle-Related Crashes

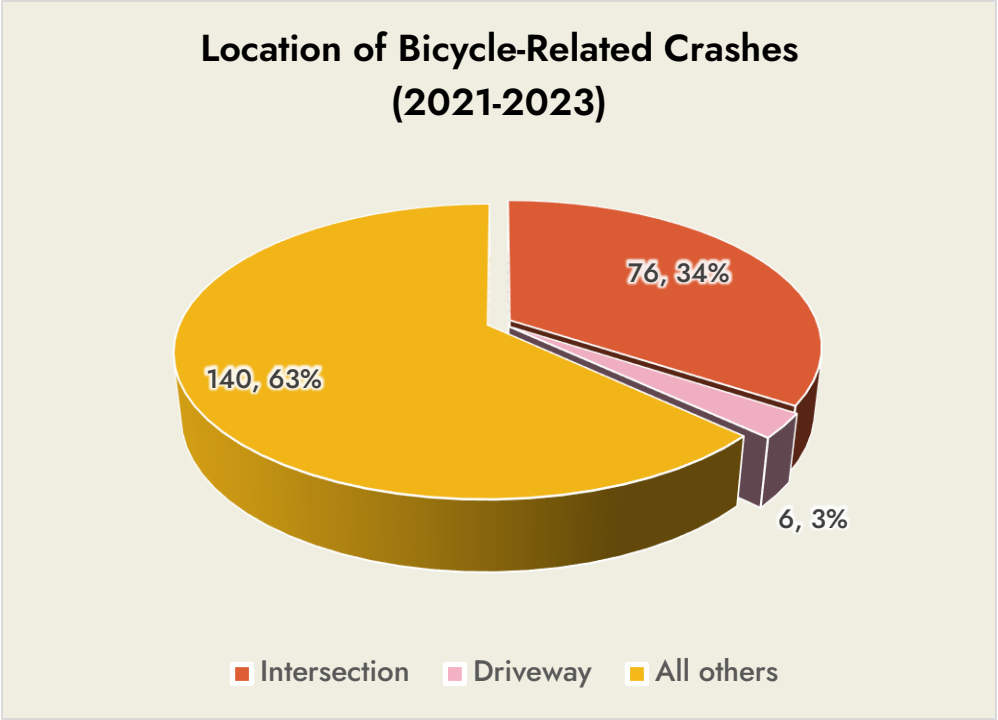
In 2023, total bicycle-related crashes increased by 14 (19.2%), but fortunately there were not any bicycle-related fatalities in 2023. Bicycle-related crashes over the past decade are shown in the charts below and on the following page.

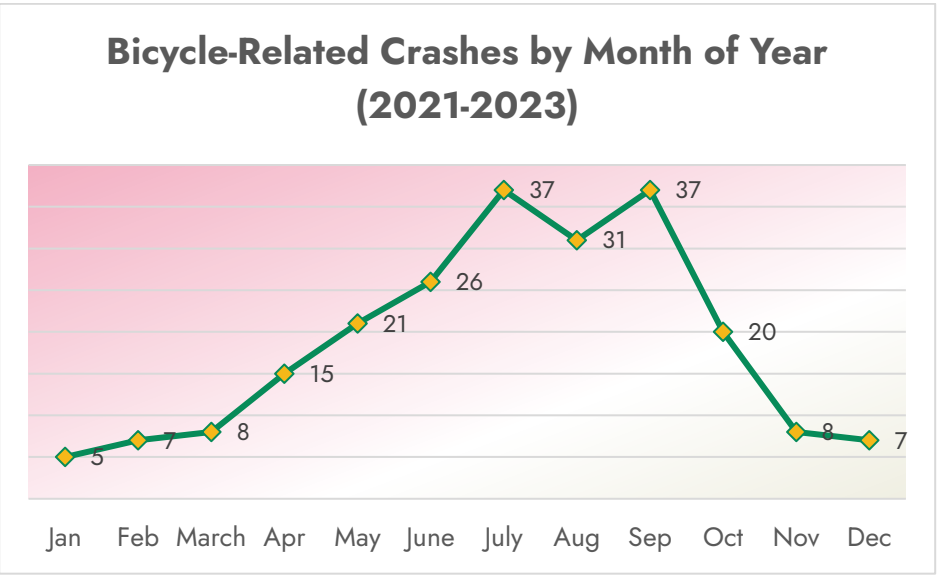


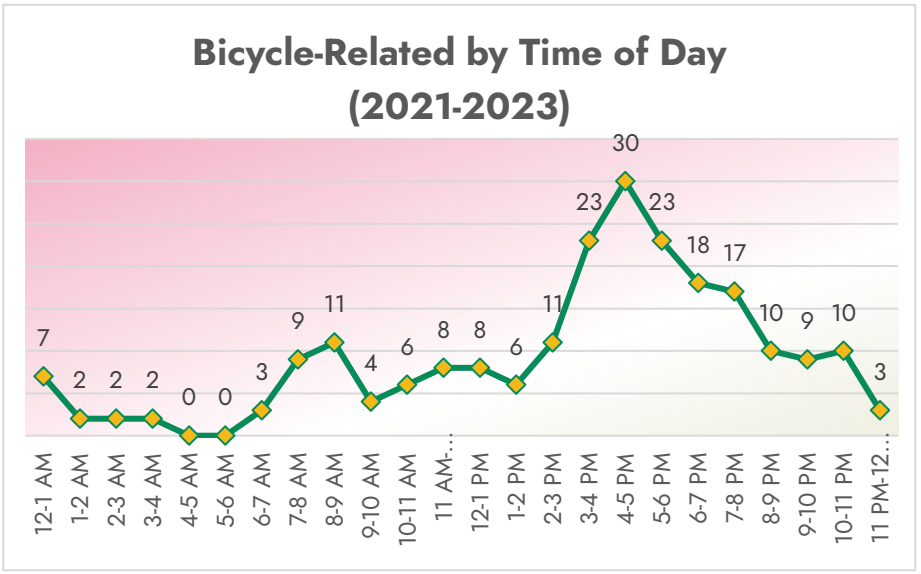


The chart to the right shows where most bicycle-related crashes occur. Nearly two out of three of these crashes occur along road segments, while just over one third occur at intersections. Many bicycle riders, especially younger ones, may not obey stop signs and traffic signals which leads to intersection-related crashes. Often a vehicle does not see a bicycle because of their narrow profile and turns into it or pulls in front of it. Sometimes a driver is not expecting a bicycle in the crosswalk or misjudges its approach speed. If a rider is bicycling against traffic a driver may not look that direction when turning into or pulling out of another street or driveway.

The two charts on the following page show bicycle-related crashes by month and by time of day. Unlike other crashes, those involving bicycles tend to be concentrated in the warmer months. Most crashes occur in summer and early fall when bicycle riding conditions are most favorable. Crashes are also more common later in the afternoon and into early evening than during other times of day.

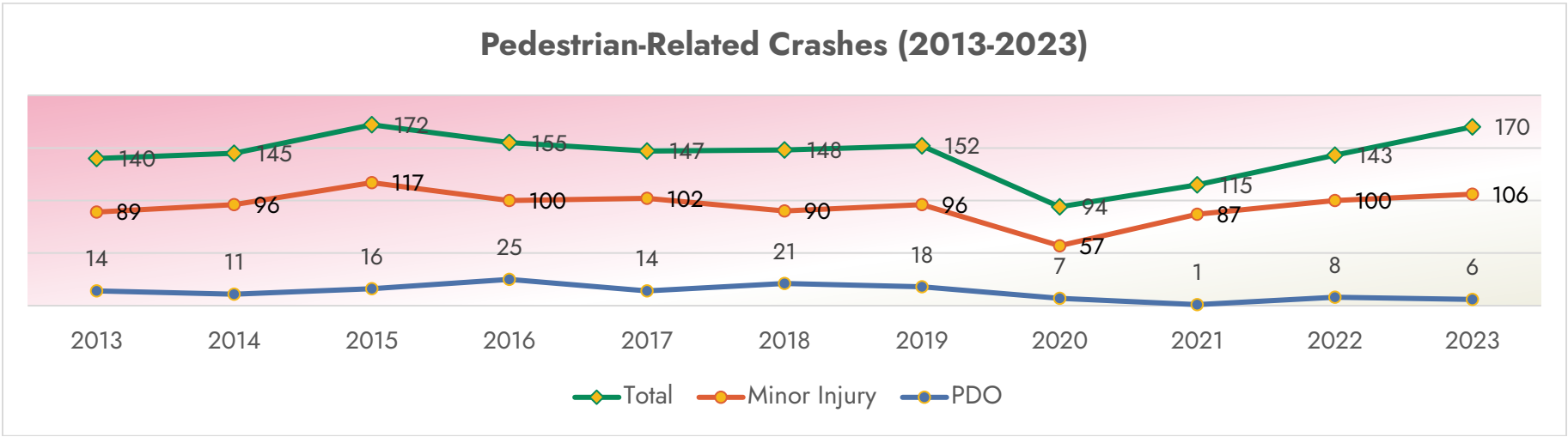


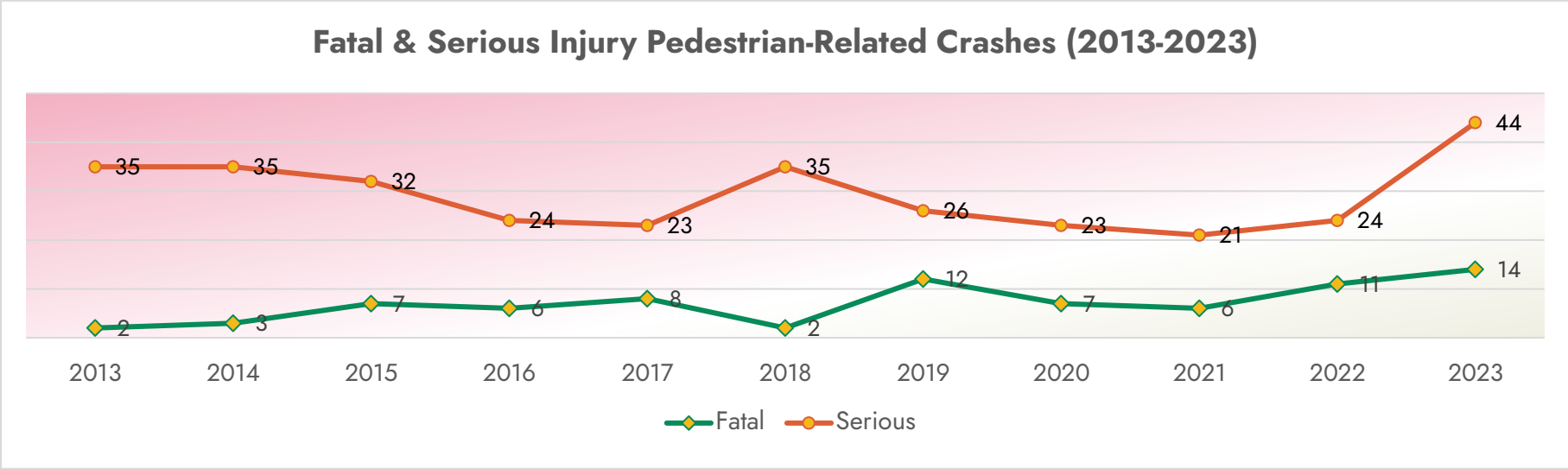




Pedestrian-Related Crashes

The number of pedestrian-related crashes and injuries has increased steadily and significantly since the atypically low number of such crashes in 2020, and 2023's pedestrian crash totals were unfortunately the second-highest number (170) of the ten-year period. Between 2021 and 2023 there were 428 pedestrian-related crashes with 382 (serious and minor) injuries and 31 fatalities. This means that nearly all (96.5%) pedestrian-related crashes resulted in injury or fatality. Overall, pedestrian fatalities accounted for 31 out of 190, or over 16.3%, of all fatalities over the three-year period. The two charts below and on the following page show pedestrian related crashes by year going back to 2013. Pedestrian crashes are broken down into two charts to show the different severity levels of crashes.

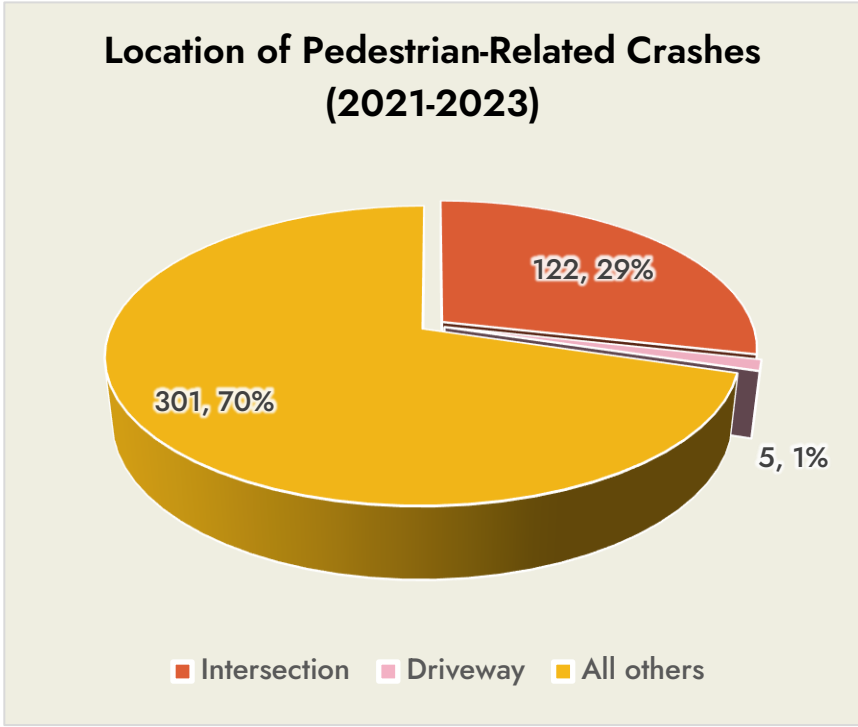


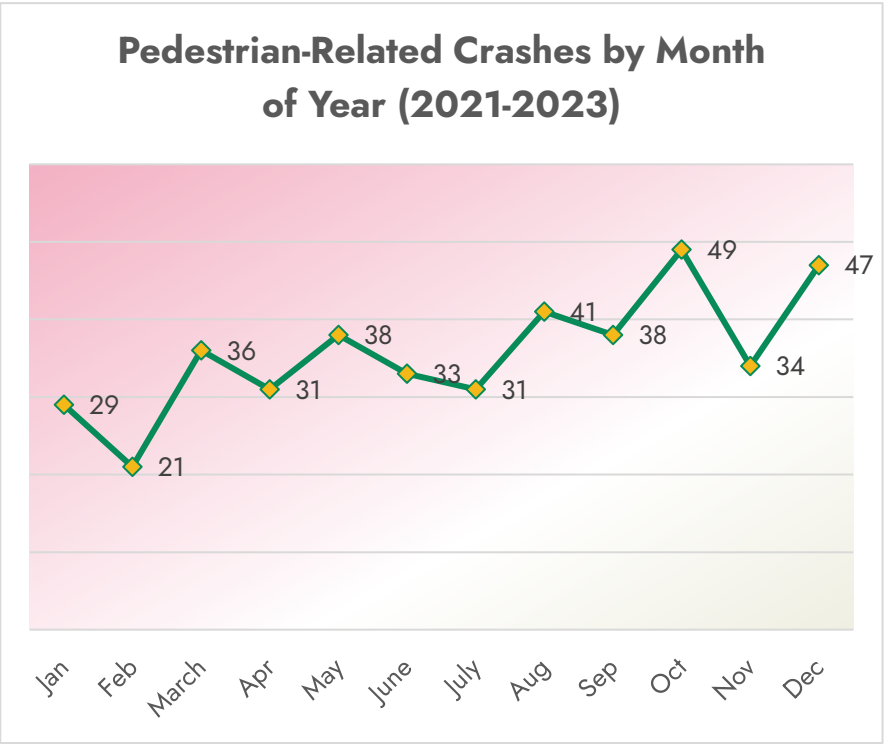


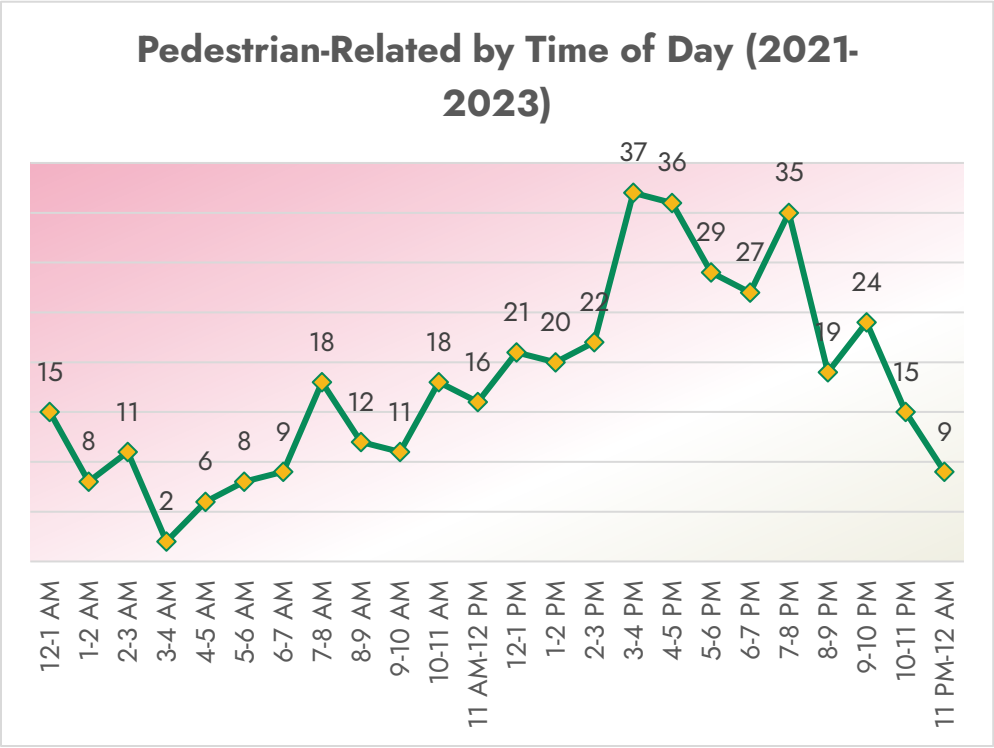
Pedestrian crashes are more likely to occur away from intersections. However, as shown in the graph to the right, a sizeable minority (29%) of pedestrian crashes occurred at an intersection within the 2021-2023 timeframe. Many pedestrian crashes that are intersection-related occur as a vehicle is turning and does not see the pedestrian. Others involve pedestrians crossing the street against traffic signals.

The graphs on the following page show the month and time of day that pedestrian-related crashes occurred. October has almost invariably been the month with the most incidents each year. A likely reason that October has the most incidents is the decreasing amount of daylight along with weather that is still reasonably nice. Pedestrians are still active but are harder to see in darkness even if streetlights are present.

Similar to bicycle-related crashes, pedestrian crashes are most common in the later afternoon and especially the early evening hours. Pedestrian crashes commonly occur during dusk and into the earlier hours of darkness, during times when larger numbers of pedestrians are still active but when light conditions are less than optimal. There is a much less-pronounced spike in morning pedestrian-related crashes from 7-9 a.m. It is likely that this is a time when many pedestrians are commuting to work or school, often in dark conditions.

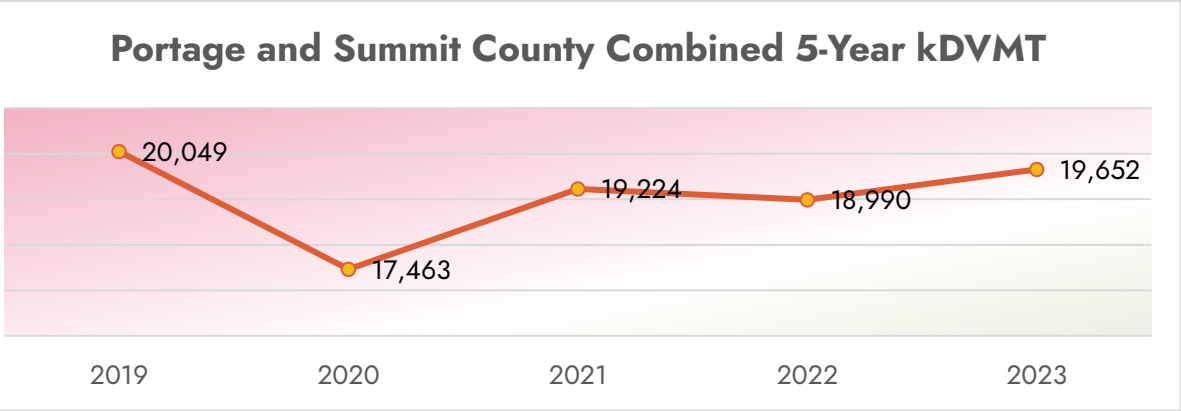






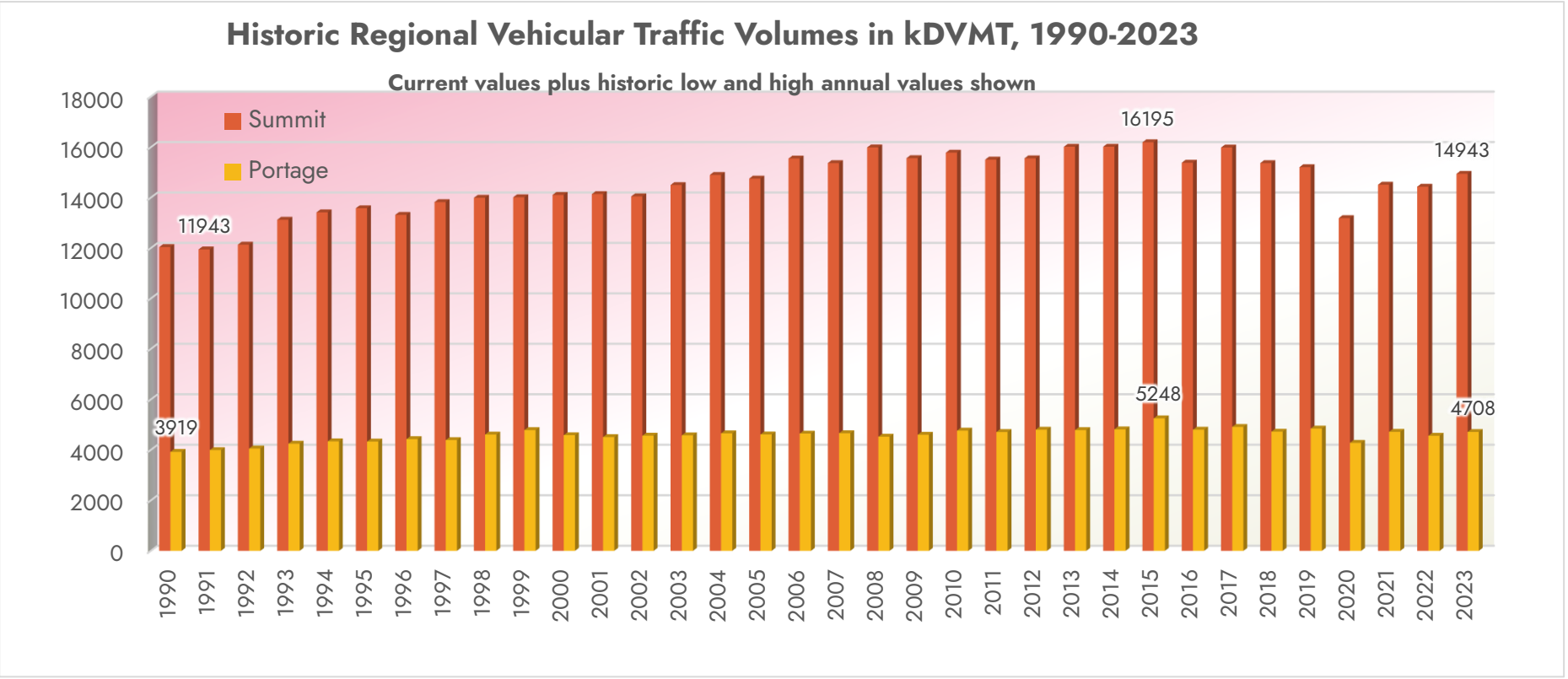
Travel Patterns

The amount of vehicular traffic is measured as Vehicle Miles Traveled (VMT), and often reported as thousands of daily vehicle miles traveled (kDVMT). As shown in the graph to the right, regional* kDVMT has changed significantly within the past five years, as shown in the graph to the right. The COVID-19 Pandemic in 2020 substantially disrupted VMT trends, and its decrease also led to a reduction in overall crashes. The kDVMT rebounded significantly in 2021, as traffic patterns returned to a somewhat normal level, and volumes have



fluctuated modestly since. 2023's regional kDVMT—up 3.5% from 2022—is only 2.0% below the pre-pandemic (2019) value. However, kDVMT is still approximately 8.4% below the combined (two-county) 2015 peak of 21,443 kDVMT. A longer view of regional kDVMT (1990 to 2023) is displayed on the graph below.

**This data, obtained from the ODOT Office of Technical Services, provides data at the county level of geography. Because the section of Wayne County within the AMATS planning area cannot reliably be extracted from the overall Wayne County kDVMT values, regional totals refer only to the combined Portage and Summit County values, omitting any Wayne County values.*



With a decreasing regional population and changing travel patterns, there is reason to believe that volumes may never fully rebound completely from historic highs from about a decade ago. A significant increase in flexible/in-home work, generational variances in how people travel, and continuing investment in the active transportation (bicycle and pedestrian) and transit networks may all combine to make other modes of transportation more accessible and safer to a larger population.

Section 3: Crash Locations

Overview

The AMATS 2021-2023 Annual Crash Report (ACR) considers 47,638 crash records obtained from the Ohio Department of Transportation (ODOT) during the three-year period. This number reflects all crashes occurring within the AMATS planning area, **except** for animal crashes and construction zone crashes. These were removed and not included in the analysis because they do not relate to the characteristics of the roadway.

Each crash record contains geographic coordinates to pinpoint the location of each crash, and various additional information about the type of crash and the circumstances leading to the crash. AMATS imports the coordinate data into GIS to map the locations of each crash. It is (1.) carefully checked for location accuracy and (2.) crashes are then categorized as section or intersection crashes. The roadway section and intersection locations are further analyzed and then ranked.

Methodology

The *2021-2023 ACR* uses Geographical Information System (GIS) coordinates to plot crashes. Occasionally, the coordinates are incorrect in the imported data and crashes must be manually moved to their proper location based on descriptions on police reports provided to AMATS. This is time-consuming, but necessary for an accurate report.

Another challenge is determining if crashes are section or intersection related. Not all crashes that occur near an intersection are classified as intersection related. An example would be a crash occurring as vehicles are departing an intersection. Another would be when crashes occur at a driveway near the intersection. The final decision made by AMATS is based on the location of the vehicles and the nature of the crash.

Once crashes are properly identified as intersection or section related, the crash is assigned a unique identification number by AMATS for sorting of the crashes. The final step in GIS is to sum up all the crashes that occur within each unique intersection or section.

Once a GIS analysis is completed by AMATS, a list of high crash sections and intersections is produced. This criterion is focused on crash severity and the number to crashes. The following are the minimum criteria used to be considered a "high crash" location.

- The high crash criterion for roadway sections is three or more crashes per mile per year.
- The high crash criterion for intersections is nine or more crashes in the three-year period.
- A minimum of 30% of the crashes at a location must be non-PDO (fatal or injury-related) for both roadway sections and intersections to be considered a high crash location.

Once the locations that meet the minimum criteria are obtained a final score is calculated based on a combined score of two ranks. The location is ranked according to total number of crashes and ranked according to the percentage of fatal and injury crashes. The lowest number once these ranks are combined is the worst. For example, ranks #3 plus #5 would be a worse location than ranks #10 and #12 combined.

Freeway crashes are reflected in crash totals and in describing the trends, but they do not show up in the high-crash section and intersection lists described below. ODOT has its own process for analyzing and ranking freeway-related crashes and AMATS does not duplicate this analysis since ODOT maintains the freeway network. For additional information, see the *High Crash Freeway Sections* subsection.

High Crash Roadway Sections

A *section*—sometimes also called a *segment*—is defined as a length of roadway between two logical termini such as intersections with other roadways. Throughout the AMATS planning area, the length of defined sections can vary considerably. Typically, sections are usually shorter in urban areas but can be several miles long in a rural area. All roads in the AMATS area were considered, including those that are not federally classified.

AMATS identified 138 high crash roadway sections that have three or more crashes per mile per year (9 total for the three-year period) and at least 30 percent of the crashes are fatal or injury-related over the three-year period. The top-ranked sections are shown on the table to the right, along with how those sections have ranked in the previous two years.

Top-10 2023 High Crash Sections and Comparison to Prior Ranks

2023 Overall Rank	*2022 Overall Rank*	*2021 Overall Rank*	*Roadway Section*	*Location*
1	1	1	SR 59 from Alpha Dr to SR 261	Franklin Twp
2	6	9	E Main St (SR 59) from Freedom St (SR 88) to SR 14/SR 44	Ravenna/Ravenna Twp
3	42	n/a	Fairchild Ave from Majors Lane to N Mantua St	Kent
4	24	12	N Main St (SR 261) from Olive St (W) to E Tallmadge Ave (SR 261)	Akron
5	12	51	E Glenwood Ave from Howard St to SR 8	Akron
6	7	54	Copley Rd (SR 162) from Collier Rd to St Micheals	Akron/Copley Twp
6	n/a	n/a	W Cedar St from Dart Ave to Locust St	Akron
8	2	1	Massillon Rd (SR241) from Krumroy Rd (CR 130) to Oakes Dr / Akron SCL	Springfield Twp
8	53	n/a	E Main St (SR 59) from Horning Rd to Kent East Corp Line	Kent/Franklin Twp
10	22	21	W Turkeyfoot Lake Rd (SR 619) from Green West Corp Line to S Main St	Green

Table 1 lists the 138 high crash roadway sections ranked by composite score. This table also notes if any crashes were bicycle or pedestrian-related and if any of these sections are on the *Safe Streets for All High Injury Network (SS4A HIN)*. A location in red font indicates at least one fatality. There are 16 sections that had at least one fatality. There are 32 sections that are also on the SS4A HIN, representing approximately 23.2% of the high crash roadway sections in **Table 1**.

Map 1 shows the top 50 high crash roadway sections.

Table 1: High Crash Sections (2021-2023)

Overall Rank	Roadway Section	Length (miles)	Total Crashes	Crashes per Mile per Year	Crash Rank	Fatal & Injury Percent	Fatal & Injury Rank	Total Rank Score	Bike Related	Ped Related	SS4A HIN	Location
1	SR 59 from Alpha Dr to SR 261	0.41	12	9.76	28	75.00%	2	30	0	0	No	Franklin Twp
2	E Main St (SR 59) from Freedom St (SR 88) to SR 14/SR 44	0.75	38	16.89	8	44.74%	25	33	0	0	No	Ravenna/Ravenna Twp
3	Fairchild Ave from Majors Lane to N Mantua St	0.33	10	10.10	27	50.00%	15	42	0	0	No	Kent
4	N Main St (SR 261) from Olive St (W) to E Tallmadge Ave (SR 261)	0.32	14	14.58	13	42.86%	31	44	0	0	No	Akron
5	E Glenwood Ave from Howard St to SR 8	0.84	21	8.33	41	52.38%	14	55	0	1	No	Akron
6	Copley Rd (SR 162) from Collier Rd to St Micheals	0.50	11	7.33	48	54.55%	10	58	0	0	No	Akron/Copley Twp
6	W Cedar St from Dart Ave to Locust St	0.28	10	11.90	17	40.00%	41	58	0	1	No	Akron
8	Massillon Rd (SR241) from Krumroy Rd (CR 130) to Oakes Dr / Akron SCL	0.29	10	11.49	19	40.00%	41	60	0	0	No	Springfield Twp
8	E Main St (SR 59) from Horning Rd to Kent East Corp Line	0.50	45	30.00	2	37.78%	58	60	0	1	No	Kent/Franklin Twp
10	W Turkeyfoot Lake Rd (SR 619) from Green West Corp Line to S Main St	0.50	14	9.33	34	42.86%	31	65	0	1	No	Green
11	Vernon Odom Blvd (SR 261) from Collier Rd / Akron Corp Line to Romig Rd	0.36	7	6.48	60	57.14%	6	66	0	2	No	Akron
11	W Wilbeth Rd from East Ave to Kenmore Blvd	0.36	7	6.48	60	57.14%	6	66	0	0	No	Akron
13	W North St from W Market St (SR 18) to N Howard St	0.74	15	6.76	58	53.33%	12	70	0	2	Yes	Akron
13	State Rd from Cuyahoga Falls Corp Line to Broad Blvd	0.66	32	16.16	11	37.50%	59	70	0	1	No	Cuyahoga Falls
15	Canton Rd (SR 91) from Waterloo Rd (US224) to Akron SCL	0.72	19	8.80	36	42.11%	37	73	0	2	Yes	Akron/Springfield Twp
16	W Thornton St from East Ave to Rhodes Ave	0.70	14	6.67	59	50.00%	15	74	0	1	No	Akron
17	Darrow Rd (SR 91) from Twinsburg SCL (E-W) to E Highland Rd	0.90	17	6.30	62	52.94%	13	75	0	0	No	Twinsburg
18	S Frank Blvd from White Pond Dr to W Market St (SR 18)	0.44	8	6.06	64	50.00%	15	79	0	0	No	Akron
18	SR 59 from Brady Lake Rd (CR 162) to Ravenna West Corp Line	0.45	22	16.30	10	36.36%	69	79	0	0	No	Ravenna Twp
20	E Thornton St from Grant St to Brown St	0.43	9	6.98	53	44.44%	27	80	0	0	No	Akron
21	S Turkeyfoot Rd from Turkeyfoot Lake Rd (SR 619) to New Franklin North Corp Line	0.67	14	6.97	54	42.86%	31	85	0	0	No	New Franklin
22	M.L. King Blvd (SR 59) from W Market St Overpass to N Broadway St	0.18	24	44.44	1	33.33%	85	86	0	0	Yes	Akron
23	S Maple St (SR 162) from W Exchange St to Glendale Ave	0.47	7	4.96	83	57.14%	6	89	0	1	No	Akron
24	W Streetsboro St (SR 303) from Nicholson Dr to Boston Mills Rd	0.79	17	7.17	51	41.18%	40	91	0	0	No	Hudson
24	Copley Rd (SR 162) from Storer Ave to East Ave	0.36	27	25.00	6	33.33%	85	91	1	1	Yes	Akron
26	W Turkeyfoot Lake Rd (SR 619) from State St to New Franklin East Corp Line	0.81	14	5.76	67	42.86%	31	98	0	0	No	New Franklin
27	W Main St (SR 59) from Diamond St to Sycamore St	0.37	15	13.51	14	33.33%	85	99	0	0	No	Ravenna
28	Cuyahoga St from Uhler Ave to Sackett Ave	1.47	20	4.54	96	60.00%	4	100	0	1	No	Akron
28	E Waterloo Rd (US 224) from Geo Washington Blvd (SR 241) to Akron Corp Line	0.51	17	11.11	20	35.29%	80	100	0	0	No	Akron
30	S Case Ave from Arlington St to E Market St (SR 18)	0.24	9	12.50	16	33.33%	85	101	0	1	No	Akron
31	W Cedar St from Rhodes Ave to Dart Ave	0.57	13	7.60	46	38.46%	56	102	0	1	No	Akron
32	Robinson Ave from 5th St (SR 619) to State St	1.05	27	8.57	39	37.04%	65	104	0	1	No	Barberton
33	Dart Ave/Ash St from Center St to W Mill St	0.28	5	5.95	65	40.00%	41	106	0	0	No	Akron
33	SR 59 from SR 261 to Brady Lake Rd (CR 162)	2.55	72	9.41	33	36.11%	73	106	0	2	Yes	Franklin Twp/Ravenna Twp
35	Hill St/E Buchtel Ave from University Ave to S Union St	0.33	4	4.04	105	75.00%	2	107	0	0	No	Akron
35	Massillon Rd/Geo Washington (SR 241) from Oakes Dr to E Waterloo Rd (US 224)	0.55	18	10.91	22	33.33%	85	107	0	0	No	Akron
37	Boulevard St from South St to Dart Ave	0.29	4	4.60	94	50.00%	15	109	0	0	No	Akron
37	W Aurora Rd/Ravenna Rd (SR 82) from Darrow Rd (SR 91) to Aurora Rd	1.16	20	5.75	68	40.00%	41	109	0	0	No	Twinsburg
37	Vernon Odom Blvd (SR 261) from Romig Rd to S Hawkins Ave	1.23	38	10.30	25	34.21%	84	109	0	0	No	Akron
40	Winton Ave from Vernon Odom Blvd (SR 261) to Stoner St	0.46	7	5.07	79	42.86%	31	110	0	0	No	Akron

Table 1: High Crash Sections (2021-2023)

Overall Rank	Roadway Section	Length (miles)	Total Crashes	Crashes per Mile per Year	Crash Rank	Fatal & Injury Percent	Fatal & Injury Rank	Total Rank Score	Bike Related	Ped Related	SS4A HIN	Location
41	East Ave from Munroe Rd to Tallmadge ECL	1.21	18	4.96	84	44.44%	27	111	0	1	No	Tallmadge
41	N Main St (SR 91) from Munroe Falls Ave to N River Rd	0.39	12	10.26	26	33.33%	85	111	0	0	No	Munroe Falls
43	SR 14 from Diagonal Rd to Streetsboro East Corp Line	1.30	30	7.69	44	36.67%	68	112	0	0	Yes	Streetsboro
43	SR 14 from Cleveland Rd (CR 171) to Infirmary Rd (CR 164)	0.47	11	7.80	43	36.36%	69	112	0	0	No	Ravenna Twp
45	Prospect St (CR 74) from SR 5/44 to Hayes Rd (CR 138)	1.70	26	5.10	77	42.31%	36	113	0	1	Yes	Rootstown Twp/Ravenna Twp
45	SR 14/44 from SR 59 to SR 5 (end SR 14 overlap)	0.39	31	26.50	4	32.26%	109	113	0	0	No	Ravenna Twp
47	Canton Rd (SR 91) from Akron SCL to Triplett Blvd	0.33	28	28.28	3	32.14%	111	114	0	0	No	Akron
48	N Cleveland Ave (SR 532) from Mogadore Rd to Mogadore North Corp Line	1.08	16	4.94	85	43.75%	30	115	0	0	Yes	Mogadore
48	SR 14 from I-76 to SR 183	0.78	16	6.84	56	37.50%	59	115	0	0	No	Edinburg Twp
50	E Thornton St from S Main St to Grant St	0.42	12	9.52	31	33.33%	85	116	0	0	No	Akron
51	Wabash Ave from W Cedar St to W Exchange St	0.09	1	3.70	116	100.00%	1	117	0	0	No	Akron
51	Snyder Ave from Van Buren Ave to 5th St SE	0.65	10	5.13	76	40.00%	41	117	0	0	No	Barberton
51	Copley Rd/S Maple St (SR 162) from Diagonal Rd/S Portage Path to W Exchange St	0.33	25	25.25	5	32.00%	112	117	0	1	Yes	Akron
54	Ravenna Rd from Shepard Rd to Chamberlin Rd	0.79	10	4.22	103	50.00%	15	118	1	0	Yes	Twinsburg
55	S Hawkins Ave from Vernon Odom Blvd (SR 261) to Copley Rd (SR 162)	1.31	27	6.87	55	37.04%	65	120	0	1	Yes	Akron
55	Wooster Rd N from Hopocan Ave to Norton Ave	0.67	17	8.46	40	35.29%	80	120	0	0	No	Barberton
55	SR 14/44 from Ravenna NE Corp Line to SR 59	1.00	27	9.00	35	33.33%	85	120	0	0	No	Ravenna Twp/Ravenna
58	Norton Ave/Fairview Ave from Wooster Rd N to 5th St NE (SR 619)	0.33	5	5.05	80	40.00%	41	121	0	0	No	Barberton
59	E Turkeyfoot Lake Rd (SR 619) from S Main St to Arlington Rd	1.56	37	7.91	42	35.14%	82	124	0	1	No	Green
60	W Miller Ave from Lakeshore Blvd to S Main St	0.64	14	7.29	50	35.71%	75	125	0	1	No	Akron
61	W Aurora Rd (SR 82) from Cuyahoga County Line to Olde Eight Rd (CR 16)	2.69	38	4.71	90	42.11%	37	127	0	0	Yes	Sagamore Hills/Northfield Cntr Twp
61	Triplett Blvd (SR 764) from S Arlington St to Seiberling St	1.13	18	5.31	74	38.89%	53	127	1	1	No	Akron
61	East Ave from Iona Ave to Morse St	0.89	31	11.61	18	32.26%	109	127	0	0	No	Akron
64	E Market St (SR 18) from E Exchange St to Seiberling St	1.12	37	11.01	21	32.43%	107	128	0	1	Yes	Akron
64	W Market St (SR 18) from Hawkins Ave to Twin Oaks Rd	0.82	38	15.45	12	31.58%	116	128	1	0	No	Akron
66	Robinson Ave (CR 54) from State St (CR162) to Manchester Rd (SR 93)	0.78	18	7.69	44	33.33%	85	129	0	1	No	Barberton/Coventry Twp
67	US422 from Geauga County Line to Trumbull County Line	1.93	22	3.80	115	50.00%	15	130	0	0	No	Nelson Twp
68	Sycamore St from W Main St (SR 59) to Highland Ave	0.18	2	3.70	116	50.00%	15	131	0	0	No	Ravenna
69	SR 585 from Benner Rd to SR 57	1.20	12	3.33	127	58.33%	5	132	0	0	No	Milton Twp
69	Rand Ave from Center St to W Market St (SR 18)	0.40	9	7.50	47	33.33%	85	132	0	0	No	Akron
71	Great Lakes Blvd (SR 21) from Clinton Rd (CR 100) to Eastern Rd (CR 150)	3.23	38	3.92	108	44.74%	25	133	0	0	No	Chippewa Twp
72	Highland Rd from Twinsburg WCL to Darrow Rd (SR 91)	0.76	9	3.95	107	44.44%	27	134	0	1	No	Twinsburg
73	SR 44 from Hartville Rd (CR 69) to Tallmadge Rd (CR 18)	1.42	14	3.29	129	57.14%	6	135	0	0	No	Rootstown Twp
74	W Wilbeth Rd from Kenmore Blvd to Maryland Ave	0.77	8	3.46	121	50.00%	15	136	0	2	No	Akron
75	SR 14 from SR 5 to I-76	4.48	67	4.99	82	38.81%	55	137	0	0	Yes	Ravenna Twp/Edinburg Twp
75	Fuller St from 7th Ave to 5th Ave	0.28	6	7.14	52	33.33%	85	137	0	0	No	Akron
77	E North St/Home Ave from N Arlington St to E Tallmadge Ave (SR 261)	1.13	15	4.42	98	40.00%	41	139	0	0	No	Akron
78	Ghent Rd from W Market St (SR 18) to Smith Rd	0.38	5	4.39	99	40.00%	41	140	0	0	No	Fairlawn
78	Smith Rd from Sand Run Rd to Riverview Rd	1.23	18	4.88	87	38.89%	53	140	0	0	Yes	Akron/Cuyahoga Falls
78	Graham Rd from Fishcreek Rd to Stow East Corp Line	0.66	33	16.67	9	30.30%	131	140	0	0	No	Stow
78	Copley Rd (SR 162) from East Ave to Diagonal Rd/S Portage Path	0.38	20	17.54	7	30.00%	133	140	0	1	No	Akron

Table 1: High Crash Sections (2021-2023)

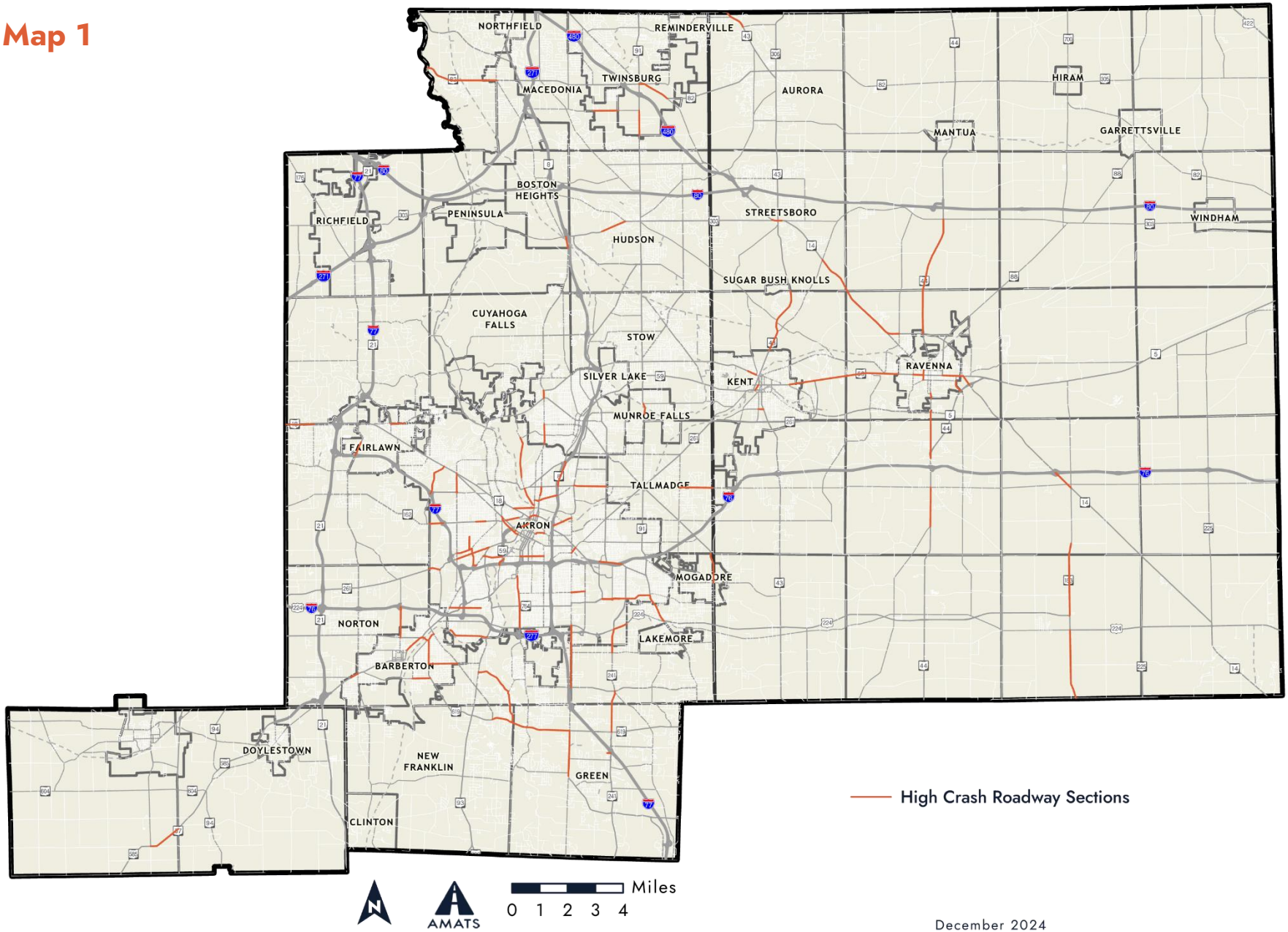
Overall Rank	Roadway Section	Length (miles)	Total Crashes	Crashes per Mile per Year	Crash Rank	Fatal & Injury Percent	Fatal & Injury Rank	Total Rank Score	Bike Related	Ped Related	SS4A HIN	Location
82	Northampton Rd from Portage Trail to Bath Rd	2.36	30	4.24	102	40.00%	41	143	0	0	No	Akron/Cuyahoga Falls
83	North Ave / S Main St (SR 91) from Howe Rd to Northmoreland Ave	0.89	13	4.87	88	38.46%	56	144	0	0	No	Tallmadge/Munroe Falls
83	Carnegie Ave from Sarlson Ave to Manchester Rd (SR 93)	1.41	22	5.20	75	36.36%	69	144	0	0	No	Akron
85	SR 183 from US 224 to Clark Rd (TR 121)	2.60	24	3.08	134	54.17%	11	145	0	0	No	Atwater Twp/Edinburg Twp
86	N Portage Path from Garman Rd to Merriman Rd	1.32	34	8.59	38	32.35%	108	146	0	0	No	Akron
86	Mogadore Rd from E Market St (SR 18) to Canton Rd (SR 91)	0.92	29	10.51	23	31.03%	123	146	0	0	Yes	Akron
88	Wooster Rd N from Norton Ave to State St	0.50	20	13.33	15	30.00%	133	148	0	0	No	Barberton
89	Arlington Rd from Greensburg Rd to Turkeyfoot Lake Rd (SR 619)	1.68	52	10.32	24	30.77%	125	149	0	0	No	Green
90	US 224 from Cleve Ave (SR532)/Por Line Rd to SR 43	2.40	22	3.06	135	50.00%	15	150	0	0	No	Suffield Twp
91	Buchholzer Blvd from Independence Ave to Howe Ave	0.57	8	4.68	92	37.50%	59	151	0	0	No	Akron/Cuyahoga Falls
92	SR 303 from Page Rd to Streetsboro East Corp Line	1.51	15	3.31	128	46.67%	24	152	0	0	Yes	Streetsboro
92	SR 43 from Kent North Corp Line to Streetsboro South Corp Line	2.40	63	8.75	37	31.75%	115	152	0	0	Yes	Franklin Twp
94	Orlando Ave from Courtland Ave to Copley Rd (SR 162)	0.87	15	5.75	68	33.33%	85	153	0	1	No	Akron
95	East Ave from Akron Corp Line to Iona Ave	0.90	26	9.63	29	30.77%	125	154	0	0	Yes	Akron
96	Albrecht Ave from Canton Rd (SR 91) to Akron Corp Line	0.70	12	5.71	70	33.33%	85	155	1	0	Yes	Akron
96	Goodyear Blvd from Kelly Ave to Brittain Rd	0.70	12	5.71	70	33.33%	85	155	0	0	No	Akron
98	SR 303 from Diagonal Rd (Streetsboro) to Diagonal Rd (Shalersville Twp)	0.91	10	3.66	119	40.00%	41	160	0	0	No	Streetsboro/Shalersville Twp
99	Medina Rd (SR 18) from Medina Line Rd (CR 2) to S Hametown Rd (CR253)	1.00	22	7.33	48	31.82%	113	161	0	0	No	Copley Twp/Bath Twp
99	SR 43 from I-76 to Kent South Corp Line	1.61	46	9.52	31	30.43%	130	161	0	0	Yes	Brimfield Twp
99	5th St NE (SR 619) from Robinson Ave to State St	1.15	33	9.57	30	30.30%	131	161	0	1	No	Barberton
102	S Seiberling St from Martha Ave to E Market St (SR 18)	0.49	5	3.40	122	40.00%	41	163	0	0	No	Akron
103	SR 183 from German Church Rd (TR 49) to Waterloo Rd (US 224)	2.48	25	3.36	126	40.00%	41	167	0	0	Yes	Atwater Twp
104	SR 5/44 from Prospect St to SR 14	3.04	29	3.18	130	41.38%	39	169	0	0	No	Rootstown Twp/Ravenna Twp/Ravenna
105	W Bath Rd from Riverview Rd to Cuy Falls Corp Line	1.02	14	4.58	95	35.71%	75	170	0	0	No	Akron
106	Massillon Rd (SR241) from Killian Rd (CR135) to Krumroy Rd (CR130)	1.39	16	3.84	114	37.50%	59	173	0	0	No	Springfield Twp
107	W Streetsboro Rd (SR303) from Richfield ECL (S) to Black Rd (CR169)	0.72	8	3.70	116	37.50%	59	175	0	0	Yes	Richfield Twp
108	Lake St from N Water St to Kent ECL	1.08	14	4.32	101	35.71%	75	176	0	0	Yes	Kent
108	Smith Rd from W Market St (SR 18) to Ghent Rd	0.64	9	4.69	91	33.33%	85	176	0	0	No	Fairlawn
110	Wooster Rd W from ramp to NB SR 21 to Johnson Rd	1.19	14	3.92	108	35.71%	75	183	0	0	No	Norton/Barberton
111	Bailey Rd from Howe Ave to Northmoreland Blvd	0.92	12	4.35	100	33.33%	85	185	0	0	No	Cuyahoga Falls
112	Northeast Ave (SR 261) from Tallmadge Circle to E Howe Rd/N Munroe Rd	1.74	19	3.64	120	36.84%	67	187	0	0	No	Tallmadge
113	N Forge St from Fountain St to N Arlington St	0.70	13	6.19	63	30.77%	125	188	0	1	No	Akron
114	W Bath Rd from Akron/Cuy Falls CL to Northampton Rd	1.18	19	5.37	73	31.58%	116	189	0	0	Yes	Cuyahoga Falls
115	E Archwood Ave from S Arlington St to Kelly Ave	0.49	10	6.80	57	30.00%	133	190	0	1	Yes	Akron
116	Akron Rd (SR 585) from Mt Eaton Rd N Jct (SR 94) to Doylestown Rd (CR 70)	1.71	16	3.12	132	37.50%	59	191	0	0	Yes	Chippewa Twp
116	Darrow Rd (SR 91) from Middleton Rd to Hudson North Corp Line	0.50	6	4.00	106	33.33%	85	191	0	0	No	Hudson
116	Russell Ave/Superior Ave from East Ave to Diagonal Rd	0.74	13	5.86	66	30.77%	125	191	0	0	No	Akron
119	S Main St from Center Rd to Turkeyfoot Lake Rd (SR 619)	2.24	26	3.87	111	34.62%	83	194	0	0	Yes	New Franklin/Green
120	Garfield Rd E (SR 82) from Chillicothe Rd (SR 306) to Town Line Rd	2.46	25	3.39	124	36.00%	74	198	0	0	Yes	Aurora/Mantua Twp
120	N Freedom St (SR 88) from SR 14/SR 44 to Ravenna North Corp Line	0.26	3	3.85	113	33.33%	85	198	0	0	No	Ravenna

Table 1: High Crash Sections (2021-2023)

Overall Rank	Roadway Section	Length (miles)	Total Crashes	Crashes per Mile per Year	Crash Rank	Fatal & Injury Percent	Fatal & Injury Rank	Total Rank Score	Bike Related	Ped Related	SS4A HIN	Location
122	W Aurora Rd (SR 82) from Twinsburg WCL to I-480	1.90	29	5.09	78	31.03%	123	201	0	1	No	Twinsburg
123	N Munroe Rd from East Ave to E Howe Rd/Northeast Ave (SR261	1.18	11	3.11	133	36.36%	69	202	0	0	No	Tallmadge
123	SR 43 from Streetsboro South Corp Line to SR 303	2.58	38	4.91	86	31.58%	116	202	1	0	No	Streetsboro
125	Copley Rd (SR162) from Jacoby Rd (CR205) to Collier Rd (CR 28) / Akron WCL	1.84	30	5.43	72	30.00%	133	205	0	0	No	Copley Twp
126	Cuyahoga St/Northampton Rd from Sackett Ave to Portage Trail	0.86	13	5.04	81	30.77%	125	206	0	1	No	Akron/Cuyahoga Falls
127	Diagonal Rd from S Hawkins Ave to Superior Ave	0.59	6	3.39	123	33.33%	85	208	0	0	No	Akron
128	Eastland Ave from Brittain Rd/Eastwood Ave to Akron Corp Line	0.89	9	3.37	125	33.33%	85	210	0	0	No	Akron
128	E State St (SR 619 part) from Wooster Rd N to Robinson Ave	1.63	22	4.50	97	31.82%	113	210	0	0	No	Barberton
130	Eastland Ave from Newton St to Brittain Rd/Eastwood Ave	1.14	16	4.68	92	31.25%	119	211	0	1	No	Akron
131	SR 44 from US 224 to Hartville Rd (CR 69)	3.41	31	3.03	137	35.48%	79	216	0	1	No	Randolph Twp/Rootstown Twp
131	Murray Ave from Cuyahoga Falls Ave to Riverside Dr	0.63	6	3.17	131	33.33%	85	216	0	0	No	Akron
133	Copley Rd (SR162) from SR 21 centerline to Cleveland-Massillon Rd (CR 17)	0.66	6	3.03	137	33.33%	85	222	0	0	No	Copley Twp
133	Portage Lakes Dr (CR 75) from Manchester Rd (SR 93) to S Turkeyfoot Rd (CR123)	1.38	20	4.83	89	30.00%	133	222	1	0	Yes	Coventry Twp
135	Killian Rd (CR135) from Massillon Rd (SR241) to Myersville Rd (CR184)	1.37	16	3.89	110	31.25%	119	229	0	0	No	Springfield Twp
136	E North St from N Howard St to N Arlington St	1.38	16	3.86	112	31.25%	119	231	0	0	Yes	Akron
137	Main St (SR 303) from Peninsula West Corp Line to Riverview Rd	1.61	20	4.14	104	30.00%	133	237	0	0	Yes	Peninsula
138	Norton Rd from Darrow Rd (SR 91) to Stow Rd	1.75	16	3.05	136	31.25%	119	255	0	0	No	Stow/Hudson

Top 50 High Crash Roadway Sections 2021-2023

Map 1



December 2024

High Crash Intersections

Crashes that occur within a radius of 250 feet from the center of an intersection and involve at least two vehicles are usually considered an intersection-related crash. Exceptions to this rule were driveway-related crashes and crashes that had non-intersection characteristics such as departing from the intersection. All intersections in the AMATS area were considered, including those of roads that are not federally classified.

AMATS identified 245 intersections (235 overall ranks) that have a minimum of 9 crashes and at least 30 percent of the crashes are fatal or injury-related over the three-year period. The top-ranked intersections are shown on the table to the right, along with how those intersections have ranked in the previous two years.

Top-10 2023 High Crash Intersections and Comparison to Prior Ranks

2023 Overall Rank	*2022 Overall Rank*	*2021 Overall Rank*	*Street and Intersection Street*	*Location*
1	1	2	SR 14 and SR 44/N Chestnut St	Ravenna Twp/Ravenna
2	2	28	Riverview Rd and Ira Rd	Cuyahoga Falls
3	45	54	SR 14/44 and N Freedom St (SR 88)	Ravenna
4	33	57	Hudson Dr and Steels Corners Rd/Allen Rd	Stow
5	29	44	S Maple St (SR 162) and W Cedar St	Akron
5	15	59	SR 261 and Summit Rd	Franklin Twp
7	7	17	Wadsworth Rd (SR 57) and Easton Rd (SR 604)	Chippewa Twp/Milton Twp
8	43	74	Rhodes Ave and W Thornton St	Akron
9	8	4	SR 261 and Mogadore Rd	Kent
10	132	n/a	S Main St and Waterloo Rd	Akron

Table 2 lists the 245 high crash intersections ranked by composite score. This table also notes if any crashes were bicycle or pedestrian-related and if any of these intersections are also on the Safe Streets for All High Injury Network (SS4A HIN). A location in red font indicates at least one fatality. 19 of these intersections had at least one fatality. Only 25 of the 245 intersections on the high crash list are also on the SS4A HIN, representing an overlap of 10.2% of the intersections listed in **Table 2**.

Map 2 shows the top 50 high crash intersections.

Table 2: High Crash Intersections (2021-2023)

Overall Rank	*Street and Intersecting Street*	Total Crashes	Total Crash Rank	Fatal & Injury Percent	Fatal & Injury Rank	Total Rank Score	Bike Related	Ped Related	SS4A HIN	Location
1	SR 14 and SR 44/N Chestnut St	32	14	59.38%	27	41	0	1	Yes	Ravenna Twp/Ravenna
2	Riverview Rd and Ira Rd	25	28	60.00%	24	52	1	0	No	Cuyahoga Falls
3	SR 14/44 and N Freedom St (SR 88)	33	11	48.48%	61	72	0	0	No	Ravenna
4	Hudson Dr and Steels Corners Rd/Allen Rd	17	65	70.59%	8	73	0	0	No	Stow
5	S Maple St (SR 162) and W Cedar St	24	32	50.00%	43	75	0	2	Yes	Akron
5	SR 261 and Summit Rd	24	32	50.00%	43	75	0	1	No	Franklin Twp
7	Wadsworth Rd (SR 57) and Easton Rd (SR 604)	16	74	81.25%	4	78	0	0	No	Chippewa Twp/Milton Twp
8	Rhodes Ave and W Thornton St	17	65	64.71%	20	85	0	0	No	Akron
9	SR 261 and Mogadore Rd	21	47	52.38%	42	89	0	0	No	Kent
10	S Main St and Waterloo Rd	32	14	43.75%	82	96	0	0	No	Akron
11	N Howard St and Glenwood Ave	23	37	47.83%	62	99	1	0	Yes	Akron
12	S Arlington St and Archwood Ave	33	11	42.42%	89	100	0	3	Yes	Akron
13	W Exchange St and Dart Av	18	62	50.00%	43	105	0	1	No	Akron
14	Myersville Rd and Killian Rd	17	65	52.94%	41	106	0	0	No	Springfield Twp
15	Kent Rd (SR 59) and Fishcreek Rd	25	28	44.00%	81	109	0	1	No	Stow
16	SR 21 and Edwards Rd	14	105	71.43%	7	112	0	0	No	Chippewa Twp
17	Kenmore Blvd and Old Manchester Rd	16	74	50.00%	43	117	1	0	No	Akron
17	S Arlington Rd and Mount Pleasant Rd	16	74	50.00%	43	117	0	0	Yes	Green
19	Medina Line Rd and Granger Rd	13	113	76.92%	6	119	0	0	No	Bath Twp
20	S Arlington Rd and Chenoweth Rd/I-77 NB On-ramp	23	37	43.48%	85	122	0	0	No	Coventry Twp/Springfield Twp
20	Medina Rd (SR 18) and Medina Line Rd	23	37	43.48%	85	122	0	0	Yes	Bath Twp/Copley Twp
22	S Miller Rd and Ridgewood Rd /I-77 Ramps	36	8	38.89%	116	124	0	0	No	Akron/Fairlawn/Copley Twp
23	SR 14/44 and SR 59	33	11	39.39%	115	126	0	0	No	Ravenna Twp
23	SR 82 and Mantua Center Rd	20	53	45.00%	73	126	0	0	No	Mantua Twp
23	Eastern Rd and Rittman Rd	14	105	64.29%	21	126	0	0	No	Chippewa Twp
26	US 224 and SR 225	25	28	40.00%	99	127	0	0	No	Atwater Twp/Deerfield Twp
26	W Market St (SR 18) and Valley St	15	90	53.33%	37	127	1	1	No	Akron
26	E Exchange St and Grant St	15	90	53.33%	37	127	0	1	No	Akron
26	SR 21 and Eastern Rd	15	90	53.33%	37	127	0	0	No	Chippewa Twp/Norton
26	Kent Rd (SR 59) and Charring Cross Rd	15	90	53.33%	37	127	0	1	No	Stow

Table 2: High Crash Intersections (2021-2023)

Overall Rank	*Street and Intersecting Street*	Total Crashes	Total Crash Rank	Fatal & Injury Percent	Fatal & Injury Rank	Total Rank Score	Bike Related	Ped Related	SS4A HIN	Location
31	Brown St and Lovers Lane	17	65	47.06%	63	128	0	0	No	Akron
32	SR 21 and Clinton Rd	12	128	83.33%	2	130	0	0	Yes	Chippewa Twp
33	W Market St (SR 18) and Maple St	21	47	42.86%	87	134	1	1	No	Akron
33	E Aurora Rd (SR 82) and Chamberlin Rd	14	105	57.14%	29	134	0	0	No	Twinsburg
35	S Main St and Thornton St	31	18	38.71%	117	135	1	0	No	Akron
36	Perkins St (SR 59) and SR 8 SB Ramps / Goodkirk St	43	3	37.21%	136	139	0	0	No	Akron
36	Tallmadge Rd and Sandy Lake Rd	12	128	66.67%	11	139	0	0	No	Brimfield Twp
36	Diagonal Rd and Mennonite Rd	12	128	66.67%	11	139	0	0	No	Mantua Twp
39	W Market St (SR 18) and Rhodes Ave	22	42	40.91%	98	140	0	2	No	Akron
40	US 224 and Portage Line Rd (SR 532)	32	14	37.50%	127	141	0	0	No	Springfield Twp/Suffield Twp
41	Triplett Blvd (SR 764) and Kelly Ave/Lindsay Ave	26	27	38.46%	118	145	0	0	Yes	Akron
42	Graham Rd and Wyoga Lake Rd/Oakwood Dr	35	10	37.14%	137	147	0	0	No	Cuyahoga Falls
43	Cleveland Massillon Rd and Eastern Rd	19	58	42.11%	90	148	0	0	No	Norton/New Franklin
43	E Waterloo Rd and Brown St	14	105	50.00%	43	148	0	0	Yes	Akron
45	SR 14 and SR 225	13	113	53.85%	36	149	0	0	No	Deerfield Twp
46	SR 14 and Alliance Rd	11	148	81.82%	3	151	0	0	No	Atwater Twp/Deerfield Twp
47	Diagonal Rd and East Ave	15	90	46.67%	64	154	0	0	Yes	Akron
47	SR 57 and SR 585	15	90	46.67%	64	154	0	0	Yes	Chippewa Twp/Milton Twp
47	Portage Trail and 4th St	15	90	46.67%	64	154	1	0	No	Cuyahoga Falls
47	Canton Rd and Tisen Rd	15	90	46.67%	64	154	0	0	No	Springfield Twp
51	W Thornton St and Channelwood Cir	16	74	43.75%	82	156	0	0	No	Akron
51	N Chestnut St and Loomis Pkwy	16	74	43.75%	82	156	0	0	No	Ravenna Twp/Ravenna
51	SR 59 and Rhodes Rd/Ashton Ln	12	128	58.33%	28	156	2	0	No	Franklin Twp
54	S Hawkins Ave and Diagonal Rd	24	32	37.50%	127	159	0	1	No	Akron
55	Manchester Rd (SR 93) and Carnegie Ave	36	8	36.11%	153	161	0	0	No	Akron
56	S Main St and US 224 WB Ramps	17	65	41.18%	97	162	0	0	No	Akron
57	Bartges St and Dart Ave	10	167	90.00%	1	168	0	0	No	Akron
58	E Market St (SR 18) and E Exchange St	11	148	63.64%	22	170	1	0	No	Akron
58	SR 261 and Franklin Ave/Sunnybrook Rd	11	148	63.64%	22	170	0	1	Yes	Kent

Table 2: High Crash Intersections (2021-2023)

Overall Rank	*Street and Intersecting Street*	Total Crashes	Total Crash Rank	Fatal & Injury Percent	Fatal & Injury Rank	Total Rank Score	Bike Related	Ped Related	SS4A HIN	Location
60	W Market St (SR 18) and Revere Rd	12	128	50.00%	43	171	0	0	No	Akron
60	Russell Ave and Boulevard St	12	128	50.00%	43	171	0	0	No	Akron
60	Mayfair Rd and Wise Rd	12	128	50.00%	43	171	0	0	No	Green
60	E Main St (SR 59) and Freedom St (SR 88)	12	128	50.00%	43	171	1	1	No	Ravenna
64	S High St and Bartges St	21	47	38.10%	126	173	0	0	No	Akron
65	Kent Rd (SR 59) and Darrow Rd (SR 91)	31	18	35.48%	158	176	0	0	No	Stow
65	S Arlington Rd and Krumroy Rd/Thierry Ave	10	167	70.00%	9	176	0	0	No	Coventry Twp/Springfield Twp
65	Killian Rd and Pressler Rd	10	167	70.00%	9	176	0	0	No	Springfield Twp
68	Glenwood Ave and SR 8 NB Off Ramp/Gorge Blvd	32	14	34.38%	166	180	1	1	No	Akron
69	Bellows St and Steiner Ave	13	113	46.15%	68	181	0	0	No	Akron
70	SR 59 and SR 261	25	28	36.00%	154	182	0	0	No	Franklin Twp
71	S Arlington Rd and Boettler Rd	22	42	36.36%	141	183	0	0	No	Green
71	SR 14 and SR 303 (W Jct)	11	148	54.55%	35	183	0	0	No	Streetsboro
73	S Arlington Rd and I-77 SB Ramps	29	22	34.48%	165	187	0	0	No	Green
74	S Arlington St and E Waterloo Rd	30	21	33.33%	167	188	0	0	No	Akron
75	Archwood Ave and Hammel St	15	90	40.00%	99	189	0	0	No	Akron
75	W Cedar St and Rand Ave	15	90	40.00%	99	189	0	0	No	Akron
75	Carroll St and Goodkirk St	15	90	40.00%	99	189	0	0	No	Akron
78	S Main St and Swartz Rd/US 224 EB Ramps	27	24	33.33%	167	191	0	0	No	Akron/Coventry Twp
78	Copley Rd (SR 162) and Diagonal Rd/S Portage Path	27	24	33.33%	167	191	1	0	Yes	Akron
78	MLK Jr. Blvd (SR 59) and N Broadway St (SR 261)	27	24	33.33%	167	191	0	0	Yes	Akron
78	N Arlington St and E North St	10	167	60.00%	24	191	0	0	Yes	Akron
78	SR 43 and Trares Rd	10	167	60.00%	24	191	0	0	Yes	Suffield Twp
83	Copley Rd (SR 162) and Madison Ave	14	105	42.86%	87	192	1	0	No	Akron
84	W Market St (SR 18) and Frank Blvd	19	58	36.84%	138	196	0	0	No	Akron
84	W Market St (SR 18) and Elmdale Ave/Kenilworth Dr	19	58	36.84%	138	196	0	0	No	Akron
84	S Arlington St and 2nd St/Martin St/I-76 WB Off-ramp	19	58	36.84%	138	196	0	0	No	Akron
87	Vernon Odom Blvd (SR 261) and Superior Ave	24	32	33.33%	167	199	0	1	Yes	Akron
87	Darrow Rd (SR 91) and Norton Rd	24	32	33.33%	167	199	0	0	No	Stow/Hudson

Table 2: High Crash Intersections (2021-2023)

Overall Rank	*Street and Intersecting Street*	Total Crashes	Total Crash Rank	Fatal & Injury Percent	Fatal & Injury Rank	Total Rank Score	Bike Related	Ped Related	SS4A HIN	Location
89	SR 14 and Infirmary Rd	23	37	34.78%	164	201	0	0	No	Ravenna Twp
89	E Market St (SR 18) and I-76 WB Ramps	16	74	37.50%	127	201	1	0	No	Akron
89	Wolf Ledges Pkwy and E South St/Bellows St	16	74	37.50%	127	201	0	0	No	Akron
89	S Hawkins Ave and Delia Ave	16	74	37.50%	127	201	0	0	No	Akron
89	Van Buren Ave and Robinson Ave	16	74	37.50%	127	201	1	1	No	Barberton
89	Portage Trail and Lillis Dr	16	74	37.50%	127	201	0	0	No	Cuyahoga Falls
89	E Aurora Rd (SR 82) and Golden Link Blvd	16	74	37.50%	127	201	0	0	No	Northfield Center Twp
89	Waterloo Rd and Portage Line Rd	16	74	37.50%	127	201	0	0	No	Springfield Twp/Suffield Twp
97	S Prospect St and Sandy Lake Rd	9	203	77.78%	5	208	0	0	No	Rootstown Twp
98	E Wilbeth Rd (SR 764) and Virgina Ave	10	167	50.00%	43	210	0	1	No	Akron
98	US 224 and SR 183 (S Jct)/Waterloo Rd	10	167	50.00%	43	210	0	0	No	Atwater Twp
98	Portage Trail and North Haven Blvd	10	167	50.00%	43	210	1	1	No	Cuyahoga Falls
98	S Miller Rd and Chamberlain Rd	10	167	50.00%	43	210	0	1	No	Fairlawn
98	Ravenna Rd and Stow Rd	10	167	50.00%	43	210	0	0	No	Hudson
98	Olde Eight Rd and E Highland Rd	10	167	50.00%	43	210	1	0	No	Northfield Center Twp
98	SR 5/44 and Hayes Rd	10	167	50.00%	43	210	0	0	No	Ravenna Twp
98	W Main St (SR 59) and Sycamore St	10	167	50.00%	43	210	1	1	No	Ravenna
106	S Main St and Wilbeth Rd (SR 764)	46	2	32.61%	211	213	0	0	No	Akron
107	S Broadway St and Rosa Parks Dr	21	47	33.33%	167	214	0	1	Yes	Akron
107	Manchester Rd (SR 93) and W Thornton St	21	47	33.33%	167	214	1	0	No	Akron
107	S Arlington Rd and Swartz Rd	21	47	33.33%	167	214	0	0	No	Coventry Twp/Springfield Twp
107	Copley Rd (SR 162) and Noble Ave	9	203	66.67%	11	214	0	1	No	Akron
107	S Arlington St and Derbydale Rd	9	203	66.67%	11	214	0	0	No	Akron
107	Copley Rd (SR 162) and Frederick Blvd	9	203	66.67%	11	214	0	2	Yes	Akron
107	E Waterloo Rd/US 224 and Hilbish Ave	9	203	66.67%	11	214	0	0	Yes	Akron
107	US 224 and SR 183 (N Jct)	9	203	66.67%	11	214	0	0	No	Atwater Twp
107	Canton Rd and Sanitarium Rd	9	203	66.67%	11	214	0	0	No	Lakemore/Springfield Twp
107	SR 5 and SR 225	9	203	66.67%	11	214	0	0	No	Paris Twp
117	Brown St and Lamparter St	20	53	35.00%	163	216	0	0	No	Akron

Table 2: High Crash Intersections (2021-2023)

Overall Rank	*Street and Intersecting Street*	Total Crashes	Total Crash Rank	Fatal & Injury Percent	Fatal & Injury Rank	Total Rank Score	Bike Related	Ped Related	SS4A HIN	Location
118	Copley Rd (SR 162) and S Hawkins Ave	40	5	32.50%	212	217	0	1	No	Akron
118	MLK Jr. Blvd (SR 59) and N High St (SR 261)	40	5	32.50%	212	217	0	0	No	Akron
118	W Market St (SR 18) and Highland Ave	11	148	45.45%	69	217	0	1	No	Akron
118	Darrow Rd (SR 91) and Eastlawn St	11	148	45.45%	69	217	0	1	No	Akron
118	State Rd and Chestnut Blvd	11	148	45.45%	69	217	0	0	No	Cuyahoga Falls
118	State Rd and Sackett Ave	11	148	45.45%	69	217	0	0	No	Cuyahoga Falls
124	S Arlington Rd and Killian Rd	47	1	31.91%	217	218	0	0	No	Coventry Twp/Springfield Twp
125	Grant St and E Thornton St	12	128	41.67%	91	219	0	0	No	Akron
125	Wooster Rd N (SR 619) and W Waterloo Rd	12	128	41.67%	91	219	0	0	No	Barberton
125	SR 14 and I-76 WB Ramps	12	128	41.67%	91	219	0	0	Yes	Edinburg Twp
125	Smith Rd and Bath Hills Blvd/Corunna Ave	12	128	41.67%	91	219	0	0	No	Fairlawn/Bath Twp
125	Cleveland Rd and Infirmary Rd/Wall St	12	128	41.67%	91	219	0	0	No	Ravenna Twp
125	US 224 and E Waterloo Rd	12	128	41.67%	91	219	0	0	No	Springfield Twp
131	N Howard St and North St	37	7	32.43%	214	221	0	0	No	Akron
132	S Arlington St and 5th Ave	17	65	35.29%	159	224	0	0	No	Akron
132	East Ave and Euclid Ave	17	65	35.29%	159	224	0	0	No	Akron
132	SR 43 and I-76 EB Ramps	17	65	35.29%	159	224	0	0	No	Brimfield Twp
132	SR 14 and Superior Ave	17	65	35.29%	159	224	0	0	No	Streetsboro
136	E Exchange St and Goodkirk Rd	18	62	33.33%	167	229	0	0	No	Akron
136	S Broadway St and E Thornton St	18	62	33.33%	167	229	0	0	No	Akron
138	Brown St and Archwood Ave	13	113	38.46%	118	231	0	0	Yes	Akron
138	E Exchange St and Spicer St	13	113	38.46%	118	231	0	3	No	Akron
138	Brittain Rd and Evans Ave	13	113	38.46%	118	231	0	0	No	Akron
138	Copley Rd (SR 162) and SR 21 NB Ramps	13	113	38.46%	118	231	0	0	No	Copley Twp
138	Main St and Water St	13	113	38.46%	118	231	0	2	No	Kent
138	SR 14 and Cleveland Rd	13	113	38.46%	118	231	0	0	No	Ravenna Twp
138	E Main St (SR 59) and New Milford Rd	13	113	38.46%	118	231	0	0	No	Ravenna

Table 2: High Crash Intersections (2021-2023)

Overall Rank	*Street and Intersecting Street*	Total Crashes	Total Crash Rank	Fatal & Injury Percent	Fatal & Injury Rank	Total Rank Score	Bike Related	Ped Related	SS4A HIN	Location
145	Portage Trail and Northampton Rd	31	18	32.26%	215	233	0	0	No	Cuyahoga Falls
145	E Tallmadge Ave (SR 261) and Dayton St	9	203	55.56%	30	233	0	0	No	Akron
145	Brown St and E Thornton St	9	203	55.56%	30	233	0	1	No	Akron
145	W Thorton St and Princeton St/Fleming Dr	9	203	55.56%	30	233	0	1	No	Akron
145	SR 5/44 and Sandy Lake Rd	9	203	55.56%	30	233	0	0	No	Rootstown Twp
145	Randolph Rd and Martin Rd	9	203	55.56%	30	233	0	0	No	Suffield Twp
151	SR 8 and Aurora Rd (SR 82)	43	3	30.23%	231	234	0	0	No	Macedonia
152	S Main St and E Miller Ave	28	23	32.14%	216	239	0	0	Yes	Akron
153	S Arlington St and 6th Ave	15	90	33.33%	167	257	0	0	No	Akron
153	E Market St (SR 18) and Fountain St	15	90	33.33%	167	257	0	0	No	Akron
153	Haymaker Pkwy (SR 59) and S Depeyster St	15	90	33.33%	167	257	0	0	No	Kent
153	SR 14 and Diagonal Rd	15	90	33.33%	167	257	0	0	No	Streetsboro
157	S Maple St (SR 162) and Rhodes Ave	22	42	31.82%	218	260	0	0	No	Akron
157	Tallmadge Ave and N Howard St	22	42	31.82%	218	260	0	0	No	Akron
157	Medina Rd (SR 18) and Flight Memorial Dr	22	42	31.82%	218	260	0	0	No	Copley Twp/Bath Twp
157	Bailey Rd and Munroe Falls Ave	14	105	35.71%	155	260	0	0	No	Cuyahoga Falls
157	E Waterloo Rd (US 224) and Kubler Trail	14	105	35.71%	155	260	1	0	No	Springfield Twp
157	Massillon Rd (SR 241) and Krumroy Rd	14	105	35.71%	155	260	0	0	No	Springfield Twp
163	E Market St (SR 18) and Summit St	10	167	40.00%	99	266	1	1	No	Akron
163	Lakeshore Blvd and W Miller Ave	10	167	40.00%	99	266	1	0	No	Akron
163	Kelly Ave and 4th Ave/I-76 EB Off-ramp	10	167	40.00%	99	266	0	0	No	Akron
163	Akron Peninsula Rd and W Bath Rd	10	167	40.00%	99	266	0	0	No	Akron
163	State St and Hiram St	10	167	40.00%	99	266	1	0	No	Barberton
163	SR 59 and Cox Ave	10	167	40.00%	99	266	1	0	No	Franklin Twp
163	SR 14 and SR 183/Rock Spring Rd	10	167	40.00%	99	266	0	0	No	Edinburg Twp
163	SR 59 and Meadowview Square Entrance	10	167	40.00%	99	266	0	0	No	Franklin Twp
163	Haymaker Pkwy (SR 59) and W Main St (SR 59)/Longmere Dr	10	167	40.00%	99	266	0	0	No	Kent
163	US 224 and SR 44	10	167	40.00%	99	266	0	0	No	Randolph Twp
163	Stow Rd and Call Rd	10	167	40.00%	99	266	0	0	No	Stow
163	S Chillicothe Rd (SR 43) and Crane Center Dr/Ethan Dr	10	167	40.00%	99	266	0	0	No	Streetsboro
175	Buchtel Ave and Fountain St	23	37	30.43%	230	267	0	0	No	Akron

Table 2: High Crash Intersections (2021-2023)

Overall Rank	*Street and Intersecting Street*	Total Crashes	Total Crash Rank	Fatal & Injury Percent	Fatal & Injury Rank	Total Rank Score	Bike Related	Ped Related	SS4A HIN	Location
176	Exchange St (SR 261) and S Main St	9	203	44.44%	74	277	0	2	No	Akron
176	Lakeshore Blvd and W South St/Boulevard St	9	203	44.44%	74	277	0	0	No	Akron
176	Graham Rd and Bailey Rd	9	203	44.44%	74	277	0	0	No	Cuyahoga Falls/Stow
176	W Market St (SR 18) and Morewood Rd/Summit Mall Entrance	9	203	44.44%	74	277	0	1	No	Fairlawn
176	S Water St (SR 43) and Rellim Dr	9	203	44.44%	74	277	1	0	No	Kent
176	SR 59 and Brady Lake Rd/Hoover Rd	9	203	44.44%	74	277	0	0	No	Ravenna Twp
176	Cleveland Canton Rd (SR 43) and Seasons Rd	9	203	44.44%	74	277	0	0	No	Streetsboro
183	Medina Rd (SR 18) and Heritage Woods Dr	20	53	30.00%	232	285	0	0	Yes	Copley Twp/Bath Twp
183	Medina Rd (SR 18) and S Hametown Rd	20	53	30.00%	232	285	0	0	No	Copley Twp/Bath Twp
183	W Streetsboro Rd (SR 303) and Terex Rd	20	53	30.00%	232	285	0	0	No	Hudson
186	N Arlington St and Kent St	11	148	36.36%	141	289	0	0	No	Akron
186	Archwood Ave and Burkhardt Ave	11	148	36.36%	141	289	0	0	No	Akron
186	Garman Rd and Castle Blvd	11	148	36.36%	141	289	0	0	No	Akron
186	State Rd and Valley Rd	11	148	36.36%	141	289	1	0	No	Cuyahoga Falls
186	Summit St and Cline Rd	11	148	36.36%	141	289	0	0	No	Franklin Twp
186	S Arlington Rd and Interstate Pkwy	11	148	36.36%	141	289	0	0	No	Green
186	Cleveland Massillon Rd and I-76 EB Ramps	11	148	36.36%	141	289	0	0	No	Norton
186	Wadsworth Rd (SR 261) and S Hametown Rd	11	148	36.36%	141	289	0	0	No	Norton
186	Diagonal Rd and Frost Rd	11	148	36.36%	141	289	0	0	No	Shalersville Twp
186	Graham Rd and Baumberger Rd	11	148	36.36%	141	289	0	0	No	Silver Lake/Stow
186	Streetsboro Rd (SR 303) and Diagonal Rd	11	148	36.36%	141	289	0	0	No	Streetsboro
197	Archwood Ave and Coventry St	16	74	31.25%	221	295	0	0	No	Akron
197	Cuyahoga Falls Ave and N Howard St	16	74	31.25%	221	295	0	0	No	Akron
197	SR 303 and SR 8 NB Off Ramp	16	74	31.25%	221	295	0	0	No	Boston Heights
197	Haymaker Pkwy and Pearl St	16	74	31.25%	221	295	0	0	No	Kent
197	Archwood Ave and Sylvan Ave	12	128	33.33%	167	295	0	0	No	Akron
197	Summit St and Powder Mill Rd	12	128	33.33%	167	295	0	0	No	Franklin Twp
197	SR 82 and Chamberlain Rd	12	128	33.33%	167	295	0	0	No	Mantua Twp
197	Barber Rd and I-76 EB Ramps	12	128	33.33%	167	295	0	0	No	Norton
197	SR 44 and Tallmadge Rd	12	128	33.33%	167	295	0	0	No	Rootstown Twp
197	Steels Corners Rd and SR 8 SB Ramps	12	128	33.33%	167	295	0	0	No	Stow

Table 2: High Crash Intersections (2021-2023)

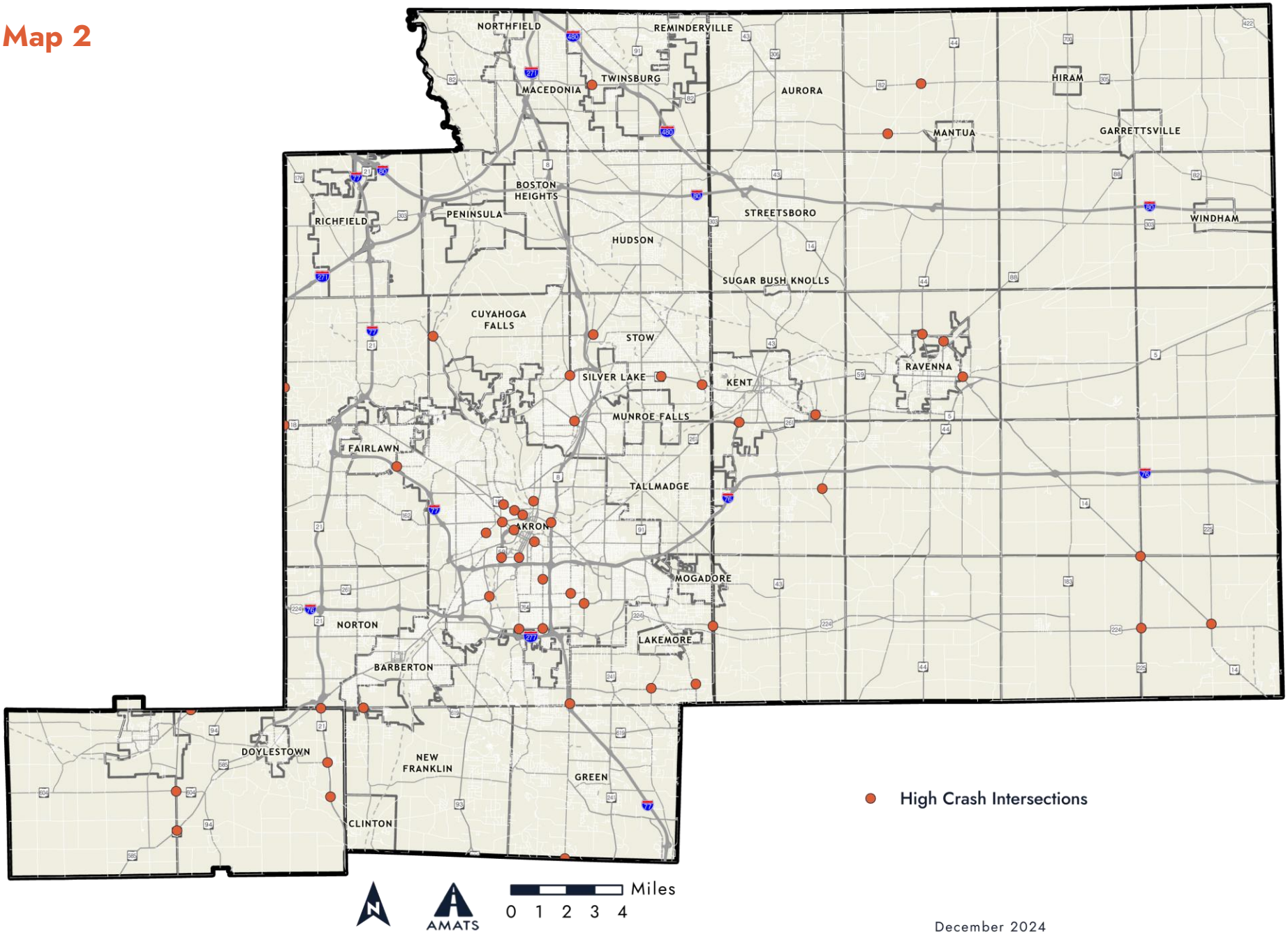
Overall Rank	*Street and Intersecting Street*	Total Crashes	Total Crash Rank	Fatal & Injury Percent	Fatal & Injury Rank	Total Rank Score	Bike Related	Ped Related	SS4A HIN	Location
207	E Market St (SR 18) and Seiberling St	13	113	30.77%	225	338	0	0	No	Akron
207	S Hawkins Ave and Stoner St	13	113	30.77%	225	338	0	0	No	Akron
207	SR 43 and E Howe Rd	13	113	30.77%	225	338	1	0	Yes	Brimfield Twp
207	N Chestnut St and Highland Ave	13	113	30.77%	225	338	1	0	No	Ravenna
207	Cleveland Canton Rd (SR 43) and Frost Rd	13	113	30.77%	225	338	0	0	No	Streetsboro
212	Copley Rd (SR 162) and Nome Ave	9	203	33.33%	167	370	0	1	No	Akron
212	S High St (SR 261) and E Mill St	9	203	33.33%	167	370	1	0	No	Akron
212	Hazel St and Eastwood Ave/Garry Rd	9	203	33.33%	167	370	0	0	No	Akron
212	Triplett Blvd (SR 764) and Massillon Rd	9	203	33.33%	167	370	0	0	No	Akron
212	E Market St (SR 18) and Goodkirk St	9	203	33.33%	167	370	0	0	No	Akron
212	White Pond Dr and Frank Blvd	9	203	33.33%	167	370	0	0	No	Akron
212	N Aurora Rd (SR 43) and East Blvd	9	203	33.33%	167	370	0	0	No	Aurora
212	State St and Robinson Ave	9	203	33.33%	167	370	0	0	No	Barberton
212	State St and Grand Blvd	9	203	33.33%	167	370	0	0	No	Barberton
212	S Main St and Warner Rd	9	203	33.33%	167	370	0	0	No	Coventry Twp/Akron
212	Howe Ave and Ritchie St	9	203	33.33%	167	370	0	0	No	Cuyahoga Falls
212	Steels Corners Rd and Northampton Rd	9	203	33.33%	167	370	0	1	No	Cuyahoga Falls
212	Ridgewood Rd and Jacoby Rd	9	203	33.33%	167	370	0	0	No	Copley Twp/Fairlawn
212	W Market St (SR 18) and Shiawassee Ave	9	203	33.33%	167	370	0	0	No	Fairlawn
212	S Arlington Rd and Greensburg Rd	9	203	33.33%	167	370	0	0	No	Green
212	Mantua St (SR 43) and W Main St	9	203	33.33%	167	370	0	0	No	Kent
212	Summit St and Loop Rd	9	203	33.33%	167	370	0	1	No	Kent
212	SR 261 and Campus Center Dr	9	203	33.33%	167	370	0	0	No	Kent
212	Center Rd and Renninger Rd	9	203	33.33%	167	370	0	0	No	New Franklin
212	SR 585 and Eastern Rd	9	203	33.33%	167	370	0	0	No	Norton
212	Greenwich Rd and S Hametown Rd	9	203	33.33%	167	370	0	0	No	Norton
212	W Main St (SR 59) and Oakwood St	9	203	33.33%	167	370	0	0	No	Ravenna
212	Darrow Rd (SR 91) and Post Rd	9	203	33.33%	167	370	0	0	No	Twinsburg

Table 2: High Crash Intersections (2021-2023)

Overall Rank	*Street and Intersecting Street*	Total Crashes	Total Crash Rank	Fatal & Injury Percent	Fatal & Injury Rank	Total Rank Score	Bike Related	Ped Related	SS4A HIN	Location
235	W Market St (SR 18) and Sand Run Rd	10	167	30.00%	232	399	1	0	No	Akron
235	S Hawkins Ave and Morse St	10	167	30.00%	232	399	0	0	No	Akron
235	Smith Rd and Revere Rd	10	167	30.00%	232	399	0	0	No	Bath Twp
235	Portage Trail and 3rd St	10	167	30.00%	232	399	0	0	No	Cuyahoga Falls
235	Broad Blvd and 6th St	10	167	30.00%	232	399	0	0	No	Cuyahoga Falls
235	E Streetsboro Rd (SR 303) and Stow Rd	10	167	30.00%	232	399	0	0	No	Hudson
235	Cherry St and Franklin Ave	10	167	30.00%	232	399	0	0	No	Kent
235	W Aurora Rd (SR 82) and Chaffee Rd	10	167	30.00%	232	399	0	0	No	Sagamore Hills Twp
235	Canton Rd and Killian Rd	10	167	30.00%	232	399	0	0	No	Springfield Twp
235	E Aurora Rd (SR 82) and Twin Hills Pkwy	10	167	30.00%	232	399	0	1	No	Twinsburg
235	Ravenna Rd and Shepard Rd	10	167	30.00%	232	399	1	0	No	Macedonia/Twinsburg

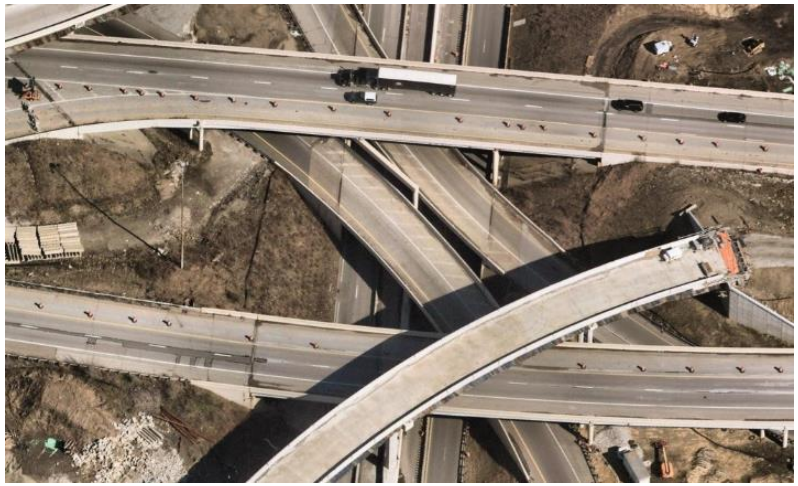
Top 50 High Crash Intersections 2021-2023

Map 2



December 2024

High Crash Freeway Locations



Analysis and severity-ranking of freeway crashes in the AMATS area is conducted by the central office of ODOT in Columbus. ODOT's analysis of freeways is done using methodology from the American Association of State Highway and Transportation Officials' (AASHTO's) Highway Safety Manual. The freeway system is divided into *rural* and *urban* and is analyzed by examining segments that are one-tenth of a mile long. ODOT only considers the top 50 rural and top 50 urban locations statewide for further study.

The AMATS area has 12 rural freeway segments in Portage County and 3 in Summit County on ODOT's 2024 HSIP Priority Locations list and they are not in the top 50. AMATS has 18 urban freeway segments in Summit County on this list and none are in the top 50 (although one section of I-77 just south of the Central Interchange in Akron is close at #58). Further information about top freeway crash locations along with other 2024 HSIP Priority Locations from ODOT can be found at the following link:

http://www.dot.state.oh.us/Divisions/Planning/ProgramManagement/HighwaySafety/HSIP/Pages/Priority-Lists-Initiatives.aspx

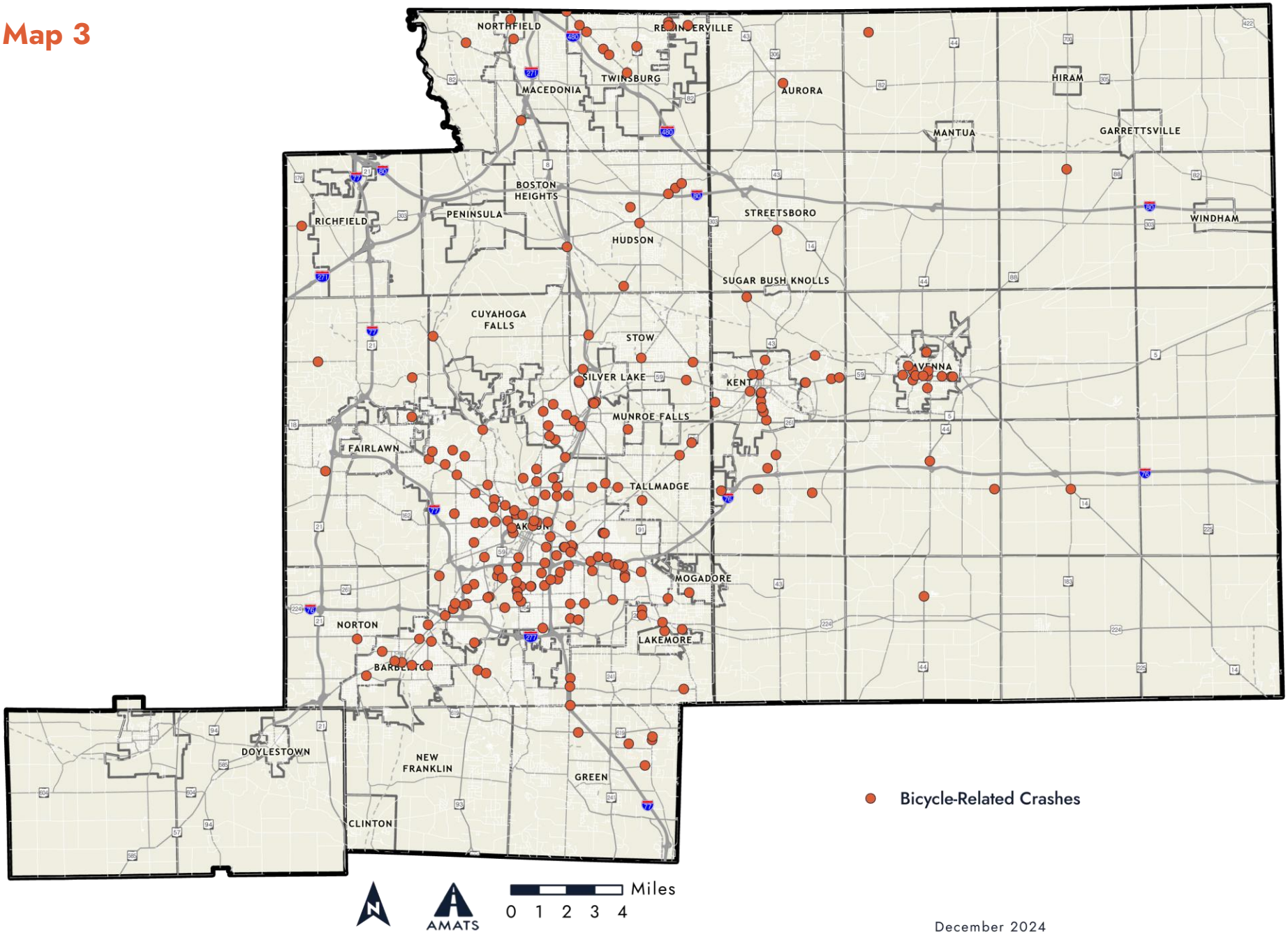
The AMATS *SS4A Action Plan's* HIN also considers freeway locations, albeit with a different methodology and timeframe as detailed earlier in this report. Again, the HIN only includes crashes involving fatalities and serious injuries, though the HIN web map allows for a detailed look at the freeway crashes within the region.

Bicycle and Pedestrian Crash Locations

Crashes involving bicycles and pedestrians during the three-year period of 2021-2023 are displayed on **Map 3** and **Map 4**, respectively. All crashes are displayed because (1.) the size of each dataset is much smaller than vehicular crashes and (2.) nearly all crashes involving these more vulnerable road users result in some level of injury, as described in *Section 2*.

Bicycle-Related Crashes 2021-2023

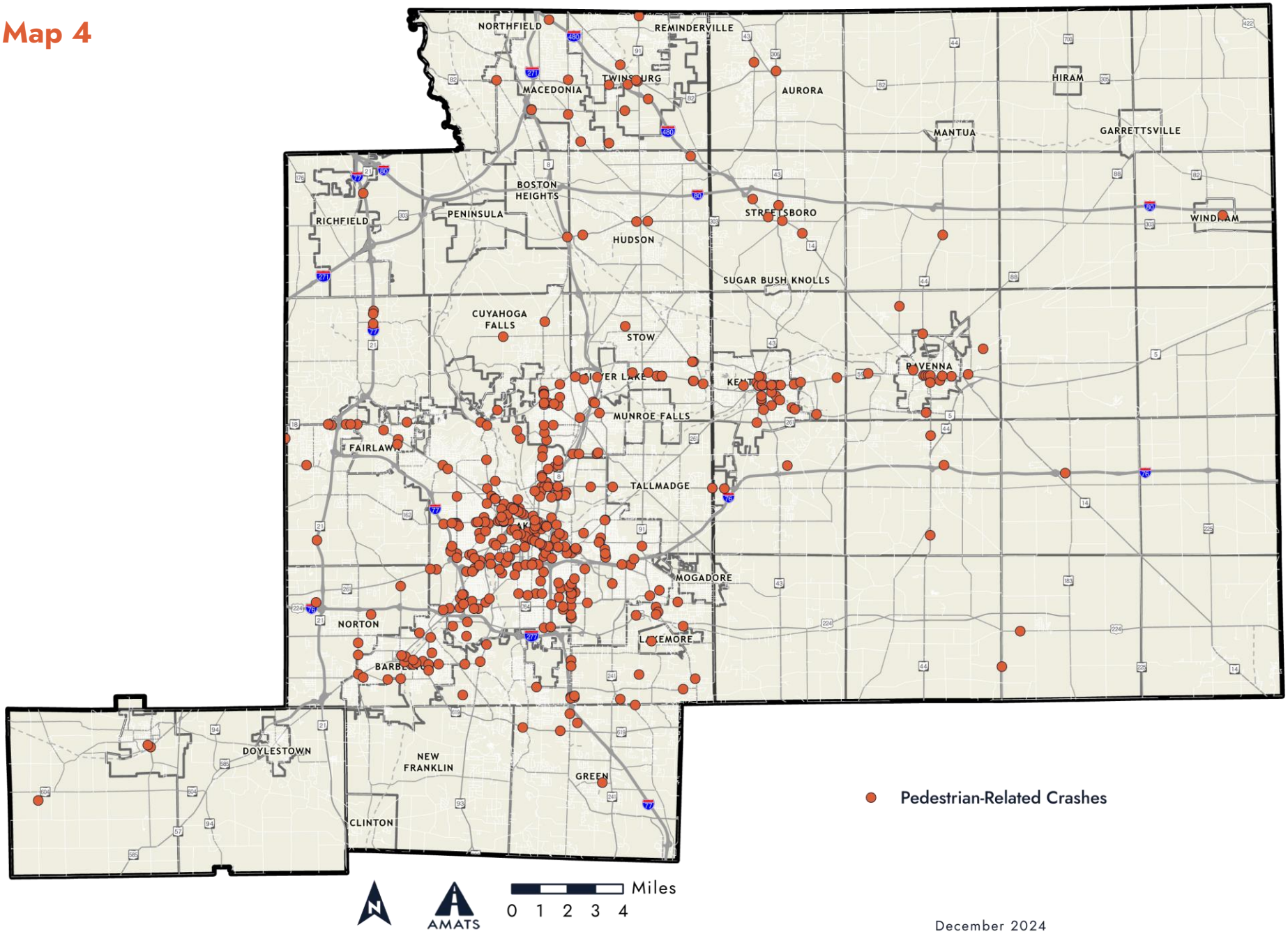
Map 3



December 2024

Pedestrian-Related Crashes 2021-2023

Map 4



December 2024

Section 4: Safety Performance Measures and Targets

Safety performance management is part of the overall Transportation Performance Management (TPM) program. The Federal Highway Administration (FHWA) requires state DOTs and agencies like AMATS to develop a strategic approach that uses system information to make investment and policy decisions to achieve national performance goals.

Recent federal legislation requires ODOT and AMATS to establish performance measures and set targets that demonstrate fatal and serious injury reductions on all public roads. The required performance measures for safety are:

- Number of fatalities
- Fatality rate
- Number of serious injuries
- Serious injury rate
- Number of non-motorized fatalities and serious injuries

AMATS is required to establish safety performance measures. There are two options available for satisfying this requirement: commit to a quantifiable target for each measure within the metropolitan area or approve of ODOT's statewide targets and agree to plan and program projects so that they contribute toward the accomplishment of those goals. AMATS is committed to support the goals set forth by ODOT for the entire state.

After reviewing historical crash trends, external factors and through consultation with the state's metropolitan planning organizations, ODOT is recommending a 2% annual reduction target across all five safety categories. A state is considered to have met or made significant progress if at least four of the five targets are better than the baseline numbers.

In accordance with federal regulations, AMATS used a five-year average (2018-2022) to calculate the initial safety targets for 2023. These averages will become the benchmark to which all future calculations will be compared. All future values will also be calculated using five years of data. This five-year rolling average is used to smooth out short term year-to-year fluctuations in data.

	Crashes					2022		
Year	2018	2019	2020	2021	2022	5-Year Ave	2023 Crashes	Percent Change
Number of Fatalities	35	44	69	70	65	**56.6**	**69**	**18%**
Fatalities Per 100 Million VMT	0.48	0.60	1.08	1.00	0.94	**0.8**	**0.96**	**15%**
Number of Serious Injuries	329	360	340	364	333	**345.2**	**396**	**13%**
Serious Injuries Per 100 MVMT	4.49	4.92	5.33	5.19	4.80	**4.95**	**5.52**	**10%**
Number of Non-motorized Fatalities and Serious Injuries	48	47	35	42	54	**45.2**	**67**	**33%**

The table to the right shows the calculation of the AMATS rolling averages for the five safety performance measures. The 2022 averages are the benchmark values that the 2023 values are compared to. Unfortunately, in all five safety performance measures, the AMATS region did not contribute toward meeting the ODOT statewide goal of reducing each category by 2% when compared to 2022 averages.

Attachment 5B

AKRON METROPOLITAN AREA TRANSPORTATION STUDY

M E M O R A N D U M

TO: **Policy Committee**
Technical Advisory Committee
Citizens Involvement Committee

FROM: **AMATS Staff**

RE: **Public Participation Plan (3P) – Final Approval Requested**

DATE: **November 27, 2024**

The AMATS Public Participation Plan or "3P" details the policies and strategies that the agency utilizes to encourage an open planning process that supports early and sustained public involvement, timely public notice, and full public access to information regarding key transportation decisions within the Akron metropolitan area.

The 3P pursues a continuing, comprehensive, and coordinated process among all area stakeholders while providing opportunities for innovative broad-based participation in the development and review of regional transportation plans, programs, and policies. The latest version of the 3P continues the agency's valuable use of social media and recognizes the needs of growing and unique populations within the area, such as the elderly, Asian and Latino communities, and those with special needs.

The 2024 Public Participation Plan (3P) describes AMATS' ongoing efforts to engage and involve the public in the metropolitan transportation planning process for the Akron area. The 3P is an update to the 2022 Public Participation Plan and will be an input into the upcoming Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP). The staff decided to perform an update to the 3P at this time following consultation with the Federal Transit Administration (FTA) and the area's local transit operators.

Following this consultation, the staff updated the 3P to include a discussion of how we assist the local transit providers, develop public meeting presentations, and process and address public comments. Otherwise, the full document remains very similar to the 2022 3P. The draft 3P was made available at the following link on the AMATS website: UPDATED 3P-Public Participation Plan-October 24-2024.pdf

In revising the 3P, AMATS is actively seeking consultation with interested parties and communities. Our agency seeks to develop a policy document that engages the public and other private and public organizations by providing ample opportunities for input and involvement in the area's planning process. It is our goal to base the 3P on the insights of the area's citizens,

community groups, affected public agencies and representatives of public transportation, freight shipping and pedestrian and bicycle transportation.

The Draft 3P details how the agency will provide opportunities for public comment and involvement throughout the planning process and for its most significant products, the RTP and TIP. These opportunities include posting committee meeting packets and MP3 podcasts on the AMATS website and using social media tools and non-traditional meetings and strategies to reach out to new audiences and communities.

AMATS will continue to give special consideration to making all of its public meetings convenient and accessible. Meetings of the AMATS Citizens Involvement Committee are scheduled in the evenings, held virtually. Also, all materials, plans and information can be accessed 24 hours a day on the AMATS website - amatsplanning.org. Additional review and involvement opportunities are provided during the development of the RTP, TIP and other significant planning documents.

AMATS provided a 45-day comment period for the Draft 3P. During the 45-day period, the public was given the oppurtunity to review and present comments for consideration by the AMATS Policy Committee for possible incorporation into the final version of the draft.

The Draft 3P was made available for public comment for 45 days beginning on October 27, 2024, through December 12, 2024. A Public Comment Form for the Draft 3P was available as a pdf for downloading through the agency web site - amatsplanning - and all comments will be presented as part of Appendix D after final approval of this draft document. The Draft 3P was also presented to the public for review and comment during the 6:30 p.m. meeting of the AMATS Citizens Involvement Committee (CIC) scheduled for December 5, 2024, held virtually. These meetings were promoted through advertisements in the Beacon Journal, Record Courier and The Reporter newspapers, press releases and various social media. These ads will be included in Appendix D when available.

AMATS is continually seeking new ways to engage and involve the public and other agencies. As new opportunities arise, they will be incorporated into the transportation planning process. The 3P will be updated accordingly. The public is encouraged to forward their opinions and suggestions regarding this document to AMATS Public Information Coordinator Kerry Prater via email at kprater@akronohio.gov or postal mail at the following address: AMATS, 1 Cascade Plaza / Suite 1300 Akron, Ohio 44308-1136

The staff is requesting final approval of the Public Participation Plan (3P).

AKRON METROPOLITAN AREA TRANSPORTATION STUDY

M E M O R A N D U M

TO: **Policy Committee**
Technical Advisory Committee
Citizens Involvement Committee

FROM: **AMATS Staff**

RE: **Resolution 2024-20 – To Add Ohio Workforce Mobility Program Funds for PARTA (FY 2024-2027 TIP Amendment #10)**

DATE: **November 27, 2024**

Executive Summary

This memorandum discusses a TIP amendment to add funding to the program of projects for PARTA in FY 2025.

The Ohio Workforce Mobility Program (OWMP) was created by the Ohio Department of Transportation (ODOT) to support projects that increase the ease and efficiency of transporting residents to economically significant employment centers or places of employment outside of their home communities. The program provides funding for infrastructure, equipment, technology, vehicles, and planning projects.

The OWMP is administered by ODOT's Office of Transit which advocates and supports safe and reliable personal mobility by coordinating and funding public transportation as a vital element of Ohio's transportation system.

On November 8, 2024, the ODOT Office of Transit awarded $17.5 million statewide for work-related transportation projects. Funds will go to 33 public transportation projects designed to increase the ease and efficiency of moving residents to economically significant employment centers or places of work outside their home communities.

As part of this latest round of funding, PARTA was awarded $638,800 in federal funds in FY 2025 for five projects. These federal funds are ODOT-attributable Surface Transportation Block Grant (STBG) Program funds.

Consequently, PARTA is requesting that these additional funds be added to the TIP.

PARTA is requesting the following changes to the TIP:

- **Add Funding for a CNG Fuel Pump Upgrade (PID 122928)**

  PARTA is requesting the addition of $156,000 in flexible federal highway funds (ODOT-attributable STBG funds) towards the acquisition of upgraded compressed natural gas (CNG) fuel pump equipment. The project is scheduled for FY 2025. PARTA will provide a local share of $39,000, with a total project cost of $195,000. Federal funds will comprise 80% of the total cost.

- **Add Funding for Computer and IT Upgrades (PID 122928)**

  PARTA is requesting the addition of $148,800 in flexible federal highway funds (ODOT-attributable STBG funds) towards the acquisition of mobile data tablets and information technology (IT) infrastructure equipment. Federal funds were awarded at 80% of the total cost. PARTA will provide a local amount of $37,200. The total project cost is $186,000, scheduled in FY 2025.

- **Add Funding for Long-Range Planning (PID 122928)**

  PARTA is requesting the addition of $200,000 in flexible federal highway funds (ODOT-attributable STBG funds) awarded through the OWMP in support of long-range planning activities. These planning activities include a Transit Feasibility Study (TFS) and a Transit Development Plan (TDP). This funding is being awarded at 80% of the total cost of $250,000. PARTA will provide the local share of $50,000, scheduled in FY 2025.

- **Add Funding for Administrative Facility Rehabilitation (PID 122928)**

  PARTA is requesting the addition of $80,000 in flexible federal highway funds (ODOT-attributable STBG funds) to assist with PARTA's administrative facility rehabilitation. The project is scheduled for FY 2025. PARTA will provide a local share of $20,000, with a total project cost of $100,000. Federal funds will comprise 80% of the total cost.

- **Add Funding for a Security Equipment Upgrade (PID 122928)**

  PARTA is requesting the addition of $54,000 in flexible federal highway funds (ODOT-attributable STBG funds) awarded through the OWMP in support of a security equipment upgrade. This funding is being awarded at 80% of the total project cost of $67,500. PARTA will provide the local share of $13,500. The project is scheduled for FY 2025.

STAFF COMMENTS

As with all TIP amendments, considerations with respect to consistency with the Regional Transportation Plan, financial capability, air quality conformity, public involvement, and environmental justice are important.

Regional Transportation Plan

The projects proposed in this amendment are consistent with *Transportation Outlook 2045*, the area's Regional Transportation Plan.

Financial Capability

With respect to financial capability, there are sufficient funds available for this amendment.

Air Quality

The project can be viewed as either exempt from air quality or has been analyzed as part of the air quality networks and has resulted in a finding of compliance with the Clean Air Act. Therefore, this amendment will not affect adversely the air quality conformity approval of *Transportation Outlook* or the TIP.

Public Involvement

The Staff is recommending that the Policy Committee consider this action as not regionally significant. As a result, the modified procedures in the AMATS *Public Participation Plan (3P)* are appropriate.

Environmental Justice

Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations states that, "each federal agency shall make achieving environmental justice part of its mission by identifying and addressing as appropriate, disproportionately high and adverse human health or environmental effects of its programs policies and activities on minority and low-income populations." This requirement also applies to recipients of federal funds, such as PARTA.

The project that will result from this TIP amendment does not appear to impose disproportionately high and adverse human health or environmental effects on minorities and/or low-income people who reside in the METRO RTA service area.

STAFF RECOMMENDATION

Attached to this memo is Resolution 2024-20. This resolution approves the requested changes to FY 2025 of the AMATS Transportation Improvement Program as described above. The Staff recommends approval.

RESOLUTION NUMBER 2024-20

OF THE METROPOLITAN TRANSPORTATION POLICY COMMITTEE OF THE AKRON METROPOLITAN AREA TRANSPORTATION STUDY

TO ADD CAPITAL FUNDS FOR PARTA - (FY 2024-2027 TIP AMENDMENT #10)

WHEREAS, the Akron Metropolitan Area Transportation Study (AMATS) is designated as the Metropolitan Planning Organization (MPO) by the Governor, acting through the Ohio Department of Transportation and in cooperation with locally elected officials in Summit and Portage Counties and the Chippewa Township and Milton Township areas of Wayne County; and

WHEREAS, it is the responsibility of this Committee to develop and maintain the area's Transportation Improvement Program (TIP); and

WHEREAS, the Portage Area Regional Transportation Authority (PARTA) provides public transportation services in the AMATS area; and

WHEREAS, PARTA intends to maintain their capital assets in a state of good repair as described more fully in each agency's Transit Asset Management (TAM) Plan; and

WHEREAS, PARTA is an eligible recipient of Ohio Workforce Mobility Program (OWMP) funds; and

WHEREAS, PARTA has requested that FY 2025 of the TIP be amended to add funds awarded through ODOT's Ohio Workforce Mobility Program (OWMP); and

WHEREAS, PARTA is an eligible recipient of Federal Transit Administration (FTA) Section 5307 Urbanized Area Formula Program funds; and

WHEREAS, federal law (23 U.S.C. § 104(f); 49 U.S.C. § 5334(i)(1)) allows federal-aid highway program funding to be made available for public transportation projects flexed (or transferred) to the administration of FTA for public transit use; and

WHEREAS, public notice of public involvement activities and time established for public review and comment on the TIP will satisfy the Program of Projects (POP) public review requirements of the Section 5307 Program; and

WHEREAS, PARTA is an eligible recipient of state of Ohio General Revenue Funds (GRF); and

WHEREAS, this Committee has analyzed this request and found it to be consistent with *Transportation Outlook 2045*, the area's Regional Transportation Plan; and

WHEREAS, these projects have been determined to be in fiscal constraint; and

RESOLUTION NUMBER 2024-20 Continued

WHEREAS, these projects have been determined to be in conformity with the State Implementation Plan for air quality; and

WHEREAS, this Committee has determined that the effects of this amendment are consistent with *Executive Order 12898 – Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations*.

NOW THEREFORE BE IT RESOLVED:

1. That this Committee amends the FY 2024-2027 Transportation Improvement Program as previously specified in the attached memorandum.

2. That this Committee affirms that the FY 2024-2027 Transportation Improvement Program is in reasonable fiscal constraint.

3. That this Committee affirms consistency with *Transportation Outlook*, the Regional Transportation Plan.

4. That this Committee reaffirms the air quality conformity determination of *Transportation Outlook*.

5. That this Committee considers the necessary public involvement has been carried out as described in the AMATS *Public Participation Plan (3P)*.

6. That this Committee affirms consistency with environmental justice requirements.

7. That this Committee authorizes the Staff to provide copies of this Resolution to the appropriate agencies as evidence of action by the Metropolitan Planning Organization.

_____

Larry Jenkins, P.E., P.S., 2024 Chairman
Metropolitan Transportation Policy Committee

_____

Date

2025 AMATS COMMITTEE MEETINGS

JANUARY

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
			1 New Year's Day	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	HOLIDAY AMATS CLOSED 20 Martin Luther King Jr.'s Birthday Observed	21	22	23	24	25
26	27	28	29	30	31	

FEBRUARY

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
						1
2	3	4	5	6 TC	7	8
9	10	11	12	13 P	14	15
16	HOLIDAY AMATS CLOSED 17 President's Day	18	19	20	21	22
23	24	25	26	27	28	

MARCH

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20 TC	21	22
23 30	24 31	25	26	27 P	28	29

APRIL

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

MAY

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
				1	2	3
4	5	6	7	8 TC	9	10
11	12	13	14	15 P	16	17
18	19	20	21	22	23	24
25	HOLIDAY AMATS CLOSED 26 Memorial Day	27	28	29	30	31

JUNE

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	HOLIDAY AMATS CLOSED 19 Juneteenth	20	21
22	23	24	25	26	27	28
29	30					

JULY

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
		1	2	3	HOLIDAY AMATS CLOSED 4 Independence Day	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

AUGUST

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
					1	2
3	4	5	6	7 TC	8	9
10	11	12	13	14 P	15	16
17	18	19	20	21	22	23
24 31	25	26	27	28	29	30

SEPTEMBER

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	HOLIDAY AMATS CLOSED 1 Labor Day	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18 TC	19	20
21	22	23	24	25 P	26	27
28	29	30				

OCTOBER

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
			1	2	3	4
5	6	7	8	9	10 ANNUAL MEETING	11
12	HOLIDAY AMATS CLOSED 13 Columbus Day Observed	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

NOVEMBER

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
						1
2	3	4	5	6	7	8
9	10	HOLIDAY AMATS CLOSED 11 Veteran's Day	12	13	14	15
16	17	18	19	20	21	22
23 30	24	25	26	HOLIDAY AMATS CLOSED 27 Thanksgiving	HOLIDAY AMATS CLOSED 28	29

DECEMBER

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	1	2	3	4 TC	5	6
7	8	9	10	11 P	12	13
14	15	16	17	18	19	20
21	22	23	24	HOLIDAY AMATS CLOSED 25 Christmas	26	27
28	29	30	31			

C - Citizens Involvement Committee (CIC) 6:30pm T - Technical Advisory Committee (TAC) 1:30pm P - Policy Committee 1:30pm