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

Thursday, August 8, 2024
1:30 p.m.

Agenda

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

2. **Minutes**
   - A. May 16, 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**

5. **New Business**
   - A. *Highway Preservation Needs Report* – **Motion Requested** — Attachment 5A
   - B. Draft *Congestion Management Process (CMP) Strategies*. – **Discussion Only** — Attachment 5B
   - C. Draft *Planning Data Forecast*. – **Discussion Only** — Attachment 5C
   - D. Draft *2024 Freight Plan*. – **Discussion Only** — Attachment 5D
   - E. Draft *2024 Transit Plan*. – **Discussion Only** — Attachment 5E

6. **Resolutions**
   - A. **Resolution 2024-15** – Approving Amendment #8 to the FY 2024-2027 Transportation Improvement Program to revise funding for two projects, add one project and delete one project phase. – **Motion Required** — Attachment 6A
   - B. **Resolution 2024-16R** – To Add Capital Funds for METRO RTA (FY 2024-2027 TIP Amendment #9). – **Motion Required** — Attachment 6B

7. **Other Business**

- MORE -

8. **Adjournment**

Next Regular Meeting:
Thursday, September 26, 2024 - 1:30 PM
The Venue
10 Tallmadge Circle
Tallmadge, Ohio 44278

NOTE: There will be a brief presentation regarding the features of the new AMATS web site following the Policy Committee meeting.

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, August 1, 2024
1:30 p.m.

Agenda

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

2. **Minutes**
   A. May 9, 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**

5. **New Business**
   A. *Highway Preservation Needs Report* – **Motion Requested** — Attachment 5A

   B. Draft *Congestion Management Process (CMP) Strategies*. – **Discussion Only** — Attachment 5B

   C. Draft *Planning Data Forecast*. – **Discussion Only** — Attachment 5C

   D. Draft *2024 Freight Plan*. – **Discussion Only** — Attachment 5D

   E. Draft *2024 Transit Plan*. – **Discussion Only** — Attachment 5E

6. **Resolutions**
   A. **Resolution 2024-15** – Approving Amendment #8 to the FY 2024-2027 Transportation Improvement Program to revise funding for two projects, add one project and delete one project phase. – **Motion Required** — Attachment 6A

   B. **Resolution 2024-16R** – To Add Capital Funds for METRO RTA (FY 2024-2027 TIP Amendment #9). – **Motion Required** — Attachment 6B

7. **Other Business**

- MORE -

8. **Adjournment**

Next Regular Meeting:
Thursday, September 19, 2024 - 1:30 PM
The Venue
10 Tallmadge Circle
Tallmadge, Ohio 44278

NOTE: There will be a brief presentation regarding the features of the new AMATS web site following the Technical Advisory Committee meeting.

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, August 1, 2024
6:30 p.m.

Agenda

1. **Welcome**

2. **Introductions**

3. **Items**
   A. Presentation regarding Attachment 5A – *Highway Preservation Needs Report*.

   B. Discussion regarding Attachment 5B – Draft *Congestion Management Process (CMP)*.

   C. Presentation regarding Attachment 5C – Draft *Planning Data Forecast*.

   D. Presentation regarding Attachment 5D – Draft *2024 Freight Plan*.

   E. Presentation regarding Attachment 5E – Draft *2024 Transit Plan*.

   F. Discussion of Fiscal Year 2025 Public Transit Program of Projects.

4. **Open Discussion**

5. **Adjournment 7:45 P.M.**
   Next Regular Meeting:
   Thursday, September 19, 2024 - 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, May 16, 2024 – 1:30 p.m.

Minutes of Meeting

Recordings of AMATS committee meetings are available in the Podcast section of the agency web site at www.amatsplanning.org/category/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 March 28, 2024 meeting.

Motion
Paul Adamson *made a motion to approve the minutes and it was seconded by* ***Jim McCleary****. The motion was approved by a voice vote.*

III. Staff Reports

A. Financial Progress Report

Curtis Baker presented Attachment 3A.

Motion
Claudia Amrhein *made a motion to approve the Financial Progress Report and it was seconded by* ***Joe Paradise****. The motion was approved by a voice vote.*

B. Technical Progress Report

Matt Stewart said that AMATS and its consultant are developing a new, user-friendly *Bike Map*.

Implementation grant applications to the federal Safe Streets for All (SS4A) Program are due soon. **Mr. Stewart** said that two Greater Akron area communities are expected to apply for SS4A grants.

Development of Akron's *Summit Lake Pedestrian Safety Master Plan* and New Franklin's *SR 619 Corridor Development Planning Study*, which were awarded grants from the AMATS Connecting Communities Program in March, is commencing.

Mr. Stewart said that preparation of the input documents necessary for the update of the long-range *Transportation Outlook 2050* continues.

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 April 30, 2024.

IV. Old Business

A. AMATS *Active Transportation Plan*.

Heather Davis Reidl presented Attachment 4A.

Motion
Paul Adamson *made a motion to approve the AMATS Active Transportation Plan and it was seconded by* ***Jim McCleary****. The motion was approved.*

B. AMATS *Areawide Roundabout Study*.

Mr. Stewart presented Attachment 4B.

Motion
Jim Bowling *made a motion to approve the AMATS Areawide Roundabout Study and it was seconded by* ***Claudia Amrhein****. The motion was approved.*

V. New Business

None.

VI. Resolutions

A. Resolution 2024-10 – Approving the FY 2025 Transportation Planning Work Program and Budget.

Ms. Reidl presented Attachment 6A.

Motion
Bobbie Beshara *made a motion to approve Resolution 2024-10 and it was seconded by* ***Bob Finney****. The motion was approved.*

B. Resolution 2024-11 – Reaffirming the Approval of the Regional Transportation Plan and the Transportation Improvement Program, and Affirming the Consistency between the Regional Transportation Plan, the Transportation Improvement Program, and the State Implementation Plan.

Jeff Gardner presented Attachment 6B.

Motion
Amy Mohr *made a motion to approve Resolution 2024-11 and it was seconded by* ***Jim Bowling****. The motion was approved.*

C. Resolution 2024-12 – Certification of the Urban Transportation Planning Process.

Mr. Gardner presented Attachment 6C.

Motion
Carol Siciliano-Kilway *made a motion to approve Resolution 2024-12 and it was seconded by* ***Justin Czekaj****. The motion was approved.*

D. Resolution 2024-13 – To Add Newly Awarded Funds for METRO RTA and PARTA (FY 2024-2027 TIP Amendment #6).

Mr. Gardner presented Attachment 6D.

Motion
Bobbie Beshara *made a motion to approve Resolution 2024-13 and it was seconded by* ***Jim Bowling****. The motion was approved.*

E. Resolution 2024-14 – Approving Amendment #7 to the FY 2024-2027 Transportation Improvement Program to add three projects, revise funding / move from group to individual project for one project and delete one project.

Ms. Prater presented Attachment 6E.

Motion
Joe Paradise *made a motion to approve Resolution 2024-14 and it was seconded by* ***Amy Mohr****. The motion was approved.*

VII. Other Business

A. Ms. Reidl summarized the development of an update to the agency web site and upcoming features of the site.

VIII. Adjournment

A. ***Motion***

Carol Siciliano-Kilway *made a motion to adjourn the meeting and it was seconded by* ***Jim Bowling***. *The motion was approved.*

The next regularly scheduled Policy Committee meeting is scheduled for **1:30 p.m**. on **Thursday, August 8**, **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				
AURORA - Mayor Ann Womer Benjamin (Stark) (Januska)						
BARBERTON - Mayor William B. Judge (Teodecki) (Wearstler)	M	M				
BOSTON HEIGHTS – Mayor Ron Antal (Maccarone)						
CLINTON - Mayor William C. McDaniel						
CUYAHOGA FALLS - Mayor Don Walters (Zumbo)	A		A			
DOYLESTOWN - Mayor Terry Lindeman						
FAIRLAWN - Mayor Russell Sharnsky (Staten) (Visca)		A	A			
GARRETTSVILLE - Mayor Rick Patrick (Klamer)						
GREEN - Mayor Rocco Yeargin (Wax Carr)	M					
HIRAM - Mayor Ann Haynam (McGee)						
HUDSON – Thomas Sheridan (Comeriato)	M	M	M			
KENT – City Mgr. David Ruller (Baker) (Bowling)	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				
MOGADORE - Mayor Michael Rick						
MUNROE FALLS - Mayor Allen Mavrides (Bowery)	M					
NEW FRANKLIN - Mayor Paul Adamson (Ganoe) (Kepler)	M	M	M			
NORTHFIELD – Mayor Jenn Domzalski (Hipps)						
NORTON – Administrative Officer Dennis Loughry (Binsley)	A					
ODOT – Gery Noirot (Phillis) (Root)	M		A			
PARTA – Claudia Amrhein (Baba) (Forbes) (Proseus) (Schrader)	M	A	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				
PORTAGE COUNTY ENGINEER – Larry Jenkins (Steigerwald)	M	M	M			
RAVENNA - Mayor Frank Seman (Finney) (DiSalvo)	A	A	A			
REMINDERVILLE - Mayor Sam Alonso (Krock)						
RICHFIELD - Mayor Michael Wheeler (Frantz) (Waldemarson)	A		A			
RITTMAN – City Mgr. Bobbie Beshara (Robertson) (Neumeyer)		M	M			
SILVER LAKE – Mayor Therese Dunphy (Housley)						
STOW - Mayor John Pribonic (McCleary) (Jones)	A	A	A			
STREETSBORO - Mayor Glenn M. Broska (Cieszkowski) (Czekaj)	A	A	A			
SUGAR BUSH KNOLLS - Mayor Jeffrey A. Coffee						
SUMMIT COUNTY ENGINEER-Al Brubaker (Fulton) (Hauber) (Paradise)	A	A	A			
SUMMIT COUNTY EXECUTIVE - Ilene Shapiro (Tubbs)						
SUMMIT COUNTY COMM. & ECON. DEV. – Diane Miller-Dawson	M					
SUMMIT COUNTY COMM. & ECON. DEV. – David Lukas						
TALLMADGE - Mayor Carol Siciliano-Kilway (Kidder)	M	M	M			
TWINSBURG - Mayor Sam Scaffide (Mohr)	A	A	A			
WAYNE COUNTY COMM. BOARD - Dominic Oliverio (Broome)						
WAYNE COUNTY ENGINEER – Scott A. Miller (Jones)						
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
Mr. Matt Stewart	AMATS
Ms. Teresa Hazlett	Cuyahoga Falls
Ms. Christine Jonke	Akron
Mr. Joe Ignazzitto	Tallmadge – DOA
Mr. Joe Paradise	Summit County Engineer's office
Mr. Benjamin Rexroad	Signal Akron
Ms. Erin Ryan	DLZ
Mr. Tony Urankar	MS

Akron Metropolitan Area Transportation Study
Technical Advisory Committee
Thursday, May 9, 2024 – 1:30 p.m.

Minutes of Meeting

Recordings of AMATS committee meetings are available in the Podcast section of the agency web site at www.amatsplanning.org/category/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 March 21, 2024 meeting.

Motion
Jim Bowling *made a motion to approve the minutes and it was seconded by* ***John Kovacich****. 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* ***Joe Paradise****. The motion was approved by a voice vote.*

B. Technical Progress Report

Matt Stewart said that AMATS and its consultant are developing a new, user-friendly *Bike Map*.

Implementation grant applications to the federal Safe Streets for All (SS4A) Program are due soon. **Mr. Stewart** said that two Greater Akron area communities are expected to apply for SS4A grants.

Development of Akron's *Summit Lake Pedestrian Safety Master Plan* and New Franklin's *SR 619 Corridor Development Planning Study*, which were awarded grants from the AMATS Connecting Communities Program in March, is commencing.

Mr. Stewart said that preparation of the input documents necessary for the update of the long-range *Transportation Outlook 2050* continues.

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 April 30, 2024.

Mr. Baker noted that AMATS may be unable to secure or over-program project funding to accommodate increasing project costs beginning in FY 2025. **Ms. Prater** added that AMATS may be unable to reschedule projects to earlier fiscal years due to similar funding constraints. **Ms. Prater** cited PDIP-funded projects as an example of projects that may not be rescheduled to FY 2025 or FY 2026 due to such constraints. **Ms. Prater** said that projects that meet PDIP criteria will be allowed to retain their funding at a 90-10 funding split.

IV. Old Business

A. AMATS *Active Transportation Plan*.

Heather Davis Reidl presented Attachment 4A.

Motion
Mike Collins *made a motion to approve the AMATS Active Transportation Plan and it was seconded by* ***Jim Bowling****. The motion was approved.*

B. AMATS *Areawide Roundabout Study*.

Mr. Stewart presented Attachment 4B.

Joe Hadley asked if the study assessed whether older roundabouts in the Greater Akron area were reaching their traffic volume limits. **Mr. Hadley** asked whether there were potential scenarios in which incoming volume should be a concern.

Mr. Stewart said that AMATS does not see traffic volume concerns at the present time. **Mr. Stewart** concurred with Mr. Hadley that scenarios could develop in which volume is a concern. **Mr. Stewart** said that, while construction guidance for roundabouts is well-established, larger roundabouts do tend to cause more confusion for unaccustomed drivers and may not be a suitable solution for every intersection.

Mike Lupica praised the agency for compiling the AMATS *Areawide Roundabout Study*.

Motion
Mike Collins *made a motion to approve the AMATS Areawide Roundabout Study and it was seconded by* ***Mike Jones****. The motion was approved.*

V. New Business

None.

VI. Resolutions

A. Resolution 2024-10 – Approving the FY 2025 Transportation Planning Work Program and Budget.

Ms. Reidl presented Attachment 6A.

Mr. Paradise asked how the totals presented in Tables 1 and 2 were tabulated. **Mr. Paradise** questioned why Table 1 showed AMATS receiving more than $3 million through various funding sources and yet the agency projects a FY 2025 carryover balance of $965,000. **Ms. Reidl** noted that the balance is only an estimate. **Mr. Paradise** questioned whether the carryover balance could be used for other purposes and whether the agency should carryover such large balances.

Ms. Reidl explained that the local share totals presented in Table 2 are based on a 10 percent local match estimate per community of the Greater Akron area's federal funding allocations, which may vary annually.

Mr. Baker explained that the carryover balance in Table 1 may be attributable to the challenges that AMATS faced as an agency with regards to staffing turnover and vacancies. **Mr. Baker** noted that these challenges have prompted AMATS to contract various services and products to outside entities, such as the pavement condition ratings map and the upcoming *Signal Inventory*. **Mr. Baker** said that the agency will likely use the carryover balance to hire and retain future staff rather than risk a return of unused funding to the federal government.

Mr. Baker noted that a significant portion of the Table 1 funds listed are federal Consolidated Planning Grant funds, which may only be used for planning purposes. These planning funds may not be used for project-related endeavors such as right-of-way acquisition, engineering, and construction phases.

Motion
Jim Bowling *made a motion to approve Resolution 2024-10 and it was seconded by* ***Joe Paradise****. The motion was approved.*

B. Resolution 2024-11 – Reaffirming the Approval of the Regional Transportation Plan and the Transportation Improvement Program, and Affirming the Consistency between the Regional Transportation Plan, the Transportation Improvement Program, and the State Implementation Plan.

Mr. Stewart presented Attachment 6B.

Motion
Mike Collins *made a motion to approve Resolution 2024-11 and it was seconded by* ***John Kovacich****. The motion was approved.*

C. Resolution 2024-12 – Certification of the Urban Transportation Planning Process.

Mr. Stewart presented Attachment 6C.

Motion
Jim Bowling *made a motion to approve Resolution 2024-12 and it was seconded by* ***Joe Paradise****. The motion was approved.*

D. Resolution 2024-13 – To Add Newly Awarded Funds for METRO RTA and PARTA (FY 2024-2027 TIP Amendment #6).

Matt Mullen presented Attachment 6D.

Motion
Mike Collins *made a motion to approve Resolution 2024-13 and it was seconded by* ***Jim Bowling****. The motion was approved.*

E. Resolution 2024-14 – Approving Amendment #7 to the FY 2024-2027 Transportation Improvement Program to add three projects, revise funding / move from group to individual project for one project and delete one project.

Ms. Prater presented Attachment 6E.

Motion
Dylan Garritano *made a motion to approve Resolution 2024-14 and it was seconded by* ***Jim Bowling****. The motion was approved.*

VII. Other Business

A. **Ms. Reidl** summarized the development of an update to the agency web site and upcoming features of the site.

VIII. Adjournment

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

Motion
John Kovacich *made a motion to adjourn the meeting and it was seconded by* ***Mike Collins****. The motion was approved.*

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

OBSERVERS AND STAFF MEMBERS PRESENT

NAME	REPRESENTING
Mr. Curtis Deibel	Thrasher
Mr. Jerry Jones	Anser Advisory
Mr. George Maki	E.L. Robinson Engineering
Mr. Brad Olinger	Thrasher Group
Mr. Myron Pakosh	CVE
Mr. Joe Paradise	Summit County Engineer's office
Ms. Cynthia Peck	ASI
Ms. Amy Proseus	PARTA

STAFF MEMBERS PRESENT

Mr. Seth Bush	AMATS
Ms. Heather Davis Reidl	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, May 9, 2024 – 6:30 p.m.

Meeting Summary

Attendees:

Ron Brubaker
William Maki
Austen Rau
Bill Sepe

Staff:

Curtis Baker, Director
Seth Bush, Geographic Information Systems (GIS) Coordinator
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. **Mr. Stewart** presented Attachment 4B – AMATS *Areawide Roundabout Study*.

Ron Brubaker expressed support for the use and development of roundabouts. **Mr. Brubaker** noted that roundabouts are used extensively and effectively at The Villages, a planned retirement community in Florida.

William Maki cautioned that, while roundabouts with interior circles displaying statues and other artwork present opportunities to promote civic pride, such artwork should not obstruct traffic views or pose other hazards. **Mr. Stewart** said that study *Chapter 4 – Planning for Roundabouts in the Greater Akron Area* presents best practices and placemaking strategies that communities should consider when planning roundabouts. **Mr. Maki** praised AMATS for its compilation of the study.

Austen Rau asked how roundabouts may accommodate cyclists and bike traffic. **Mr. Stewart** said that bike lane and merging strategies suggested by city of Green officials are also presented in *Chapter 4*. The attendees discussed various roundabout strategies to accommodate cyclists.

B. **Matt Mullen** presented Attachment 4A – AMATS *Active Transportation Plan* Recommendations.

Mr. Brubaker asked Messrs. Mullen and Stewart to summarize *Chapter 11 – Conclusion* of the Active Transportation Plan (ATP). **Mr. Stewart** described the chapter.

Curtis Baker noted that the *Shared Use Path Recommendation Listing* in the ATP will likely have to be reduced to be considered for inclusion in the upcoming AMATS long-range regional transportation plan. **Mr. Baker** described the project selection process for the regional transportation plan.

C. **Mr. Stewart** invited the attendees to participate in the May 11 Bike & Brainstorm in Hudson.

D. **Mr. Brubaker** asked whether AMATS had received information regarding the appraisals of rail lines owned by METRO of Summit County. **Mr. Baker** said that AMATS has not received such information. **Mr. Baker** noted that METRO recently hired a new planning director, Nate Leppo.

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, August 1, 2024**.

FINANCIAL PROGRESS REPORT
AKRON METROPOLITAN AREA TRANSPORTATION STUDY
June 30, 2024

	Description	Annual Budget	Year-to-Date Expenses	% Budget Expended	June Expenses
I.	**Short Range Planning**	**$685,000**	**$525,344**	**77%**	**$42,386**
	FY2023 Carryover	185,000	184,961		0
	FY2024	500,000	340,384		42,386
II.	**Transportation Improvement Program**	**$250,000**	**$178,274**	**71%**	**$5,911**
	FY2024	250,000	178,274		5,911
III.	**Continuing Planning & Data Collection Transportation System Update**	**$432,000**	**$416,277**	**96%**	**$17,560**
	FY2023 Carryover	132,000	130,903		0
	FY2024	300,000	285,374		17,560
IV.	**Long Range Plan Activity**	**$560,000**	**$301,695**	**54%**	**$29,619**
	FY2023 Carryover	110,000	104,293		0
	FY2024	450,000	197,402		29,619
V.	**Service**	**$665,000**	**$350,924**	**53%**	**$28,409**
	FY2023 Carryover	165,000	147,150		0
	FY2024	500,000	203,775		28,409
VI.	**OhioRideshare and AQ Advocacy**	**$180,000**	**$63,201**	**35%**	**$0**
	FY2024 OhioRideshare	80,000	25,764		0
	FY2024 Air Quality	100,000	37,437		0
VII.	**Local**	**$25,000**	**$22,747**	**91%**	**$0**
	AMATS local Costs	25,000	22,747		0
VIII.	**AMATS Transportation Quarterly**	**$80,466**	**$33,248**	**41%**	**$5,096**
	FY2023 Carryover	4,000	3,972		0
	FY2024	76,466	29,276		5,096
IX.	**GRAND TOTAL AMATS BUDGET**	**$2,877,466**	**$1,891,711**	**66%**	**$128,981**

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: **August 8, 2024**

FY 2025 began on July 1st and only Air Quality and Rideshare of the CMAQ funds has encumbered so far. All approved projects from the last rounds of funding have been added to the funding program and balances sheets to show the most up to date listing.

STBG allocations are lower this year than in previous years due to the FY 2024 loan repayment of $1.3 million. A loan will be needed again this year to cover all the STBG projects as carryover will be minimal. Approximately $3.84 million of Carbon Reduction Program (CRP) funding from FY 2024 will be carried forward and will cover the negative balance currently shown in FY 2025. CMAQ and TASA funding are currently negative this year, but AMATS expects carryover funding from FY 2024.

AMATS TRANSPORTATION IMPROVEMENT PROGRAM

STBG Funding Program and Balances

July 23, 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											
	Pending											
113161	Highland & Valley View Improvements	Macedonia	R(C)	$64,000	1							$64,000
116917	Arlington Rd Widening	Green	R(C)	$674,602	1							$674,602
116742	Wyoga Lake Rd	Cuyahoga Falls	R(C)	$200,000	1							$200,000
113175	Ravenna Rd Part 2 Resurfacing	Summit Co	C	$600,000	1							$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	$238,051	3							$238,051
116742	Wyoga Lake Rd	Cuyahoga Falls	(R)C			$5,900,000	3					$5,900,000
116929	SR 91/Terex Rd Turn lane Improvements	Hudson	C			$400,142	3					$400,142
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	Cuy Falls	R(C)					69,520				69,520
121863	State Rd Widening	Cuy 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
112889	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

P = Engineering
R = Right-of-Way
C = Construction

	2025	2026	2027	2028	2029	2030
Annual STBG Expenditures	**$12,443,761**	**$9,088,934**	**$12,619,421**	**$11,876,570**	**$9,964,218**	**$5,700,000**
Annual STBG Allocations	$9,924,266	$11,416,572	$11,416,572	$11,416,572	$11,416,572	$11,416,572
Balanc	-$2,519,495	$2,327,638	-$1,202,849	-$459,998	$1,452,354	$5,716,572
Allowable carryover	$2,658,354	$2,658,354	$2,658,354	$2,658,354	$2,658,354	
Possible recall	$0	$0	$0	$0	$0	

AMATS TRANSPORTATION IMPROVEMENT PROGRAM

CRP Funding Program and Balances

July 23, 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	$3,600,000	4							$3,600,000
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

P = Engineering
R = Right-of-Way
C = Construction

	2025	2026	2027	2028	2029	2030
Annual CRP Expenditures	$3,600,000	$2,000,000	$2,240,000	$2,024,400	$1,713,452	$0
Annual CRP Allocations	$1,111,737	$1,224,465	$1,224,465	$1,224,465	$1,224,465	$1,224,465
Balanc	-$2,488,263	-$775,535	-$1,015,535	-$799,935	-$488,987	$1,224,465

AMATS TRANSPORTATION IMPROVEMENT PROGRAM

CMAQ Funding Program and Balances

July 23, 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											
116924	Downtown Hudson Signal Improvements	Hudson	C	$25,878								$2,664,480
116917	Arlington Rd Roundabouts	Green	R(C)	$762,124	1							$762,124
113165	Ravenna & Shephard Improvements	Twinsburg	(R)C	$1,252,292	2							$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	$5,301,065	4							$5,301,065
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	$12,842,325	$6,999,933	$3,253,600	$10,777,285	$0	$0
R = Right-of-Way	Annual CMAQ Allocations	$6,191,288	$6,335,950	$6,335,950	$6,335,950	$6,335,950	$6,335,950
C = Construction	Balance	-$6,651,037	-$663,983	$3,082,350	-$4,441,335	$6,335,950	$6,335,950

AMATS TRANSPORTATION IMPROVEMENT PROGRAM

TASA Funding Program and Balances

July 23, 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								$375,732
105556	The Portage Trail - Ravenna Rd Bridge	Portage Co	(P)C	$313,600	1							$313,600
107930	Freedom Trail Phase 4	MetroParks	C	$700,000	2							$700,000
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
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
121755	Stow/Summit St Pedestrian Improvements	Portage Co	P	$200,000								$200,000
121747	Rubber City Heritage Trail Ph 3	Akron	P(R)(C)					$133,600				$133,600
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	$3,629,803	$590,584	$2,133,600	$1,045,200	$921,200	$0
R = Right-of-Way	Annual TASA Allocations	$1,116,206	$1,228,521	$1,228,521	$1,228,521	$1,228,521	$1,228,521
C = Construction	Balance	-$2,513,597	$637,937	-$905,079	$183,321	$307,321	$1,228,521

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: **Highway Preservation Needs Report**

DATE: **August 8, 2024**

As part of the planning process to complete the 2050 Regional Transportation Plan, the attached *Highway Preservation Needs Report* has been developed. The purpose of this report is to identify and evaluate the preservation needs of the existing highway system. It describes the highway system in the AMATS region and estimates the required cost needed to maintain and preserve it in an acceptable condition.

Pavement resurfacing and replacement needs and bridge preservation needs are described and evaluated in the report. AMATS Pavement Condition Index (PCI) and National Highway System (NHS) bridge ratings were included to evaluate performance measures.

The total estimated cost for highway preservation between now and 2050 is approximately $6.47 billion, valued in 2024 dollars. This cost estimate is approximately 71 percent higher than the $3.78 billion estimated in the last system preservation report, which was valued in 2019 dollars. The estimated cost will be considered in the development of 2050 Regional Transportation Plan.

The Staff recommends approval of the *Highway Preservation Needs Report*. The final report will be posted on the AMATS website at amatsplanning.org.

AMATS

HIGHWAY PRESERVATION NEEDS REPORT

August 2024

HIGHWAY PRESERVATION NEEDS REPORT

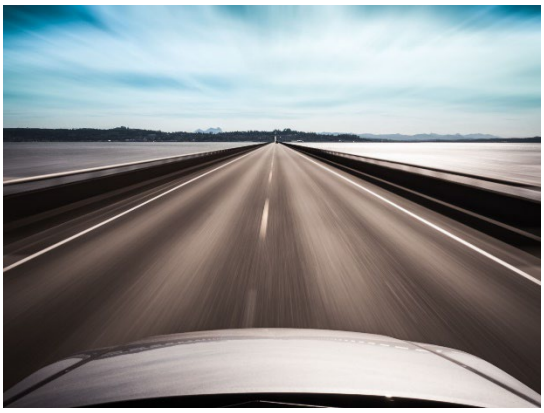
August 2024

Akron Metropolitan Area Transportation Study
1 Cascade Plaza, Suite 1300/Akron, Ohio 44308
Phone: (330) 375-2436
FAX: (330) 375-2275

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 Chippewa and Milton Township in 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.

Introduction

The Akron Metropolitan Area Transportation Study (AMATS) recognizes that maintaining and preserving the existing highway system should be a priority of the transportation planning process. Therefore, the purpose of this report is to estimate the federal funds (in 2024 dollars) needed to preserve and maintain the existing highway system between now and 2050. This report will not list specific maintenance projects; however, it will describe the existing highway system including resurfacing and replacement needs. It will also describe and quantify bridge maintenance and replacement needs on eligible bridges.



All future highway system preservation projects on the federal aid system will be considered consistent with the forthcoming Regional Transportation Plan, *Transportation Outlook 2050,* and will be eligible for federal funding as it becomes available. Highway maintenance items, such as shoulder and drainage improvements, pavement repairs, guiderail, fence replacement, pavement markings, signage, lighting and painting are included in the estimated costs for highway resurfacing and bridge maintenance. The findings of this report will be used in determining the portion of anticipated federal funding that should be reserved for highway projects to ensure maintenance and preservation of the existing highway system over the life of *Transportation Outlook 2050*.

Existing Highway System

Roadways

Federal Functional Classification

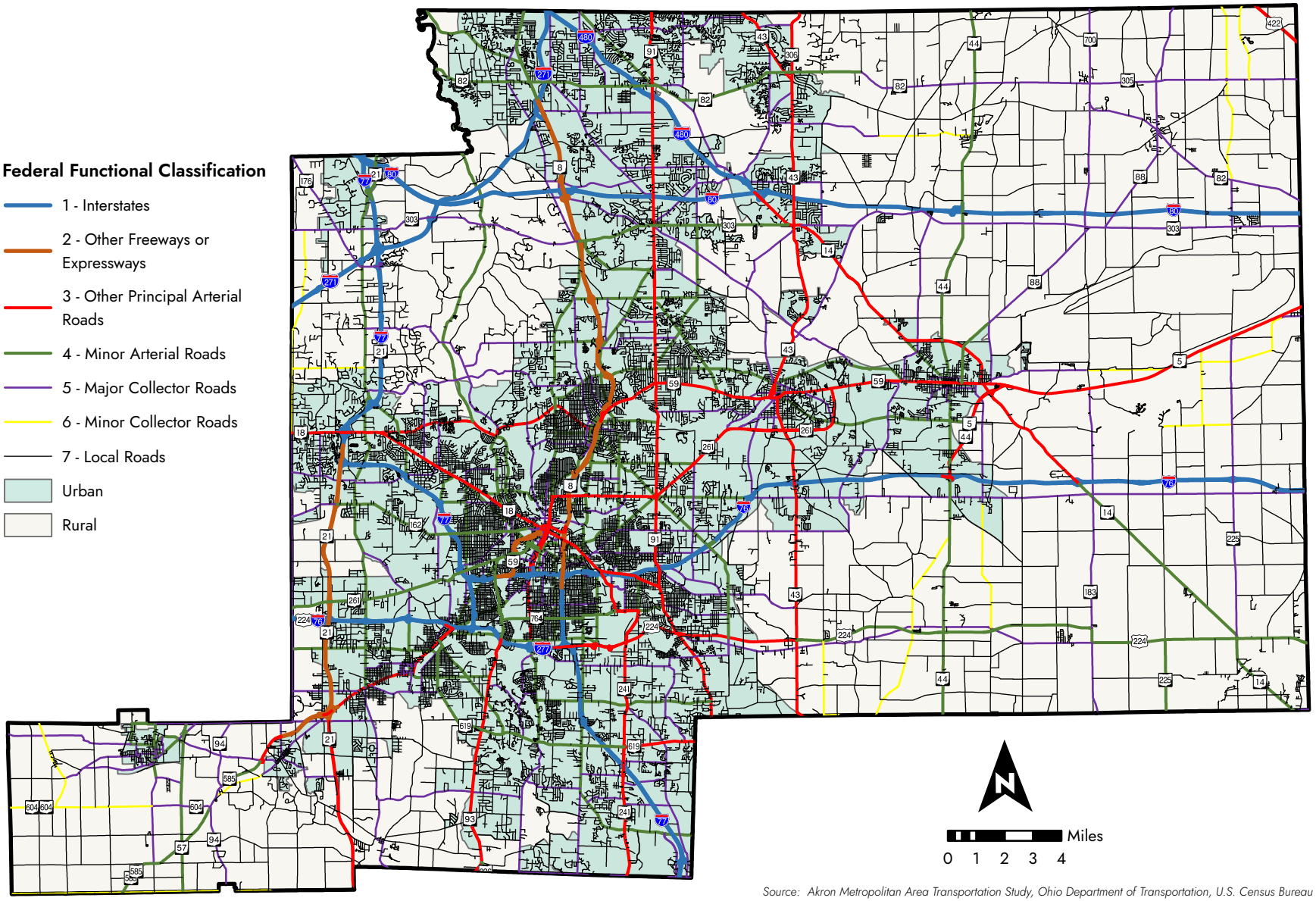
The Akron metropolitan area contains 4,797 miles of roadways. Map 1 shows the roadways by federal functional classification. Table 1 shows the length in miles and lane miles for each roadway classification.

Table 1: Mileages by Federal Functional Classification

Federal Functional Classification	Length (in Miles)	Number of Lane Miles
Interstate	106	493
Expressway	33	164
Ohio Turnpike (I-80)	34	204
Principal Arterial	194	585
Minor Arterial	354	969
Major Collector	547	1,165
Urban Minor Collector	6	12
Rural Minor Collector	71	142
Local	3,452	6,935
Totals:	**4,797**	**10,669**

Rural minor collectors and local roads are not considered part of the federal aid system. Therefore, they are not eligible for federal funding and will not be included in the pavement cost estimates in the subsequent sections. The local jurisdiction or the county in which they are located assumes responsibility for maintaining these roadways.

Map 1: Federal Functional Classification of Roadways



Source: Akron Metropolitan Area Transportation Study, Ohio Department of Transportation, U.S. Census Bureau

Pavement Condition Rating

Historically, AMATS used a rating known as Pavement Condition Rating (PCR), which was developed by and still used by ODOT. In 2019, AMATS began collecting pavement condition index (PCI) data on all its federal-aid eligible roadways. PCI considers the severity and extent of distress on a pavement surface at a given point in time. High resolution video is taken along area roadways and PCI is assigned for each segment. PCIs are ranked from 0 to 100, with 100 being freshly paved and 0 being complete failure of the pavement. By using PCIs, AMATS was able to select segments specifically based on logical termini and changes in pavement quality. Most PCI segments are shorter than the previously used ODOT PCR segments, which means there is less averaging and more targeted project locations. Any location with a PCI of 80 or less is eligible for resurfacing if it hasn't been resurfaced with federal funds within the last 10 years. PCI has become the new pavement grading standard for AMATS and is used for funding selection and performance tracking.

Since the PCI data has been collected, the average areawide PCI has remained in the mid to upper 60s. AMATS' goal is to raise the areawide PCI to 70 by focusing on roadway preservation. Please see the PCI systemwide averages and roadway quality percentages in Table 2 below.

Table 2: PCI Systemwide Averages and Roadway Quality Percentages

2019-2020 Average	67
2020-2021 Average	65
2021-2022 Average	68
2022-2023 Average	66
2023-2024 Average	67

Roadway Quality	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Excellent/Very good	22%	20%	25%	26%	16%
Good	29%	27%	28%	24%	28%
Fair	34%	35%	34%	33%	37%
Poor	13%	13%	11%	14%	17%
Very Poor/Fail	3%	5%	2%	4%	2%

A current map of PCI ratings can be found on the AMATS website under "Reports and Data" then "Pavement Data Map". This dashboard is updated as soon as new data becomes available.

ODOT still maintains PCR ratings for many roadways statewide. A full map of PCR ratings can be found on the ODOT TIMS website located at: https://gis.dot.state.oh.us/tims/ under "assets" when you create at map. Select both "PCR (state)" and "PCR (local)" for more detailed information in your community. Please note "PCR (local)" is for non-state routes or non-interstate locations not "local" roadways as with functional classification.

Bridges

The AMATS area contains 1,326 total bridges. Table 3 shows the number and deck area for each type of bridge based on information from ODOT.

Table 3: Number and Deck Area of Bridges by County

Bridge Type	Number of Bridges	Deck Area (sq ft)
Portage County		
Bridges under 20 ft	124	63,235
Railroad bridges (20+ ft)	4	17,557
Army bridge (20+ ft)	1	4,640
Turnpike Bridges (20+ feet)	27	301,552
Remaining Bridges (20+ ft)	207	978,028
Summit County		
Bridges under 20 ft	194	109,677
Railroad bridges (20+ ft)	24	107,078
Private bridges (20+ ft)	10	18,288
Turnpike Bridges (20+ feet)	23	753,702
Remaining Bridges (20+ ft)	614	6,040,489
Wayne County		
Bridges under 20 ft	22	10,873
Railroad bridges (20+ ft)	0	0
Remaining Bridges (20+ ft)	76	226,028
Totals:	**1,326**	**8,631,147**

* Includes non-private pedestrian and bicycle bridges

The federal definition of a bridge is a self-supported structure equal or greater than 20 feet in length; therefore, bridges under 20 feet will be listed but excluded in maintenance costs estimates. Similarly, the 28 "railroad bridges," 1 "Army bridge" and 10 "private bridges" were also excluded because they are not eligible for federal funds. The only bridges eligible for federal funds are listed as turnpike bridges and remaining bridges (20+ ft.) in Table 3.

All bridges are inspected annually using a consistent statewide procedure and assigned a National Bridge Index (NBI) rating. Bridges are defined as "Poor," "Fair" or "Good." Poor bridges should be closely monitored for closure, restrictions, rehabilitation, and possible replacement soon. All poor bridges within the AMATS area are listed in Table 4.

Please note for the "maint." column designates the maintenance responsibility of a bridge. Also, "status" references the drivability of the road. "Open" means open with no restrictions, "Posted" means load restrictions are posted on this bridge, and "Closed" means closed to all traffic.

Tables containing all Poor and Fair rated bridges are listed in Appendix A by county and then by community/township. All information regarding "bridge inventory" can be found on the ODOT's TIMS website under "assets". Zoom in to the desired area and select the bridge with the "i" (identify features) pointer for more detailed information about a specific bridge.

Table 4: Poor Bridges in the AMATS area

SFN	Facility carried	Features intersected	Length	Deck Area	Maint.	Status	Latitude	Longitude
6701809	CSX RR	SR 59	140	4,620	Railroad	Open	41.1562	-81.3161
6730256	Esworthy Rd	Hinkley Creek	44	1,074	Portage Co	Posted	41.1606	-81.13917
6730329	Pioneer Trail	Aurora Br Chagrin River	24	456	Portage Co	Open	41.3042	-81.31083
6730582	Sunnybrook Rd	Plum Creek	39	850	Portage Co	Open	41.1265	-81.36616
6730906	Stanley Rd	Mahoning Creek	22	477	Portage Co	Posted	41.2597	-81.08515
6730914	Howe Rd	Plum Creek	43	873	Portage Co	Open	41.1177	-81.36755
6730922	Whippoorwill Rd	Kale Creek Tributary	32	704	Portage Co	Posted	41.1133	-81.01556
6732208	Hopkins Rd	Br Eagle Creek	25	403	Portage Co	Posted	41.2764	-81.05667
6732534	Newton Falls Rd	Hinkley Creek	51	1,214	Portage Co	Posted	41.1629	-81.1328
6732569	Newton Falls Rd	Mahoning River	107	2,996	Portage Co	Posted	41.1711	-81.02167
6732879	Elliman Rd	Cuyahoga Tributary	25	603	Portage Co	Open	41.2539	-81.29916
6732909	Jones Rd	Kale Creek	40	640	Portage Co	Posted	41.1103	-81.01278
6733646	Randolph Rd	Potter Creek	26	624	Portage Co	Posted	41.0469	-81.29571
6733840	Tallmadge Rd	Barrell Run	43	1,157	Portage Co	Open	41.0984	-81.18761
6734111	Old Forge Rd	Breakneck Creek	49	882	Portage Co	Posted	41.0708	-81.26861
6735800	Yale Rd	Kale Creek Stream	22	440	Portage Co	Open	41.0622	-81.04632
6737080	W Main St	Cuyahoga River & CSX RR	249	17,430	Portage Co	Open	41.1538	-81.35909
6737498	Stow St	Cuyahoga River	141	5,006	Portage Co	Open	41.1506	-81.36222
6738850	Wayland Rd	West Branch Tributary	20	428	Portage Co	Open	41.1692	-81.07139
6740383	Judson Rd	W&LE RR	152	3,648	Portage Co	Open	41.1936	-81.38
6740448	Ravenna Rd	NS RR	67	1,829	Portage Co	Closed	41.1722	-81.31278
6760000	Mats Rd	Cuyahoga River	230	2,783	Mantua	Closed	41.2777	-81.22711
6760015	Sunrise Blvd	Fish Creek	43	1,475	Kent	Posted	41.1566	-81.38926
7700679	Pedestrian Bridge	SR 8	601	6,010	ODOT	Open	41.1597	-81.46877
7710089	NS RR	SR 303	46	736	Railroad	Open	41.2399	-81.44406
7730225	Kent St	Little Cuyahoga River	51	1,862	Akron	Open	41.0724	-81.48613
7731019	Snyder Ave	Tuscarawas River	61	2,074	Summit Co	Posted	41.0029	-81.60594
7731108	Brady Ave	Wolf Creek	72	2,160	Summit Co	Posted	41.0217	-81.61604
7732120	Ira Rd	N Fork Yellow Creek	27.2	490	Summit Co	Posted	41.1889	-81.65326
7732155	Granger Rd	Yellow Creek	65	1,560	Summit Co	Posted	41.1606	-81.64911
7733070	Akron Peninsula Rd	Salt Run	28	927	Summit Co	Posted	41.226	-81.54727
7735189	Minor Rd	Br Wolf Creek	21	714	Summit Co	Open	41.0812	-81.67022
7736029	S Main St	Feeder Channel	20.5	1,183	Summit Co	Open	41.0142	-81.5236
7738153	Grill Rd	Pancake Creek	34	680	New Franklin	Open	40.9699	-81.62308
7740220	Dillman Dr	Wagar Ditch	25.5	714	Hudson	Open	41.2599	-81.40707

Table 4: Poor Bridges in the AMATS area (continued)

SFN	Facility carried	Features intersected	Length	Deck Area	Maint.	Status	Latitude	Longitude
7749023	Wheatley Rd	Riding Run	35.3	1,168	Summit Co	Posted	41.2162	-81.59256
7750013	Brecksville Rd	Furnace Run	43	2,503	Summit Co	Open	41.2577	-81.63331
7755058	Glenwood Dr	Tinkers Creek	118	3,776	Summit Co	Posted	41.3406	-81.45479
7760027	Main St	CSX & NS RR	234	19,656	Akron	Open	41.0555	-81.52822
7760094	W&LE RR	Memorial Pkwy	251	2,510	Railroad	Open	41.1048	-81.53584
7760272	W&LE RR	Newton St	98	1,421	Railroad	Open	41.0732	-81.48059
7761309	W&LE RR	N Forge St	68	1,428	Railroad	Open	41.0842	-81.49565
7761678	Bowery St	Ohio Canal	278	17,792	Akron	Posted	41.0813	-81.52023
7762542	W&LE RR	Silver St	66	660	Railroad	Open	41.0931	-81.52579
7762593	W&LE RR	N Forge St	68	1,020	Railroad	Open	41.0841	-81.49574
7762631	W&LE RR	Eastland Ave	68	986	Railroad	Open	41.0742	-81.48169
7762771	CSX RR	Eastwood Ave	28	1,064	Railroad	Open	41.0867	-81.48833
8535760	Coal Bank Rd	Chippewa Creek	125.5	3,062	Wayne Co	Posted	40.9355	-81.70572
8535949	Porr Rd	Chippewa Creek	125.5	3,062	Wayne Co	Posted	40.9393	-81.7244
8546959	Zigler Rd	Wald Ditch	22.3	359	Wayne Co	Open	40.9751	-81.84169
8547114	E Ohio Ave	River Styx	105.7	4,281	Wayne Co	Open	40.9749	-81.7725
8547149	Doylestown Rd	Chippewa Creek	59	1,316	Wayne Co	Posted	40.9823	-81.85866
8547424	Atlantic Ave	Fall Creek	35	851	Wayne Co	Open	40.9658	-81.83474
8547440	Pleasant Home Rd	W Branch Red Run	21.6	335	Wayne Co	Open	40.9168	-81.76685
8547475	Eastern Rd	River Styx	22	462	Wayne Co	Posted	40.9882	-81.78546

Highway Resurfacing and Replacement Needs

Resurfacing needs between 2024 and 2050 are identified for all roadways in the AMATS area that are eligible for federal funding. An inventory of highway lane miles for roadways with federal classification rural major collector and urban minor collector and above is documented in Table 5 below. Roadways are typically resurfaced every 12-20 years. For this report AMATS assumed interstates/expressways would be resurfacing every 13 years, arterials would be resurfaced every 15 years, and collectors would be resurfaced every 20 years. To estimate resurfacing costs, the lane miles in each roadway type are multiplied by the ratio of 27 years divided by how often they are assumed to be resurfaced, then multiplied by the cost per lane mile provided by ODOT in 2024 dollars. The total resurfacing cost is estimated to be approximately $1.90 billion shown in Table 5.

Table 5: Pavement Resurfacing

Road Description (Federal Functional Class)	Length (in miles)	Number of Lane Miles	Number of Resurfacings	Cost per Lane Mile	Total Cost
Interstates/Expressways	139	657	2.08	$490,000	$668,623,846
Ohio Turnpike	34	204	2.08	$490,000	$207,609,231
Principal & Minor Arterials	548	1,554	1.80	$240,000	$671,328,000
Major Collectors	547	1,165	1.35	$220,000	$346,005,000
Minor Urban Collectors	6	12	1.35	$220,000	$3,564,000
Pavement Resurfacing	1,274	3,592			**$1,897,130,077**

Aside from periodically resurfacing the existing roads, periodically pavement needs to be completely replaced. Pavement replacement is done less frequently than resurfacing. AMATS assumed that only 2 percent of all roadways will be replaced between now and 2050. Table 6 shows the estimated pavement replacement costs in the AMATS area between now and 2050 using cost per lane mile provided by ODOT. The cost for pavement replacement is approximately $0.12 billion.

Table 6: Pavement Replacement

Road Description (Federal Functional Class)	Length (in miles)	Number of Lane Miles	Lane Miles Replaced	Cost per Lane Mile	Total Cost
Interstates/Expressways	139	657	13.14	$2,500,000	$32,850,000
Ohio Turnpike	34	204	4.08	$2,500,000	$10,200,000
Principal & Minor Arterials	548	1,554	31.08	$1,400,000	$43,512,000
Major Collectors	547	1,165	23.30	$1,400,000	$32,620,000
Minor Urban Collector	6	12	0.24	$1,400,000	$336,000
Pavement Replacement	**1,274**	**3,592**	**71.84**		**$119,518,000**

The combined cost of pavement resurfacing and replacement is just over $2.02 billion.

Bridge Maintenance and Replacement Needs

Bridge preservation needs are varied depending on the age and degree of usage of the bridge. The four common stages dealing with maintenance, repair, or replacement are: a) painting steel structure, b) deck overlay, c) deck replacement, and d) superstructure replacement. Table 7 shows an inventory of bridges over 20 feet in length in AMATS area (excluding railroad, Army, and other private bridges).

Table 7: Bridge Deck Area by County

	Number of Bridges	Deck Area
Bridges (20+ feet)*		
Portage Co.	207	978,028
Summit Co.	614	6,040,489
Chippewa & Milton Twp (Wayne Co.)	76	226,028
Turnpike Bridges (20+ feet)		
Portage Co.	27	301,552
Summit Co.	23	753,702
Totals:	**947**	**8,299,799**

Table 8 gives an estimate of the cost of preserving the bridges from 2024 to 2050, i.e., 27 years. The following assumptions were made with respect to the frequency of preservation of the four stages listed above: a) painting steel structure every 17 years, b) deck overlay every 17 years, c) deck replacement every 50 years, and d) superstructure replacement every 80 years.

The preservation cost for each stage of preservation was calculated by dividing 27 years by the frequency listed above and then multiplying that quantity by the total bridge deck area listed in Table 7 above. The unit costs shown on Table 8 were provided by ODOT in 2024 dollars. The total preservation cost of AMATS area bridges is approximately $4.45 billion.

Table 8: Bridge Preservation Costs

State of Preservation	Serviced Deck Area (sq. ft.)	Unit Cost (per sq.ft.)	Total Cost
Painting Steel Structure	13,182,034	$60	$790,922,040
Deck Overlay	13,182,034	$80	$1,054,562,720
Deck Replacement	4,481,891	$300	$1,344,567,300
Superstructure Replacement	2,801,182	$450	$1,260,531,900
Bridge Preservation			**$4,450,583,960**

Summary

It is necessary to assess the needs associated with maintaining and preserving the existing highway system to an acceptable level. Over the next 27 years, the total cost of preserving the AMATS existing highway system is estimated to be approximately $6.86 billion, valued in 2024 dollars. This cost estimate is approximately 71 percent higher than the $3.78 billion estimated in the last system preservation report, which was valued in 2019 dollars. There has been an increase of 130 lane miles of roadway and a 0.8 percent reduction in bridge deck square footage in these cost estimates. However, the higher preservation cost is primarily due to the dramatic increase in construction costs for both pavement and bridge maintenance.

The $6.47 billion total was determined by adding the estimated costs of pavement resurfacing ($1.90 billion), pavement replacement ($0.12 billion) and bridge preservation ($4.45 billion). The next step in the development of the 2050 Regional Transportation Plan is to determine the expected amount of revenue available over the life of the Plan. The preservation costs to maintain the system in this report will be considered when determining the amount available for operational and expansion project recommendations in the next Plan.

It is important to note that this study does not account for any rural minor collectors or local roadway preservation costs because they do not qualify for federal funds. If those roadway miles were added back into the report, then the costs would be substantially greater as they account for 73 percent of the total mileage and 66 percent of the total lane miles according to Table 1. This is important to note as local communities struggle to find necessary funding for their transportation infrastructure.

Appendix A: Portage County

SFN	Facility carried	Features intersected	Length	Deck Area	Rating	Maint.	Status	Latitude	Longitude
AURORA									
6730329	Pioneer Trail	Aurora Br Chagrin River	24	456	Poor	Portage County	Open	41.304167	-81.310833
6704743	SR 306	Br Chagrin River	136	4,978	Fair	ODOT	Open	41.343968	-81.342663
6733328	Crackel Rd	Aurora Br Chagrin River	76	1,710	Fair	Portage County	Open	41.347608	-81.336925
KENT									
6730582	Sunnybrook Rd	Plum Creek	39	850	Poor	Portage County	Open	41.126533	-81.366164
6737080	W Main St	Cuyahoga River & CSX RR	249	17,430	Poor	Portage County	Open	41.153773	-81.359085
6737498	Stow St	Cuyahoga River	141	5,006	Poor	Portage County	Open	41.150556	-81.362222
6760015	Sunrise Blvd	Fish Creek	43	1,475	Poor	Kent	Posted	41.15655	-81.389256
6701132	SR 43/SR 59	Cuyhoga River, CSX RR, Franklin Ave	762	46,482	Fair	ODOT	Open	41.151161	-81.359533
6704964	WB SR 261	Plum Creek & W&LE RR	538	22,596	Fair	ODOT	Open	41.134858	-81.369692
6704972	EB SR 261	Plum Creek & W&LE RR	538	22,596	Fair	ODOT	Open	41.134556	-81.369653
6760060	The Portage Hike & Bike Trail	CSX RR	54	756	Fair	Kent	Open	41.166374	-81.340199
6760074	W&LE RR	Mogadore Rd & RR	121	3,509	Fair	Railroad	Open	41.142586	-81.370258
6760082	W&LE RR	Cherry St	76	4,788	Fair	Railroad	Open	41.141197	-81.368997
MANTUA									
6760000	Mats Rd	Cuyahoga River	230	2,783	Poor	Mantua	Closed	41.277665	-81.227105
6701663	SR 44	Cuyahoga River	129	5,354	Fair	ODOT	Open	41.278539	-81.224578
6730876	Canada Rd	Cuyahoga Tributary	34	680	Fair	Portage County	Open	41.275253	-81.216455
MOGADORE									
6733301	Martin Rd	Mogadore Reservoir Outlet	27	648	Fair	Portage County	Open	41.056429	-81.382952
RAVENNA									
6760406	S Prospect St	CSX RR	377.5	15,780	Fair	Ravenna	Open	41.149697	-81.241994
STREETSBORO									
6704778	IR 480	W&LE RR	135	8,694	Fair	ODOT	Open	41.265286	-81.390069
6704808	IR 480	W&LE RR	135	8,694	Fair	ODOT	Open	41.264875	-81.390114
6729320	Tpk Exit 187 Ramp	IR 80	215	7,246	Fair	Ohio Turnpike	Open	41.256275	-81.364225
6729398	IR 80	SR 43	167	20,959	Fair	Ohio Turnpike	Open	41.253018	-81.345398
6729436	Page Rd	IR 80	206	6,118	Fair	Ohio Turnpike	Open	41.251239	-81.326631
WINDHAM									
6704506	SR 303	Br Eagle Creek	62	1,823	Fair	ODOT	Open	41.234969	-81.024292
6729908	IR 80	Windham Parkman Rd	140	17,612	Fair	Ohio Turnpike	Open	41.24179	-81.048856

Appendix A: Portage County

SFN	Facility carried	Features intersected	Length	Deck Area	Rating	Maint.	Status	Latitude	Longitude
ATWATER TWP									
6735630	Stroup Rd	Walborn Reservoir	77	2,772	Fair	Portage County	Open	40.992861	-81.172092
6739660	Alliance Rd	Willow Creek	30	810	Fair	Portage County	Open	41.0325	-81.098611
BRIMFIELD TWP									
6730914	Howe Rd	Plum Creek	43	873	Poor	Portage County	Open	41.117702	-81.367554
6701957	IR 76 WB	W&LE RR	147	6,468	Fair	ODOT	Open	41.106189	-81.369114
6701981	IR 76 EB	W&LE RR	147	6,468	Fair	ODOT	Open	41.105864	-81.369144
6733808	Tallmadge Rd	Plum Creek	32.6	1,174	Fair	Portage County	Open	41.100149	-81.369857
CHARLESTOWN TWP									
6730256	Esworthy Rd	Hinkley Creek	44	1,074	Poor	Portage County	Posted	41.160556	-81.139167
6732534	Newton Falls Rd	Hinkley Creek	51	1,214	Poor	Portage County	Posted	41.162913	-81.132799
6700217	SR 5	Hinkley Creek	24	1,152	Fair	ODOT	Open	41.151806	-81.167686
6735967	Knapp Rd	West Branch Reservoir	210	5,523	Fair	Portage County	Open	41.135278	-81.191389
DEERFIELD TWP									
6735800	Yale Rd	Kale Creek Stream	22	440	Poor	Portage County	Open	41.062214	-81.046317
5054486	Western Reserve Rd	Tributary Mahoning River	21	672	Fair	Portage County	Open	40.987796	-81.004361
6701000	SR 14	Berlin Reservoir	282	11,280	Fair	ODOT	Open	41.009664	-81.045742
6739660	Alliance Rd	Willow Creek	30	810	Fair	Portage County	Open	41.0325	-81.098611
EDINBURG TWP									
6733840	Tallmadge Rd	Barrell Run	43	1,157	Poor	Portage County	Open	41.098419	-81.18761
6700810	SR 14	Barrel Run	99	4,356	Fair	ODOT	Open	41.133189	-81.1895
6702643	IR 76 WB	SR 14	270	11,880	Fair	ODOT	Open	41.105975	-81.156939
6702708	IR 76 EB	SR 14	270	11,880	Fair	ODOT	Open	41.105692	-81.156675
6702732	Rock Spring Rd	IR 76	211	7,216	Fair	ODOT	Open	41.10567	-81.145896
6702767	Porter Rd	IR 76	211	6,499	Fair	ODOT	Open	41.105424	-81.12185
6702791	IR 76	Silver Creek	139	6,172	Fair	ODOT	Open	41.105544	-81.104672
6702821	IR 76	Silver Creek	141	6,246	Fair	ODOT	Open	41.105258	-81.10475
6702864	Alliance Rd	IR 76	212	6,572	Fair	ODOT	Open	41.105772	-81.098753
6731589	Industry Rd	Barrell Run	22	484	Fair	Portage County	Posted	41.086667	-81.193889
6731953	Industry Rd	Barrell Run	32	768	Fair	Portage County	Open	41.091111	-81.193889
6735304	Calvin Rd	Silver Creek	93	2,418	Fair	Portage County	Open	41.118889	-81.105833

Appendix A: Portage County

SFN	Facility carried	Features intersected	Length	Deck Area	Rating	Maint.	Status	Latitude	Longitude
FRANKLIN TWP									
6701809	CSX RR	SR 59	140	4,620	Poor	Railroad	Open	41.156164	-81.316097
6740383	Judson Rd	W&LE RR	152	3,648	Poor	Portage County	Open	41.193611	-81.38
6740448	Ravenna Rd	NS RR	67	1,829	Poor	Portage County	Closed	41.172222	-81.312778
6701213	SR 43	Abd RR	50	1,950	Fair	ODOT	Open	41.1811	-81.346828
6701264	SR 43	NS RR	155	7,130	Fair	ODOT	Open	41.186869	-81.347078
6701787	SR 59	Breakneck Creek	62	3,596	Fair	ODOT	Open	41.155872	-81.318822
6731570	Lake Rockwell Rd	Eckert Ditch	28	616	Fair	Portage County	Open	41.197222	-81.303333
6733492	Powder Mill Rd	Breakneck Creek	95	3,069	Fair	Portage County	Open	41.144444	-81.307778
FREEDOM TWP									
6729681	Lime Ridge Rd	IR 80	203	6,029	Fair	Ohio Turnpike	Open	41.243567	-81.182856
6729738	SR 700	IR 80	204	6,671	Fair	Ohio Turnpike	Open	41.243042	-81.148414
6729762	Nichols Rd	IR 80	203	6,029	Fair	Ohio Turnpike	Open	41.242267	-81.13435
6729789	SR 88	IR 80	249	8,391	Fair	Ohio Turnpike	Open	41.242425	-81.12855
HIRAM TWP									
6704530	SR 305	Silver Creek	33	884	Fair	ODOT	Open	41.309519	-81.129861
6731538	Hankee Rd	Eagle Creek Tributary	26	653	Fair	Portage County	Open	41.275278	-81.1125
6734316	Winchell Rd	Cuyahoga River	86	2,408	Fair	Portage County	Open	41.340833	-81.166944
MANTUA TWP									
6703364	SR 82	Cuyahoga River	171	5,985	Fair	ODOT	Open	41.310447	-81.195142
6733662	Pioneer Trail	Cuyahoga River	119	2,856	Fair	Portage County	Open	41.300556	-81.203056
6737404	Mantua Center Rd	Black Brook Ditch	25	488	Fair	Portage County	Open	41.330179	-81.245293
NELSON TWP									
6732208	Hopkins Rd	Br Eagle Creek	25	403	Poor	Portage County	Posted	41.276389	-81.056667
6703631	SR 88	Camp Creek	32	1,171	Fair	ODOT	Open	41.312247	-81.098325
6704573	SR 305	Camp Creek	85	3,060	Fair	ODOT	Open	41.31005	-81.096886
6730566	Knowlton Rd	Tinker Creek Tributary	22	374	Fair	Portage County	Open	41.296894	-81.022333
6739024	Parkman Rd	Tinker Creek	44	1,034	Fair	Portage County	Posted	41.295833	-81.047778
7841892	Shanks Downes Rd	Tinker Creek	45	1,269	Fair	Portage County	Open	41.291914	-81.003

Appendix A: Portage County

SFN	Facility carried	Features intersected	Length	Deck Area	Rating	Maint.	Status	Latitude	Longitude
PALMYRA TWP									
6730922	Whippoorwill Rd	Kale Creek Tributary	32	704	Poor	Portage County	Posted	41.113333	-81.015556
6732909	Jones Road	Kale Creek	40	640	Poor	Portage County	Posted	41.110278	-81.012778
6735800	Yale Rd	Kale Creek Stream	22	440	Poor	Portage County	Open	41.062214	-81.046317
6702864	Alliance Rd	IR 76	212	6,572	Fair	ODOT	Open	41.105772	-81.098753
6702945	IR 76	SR 225	118	5,192	Fair	ODOT	Open	41.106122	-81.050856
6703003	IR 76	SR 225	118	5,192	Fair	ODOT	Open	41.105828	-81.051317
6703097	IR 76 WB	Universal Rd & Abd RR	196	8,428	Fair	ODOT	Open	41.101267	-81.022668
6703127	IR 76 EB	Universal Rd & Adb RR	196	8,428	Fair	ODOT	Open	41.101014	-81.022686
6703151	IR 76	Kale Creek	80	3,520	Fair	ODOT	Open	41.100022	-81.014408
6703186	IR 76	Kale Creek	80	3,520	Fair	ODOT	Open	41.099708	-81.014425
6704026	SR 225	Br Kale Creek	20.6	371	Fair	ODOT	Open	41.080378	-81.050994
6733891	Tallmadge Rd	Kale Creek	80	2,560	Fair	Portage County	Open	41.098736	-81.014583
PARIS TWP									
6732569	Newton Falls Rd	Mahoning River	107	2,996	Poor	Portage County	Posted	41.171111	-81.021667
6738850	Wayland Rd	West Branch Tributary	20	428	Poor	Portage County	Open	41.169167	-81.071389
6700306	Ravenna Arsenal RR	SR 5	290	4,640	Fair	Army	Open	41.191333	-81.010219
6704174	SR 225	W Br Mahoning River	105	3,360	Fair	ODOT	Open	41.156797	-81.05145
6732895	Cable Line Rd	Kale Creek Tributary	25	500	Fair	Portage County	Open	41.134167	-81.010278
6732917	Cable Line Rd	Kale Creek Tributary	23	345	Fair	Portage County	Open	41.134155	-81.00411
6738575	Wayland Rd	W Br Mahoning River	131	3,943	Fair	Portage County	Open	41.157222	-81.071389
RANDOLPH TWP									
6733646	Randolph Rd	Potter Creek	26	624	Poor	Portage County	Posted	41.046906	-81.295705
6703879	US 224	Congress Lake Outlet	93	4,092	Fair	ODOT	Open	41.029817	-81.259414
6734626	Laubert Rd	Congress Lake Outlet	39	780	Fair	Portage County	Open	40.996518	-81.26673
6734804	Waterloo Rd	Congress Lake Outlet	44	1,434	Fair	Portage County	Open	41.033056	-81.257222
RAVENNA TWP									
6700667	SR 14	Portage Hike & Bike Tr / Abd RR	161	7,567	Fair	ODOT	Open	41.173725	-81.228958
6732062	Mccormick Rd	W Br Mahoning River	77	2,179	Fair	Portage County	Open	41.171667	-81.201944
6732704	Summit Rd	Breakneck Creek	132	4,224	Fair	Portage County	Open	41.139626	-81.27101
6738303	Wall St	RR & Portage Hike & Bike Tr	199	7,622	Fair	Portage County	Open	41.17	-81.271667

Appendix A: Portage County

SFN	Facility carried	Features intersected	Length	Deck Area	Rating	Maint.	Status	Latitude	Longitude
ROOTSTOWN TWP									
6734111	Old Forge Rd	Breakneck Creek	49	882	Poor	Portage County	Posted	41.070833	-81.268611
6702198	Rootstown Rd	IR 76	331	10,096	Fair	ODOT	Posted	41.110806	-81.270064
6702287	IR 76 WB	SR 5/SR 44	167	8,684	Fair	ODOT	Open	41.10959	-81.242737
6702317	IR 76 EB	SR 5/SR 44	167	8,684	Fair	ODOT	Open	41.109314	-81.242744
6702376	IR 76	New Milford Rd	120	10,560	Fair	ODOT	Open	41.107058	-81.220533
6702554	IR 76	Hattrick Rd	106	9,328	Fair	ODOT	Open	41.106392	-81.214125
6731589	Industry Rd	Barrell Run	22	484	Fair	Portage County	Posted	41.086667	-81.193889
6731953	Industry Rd	Barrell Run	32	768	Fair	Portage County	Open	41.091111	-81.193889
6734138	Old Forge Rd	Breakneck Creek	46	1,173	Fair	Portage County	Open	41.070264	-81.266261
6734650	Harriff Rd	Breakneck Creek	77	2,272	Fair	Portage County	Open	41.133056	-81.260556
6735029	Rootstown Rd	Breakneck Creek	76	1,824	Fair	Portage County	Open	41.105561	-81.263478
SUFFIELD TWP									
6733301	Martin Rd	Mogadore Reservoir Outlet	27	648	Fair	Portage County	Open	41.056429	-81.382952
SHALESRSVILLE TWP									
6732879	Elliman Rd	Cuyahoga Tributary	25	603	Poor	Portage County	Open	41.253892	-81.299158
6729479	Diagonal Rd	IR 80	213	6,326	Fair	Ohio Turnpike	Open	41.248147	-81.288797
6729495	IR 80	Cuyahoga River	238	29,940	Fair	Ohio Turnpike	Open	41.247983	-81.283863
6729576	IR 80	Infirmary Rd	116	14,593	Fair	Ohio Turnpike	Open	41.245758	-81.25079
6730299	Beck Rd	Harper Ditch	65	1,573	Fair	Portage County	Open	41.255	-81.256944
WINDHAM TWP									
6730906	Stanley Rd	Mahoning Creek	22	477	Poor	Portage County	Posted	41.259693	-81.085147
6704506	SR 303	Br Eagle Creek	62	1,823	Fair	ODOT	Open	41.234969	-81.024292
6729843	IR 80	Bryant Rd	134	16,857	Fair	Ohio Turnpike	Open	41.242318	-81.066473
6729975	IR 80	S Fork Eagle Creek	156	19,625	Fair	Ohio Turnpike	Open	41.241428	-81.020519
6739008	Parkman Rd	Mahoning Creek	26	569	Fair	Portage County	Open	41.264444	-81.050833

Appendix A: Summit County

SFN	Facility carried	Features intersected	Length	Deck Area	Rating	Maint.	Status	Latitude	Longitude
AKRON									
7730225	Kent St	Little Cuyahoga River	51	1,862	Poor	Akron	Open	41.072358	-81.486127
7760027	Main St	CSX & NS RR	234	19,656	Poor	Akron	Open	41.055519	-81.528222
7760094	W&LE RR	Memorial Pkwy	251	2,510	Poor	Railroad	Open	41.104828	-81.535842
7760272	W&LE RR	Newton St	98	1,421	Poor	Railroad	Open	41.073156	-81.480586
7761309	W&LE RR	N Forge St	68	1,428	Poor	Railroad	Open	41.08417	-81.495646
7761678	Bowery St	Ohio Canal	278	17,792	Poor	Akron	Posted	41.081317	-81.520231
7762542	W&LE RR	Silver St	66	660	Poor	Railroad	Open	41.09305	-81.525792
7762593	W&LE RR	N Forge St	68	1,020	Poor	Railroad	Open	41.084134	-81.495737
7762631	W&LE RR	Eastland Ave	68	986	Poor	Railroad	Open	41.074231	-81.481694
7762771	CSX RR	Eastwood Ave	28	1,064	Poor	Railroad	Open	41.086667	-81.488333
7700067	Johnston St	SR 8 & ramps to IR 76& IR 77	309	14,214	Fair	ODOT	Open	41.064032	-81.504843
7700180	Caroll St	SR 8	118	7,363	Fair	ODOT	Open	41.075326	-81.504473
7700210	Buchtel St	SR 8	118	7,363	Fair	ODOT	Open	41.076613	-81.504469
7700334	SR 59	SR 8	121	7,986	Fair	ODOT	Open	41.083864	-81.503312
7700369	SR 8 & SR 59	North St, L Cuy River & RRs	1583	131,389	Fair	ODOT	Open	41.086479	-81.501211
7700393	Glenwood Ave	SR 8	120	7,464	Fair	ODOT	Open	41.097565	-81.500266
7700423	SR 261	SR 8 & SR 59	119	9,996	Fair	ODOT	Open	41.102197	-81.500197
7700989	SR 18	SR 59 & Ohio Canal Encl	226	22,148	Fair	ODOT	Open	41.08575	-81.519092
7700997	SR 18	Little Cuyahoga River	25	1,950	Fair	ODOT	Open	41.070486	-81.488258
7701799	SR 59 NB	IR 76	1500	62,700	Fair	ODOT	Open	41.06175	-81.543153
7701802	SR 59 SB	Lakeshore Blvd & Russell Ave	564	23,575	Fair	ODOT	Open	41.061789	-81.540867
7701810	SR 59 NB	Lakeshore Blvd, Canal, Thornton St	864	36,115	Fair	ODOT	Open	41.063886	-81.537842
7701829	SR 59 SB	Lakeshore Blvd, Canal, Thornton St	800	33,440	Fair	ODOT	Open	41.063333	-81.538333
7701853	SR 59	W Exchange St	176	30,800	Fair	ODOT	Open	41.080525	-81.530789
7701918	Mill St EB	SR 59	350	16,450	Fair	ODOT	Open	41.083656	-81.520856
7701934	Mill St WB	SR 59 (to Glendale)	686	26,754	Fair	ODOT	Open	41.083667	-81.519441
7701942	SR 59	Ohio Canal Enclosure	67	4,288	Fair	ODOT	Open	41.086517	-81.518889
7701977	Bartges St	SR 59	196	15,876	Fair	ODOT	Open	41.070364	-81.537778
7701993	Dart Ave	Ramp to Bell St	158	5,846	Fair	ODOT	Open	41.074281	-81.537719
7702000	Euclid Ave	SR 59	354	19,824	Fair	ODOT	Open	41.075925	-81.537572
7702043	SR 59	Cedar St	172	25,112	Fair	ODOT	Open	41.080094	-81.532474
7702701	IR 77 SB	Waterloo Rd	202	13,696	Fair	ODOT	Open	41.028856	-81.504867

Appendix A: Summit County

SFN	Facility carried	Features intersected	Length	Deck Area	Rating	Maint.	Status	Latitude	Longitude
AKRON (continued)									
7702736	IR 77 NB	Waterloo Rd	206	12,628	Fair	ODOT	Open	41.028933	-81.504239
7702760	Catawba Ave	IR 77	163	6,976	Fair	ODOT	Open	41.035653	-81.505318
7702825	Cole Ave	IR 77	158	9,591	Fair	ODOT	Open	41.051624	-81.505643
7702884	IR 77	Archwood Ave	157	18,526	Fair	ODOT	Open	41.046443	-81.505507
7702914	Lovers Lane	IR 77	150	9,120	Fair	ODOT	Open	41.054474	-81.505611
7702973	IR 77 NB	SR 8 (CI)	143	5,777	Fair	ODOT	Open	41.061617	-81.504625
7703368	Princeton St	IR 76	154	9,594	Fair	ODOT	Open	41.061888	-81.534513
7703392	IR 76	Lakeshore Blvd	171	20,246	Fair	ODOT	Open	41.062045	-81.540766
7703457	IR 76	Bowery St & Ohio Canal	432	67,824	Fair	ODOT	Open	41.061833	-81.542886
7703481	IR 76	SR 93	158	22,499	Fair	ODOT	Open	41.061147	-81.55077
7703511	Hillcrest Ped Brdg	IR 76	262	2,620	Fair	ODOT	Open	41.059909	-81.554373
7703546	East Ave	IR 76	292	16,586	Fair	ODOT	Open	41.059653	-81.558108
7703570	IR 76	IR 77 (N Kenmore Leg)	197	15,366	Fair	ODOT	Open	41.060419	-81.568247
7703600	IR 77	Hawkins Ave	160	19,520	Fair	ODOT	Open	41.061293	-81.569508
7703635	IR 77	SR 261	147	20,477	Fair	ODOT	Open	41.063902	-81.572699
7703961	Schocalog Rd	IR 77	259	10,956	Fair	ODOT	Open	41.10885	-81.604034
7705557	IR 76	CSX RR	379	42,448	Fair	ODOT	Open	41.035638	-81.576218
7705581	27th St	IR 76	223	9,879	Fair	ODOT	Open	41.035264	-81.571906
7705611	IR 76	IR 277	202	15,352	Fair	ODOT	Open	41.035147	-81.565406
7705646	IR 76	CSX RR	221	23,537	Fair	ODOT	Open	41.037428	-81.565256
7705670	IR 76	Wilbeth Rd	218	21,364	Fair	ODOT	Open	41.039114	-81.565169
7705700	IR 76	Kenmore Blvd	183	19,032	Fair	ODOT	Open	41.041307	-81.565229
7705735	IR 76	Battles Ave	132	12,012	Fair	ODOT	Open	41.046472	-81.564839
7705824	East Ave	IR 76	261	14,616	Fair	ODOT	Open	41.051704	-81.565758
7705859	IR 76	Morse St	152	11,902	Fair	ODOT	Open	41.058556	-81.567619
7705883	IR 76 EB Ramp	Morse St	119	5,236	Fair	ODOT	Open	41.058557	-81.567417
7705891	Sumner Ped Brdg	IR 76	170	1,632	Fair	ODOT	Open	41.06235	-81.514894
7705972	IR 76 WB to IR 77 SB	IR 76 EB to IR 77 SB (CI)	240	9,120	Fair	ODOT	Closed	41.061329	-81.506507
7706006	IR 76 WB	SR 8 & IR 77 NB (CI)	353	22,557	Fair	ODOT	Open	41.062084	-81.505609
7706030	IR 76 EB Ramp	IR 77 NB & SR 8 (CI)	466	27,447	Fair	ODOT	Open	41.06153	-81.505151
7706219	Hoban HS Ped Bridge	IR 76	206	3,729	Fair	ODOT	Open	41.062922	-81.496592
7706332	IR 76	Kelly Ave, RR, Canal	814	121,286	Fair	ODOT	Open	41.06238	-81.482246

Appendix A: Summit County

SFN	Facility carried	Features intersected	Length	Deck Area	Rating	Maint.	Status	Latitude	Longitude
AKRON (continued)									
7706480	IR 76	SR 18	163	21,842	Fair	ODOT	Open	41.061311	-81.457338
7706537	SR 91 (Canton Rd)	IR 76, L Cuy River, W&LE ABC RR	481	26,696	Fair	ODOT	Open	41.064411	-81.43935
7706545	IR 76	Little Cuyahoga River	28	2,016	Fair	ODOT	Open	41.064567	-81.438144
7706669	IR 76	Gilchrest Rd	286	32,032	Fair	ODOT	Open	41.065153	-81.434572
7706723	Newton St	IR 76	399	14,763	Fair	ODOT	Open	41.072461	-81.414183
7707592	SR 93	Maryland Ave, ABC RR & CSX RR	581	39,973	Fair	ODOT	Open	41.041808	-81.546067
7707657	SR 162	Pigeon Creek	96	2,112	Fair	ODOT	Open	41.083483	-81.585522
7707789	US 224	S Arlington St	147	16,464	Fair	ODOT	Open	41.025828	-81.491783
7707797	Kelly Ave	US 224	182.4	9,850	Fair	ODOT	Open	41.025638	-81.483306
7708246	SR 18	CSX RR	69	5,037	Fair	ODOT	Open	41.069669	-81.487247
7708319	SR 18	CSX RR	112.5	9,000	Fair	ODOT	Open	41.082581	-81.510167
7708629	SR 261	SR 59	160	12,960	Fair	ODOT	Open	41.07315	-81.538006
7708645	SR 261 NB	L Cuy River, W&LE & Cuy Valley RRs	3351	139,067	Fair	ODOT	Open	41.096111	-81.512458
7708653	SR 261 SB	L Cuy River, W&LE & Cuy Valley RRs	3410	129,580	Fair	ODOT	Open	41.087104	-81.514607
7709315	Martha Ave	Little Cuyahoga River	33	1,617	Fair	ODOT	Open	41.059858	-81.476597
7709323	Martha Ave	Abd RR	28	1,120	Fair	ODOT	Open	41.060486	-81.477017
7709609	IR 277	Waterloo Rd	220	24,640	Fair	ODOT	Open	41.031353	-81.549311
7709633	IR 277	SR 93	217	23,935	Fair	ODOT	Open	41.029036	-81.547381
7709757	IR 277	Glenmount Ave	119	11,900	Fair	ODOT	Open	41.024508	-81.515554
7711220	SR 764	IR 77	128	7,808	Fair	ODOT	Open	41.039875	-81.505194
7711255	SR 764	METRO RTA RR	136	7,616	Fair	ODOT	Open	41.041628	-81.477153
7730055	South St	Ohio Canal	55.1	3,526	Fair	Summit County	Posted	41.061667	-81.542191
7730144	White Pond Dr	Schocalog Run	29	812	Fair	Summit County	Open	41.096408	-81.588907
7730209	Emmitt Rd	CSX RR	97	3,977	Fair	Akron	Open	41.025529	-81.478119
7730306	N Main St	Cuyahoga River	909	61,448	Fair	Summit County	Open	41.121514	-81.509763
7730322	Front St	Cuyahoga River	230	12,397	Fair	Summit County	Open	41.118351	-81.493451
7730357	W North St	Ohio Canal	66	3,861	Fair	Summit County	Open	41.091107	-81.518179
7735278	Collier Rd	Fredrick Ditch	20	790	Fair	Summit County	Open	41.069842	-81.588692
7736118	Glenmount Ave	Holy Cross Inlet	53	1,802	Fair	Summit County	Open	41.024851	-81.515277
7759398	Sand Run park access	Sand Run Creek	43	688	Fair	Local Park	Open	41.137274	-81.564358
7760000	E Exchange St	Wolf Ledges Pkwy & RRs	243	24,057	Fair	Akron	Open	41.075228	-81.518762
7760019	High St-Main St Viaduct	Rosa Parks Dr	982	47,038	Fair	Akron	Open	41.072457	-81.523444

Appendix A: Summit County

SFN	Facility carried	Features intersected	Length	Deck Area	Rating	Maint.	Status	Latitude	Longitude
AKRON (continued)									
7760116	University Blvd	CSX RR	249	19,870	Fair	Akron	Open	41.078041	-81.516437
7760124	Cedar St	Ohio Canal	431	24,567	Fair	ODOT	Open	41.07628	-81.524835
7760175	Brown St	ABC RR	34	2,040	Fair	Akron	Open	41.056531	-81.509946
7760248	W&LE RR	Hazel St	57	878	Fair	Railroad	Open	41.079642	-81.483922
7760310	Thornton St	Ohio Canal	147	9,158	Fair	Akron	Open	41.066061	-81.536111
7760469	Pedestrian Bridge	Springfield Lake Outlet	26	190	Fair	Akron	Open	41.053861	-81.447169
7760604	Dart Ave	Ohio Canal	136	5,032	Fair	Akron	Open	41.065169	-81.53729
7760949	Towpath trail	Ravine	246	3,690	Fair	ODNR	Open	41.127686	-81.538797
7761066	GOJO Ped Bridge	S Main St	111	1,288	Fair	Akron	Open	41.071869	-81.525253
7761228	W Mill St	Cascade Parking Deck	107	11,770	Fair	Akron	Open	41.082999	-81.519667
7761279	Pedestrian Bridge	Hill St	124	2,505	Fair	Private	Open	41.078039	-81.514653
7761341	Freedom Trail	N Forge St	53	2,544	Fair	Railroad	Open	41.083872	-81.49646
7761627	E Miller Ave	CSX & NS RR	166	8,300	Fair	Akron	Open	41.056486	-81.527544
7761635	Russell Ave	Ohio Canal	184	7,121	Fair	Akron	Open	41.06253	-81.541281
7761643	Rhodes Ave	Ohio Canal	56	3,360	Fair	Akron	Open	41.064714	-81.538477
7761759	Wedgewood Dr	Spring Lake Outlet	31	930	Fair	Akron	Open	41.04984	-81.440512
7762275	Carey Ave Ped Br	Mudrun	63	416	Fair	Akron	Open	41.041719	-81.576419
7762348	W&LE RR	Ohio Canal	690	6,624	Fair	Railroad	Open	41.089119	-81.519942
7762534	RR	River St	786	47,317	Fair	Railroad	Open	41.064875	-81.484739
7762550	W&LE RR	N Maple St	75	1,050	Fair	Railroad	Open	41.09	-81.521667
7762690	CSX RR	Furnace St	69	2,070	Fair	Railroad	Open	41.088603	-81.506803
7762844	CSX RR	N Forge St	53	2,120	Fair	Railroad	Open	41.083967	-81.496149

Appendix A: Summit County

SFN	Facility carried	Features intersected	Length	Deck Area	Rating	Maint.	Status	Latitude	Longitude
BARBERTON									
7731019	Snyder Ave	Tuscarawas River	61	2,074	Poor	Summit County	Posted	41.002861	-81.605944
7731108	Brady Ave	Wolf Creek	72	2,160	Poor	Summit County	Posted	41.021719	-81.616041
7705344	W State St	IR 76/US 224	176	11,616	Fair	ODOT	Open	41.037183	-81.583941
7705468	IR 76	Mud Run	26	1,872	Fair	ODOT	Open	41.035886	-81.578611
7711034	SR 619	Tusc River, CSX & ABC RRs	866	63,218	Fair	ODOT	Open	41.028487	-81.587991
7731000	Norton Ave	Wolf Creek	65	3,445	Fair	Summit County	Open	41.024672	-81.614603
7731043	Wooster Rd	Hudson Run	67	4,221	Fair	Summit County	Open	41.006789	-81.634173
7731124	Coventry Rd	Mud Run	34.2	1,163	Fair	Summit County	Open	41.033679	-81.579634
7731140	Hopocan Ave	Wolf Creek	75	2,888	Fair	Summit County	Open	41.017742	-81.617733
7731175	Wooster Rd	Wolf Creek	74.5	4,619	Fair	Summit County	Open	41.011667	-81.618333
BOSTON HEIGHTS									
7700172	Bike & Hike Trail	SR 8	251	2,912	Fair	ODOT	Open	41.228378	-81.489244
7729677	Bike & Hike Trail	IR 80	219	2,935	Fair	Ohio Turnpike	Open	41.257625	-81.520106
CLINTON									
7734050	Lawrence Rd	Chippewa Creek	130	4,771	Fair	Summit County	Open	40.91615	-81.64384
CUYAHOGA FALLS									
7700679	Pedestrian Bridge	SR 8	601	6,010	Poor	ODOT	Open	41.1597	-81.468772
7700598	SR 8	Broad Blvd	80	10,800	Fair	ODOT	Open	41.133464	-81.481092
7700601	SR 8 SB from Portage Tr	SR 8 SB ramp to Broad Blvd	209	6,270	Fair	ODOT	Open	41.135597	-81.481139
7700628	SR 8 NB to Portage Tr	SR 8 NB Ramp from Broad Blvd	329	10,528	Fair	ODOT	Open	41.135256	-81.480617
7700644	SR 8 & SR 59	Cuyahoga River	150	18,900	Fair	ODOT	Open	41.139939	-81.477939
7700733	SR 8	Relief Sidehill Structure	358	10,668	Fair	ODOT	Open	41.134875	-81.4815
7710798	Front St	SR 8	349	18,148	Fair	ODOT	Open	41.142574	-81.477209
7710828	Bailey Rd	SR 8	210	8,820	Fair	ODOT	Open	41.14647	-81.47507
7730306	N Main St	Cuyahoga River	909	61,448	Fair	Summit County	Open	41.121514	-81.509763
7730322	Front St	Cuyahoga River	230	12,397	Fair	Summit County	Open	41.118351	-81.493451
7745036	Riverview Rd	Yellow Creek	22	528	Fair	Summit County	Open	41.163494	-81.576261
7745052	Akron Peninsula Rd	Br Cuyahoga River	27	907	Fair	Summit County	Open	41.16749	-81.568849
7745206	Bolanz Rd	Cuyahoga River	127	4,712	Fair	Summit County	Open	41.200825	-81.568544
7768017	Queens Gate Cir	Kelsey Brook	31.5	725	Fair	Cuyahoga Falls	Open	41.123537	-81.45959
FAIRLAWN									
7764391	Elgin Dr	Schocalog Run	23	529	Fair	Fairlawn	Open	41.126326	-81.62578

Appendix A: Summit County

SFN	Facility carried	Features intersected	Length	Deck Area	Rating	Maint.	Status	Latitude	Longitude
GREEN									
7711131	SR 619	IR 77	394	14,539	Fair	ODOT	Open	40.974211	-81.478361
7738935	Graybill Rd	Heckman Ditch	21	588	Fair	Summit County	Open	40.956832	-81.440714
7739117	Mayfair Rd	Heckman Ditch	27	896	Fair	Summit County	Open	40.952053	-81.437033
7739125	Raber Road	Br Tuscarawas River	54	1,404	Fair	Green	Open	40.965348	-81.430539
7739133	Heckman Rd	Yenny Ditch	23	782	Fair	Green	Open	40.950702	-81.431886
7739389	Christman Rd	Lake Noah Outlet	32	736	Fair	Summit County	Open	40.914147	-81.516172
7739397	Arlington Rd	Nimisila Creek	37	1,480	Fair	Summit County	Open	40.90899	-81.497146
HUDSON									
7710089	NS RR	SR 303	46	736	Poor	Railroad	Open	41.239931	-81.444058
7740220	Dillman Dr	Wagar Ditch	25.5	714	Poor	Hudson	Open	41.259926	-81.407069
7700148	SR 8	Seasons Rd	689	75,790	Fair	ODOT	Open	41.201525	-81.482297
7700172	Bike & Hike Trail	SR 8	251	2,912	Fair	ODOT	Open	41.228378	-81.489244
7707266	NS RR	SR 91	68	2,856	Fair	Railroad	Open	41.237589	-81.440361
7710054	NS RR	SR 303	46	736	Fair	Railroad	Open	41.23995	-81.444694
7710569	Middletown Rd	IR 480	383	11,682	Fair	ODOT	Open	41.269656	-81.400733
7729782	IR 80	Brandywine Creek	32	3,968	Fair	Ohio Turnpike	Open	41.255331	-81.472303
7729863	SR 91	IR 80	204	13,342	Fair	Ohio Turnpike	Open	41.254689	-81.440464
7729898	IR 80	Hudson-Aurora Rd	129	16,254	Fair	Ohio Turnpike	Open	41.253314	-81.421372
7729979	IR 80	Tinkers Cr & Swamp	988	123,796	Fair	Ohio Turnpike	Open	41.254086	-81.395382
7740050	Hudson-Aurora Rd	Tinkers Creek	80	2,880	Fair	Summit County	Open	41.261895	-81.394315
7740085	E Hines Hill Rd	Brandywine Creek	32.3	1,050	Fair	Summit County	Open	41.26027	-81.489186
7740093	Hines Hill Rd	Br Brandywine Creek	20	540	Fair	Summit County	Open	41.260807	-81.47483
7740107	Hines Hill Rd	Br Brandywine Creek	23	626	Fair	Summit County	Open	41.263384	-81.451241
7740115	Hines Hill Rd	Br Brandywine Creek	20	546	Fair	Summit County	Open	41.263831	-81.448189
7741022	W Prospect St	Br Brandywine Creek	38.4	922	Fair	Hudson	Open	41.248979	-81.452008
7741049	Boston Mills Rd	Brandywine Creek	27	918	Fair	Summit County	Open	41.245648	-81.468333
7759322	Bike & Hike Trail	Barlow Rd	72	864	Fair	Local Park	Open	41.21778	-81.47076

Appendix A: Summit County

SFN	Facility carried	Features intersected	Length	Deck Area	Rating	Maint.	Status	Latitude	Longitude
MACEDONIA									
7706928	SR 82	Indian Creek	20	2,880	Fair	ODOT	Open	41.313775	-81.509014
7700768	SR 8 NB to IR 271 NB	SR 8 & Brandywine Creek	950.5	46,575	Fair	ODOT	Open	41.292778	-81.511389
7700806	SR 8	Brandywine Creek	72.8	3,640	Fair	ODOT	Open	41.294444	-81.5125
7700725	SR 8	Indian Creek	33	1,584	Fair	ODOT	Open	41.301019	-81.515947
7742045	Bedford Rd	Indian Creek	25	700	Fair	Summit County	Open	41.311833	-81.509622
7710208	Shepard Road	IR 480	325	9,750	Fair	ODOT	Open	41.338502	-81.4891
MUNROE FALLS									
7707142	SR 91 (N Main St)	Cuyahoga River	148	5,032	Fair	ODOT	Open	41.142142	-81.438822
7759339	Park Rd	Main Lake Inlet	28	568	Fair	Local Park	Posted	41.129722	-81.425194
7759347	Park Rd	Main Lake Outlet	23	483	Fair	Local Park	Open	41.131903	-81.421792
NEW FRANKLIN									
7707479	SR 93	Nimisila Creek	80	5,760	Fair	ODOT	Posted	40.915908	-81.561383
7711107	SR 619	Turkeyfoot Channel	118	4,720	Fair	ODOT	Open	40.980258	-81.535378
7738013	Cleveland Massillon Rd	Pancake Creek	21	840	Fair	Summit County	Open	40.976836	-81.631114
7738153	Grill Rd	Pancake Creek	34	680	Poor	New Franklin	Open	40.969942	-81.623082
7738188	Grove Rd	Br Tuscarawas River	23	794	Fair	Summit County	Open	40.970875	-81.591231
7738196	Kungle Rd	Br Pancake Creek	21.4	642	Fair	Summit County	Open	40.976633	-81.638
7738331	Ormond Dr	Turkeyfoot Lake Channel	44	1,082	Fair	New Franklin	Open	40.97705	-81.537794

Appendix A: Summit County

SFN	Facility carried	Features intersected	Length	Deck Area	Rating	Maint.	Status	Latitude	Longitude
NORTON									
7701055	SR 21 SB	SR 585	249	12,201	Fair	ODOT	Open	40.992467	-81.663114
7701144	SR 21 NB	SR 585	249	9,213	Fair	ODOT	Open	40.992667	-81.662706
7701179	Johnson Rd	SR 21	202	6,868	Fair	ODOT	Open	41.003941	-81.661579
7701209	SR 21 SB	Dorothy St & ABC RR	239	8,365	Fair	ODOT	Open	41.014092	-81.664389
7701268	SR 21	Br Hudson Creek	28	1,344	Fair	ODOT	Open	41.017919	-81.665217
7701322	SR 21	Br Hudson Creek	34	1,632	Fair	ODOT	Open	41.027681	-81.665111
7704895	IR 76	Hudson Run	24	1,152	Fair	ODOT	Open	41.040136	-81.681483
7704925	Hametown Rd	IR 76	246	7,626	Fair	ODOT	Open	41.039688	-81.667088
7705018	IR 76	SR 21	259	34,965	Fair	ODOT	Open	41.039929	-81.663459
7705042	Easton Rd	IR 76	211	6,541	Fair	ODOT	Open	41.03951	-81.647963
7708408	SR 261	Hudson Run	32	1,312	Fair	ODOT	Posted	41.046797	-81.686481
7708467	SR 261	SR 21	203	11,165	Fair	ODOT	Open	41.049469	-81.662628
7708491	SR 261	Van Hyning Run	22	528	Fair	ODOT	Posted	41.050086	-81.646156
7708521	SR 261	Wolf Creek	106	4,664	Fair	ODOT	Open	41.055036	-81.608994
7708556	SR 261	Pigeon Creek	54	2,376	Fair	ODOT	Open	41.056639	-81.601983
7708580	SR 261	Pigeon Creek	54	2,376	Fair	ODOT	Open	41.0574	-81.598711
7708610	SR 261	Pigeon Creek	39	1,716	Fair	ODOT	Open	41.058136	-81.595486
7710992	SR 585 EB to SR 21 NB	Wooster Rd	211	6,963	Fair	ODOT	Open	40.994225	-81.660533
7747144	Summit Rd	Wolf Creek	77	2,464	Fair	Summit County	Open	41.048811	-81.599917
7747187	Barber Rd	Wolf Creek	146	5,110	Fair	Summit County	Posted	41.034542	-81.608894
7747225	Hametown Rd	Hudson Run	32	1,037	Fair	Summit County	Open	41.028881	-81.667272
PENINSULA									
7709935	SR 303	Cuyahoga River	213	8,520	Fair	ODOT	Open	41.241297	-81.550339
7748043	Akron Peninsula Rd	Haskell Run	23	773	Fair	Summit County	Open	41.234536	-81.546825
REMINDERVILLE									
7758022	Glenwood Blvd	Pond Brook	24	960	Fair	Summit County	Open	41.341882	-81.405183
RICHFIELD									
7750013	Brecksville Rd	Furnace Run	43	2,503	Poor	Summit County	Open	41.257697	-81.633314
7707711	SR 176 (Wheatley Rd)	IR 77	305	16,318	Fair	ODOT	Open	41.2208	-81.626064
7750021	Brush Rd	Telling Ditch	22	821	Fair	Summit County	Open	41.254324	-81.651891
SILVER LAKE									
7700679	Pedestrian Bridge	SR 8	601	6,010	Poor	ODOT	Open	41.1597	-81.468772

Appendix A: Summit County

SFN	Facility carried	Features intersected	Length	Deck Area	Rating	Maint.	Status	Latitude	Longitude
STOW									
7700113	SR 8	Over Hampshire Rd	123	13,530	Fair	ODOT	Open	41.188303	-81.477611
7700121	SR 8	Mud Brook	120	12,960	Fair	ODOT	Open	41.196117	-81.479775
7700148	SR 8	Seasons Rd	689	75,790	Fair	ODOT	Open	41.201525	-81.482297
7702019	SR 59	Fish Creek	28	1,624	Fair	ODOT	Open	41.154278	-81.396519
7707215	SR 91	Powers Brook	23	1,334	Fair	ODOT	Open	41.195425	-81.440378
7753047	Hudson Dr	Powers Brook	27.5	1,023	Fair	Summit County	Open	41.202252	-81.45484
7753063	North River Rd	Fish Creek	29	1,421	Fair	Summit County	Open	41.145	-81.396667
7753128	Fishcreek Rd	Powers Brook	28	1,000	Fair	Summit County	Open	41.19549	-81.433135
TALLMADGE									
7706693	Munroe Falls Rd	IR 76	266	9,842	Fair	ODOT	Open	41.070681	-81.417216
TWINSBURG									
7755058	Glenwood Dr	Tinkers Creek	118	3,776	Poor	Summit County	Posted	41.340601	-81.454794
7707444	SR 91	Tinkers Creek	119	4,760	Fair	ODOT	Open	41.318308	-81.440169
7710208	Shepard Road	IR 480	325	9,750	Fair	ODOT	Open	41.338502	-81.4891
7710356	IR 480 WB	SR 91	221	10,166	Fair	ODOT	Open	41.306181	-81.440503
7710380	IR 480 EB	SR 91	221	9,724	Fair	ODOT	Open	41.305767	-81.440575
7756003	Chamberlain Rd	NS RR	118	4,484	Fair	Summit County	Open	41.302398	-81.472022
7756011	Chamberlain Rd	NS RR	118.5	4,503	Fair	Summit County	Open	41.302398	-81.472022

Appendix A: Summit County

SFN	Facility carried	Features intersected	Length	Deck Area	Rating	Maint.	Status	Latitude	Longitude
BATH TWP									
7732120	Ira Rd	N Fork Yellow Creek	27.2	490	Poor	Summit County	Posted	41.188887	-81.653255
7732155	Granger Rd	Yellow Creek	65	1,560	Poor	Summit County	Posted	41.160647	-81.649114
7708793	Medina Line Rd	IR 271	327	9,810	Fair	ODOT	Open	41.203806	-81.678397
7732023	Cleveland Massillon Rd	Yellow Creek	77	4,489	Fair	Summit County	Open	41.157636	-81.635881
7732031	Cleveland Massillon Rd	Br North Fork Stream	48	2,808	Fair	Summit County	Open	41.162916	-81.636898
7732058	Cleveland Massillon Rd	North Fork Stream	32	1,872	Fair	Summit County	Open	41.176878	-81.636568
7732082	Yellow Creek Rd	Yellow Creek	79.6	2,905	Fair	Summit County	Open	41.157197	-81.630433
7732090	Yellow Creek Rd	Yellow Creek	64.8	2,527	Fair	Summit County	Open	41.160122	-81.600257
7732112	Ira Rd	Bath Ditch	32	1,078	Fair	Summit County	Open	41.188838	-81.665065
7732147	Granger Rd	Yellow Creek	74	2,368	Fair	Summit County	Posted	41.160397	-81.652447
7732163	Granger Rd	North Fork	67	2,580	Fair	Summit County	Posted	41.158203	-81.637922
7732171	Shade Rd	North Fork	28	770	Fair	Summit County	Open	41.175564	-81.635133
7732228	Hametown Rd	Br Yellow Creek	36	1,346	Fair	Summit County	Open	41.15	-81.665
7732236	N Hametown Rd	Bath Ditch	26	884	Fair	Summit County	Open	41.189203	-81.665775
7732430	Hametown Rd	Br Yellow Creek	34	1,122	Fair	Summit County	Open	41.138333	-81.67
7732481	Martin Rd	Br Ira Creek	23	828	Fair	Summit County	Open	41.179492	-81.589628
7732503	Bath Rd	North Fork	30	660	Fair	Summit County	Open	41.168986	-81.634353
7763832	Bath Rd	Mudd Brook	92	3,680	Fair	Summit County	Open	41.158333	-81.505
BOSTON TWP									
7733070	Akron Peninsula Rd	Salt Run	28	927	Poor	Summit County	Posted	41.226014	-81.547267
7708971	IR 271	Furnace Run	23	3,312	Fair	ODOT	Open	41.233586	-81.604561
7709099	IR 271 SB	Boston Mills Rd	191	8,022	Fair	ODOT	Open	41.264081	-81.552333
7709129	IR 271 NB	Boston Mills Rd	163	5,868	Fair	ODOT	Open	41.263839	-81.552111
7729545	IR 80 EB	IR 271	406	26,390	Fair	ODOT	Open	41.252682	-81.586922
7729596	IR 271 NB	IR 80 WB	214.7	9,103	Fair	ODOT	Open	41.252753	-81.585699
7733038	Riverview Rd	Columbia Run	34.7	944	Fair	Summit County	Posted	41.275601	-81.568011
7733062	Akron Peninsula Rd	Dickerson Run	34	1,258	Fair	Summit County	Open	41.218361	-81.551975
7733127	Everett Rd	Furnace Run	86	3,320	Fair	Summit County	Open	41.2079	-81.584953
7733194	Boston Mills Rd	Cuyahoga River	250	10,075	Fair	Summit County	Open	41.262939	-81.560017
7746040	Stanford Rd	Br Brandywine Ck	20	608	Fair	National Park Service	Closed	41.276667	-81.548333

Appendix A: Summit County

SFN	Facility carried	Features intersected	Length	Deck Area	Rating	Maint.	Status	Latitude	Longitude
COPLEY TWP									
7735189	Minor Rd	Br Wolf Creek	21	714	Poor	Summit County	Open	41.081212	-81.670215
5233119	Medina Line Rd	Wolf Creek	99	3,020	Fair	Summit County	Open	41.087821	-81.687467
7701500	SR 21 SB	Barberton Res Inlet	112	4,928	Fair	ODOT	Open	41.085422	-81.662117
7701535	SR 21 NB	Barberton Res Inlet	112	4,928	Fair	ODOT	Open	41.0853	-81.661742
7701748	Ridgewood Rd	SR 21	219	8,322	Fair	ODOT	Open	41.111486	-81.654964
7701756	IR 77 NB to SR 21 SB	SR 21	225	7,200	Fair	ODOT	Open	41.120736	-81.653642
7704038	IR 77 SB	SR 21 NB	238	11,900	Fair	ODOT	Open	41.12295	-81.652722
7704046	IR 77 NB	SR 21 NB	238	14,756	Fair	ODOT	Open	41.123139	-81.652422
7735103	Shocalog Rd	Pigeon Creek	23	690	Fair	Summit County	Open	41.096342	-81.603108
7735154	Minor Rd	Wolf Creek	98	2,744	Fair	Summit County	Posted	41.081181	-81.656825
7735162	White Pond Dr	Pigeon Creek	34	1,275	Fair	Summit County	Open	41.092086	-81.590331
7735200	Jacoby Rd	Pigeon Creek	20	670	Fair	Summit County	Open	41.106769	-81.619414
7735278	Collier Rd	Fredrick Ditch	20	790	Fair	Summit County	Open	41.069842	-81.588692
COVENTRY TWP									
7736029	S Main St	Feeder Channel	20.5	1,183	Poor	Summit County	Open	41.014158	-81.523603
7702558	IR 77	Tuscarawas River	161	12,719	Fair	ODOT	Open	41.007099	-81.494458
7702612	Swartz Rd	IR 77	285	10,517	Fair	ODOT	Open	41.017669	-81.496225
7702647	IR 77 SB to US 224 EB	IR 77 NB	233	6,990	Fair	ODOT	Closed	41.023653	-81.498925
7707509	SR 93	Tuscarawas River	106	7,272	Fair	ODOT	Open	41.021606	-81.550086
7707568	SR 93	Ohio Canal	99	6,732	Fair	ODOT	Open	41.0237	-81.549722
7709811	IR 277	IR 77	561	59,634	Fair	ODOT	Open	41.025186	-81.502358
7736002	Arlington Rd	Tuscarawas River	73	3,796	Fair	Summit County	Open	41.007194	-81.492006
7736061	Portage Lakes Dr	East Reservoir Outlet	23	1,081	Fair	Summit County	Open	40.995798	-81.534768
7736088	Portage Lakes Dr	East Reservoir Outlet	29	1,035	Fair	Summit County	Open	41.00101	-81.53139
7736215	Turkeyfoot Dr	Turkeyfoot Channel	74	2,982	Fair	Summit County	Open	40.994259	-81.535195
NORTHFIELD CENTER TWP									
7709188	Brandywine Rd	IR 271	263	7,364	Fair	ODOT	Open	41.275676	-81.537007
7709242	IR 271 NB	Akron Cleveland Rd	135	5,670	Fair	ODOT	Open	41.29335	-81.521922
7709307	IR 271	Brandywine Creek	161	6,762	Fair	ODOT	Open	41.294153	-81.521556
7746024	Twinsburg Rd	Brandywine Creek	39	1,326	Fair	Summit County	Open	41.283333	-81.505

Appendix A: Summit County

SFN	Facility carried	Features intersected	Length	Deck Area	Rating	Maint.	Status	Latitude	Longitude
RICHFIELD TWP									
7749023	Wheatley Rd	Riding Run	35.3	1,168	Poor	Summit County	Posted	41.21622	-81.59256
7707711	SR 176 (Wheatley Rd)	IR 77	305	16,318	Fair	ODOT	Open	41.2208	-81.626064
7708793	Medina Line Rd	IR 271	327	9,810	Fair	ODOT	Open	41.203806	-81.678397
7708823	Southern Rd	IR 271	337	10,110	Fair	ODOT	Open	41.212314	-81.661111
7729766	IR 80 WB to SR 8	IR 80	213	7,178	Fair	Ohio Turnpike	Open	41.258444	-81.495097
7749015	Harter Rd	East Br Rocky River	30	720	Fair	Summit County	Open	41.21	-81.685
7749031	Townsend Rd	Furnace Run	28	952	Fair	Summit County	Open	41.268506	-81.641244
7749066	Brush Rd	Furnace Run	34.3	1,142	Fair	Summit County	Open	41.253158	-81.63008
7749082	Townsend Rd	Br Furnace Run	21	714	Fair	Summit County	Open	41.261453	-81.638283
7749090	Townsend Rd	Br Furnace Run	20	674	Fair	Summit County	Open	41.267261	-81.640406
7749139	Brush Rd	Br Furnace Run	27	959	Fair	Summit County	Open	41.253128	-81.632464
SAGAMORE HILLS TWP									
7746040	Stanford Rd	Br Brandywine Ck	20	608	Fair	National Park Service	Closed	41.276667	-81.548333
7751044	Houghton Rd	Br Sagamore Creek	22	550	Fair	Summit County	Open	41.34367	-81.55077
7751109	Holzhauer Rd	Br Cuyahoga River	20	680	Fair	Summit County	Open	41.311667	-81.558333
SPRINGFIELD TWP									
7706669	IR 76	Gilchrest Rd	286	32,032	Fair	ODOT	Open	41.065153	-81.434572
7708076	SR 241	METRO RTA RR	188	8,836	Fair	ODOT	Open	41.005733	-81.463633
7736002	Arlington Rd	Tuscarawas River	73	3,796	Fair	Summit County	Open	41.007194	-81.492006
7752008	Canton Rd	E Fork Tuscarawas River	28	1,848	Fair	Summit County	Open	40.990947	-81.405614
7752083	Skelton Rd	Little Cuyahoga River	35	840	Fair	Summit County	Open	41.056023	-81.423144
TWINSBURG TWP									
7710445	IR 480 WB	Stow Rd	119	4,284	Fair	ODOT	Open	41.277094	-81.409814
7710534	IR 480 EB	Stow Rd	119	4,284	Fair	ODOT	Open	41.276739	-81.410017
7756003	Chamberlain Rd	NS RR	118	4,484	Fair	Summit County	Open	41.302398	-81.472022
7756011	Chamberlain Rd	NS RR	118.5	4,503	Fair	Summit County	Open	41.302398	-81.472022
7756054	Old Mill Rd	Tinkers Creek	75	2,198	Fair	Summit County	Open	41.285226	-81.394417

Appendix A: Wayne County

SFN	Facility carried	Features intersected	Length	Deck Area	Rating	Maint.	Status	Latitude	Longitude
RITTMAN									
8547114	E Ohio Ave	River Styx	105.7	4,281	Poor	Wayne County	Open	40.974948	-81.772499
8502706	SR 57	Chippewa Creek	173	7,612	Fair	ODOT	Open	40.958079	-81.763241
8546975	N Main St	Landis Ditch	30.7	1,296	Fair	Wayne County	Open	40.980228	-81.781512
8547408	Salt St	River Styx	63.5	1,537	Fair	Wayne County	Open	40.968322	-81.770873
8547513	S Main St	Little Chippewa Creek	117.3	4,012	Fair	Wayne County	Open	40.961652	-81.780641
8547521	S Main St	Chippewa Creek	176.7	6,025	Fair	Wayne County	Open	40.963105	-81.780956
CHIPPEWA TWP									
8535760	Coal Bank Rd	Chippewa Creek	125.5	3,062	Poor	Wayne County	Posted	40.935531	-81.705717
8535949	Porr Rd	Chippewa Creek	125.5	3,062	Poor	Wayne County	Posted	40.939336	-81.7244
5235456	Eastern Rd	River Styx	55	1,650	Fair	Wayne County	Open	40.98815	-81.764875
8502854	SR 57	Rittman Rd/B&O RR	349	12,564	Fair	ODOT	Open	40.982005	-81.76141
8504059	SR 94	Ditch	27	648	Fair	ODOT	Posted	40.924475	-81.740029
8504083	SR 94	Chippewa Creek	159	6,440	Fair	ODOT	Open	40.946385	-81.743232
8504113	SR 94 & SR 585	CSX RR & Cleveland St	223	10,325	Fair	ODOT	Open	40.95516	-81.736997
8506124	SR 585	Mill Creek	93	4,092	Fair	ODOT	Open	40.959289	-81.730894
8506213	Doylestown Rd	SR 585	247.2	7,638	Fair	ODOT	Open	40.969064	-81.709497
8535612	Eastern Rd	Deibel Ditch Silver Creek	22.6	610	Fair	Wayne County	Open	40.988589	-81.681828
8535833	Hametown Rd	Silver Creek	34.5	725	Fair	Wayne County	Posted	40.936132	-81.675552
8535868	Clinton Rd	Silver Creek	43	1,036	Fair	Wayne County	Open	40.948959	-81.671655
8535906	Galehouse Rd	Silver Creek	28	420	Fair	Wayne County	Open	40.9411	-81.675282
8535922	Porr Rd	E Branch Red Run	30.3	524	Fair	Wayne County	Open	40.927157	-81.724123
8535981	Galehouse Rd	Mill Creek	45.6	1,094	Fair	Wayne County	Posted	40.952516	-81.734235

Appendix A: Wayne County

SFN	Facility carried	Features intersected	Length	Deck Area	Rating	Maint.	Status	Latitude	Longitude
MILTON TWP									
8546959	Zigler Rd	Wald Ditch	22.3	359	Poor	Wayne County	Open	40.975137	-81.841685
8547149	Doylestown Rd	Chippewa Creek	59	1,316	Poor	Wayne County	Posted	40.982348	-81.858657
8547424	Atlantic Ave	Fall Creek	35	851	Poor	Wayne County	Open	40.965813	-81.834744
8547440	Pleasant Home Rd	W Branch Red Run	21.6	335	Poor	Wayne County	Open	40.916849	-81.766851
8547475	Eastern Rd	River Styx	22	462	Poor	Wayne County	Posted	40.988204	-81.785456
8506574	SR 604	Chippewa Creek	86	3,148	Fair	ODOT	Open	40.945722	-81.812371
8546886	Sterling Rd	Tommy Run	92.9	3,716	Fair	Wayne County	Open	40.966142	-81.815626
8546924	Shorle Rd	Chippewa Creek	48.3	894	Fair	Wayne County	Posted	40.95661	-81.821643
8546932	Shorle Rd	Wald Ditch	48.2	887	Fair	Wayne County	Posted	40.956862	-81.821644
8547041	Miller Rd/Chestnut St	Steele Ditch	43.1	776	Fair	Wayne County	Open	40.962692	-81.85063
8547068	Miller Rd/Chestnut St	Chippewa Creek	48.8	820	Fair	Wayne County	Open	40.966495	-81.850494
8547246	Eby Rd	R M Carnahan Ditch	20	400	Fair	Wayne County	Open	40.968702	-81.864233
8547289	Steiner Rd	Little Chippewa Creek	61.7	1,265	Fair	Wayne County	Posted	40.931011	-81.826331
8547343	Blough Rd	Chippewa Creek	51.6	1,053	Fair	Wayne County	Posted	40.95494	-81.812172
8547416	Yoder Rd	W Branch Red Run	31.7	640	Fair	Wayne County	Open	40.909453	-81.769725

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: **Draft Congestion Management Process Strategies**

DATE: **July 24, 2024**

The Congestion Management Process (CMP) is an important part of the AMATS long-range transportation planning process. AMATS develops a CMP every four years. The purpose of this CMP is to identify congestion in the region, evaluate strategies for congested locations, recommend improvements, 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 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 staff has developed a list of strategies in each of the five tiers with an effectiveness and feasibility rating. These draft strategies must be reviewed by the AMATS Committees as well as public stakeholders.

AMATS has also developed a draft set of strategy recommendations for each congested segment identified in the CMP. These draft strategy recommendations will be incorporated into the final CMP document and have the potential to be included in AMATS long range transportation plan, Transportation Outlook 2050.

AMATS staff are requesting that the committees review the strategies and project recommendations. AMATS anticipates a draft CMP to be available in September and will request final approval in December 2024.

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 flow/safety	High	Low/Medium

Congestion Management Strategies (continued)

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

DRAFT STRATEGY RECOMMENDATIONS

	ARTERIALS				
	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
21	West Bowery Street	Quaker Street to Main Street	43.9	MD/PM	Existing Project (116146) - 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
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
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
	FREEWAYS				
	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)

AMATS DRAFT 2022 CONGESTED LOCATIONS

Peak Percent of Congestion

- 35.00% - 44.99%
- 45.00% - 54.99%
- 55.00% or Higher

N

Miles

0 1 2 3 4

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: **Draft 2050 Planning Data Forecast**

DATE: **July 24, 2024**

As an input to the Long-Range Transportation Plan, Transportation Outlook 2050, AMATS has developed the 2050 Planning Data Forecast. The purpose of the forecast is to project socio economic data from a base year of 2020 to 2050. The data forecasted in the report will be used to update Transportation Outlook 2050 and to update AMATS' transportation model.

The AMATS Planning Data Forecast is the formal report in which forecasted variables and underlying methodologies are presented. In 2023, AMATS hired Burgess & Niple (B&N), Inc to complete its 2050 Planning Data Forecast. B&N were tasked with updating AMATS existing variables to 2020 with the latest U.S. Census figures, distributing all new data to AMATS traffic analysis zones (TAZ) and the forecasting these data to 2050.

The AMATS 2050 Planning Data Forecast projects a number of variables, each of which has a direct impact on local traffic and is therefore required for input into the regional travel demand model. These variables include:

Population	Household	Employment	Stand-alone
Total Population	Total HH	Total Employment	Hotel Rooms
Age Under 18	Median HH Income	Employment by Sector	Parking Cost
Age 18-21	Vehicles		K-12 Enrollment
Group Quarters			University Enrollment
Workers			

The AMATS region is divided into 837 traffic analysis zones (traffic zones or TAZ). These traffic zones are used by the regional travel demand model to generate traffic volumes and to determine where trips begin and end. The model requires that each of the variables be provided for each traffic zone – for the base year 2020 and plan year 2050.

The 2050 Planning Data Forecast is the first AMATS forecast to include two scenarios. One scenario uses county control totals provided by the Ohio Department of Development (ODOD). AMATS must develop model variables based on the population control totals by county to ensure that its model is coordinated with the Ohio Department of Transportation's model. The ODOD uses a methodology that considers births, deaths, in-migration and out-migration. ODOD projects that Ohio is expected to lose 5.7 percent of its population by 2050 blaming primarily falling fertility rates and higher than usual mortality rates.

This statewide projected loss of population has a stark impact on the population control totals of the counties in the AMATS region and the AMATS Planning Data Forecast reflects that. While the ODOD populations are outside AMATS control, staff felt it necessary to develop a second population scenario that would focus on past population trends of the region. This forecast is more in keeping with AMATS past forecasts and provides another planning tool for the region.

See the forecast summary tables below:

ODOD Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	720,087	612,750	-14.9%
Households	304,094	274,482	-9.7%
Population Under 18	146,339	124,664	-14.8%
Vehicles	538,456	486,949	-9.6%
Workers	356,805	303,822	-14.8%

Current Trends Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	720,087	722,064	0.3%
Households	304,094	322,855	6.2%
Population Under 18	146,339	146,584	0.2%
Vehicles	538,456	571,355	6.1%
Workers	356,805	357,941	0.3%

While AMATS must use the ODOD forecast for its traffic model, it is not required to be used in the region's planning efforts, where multiple forecast scenarios are encouraged.

The attached Draft 2050 Planning Data Forecast document includes methodologies for forecasting using both scenarios. The document also breaks down the forecast by county and planning areas. The staff will be seeking approval of the Draft 2050 Planning Data Forecast in September, 2024.

AMATS 2050 Planning Data Forecast

August 2024

DRAFT

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

Executive Summary

The Akron Metropolitan Area Transportation Study (AMATS) Planning Data Forecast is a useful tool to understand what the greater Akron area could possibly look like in 2050. While it is truly impossible to accurately predict the future, current trends can give us some expectation of what the future holds. The forecasting of planning variables provides insight to what needs our transportation system may require and it is a critical part of the long-range planning process.

Predicting the exact changes in the population of the Akron, Ohio metropolitan area from now until 2050 involves considering various factors and scenarios. Currently, Akron and its surrounding areas have experienced periods of stable population growth, but also faced challenges such as overall population stagnation seen across Ohio. Looking forward, several trends may influence population dynamics:

1. **Economic Factors**: Akron's economy, historically rooted in manufacturing (especially rubber and polymers), has diversified into healthcare, education, and technology sectors. Economic growth and job opportunities could attract new residents and stabilize population trends.
2. **Cost of Living**: Ohio, including Akron, is known for its relatively low cost of living compared to coastal cities. This affordability can attract individuals and families seeking more affordable housing options and a lower cost of living, potentially boosting population growth.
3. **Quality of Life**: The region's proximity to natural resources like abundant freshwater and its inland location, which offers some protection from coastal weather events, may become increasingly attractive as climate change impacts intensify elsewhere.
4. **Migration Patterns**: Migration trends, both domestic and international, will play a significant role. Factors such as employment opportunities, quality of life, and educational institutions can influence whether people choose to move to or from the Akron area.
5. **Policy and Planning**: Long-term planning initiatives, including transportation infrastructure development, urban revitalization projects, and environmental policies, can shape the attractiveness and livability of the Akron area, influencing population trends.

While these factors suggest potential for growth, uncertainties remain. Demographic shifts, economic conditions, and unforeseen events like pandemics or economic recessions could also impact population trends. Therefore, projecting the precise population changes in the Akron metropolitan area by 2050 involves considering a range of scenarios and adapting planning strategies accordingly. This report presents the results of two different population forecast scenarios:

- The **ODOD Scenario** is based on aligning the 2050 population totals with the Ohio Department of Development's county-level population forecasts for Ohio.
- The **Current Trends Scenario** is based on analyzing population trends over the last 20 years to extrapolate future population and employment projections.

Introduction

One of the most fundamental steps in the regional transportation planning process is the collection, organization and analysis of existing planning-related data. Using this data, AMATS can determine where we have been (from a social-economic standpoint), the region's current conditions, and perhaps most critical to any planning effort, in what direction we are heading.

Although the most commonly used data items (ex. population or employment data) are gathered and analyzed on an ongoing basis, a greatly expanded effort is undertaken in preparation for each upcoming long-range regional transportation plan. For this reason, the AMATS 2050 Planning Data Forecast has been completed as a necessary precursor to the upcoming long-range plan update.

AMATS analyzes the base year of 2020 and the planning period year of 2050. The 2020 data generally comes from either the most recent U.S. census or from American Community Survey (ACS). Using forecasting methodology, this 2020 data is projected out to the plan year of 2050. Projection methodologies vary depending on the nature of each variable and are described below.

The AMATS 2050 Planning Data Forecast projects a number of variables, each of which has a direct impact on local traffic and is therefore required for input into the regional travel demand model. These variables include:

Population	Household	Employment	Stand-alone
Total Population	Total HH	Total Employment	Hotel Rooms
Age Under 18	Median HH Income	Employment by Sector	Parking Cost
Age 18-21	Vehicles		K-12 Enrollment
Group Quarters			University Enrollment
Workers			

The AMATS region is divided into 837 traffic analysis zones (traffic zones or TAZ). These traffic zones are used by the regional travel demand model to generate traffic volumes and to determine where trips begin and end. The model requires that each of the variables be provided for each traffic zone – for the base year 2020 and plan year 2050.

The AMATS 2050 Planning Data Forecast places the planning variables into three categories: population-based, employment-based and stand-alone variables. For each variable, this report will explain the sources of the underlying data and the methodology used to generate 2050 forecasts. In Part V of this report, the data representing each of the planning variables will be presented by subarea.

Future Projections

AMATS actively forecasts future data by analyzing historical trends, though predicting future growth with absolute precision is challenging. Minor fluctuations over the 30-year horizon can significantly impact anticipated outcomes for individual communities. Major shifts can drastically change projected totals.

To smooth out these data fluctuations, as well as to resolve problems of redundancy (i.e. where census tracts or TAZs include portions of more than one municipality), AMATS has aggregated TAZ-level data - for every variable - into eight different subareas. These subareas reflect the shared growth characteristics of the political units within the same geographic area. In addition, data has been presented at the regional and county levels, as well as for three specific larger cities: Akron, Barberton and Cuyahoga Falls. The data from these three communities is not included in the subarea data. The following is a breakdown of the levels in which data has been presented for this analysis:

Forecasting Levels Breakdown	
Regional	
AMATS Region	
COUNTY	
Summit County, Portage County	
SELECT CITIES	
Akron, Barberton, Cuyahoga Falls	
SUBAREAS	
Northern Summit	Boston Heights, Boston Township, Hudson, Macedonia, Northfield Village, Northfield Center Township, Sagamore Hills, Twinsburg, Twinsburg Township
Central Summit	Bath Township, Copley Township, Fairlawn, Munroe Falls, Silver Lake, Stow, Tallmadge
Southern Summit	Clinton, Coventry Township, Green, Lakemore, Mogadore, New Franklin, Norton, Springfield Township
Northwest Portage	Aurora, Mantua Village, Mantua Township, Shalersville Township, Streetsboro, Sugar Bush Knolls
Northeast Portage	Freedom Township, Garrettsville, Hiram Village, Hiram Township, Nelson Township, Windham Village, Windahm Township
Southwest Portage	Brimfield Township, Franklin Township, Kent, Mogadore (Portage), Randolph Township, Ravenna, Ravenna Township, Rootstown Township, Suffield Township, Tallmadge (Portage)
Southeast Portage	Atwater Township, Charlestown Township, Deerfield Township, Edinburg Township, Palmyra Township, Paris Township
Northeast Wayne	Chippewa Township, Doylestown, Milton Township, Norton (Wayne), Rittman

While performing the various data analyses required for the Planning Data Forecast, AMATS generally allows historic data points to paint the picture of what may be expected in 2050. AMATS solely uses these projections for planning purposes and in no way does it impact current project selection or funding.

ODOD Scenario Forecasting Methodology

Part I: Population-Based Variables

Population

Data Sources

AMATS relied on the following data sources to distribution changes in population between the base year (2020) and planning horizon (2050) among the region's TAZs:

- Historic data from the 2010 and 2020 U.S. Census, collected at the block level
- ACS 2015 5-Year, collected at the census tract level and down sampled to the block level

Methodology

The approach for forecasting population integrates local population dynamics with broader regional trends. This process is described below.

1. The project team calculated the rate of population between 2015 and 2020 for each county and TAZ.
2. We applied the Interquartile Range (IQR) method to identify and exclude outliers in TAZ-level population change rates to prevent them from distorting the forecast. Specifically:
    i. We projected the 2025 population for TAZs *without* outlier change rates using their specific 2015 – 2020 change rate, capturing the localized trend.
    ii. For TAZs *with* outlier change rates, we forecasted the 2025 population using the overall county rate of change according to the Ohio Department of Development (ODOD) 2025 forecast for county population.
    iii. For counties fully contained within the AMATS region (Summit and Portage), we used the complete ODOD forecast numbers. For counties only partially within the AMATS region (Wayne and Medina), we kept the population proportion within the AMATS region constant through the forecast horizon.
3. We employed the 2025 forecast approach to project the 2030 population, this time using the 2020 - 2025 population data and 2030 ODOD county rate of change numbers for outliers.
4. For long-term forecasts (2035, 2040, 2045, 2050), we adapted our methodology to address the increasing uncertainty of predicting long-term population trends at the TAZ level. We relied exclusively on ODOD county control totals for these forecasts.
5. If the 2050 forecast showed discrepancies with the ODOD county control totals, we proportionally adjusted each TAZ's forecast. This adjustment was based on the error percentage between the aggregate county-level 2050 forecast and the ODOD 2050 county control totals. This step ensured our forecast was consistent with regional expectations while preserving local trends, adding an additional layer of validation.

Summary

Our methodology merges localized changes at the TAZ level with broader regional trends at the county level to enhance the accuracy and realism of our forecasts. Shifting our approach for long-term

forecasts, we actively consider the growing uncertainty in extended range predictions. Our final error adjustment mechanism aligns our forecasts with regional expectations. However, we must acknowledge that this methodology assumes the continuity of trends and relationships, relying on the continuation of the observed and forecasted trend of population decline across the forecast horizon.

Population Under 18

Data Sources

To forecast the population under the age of 18 for 2050 in the AMATS region, the team used two primary data sources:

- 2020 U.S. Census
- Previously calculated 2050 population by TAZ figures

Methodology

We calculated the percentage of the under-18 population for each TAZ, using the total 2020 population. Assuming the under-18 population percentage would remain constant through 2050, we multiplied the 2020 rate by the previously forecasted 2050 total population for each TAZ to determine the 2050 under-18 population.

Population 18 - 21

Data Sources

To forecast the population between the ages of 18 and 21 for 2050 in the AMATS region, the team used two primary data sources:

- 2020 5-year ACS
- Previously calculated 2050 population by TAZ figures

Methodology

The 2020 U.S. Census did not specifically provide numbers for the population aged between 18 and 21. However, we found age cohorts for the total population of 21 and over in the 2020 5-year American Community Survey (ACS) data. We subtracted the previously calculated 2020 populations under 18 and 21 and over from the total population to calculate the 2020 population between the ages of 18 and 21. For each TAZ, we calculated the percentage of the 18 to 21 population using the total 2020 population. Assuming the 18 to 21 population percentage would remain constant through 2050, we multiplied the 2020 rate by the previously forecasted 2050 total population for each TAZ to determine the 2050 population of those aged 18 to 21.

Group Quarters

Data Sources

To project the number of residents living in group quarters by 2050, AMATS used the following data sources:

- 2020 U.S. Census
- Various institutional websites and reports for resident count and verification purposes

Methodology

Group quarters include college dormitories, jails and similar detention centers, and nursing homes. The 2020 U.S. Census provided data for group quarters down to the block level. We apportioned the total number of group quarter residents to the traffic zones within each block.

Since group quarters populations are not related to the surrounding local community (i.e., university students, inmates and nursing home residents may come from anywhere), AMATS assumed that group quarters populations would remain the same for existing facilities. Given the decline in population it was assumed that new group quarter population centers would not be constructed.

Workers

Data Sources

To project the number of workers expected by 2050, AMATS used the following data sources:

- 2020 5-year ACS
- Previously calculated 2050 population by TAZ figures

Methodology

The Census Bureau defines workers as people who reside within a community, are 16 years or older and who did any work for pay. Workers may be employed in a community other than the one in which they live. In this case, a worker specifically refers to someone who lives within a given TAZ. The 2020 5-year ACS data contains the number of workers within a community at the tract level. Tract level data was down sampled to the block level and apportioned to the TAZs.

For each TAZ, the 2020 number of workers was divided by the 2020 total population of the TAZ to determine the percentage of the population within that TAZ that could be classified as workers. Assuming this rate would remain constant through 2050, this 2020 rate of workers per TAZ was multiplied by the previously calculated 2050 population by TAZ to determine the number of workers in each TAZ in 2050.

Part II: Household-Based Variables

Households

Data Sources

To project the number of households anticipated by 2050, AMATS used the following data sources:

- Historic data from the 2010 and 2020 U.S. Census, collected at the block level
- ACS 2011 – 2019, 2021, and 2022 5-Year data, collected at the census tract level and down sampled to the block level
- AMATS Population Projections

Methodology

The approach for forecasting households emphasizes statistical rigor and validation to address the challenges of long-term forecasting.

1. Our project team forecasted household numbers (HH) for TAZs up to 2050 using time series analysis. This task required a more robust analysis and validation, as ODOD did not provide HH control numbers, unlike the population forecast.

2. To ensure the effectiveness of our time series analysis, we tested each TAZ's household formation rate (HH divided by Population) for stationarity.
    i. We applied differencing transformations to TAZs showing non-stationarity and reassessed their stationarity status.
    ii. We then identified the best fitting ARIMA models for each TAZ using the Autoregressive Integrated Moving Average (ARIMA) function, carefully selecting appropriate lag orders and differencing levels.
3. We validated our models' reliability through time series cross-validation, using an expanding window approach and evaluated model performance by calculating the Root Mean Square Error (RMSE). This step confirmed our models' accuracy and helped us understand our forecasts' uncertainty.
4. We then applied these RMSE values to the most recent household data, creating upper and lower bounds for our forecasts and providing a range of plausible outcomes.

Summary

Our methodology is underpinned by a balance between statistical rigor and practical adaptation to the data's challenges. While acknowledging the limitations of ARIMA models and the inherent assumptions in long-term forecasting, our approach is characterized by its thoroughness in testing, validation, and careful application of error estimates. Across the AMATS region we calculated an uncertainty of less than 2% for our forecast.

Median Household Income

Data Sources

To project the median household income for 2050, AMATS used the following data source:

- 2020 5-year ACS

Methodology

We determined the 2020 median household income for every census tract within the AMATS region using data from the 2020 5-year ACS, assuming it remained consistent across every TAZ within that census tract. For TAZs spanning multiple census tracts, we calculated the median. Given the region's declining population, we assumed that median household income would not increase, thus keeping it constant through 2050. We also did not apply any inflation factor to the 2050 median household income numbers.

Vehicles

Data Sources

To forecast the number of HH (i.e., non-commercial) vehicles for 2050, AMATS used the following data sources:

- 2020 5-year ACS
- Previously calculated 2050 number of households by TAZ figures

Methodology

We used 2020 5-year ACS data to apportion the total number of vehicles to TAZs within each tract. The project team divided the number of vehicles by the 2020 the number of 2020 households to determine

the number of vehicles per household for each TAZ. We assumed that the number of vehicles per household rate would remain constant through 2050.

Part III: Employment-Based Variables

Employment

Data Sources

To forecast change in employment in the AMATS region for 2050, we used the following data sources:

- 2020 Quarterly Census of Employment and Wages (QCEW)
- Ohio Department of Jobs and Family Services Industry Employment Projection Report 2020-2030

Methodology

Total employment differs from total number of workers as defined by the U.S. Census. While workers are defined by the area in which they live, employment is defined by the area in which they work. The QCEW 2020 data was used to establish total employment within the AMATS region. This dataset contains employment centers as points which were overlayed with the AMATS TAZs in GIS to allocate Employment by TAZ. Employment industry data is differentiated by its North American Industry Classification System (NAICS) code, as identified in the following table:

NAICS Industry Code

Code #	Industry Description
NAICS 11	Agriculture, Forestry and Hunting
NAICS 21	Mining
NAICS 22	Utilities
NAICS 23	Construction
NAICS 31-33	Manufacturing – Aggregated
NAICS 42	Wholesale Trade
NAICS 44-45	Retail Trade – Aggregated
NAICS 48-49	Transportation and Warehousing – Aggregated
NAICS 51	Information
NAICS 52	Finance and Insurance
NAICS 53	Real Estate and Rental and Leasing
NAICS 54	Professional Scientific and Technical Services
NAICS 55	Management of Companies and Enterprises
NAICS 56	Administrative Support, Waste Management and Remediation Services
NAICS 61	Education Services
NAICS 62	Health Care and Social Assistance
NAICS 71	Arts, Entertainment and Recreation
NAICS 72	Accommodation and Food Services
NAICS 81	Other Services (except Public Administration)
NAICS 91	Public Administration
NAICS 99	Other

Ohio Department of Jobs and Family Services employment projections from 2020 to 2030 were used to develop growth rates for NAICS job codes out to 2050. It was assumed that most employment centers would remain employment centers between 2020 and 2050. The employment growth assumed in the AMATS region was distributed to TAZs where NAICS employment was already located.

It is important to note that these employment numbers may show substantial impact from the COVID-19 pandemic. For example, the Arts, Entertainment and Recreation industry – heavily impacted by the COVID-19 pandemic – is showing over 75% growth for the 2050 forecast. The analysis team believes that the resulting job losses and economic rebound could be inflating the rate employment growth in the region.

Part IV: Stand Alone-Based Variables

Hotel Rooms

Data Sources

To forecast the number of hotel rooms available in 2050, AMATS used the following data sources:

- Various hotel and travel industry websites to identify hotels and their room inventories
- Press releases regarding planned and/ or pending hotel construction

Methodology

AMATS identified every hotel, as well as the total number of rooms at each hotel, in the region. Once hotels and their addresses were identified, they were overlayed in GIS to determine which TAZ housed each hotel. All hotels and room inventories existing as of 2020 were assumed to exist unchanged through 2050.

Parking

Data Sources

To forecast the cost of parking in 2050, AMATS used the following data sources:

- Various parking availability websites to identify parking lot locations and cost
- Press releases in frequently visited areas regarding the planned construction of additional parking lots

Methodology

AMATS located all paid parking lots and garages, and research was conducted to identify the average cost per hour (in cents) for parking at these facilities. Once parking facilities and their addresses were identified, they were overlayed in GIS to determine which TAZ housed each parking facility. All parking facilities existing as of 2020 were assumed to exist unchanged through 2050.

School Enrollment

Data Sources

To forecast the number of students enrolled in K-12 in 2050, AMATS used the following data sources:

- Public and Private school Homeland Infrastructure Foundation-Level Data (HIFLD)
- Research on various school closures
- Previously forecasted 2050 population under 18

Methodology

We categorized school enrollment data into two groups: students in grades K-8 and students in grades 9-12. The HIFLD dataset, which includes both public and private school enrollment numbers, allowed us to overlay these numbers with the AMATS TAZs in GIS, allocating enrolled students by TAZ.

Currently, many school districts in the region are closing and/or consolidating school facilities. We conducted research to identify schools affected by these changes to exclude them from the 2050 forecast. We assumed that each school facility draws students from beyond its TAZ, leading us to consolidate the total student population by school district. We then calculated the percentage of the total student body for each school within a district. Assuming the total number of students in a school district would change in proportion to the under-18 population of the TAZs within the district, we calculated the 2050 total number of students for each school district. Assuming the percentage of students in each school district remains constant—excluding schools slated for closure—we multiplied this rate by the 2050 total student number previously calculated for each school district.

University Enrollment

Data Sources

To forecast the number of students enrolled in universities in 2050, AMATS used the following data sources:

- Public and Private school Homeland Infrastructure Foundation-Level Data (HIFLD)

Methodology

The HIFLD dataset identifies university enrollment numbers as points which we overlayed with the AMATS TAZs in GIS to allocate enrolled students by TAZ. University enrollment numbers were assumed to stay constant for the 2050 forecast. University enrollment tends to stay constant, and no plans were found for building new universities or closing current universities within our forecast time horizon.

Current Trends Scenario Forecasting Methodology

The ODOD Scenario for predicting the 2050 population relied on state-provided county control totals, using these figures as the foundational basis for all other variable calculations. The Current Trends scenario instead leverages historic trends and a logarithmic regression model to forecast the 2050 population. While this approach changes the calculation for population figures, it is important to note that all other variables continue to be derived from this revised population estimate. As a result, the overall methodology remains consistent, with the primary adjustment being the source and method of determining the population projections.

Population

Data Sources

AMATS relied on the following data sources to distribution changes in population between the base year (2020) and planning horizon (2050) among the region's TAZs:

- Historic data from the 2000, 2010, and 2020 U.S. Census, collected at the block level
- ACS 2015 5-Year, collected at the census tract level and down sampled to the block level

Methodology

The approach for forecasting population integrates local population dynamics with broader regional trends. This process is described below.

1. The project team calculated the rate of population change from 2000 to 2020 for each county and TAZ.
2. We applied the Interquartile Range (IQR) method to identify and exclude outliers in TAZ-level population change rates to prevent them from distorting the forecast. Specifically:
    a. We projected the 2030 population for TAZs *without* outlier change rates using their specific 2000 – 2020 change rate, capturing the localized trend.
    b. For TAZs *with* outlier change rates, we forecasted the 2030 population using the overall county rate of change. We calculated the county rate of change with a logarithmic regression model.
3. For long-term forecasts (2040, and 2050), we adapted our methodology to address the increasing uncertainty of predicting long-term population trends at the TAZ level. We relied exclusively on our county-level logarithmic model for these forecasts.
4. If the 2050 forecast showed discrepancies with the model totals, we proportionally adjusted each TAZ's forecast. This adjustment was based on the error percentage between the aggregate county-level 2050 forecast and the logarithmic regression model 2050 county control totals. This step ensured our forecast was consistent with regional expectations while preserving local trends, adding an additional layer of validation.

Summary

Our methodology merges localized changes at the TAZ level with broader regional trends at the county level to enhance the accuracy and realism of our forecasts. Shifting our approach for long-term forecasts, we actively consider the growing uncertainty in extended range predictions. Our final error adjustment mechanism aligns our forecasts with regional expectations. However, we must acknowledge that this methodology assumes the continuity of trends and relationships, relying on the continuation of the observed and forecasted trend across the forecast horizon.

Forecast Results

The following tables present the results of the various analyses conducted for both scenarios as part of the Planning Data Forecast process. All variables have been forecasted for the AMATS region, at the county level, for three significant cities and eight subareas. Employment data has been summarized by NAICS code.

Each table includes 2020 base year data, as well as the data forecasted through the plan year of 2050. Although data has been cross-checked for as much consistency as possible, certain situations prevent the perfect reconciliation of totals between different variables and/or subareas. Some of these situations include, but are not limited to:

- Rounding error
- Overlap between geographical boundaries (municipal/TAZ/census tract/etc.)
- The necessity of using different data sources within the same analysis due to data gaps or unavailability
- Internal efforts to smooth untenable forecasted totals

The following pages include a map illustrating the political units, subareas and traffic analysis zones that were considered as part of this analysis, as well as a presentation of the variables for each of these geographic areas.

AMATS 2050 Forecast Characteristics – ODOD Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	720,087	612,750	-14.9%
Households	304,094	274,482	-9.7%
Population Under 18	146,339	124,664	-14.8%
Vehicles	538,456	486,949	-9.6%
Workers	356,805	303,822	-14.8%

Employment				
NAICS 11	440	495	12.5%	Agriculture, Forestry and Hunting
NAICS 21	373	487	30.6%	Mining
NAICS 22	1,582	1,241	-21.6%	Utilities
NAICS 23	13,191	14,885	12.8%	Construction
NAICS 31-33	39,470	39,103	-0.9%	Manufacturing - Aggregated
NAICS 42	15,468	15,792	2.1%	Wholesale Trade
NAICS 44-45	34,812	31,342	-10.0%	Retail Trade - Aggregated
NAICS 48-49	14,370	19,364	34.8%	Transportation and Warehousing - Aggregated
NAICS 51	5,221	5,260	0.7%	Information
NAICS 52	10,448	10,695	2.4%	Finance and Insurance
NAICS 53	3,327	3,505	5.4%	Real Estate and Rental and Leasing
NAICS 54	15,107	18,123	20.0%	Professional Scientific and Technical Services
NAICS 55	14,242	16,618	16.7%	Management of Companies and Enterprises
NAICS 56	15,966	18,287	14.5%	Administrative Support, Waste Management and Remediation
NAICS 61	27,086	31,911	17.8%	Education Services
NAICS 62	53,036	69,812	31.6%	Health Care and Social Assistance
NAICS 71	5,459	9,722	78.1%	Arts, Entertainment and Recreation
NAICS 72	28,620	42,056	46.9%	Accommodation and Food Services
NAICS 81	9,592	11,050	15.2%	Other Services (except Public Administration)
NAICS 92	9,245	9,170	-0.8%	Public Administration
NAICS 99	12	12	0.0%	Other
Total Employment	317,067	368,930	16.4%	

K-12 School Enrollment	97,980	81,005	-17.3%

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Summit County 2050 Forecast Characteristics – ODOD Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	540,094	452,427	-16.2%
Households	230,380	203,087	-11.8%
Population Under 18	112,408	94,314	-16.1%
Vehicles	400,141	353,159	-11.7%
Workers	265,592	222,750	-16.1%

Employment				
NAICS 11	111	123	10.8%	Agriculture, Forestry and Hunting
NAICS 21	106	135	27.4%	Mining
NAICS 22	1,476	1,159	-21.5%	Utilities
NAICS 23	11,030	12,467	13.0%	Construction
NAICS 31-33	28,303	28,046	-0.9%	Manufacturing - Aggregated
NAICS 42	12,426	12,681	2.1%	Wholesale Trade
NAICS 44-45	28,213	25,389	-10.2%	Retail Trade - Aggregated
NAICS 48-49	12,334	16,639	34.9%	Transportation and Warehousing - Aggregated
NAICS 51	4,697	4,733	0.8%	Information
NAICS 52	9,773	10,011	2.4%	Finance and Insurance
NAICS 53	2,831	2,991	5.7%	Real Estate and Rental and Leasing
NAICS 54	13,260	15,926	20.1%	Professional Scientific and Technical Services
NAICS 55	13,488	15,739	16.7%	Management of Companies and Enterprises
NAICS 56	14,801	16,974	14.7%	Administrative Support, Waste Management and Remediation
NAICS 61	18,142	21,368	17.8%	Education Services
NAICS 62	46,682	61,456	31.6%	Health Care and Social Assistance
NAICS 71	5,057	9,012	78.2%	Arts, Entertainment and Recreation
NAICS 72	22,337	32,824	46.9%	Accommodation and Food Services
NAICS 81	7,969	9,190	15.3%	Other Services (except Public Administration)
NAICS 92	7,335	7,266	-0.9%	Public Administration
NAICS 99	7	7	0.0%	Other
Total Employment	260,378	304,136	16.8%	

K-12 School Enrollment	75,624	61,769	-18.3%

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Portage County 2050 Forecast Characteristics – ODOD Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	161,184	143,049	-11.3%
Households	66,010	63,535	-3.7%
Population Under 18	29,903	26,654	-10.9%
Vehicles	122,108	117,175	-4.0%
Workers	82,205	72,773	-11.5%

Employment				
NAICS 11	151	167	10.6%	Agriculture, Forestry and Hunting
NAICS 21	209	275	31.6%	Mining
NAICS 22	92	71	-22.8%	Utilities
NAICS 23	1,890	2,116	12.0%	Construction
NAICS 31-33	10,558	10,451	-1.0%	Manufacturing - Aggregated
NAICS 42	2,937	3,003	2.2%	Wholesale Trade
NAICS 44-45	6,237	5,629	-9.7%	Retail Trade - Aggregated
NAICS 48-49	1,988	2,663	34.0%	Transportation and Warehousing - Aggregated
NAICS 51	506	509	5.9%	Information
NAICS 52	625	634	1.4%	Finance and Insurance
NAICS 53	482	500	3.7%	Real Estate and Rental and Leasing
NAICS 54	1,786	2,127	19.1%	Professional Scientific and Technical Services
NAICS 55	754	879	16.6%	Management of Companies and Enterprises
NAICS 56	1,104	1,243	12.6%	Administrative Support, Waste Management and Remediation
NAICS 61	8,567	10,098	17.9%	Education Services
NAICS 62	5,857	7,703	31.5%	Health Care and Social Assistance
NAICS 71	369	652	76.7%	Arts, Entertainment and Recreation
NAICS 72	6,111	8,979	46.9%	Accommodation and Food Services
NAICS 81	1,491	1,709	14.6%	Other Services (except Public Administration)
NAICS 92	1,799	1,793	-0.3%	Public Administration
NAICS 99	5	5	0.0%	Other
Total Employment	53,518	61,206	14.4%	

K-12 School Enrollment	20,612	18276	-11.3%

Akron 2050 Forecast Characteristics – ODOD Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	192,551	157,019	-18.5%
Households	84,194	72,495	-13.9%
Population Under 18	41,275	33,659	-18.5%
Vehicles	123,706	106,495	-14.0%
Workers	88,925	72,737	-18.2%

Employment				
NAICS 11	56	62	10.7%	Agriculture, Forestry and Hunting
NAICS 21	21	27	28.6%	Mining
NAICS 22	797	623	-21.8%	Utilities
NAICS 23	2904	3,277	12.8%	Construction
NAICS 31-33	8,148	8,082	-0.8%	Manufacturing - Aggregated
NAICS 42	2,715	2,766	1.9%	Wholesale Trade
NAICS 44-45	6,573	5,943	-9.6%	Retail Trade - Aggregated
NAICS 48-49	3,598	4,850	34.8%	Transportation and Warehousing - Aggregated
NAICS 51	1,721	1,733	0.7%	Information
NAICS 52	1,659	1,692	2.0%	Finance and Insurance
NAICS 53	1,043	1,103	5.8%	Real Estate and Rental and Leasing
NAICS 54	4,637	5,562	19.9%	Professional Scientific and Technical Services
NAICS 55	7,122	8,313	16.7%	Management of Companies and Enterprises
NAICS 56	4,629	5,313	14.8%	Administrative Support, Waste Management and Remediation
NAICS 61	8,721	10,274	17.8%	Education Services
NAICS 62	26,008	34,240	31.7%	Health Care and Social Assistance
NAICS 71	1,343	2,395	78.3%	Arts, Entertainment and Recreation
NAICS 72	5,794	8,515	47.0%	Accommodation and Food Services
NAICS 81	2,633	3,027	15.0%	Other Services (except Public Administration)
NAICS 92	4,125	4,074	-1.2%	Public Administration
NAICS 99	1	1	0.0%	Other
Total Employment	94,248	111,872	18.7%	

K-12 School Enrollment	24,474	20,090	-17.9%

Barberton 2050 Forecast Characteristics – ODOD Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	26,128	20,623	-21.1%
Households	11,319	9,848	-13.0%
Population Under 18	5,448	4,299	-21.1%
Vehicles	17,751	15,426	-13.1%
Workers	11,202	8,844	-21.0%

Employment				
NAICS 11	0	0	0.0%	Agriculture, Forestry and Hunting
NAICS 21	0	0	0.0%	Mining
NAICS 22	0	0	0.0%	Utilities
NAICS 23	421	472	12.1%	Construction
NAICS 31-33	2,145	2,124	-1.0%	Manufacturing - Aggregated
NAICS 42	318	324	1.9%	Wholesale Trade
NAICS 44-45	564	515	-8.7%	Retail Trade - Aggregated
NAICS 48-49	143	194	35.7%	Transportation and Warehousing - Aggregated
NAICS 51	83	83	0.0%	Information
NAICS 52	108	108	0.0%	Finance and Insurance
NAICS 53	16	16	0.0%	Real Estate and Rental and Leasing
NAICS 54	146	177	21.2%	Professional Scientific and Technical Services
NAICS 55	105	123	17.1%	Management of Companies and Enterprises
NAICS 56	264	303	14.8%	Administrative Support, Waste Management and Remediation
NAICS 61	568	670	18.0%	Education Services
NAICS 62	1,887	2,485	31.7%	Health Care and Social Assistance
NAICS 71	11	18	63.6%	Arts, Entertainment and Recreation
NAICS 72	772	1,135	47.0%	Accommodation and Food Services
NAICS 81	458	528	15.3%	Other Services (except Public Administration)
NAICS 92	154	154	0.0%	Public Administration
NAICS 99	0	0	0.0%	Other
Total Employment	8,163	9,429	15.5%	

K-12 School Enrollment	3,737	2,952	-21.0%

Cuyahoga Falls 2050 Forecast Characteristics – ODOD Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	49,908	42,038	-15.8%
Households	23,413	20,224	-13.6%
Population Under 18	9,275	7,746	-16.5%
Vehicles	39,116	33,400	-14.6%
Workers	27,623	23,196	-16.0%

Employment				
NAICS 11	1	1	0.0%	Agriculture, Forestry and Hunting
NAICS 21	0	0	0.0%	Mining
NAICS 22	68	53	-22.1%	Utilities
NAICS 23	380	428	12.6%	Construction
NAICS 31-33	3,495	3,459	-1.0%	Manufacturing - Aggregated
NAICS 42	598	610	2.0%	Wholesale Trade
NAICS 44-45	2,561	2,303	-10.1%	Retail Trade - Aggregated
NAICS 48-49	155	209	34.8%	Transportation and Warehousing - Aggregated
NAICS 51	185	185	0.0%	Information
NAICS 52	290	290	0.0%	Finance and Insurance
NAICS 53	202	211	4.5%	Real Estate and Rental and Leasing
NAICS 54	648	777	19.9%	Professional Scientific and Technical Services
NAICS 55	683	797	16.7%	Management of Companies and Enterprises
NAICS 56	1,273	1,459	14.6%	Administrative Support, Waste Management and Remediation
NAICS 61	1,677	1,975	17.8%	Education Services
NAICS 62	3,328	4,384	31.7%	Health Care and Social Assistance
NAICS 71	373	667	78.8%	Arts, Entertainment and Recreation
NAICS 72	2,293	3,367	46.8%	Accommodation and Food Services
NAICS 81	699	811	16.0%	Other Services (except Public Administration)
NAICS 92	532	526	-1.1%	Public Administration
NAICS 99	0	0	0.0%	Other
Total Employment	19,441	22,512	15.8%	

K-12 School Enrollment	6,394	4,787	-25.1%

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Northern Summit 2050 Forecast Characteristics – ODOD Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	93,396	80,569	-13.7%
Households	36,746	32,634	-11.2%
Population Under 18	20,239	17,484	-13.6%
Vehicles	73,420	65,229	-11.2%
Workers	47,477	40,880	-13.9%

Employment				
NAICS 11	23	26	13.0%	Agriculture, Forestry and Hunting
NAICS 21	30	40	33.3%	Mining
NAICS 22	89	71	-20.2%	Utilities
NAICS 23	2,899	3,284	13.3%	Construction
NAICS 31-33	7,531	7,451	-1.1%	Manufacturing - Aggregated
NAICS 42	5,742	5,871	2.2%	Wholesale Trade
NAICS 44-45	5,332	4,794	-10.1%	Retail Trade - Aggregated
NAICS 48-49	4,908	6,629	35.1%	Transportation and Warehousing - Aggregated
NAICS 51	2,046	2,067	1.0%	Information
NAICS 52	4,570	4,700	2.8%	Finance and Insurance
NAICS 53	688	737	7.1%	Real Estate and Rental and Leasing
NAICS 54	2,239	2,684	19.9%	Professional Scientific and Technical Services
NAICS 55	2,056	2,397	16.6%	Management of Companies and Enterprises
NAICS 56	2,225	2,549	14.6%	Administrative Support, Waste Management and Remediation
NAICS 61	2,751	3,241	17.8%	Education Services
NAICS 62	4,157	5,473	31.7%	Health Care and Social Assistance
NAICS 71	2,555	4,559	78.4%	Arts, Entertainment and Recreation
NAICS 72	3,939	5,789	47.0%	Accommodation and Food Services
NAICS 81	1,771	2,047	15.6%	Other Services (except Public Administration)
NAICS 92	948	945	0.0%	Public Administration
NAICS 99	1	1	0.0%	Other
Total Employment	56,500	65,355	15.7%	

K-12 School Enrollment	15,998	13,405	-16.2%

Central Summit 2050 Forecast Characteristics – ODOD Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	96,755	83,484	-13.7%
Households	40,266	37,193	-7.6%
Population Under 18	19,848	17,213	-13.3%
Vehicles	77,114	71,006	-7.9%
Workers	48,973	42,146	-13.9%

Employment				
NAICS 11	17	17	0.0%	Agriculture, Forestry and Hunting
NAICS 21	7	7	0.0%	Mining
NAICS 22	432	341	-21.1%	Utilities
NAICS 23	1,655	1,867	12.8%	Construction
NAICS 31-33	2,939	2,918	-0.7%	Manufacturing - Aggregated
NAICS 42	1,714	1,747	1.9%	Wholesale Trade
NAICS 44-45	8,696	7,804	-10.3%	Retail Trade - Aggregated
NAICS 48-49	1,106	1,485	34.3%	Transportation and Warehousing - Aggregated
NAICS 51	519	522	5.8%	Information
NAICS 52	2,339	2,401	2.7%	Finance and Insurance
NAICS 53	507	528	4.1%	Real Estate and Rental and Leasing
NAICS 54	3,926	4,733	20.6%	Professional Scientific and Technical Services
NAICS 55	2,310	2,694	16.6%	Management of Companies and Enterprises
NAICS 56	2,448	2,806	14.6%	Administrative Support, Waste Management and Remediation
NAICS 61	2,389	2,813	17.7%	Education Services
NAICS 62	7,829	10,301	31.6%	Health Care and Social Assistance
NAICS 71	610	1,083	77.5%	Arts, Entertainment and Recreation
NAICS 72	6,013	8,841	47.0%	Accommodation and Food Services
NAICS 81	1,423	1,635	14.9%	Other Services (except Public Administration)
NAICS 92	717	714	-0.4%	Public Administration
NAICS 99	5	5	0.0%	Other
Total Employment	47,601	55,262	16.1%	

K-12 School Enrollment	12,781	11,005	-13.9%

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Southern Summit 2050 Forecast Characteristics – ODOD Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	81,356	68,694	-15.6%
Households	34,442	30,693	-10.9%
Population Under 18	16,323	13,913	-14.8%
Vehicles	69,034	61,603	-10.8%
Workers	41,392	34,947	-15.6%

Employment				
NAICS 11	14	17	21.4%	Agriculture, Forestry and Hunting
NAICS 21	48	61	27.1%	Mining
NAICS 22	90	71	-21.1%	Utilities
NAICS 23	2,771	3,139	13.3%	Construction
NAICS 31-33	4,045	4,012	-0.8%	Manufacturing - Aggregated
NAICS 42	1,339	1,363	1.8%	Wholesale Trade
NAICS 44-45	4,487	4,030	-10.2%	Retail Trade - Aggregated
NAICS 48-49	2,424	3,272	35%	Transportation and Warehousing - Aggregated
NAICS 51	143	143	0.0%	Information
NAICS 52	807	820	1.6%	Finance and Insurance
NAICS 53	375	396	40.6%	Real Estate and Rental and Leasing
NAICS 54	1,664	1,993	19.8%	Professional Scientific and Technical Services
NAICS 55	1,212	1,415	16.7%	Management of Companies and Enterprises
NAICS 56	3,962	4,544	14.7%	Administrative Support, Waste Management and Remediation
NAICS 61	2,036	2,395	17.6%	Education Services
NAICS 62	3,473	4,573	31.7%	Health Care and Social Assistance
NAICS 71	165	290	75.8%	Arts, Entertainment and Recreation
NAICS 72	3,526	5,177	46.8%	Accommodation and Food Services
NAICS 81	985	1,142	15.9%	Other Services (except Public Administration)
NAICS 92	859	853	0.7%	Public Administration
NAICS 99	0	0	0.0%	Other
Total Employment	34,425	39,706	15.3%	

K-12 School Enrollment	12,240	9,530	-22.1%

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Northwest Portage 2050 Forecast Characteristics – ODOD Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	45,289	41,331	-8.7%
Households	18,542	18,086	-2.5%
Population Under 18	9,183	8,358	-9.0%
Vehicles	36,102	35,015	-3.0%
Workers	23,618	21,567	-8.7%

Employment				
NAICS 11	55	61	10.9%	Agriculture, Forestry and Hunting
NAICS 21	86	115	33.7%	Mining
NAICS 22	20	16	-20.0%	Utilities
NAICS 23	438	486	11.0%	Construction
NAICS 31-33	5,076	5,016	-1.2%	Manufacturing - Aggregated
NAICS 42	2,046	2,097	2.5%	Wholesale Trade
NAICS 44-45	2,618	2,357	-10.0%	Retail Trade - Aggregated
NAICS 48-49	1,002	1,341	33.8%	Transportation and Warehousing - Aggregated
NAICS 51	230	233	1.3%	Information
NAICS 52	180	180	0.0%	Finance and Insurance
NAICS 53	159	162	1.9%	Real Estate and Rental and Leasing
NAICS 54	791	945	19.5%	Professional Scientific and Technical Services
NAICS 55	31	34	9.7%	Management of Companies and Enterprises
NAICS 56	477	536	12.4%	Administrative Support, Waste Management and Remediation
NAICS 61	1,152	1,353	17.4%	Education Services
NAICS 62	1,785	2,347	31.5%	Health Care and Social Assistance
NAICS 71	146	261	78.8%	Arts, Entertainment and Recreation
NAICS 72	1,573	2,310	46.9%	Accommodation and Food Services
NAICS 81	477	544	14.0%	Other Services (except Public Administration)
NAICS 92	373	373	0.0%	Public Administration
NAICS 99	0	0	0.0%	Other
Total Employment	18,715	20,767	11.0%	

K-12 School Enrollment	7,064	6,398	-9.4%

Northeast Portage 2050 Forecast Characteristics – ODOD Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	15,039	13,143	-12.6%
Households	5,837	5,561	-4.7%
Population Under 18	3,059	2,687	-12.2%
Vehicles	10,949	10,446	-4.6%
Workers	7,144	6,243	-12.6%

Employment				
NAICS 11	37	41	10.8%	Agriculture, Forestry and Hunting
NAICS 21	3	3	0.0%	Mining
NAICS 22	0	0	0.0%	Utilities
NAICS 23	151	166	9.9%	Construction
NAICS 31-33	420	420	0.0%	Manufacturing - Aggregated
NAICS 42	8	8	0.0%	Wholesale Trade
NAICS 44-45	303	279	-7.9%	Retail Trade - Aggregated
NAICS 48-49	92	123	33.7%	Transportation and Warehousing - Aggregated
NAICS 51	54	54	0.0%	Information
NAICS 52	29	29	0.0%	Finance and Insurance
NAICS 53	8	8	0.0%	Real Estate and Rental and Leasing
NAICS 54	24	27	12.5%	Professional Scientific and Technical Services
NAICS 55	0	0	0.0%	Management of Companies and Enterprises
NAICS 56	77	86	11.7%	Administrative Support, Waste Management and Remediation
NAICS 61	539	636	18.0%	Education Services
NAICS 62	126	164	30.2%	Health Care and Social Assistance
NAICS 71	24	42	18.0%	Arts, Entertainment and Recreation
NAICS 72	361	532	47.7%	Accommodation and Food Services
NAICS 81	71	77	8.5%	Other Services (except Public Administration)
NAICS 92	158	158	0.0%	Public Administration
NAICS 99	0	0	0.0%	Other
Total Employment	2,485	2,853	14.8%	

K-12 School Enrollment	1,702	1,503	-11.7

Southwest Portage 2050 Forecast Characteristics – ODOD Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	86,950	76,605	-11.9%
Households	36,061	34,517	-4.3%
Population Under 18	14,787	13,135	-11.2%
Vehicles	62,672	59,716	-4.7%
Workers	44,155	38,685	-12.6%

Employment				
NAICS 11	49	55	12.2%	Agriculture, Forestry and Hunting
NAICS 21	95	123	29.5%	Mining
NAICS 22	72	55	-23.6%	Utilities
NAICS 23	1,093	1,232	12.7%	Construction
NAICS 31-33	4,973	4,926	-0.9%	Manufacturing - Aggregated
NAICS 42	796	811	1.9%	Wholesale Trade
NAICS 44-45	3,159	2,851	-9.7%	Retail Trade - Aggregated
NAICS 48-49	787	1,059	34.6%	Transportation and Warehousing - Aggregated
NAICS 51	222	222	0.0%	Information
NAICS 52	414	423	2.2%	Finance and Insurance
NAICS 53	302	317	5.0%	Real Estate and Rental and Leasing
NAICS 54	930	1,108	19.1%	Professional Scientific and Technical Services
NAICS 55	721	843	16.9%	Management of Companies and Enterprises
NAICS 56	527	598	13.5%	Administrative Support, Waste Management and Remediation
NAICS 61	6,522	7,693	18.0%	Education Services
NAICS 62	3,914	5,154	31.7%	Health Care and Social Assistance
NAICS 71	190	333	75.3%	Arts, Entertainment and Recreation
NAICS 72	4,061	5,966	46.9%	Accommodation and Food Services
NAICS 81	923	1,068	15.7%	Other Services (except Public Administration)
NAICS 92	1,195	1,189	-0.5%	Public Administration
NAICS 99	5	5	0.0%	Other
Total Employment	30,950	36,031	16.4%	

K-12 School Enrollment	9,609	8,427	-12.3%

Southeast Portage 2050 Forecast Characteristics – ODOD Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	13,906	11,970	-13.9%
Households	5,570	5,371	-3.6%
Population Under 18	2,874	2,474	-13.9%
Vehicles	12,385	11,998	-3.1%
Workers	7,288	6,278	-13.9%

Employment				
NAICS 11	10	10	0.0%	Agriculture, Forestry and Hunting
NAICS 21	25	34	36.0%	Mining
NAICS 22	0	0	0.0%	Utilities
NAICS 23	208	232	11.5%	Construction
NAICS 31-33	89	89	0.0%	Manufacturing - Aggregated
NAICS 42	87	87	0.0%	Wholesale Trade
NAICS 44-45	157	142	-9.6%	Retail Trade - Aggregated
NAICS 48-49	107	140	30.8%	Transportation and Warehousing - Aggregated
NAICS 51	0	0	0.0%	Information
NAICS 52	2	2	0.0%	Finance and Insurance
NAICS 53	13	13	0.0%	Real Estate and Rental and Leasing
NAICS 54	41	47	14.6%	Professional Scientific and Technical Services
NAICS 55	2	2	0.0%	Management of Companies and Enterprises
NAICS 56	23	23	0.0%	Administrative Support, Waste Management and Remediation
NAICS 61	354	416	17.5%	Education Services
NAICS 62	32	38	18.8%	Health Care and Social Assistance
NAICS 71	9	16	77.8%	Arts, Entertainment and Recreation
NAICS 72	116	171	47.4%	Accommodation and Food Services
NAICS 81	20	20	0.0%	Other Services (except Public Administration)
NAICS 92	73	73	0.0%	Public Administration
NAICS 99	0	0	0.0%	Other
Total Employment	1,368	1,555	13.7%	

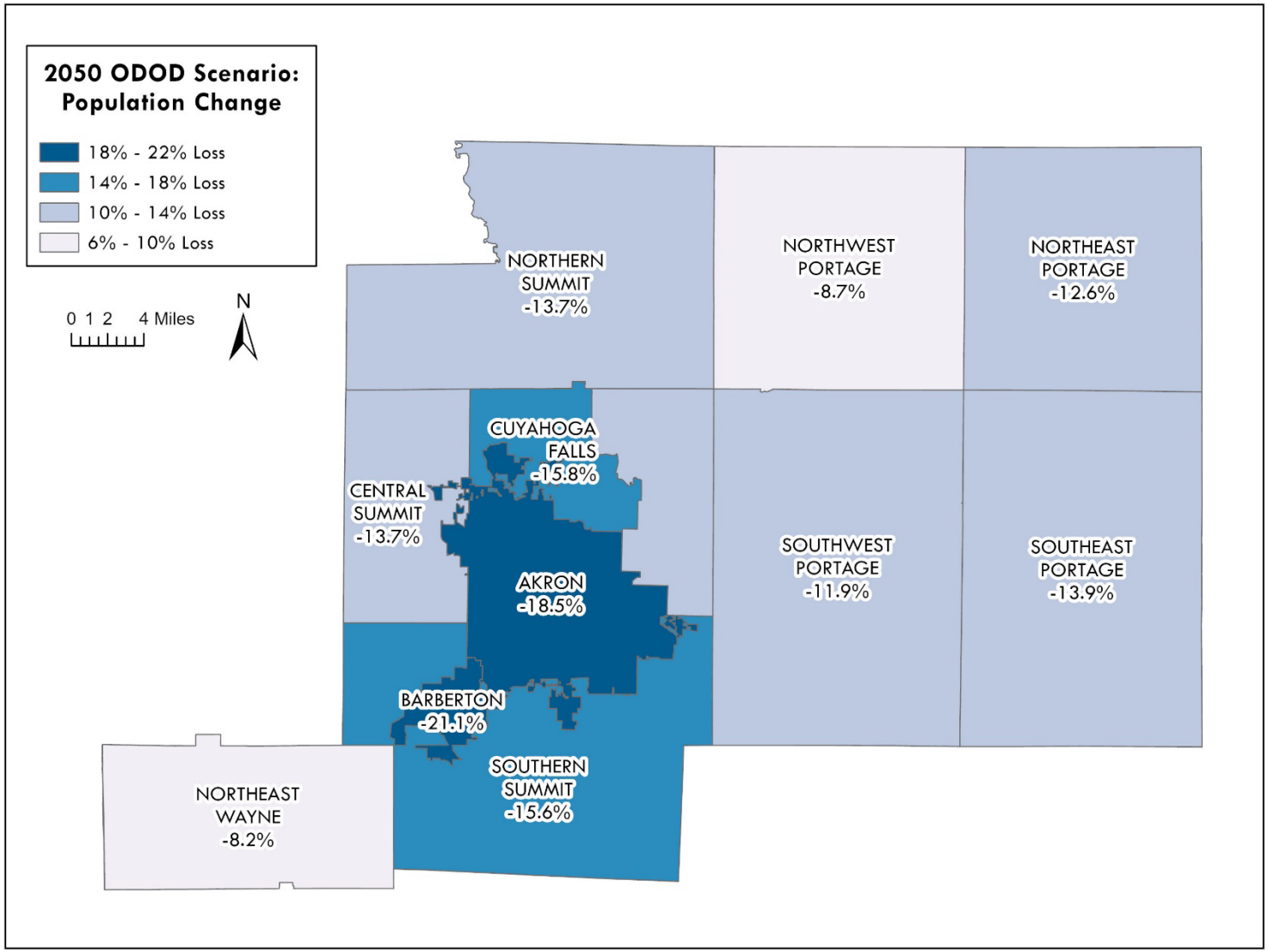
K-12 School Enrollment	2,237	1,948	-12.9%

Northeast Wayne 2050 Forecast Characteristics – ODOD Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	18,809	17,274	-8.2%
Households	7,704	7,860	2.0%
Population Under 18	4,028	3,696	-8.3%
Vehicles	16,207	16,615	2.5%
Workers	9,008	8,299	-7.9%

Employment				
NAICS 11	178	205	15.2%	Agriculture, Forestry and Hunting
NAICS 21	58	77	32.8%	Mining
NAICS 22	14	11	-21.4%	Utilities
NAICS 23	271	302	11.4%	Construction
NAICS 31-33	609	606	-0.5%	Manufacturing - Aggregated
NAICS 42	105	108	2.9%	Wholesale Trade
NAICS 44-45	362	324	-10.5%	Retail Trade - Aggregated
NAICS 48-49	48	62	29.2%	Transportation and Warehousing - Aggregated
NAICS 51	18	18	0.0%	Information
NAICS 52	50	50	0.0%	Finance and Insurance
NAICS 53	14	14	0.0%	Real Estate and Rental and Leasing
NAICS 54	61	70	14.8%	Professional Scientific and Technical Services
NAICS 55	0	0	0.0%	Management of Companies and Enterprises
NAICS 56	61	70	14.8%	Administrative Support, Waste Management and Remediation
NAICS 61	377	445	18.0%	Education Services
NAICS 62	497	653	31.4%	Health Care and Social Assistance
NAICS 71	33	58	75.8%	Arts, Entertainment and Recreation
NAICS 72	172	253	47.1%	Accommodation and Food Services
NAICS 81	132	151	14.4%	Other Services (except Public Administration)
NAICS 92	111	111	0.0%	Public Administration
NAICS 99	0	0	0.0%	Other
Total Employment	3,171	3,588	13.2%	

K-12 School Enrollment	1,744	960	-45.0%


2050 ODOD Scenario:
Population Change
18% - 22% Loss
14% - 18% Loss
10% - 14% Loss
6% - 10% Loss
0 1 2 4 Miles
N
NORTHERN SUMMIT -13.7%
NORTHWEST PORTAGE -8.7%
NORTHEAST PORTAGE -12.6%
CUYAHOGA FALLS -15.8%
CENTRAL SUMMIT -13.7%
AKRON -18.5%
SOUTHWEST PORTAGE -11.9%
SOUTHEAST PORTAGE -13.9%
BARBERTON -21.1%
SOUTHERN SUMMIT -15.6%
NORTHEAST WAYNE -8.2%

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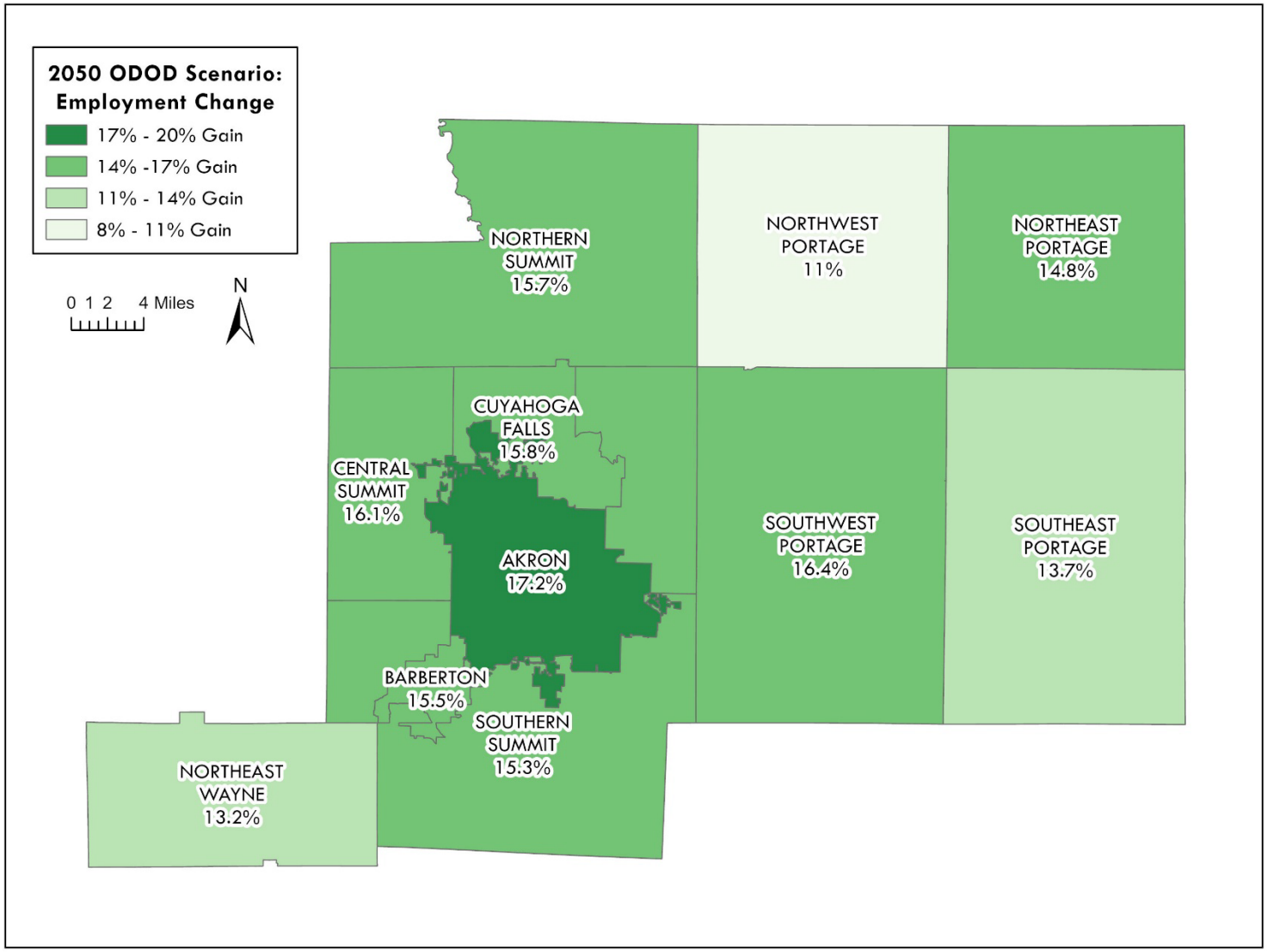
2050 ODOD Scenario:
Employment Change
17% - 20% Gain
14% -17% Gain
11% - 14% Gain
8% - 11% Gain
0 1 2 4 Miles
N
NORTHERN SUMMIT 15.7%
NORTHWEST PORTAGE 11%
NORTHEAST PORTAGE 14.8%
CUYAHOGA FALLS 15.8%
CENTRAL SUMMIT 16.1%
AKRON 17.2%
SOUTHWEST PORTAGE 16.4%
SOUTHEAST PORTAGE 13.7%
BARBERTON 15.5%
SOUTHERN SUMMIT 15.3%
NORTHEAST WAYNE 13.2%

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AMATS 2050 Forecast Characteristics – Current Trends Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	720,087	722,064	0.3%
Households	304,094	322,855	6.2%
Population Under 18	146,339	146,584	0.2%
Vehicles	538,456	571,355	6.1%
Workers	356,805	357,941	0.3%

Employment				
NAICS 11	440	495	12.5%	Agriculture, Forestry and Hunting
NAICS 21	373	487	30.6%	Mining
NAICS 22	1,582	1,241	-21.6%	Utilities
NAICS 23	13,191	14,885	12.8%	Construction
NAICS 31-33	39,470	39,103	-0.9%	Manufacturing - Aggregated
NAICS 42	15,468	15,792	2.1%	Wholesale Trade
NAICS 44-45	34,812	31,342	-10.0%	Retail Trade - Aggregated
NAICS 48-49	14,370	19,364	34.8%	Transportation and Warehousing - Aggregated
NAICS 51	5,221	5,260	0.7%	Information
NAICS 52	10,448	10,695	2.4%	Finance and Insurance
NAICS 53	3,327	3,505	5.4%	Real Estate and Rental and Leasing
NAICS 54	15,107	18,123	20.0%	Professional Scientific and Technical Services
NAICS 55	14,242	16,618	16.7%	Management of Companies and Enterprises
NAICS 56	15,966	18,287	14.5%	Administrative Support, Waste Management and Remediation
NAICS 61	27,086	31,911	17.8%	Education Services
NAICS 62	53,036	69,812	31.6%	Health Care and Social Assistance
NAICS 71	5,459	9,722	78.1%	Arts, Entertainment and Recreation
NAICS 72	28,620	42,056	46.9%	Accommodation and Food Services
NAICS 81	9,592	11,050	15.2%	Other Services (except Public Administration)
NAICS 92	9,245	9,170	-0.8%	Public Administration
NAICS 99	12	12	0.0%	Other
Total Employment	317,067	368,930	16.4%	

K-12 School Enrollment	97,980	97,753	-0.2%

Summit County 2050 Forecast Characteristics – Current Trends Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	540,094	537,173	-0.5%
Households	230,380	240,988	4.6%
Population Under 18	112,408	111,804	-0.5%
Vehicles	400,141	418,561	4.6%
Workers	265,592	264,490	-0.4%

Employment				
NAICS 11	111	123	10.8%	Agriculture, Forestry and Hunting
NAICS 21	106	135	27.4%	Mining
NAICS 22	1,476	1,159	-21.5%	Utilities
NAICS 23	11,030	12,467	13.0%	Construction
NAICS 31-33	28,303	28,046	-0.9%	Manufacturing - Aggregated
NAICS 42	12,426	12,681	2.1%	Wholesale Trade
NAICS 44-45	28,213	25,389	-10.0%	Retail Trade - Aggregated
NAICS 48-49	12,334	16,639	34.9%	Transportation and Warehousing - Aggregated
NAICS 51	4,697	4,733	0.8%	Information
NAICS 52	9,773	10,011	2.4%	Finance and Insurance
NAICS 53	2,831	2,991	5.7%	Real Estate and Rental and Leasing
NAICS 54	13,260	15,926	20.1%	Professional Scientific and Technical Services
NAICS 55	13,488	15,739	16.7%	Management of Companies and Enterprises
NAICS 56	14,801	16,974	14.7%	Administrative Support, Waste Management and Remediation
NAICS 61	18,142	21,368	17.8%	Education Services
NAICS 62	46,682	61,456	31.6%	Health Care and Social Assistance
NAICS 71	5,057	9,012	78.2%	Arts, Entertainment and Recreation
NAICS 72	22,337	32,824	46.9%	Accommodation and Food Services
NAICS 81	7,969	9,190	15.3%	Other Services (except Public Administration)
NAICS 92	7,335	7,266	-0.9%	Public Administration
NAICS 99	7	7	0.0%	Other
Total Employment	260,378	304,136	16.8%	

K-12 School Enrollment	75,624	74,907	-0.9%

Portage County 2050 Forecast Characteristics – Current Trends Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	161,184	165,567	2.7%
Households	66,010	73,078	10.7%
Population Under 18	29,903	30,647	2.5%
Vehicles	122,108	134,205	9.9%
Workers	82,205	84,173	2.4%

Employment				
NAICS 11	151	167	10.6%	Agriculture, Forestry and Hunting
NAICS 21	209	275	31.6%	Mining
NAICS 22	92	71	-22.8%	Utilities
NAICS 23	1,890	2,116	12.0%	Construction
NAICS 31-33	10,558	10,451	-1.0%	Manufacturing - Aggregated
NAICS 42	2,937	3,003	2.2%	Wholesale Trade
NAICS 44-45	6,237	5,629	-9.7%	Retail Trade - Aggregated
NAICS 48-49	1,988	2,663	34.0%	Transportation and Warehousing - Aggregated
NAICS 51	506	509	0.6%	Information
NAICS 52	625	634	1.4%	Finance and Insurance
NAICS 53	482	500	3.7%	Real Estate and Rental and Leasing
NAICS 54	1,786	2,127	19.1%	Professional Scientific and Technical Services
NAICS 55	754	879	16.6%	Management of Companies and Enterprises
NAICS 56	1,104	1,243	12.6%	Administrative Support, Waste Management and Remediation
NAICS 61	8,567	10,098	17.9%	Education Services
NAICS 62	5,857	7,703	31.5%	Health Care and Social Assistance
NAICS 71	369	652	76.7%	Arts, Entertainment and Recreation
NAICS 72	6,111	8,979	46.9%	Accommodation and Food Services
NAICS 81	1,491	1,709	14.6%	Other Services (except Public Administration)
NAICS 92	1,799	1,793	-0.3%	Public Administration
NAICS 99	5	5	0.0%	Other
Total Employment	53,518	61,206	14.4%	

K-12 School Enrollment	20,612	21110	2.4%

Akron 2050 Forecast Characteristics – Current Trends Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	192,551	186,866	-3.0%
Households	84,194	86,194	2.4%
Population Under 18	41,275	40,006	-3.1%
Vehicles	123,706	126,425	2.2%
Workers	88,925	86,541	-2.7%

Employment				
NAICS 11	56	62	10.7%	Agriculture, Forestry and Hunting
NAICS 21	21	27	28.6%	Mining
NAICS 22	797	623	-21.8%	Utilities
NAICS 23	2904	3,277	12.8%	Construction
NAICS 31-33	8,148	8,082	-0.8%	Manufacturing - Aggregated
NAICS 42	2,715	2,766	1.9%	Wholesale Trade
NAICS 44-45	6,573	5,943	-9.6%	Retail Trade - Aggregated
NAICS 48-49	3,598	4,850	34.8%	Transportation and Warehousing - Aggregated
NAICS 51	1,721	1,733	0.7%	Information
NAICS 52	1,659	1,692	2.0%	Finance and Insurance
NAICS 53	1,043	1,103	5.8%	Real Estate and Rental and Leasing
NAICS 54	4,637	5,562	19.9%	Professional Scientific and Technical Services
NAICS 55	7,122	8,313	16.7%	Management of Companies and Enterprises
NAICS 56	4,629	5,313	14.8%	Administrative Support, Waste Management and Remediation
NAICS 61	8,721	10,274	17.8%	Education Services
NAICS 62	26,008	34,240	31.7%	Health Care and Social Assistance
NAICS 71	1,343	2,395	78.3%	Arts, Entertainment and Recreation
NAICS 72	5,794	8,515	47.0%	Accommodation and Food Services
NAICS 81	2,633	3,027	15.0%	Other Services (except Public Administration)
NAICS 92	4,125	4,074	-1.2%	Public Administration
NAICS 99	1	1	0.0%	Other
Total Employment	94,248	111,872	18.7%	

K-12 School Enrollment	24,474	23,337	-4.6%

Barberton 2050 Forecast Characteristics – Current Trends Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	26,128	24,511	-6.2%
Households	11,319	11,732	3.6%
Population Under 18	5,448	5,112	-6.2%
Vehicles	17,751	18,330	3.3%
Workers	11,202	10,507	-6.2%

Employment				
NAICS 11	0	0	0.0%	Agriculture, Forestry and Hunting
NAICS 21	0	0	0.0%	Mining
NAICS 22	0	0	0.0%	Utilities
NAICS 23	421	472	12.1%	Construction
NAICS 31-33	2,145	2,124	-1.0%	Manufacturing - Aggregated
NAICS 42	318	324	1.9%	Wholesale Trade
NAICS 44-45	564	515	-8.7%	Retail Trade - Aggregated
NAICS 48-49	143	194	35.7%	Transportation and Warehousing - Aggregated
NAICS 51	83	83	0.0%	Information
NAICS 52	108	108	0.0%	Finance and Insurance
NAICS 53	16	16	0.0%	Real Estate and Rental and Leasing
NAICS 54	146	177	21.2%	Professional Scientific and Technical Services
NAICS 55	105	123	17.1%	Management of Companies and Enterprises
NAICS 56	264	303	14.8%	Administrative Support, Waste Management and Remediation
NAICS 61	568	670	18.0%	Education Services
NAICS 62	1,887	2,485	31.7%	Health Care and Social Assistance
NAICS 71	11	18	63.6%	Arts, Entertainment and Recreation
NAICS 72	772	1,135	47.0%	Accommodation and Food Services
NAICS 81	458	528	15.3%	Other Services (except Public Administration)
NAICS 92	154	154	0.0%	Public Administration
NAICS 99	0	0	0.0%	Other
Total Employment	8,163	9,429	15.5%	

K-12 School Enrollment	3,737	3,737	-6.8%

Cuyahoga Falls 2050 Forecast Characteristics – Current Trends Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	49,908	50,408	1.0%
Households	23,413	24,275	3.7%
Population Under 18	9,275	9,271	0.0%
Vehicles	39,116	40,044	2.4%
Workers	27,623	27,834	0.8%

Employment				
NAICS 11	1	1	0.0%	Agriculture, Forestry and Hunting
NAICS 21	0	0	0.0%	Mining
NAICS 22	68	53	-22.1%	Utilities
NAICS 23	380	428	12.6%	Construction
NAICS 31-33	3,495	3,459	-1.0%	Manufacturing - Aggregated
NAICS 42	598	610	2.0%	Wholesale Trade
NAICS 44-45	2,561	2,303	-10.1%	Retail Trade - Aggregated
NAICS 48-49	155	209	34.8%	Transportation and Warehousing - Aggregated
NAICS 51	185	185	0.0%	Information
NAICS 52	290	290	0.0%	Finance and Insurance
NAICS 53	202	211	4.5%	Real Estate and Rental and Leasing
NAICS 54	648	777	19.9%	Professional Scientific and Technical Services
NAICS 55	683	797	16.7%	Management of Companies and Enterprises
NAICS 56	1,273	1,459	14.6%	Administrative Support, Waste Management and Remediation
NAICS 61	1,677	1,975	17.8%	Education Services
NAICS 62	3,328	4,384	31.7%	Health Care and Social Assistance
NAICS 71	373	667	78.8%	Arts, Entertainment and Recreation
NAICS 72	2,293	3,367	46.8%	Accommodation and Food Services
NAICS 81	699	811	16.0%	Other Services (except Public Administration)
NAICS 92	532	526	-1.1%	Public Administration
NAICS 99	0	0	0.0%	Other
Total Employment	19,441	22,512	15.8%	

K-12 School Enrollment	6,394	6,303	-1.4%

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Northern Summit 2050 Forecast Characteristics – Current Trends Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	93,396	94,528	1.2%
Households	36,746	38,342	4.3%
Population Under 18	20,239	20,476	1.2%
Vehicles	73,420	76,517	4.2%
Workers	47,477	47,941	1.0%

Employment				
NAICS 11	23	26	13.0%	Agriculture, Forestry and Hunting
NAICS 21	30	40	33.3%	Mining
NAICS 22	89	71	-20.2%	Utilities
NAICS 23	2,899	3,284	13.3%	Construction
NAICS 31-33	7,531	7,451	-1.1%	Manufacturing - Aggregated
NAICS 42	5,742	5,871	2.2%	Wholesale Trade
NAICS 44-45	5,332	4,794	-10.1%	Retail Trade - Aggregated
NAICS 48-49	4,908	6,629	35.1%	Transportation and Warehousing - Aggregated
NAICS 51	2,046	2,067	1.0%	Information
NAICS 52	4,570	4,700	2.8%	Finance and Insurance
NAICS 53	688	737	7.1%	Real Estate and Rental and Leasing
NAICS 54	2,239	2,684	19.9%	Professional Scientific and Technical Services
NAICS 55	2,056	2,397	16.6%	Management of Companies and Enterprises
NAICS 56	2,225	2,549	14.6%	Administrative Support, Waste Management and Remediation
NAICS 61	2,751	3,241	17.8%	Education Services
NAICS 62	4,157	5,473	31.7%	Health Care and Social Assistance
NAICS 71	2,555	4,559	78.4%	Arts, Entertainment and Recreation
NAICS 72	3,939	5,789	47.0%	Accommodation and Food Services
NAICS 81	1,771	2,047	15.6%	Other Services (except Public Administration)
NAICS 92	948	945	-0.3%	Public Administration
NAICS 99	1	1	0.0%	Other
Total Employment	56,500	65,355	15.7%	

K-12 School Enrollment	15,998	16,305	1.9%

Central Summit 2050 Forecast Characteristics – Current Trends Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	96,755	99,342	2.7%
Households	40,266	44,011	9.3%
Population Under 18	19,848	20,446	3.0%
Vehicles	77,114	84,086	9.0%
Workers	48,973	50,204	2.5%

Employment				
NAICS 11	17	17	0.0%	Agriculture, Forestry and Hunting
NAICS 21	7	7	0.0%	Mining
NAICS 22	432	341	-21.0%	Utilities
NAICS 23	1,655	1,867	12.8%	Construction
NAICS 31-33	2,939	2,918	-0.7%	Manufacturing - Aggregated
NAICS 42	1,714	1,747	1.9%	Wholesale Trade
NAICS 44-45	8,696	7,804	-10.3%	Retail Trade - Aggregated
NAICS 48-49	1,106	1,485	34.3%	Transportation and Warehousing - Aggregated
NAICS 51	519	522	0.6%	Information
NAICS 52	2,339	2,401	2.7%	Finance and Insurance
NAICS 53	507	528	4.1%	Real Estate and Rental and Leasing
NAICS 54	3,926	4,733	20.6%	Professional Scientific and Technical Services
NAICS 55	2,310	2,694	16.6%	Management of Companies and Enterprises
NAICS 56	2,448	2,806	14.6%	Administrative Support, Waste Management and Remediation
NAICS 61	2,389	2,813	17.7%	Education Services
NAICS 62	7,829	10,301	31.6%	Health Care and Social Assistance
NAICS 71	610	1,083	77.5%	Arts, Entertainment and Recreation
NAICS 72	6,013	8,841	47.0%	Accommodation and Food Services
NAICS 81	1,423	1,635	14.9%	Other Services (except Public Administration)
NAICS 92	717	714	-0.4%	Public Administration
NAICS 99	5	5	0.0%	Other
Total Employment	47,601	55,262	16.1%	

K-12 School Enrollment	12,781	13,116	2.6%

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Southern Summit 2050 Forecast Characteristics – Current Trends Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	81,356	81,518	0.2%
Households	34,442	36,434	5.8%
Population Under 18	16,323	16,493	1.0%
Vehicles	69,034	73,159	6.0%
Workers	41,392	41,463	0.2%

Employment				
NAICS 11	14	17	21.4%	Agriculture, Forestry and Hunting
NAICS 21	48	61	27.1%	Mining
NAICS 22	90	71	-21.1%	Utilities
NAICS 23	2,771	3,139	13.3%	Construction
NAICS 31-33	4,045	4,012	-0.8%	Manufacturing - Aggregated
NAICS 42	1,339	1,363	1.8%	Wholesale Trade
NAICS 44-45	4,487	4,030	-10.2%	Retail Trade - Aggregated
NAICS 48-49	2,424	3,272	35.0%	Transportation and Warehousing - Aggregated
NAICS 51	143	143	0.0%	Information
NAICS 52	807	820	1.6%	Finance and Insurance
NAICS 53	375	396	5.6%	Real Estate and Rental and Leasing
NAICS 54	1,664	1,993	19.8%	Professional Scientific and Technical Services
NAICS 55	1,212	1,415	16.7%	Management of Companies and Enterprises
NAICS 56	3,962	4,544	14.7%	Administrative Support, Waste Management and Remediation
NAICS 61	2,036	2,395	17.6%	Education Services
NAICS 62	3,473	4,573	31.7%	Health Care and Social Assistance
NAICS 71	165	290	75.8%	Arts, Entertainment and Recreation
NAICS 72	3,526	5,177	46.8%	Accommodation and Food Services
NAICS 81	985	1,142	15.9%	Other Services (except Public Administration)
NAICS 92	859	853	-0.7%	Public Administration
NAICS 99	0	0	0.0%	Other
Total Employment	34,425	39,706	15.3%	

K-12 School Enrollment	12,240	12,362	1.0%

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Northwest Portage 2050 Forecast Characteristics – Current Trends Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	45,289	48,078	6.2%
Households	18,542	20,947	13.0%
Population Under 18	9,183	9,776	6.5%
Vehicles	36,102	40,661	12.6%
Workers	23,618	25,036	6.0%

Employment				
NAICS 11	55	61	10.9%	Agriculture, Forestry and Hunting
NAICS 21	86	115	33.7%	Mining
NAICS 22	20	16	-20.0%	Utilities
NAICS 23	438	486	11.0%	Construction
NAICS 31-33	5,076	5,016	-1.2%	Manufacturing - Aggregated
NAICS 42	2,046	2,097	2.5%	Wholesale Trade
NAICS 44-45	2,618	2,357	-10.0%	Retail Trade - Aggregated
NAICS 48-49	1,002	1,341	33.8%	Transportation and Warehousing - Aggregated
NAICS 51	230	233	1.3%	Information
NAICS 52	180	180	0.0%	Finance and Insurance
NAICS 53	159	162	1.9%	Real Estate and Rental and Leasing
NAICS 54	791	945	19.5%	Professional Scientific and Technical Services
NAICS 55	31	34	9.7%	Management of Companies and Enterprises
NAICS 56	477	536	12.4%	Administrative Support, Waste Management and Remediation
NAICS 61	1,152	1,353	17.4%	Education Services
NAICS 62	1,785	2,347	31.5%	Health Care and Social Assistance
NAICS 71	146	261	78.8%	Arts, Entertainment and Recreation
NAICS 72	1,573	2,310	46.9%	Accommodation and Food Services
NAICS 81	477	544	14.0%	Other Services (except Public Administration)
NAICS 92	373	373	0.0%	Public Administration
NAICS 99	0	0	0.0%	Other
Total Employment	18,715	20,767	11.0%	

K-12 School Enrollment	7,064	7,473	5.8%

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Northeast Portage 2050 Forecast Characteristics – Current Trends Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	15,039	14,897	-0.9%
Households	5,837	6,319	8.3%
Population Under 18	3,059	3,058	0.0%
Vehicles	10,949	11,843	8.2%
Workers	7,144	7,064	-1.1%

Employment				
NAICS 11	37	41	10.8%	Agriculture, Forestry and Hunting
NAICS 21	3	3	0.0%	Mining
NAICS 22	0	0	0.0%	Utilities
NAICS 23	151	166	9.9%	Construction
NAICS 31-33	420	420	0.0%	Manufacturing - Aggregated
NAICS 42	8	8	0.0%	Wholesale Trade
NAICS 44-45	303	279	-7.9%	Retail Trade - Aggregated
NAICS 48-49	92	123	33.7%	Transportation and Warehousing - Aggregated
NAICS 51	54	54	0.0%	Information
NAICS 52	29	29	0.0%	Finance and Insurance
NAICS 53	8	8	0.0%	Real Estate and Rental and Leasing
NAICS 54	24	27	12.5%	Professional Scientific and Technical Services
NAICS 55	0	0	0.0%	Management of Companies and Enterprises
NAICS 56	77	86	11.7%	Administrative Support, Waste Management and Remediation
NAICS 61	539	636	18.0%	Education Services
NAICS 62	126	164	30.2%	Health Care and Social Assistance
NAICS 71	24	42	75.0%	Arts, Entertainment and Recreation
NAICS 72	361	532	47.4%	Accommodation and Food Services
NAICS 81	71	77	8.5%	Other Services (except Public Administration)
NAICS 92	158	158	0.0%	Public Administration
NAICS 99	0	0	0.0%	Other
Total Employment	2,485	2,853	14.8%	

K-12 School Enrollment	1,702	1,728	1.5%

Southwest Portage 2050 Forecast Characteristics – Current Trends Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	86,950	88,950	2.3%
Households	36,061	39,699	10.1%
Population Under 18	14,787	14,991	1.4%
Vehicles	62,672	68,045	8.6%
Workers	44,155	44,921	1.7%

Employment				
NAICS 11	49	55	12.2%	Agriculture, Forestry and Hunting
NAICS 21	95	123	29.5%	Mining
NAICS 22	72	55	-23.6%	Utilities
NAICS 23	1,093	1,232	12.7%	Construction
NAICS 31-33	4,973	4,926	-0.9%	Manufacturing - Aggregated
NAICS 42	796	811	1.9%	Wholesale Trade
NAICS 44-45	3,159	2,851	-9.7%	Retail Trade - Aggregated
NAICS 48-49	787	1,059	34.6%	Transportation and Warehousing - Aggregated
NAICS 51	222	222	0.0%	Information
NAICS 52	414	423	2.2%	Finance and Insurance
NAICS 53	302	317	5.0%	Real Estate and Rental and Leasing
NAICS 54	930	1,108	19.1%	Professional Scientific and Technical Services
NAICS 55	721	843	16.9%	Management of Companies and Enterprises
NAICS 56	527	598	13.5%	Administrative Support, Waste Management and Remediation
NAICS 61	6,522	7,693	18.0%	Education Services
NAICS 62	3,914	5,154	31.7%	Health Care and Social Assistance
NAICS 71	190	333	77.5%	Arts, Entertainment and Recreation
NAICS 72	4,061	5,966	46.9%	Accommodation and Food Services
NAICS 81	923	1,068	15.7%	Other Services (except Public Administration)
NAICS 92	1,195	1,189	-0.5%	Public Administration
NAICS 99	5	5	0.0%	Other
Total Employment	30,950	36,031	16.4%	

K-12 School Enrollment	9,609	9,687	0.8%

Southeast Portage 2050 Forecast Characteristics – Current Trends Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	13,906	13,642	-1.9%
Households	5,570	6,113	9.7%
Population Under 18	2,874	2,822	-1.8%
Vehicles	12,385	13,656	10.3%
Workers	7,288	7,152	-1.9%

Employment				
NAICS 11	10	10	0.0%	Agriculture, Forestry and Hunting
NAICS 21	25	34	36.0%	Mining
NAICS 22	0	0	0.0%	Utilities
NAICS 23	208	232	11.5%	Construction
NAICS 31-33	89	89	0.0%	Manufacturing - Aggregated
NAICS 42	87	87	0.0%	Wholesale Trade
NAICS 44-45	157	142	-9.6%	Retail Trade - Aggregated
NAICS 48-49	107	140	30.8%	Transportation and Warehousing - Aggregated
NAICS 51	0	0	0.0%	Information
NAICS 52	2	2	0.0%	Finance and Insurance
NAICS 53	13	13	0.0%	Real Estate and Rental and Leasing
NAICS 54	41	47	14.6%	Professional Scientific and Technical Services
NAICS 55	2	2	0.0%	Management of Companies and Enterprises
NAICS 56	23	23	0.0%	Administrative Support, Waste Management and Remediation
NAICS 61	354	416	17.5%	Education Services
NAICS 62	32	38	18.8%	Health Care and Social Assistance
NAICS 71	9	16	77.8%	Arts, Entertainment and Recreation
NAICS 72	116	171	47.4%	Accommodation and Food Services
NAICS 81	20	20	0.0%	Other Services (except Public Administration)
NAICS 92	73	73	0.0%	Public Administration
NAICS 99	0	0	0.0%	Other
Total Employment	1,368	1,555	13.7%	

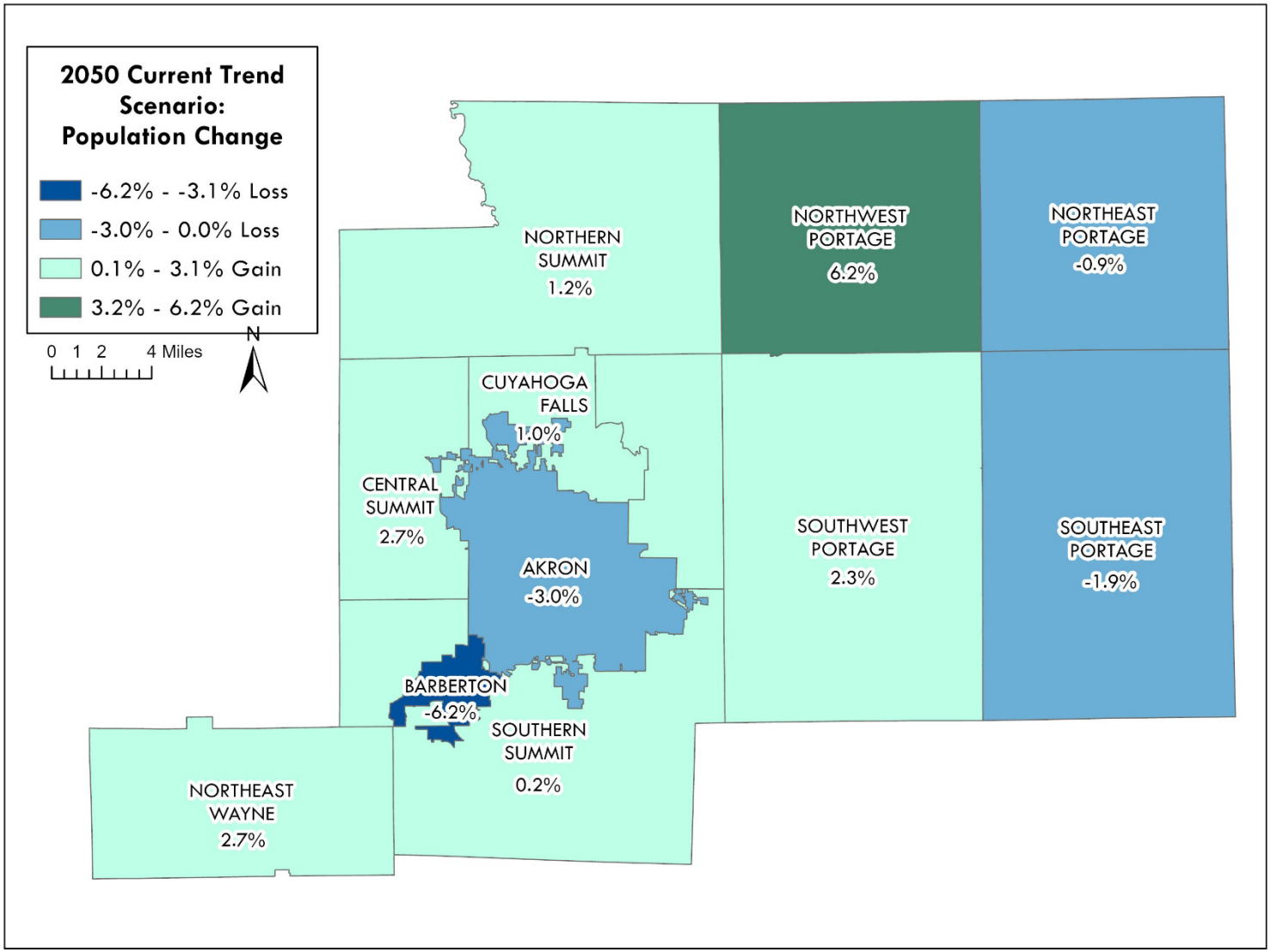
K-12 School Enrollment	2,237	2,222	-0.7%

Northeast Wayne 2050 Forecast Characteristics – Current Trends Scenario

	BASE YEAR 2020	BASE YEAR 2050	% Change
Population	18,809	19,324	2.7%
Households	7,704	8,789	14.1%
Population Under 18	4,028	4,133	2.6%
Vehicles	16,207	18,589	14.7%
Workers	9,008	9,278	3.0%

Employment				
NAICS 11	178	205	15.2%	Agriculture, Forestry and Hunting
NAICS 21	58	77	32.8%	Mining
NAICS 22	14	11	-21.4%	Utilities
NAICS 23	271	3,021	11.4%	Construction
NAICS 31-33	609	606	-0.5%	Manufacturing - Aggregated
NAICS 42	105	108	2.9%	Wholesale Trade
NAICS 44-45	362	324	-10.5%	Retail Trade - Aggregated
NAICS 48-49	48	62	29.2%	Transportation and Warehousing - Aggregated
NAICS 51	18	18	0.0%	Information
NAICS 52	50	50	0.0%	Finance and Insurance
NAICS 53	14	14	0.0%	Real Estate and Rental and Leasing
NAICS 54	61	70	14.8%	Professional Scientific and Technical Services
NAICS 55	0	0	0.0%	Management of Companies and Enterprises
NAICS 56	61	70	14.8%	Administrative Support, Waste Management and Remediation
NAICS 61	377	445	18.0%	Education Services
NAICS 62	497	653	31.4%	Health Care and Social Assistance
NAICS 71	33	58	75.8%	Arts, Entertainment and Recreation
NAICS 72	172	253	47.1%	Accommodation and Food Services
NAICS 81	132	151	14.4%	Other Services (except Public Administration)
NAICS 92	111	111	0.0%	Public Administration
NAICS 99	0	0	0.0%	Other
Total Employment	3,171	3,588	13.2%	

K-12 School Enrollment	1,744	1,736	-0.5%


2050 Current Trend Scenario: Population Change
-6.2% - -3.1% Loss
-3.0% - 0.0% Loss
0.1% - 3.1% Gain
3.2% - 6.2% Gain
0 1 2 4 Miles
N
NORTHERN SUMMIT 1.2%
NORTHWEST PORTAGE 6.2%
NORTHEAST PORTAGE -0.9%
CUYAHOGA FALLS 1.0%
CENTRAL SUMMIT 2.7%
AKRON -3.0%
SOUTHWEST PORTAGE 2.3%
SOUTHEAST PORTAGE -1.9%
BARBERTON -6.2%
SOUTHERN SUMMIT 0.2%
NORTHEAST WAYNE 2.7%

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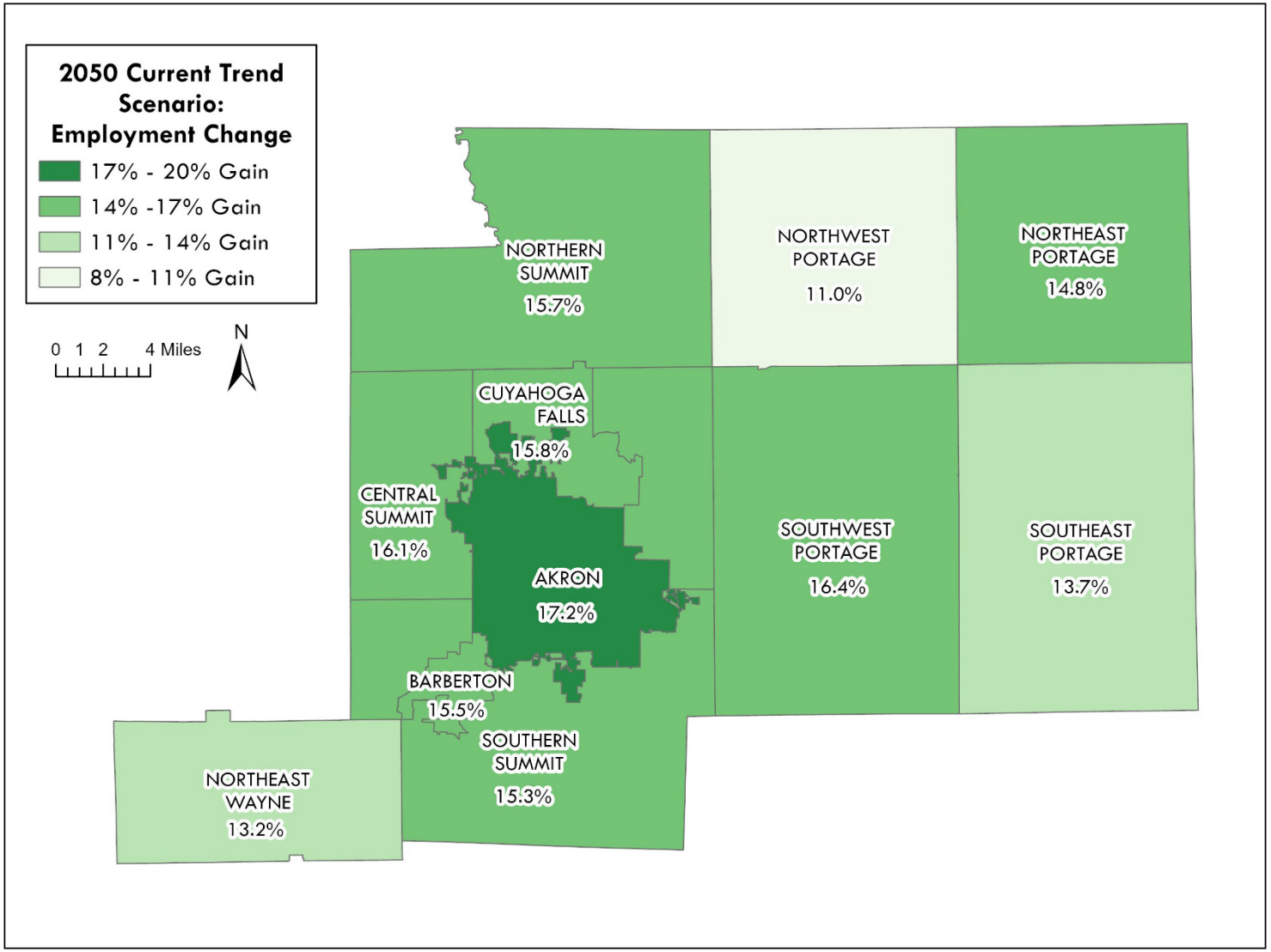
2050 Current Trend Scenario: Employment Change
17% - 20% Gain
14% -17% Gain
11% - 14% Gain
8% - 11% Gain
0 1 2 4 Miles
N
NORTHERN SUMMIT 15.7%
NORTHWEST PORTAGE 11.0%
NORTHEAST PORTAGE 14.8%
CUYAHOGA FALLS 15.8%
CENTRAL SUMMIT 16.1%
AKRON 17.2%
SOUTHWEST PORTAGE 16.4%
SOUTHEAST PORTAGE 13.7%
BARBERTON 15.5%
SOUTHERN SUMMIT 15.3%
NORTHEAST WAYNE 13.2%

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Conclusion

Shifts in population and employment can influence regional travel patterns in many ways. This includes the overall number of trips, time and duration of travel, origins and destinations, the travel mode selected, and many other factors. This is why understanding where current trends could be taking the AMATS region in the long-term future is an important part of the greater transportation planning process. Our analysis reveals a nuanced future for the region, characterized by contrasting trends in population and employment. Depending on the scenario, overall population in the region is projected to either decline or remain relatively flat. Under both scenarios, the region exhibits robust employment growth, projected to increase by 16.4%. This mixed landscape of demographic and economic change presents unique challenges and opportunities for regional planning. A potential decrease in population and households signals a need for strategic adjustments in infrastructure and service provision, while employment growth suggests economic resilience and the potential for revitalization. In addition to providing important planning insight, the massive amount of TAZ-level data generated during the Planning Data Forecast process will be input directly into the regional traffic demand model. Using this data, the model will be able to generate future traffic volumes, congestion and air quality data with the greatest possible accuracy.

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: **Draft 2024 Freight Plan**

DATE: **July 25, 2024**

The draft AMATS Freight Plan contains an analysis of the region's existing freight system and makes recommendations that are eligible for inclusion in the upcoming Draft 2050 Regional Transportation Plan.

The AMATS Freight Plan identifies the elements of the transportation system in the AMATS area that are critical for movement of bulk goods into, out of, and within the region. The report also addresses the factors and trends that affect both railway and roadway freight, and examines highway-rail grade crossings and freight corridors in the area.

This report:

- Analyzes the highway and freight network,
- Contains updated analysis since the last freight plan (2020)
- Adds assessments of truck parking and railroad quiet zones
- Identifies regional job hubs that generate freight activity,
- Evaluates the freight network's efficiency in these job hubs, and
- Recommends strategies to improve the freight network in the AMATS region.

Examples of transportation projects that are freight-related or critical to goods movement include bridge replacements, roadway improvements, rail-access improvements and grade separations for highway and rail.

The complete Freight Plan is available on the AMATS website, www.amatsplanning.org.

The staff is asking that you review this document. We are pleased to accept your comments and questions. Final approval will be requested in September.

AMATS

2024 FREIGHT PLAN

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2024 FREIGHT PLAN

DRAFT

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

EXECUTIVE SUMMARY

The Akron Metropolitan Area Transportation Study (AMATS) is the federally designated Metropolitan Planning Organization (MPO) for the Greater Akron, Ohio area. AMATS is responsible for directing the continuing, cooperative, and comprehensive transportation planning process for the region in order to receive federal funds for transportation improvements. AMATS is committed to ensuring that transportation improvements meet the needs of the region and that federal transportation funds are used in an efficient, effective, and equitable manner.

The movement of freight is an important part of a fully functioning transportation system. 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.

The purpose of this report is to identify the transportation systems that exist in the AMATS area used to move freight into, out of, and within the region. This report will also address the factors and trends that affect the multiple modes of traffic and the flow of freight, as well as the procedures used for planning and programming freight-related projects through the AMATS transportation planning process. The projects and strategies recommended in this report will be considered as part of the Regional Transportation Plan update process.

The AMATS freight-planning process includes three primary strategies:

- Develop and maintain databases and analysis tools for decision-making
- Interact with freight stakeholders to better understand the freight system, identify common issues and build consensus
- Incorporate freight into the regional planning process

INTRODUCTION

AMATS and the Ohio Department of Transportation (ODOT) are responsible for ensuring that freight movement is considered in the transportation planning process. This report identifies the elements of the transportation system that are critical for the movement of goods, to determine where improvements can be made, and to offer recommendations for those improvements. Examples of transportation projects that are freight-related or critical to goods movement include bridge replacements, road widening, rail-access improvements, terminal facility enhancements, grade separations for highway and rail, and connections to cargo terminals and new commercial infrastructure. Additionally, job hubs help to identify where products are being manufactured as well as where goods are being delivered. A number of job hubs are studied in this report to determine where goods movement may encounter traffic issues.

This report analyzes the highway and rail freight network. It identifies regional job hubs that generate freight activity and evaluates the freight network's efficiency in these job hubs. Finally, the AMATS Freight Report recommends strategies to improve the freight network in the AMATS region. The recommendations made in the 2024 Freight Report will be considered for inclusion in Transportation Outlook 2050, the area's long-range transportation plan.

Purpose

The movement of freight is an important part of a fully functioning transportation system. 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 their higher density of development served by air cargo airports, intermodal freight yards, large trucking terminals, and shipyards are especially affected by freight movement issues.

Examples of transportation projects that are freight-related or critical to goods movement include bridge replacements, road widening, port and rail access improvements, terminal facility enhancements, grade separations for highway and rail and providing connections to air cargo and new commercial infrastructure.

The purpose of this report is to identify the transportation systems in the AMATS area that are used to move freight into, out of, and within the region. This report will also address the factors and trends that affect the multiple modes of traffic and the flow of freight, as well as the procedures used for planning and programming freight-related projects through the AMATS transportation planning process.

AMATS and the Ohio Department of Transportation (ODOT) are responsible for making sure that freight movement is considered in the transportation planning process. Federal legislation calls for the statewide and metropolitan planning processes to include reasonable opportunity for the public and interested parties, including freight shippers and providers of freight transportation services, to participate in the development of transportation plans and programs.

Many state DOTs and MPOs have systematically incorporated freight movement issues into their planning activities. This report attempts to:

- Define those elements of the area's transportation system that are critical for the efficient movement of freight,
- Identify ways to measure system performance in terms of freight movement,
- Develop freight-oriented data collection and modeling in order to identify problems and potential solutions, and
- Discuss critical issues and identify important bottlenecks in the freight network.

Importance of Freight Movement

Freight movement is an important component of the national, regional, and local economies. The term "freight" is used generically throughout this report to indicate the commercial transport of goods. Goods need to be shipped from their point of origin to their final consumer destination. The term "goods" used in the plan refers to all items, except services, that can be moved commercially. Freight movement can be by truck, rail, air, water, or pipeline; but usually freight movement is accomplished by a combination of modes. Freight arriving from other countries in container ships at major US maritime ports, or goods manufactured in the US, are transferred to rail, trucks, or pipelines and shipped to other distribution centers for additional modal transfers. These goods eventually arrive at shopping malls, grocery stores, car dealers, department stores, other manufacturing centers, or directly to our homes.Freight transportation has grown over time with the expansion or shifting of population and economic activity within the United States and with the increasing interdependence of economies across the globe.

Freight plays a significant role within the AMATS area. As consumer demands increase, the transportation system throughout the region and nation will experience an increase in freight movements (by truck, rail, air, and waterway). According to the Federal Highway Administration (FHWA), the total amount of freight tonnage that moves through the nation's transportation network is expected to double by 2060.

Factors such as population growth and economic growth drive increasing vehicle miles traveled (VMT) and increased demand for goods, resulting in more freight transportation. The growth of on-line commerce and demand for next day delivery have impacted freight movements, with more need for on-demand and short-distance transportation. This has resulted in the development of warehouses and distribution centers on the urban periphery and into urban areas. These new warehouses and distribution centers in these areas generate additional truck traffic near last-mile corridors. Furthermore, on-line commerce growth has driven an increase in parcel delivery traffic on local street networks and two-lane systems. With these changing patterns come new challenges: potential land use conflict and a need to incorporate freight-related land uses into urban area development; the need to match traffic operations and infrastructure to meet increased traffic; and need to mitigate the exacerbation or creation of new problems, such as facility access and corridor management.

For nearly 30 years, the US Congress and the US Department of Transportation (USDOT) have placed a greater emphasis on freight and the efficient movement of goods, incorporating the efficient movement of goods into the last three transportation laws. Consequently, Metropolitan Planning Organizations (MPOs) such as AMATS, and state departments of transportation such as ODOT, have been addressing the public's interest in freight issues as part of the planning process.

ROADWAY FREIGHT

The economy of the AMATS area depends on its roadways. Business and industry depend on an effective freight transportation system to reach state, regional, national, and global markets. Trucks move most of Ohio's freight.

A large number of Ohioans are employed in trucking-related occupations at private and for-hire motor carriers. The table below shows 416,070 workers statewide within six primary categories related to roadway freight.

Selected Roadway Freight-Related Employment Statistics in Ohio, May 2023

Source: Bureau of Labor Statistics

OCCUPATION CODE	OCCUPATION TITLE	EMPLOYMENT	ANNUAL MEAN WAGE
53-1047	First-Line Supervisors of Transportation and Material Moving Workers *(Except Aircraft Cargo Handling Supervisors)*	22,760	$62,020
53-3032	Heavy and Tractor-Trailer Truck Drivers	89,560	$55,610
53-3033	Light Truck Drivers	36,370	$44,200
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	114,010	$39,330
53-7064	Packers and Packagers, Hand	18,110	$34,950
53-7065	Stockers and Order Fillers	135,260	$37,350

Truck traffic originates and terminates primarily in metropolitan areas. As a result, increases in freight-truck traffic have the greatest impact in the metropolitan areas in terms of greater roadway congestion, deteriorating pavement conditions, and increased emissions.

Trucks account for much of the wear and tear on roadways. A large, legally loaded truck weighing 80,000 pounds puts about the same wear and tear on a road as 9,000 to 10,000 cars. Furthermore, a large truck causes as much congestion as 2.5 to 3.5 cars on flat terrain and as much as 15 cars on uphill grades. Building and preserving roads and bridges is vital to the economy. As the economy changes, generating varying types of freight movement and new demands for reliable access to markets, policy-makers need to understand the nature of the freight system and how it affects trucking and the area's roadways.

Commercial transportation companies in Ohio are designated as public utilities under the jurisdiction of the Public Utilities Commission of Ohio (PUCO). These companies pay special fees and taxes in exchange for exemption from other taxes, such as sales tax on equipment. They are also exempt from many forms of local regulation.

In terms of trucking, one responsibility of the PUCO is to improve road safety and ensure quality, equitable service for commercial motor and hazardous materials carriers and their customers. The PUCO registers more than 58,000 general freight carriers; 2,500 hazardous materials transporters; 1,000 towing companies; and 300 household goods movers in the state of Ohio.

The Akron metropolitan area contains 4,775 miles of roadways of all types. Table 1-1 shows the length in miles and lane miles for each roadway classification.

Minor collectors and local roads are not considered part of the federal aid system; therefore, they are not eligible for federal funding. The local jurisdiction or the county in which they are located assumes responsibility for maintaining these roadways.

The Akron metropolitan area contains 1,326 bridges. Table 1-2 shows the number and deck area for each type of bridge based on information from the Ohio Department of Transportation (ODOT). The federal definition of a bridge is a self-supported structure equal to or greater than 20 feet in length. Bridges less than 20 feet are not eligible for federal funds. The railroad bridges listed in Table 1-2 are maintained by the privately held railroad companies operating in the AMATS area.

These roads and bridges support the largest portion of freight movement in the AMATS area. The current Highway Preservation Needs Report (2050) estimates that it will cost nearly $2.02 billion to maintain the area's roads over the next 25 years. Bridge preservation is estimated to cost $4.45 billion over the same period. In order for the area to maintain its transportation infrastructure and continue the status quo in terms of freight movement in the area, sufficient and regular funding will need to continue and accelerate.

Taking future growth and development into account, the AMATS Congestion Management Process (CMP) report identifies existing and projected future congestion on our region's freeways, arterial streets and key intersections, and provides recommendations to alleviate identified congestion. The report provides an extensive list of freeway, arterial street and intersection needs for our region.

Table 1-1: Mileages by Roadway Classification

FEDERAL FUNCTIONAL CLASSIFICATION	LENGTH (IN MILES)	NUMBER OF LANE MILES
Interstate	106	493
Expressway	33	164
Ohio Turnpike (I-80)	34	204
Principal Arterial	194	585
Minor Arterial	354	969
Major Collector	547	1,165
Urban Minor Collector	6	12
Rural Minor Collector	71	142
Local	3,452	6,935
Totals:	4,797	10,669

Table 1-2: Number and Deck Area of Bridges

BRIDGE TYPE	NUMBER OF BRIDGES	DECK AREA (SQ FT)
Bridges (20+ feet)*	908	7,267,473
Turnpike Bridges (20+ feet)	50	1,055,254
Railroad Bridges (20+ feet)	28	124,635
Bridges (<20 feet)	340	183,785
TOTAL	1,326	8,631,147

Environmental and Safety Concerns

Long-haul tractor-trailer operators frequently will run their engines, both overnight and during the workday. The reasons for this idling may be the need to heat and cool the cab and sleeper, avoid cold starting, the need to power electronic equipment or work machinery, or provide for personal safety. Long-haul trucks typically idle several hours per day but may vary from idling one to two nights per week to hardly ever turning the engine off. Buses, locomotives, and marine vehicles can idle for similar reasons. Unfortunately, this practice results in additional air pollution.

The Ohio Department of Transportation (ODOT) and Ohio Environmental Protection Agency (Ohio EPA) provide grants to reduce idling and other diesel-related emissions. Grants are being provided for a number of Idling Reduction Technologies (IRTs) for trucks and buses. U.S. Department of Transportation's Carbon Reduction Program (CRP), administered by the Federal Highway Administration, also provides funds for similar air quality improvements.

Truck stop electrification and onboard equipment can help reduce idling at truck stops, roadsides, and delivery sites. Truck Stop Electrification (TSE) provides power from an external source for important systems such as air conditioning, heating, and appliances, without needing to idle the engine during required stops at rest areas. Auxiliary power units are portable units that are mounted to the vehicle and provide power for climate control and electrical devices in trucks, locomotives, and marine vehicles, without idling the primary vehicle engine. Engine recovery systems use the vehicle's heat-transfer system to keep the truck's heater operating after the engine is turned off, using heat that would otherwise dissipate. Automatic engine stop-start controls sense the temperature in the sleeper cabin and automatically turn the engine on if the sleeper is too hot or cold. Cab or bunk heaters supply warm air to the cab or bunk compartment using small diesel heaters. Heaters can be coupled with air conditioners if needed.

Truck driver access to safe and available truck parking is critical to the efficient movement of freight throughout Ohio. Truck drivers rely on parking locations to get the rest they need, as required by federal Hours of Service (HOS) regulations. Truck parking is also important as drivers wait for pick-up and delivery appointments, known as staging. Inadequate truck parking produces higher economic and social costs for the movement of freight.

Trucks parked in undesignated areas for longer periods of time (seven-plus hours) suggest a truck parking capacity issue for drivers trying to find a place to take long breaks. Trucks parked in undesignated areas for less than seven hours and in urban areas or near freight generators suggest a truck parking capacity issue for drivers waiting for shipper/receiver appointments (staging). Truck drivers often need space to stage, since many shippers/receivers do not allow trucks to park on-site early. Truck parking should be provided at locations with high demand, along existing key freight corridors and near freight-generating facilities, particularly in and near urban areas. Adding truck parking to meet demand in urban areas is further challenged by the high price of land and land-use conflicts in urban areas.

Many truck parking locations are not designed to handle the length and width of today's trucks. At these locations, longer trucks with wider loads have difficulty maneuvering in and out of truck parking facilities and spaces. Without sufficient space, truck drivers may be forced to drive over curbs or through undesignated areas.

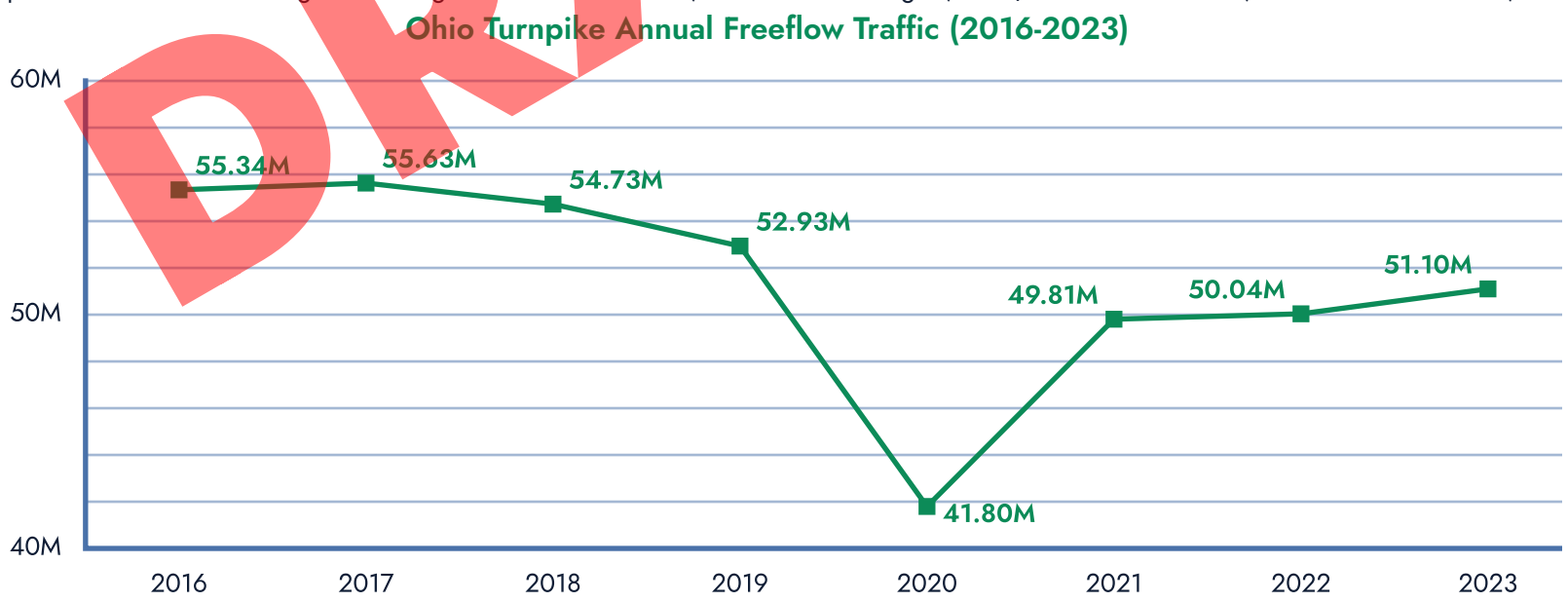
Truck drivers, particularly those on long-haul routes that require overnight parking stays, require basic amenities, notably lighting, security, restrooms, showers, food options, and trash cans. However, these amenities are not available at all truck parking locations, particularly those not developed with overnight truck parking needs in mind. Access to restrooms is important at both overnight and staging locations, as shipper/receivers may not allow truck drivers to use their facilities. Amenity issues were further challenged during the COVID-19 Pandemic. As some facilities closed, many drivers were unable to access restrooms and other basic amenities, with limited information about which facilities were open/closed. Additionally, as new trucking technologies emerge, truck parking facilities will need to consider providing additional amenities, such as alternative fuel/electric charging stations and idle reduction technologies.

ODOT's statewide freight plan, Transport Ohio, identifies the need for adequate truck parking. The Akron area was identified as a cluster of significant truck parking, with the needs discussed above.

The Ohio Turnpike

Constructed in 1955, the Ohio Turnpike is a 241-mile toll road running east-west across Northern Ohio. The Turnpike traverses the AMATS area through Northern Portage and Summit Counties paralleling SR 303. The Turnpike can be accessed through interchanges with I-77 in Richfield, SR-8 in Boston Heights, I-480/SR-14 in Streetsboro, SR-44 north of Ravenna, and at SR-5 just outside of the AMATS area in Trumbull County. In the AMATS area, the Ohio Turnpike is designated as I-80. The Turnpike is administered by the Ohio Turnpike and Infrastructure Commission, independent of ODOT.

The Turnpike operates under capacity; meaning that the volume of traffic does not exceed the amount of roadway needed for the smooth flow of vehicles at optimal speed. The Ohio Turnpike Commission measures and reports their traffic performance utilizing the term, freeflow traffic, which is the amount of traffic moving freely without delay during the reported year. The reported numbers for the last eight years are reflected in



the graph above.

The speed limit on the Turnpike is generally 70 miles per hour. In addition, the Turnpike allows the movement of freight through the use of Long Combination Vehicles (LCVs). LCVs are combinations of multiple trailers on one tractor truck as compared to a standard 5-axle semi-trailer-truck with one trailer. The use of LCVs optimizes freight movement on the highway. The Turnpike is the only facility in the state where LCV (triple trailer) use is permitted.

In 2013 the Ohio assembly passed a $7.6 billion transportation and public safety bill. This bill allows the state to use toll revenue from the Ohio Turnpike for projects beyond the Turnpike's borders. The bill raised turnpike tolls for each of the next ten years, allowing Ohio to issue $1.5 billion in bonds and shift funding to road and bridge projects across the state. Of the funding available, ninety percent of the turnpike money is designated for projects within 75 miles of the Turnpike. That means projects from across northern Ohio compete for funding based on need.

Presently, the Turnpike Commission intends to raise tolls at no more than the rate of inflation. The state believes the bond money can leverage an equal amount of federal and local funding, continuing to yield additional funds for roads and bridges in the coming years.

The Ohio Turnpike Commission implemented a new toll collection system in April 2024. This $250 million project features open road tolling for EZ Pass customers to bypass gates at entrances and exits along the entire Ohio Turnpike. Toll booths are fully automated and streamlined. EZ Pass use on the Ohio Turnpike continued to increase in 2023. Combined EZ Pass use by Turnpike passenger car and commercial truck customers was 74.1%, up 0.7% from 2022. Separately, 64.5% of Turnpike passenger cars used EZ Pass, up 2.1% in 2023; and 89.6% of Turnpike commercial truck customers used EZ Pass, up 0.4% in 2023.

EZ Pass customers in passenger vehicles save an average of about 33% on Ohio Turnpike tolls compared to customers who pay by cash or credit card. EZ Pass toll rates are calculated and deducted electronically from prepaid account balances. There are more than 635,000 active Ohio Turnpike EZ Pass accounts, which includes both passenger vehicle and commercial truck customers. EZ Pass transponders are available for purchase at 448 retail locations in 54 Ohio counties, including all fourteen service locations throughout the Turnpike.

The Turnpike continues to modernize with improvements to its fiber optic network, electric vehicle (EV) charging stations, automatic traffic recorders, license plate readers and weigh-in motion systems (pavement sensors that weigh trucks as they are driving at high speeds).

Highway / Trucking Network

The highway network and trucking system have a number of strengths and weaknesses affecting the cost and efficiency of moving freight. A broad Strengths, Weaknesses, Opportunities and Threats (SWOT) evaluation was conducted to find the elements that should be considered when planning freight movement. The results of the SWOT assessment help AMATS strategize and plan for the future freight system.

Strengths

- Direct delivery of goods to stores and consumers
- Accessibility to other modes of transportation
- Dense network of roads
- Publicly owned and managed roadway infrastructure
- Dedicated funds for maintenance
- On-line retailing boosts delivery demand
- Ohio is strategically located for goods movement (60% percent of the US/Canada population is within a one day drive - 600 miles)

Weaknesses

- Congestion at strategic locations, bottlenecks
- Limited ability to increase capacity
- Rising fuel costs
- Environmental concerns / air quality regulations
- Shortage of trained drivers, driver fatigue
- An inadequate supply of truck parking facilities

- Limited funding for maintenance and improvements
- Limitations on truck size and weights
- Speeds limits, varying by location
- Climate/weather conditions affect movement
- Economic cycles affect demand

Opportunities

- The AMATS area should support the adoption of connected and automated vehicle technologies
- The area should assist in developing additional safe truck parking locations
- Job re-training programs can assist in alleviating the shortage of truck drivers

Threats

- Severe weather events (floods, blizzards, tornados) hamper freight movement
- Cyber security dangers affect the cost and safety of goods
- Uncertainties in the global supply chain create volatility
- Increases in population within specific areas would lead to greater traffic congestion

RAILWAY FREIGHT

The level of importance of rail to the AMATS area transportation system is reflected by the concentration of rail lines within the area. The high mileage of rail lines reflects the close integration of rail with the area's economic activity. Although rail volumes and tonnage of freight moved are less than the Akron area's historical peak, the movement of goods by rail remains important to the economy.

Northeast Ohio contains heavily utilized rail routes between Chicago and the US East Coast ports. Northeast Ohio serves as a hub where freight moving east from Chicago can be redirected toward New York, Philadelphia, Baltimore, and Virginia. The rail lines which see heavy traffic are operated by Class 1 carriers Norfolk Southern and CSX Transportation.

Area Rail Carriers

Norfolk Southern's Cleveland line runs from Cleveland, Ohio to Rochester, Pennsylvania, along a former Pennsylvania Railroad line. In the AMATS area, it operates by way of Macedonia, Hudson, Ravenna and Atwater. See Map 2-1 (page 10) for rail ownership. Amtrak's Capitol Limited uses the Cleveland Line between Cleveland and Alliance for passenger service. Both the eastbound and westbound train are scheduled to use the line between midnight and early morning.

Norfolk Southern's line through the AMATS area remains the busiest section of rail, averaging over 74 trains per day. The Norfolk Southern Motor Yard is located near I-271 in Macedonia. At one time this yard was filled with boxcars containing automobile body stampings produced at Ford's Walton Hills plant and the Chrysler plant in Twinsburg a few miles to the southeast. Norfolk Southern closed this yard in November 2018, and today it is used to store a few dozen freight cars. Norfolk Southern has an additional rail yard in Twinsburg. This yard also served the Chrysler plant until the plant closed in 2010. The rail yard would have been filled with boxcars for shipment of auto parts to Chrysler assembly plants around the country.

Once Chrysler ceased operations, the Twinsburg Yard became much less active. The primary business today is inbound stone traffic to Shelly Company, that unloads unit stone trains along the south side of the yard. This activity is seasonal, spring to fall. There is also some local rail traffic, to switch the industrial area south of the yard. The primary business there is inbound corn syrup for Coke and Pepsi bottling plants. There are numerous warehouses and distribution centers now on the former Chrysler property, including FedEx and Amazon, but none have rail sidings.

The other Class 1 rail carrier in the area, CSX, runs approximately forty trains per day through the Akron area. The CSX Line runs from Pittsburgh to Chicago by way of Ravenna, Kent, Akron and Barberton. CSX operates the Hill Yard and adjacent Valley Yard, located between Evans Avenue and Arlington Street in Akron. These rail yards remain active.

Northeast Ohio also has a regional railroad of its own, the Wheeling and Lake Erie Railway (WLE). See map 2-1. The WLE connects the Cleveland/Akron/ Canton area with Pittsburgh, Toledo, and Lima Ohio. As such, the WLE removes a significant number of trucks from Northeast Ohio highways, allowing for less congested highways and less demand for expensive highway maintenance. In addition to easing the burden on our highways, the WLE provides rate competition for the two major railroads and allows the Canadian National Railway (CN) access to Northeast Ohio (which it would not otherwise have). WLE provides this access through CN's Lang yard in Toledo.

Consequently, the WLE provides Northeast Ohio with access for three of the seven Class I railroads. In addition, WLE conveys most of the rail freight with origins or destinations in the Akron area. WLE operates a rail yard near I-76 near Goodyear Heights in Akron (known as the Brittain Yard, or presently called the Akron Yard).

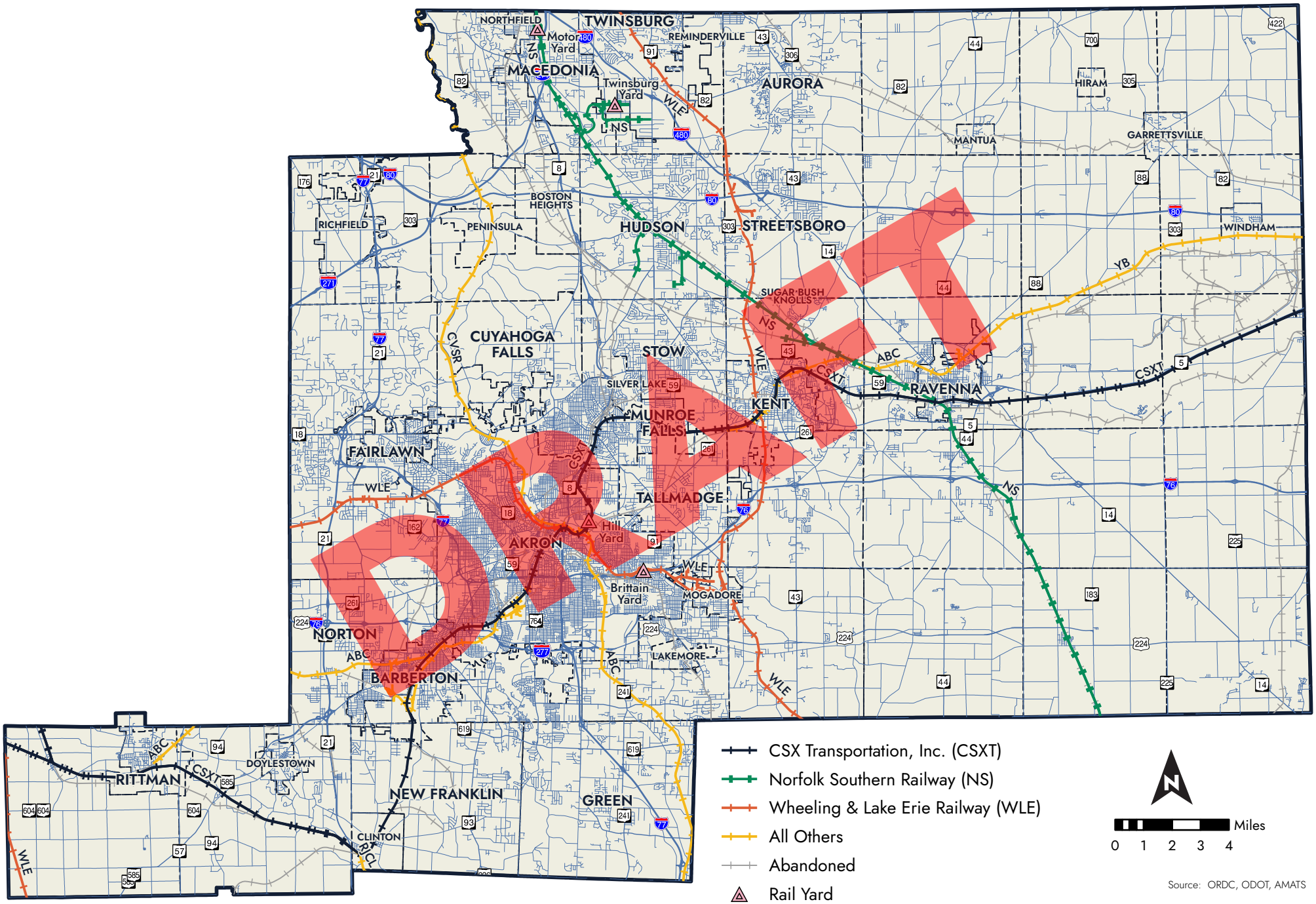
The Akron Barberton Cluster Railway (ABC) is a Class III railroad that operates on 73 miles of track in and around the AMATS area. It serves as a switching service for important industries in the area. Its parent company is the Wheeling & Lake Erie Railway.

Intermodal Freight

Intermodal shipping refers to moving freight by two or more modes of transportation. By loading cargo into intermodal containers, shipments can move seamlessly between trucks, trains and cargo ships. The method reduces cargo handling, and so improves security, reduces damage and loss, and allows freight to be transported faster.

An intermodal container is a standardized reusable steel box used for the safe, efficient and secure storage and movement of materials and products within a global containerized

Map 2-1 | Rail Line Ownership



intermodal freight transport system. The term intermodal indicates that the container can be moved from one mode of transport to another (from ship, to rail, to truck) without unloading and reloading the contents of the container. There are approximately seventeen million intermodal containers in the world of varying types to suit different cargoes. Aggregate container capacity may be expressed as twenty-foot equivalent units.

The Twenty-foot Equivalent Unit (TEU) is an inexact unit of cargo capacity often used to describe the capacity of container ships and container terminals. It is based on the volume of a 20 foot-long intermodal container, a standard-sized metal box which can be easily transferred between different modes of transportation, such as ships, trains and trucks.

One TEU represents the cargo capacity of a standard intermodal container, 20 feet long and 8 feet wide. There is a lack of standardization in regards to height, ranging between 4 feet 3 inches and 9 feet 6 inches, with the most common height being 8 feet 6 inches. Also, it is common to designate a 45 foot container as 2 TEU, rather than 2.25 TEU.

In the US, starting in the 1960s the use of containers increased steadily. Rail intermodal traffic tripled between 1980 and 2002, according to the Association of American Railroads (AAR), from 3.1 million trailers and containers to 9.3 million. Large investments were made in intermodal freight projects. Intermodal facilities were built at the Port of Los Angeles/ Port of Long Beach, and the Port of New York/New Jersey.

Since 1984, a mechanism for intermodal shipping known as double-stack rail transport has become increasingly common. Rising to over 70% of United States intermodal shipments, it transports more than one million containers per year. A succession of large, new domestic container sizes was introduced to increase shipping productivity.

Using double stack technology, a freight train of a given length can carry roughly twice as many containers, sharply reducing costs per container. On most railroads, special well cars are used for double-stack to reduce the needed vertical clearance and to lower the center of gravity of a loaded car. In addition, the well car design significantly reduces damage in transit and provides greater cargo security by cradling the lower containers so their doors cannot be opened. A succession of larger container sizes has been introduced to further increase shipping productivity on domestic routes.

To serve its local and Ohio markets, Northeast Ohio has three intermodal terminals which serve as loading and unloading locations for these self-contained units of freight. Norfolk Southern (NS) has a terminal in Maple Heights, CSX has one located in Collinwood (on the east side of Cleveland), and the Wheeling and Lake Erie Railway has an intermodal terminal located in Navarre, called NEOMODAL (near Massillon). These terminals transfer domestic and international containers between rail and truck. Containers arrive at these terminals from coastal ports for local and Ohio delivery and are also shipped out to these ports for export. There are no intermodal terminals in the AMATS area.

The NEOMODAL facility, located in Navarre (in Stark County), is a modern intermodal transfer facility built as part of a public-private partnership and operated by the Wheeling and Lake Erie Railway. Completed in 1995, the NEOMODAL facility functions beneath its capacity.

The Ohio Rail Development Commission (ORDC) has desktop applications and documents with rail information. The website can be found here: https://rail.ohio.gov/home/ohio-rail-maps. ORDC is an independent commission within ODOT which represents the state in non-regulatory interactions with the railroad industry. ORDC improves public safety by funding grade crossing safety improvements while providing grants, loans, and other assistance to perform an economic development function by assisting businesses locating or expanding in Ohio with rail spurs and other rail infrastructure; by helping rehabilitate light density branch lines on small short-line and regional railroads; by assist in the acquisition and continued operation of branch lines; by addressing special rail problems such as mainline congestion; by assisting businesses with rail-related issues; and by promoting the rail-related tourism industry.

METRO RTA

METRO RTA is the public transit agency for Summit County, providing both fixed route and demand response bus services.

METRO RTA also owns three rail lines, totaling 51 miles in length. These rail lines were purchased in order to preserve them for future use. Possible uses include passenger service, freight service, or recreational trail usage. The following three rail lines are owned by METRO:

- The former Conrail Akron Secondary between Hudson and Akron (terminus near Eastwood Avenue)
- The former Conrail Freedom Secondary between Akron (near Mill Street) and Kent (near Mogadore Road)
- The former CSX Sandyville Line between Akron (at Howard Street) and Canton (near Marion Avenue SW, outside of Summit County).

The Akron Secondary Line between Hudson and Akron is non-operational. This line has not had service since the early 1990s. It begins as a one-track line in the City of Hudson with an at-grade crossing at Barlow Road, passing 1.5 miles south through Hudson into the City of Stow. The Akron Secondary Line then proceeds 2.75 miles through the City of Stow, entering the Village of Silver Lake at an at-grade crossing at Graham Road. The line then runs adjacent to SR 8 for one-half mile, entering the City of Cuyahoga Falls just west of Ivanhoe Road. The tracked portion of the line runs for 2.25 miles through Cuyahoga Falls before pairing with the CSX line, just north of Broad Boulevard. The final 0.6 miles of the Akron Secondary, between the Cuyahoga Falls Electric Services property and Broad Boulevard, then runs west of, and adjacent to, the main east-west CSX two-track rail line arriving from the east. The Akron Secondary right-of-way then continues south, untracked, for 3.5 miles, running from near Broad Boulevard in Cuyahoga Falls to its connection with the Sandyville Line in the City of Akron, just north of the Hill Rail Yard.

The Akron Secondary Line could be reactivated to provide a connection between the CSX Line in Cuyahoga Falls and NS in Hudson. The line could also provide service to potential clients adjacent to the right-of-way. The right-of-way would need to be restored and upgraded to Class I to meet these needs. Costs to restore this service would run into the millions of dollars.

Most of the Freedom Secondary Line is non-operational. Portions of the track have been removed. The right-of-way extends from a site near Mill Street in Akron to Mogadore Road in Kent. The north end of the Freedom Secondary right-of-way ties into the WLE and NS Lines. The south end of the right-of-way does not have any existing track connecting with existing freight carriers. Portage County owns seven miles of the Freedom Secondary operating between Kent and Ravenna.

The Freedom Secondary could be reactivated to provide a connection between the WLE and NS lines at the north end of the line in Kent with the WLE and CSX lines at the south end in Akron. The line could also provide service to existing or potential clients adjacent to the right-of-way. The right-of-way would need to be reconstructed in order to be put back into service.

Currently, the Freedom Secondary trail is an 8.5 mile long bike and hike trail connecting downtown Akron (Mill Street) to Middlebury Road in Kent. It is operated by the Summit Metro Parks. In Kent, the Freedom Secondary trail connects to the Portage Bike Trail and extends from Middlebury Road to Ravenna. The unused railroad corridor is owned by Metro Regional Transit Authority and leased to the Metro Parks.

The Sandyville Line begins in the City of Akron at Howard Street, at the eastern terminus of the Cuyahoga Valley Scenic Railroad (CVSR). The Sandyville line continues approximately 1.6 miles east, where the Akron Secondary right-of-way joins just south of Eastwood Avenue. From this junction, the Sandyville Line continues approximately 4.75 miles south through the City of Akron into Springfield Township. The line then runs for approximately 3.1 miles southeast through Springfield, where it enters the City of Green at an at-grade crossing at SR 619. From this crossing, the line then continues for approximately 6 miles before exiting Summit County just west of the Akron-Canton Airport. The Sandyville Line enters Stark County in Jackson Township at an at-grade crossing at Mount Pleasant Road, continuing southeast approximately 2.85 miles into Plain Township at an at-grade crossing at Whipple Avenue. The Sandyville Line then proceeds 1.85 miles southeast through Plain Township, entering the City of Canton approximately 300 feet north of the I-77 overpass of 38th Street. The Sandyville Line travels south through the City of Canton for 3.9 miles just east of I-77, ultimately terminating at the Canton Crossing Diamond where it connects to the former Conrail line operated by WLE and NS.

The Sandyville Line and a short section of the Freedom Secondary near Kent are in active use for local freight service. In addition, the Sandyville Line is also used by the CVSR for excursion service to Canton. Despite the costs and liability, METRO continues to invest in the maintenance of this rail line, serving an important role in economic development.

In 2022, the cities of Stow and Hudson approached METRO RTA to discuss a trail conversion project along the inactive Akron Secondary freight rail line, extending from Barlow Road down through the city of Stow. At that time METRO RTA reached out to the FTA for potential concurrence for this project, which is the same process that was followed to complete the Freedom Trail heading east from Akron to Kent. The FTA informed METRO that the previous FTA program "rails to trails" regulations have changed and that the program no longer existed and that if METRO was not using the rail line for its initial planned use of commuter service, that it must pay back the amount of the initial grant or divest themselves from ownership of the rail lines.

METRO RTA has taken the first steps in divesting from these three rail lines. In late 2023, METRO RTA following FTA stipulations hired an independent auditor to assess the value of each rail line. After the appraisals were completed, METRO then contracted an independent auditor to conduct a review appraisal, the appraisal and review appraisal are now under audit by FTA. METRO is currently waiting for FTA to rule on its findings before moving forward with the next step to divest ownership of the rail lines. METRO RTA has several options on how to divest themselves and will decide on that path after the independent audit is confirmed by the FTA. Following that process, METRO will meet with FTA officials once the audit is completed to discuss their ruling.

Recent Changes to the Rail System

Improvements in technology are dramatically improving the operations of the area's rail network. When combined with evolving industry requirements and a changing commodity mix, the rail network of the future will be quite different in terms of extent, service, and safety compared to the network of the past.

Positive Train Control (PTC) systems are advanced communication-based and processor-based train control technologies that can automatically stop trains to prevent accidents. PTC technology is particularly useful in preventing train-to-train collisions, over-speed derailments, incursions into established work zone limits, and train movements through a misaligned route. After multiple fatal rail incidents around the U.S., including two incidents that involved commuter trains in California, the U.S. Congress passed the Rail Safety Improvement Act (RSIA) in 2008 to address the underlying causes of these incidents. In addition to the highway-rail grade crossing safety, pedestrian safety, and trespasser prevention regulations, the RSIA required PTC systems to be fully implemented on Class I railroad main lines that transport hazardous materials and on any main lines with regularly scheduled intercity or commuter rail passenger service. PTC installation required for Amtrak and Class I railroads serving the area is now fully complete.

Precision Scheduled Railroading (PSR) is an operating model utilized by almost all Class I railroads to increase operational efficiency. PSR focuses on five principles: improve service, control costs, optimize asset utilization, operate safely, and develop employees. Operationally, a railroad using PSR operates trains on a fixed schedule rather than using the number of loaded cars to determine when a train should depart. PSR also focuses on minimizing the number of times a railroad handles a railcar, decreasing network complexity, and eliminating unprofitable origin and destination pairs. Impacts of PSR may include closing rail yards and the elimination of unprofitable rail lines, leading to changes in the rail freight origins/destinations and shipper options. PSR may negatively impact the safety of at-grade rail crossings by using longer trains that block vehicle and pedestrian access at grade crossings.

Concerns

It appears that both major Class I railroads are operating intermodal terminals in Pittsburgh, Columbus, and Toledo. Their investments do not include direct investments in Northeast Ohio, despite the fact that Northeast Ohio is the historical manufacturing center of the state. Thus, the railroads may not foresee a return to traditional manufacturing in the area. In addition, there is the concern that any new intermodal terminals will compete for business with the existing Northeast Ohio intermodal terminals.

The Federal Railroad Administration (FRA) tracks railroad employment trends over time to identify trends in railroad hiring practices, monitors recovery of normal business operations after disruptions, and anticipates issues resulting from workforce hiring and retention challenges. Nationally, railroad employment was decreasing before 2020, and that decrease accelerated once the pandemic began to impact railroad operations in March 2020. Beginning in January 2022, employment levels began to rise back towards pre-pandemic levels, but have still not returned to previous figures.

According to the US Bureau of Labor Statistics (BLS), overall employment of railroad workers is projected to show little or no change from 2022 to 2032. Despite limited employment growth, about 6,500 openings for railroad workers are projected each year, on average, over the decade. Most of those openings are expected to result from the need to replace

workers who transfer to different occupations or exit the labor force, such as retirement.

The expected increase in intermodal freight activity may support demand for railroad workers. However, railroads' efforts to operate more efficiently, such as by deploying automated systems, are likely to limit employment. Furthermore, a decline in the use of coal, which historically has been the largest commodity moved by rail, may decrease the demand for its transportation by rail.

Congestion

ODOT's 2019 State of Ohio Rail Plan noted that, nationally, rail congestion fluctuates mildly year-to-year, but that there has been no consistent trend upward or downward. Although neither the 2019 Rail Plan nor the State's Transport Ohio freight plan cataloged specific locations of rail freight congestion or bottlenecks within Ohio, local and state officials know how frustrating rail congestion can be. Congestion on rail lines not only inhibits the movement of freight; it also poses a safety and traffic congestion problem when stopped or slowed trains block at-grade crossings in the area. Safety vehicles (police, fire, ambulance) are required to drive around blocked at-grade crossings to reach their destination. Moreover, longer train lengths—regardless of speed—can exacerbate roadway congestion issues occurring because of at-grade crossings.

Rail congestion can also be caused when higher-traffic double-track rail lines consolidate to single-track runs. A well-known example of this in the AMATS area is the CSX Lambert (Southwest Akron) to Warwick section near Clinton. It is one of few remaining single-track segments on the CSX main line between Baltimore/Washington and Chicago. A mixture of bulk commodities, merchandise, and intermodal traffic moves between the West Coast and Midwest to and from Mid-Atlantic markets. A proposal to reactivate 9.25 miles of abandoned, parallel, ex-Conrail right-of-way would eliminate this choke point. This project would increase capacity and improve rail service, helping to divert long-haul trucks from the highway network. This project would free highway capacity, lower maintenance costs, improve safety, and mitigate mobile air pollutants, and reduce delays on this section of track, thereby increasing the overall average train speed. However, financial and environmental concerns have stalled this project. As CSX is a private company and the owner of this private right-of-way, improvements can only be made in cooperation with CSX.

Contrary to focusing on the congestion on railways, rail can help to alleviate highway-related congestion. Rail diverts freight and, in some cases, people from trucks and automobiles on roadways. During peak travel times and especially on high tuck freight corridors, transporting goods and people by rail has the potential to significantly reduce congestion.

Highway-Rail Grade Crossings

A highway-rail grade crossing is where a railway and roadway intersect. There are approximately 393 grade crossings in the AMATS area (many are on abandoned or out of service rail lines). At-grade crossings are protected either by train-activated, active warning devices (such as gates and flashing lights) or by passive warning devices (such as crossbucks, stop signs, and yield signs). Trains often require a mile or more to stop and are unable to deviate from their path. Consequently, safety at grade crossings is primarily a motorist's responsibility. The warning devices are there to protect motorists, not trains.

As a result, states, not railroads, are responsible for evaluating grade crossing risks and prioritizing grade crossings for improvement. The decision to install a specific type of warning device at a particular public grade crossing is made by ODOT, not by the railroad, with final approval by the Federal Highway Administration.

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 costly, and this is not always feasible due to cost or geographic configuration.

The Association of American Railroads recommends that at-grade crossing accidents can best be reduced through a mix of engineering, education and enforcement, including:

- Closing unnecessary crossings and adopting a uniform national at-grade crossing closure process, combined with a freeze on the overall number of grade crossings within each state. Ultimately, the goal is to eliminate all at-grade crossings on the National Highway System.
- Generously funding Operation Lifesaver, a nationwide non-profit organization that educates the public about the need for proper behavior at grade crossings and on railroad property; as well as a research and development program to design effective low-cost active warning systems for at-grade crossings.
- Examining the effectiveness of other types of warning devices such as four quadrant gates.
- Requiring that grade crossing safety be part of commercial driver's license educational curricula and administer tough penalties for grade crossing traffic violations.
- Requiring a minimum set-back or a physical safety barrier between active railroad tracks and adjacent parallel trails and paths.

Ohio has four major grade crossing safety programs that use a combination of both federal and state funds as part of its Highway Safety Improvement Program (HSIP). The use of four programs allows for flexibility to maximize needed improvements at the state's at-grade crossings. The four programs are:

- The formula-based upgrade program which is based on a calculation of the most hazardous crossings.
- The corridor-based upgrade program provides a framework for systematically considering, identifying, and prioritizing projects that have public safety benefits at multiple grade crossings along a railroad corridor. Ohio identifies these corridors in collaboration with the railroads. The Heartland Corridor is an example of a corridor-based project that runs through the state.
- The constituent-identified upgrade program considers project referrals from a number of sources and makes selections based on hazard rankings, extenuating conditions, and funding availability.
- The preemption program upgrades warning devices and traffic signals to establish appropriate traffic signal preemption when a train approaches a crossing that has a highway traffic signal in close proximity.

Ohio has the fourth largest number of highway rail grade crossings in the country behind Texas, Illinois, and California. As of 2018, 5,737 at-grade vehicular public crossings were located in Ohio, of which 58% have flashing lights and roadway gates, 32% have passive systems such as crossbucks, and 10% have flashing lights.

ORDC administers an average of $15 million in infrastructure improvements at highway rail grade crossings annually. The AMATS area has a number of at-grade crossings with significant train and vehicle volumes.

Between the years of 2020 and 2022, the AMATS area suffered eight train-motor vehicle crashes. One of these crashes resulted in a fatality, two resulted in injury (both were non-serious injuries), and the remaining five only resulted in property damage.

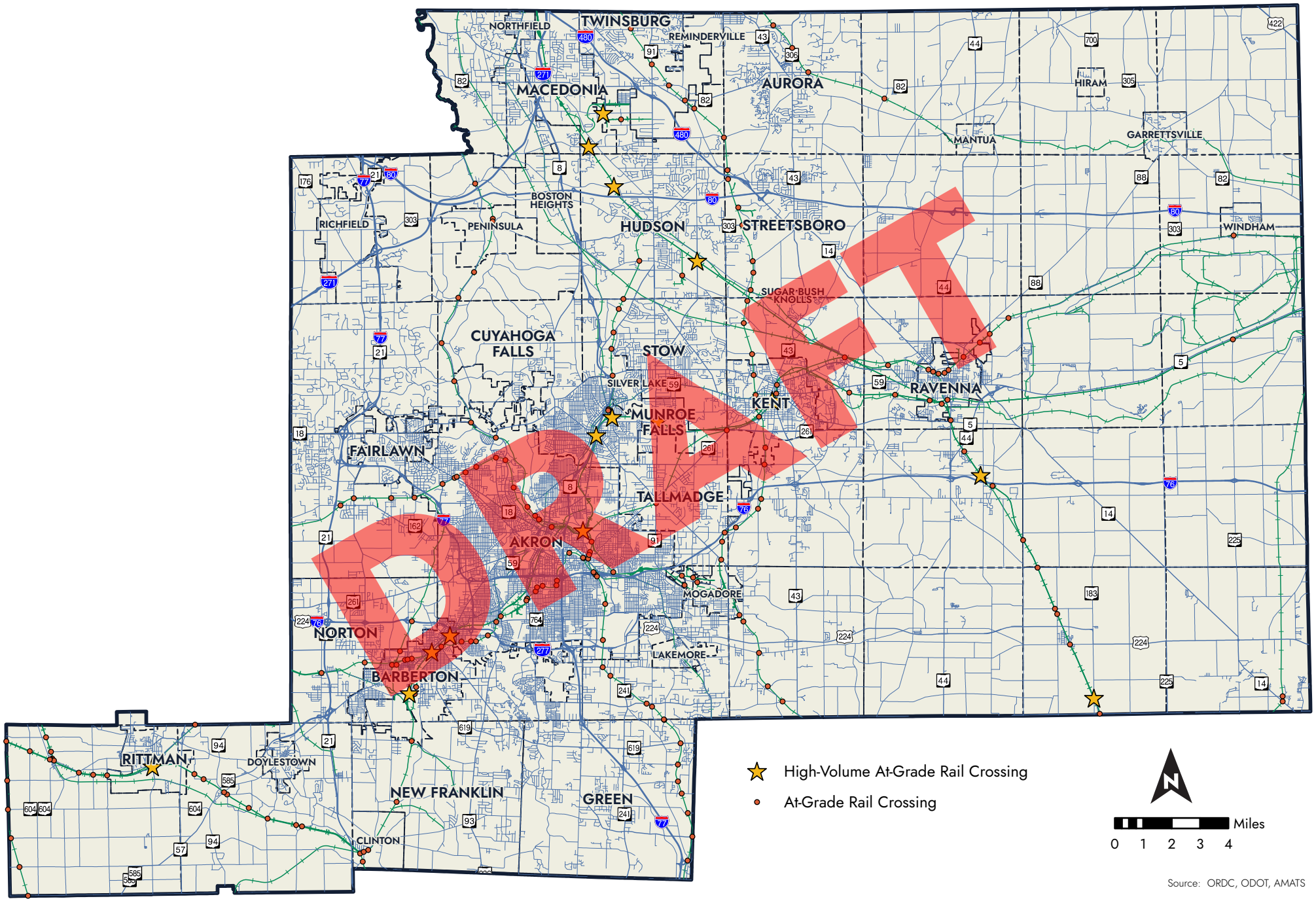
Map 2-2 on page 16 shows all at-grade crossings in the AMATS area with high volume crossings highlighted. At-grade crossings are prioritized by scoring the number of trains per day and the daily traffic volume (ADT). Scores greater than 100 are shown in Table 2-1. A description of the top-ranking at-grade crossings follows Table 2-1.

Table 2-1 | 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

- #1: Stow Road in Hudson, crossing the busy Norfolk-Southern rail line, is the highest-rated candidate for a grade separation. This location recently (2023) underwent safety improvements. Stow Road provides a good alternative to bypass the busy intersection of SR 91 and SR 303 in the center of Hudson.
- # 2: North Main Street (SR 91) in Munroe Falls places second in priority because of its high daily traffic volume. But the CSX rail line at this location does not have the same level of frequency (trains per day) as the Norfolk-Southern line discussed above.
- #3 (tie): Twinsburg Road in Macedonia crosses the busy Norfolk-Southern rail line. This crossing has a lower vehicle count, but with many trains per day (74), this crossing is a good candidate for a grade separation when funding becomes available.
- #3 (tie): #The Broad Boulevard crossing with CSX in Cuyahoga Falls The high number of trains per day and the average daily traffic (ADT) make this a good candidate for a grade separation. However, the geometrics of the area prohibit an easy grade separation at this location due to the close proximity of SR 8.
- #5: In between the Broad Boulevard and North Main Street (SR 91) crossings on the CSX line is the Bailey Road crossing in Cuyahoga Falls. This location contains a nearly identical ADT to Broad Boulevard but scores lower because the data on trains per day is listed as slightly lower. In reality, the trains per day should be identical between the two crossings.
- #6: The City of Hudson has received funding to pursue the removal of an at-grade rail crossing at Hines Hill Road, the sixth-highest priority on this list. In January 2024, the Ohio Rail Development Commission (ORDC) approved funding from the Ohio Grade Crossing Elimination Program. The ORDC will contribute 20 percent funding ($2,886,174) to match the community's additional 20 percent funding commitment to ensure the application to the Federal Railroad Administration's Railroad Crossing Elimination (RCE) Program, is competitive. The city of Hudson confirmed in July 2024 that the ORDC will be submitting, on behalf of the City of Hudson, to this grant opportunity for approximately $8,580,000 in additional federal funding for the project. The grant application is due in September 2024.

Map 2-2 | High Volume At-Grade Crossings



Source: ORDC, ODOT, AMATS

If the federal application is successful, this $14 million project will construct a grade separation at Hines Hill Road and permanently close the crossing. The Hines Hill Road corridor, an important connection for the north side of the City, is frequently blocked by train traffic. These blockages have caused traffic interruptions as well as safety concerns due to the increased potential for emergency services delays.

Eliminating at-grade rail crossings is an expensive endeavor, and examples of these projects occur infrequently within the AMATS area. However, the Greater Akron area does have a recent example to showcase: the Evans Avenue Railroad Grade Separation project in Akron, which was completed in 2021. The project consisted of the construction of separated rail grade crossings including an approximately 230' long bridge over the CSX railroad tracks and a tunnel over the Metro RTA railroad tracks This project also included significant roadway realignment, construction of concrete curbs and gutters, asphalt pavement, storm sewer, sanitary sewer, water main and a cul-de-sac. This new project is approximately 2,200 feet in length with a total project cost of $9.3 million.

Quiet Zones

The Federal Railroad Administration (FRA) train horn rule provides localities nationwide with the opportunity to establish quiet zones. The federal rule pre-empts all applicable state laws. To qualify, communities wishing to establish quiet zones must equip proposed grade crossings with adequate safety measures (supplemental safety measures - SSM) to overcome the decrease in safety created by silencing the train horns. The additional safety measures must be constructed at the community's own expense and must meet federal specifications.

While the FRA is the only entity that has the ability to approve quiet zones, local communities may take steps to establish a quiet zone:

The public authority of the community is the only entity that can petition for a quiet zone (mayor, city manager, etc). A quiet zone must be at least 0.5 miles long and each crossing must be equipped with:

- Lights and Gates
- Power Out indicator on bungalow
- Constant Warning Time

The AMATS area has four communities with existing quiet zones, covering nine crossings:

- Cuyahoga Falls (CSX)—Broad Boulevard; established 2016
- Twinsburg (Wheeling and Lake Erie)—Herrick Road, E. Aurora Road (SR 82), Cannon Road, Darrow Road (SR 91), Glenwood Drive; established 2015
- Macedonia (NS)—E. Twinsburg Road; established 2010
- Hudson (NS)—Stow Road and Hines Hill Road; established 2023

Rail Network Outlook

The rail network has a number of strengths and weaknesses affecting the cost and efficiency of moving freight. A broad Strengths, Weaknesses, Opportunities and Threats (SWOT) evaluation was conducted to find the elements that should be considered when planning freight movement. The results of the SWOT assessment help AMATS strategize and plan for the future freight system.

Strengths

- Most fuel-efficient land transportation mode
- Developed to transport heavy and repetitive loads
- Efficiently moves bulk commodities and large volumes over long distances
- Intercontinental system with connections to multiple shippers
- Intermodal Connectivity
- Most of the rail system is privately funded, on private right-of-way
- The AMATS area has multiple rail providers
- Rail use reduces highway congestion by providing an alternative to trucking
- Recent technological advances in scheduling, automation and safety

Weaknesses

- Rail is less flexible in delivering goods to final destination
- Some industry does not have access to rail
- Limited funds to fix existing choke points / bottlenecks
- Limited funds for capital improvements necessary for forecasted increases in freight movement
- Private infrastructure may not be eligible for public funds
- Cooperation is problematic between competing rail companies
- Rising fuel costs
- The cost of compliance of environmental regulations

Opportunities

- The AMATS area should support the adoption of connected and automated rail technologies
- The area should continue to apply for grade separation funding and other safety-related projects
- AMATS should support additional safe truck parking locations
- AMATS should continue to work with our partners and stakeholders on integrating freight planning into the continuing, comprehensive, and cooperative planning (3-C) process

Threats

- Severe weather events (floods, blizzards, tornados) hamper freight movement
- Cyber security dangers affect the cost and safety of goods
- Uncertainties in the global supply chain create volatility
- Increased international trade could lead to greater demands on rail assets for freight movement

FREIGHT PROFILES

In 2017, AMATS partnered with Fund for Our Economic Future (The Fund) to develop 14 Job Hubs in the AMATS area. More recently, and to adjust to changing economic conditions, two additional Job Hubs were added within the region, bringing the total to 16.

What Are Job Hubs?

According to The Fund, "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:

High concentration of traded-sector jobs: We identified job hubs based on the number of traded-sector jobs in a particular area, with a focus on places with job density in the top 5 percent in the region. The research focused specifically on identifying clusters of employment in sectors of the economy like manufacturing or business consulting that can export (or trade) goods and services outside of Northeast Ohio. To learn more about the importance of the traded sector and why we focused on it in this study, download our full report here.

Multiple traded-sector employers: Job hubs represent "clusters" of business activity and other assets like roads, highways, transit, and utilities. Business clustering allows for efficient use of infrastructure and creates other spill-over benefits from the accumulation of human and physical capital.

Alignment with local development patterns: Job hubs reflect local development patterns and the location of businesses, infrastructure, transportation assets, and land inventory in each place. This alignment with the built environment will hopefully facilitate local community planning discussions around potential land use policies, transportation investments or other strategies to enhance each job hub's market competitiveness.

Alignment with civic priorities and economic development opportunities: Beyond encompassing many existing businesses and jobs, job hubs also contain high-quality sites with existing infrastructure or office inventory that, if occupied, could further add density to the job hub. As we continue to develop the research, we hope to work with local partners across Northeast Ohio to promote the vibrancy and growth of regional job hubs that can compete in the global 21st-century economy."

Methodology

The data displayed in the last two maps for each corridor was derived from a Streetlight Data analysis project. Using the boundaries for each corridor as both an origin and a destination, data regarding truck trips was collected. That data was then imported into GIS to map the total percentage of truck trips in and out of the corridor by means of each roadway.

AMATS Job Hubs

Having identified these 16 specific focal points within the region, AMATS has been able to pinpoint general areas which serve as primary origins and destinations for freight trips based upon expected demand of businesses in retail, warehousing, manufacturing and medical services, among various others. These areas will be referred to throughout this chapter as Freight Corridors. The identified corridors are as follows: Firestone Park, Downtown Akron, Chapel Hill, Cuyahoga Falls, Barberton, Green, Akron-Canton Airport, Brimfield, Gilchrist Road, Twinsburg, Aurora / Streetsboro, East Akron / Airport, Richfield, Hudson / Stow, South Kent, and Rolling Acres.

The following pages within this chapter focus on providing freight-related information about each of the 16 Freight Corridors. The first page of each of the following profiles provides a general description of the corridor followed by some additional relevant information such as location, accessible Interstate / Freeway routes, number of jobs and pavement conditions in and around the corridor. The second page consists of tables identifying safety and traffic issues in and around the corridor The third and fourth pages show inbound and outbound truck traffic for the corridor.

Firestone Park Freight Corridor

Characteristics:

The Firestone Park Job Hub is located just south of downtown Akron and is easily accessed by I-76 to the north, I-277 to the south, I-77 to the east and SR 93 to the west. The job hub encompasses the original Firestone Headquarters and campus and Bridgestone Americas still has a presence in the corridor and employs approximately 700 jobs in the technical center. There are an estimated 2,500 jobs located within the job hub, in the industries of manufacturing, transportation and warehousing, and professional, scientific, and technical services. There are a number of locations within the corridor that have the potential to negatively impact freight traffic. These locations include high crash intersections and segments as well as congestion along S. Main Street. This job hub benefits from its proximity to downtown Akron and several interstates.

Key Freeway / Highway Access:

I-77
SR 764

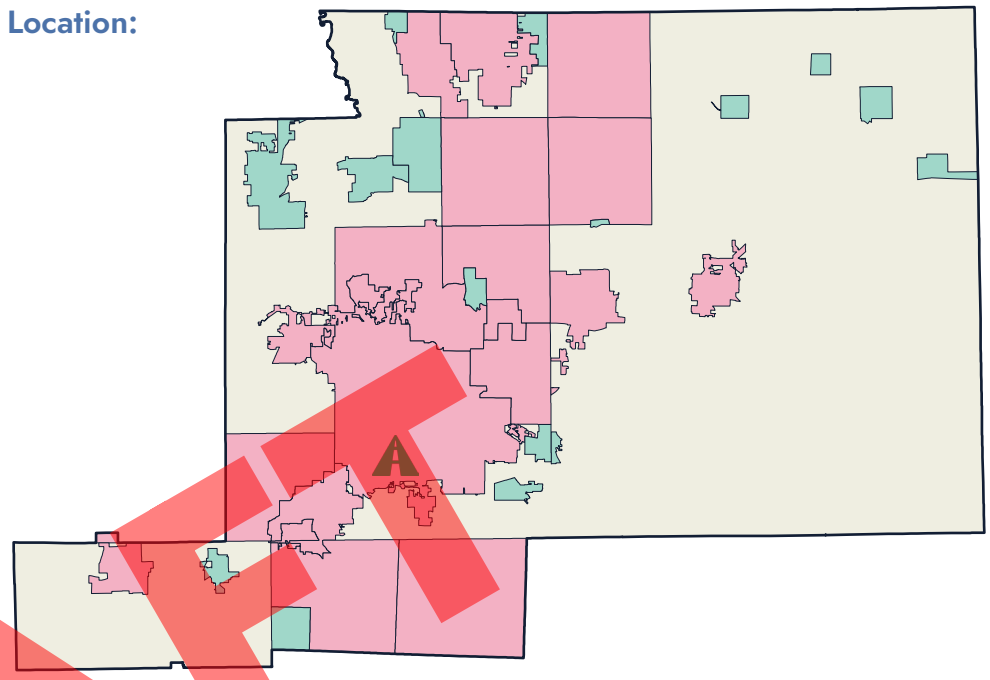
Top 3 Job Types:

1. Transportation and Warehousing
2. Manufacturing
3. Professional, Scientific, and Technical Services

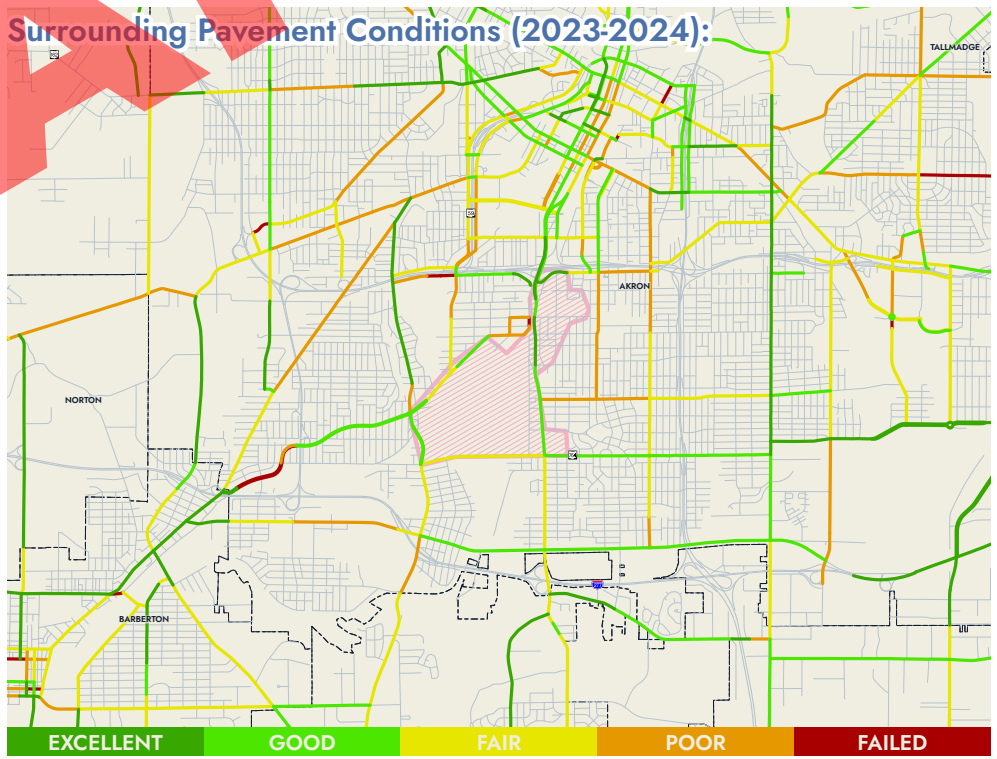
2022 Estimated Jobs:

3,000

Location:



Surrounding Pavement Conditions (2023-2024):



Firestone Park Freight Corridor

Top High Crash Segments

The following table identifies the segments in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Roadway Section (segment with limits), Length (MI), Average Daily Traffic, Total Crashes (2020-2022), and Crashes per MI per YR.

LOCATION	LOCAL RANK	OVERALL RANK	ROADWAY SECTION	LENGTH (MI)	AVERAGE DAILY TRAFFIC	TOTAL CRASHES	CRASHES PER MILE PER YEAR
Akron	19	45	S Main St from Waterloo Rd to Wilbeth Rd (SR 764)	0.77	18,700	20	8.658
Akron	45	108	South St from S Main St to Wolf Ledges Pkwy / Bellows St	0.46	5,640	10	7.246
Akron	41	101	E Archwood Ave from S Main St to Brown St	0.9	3,880	15	5.556

Top High Crash Intersections

The following table identifies the intersections in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Intersection, Approach Average Daily Traffic (Average Daily Traffic entering Intersection), and Total Crashes (2020-2022).

LOCATION	LOCAL RANK	OVERALL RANK	INTERSECTION	APPROACH AVERAGE DAILY TRAFFIC	TOTAL CRASHES
Akron	18	53	Kenmore Blvd and Old Manchester Rd	Insufficient Data	13
Akron	24	66	S Main St and E Miller Ave	Insufficient Data	28
Akron	43	107	S Main St and Wilbeth Rd (SR 764)	25,544	41

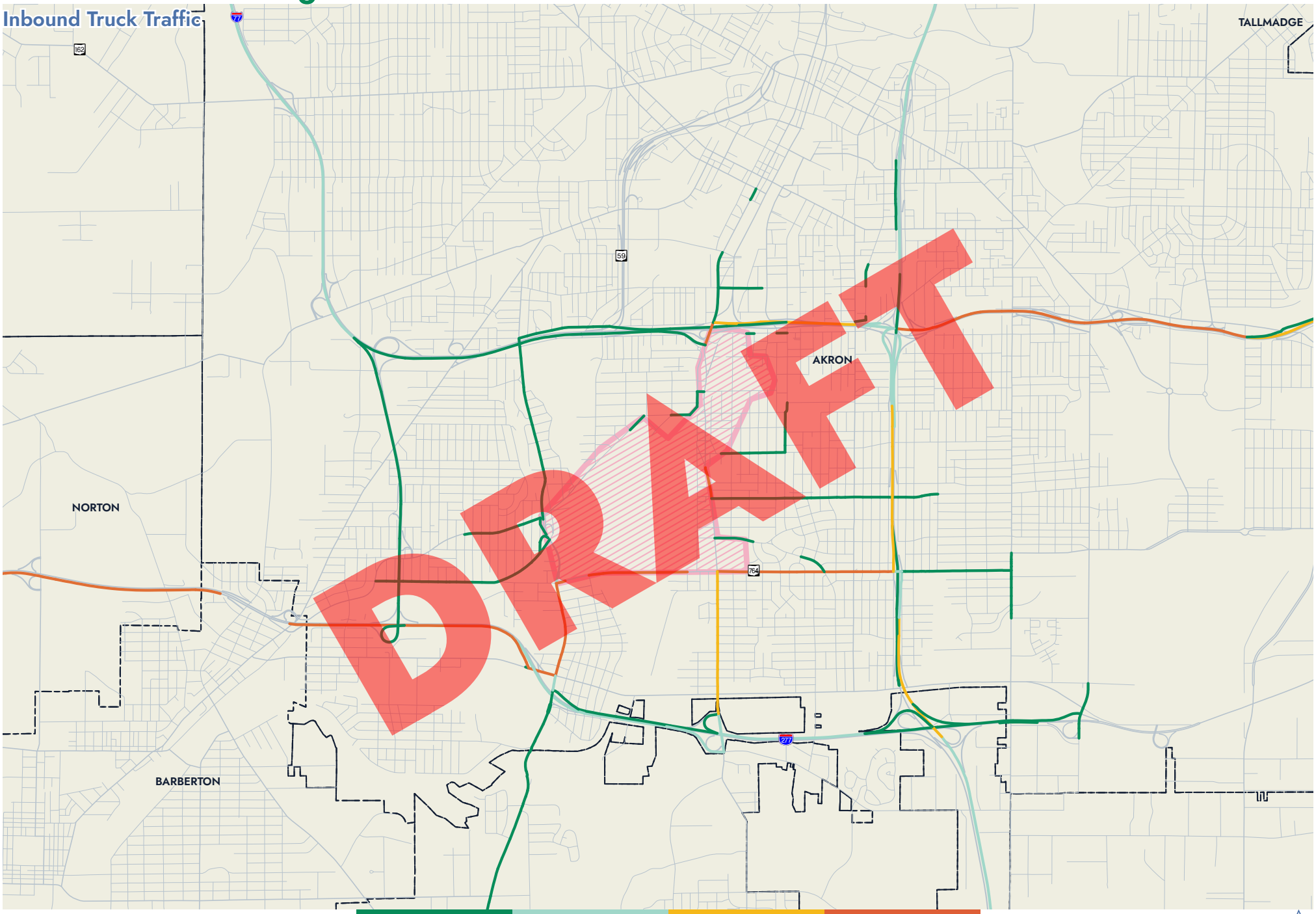
Top Congested Segments

The following table identifies the top segments in or within 300' of the job hub that have been identified in AMATS' *Draft 2024 Congestion Management Process* report. The fields contained within the table are: Location, Name, Miles, Peak Period (part of the day in which peak occurs), Type (description of section), Direction (direction of traffic flow), and % Free Flow (ratio of the speed traffic is traveling in relation to the free flow speed, or the speed at which unimpeded traffic can travel).

LOCATION	NAME	MILES	PEAK PERIOD	TYPE	DIRECTION	% FREE FLOW
Akron	S Main St from Miller Ave to I-76 EB / I-77 SB Off-ramp / E South St	0.297	Mid-Day	Arterial	NB	70.99
Akron	S Main St from Wilbeth Rd to Firestone Blvd	0.212	Peak PM	Arterial	NB / SB	71.17
Akron	S Main St from W Mapledale Ave to E Archwood Ave	0.072	Peak PM	Arterial	NB / SB	74.18

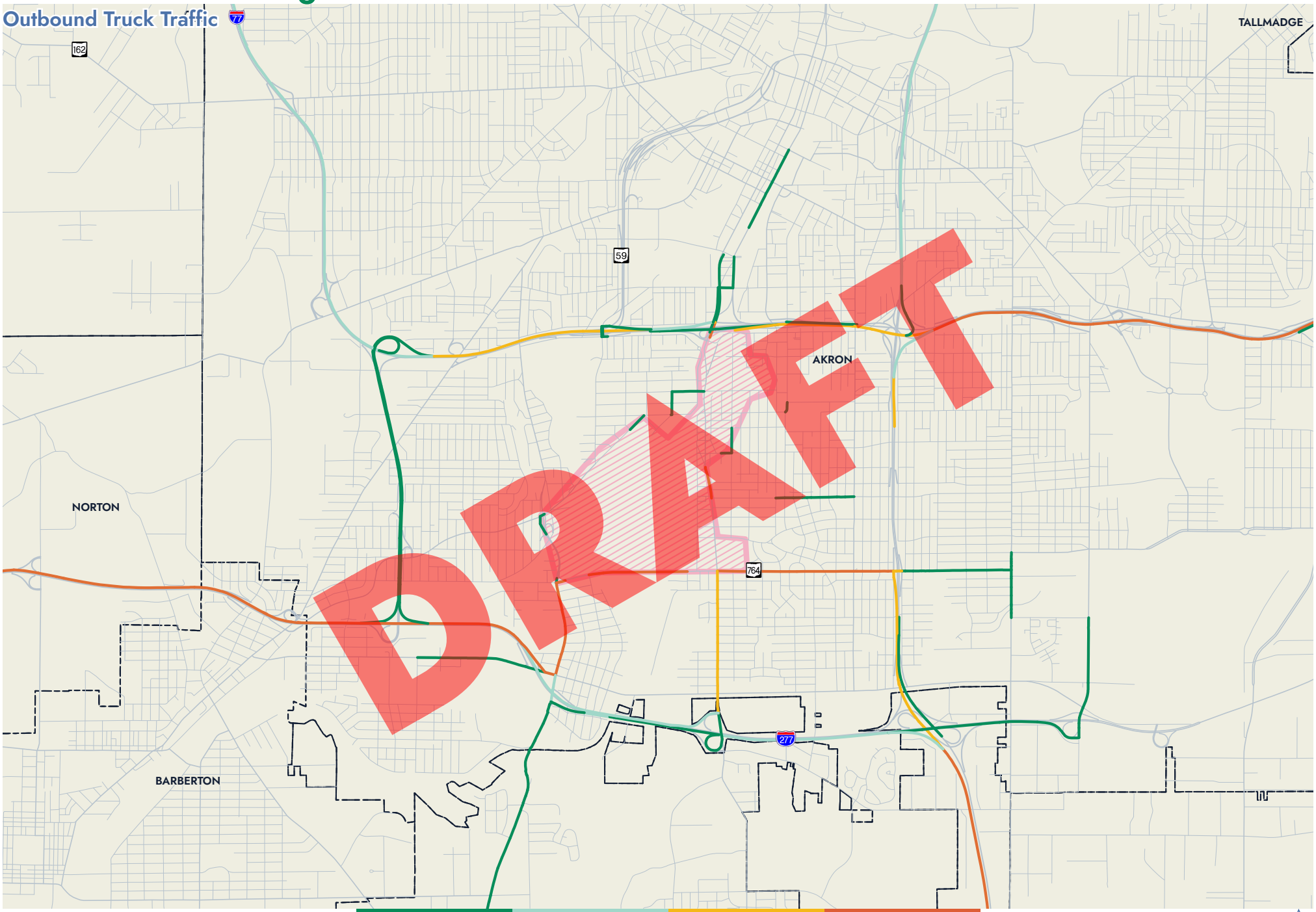
Firestone Park Freight Corridor

Inbound Truck Traffic



Firestone Park Freight Corridor

Outbound Truck Traffic



Percentage of Outbound Truck Trips: .1% - 5% | 5.1% - 10% | 10.1% - 15% | 15.1% - 82.6%

0 0.25 0.5 0.75 1 Miles

Downtown Akron Freight Corridor

Characteristics:

An estimated 34,500 jobs are located within the Downtown Akron Job Hub, the majority of which are in the healthcare and social assistance, public administration, and educational services industries. This job hub is located in central Summit County and has easy access to I-76 and SR 8. Home to the University of Akron, downtown Akron is also a destination for art, music, retail, and restaurants, drawing travelers from surrounding areas for public events, baseball games, and fairs. Several intersections and segments within the job hub are contained in the AMATS crash listings. These locations, coupled with congestion on SR 8 and S. Main Street near I-76, contribute to potential freight delays in the area.

Key Freeway / Highway Access:

I-76
SR 8

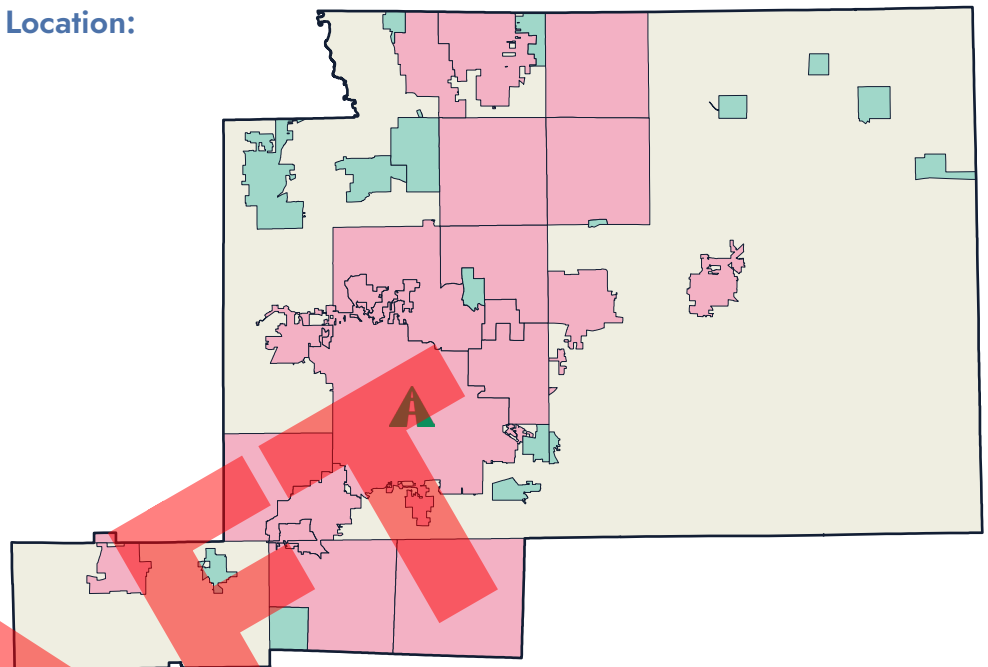
Top 3 Job Types:

1. Health Care and Social Assistance
2. Public Administration
3. Educational Services

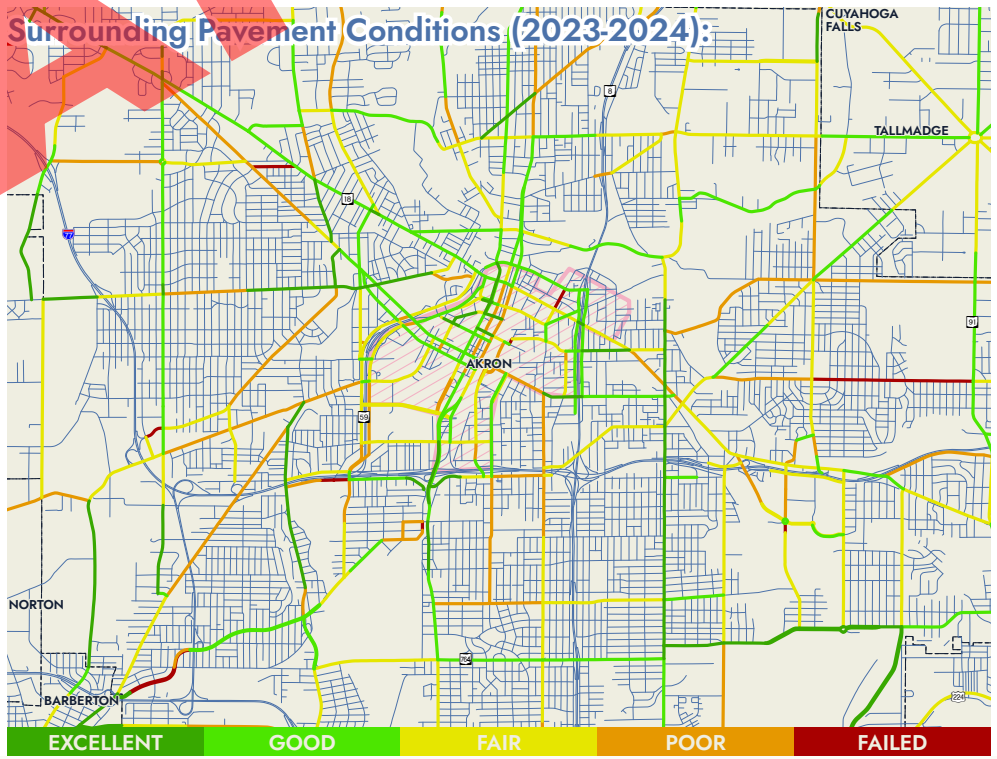
2022 Estimated Jobs:

34,500

Location:



Surrounding Pavement Conditions (2023-2024):



Downtown Akron Freight Corridor

Top High Crash Segments

The following table identifies the segments in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Roadway Section (segment with limits), Length (MI), Average Daily Traffic, Total Crashes (2020-2022), and Crashes per MI per YR.

LOCATION	LOCAL RANK	OVERALL RANK	ROADWAY SECTION	LENGTH (MI)	AVERAGE DAILY TRAFFIC	TOTAL CRASHES	CRASHES PER MILE PER YEAR
Akron	1	3	M.L. King Blvd (SR 59) from W Market St Overpass to N Broadway St	0.18	17,817	21	38.889
Akron	7	16	N Forge St from Fountain St to N Arlington St	0.70	6,500	13	6.190
Akron	14	34	Akron General Ave from W Cedar St to W Exchange St	0.09	2,800	1	3.704

Top High Crash Intersections

The following table identifies the intersections in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Intersection, Approach Average Daily Traffic (Average Daily Traffic entering Intersection), and Total Crashes (2020-2022).

LOCATION	LOCAL RANK	OVERALL RANK	INTERSECTION	APPROACH AVERAGE DAILY TRAFFIC	TOTAL CRASHES
Akron	2	5	S Broadway St and Rosa Parks Dr	Insufficient Data	24
Akron	3	6	S High St and Bartges St	12,855	25
Akron	4	11	Bartges St and Dart Ave	Insufficient Data	15

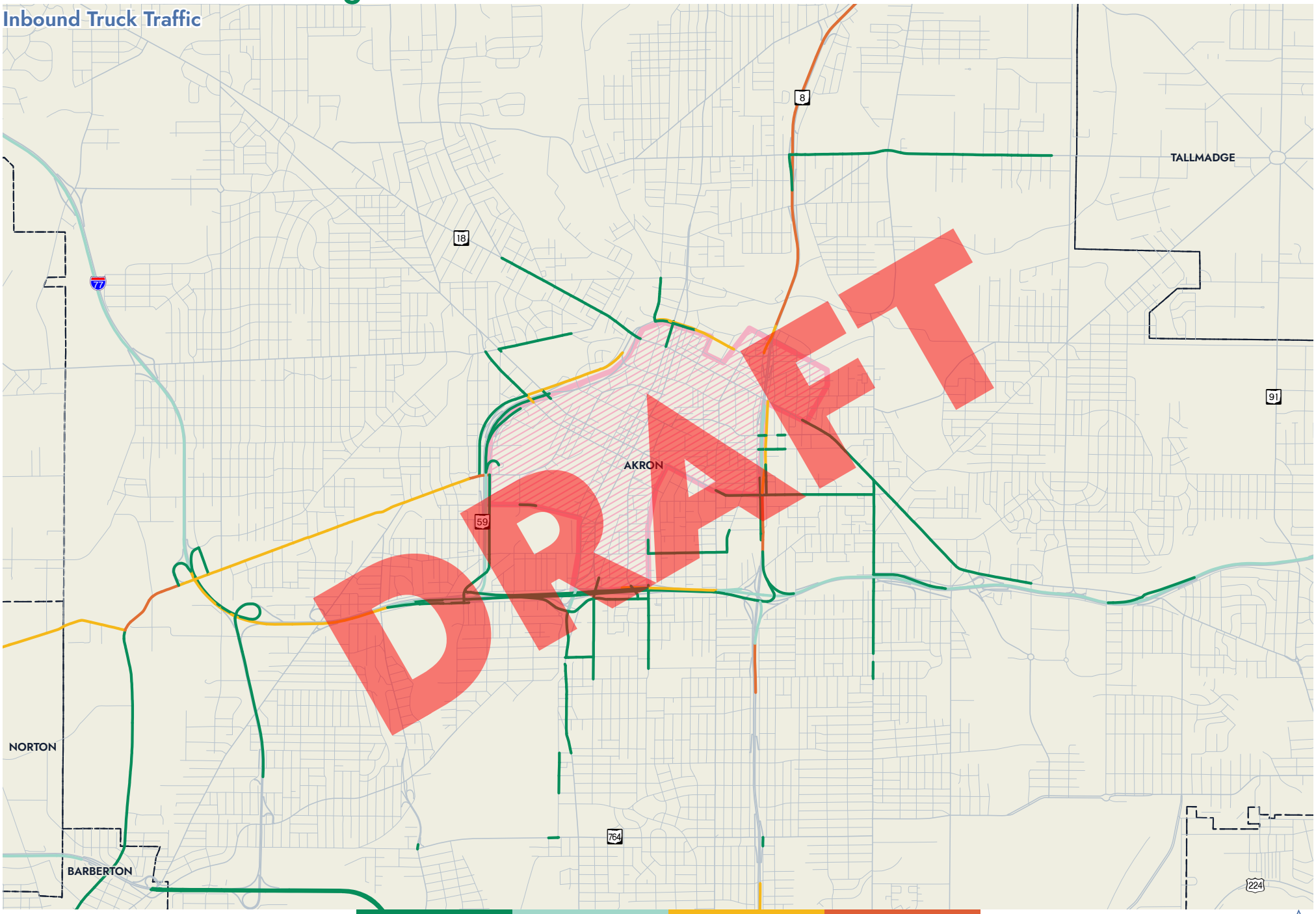
Top Congested Segments

The following table identifies the top segments in or within 300' of the job hub that have been identified in AMATS' *Draft 2024 Congestion Management Process* report. The fields contained within the table are: Location, Name, Miles, Peak Period (part of the day in which peak occurs), Type (description of section), Direction (direction of traffic flow), and % Free Flow (ratio of the speed traffic is traveling in relation to the free flow speed, or the speed at which unimpeded traffic can travel).

LOCATION	NAME	MILES	PEAK PERIOD	TYPE	DIRECTION	% FREE FLOW
Akron	Arc Dr from Wolf Ledges Pkwy to E Exchange St	0.349	Peak AM / Mid-Day	Arterial	EB	50.18
Akron	W Bowery St from W Exchange St to W State St	0.177	Peak AM	Arterial	NB	51.19
Akron	S Main St from North of St. Mary's School to W Thornton St	0.079	Mid-Day	Arterial	SB	53.36

Downtown Akron Freight Corridor

Inbound Truck Traffic

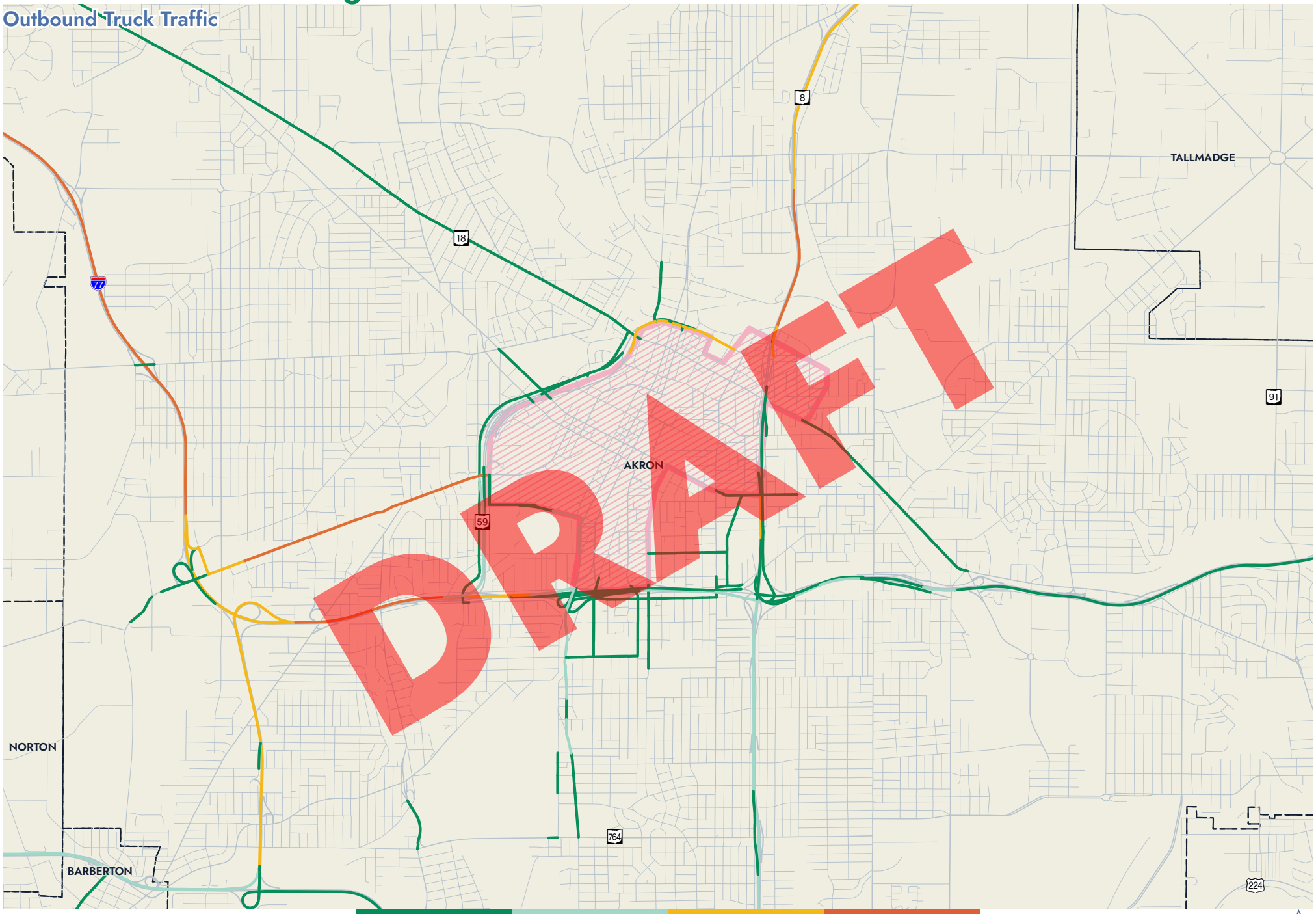


Percentage of Inbound Truck Trips: .1% - 5% | 5.1% - 10% | 10.1% - 15% | 15.1% - 82.6%

0 0.25 0.5 0.75 1 Miles

Downtown Akron Freight Corridor

Outbound Truck Traffic



Barberton Freight Corridor

Characteristics:

The city of Barberton was established as a planned industrial community in the late 1800's and the city's core was centered on a natural glacial lake called Lake Anna. Businesses such as the Diamond Match Company and Babcock & Wilcox helped establish Barberton as an industrial center and major employment hub. Although the region's industrial landscape has changed, Barberton remains an attractive location for businesses. The city boasts a vibrant downtown and is in close proximity to the Ohio and Erie Canal Towpath Trail via the Magic Mile. Barberton is home to 1,500 jobs in manufacturing, retail trade, and wholesale trade. Barberton is located in southwest Summit County, with I-76 highway access nearby. Robinson Avenue and Wooster Road North can have some moderate congestion issues, creating the potential for freight delay.

Key Freeway / Highway Access:

I-76
SR 619

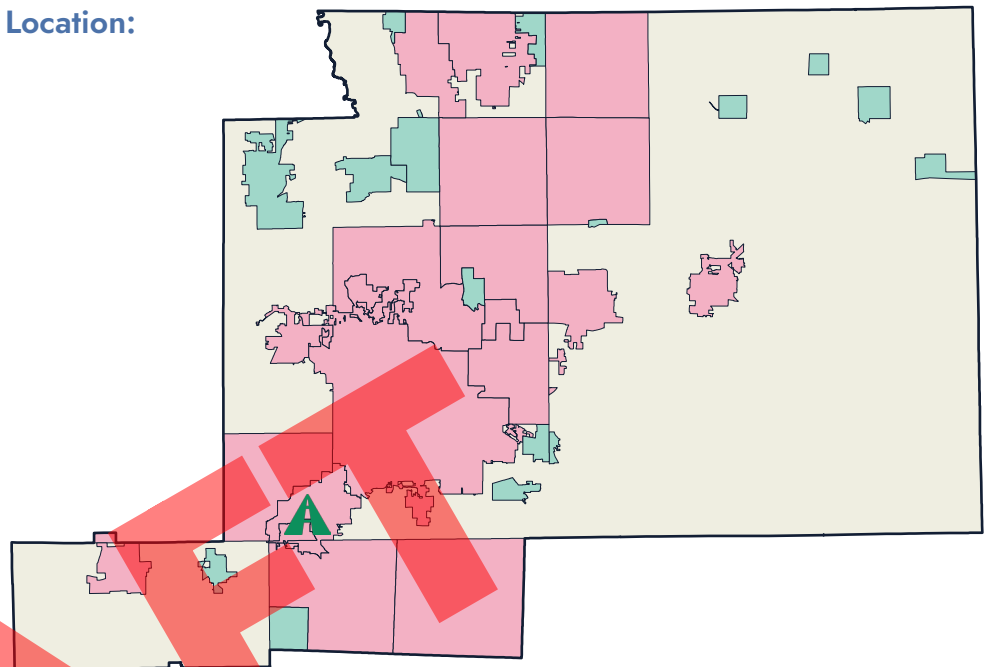
Top 3 Job Types:

1. Manufacturing
2. Professional, Scientific, and Technical Services
3. Retail Trade

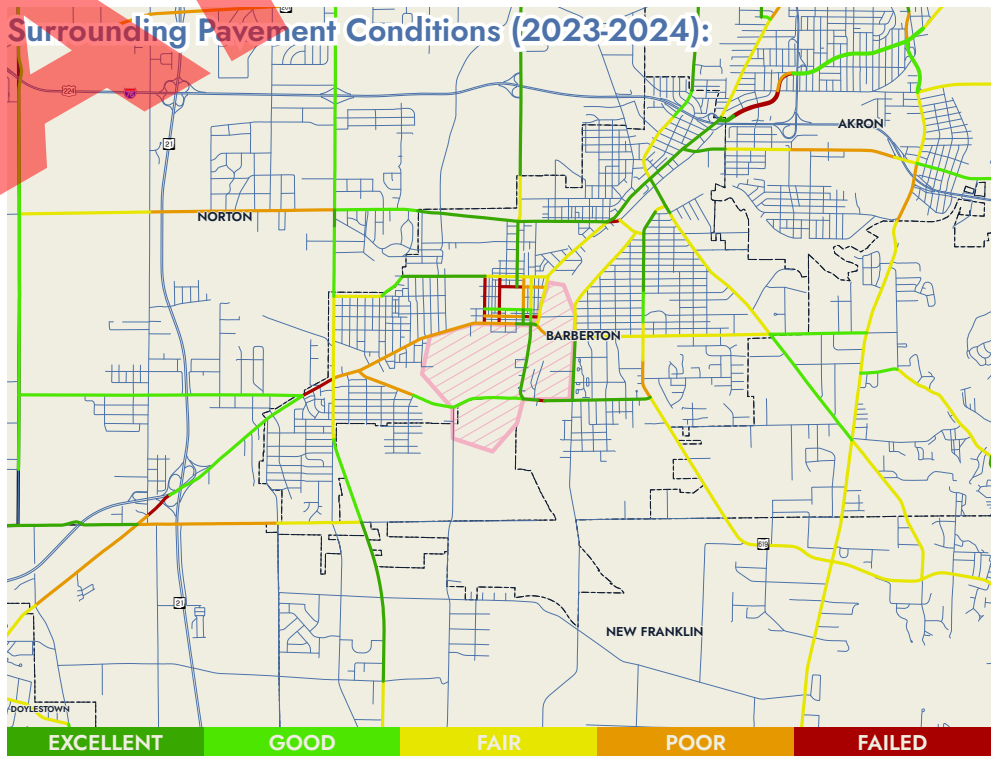
2022 Estimated Jobs:

1,500

Location:



Surrounding Pavement Conditions (2023-2024):



Barberton Freight Corridor

Top High Crash Segments

The following table identifies the segments in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Roadway Section (segment with limits), Length (MI), Average Daily Traffic, Total Crashes (2020-2022), and Crashes per MI per YR.

LOCATION	LOCAL RANK	OVERALL RANK	ROADWAY SECTION	LENGTH (MI)	AVERAGE DAILY TRAFFIC	TOTAL CRASHES	CRASHES PER MILE PER YEAR
Barberton	4	25	Snyder ave from Van Buren Ave to 5th St SE	0.65	5,240	9	4.615
Barberton	4	25	Wooster Rd N from Hopocan Ave to Norton Ave	0.67	7,740	15	7.463
Barberton	7	61	Wooster Rd W from 31st St to 14th St NW	1.01	7,837	43	14.191

Top High Crash Intersections

The following table identifies the intersections in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Intersection, Approach Average Daily Traffic (Average Daily Traffic entering Intersection), and Total Crashes (2020-2022).

LOCATION	LOCAL RANK	OVERALL RANK	INTERSECTION	APPROACH AVERAGE DAILY TRAFFIC	TOTAL CRASHES
No Nearby Intersections in the *2020-2022 Traffic Crashes Report*					

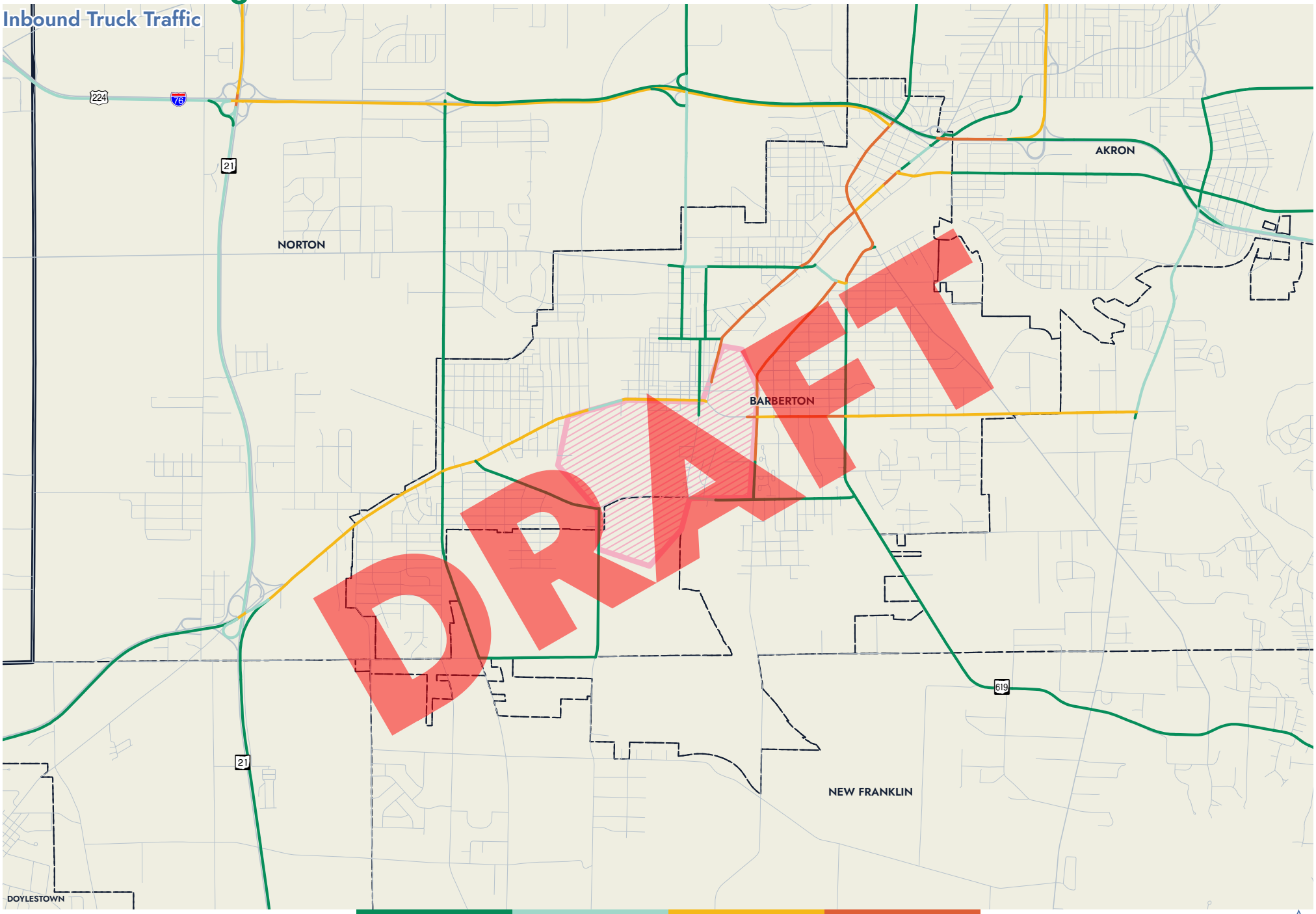
Top Congested Segments

The following table identifies the top segments in or within 300' of the job hub that have been identified in AMATS' *Draft 2024 Congestion Management Process* report. The fields contained within the table are: Location, Name, Miles, Peak Period (part of the day in which peak occurs), Type (description of section), Direction (direction of traffic flow), and % Free Flow (ratio of the speed traffic is traveling in relation to the free flow speed, or the speed at which unimpeded traffic can travel).

LOCATION	NAME	MILES	PEAK PERIOD	TYPE	DIRECTION	% FREE FLOW
Barberton	Wooster Rd N from .029 Miles North of Wooster Rd W to W Hopocan Ave	0.384	Mid-Day / Peak PM	Arterial	NB / SB	71.45
Barberton	Wooster Rd N from Wooster Rd W to .029 Miles North of Wooster Rd W	0.029	Mid-Day / Peak PM	Arterial	NB / SB	71.96
Barberton	Robinson Ave from 0.041 Miles East of Wooster Rd N to Wooster Rd N	0.041	Mid-Day	Arterial	EB / WB	85.14

Barberton Freight Corridor

Inbound Truck Traffic

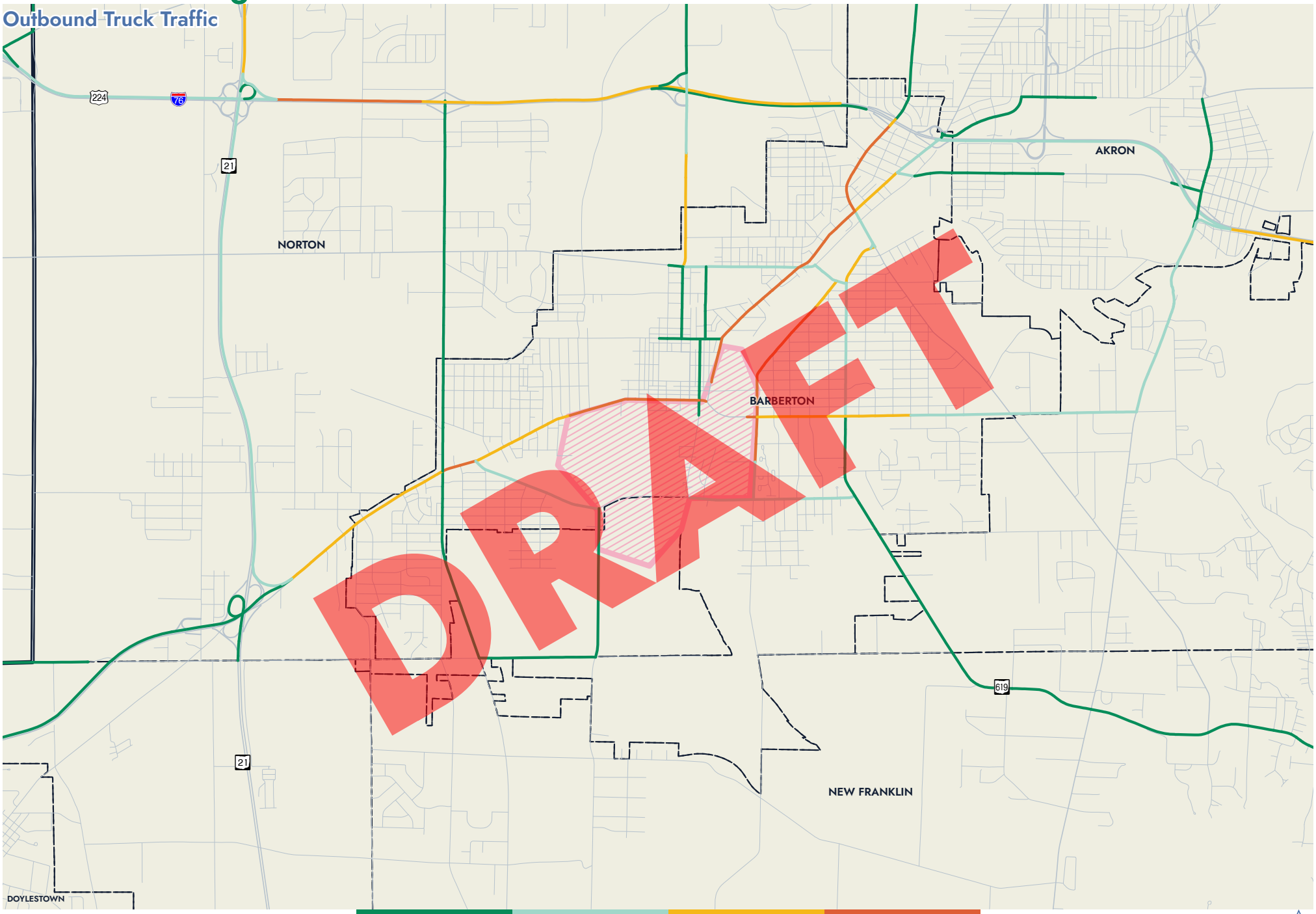


Percentage of Inbound Truck Trips: .1% - 5% | 5.1% - 10% | 10.1% - 15% | 15.1% - 82.6%

0 0.25 0.5 0.75 1 Miles

Barberton Freight Corridor

Outbound Truck Traffic



Percentage of Outbound Truck Trips: .1% - 5% | 5.1% - 10% | 10.1% - 15% | 15.1% - 82.6%

0 0.25 0.5 0.75 1 Miles

Green Freight Corridor

Characteristics:

The city of Green is the southernmost city in Summit County, with I-77 and SR 619 serving as key access roads. This job hub is home to approximately 7,000 jobs in health care and social assistance, and transportation and warehousing. Massillon Road (SR 241) runs north and south through the corridor and is one of the region's highest-volume roadways due to the rapid growth of businesses and residences surrounding the corridor. Massillon Road was very recently improved with several new roadway enhancements including roundabouts. The corridor will continue to be monitored to assess how these improvements affect both congestion and safety.

Key Freeway / Highway Access:

I-76
SR 8

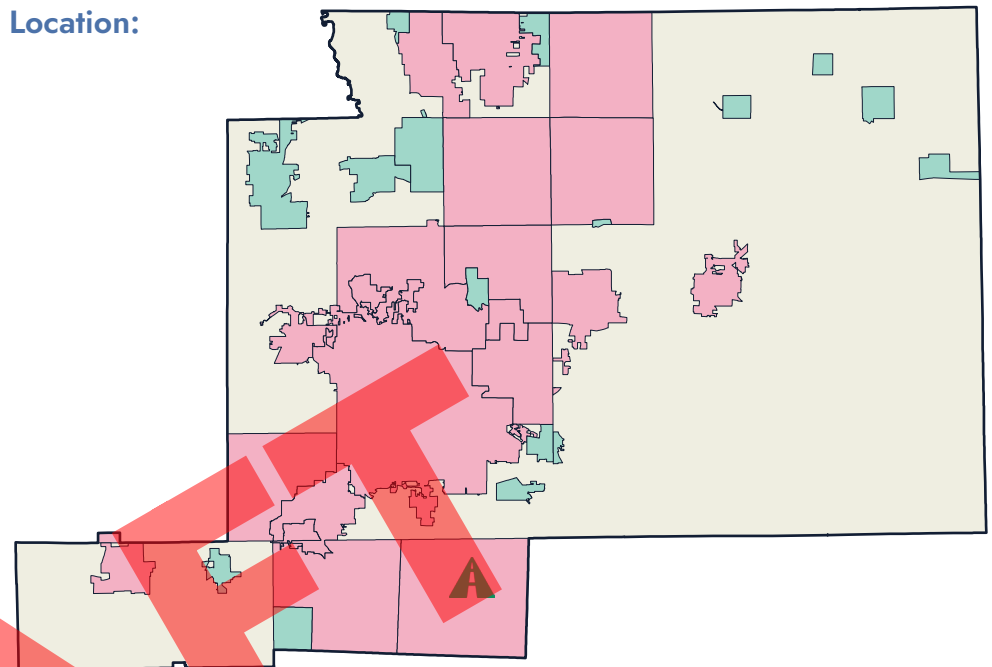
Top 3 Job Types:

1. Health Care and Social Assistance
2. Public Administration
3. Educational Services

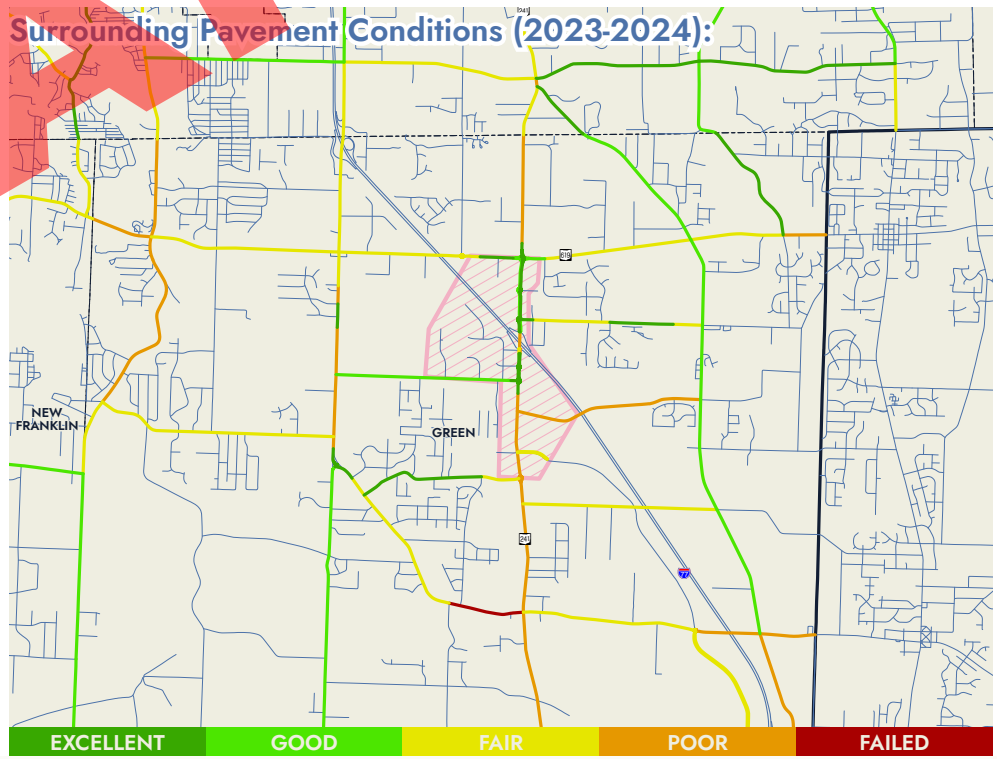
2022 Estimated Jobs:

7,000

Location:



Surrounding Pavement Conditions (2023-2024):



Green Freight Corridor

Top High Crash Segments

The following table identifies the segments in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Roadway Section (segment with limits), Length (MI), Average Daily Traffic, Total Crashes (2020-2022), and Crashes per MI per YR.

LOCATION	LOCAL RANK	OVERALL RANK	ROADWAY SECTION	LENGTH (MI)	AVERAGE DAILY TRAFFIC	TOTAL CRASHES	CRASHES PER MILE PER YEAR
Green	3	22	Sandy Knoll Dr from Corporate Woods Pkw to Massillon Rd (SR 241)	0.13	Data Not Available	2	5.128
Green	6	122	E Turkeyfoot Lake Rd (SR 619) from Massillon Rd (SR 241) to Green ECL	2.51	9,055	24	3.187
Green	7	131	Massillon Rd (SR 241) from Turkeyfoot Lake Rd (SR 619) to Killian Rd	1.5	9,979	14	3.111

Top High Crash Intersections

The following table identifies the intersections in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Intersection, Approach Average Daily Traffic (Average Daily Traffic entering Intersection), and Total Crashes (2020-2022).

LOCATION	LOCAL RANK	OVERALL RANK	INTERSECTION	APPROACH AVERAGE DAILY TRAFFIC	TOTAL CRASHES
Green	5	163	Massillon Rd (SR 241) and Corporate Woods Cir / Thorn Dr	Insufficient Data	10
Green	7	202	Massillon Rd (SR 241) and Town Park Blvd	Insufficient Data	9

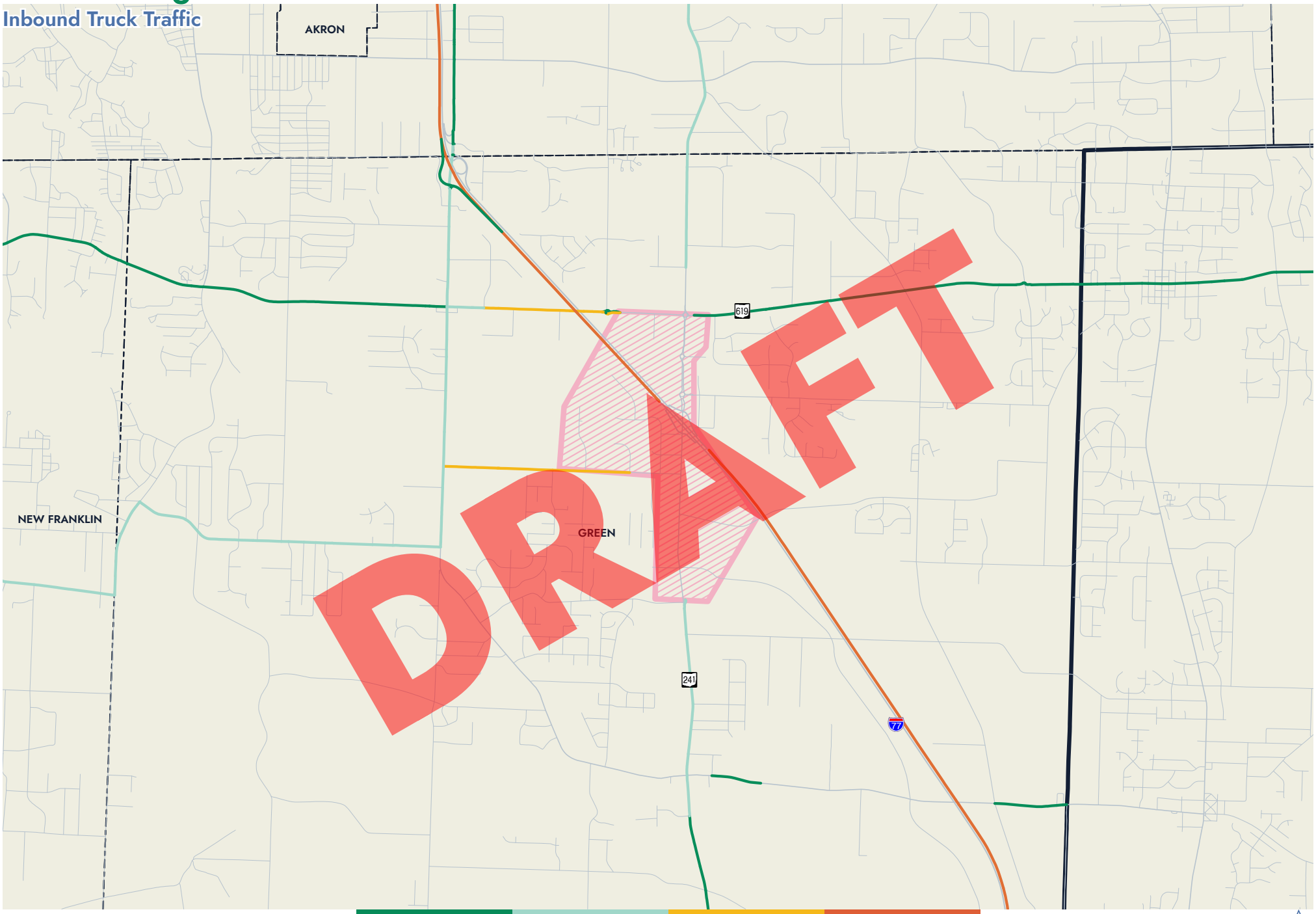
Top Congested Segments

The following table identifies the top segments in or within 300' of the job hub that have been identified in AMATS' *Draft 2024 Congestion Management Process* report. The fields contained within the table are: Location, Name, Miles, Peak Period (part of the day in which peak occurs), Type (description of section), Direction (direction of traffic flow), and % Free Flow (ratio of the speed traffic is traveling in relation to the free flow speed, or the speed at which unimpeded traffic can travel).

LOCATION	NAME	MILES	PEAK PERIOD	TYPE	DIRECTION	% FREE FLOW
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	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	Massillon Rd (SR 241) from Graybill Rd to Boettler Rd	0.248	Mid-Day	Arterial	NB / SB	61.76

Green Freight Corridor

Inbound Truck Traffic

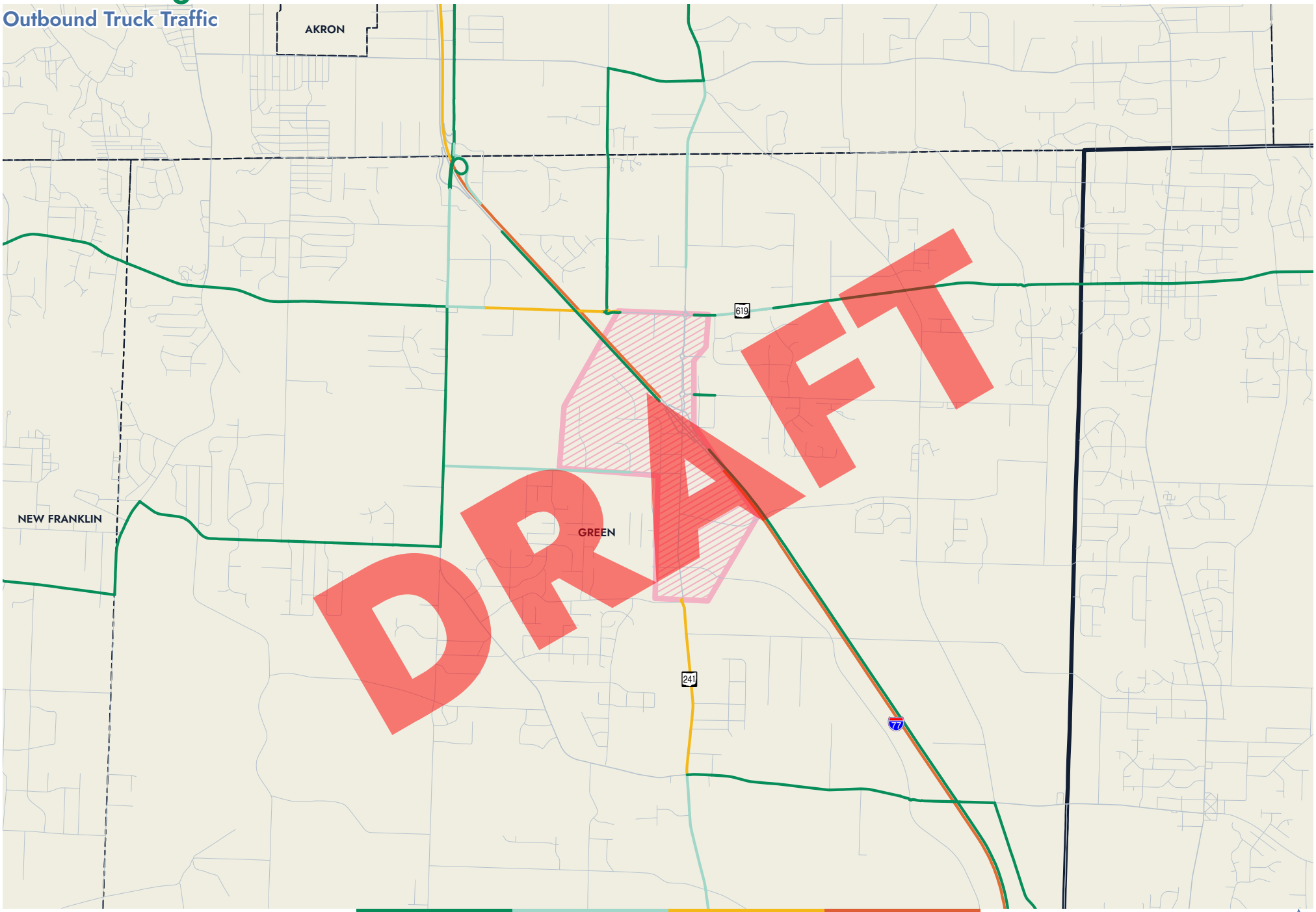


Percentage of Inbound Truck Trips: .1% - 5% | 5.1% - 10% | 10.1% - 15% | 15.1% - 82.6%

0 0.25 0.5 0.75 1 Miles

Green Freight Corridor

Outbound Truck Traffic



Percentage of Outbound Truck Trips: .1% - 5% | 5.1% - 10% | 10.1% - 15% | 15.1% - 82.6%

0 0.25 0.5 0.75 1 Miles

Cuyahoga Falls Freight Corridor

Characteristics:

The Cuyahoga Falls job hub is located north of Akron in central Summit County. The city of Cuyahoga Falls has a population of 50,000, making it one of the county's larger cities. With access from SR 8 and SR 59, this job hub includes over 5,000 jobs in the industries of manufacturing, management of companies and enterprises, administrative and support, and waste management and remediation. The city of Cuyahoga Falls has witnessed a resurgence recently due to the reconstruction and reopening of Front Street and its Portage Crossing development. These developments provide attractive amenities to employers that locate within the job hub. There are no significant safety concerns within the job hub and only some moderate congestion along sections of State Road. An upcoming project on State Road from Steels Corners Road to the northern city line may help to address some issues.

Key Freeway / Highway Access:

SR 8
SR 59

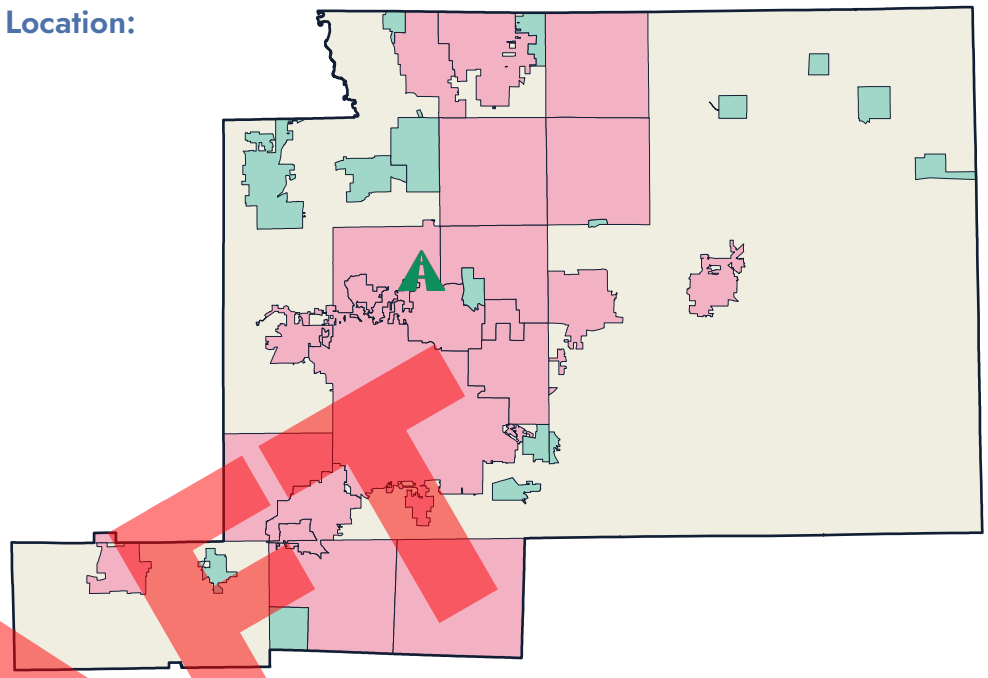
Top 3 Job Types:

1. Manufacturing
2. Management of Companies and Enterprises
3. Administrative and Support and Waste Management and Remediation Services

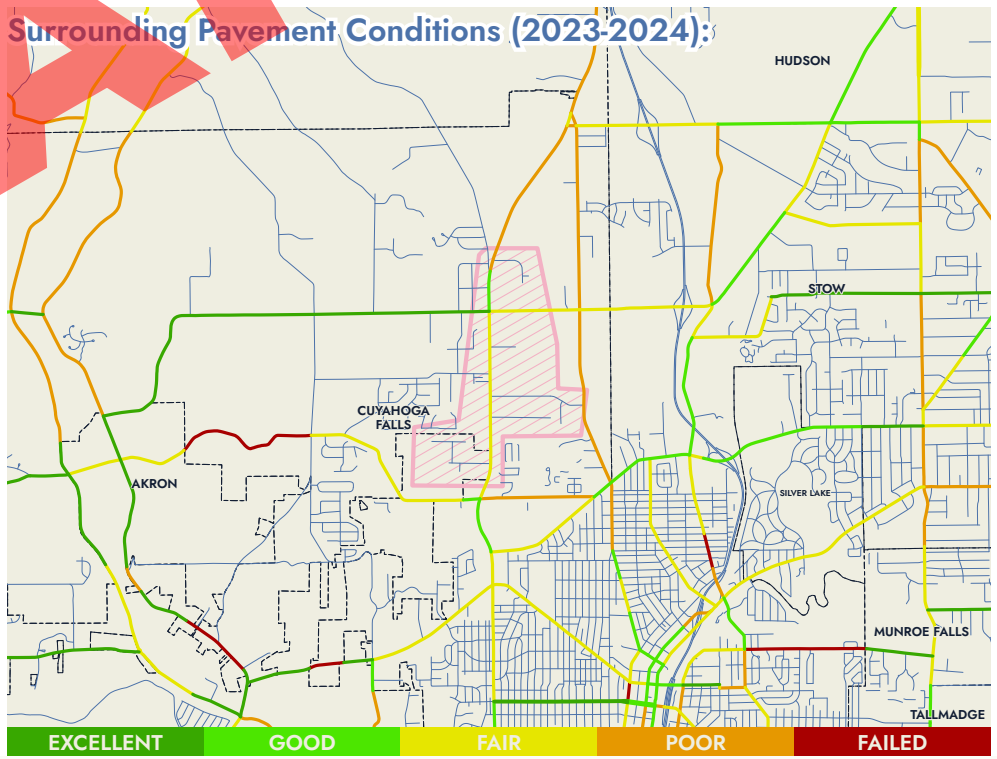
2022 Estimated Jobs:

5,000

Location:



Surrounding Pavement Conditions (2023-2024):



Cuyahoga Falls Freight Corridor

Top High Crash Segments

The following table identifies the segments in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Roadway Section (segment with limits), Length (MI), Average Daily Traffic, Total Crashes (2020-2022), and Crashes per MI per YR.

LOCATION	LOCAL RANK	OVERALL RANK	ROADWAY SECTION	LENGTH (MI)	AVERAGE DAILY TRAFFIC	TOTAL CRASHES	CRASHES PER MILE PER YEAR
No Nearby Segments in the *2020-2022 Traffic Crashes Report*							

Top High Crash Intersections

The following table identifies the intersections in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Intersection, Approach Average Daily Traffic (Average Daily Traffic entering Intersection), and Total Crashes (2020-2022).

LOCATION	LOCAL RANK	OVERALL RANK	INTERSECTION	APPROACH AVERAGE DAILY TRAFFIC	TOTAL CRASHES
No Nearby Intersections in the *2020-2022 Traffic Crashes Report*					

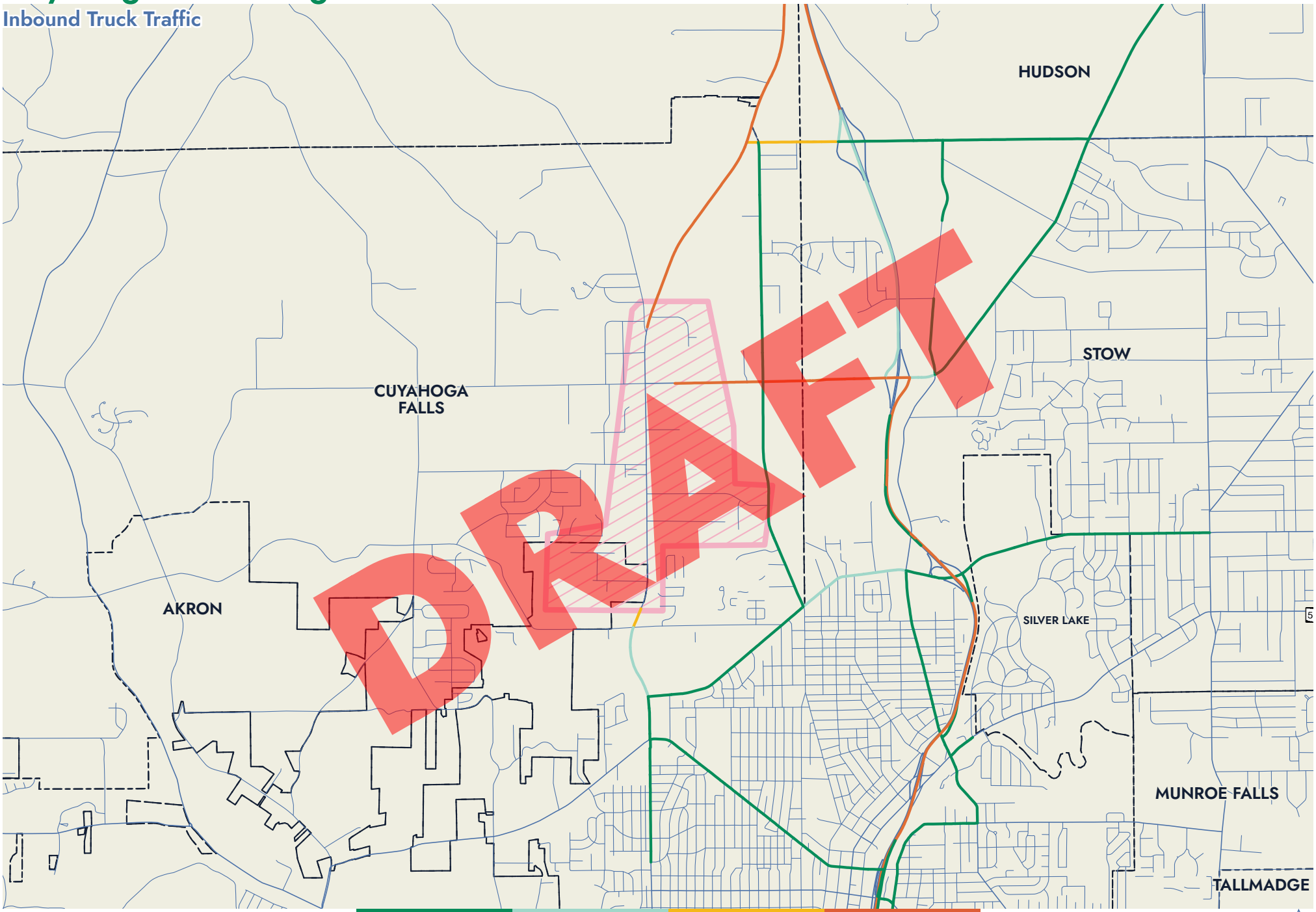
Top Congested Segments

The following table identifies the top segments in or within 300' of the job hub that have been identified in AMATS' *Draft 2024 Congestion Management Process* report. The fields contained within the table are: Location, Name, Miles, Peak Period (part of the day in which peak occurs), Type (description of section), Direction (direction of traffic flow), and % Free Flow (ratio of the speed traffic is traveling in relation to the free flow speed, or the speed at which unimpeded traffic can travel).

LOCATION	NAME	MILES	PEAK PERIOD	TYPE	DIRECTION	% FREE FLOW
Cuyahoga Falls	State Rd from Steels Corners Rd to Quick Rd	0.326	Mid-Day / Peak PM	Arterial	NB / SB	74.83
Cuyahoga Falls	State Rd from Chart Rd to Steels Corners Rd	0.516	Mid-Day	Arterial	NB / SB	77.30
Cuyahoga Falls	State Rd from Bath Rd to Chart Rd	1.052	Mid-Day / Peak PM	Arterial	NB / SB	79.18

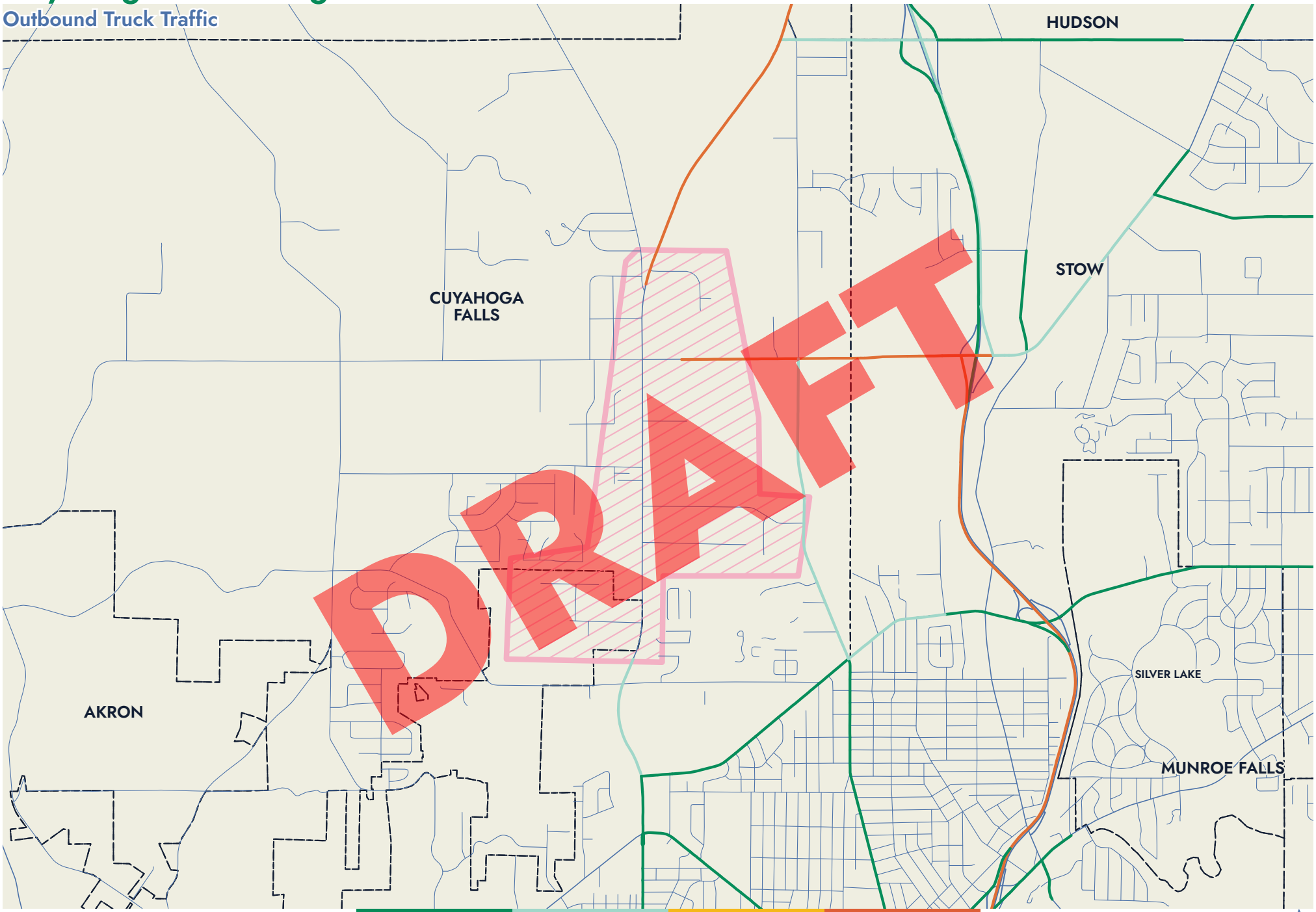
Cuyahoga Falls Freight Corridor

Inbound Truck Traffic



Cuyahoga Falls Freight Corridor

Outbound Truck Traffic



Percentage of Outbound Truck Trips: .1% - 5% | 5.1% - 10% | 10.1% - 15% | 15.1% - 82.6%

0 0.25 0.5 0.75 1 Miles

Chapel Hill Freight Corridor

Characteristics:

Located in central Summit County just north of downtown Akron, the Chapel Hill job hub employs 4,000 people in the areas of manufacturing, management of companies and enterprises, and information. Anchored by the Chapel Hill Mall built in 1967, this job hub is easily accessed by SR 8 and continues to be a destination for retail and restaurants. In addition to SR 8, SR 261 connects the Chapel Hill area to communities to the east and west. AMATS has identified several high crash locations and intersections near the job hub, as well as highly congested areas that could interfere with freight traffic in the corridor.

Key Freeway / Highway Access:

SR 8
SR 261

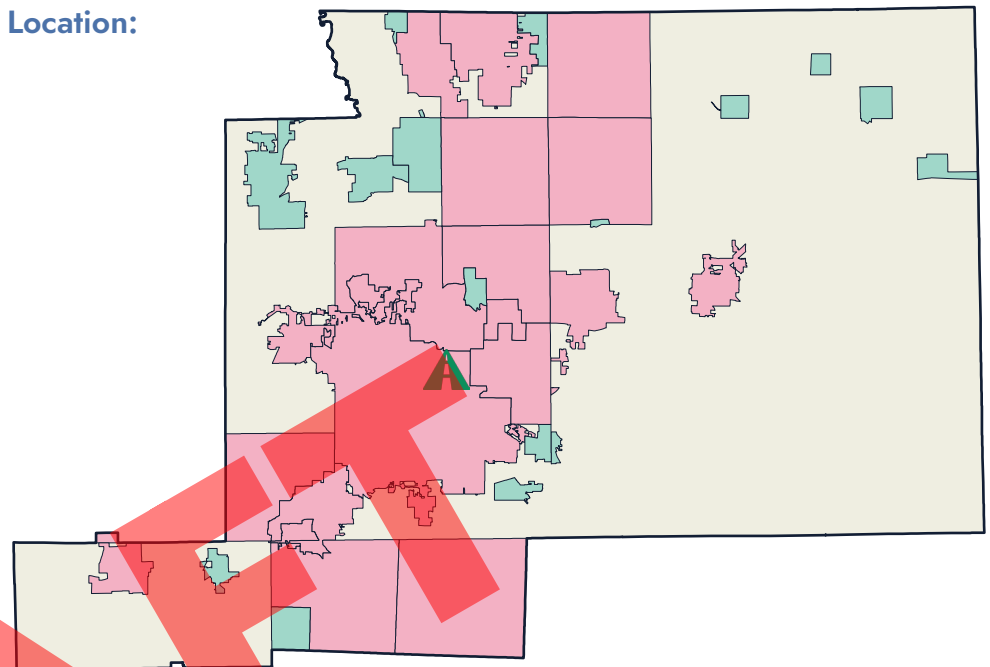
Top 3 Job Types:

1. Manufacturing
2. Transportation and Warehousing
3. Management of Companies and Enterprises

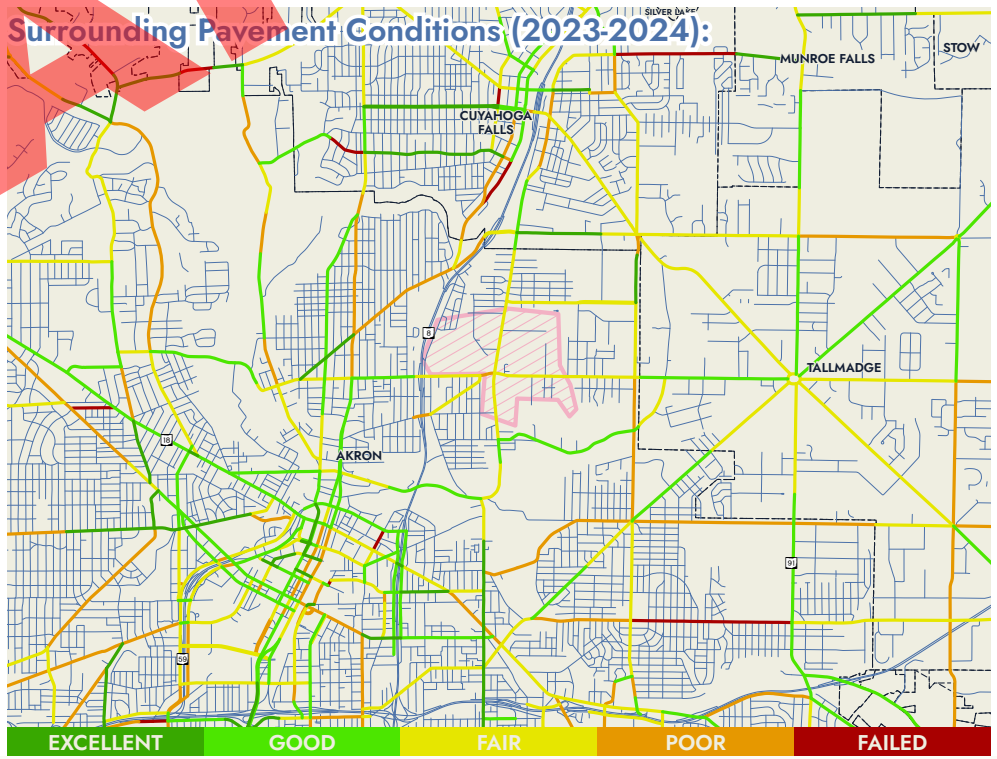
2022 Estimated Jobs:

4,000

Location:



Surrounding Pavement Conditions (2023-2024):



Chapel Hill Freight Corridor

Top High Crash Segments

The following table identifies the segments in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Roadway Section (segment with limits), Length (MI), Average Daily Traffic, Total Crashes (2020-2022), and Crashes per MI per YR.

LOCATION	LOCAL RANK	OVERALL RANK	ROADWAY SECTION	LENGTH (MI)	AVERAGE DAILY TRAFFIC	TOTAL CRASHES	CRASHES PER MILE PER YEAR
Akron	32	81	Gorge Blvd from Tallmadge Ave (SR 261) to Cuyahoga Falls Ave	0.95	4,220	12	4.211
Akron	52	134	E Glenwood Ave from SR 8 to Tallmadge Ave (SR 261)	0.63	5,370	6	3.175

Top High Crash Intersections

The following table identifies the intersections in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Intersection, Approach Average Daily Traffic (Average Daily Traffic entering Intersection), and Total Crashes (2020-2022).

LOCATION	LOCAL RANK	OVERALL RANK	INTERSECTION	APPROACH AVERAGE DAILY TRAFFIC	TOTAL CRASHES
Akron	57	132	E Tallmadge Ave (SR 261) and Gorge Blvd / SR 8 NB Off Ramp	23,633	33

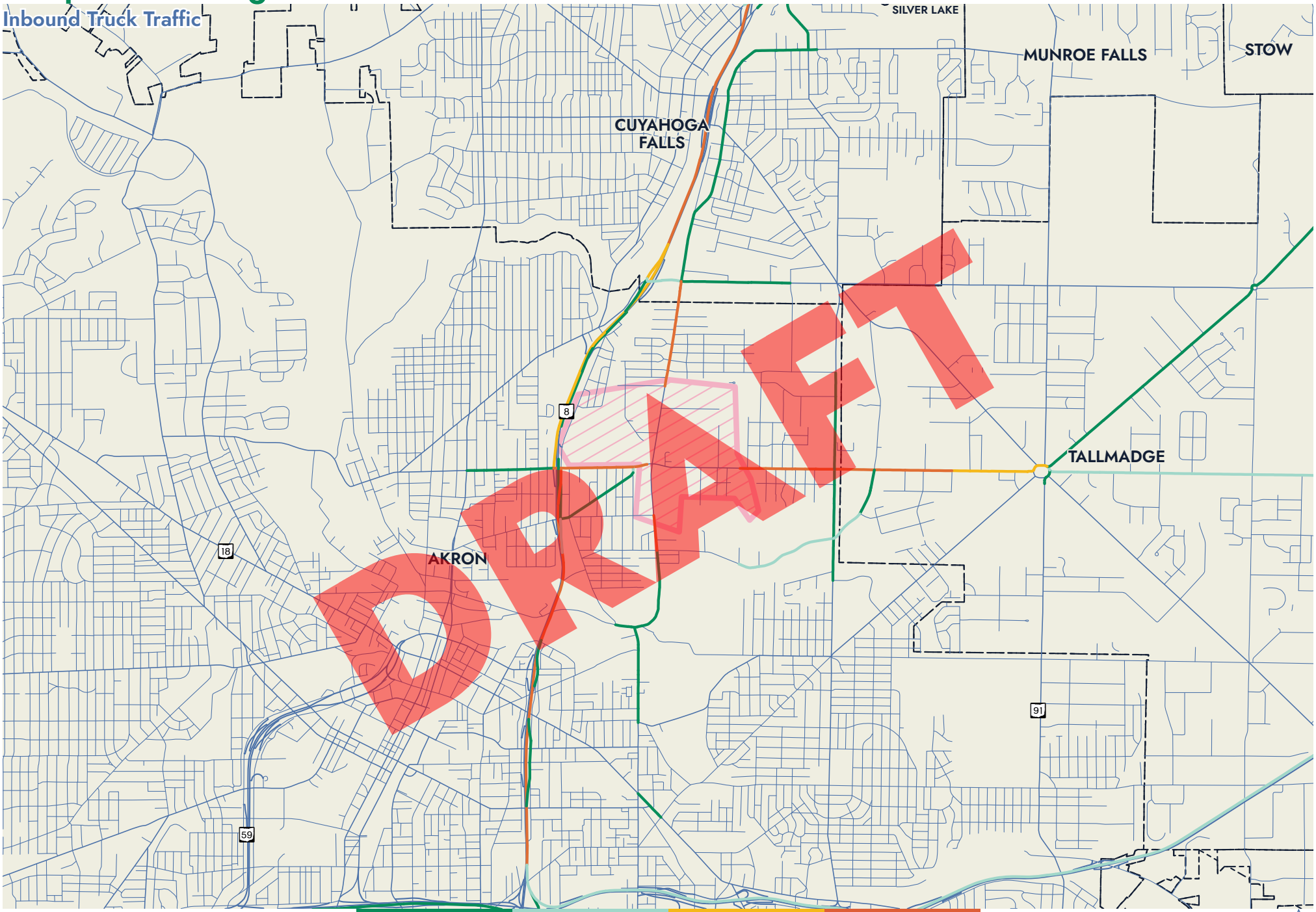
Top Congested Segments

The following table identifies the top segments in or within 300' of the job hub that have been identified in AMATS' *Draft 2024 Congestion Management Process* report. The fields contained within the table are: Location, Name, Miles, Peak Period (part of the day in which peak occurs), Type (description of section), Direction (direction of traffic flow), and % Free Flow (ratio of the speed traffic is traveling in relation to the free flow speed, or the speed at which unimpeded traffic can travel).

LOCATION	NAME	MILES	PEAK PERIOD	TYPE	DIRECTION	% FREE FLOW
Akron	E Tallmadge Ave (SR 261) from E Glenwood Ave to Home Ave	0.121	Mid-Day / Peak PM	Arterial	EB / WB	73.20
Akron	Home Ave from E Tallmadge Ave (SR 261) to Independence Ave	0.605	Mid-Day	Arterial	NB / SB	79.64
Akron	E Tallmadge Ave (SR 261) from Home Ave to Brittain Rd	1.145	Mid-Day / Peak PM	Arterial	EB / WB	79.88

Chapel Hill Freight Corridor

Inbound Truck Traffic

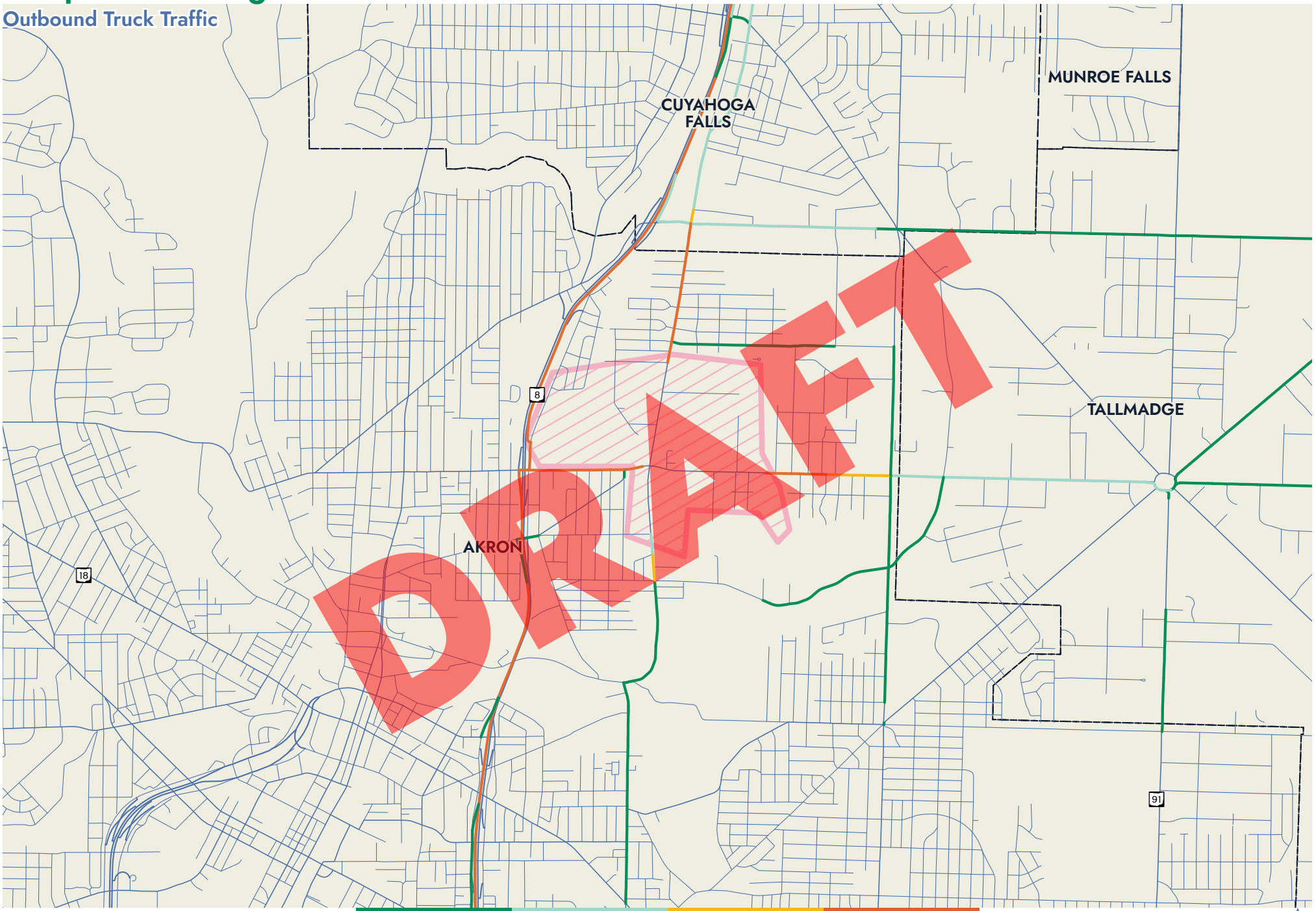


Percentage of Inbound Truck Trips: .1% - 5% | 5.1% - 10% | 10.1% - 15% | 15.1% - 82.6%

0 0.25 0.5 0.75 1 Miles

Chapel Hill Freight Corridor

Outbound Truck Traffic



Percentage of Outbound Truck Trips: .1% - 5% | 5.1% - 10% | 10.1% - 15% | 15.1% - 82.6%

0 0.25 0.5 0.75 1 Miles

East Akron / Airport Freight Corridor

Characteristics:

The East Akron / Airport Job Hub is located in the southeast corner of Akron, between Springfield Township and downtown Akron. This job hub is home to 8,000 jobs in the areas of manufacturing, construction, and transportation and warehousing. This job hub is dense with employers benefiting from the nearby access to I-76 and US 224, including the Goodyear Tire's World Headquarters. There are some nearby areas of congestion and a few high crash locations that could impact freight traffic.

Key Freeway / Highway Access:

I-76
US 224

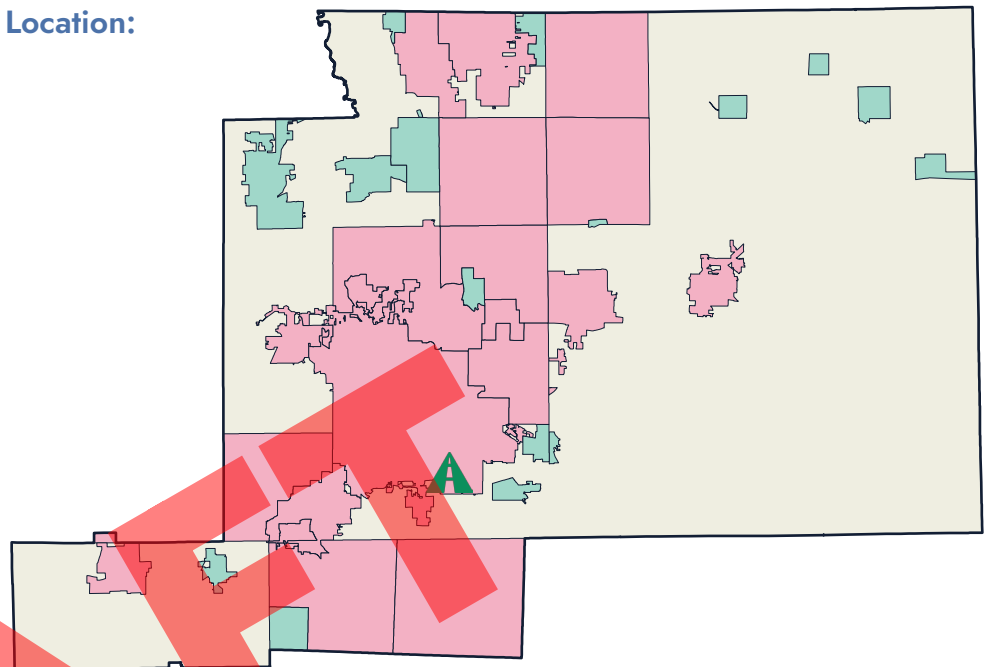
Top 3 Job Types:

1. Management of Companies and Enterprises
2. Manufacturing
3. Transportation and Warehousing

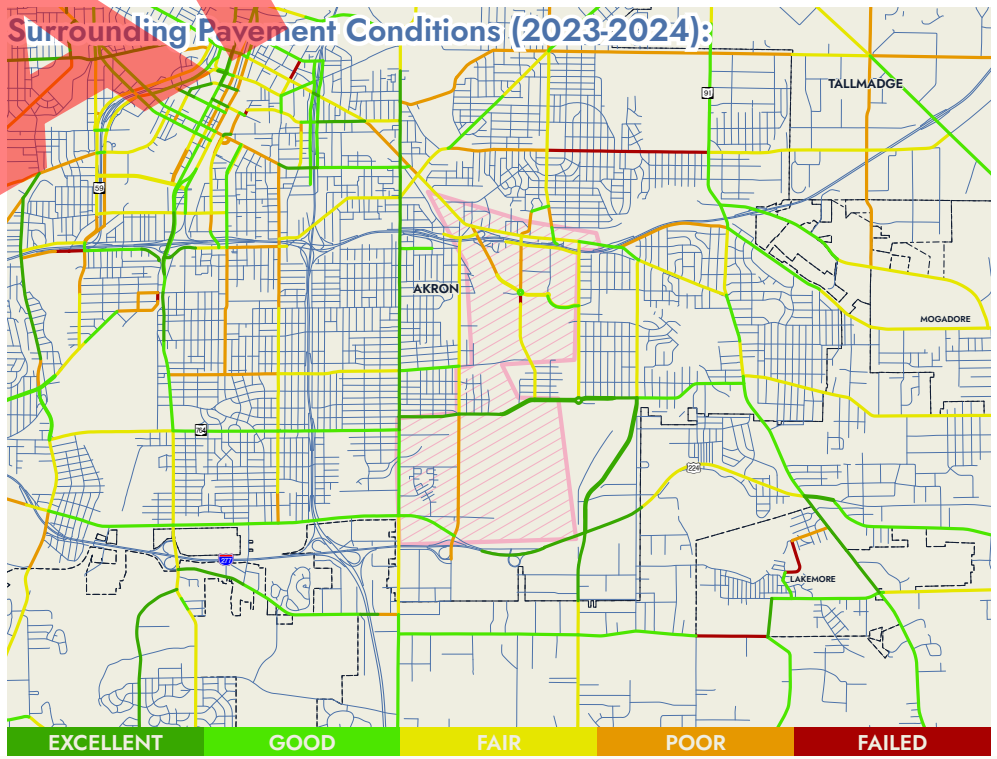
2022 Estimated Jobs:

8,000

Location:



Surrounding Pavement Conditions (2023-2024):



East Akron / Airport Freight Corridor

Top High Crash Segments

The following table identifies the segments in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Roadway Section (segment with limits), Length (MI), Average Daily Traffic, Total Crashes (2020-2022), and Crashes per MI per YR.

LOCATION	LOCAL RANK	OVERALL RANK	ROADWAY SECTION	LENGTH (MI)	AVERAGE DAILY TRAFFIC	TOTAL CRASHES	CRASHES PER MILE PER YEAR
Akron	6	13	Massillon Rd / Geo Washington Blvd (SR 241) from Oaks Dr / Akron CL to E Waterloo Rd (US 224)	0.55	14,193	18	10.909
Akron	23	64	E Archwood Ave from S Arlington St to Kelly Ave	0.49	3,500	8	5.442
Akron	26	70	S Arlington St from E Waterloo Rd to E Wilbeth Rd (SR 764)	0.70	12,800	69	3.857

Top High Crash Intersections

The following table identifies the intersections in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Intersection, Approach Average Daily Traffic (Average Daily Traffic entering Intersection), and Total Crashes (2020-2022).

LOCATION	LOCAL RANK	OVERALL RANK	INTERSECTION	APPROACH AVERAGE DAILY TRAFFIC	TOTAL CRASHES
Akron	26	68	S Arlington St and E Waterloo Rd	19,965	36
Akron	69	150	Kelly Ave and 4th Ave / I-76 EB Off-Ramp	Insufficient Data	9
Akron	87	195	S Arlington St and Palmetto St	Insufficient Data	13

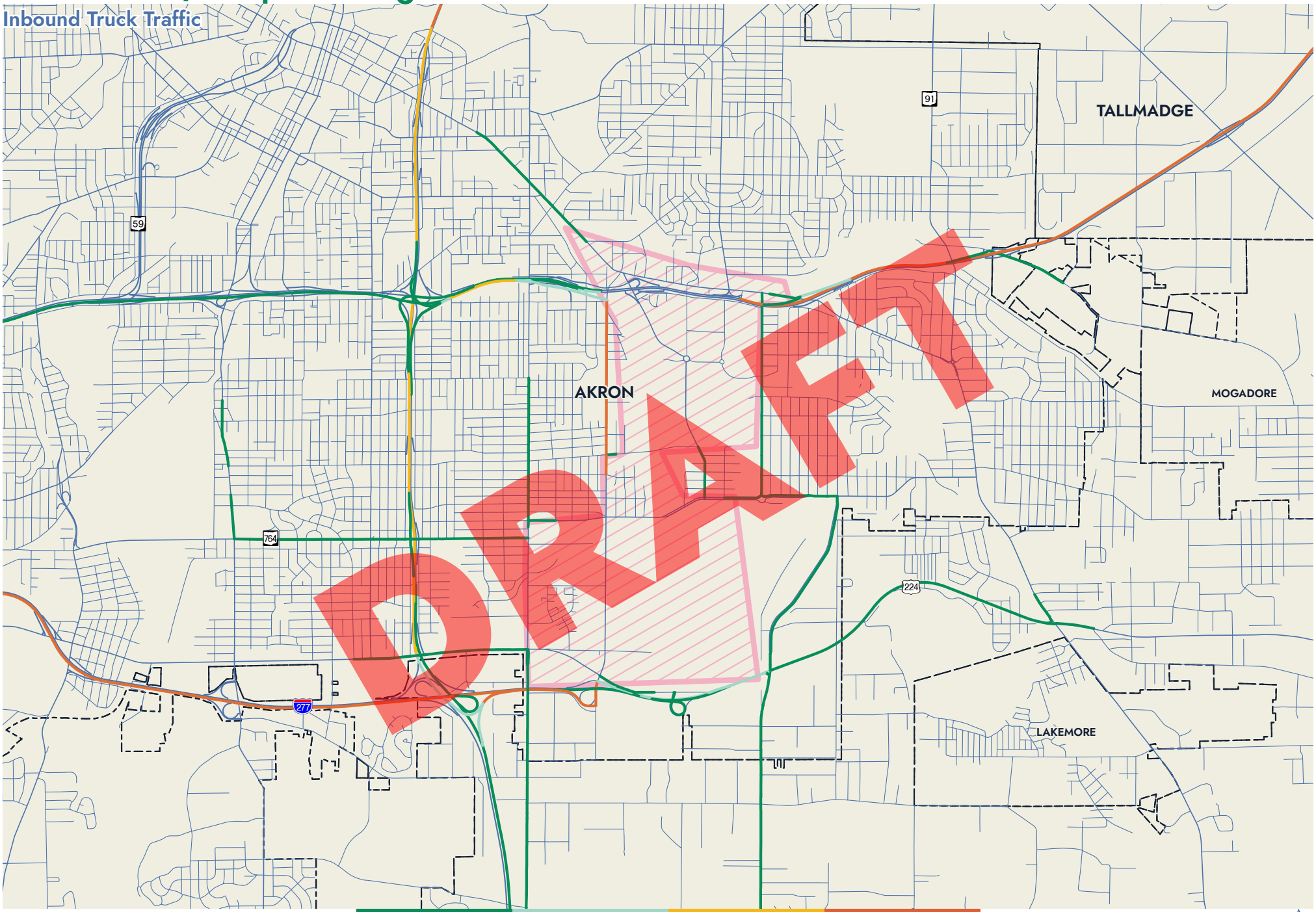
Top Congested Segments

The following table identifies the top segments in or within 300' of the job hub that have been identified in AMATS' *Draft 2024 Congestion Management Process* report. The fields contained within the table are: Location, Name, Miles, Peak Period (part of the day in which peak occurs), Type (description of section), Direction (direction of traffic flow), and % Free Flow (ratio of the speed traffic is traveling in relation to the free flow speed, or the speed at which unimpeded traffic can travel).

LOCATION	NAME	MILES	PEAK PERIOD	TYPE	DIRECTION	% FREE FLOW
Akron	Innovation Way (SR 241) from 3rd Ave to E Market St (SR 18)	0.067	Peak AM	Arterial	NB / SB	62.52
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
Akron	S Arlington St from Arlington Circle to E Waterloo Rd	0.097	Mid-Day / Peak PM	Arterial	NB	64.10

East Akron / Airport Freight Corridor

Inbound Truck Traffic



Percentage of Inbound Truck Trips: .1% - 5% | 5.1% - 10% | 10.1% - 15% | 15.1% - 82.6%

0 0.25 0.5 0.75 1 Miles

East Akron / Airport Freight Corridor

Outbound Truck Traffic

Percentage of Outbound Truck Trips: .1% - 5% | 5.1% - 10% | 10.1% - 15% | 15.1% - 82.6%

0 0.25 0.5 0.75 1 Miles

Akron-Canton Airport Freight Corridor

Characteristics:

The Akron-Canton Airport Job Hub is located in the southeast corner of the City of Green. There are an estimated 2,500 jobs located in the hub with the top industries being manufacturing, management and transportation and warehousing. This job hub benefits from being centrally located between Akron and Canton. The Akron-Canton Airport is nestled next to the job hub on 2,700 acres of land providing a competitive advantage to businesses nearby. Primary transportation to and from the Akron-Canton Airport job hub is Interstate I-77. AMATS has identified a number of crash locations near the corridor that would impact local freight traffic that have the potential to generate incident level congestion. This job hub also benefits from access to the ABC Railway rail line.

Key Freeway / Highway Access:

I-77
SR 241

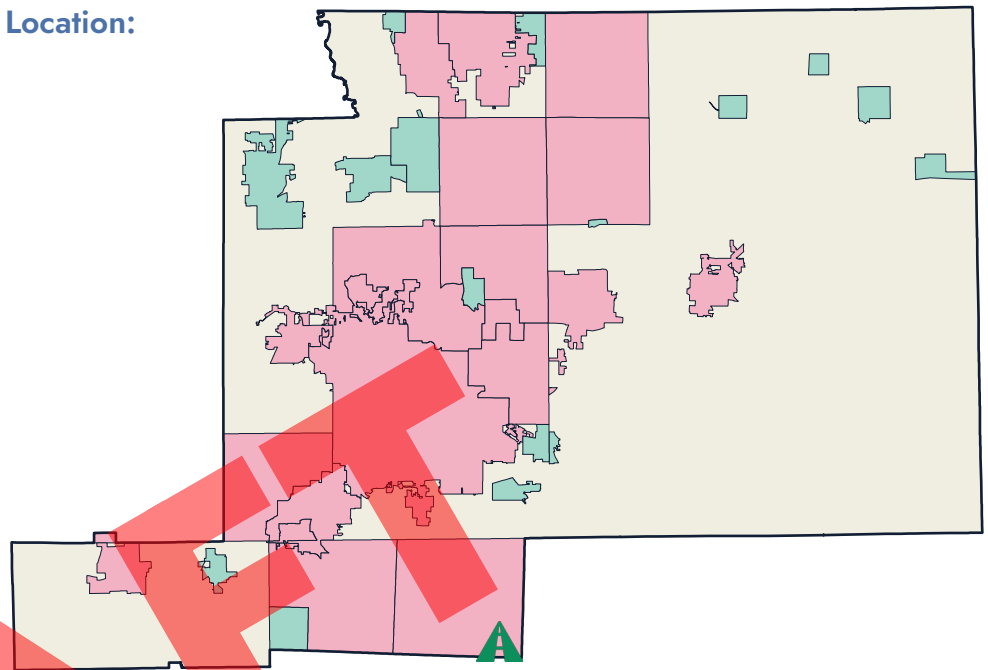
Top 3 Job Types:

1. Manufacturing
2. Transportation and Warehousing
3. Administrative and Support and Waste Management and Remediation Services

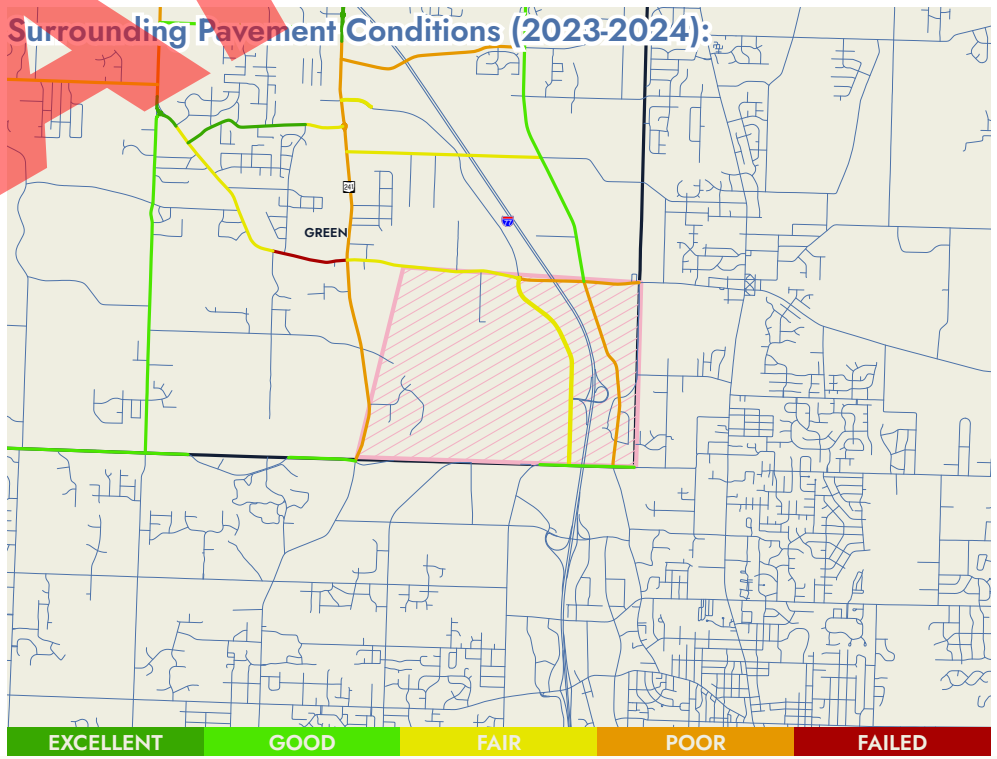
2022 Estimated Jobs:

2,500

Location:



Surrounding Pavement Conditions (2023-2024):



Akron-Canton Airport Freight Corridor

Top High Crash Segments

The following table identifies the segments in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Roadway Section (segment with limits), Length (MI), Average Daily Traffic, Total Crashes (2020-2022), and Crashes per MI per YR.

LOCATION	LOCAL RANK	OVERALL RANK	ROADWAY SECTION	LENGTH (MI)	AVERAGE DAILY TRAFFIC	TOTAL CRASHES	CRASHES PER MILE PER YEAR
Green	9	142	Lauby Rd from Mt. Pleasant Rd to Greensburg Rd	1.70	9,245	16	3.137

Top High Crash Intersections

The following table identifies the intersections in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Intersection, Approach Average Daily Traffic (Average Daily Traffic entering Intersection), and Total Crashes (2020-2022).

LOCATION	LOCAL RANK	OVERALL RANK	INTERSECTION	APPROACH AVERAGE DAILY TRAFFIC	TOTAL CRASHES
Green	8	223	Mayfair Rd and Mt. Pleasant Rd	Insufficient Data	10

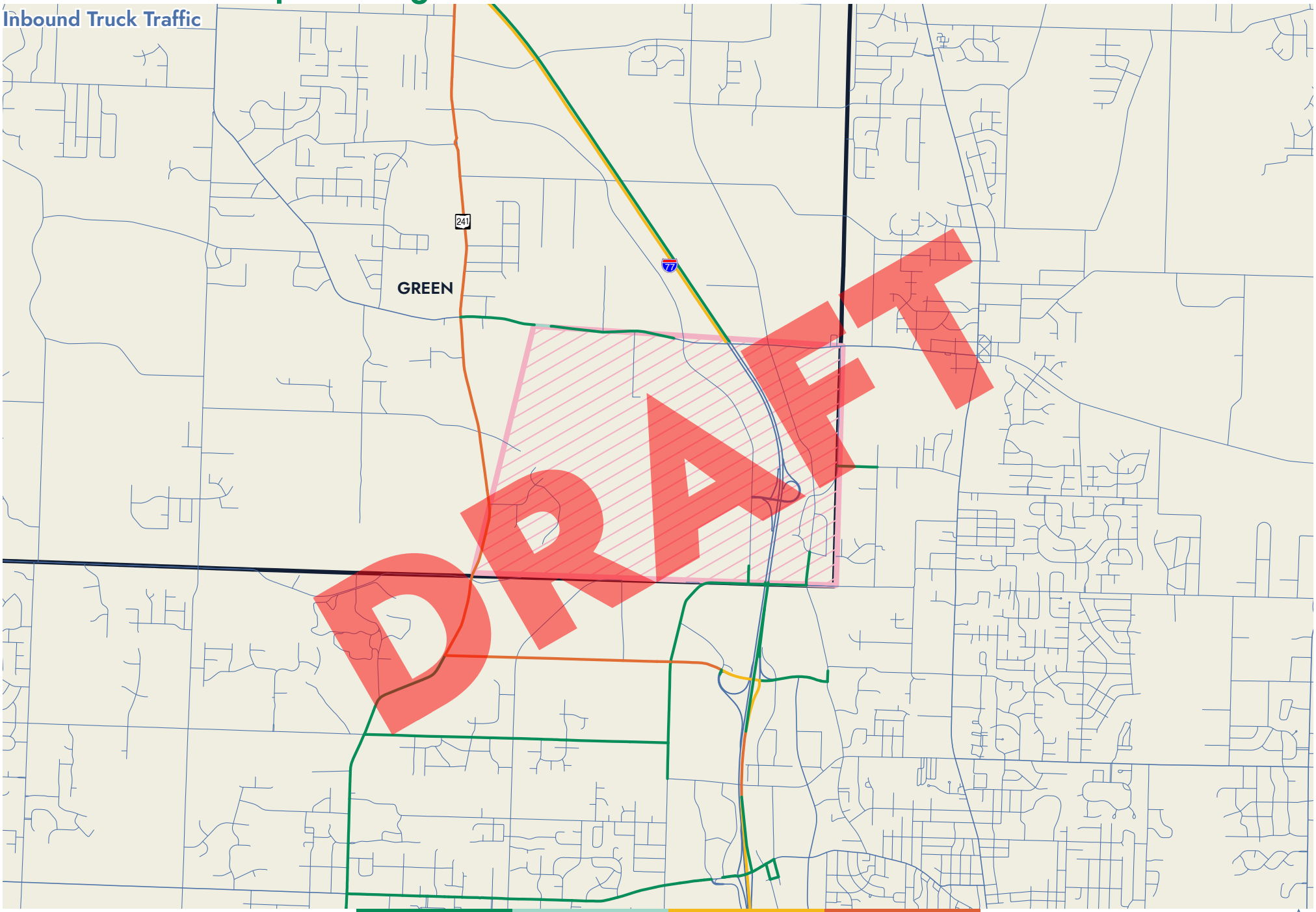
Top Congested Segments

The following table identifies the top segments in or within 300' of the job hub that have been identified in AMATS' *Draft 2024 Congestion Management Process* report. The fields contained within the table are: Location, Name, Miles, Peak Period (part of the day in which peak occurs), Type (description of section), Direction (direction of traffic flow), and % Free Flow (ratio of the speed traffic is traveling in relation to the free flow speed, or the speed at which unimpeded traffic can travel).

LOCATION	NAME	MILES	PEAK PERIOD	TYPE	DIRECTION	% FREE FLOW
Green	Greensburg Rd Westbound Approach to Lauby Rd Roundabout	0.063	Peak PM	Arterial	WB	77.15
Green	Greensburg Rd Eastbound Approach to Lauby Rd Roundabout	0.060	Peak AM / Mid-Day / Peak PM	Arterial	EB	78.76
Green	Greensburg Rd from Lauby Rd Roundabout Merge to Mayfair Rd	0.459	Peak PM	Arterial	EB / WB	82.35

Akron-Canton Airport Freight Corridor

Inbound Truck Traffic

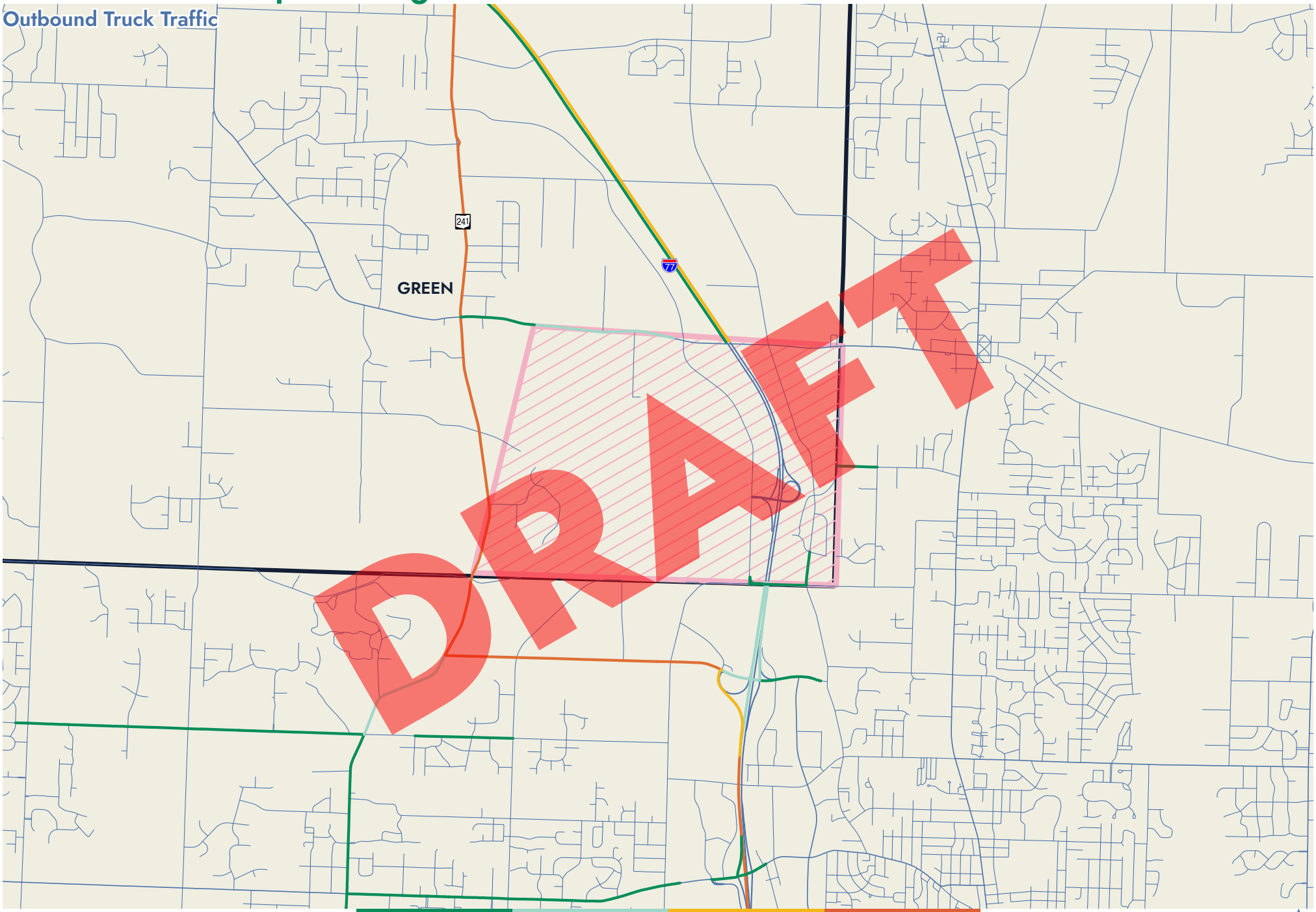


Percentage of Inbound Truck Trips: .1% - 5% | 5.1% - 10% | 10.1% - 15% | 15.1% - 82.6%

0 0.25 0.5 0.75 1 Miles

Akron-Canton Airport Freight Corridor

Outbound Truck Traffic



Percentage of Outbound Truck Trips: .1% - 5% | 5.1% - 10% | 10.1% - 15% | 15.1% - 82.6%

0 0.25 0.5 0.75 1 Miles

Twinsburg Freight Corridor

Characteristics:

The Twinsburg Job Hub is located in northern Summit County and is the largest traded sector employment hub in greater Akron with 14,500 jobs in manufacturing, wholesale trade, and retail trade. With access nearby to I-271, I-480 and I-80, as well as being halfway between Cleveland and Akron, this location is ideal for businesses and employees alike. State Routes 82 and 91 have some congestion and high crash locations. There is the potential for delays to freight traffic. Recent improvements to SR 91 include a roundabout and operational improvements to help ease some of the safety and congestion issues.

Key Freeway / Highway Access:

I-80
I-271

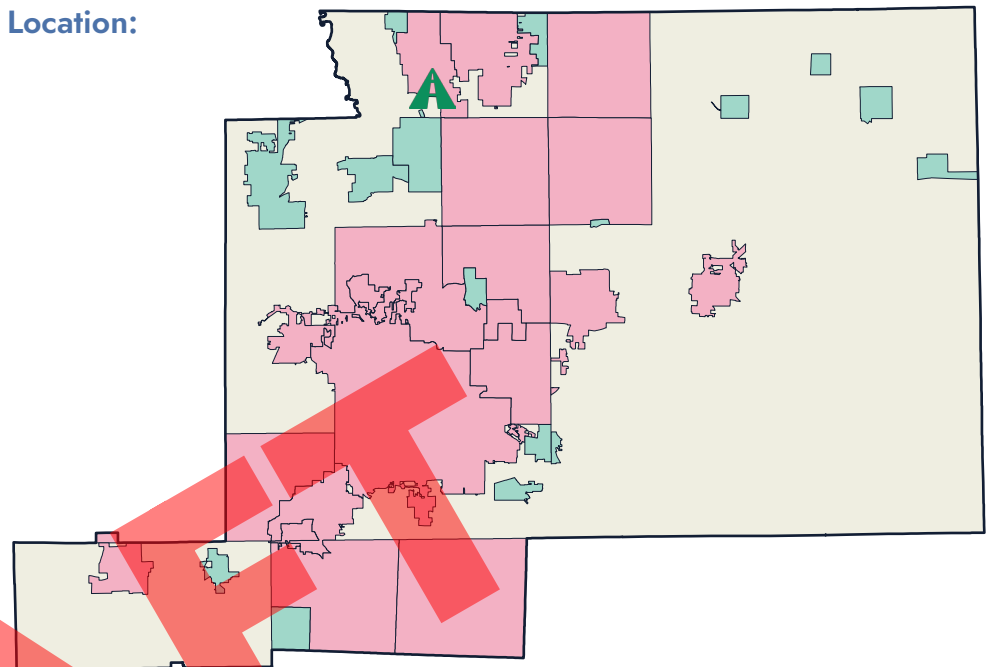
Top 3 Job Types:

1. Manufacturing
2. Wholesale Trade
3. Transportation and Warehousing

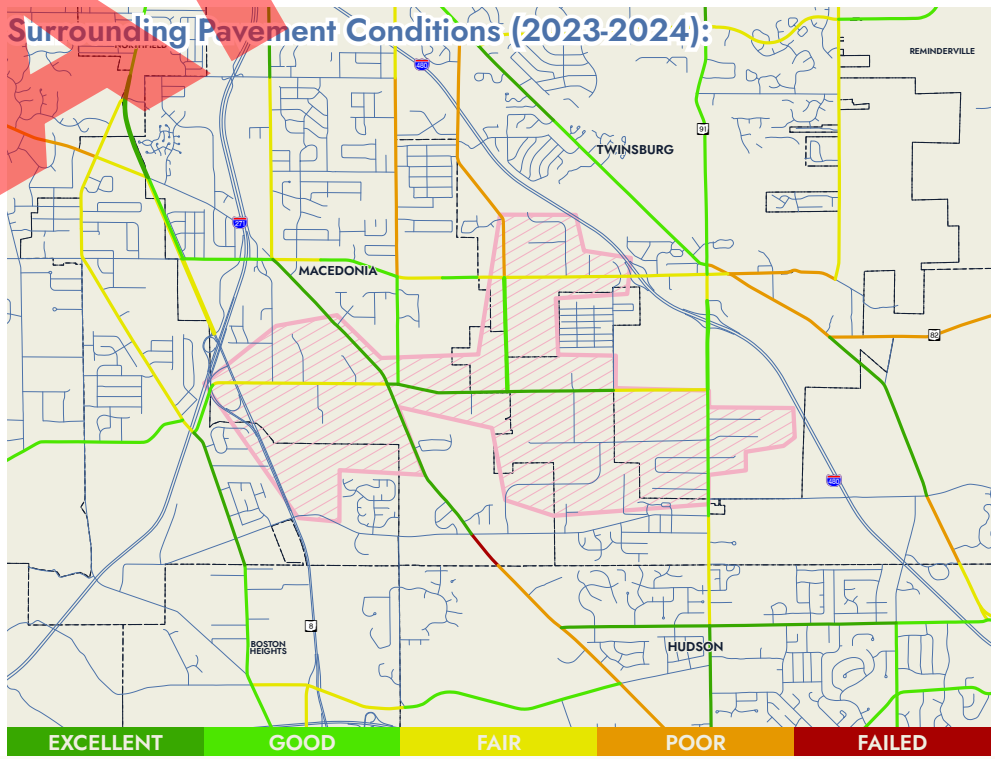
2022 Estimated Jobs:

14,500

Location:



Surrounding Pavement Conditions (2023-2024):



Twinsburg Freight Corridor

Top High Crash Segments

The following table identifies the segments in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Roadway Section (segment with limits), Length (MI), Average Daily Traffic, Total Crashes (2020-2022), and Crashes per MI per YR.

LOCATION	LOCAL RANK	OVERALL RANK	ROADWAY SECTION	LENGTH (MI)	AVERAGE DAILY TRAFFIC	TOTAL CRASHES	CRASHES PER MILE PER YEAR
Macedonia	1	94	E Highland Rd from Valley View Rd to Macedonia ECL	0.99	14,650	18	6.061
Twinsburg	3	111	Darrow Rd (SR 91) from Twinsburg SCL (E-W) to E Highland Rd	0.9	17,130	11	4.074

Top High Crash Intersections

The following table identifies the intersections in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Intersection, Approach Average Daily Traffic (Average Daily Traffic entering Intersection), and Total Crashes (2020-2022).

LOCATION	LOCAL RANK	OVERALL RANK	INTERSECTION	APPROACH AVERAGE DAILY TRAFFIC	TOTAL CRASHES
Twinsburg	1	33	E Aurora Rd (SR 82) and Chamberlin Rd	20,630	13
Twinsburg	3	129	E Aurora Rd (SR 82) and I-480 / SR 14 EB Ramps	22,609	25

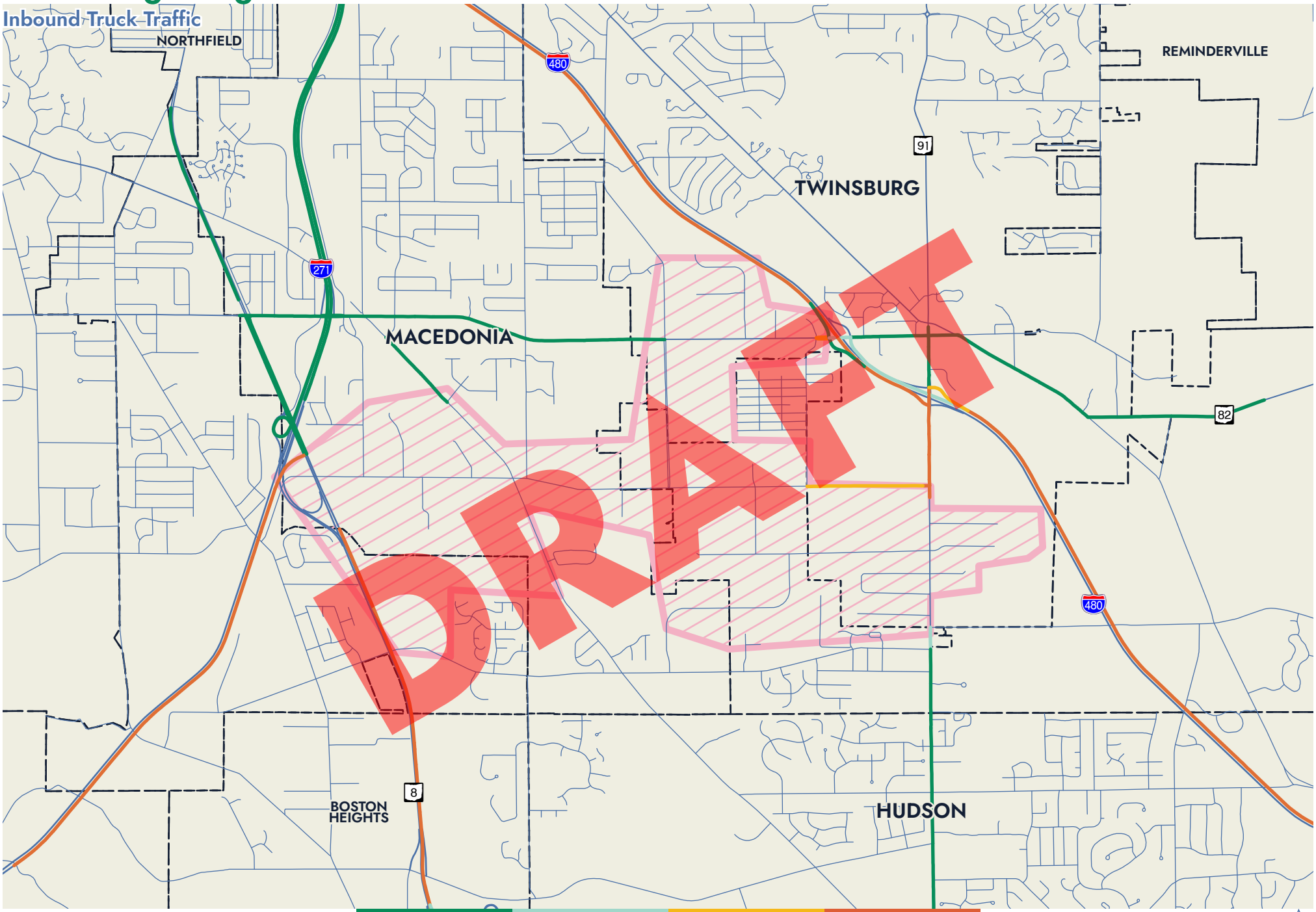
Top Congested Segments

The following table identifies the top segments in or within 300' of the job hub that have been identified in AMATS' *Draft 2024 Congestion Management Process* report. The fields contained within the table are: Location, Name, Miles, Peak Period (part of the day in which peak occurs), Type (description of section), Direction (direction of traffic flow), and % Free Flow (ratio of the speed traffic is traveling in relation to the free flow speed, or the speed at which unimpeded traffic can travel).

LOCATION	NAME	MILES	PEAK PERIOD	TYPE	DIRECTION	% FREE FLOW
Twinsburg	Darrow Rd (SR 91) from E Twinsburg Rd to Akron Children's Hospital Pediatrics - Twinsburg	0.143	Mid-Day	Arterial	NB / SB	74.07
Twinsburg	E Aurora Rd (SR 82) from Wilcox Dr / Hadden Rd to I-480 EB Ramps	0.083	Peak PM	Arterial	EB	75.30
Twinsburg	Darrow Rd (SR 91) from Akron Children's Hospital Pediatrics - Twinsburg to E Highland Rd	0.899	Mid-Day / Peak PM	Arterial	NB / SB	83.31

Twinsburg Freight Corridor

Inbound Truck Traffic

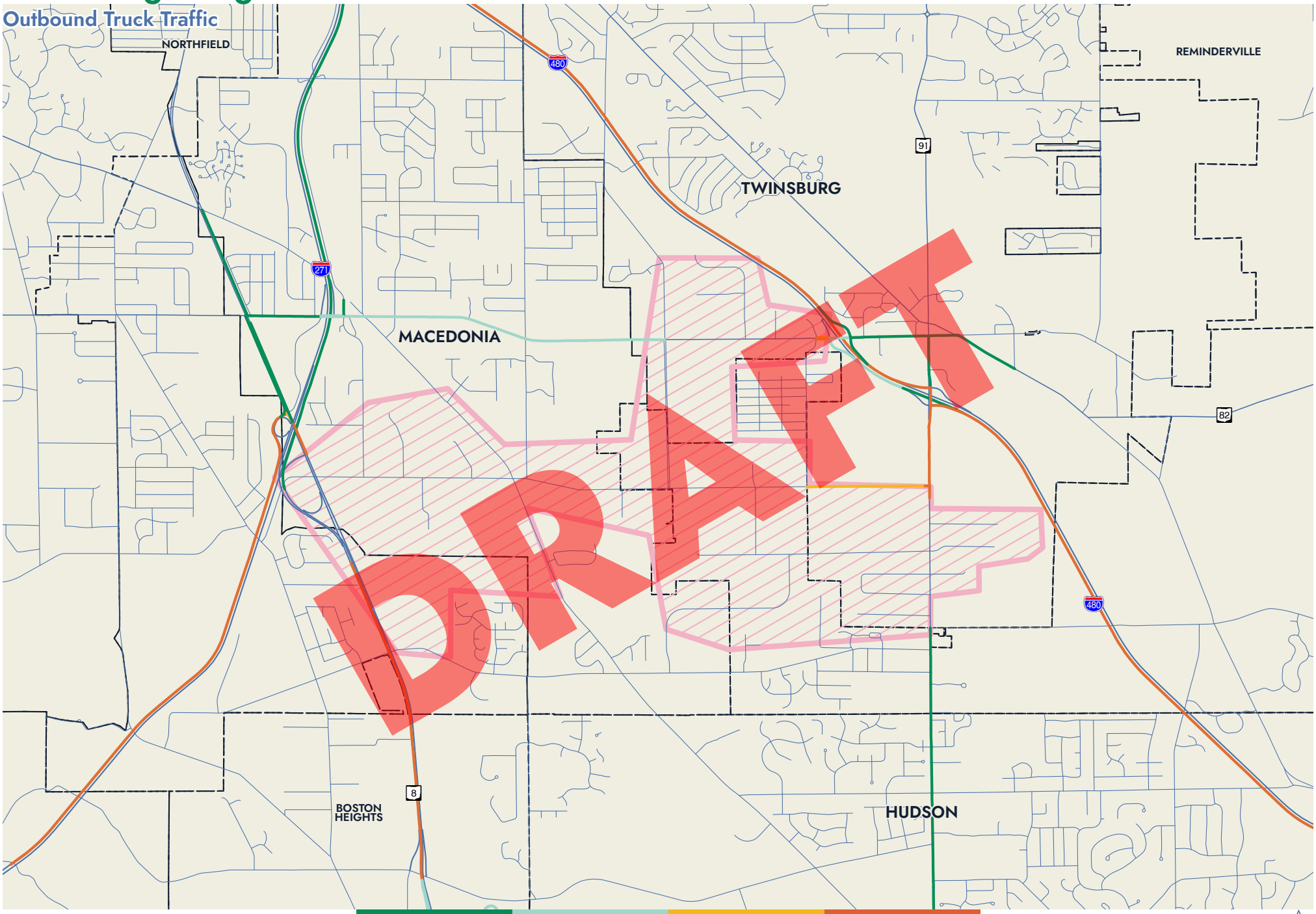


Percentage of Inbound Truck Trips: .1% - 5% | 5.1% - 10% | 10.1% - 15% | 15.1% - 82.6%

0 0.25 0.5 0.75 1 Miles

Twinsburg Freight Corridor

Outbound Truck Traffic



Percentage of Outbound Truck Trips: .1% - 5% | 5.1% - 10% | 10.1% - 15% | 15.1% - 82.6%

0 0.25 0.5 0.75 1 Miles

Aurora / Streetsboro Freight Corridor

Characteristics:

The Aurora / Streetsboro Job Hub is located on northwestern edge of Portage County and is in close proximity to Cleveland, Akron and Kent. With 7,500 jobs and I-80, SR 43, and I-480 nearby, this job hub is home to jobs in manufacturing, wholesale trade, and professional, scientific, and technical services. Freight traffic experiences congestion on nearby SR 14, and AMATS has identified several high crash locations and intersections along this corridor. Improvements are expected to ease some of the congestion as both Aurora and Streetsboro have recently or are in the process of overhauling their traffic signal systems.

Key Freeway / Highway Access:

I-80
SR 43

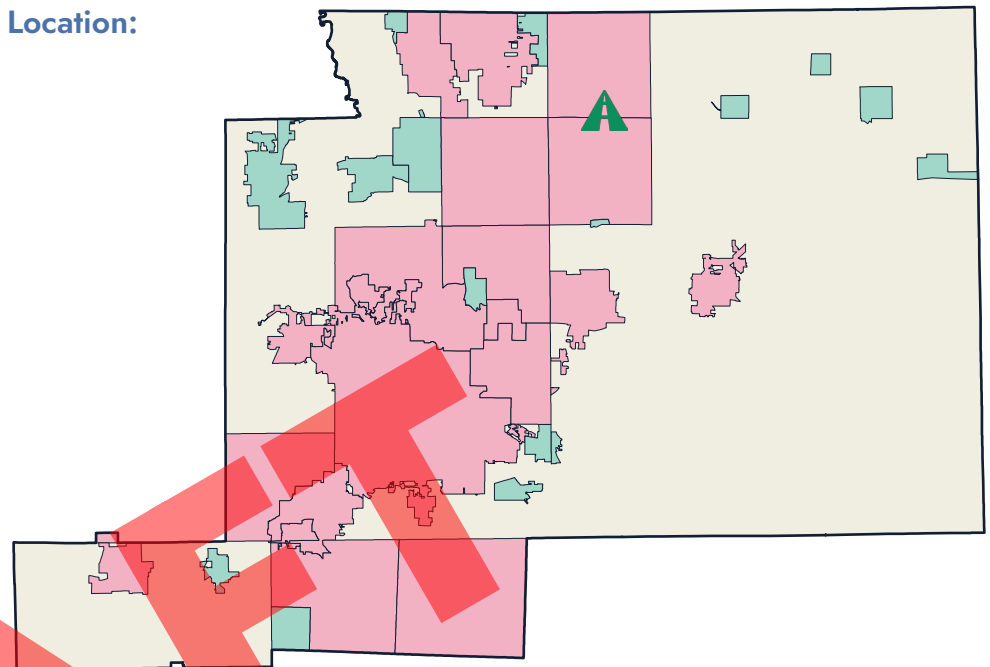
Top 3 Job Types:

1. Manufacturing
2. Wholesale Trade
3. Professional, Scientific, and Technical Services

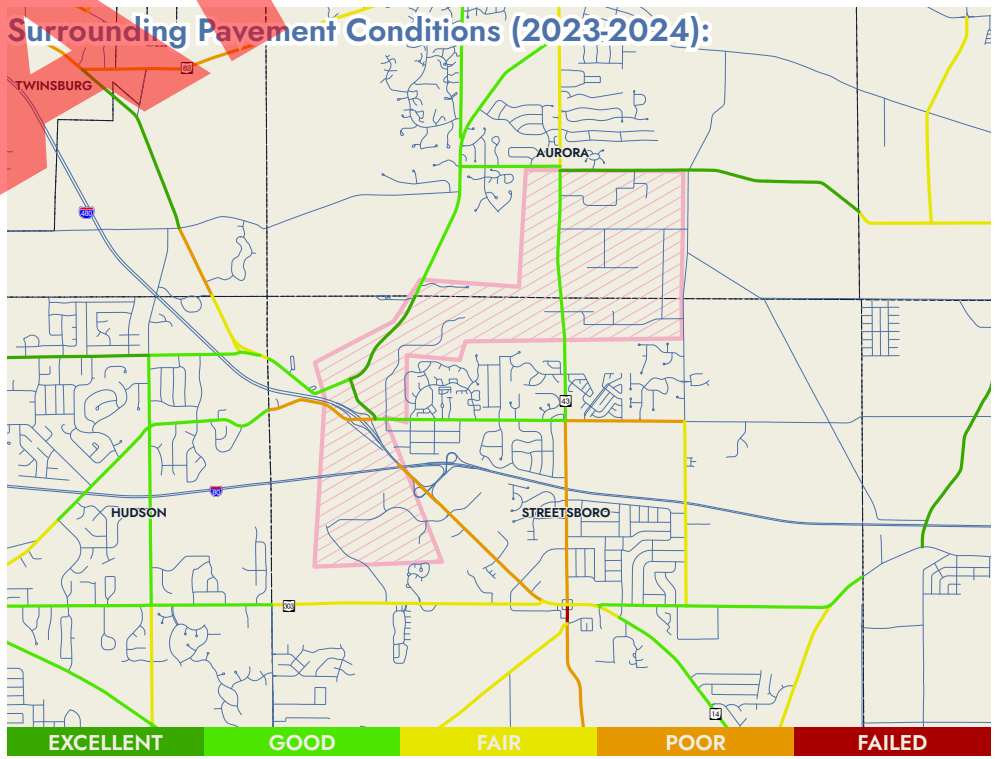
2022 Estimated Jobs:

7,500

Location:



Surrounding Pavement Conditions (2023-2024):



Aurora / Streetsboro Freight Corridor

Top High Crash Segments

The following table identifies the segments in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Roadway Section (segment with limits), Length (MI), Average Daily Traffic, Total Crashes (2020-2022), and Crashes per MI per YR.

LOCATION	LOCAL RANK	OVERALL RANK	ROADWAY SECTION	LENGTH (MI)	AVERAGE DAILY TRAFFIC	TOTAL CRASHES	CRASHES PER MILE PER YEAR
Streetsboro	6	107	SR 43 from Frost Rd to Streetsboro NCL	1.02	11,140	26	8.497

Top High Crash Intersections

The following table identifies the intersections in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Intersection, Approach Average Daily Traffic (Average Daily Traffic entering Intersection), and Total Crashes (2020-2022).

LOCATION	LOCAL RANK	OVERALL RANK	INTERSECTION	APPROACH AVERAGE DAILY TRAFFIC	TOTAL CRASHES
Streetsboro	5	202	S Chillicothe Rd (SR 43) and Crane Center Dr / Ethan Dr	Insufficient Data	9

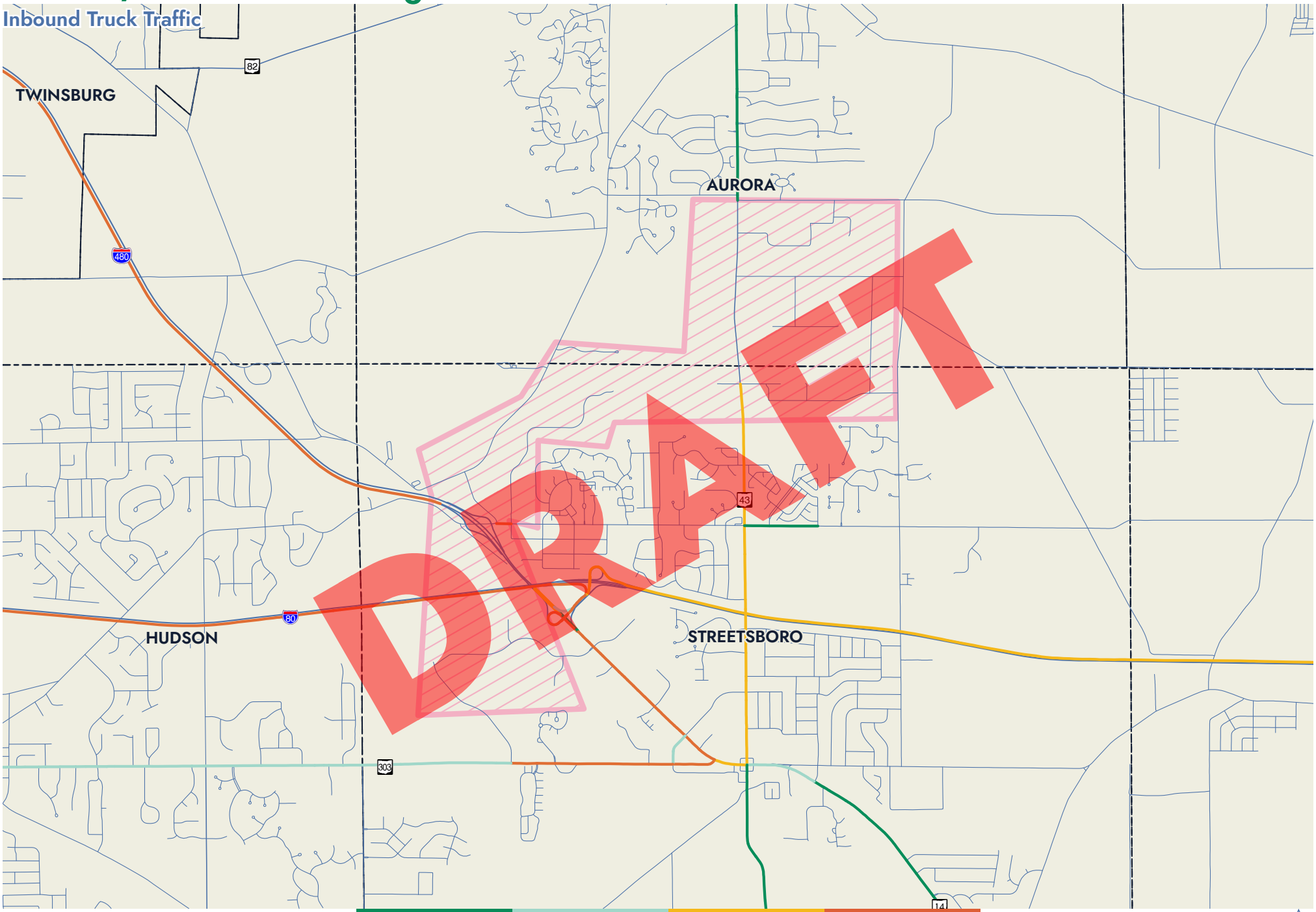
Top Congested Segments

The following table identifies the top segments in or within 300' of the job hub that have been identified in AMATS' *Draft 2024 Congestion Management Process* report. The fields contained within the table are: Location, Name, Miles, Peak Period (part of the day in which peak occurs), Type (description of section), Direction (direction of traffic flow), and % Free Flow (ratio of the speed traffic is traveling in relation to the free flow speed, or the speed at which unimpeded traffic can travel).

LOCATION	NAME	MILES	PEAK PERIOD	TYPE	DIRECTION	% FREE FLOW
Streetsboro	SR 43 from Frost Rd to Streetsboro North Corp Limit	1.016	Mid-Day / Peak PM	Arterial	NB / SB	72.87
Aurora	S Chillicothe Rd (SR 43) from E Mennonite Rd to W Mennonite Rd	0.035	Peak PM	Arterial	NB / SB	77.18
Aurora	S Chillicothe Rd (SR 43) from Aurora South Corp Limit to E Mennonite Rd	1.057	Mid-Day	Arterial	NB / SB	84.34

Aurora / Streetsboro Freight Corridor

Inbound Truck Traffic

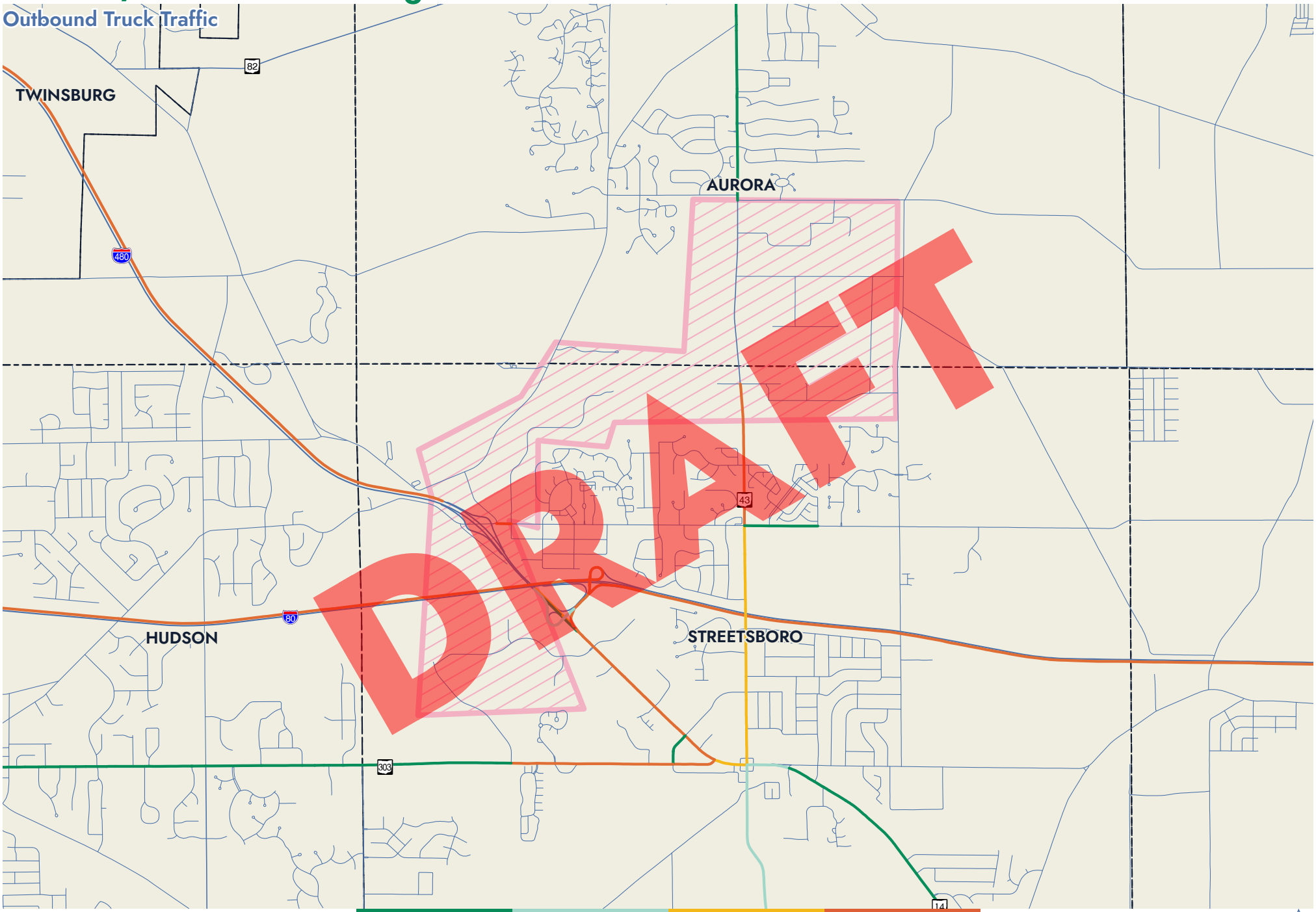


Percentage of Inbound Truck Trips: .1% - 5% | 5.1% - 10% | 10.1% - 15% | 15.1% - 82.6%

0 0.25 0.5 0.75 1 Miles

Aurora / Streetsboro Freight Corridor

Outbound Truck Traffic



Percentage of Outbound Truck Trips: .1% - 5% | 5.1% - 10% | 10.1% - 15% | 15.1% - 82.6%

0 0.25 0.5 0.75 1 Miles

Richfield Freight Corridor

Characteristics:

With 3,500 jobs in finance and insurance, wholesale trade, and transportation warehousing, the Richfield Job Hub is an important regional job hub. This job hub sits in northwestern Summit County, a short drive to either Cleveland or Akron. The Crossroads Development District, a new development off of Wheatley Road, promises potential new businesses easy access to I-271 and I-77. In addition to recent improvements along Wheatley Road, the corridor boasts attractive amenities for employers. Congestion in the area is typically on nearby I-77 or on Brecksville Road.

Key Freeway / Highway Access:

I-77
I-271

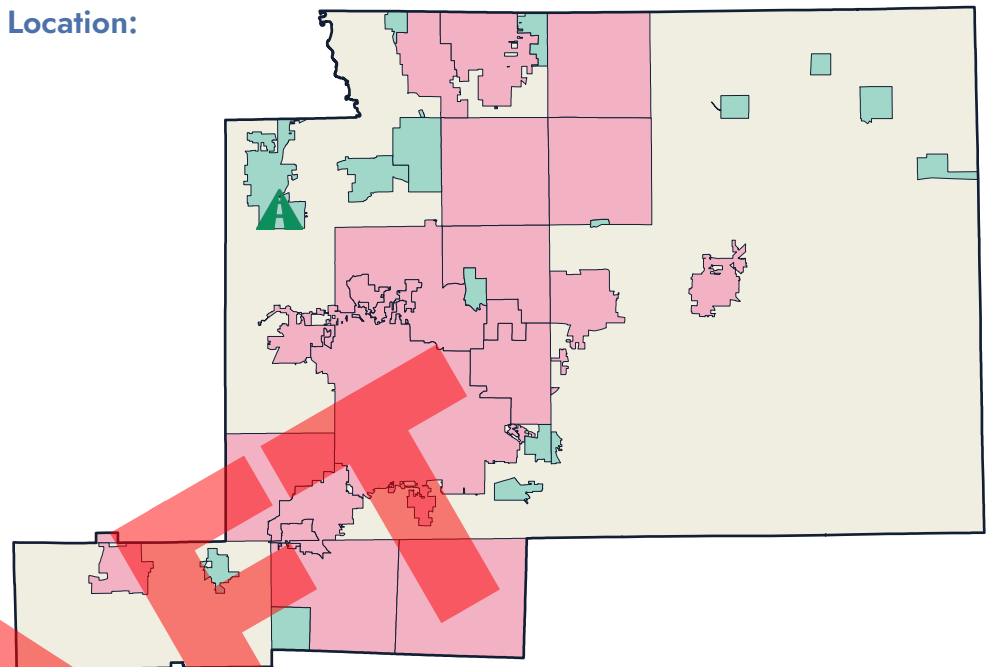
Top 3 Job Types:

1. Finance and Insurance
2. Transportation and Warehousing
3. Wholesale Trade

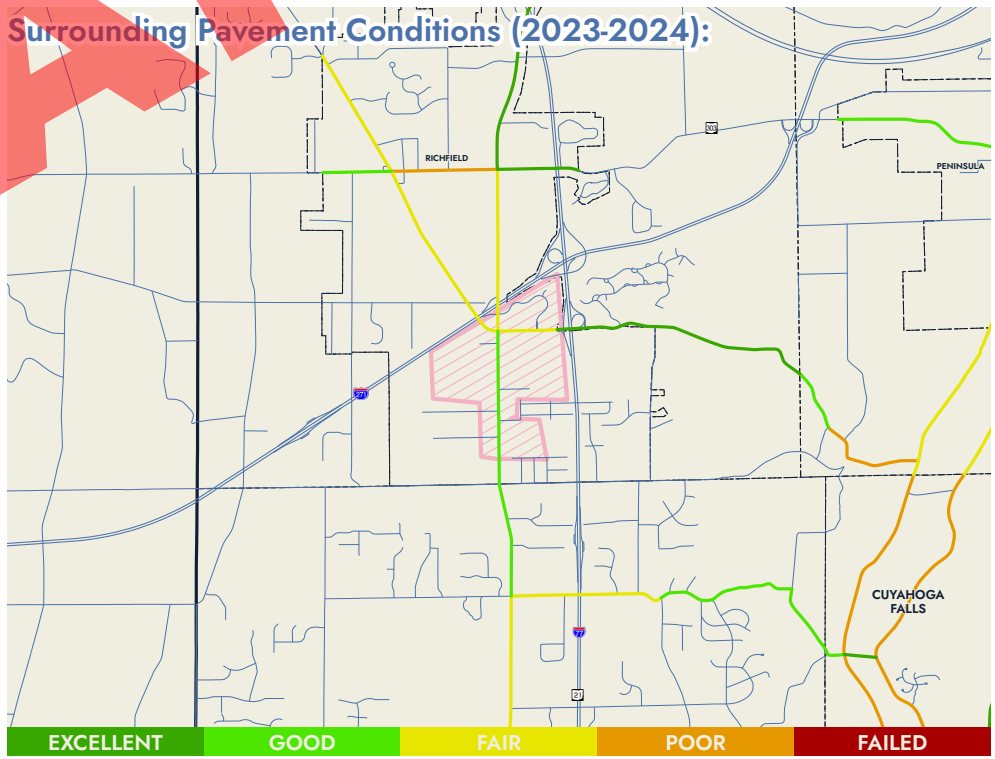
2022 Estimated Jobs:

3,500

Location:



Surrounding Pavement Conditions (2023-2024):



Richfield Freight Corridor

Top High Crash Segments

The following table identifies the segments in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Roadway Section (segment with limits), Length (MI), Average Daily Traffic, Total Crashes (2020-2022), and Crashes per MI per YR.

LOCATION	LOCAL RANK	OVERALL RANK	ROADWAY SECTION	LENGTH (MI)	AVERAGE DAILY TRAFFIC	TOTAL CRASHES	CRASHES PER MILE PER YEAR
No Nearby Segments in the *2020-2022 Traffic Crashes Report*							

Top High Crash Intersections

The following table identifies the intersections in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Intersection, Approach Average Daily Traffic (Average Daily Traffic entering Intersection), and Total Crashes (2020-2022).

LOCATION	LOCAL RANK	OVERALL RANK	INTERSECTION	APPROACH AVERAGE DAILY TRAFFIC	TOTAL CRASHES
No Nearby Intersections in the *2020-2022 Traffic Crashes Report*					

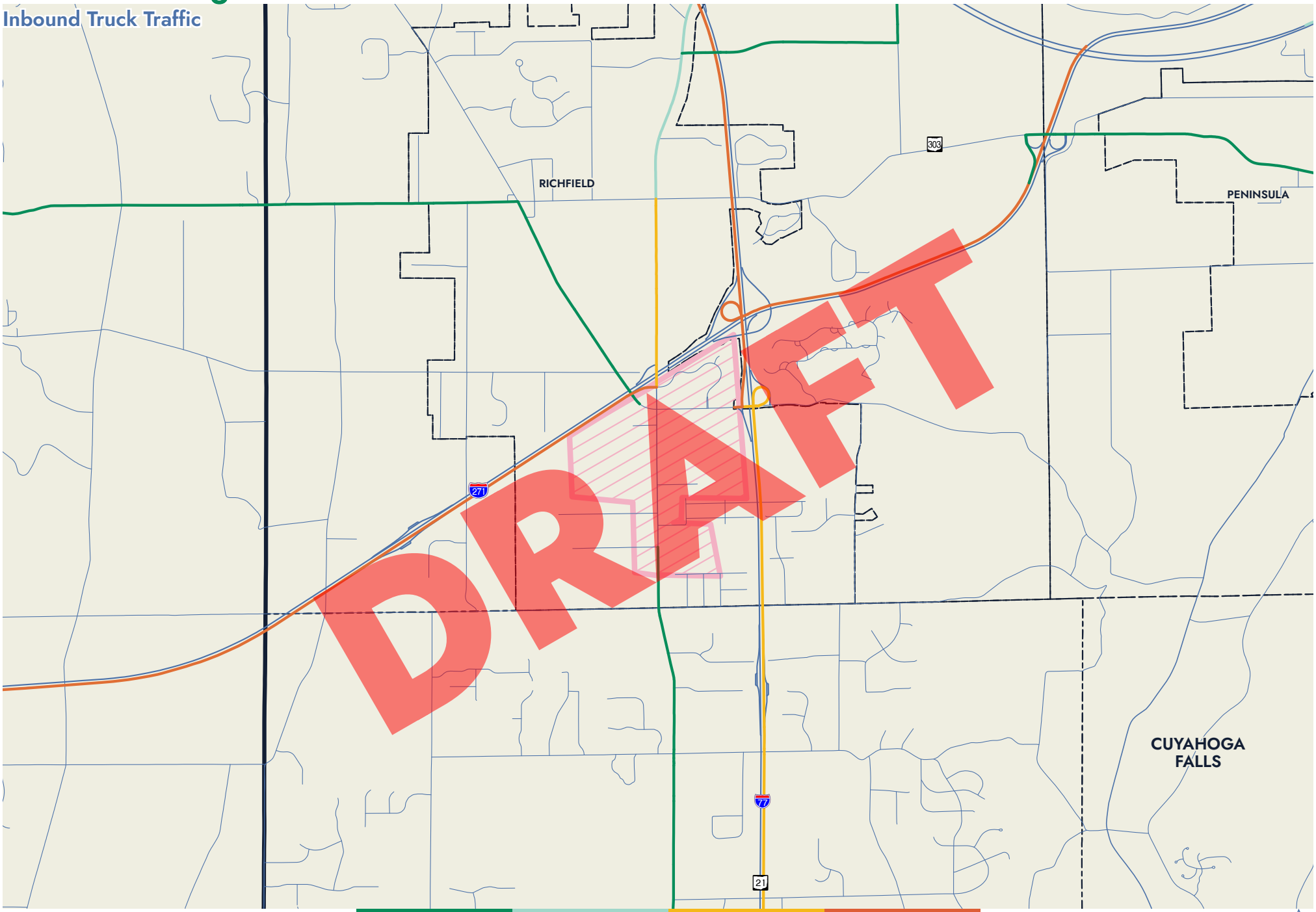
Top Congested Segments

The following table identifies the top segments in or within 300' of the job hub that have been identified in AMATS' *Draft 2024 Congestion Management Process* report. The fields contained within the table are: Location, Name, Miles, Peak Period (part of the day in which peak occurs), Type (description of section), Direction (direction of traffic flow), and % Free Flow (ratio of the speed traffic is traveling in relation to the free flow speed, or the speed at which unimpeded traffic can travel).

LOCATION	NAME	MILES	PEAK PERIOD	TYPE	DIRECTION	% FREE FLOW
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
Richfield	Brecksville Rd from 0.033 Miles South of SR 176 to Broadview Rd / Wheatley Rd (SR 176)	0.033	Peak PM	Arterial	NB / SB	73.26
Richfield	Brecksville Rd from 0.047 Miles North of SR 176 to I-271 NB Off-Ramp / Kinross Lakes Pkwy	0.095	Peak AM / Peak PM	Arterial	NB / SB	79.68

Richfield Freight Corridor

Inbound Truck Traffic

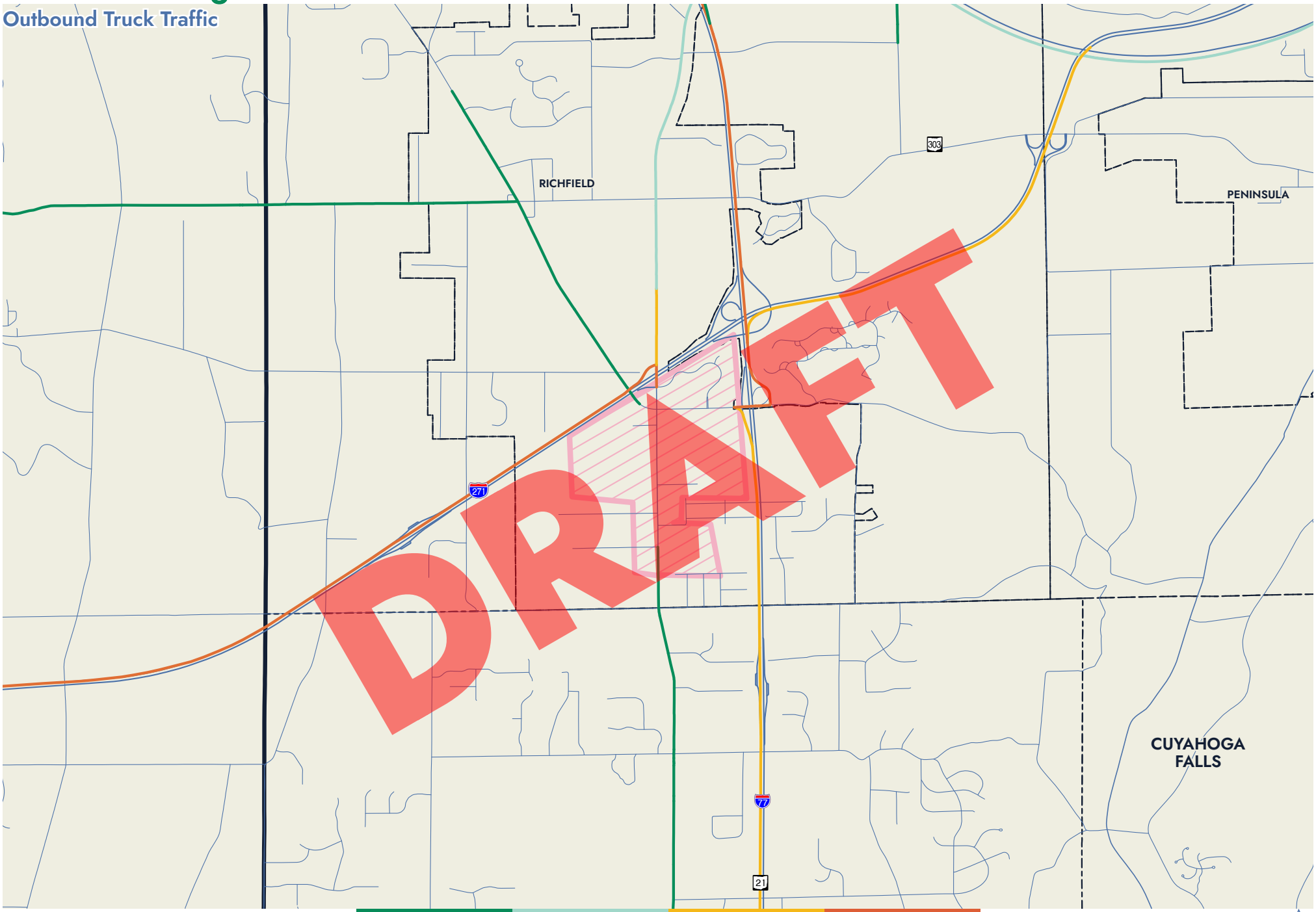


Percentage of Inbound Truck Trips: .1% - 5% | 5.1% - 10% | 10.1% - 15% | 15.1% - 82.6%

0 0.25 0.5 0.75 1 Miles

Richfield Freight Corridor

Outbound Truck Traffic



Percentage of Outbound Truck Trips: .1% - 5% | 5.1% - 10% | 10.1% - 15% | 15.1% - 82.6%

0 0.25 0.5 0.75 1 Miles

Hudson / Stow Freight Corridor

Characteristics:

The Hudson / Stow Job Hub is located north of Akron in Summit County. With 7,500 jobs in manufacturing, wholesale trade, and management of companies and enterprises this job hub is one of the larger hubs in the region. The corridor is near I-80 and is easily accessed by SR 8. The area boasts attractive amenities with vibrant residential communities. Anchored by JOANN Fabrics, this job hub includes several industrial parks with room for growth. Several high crash locations and intersections have been identified near the job hub, and congestion along SR 91 has the potential to impact freight traffic.

Key Freeway / Highway Access:

I-80
SR 8

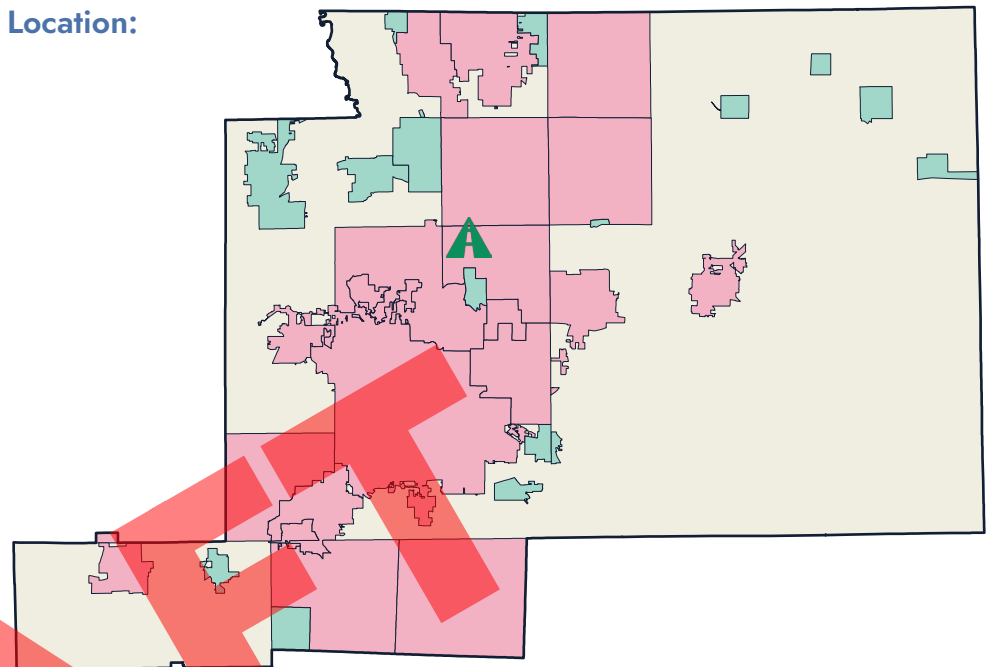
Top 3 Job Types:

1. Manufacturing
2. Wholesale Trade
3. Construction

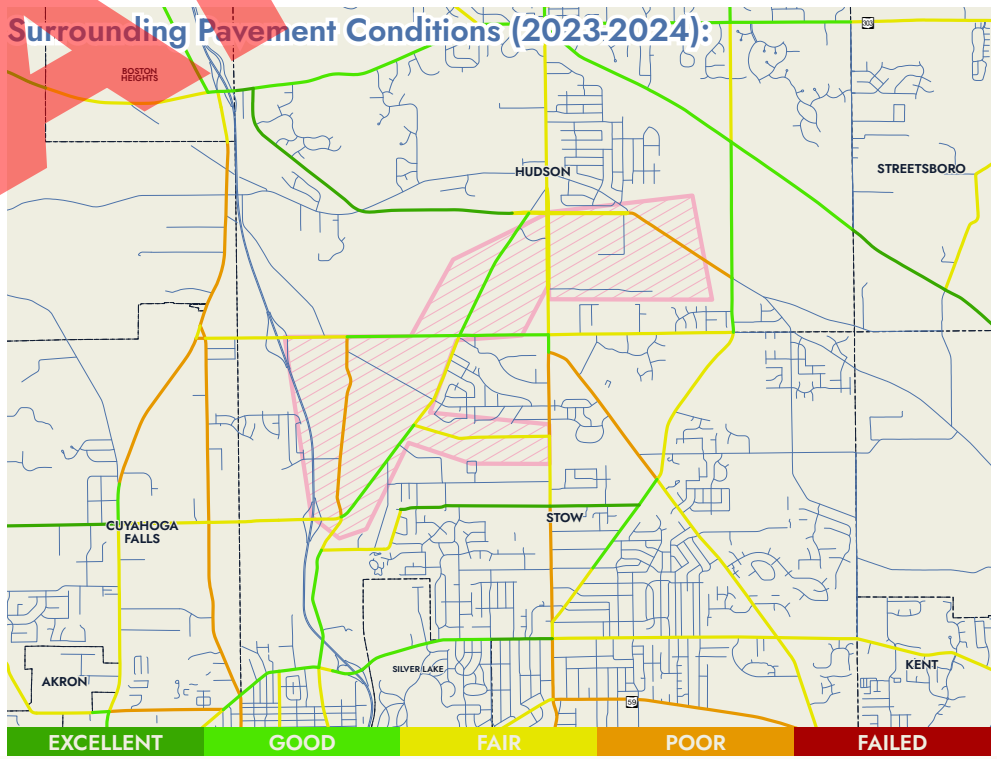
2022 Estimated Jobs:

7,500

Location:



Surrounding Pavement Conditions (2023-2024):



Hudson / Stow Freight Corridor

Top High Crash Segments

The following table identifies the segments in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Roadway Section (segment with limits), Length (MI), Average Daily Traffic, Total Crashes (2020-2022), and Crashes per MI per YR.

LOCATION	LOCAL RANK	OVERALL RANK	ROADWAY SECTION	LENGTH (MI)	AVERAGE DAILY TRAFFIC	TOTAL CRASHES	CRASHES PER MILE PER YEAR
Stow	2	122	Darrow Rd (SR 91) from Stow Rd to Fishcreek Rd	2.22	12,358	40	6.006

Top High Crash Intersections

The following table identifies the intersections in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Intersection, Approach Average Daily Traffic (Average Daily Traffic entering Intersection), and Total Crashes (2020-2022).

LOCATION	LOCAL RANK	OVERALL RANK	INTERSECTION	APPROACH AVERAGE DAILY TRAFFIC	TOTAL CRASHES
Stow	1	33	Hudson Dr and Steels Corners Rd / Allen Rd	Insufficient Data	13
Hudson	1	59	Darrow Rd (SR 91) and Terex Rd	25,550	21
Stow	7	202	Steels Corners Rd and SR 8 SB Ramps	Insufficient Data	9

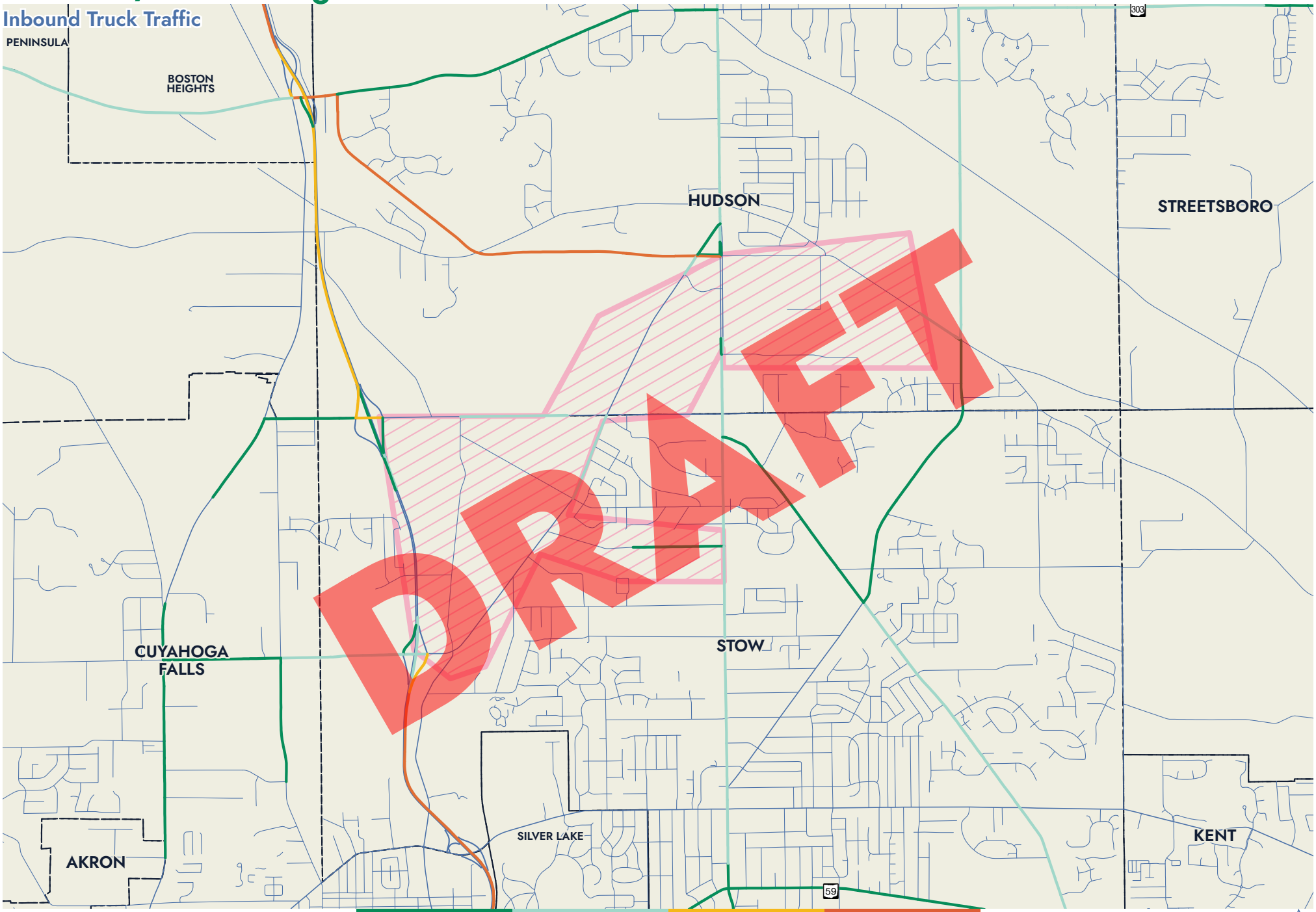
Top Congested Segments

The following table identifies the top segments in or within 300' of the job hub that have been identified in AMATS' *Draft 2024 Congestion Management Process* report. The fields contained within the table are: Location, Name, Miles, Peak Period (part of the day in which peak occurs), Type (description of section), Direction (direction of traffic flow), and % Free Flow (ratio of the speed traffic is traveling in relation to the free flow speed, or the speed at which unimpeded traffic can travel).

LOCATION	NAME	MILES	PEAK PERIOD	TYPE	DIRECTION	% FREE FLOW
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
Stow	E Steels Corners Rd from SR 8 NB Ramps to Hudson Dr / Allen Rd	0.162	Peak PM	Arterial	EB / WB	67.80
Stow	Hudson Dr from Graham Rd to E Steels Corners Rd	1.324	Mid-Day / Peak PM	Arterial	NB / SB	78.36

Hudson / Stow Freight Corridor

Inbound Truck Traffic

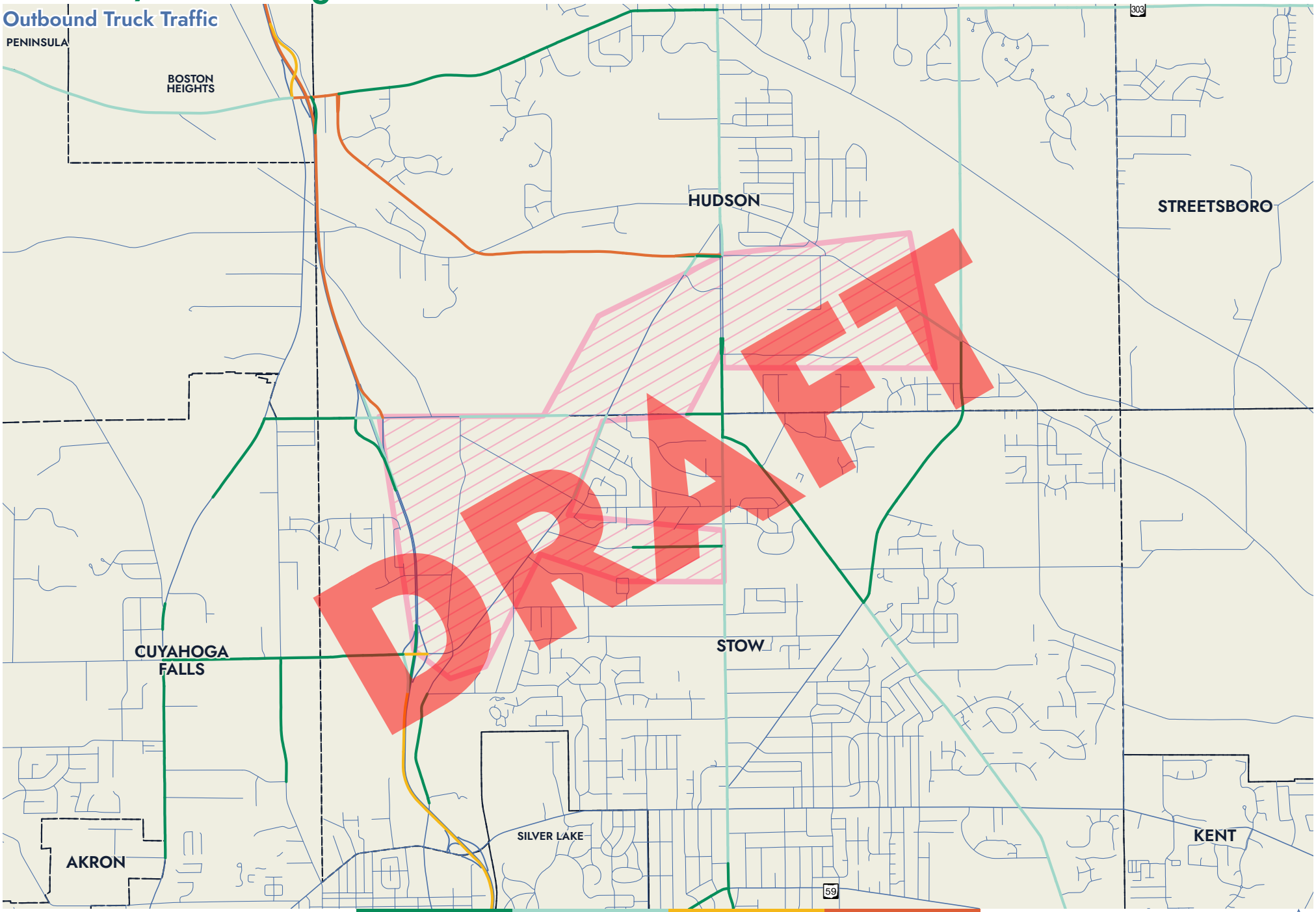


Percentage of Inbound Truck Trips: .1% - 5% | 5.1% - 10% | 10.1% - 15% | 15.1% - 82.6%

0 0.25 0.5 0.75 1 Miles

Hudson / Stow Freight Corridor

Outbound Truck Traffic



Percentage of Outbound Truck Trips: .1% - 5% | 5.1% - 10% | 10.1% - 15% | 15.1% - 82.6%

0 0.25 0.5 0.75 1 Miles

Brimfield Freight Corridor

Characteristics:

The Brimfield Job Hub is located in western Portage County and is easily accessed by I-76 and SR 43. Brimfield benefits from its proximity to Akron, Canton and Kent. Brimfield Township has a growing population, but it also strives to maintain its rural identity. There are an estimated 1,000 jobs in manufacturing, transportation and warehousing, and wholesale trade in this job hub. In 2022, a project to improve the intersection of Tallmadge Road, Mogadore Road and the I-76 off-ramp was completed. This was previously a trouble spot for congestion and crashes. Some congestion exists along Tallmadge Road and Mogadore Road has a moderate level of crashes, both of which can affect freight movement.

Key Freeway / Highway Access:

I-76
SR 43

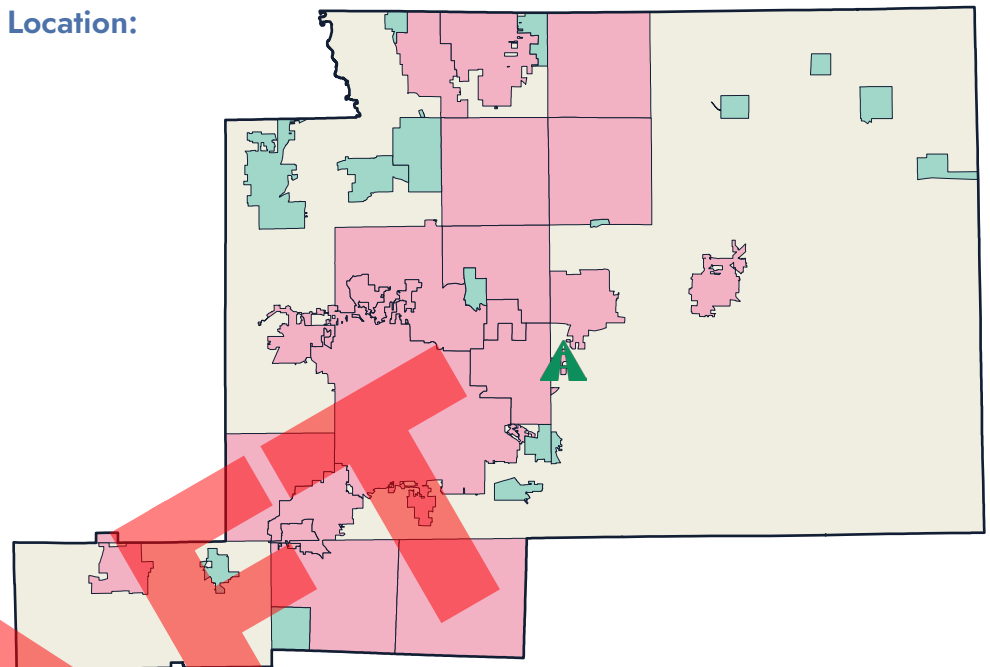
Top 3 Job Types:

1. Manufacturing
2. Transportation and Warehousing
3. Wholesale Trade

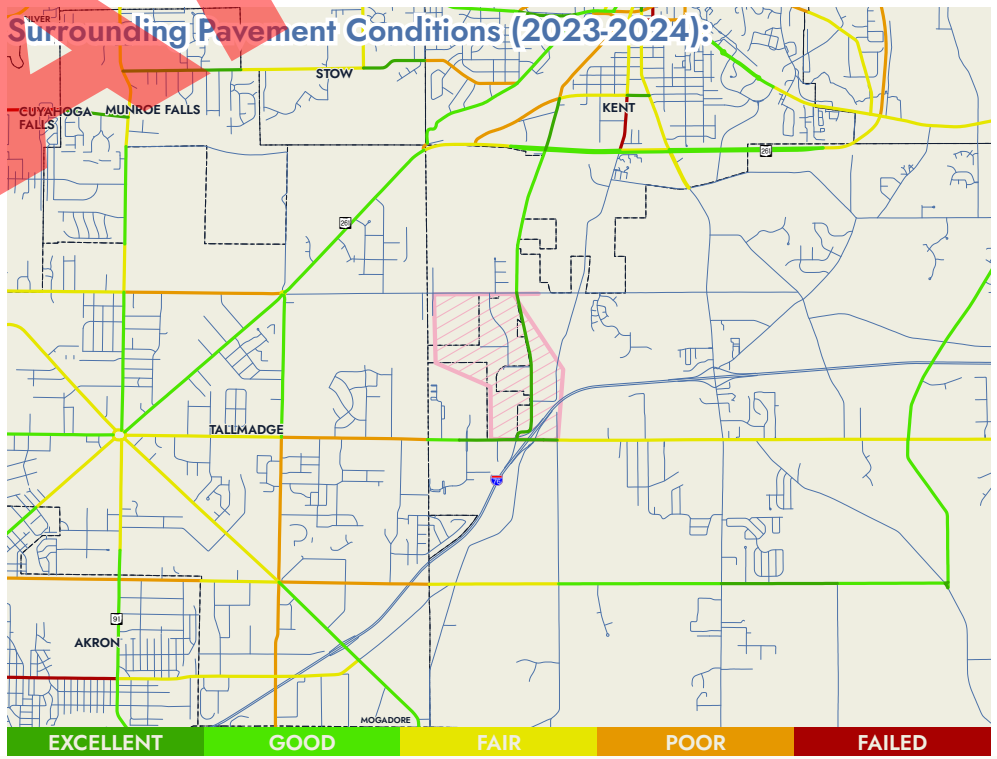
2022 Estimated Jobs:

1,000

Location:



Surrounding Pavement Conditions (2023-2024):



Brimfield Freight Corridor

Top High Crash Segments

The following table identifies the segments in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Roadway Section (segment with limits), Length (MI), Average Daily Traffic, Total Crashes (2020-2022), and Crashes per MI per YR.

LOCATION	LOCAL RANK	OVERALL RANK	ROADWAY SECTION	LENGTH (MI)	AVERAGE DAILY TRAFFIC	TOTAL CRASHES	CRASHES PER MILE PER YEAR
Tallmadge	7	144	Mogadore Rd (CR 81) from Tallmadge Rd (CR 18) to SR 261	2.52	7,470	23	3.042
Brimfield Twp	23	144	Mogadore Rd (CR 81) from Tallmadge Rd (CR 18) to SR 261	2.52	7,470	23	3.042

Top High Crash Intersections

The following table identifies the intersections in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Intersection, Approach Average Daily Traffic (Average Daily Traffic entering Intersection), and Total Crashes (2020-2022).

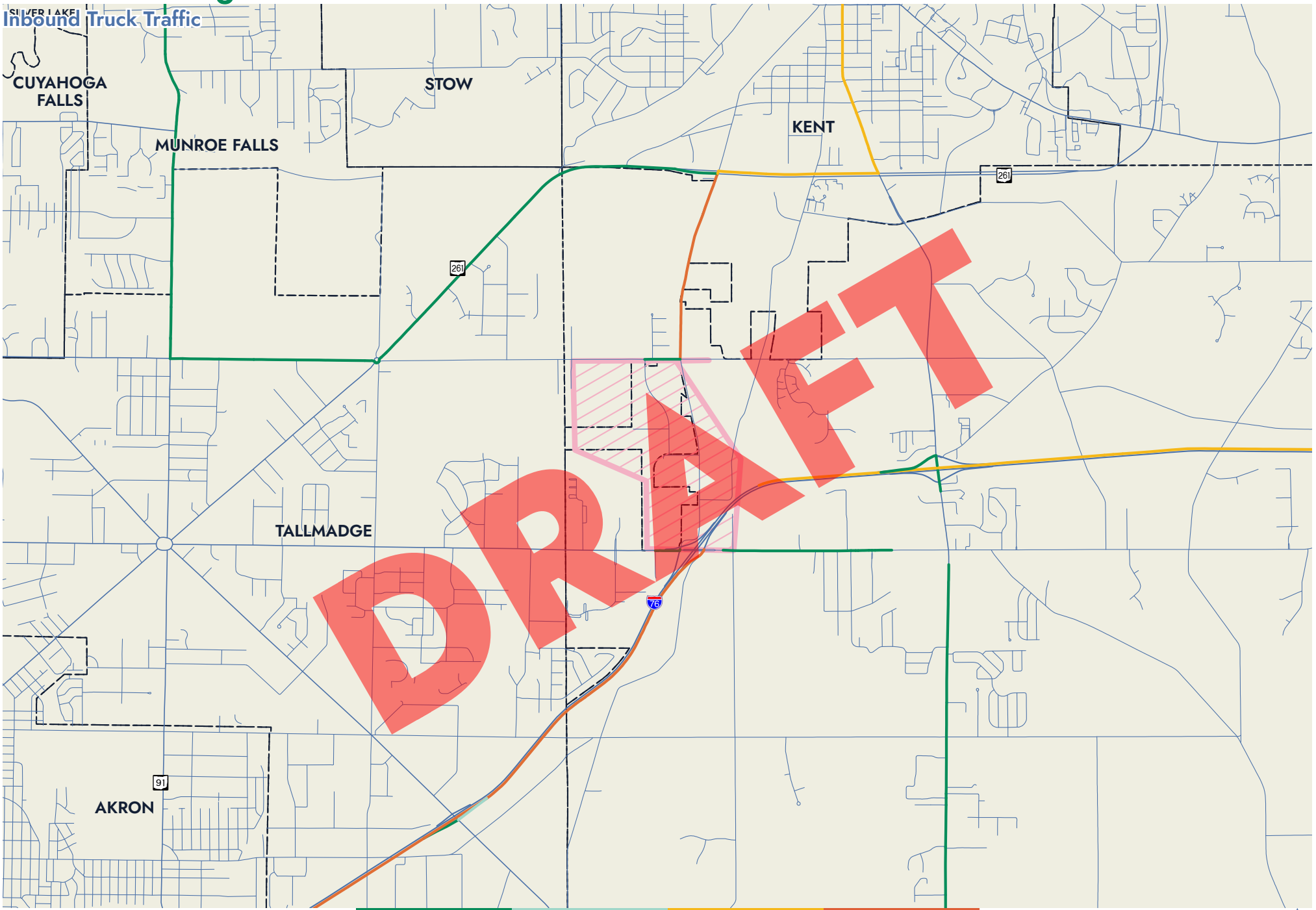
LOCATION	LOCAL RANK	OVERALL RANK	INTERSECTION	APPROACH AVERAGE DAILY TRAFFIC	TOTAL CRASHES
No Nearby Intersections in the *2020-2022 Traffic Crashes Report*					

Top Congested Segments

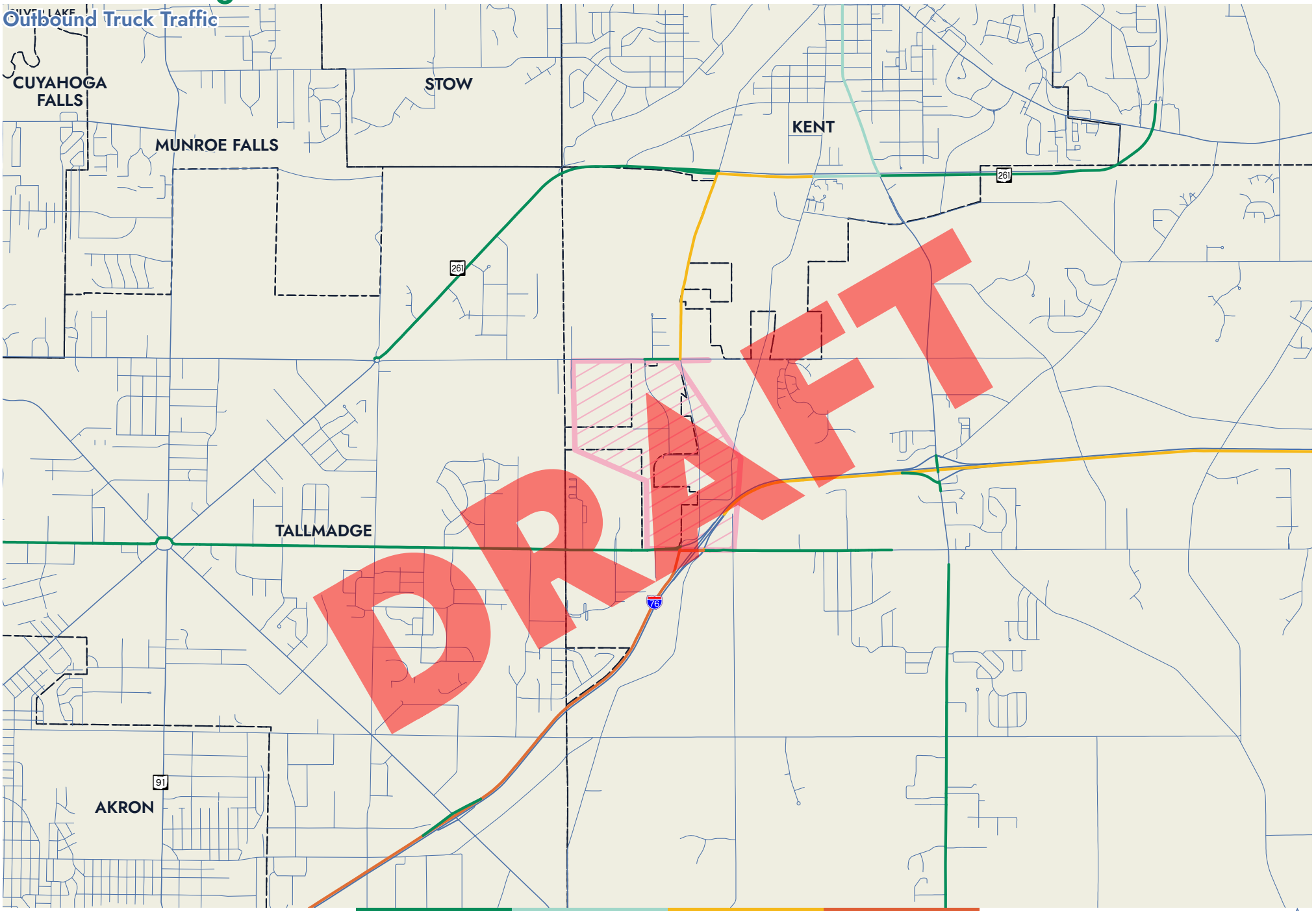
The following table identifies the top segments in or within 300' of the job hub that have been identified in AMATS' *Draft 2024 Congestion Management Process* report. The fields contained within the table are: Location, Name, Miles, Peak Period (part of the day in which peak occurs), Type (description of section), Direction (direction of traffic flow), and % Free Flow (ratio of the speed traffic is traveling in relation to the free flow speed, or the speed at which unimpeded traffic can travel).

LOCATION	NAME	MILES	PEAK PERIOD	TYPE	DIRECTION	% FREE FLOW
Brimfield Twp	Tallmadge Rd from Mogadore Rd / I-76 EB Ramps to Mogadore Rd / I-76 WB On-Ramp	0.144	Peak AM / Mid-Day	Arterial	WB	69.56
Brimfield Twp	Tallmadge Rd from Mogadore Rd / I-76 WB On-Ramp to 0.05 Miles West of Highway View Dr	0.206	Mid-Day	Arterial	WB	84.69
Brimfield Twp	Mogadore Rd / I-76 EB Off-Ramp from I-76 EB Off-Ramp Merge to Tallmadge Rd	0.009	Peak AM	Arterial	NB	92.55

Brimfield Freight Corridor



Brimfield Freight Corridor



South Kent Freight Corridor

Characteristics:

The city of Kent is Portage County's most populous community and a regional center of economic activity. Kent's early industrial prosperity was related to canal access, followed later by railroads. In the early 20th century Kent also became a center of higher-education; Kent State University is currently the State of Ohio's third-largest university. Kent is located on the western edge of Portage County, and the South Kent Freight corridor is located on the southwestern quadrant of the city, bordering Brimfield Township. This job hub has an estimated 800 jobs primarily in manufacturing, health care, and construction industries. This area is well-served by State Route 261, which acts as a bypass, and is close to State Routes 43 and 59. I-76 is located two miles to the south, and two interchanges serve this area. Although there are no capacity or congestion issues in or near the freight corridor, several intersections and segments are areas of high crashes. CSX and W&LE rail lines pass through the area, with limited service to one sand and gravel operation.

Key Freeway / Highway Access:

SR 43
SR 59
SR 261

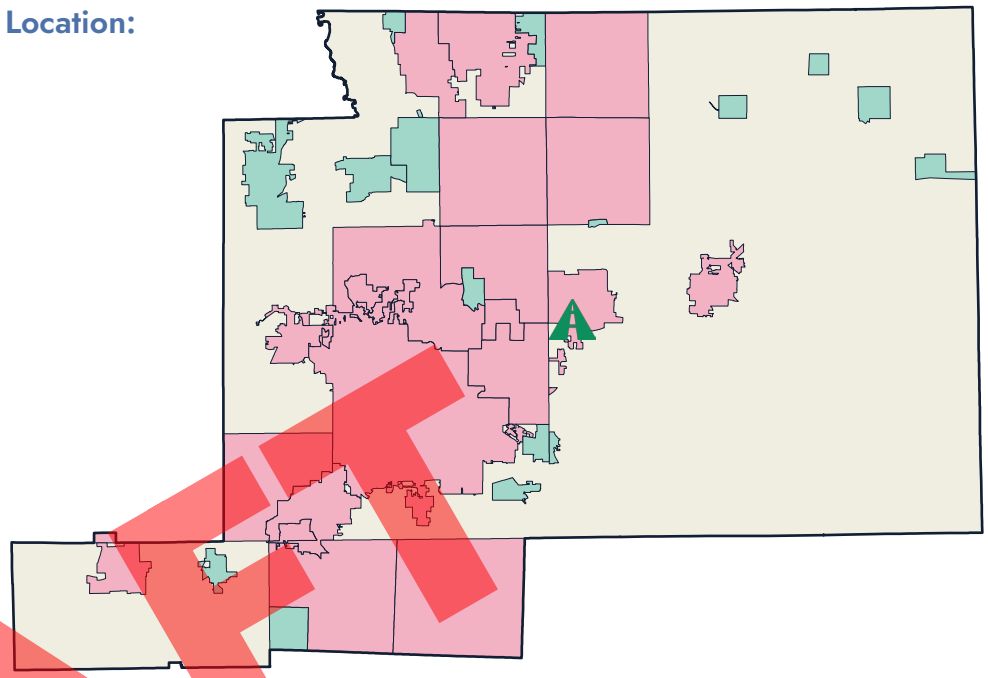
Top 3 Job Types:

1. Manufacturing
2. Health Care and Social Assistance
3. Construction

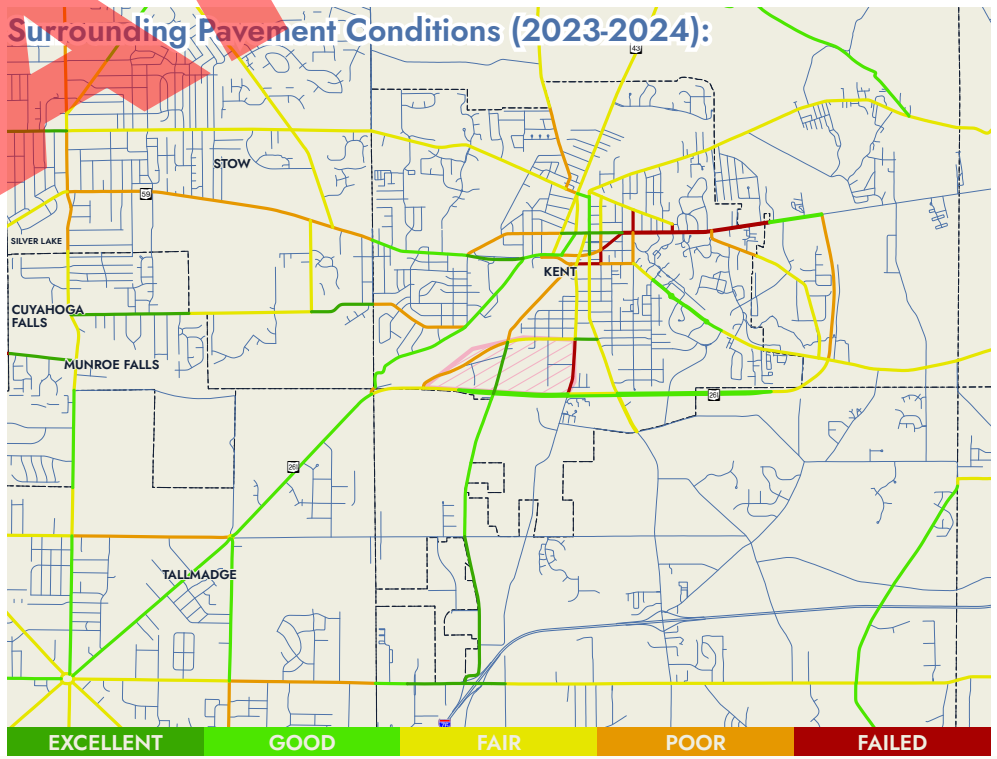
2022 Estimated Jobs:

800

Location:



Surrounding Pavement Conditions (2023-2024):



South Kent Freight Corridor

Top High Crash Segments

The following table identifies the segments in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Roadway Section (segment with limits), Length (MI), Average Daily Traffic, Total Crashes (2020-2022), and Crashes per MI per YR.

LOCATION	LOCAL RANK	OVERALL RANK	ROADWAY SECTION	LENGTH (MI)	AVERAGE DAILY TRAFFIC	TOTAL CRASHES	CRASHES PER MILE PER YEAR
Kent	4	144	Mogadore Rd (CR 81) from Tallmadge Rd (CR 18) to SR 261	2.52	7,740	23	3.042

Top High Crash Intersections

The following table identifies the intersections in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Intersection, Approach Average Daily Traffic (Average Daily Traffic entering Intersection), and Total Crashes (2020-2022).

LOCATION	LOCAL RANK	OVERALL RANK	INTERSECTION	APPROACH AVERAGE DAILY TRAFFIC	TOTAL CRASHES
Kent	1	8	SR 261 and Mogadore Rd	12,785	20
Kent	2	36	SR 261 and Franklin Ave / Sunnybrook Rd	10,525	12

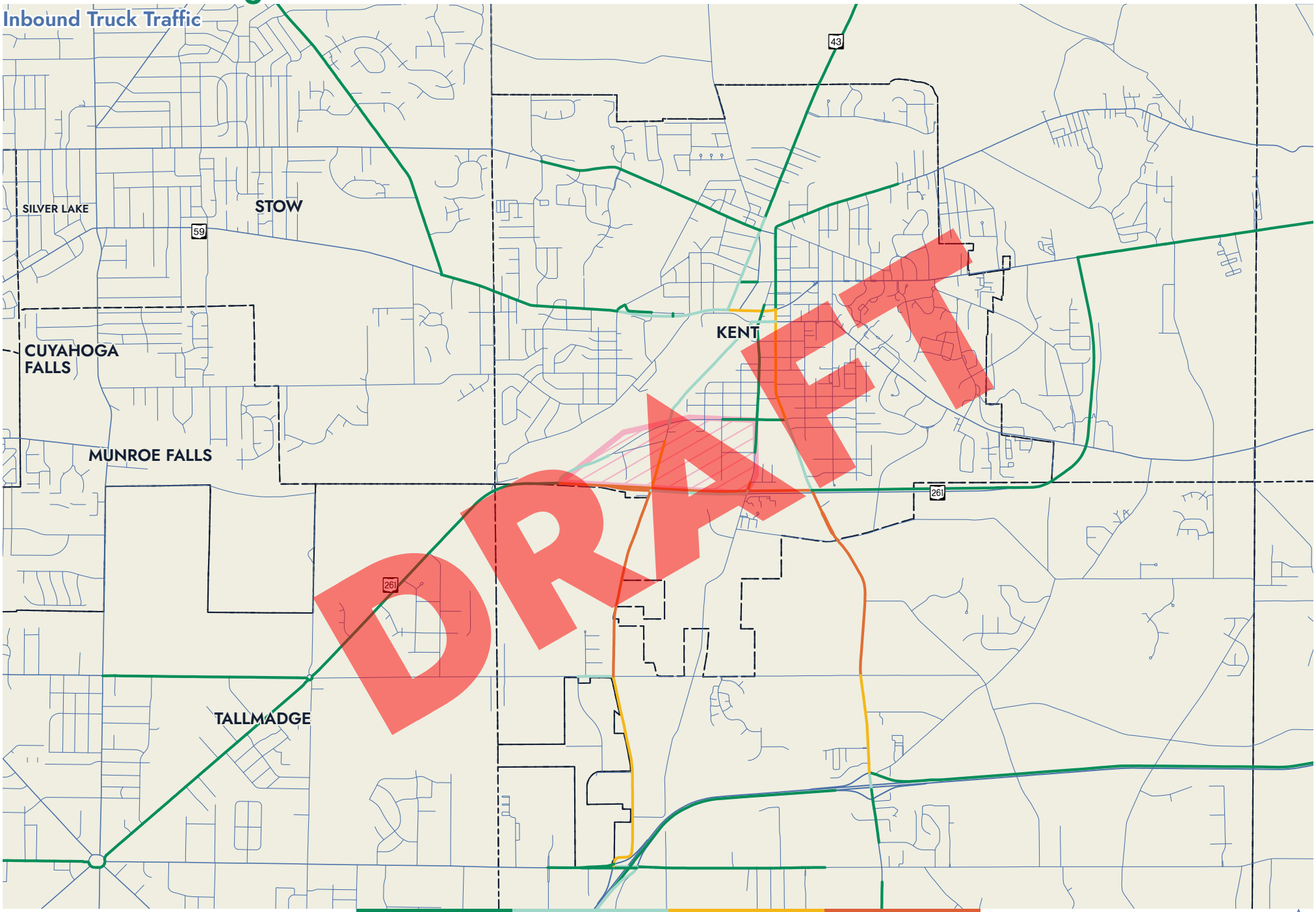
Top Congested Segments

The following table identifies the top segments in or within 300' of the job hub that have been identified in AMATS' *Draft 2024 Congestion Management Process* report. The fields contained within the table are: Location, Name, Miles, Peak Period (part of the day in which peak occurs), Type (description of section), Direction (direction of traffic flow), and % Free Flow (ratio of the speed traffic is traveling in relation to the free flow speed, or the speed at which unimpeded traffic can travel).

LOCATION	NAME	MILES	PEAK PERIOD	TYPE	DIRECTION	% FREE FLOW
Kent	SR 261 from Begin Divide to Mogadore Rd	0.271	Mid-Day / Peak PM	Arterial	EB	84.07
Kent	SR 261 from Franklin Ave to Mogadore Rd	0.602	Mid-Day / Peak PM	Arterial	WB	84.85
Kent	SR 261 from Mogadore Rd to Franklin Ave	0.602	Mid-Day / Peak PM	Arterial	EB	92.83

South Kent Freight Corridor

Inbound Truck Traffic

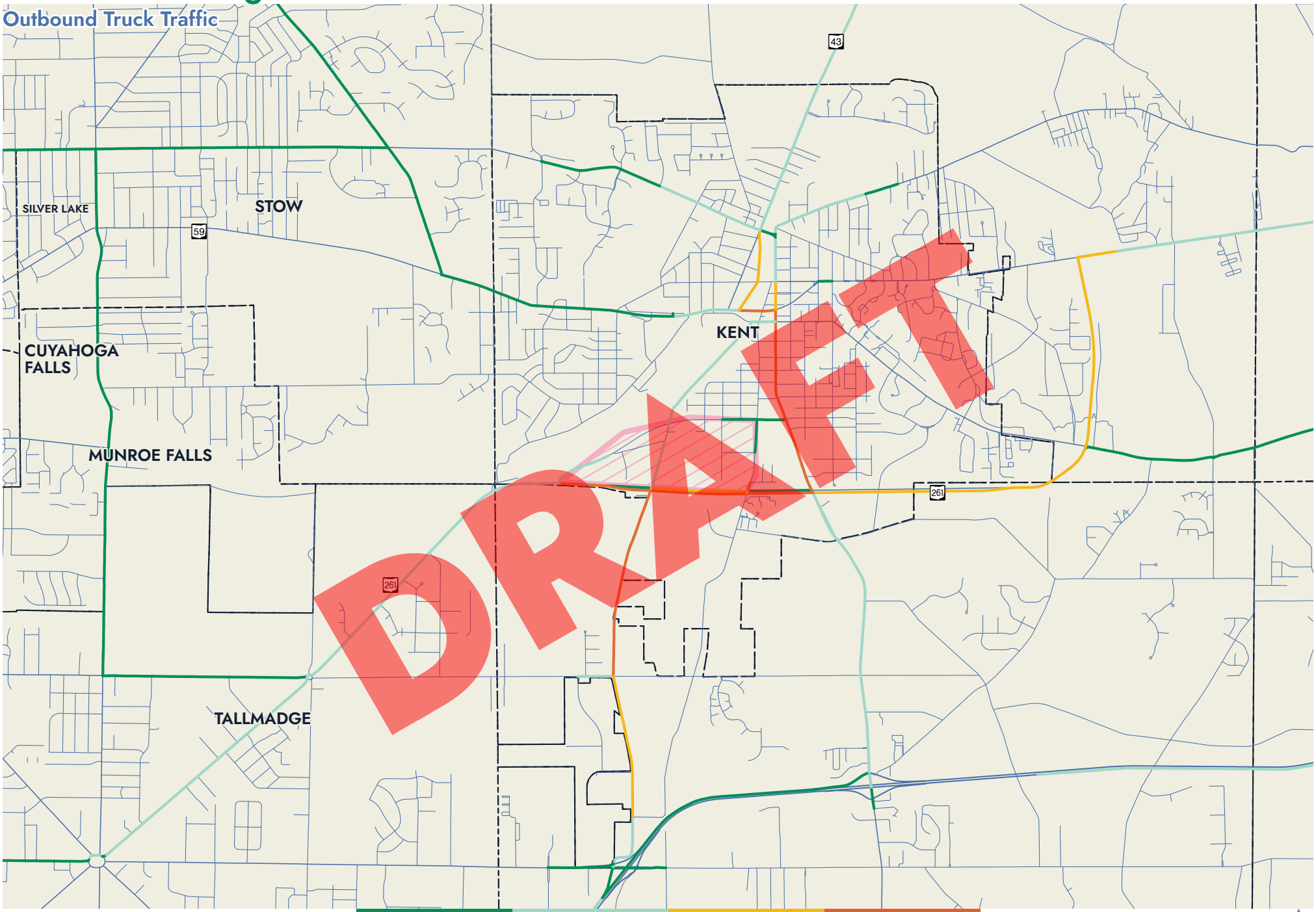


Percentage of Inbound Truck Trips: .1% - 5% | 5.1% - 10% | 10.1% - 15% | 15.1% - 82.6%

0 0.25 0.5 0.75 1 Miles

South Kent Freight Corridor

Outbound Truck Traffic



Percentage of Outbound Truck Trips: .1% - 5% | 5.1% - 10% | 10.1% - 15% | 15.1% - 82.6%

0 0.25 0.5 0.75 1 Miles

Gilchrist Road Freight Corridor

Characteristics:

The Gilchrist Road Job Hub is an industrial road located in eastern Summit County, in the city of Akron. This job hub is easily accessible from I-76 and SR 91. There are 2,800 jobs in manufacturing, transportation and warehousing, and wholesale trade. The job hub is small in geography but is very dense with employers. With a 54 acre undeveloped industrial park located within the job hub it has potential room to expand. Freight traffic can experience congestion along the nearby I-76 corridor, but there are no other reported congestion issues and only one crash cluster within the job hub.

Key Freeway / Highway Access:

I-76
SR 91

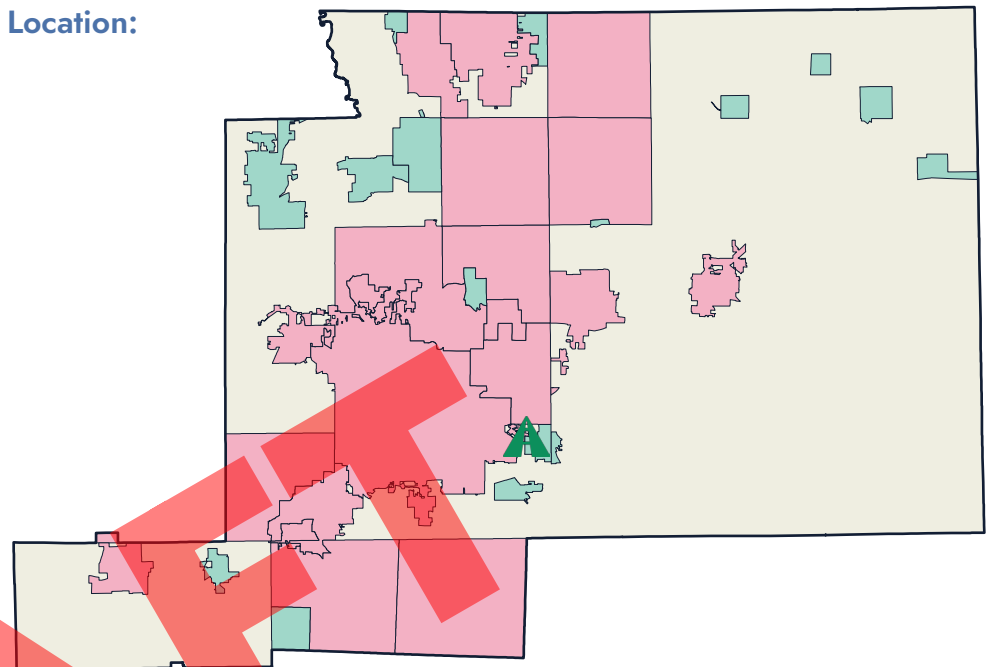
Top 3 Job Types:

1. Manufacturing
2. Transportation and Warehousing
3. Wholesale Trade

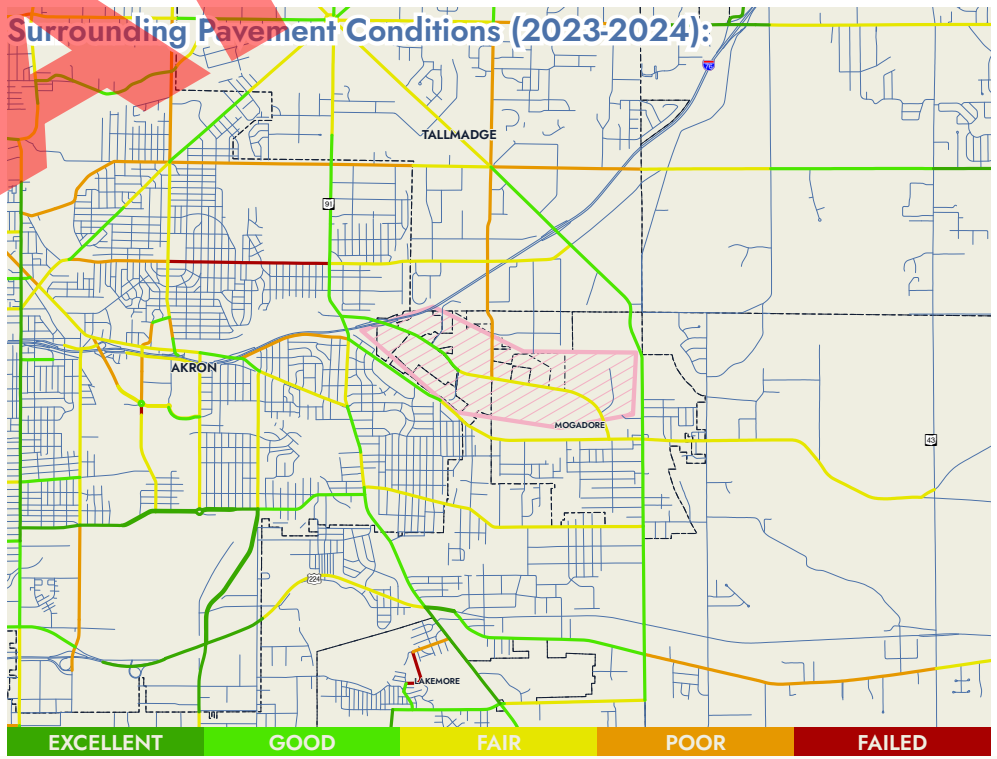
2022 Estimated Jobs:

2,800

Location:



Surrounding Pavement Conditions (2023-2024):



Gilchrist Road Freight Corridor

Top High Crash Segments

The following table identifies the segments in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Roadway Section (segment with limits), Length (MI), Average Daily Traffic, Total Crashes (2020-2022), and Crashes per MI per YR.

LOCATION	LOCAL RANK	OVERALL RANK	ROADWAY SECTION	LENGTH (MI)	AVERAGE DAILY TRAFFIC	TOTAL CRASHES	CRASHES PER MILE PER YEAR
Mogadore	1	67	N Cleveland Ave (SR 532) from Mogadore Rd to Mogadore NCL	1.08	8,543	15	4.630

Top High Crash Intersections

The following table identifies the intersections in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Intersection, Approach Average Daily Traffic (Average Daily Traffic entering Intersection), and Total Crashes (2020-2022).

LOCATION	LOCAL RANK	OVERALL RANK	INTERSECTION	APPROACH AVERAGE DAILY TRAFFIC	TOTAL CRASHES
No Nearby Intersections in the *2020-2022 Traffic Crashes Report*					

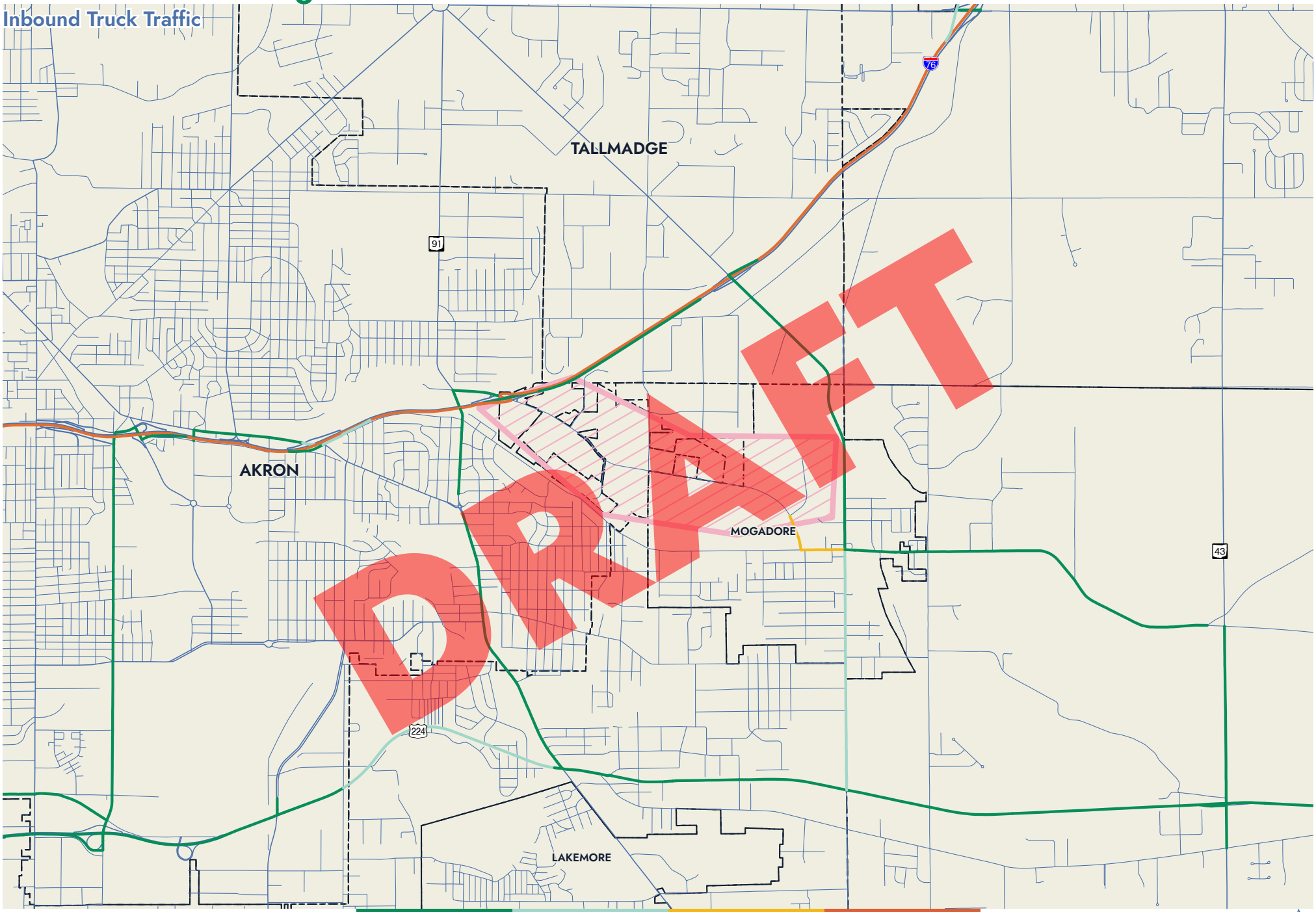
Top Congested Segments

The following table identifies the top segments in or within 300' of the job hub that have been identified in AMATS' *Draft 2024 Congestion Management Process* report. The fields contained within the table are: Location, Name, Miles, Peak Period (part of the day in which peak occurs), Type (description of section), Direction (direction of traffic flow), and % Free Flow (ratio of the speed traffic is traveling in relation to the free flow speed, or the speed at which unimpeded traffic can travel).

LOCATION	NAME	MILES	PEAK PERIOD	TYPE	DIRECTION	% FREE FLOW
No Nearby Intersections in the *2022 Congestion Management Process*						

Gilchrist Road Freight Corridor

Inbound Truck Traffic

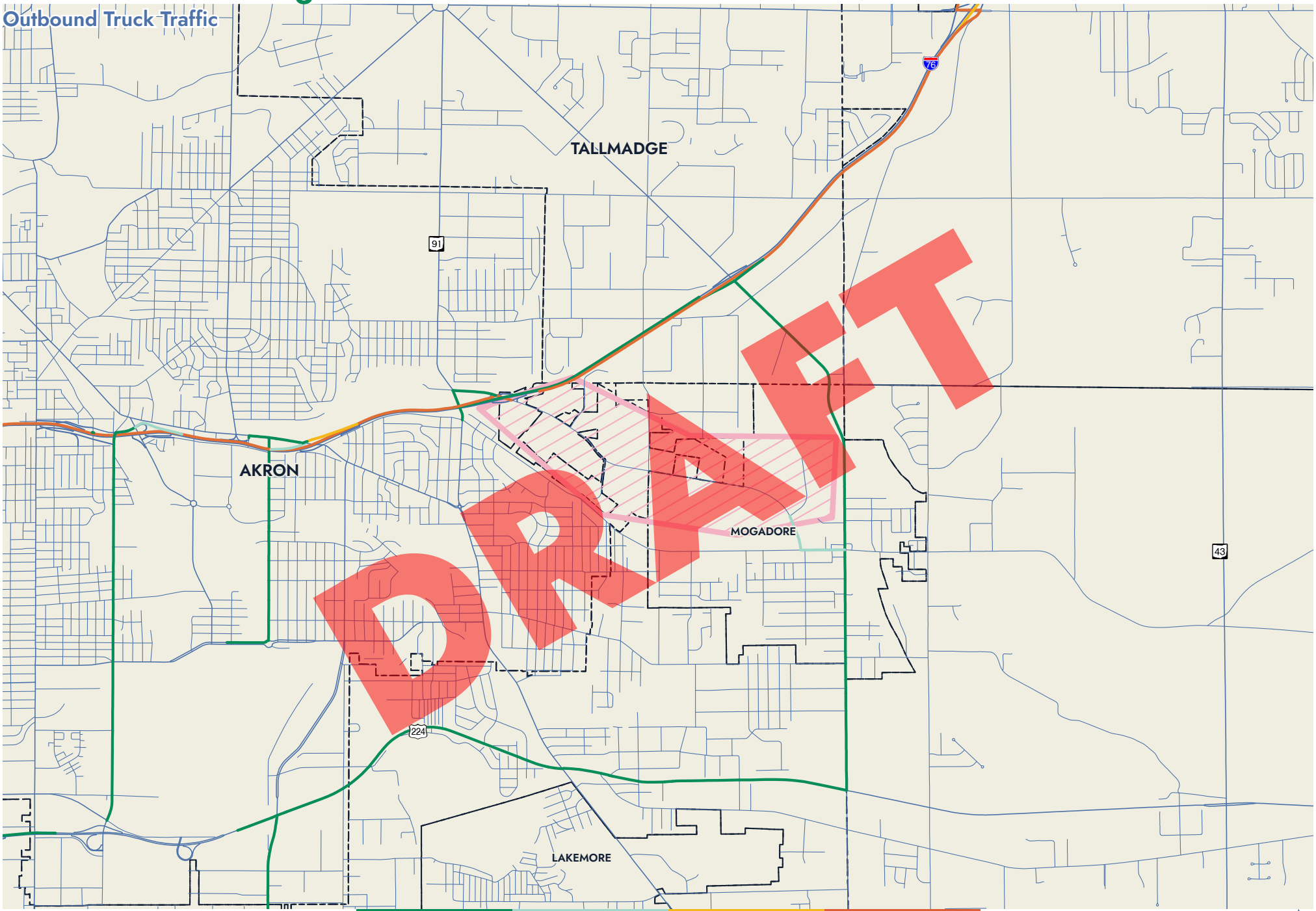


Percentage of Inbound Truck Trips: .1% - 5% | 5.1% - 10% | 10.1% - 15% | 15.1% - 82.6%

0 0.25 0.5 0.75 1 Miles

Gilchrist Road Freight Corridor

Outbound Truck Traffic



Percentage of Outbound Truck Trips: .1% - 5% | 5.1% - 10% | 10.1% - 15% | 15.1% - 82.6%

0 0.25 0.5 0.75 1 Miles

Rolling Acres Freight Corridor

Characteristics:

The Rolling Acres area of Akron was largely developed following the former Rolling Acres Mall's opening in the mid-1970s. This led to significant commercial development along Romig Road and toward the I-77/V. Odom Blvd interchange. The mall began declining significantly in the 1990s and largely closed in 2008. The mall was demolished beginning in 2017 and an Amazon distribution facility was soon thereafter built upon this site. About 3,200 jobs centered primarily on transporation and warehousing, but also on retail trade and real estate are within this job hub, all serving southwest Akron, Barberton, and surrounding communities. This job hub is well-served by both I-76 and I-77, and roads within the job hub more than adequately serve freight traffic. Romig Road is on the AMATS High Injury Network, so safety can be a concern.

Key Freeway / Highway Access:

I-76
I-77

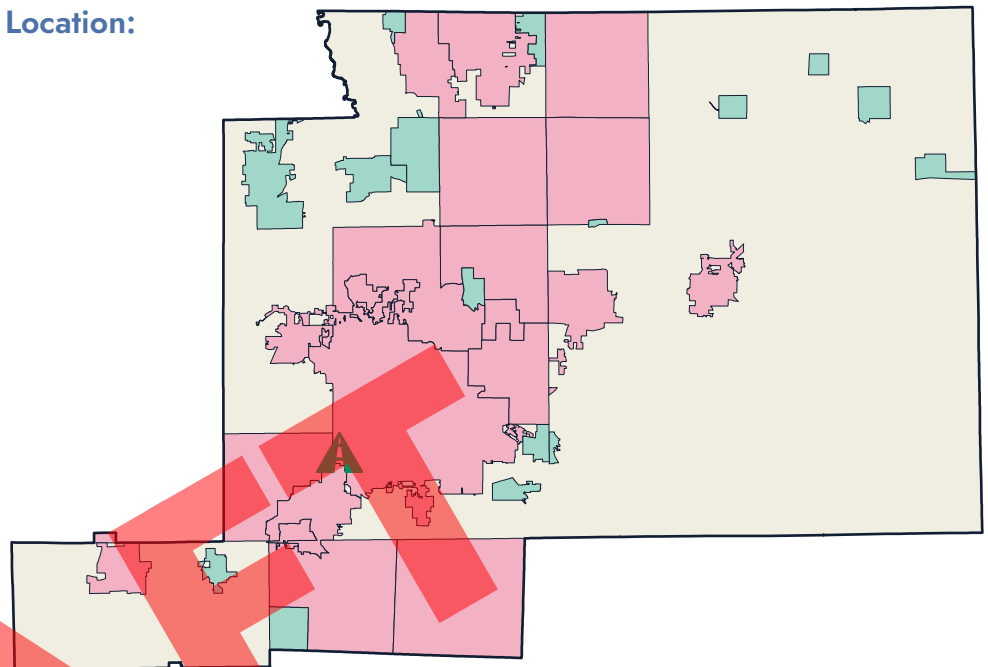
Top 3 Job Types:

1. Transportation and Warehousing
2. Retail Trade
3. Real Estate and Rental and Leasing

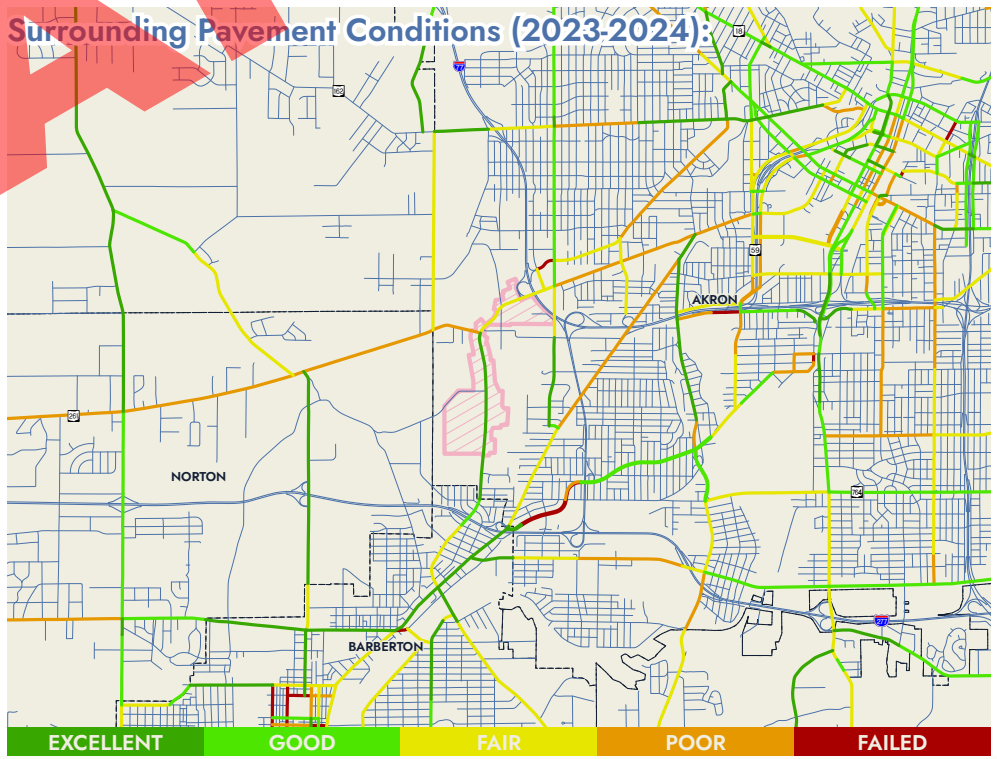
2022 Estimated Jobs:

3,200

Location:



Surrounding Pavement Conditions (2023-2024):



Rolling Acres Freight Corridor

Top High Crash Segments

The following table identifies the segments in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Roadway Section (segment with limits), Length (MI), Average Daily Traffic, Total Crashes (2020-2022), and Crashes per MI per YR.

LOCATION	LOCAL RANK	OVERALL RANK	ROADWAY SECTION	LENGTH (MI)	AVERAGE DAILY TRAFFIC	TOTAL CRASHES	CRASHES PER MILE PER YEAR
Akron	3	5	Vernon Odom Blvd (SR 261) from Collier Rd / Akron CL to Romig Rd	0.36	5,620	8	7.407

Top High Crash Intersections

The following table identifies the intersections in or within 300' of the job hub with the highest number of crashes based on recent crash history. The fields contained within the table are: Location, Local Rank (rank within community), Overall Rank (rank within AMATS), Intersection, Approach Average Daily Traffic (Average Daily Traffic entering Intersection), and Total Crashes (2020-2022).

LOCATION	LOCAL RANK	OVERALL RANK	INTERSECTION	APPROACH AVERAGE DAILY TRAFFIC	TOTAL CRASHES
No Nearby Intersections in the *2020-2022 Traffic Crashes Report*					

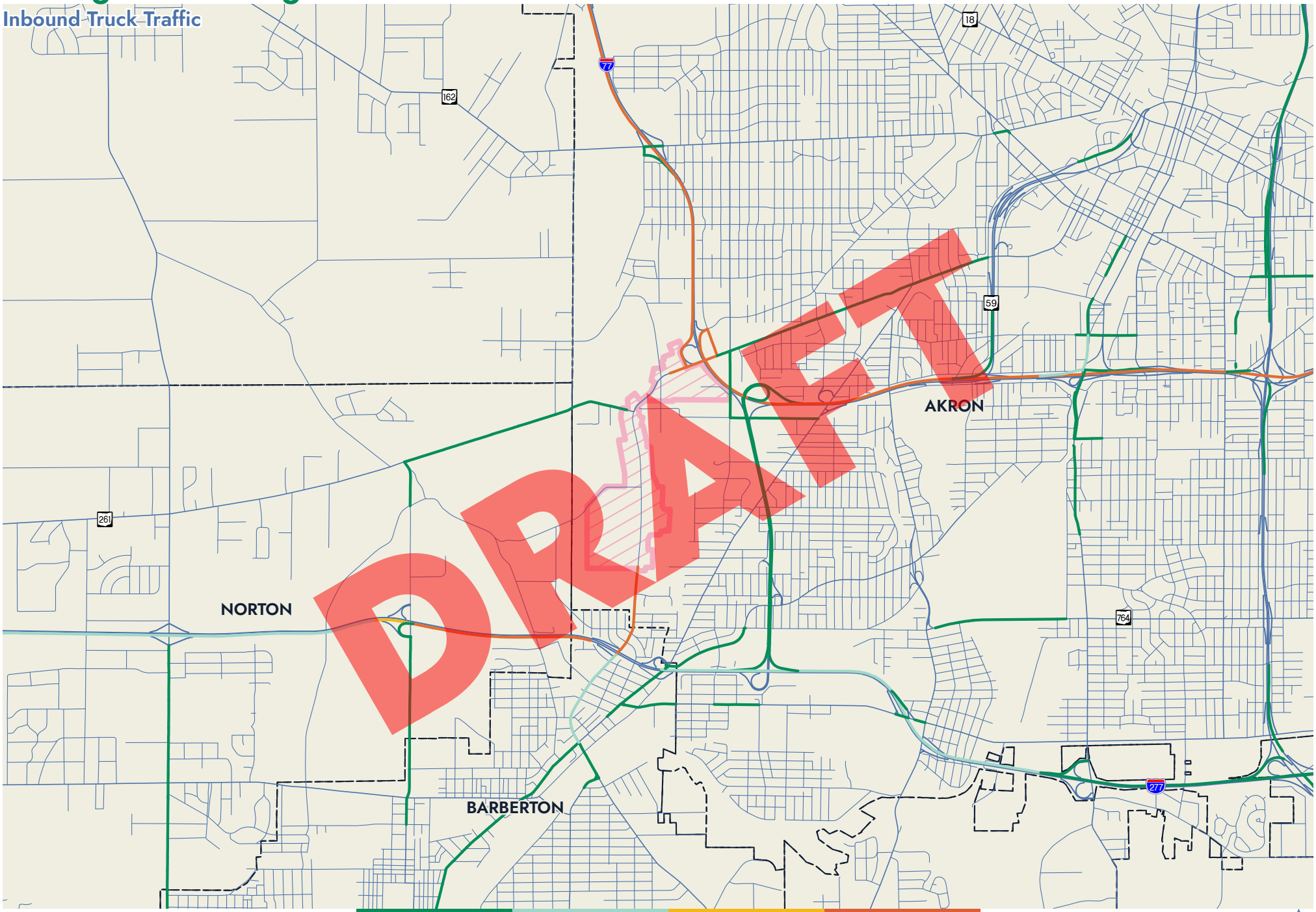
Top Congested Segments

The following table identifies the top segments in or within 300' of the job hub that have been identified in AMATS' *Draft 2024 Congestion Management Process* report. The fields contained within the table are: Location, Name, Miles, Peak Period (part of the day in which peak occurs), Type (description of section), Direction (direction of traffic flow), and % Free Flow (ratio of the speed traffic is traveling in relation to the free flow speed, or the speed at which unimpeded traffic can travel).

LOCATION	NAME	MILES	PEAK PERIOD	TYPE	DIRECTION	% FREE FLOW
Akron	Vernon Odom Blvd (SR 261) from 0.046 Miles West of Romig Rd to Romig Rd	0.046	Peak AM	Arterial	EB / WB	76.47
Akron	Vernon Odom Blvd (SR 261) from Romig Rd to 0.063 Miles North of Romig Rd	0.063	Peak AM / Mid-Day / Peak PM	Arterial	NB / SB	79.84
Akron	Vernon Odom Blvd (SR 261) from 0.03 Miles West of McTaggart Dr to I-77 SB Ramps	0.208	Mid-Day	Arterial	EB / WB	89.58

Rolling Acres Freight Corridor

Inbound Truck Traffic

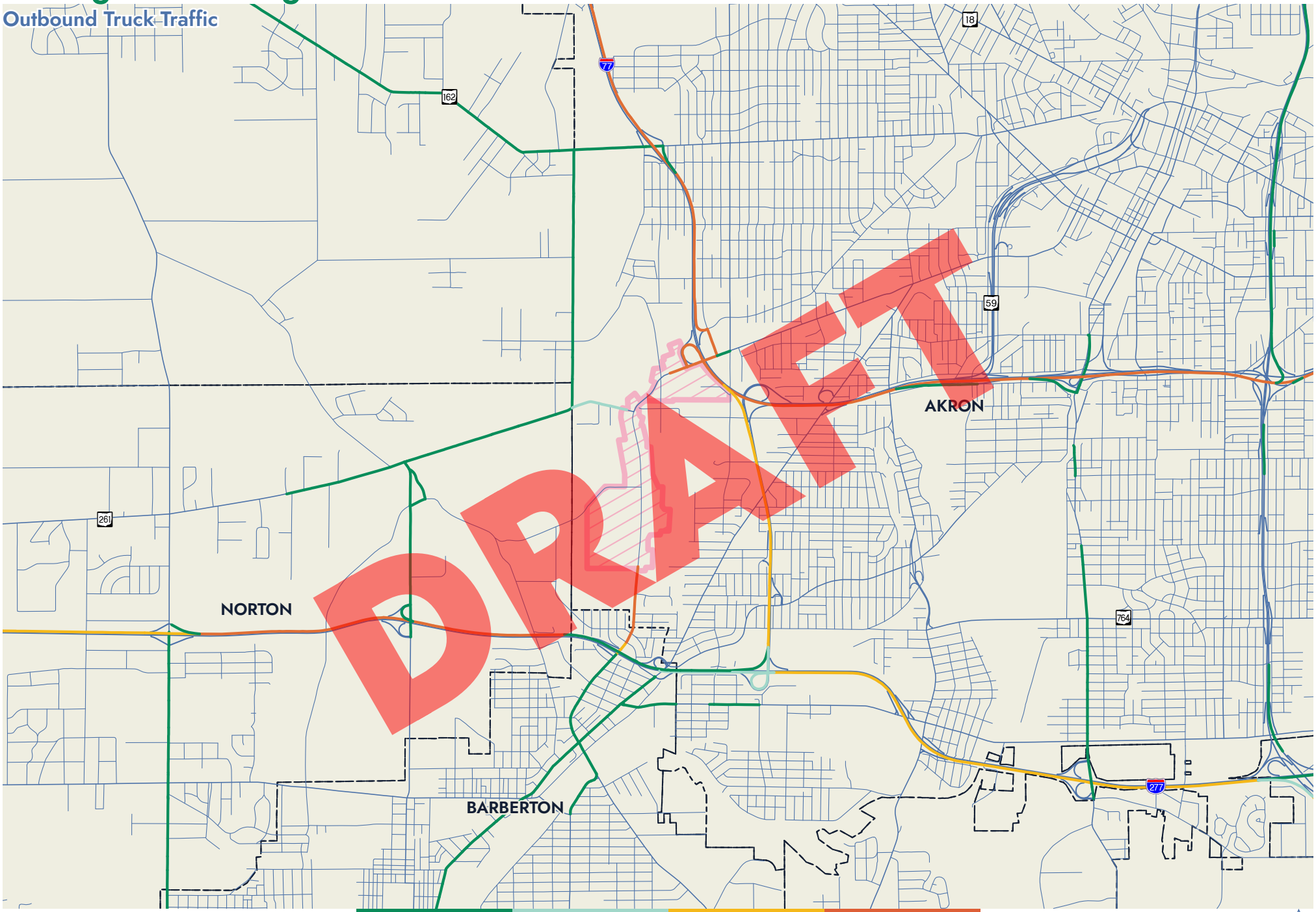


Percentage of Inbound Truck Trips: .1% - 5% | 5.1% - 10% | 10.1% - 15% | 15.1% - 82.6%

0 0.25 0.5 0.75 1 Miles

Rolling Acres Freight Corridor

Outbound Truck Traffic



Percentage of Outbound Truck Trips: .1% - 5% | 5.1% - 10% | 10.1% - 15% | 15.1% - 82.6%

0 0.25 0.5 0.75 1 Miles

PERFORMANCE MEASURES

Current federal regulations require performance management to ensure that state DOTs and MPOs such as AMATS choose the most efficient investments for federal transportation funds.

Performance management focuses attention on national transportation goals, increases the accountability of federal fund programming, and improves project decision-making through performance-based planning. State DOTs and MPOs have established performance goals and will assess this performance over time. The USDOT requires that states and MPOs develop and assess performance measures for areas such as safety, infrastructure condition, traffic congestion, system reliability, vehicle emissions and freight movement.

Specifically, the USDOT will be assessing performance and pavement conditions on the National Highway System (NHS); bridge conditions on the NHS; fatalities and serious injuries (both the number and the rate per vehicle mile traveled) on all public roads; traffic congestion; mobile source emissions; and freight movement on the interstate system.

AMATS will continue to coordinate with ODOT to assess and review factors that influence the level of performance of various transportation modes, and periodically refine the performance targets that will be necessary to maintain or improve operational efficiency.

The assessment of freight performance is measured in terms of mobility and efficiency (travel time, delay and safety) and accessibility and connectivity. Bottlenecks and roadways (or corridors) with particularly high levels of freight movement are singled out for more detailed analysis in terms of the adopted performance measures and goals. Consequently, stakeholders can use performance measures to develop policy objectives that are part of the Regional Transportation Plan. Projects that are essential to the movement of goods are then programmed into the TIP as a part of an integral process. See the AMATS Funding Policy Guidelines for a full discussion of the area's project selection process and criteria.

Travel Time Reliability and Freight Movement Performance Measures

Federal rules 23 CFR 490.507 and 23 CFR 490.607 establish National Highway System 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 (2022-2024) targets are listed in Table 4-1 below:

Table 4-1 | 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 NHS Travel Time Reliabilty	> 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) is defined as the ratio of the longer travel times (80th percentile) to a "normal" travel time (50th percentile). The measures are the percentage of person-miles traveled on the relevant portion of the NHS that are reliable.

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.

The data to assess travel time reliability and establish targets is 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.

AMATS current performance is documented in the following Table 4-2:

Table 4-2 | AMATS Travel Time Reliability

Level of Travel Time Reliability - AMATS

TRAVEL TIME RELIABILITY	2016	2017	2018	2019	2020	2021	AVERAGE	TARGET
Interstate Travel Time Reliability	97.6%	98.6%	98.5%	98.8%	100.0%	100.0%	99.2%	> 85%
Non-Interstate NHS Travel Time Reliabilty	59.9%	89.3%	90.4%	89.3%	97.7%	93.8%	92.1%	> 80%
Interstate Truck Travel Time Reliability 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 also meets the target.

Overall state of Ohio performance is documented in table 4-3 below:

Table 4-3 | Ohio Travel Time Reliability

Level of Travel Time Reliability - AMATS

TRAVEL TIME RELIABILITY	2016	2017	2018	2019	2020	2021	AVERAGE	TARGET
Interstate Travel Time Reliability	90.9%	91.2%	89.3%	89.8%	99.5%	98.4%	93.6%	> 85%
Non-Interstate NHS Travel Time Reliabilty	66.1%	89.9%	90.0%	92.6%	95.7%	95.5%	92.7%	> 80%
Interstate Truck Travel Time Reliability Index	1.40	1.33	1.37	1.36	1.17	1.19	1.28	< 1.50

AMATS identifies 4 projects that will improve travel time reliability in the greater Akron area. The projects total $160.4 million. These projects are also anticipated to benefit truck travel time reliability as well.

Table 4-4 | TIP Projects (FY 2024-2027)

Improving Travel Time Reliability - AMATS TIP Projects

ROAD TYPE	NUMBER OF PROJECTS	CONSTRUCTION $ (MILLIONS)
Interstate	4	$160.4
Non-Interstate NHS	0	$0

Consequently, the assessment of freight performance is measured in terms of mobility and efficiency (travel time, delay and safety) and accessibility and connectivity. Bottlenecks and roadways (or corridors) with particularly high levels of freight movement are singled out for more detailed analysis using these performance measures and goals. The result is to

use performance measures to achieve policy objectives that are part of the Regional Transportation Plan. Projects that are essential to the movement of goods are then programmed into the TIP as part of an integral process.

AMATS is committed to enhancing the performance of the transportation system while also protecting and enhancing the natural environment. Both the AMATS Transportation Improvement Program (TIP) and Regional Transportation Plan meet US DOT requirements for air quality conformity. In the future, AMATS will continue the process of improving air quality by developing a transportation system that meets the intent of federal requirements.

It is also a priority of AMATS to ensure that projects are completed on schedule. AMATS continues to dedicate efforts to reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

The project scoring and evaluation criteria in the AMATS Funding Policy Guidelines are intended to effectively allocate the region's resources. In addition, AMATS coordinates its efforts with other MPOs, along with ODOT, to ensure that projects are fully funded and completed on time.

A full discussion of the AMATS area's performance measures and targets can be found in Appendix H: Performance Measures of the *Transportation Improvement Program FY 2024-2027* (adopted May 18, 2023).

RECOMMENDATIONS

The highest priority needs in the AMATS area regarding freight movement involve improvements to the highway and rail systems. The AMATS *Highway Preservation Needs Report* and the *Congestion Management Process Report (CMP)* address the needs of the AMATS area in terms of highway improvements that streamline the flow of freight in the region. After studying existing and future levels of congestion, the CMP makes recommendations which are then considered for inclusion in the financially constrained *Transportation Outlook 2050*.

Freight movement, by way of trucks, is heavily concentrated on freeways and major state routes. The number of trucks on these roads ranges from 50 to 20,705 trucks per day, with I-271 in Macedonia being the busiest freeway for trucks. Highway improvements such as the Central Interchange project will help improve the efficiency of freight movement on the area's roadways. Recommended grade separations will reduce delays and eliminate conflicts between trains and automobiles.

Since the approval of the current *2020 Freight Plan* in September 2020, ODOT has completed improvements to the South Main/Broadway interchange with I-76/77 just south of downtown Akron. This $113 million project included removing interchanges at Wolf Ledges Parkway and Grant Street, and reconstructing access points and re-aligning Main Street and Broadway.

In addition, there are several upcoming projects that will aid in the improvement of the overall freight network. These projects include:

- The SR-8 Bridge Replacement (SR-8 High Level Bridge over the Little Cuyahoga River Valley in Akron), a $193.3 million project expected to begin construction in late 2023, finishing in 2028 (PID 91710).
- The widening of I-77 in Northern Summit County from SR 21 north to the Cuyahoga County line, including the replacement of several bridges, a $132.2 million project currently under construction, expected to be completed in mid-2026 (PIDs 111404 and 111405).
- The I-76/77/SR 8 Akron Beltway Improvements in the City of Akron, beginning in 2021. This $160 million project includes pavement replacement, additional lanes, and the realignment of several ramps (PID 102329). Estimated completion is expected in mid-2025.
- The I-76 Kenmore Leg Major Rehabilitation is a $143.9 million project expected to begin construction in spring 2026, finishing in 2029 (PID 100713). This project includes full depth road base replacement, widening, bridge replacements and noise walls.

CONCLUSION

The efficient movement of goods is of great importance to a region's economy. The consideration of freight is critical to the transportation planning process to ensure the transportation network promotes multimodal freight movement. The AMATS Freight Report's recommended strategies to improve the freight network in the AMATS region will strengthen the freight network and improve its safety and efficiency. Recommendations made in the *2024 Freight Report* will be considered for inclusion in *Transportation Outlook 2050*.

2024 FREIGHT PLAN

DRAFT

The *2024 Freight Plan* is published by:
Akron Metropolitan Area Transportation Study
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Editorial Comments are welcome.

Director: Curtis Baker

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AMATS

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.

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: **2024 Draft Transit Plan**

DATE: **July 25, 2024**

AMATS, in conjunction with its two local transit agencies METRO RTA and PARTA, is responsible for the periodic development of a regional public transit plan. This AMATS 2024 Transit Plan is in draft form, we the staff are asking the committee to review and offer feedback to finalize the plan in September. The AMATS 2024 Transit Plan summarizes existing services performance measures, current challenges while recommending general goals and strategies. The goals achieve a balance between strengthening the existing system to provide better service to current transit riders and expanding services to satisfy new needs. This plan contains an analysis of the region's existing transit system and sets recommendations that are eligible for inclusion in the upcoming 2050 Regional Transportation Plan.

As part of the public transit plan development process, AMATS collects and analyzes a wide variety of data, including several analyses of the existing transit system and demographics likely to use transit. These analyses help guide the recommendations for improving existing service for those who already use public transit, as well as attracting new passengers. The AMATS 2024 Transit Plan encourages investing in a sustainable vehicle fleet and improvements to increase access to transit. Additionally, the AMATS 2024 Transit Plan recommends transit agencies and communities work together to find the best solutions that meet the needs of their riders.

To view the entire report, please visit the AMATS website at www.amatsplanning.org

The staff recommends approval of this draft document.

AMATS

TRANSIT REPORT

August 2024

DRAFT

Chapter 1: Introduction

The Akron Metropolitan Area Transportation Study (AMATS) is the metropolitan planning organization responsible for ensuring comprehensive transportation planning for Summit and Portage counties and parts of Wayne County. This responsibility includes coordination with various agencies in Northeast Ohio, including two transit providers, METRO RTA in Summit County and the Portage Area Regional Transportation Authority (PARTA) in Portage County. The portions of Wayne County in the AMATS region are currently served by a transportation provider in partnership with Stark Area Regional Transit Authority which operates demand response service to portions of Wayne County. This plan examines the current transit coverage of the AMATS region through a brief overview of the demographics of the region and an examination of the service that the two major transit authorities provide. The plan also provides a brief goals and strategy matrix, which highlights methods that can help sustain and grow the impact of transit.

In planning for all 723,549 potential users in the AMATS region, transit provides a necessary tool to ensure mobility access for disabled, elderly, and low-income residents. Providing a strong and efficient transit system is essential for a dynamic region preparing for the future. METRO RTA and PARTA both provide traditional fixed-route service, operating a combined 39 routes throughout Summit and Portage Counties, as well as express routes to Cleveland.

Both transit agencies also provide demand response services to seniors, individuals with disabilities and workforce trips with smaller buses and vans that operate as complementary service to fixed route service.

At a minimum, transit provides basic mobility to those without access to vehicles. Transit riders use services to get to work, to get to a doctor, to run errands, to visit family and friends, etc. Some transit users may even choose to ride a bus instead of taking a car, saving wear and tear on their vehicle and avoiding parking fees. Additionally, transit reduces emissions and congestion in metropolitan areas, which is a benefit for all users of the roadways. Both transit authorities deploy Compressed Natural Gas (CNG) buses on their fixed routes and in the case of METRO RTA, electric powered buses which have much cleaner emissions for the environment than diesel or gasoline powered vehicles.

Lastly, transit can provide a basis for development, spurring economic development along a bus route by potentially adding jobs to an area. In some cases, transit-oriented development (T.O.D) can be implemented, which is defined as a type of urban development that is designed and constructed with transit access in mind. It usually includes mixed-use development and easy access to transit in a defined area. One of the goals of the area transit plan are for municipalities and transit authorities to work together to develop these areas of mixed use which could include T.O.D. projects that help community

revitalization efforts by creating opportunities for people to access transit, employment, social services, housing and grocery options within a centralized area or along a transit route. This type of development takes a community effort and needs full support from municipalities as well as transit providers to have a positive impact on the well-being of the public and the local economy.

Chapter 2: Existing System

Demographics of the AMATS area

The data described below is analyzed at a Block Group (BG) level of geography. The analysis includes the population characteristics described in the table below. This data is conducted using 2020 Census information and 2022 5-year American Community Survey (ACS) data for the region.

Total Population	Current population and future population projections
Age	Number and percentage of elderly (65+) population
Race	Number and percentage of racial minority groups
Disability	Number and percentage of people with disabilities
Income	Number and percentage of both individuals and households with incomes below the federal poverty level
Limited-English Proficiency	Number and percentage of population that speaks English "less than very well
Carless Households	Number and percentage of households that do not own a vehicle

General Population Trends

The AMATS region includes all of Summit and Portage with a small portion of Wayne County, the area, like any other metropolitan region, encompasses a diverse array of communities with varying densities, land uses, and numerous other physical and human geographical traits. A crucial component of this plan is to examine these demographic characteristics to better understand the population's needs and identify any transportation gaps.

The region's population trend mirrors that of current Midwestern-"rust belt" cities with an industrial history, showing a declining population in a large centralized downtown city. Surrounding cities either shrink or remain stable and most growth occurs within the suburban areas further from the city center.

As of 2020, the City of Akron is Ohio's fifth largest city, containing a population of 190,469. The City's population peaked in 1960 at 290,351, subsequently declining in population as deindustrialization and suburbanization negatively affected most midwestern population centers. Although the City of Akron has lost about one-third of its population since its peak, surrounding Summit County has grown modestly during this same period: 513,569 to 540,428 (1960 to 2020). However, Summit County is modestly down from its peak population (1970) of 553,371.

Portage County grew much more rapidly during the last half of the twentieth century and, in fact, is at its population peak in 2020. For comparison, Portage County had a population of 91,798 in 1960

compared to a 2020 population of 161,791. Although still growing, the 2020 census indicates that this growth appears to have leveled-off; the county only grew 0.2% between 2010 and 2020.

	Summit	Portage	Wayne (AMATS Portion)	Total Region
Total Population	540,428	161,791	19,734	***723,549***

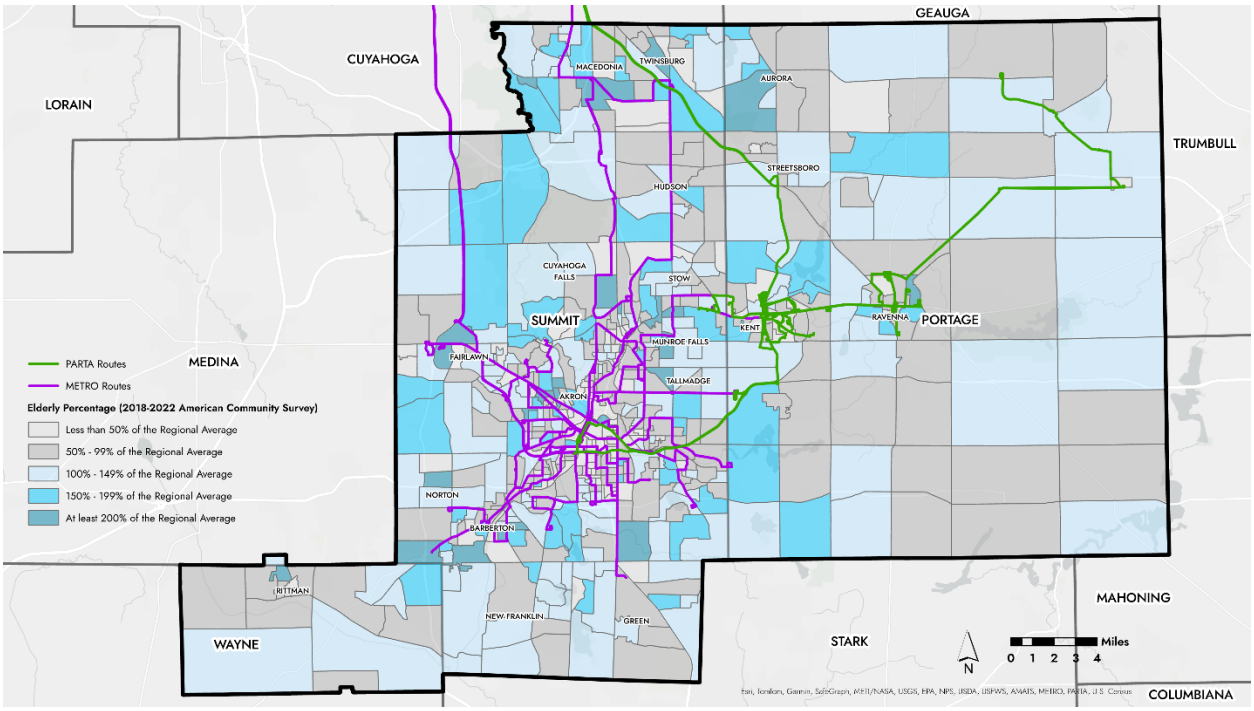
The maps on the following pages [which will be made larger on the final plan] illustrate how the present-day regional population based on demographic information gathered through 2022 American Community Survey Census data is distributed throughout the entire AMATS planning area.

Age

Elderly populations are defined as being aged 65 and older. Within the AMATS planning area, many of the areas of high elderly populations are outside of the high-density urban core—cities like Akron, Barberton, Cuyahoga Falls and Kent—though higher elderly populations can be found throughout the region, even within portions of those cities. Some of the larger percentages of elderly populations are in large suburban condominium or senior specific apartment developments. This population is expected to increase in the following years as the Baby Boomer generation reaches retirement age, many of which will need some sort of transportation assistance as driving personal vehicles becomes more difficult or impossible for many. Below is a chart that depicts the number of individuals who are 65 and older and the percentage of the senior population within each county of the AMATS region.

	Summit	Portage	Wayne/Medina (AMATS Portion)	Total Region
Elderly Population	100,350	27,897	4,105	132,352
Elderly Percentage	18.6%	17.3	19%	18.3%

2022 ACS-5-year Community Survey Data



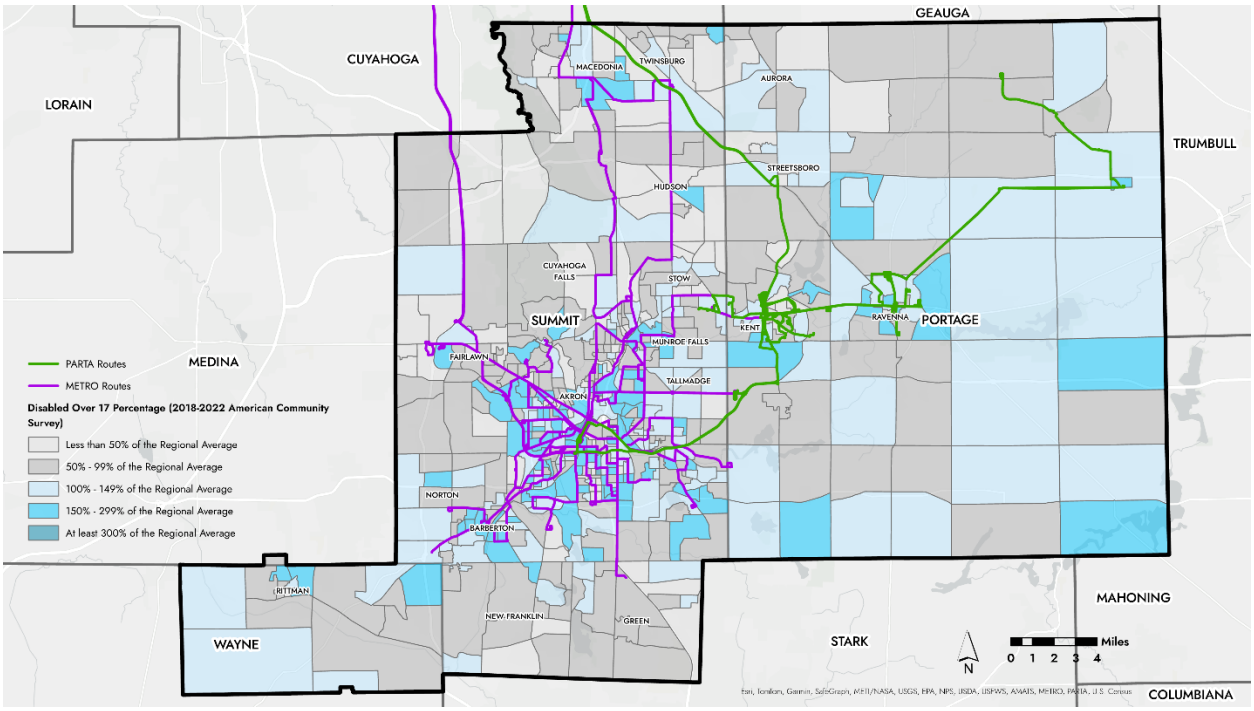
Elderly ACS 2022

Disability

Disabled populations are adults—over the age of 17—who have hearing, vision, cognitive, ambulatory, self-care, or independent living difficulties. The disabled population is more geographically scattered than the other groups analyzed. Some of the areas with the highest percentage of disabled population are within the cities of Akron and Barberton, although both have many areas of below-average disabled populations, often in adjoining BGs. Other areas of above-average disabled populations can be found throughout all portions of the planning area.

	Summit	Portage	Wayne/Medina (AMATS Portion)	Total Region
Disability Population	66,563	18,832	2,561	**87,956**
Disability Percentage	15.8%	15%	15.9%	**15.6%**

2022 ACS-5-year Community Survey Data



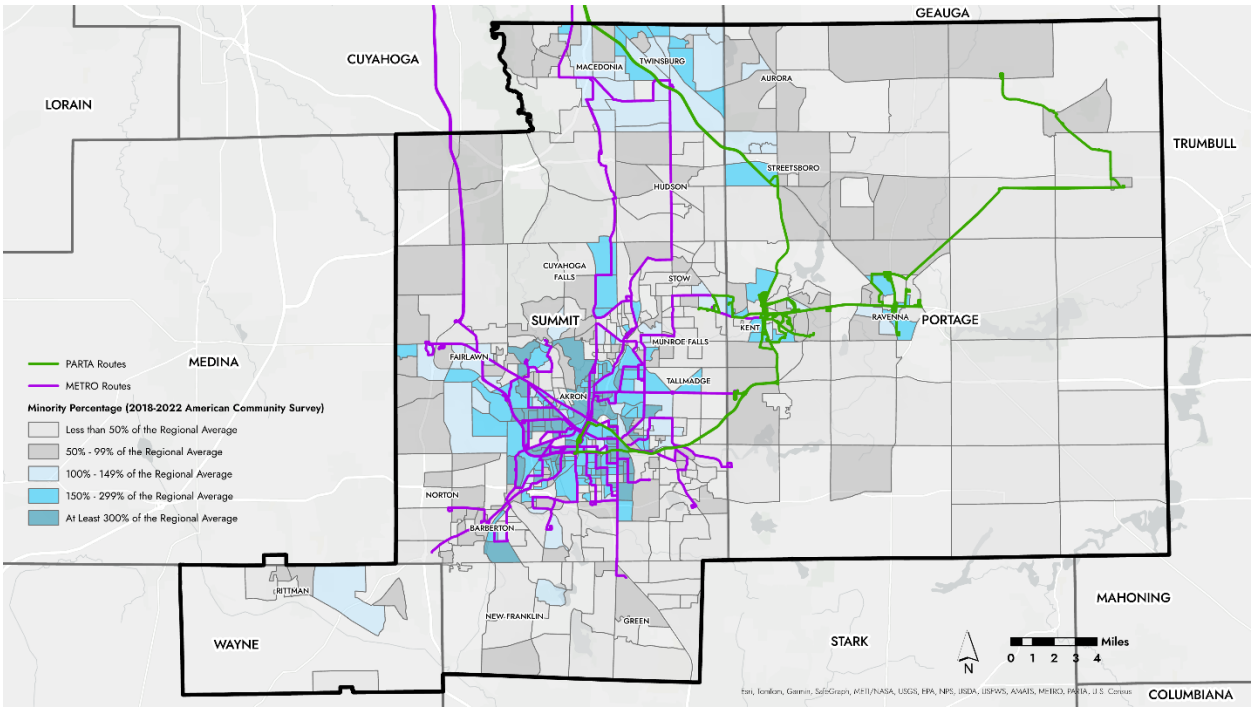
Disability ACS 2022

Race

Minorities are defined as non-white populations. Within the Greater Akron area, black populations are by far the most common minority group, though several other minority populations exist throughout the area. The highest concentrations of minority populations are in the City of Akron, particularly in West Akron and, to a slightly lesser extent, in the Middlebury, East Akron, and North Hill sections of the city. There is also a high minority population in the Twinsburg Heights section of Twinsburg Township. Other notable concentrations of minority populations can be found in portions of the cities of Barberton, Kent, Ravenna, Streetsboro and Twinsburg, and Copley and Twinsburg townships. Summit County has far more racial diversity than the balance of the planning region. Below is a chart that depicts the number of minority individuals and a percentage of the minority population within each county of the AMATS region.

	Summit	Portage	Wayne/Medina (AMATS Portion)	Total Region
Minority Population	129,800	18,437	1,305	149,542
Minority Percentage	24%	11.4%	6%	22.52%

2022 ACS-5-year Community Survey Data



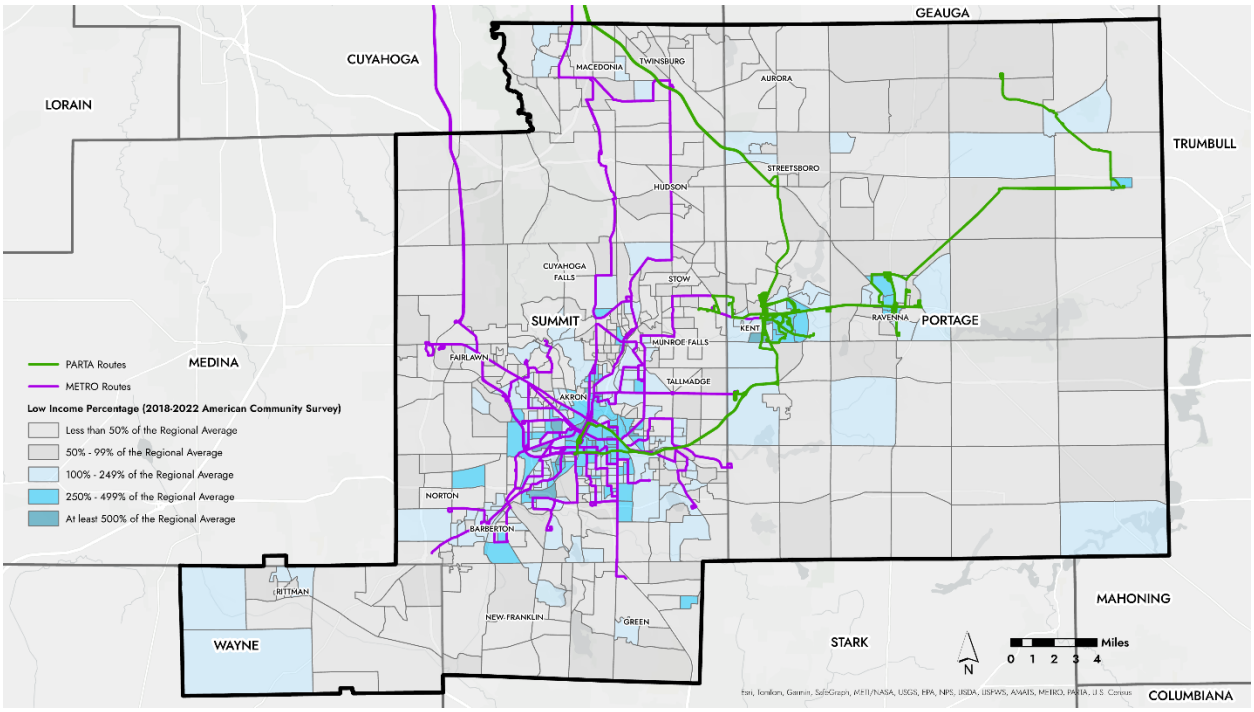
Minority ACS 2022

Low Income

Low-Income is defined as the population receiving less annual income than the regional average. For this Plan, both household and individual incomes were considered separately below is the data and map for individuals. In the Greater Akron area, many of the lowest-income areas are within the City of Akron. Significant low-income populations are spread throughout the city, generally closer to the center. Additionally, some sections of the cities of Kent, Ravenna, Barberton, Green, and Cuyahoga Falls, as well as the Village of Windham, have significant low-income populations. There are also block groups throughout the region with above-average low-income populations, particularly in rural areas. Below is a chart that depicts the number of low-income below 150% of poverty for individuals and a percentage of the low-income population within each county of the AMATS region.

	Summit	Portage	Wayne/Medina (AMATS Portion)	Total Region
Low Income Population	65,839	17,374	1,752	86,151
Low Income Percentage	12.64%	11.15%	8.87%	12.20%

Low Income Individuals ACS 2022

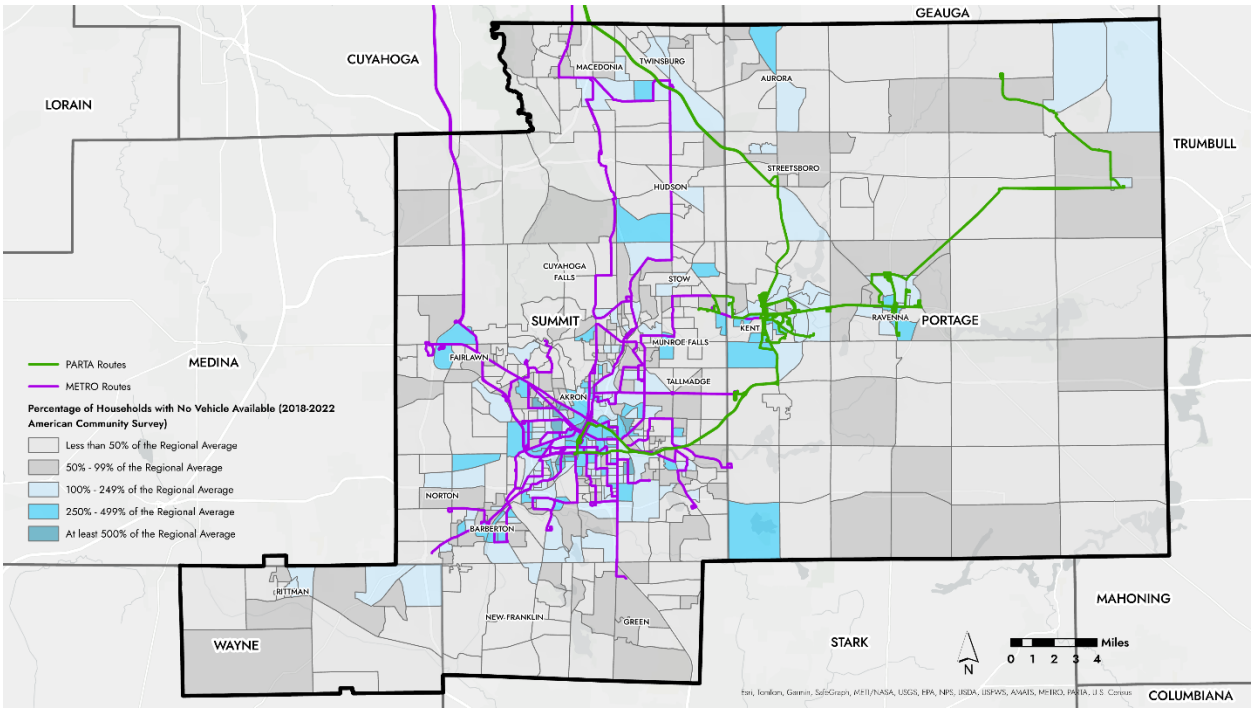


Low Income ACS 2022

Carless Households

This data is collected at the household level rather than the individual level and represents the percentage of households within each block group without a car. It's important to note that the reasons for this vary, including age, disabilities, lack of affordability, and personal choice. Some individuals may choose alternative transportation options but still have access to a personal vehicle, for most others, they're an essential part of life. The number of households without access to a personal vehicle can be used as a tool for predicting the number of people that rely on transit or other modes of transportation, other than a personal vehicle. A strong concentration of the region's carless households can be found within the city of Akron. There is a correlation with many of the lower income block groups within the city and carless households. Other areas of carless households can be found within the AMATS planning region. Most of these tend to be in more walkable communities, block groups where large senior housing facilities exist, or, as in Northeastern Portage County, where Amish populations exist. Below is a chart that depicts the number of carless households and a percentage of the carless household population within each county of the AMATS region.

	Summit	Portage	Wayne/Medina (AMATS Portion)	Total Region
Carless Household Population	22,212	5,473	497	28,182
Carless Household Percentage	9.7%	8.6%	6%	9.3%



Carless Household ACS 2022

Prior to 2020, the number of households without access to a vehicle slightly resembled the amount of average weekday transit ridership of 22,603 (Ave. of 2018 and 2019). However, the number of households without access to vehicles did not see the decrease that transit ridership faced starting in April of 2020, of which ridership has still not recovered to pre-pandemic levels.

Current Transit System Overview

The AMATS area consists of Summit, Portage and parts of Wayne County, the two major transit systems within the region are: METRO Regional Transit Authority (METRO), which operates primarily in Summit County with regional connections to Brimfield located in Portage County and an express route into downtown Cleveland, and Portage Area Regional Transit Authority (PARTA), which operates primarily in Portage County, with an express route that serves downtown Akron. Both transit options offer fixed route and demand response services for qualifying individuals of the elderly, disabled and low-income (consider re-wording) communities. For the AMATS-coverage portions of Wayne County, Stark Area Regional Transit Authority (SARTA) operates WCT (Wayne County Transit) in partnership with Community Action Wayne/Medina. WCT provides countywide service Monday through Saturday from 6am to midnight and is a reservation-based service. No fixed route is offered, however.

Ridership/Travel Patterns: "Frequency VS. Coverage"

When transit systems' operators and planners are thinking about route planning because it is not feasible to be in every place running on 10-minute schedules, the balance between frequency and coverage is an overall underlying thought at all times in route planning. A frequent ridership model emphasizes service along densely populated routes, linking individuals to major employment hubs and operating extended hours. While effective in serving specific routes, ridership models typically prioritize maximizing trip volume while minimizing operational costs per passenger.

A coverage model measures the proximity of residents to transit lines within a certain radius, irrespective of service frequency or hours of operation. Successful coverage models ensure widespread accessibility to transit but may incur higher operating expenses per passenger trip. Success metrics for coverage models focus on geographic reach rather than trip volume.

No transit system exclusively adheres to either ridership or coverage principles. Transit providers aim to incorporate both values, offering a high number of trips while still catering to less densely populated areas. Special efforts are directed towards reaching communities with higher concentrations of vulnerable populations and desired destinations.

Transit Coverage:

[Map of transit routes and table of communities with % of transit coverage will be provided for the final draft].

One factor to examine when evaluating the success of a system, is overall transit coverage served by fixed route services. The above map and following table were produced using data from the American

Community Survey - 2019 5 year estimates. Out of the entire AMATS region's 2020 population of 723,549, ###,### people (almost XX% of the population) have access to fixed-route transit within a quarter mile. It should be mentioned that the quarter mile standard is only part of the picture. A comprehensive multi-modal network includes bus shelters, park and ride lots, bike paths and sidewalks. This integrated approach makes access to transit stops seamless and traveling longer distances to stops more feasible.

The following table (Table #) shows all the communities with access to fixed-route transit within the AMATS region. Older, established cities with a higher density of development have better transit coverage. Cities such as Akron, Kent, Ravenna, Barberton, and Cuyahoga Falls offer some of the highest levels of transit access in the area. Some smaller suburban communities (Look at new coverage** Insert communities that stand out) also offer excellent coverage. As expected, there are very low levels of transit access in rural communities.

National Ridership Trends: Figure 1 depicts monthly ridership trends for the US Public Transit revenue miles which is a measure of activity. NTD National Trends and Summaries 2021

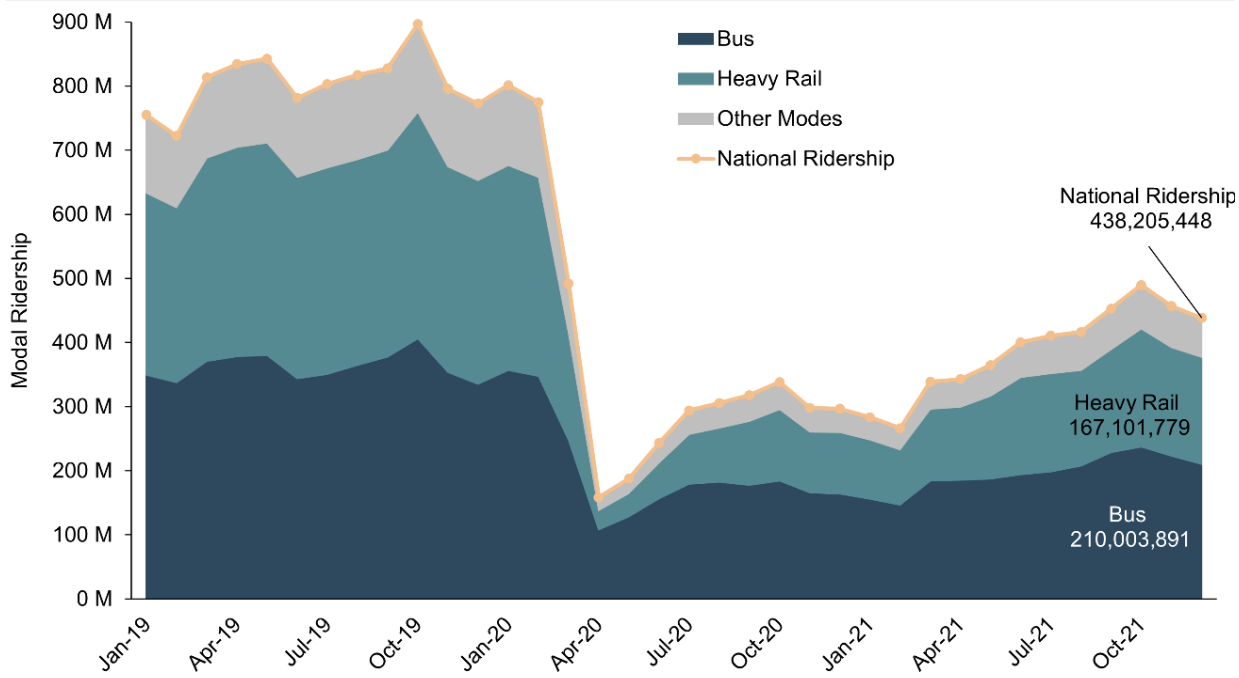
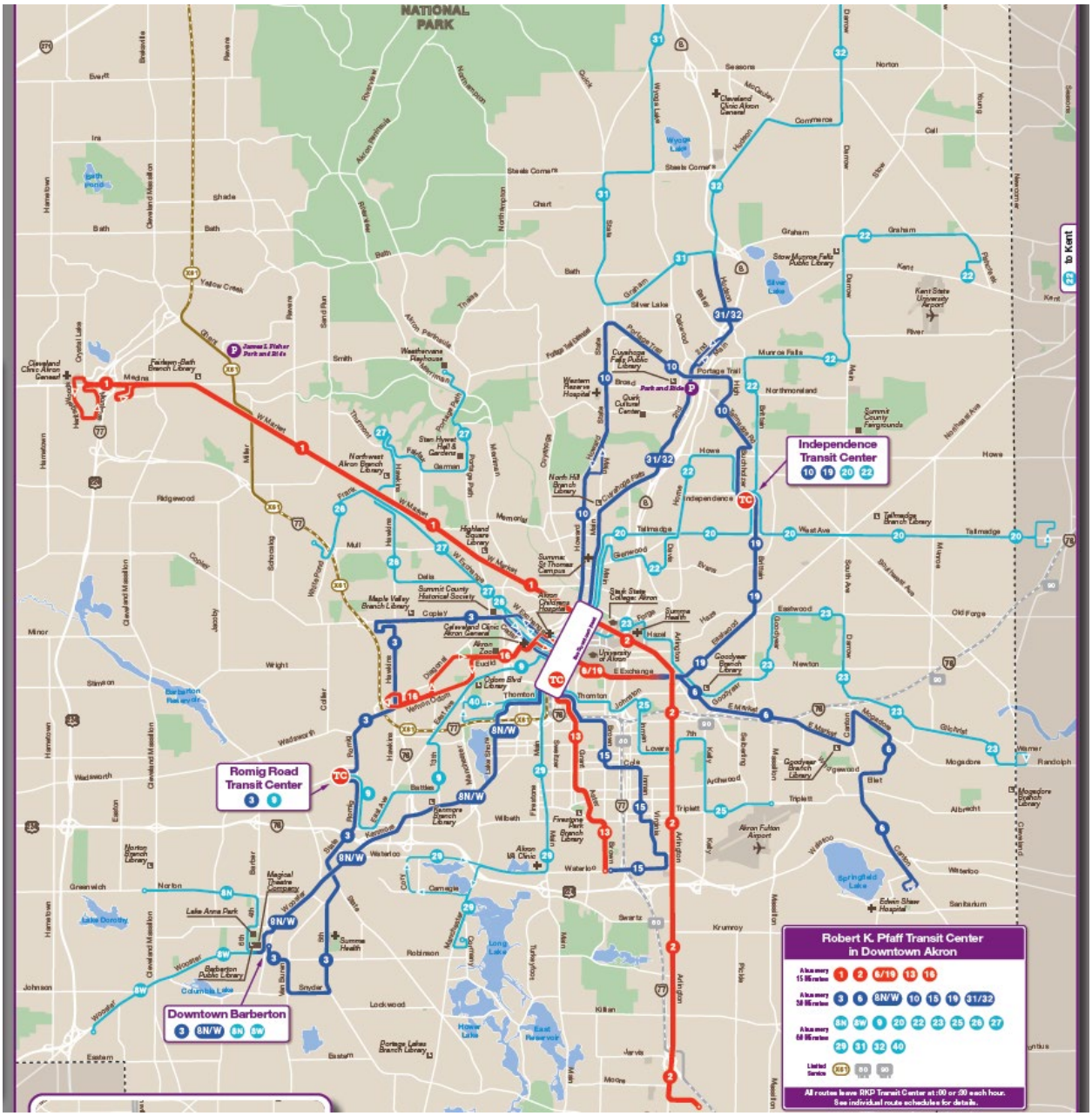


Figure 1. National Monthly Ridership for Heavy Rail vs. Bus (2020–2021)

National ridership experienced a massive decrease in ridership across all modes starting in March of 2020. Larger transit systems have reached or exceeded pre-covid levels but some larger, mid-size and smaller urban transit agencies have yet to fully recover ridership levels compared to pre-covid levels.

METRO RTA:

METRO RTA operates fixed route service from the Robert K. Pfaff Transit Center located just south of the downtown city center, consists of **24** fixed routes with the following key features: 1) five high-frequency 15 minute corridors and eight 30 minute routes, 2) streamlined service with increased route directness and more consistent weekend service, and 3) additional regional connections to Brimfield and Cuyahoga County as well as an express route to downtown Cleveland. METRO RTA System Map



METRO's demand response services operate multiple programs including METRO ADA and Select.

METRO ADA: Complementary Americans with Act (ADA) service for eligible persons with disabilities. Service is available at the same times as METRO fixed route service, with the pick-up location and destination no further than 3/4 of a mile from a fixed route.
METRO ADA Services

METRO Select: involves a variety of services based on qualifying factors.

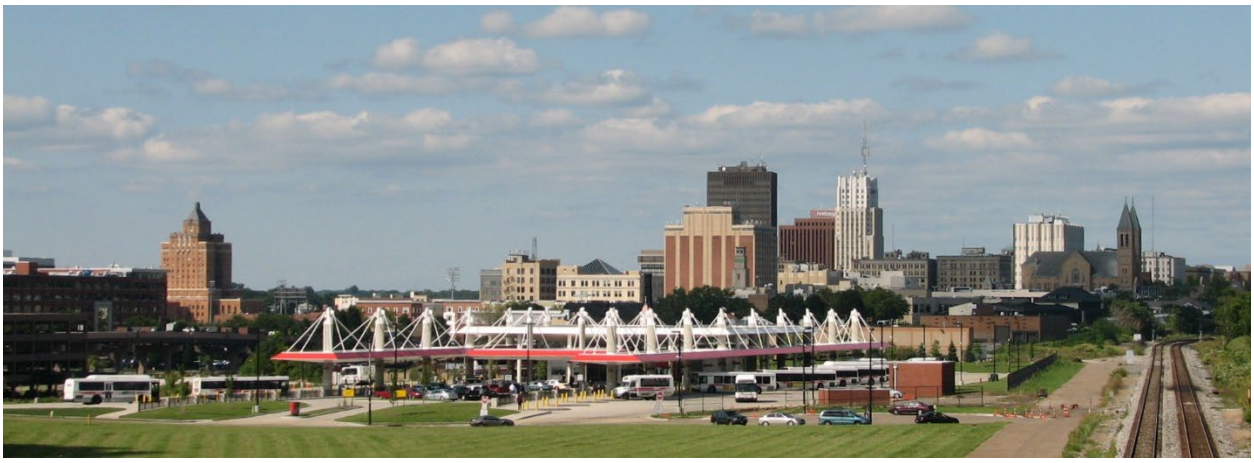
METRO SCAT Service for seniors and persons with disabilities who live outside the ADA zone and qualify for service. Trips also include coordination and provision of transportation services for Medicaid eligible residents Non-Emergency Transportation (NET) trips to Medicaid eligible medical facilities, as well as Title III trips for eligible Direction Home (Area on Aging and Disabilities) participants. METRO Call-A-Bus zones which is a workforce development program for making suburban connections that are difficult for fixed route to adequately serve. Areas include Macedonia, Twinsburg, Townships of Sagamore Hills, Twinsburg, and Northfield Center and the Villages of Northfield and Reminderville, or riders within the City of Green.
METRO Select Services

METRO Capital Assets:

[Add pictures of all types of Buses: CNG-Electric and smaller vans/buses. METRO has an active fleet of 222 vehicles comprised of 131 Large Fixed Route CNG and Electric buses and 91 Demand Response CNG/Electric/Gas/Diesel fuel vehicles. METRO's fleet is varied and includes 60-foot articulated, 40-foot diesel, 40-foot CNG, and 40-foot hybrid buses. Smaller vehicles including less than 30 foot buses and transit vans for Demand Response Services also are part of the fleet. All METRO fixed route buses are equipped with bike racks and all revenue vehicles are handicap accessible.]

METRO Facilities:

Robert K. Pfaff Transit Center: 631 South Broadway, Downtown Akron. Main Transit Center for all METRO Fixed Route Buses and Connections with PARTA, SARTA and Greyhound services.



Maintenance and Operations Building- 416 Kenmore Boulevard, Akron, OH. New facility being constructed on current site of administration and maintenance facility.

METRO RTA New Maintenance Facility Design Renderings

METRO RTA-Trillium Public CNG Station: 416 Kenmore Blvd: Next door to Operations and Maintenance Facility.

Romig Road Transit Center: Located in Amazon Fulfilment Center: 2450 Romig Rd. Akron, OH. Currently serves Routes # 3 and #9

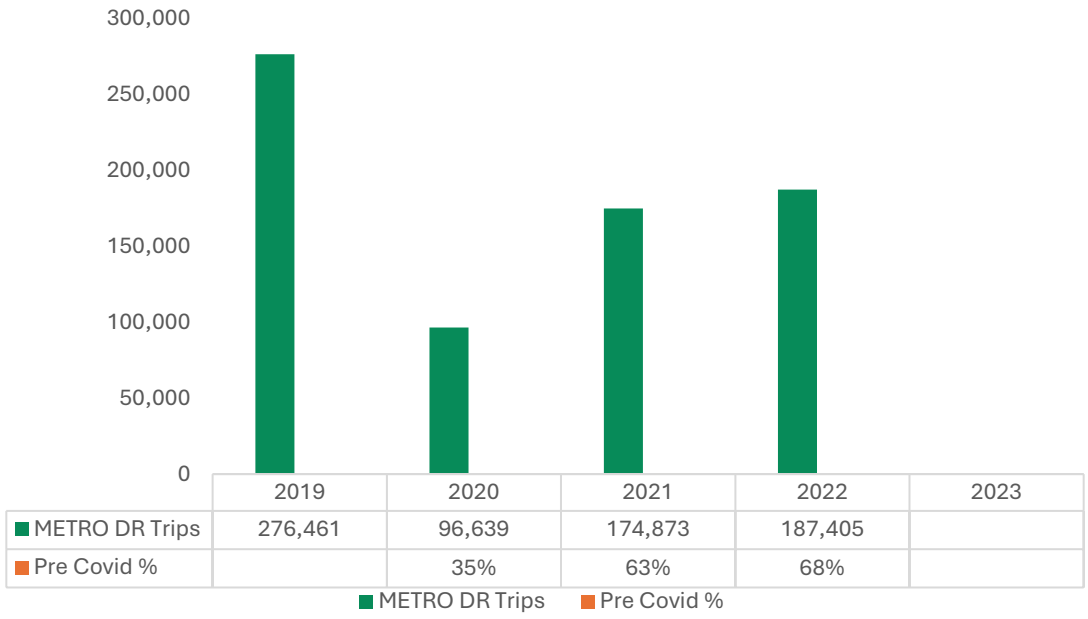
Independence Transit Center- Located on Independence Ave-Across from the old Chapel Hill Mall. Serves Routes #10, #19, #20 and #22

METRO Ridership Performance: [Ridership information and analysis to be provided in the final draft. AMATS plans to examine ridership by route from 2019-2023. Overall METRO ridership was affected negatively in 2020 and is still recovering to pre-covid levels]

METRO Demand Response:

METRO's Demand Response program consists of 91 small LTV or Transit Vans that transport people throughout Summit County 7 days a week. Below is a table that depicts demand response ridership based on National Transit Database reported unlinked passenger trips by year. METRO's demand response program number of trips vastly decreased in 2020 and accounted for 35% of pre covid levels. The next two years 2021 and 2022 saw trips increase to 63% and 68% of pre covid levels. Last

year, 2023, saw an increase in the number of trips. [2023 numbers will be included in the final draft report.]



PARTA:

PARTA provides fixed routes and demand response services for Portage County, Ohio. Portage County. PARTA operates a fleet of 62 revenue vehicles, all of which are accessible for individuals with disabilities. PARTA's administrative offices and maintenance garage are located at 2000 Summit Road in Kent, Ohio. *PARTA*'s fixed route service operates two divisions—county and campus. County service offers **15** fixed routes with the highest frequency route operating every 30 minutes. County routes operate Monday through Saturday with express service to Akron and Cleveland operating Monday through Friday. PARTA also has a contract with Kent State University to operate campus service. Campus service consists of five fixed routes with frequencies ranging between 9 and 15 minutes, Monday through Friday, and reduced service on Saturday and Sunday. PARTA offers complementary ADA paratransit service for individuals with disabilities whose pick-up location and destinations are no more than ¾ of a mile from a fixed route.

[PARTA System Map Inserted here for final draft]

PARTA's demand response service operates Monday through Friday, 5:00 a.m. – 11:00 p.m., and Saturday, 8:00 a.m. – 7:00 p.m. Demand response service covers all of Portage County; however,

some townships are limited to certain days of the week. For those who qualify, PARTA provides Title III trips for Direction Home (Area Agency on Aging and Disabilities) participants; and, in addition, free transportation to medical appointments is available through the NET program. PARTA's ADA fare is $2.00, reduced fare for the elderly and disabled is $3.00, and the public fare is $6.00 per one-way trip.

PARTA Capital Assets:

[PARTA's Pictures will be added to each type of vehicle fixed-route buses comprised of 32 large buses and 3 small buses/light transit vehicles (LTVs). Additionally, PARTA has **23** Light Transit Vehicles (LTVs) and **5** vans/small transit vehicles (STVs) that provide demand response service.. All PARTA large fixed route buses are equipped with bike racks and all revenue vehicles are handicap accessible.]

PARTA Facilities

Kent Central Gateway: Located at the corner of E. Erie and DePeyster Streets (201 E. Erie Street), Kent OH

PARTA's Kent Central Gateway, a multi-modal transportation facility in the heart of downtown Kent, offers a central point of operations for transportation in Portage County, in addition to a secondary hub at University Hospitals in Ravenna.

Administration and Maintenance Building Storage Facility and Wash Bay: 2000 Summit Road, Kent, OH

CNG fueling station: 2000 Summit Road in Kent

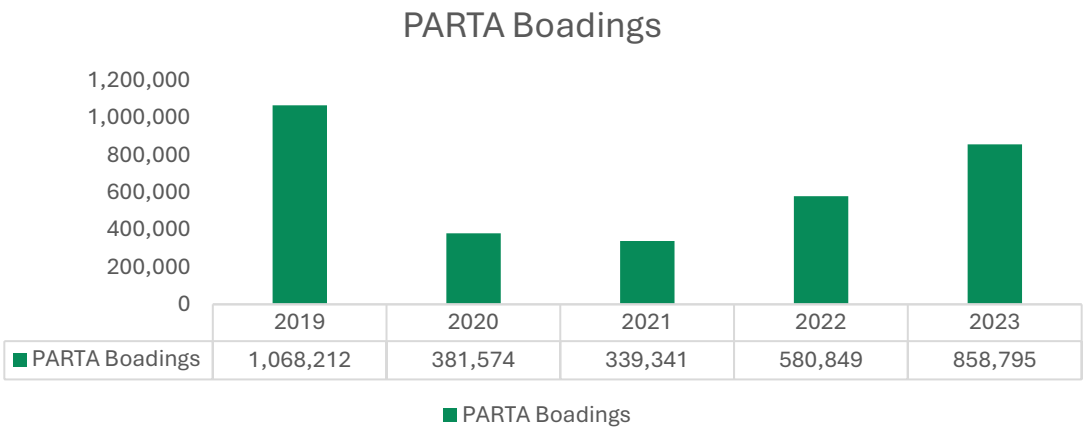
PARTA Ridership Performance: Inner Urban and Rural route performance:

PARTA's routes run on coordinated timing for easier transfers and reduced wait times. PARTA consistently monitors routes to identify gaps in services and make changes as necessary. In addition, PARTA offers a "Dial-A-Ride" demand-response bus service county-wide to everyone, regardless of qualification.

PARTA currently offers 15 fixed routes, consisting of 8 county routes, 2 express routes to Akron and Cleveland and 5 campus routes that service Kent State University. When looking at the performance of their fixed routes one metric is to examine boardings by route. "Boardings" are the number of times a passenger boards a bus. A passenger making a round-trip would count as two boardings.

PARTA's number of boardings reached a total of 1,068,212 in 2019 with their campus routes-#58 Summit East (373,546) and #51 Campus Loop (139,641) experienced the highest number of

boardings and #35 Interurban East (158,885) and #30 Interurban West (69,824) was their highest number of boardings for county fixed routes.



PARTA's ridership dipped to their lowest point in 2021 with 339,341 boardings, which accounted for 32% of 2019 pre-covid ridership. Ridership showed an increase to 54% in 2022 and reached 80% of pre-covid levels by 2023. This loss and recovery of ridership mirrored the same trend of other local agencies and national trends.

PARTA's highest four performing routes in terms of ridership (boardings) as of 2023 are routes; #58 Summit East (288,338), #51 Campus Loop (165,657), #35 Interurban East (138,096) and #30 Interurban West (68,328). These four routes make up 77% of total ridership (boardings) for PARTA. Summit East and Interurban East have recovered to 77% and 87% of pre-covid levels. Interurban West is at 98% and Campus Loop is performing at 119% of pre-covid levels. If these ridership numbers continue at this pace, PARTA's ridership is predicted to meet or exceed pre-covid levels within the next year.

PARTA Boardings by Route 2019

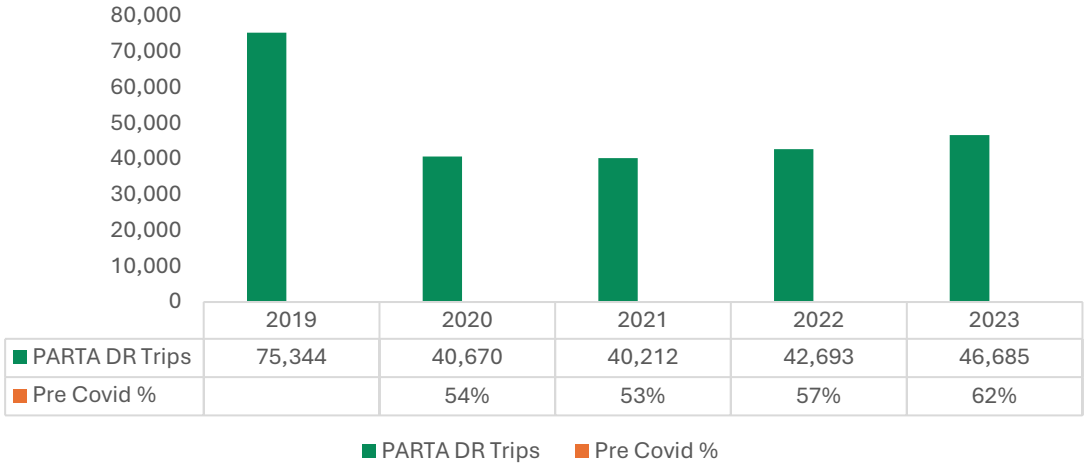
Route	Ridership
Weekday	
30-Interurban West	69,824
35-Interuban East	158,885
40-Suburban North	32,842
45-Suburban South	39,639
46-Downtowner	N/A
60-Black Squirrel	12,760
70-Wind/Garr	10,255
80-Raven West	4,273
85-Raven East	11,577
Weekend	
30-Interurban, Sat.	14,424
35-Interuban East, Sat	Combined w/ 30
40-Suburban, Sat.	4,687
45-Suburban South	Combined w/ 40
46-Downtowner, Sat.	N/A
Express	
90-Akron Express	18,880
100-Cleveland Express	5,381
Kent State University	
51-Campus Loop	139,641
53-Reverse Loop	62,608
55-Allerton	71,566
57-Stadium Loop	11,381
58-Summit East	373,546
59-Night Shuttle	26,043

PARTA Boardings by Route 2023

Route	Ridership
Weekday	
30-Interurban West	68,328
35-Interuban East	138,096
40-Suburban North	20,338
45-Suburban South	19,260
46-Downtowner	637
60-Black Squirrel	N/A
70-Wind/Garr	5,095
80-Raven West	9,613
85-Raven East	Combined w/ 80
Weekend	
30-Interurban, Sat.	8,867
35-Interuban East, Sat	Combined w/ 30
40-Suburban, Sat.	3,087
45-Suburban South	Combined w/ 40
46-Downtowner, Sat.	285
Express	
90-Akron Express	14,589
100-Cleveland Express	2,743
Kent State University	
51-Campus Loop	165,657
53-Reverse Loop	Suspended
55-Allerton	56,245
57-Stadium Loop	33,725
58-Summit East	288,338
59-Night Shuttle	23,892

PARTA Demand Response:

PARTA's Demand Response program consists of 23 small LTV or Transit Vans that transport people throughout Portage County 6 days a week. Below is a table that depicts demand response ridership based on National Transit Database reported unlinked passenger trips by year.



	2019	2020	2021	2022	2023
PARTA DR Trips	75,344	40,670	40,212	42,693	46,685
Pre Covid %		54%	53%	57%	62%

PARTA's number of trips decrease by 46% from 2019 to 2020 as the pandemic affected transit operations and services of the entire region as well as the entire country. PARTA has yet to recover demand response trip numbers to pre-pandemic levels.

Challenges

Aging of America increased cost of transit service:

The statistics show that the senior population will reach a peak between 2025 and 2030 perhaps going beyond that. That means more individuals will be looking for affordable demand response public transportation service to help age in place and promote more active lifestyle for the aging demographic. The recent Summit County Area on Aging 2022 Adult Needs Assessment identifies one of the key findings as needing more robust medical transportation services and states that a third of the residents do not have access to affordable, reliable and consistent public transportation. Increased collaboration between the medical community and the public and private transportation providers of the region is needed to better serve the aging population.

For all transit authorities costs of goods and services are on the rise and the need to maintain a state of good repair has become more difficult. The Federal Transit Authority (FTA) has defined and helps assist transit agencies maintain bus and rail systems in a State of Good Repair (SGR) and is one of FTA's highest priorities. The FTA recommends Transit Asset Management (TAM) practices to preserve and expand transit investments. Having well maintained, reliable transit infrastructure will help ensure safe, dependable and accessible services.

Understanding and adjusting to the workforce needs of the area:

Transit Authorities need to understand the recent local workforce trends in the area in order to best maximize service. However, this is not a transit only concern. Local regional economic development strategies need to consider existing transit service when attracting new employers, especially employers with a higher transit dependent workforce. Companies are looking to relocate to areas with cheaper rent and cost of living for their employees and another cost savings benefit is being located on an existing transit line providing employees the choice or ability to use public transit service. These decisions and conversations about land use are complex and certain opportunities may not exist for some businesses to locate along a transit line however, communication between these two interests need to align in order for overall cohesive land use planning that benefits all transportation users.

METRO specific-Investment in TOD/BRT and need for increased local funding for operational increase to support these programs: Transit-Oriented Development (TOD) refers to the planning and development of transit-oriented communities that integrate housing, businesses, and amenities around transit stations, promoting walkability and ensuring easy access to transit stations on foot through well-designed pedestrian pathways. Bus Rapid Transit (BRT) is an advanced, high-quality transit system that delivers safe, fast, and comfortable service. Improvements typically found within BRT routes include fewer stops, traffic signal priority, off-board fare collection, and elevated platforms which create a better trip experience compared to typical bus service.

PARTA and City of Kent have partnered on TOD projects in the past with the Kent Central Gateway project being located downtown Kent in an area of growing mixed-use development. METRO RTA is exploring TOD and BRT projects for the near future METRO RTA BRT Information Page .
TOD and BRT involves not only large amounts of Federal and State grant funding but a considerable amount of local funding investment by transit authorities as well as local municipalities. Transit systems may be hesitant to increase their share of local sales tax which accounts for much of their local operating budgets, so collaboration and investment between local communities is essential for these large types of investments. The areas of specific investment need to be considered a joint effort between communities and the local transit authority. As local budgets become tighter, and as inflation and costs rise, investments for these types of large-scale projects can be difficult for communities and transit agencies to justify.

METRO/PARTA specific areas that are currently not served by transit: In general, it is difficult for mid-size transit systems to be everywhere for everyone. Therefore, it becomes inevitable that some suburban and rural areas may not be served by fixed route service. Public transportation, by nature, is designed to provide the widest, most efficient service to as many riders as possible. While METRO and PARTA strive for continuous improvement in meeting the needs of all riders, it is not currently economically or logistically feasible to offer fixed route line service throughout all neighborhoods within each of their counties. Local municipalities who are currently underserved or not served need to voice their concerns to their respective transit authority about potential transit coverage. Transit authorities have the challenge of examining the cost and effectiveness of serving a particular area and need to create a cost benefit analysis for each community or be willing to discuss feasibility of what that service might look like. This is the challenge that all transit authorities face as current demand for transit does not yet support that level of investment for a 24/7 expansion of service. Finally, even in areas where fixed route coverage exists, there are additional gaps created when the sidewalk infrastructure does not fully and safely connect destinations and bus stops.

Public Outreach and Stakeholders

This plan involved discussions with the two major local transit authority METRO RTA and PARTA on the different issues facing transit as well as some of their future goals and strategies. The AMATS staff is also allowing our member organizations as well as the public a comment period for the month of August beginning with AMATS Technical Advisory Committee (TAC) and Citizens Involvement Committee (CIC) meetings August 1st, 2024. After the final comments have been received, AMATS staff plan to integrate any changes brought on by specific relevant comments into the plan and to ask for approval of the full final transit plan during our September TAC and Policy meetings.

METRO and PARTA work with a number of local public and private organizations in order to provide the current levels of service that both respective agencies provide. Last year, AMATS along with

METRO and PARTA, developed a Coordinated Public Transit-Human Services Transportation Plan METRO and *PARTA* assisted in gathering a list of stakeholders that either work with or provide transportation for older adults, individuals with disabilities, and/or people with low incomes, a full list of participants can be found in appendix A of the Coordinated Plan. Various agencies were identified, including agencies representing:

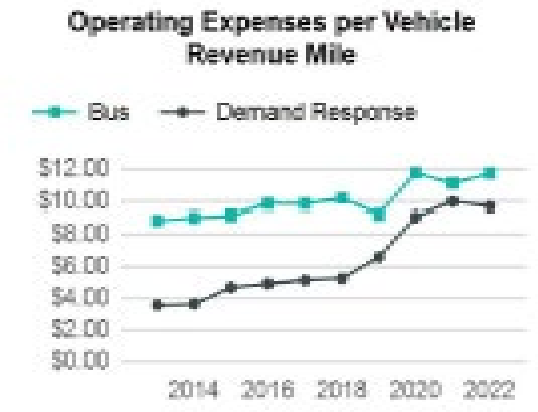
a. Public transit
b. Senior center or other organization serving older adults
c. Local County and/or city government
d. Department of Developmental Disabilities (local/regional) office and programs
e. Department of Health and Human Services office (local/regional)
f. Department of Job and Family Services office
g. Private transportation providers

Stakeholders were invited to participate in the Planning Committee. METRO and *PARTA* also invited some of their loyal transit riders to ensure that citizen concerns and ideas were represented within the group for the coordinated plan that was published in 2023.

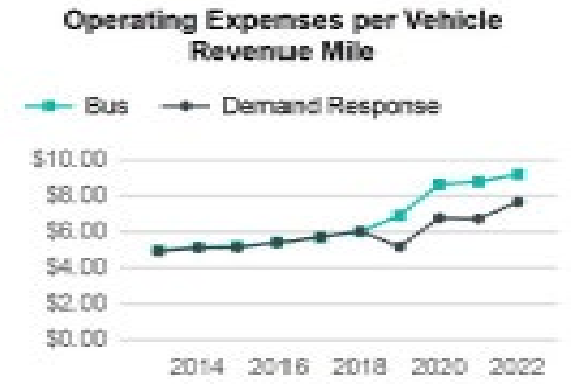
Chapter 3: Performance Measures

Performance and asset measures are widely used in the transit industry today, with most transit agencies reporting basic information about their service to the National Transit Database (NTD). After data reporting was required by Congress in 1974, the FTA's National Transit Database (NTD) was set up to be the repository of data about the financial, operating and asset conditions of American transit systems. The NTD records the financial, operating, and asset condition of transit systems helping to keep track of the industry and provide public information and statistics. The NTD is designed to support local, state and regional planning efforts and help governments and other decision-makers make multi-year comparisons and perform trend analyses. It contains a wealth of information such as agency funding sources, inventories of vehicles and maintenance facilities, safety event reports, measures of transit service provided and consumed, and data on transit employees.

FTA uses NTD data to apportion funding to urbanized and rural areas in the United States. Transit agencies report data on a few key metrics including Vehicle Revenue Miles (VRM), Vehicle Revenue Hours (VRH), Passenger Miles Traveled (PMT), Unlinked Passenger Trips (UPT), and Operating Expenses (OE). The National Transit Database has an agency profile page NTD Agency Profile Page where the public can view NTD yearly reports of transit authorities to learn more about their production. Operating Expenses per vehicle per revenue mile is an example of some of the information when viewing these agency profiles, as seen below for METRO and PARTA.



METRO 2022



PARTA 2022

Transit Asset Management

Transit Asset Management (TAM) is the strategic and systematic practice of procuring, operating, inspecting, maintaining, rehabilitating, and replacing transit capital assets to manage their

performance, risks, and costs over their life cycles to provide safe, cost effective, and reliable public transportation. TAM uses transit asset condition to guide how to manage capital assets and prioritize funding to improve or maintain a state of good repair. Federal regulations require the Federal Transit Administration (FTA) to develop a rule to establish a strategic and systematic process of operating, maintaining and improving public transportation capital assets effectively through their entire life cycle. FTA's national Transit Asset Management system rule defines the term "state of good repair," requires grantees to develop a TAM plan, establishes performance measures, establishes annual reporting requirements, and requires FTA to provide technical assistance. In July 2016, FTA published a final rule for TAM. The rule requires FTA grantees to develop asset management plans for their public transportation assets, including vehicles, facilities, equipment, and other infrastructure.

A state of good repair (SGR) is a threshold that identifies the desired performance condition of a capital asset, such as a bus, transfer facility, or office building. An asset is in a state of good repair when it is able to operate at a full level of performance. This means:

- The asset is able to perform its designed function.
- Does not pose a known or unacceptable safety risk (condition); and
- Its life cycle investments have been met or recovered (Useful Benchmark- ULB)

SGR performance targets are based on realistic expectations derived from the most recent available data (condition and ULB), FTA performance measure criteria, and the financial resources from all sources that the area reasonably expects to be available during the TAM plan horizon period for capital planning purposes. Each agency works with the Federal Transit Administration to set individual targets for their respective systems.

Local TAM Targets

PARTA has set a goal to maintain their fleet with at least 100 percent of the vehicles are at least in fair or good condition. As of 2022, 100 percent of the large bus fleet meets this standard, which consists of 24 diesel, 6 CNG and 3 CNG fueled trolley buses. 90 percent of the 23-gasoline fueled small LTV cutaway and 100 percent of the 5-van fleet meets the standard of good or fair condition. PARTA intends to replace vehicles to meet this 100 percent goal. PARTA currently has 5 facilities including an administration building, maintenance building, wash bay facility, CNG fueling station and bus storage facility which are all located at 2000 Summit Rd. Kent, Ohio. The Kent Central Gateway, which is a multimodal transfer center with parking is located at 201 E. Erie St. Kent, Ohio and all facilities are in new or good condition based on a recent facility condition assessment.

METRO has set targets for SGR and determined that their overall revenue vehicles should be less than 15% over their ULB, on average. METRO also reviews its Bus Improvement Plan (BIP) annually to ensure the buses are within the ULB of 12 years. This helps to keep their fleet reliable and reduce maintenance costs.

SOGR Policy Targets			
FTA Category	**Sub-Group**	**Limit**	**Measurement**
Revenue Fleet (ULB)	Overall Revenue Vehicles	< 15% over ULB	varies 4-15 years
	Bus 60'	< 10% over ULB	< 12 Years
	Bus 40'	< 15% over ULB	< 12 Years
	Bus 45' Commuter	< 5% over ULB	< 15 Years
	Bus 35'	< 15% over ULB	< 12 Years
	Paratransit	< 15% over ULB	< 5 Years
Facilities (SOGR)	Facility	< 10% Under 3.0 SOGR	SOGR
	Facility Assets	< 10% Under 3.0 SOGR	SOGR
Infrastructure	Track, Signals	< 10% Under 1.0 SOGR	SOGR
Equipment	Heavy Equipment	< 25% Over ULB	SOGR
	Non-Revenue Vehicles	< 25% Over ULB	< 8 Years

Current METRO RTA TAM Targets for Vehicles

METRO currently as of 2023 is meeting all vehicle goals. Only showing 6% of their 131 large bus fleet bus fleet has met or exceed their ULB. METRO's large bus fleet consist of 127 CNG buses and 4 electric buses. Of the smaller LTV cutaway and vans METRO as of 2023 has zero vehicles that are beyond their useful life benchmark.

All of METRO RTA's parking facilities meet condition rating goals. However, 16% of their administrative and maintenance facilities are rated below 3 on the condition scale, see facility ratings chart below.

Rating	Open Defects From	Open Defects To	Overdue PMs	Notes from Data Migration Spreadsheets
5	**0**	**10**	**0**	**5** = No unfunded or deferred maintenance activities.
4	**10**	**20**	**1**	**4** = Some temporary deferment of PM and CM; no activity skipped completely.
3	**20**	**30**	**2**	**3** = More frequent deferment and extended of PM and CM; some activity skipped altogether.
2	**30**	**50**	**3**	**2** = PM and CM activity frequent delayed or skipped until major problems surface.
1	**50**		**4**	**1** = Significant back log of PM and CM work due to history of deferred and skipped activities.

METRO RTA's administration, maintenance, storage facilities, wash bay and CNG station are located at the Kenmore location, only the maintenance and administration building are in need of upgrades.

The RKP Transit Center located downtown Akron and Independence and Romig Road Transit centers are in new or good condition. METRO is already in the process of improving their overall facility conditions rating by constructing a new maintenance facility at the 416 Kenmore Blvd location. More information on the project can be found on their website.

Transit Safety

The Public Transportation Agency Safety Plans (PTASP) regulation (49 CFR Part 673) requires operators of public transportation systems that receive federal funds under the FTA Urbanized Area Formula Grants (Section 5307), and rail transit agencies subject to the FTA State Safety Oversight (SSO) program, to develop an Agency Safety Plan (ASP) that includes the processes and procedures to implement a Safety Management System (SMS). SMS is a comprehensive, collaborative, and systematic approach to managing safety.

The PTASP requirement is in part to ensure that all agencies are examining and defining their safety roles, responsibilities and protocols on a more regular basis. It also requires agencies to examine new potential threats to their system and develop and adapt to industry best practices methods for safety and dangerous situations. The plan highlights different risk mitigation, safety assurance and provides an overall comprehensive Safety Management systems (SMS) framework to guide agencies approach to safety.

Some key performance indicators (KPIs) that are examined through the PTASP may not all have specific data that can be measured such as how secure a certain facility is, which is more of a full safety risk assessment taking into account such as (METRO RTA PTASP language):

Step 1: Collecting Information;
Step 2: Assessing Severity;
Step 3: Assessing Likelihood;
Step 4: Determining the Safety Risk Index; and
Step 5: Documenting Results.

However, some KPI's yield specific data that can be analyzed and compared such as safety performance targets (SPT's) and they are examined by each transit agency and reported to the NTD on a yearly basis:

· Fatalities: Total number of fatalities reported to NTD and rate per total vehicle revenue miles (VRM)
· Injuries: Total number of injuries reported to NTD and rate per total VRM by mode.
· Safety Events: Total number of safety events reported to NTD and r ate per total VRM by mode.
· System Reliability: Mean distance between major mechanical failures by mode.

METRO RTA for example, utilizes Key Performance Indicators (KPIs) and Safety Performance Targets (SPTs) within the organization to 1) monitor company health, 2) measure progress, 3) analyze patterns over time, 4) solve problems or tackle opportunities and 5) make adjustments to stay on track. This information is intended to answer two primary questions that aid METRO RTA in the assessment of its performance and help determine where or if changes in policy or procedure is required: Why did performance change? What actions are being taken to improve performance?

Both METRO and PARTA are dedicated to safety and these plans help assist agencies examine, track and improve overall safety levels.

Chapter 4: Vision, Goals, and Strategies

Vision

The area's two regional public transit providers—METRO and PARTA—each have visions that guide their mission and operations. While each agency's overall vision might be different because of size/scale of the agency, the populations they serve, and geography, there is significant common ground between what each agency wants to accomplish.

Taking into account these differences and similarities, the AMATS 2024 Transit Plan's general, overarching vision for the region is as follows:

Provide safe and equitable transit service for the region. Improve the accessibility of life-sustaining trips with access to employment, food and medical facilities. Healthy smart collaboration with community partners to provide innovative service approaches to the needs of the area. Continue to remain financially stable and to pursue all relevant State and Federal funding opportunities.

Goals and Strategies

The matrix on the following pages provides numerous six and eleven strategies that support the AMATS Transit Plan's vision.

Goals are listed and defined in the pink-shaded sections of the matrix. Each goal falls into one or more categories:

- Collaboration Goals
- Funding Goals
- Service Goals

Strategies corresponding to each goal are listed below each goal. Strategies are what can be done to accomplish each of the broader goals. Each goal has between one and four strategies listed.

Implementation lists the agencies responsible for putting the strategies into action. Lead agencies would be those primarily responsible for the effort, while supporting agencies include those who would likely participate in the effort.

Additional Notes is a catch-all, general summary category that might describe how and why a strategy gets implemented, why it is important, and other general nuance about past work or specific areas of focus.

Transit Plan Goals and Strategies Matrix

= Collaboration Goal = Funding Goal = Service Goal

Strategy	Implementation		Additional Notes
	Lead	Support	
Goal # 1: Invest in programs supporting transit goals *Transit agencies provide a level of service that supports the needs of the area and to invest in opportunities that promote a safe, sustainable and equitable transit system.*			
Pursue available Local, State and Federal funding programs that support transit operations and projects.	METRO, PARTA	AMATS	More information on specific programs can be found in the *Implementation* section of this chapter.
Goal # 2: Invest in sustainable fleet and operations *Transit agencies make sound decisions and create a visible opportunity to lead by example.*			
Pursue and ensure a sustainable fleet and maintain a state of good repair to preserve the investment in transit and maintain sustainability of thier service.	METRO, PARTA		Invest in updating fleet and meeting FTA Transit Asset Management Targets as well as investing in preventative maintenance practices ("fix it first" philosophy) to maintain a state of good repair for all vehicles.
Goal # 3: Integrate transit into regional transportation projects *Creating a robust public transportation network becomes a primary consideration of many roadway improvement projects.*			
Work with local communities to discuss integration in roadway projects with a transit add on component like a bus shelter or enhanced waiting environments.	METRO, PARTA, AMATS	Community Officials, AMATS	Transit authorities and local officials can have a shared understanding of projects before plans are made, allowing them to maximize potential for transit improvements when necessary.
Goal # 4: Ensure that transit is an intergral component of land use planning efforts *Sound land-use decisions and future development can impove the public transportation network, and quality transit services can allow development to occur more responsibly.*			
Partner with economic development agencies and local officials when conversations about business attrraction and expansion occur.	Community Officials, Econ. Dev. Agencies, METRO, PARTA		It is important to locate jobs–especially when employees us transit–in areas where service exists or can be provided. Having transit agencies involved in regional employment conversations helps inform the planning process.
Communicate the benefits of increasing the transit footprint and the positive effect this can have on the region and quality of life for transit users.	METRO, PARTA	Community Officials, AMATS	Building partneships between transit agencies and community officials will help to build trust and a stronger public transit network.
Continue to explore the feasibility of and pursue Bus Rapid Transit (BRT) in the City of Akron and surrounding municipalities.	METRO	Akron , C. Falls, Barberton, Fair-lawn, Green, Springfield, AMATS	Once METRO and its partners decide on final alternatives (several potential routes have been studied in-depth), partners can negotiate how local shares of BRT development will be paid. Partners can then pursue FTA's Small Starts funding.
Explore opportunities for Transit-Oriented Development (TOD)	METRO, possibly PARTA	Private developers, Community officials, CDCs/NDCs	METRO is exploring TOD near their RKP Transit Center, south of downtown Akron. Other possible locations include Akron's Middlebury Neighborhood and the Arlington Rd. corridor. Downtown Kent has seen significant TOD over the past 15 years.
Goal # 5: Optimize transit service *Transit agencies adapt to the inevitable and continuous changes occuring in communities.*			
Study current service and conduct service optimization every 5-10 years to adjust to new travel patterns.	METRO, PARTA	AMATS	METRO recently completed (2023) the Reimagine METRO redesign; PARTA intends to take a comprehensive look at route optimization in 2025. AMATS can assist as needed by analyzing demographic and employment data.
Examine potential coverage to peripheral locations.	METRO, PARTA		Demand for expansion into exurban communities exists, but can be difficult to justify because of total ridership and mileage.
Continue to invest in new technologies that improve the ridership expereince and efficiency of operations.	METRO, PARTA		Various technologies, such as scheduling software for service or personell, can assist transit agencies by making operations more efficient. PARTA recently invested in ITS improvements.
Goal # 6: Increase sidewalk access to bus stops and shelters *The transportation system safely accomodates all people, regardless of their mode of transport.*			
Apply for funding opportunities to create or improve infrastructure for pedestrians and bicyclists, ensuring safe access to and from transit stops.	Local Communities	AMATS, METRO, PARTA	Quality pedestrian access from homes, places of employment, medical facilities, and stores to transit stops is essential for safety, but it also allows transit to become a more viable mode of transportation for more people.

Implementation

Each of this plan's goals and many of the strategies require funding to implement. Transit agencies have access to myriad federal, state, and local funding sources.

Federal Grant Programs

Federal funding programs are generally used for capital expenses. Transit agencies can often utilize multiple federal funding sources for one project, administered at the state level by the Ohio Department of Transportation.

The primary source of federal funding for capital and maintenance projects is the Federal Transit Authority's (FTA) Section 5307 Program. These funds are typically used to purchase new buses, equipment, and for preventative maintenance and planning.

To better serve elderly persons and persons with disabilities, the transit agencies are also eligible for FTA's Section 5310 Enhanced Mobility for the Elderly and Disabled Program funds. Also known as the Specialized Transportation Program, these funds may be used for capital or operating expenses.

FTA's Section 5339 Bus and Bus Facilities Program can also fund capital projects. These funds are also used for new buses or for capital facilities.

Within the Section 5339 Funding Program is a discretionary source dedicated to funding zero and low-emission buses in order to reduce air pollution. This is known as the Low or No Emissions Grant Program

Funding for implementing or expanding Bus Rapid Transit (BRT) is available through FTA's Small Starts Program.

Federal Highway Administration (FHWA) Surface Transportation Block Grant Program (STBG) is the most versatile funding option that can be used for a variety of projects including highways, transit and bicycle and pedestrian facilities.

Congestion Mitigation Air Quality Program (CMAQ) can be used for projects that improve air quality, such as CNG buses, traffic signal improvements, and park and ride lots.

Carbon Reduction Program (CRP) can be used for projects designed to reduce transportation emissions, defined as carbon dioxide (CO2) emissions from on-road highway sources. Projects eligible for CRP funds include roundabouts, operational projects that improve traffic flow, clean fuel bus purchases, and bicycle and pedestrian projects.

State Grant Programs

The Ohio Transit Partnership Program (OTP2) is a competitive grant program that was established to provide additional capital funding to Ohio's public transit operators for projects emphasizing system preservation. METRO RTA and PARTA have each received OTP2 funds almost every year since 2012. The OTP2 funds have come from ODOT-attributable federal funds (CMAQ or STBG), and now come from state general revenue funds (GRF). Although the OTP2 program now uses state general revenue funds (instead of CMAQ or STBG as it did in the past), the amount of funding is insufficient for the needs of the transit agencies. According to the Ohio Statewide Transit Needs Study from 2015, "The use of GRF (general revenue funds) in Ohio to fund public transit has been in steady decline" since 2000.

The Diesel Emissions Reduction Grant (DERG) Program is offered by ODOT annually in coordination with the Ohio Environmental Protection Agency (OEPA) to public and private sector diesel fleets (motor vehicle, marine, locomotive, and highway construction equipment). METRO and PARTA have each been awarded DERG funds regularly on an annual basis for a number of years.

The Urban Transit Program (UTP) is a statewide source of funding catered to transit service in Ohio's urbanized areas with populations of 50,000 or greater (therefore both METRO and PARTA receive funding). UTP is a flexible funding source available for a wide variety of activities that support the provision of public transportation.

General Revenue Ohio State Funding

Until recently, besides the small amount of OTP2, and urban and rural funding programs the State of Ohio had no stable or dedicated funding for transit service. The overall Transit agencies rely on federal funds for their capital, maintenance, and planning expenses, but these aren't always sufficient. The small amount of local funding transit agencies receive from sales tax may not cover their operations. Additionally, smaller transit agencies may not be able to use federal funds because they are unable to come up with the required local match. As the State of Ohio demonstrated in 2019 with the gas tax increase, there is a need for increased and dedicated funding at the state level. State general revenue funds for transit have been declining since their peak in 2000 and dwindled down to $6.5 million in in State Fiscal year 2018-2019 for urban and rural transit agencies.

AMATS Policy Committee discussed the state funding to support transit in 2019 and approved a motion for the AMATS staff to provide a letter of support that requested that the governor support a $70 million investment beginning with the 2020-21 budget. This amount was substantially smaller than the recommendation that came out of the Ohio Statewide Transit Needs Study in 2015. That study, produced by ODOT, recommended the state invest $120 million a year in transit, rising to $185 million in 2025, in order to cover 10% of the costs to preserve Ohio's transit system and provide the stable and reliable funding source that is so greatly needed.

The past two budget cycles (FY2022-FY2023 and FY2024-2025) show a substantially larger investment of $74,029,272 ($37,014,636 per year) for Ohio Transit Systems than in previous cycles. This increased investment allows transit agencies the flexibility to use State General Revenue Funding as local match to Federal funding. The 2023 Ohio Legislative Service Commission Report details on page 3 provide the breakdown for public transit funding.

Local Funding

Local sources of funding are essential to providing the daily operations transit riders depend upon. The transit agencies' operating expenses are primarily funded through two local sources.

Dedicated sales tax revenue is by far the largest source of local revenue. For METRO RTA, this amounts to a .50% sales tax while PARTA benefits from a .25% sales tax. These sales tax funds can be used for operations as well as a match for federal funds.

Another local source of funding is the **fare box revenue**, which are the funds received from riders. This revenue makes up a small part of the operating budget, and can vary by month and by route, making it difficult to plan ahead using this source. The transit agency's operating expenses are funded mainly through these two local sources.

Attachment 6A

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 2024-15 - Approving Amendment #8 to the FY 2024-2027 Transportation Improvement Program to revise funding for two projects, add one project and delete one project phase.**

DATE: **August 8, 2024**

The following changes have been requested to the FY 2024-2027 Transportation Improvement Program:

Revise funding

1. **SUM-IR 76-6.15 (PID 100713)** – Is a project that includes increasing capacity and safety on the "Kenmore Leg" in Akron. This project has received additional funding for the right-of-way phase. Construction is tentatively scheduled to begin in FY 2027 but is not fully funded.

2. **SUM-N Main St High Level Bridge (CR 8-9.08) (PID 115383)** – Is a project that includes replacing the high-level bridge over the Cuyahoga River in Akron. This project has received approximately $4.12 million from the Omnibus bill for the design phase. Construction is tentatively scheduled to begin in FY 2030 but is not currently funded.

Add new project

3. **SUM-State Rd Widening (PID 121863)** – Is a project that includes reconstruction of State Rd to add a two way left turn lane and sidewalk on the northwest side from Quick Rd to Wyoga Lake Rd and adding a roundabout at Quick Rd. This project received $69,520 in STBG funds for right-of-way in FY 2027. Construction is scheduled for FY 2028.

Deleted project phase

4. **SUM-SR 532 & Albrecht Ave (PID 120949)** – This phase of the project is being removed as monies are moving to construction phase. Construction is scheduled for FY 2028.

STAFF COMMENTS

As with all TIP amendments, considerations with respect to public participation, financial capability, air quality, environmental justice and Plan consistency are important. Sufficient funding is forecasted from federal and state sources for this amendment. The projects listed meet all the amendment requirements mentioned above. Therefore, this amendment does not cause any negative impact.

STAFF RECOMMENDATION

Attached to this memo is Resolution Number 2024-15. This Resolution approves the amendment to the FY 2024-2027 TIP. The Staff recommends approval.

RESOLUTION NUMBER 2024-15

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

Approving Amendment #8 to the FY 2024-2027 Transportation Improvement Program to revise funding for two projects, add one project and delete one project phase.

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 Transportation Improvement Program (TIP); and

WHEREAS, this Committee has been requested to amend the AMATS FY 2024-2027 Transportation Improvement Program to revise funding for two projects, add one project and delete one project phase:

1. **SUM-IR 76-6.15 (PID 100713)** – Is a project that includes increasing capacity and safety on the "Kenmore Leg" in Akron. This project has received additional funding for the right-of-way phase. Construction is tentatively scheduled to begin in FY 2027 but is not fully funded.

2. **SUM-N Main St High Level Bridge (CR 8-9.08) (PID 115383)** – Is a project that includes replacing the high-level bridge over the Cuyahoga River in Akron. This project has received approximately $4.12 million from the Omnibus bill for the design phase. Construction is tentatively scheduled to begin in FY 2030 but is not currently funded.

3. **SUM-State Rd Widening (PID 121863)** – Is a project that includes reconstruction of State Rd to add a two way left turn lane and sidewalk on the northwest side from Quick Rd to Wyoga Lake Rd and adding a roundabout at Quick Rd. This project received $69,520 in STBG funds for right-of-way in FY 2027. Construction is scheduled for FY 2028.

4. **SUM-SR 532 & Albrecht Ave (PID 120949)** – This phase of the project is being removed as monies are moving to construction phase. Construction is scheduled for FY 2028.

WHEREAS, the necessary public involvement has been fulfilled as described in the AMATS Public Participation Plan; and

WHEREAS, it has been determined that the IR 76 project is not exempt from regional air quality conformity analysis and has been analyzed for air quality conformity. An air quality conformity determination that addresses both ozone and $PM_{2.5}$ pollutants has been conducted and has shown that the projects will conform to air quality requirements; and

WHEREAS, interagency consultation has occurred on July 18, 2024 and all planning partners concur to use current conformity determination due to no scope changes for this project; and

WHEREAS, the environmental justice impacts of this amendment has been considered consistent with "Executive Order 12898 Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations"; and

WHEREAS, this Committee has analyzed this request and found this amendment to be consistent with Transportation Outlook 2045, the Regional Transportation Plan, and with the availability of federal funds forecasted for the AMATS area.

NOW THEREFORE BE IT RESOLVED:

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

2. That this Committee considers the necessary public involvement has been carried out as described in the AMATS Public Participation Plan.

3. That this Committee affirms that sufficient federal funding is expected to be available for the Akron Urbanized Area to maintain financial constraint.

4. That this Committee reaffirms the air quality conformity determination of Transportation Outlook, the 2045 Regional Transportation Plan.

5. That this Committee affirms conformity with environmental justice requirements.

6. That this Committee affirms consistency with Transportation Outlook 2045, the Regional Transportation Plan.

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

AMENDMENT # 8 - 8/8/24
RESOLUTION 2024-15
AMATS TRANSPORTATION IMPROVEMENT PROGRAM FY 2024-2027
TABLE 2-3 (HIGHWAY IMPROVEMENTS)

PID #	CO-RTE-SECTION	LENGTH (MILES)	LOCATION & TERMINI	TYPE OF WORK	FUND TYPE	PHASE	2024	2025	2026	2027	TOTAL PROJECT COST ($000)	PROJECT SPONSOR	AIR QUALITY STATUS
100713	**SUM-IR 76-6.15** **(REVISED FUNDING)**	3.30	AKRON I-76 ALSO KNOW AS THE "KENMORE LEG" BETWEEN THE US 224/I-277 INTERCHANGE ON THE SOUTH END AND THE I-77 INTERCHANGE ON THE THE NORTH END	IMPROVEMENTS TO INCREASE CAPACITY AND IMPROVE SAFETY INCLUDING STRUCTUAL REHABILITATION AND NOISE WALLS	**FED** **STATE** FED STATE	**P** **P** R R		1,231,830 136,870 **415,000** ~~45,000~~ ~~5,000~~ **185,000**			~~143,913,188~~ **144,463,188**	ODOT	ANALYZE
115383	**SUM-N MAIN ST HIGH LEVEL BRIDGE CR 8-9.08** **(REVISED FUNDING)**	0.17	AKRON OVER CUYAHOGA BRIDGE	REPLACE BRIDGE SFN 7730306 (OVER THE CUYAHOGA RIVER)	BRIDGE TRC LOCAL OMNIBUS	P P P P		4,210,526 789,474 ~~263,158~~ **1,292,228** **4,116,279**			~~5,263,158~~ **10,408,507**	SUMMIT COUNTY ENGINEER	EXEMPT
121863	**SUM-STATE RD WIDENING** **(NEW PROJECT)**	1.49	CUYAHOGA FALLS QUICK RD TO WYOGA LAKE RD	PAVEMENT REPLACEMENT, ADDING TWO WAY LEFT TURN LANE, ROUNDABOUT AT QUICK RD, ADDING SIDEWALK ON NORTH/WEST SIDE	STBG LOCAL	R R				**69,520** **17,380**	**15,000,000**	CUYAHOGA FALLS	EXEMPT
120949	**SUM-SR 532 & ALBRECHT AVE SR 532-0.80** **(DELETE PHASE)**	0.01	MOGADORE SR 532 & ALBRECHT AVE	NEW SIGNAL	**CMAQ** **LOCAL**	**R** **R**				**0** ~~4,800~~ ~~1,200~~ **0**	**358,113**	MOGADORE	EXEMPT

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 2024-16R – To Add Capital Funds for METRO RTA (FY 2024-2027 TIP Amendment #9)**

DATE: **July 24, 2024**

Executive Summary

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

The Federal Transit Administration (FTA) makes funds available to the area's two transit agencies through its Urbanized Area Formula Funding Program (49 U.S.C. Section 5307). METRO RTA and PARTA split approximately $10.5 million per year allocated to the Akron urbanized area (UZA) for capital and capital-related projects. The bulk of these funds generally goes to the purchase of replacement buses and preventive maintenance in order to keep the vehicle fleet and other assets in a state of good repair.

METRO and PARTA recently received their annual apportionment of federal capital funds. Consequently, METRO is requesting that these additional funds be added to the TIP.

METRO RTA is requesting the following changes to the TIP:

- Add Funding for Replacement Buses (PID 104362)

METRO is requesting the addition of $14,368,000 in federal transit funds (Section 5307) towards an existing project for the replacement of large compressed natural gas (CNG) fueled buses. This request will increase the number of buses from fifteen to thirty-three. The project will remain scheduled in FY 2025. METRO will provide a local share of $4,092,000, with a total project cost of $20,460,000.

- Add Funding for Preventive Maintenance (PID 104364)

METRO RTA is requesting to add $3,386,880 in federal transit funds (Section 5307) towards an existing project for the capital costs of maintenance. This project currently has $1,070,000 in state general revenue funds (GRF) awarded through ODOT's Urban Transit Program. METRO will provide a local amount of $696,720. The total project cost is $8,833,600, remaining scheduled in 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 METRO RTA.

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 2024-16R. This resolution approves the requested changes to FY 2025 of the AMATS Transportation Improvement Program as described above. The Staff recommends approval.

RESOLUTION NUMBER 2024-16R

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

TO ADD CAPITAL FUNDS FOR METRO RTA - (FY 2024-2027 TIP AMENDMENT #9)

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, METRO RTA provides public transportation services in the AMATS area; and

WHEREAS, METRO RTA 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, METRO RTA and PARTA are eligible recipients of Federal Transit Administration (FTA) Section 5307 Urbanized Area Formula Program funds; 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, METRO RTA is an eligible recipient of Congestion Mitigation and Air Quality Improvement (CMAQ) Program funds flexed over to the FTA; and

WHEREAS, METRO RTA is an eligible recipient of Carbon Reduction Program (CRP) and Surface Transportation Block Program (STBG) funds flexed over to the FTA; and

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

WHEREAS, METRO RTA has requested that FY 2025 of the TIP be amended to add funds from the FTA Section 5307 Urbanized Area Formula Program; 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

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

RESOLUTION NUMBER 2024-16R Continued

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.

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

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Date