

INFRASTRUCTURE

Interstates and National Highway System	—	38
Functional Class	—————	40
Pavement	—————	42
Bridges	—————	44
Rail Facilities	—————	46
Freight	—————	48
Air Travel	—————	50
Transit Facilities	—————	52
Transit Ridership	—————	54
Trails and Bicycle Facilities	—————	56

Components of the National Highway System

Interstate: The Eisenhower Interstate System of highways retains its separate identity within the NHS.

Other Principal Arterials: These are highways in rural and urban areas which provide access between an arterial and a major port, airport, public transportation facility, or other intermodal transportation facility.

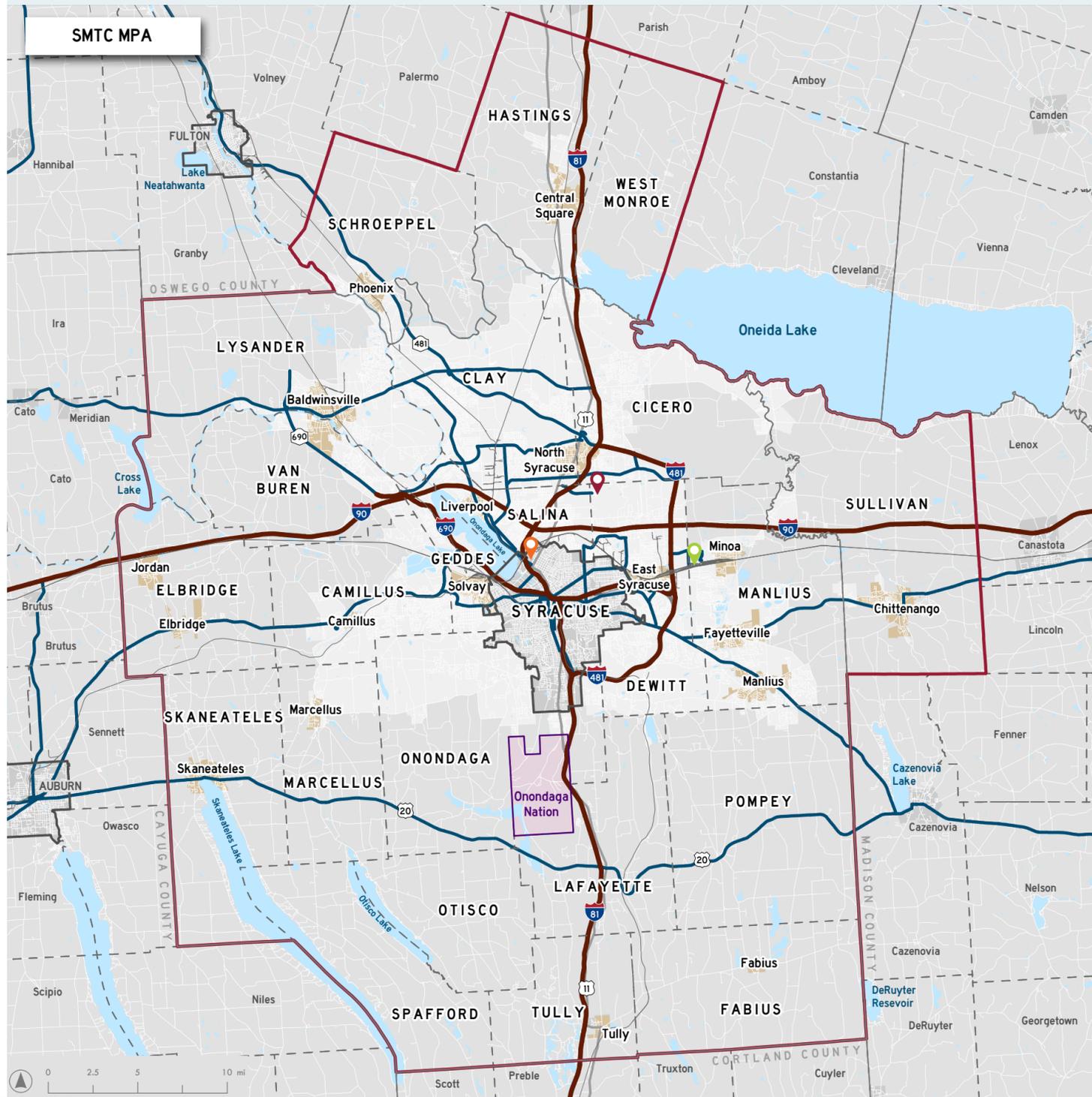
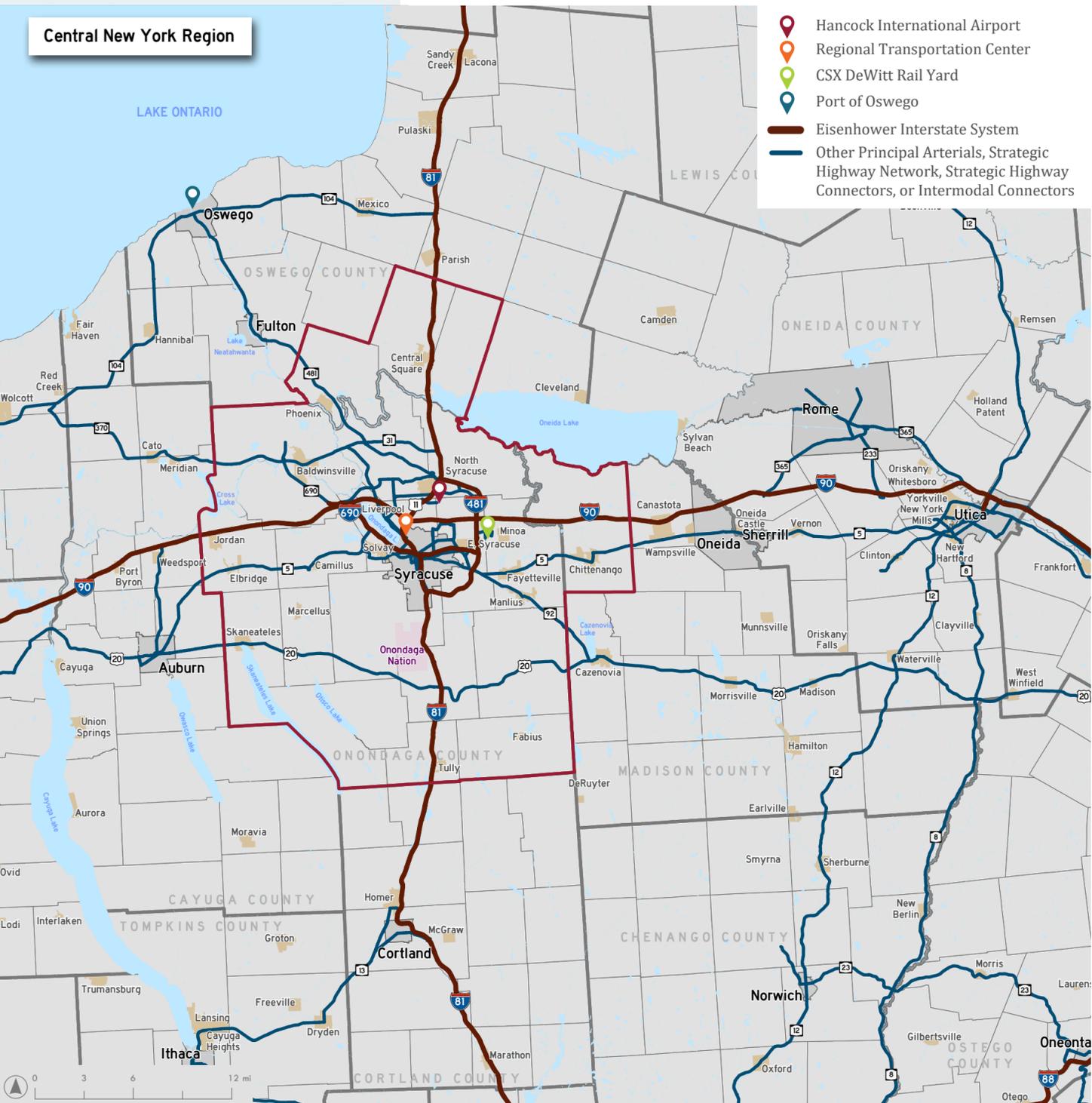
Strategic Highway Network (STRAHNET): This is a network of highways which are important to the United States' strategic defense policy and which provide defense access, continuity and emergency capabilities for defense purposes.

Major Strategic Highway Network Connectors: These are highways which provide access between major military installations and highways which are part of the Strategic Highway Network.

Intermodal Connectors: These highways provide access between major intermodal facilities and the other four subsystems making up the National Highway System.

Data Source: NYSDOT, 2023; FHWA

In the SMTC Planning Area, there are 292 centerline miles included on the National Highway System.



The National Highway System (NHS) is a network of strategic roadways important to the United States economy, defense, and mobility. The NHS was developed by the US Department of Transportation in cooperation with the states, local officials, and metropolitan planning organizations, and was designated by Act of Congress in 1995.

The NHS includes the entirety of the

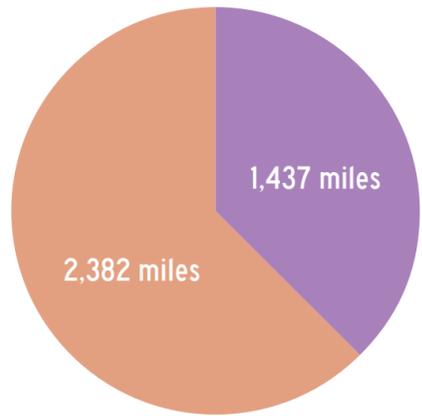
Interstate Highway System. Interstates 81 and 90 serve as crossroads in Central New York, carrying goods and traffic across the state. These interstates, along with Interstates 690 and 481, serve as essential links to the local, regional, and national transportation network. Several other roadways are on the NHS in the SMTC planning area, including the intermodal connectors near the Walsh

Rail Yard.

The US DOT apportions funding through the National Highway Performance Program specifically for use on the NHS. Approximately \$615 million of these NHPP funds are currently programmed to several bridge or highway projects on the NHS inside the SMTC's Metropolitan Planning Area, according to the 2026-2030 TIP.

Functional Classification is the process by which roads are categorized according to the type of service they are meant to provide.

Functional Class is directly related to federal aid eligibility, which determines if a road can receive federal transportation funding.

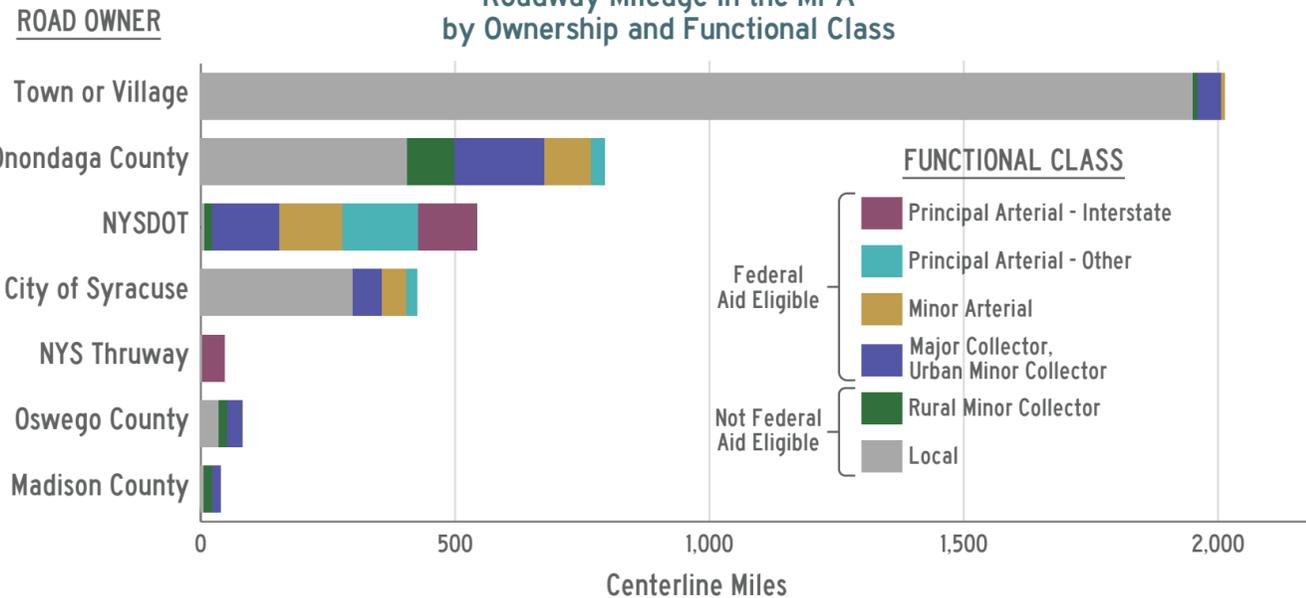


Urban/Rural Roadway Mileage

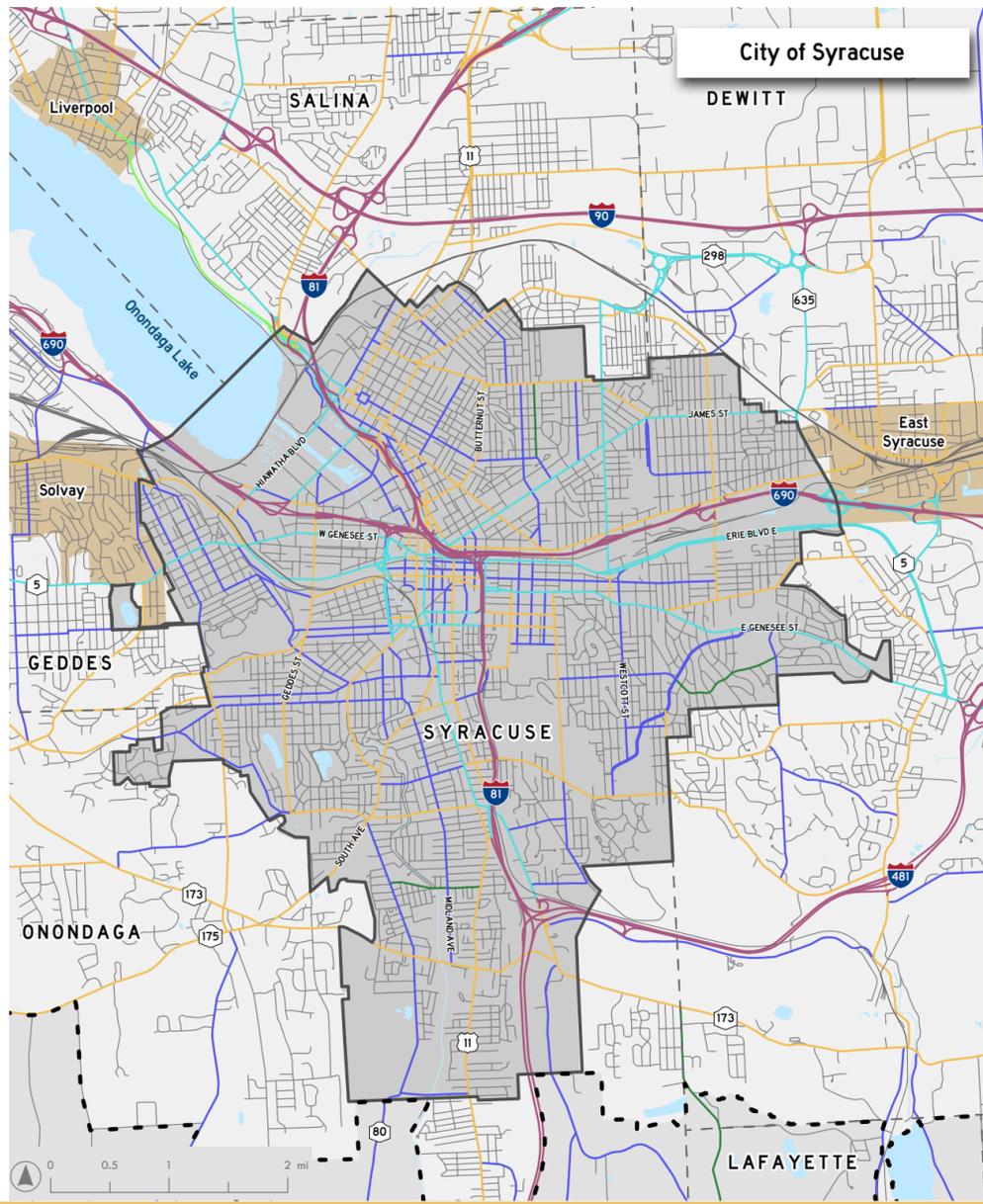
- Urban (within the 2020 Urban Area)
- Rural (outside the 2020 Urban Area)



Roadway Mileage in the MPA by Ownership and Functional Class



Data Source: NYSDOT, 2023; FHWA



Functional classification, or "Functional Class," categorizes roads according to their character and the role they play in the transportation network. This hierarchy ranges from high-speed Interstates for long-distance trips between cities to low-speed local roads providing access to individual properties. In between are arterials, which provide a high level of mobility for longer trips within the region, and collector roads, which connect traffic traveling between local roads and arterials or Interstates. Roads are also identified as being urban or rural. For example, within Onondaga County, Interstate 81 inside of the SMTC's urban area boundary is considered an Urban Principal Arterial; outside of the urban area boundary, I-81 is considered a Rural Principal Arterial.

Functional classifications are directly related to federal-aid eligibility, which determines whether a road may receive federal transportation funding. Federal-aid eligible status is given to those roads that provide critical connections within or between communities. Minor Collectors and Local roads (both urban and rural) are not federal-aid eligible.

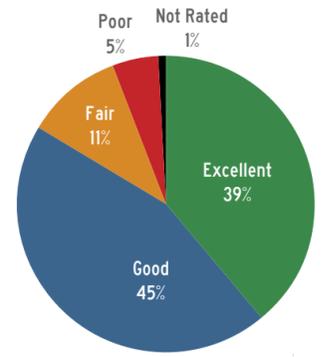
Pavement

The approximately 1,000 centerline miles of federal-aid eligible (FAE) roads in the MPA are given a pavement score.

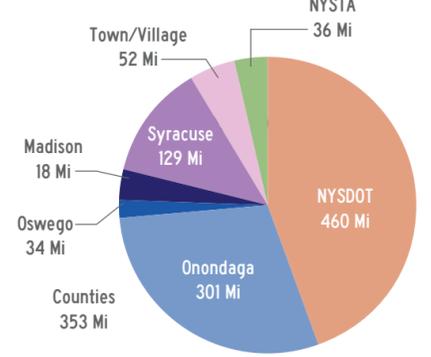
The overall weighted average rating for FAE roads is 7.6

Federal-aid pavements in the MPA are largely in Good or Excellent condition.

All FAE Pavement Conditions

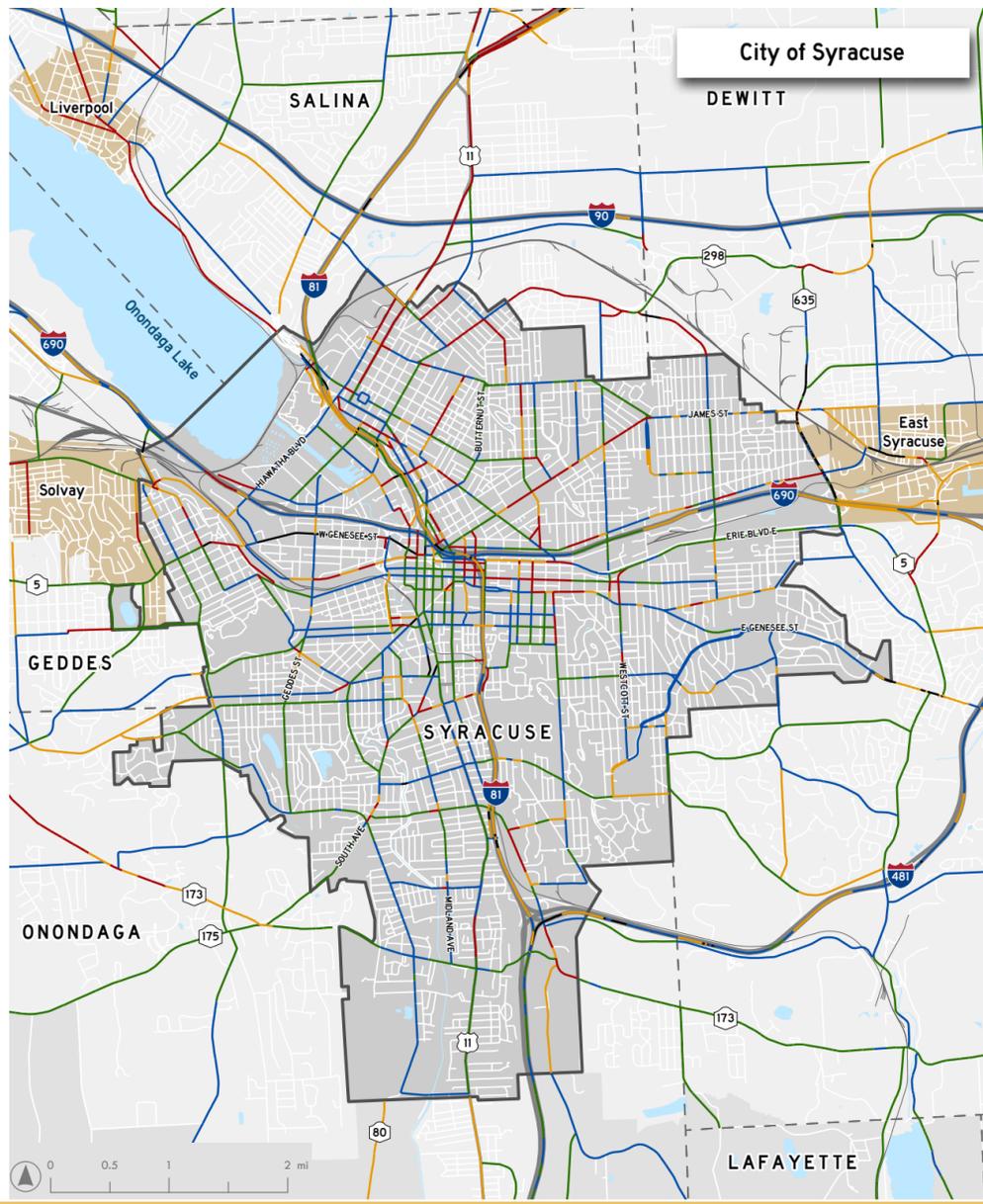
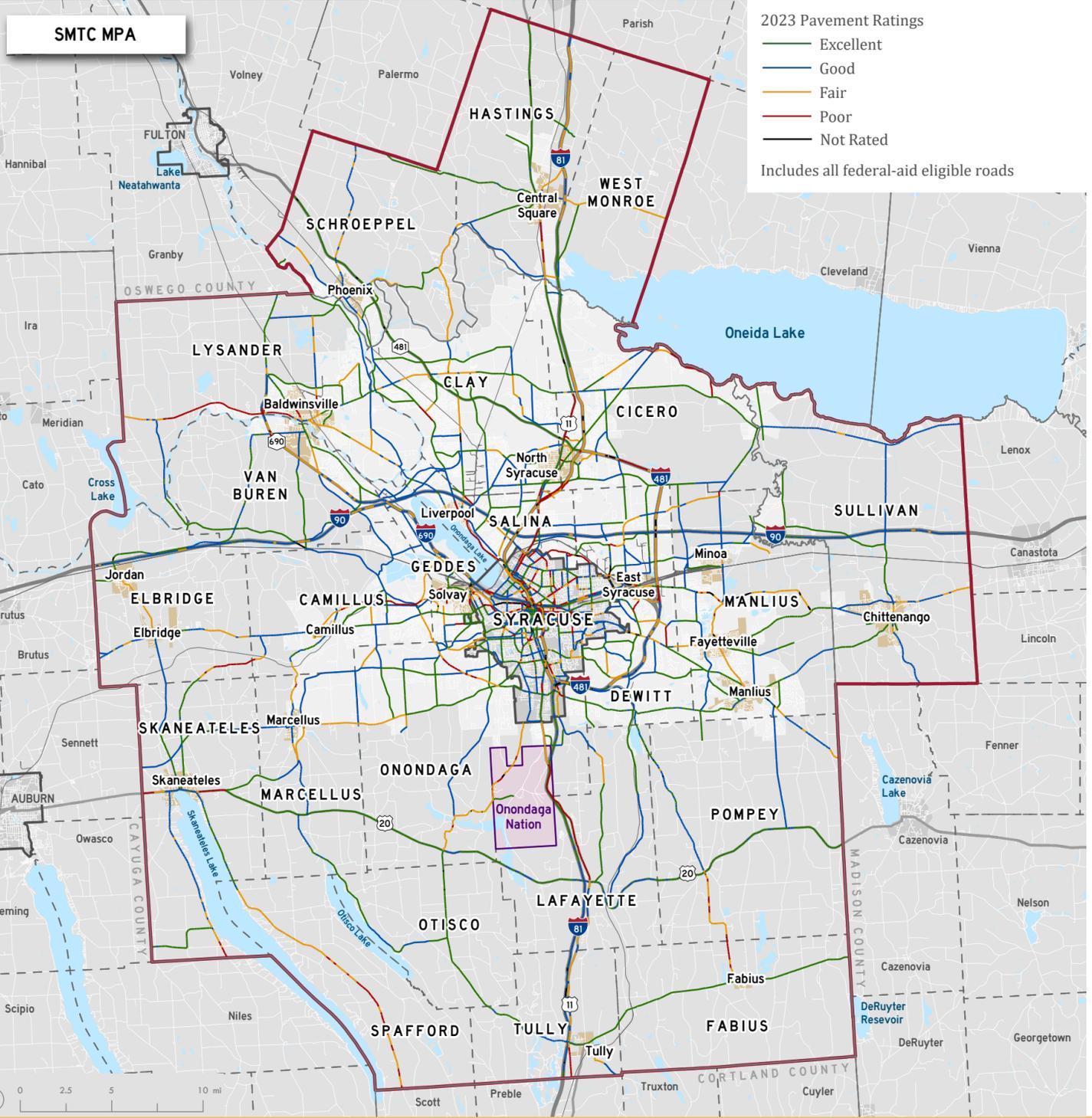
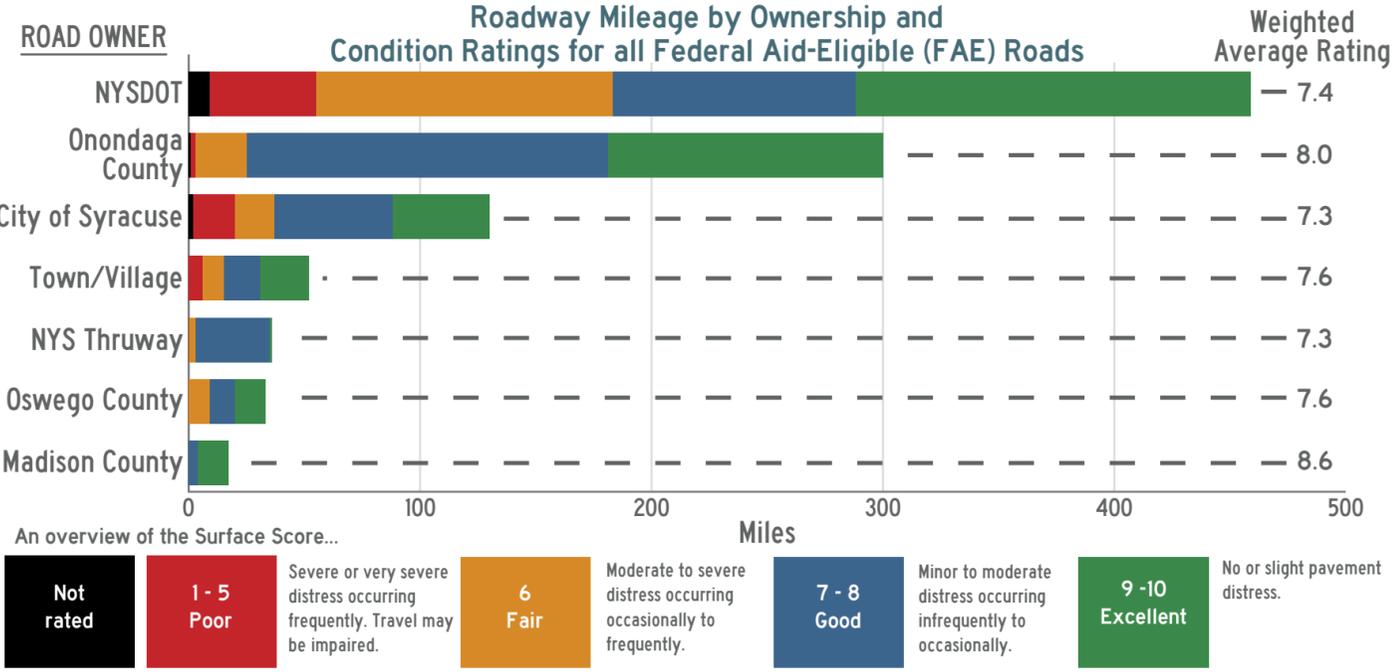


FAE mileage by Ownership



Data Source: NYSDOT, 2023; Onondaga County, 2024; City of Syracuse DPW, 2024

DRAFT DOCUMENT



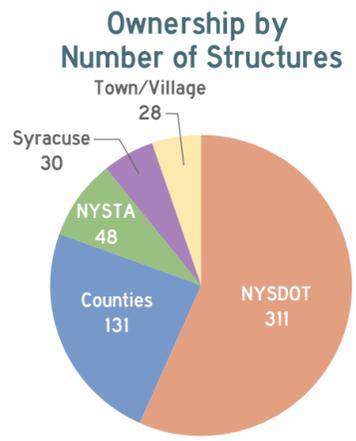
The SMTC publishes an annual report documenting pavement conditions on all federal-aid eligible (FAE) roads in the metropolitan planning area. Pavement conditions in the MPA are determined based on either the Surface Score scale or an automated data collection profiler vehicle. The Surface Score scale, carefully crafted by the NYS Department of Transportation and illustrated above, ranges from "1" (very poor) to "10" (excellent condition), based on the frequency and severity of pavement distress. This moving-vehicle windshield survey utilized by SMTC staff is designed to permit rapid estimates of overall condition. The NYSDOT also collects additional pavement metrics using an automated data collection profiler vehicle. Data from the profiler vehicle is collected on the Interstate Highway System and the whole of the National Highway System every year, and the entirety of the FAE system over the course of two years. Selected metrics are run through an algorithm to produce a 1-10 score.

Using the 2023 data, the weighted average pavement rating for FAE roads is 7.6, or Good. Nearly a quarter of projects programmed on the SMTC's TIP are paving projects, representing approximately \$50 million in federal funds.

There are 548 roadway bridges in the MPA. This does not include rail bridges, private bridges, or bicycle/pedestrian bridges.

NYSDOT has the most structures (57%) and bridge deck area (80%) of any bridge owner in our area.

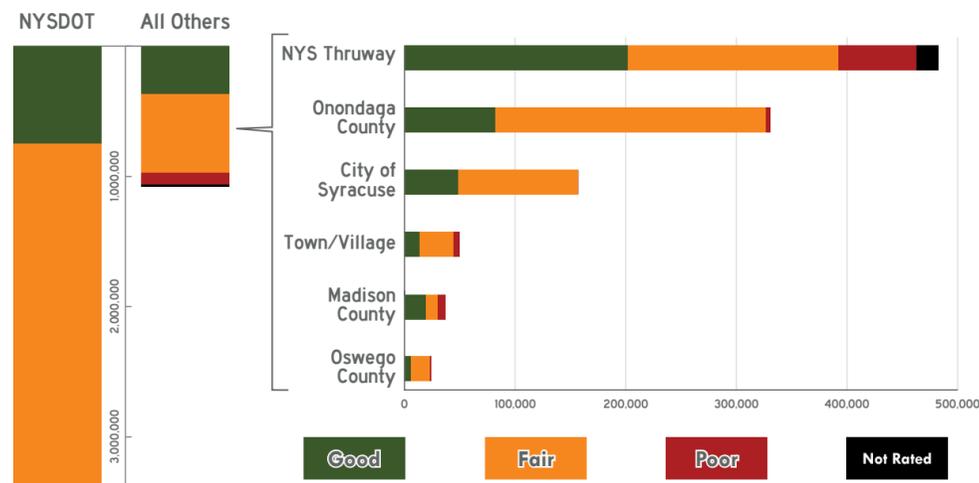
90% of bridges in our area are rated Good or Fair.



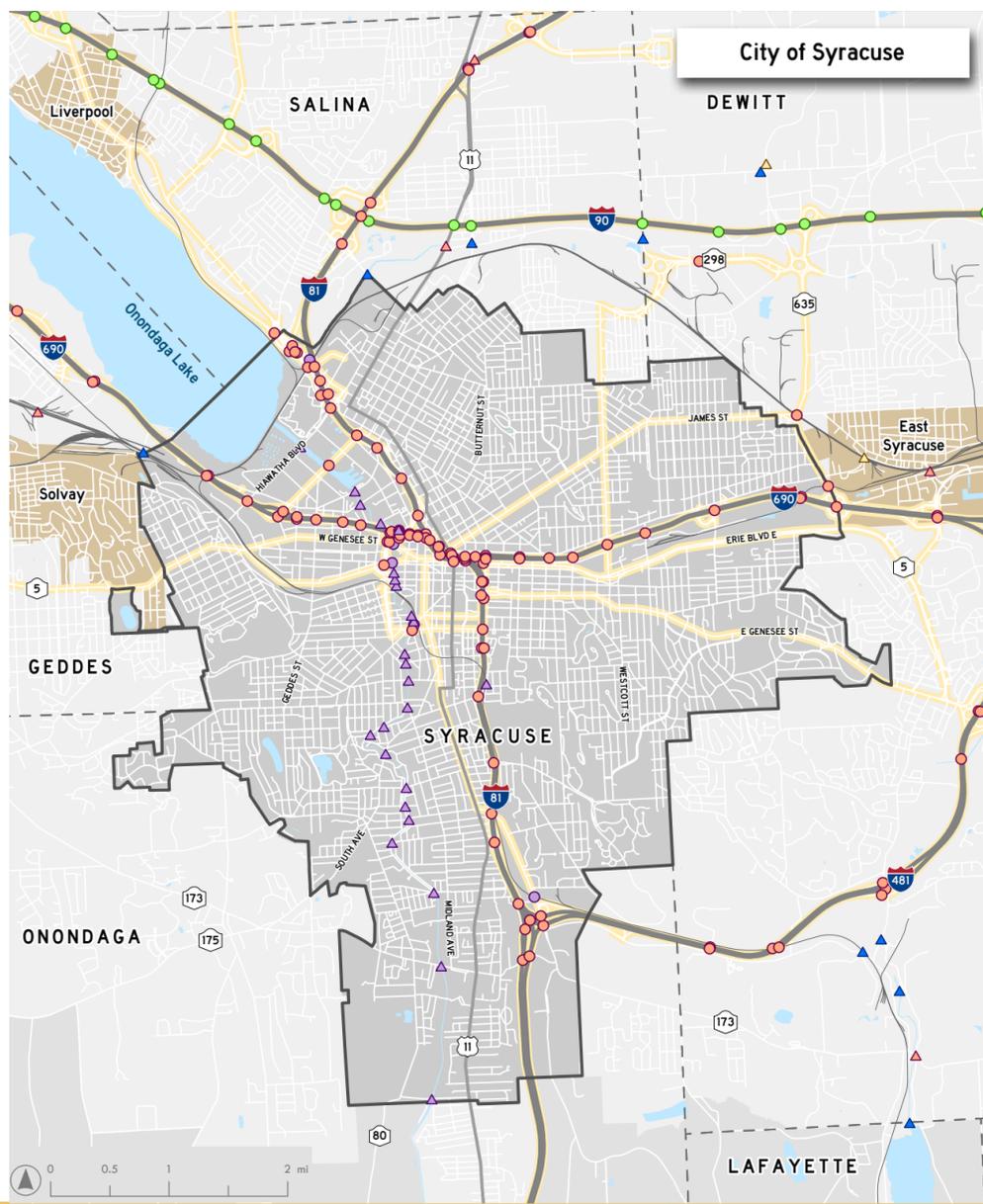
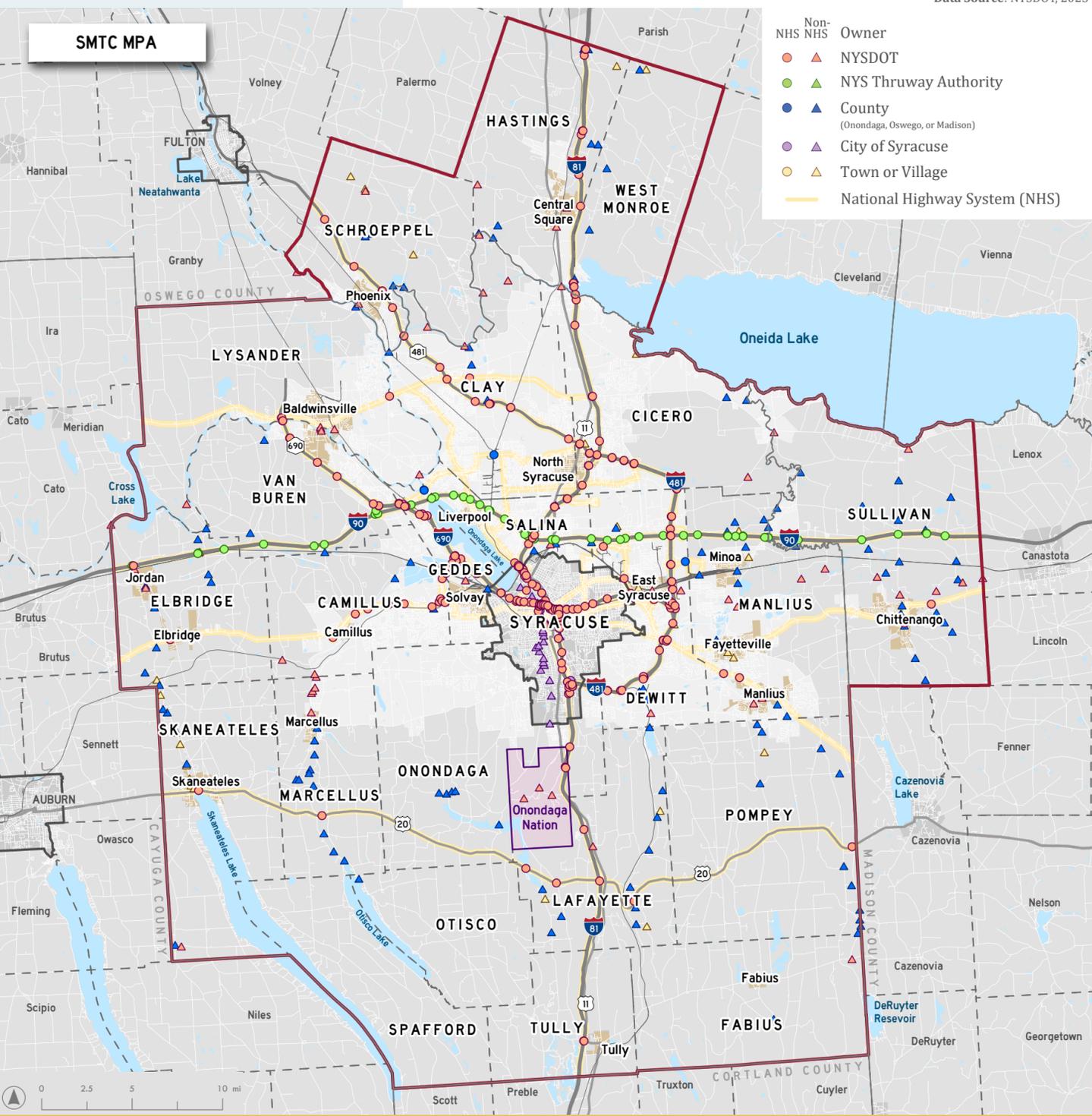
Owner	Deck Area (sf)	Percent
NYSDOT	4,367,879	80.1%
NYSTA	483,187	8.9%
Onondaga County	330,724	6.1%
Syracuse	157,034	2.9%
Town/Village	49,019	0.9%
Madison County	36,669	0.7%
Oswego County	25,262	0.5%
Grand Total	5,449,774	100%

Data Source: NYSDOT, 2023

Bridge Ratings by Deck Area (sq. ft.)



NHS Status
 180 Carry NHS
 79 Carry and Cross NHS
 50 Cross NHS
 238 Non-NHS



Each year, the SMTC publishes a report documenting conditions on roadway bridges open to vehicular travel. There are 548 of these types of bridges in the MPA.

The New York State Department of Transportation is responsible for ensuring all bridges that carry highway traffic in the state are inspected following state and federal mandates. NYSDOT inspects all highway bridges that it owns, as well as those owned by local municipalities, at a maximum of once every 24 months. Tolling authorities (such as the New York State Thruway Authority) are responsible for their own inspections but are required to submit their data to NYSDOT. NYSDOT owns the most bridges in the SMTC MPA, both by number of structures as well as by bridge deck area.

Bridge condition ratings are given on a scale of Good-Fair-Poor. This classification is based on the National Bridge Inventory (NBI) condition ratings for Item 58 (Deck), Item 59 (Superstructure), Item 60 (Substructure), and Item 62 (Culvert). Each of these items are rated on a scale of 0-9. If the lowest rating is greater than or equal to 7, the bridge is classified as "Good." If the lowest rating is less than or equal to 4, it is classified as "Poor." Bridges rated below 7 but above 4 are classified as "Fair."

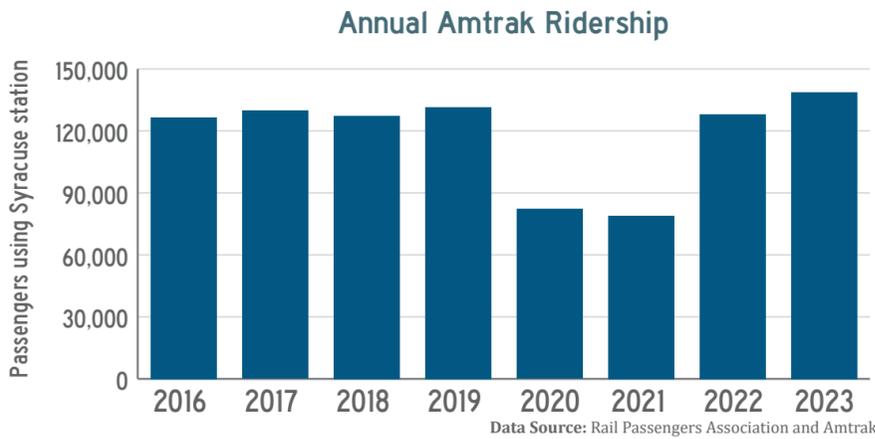
In the most recent rating cycle, 27 percent of bridges were rated Good, 63 percent Fair, and 10 percent Poor.

A significant portion of Transportation Improvement Program (TIP) funds are devoted to maintaining bridges in our region; for the most recent TIP (2026-2030), 75 percent of federal funds have been programmed to bridge projects. Bridges on the National Highway System (NHS) are prioritized for federal funding.

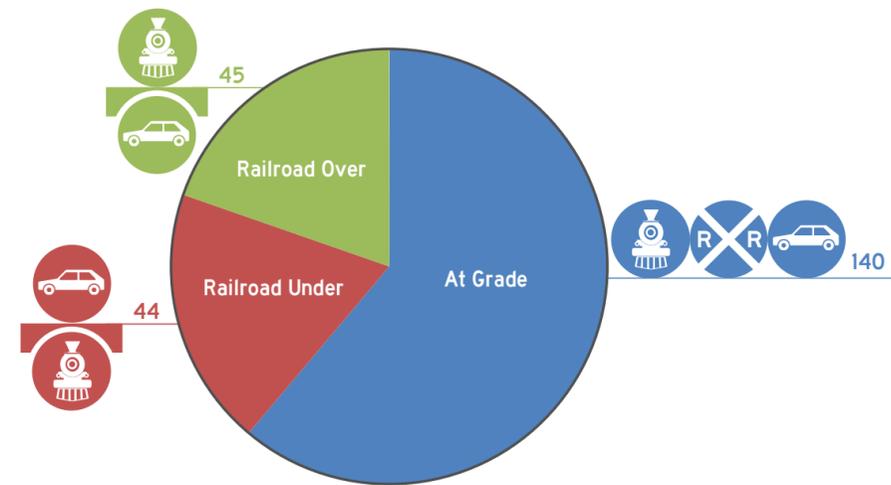
CSX (Class I) operates 82% of the total mileage of active rail lines that run within the MPA.

The CSX intermodal terminal at the DeWitt Rail Yard is a major facility that serves the Northeast and is the only facility of its type between New York City and Buffalo.

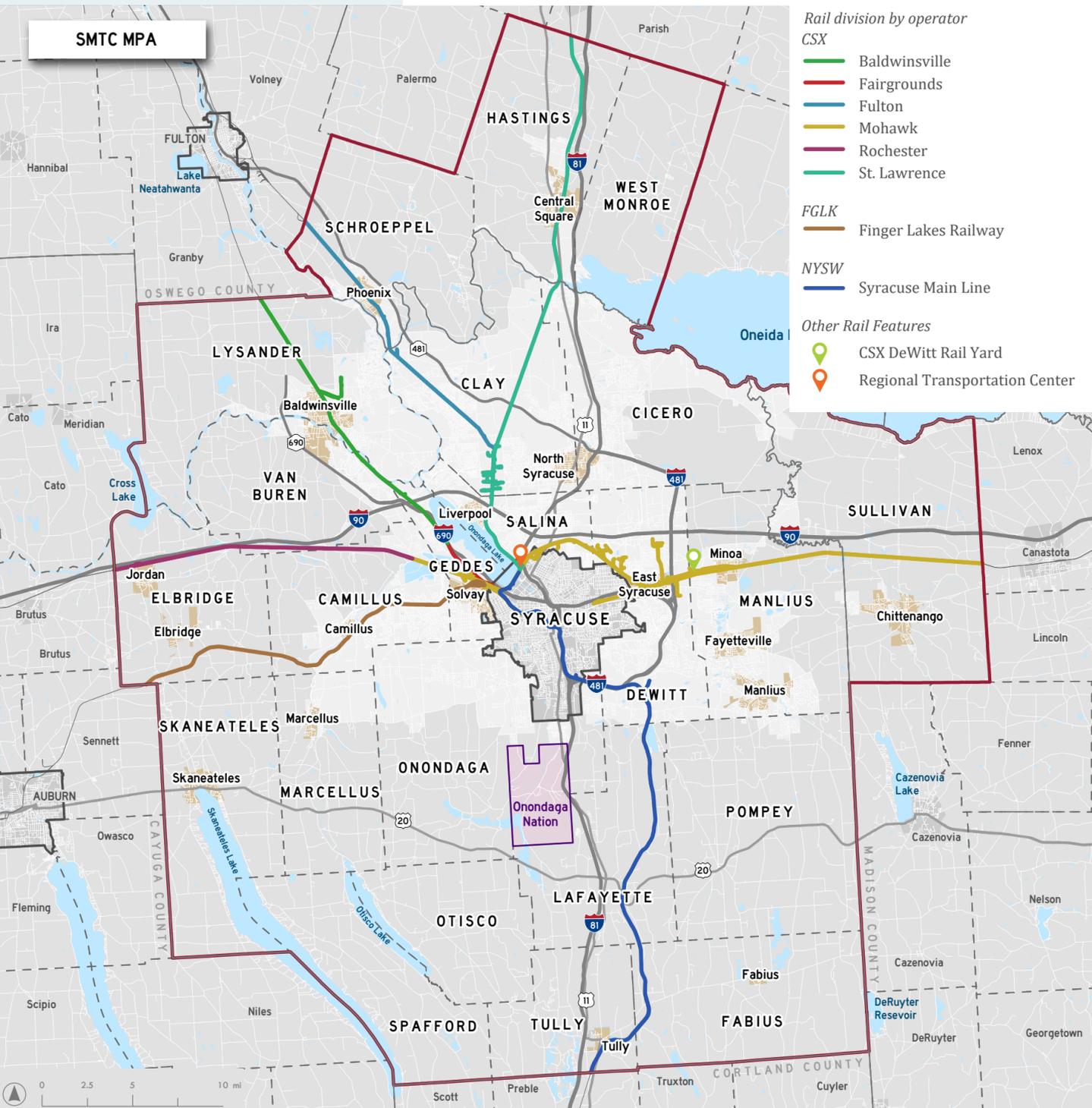
Passenger rail service is provided by Amtrak at the Regional Transportation Center on the CSX mainline.



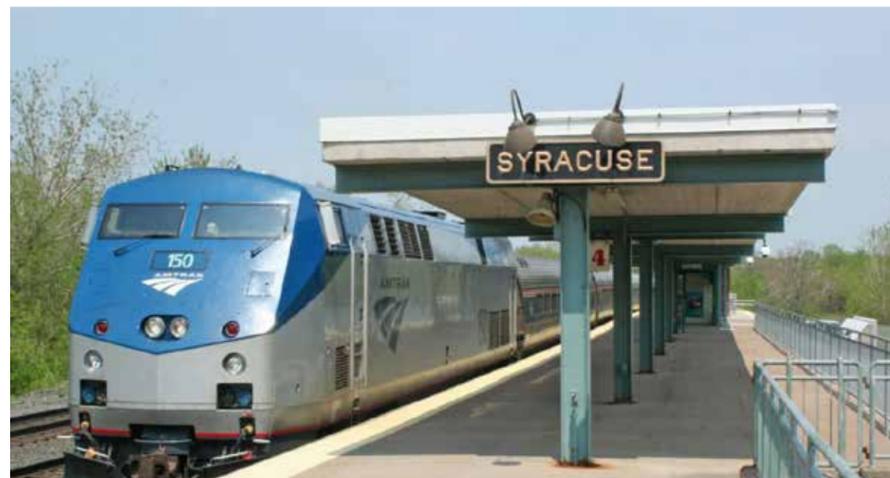
Types of Rail Crossings in the MPA



Data Source: NYSDOT



Cargo containers stacked on rail cars at CSX's DeWitt Rail Yard. Looking east from Fremont Road bridge



The Amtrak Syracuse terminal at the Regional Transportation Center

There are 305 miles of active rail lines within the MPA with 251 miles categorized as Class I, 31 miles classified as Class II, 23 miles as Class III, and about a mile of terminal lines. There are approximately 90 railroad bridges and 140 at-grade crossings.

Rail passenger service is provided by Amtrak at the William F. Walsh Regional Transportation Center (RTC). Amtrak provides intercity service on three routes: Lake Shore Limited, Empire Service, and Maple Leaf. OnTrack operated passenger shuttles from 1994 to 2007 to and from Downtown, Destiny USA, and Syracuse University. OnTrack service has since been discontinued, but the infrastructure, which includes 6 railroad stations, is still in place.

For freight, there is one major (Class I) carrier, CSX Transportation; one regional (Class II) carrier, New York, Susquehanna & Western Railway (NYS&W); and one shortline (Class III) railroad, Finger Lakes Railway. CSX operates the Chicago Main line that links Central New York with New York City, New England, and the Midwest. The Baldwinsville, Fulton, and St. Lawrence Subdivision lines north of Syracuse are operated by CSX as well, with the St. Lawrence Subdivision being the gateway to Montreal and Canada. The NYS&W interchanges with CSX in Syracuse and with Norfolk Southern Railway and the Canadian Pacific Railway in Binghamton. The Finger Lakes Railway operates between Solvay and Geneva. It has an interchange with CSX in Solvay and an interchange with the Norfolk Southern in Geneva.

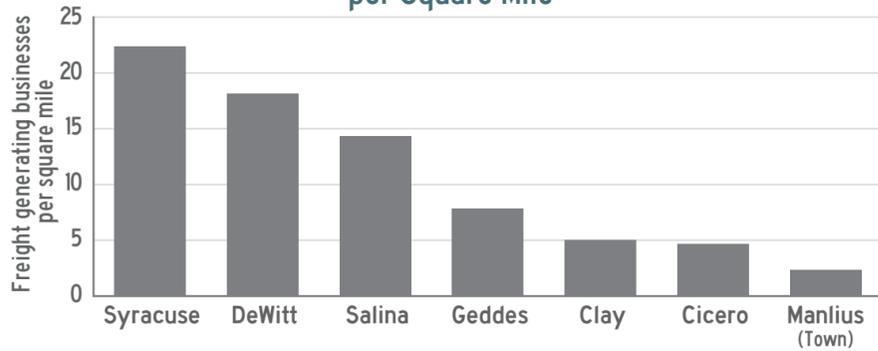
CSX also operates the intermodal terminal at the DeWitt Rail Yard, which is a major intermodal facility that handles international containers to/from Chicago, domestic containers, and "trailer on flat car;" it is the only terminal of its type between New York City and Buffalo. The DeWitt Yard is also one of three major classification yards operated by CSX in New York State.

Many businesses that ship goods by truck are located in the northern half of Onondaga County.

Heavy vehicles make up 10% or less of the total traffic volume on most roads in the MPA.

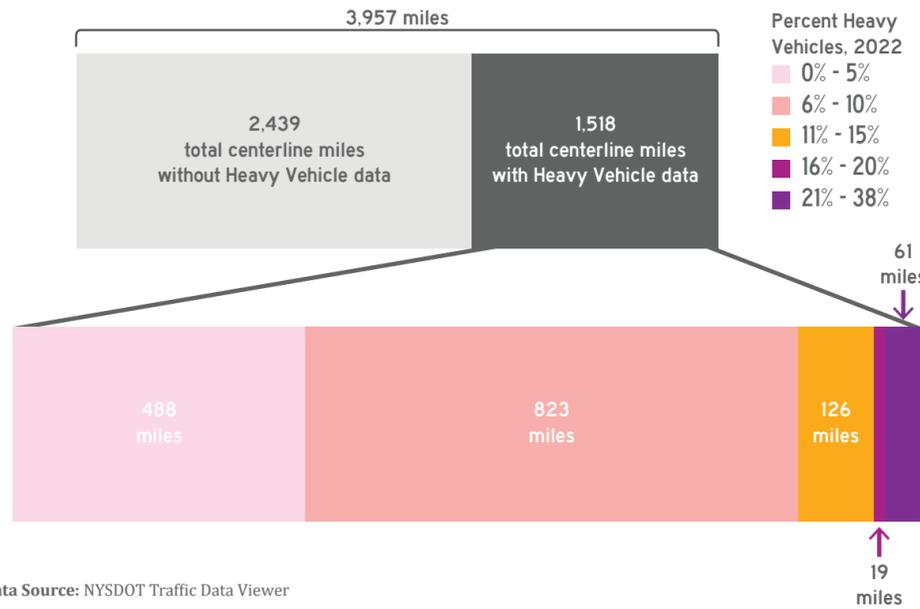
Most of the local interstate system experiences higher percentages of heavy vehicles, with highest along the NYS Thruway and I-81 south of the City.

Municipalities with Most Freight Generating Businesses per Square Mile

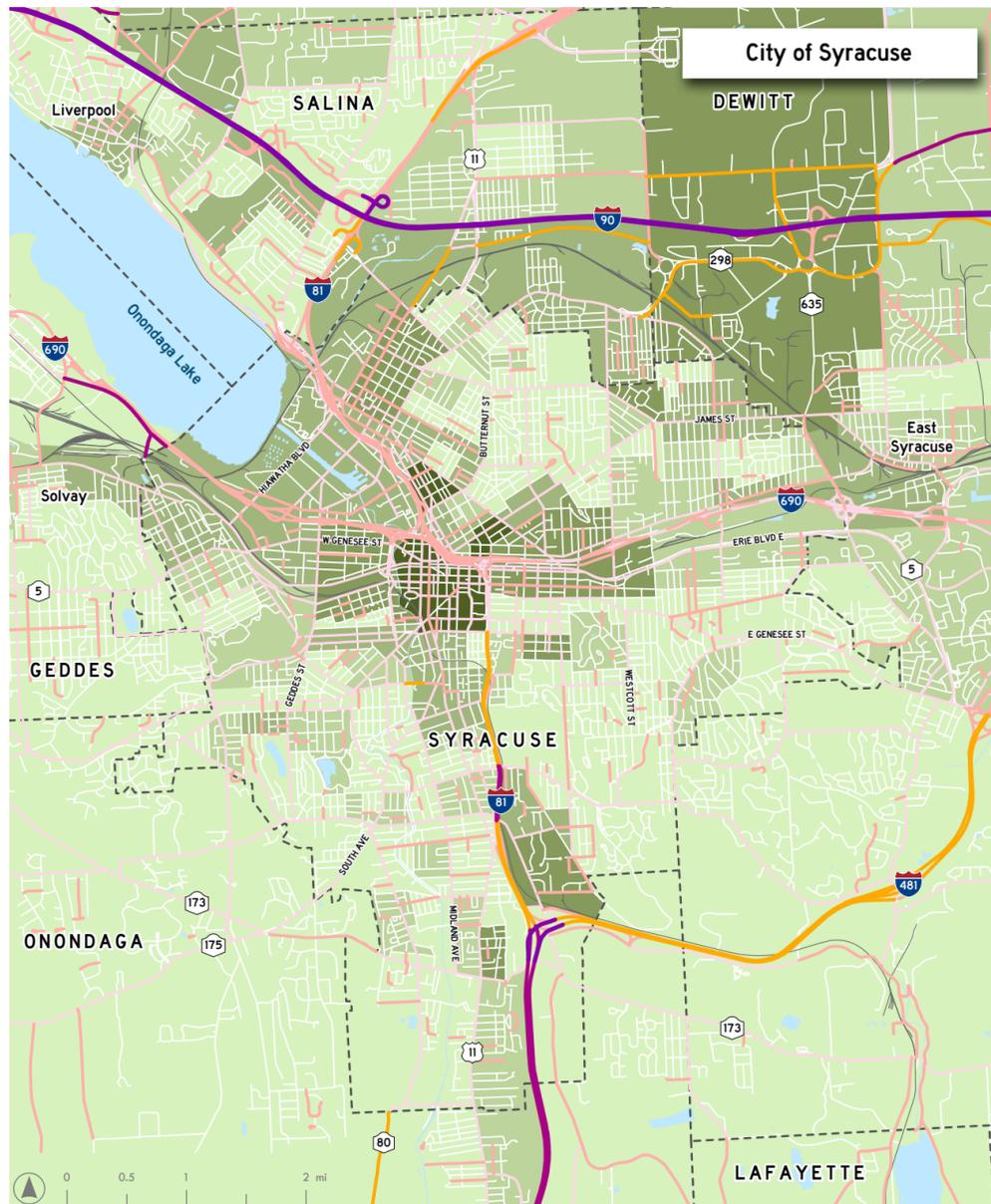
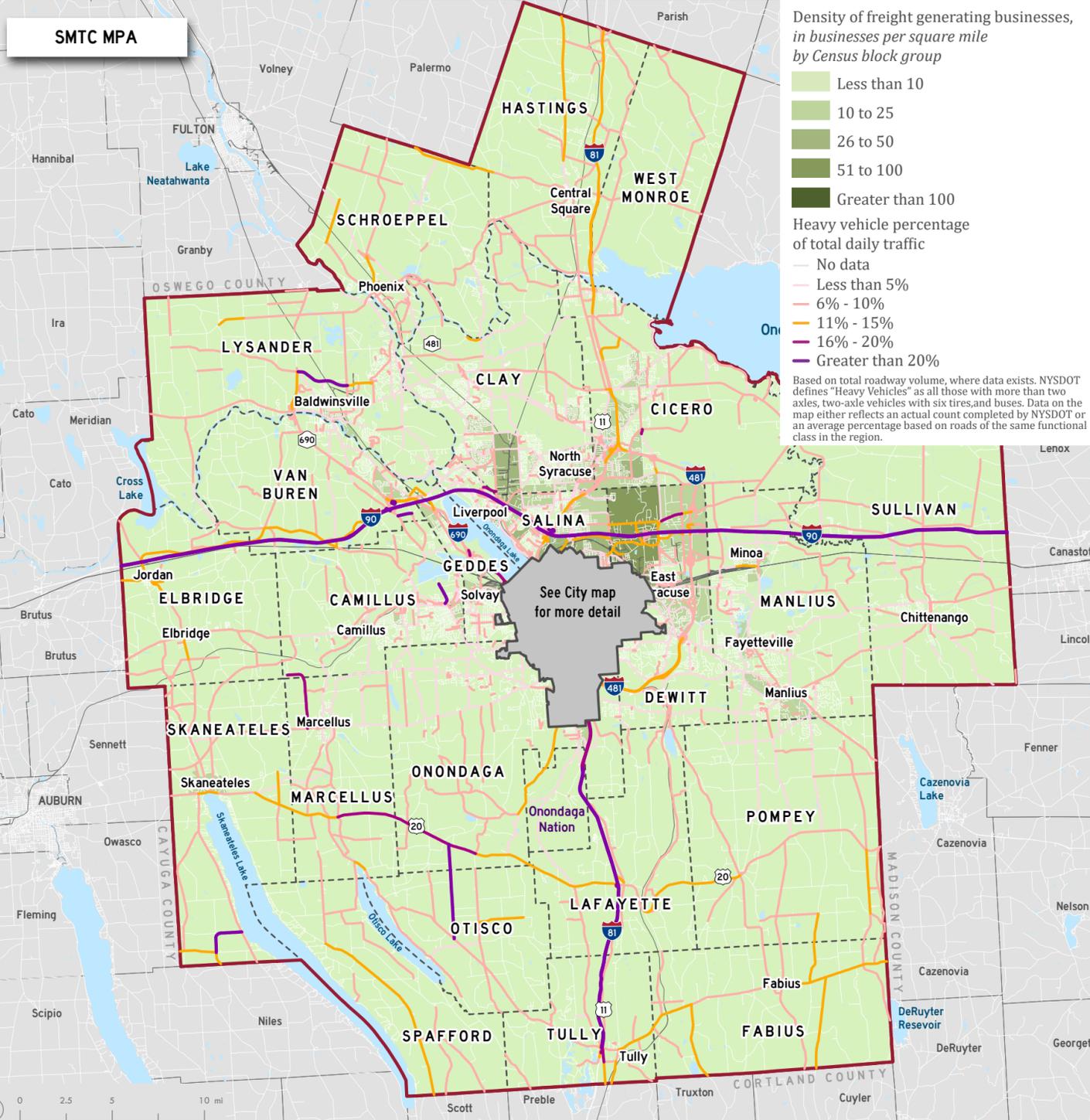


Data Source: DataAxle NAICS codes

Total Centerline Miles of Roads in the MPA by Percent Heavy Vehicles



Data Source: NYSDOT Traffic Data Viewer



Most freight generating businesses in our planning area are in the northern half of Onondaga County, with few businesses at the southern and western edges of the county. The most evident clusters of these businesses are in northern DeWitt/East Syracuse, Downtown/Northside/Inner Harbor/Solvay, along Morgan Road and Henry Clay Boulevard in Clay, and Ainsley Drive south of the Eastside.

The maps also show heavy vehicle volumes as a percentage of total daily roadway traffic. Most highlighted roadways (those with data available) experience heavy vehicle volumes of 5 percent or less. This includes many roadways within the City of Syracuse. High rates of heavy vehicles are primarily found on the local interstate system, with more than 20% heavy vehicles on all portions of the NYS Thruway in the MPA, as well as the I-81 south of the City.

Rural areas such as the southern half of Onondaga County tend to have heavy vehicle volumes between 6 percent and 10 percent, but occasionally have higher percentages of heavy vehicles. This is due to a few freight generating businesses along roads with a low overall traffic volume. Industrial areas such as the Radisson Corporate Park have higher than average heavy vehicle percentages due to this effect as well.

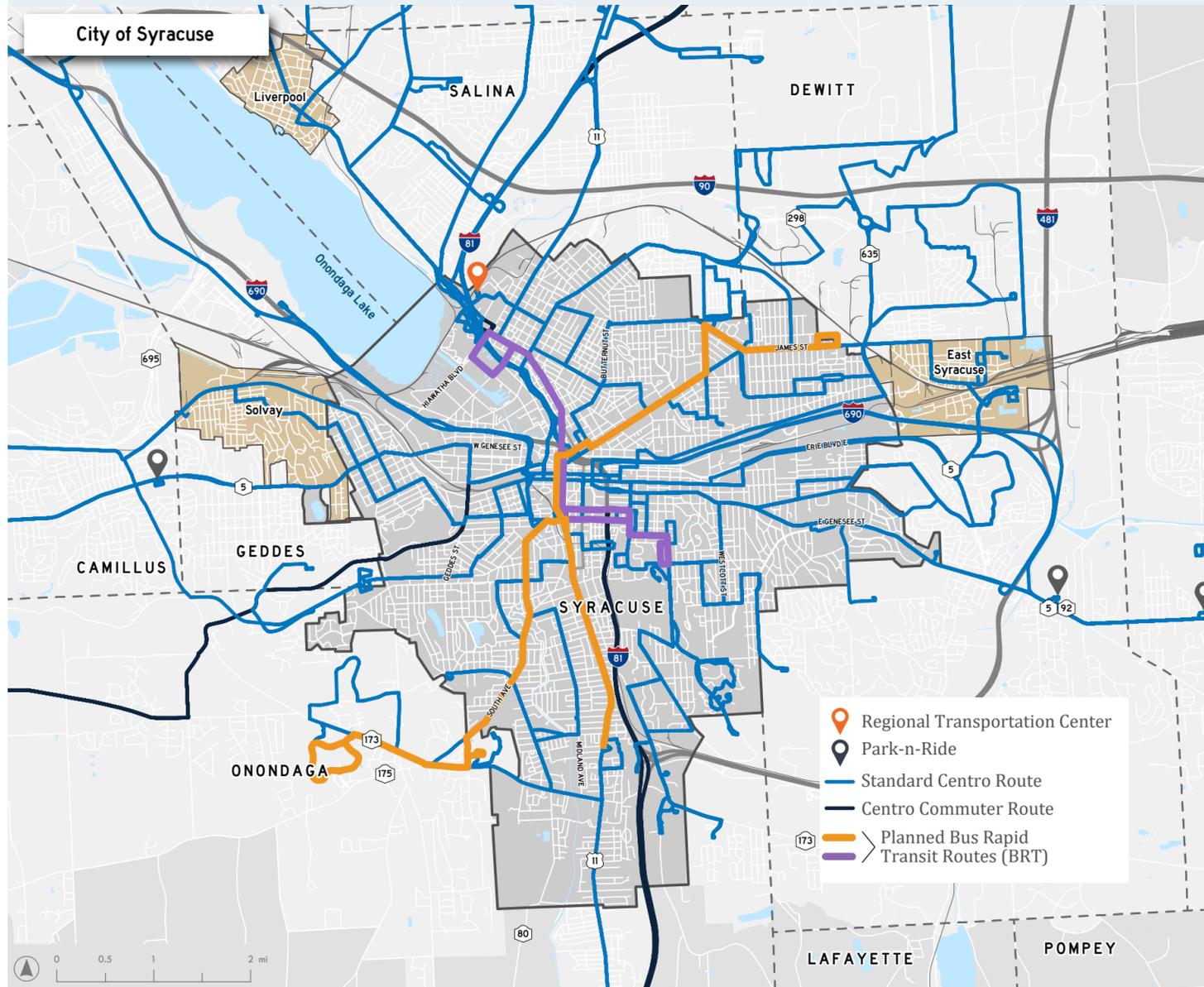
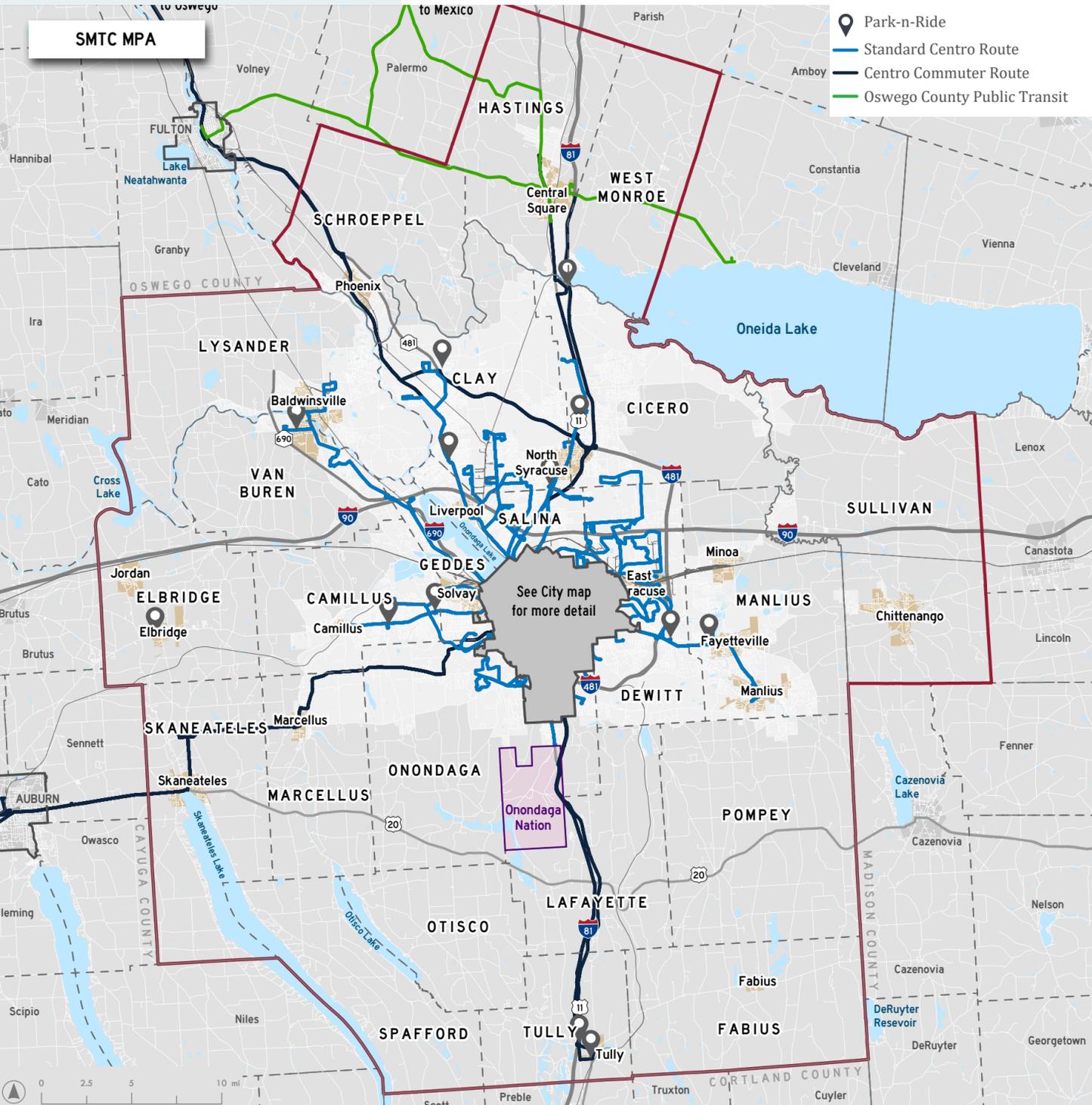
(Note: The SMTC, using data from Data Axle, mapped the density of freight generating businesses within the MPA. "Freight generating businesses" were identified using NAICS codes for utilities, construction, manufacturing, wholesale trade, and transportation and warehousing. Retail trade establishments, such as businesses in shopping malls, were not included in this analysis. Notably, the two Amazon warehouses in our MPA, Morgan Road and Kirkville Road, were not included due to being coded under a different NAICS code and not being in the Data Axle data set, respectively.)

SMTC's planning area is served by two primary public transit agencies, Centro and Oswego County Public Transit.

Bus Rapid Transit (BRT) is planned to be implemented along two corridors in Syracuse.



The Centro Transit Hub at Salina Street and Adams Street in downtown Syracuse opened in 2012.



The Central New York Regional Transportation Authority (Centro) provides public transit service in Onondaga, Oswego, Cayuga, Oneida and Cortland Counties. Centro's Transit Hub in Downtown Syracuse opened in 2012; all of Centro's bus routes in the Syracuse area originate at and return to the Hub.

Bus routes run along all major corridors in Syracuse including James Street, Salina Street, South Avenue, Genesee Street, Erie Boulevard, Court Street, and Midland Ave. Destinations served in and around the city include DestinyUSA, Shop City, Onondaga Community College (OCC), LeMoyne College, SUNY Upstate Community Hospital,

and the Liverpool Amazon Warehouse. Centro also has multiple bus routes that serve the Syracuse University area, including a free bus route developed in partnership with the university known as the "Connective Corridor." Additionally, Bus Rapid Transit (BRT) is planned to be implemented along two primary corridors in Syracuse: one connecting SU/ESF to DestinyUSA, and one connecting Eastwood to OCC and Valley Plaza, both intersecting at the Hub.

Bus service extends to most of the area's villages and population centers; select routes through Liverpool extend to Phoenix, Fulton, and Oswego. Two routes run out of

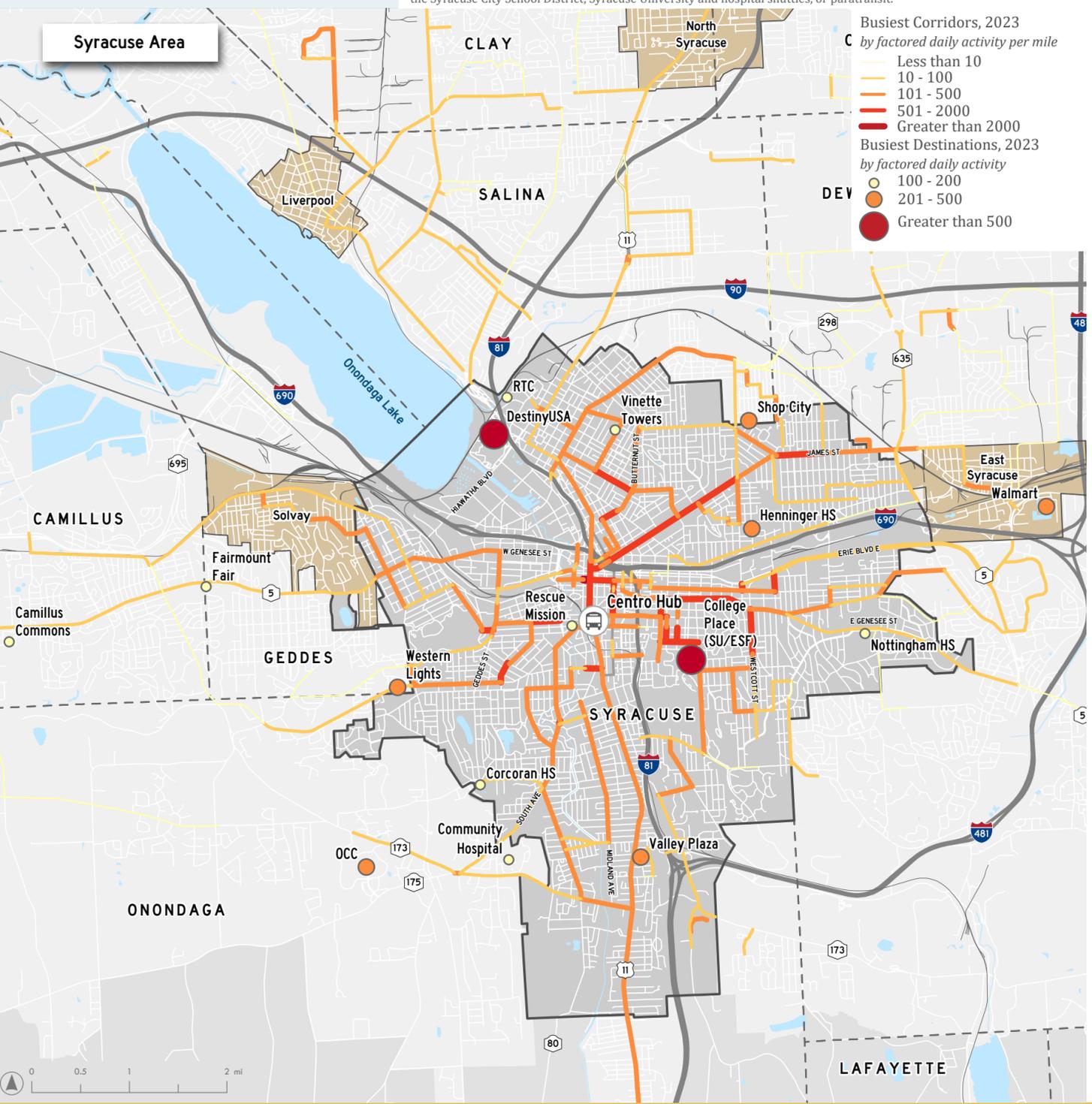
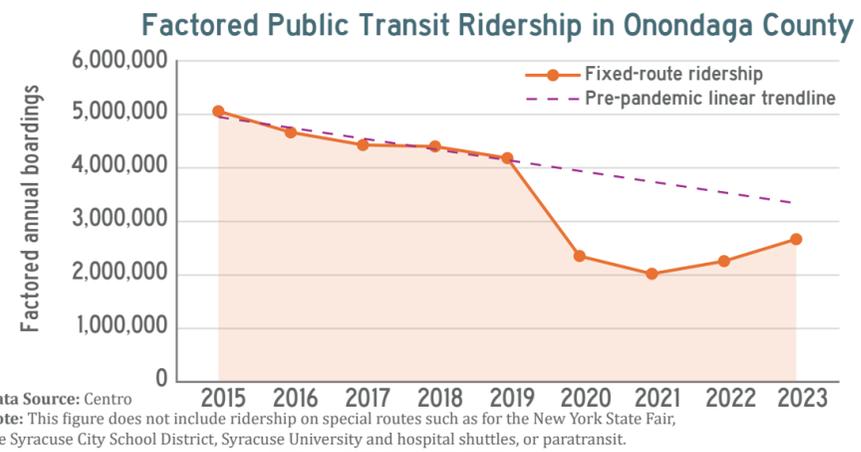
Syracuse to the west, one to Solvay and Camillus, and one through Marcellus and Skaneateles to Auburn. Centro's service reaches north into Central Square and south to Tully.

In addition to Centro's service, Oswego County provides another public transit system, Oswego County Public Transit (OPT). This includes one route through SMTC's planning area, Route 12, connecting Fulton, Central Square, Constantia, and Mexico. Before the COVID-19 pandemic, both Centro and OPT ridership were gradually decreasing. Since 2021, ridership has gradually increased in both transit systems, approaching expected ridership.

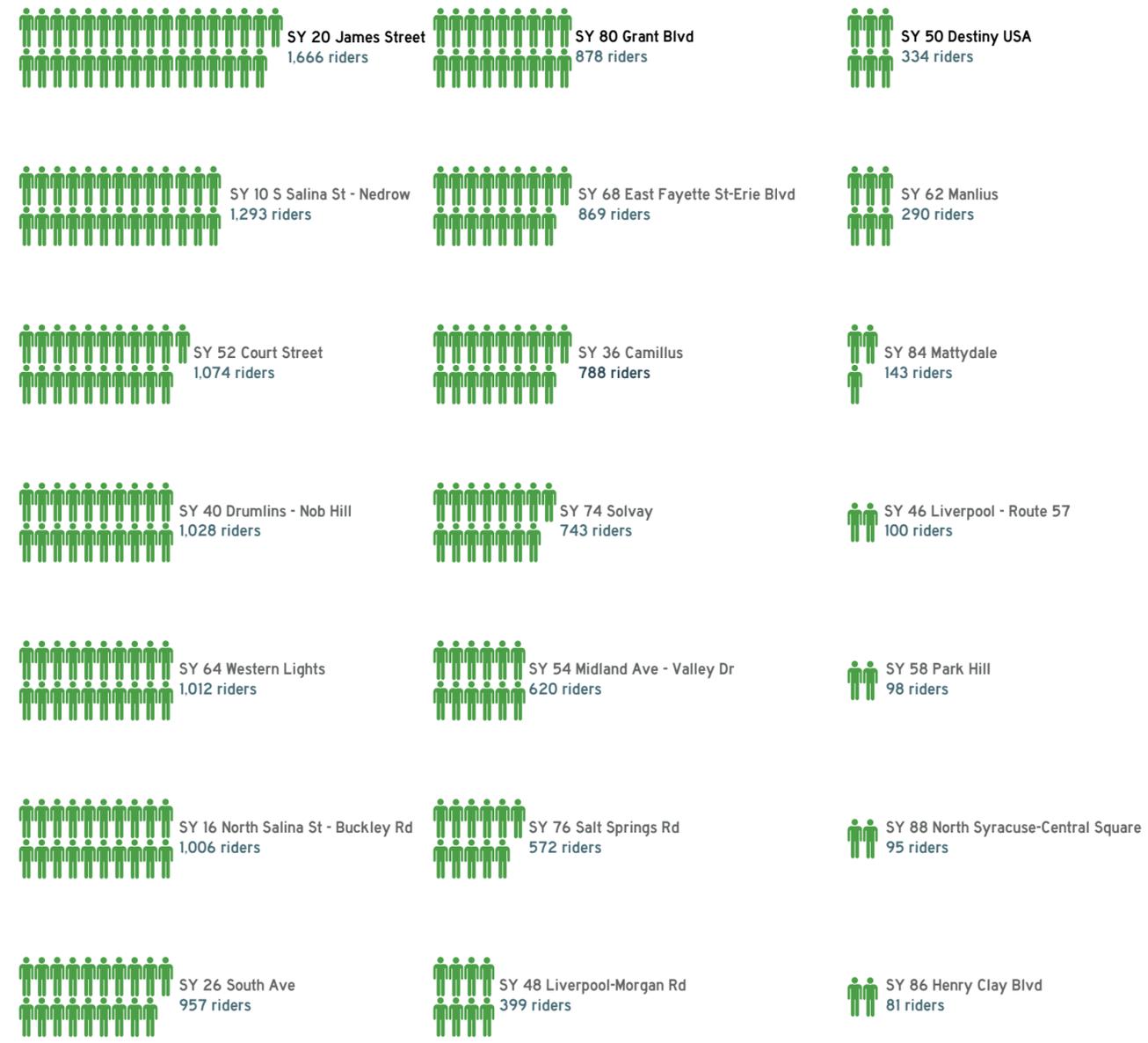
Centro's total ridership for 2023 was nearly 2.7 million, with 14,000 riders on an average weekday.

The busiest transit route in the MPA is Centro's SY 20 James Street with 1,666 riders on an average weekday in 2023.

Transit ridership has steadily increased since the COVID-19 pandemic.



Average Weekday Ridership by Centro Route (2023)



Data Source: Centro
 Note: This figure does not include ridership on special routes for the New York State Fair, the Syracuse City School District, Syracuse University and hospital shuttles, or paratransit. It also does not include routes with 75 or less average daily riders, SY 82 Baldwinsville (75 riders), SY 72 Townsend St (31 riders), SY 30 Westcott (22 riders), SY 510 Lafayette - Tully (4 riders), and SY 323 James St - Minoa (3 riders).

Over 14,000 people ride the Centro bus routes shown here on an average weekday in Onondaga County. Total annual Centro ridership in Onondaga County for 2023 was nearly 2.7 million passengers, excluding contract and special routes such as service to the New York State Fair, the Syracuse City School District, Syracuse University/SUNY ESF, hospital shuttles and other special services such as paratransit, all bringing

2023 annual ridership in Onondaga County to nearly 5.8 million. The most heavily used bus routes in the region are those that provide service in the City of Syracuse and adjacent suburbs.

The James Street routes have the highest total ridership in the region with over 1,600 daily riders. Routes along James Street serve Eastwood, Lincoln Hill, and

part of the Northside neighborhoods, with selected routes connecting to East Syracuse as well as Mollo and Taft Roads. Other corridors with high ridership include Salina Street from Court Street through Nedrow, East Genesee Street through the University Neighborhood, Park and Court Streets through the Northside, and South Avenue through the Elmwood neighborhood connecting to OCC.

Trails and Bicycle Facilities

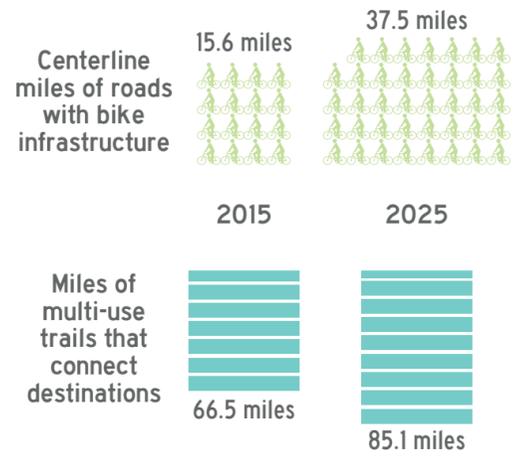
There are 85 miles of off-road bicycle and pedestrian facilities in the SMTC MPA.

There are 38 miles of on-road bicycle facilities, largely concentrated in the City of Syracuse.

Approximately \$38 million of federal funds on the current TIP are programmed for bicycle and pedestrian projects.



DRAFT DOCUMENT



Cyclists riding the Empire State Trail along Erie Boulevard East.

Data Source: NYSDOT, City of Syracuse



The regional trail network continues to expand in the SMTC MPA. Recent work within the MPA has focused on three main trail arteries: the Empire State Trail, the Onondaga Lake Loop the Lake Trail, and the Onondaga Creekwalk.

The 14-mile stretch between the Camillus and DeWitt trailheads of the statewide Erie Canalway Trail was long one of the most challenging gaps in the system. Several SMTC studies suggested on-road routes to navigate the area between the trailheads, mostly through the City of Syracuse. After several years of planning and construction, this gap was connected as a part of the overall completion of the statewide Empire State Trail system. This 750-mile bicycle and pedestrian trail spans Upstate New York from Buffalo to Albany, and then from New York City north to Canada. The system is the longest single multi-use trail in the country.

Onondaga County continues to expand the Loop the Lake Trail around Onondaga Lake. This trail system is now over ten miles long, with a new extension from the West Shore Trail over the CSX rail lines to the Onondaga Creekwalk.

The Onondaga Creekwalk has also been expanded from its former terminus in Armory Square all the way south to Kirk Park. Eventually, the trail will extend all the way to the Syracuse city line at Dorwin Avenue, providing a north-south travel route along Onondaga Creek.

The City of Syracuse also continues to expand its on-road bicycle infrastructure network, adding lanes and other painted markings to several streets throughout the city, connecting to existing trails where possible.

New York State's Bicycle Routes 5 and 11, largely in the form of wide roadside shoulders, also provide connections from east to west and north to south across our MPA. Several other smaller trails exist across the county and see both recreational and transportation use.

