SMARTer MOBILITY PROGRAM

Mobility Study
Existing Conditions Report

Final Report Submitted 12-1-23

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Figures and Tables

1 About SMART

Founded in 1967, the Suburban Mobility Authority for Regional Transportation (SMART) is the regional transportation provider for Southeast Michigan, which includes Macomb, Oakland, and Wayne Counties. With a service area of more than 2,000 square miles, SMART is a significant transit provider, serving millions of riders annually. The regional bus system helps connect people to work, school, medical appointments, recreation, and more. With a fleet of 234 fixed-route buses, SMART operates service seven days a week for approximately 22 hours a day along 47 fixed routes, helping nearly 11 million transit users reach their destinations.

SMART is prioritizing accessible transit options through a variety of service models, such as the Connector, ADA Paratransit, and Community Partnership/Community Transit Programs. The Connector is an advance-reservation, curb-to-curb service aimed at helping seniors and people with disabilities who have difficulty navigating fixed-route service to travel independently that also serves full-fare customers living within 1/3 mile of a fixed service bus route. The Community Partnership Program (CPP) facilitates transportation-oriented partnerships with neighboring municipalities and organizations. Through the program, partners can take advantage of federal funding to encourage more efficient transit programs in Southeast Michigan. These partnerships have resulted in shared and focused transit priorities that suit local needs.

Figure 1: Project Location

2 Study Purpose

SMART launched the SMARTer Mobility Program in early 2023 to evaluate their fixed route/ADA, connector general service, and the current micro transit pilot program to aid in the evaluation and analysis of the services within the region. When complete, the Program will include:

- Recommendations for service design and improvements for overall system efficiency and operational effectiveness
- Examination of all possible alternatives to address the existing services, as well as currently known, but unmet service requests that are anticipated in conjunction with new areas of development
- Comprehensive engagement with legislators, regional and local stakeholders, transit riders, and the communities

The SMARTer Mobility Program Existing Conditions report establishes a foundational resource for the agency's future analyses. To best understand the implications of transit operations in Southeast Michigan, the report will be used to evaluate SMART's current strengths, assets, and challenges in order to provide better service to riders. SMART envisions a reimagined transportation network including the implementation of a microtransit-focused service plan, SMARTer Mobility. Through the evaluation of the current fixed routes, connecting and partner services, and the microtransit pilot program, Flex, recommendations for service design improvements for overall system efficiency and operational effectiveness can be made. An in-depth examination of possible alternatives to address the existing services will help determine the best methods to provide quality service within the recently expanded service area.

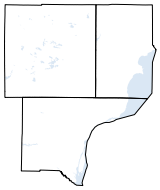
SMART has a large service area consisting of the majority of three counties in Southeast Michigan (Macomb, Oakland, and Wayne) outside of Detroit and is working to close connective gaps within and between each jurisdiction, while also ensuring that fixed-route service is integrated seamlessly with the SMARTer Mobility program. SMART aims to increase the flexibility, efficiency, and connectivity of its system for the benefit of both current and potential riders.

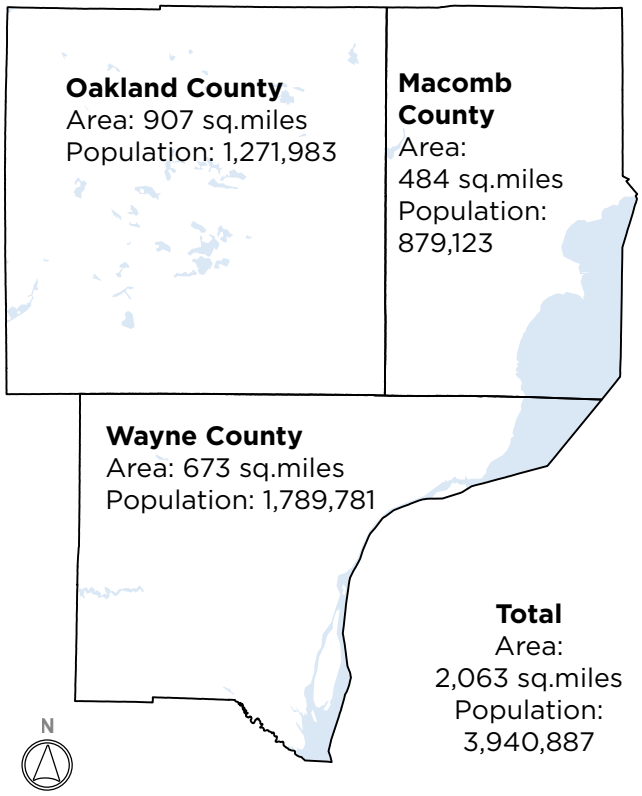
Property millages fund part of SMART's operations, and the three counties in SMART's service area participate with varying levels of funding. While the entirety of Macomb County participates, individual Wayne County municipalities have the ability to opt out of the millage. Until recently, municipalities in Oakland County were also able to opt out of providing financial support for SMART transit service. However, in 2022, Oakland County voters approved legislation adjusting the millage rate of the property tax and prohibiting communities from opting out of transit services. As a result, SMART's service area has significantly increased by more than 632 square miles and is discussed more in the System Overview Section.

3 Facts and Figures

SERVICE AREA STATS

County





Total
Area:
2,063 sq.miles
Population:
3,940,887

Household

Median Household Income:
$68,977.67

Persons in Poverty:
13.9%

Households without a car:
3.73%

Commuting

69.25%
Drove Alone:
(76% Nationally)

6.76%
Carpool:
(7.8% Nationally)

0.94%
Public Transit:
(2.5% Nationally)

Other: 23.06%
* Walked: 1.17% Taxi, Bike, Motorcycle: 1.35% Work from Home: 20.54%

Agency

Detroit's metropolitan area is ranked as a top 50 urbanized area with the most transit travel and bus agencies

SMART is among the top 50 largest demand response agencies.

SMART is a Tier 1 agency and has also been ranked as a top 50 largest demand response agency by the Metro Area Fact Book.

OPERATION CHARACTERISTICS

Routes
47

Annual Passenger Miles
Bus: 41,169,962

Stops
5,300

Annual Unlinked Trips
Bus: 3,000,287

Service Span
22 Hours a Day

SMART efficiently address the transportation needs of the region by providing a comprehensive range of services, including fixed-route, Connector, ADA paratransit, and on-demand services. In addition, SMART hosts its Community Partnership Program to provide localized transportation options to other cities and townships within Southeast Michigan. Through its 77 community partnerships, it has successfully provided service across its service area.

OPERATIONS & PERFORMANCE INDICATORS[1]

Service Supplied

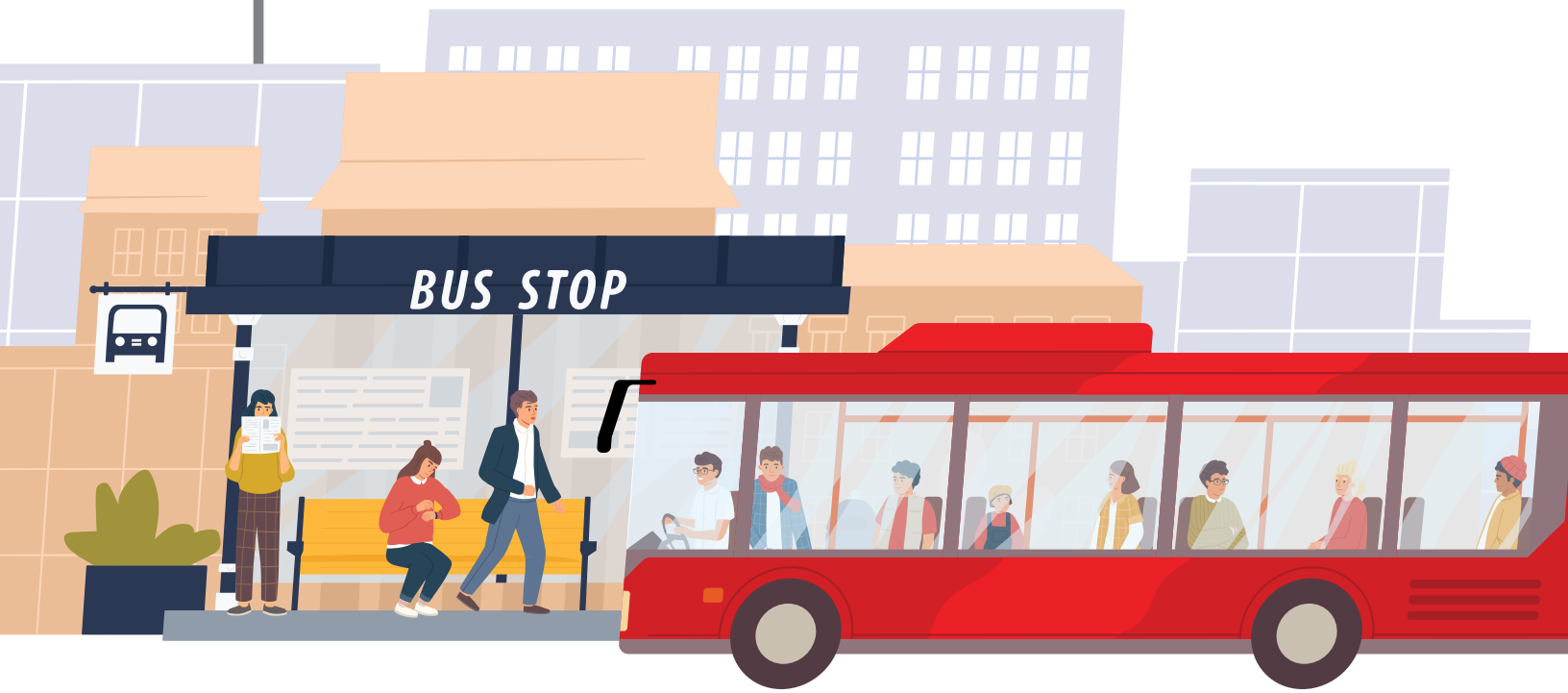
Annual Vehicle Revenue Miles: 10,934,778
Annual Vehicle Revenue Hours: 699,311
Vehicles Operated in Max Service: 239
Vehicles Available for Max Service: 424

Service Efficiency

Operating Expenses per Vehicle Mile - Bus: $8.45
Operating Expenses per Vehicle Revenue Hour: $136.58

Service Effectiveness

Operating Expenses per Passenger Mile - Bus: $1.74
Operating Expenses per Unlinked Passenger Trip: $23.88



Public transportation benefits all segments of society, connecting people with resources and jobs and providing economic opportunities. Public transit modes, including buses, light rail, subways, streetcars, and trolleys, and vanpool services, transport 34 million people daily in the United States. Of that transit ridership population, 55% ride by bus, bus rapid transit (BRT), and trolley; 30% by metro rail; and 6% by light rail and streetcars.[2] Approximately 6,800 organizations provide public transportation throughout the United States. However, 45% of Americans still lack access to public transportation[3] due to deficiencies in the network or aging infrastructure. Flexible microtransit options could provide a practical and economically viable service for filling many gaps in the United States' public transportation network.

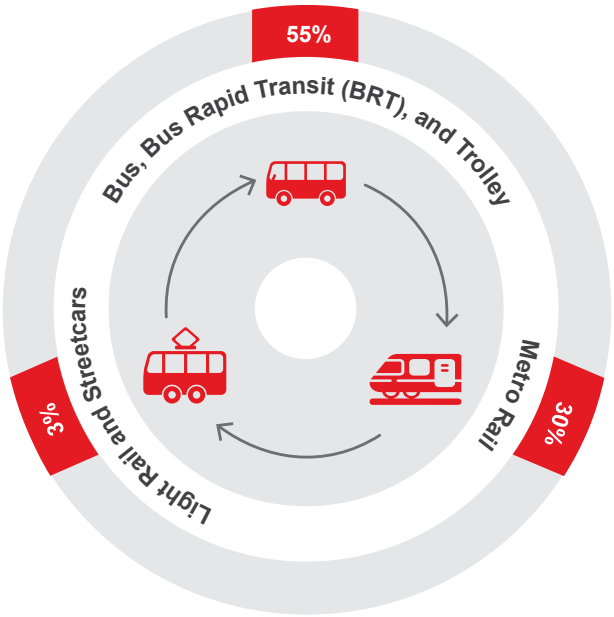
National Trends

Federal Funding Priorities

The Federal Transit Administration (FTA), under the purview of the USDOT, assists in developing and improving mass transportation systems for cities and communities nationwide, providing oversight, financial and technical assistance, as well as technology research for the industry. FTA invests more than $20 billion[4] annually to support and expand public transit services. Buses and rail vehicles are the most common in this category; however, it also includes trolleys, inclined planes, subways, and monorails.

Congress authorizes funding to FTA through long- and short-term transportation legislation. FTA finances the construction, operation, and maintenance of public transportation systems through various funding sources. Most transit systems operating in urban and rural areas receive funding. According to the National Transit Database[5] (NTD), 2,253 transit systems received federal funding in 2021, of which 1,308 were located in rural areas and 945 are in urbanized areas.

In addition to regularly distributed formula funding, FTA also administers competitive discretionary grants to transit agencies and local governments that apply for them. Each grant has specific requirements, but successful grant applications are frequently ones that align with FTA's focus on safety, infrastructure, and mobility innovation.



OF THE
34 MILLION PEOPLE
THAT USE
PUBLIC TRANSIT
DAILY,
55% RIDE BY BUS,
BUS RAPID TRANSIT
(BRT), AND/OR
TROLLEY

Safety

FTA supports research on technologies and practices that can reduce fatalities and injuries, improve safety culture, identify hazards and risks, and institute processes that can help transit agencies operate public systems more safely. Some activities include cybersecurity, standards development, and safety hazards (i.e., safer vehicle design to reduce the potential for incidents).

Infrastructure

FTA supports the exploration of technological innovation to enhance public transportation operations across all system services. Activities include bus of the future initiatives, low- or no-emissions fleet replacement, and transit automation.

Mobility Innovations

FTA supports new and improved mobility options that increase geographic coverage and service times, address “last-mile” issues for travelers, and ensure accessibility. Activities include the Mobility on Demand program, which helps transit agencies and communities integrate innovative tools and services (such as trip planner apps with real-time information) to be more accessible, efficient, and integrated.

Economic Impact of Transit

The American Public Transportation Association's (APTA) Economic Impact of Public Transportation Investment 2020 Update[6] indicates that for every $1 billion dollars of annual spending on public transportation:

- **Operations** (i.e. management, operations and maintenance of vehicles and facilities), approximately 20,000 jobs are supported for a year
- **Capital**, approximately 13,000 jobs are supported for a year

In addition, for every $1 invested in public transportation, approximately $5 are generated in return. The potential long-term economic impact per billion dollars of enhanced investment in public transportation yeilds a total economic impact of $5 billion and 49,700 jobs.

The transit industry employs more than 430,000 people, according to APTA's Public Transportation Fact Book 2022[7] update. It is estimated that a total of 87% of public transportation trips involve direct economic impact on the local economy, whereas 50% of trips are for employment purposes and 37% are for shopping and recreational spending.

INVESTMENT IN **TRANSIT** CAN YIELD **49,700 JOBS** PER **$1 BILLION INVESTED**, AND OFFERS A **5 TO 1 ECONOMIC RETURN**

Industry Challenges

Transit Workforce Shortage

In recent years, the transit industry has faced a workforce shortage crisis which has resulted in service reductions nationwide. Since the end of the COVID-19 pandemic, agencies have been competing for high-demand workers like bus (CDL) operators and mechanics, reporting that 45% of departing employees took jobs outside the transit industry. APTA and agencies have been evaluating possible actions to relieve the shortage of transit workers.

The transit workforce shortage is widespread and severe. Approximately 96% of surveyed agencies reported experiencing a workforce shortage, 84% of which said the shortage affects their ability to provide service.[8]

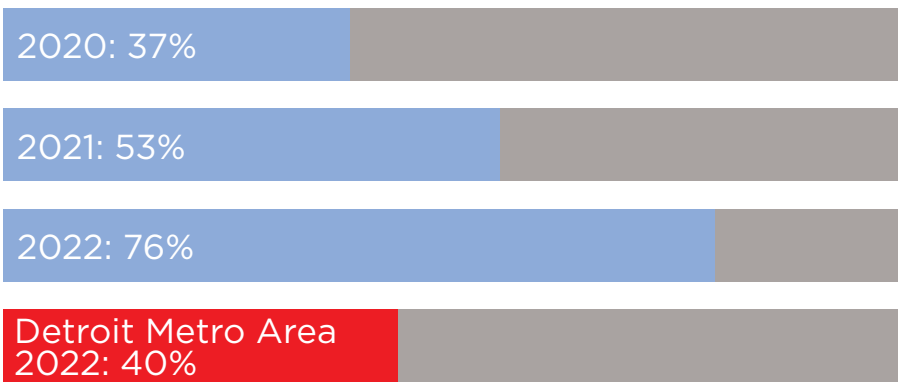
The Transit Workforce Shortage Report[9], published by APTA in October 2022, indicates that complex schedules, lack of career paths, and little recognition are identified as influential factors. Moreover, a complex regulatory framework is holding up processes to fill vacancies. The report recommends increasing compensation and improving benefit packages, including providing worker housing and tuition assistance.

Ridership Decline

Another impact of the COVID-19 pandemic was the abrupt national decline in ridership, due first to stay-at-home orders and massive layoffs, and then to long-term changes in work-from-home policies. The nationwide transit decline started in mid-March 2020 and began recovering slowly by July 2020, reaching 37% of the pre-pandemic ridership. In 2021, with the availability of vaccines and more employees returning to offices, ridership increased to 53%. Ridership slightly increased during 2021 to reach 68% of 2019 ridership levels. By February 2023, on average, ridership has recovered to 76% of 2019 levels. Some small cities have shown a rapid recovery, while other regions with a higher proportion of white-collar teleworkers have shown a slower recovery. According to the latest data from APTA's Ridership Trends Dashboard[10], Detroit-area agencies on average have recovered 40% of their ridership compared to pre-pandemic levels.

The different modes of public transportation have recovered at a different pace. Demand-response service has recovered the most quickly, followed by bus ridership.

National Covid-19 Pandemic Ridership Recovery (2019)



Commuter rail has had the slowest recovery, with a recovery rate of only 58% of 2019 ridership levels by December 2022.

The pandemic caused significant reductions in underlying transit demand factors. While many office-based jobs reduced the number of trips to the office, this reduction has led to related service and retail industries closing locations or reducing staff. For example, downtown areas with few daily employees require fewer coffee shops, dry cleaners, and fast-casual restaurants. Additionally, the increase of virtual services, such as telemedicine, and retail delivery services, such as Instacart and Amazon, has reduced the demand for transit trips to medical centers, markets, and malls. Government agencies have also automated services which previously required in-person appointments. The overall reduction in underlying transit demand factors will likely be enduring. Transit agencies across the nation are adjusting their services to meet the new, specific needs of their service areas.

Transit Industry Emerging Trends

Passenger Experience - Microtransit

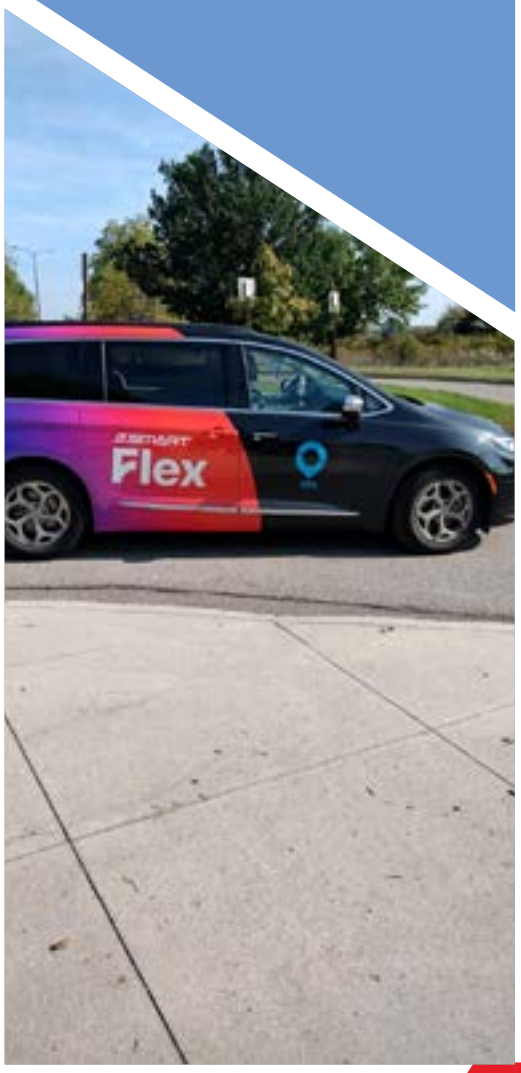
The transit industry is facing changes that require more flexible travel behavior. To address this, agencies are innovating different mobility projects that can be adapted to the needs of each community. Project objectives include the enhancement of first- and last- mile solutions through the integration of multimodal transit, including on-demand services. Microtransit is an on-demand service that operates within a specific service zone that complements fixed-route services. This service has grown in popularity in rural areas and regions with very low population density where public transit has traditionally been considered impractical. The goal of microtransit is to provide transportation that is easier to access and more affordable for riders than private ride-hailing services. The service model allows passengers to request a trip specific to their origin and destination. The rates are lower than those of ride-hailing services, and connections to larger transit systems are available if necessary.

Long commute times in the Detroit metropolitan area have been a perennial challenge in Southeast Michigan. SMART developed a simulation to evaluate how best to implement microtransit by measuring the potential performance and cost of microtransit services in the region. SMART is currently operating pilot on-demand service in several locations within its service area and is in the process of developing a strategy to implement permanent microtransit service across the metropolitan area.

Bus Rapid Transit (BRT)

Bus Rapid Transit (BRT) is an established mode of transportation throughout cities both nationally and internationally. BRT is a flexible premium transit mode used in urban and suburban areas that provides high-capacity transportation at a lower cost than rail networks. BRT include features to enhance bus service including BRT-branded, upgraded vehicles, dedicated bus lanes, signal priority, and jump queues. BRT systems can be customized to accommodate the needs of a community through roadway design and the use of accessibility technologies to reduce traffic congestion and maintain safety.

TRANSIT AGENCIES ACROSS THE NATION ARE ADJUSTING THEIR SERVICES TO MEET THE NEW, SPECIFIC NEEDS OF THEIR SERVICE AREAS.



Electrified and Autonomous Vehicles

The transit industry is transforming by adopting new technologies ranging from simple driver-assist systems to fully automated systems that do not require a human presence. Additionally, agencies around the country are piloting the deployment of fully electric automated vehicles on specific routes. A national goal to reduce carbon emissions through transportation initiatives has federally awarded millions to transportation agencies across the country, SMART being one of those agencies, hosting four electric vehicles within their fleet.[11] These vehicles help agencies achieve their goal to adopt zero-emission fleets.

Local Trends

The Detroit-Warren-Dearborn metropolitan area has a lower rate of transit ridership compared to other metro areas of a similar size or geography. As of 2021, only 0.9% of workers commute using public transportation, compared to the national average of 2.5%.

Compounding this situation, demand for transit in the Southeast region of Michigan has been steadily declining over the last decade, according to 2021 data from the National Transit Database. This has been occurring despite the population bases of each of the counties within the SMART service area remaining stable in the last decade.

The automotive industry looms large in the transit landscape of Southeast Michigan. The majority of jobs in Michigan are in healthcare, retail, finance, and other professional business types (i.e., accountants, engineers, and consultants), which reflects a shift in recent years towards a more diverse employment field. However, Michigan continues to be heavily dependent on the auto industry and durable goods manufacturing in general. Of North America's top 100 automotive suppliers, 96 have a presence in Michigan and 60 are headquartered in Michigan. Many of these automotive employers offer substantial discounts for employees and their families to buy or lease the cars that they manufacture. In addition, Michigan is home to nearly 19% of all US auto production, more than any state in the nation[12]. This dependency may make the community reluctant to embrace public transportation and new ways to connect with other counties besides the automobile.

Workers Commuting by Public Transportation

Detroit-Warren-Dearborn
pop. 4,365,205
0.9%

Seattle-Tacoma-Bellevue
pop. 4,011,553
3.0%

Minneapolis-St. Paul
pop. 3,690,512
1.7%

Pittsburgh
pop. 2,353,538
2.4%

Cleveland-Elyria
pop. 2,075,662
1.4%

Ford assembly line. The Henry Ford Museum

Local Industry Trends

Infrastructure

Improving infrastructure is a focus in the local planning community. Currently in the city of Detroit there is a public transportation infrastructure project underway, the New Center Intermodal Facility (NCIF), which aims to weave together existing needs of aged facilities with improved intermodal connectivity and high-quality passenger amenities. The goal is to establish the facility as a world-class transit station through such improvements and additions as:

- A new facility replacing the existing Amtrak station on Baltimore Street
- A new intercity bus station on Howard Street
- An upgraded train platform with improved safety and faster onboarding/offboarding
- Support for the creation of a transit-oriented development district with enhanced multimodal connectivity

The passenger rail industry is also trending statewide in Michigan. MDOT, along with several other surrounding states, is replacing aging equipment used by Amtrak in the Midwest. The equipment, which is 100 percent Buy America compliant, is branded "Amtrak Midwest" and jointly owned by Michigan, Illinois, Wisconsin, and Missouri.

Mobility Innovations

MDOT partnered with the Michigan Economic Development Corp. (MEDC), PlanetM, Capital Area Transportation Authority (CATA) in Lansing, the Huron Transit Corp./Huron County, and 10 other agencies around the country to form an association of transit and transportation agencies working towards implementing automated bus projects across the US. The association is called the Automated Bus Consortium (ABC).

ABC members developed and issued a Request for Proposals (RFP) in January of 2022 to procure up to 70 40-foot full-speed accessible and electric automated buses that will be deployed in various environments around the country. By joining the consortium, the cost of developing, implementing, and evaluating the demonstration vehicles is shared and reduced for each agency. [13] The RFP is being updated and re-released in 2024 with new bus specifications based on the latest technology advancements.

Electric Buses and Infrastructure

MDOT is working on the nation's first extended purchase contract for small electric buses. A Federal Transit Administration (FTA) Low and No-Emission Bus and Bus Facilities Program grant, which for FY 2023 will provide $1.7 billion from the Bipartisan Infrastructure Law, provided funding for buses and charging infrastructure to six transit agencies across Michigan, including Macatawa Area Express, Benzie Transportation Authority, Delta Area Transit Authority, Clare County Transportation Corp., CATA, and Huron Transportation Corp.

Funding is allocated to projects on a competitive basis from proposals submitted to FTA in response to a Notice of Funding Opportunity (NOFO). The awarded grants for the state of Michigan in FY 2022 and 2023 are listed in Table 1.

AMTRAK Midwest train. Photo copyright the Houston Herald

Table 1: FTA Grants Awarded to Michigan in FY 2022-23

Description	Fiscal Year	Funding
Michigan DOT will receive funds to assist transit agencies and non-profit organizations that provide public transit service 1) to replace buses and vans that have exceeded their useful life and 2) to buy additional buses to expand service in rural areas. The project will also fund the conversion of diesel buses to propane, install electric charging infrastructure, and buy software for scheduling and e-ticket services.	2022	$12,000,000
The DDOT will receive funding to buy battery electric buses and install charging equipment, part of the state's plan to eliminate greenhouse gas emissions by 2050. Greenhouse gases and their effect on the environment disproportionately impact the historically disadvantaged communities that DDOT serves.	2022	$6,912,404
MTA Flint will receive funding to buy hydrogen fuel cell buses and upgrade equipment for an existing hydrogen refueling station. The zero-emission buses will replace diesel-hybrid transit buses that have exceeded their useful life.	2022	$4,334,800
The City of Midland Dial-A-Ride will receive funding to buy electric transit vans to replace older gas-powered buses that have exceeded their useful life. The project will reduce greenhouse gas emissions and support workforce training and development.	2022	$167,257
The Interurban Transit Partnership (The Rapid) will receive funding to buy compressed natural gas buses to replace aging diesel-fueled buses. The project will improve service and reliability, particularly in disadvantaged communities.	2023	$6,197,180
The Michigan DOT, on behalf of four rural transit agencies, will receive funding to buy vans to replace older vehicles, upgrade bus lifts, modernize a transit facility and purchase software for scheduling and dispatch services. These projects will enable the rural agencies to enhance transit services, better meet the needs of their customers, and provide reliable, safe, and affordable transit in their communities.	2023	$514,002
The Michigan DOT will receive funding, on behalf of the Interurban Transit Authority, to rehabilitate and expand its maintenance and administrative facility outside Grand Rapids. The MDOT will also receive funding on behalf of People's Express to build a transit maintenance and operations center near Ann Arbor. These projects will allow the transit providers to improve safety and efficiency in their communities.	2023	$10,700,000

Overview

SMART operates within Macomb County, Oakland County, and Wayne County in the Southeast region of Michigan, encompassing an area of 2,063 square miles with a population base of nearly 4 million people. The system operates 47 bus routes and maintains over 5,300 bus stops which are serviced by various fixed-route and curb-to-curb transit options. A table of SMART's routes, along with the terminal, spans, and headways of each route are included in Appendix C.

47 fixed-routes
5 Flex zones

234 fixed-route buses

5,300 Bus Stops

22 Hours a Day Service

Organization

Board of Directors

SMART has a Board of Directors comprised of the chief executive officers of each county in which a city with a population of 750,000 or more is located within the area served by SMART, as well as other counties immediately contiguous to such a city. CEO's can designate representatives or alternates to serve in their place on the board. This representative position rotates among the counties every two years, or otherwise a predefined arrangement is made. Currently, Macomb, Oakland, and Wayne County have two representatives while Monroe County has one representative. Currently, Oakland County has two representatives, one being the Chief Deputy County Executive and the other a Planning Manager within the county. Macomb has two representatives, both being the Deputy County Executive. Wayne County also has two representatives comprised of a Wayne County Commissioner and the Wayne County Community College District Chancellor. Monroe county has one representative which is the Former Administrator and Chief Finance Officer.

Workforce

SMART employs approximately 900 individuals as part of its workforce, consisting of executive and administrative personnel as well as unionized employees serving the Southeast region of Michigan. The staff is organized into 13 teams as follows:

- General Manager
- Deputy General Manager
- General Counsel
- Human Resources
- Finance
- Transportation
- Maintenance
- Connector Services
- Wayne Terminal
- Macomb Terminal
- Oakland Terminal
- Service Development
- Marketing and Communications

The SMART 2024 operational budget estimates that active and retired employee wages and benefits equate to 67% of expended funds, totaling nearly $115 million dollars. SMART is engaged in negotiations with all of its union groups: Amalgamated Transit Union (ATU) representing fixed-route operators and clerical employees; United Auto Workers (UAW) representing maintenance employees; American Federation of State, County and Municipal Employees (AFSCME) representing dispatchers, road supervisors, and maintenance supervisors; and Teamsters representing connector operations and customer service operators.

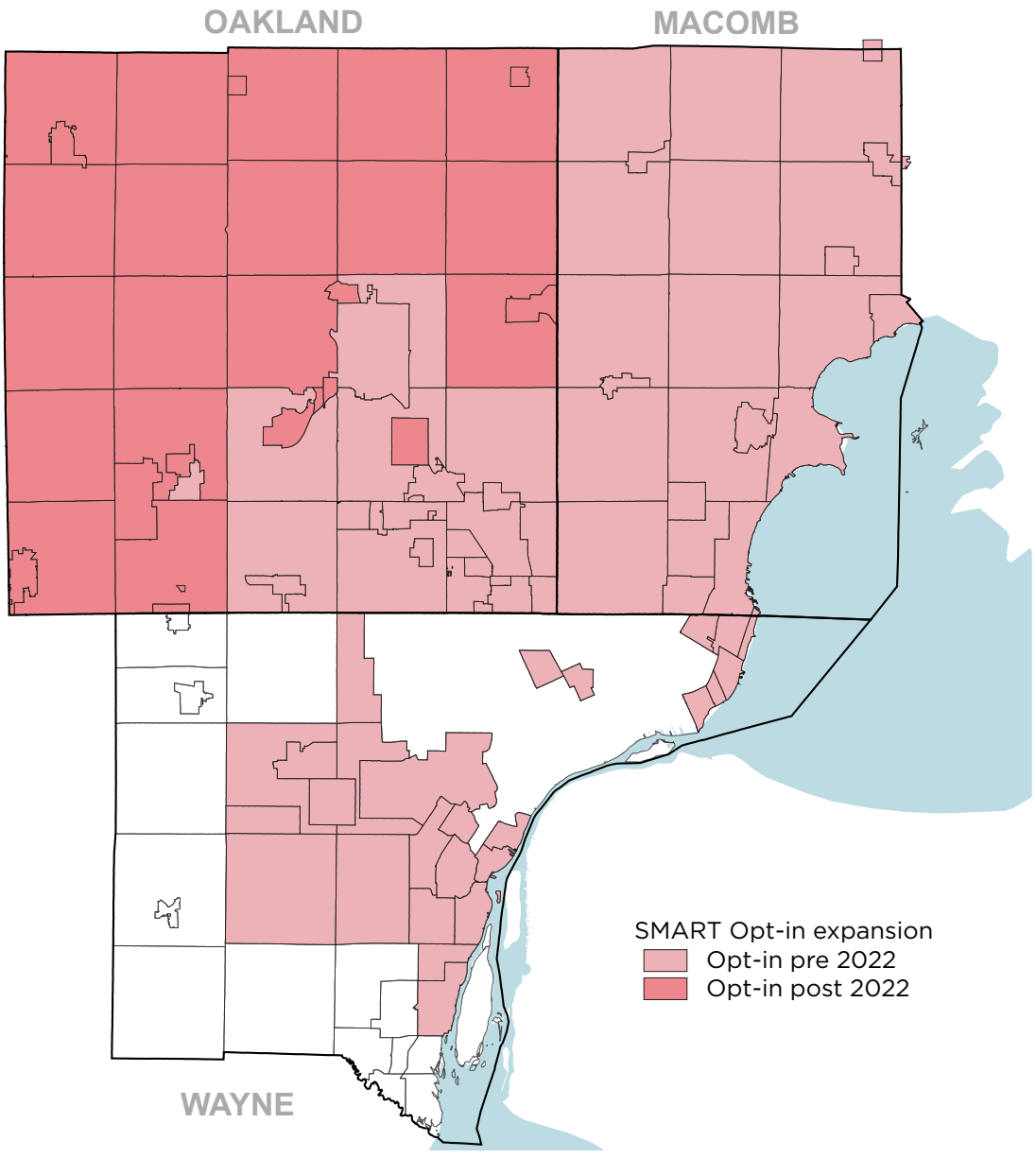
Service Area

SMART's operations are partially funded through property millages passed in each of the three counties within the service area. Some municipalities were permitted to opt out of providing financial support for transit service. This provision in the transportation tax has historically caused connectivity issues across the regional transportation network, therefore adding more barriers to those who are reliant on these services. To promote transportation initiatives within the area, higher millage rates were passed to allow SMART to collect more revenue from property values. In 2022, Oakland County passed new legislation adjusting the millage rate of property tax and eliminating the opt-out option to provide for a more connected public transportation service. Macomb County voted to pass a 0.95 millage rate measure for a five-year period. Oakland County also voted to approve a new 0.95 millage rate and 10-year property tax that has expanded SMART's funding as well as the overall service area. For the opt in communities in Wayne County, a 0.994 millage rate was passed.

Due to the recent legislation, SMART is now responsible for serving the entirety of Oakland County, effectively doubling the size of its service area and resulting in expanded accessible public transportation options such as new routes and increased service frequencies. SMART aims to work with the regional transit providers on the shared goal of improving regional connectivity and gap issues to further economic development goals in the area such as workforce development and education.

The opt-in/opt-out municipality map, shown in Figure 2, represents the areas previously not included in the SMART service area prior to the recent vote and successful passage of the millage rates.

Figure 2: SMART Opt-In and Opt-Out Municipalities



Agency Assets

Fleet

SMART's fleet is composed of:

- 276 fixed-route buses;
- 120 demand-response vehicles;
- 298 vehicles are provided by SMART for the purpose of Community Transit Provider operations; therefore the vehicles are owned and operated under the SMART name; and
- 53 vehicles were purchased by SMART but are operated by a local community member such as municipal governments of member communities, as well as some nonprofit organizations.

Bus

Fixed-route bus service comprises a significant portion of SMART's ridership. SMART fixed-route buses account for 276 vehicles with 155 operated during peak service. The average fleet age in 2022 for SMART's buses was 5.6 years [14] Buses have an operating expense per unlinked passenger trip of $20.34, almost double the national average of $10.36.[15] This expense indicates the cost for each passenger trip including fuel, maintenance, labor, and administrative costs.

Demand-Response

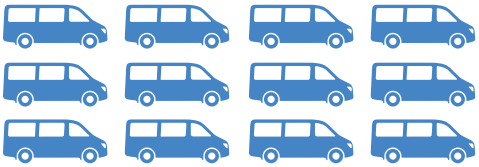
Demand-Response (DR) service encompasses all vehicles within a transportation agency provider that are dispatched by request to personally pick up passengers to transport them to the desired locations. SMART's demand-response service consists of 120 vehicles, with 90 operated during peak service. The operating expenses for demand-response service are significantly higher than fixed bus routes at 63.85 per unlinked passenger trip. The average fleet age in 2022 for SMART's demand-response vehicles was 5.4 years, compared to a national average of four years.[16]

Facilities

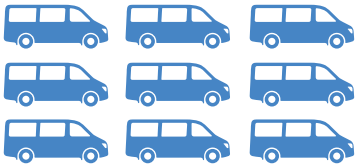
According to SMART's FY 2022 – 2026 Transit Asset Management (TAM) Plan[17], SMART owns five facilities: two maintenance facilities, one passenger facility, and two parking lots. There are 52 locally owned facilities, however, only twelve of the facilities have public transit as their primary purpose: seven maintenance facilities and five administrative facilities. The 17 facilities range in age from six to 98 years, representing an estimated $14.9 million in total asset value. However, being locally-owned facilities, the maintenance activities and the condition of these assets remains unknown. See Appendix B for a complete list of facilities

Vehicles in Service vs. Operating

Total Demand Response Vehicles: 120



Vehicles Operated in Max Service: 90



Total Buses: 276

Buses Operated in Max Service: 155

 = 10 Demand Response Vehicles

 = 10 Buses

The number of vechicles in service vs. operating for demand response vehicles is from SMART; buses are from the 2022 NTD Report: https://www.transit.dot.gov/sites/fta.dot.gov/files/transit_agency_profile_doc/2022/50031.pdf

SMART Services

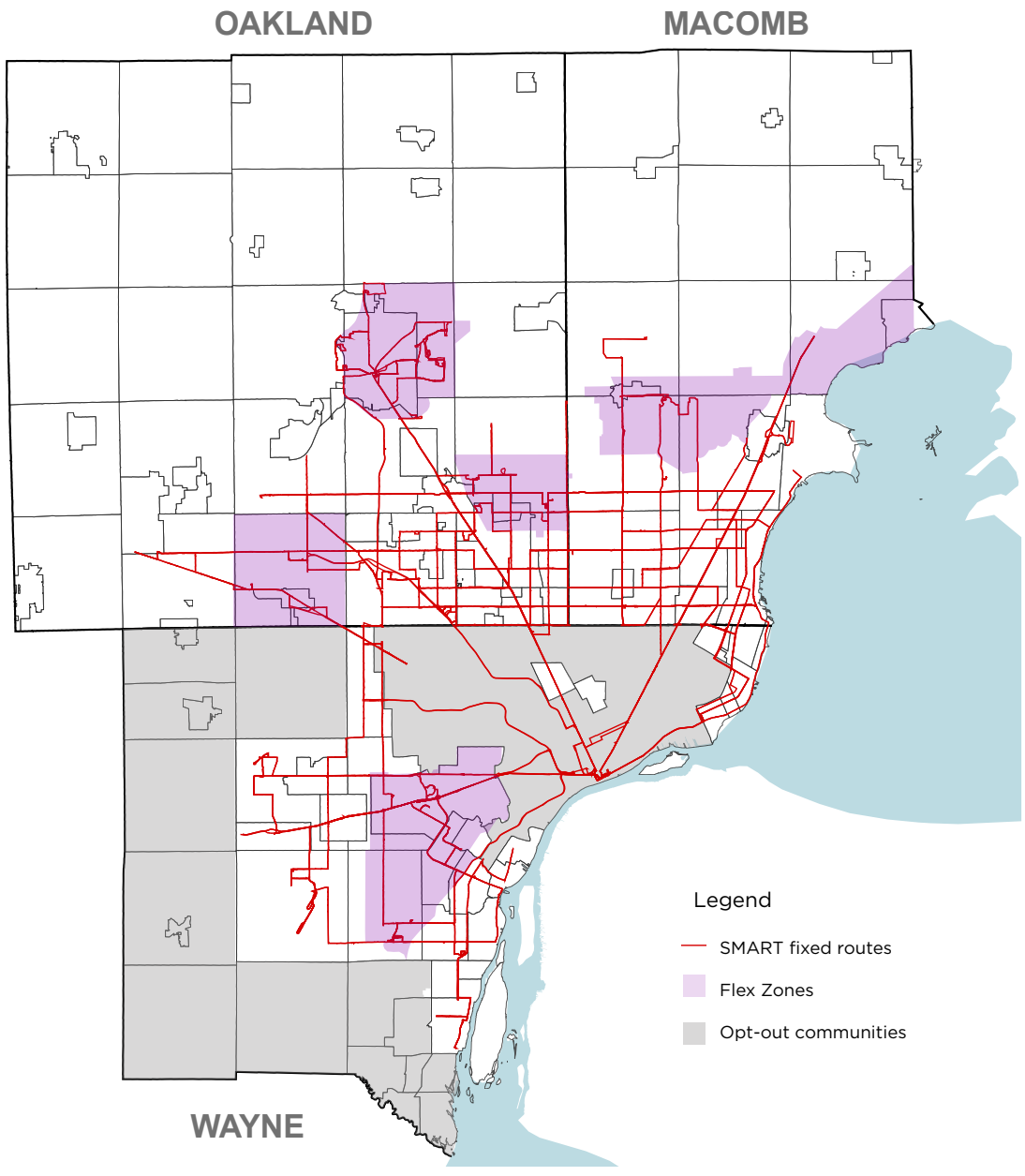
Fixed Route Service

SMART operates fixed-route service Monday to Friday with select weekend routes, offering a variety of route options including crosstown, major corridor, limited stop, and express routes. Bus stops for SMART's limited stop service (LTD) are located approximately every half-mile and can be identified by the LTD sign. The express bus service picks up along designated corridors but operates as non-stop express service into downtown upon reaching Detroit city limits.

Figure 3 shows the fixed routes and bus stops of SMART, DDOT, and the People Mover. The average length of a ride taken on the fixed-route service is 8.2 miles, with an average of 5.7 passenger boardings every hour of service in 2021. SMART does not operate local bus service within Detroit city limits, helping to provide a more efficient ride for longer distances traveled on its suburban express routes.

All of SMART's fixed-route buses have front-position bicycle racks for two bicycles and are equipped with wheelchair accessible capabilities. Senior citizens (65+) or people with disabilities age 5 to 18 may have the ability to qualify for reduced fares on the service. An application must be completed and mailed to the transit agency to apply for a SMART Reduced Fare ID card. Full-fare customers, or anyone age 19 to 64 without a disability, must pay $2. Youth, children ages 6 to 18, senior citizens age 65+, and persons with disabilities pay a reduced fare of $0.50. SMART FAST service has the same fare as the local fixed-route bus service.

Figure 3: SMART Service Map



SMART FAST

SMART FAST (Frequent Affordable Safe Transit) service is a high frequency, limited stop/express bus service that connects the surrounding suburbs to downtown Detroit. The FAST service travels along Gratiot,—three of Detroit's busiest corridors with destinations including but not limited to employment centers, restaurants, stadiums, entertainment venues, and Detroit's Metro Airport. Stops for this service are located approximately every mile along each route; however, passengers can only board and deboard at designated FAST stops. Local SMART routes can be used to transfer to a final destination or as an initial connection to a FAST bus route. The service utilizes Wi-Fi enabled buses which operate 7 days a week, even during late-night hours, with a service frequency of approximately every 15 to 20 minutes during peak service hours.

Flex Service (Microtransit)

Microtransit is an on-demand transit service that provides app-based transportation during specific time periods or in geographic areas poorly served by regular fixed-route service. With current operation of 5 zones, riders have more flexibility than the fixed-route bus system by utilizing smaller vehicles to pick up and drop off riders anywhere within a designated area, known as a service zone. SMART Flex, powered by Via Transportation, is a microtransit on-demand service which operates within the Dearborn, Troy/Clawson, Auburn Hills/Pontiac, Hall Road, and Farmington/Farmington Hills areas by way of five designated service zones. Figure 3 shows the specific areas within the larger regional transportation network that are serviced by SMART Flex. Rides can be requested any day of the week, between the hours of 6:00 AM and 11:00 PM, through a mobile phone application. Similar to transportation network companies (TNCs), like Uber or Lyft, passengers are able to enter their origin and destination address. Flex Services differ from TNCs because rides might be shared and pick up other passengers en route as the vehicle drives from origin to destination. The application is able to show the exact pickup location, the driver's name, vehicle model, and license plate. The cost of a SMART Flex ride varies between $2 to $8 depending on how far the passenger is traveling.

ADA Paratransit Service

SMART offers ADA paratransit service in Macomb, Monroe, Oakland and Wayne Counties. Operating similar to the fixed-route service, the ADA paratransit service operates the same days and hours but has the requirement that the pick-up and drop-off locations of the passenger be within 3/4 of a mile from a fixed-route bus stop. The service is recommended for people with disabilities that have difficulty getting on or off SMART fixed-route buses. Door-to-door service can also be requested at the time of need as long as they are approved by the ADA coordinator. SMART prefers to schedule calls in advance and prepare necessary ridership amenities like steps and ramps. Individuals whose disability prohibits them from accessing fixed-route bus stops are conditionally eligible for the ADA paratransit service. ADA paratransit services may be prohibited from accessing certain areas due to bus stop obstructions like construction, lack of a sidewalk, or snow. Until conditions improved or change, the ADA service eligibility remains.

Passengers must be ADA certified using the previously mentioned application process. Personal Care Attendants (PCA) are allowed to accompany a passenger at no cost if specified in the individual's ADA certification. For all other passengers, the fare costs $3 each way, with the inclusion of transfers.

Connector Service

The Connector service is a weekday-only curb-to-curb service operated by SMART connecting suburbs within its service area. The Connector provides service to seniors, people with disabilities, or individuals with limited access to fixed-route service. Trip destinations must be within a 10-mile radius of the trip origin. The average length of a ride on the Connector is 7.5 miles. Anyone living within the SMART service area is allowed to ride on Connector on a first-come, first-served basis. Appointments for medical trips can be made 6 business days in advance; a two-day advanced notice is recommended for other destinations. Reservations can be made by calling customer service or using the MyConnector automated phone and internet system. The Connector does allow for the reservation of a bus for a group of five or more people up to five business days prior to the trip. When scheduling a trip, riders are given a 30-minute window. At the time of pick-up, the bus will only wait three (3) minutes before leaving the pick-up location.

If the origin and destination points of a requested trip are within 1/3 mile of a existing fixed-route service, the full-fare rider must use fixed-route services instead of Connector Services. The full fare costs $4 each way, with transfers costing $0.25. Senior citizens ages 65+, Medicare cardholders, and people with a disability pay a reduced fare and are also exempt from the 1/3-mile provision. The reduced fare one-way costs $1, with free transfers.

Community Transit Program

Established in 1995, local communities or groups have partnered with SMART to form the SMART Community Partnership Program. This program enables the building, operating, and maintaining of local Community Transit service to be shared between SMART and local communities or groups. The SMART Community Partnership Program builds a dialogue between SMART and the 77 community partners participating in the program. The program fosters adaptive and innovative solutions for present and future needs of each respective community.

CONNECTOR TRIP DESTINATIONS MUST BE WITHIN A 10-MILE RADIUS OF THE TRIP ORIGIN. THE AVERAGE LENGTH OF A RIDE ON THE CONNECTOR IS 7.5 MILES.

Regional Transportation Network

Connections to Other Transit Systems

SMART's Community Transit Service connects Macomb, Oakland, and Wayne Counties and offers a variety of services as well as connections to other transportation services. The agency's DART (DDOT and SMART) regional passes (ranging in use periods from 4 hours to 31 days) enable unlimited rides within the allotted pass time on SMART and DDOT fixed-route buses in any direction, as well as the QLINE Streetcar. SMART transfers are accepted by MTA within Auburn Hills for one ride only and within Port Huron by Blue Water Transit for up to two rides. In turn, SMART accepts transfers from DDOT, MTA Flint, and Blue Water Transit.

Park & Ride

SMART routes that originate at various regional Park & Ride facilities enable passengers to drive to a nearby facility and transfer to SMART transit services to complete their trip. See Table 2 for the SMART transit services that passengers of Park & Ride routes can transfer to, and at what additional cost.

Table 2: Cost of Transferring from Park & Ride Routes to Other Services

SMART Transit Service	Additional Fare Required
Fixed Route	No additional fare required
Fllexible Service / Dial-A-Ride	No additional fare required
Connector (Full Fare)	Additional $1.50 required
Connector (Senior/Disabled)	No additional fare required
Connector (Youth)	Additional $3.00 required

So that the total fare paid for using SMART transit services amounts to the same price of the Park & Ride fare, an additional fare is required when transferring from other SMART transit services to Park & Ride routes. Table 3 shows the additional cost required to transfer from SMART services to Park & Ride routes.

Table 3: Cost of Transferring to Park & Ride Routes from Other SMART Services

SMART Transit Service	Additional Fare Required
Connector (Full Fare)	No additional fare required
Connector (Senior/Disabled)	Additional $1.50 required
Regular Fixed Route	Additional $0.50 required- must be paid in cash

First-Mile Last-Mile Connections

First-Mile Last-Mile (FMLM) Connections are the bookending steps a passenger takes before and after they use public transportation. An example of first-mile connections would be walking a quarter mile to a bus stop near your home. A last-mile connection could be using a bicycle or scooter to travel from the nearest bus stop to your destination at the grocery store. Functional and inclusive transit networks build the adequate supporting infrastructure to make FMLM connections simple for all passengers. In the context of SMART, this means developing a sufficient network of sidewalks, bike lanes, or road shoulders that allow riders to reach bus stations without dangerous interactions. Interactions which can be circumvented via sufficient supplementary infrastructure include encounters with high-speed vehicles, aggressive wildlife, inhospitable pathways, inclement weather, and more. Furthermore, the infrastructure surrounding transit must also accommodate for riders with disabilities. Accommodations can include lowering curb heights to facilitate wheelchair accessibility, protective guardrails or railings, providing areas for wheelchair or walkers to be stationed while waiting, and many more. Ultimately, without proper FMLM networks, a rider may be discouraged from using public transportation due to the dangers or inconveniences their trip may pose. Implementing the necessary FMLM measures can allow rural microtransit to flourish as riders become comfortable taking the initial steps to access a transformative transportation tool at their disposal.

ULTIMATELY, WITHOUT PROPER FIRST-MILE LAST-MILE NETWORKS, A RIDER MAY BE DISCOURAGED FROM USING PUBLIC TRANSPORTATION DUE TO THE DANGERS OR INCONVENIENCES THEIR TRIP MAY POSE.

Previous Planning Studies

To understand what has already been studies related to transit in the SMART service area, previous plans completed by SMART, other transit agencies, or any related organizations, were reviewed by the planning team. A summary of the plans and key recommendations is included in Appendix A.

Transit Partners

Regional Transit Authority of Southeast Michigan (RTA)

The Regional Transit Authority of Southeast Michigan was formed in December of 2012 to promote collaboration between SMART and the Detroit Department of Transportation (DDOT) and to ensure the provision of quality and consistent public transportation services within Macomb, Oakland, Washtenaw, and Wayne Counties. RTA's mission is "to manage and secure transportation resources that significantly enhance mobility options, to improve quality of life for the residents, and to increase economic viability for the region."

While SMART is the transportation provider that operates within Southeast Michigan, RTA is responsible for coordinating and overseeing regional public transportation, such as planning regional transit services, developing regional transit initiatives, and managing regional transportation funding and grants. The creation of RTA has resulted in more federal and state grants being awarded to SMART and DDOT to support their transportation.

North Oakland Transportation Authority (NOTA)

The North Oakland Transportation Authority (NOTA) is a demand-response service created in 2001 that serves seniors, people with disabilities, and low-income residents of municipalities including Oxford, Orion, and Addison Townships, and the Villages of Oxford, Orion, and Leonard. This service provides transportation for those that would otherwise have no alternative mobility options. On weekdays, there are 16 deviated routes available with two routes on weekends. The fleet includes 22 vehicles, of which 21 are equipped to handle wheelchairs and other larger mobility devices. NOTA does not report data to the National Transit Database.

Western Oakland Transportation Authority (WOTA)

The Western Oakland Transportation Authority (WOTA) is a demand-response transportation service for seniors aged 55 and older and adults with disabilities aged 18 and older. Service is provided to the municipalities of Highland Township, the City of Walled Lake, Waterford Township, and White Lake Charter Township. As of June 1, 2023, WOTA has expanded to other locales including the Cities of Orchard Lake, Sylvan Lake, Lake Angelus, and Keego Harbor. Its assets include 33 vehicles that are all wheelchair lift equipped. WOTA does not report data to the National Transit Database.

People's Express

People's Express is a regional transportation authority that serves as a demand-response service that aims to provide quality-of-life enhancements to its users. Its target population are those that are aging, people with disabilities, and those who are low-income, underemployed, or unemployed. The service area includes select townships and cities throughout Southeast Michigan. Some of the areas served by the agency overlap with WOTA's service area, yet this service has fewer eligibility requirements than WOTA. People's Express provided 52,068 trips in 2021.

Older Person's Commission (OPC)

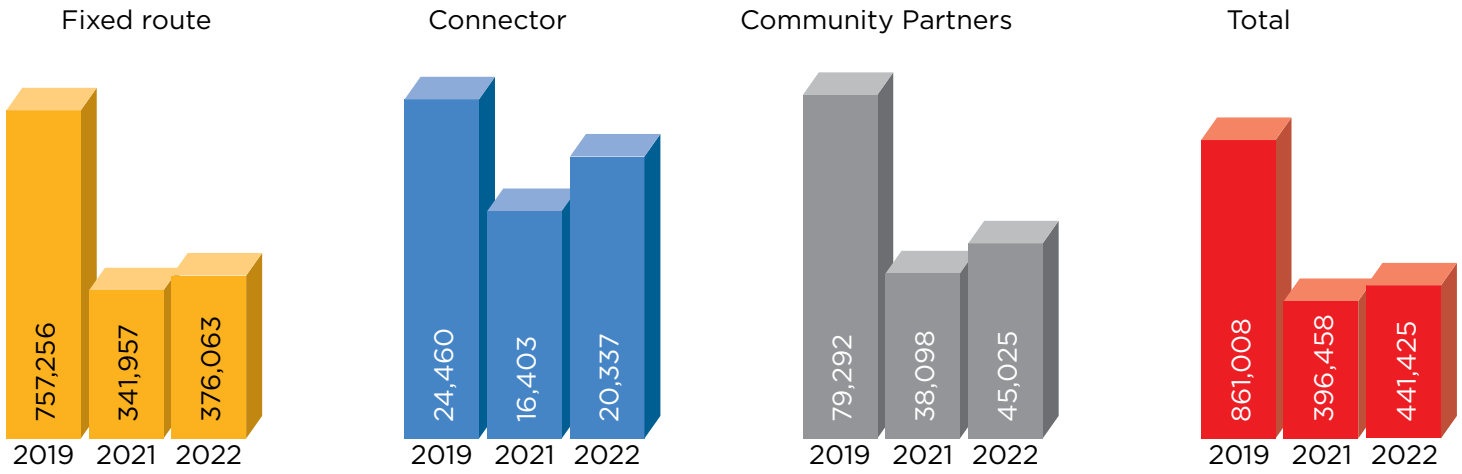
The Older Person's Commission (OPC) is a non-profit senior citizen organization that offers a variety of services including adult day services, fitness and aquatics, and performing arts. OPC also provides a transportation service to those above the age of 50 and those with disabilities within the City of Rochester, City of Rochester Hills, and Oakland Charter Township. OPC is primarily funded through millage rates from its respective service areas. The organization also receives federal funding, state funding, and specialized grants through SMART to support its transportation service. OPC does not report data to the National Transit Database.

SMART Ridership

According to SMART's most recent assessment, its ridership currently stands at more than 5 million passengers annually, or more than 440,000 riders per month. This is a significant decrease from the pre-pandemic 9 million annual trips, or 860,000 trips per month, in 2019. However, SMART has seen a steady increase in returning ridership since the COVID-19 pandemic caused ridership to fall by more than 75% in the spring of 2020.[18]

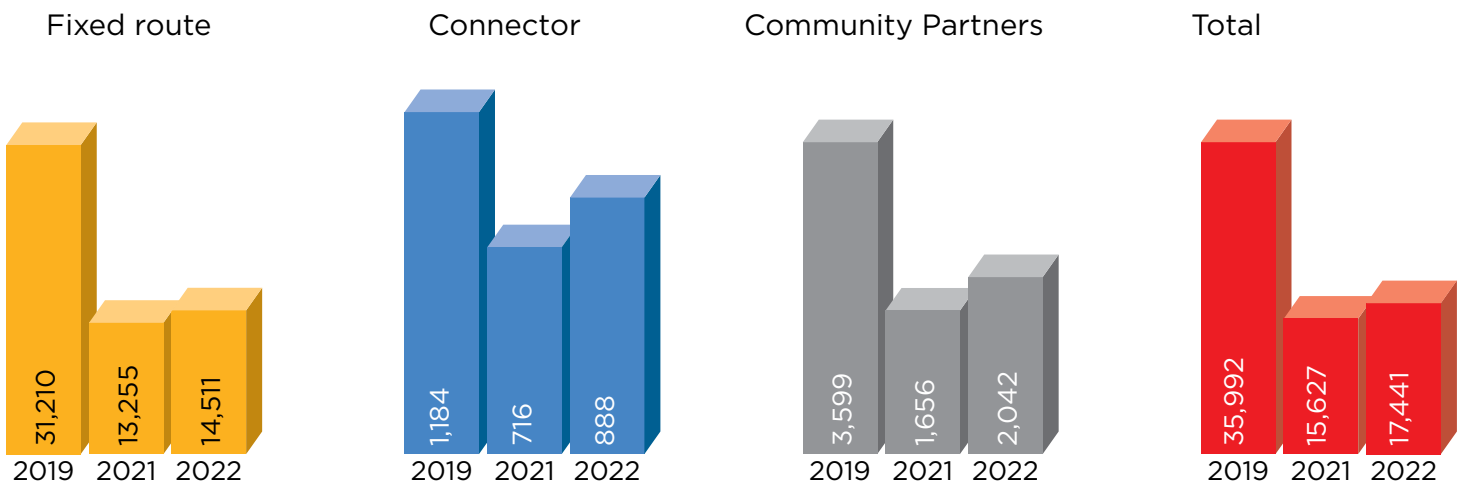
Monthly Ridership

* based on June of each respective year.

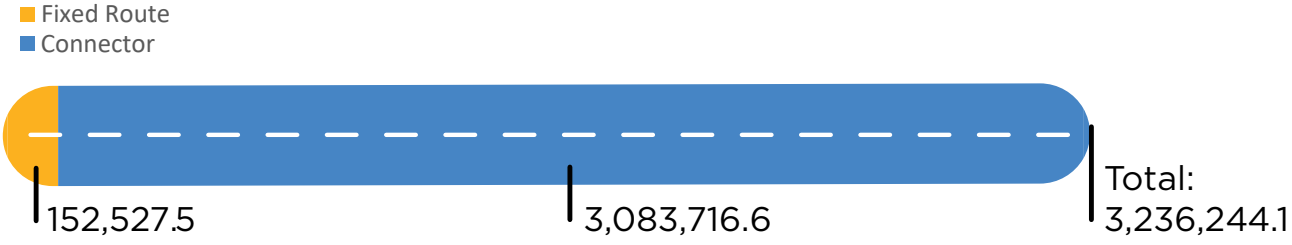


Average Weekly Ridership

* based on June of each respective year.



SMART Average Vehicle Revenue Miles, June 2022



Regional Origins and Destinations

The 1,258 census tracts that make up the counties and surrounding areas of the SMART project area experience varying levels of transit and have unique hotspots of travel to and from trends. This study area consisted of 1,258 census tracts used in these maps, of which 1,066 census tracts were located within the tri-county project area. The origin and destination data used for this map were sourced from cellphone GPS data hosted by Replica, and represent every Thursday in the spring of 2023.

There were 16,077,737 trip **origins** in the 1,258 census tracts shown in Figure 4. The minimum number of trips that were made from any of the tracts was 294, the maximum was 100,905, and the average was 12,780. The areas that were the highest and lowest sources of trip origins include:

Highest:

- Novi: 154,553 (three tracts)
- West Dearborn: 110,093 (two tracts)
- Downtown Detroit: 105,396 (two tracts)
- Livonia: 100,905
- Auburn Hills: 96,249 (two tracts)

Lowest:

- Selfridge Air National Guard Base: 1,335
- Belle Island: 1,326
- Zug Island: 847
- North Corktown: 846
- Southern East Highland: 294

There were 16,256,680 trip **destinations** in the census tracts shown in Figure 5. The minimum number was number of trips that were made to any of the tracts was 305, the maximum was 102,848, and the average was 12,923. The areas that were the highest and lowest destination points include:

Highest:

- West Dearborn: 111,115 (two tracts)
- Novi: 106,337 (two tracts)
- Detroit Metro: 105,210 (two tracts)
- Livonia: 102,848
- North Madison Heights: 93,632 (two tracts)

Lowest:

- Belle Island: 1,371
- Selfridge Air National Guard Base: 1,359
- Zug Island: 981
- North Corktown: 855
- Southern East Highland: 305

In general, the study area had roughly equal origin and destination values. The hotspots of origin and destination reflect areas of high commercial, shipping/logistics, and residential activities. The Livonia tract (US Census Tract 26163558300) is made up of a large number of high-volume shipping and deliveries including an Amazon Fulfillment Center, Ford motor company parts, and several other large companies and organizations.

Figure 4: Trip Origins

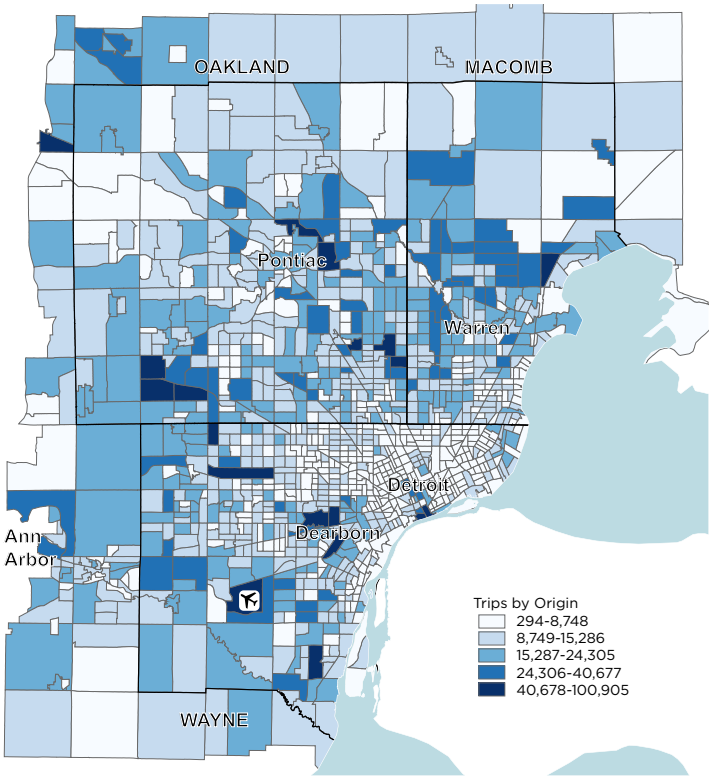
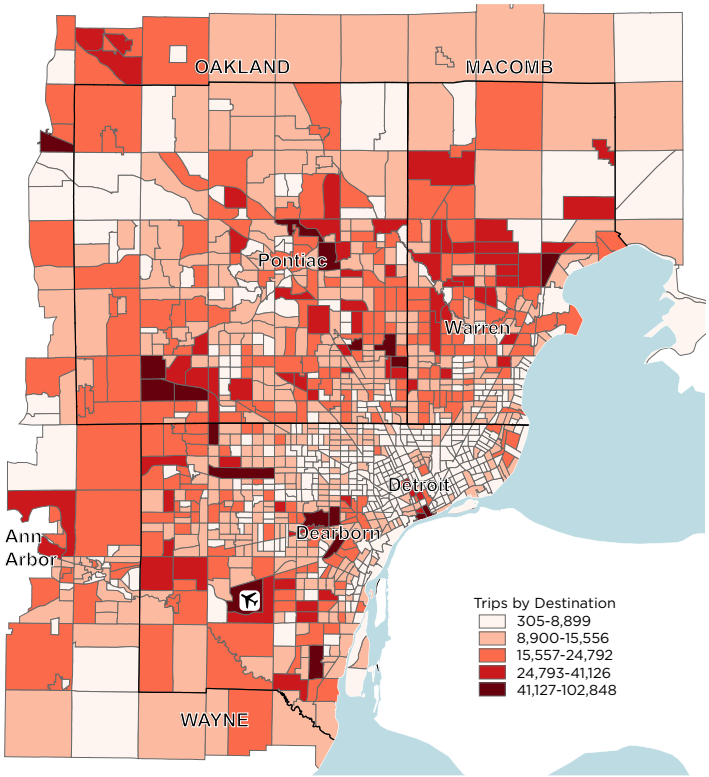


Figure 5 Trip Destinations



6 Funding and Financial

Funding History

Traditionally, transit is funded through a combination of federal, state, and local funds. Public transportation agencies in the United States traditionally rely on a general sales tax for funding. Sales tax rates vary by state, and Michigan administers a sales tax of 6%. Local taxes such as property tax and income tax may also be levied to fund public transit ventures.

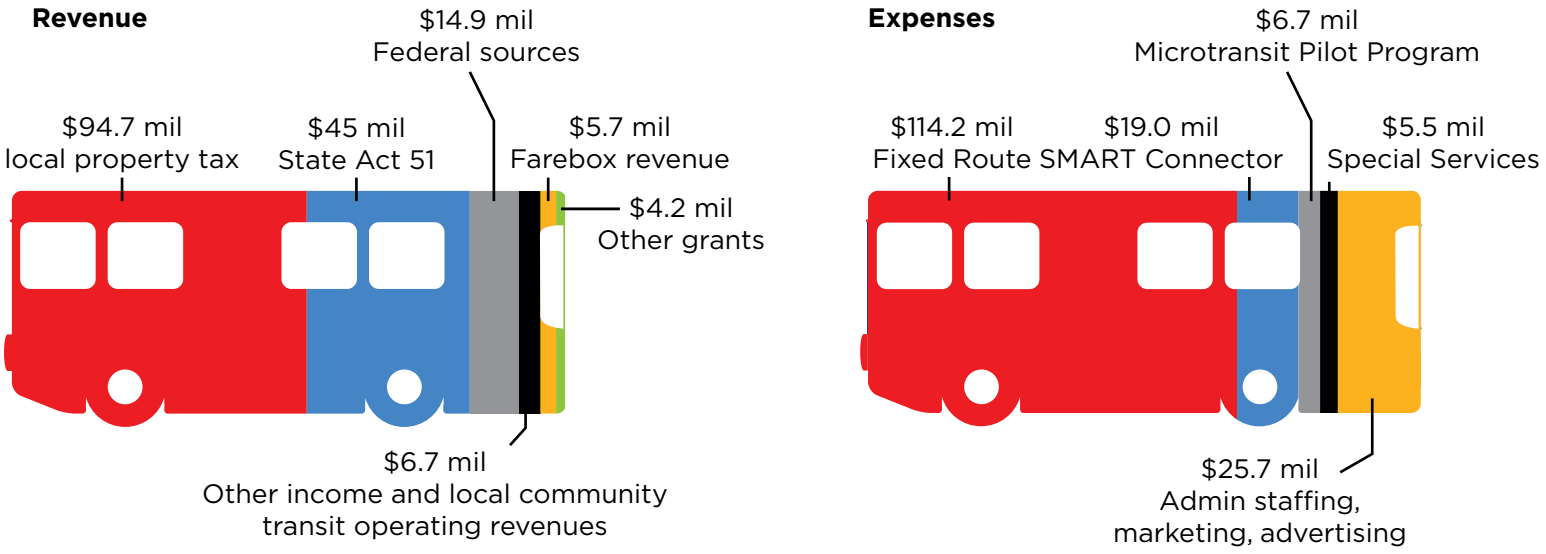
Conversely to traditional funding sources, SMART has utilized a millage fund since 1995. This fund is obtained from communities in Macomb, Oakland, and Wayne Counties. The millage rate dictates ad valorem tax revenue and is contingent upon the County Tax Collector. The tax collector must collect property tax proceeds and then remit the proceeds to SMART. The taxable values of various properties are determined by the County Property Appraiser. Millage rates specify that amounts collected must be expended within their own geography. In SMART's context, the monetary value that is collected from property tax in Oakland, Wayne, and Macomb County should be redirected towards transportation services serving residents of all three counties within SMART's jurisdiction.

SMART's fiscal year (FY) 2024 budget of $171,068,000 is funded through an array of revenue streams. This operating budget is utilized for personnel costs and annual operating costs supporting ventures such as SMART's wide range of transportation offerings, including Frequent Affordable Safe Transit (FAST), fixed-route service, Connector/ADA, microtransit, and Community Partnership/Community Transit Programs.

SMART's existing financial situation is relatively strong considering the unforeseen consequences and reduced fare revenues related to the 2020 COVID-19 pandemic. SMART paid pandemic hazard compensation to employees throughout FY 2022 and incurred expenses related to cleaning, safety, maintenance, and other pandemic-related criteria. Hazard compensations remained through 2023 albeit at a lower rate as employment and ridership trended towards a return to pre-pandemic conditions. As operating hours, employment, and ridership return to pre-pandemic levels, the associated budget has increased accordingly. SMART also has a reserve of Coronavirus Aid, Relief, and Economic Security Act (CARES) and Coronavirus Response and Relief Supplemental Appropriations Act (CRRSA) funding that it can still use to recover from the pandemic.

Additionally, SMART will receive financial assistance from federal Infrastructure Investment and Jobs Act (IIJA) funds. These funds present a unique opportunity for SMART to invest in facility and equipment upgrades, explore innovative services, and secure long-term financial sustainability. [19]

Fiscal Year 2024 Functional Operating Budget
$171.1 million



Farebox Recovery

Farebox recovery ratio is the fraction of operating expenses which are met by passenger paid fares. The rate is calculated by dividing the total system fare revenue by the total operating expenses.

To understand farebox recovery rates, it is useful to acknowledge the existing fare rates. SMART offers payment options encompassing an array of pass options, the DART Mobile app, or cash payment. SMART fareboxes accept coins and $1, $5, and $10 bills. If a rider does not possess the exact fare, the rider can receive a change card containing the remaining balance. This change card can be utilized on future fixed-route rides. Reduced fares are offered to young people ages 6 to 18, seniors ages 65+, as well as people with disabilities. Single, one-way trips can cost up to $4 for regular fare Connector trips, and as little as a $0.50 reduced fare for fixed-route trips. Monthly passes range in price from $81 for full-fare Park & Ride passes, to a $29 reduced fare for SMART/DDOT fixed-route and flex services.

During the most recent documented FY 2021-2022 according to the National Transit Database Agency Profile, operating revenue decreased dramatically by 67.69%, or approximately $7 million. Operating expenses also decreased in accordance with fare revenue by $7 million. The summary of operating expenses is a similar comparison with the main decrease in operating funding falling into other operating expenses from 2021 to 2022.

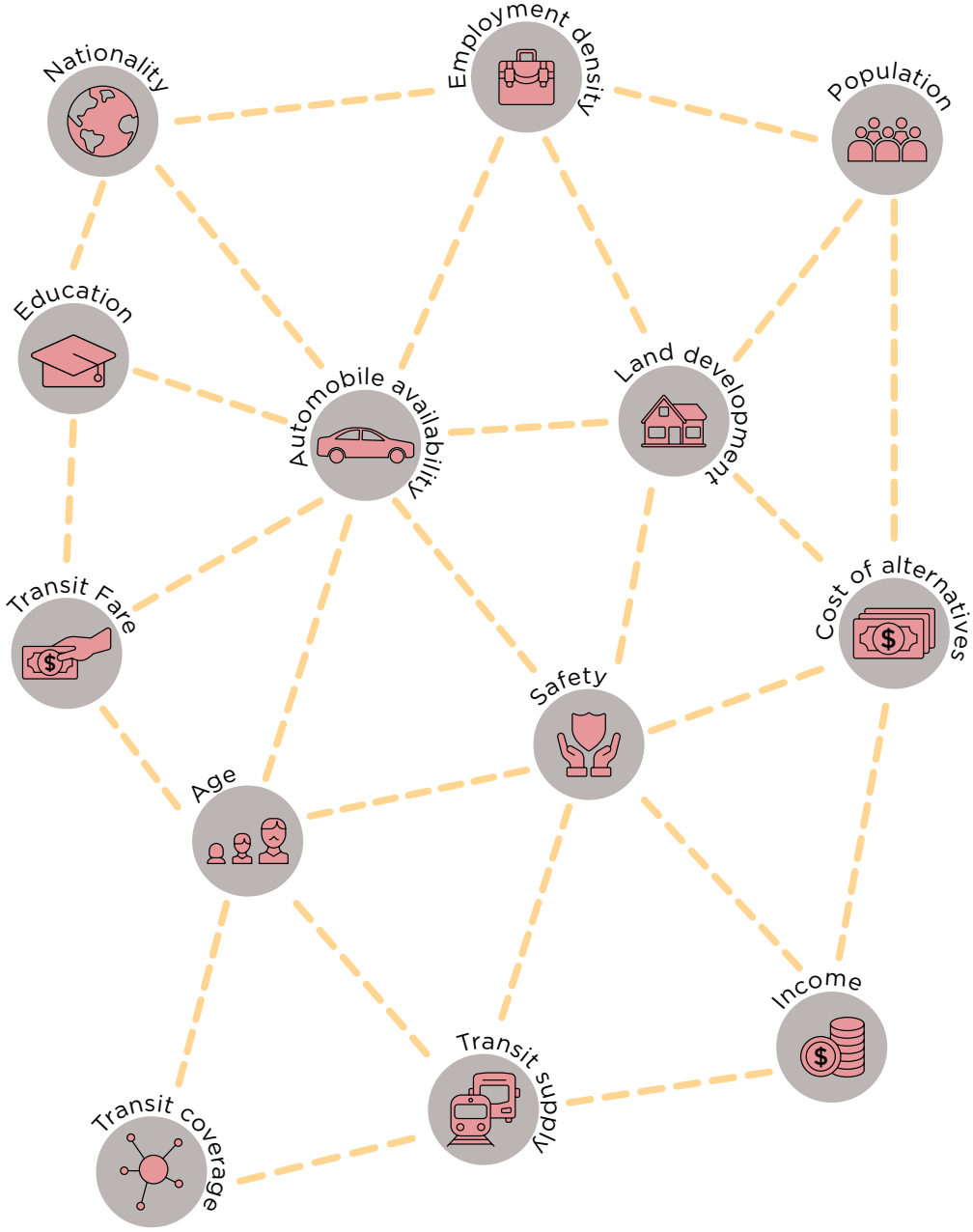
Overall, in 2021, SMART accumulated $91,268,839 in total operating revenue. Of this total operating revenue, $3,414,830 was from fares and other income sources are primarily local funds, with state and federal support. Some expenses include labor, materials and supplies, transportation, and other operating expenses.

When following the equation, dividing total system fare revenue by the total operating expenses, SMART's farebox recovery rate is 3.74%. It is recommended that urban transit agencies maintain a farebox ratio of 20% and rural agencies a ratio of 10%. [20] For context, Portland, Oregon has a similar population to Detroit; Portland's TriMET transit system operation returns a farebox recovery rate of 18.22%.[21] Comparing SMART's farebox recovery rate to other agencies throughout the US exemplifies a below average return.

When considering the unforeseeable circumstances of the COVID-19 pandemic, along with large losses in metropolitan Detroit's population base, SMART's farebox recovery rate has significant room for improvement as they rebuild their ridership base. Utilizing operating grants and special fare assistance awards in the future can ensure that SMART can maintain equitable fare prices without compromising service area or frequency.

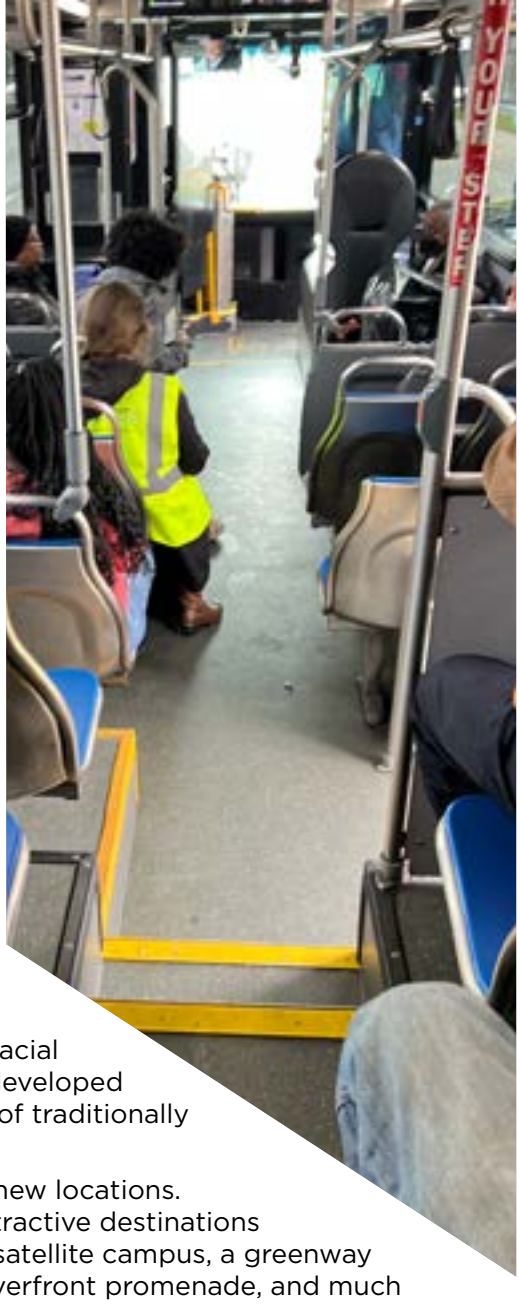
Transit Demand

While transit demand will be explored in detail under the Transit Demand and Market Analysis report, initial data collection and analysis shows demand for transit within and around areas adjacent to SMART's service area. This demand can be attributed to the proliferation of employment opportunities throughout the service area. Employers in fields such as industry, health, automotives, and more create a dense network of employment opportunities for riders. Transit demand factors that influence the implementation of microtransit include:



There are promising signs of growing income levels in Detroit, as healthy wage, and salary growth, accompanied by strong business income create an economically vibrant environment. Overall output growth is expected to be just below 3%, after accounting for inflation.[23] These are promising trends that corroborate the assertion that a consumer base will have enough income to afford microtransit services. Ensuring that the microtransit experience is reliable, safe, and convenient can retain ridership as average rider income grows.

The Detroit metro area is a diverse community composed of immigrants from many backgrounds. As stated by accounts from 2011, The Detroit metropolitan area is home to the largest concentration of Arab Americans in the United States at greater than 400,000. Notable countries of origin for these immigrant communities include Lebanon, Syria, Iraq, Yemen, Palestine, and more[24]. It is pivotal for microtransit to abridge the language barrier that may become present with immigrant communities. Signage in Arabic, Spanish, and more would create a more welcoming transportation landscape and make transit more inviting for immigrant residents. Community outreach programs also create useful publicity, ameliorate cultural concerns, and improve the profile of transit services.



Other transit demand factors such as education and population age can dictate transit ridership trends. Metropolitan Detroit possesses a wide age distribution, meaning that there is significant demand for transit options for young populations (16 y/o and under) along with older population (65 y/o or more). Generally, these groups are unable to drive or feel less comfortable operate a vehicle. While not directly correlated, the education levels in Detroit metro suggest that transit options should be supported. While ranking near the median in educational attainment and percentage of residents with a bachelor's degree, Detroit ranks among the bottom 20% for US cities in the metric of "Quality of Education and Attainment Gap." This means that factors such as public school system strength, university quality, racial equity, gender equity, and learning opportunities are low in Detroit.[25] A well-developed transit system could alleviate some of these issues and facilitate the mobility of traditionally disenfranchised groups towards obtaining higher education.

Land development also affects transit demand by creating travel demand to new locations. Developers such as the Ilitch family, Stephen Ross, and others are building attractive destinations throughout the Detroit metropolitan area, including a University of Michigan satellite campus, a greenway of pedestrian and cyclist-oriented infrastructure, adaptive reuse projects, a riverfront promenade, and much more[26]. Creating a vibrant and diverse cityscape will attract transit riders and the accompanying microtransit infrastructure will be a useful tool in accessing these amenities.

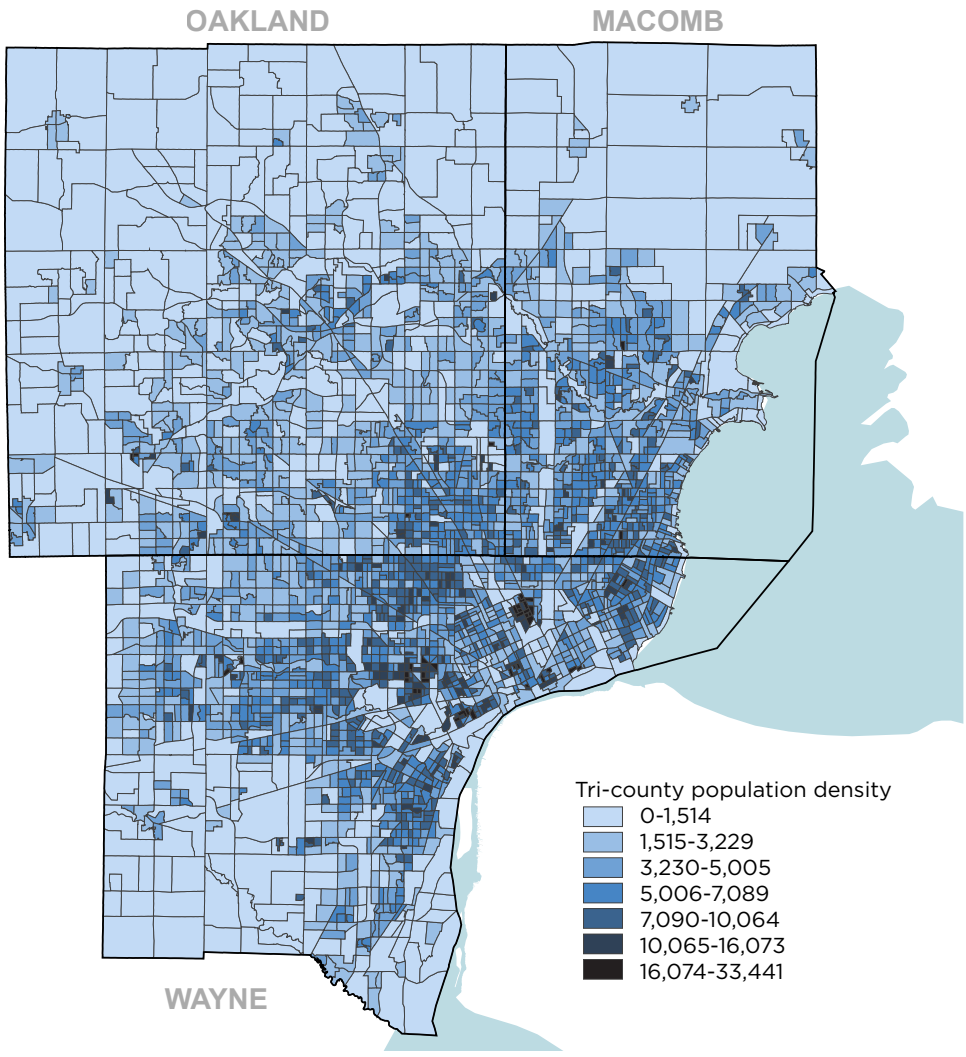
It warrants mention that the unique circumstances surrounding Detroit's support of the motor vehicle industry, and design oriented for single occupancy vehicles (SOV), can be challenging for transit providers yet recent trends indicate that SOV dependence is on the decline. Long-range plans, Complete Streets initiatives, and bicycle/pedestrian improvement strategies have gained headway in recent years, as supported by the preliminary analysis of MDOT, Southeast Michigan Council of Governments (SEMCOG), and DDOT reports.

Population Trends

The counties surrounding the city of Detroit are less densely populated than the city itself. Microtransit is suitable for such low-density areas because it provides flexible on-demand service within a fixed zone. This ensures that demand represented by each trip aligns with the supply of microtransit service vehicles, and microtransit service can address existing service gaps. The existing SMART flex zones help visualize how less populated areas with gaps in service can still be provided the necessary public transportation, better meeting the needs of residents.

Data from the 2021 5-Year American Community Survey further demonstrate that Macomb, Oakland, and Wayne Counties could benefit from microtransit due to the rates of zero car households. Of Macomb and Oakland County residents, 5% of households do not own a vehicle. In Wayne County, the percentage is ever higher, with 17% of households owning no vehicles.[27] While it is important to note that some households may choose to live car free, many households simply cannot afford the costs surrounding vehicle ownership such as insurance, maintenance, parking, tolls, and more. As the overall population of Macomb and Oakland County grow and the percentage of zero vehicle households remains constant, the need for microtransit will intensify. Overall, low rates of automotive availability/ownership and low population density support the implementation of SMART's microtransit service in the desired service area. Figure 6 and the following sections demonstrate the population growth and local employment trends for each of the counties in the SMART area.

Figure 6: Population Density of Macomb, Oakland, and Wayne Counties



17%

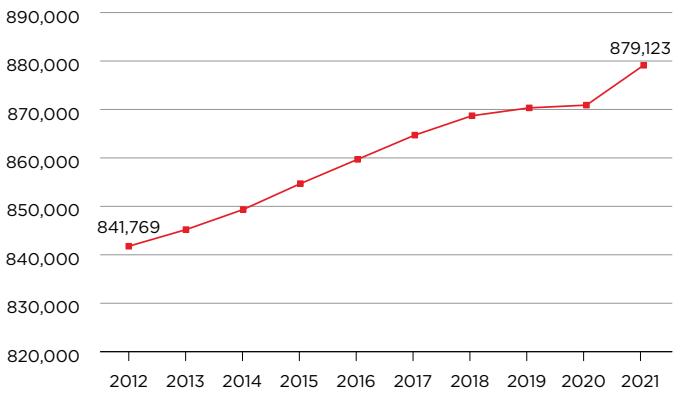
OF WAYNE COUNTY RESIDENTS DO **NOT OWN A VEHICLE**, COMPARED TO 5% IN MACOMB AND OAKLAND COUNTIES.

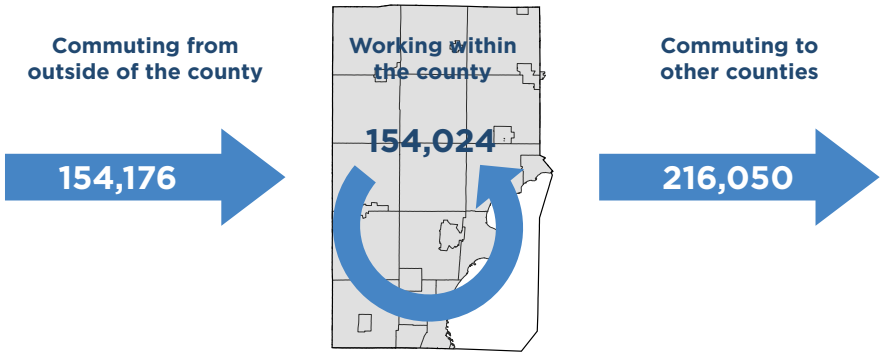
Macomb County

As seen in Chart 1, over a 10-year period, Macomb County has been growing slightly. From 2012 to 2021, Macomb County has grown by 37,354 people, according to data from the American Community Survey 5-Year Estimates published by the U.S. Census Bureau.

According to the 2020 Longitudinal Employer-Household Dynamics (LEHD) data from the U.S. Census Bureau, of the 308,200 jobs in Macomb County in 2020, 50% were filled by workers coming from outside the county. Conversely, of the 370,074 employed residents of Macomb County, 58% left the county for work. These trends reflect the importance of commuter transit that can bring workers into the county and out of the county for employment. There may be an opportunity for SMART to invest in a park-and-ride in Macomb County.

Chart 1: Macomb County Population Trends



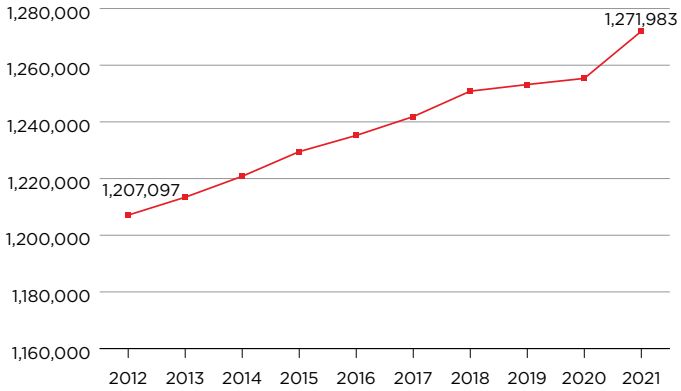


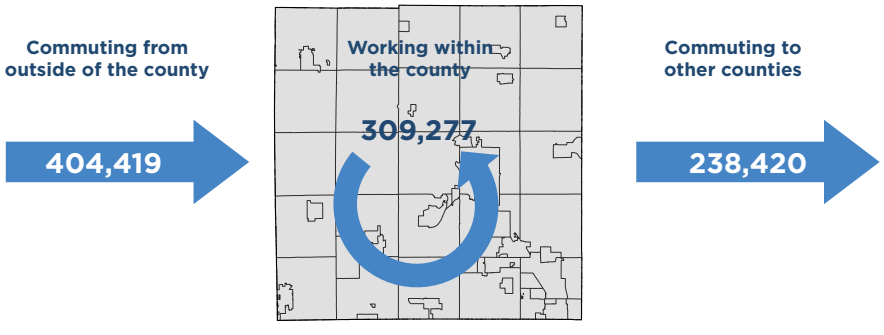
Oakland County

As sen in Chart 2, over a 10-year period, Oakland County has been growing. From 2012 to 2021, Macomb County has grown by 64,886 people, according to data from the American Community Survey 5-Year Estimates published by the U.S. Census Bureau. This is almost twice the growth seen in Macomb County over the same period of time.

LEHD Data shows that 57% of Oakland County jobs were filled by those commuting from outside of the county, while 43% of Oakland County's working residents left the county for work. This trend shows that more than half of Oakland County residents remain in the county for work, and this could be an opportunity to assess local transit in Oakland County.

Chart 2: Oakland County Population Trends



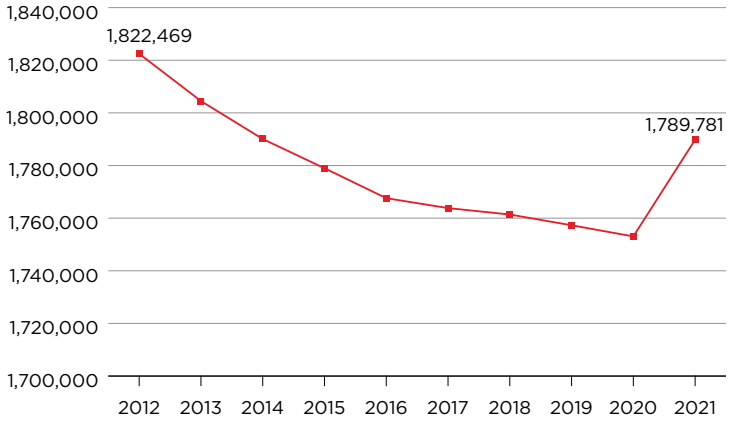


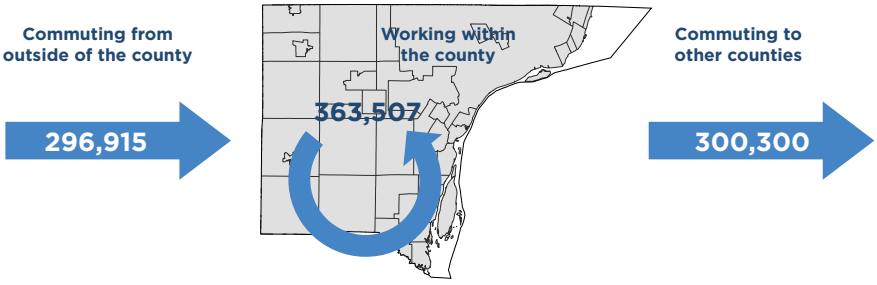
Wayne County

As seen in Chart 3, over a 10-year period, the population of Wayne County has been decreasing slowly, apart from a growth spurt in 2021. Since 2012, Wayne County has lost 32,688 residents, according to the American Community Survey 5-Year estimates published by the U.S. Census Bureau.

The rate of workers who commute from outside the county and the rate of residents who leave the county for work are roughly equal – 45%. Wayne County's employment trends reflect the importance that commuter transit has on the region. There's likely an opportunity for SMART to assess current commuter transit option to and from Wayne County and the best location for a park-and-ride in the county.

Chart 3: Wayne County Population Trends





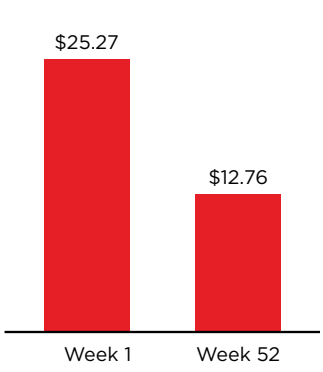
Financial Efficiency of Microtransit

It is difficult to compare the efficiency and effectiveness of fixed-route transit against microtransit, as both their capacities and intended purposes differ from one another. Fixed-route service is designed to carry higher volumes of passengers over longer distances, while microtransit is intended to transport smaller numbers of people to their specific locations within specified zones. However, in areas where fixed-route services are inefficient, such as areas with low population or employment densities, microtransit may be more viable in certain traditional metrics.

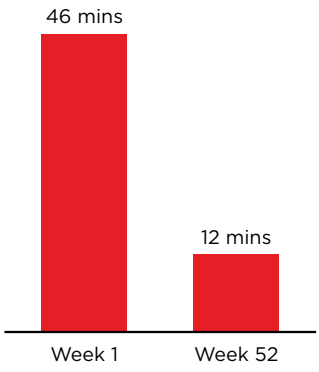
Transit agencies across the country have implemented microtransit to serve regions with lower population densities and ridership. Pilot projects across the nation are demonstrating the potential of microtransit to save costs compared to fixed-route service in areas with lower ridership. Anecdotal evidence from agencies with existing pilot projects indicates microtransit zones could be a viable alternative for fixed routes that average fewer than six passengers per hour. When considering SMART's proposed microtransit services, these nationwide trends are both financially and functionally promising.

In August 2020, WeGo transit in Hall County, GA, substituted three fixed routes for a new rural microtransit service. During the first year of the pilot, WeGo experienced a reduction in cost per trip from $25.27 to 12.76; wait time decreased from 46 minutes to 12 minutes; and trips per week grew from 386 to 465. Utah Transit Authority (UTA) reduced cost per hour from $45.93 to $35.07 during its microtransit pilot.

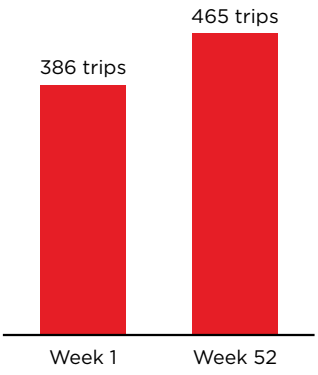
Hall County, Georgia Microtransit



Cost per Trip



Wait Time per Trip



Trips per Week

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Appendix A

SMART Routes' Span of Service and Headways

Route	Terminal	Type Of Route	Weekday Span	Weekday Headways (Minutes)	Saturday Span	Saturday Headways (Minutes)	Sunday Span	Sunday Headways (Minutes)
125 Fort Street /Eureka	Wayne	Main Corridor	0500 to 2345	30	0545 to 2400	60	0615 to 2215	60
140 Southshore	Wayne	Crosstown	0600 to 2245	60				
160 Downriver	Wayne	Community	0600 to 2145	60	0830 to 1815	60		
200/210 Michigan Ave	Wayne	Main Corridor	0400 to 2530	45 (combined), 90 (per branch)	0430 to 2400	60 (combined), 120 (per branch)	0515 to 2345	60 (combined), 120 (per branch)
250 Ford Rd	Wayne	Crosstown	0600 to 2315	60				
255 Ford Express	Wayne	Commuter	2 morning and 2 afternoon trips	2 morning and 2 afternoon trips				
261 FAST Michigan	Wayne	FAST Service	0500 to 2400	30	0500 to 2415	45 (peak hours), 60 (off peak)	0545 to 2315	45-50 (peak hours), 60 (off peak)
275 South Telegraph	Wayne	Crosstown	0530 to 2345	40 (0530 to 1730), 60 (after 1800)	0630 to 2215	60		
280 Middlebelt / Beech-Daly	Wayne	Crosstown	0500 to 2400	60	0500 to 2400	60	0500 to 2100	60
305 Grand River	Wayne	Crosstown	0630 to 2445	60	0630 to 2345	60	0630 to 2045	60

Route	Terminal	Type Of Route	Weekday Span	Weekday Headways (Minutes)	Saturday Span	Saturday Headways (Minutes)	Sunday Span	Sunday Headways (Minutes)
375 North Telegraph	Oakland	Crosstown	0545 to 2400	60	0545 to 2300	60		
400 Southfield /Orchard Ridge	Oakland	Community	0630 to 2130	60				
405 Northwestern	Oakland	Crosstown	0500 to 2300	60	0800 to 2030	60		
415 Greenfield	Oakland	Community	0615 to 2215	70	0615 to 2215	70	0730 to 2230	45
420 Southfield	Oakland	Community	0545 to 2245	70	0545 to 2245	70		
430 Main Street	Oakland	Community	0600 to 2200	60				
450/460 Woodward	Oakland	Main Corridor	0430 to 2430	30 (combined), 60 (per branch)	0430 to 2400	30 (combined), 60 (per branch)	0545 to 2345	60 (combined), 120 (per branch)
461/62 FAST Woodward	Oakland	FAST Service	0500 to 2400	30 (combined), 60 (per branch)	0400 to 2400	30 (combined), 60 (per branch)	0600 to 2300	45-60 (combined), 90-150 (per branch)
494 Dequindre	Oakland	Community	0500 to 2345	60	0500 to 2345	60		
495 John R	Oakland	Community	0500 to 2330	30	0630 to 2330	45	0800 to 1915	45-90
510 Van Dyke	Macomb	Main Corridor	0430 to 2400	20 (combined, 0800-1800), 30 (combined, before 0800 and after 1800); 40 (per branch, 0800-1800), 60 (per branch, before 0800 and after 1800)	0430 to 2315	30 (combined), 60 (per branch)	0630 to 2230	60 (combined), 120 (per branch)

Route	Terminal	Type Of Route	Weekday Span	Weekday Headways (Minutes)	Saturday Span	Saturday Headways (Minutes)	Sunday Span	Sunday Headways (Minutes)
525 Groesbeck	Macomb	Community	0430 to 2045	60				
530 Schoenherr	Macomb	Commuter	2 morning and 2 afternoon trips	2 morning and 2 afternoon trips				
550 Garfield	Macomb	Community	0600 to 2130	60				
560 Gratiot	Macomb	Main Corridor	0430 to 2445	15 (peak hours), 20 (off peak)	0430 to 2415	30	0630 to 2215	60
562 FAST Gratiot Direct	Macomb	FAST / Commuter	2 morning and 2 afternoon trips	2 morning and 2 afternoon trips				
563 FAST Gratiot	Macomb	FAST Service	0500 to 2345	30	0500 to 2345	30	0715 to 2200	60
610 Kercheval /Harper	Macomb	Community	0545 to 2330	60	0545 to 2330	60	0700 to 2100	65
615 Jefferson	Macomb	Community	0530 to 2100	60				
620 Charlevoix	Macomb	Commuter	2 morning and 2 afternoon trips	2 morning and 2 afternoon trips				
635 Jefferson Express	Macomb	Commuter	2 morning and 2 afternoon trips	2 morning and 2 afternoon trips				
710 Nine Mile	Macomb / Oakland	Crosstown	0530 to 2330	45	0530 to 2315	60	0730 to 2200	90
730 Ten Mile	Macomb / Oakland	Crosstown	0615 to 2000	60	0645 to 2000	60		
740 Twelve Mile	Macomb / Oakland	Crosstown	0445 to 2315	60	0445 to 2315	60	0800 to 2100	55-70
760 13/14 Mile	Macomb / Oakland	Crosstown	0445 to 2300	60				
780 Fifteen Mile	Macomb / Oakland	Crosstown	0500 to 2345	60	0500 to 2300	60		

Route	Terminal	Type Of Route	Weekday Span	Weekday Headways (Minutes)	Saturday Span	Saturday Headways (Minutes)	Sunday Span	Sunday Headways (Minutes)
790 Pontiac Crosstown	Oakland	Community	0530 to 2220	60	0530 to 2220	60	0630 to 1930	60
796 Perry/ Opdyke	Oakland	Community	0600 to 2130	60				
805 Grand River P&R	Wayne	Commuter	3 morning and 3 afternoon trips	3 morning and 3 afternoon trips				
830 Downriver P&R	Wayne	Commuter	3 morning and 3 afternoon trips	3 morning and 3 afternoon trips				
851 Orchard Lake P&R	Oakland	Commuter	3 morning and 3 afternoon trips	3 morning and 3 afternoon trips				

Appendix B

SMART Facilities Inventory

Facility Name	Facility Location	Notes - Description	Facility Type	Year Built / Rehab.	Designated Primary Public Transit Facility	In- service Date (Occupancy)	Original Cost	Age
DPS Facility	370 E. Columbia, Belleville, MI 48111	Road & Utility Maintenance Equipment	Multi-use	1980	Yes	2000	$620,000	42
Berkley Public Works Department	3238 Bacon Berkley, MI 48072	Maintenance of SMART vehicles	Maint.	1935	Yes	1930's - present	$1,600,000	92
Berkley Community Center	2400 Robina Berkley, MI 48072	Intake rider transportation calls and manage drivers	Admin	1973	No	1973 - present	$116,344	49
Bedford Health Van	8486 Douglas Road Temperance, MI 48182	Transportation Maintenance	Maint.	1975	Yes	1975	$1,500,000	47
BASCC/NEXT Midvale Center	2121 Midvale St. Birmingham, MI 48009	Senior Center	Multi-use	1957	No	1998	$1,250,000	65
Edna Burton Senior Center	345 Ball Street, Ortonville, MI 48462-0929	Senior & Community Center	Multi-use	1963	No	1982	$50,000	59
Brownstown Twp DPW Garage	21313 Telegraph Road, Brownstown, MI 48183	Vehicle Storage, Maintenance and Repair Facility	Maint.	2011	Yes	9/20/2011	$925,000	11
Brownstown Twp Community Center	21311 Telegraph Road, Brownstown MI 48183	Community Center - Offices, Scheduling, Record Keeping	Admin.	1992 / 1995	No	33800	$795,000	30
City of Allen Park	15800 White Ave., Allen Park MI 48101	Community Center	Multi-use	2000	No	2000	$7,000,000	22

Facility Name	Facility Location	Notes - Description	Facility Type	Year Built / Rehab.	Designated Primary Public Transit Facility	In- service Date (Occupancy)	Original Cost	Age
Fraser Activity Center	34935 Hidden Pine Drive, Fraser 48026	Senior and Recreation offices, Senior program and event building, Van storage	Multi-use	1993	No	1993	$3,125,000	29
Royal Oak Senior Center	3500 Marais	Senior Center	Multi-use	1991	No	1991	$3,125,000	31
Highland Township Annex	205 W Livingston Rd, Highland, MI 48357	Office, dispatch, and meeting for staff	Multi-use	1913	No	1913	$555,125	109
Downriver Community Conference	15100 Northline Road, Southgate, MI 48195	Multi-purpose human services programs, including transportation	Multi-use	1950	No	1983 (for DCC)	$3,125,000	72
City of Ecorse / Senior Bldg	4072-W Jefferson, Ecorse, MI 48229	Serving Seniors with meals, senior activities, and other senior services	Multi-use	1945	No	1945	$3,125,000	77
Gerry Kulick Community Center	1201 Livernois, Ferndale, MI 48220	Community Recreation Center	Building	2001	No	2001	$3,150,000	21
Independence Twp. Senior Community Center	6000 Clarkston Road, Clarkston, MI 48348	Senior Community Center that houses transportation program that serves Independence and Springfield Townships and the City of the Village of Clarkston	Multi-use	1997; new addition 2015	No	1997	$262,500	17
LETC Maintenance	1105 W. Seventh St. Monroe, MI		Mixed Maint./ Admin.	1985	Yes	2011	$2,346,053	37
Hunter Community Center	509 Fisher Ct., Clawson, MI 48017	Main location for dispatch and scheduling of vehicles	Admin.	1957 / 1996	No	1996	$1,200,000	65
Fraser Activity Center	34935 Hidden Pine Drive, Fraser 48026	Senior and Recreation offices, Senior program and event building, Van storage	Multi-use	1993	No	1993	$3,125,000	29
Royal Oak Senior Center	3500 Marais, Royal Oak, MI 48073	Senior Center	Multi-use	1991	No	1991	$3,125,000	31

Facility Name	Facility Location	Notes - Description	Facility Type	Year Built / Rehab.	Designated Primary Public Transit Facility	In- service Date (Occupancy)	Original Cost	Age
Highland Township Annex	205 W Livingston Rd, Highland, MI 48357	Office, dispatch, and meeting for staff	Multi-use	1913	No	1913	$555,125	109
Downriver Community Conference	15100 Northline Road, Southgate, MI 48195	Multi-purpose human services programs, including transportation	Multi-use	1950	No	1983 (for DCC)	$3,125,000	72
City of Ecorse / Senior Bldg	4072-W Jefferson, Ecorse, MI 48229	Serving Seniors with meals, senior activities, and other senior services	Multi-use	1945	No	1945	$3,125,000	77
Gerry Kulick Community Center	1201 Livernois, Ferndale, MI 48220	Community Recreation Center	Building	2001	No	2001	$3,150,000	21
Independence Twp. Senior Community Center	6000 Clarkston Road, Clarkston, MI 48348	Senior Community Center that houses transportation program that serves Independence and Springfield Townships and the City of the Village of Clarkston	Multi-use	1997 and new addition 2015	No	1997	$262,500	17
LETC Maintenance	1105 W. Seventh St. Monroe, MI 48161		Mixed-Maint./ Admin.	1985	Yes	2011	$2,346,053	37
LETC Garage Facility	1105 W. Seventh St. Monroe, MI 48161		Garage	1985	Yes	2011	$1,674,000	37
LETC Maintenance Parking Lot	1105 W. Seventh St. Monroe, MI 48161		Parking Lot	1985	Yes	N/A	N/A	37
LETC Garage Parking Lot	1105 W. Seventh St. Monroe, MI 48161		Parking Lot	1985	Yes	N/A	N/A	37
LETC Transfer Station	730 Telegraph Rd, Monroe, MI 48162		Passenger	2004	Yes	2004	$2,265,279	18
Civic Park Senior Center	15218 Farmington Rd, Livonia, MI 48154	Senior Activities	Multi-use	1956 / 2002	No	1956	$3,125,000	

Facility Name	Facility Location	Notes - Description	Facility Type	Year Built / Rehab.	Designated Primary Public Transit Facility	In- service Date (Occupancy)	Original Cost	Age
City of Lincoln Park Senior Center	3240 Ferris Lincoln Park MI 48146	Sr. Center/Parks & Recreation	Multi-use	1954 / 1964	No	1964	$3,125,000	68
Madison Heights Senior Center	29448 John R Rd, Madison Heights, MI 48071	Provide senior recreation services	Admin.	1976	No	1976	$272,253	46
Dial-a-ride bus garage	97 Elredge Mount Clemens, MI 48043	Bus garage / dispatch / supervisor office	Multi-use	1924 / 2017	Yes	1961	$442,000	98
MCOP	1140 S Telegraph Rd, Monroe, MI 48161	Non-Profit Community Action Agency	Multi-use	2000	No	5/8/2000	$435,861	22
Vic Wertz Warehouse	44900 Vic Wertz, Clinton Township MI 48036	County offices and warehouse		1979	No	1979	$10,475,900	43
Nankin Transit	32150 DORSEY WESTLAND MICHIGAN 48146	Adm. Office, dispatch, bus yard	Multi-use	2016	Yes	2016	$58,000	6
NOTA	675 S Glaspie Street, Oxford, MI 48371	Office and indoor storage of vehicles	Multi-use	1989	Yes	2019	$1,100,000	33
Older Persons' Commission	650 Letica Drive, Rochester, MI 48307	Senior Center	Multi-use	2003	No	2003	$11,844,748	19
Older Persons' Commission	650 Letica Drive, Rochester, MI 48307	Bus Garage	Maint.	2004	Yes	2004	$828,393	22
Department of Public Works/ Leo Snage Water Building	12200 Beech Daly	This building is used to house the buses and other governmental vehicles	Multi-use	Built 1965/ Rehab 2000	Yes	1965	$3,883,250	59
Richmond Lenox EMS	34505 32 Mile Rd, Richmond MI 48062	Storage, Maint., Dispatch transit and EMS vehicles	Multi-use	2017	No	2017	$2,900,000	6

Facility Name	Facility Location	Notes - Description	Facility Type	Year Built / Rehab.	Designated Primary Public Transit Facility	In- service Date (Occupancy)	Original Cost	Age
City of Romulus, Romulus Senior Center	36525 Bibbins, Romulus, MI 48174	Senior Services, Meals on Wheels program.	Admin.	2005	No	2005	$3,000,000	17
Roseville	18185 Sycamore Roseville, MI 48066	SMART Garage (Barn)	Multi-use	1998	Yes	1998	$85,000	24
Shelby Township Senior Bus Garage	51720 Van Dyke Ave, Shelby Twp., MI 48316	Store Smart Buses	Multi-use	2000	Yes	10/26/2000	$121,600	22
Senior Center	40200 Utica Rd., Sterling Heights MI 48313	To provide resources and programming for individuals over the age of 50 and those with disabilities	Multi-use	1997 / 2017	No	1997	$2,400,000	25
Ford Senior Center	6750 Troy St. Taylor, MI 48180	Recreational building for seniors and hub for transportation services	Multi-use	2000	No	1984	$0/donated by Taylor School District	22
Westfield Activities Center	2700 Westfield Trenton, MI 48183	Senior Center/Community activities Center			No		$4,600,000	24
West Bloomfield Parks and Recreation Activity Center	4640 Walnut Lake Road, West Bloomfield, Michigan 48323	Main Office and activity center for West Bloomfield Parks and Recreation	Multi-use	1973 / 1997	No	1973	$391,341	49
Yack Arena - Recreation Offices	3131 Third Street	Multi-use arena/community center home to the Recreation Department Offices. Mileage, inspection, and repair reports are sent out from this office.	Multi-use	1996	No	1996	$800,000	26

Facility Name	Facility Location	Notes - Description	Facility Type	Year Built / Rehab.	Designated Primary Public Transit Facility	In- service Date (Occupancy)	Original Cost	Age
Copeland Center	2306 Fourth Street, Wyandotte, Michigan 48192	Senior Recreation Facility. Houses the Senior Transportation office which coordinates rides for the elderly and those who cannot drive.	Multi-use	1969 / 2006	No	1969	$3,750,000	53
Recreation Service Building	1100 Biddle Avenue, Wyandotte, Michigan 48192	Maintenance Warehouse for Recreation Staff. All vehicles are parked inside daily	Multi-use	1974	No	1974	$3,125,000	48
WPRD-Transportation	5440 Arden, Warren, MI 48092	Transportation Office & Garage that houses the SMART buses	Maint.	1960	Yes	2008	$888,800	62
Waterford Senior Center	3621 Pontiac Lake Rd. Waterford, MI 48328	To provide services, resources, and recreation for Senior Citizens	Multi-use	1965	No	1/1/1965	$102,427	57

Appendix C

Summary of Relevant Studies and Related Reports

Study / Report Title	Theme / Relevance	Owner / Agency	General Content / Purpose
Report DDOT 2023 Title VI Onboard Survey Report 2023-03-13	Demographics of Ridership	DDOT	Concerted and comprehensive series of surveys addressing how Title VI criterea (race, color, language spoken at home, household income, travel patterns, fare usage, national origin, and English proficiency) affect transit ridership
MDOT 5 Year Program 2023-2027	Capital Improvements	MDOT	Overarching summary of planned investments in transportation encompassing Michigan's highways, bridges, buses, rail, aviation, marine, and active transportation.
Michigan Mobility 2045 Plan	Mobility Improvement	MDOT	Long-range companion to MDOT 5 Year Program addressing Michigan's future social and economic prosperity through statewide, rural and metropolitan transportation improvement programs
Northern Michigan Rail Ridership Feasability and Cost Estimate Study	Regional Connectivity	BATA & MDOT	Assesses the potential for operating passenger rail service between the southeast Michigan including Detroit and Ann Arbor, and the northwestern tourism-oriented region of Michigan including Traverse City and Petoskey
2023-2026 State of Michigan Strategic Highway Safety Plan	Transit Study	GTSAC (Governor's Traffic Safety Advisory Commision)	Analytical four-year comprehensive plan intended to identify safety needs and invest accordingly to eliminate highway fatalities and serious injuries
Detroit Department of Transportation 2023 Transit Accessibility Plan	ADA Compliancy	DDOT	Affirms DDOT commitment to ADA by ensuring that buses, service levels, facility access, pedestrian connections, bus stop surface pads, shelters, signage, snow clearing standards, wayfinding, transit information, policies, and customer service meet the needs of all riders
City of Detroit Strategic Plan for Transportation 2022	Mobility	City of Detoit	Focus on mobility access in Detoit, heavy reliance on DDOT
I-375 Reconnecting Communities Project	Transportation Options	MDOT	Convert Detroit's I-375 freeway to a street-level boulevard as a safer and more connected transportation option for all users

Study / Report Title	Theme / Relevance	Owner / Agency	General Content / Purpose
City of Detroit Complete Streets Program	Transportation Optoins	City of Detoit	Plans, designs, operates and maintains streets as equally conducive to all methods and scales of transportation, whether walking, roling, driving, or riding transit
Connect Southeast Michigan:Framework Summary	Regional Transit Access	Transit plan proposed by Wayne County Executive, Warren Evans	Improving, expanding, and modernizing current transit regionally
FINAL DDOT 2023 Title VI Onboard Survey Report	Transit Study	AECOM	DDOT Ridership survey information
Regional Master Transit Plan: Transit Plan for Southeast Michigan 2021	Update Transit Services	RTA	Ways to advance current transit services, patterns, projects, and public input for regional transit
Advance Regional Transit: 2022 Regional Master Transit Plan Update	Update Transit Services	RTA	Advance Regional Transit documents progress made to implement the RMTP in 2022, transit industry trends, and recent community outreach efforts. These inform updates to the RMTP strategies and actions that ensure RTA is adapting to changing regional transit needs
Streets for People: Detroit Comprehensive Safety Action Plan	Safety Features	City of Detoit	"Describes a citywide approach across multiple departments utilizing strategies such as Safe Users, Safe Vehicles, Safe Speeds, Safe Streets, and Post-Crash Care with Equity, Dignity, and Transparency as its foundational principles"
Detroit Workforce Mobility Equity Analysis: Gap Analysis Report	Economic Development	RTA	"Connecting Detoiters to Opportunity" Study aims to find gaps in transit for low income populations to, in turn, provide access to employment opportunities
Gratiot Avenue Transit Study	Transit study	RTA	Transit study affecting Wayne and Macomb County for recommendation of multiple rapid transit alternatives
Michigan Avenue Corridor Study	Transit study	RTA	Transit study affecting Wayne County for recommendation of rapid transit alternatives for a locally preferred alternative
OnHand: Expanding Transportation Access Across Southeast Michigan	Accessible Transportation	RTA	Supporting accessible transit options, Highlighting gaps in transit options in opt-out cities, sub-regional transportation, issues between transferring between DDOT and SMART
Regional Transit Corridor Strategy	Transit Support	RTA	Overview of economic development benefits from transportation initiatives
Southeast Michigan Regional Transit Briefing Book	Public Engagement	RTA	Provide the public with a baseline understanding of the existing regional transit system; Share recently completed and ongoing planning efforts to improve the system; Describe the benefits of improved transit to the region's residents and businesses ; Present an updated Vision, Goals, and Strategies for improved regional transit; Set a framework for public engagement.

Study / Report Title	Theme / Relevance	Owner / Agency	General Content / Purpose
Transportation Improvement Program for Southeast Michigan FY 2023-2026	Existing Service Analysis	SEMCOG	Describes how and when the $4.28 billion from the TIP will be allocated to specific rojects from the 2045 Regional Transportation Plan (2045 RTP) and agreed upon by stakeholders such as cities, villages, county road agencies, transit providers, and the Michigan Deparment of Transportation (MDOT)
2045 Regional Transportation Plan for Southeast Michigan	Develop Service Alternatives	SEMCOG	Considers agining demographic change, future tedchnology, and funding concerns while detailing how $35 billion in revenue will be invested in 174 projects to support the region's transportation system through 2045.
Access to Core Services in Southeast Michigan	Updated Analysis of Service Adequacy	SEMCOG	Outlines public transportation accessibility in Southeast Michigan via regional benchmarks and identifying gaps and barriers in accessibility. Sets regional policies and local actions to address the identified gaps in accessibility and improve residents' ability to reach core services.
Bicycle and Pedestrian Mobility Plan for Souteast Michigan	Develop Service Alternatives	SEMCOG	Establishes guidelines for bicycling and walking in the region, and provides guidance on increasing connectivity, use, and safety of the system for all residents with aspirations for connecting future communities in a cycling and pedestrian network
Improving Transit in Southeast Michigan: A Framework for Action	Market Analysis	SEMCOG	Cohesive plan for mobility throughout the seven-county service area. Includes a regional network that incorporates an array of service levels, a variety of features and amenities, and delivers the delivers comprehensive service to all who need it.
Woodward Avenue Rapid Transit Alternatives Analysis Locally Preferred Alternative	Develop Service Alternatives	SEMCOG	Outlines and analyzes costs, benefits, and impacts of service alternatives. Details qualitative factors effecting local preferred action selection through public discourse and agency stakeholder feedback.
SMART: Group Transit Asset Management Plan for SMART Subrecipients	Asset Management	SMART	Establishing a linkage between operating and maintenance budgets and the Capital Improvement Program's multi-year planning horizon taking into account the effects of aging assets and the estimated costs of new assets; and Expanding the availability of asset management data agency wide and providing training on how to access and utilize the information.
SMART: Transit Asset Management Plan	Asset Management	SMART	Review and update operating and data standards, policies and procedures covering all aspects of asset management; Continue to build on the comprehensiveness and accuracy of the inventory by adding funding source for each asset in EAM and requesting asset data from vendor at time of facility asset purchase
Copy of 5 Year Capital Plan	Budget	RTA?	Capital plan for Southeast Michigan transit centers, includes NOTA