



Southeast Michigan Regional Transit Briefing Book

RTA



2021



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The RTA was created by Public Act No. 387 of 2012. Its 10-member board is appointed for three year terms by the county executives of Wayne, Oakland and Macomb counties, the chair of the Washtenaw County Board of Commissioners, the Mayor of Detroit, and the Governor of Michigan. The Governor’s appointee serves as chair and without a vote.



1 | INTRODUCTION

The Regional Transit Authority of Southeast Michigan (RTA) is the agency charged with coordinating transit planning activities, allocating federal and state funding, and securing new regional funding in Macomb, Oakland, Washtenaw, and Wayne Counties (referred to as Southeast Michigan throughout this document). The RTA works in partnership with the region's transit providers and community partners to serve 82 communities in Southeast Michigan. Nearly 120,000 trips are made daily on public transit in Southeast Michigan, connecting people to jobs, education, services, and their communities. On average, 60,000 paratransit trips are taken daily in the region, enabling seniors and people with disabilities to reach jobs, medical appointments, shopping, and social activities.

The COVID-19 pandemic has highlighted the critical role our transit system plays in keeping Southeast Michigan moving. Our transit operators have been on the front lines safely transporting essential employees to and from work; these are the medical and service industry workers we have relied on for everyday needs throughout the pandemic. Transit is truly a community asset, and much like the development of schools, roads and parks, Southeast Michigan needs to make long-term investments in transit service, transit workforce and transit infrastructure to support daily life in our communities in the coming decades.

Regional Transit Accomplishments

Southeast Michigan's transit agencies have worked proactively and collaboratively to improve regional transit over the last several years. The following transit services have been implemented to improve and better integrate regional transit:



Dart Card: A regional transit pass that provides access to any DDOT and SMART fixed-route bus, and the QLINE streetcar. Passes are active from 4 hours to 31 days and can be purchased onboard, at transit centers, online, or through the Dart app.



ConnectTen: In 2018, DDOT introduced ConnectTen service, which improved the ten most popular routes, adding 24 hour, seven day a week service and peak hour frequencies of 20 minutes or less.



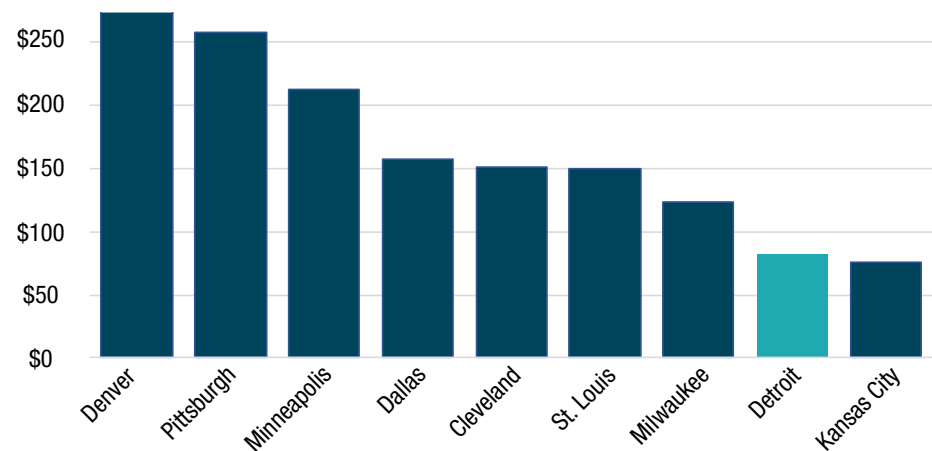
FAST Service: New FAST (Frequent. Affordable. Safe. Transit.) service powered by SMART offers limited stops to connect suburbs with Downtown Detroit quickly and easily. The high-frequency service travels along the region's three busiest corridors at 15-minute intervals during peak operating hours.



D2A2 Service: A new hourly service that connects Downtown Ann Arbor to Downtown Detroit. This service represents a groundbreaking regional partnership between AAATA and RTA that offers regular service from 6 am to 10 pm weekdays and between 9:45 am and midnight on weekends. The service will re-launch in 2021.

Over the last several years, the region's transit providers have improved service for riders. However, despite advancements, our region is still in need of a large sustainable investment to expand and enhance transit service, embrace emerging trends in mobility, modernize vehicles and infrastructure, and improve the customer experience. The Detroit Metropolitan Area spends significantly less per capita on transit than peer regions, investing less than \$100 per capita on transit compared to an average of \$176 in peer regions. While transit is a lifeline for many people in Southeast Michigan, many others—particularly minority, low-income, disabled, and older people in our region—still do not have access to the opportunities or services needed to thrive.

OVERALL TRANSIT FUNDING PER CAPITA (2018 DATA)



Source: National Transit Database, 2018.

As Southeast Michigan moves toward recovery from COVID-19 and its economic impacts, it is our collective responsibility to plan and build a more comprehensive and connected transit network that lifts up and serves all people in our region for generations to come.

The RTA envisions a region with sufficient and stable funding to support improved public transit options that will advance equity by increasing accessibility; satisfy the integrated mobility needs of Southeast Michigan communities; and promote livable, healthy, and sustainable growth. We need a comprehensive plan to realize that vision. Therefore, the RTA will be embarking on a process to update the 20-year Regional Master Transit Plan (RMTP) in 2021.

A foundational step in the planning process is this Southeast Michigan Regional Transit Briefing Book (Briefing Book). The purpose of the Briefing Book is to:

- 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.

REGIONAL MASTER TRANSIT PLAN PROCESS



Regional Transit Overview

Fixed-Route Transit



Ann Arbor Area Transportation Authority (AAATA, a.k.a. TheRide) provides transit service to the greater Ann Arbor-Ypsilanti area. AAATA operates fixed-route buses, paratransit, commuter, demand-responsive, event, and airport services.



DDOT provides transit service throughout the City of Detroit and small portions of neighboring cities. DDOT operates fixed-route buses and paratransit services.



SMART provides transit services in all of Macomb County, and portions of Oakland, and Wayne Counties. SMART operates fixed-route buses, paratransit, commuter, and demand-responsive services.



DTC operates the Detroit People Mover, which is a fully automated light rail system that operates on an elevated single track loop in Downtown Detroit.



M-1 RAIL operates the QLINE, a 6.6-mile circulating streetcar loop serving locations along Woodward Avenue from Downtown Detroit to New Center.

FIXED-ROUTE TRANSIT PROVIDER CHARACTERISTICS (2019)

PROVIDER	EMPLOYEES	BUSES/TRAINS	ROUTES	PASSENGERS	2019 OPERATING EXPENSE	2019 CAPITAL EXPENSE	2019 TOTAL EXPENSE
AAATA - The Ride	283	104	18	6,963,597	\$41,842,544	\$2,307,237	\$44,149,781
DDOT	906	298	43	22,751,799	\$116,343,511	\$20,762,113	\$137,105,624
SMART	842	277	39	9,038,149	\$108,208,179	\$30,180,877	\$138,389,056
DTC - Detroit People Mover	126	10	1	1,735,852	\$19,200,567	\$1,283,035	\$20,483,602
M-1 RAIL - QLINE	50	6	1	1,169,213	\$8,743,255	\$0	\$8,743,255

Source: National Transit Database, 2019

Other Mobility Services in the Region

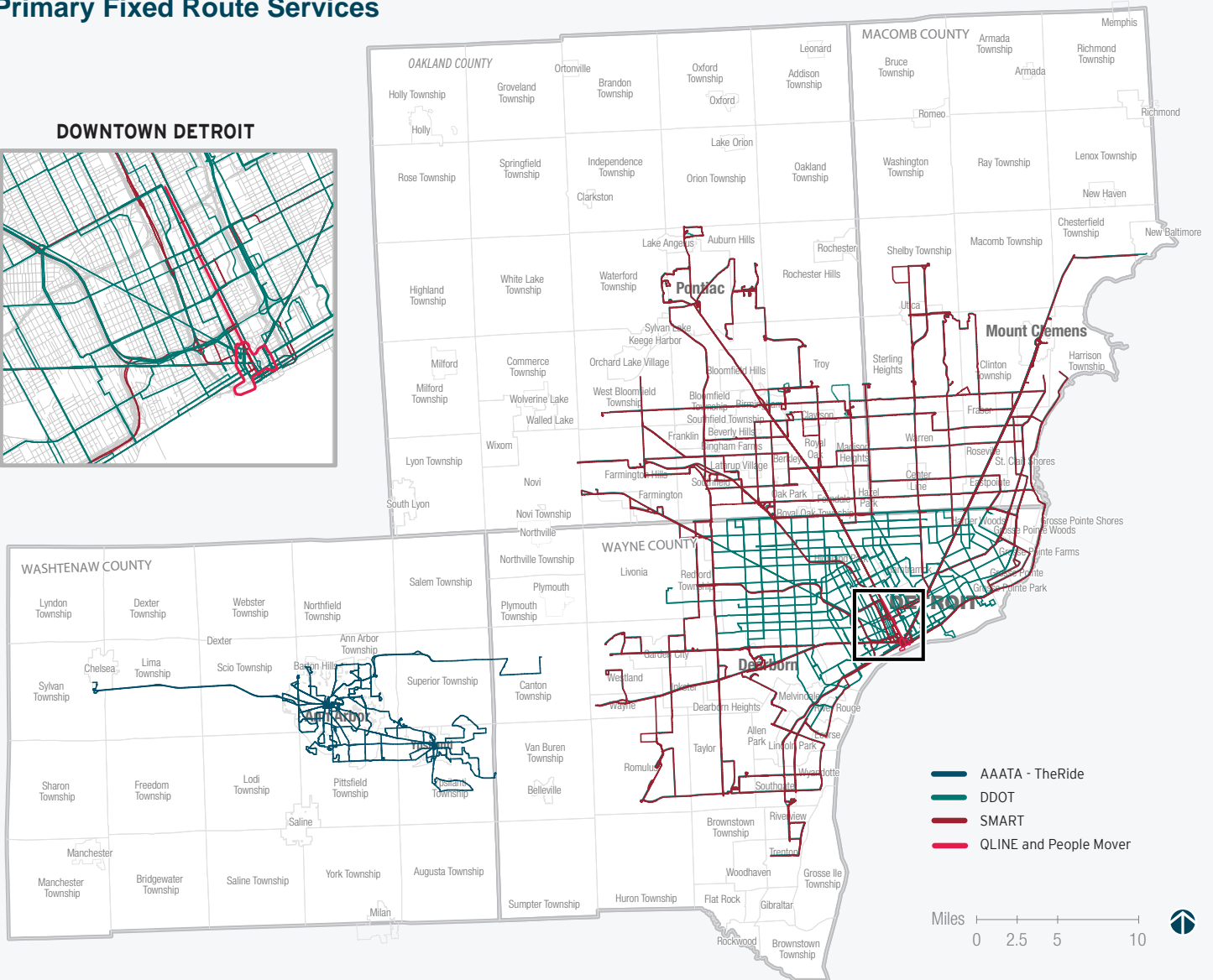
The community transit and mobility providers throughout the region offer services ranging from community sponsored and operated on-demand services, to non-profit and for-profit specialized services, as well as mobility solutions. These services include:

- **Community-Sponsored Transit Systems:** These transit systems are generally on-demand and focused on providing local trips for seniors and people with disabilities. These range from fully independent systems like the Western-Washtenaw Area Value Express (WAVE) and the North Oakland Transportation Authority (NOTA) to services funded through SMART's Community Partnership Program (CPP). CPP is a unique program that allows communities that opt-in to SMART's local funding to develop and deliver targeted local on-demand services. Currently 76 municipalities and organizations participate in SMART's CPP.

- **Additional Specialized Services:** There are over 25 additional specialized service providers that include non-profit and for-profit services providers with a focus on service for non-emergency medical transportation, senior service, and service for people with disabilities. Additionally, MichiVan, sponsored by the Michigan Department of Transportation (MDOT), offers commuter van pool service to the region.
- **Emerging Mobility Options:** Emerging mobility systems supplement transit by adding flexible services and first/last mile solutions. These systems are predominantly developed and deployed by partnerships between local municipalities and private companies. These emerging mobility solutions include transportation network companies (TNCs) (e.g. Uber, Lyft), car-sharing (e.g. Zipcar), bike share (e.g. MoGo, ArborBike), and electric scooters (e.g. Lime, Bird).

Primary Fixed Route Services

DOWNTOWN DETROIT

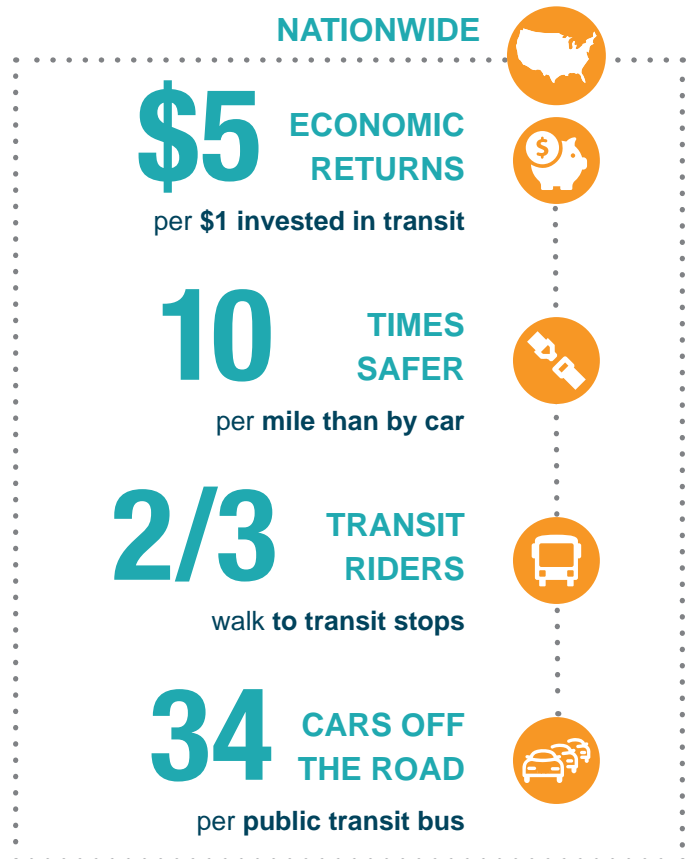


2 | TRANSIT AND MOBILITY TODAY

Why Transit Matters

Public transit benefits everyone. Even those who do not use transit on a regular basis benefit from improved accessibility, economic stability, regional competitiveness, and quality of life. Transit can provide:

- **Access to Opportunity:** High-quality, reliable public transit offers access to education and employment for people who are unable to afford a car. Transit also connects businesses to a larger and more stable workforce so they can continue to provide goods and services.
- **Increased Economic Activity:** Transit investments attract residents and businesses, provide better access to jobs, and improve the economy now and for the future. Nationally, every \$1 invested in public transit generates \$5 of economic returns, and 49,700 jobs are created per \$1 billion invested in public transit.
- **Environmental Improvements:** Transportation is one of the largest contributors to air pollution and fuel consumption in American cities. Quality transit can reduce automobile emissions by presenting a viable alternative to a personal vehicle, which can mitigate the impacts of transportation on climate change and health.
- **Public Health Benefits:** In addition to the benefits of mitigating vehicle emissions, riding public transit encourages regular physical activity, improving health outcomes. More than two-thirds of the nation's transit riders walk to their transit stop.
- **Reduced Congestion:** At the national average of 1.6 passengers per personal vehicle, one transit bus can take approximately 34 cars off the road, roughly two city blocks worth of traffic. As metropolitan populations continue to grow, so will congestion without high-quality transit options to mitigate it.



Sources: APTA (2020); APTA (2016); APTA (2017); FHWA (2009) NHTS.

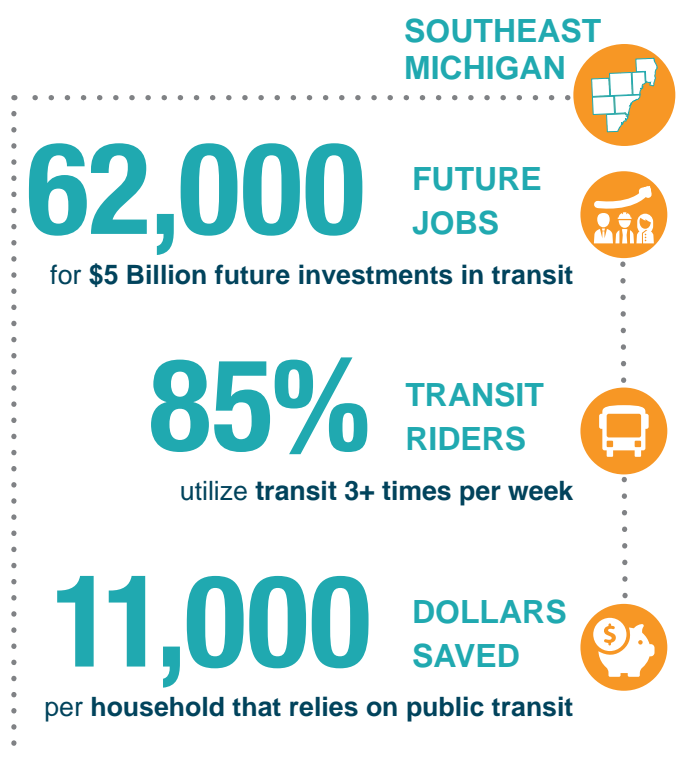
- **Safety:** In the United States, traveling by public transit is 10 times safer per mile than by car, reducing the chance of being in a crash by more than 90%.
- **Financial Savings:** Nationally, households that rely solely on public transit or those that are able to reduce the number of vehicles in their household by one, can save nearly \$10,000 annually on transportation, freeing up income to be invested in education, housing, or other sectors of the economy.

Why Transit Matters in Southeast Michigan

- **Access to Opportunity:** There are over 2 million jobs and 65 post-secondary education institutions in Southeast Michigan. Currently, 58% of jobs and 34% of post-secondary education institutions cannot be reached by public transit, meaning that these opportunities are not equitably accessible. This is particularly true for non-white households. Black households without cars face extreme disadvantage in accessing jobs. Regionally, 79% of transit riders do not identify as white.

Our region's low- and moderate-income workers depend on transit service to access jobs, education, and services:

- 83% of transit riders have annual household incomes under \$50,000.
- On average, 85% of transit riders use transit three or more times per week.
- If transit were not available, 20% of riders report that they would not be able to make their trip.
- 49% of riders do not have a car in their household.
- About 40% of transit riders do not have a valid driver's license.
- **Increased Economic Activity:** The RTA's Connect Southeast Michigan Transit Plan identified that \$5.4 billion in transit spending over a 20 year period would create approximately 62,000 jobs in the region and would add \$6.6 billion to the region's gross regional product.
- **Environmental Improvements:** The Environmental Protection Agency (EPA) has designated the SEMCOG region as a non-attainment area for not meeting the allowable ozone levels set by the 2015 National Ambient Air Quality Standard (NAAQS). In Detroit, 98% of greenhouse gas emissions related transportation come from cars and trucks, while only 2% are emitted from public transit vehicles. Increasing transit ridership in the region will reduce greenhouse gas emissions and help us meet federal requirements.
- **Public Health Benefits:** Increasing transit ridership will help to improve air quality, reducing our region's asthma rates, which are among the highest in the country. Detroit has double the asthma rates of the State of Michigan as a whole. High levels of air pollution have also been linked to higher COVID-19 death rates.



Sources: SEMCOG (2020); U.S. Bureau of Labor Statistics; MDOT Regional Economic Models Inc. modeling results.

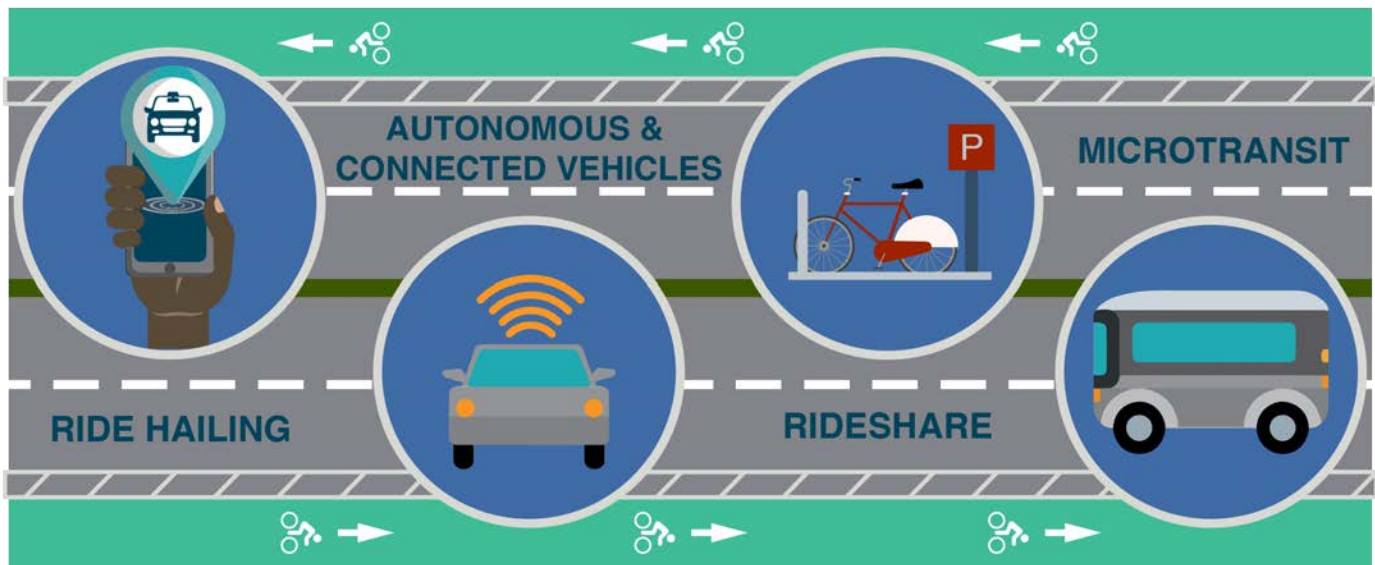
- **Reduced Congestion:** 40% of commuters cross county or Detroit borders to travel to work. With an average of 1.1 passengers per car in Detroit work trips, improved transit could help to reduce traffic across the Southeast Michigan.
- **Safety:** In 2019, there were a total of 128,443 crashes in Oakland, Macomb, Washtenaw, and Wayne counties, only 102 of which involved transit. Traveling by public transit was 5 times safer per mile than by car. On average, 26 people are injured or killed in a traffic accident in Southeast Michigan every day.
- **Financial Savings:** Auto ownership creates significant costs for residents of Southeast Michigan, particularly for low-income households. In 2019, 17% of consumer expenses in the Detroit Metropolitan Statistical Area (MSA) were spent on transportation costs, just over \$11,000 per year. In Southeast Michigan, 7% of households have an income less than \$10,000, making car ownership an enormous challenge.

The Changing Transit Landscape

Ridership Trends

Both nationally and regionally, transit ridership has been declining in recent years. Between 2016 and 2019, national annual transit ridership declined by approximately 6% from 10.4 billion to 9.8

REGIONAL DEVELOPMENTS IN NEW MOBILITY



passenger trips. Southeast Michigan has experienced similar trends with a 9% decrease in transit trips over the same period, from 45.8 million to 41.7 million annual passenger trips. There are a number of reasons for declining transit ridership, including increased telecommuting, low gas prices, and the introduction of new transportation services and technologies, like TNCs, car-sharing and bike and scooter sharing.

While national trends do demonstrate declining transit ridership, between 2010 and 2019 this decline was only on bus ridership, while other modes, such as rail and paratransit services saw increases. Additionally, data indicates that in regions like Seattle, where transit networks were redesigned or expanded, saw increases in ridership. This is reflected locally: between 2018 and 2019, SMART ridership increased by 5% after the introduction of FAST Service; rail ridership in Detroit increased by 27% with the introduction of M-1 RAIL. These trends indicate that transit ridership does improve when residents are provided with high-quality transit options that meet their needs.

Additionally, our national and regional population of adults 65 and over is increasing. In Southeast Michigan, the population of adults 65 and over is projected to increase from 15% of the population in 2015 to 23% of the population in 2045. Between 2016 and 2019, Detroit's population of older adults increased by 7%, and over the same period DDOT's paratransit trips increased by 34%. Transit must adapt to ensure that funding and service levels continue to meet this population's needs.

Service and Technology Trends

Technology is fundamentally changing the transit and mobility landscape. The ability to plan, request, and pay for a trip with

a mobile phone combined with the increase in shared use mobility systems like carshare, bikeshare, and scooter share has changed the way people move around metropolitan areas. Additionally, TNCs are growing rapidly and reported 2.6 billion passengers in 2017, a 37% increase from 1.9 billion in 2016. They have the opportunity to close first/last mile mobility gaps, provide more customized service, and improve convenience for existing and future system users. Further, current and future changes in vehicle and infrastructure technology, like connected, autonomous, and electric vehicle technology, will move us toward a safer and more sustainable mobility future.

Changes to the transportation ecosystem need to be a key consideration for transit in Southeast Michigan. However, these changes also need to be considered in an equity context: for example, a large number of transit riders do not have the means to afford the required technology (e.g. smartphone and data plan) and private transportation providers do not have an incentive to provide services in low-income areas.

These changes also need to be considered in the context of the ongoing COVID-19 pandemic. The pandemic has largely kept people at home, and away from the jobs centers, educational institutions, and events that are the backbone of transit ridership. Despite low risks of transmission on public transit, it may be a challenge to regain transit riders as people adjust to being comfortable in confined spaces with large groups of people in a post-COVID-19 world. This hastens the need for the RTA to integrate different service models that provide smaller and more individualized trips, while also using every tool in our toolkit to preserve and enhance existing transit service. RTA will need to work with regional employers to adapt service as some employers have changed shifts to accommodate off-peak

travel. As TransitCenter states in their report *A Transit Agenda for the COVID-19 Emergency*, "By enacting measures to protect transit riders and transit workers while redoubling efforts to enhance the fundamentals of good service, policy makers will not only keep cities moving during the pandemic, they will make city transportation systems more just and sustainable after COVID-19 recedes."

Southeast Michigan's transit providers and MDOT have begun implementing new service models through projects and programs such as:

- **Night Shift:** A partnership between DDOT, New Economy Initiative, Lyft, and the Detroit Cab Company that provides riders on late-night routes between 11 pm and 5 am with a \$7 credit for a Lyft ride to or from their bus stop.
- **AAATA Flex Ride:** A shared shuttle service connecting riders to fixed-route bus stops and limited-access destinations, and on-demand, curb-to-curb service in select locations.
- **Michigan Ride Paratransit App:** A pilot mobile phone trip booking platform that allows riders to directly book and pay for their travel.
- **MDOT's Connected and Autonomous Vehicle (CAV) Corridor Project:** A project to develop a CAV corridor in Southeast Michigan along Michigan Avenue and I-94.
- **SMART Quick Connect Microtransit Pilot:** A pilot project for enhanced on-demand transit providing service to areas fixed bus routes do not serve well. Quick Connect provides access in Farmington and Farmington Hills using the Moovit On-Demand app.
- **City of Detroit Office of Mobility Innovation (OMI) COVID-19 Response Pilots:** Two pilots that transport Detroit residents to COVID-19 testing sites and transport essential workers to their job sites.

Regional Planning Efforts

The timeline of regional planning efforts includes plans or ongoing planning efforts that share a similar goal with the Southeast Michigan Regional Transit Improvements Briefing Book, which is to build a regional identity in transit in order to improve quality of life and increase economic viability for the region.

REGIONAL PLANNING EFFORTS

2016

REGIONAL MASTER TRANSIT PLAN (RMTP)
Including Locally Preferred Alternatives (LPAs) for Gratiot, Michigan, and Woodward Avenue Corridors

RTA

2017

SEAMLESS FARE INTEGRATION STUDY

RTA

2018

STRATEGIC PLAN FOR TRANSPORTATION



DOWNTOWN DETROIT TRANSPORTATION STUDY



CONNECT SOUTHEAST MICHIGAN

RTA

2019

2045 REGIONAL TRANSPORTATION PLAN

SEMCOG

COMPREHENSIVE OPERATIONS ANALYSIS (COA)



RTA SEAMLESS FARE INTEGRATION PROJECT: PHASE 2 - CONCEPT OF OPERATIONS

RTA

2020

ONHAND: EXPANDING TRANSPORTATION ACCESS ACROSS SOUTHEAST MICHIGAN

RTA

MOBILITY ORIENTED DEVELOPMENT STUDY (MOD)

RTA

Ongoing Efforts

MICHIGAN MOBILITY 2045 (MM2045)



STREETS FOR PEOPLE



SMART "MOBILITY HUBS"



MICHIGAN AVENUE PLANNING AND ENVIRONMENTAL LINKAGES (PEL) STUDY



CONNECTED AND AUTOMATED VEHICLES CORRIDOR



3 | VISION, GOALS AND STRATEGIES

The RTA's long-range vision, goals, and strategies will serve as the foundation of the Regional Master Transit Plan. During subsequent phases of community engagement we will work to reaffirm regional transit priorities, discuss potential trade-offs in a constrained funding environment, and ultimately craft recommendations for future investments in regional transit. These will also define the RTA's strategic agenda as an agency over the next several years.

Our Vision is an ideal but realistic target for the next 20 years.

Goals are measurable milestones that are needed to reach our vision.

Strategies are approaches we can take to achieve our goals.

The RTA developed strategies based on community needs, desires, and feedback voiced during over 180 outreach events, by 4,000 telephone town hall participants, and 7,000 survey respondents since 2015. We have integrated key lessons learned into each strategy under the "What We Heard" section. In addition, each strategy is paired with an indicator that can be used as a benchmark to measure our progress toward our regional transit goals.

Strategies can be implemented by transit providers, the RTA, or other partners. The strategies have been divided into three categories to help organize potential recommendations:

Transit Network Improvements – new routes, extensions of existing routes, frequency improvements, span improvements.

Transit Priority Corridors – high ridership corridors that will be prioritized for capital investments.

Initiatives – actions undertaken to improve the delivery of transit service and customer experience.

STRATEGY CATEGORIES



**TRANSIT
NETWORK
IMPROVEMENTS**



**TRANSIT
PRIORITY
CORRIDORS**



INITIATIVES

VISION

We envision a region with sufficient and stable funding to support improved public transit options that will advance equity by increasing accessibility; satisfy the integrated mobility needs of Southeast Michigan communities; and promote livable, healthy, and sustainable growth.

Equity

Realizing our vision for a more just and equitable region will require concerted effort on all fronts, from connecting systemically disadvantaged people to opportunity through new transit services, to improving existing services. Therefore, equity must cut across all our Goals and Strategies as well as the actions we take as we update the RMTP. The Briefing Book represents our first steps to intentionally integrate equity across our activities. To ensure that we are directing resources towards those who need them most, we commit to the following initial actions:

- **Institutionalizing Equity within the RTA:** As we move forward, we will proactively identify opportunities to incorporate equity into the RTA's structure and internal policies, from prioritizing grant opportunities to our communications.
- **Investing Strategically to Address Inequities:** The RTA will develop quantitative and qualitative methods to assess how well our future capital and planning expenditures are targeting equity populations and set goals to keep ourselves accountable.
- **Conducting Inclusive Outreach and Engagement:** Starting with the RMTP update, we will develop focused engagement efforts for reaching equity populations including current riders, those underserved by transit, and those who have been unable to participate in past public input opportunities due to language, venue, format, or scheduling.

Goals

1

EXPAND: Expand Transit to New Places

Connect more people to more jobs, educational opportunities, and healthcare services in Southeast Michigan through an expanded regional transit system with a focus on expanding access for equity populations; this includes seniors, people with disabilities, and low-income households.

2

ENHANCE: Enhance Existing Services

Upgrade the frequency, reliability, comfort, safety, and speed of existing transit services to increase their value to current customers and to attract new riders.

3

INNOVATE: Develop Innovative and Adaptable Solutions

Implement innovative programs and pilot projects to improve transit, increase flexibility, and encourage transit providers to adopt new technologies.

4

FINANCE: Secure Long-term Dedicated Transit Revenue

Position Southeast Michigan for economic success by raising regional revenues and leveraging state and federal funding opportunities to sustain and expand the mobility services that our residents, employers, businesses, developers, and education system count on to thrive.

5

PARTNER: Build Sustainable Partnerships

Support existing provider efforts to sustain and improve their core services, implement expansion programs through active coordination with local transit providers and non-profits, coordinate with agencies that have goals related to accessibility improvements, and provide a seamless user experience.

Strategies

To make progress toward achieving measurable benchmarks within the five goals identified above, specific strategies are needed to move the indicators identified for each strategy in a positive direction.



STRATEGY #1: INCREASE CONNECTIVITY TO REGIONAL DESTINATIONS

Improve and expand transit service to major employment, education and medical centers, and connect transportation hubs with high-quality transit.

Strategy Type: Transit Network Improvements

What We Heard: The fundamental necessity for transit is to help people reach the destinations they want and need to go to. In Southeast Michigan, a high percentage of jobs, post-secondary education institutions, hospitals, and other major regional job centers are either not connected to the existing transit network or are connected by a transit route that has limited frequency. Improved mobility options will increase employers’ ability to attract and retain talented employees and increase residents’ access to essential healthcare services and educational opportunities. Feedback has highlighted not just the need to better connect routes to job centers, but also the need to improve mid-day/off-peak travel and cross system accessibility. One of the most frequent comments received by the RTA is to improve transit to the airport, a key destination and employment center.

Indicator: Percentage of jobs, post-secondary education institutions and healthcare facilities inside the current transit network that can be reached from existing transit.

Where We Are: 41.9% of jobs and 66.9% of points of interest can be reached from existing transit.

JOB, POST-SECONDARY EDUCATIONAL INSTITUTIONS AND HOSPITALS THAT CAN BE REACHED WITH EXISTING TRANSIT

	WITHIN ¼ MILE OF TRANSIT STOPS	WITHIN REGION	PERCENTAGE
Jobs	841,236	~2,006,400	41.9%
Points of Interest			
Post-Secondary Education	43	65	66.2%
Hospitals	40	59	67.8%
TOTAL Points of Interest	83	124	66.9%

Sources: LODES, HIFLD. Stats estimated by geospatial intersection in Remix (~).



STRATEGY #2: PROVIDE NEW SERVICE IN AREAS WITH UNMET DEMAND

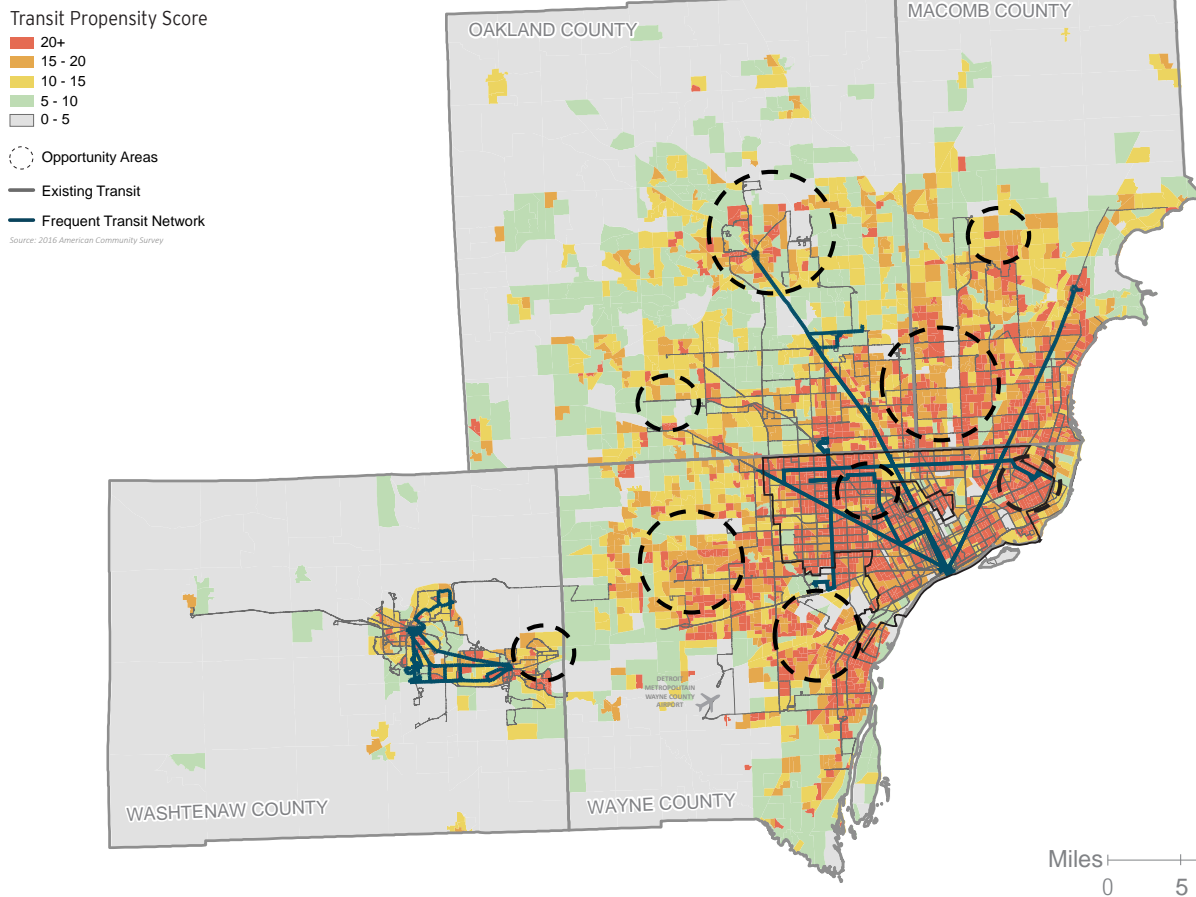
Develop transit solutions that meet people’s needs in areas that have demand but little or no existing service.

Strategy Type: Transit Network Improvements

What We Heard: There are many areas in the region that are underserved or have unmet demand for transit, which limits people’s access to job opportunities and vital services. Many of these gaps are in areas that have a high propensity for transit, a metric of how inclined a population or area is to utilize transit services. These include areas in both the urban core and in the outer parts of the four-county region. Of residents with a high transit propensity, 73.5% currently live in areas of the region that are underserved, or not currently served by transit. People in these areas have voiced that they want transit that meets their needs, whether it be flexible transit solutions or fixed-route transit.

Indicator: Percentage of areas with high transit propensity score (greater than or equal to 15, based on concentrations of population, employment, poverty, zero car households, people under the age of 18, people over the age of 65, and those who are disabled—that are underserved (not within 0.5 miles of a frequent transit route), or not currently served by transit.

Transit Propensity and Opportunity Areas



ABOVE Transit Propensity Scores in Southeast Michigan's Census

Where We Are: 73.5% of the high propensity for transit population is not currently within 0.5 miles of the high-frequency transit network.



STRATEGY #3: INCREASE FREQUENCY AND SERVICE HOURS

Increase late night, early morning and weekend transit frequency while extending service hours to make transit more attractive and dependable for service, manufacturing, and other essential workers.

Strategy Type: Transit Network Improvements

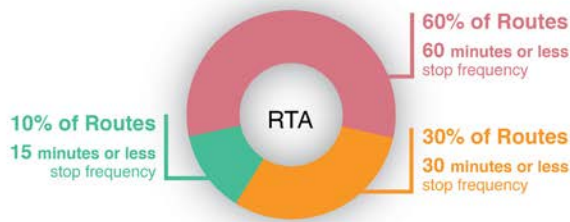
What We Heard: While there is fixed-route transit service in many areas in the urban core, many routes do not provide mid-day or off-peak coverage that is needed to get around the region during non-commute hours. When off-peak service is offered, it often comes infrequently, making it inconvenient.

Many jobs in our region do not adhere to the traditional workday hours of 9 am to 5 pm. A 2019 Workforce Intelligence Network for Southeast Michigan (WIN) report indicates that transportation was most frequently cited as a top barrier for job seekers. Additionally, in the RTA's 2018 public engagement survey, 73% of non-transit users responded that they do not ride transit because it is either not convenient, takes too long, does not travel where they want to go, or that there was no transit service in their area. Residents of Southeast Michigan have requested more frequent service and longer service hours so they can get to where they need to go regardless of the time of day.

Indicator: Percentage of the transit network that is frequent (15-minute headways), percentage that is 24-hour, percentage that operates on weekends.

Where We Are: 10.1% of the network is frequent, 10.9% is 24-hour, 68.9% operates on Saturdays, and 58.0% operates on Sundays.

Regional Weekday Peak Hour Headways, 2019



Ann Arbor Area Transportation Authority



SMART



Detroit Department of Transportation



ABOVE Regional Weekday Peak Hour Headways. In 2019, 10% of the region's 119 routes run every 15 minutes or less.



STRATEGY #4: DEVELOP A NETWORK OF TRANSIT PRIORITY CORRIDORS

Invest in transit projects that offer faster trips, passenger amenities, comfort and convenience to improve transit for existing customers and attract new ones.

Strategy Type: Transit Priority Corridors

What We Heard: Transit riders and potential riders alike are requesting transformative capital projects, like bus rapid transit (BRT), light rail, and improved amenities, which make transit more reliable, comfortable and appealing, improve options for regional connectivity, and have the potential to create economic returns.

In Michigan, Grand Rapids has implemented projects such as the Silver Line and the Laker Line, BRTs connecting into downtown and through Grand Valley State University. There is clear interest from the public and stakeholders for transformative capital projects to be included as a transit option on Southeast Michigan's major corridors.

Long-term dedicated transit funding in the region would make Southeast Michigan more competitive and eligible to receive federal funding, and would accelerate the progress on this strategy.

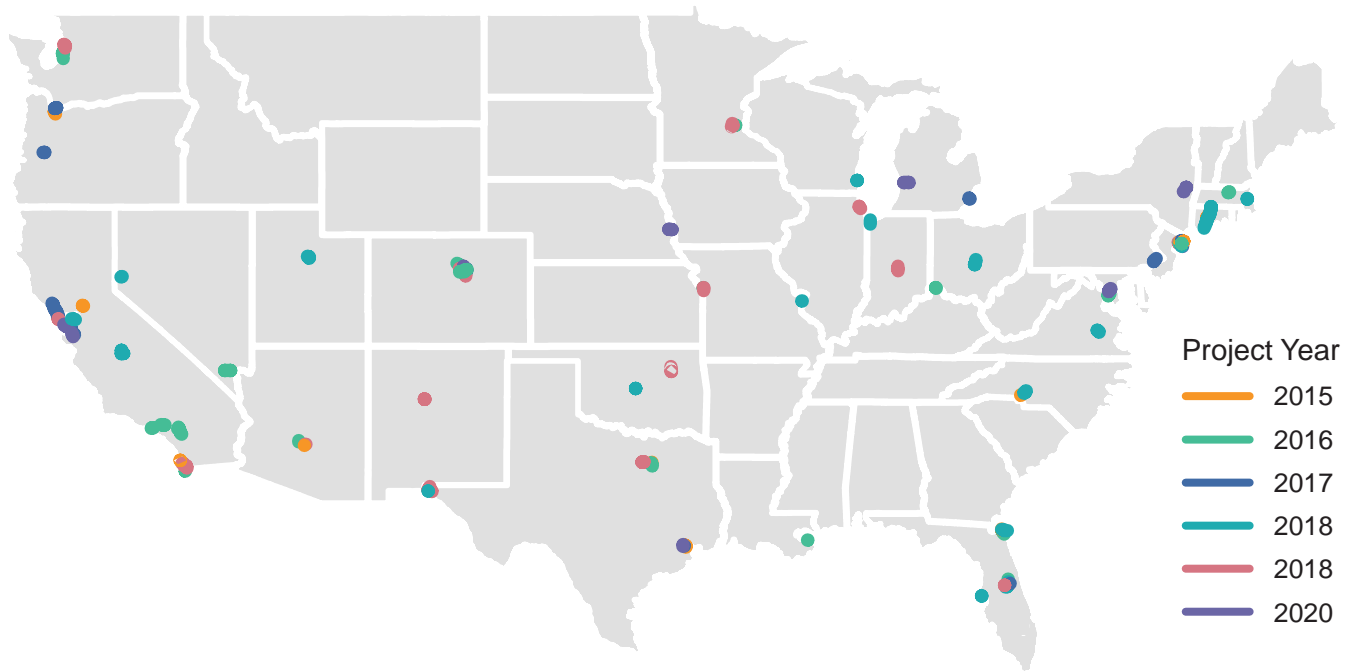
Transformative capital projects have driven economic development, such as the \$190 return per dollar invested in the Cleveland HealthLine BRT. Transit ridership often increases as well. When Washington State's King County converted conventional routes to BRT, transit ridership increased by 29% across those corridors.

Transformative capital projects can have significant costs. Federal funding is available through Federal Transit Administration (FTA) competitive grant programs, but these grants have local match funding requirements. Most BRT, light rail, and streetcar projects throughout the country receive federal funds through



ABOVE The Silver Line, a BRT route in Grand Rapids offers frequent service at 34 stations, which include shelters, seating, real-time signage, a sidewalk snowmelt system, ticket vending machines, and level boarding. Silver Line buses all include free wi-fi and bike racks. Source: therapidian.org

Transformative Capital Transit Projects 831 Projects, 2015 - 2020



ABOVE Map of transformative capital transit projects in the US from 2015-2020. Source: Transport Politic (2020).

STATUS OF TRANSIT CORRIDOR PROJECTS IN SOUTHEAST MICHIGAN (2011-2021)

CORRIDOR	LOCATION	TYPE	LENGTH	PHASE
Ann Arbor to Detroit Commuter Rail	Ann Arbor, City of Detroit	Commuter Rail	53 miles	LPA Selected
Woodward Ave	City of Detroit, Oakland County	Bus Rapid Transit	25.4 miles	LPA Selected
Michigan Ave	City of Detroit, Wayne County	Bus Rapid Transit	22.4 miles	LPA Selected
Washtenaw Ave	Washtenaw County	Bus Rapid Transit	8.2 miles	LPA Selected
Gratiot Ave	City of Detroit, Macomb County	Bus Rapid Transit	23.5 miles	LPA Selected
Michigan Ave	City of Detroit	High Capacity Transit	2.0 miles	Alternatives Analysis
Jefferson Ave	City of Detroit	High Capacity Transit	7.5 miles	Planning
Grand River Ave	City of Detroit, Oakland County	FAST Route	24.1 miles	Planning
Van Dyke Ave	City of Detroit, Macomb County	FAST Route	29.7 miles	Planning

the Capital Investment Grant Program (CIG). Over 800 projects have been completed nationally between 2015 and 2020. There are currently 61 projects in the program from 55 urban areas.

Indicator: Miles of transformative capital projects implemented over a ten-year period.



STRATEGY #5: IMPROVE OPTIONS FOR SENIORS AND PEOPLE WITH DISABILITIES

Provide equitable mobility options for those who cannot ride fixed-route transit with a focus on increasing regional mobility.

Strategy Type: Initiative

What We Heard: From seniors and people with disabilities who rely on transit, the RTA has heard that improved door-to-door service, better coordination between providers, more



ABOVE SMART Connector is an advance reservation, curb-to-curb, service operated by SMART. Source: detroittransit.org

coverage, and improved accessibility would all advance the equity of transit and mobility options available to them. Riders who use community transit would like a seamless experience when accessing regional destinations, and access to more destinations. From 2019 through 2020, the RTA conducted the OnHand User Survey to understand how the transit and human-services transportation network serves those relying on fixed-route and demand-response transportation in Southeast Michigan. The survey had over 1,200 responses representing 72% of the region's zip codes. Survey results showed that target population respondents (people above the age of 65, people who are unemployed, people with a disability) primarily depend upon fixed-route services and driving (73%). After fixed-route transit, target population respondents rely on lower cost options such as friends or family before using private services such as taxis or TNCs.

Indicator: Progress on the OnHand Action Plan goals and strategies.

Where We Are: In partnership with transit providers, riders, and stakeholders, the RTA completed OnHand: Coordinated Human Services Public Transportation Plan, a comprehensive and coordinated regional study and action plan to improve transportation options for seniors and people with disabilities.



STRATEGY #6: INCORPORATE FLEXIBLE SOLUTIONS INTO THE DELIVERY OF REGIONAL TRANSIT TO LOWER DENSITY COMMUNITIES

Develop new partnerships and improved service models to better serve markets where fixed-route transit is impractical.

Strategy Type: Initiative

What We Heard: Providing a one-size fits all solution does not work for Southeast Michigan. People from across the region want different kinds of services to meet their needs; some are looking for traditional fixed-route service, while others are looking for alternatives like microtransit, commuter services, or community transit.

There are various approaches to flexible transit service. One example from Washington is King County's Community Connections process, which connects King County with local governments and community partners to develop transportation solutions for areas that do not support fixed-route service. To date, Community Connections has developed three new

services: Community Ride, Community Van and Real-Time Rideshare.

Indicator: Population served and ridership of flexible transit solutions.

Where We Are: AAATA's FlexRide program has a service area with a population of 41,934 people, providing shuttle service to fixed-route bus stops and limited-access destinations as well as on-demand curb-to-curb service for select locations. There are additional community sponsored transit services that offer flexible programs, such as NOTA in Lake Orion, and Western Washtenaw Value Express WAVE in Chelsea. There are also services through partnerships between multiple municipalities, such as Richmond-Lenox EMS (RLEMS), jointly owned by Richmond and Lenox townships, and the Senior Transportation with Advanced Reservation (STAR), which serves Romeo, Washington and Bruce townships.

This strategy will be monitored by tracking programs that aim to provide these flexible solutions. For example, SMART's recently completed Comprehensive Operations Analysis (2020) recommends the implementation of microtransit pilot projects in four zones (two in Macomb County, one in Oakland County, and one in Wayne County).

LOW-DENSITY AREA TRANSIT SERVICES

Commuter Services: Peak-hour services that travel to employment centers from a designated accessible area, such as a park-and-ride.

Community Transportation: Local or non-profit sponsored on-demand services that are and focused on providing local trips for seniors and people with disabilities.

Flex Routes: Fixed-route bus service designed to make deviations of up to a quarter mile to serve a larger area, while adhering to scheduled trip times.

Microtransit: small-scale transit service that can operate on-demand, on fixed- or flexible routes and schedules, or in designated areas.

Transit Supportive Infrastructure: Improvements to sidewalks, pedestrian crossings, and wayfinding that make transit more accessible to all users.

Vanpools: Shared-ride option for small groups with similar commutes.

Voucher Programs: Offer riders vouchers for all or part of the cost of a taxi or ride-hailing service.



STRATEGY #7: IMPLEMENT NEW TECHNOLOGIES TO EXPAND THE SYSTEM AND IMPROVE CUSTOMER EXPERIENCE

Determine the appropriate areas for technological innovation, such as service delivery, fare, service management and infrastructure, and integrate emerging technologies into the existing mobility system to serve new areas and improve customer experience.

Strategy Type: Initiative

What We Heard: With transportation technology rapidly changing, the RTA has heard that the region needs to be responsive and ready to leverage new innovations. Emerging technologies, such as microtransit, can fill mobility gaps in the existing system, such as first mile/last mile connectivity and services for low-density areas, and can improve efficiency and cost savings. Microtransit can provide door-to-door service or be used for more general trips to and from popular destinations. It is important to support foundational transit services while keeping an eye to the future.

Indicator: Planned emerging technology initiatives and projects

Where We Are: Currently planned initiatives include:

- MDOT's CAV Corridor Project
- City of Detroit OMI COVID-19 response pilots
- DDOT fare collection system replacement and on-board camera system replacement
- DDOT and SMART electric bus pilots
- RTA paratransit booking app
- Michigan Ride paratransit app
- SMART Quick Connect Pilot
- SMART MicroTransit Zones



STRATEGY #8: MODERNIZE EQUIPMENT AND FACILITIES

Modernize aging equipment and facilities to retain and attract new customers and staff while reducing operational costs and service delays.

Strategy Type: Initiative

What We Heard: Received feedback supports the need to sustain existing transit services as the foundation for regional transit in Southeast Michigan. To do so, it is important to maintain

and modernize existing fleets and facilities. Older buses and facilities can make a transit system unattractive or unreliable, resulting in less community support and fewer riders.

Through the regionally adopted Transit Asset Management Plan (TAMP) performance measure targets, it is clear that our transit providers have made great progress in modernizing and upgrading aging equipment. Providers identified facilities as an area for improvement. Initiatives that are not captured in the TAMP, such as the fare equipment modernization project currently being led by DDOT, can also be tracked to measure success.

Indicator: Meeting or exceeding the current, regionally adopted, TAMP targets developed by SEMCOG and the RTA in coordination with the major transit providers in the region.

Where We Are: Southeast Michigan's TAMP performance measures indicate that rolling stock (buses and train cars) and equipment are in a state of good repair that exceeds regional targets. In 2019, 19% of rolling stock and 22% of equipment has met or exceeded its Useful Life Benchmark (ULB), meaning they are eligible for replacement. Our regional targets were not to exceed 20% and 25%, respectively. However, we are falling behind in maintaining our region's transit facilities, 11% of which are below their optimal condition, which is above our 5% target. Transit providers are currently working to remedy this through maintenance and repairs, as well as through large-scale projects like DDOT's Coolidge Terminal reconstruction project.



STRATEGY #9: REDUCE THE ENVIRONMENTAL IMPACT OF THE TRANSIT SYSTEM

Implement technology solutions with transit providers that minimize energy use and pollution

Strategy Type: Initiative

What We Heard: Improved public transit could reduce the environmental impact of transportation in the region. More service, frequency, and riders could take cars off the road and reduce single-occupancy vehicle use, having a positive impact on our environment.

Although there are various ways that transit agencies can reduce their impact on the environment through facilities upgrades and maintenance practices, the single biggest impact is through reducing vehicle emissions, and increasing the use of environmentally friendly fuel alternatives, such as biodiesel and electricity. In 2019, SMART and DDOT received a \$2.6 million Low or No Emission Grant from the FTA to purchase and pilot the use of six battery-electric buses in the region.

Indicator: Regional percentage of vehicle miles traveled using environmentally friendly fuel alternatives.

Where We Are: As of 2019, 10% of the region's transit vehicle miles traveled are made by vehicles using environmentally friendly fuel alternatives.

REGIONAL VEHICLE MILES TRAVELED (VMT) BY FUEL TYPE

	TRADITIONAL FUELS	ALTERNATIVE FUELS	TOTAL
VMT by Fuel Type	33.5 million	3.6 million	37.1 million
Frequent Routes (Weekday)	90%	10%	100%

Source: National Transit Database (2019)



STRATEGY #10: ADVOCATE FOR FUTURE FUNDING OPTIONS

Identify funding alternatives that are available to the region and explore viability of their implementation.

Strategy Type: Initiative

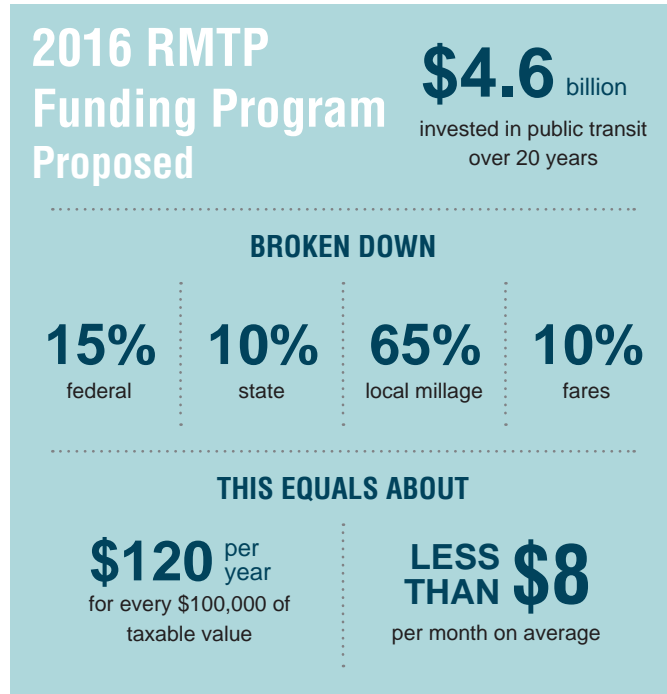
What We Heard: To improve transit, we must take advantage of funding match opportunities and look into alternatives to supplement the ballot initiatives that currently fund a majority of transit in the region. Public feedback supports innovative approaches to funding.

SMART and AAATA must both return to the ballot every four to five years to ask the public for financial support for current transit operations through a property tax. DDOT's funding is provided by the City of Detroit's general fund, which is subject to annual approval as part of the City's budget. The RTA legislation provides the opportunity for a 20-year funding source to help finance all of our systems.

Based on our enabling legislation, the RTA currently has the authority to seek local funding through two taxes (property tax and vehicle registration tax) to implement a regional transit program through the strategies identified in this briefing book. Additional sources of transit funding that are used in other regions across the country for transit or other activities should be explored in addition to those that are currently allowable under Michigan law.

Indicator: Implementation of potential funding alternatives.

Where We Are: Currently, the RTA is not collecting any local revenue for transit purposes and each transit provider in the region is generating its own operating funds primarily through property taxes or in the case of the municipal providers, municipal general fund revenues. As an example, the 2016 RMTP was a \$4.6 billion dollar plan that included a variety of funding sources over a 20 year period.



ABOVE Example Funding Strategy. These funding limits are for information purposes only, not proposed or future ballot initiatives.

POTENTIAL FUNDING ALTERNATIVES

FEE TYPE	FUNDING TYPE	RTA FUNDING AUTHORITY	IMPLEMENTED
Property Tax	Traditional Transit Source	Yes	No
Vehicle Registration Tax	Traditional Transit Source	Yes	No
Sales Tax	Traditional Transit Source	No	No
Gas Tax	Traditional Transit Source	No	No
Income Tax	Related Funding Source	No	No



STRATEGY #11: SUPPORT PROVIDER FUNDING INITIATIVES

Support local ballot measures that are necessary to continue and enhance current transit service and require coordinated advocacy until alternatives are available.

Strategy Type: Initiative

What We Heard: One of the top priorities expressed by the public is that funding for existing services should be maintained when looking at opportunities for long-term sustainable funding. Given the importance of transit service to keep our economy and essential workforce moving, the RTA and municipal agencies must support the provider funding initiatives that are necessary to maintain current public transit services. Discussion of raising additional revenues through various sources (including the RTA) should be coordinated with efforts to maintain existing funding to avoid voter confusion that could hurt current services.

Indicator: Stable or increasing funding rates for transit agencies in the region.

Where We Are: Our region's primary transit providers rely on either four or five year ballot proposals or municipal general fund allocations to maintain current levels of service. While funding has remained stable, funding is short-term and depends on election results and municipal budgets.



STRATEGY #12: PURSUE AND SECURE STRATEGIC GRANTS

Collaborate with providers and regional partners on grant applications for projects and programs that advance the RTA's vision.

Strategy Type: Initiative

What We Heard: Grants provide additional and unique opportunities to support projects that improve regional transit and innovation. Federal competitive grant programs in which Southeast Michigan competes with other metropolitan areas for funding for specific programs have been a successful way to stretch locally generated revenue to grow and modernize our regional transit system. Since 2016, these grant programs have brought over \$25 million to Southeast Michigan.

Regional coordination of grant applications and a defined strategy for grant application prioritization can improve our

regional win-rate for competitive grants and ensure no duplication of effort. In current transit agency operating budgets there is little room to perform target studies, fund pilot projects or make large capital investments. Given this challenge, competitive grant programs are imperative to continue the great progress that transit providers in the region are making to modernize equipment and deliver innovative service concepts that attract new transit riders and retain current customers.

Indicator: Growth in non-recurring grant funding.

Where We Are: Between 2016 and 2020, transit providers have been awarded \$25.3 million, an average of \$5.1 million annually.



STRATEGY #13: INCREASE COORDINATION AMONG PROVIDERS

Enhance quality and frequency of communications and marketing, standardize protocols for a better customer experience, and increase awareness of existing services.

Strategy Type: Initiative

What We Heard: Transit riders have expressed that a seamless system, with integrated fares, easier transfers, frequent and standardized communication, and improved coordination is a priority for regional transit. A system that feels more unified, which can be advanced through marketing and communication, will be a benefit to transit riders and the system overall. The success of the Dart unified payment system, which was introduced on DDOT, SMART, and QLINE in 2019, demonstrated the positive impacts coordination amongst providers can have on the customer experience. Another example of successful regional marketing and communication is Myride2.com, a one-call, one-click mobility management service that is dedicated to helping seniors and people with disabilities remain mobile. In 2019, MyRide2 directly booked over 4,000 trips for people in Southeast Michigan.

Indicator: Growing areas of existing and potential coordination.

Where We Are: We have current identified three areas of existing and potential coordination, which include:

- Myride2.com, One-call, One-click mobility management website – Implemented 2018
- Dart card unified payment system – Implemented in 2019
- Michigan Ride Paratransit App – Planning for implementation in 2021

TRANSIT FUNDING IN SOUTHEAST MICHIGAN

Southeast Michigan's transit providers are funded through federal, state, and local resources.

Federal Funding: FTA and the Federal Highways Administration (FHWA) provide transit funding through formula and discretionary programs. Formula funding is appropriated annually, and then allocated to our providers. Discretionary, or competitive, funding opportunities are released annually and providers submit applications to fund specific projects.

In 2019, our region's transit agencies spent over \$73 million in federal funding, 18% of expenses. However, federal funding accounted for 81% of capital expenditures.

State Funding: Through MDOT, the State provides Local Bus Operating (LBO) Funding to transit providers to support operating costs. Though our region's providers are eligible for receive LBO funding for up to 50% of operating costs, the state typically reimburses around 30% due to budget constraints. MDOT also provides capital assistance, providing the local match required for federal programs.

Additionally, MDOT awards funding for research, training/education, planning and coordination, and operational and technical projects that preserve or enhance public transit through its Service Development and New Technology Program.

In 2019, MDOT contributed almost \$115 million in operating and capital assistance to Southeast Michigan's providers, 29% of expenses.

Local Funding: Local funding is provided through millages, in the case of AAATA and SMART, and through the City of Detroit's general fund for DDOT. AAATA's total mill rate is 2.7 mills with contributions from Ann Arbor, Ypsilanti, and Ypsilanti Township. SMART's millage is 1.0 and is raised throughout Macomb County and in opt-in communities in Oakland and Wayne Counties, where communities are able to opt-out of participating in the millage.

Local funding supported 40% of 2019 transit expenditures: over \$159 million in operating costs.

Fare Revenue: The fares riders pay are put back into our transit system and support our agencies operating budgets. In 2019, \$51.7 million was generated through fare revenue accounting for 13% of our agencies' expenses.



STRATEGY #14: DEVELOP THE REGION'S TRANSIT WORKFORCE

Make transit a desirable and sustainable career through supporting agencies in their efforts to attract talent, offer educational opportunities, provide competitive compensation, and adapt to a changing mobility landscape.

Strategy Type: Initiative

What We Heard: Attracting, developing, and retaining a diverse workforce is critical to the continued success of public transit in Southeast Michigan. The region's transit workforce is the backbone of the public transit system and supporting and promoting opportunity will allow the regional transit system to continue to operate, grow and adapt.

In 2019, the region had over 2,000 public transit employees. In recent years, the region's service providers have had challenges in recruiting and retaining qualified employees. Providers work with local community colleges and organizations, such as Wayne County Community College, to attract and train new talent. Providers also regularly attend and host job fairs. Potential projects that can be deployed to reduce the regional turnover rate of transit employees include:

- Support the creation of regional taskforce to investigate and develop plans that improve recruitment and retention of qualified operators and mechanics.
- Work collaboratively with the WIN and community colleges to develop transit and mobility training programs and modules that are flexible and responsive to today's learning environment, and technology changes in the transit industry.
- Develop effective recruitment and retention strategies, including employee referral programs, social networking sites, overall job enrichment, and improving connections with Veterans Affairs and affiliates.

Indicator: Change in the employee turnover rate for public transit agencies in the region.

Where We Are: In recent years, both nationally and regionally, transit providers have struggled to attract and retain their workforces. Providers have been working with community colleges and workforce organizations to develop new transit talent. A regional study of turnover rates would help us to hone in on potential concerns and find long-term solutions.



STRATEGY #15: IMPROVE ACCESS TO TRANSIT

Increase the safety and accessibility of transit stops with capital improvements that benefit those connecting to transit as a pedestrian, bicyclist or in a car.

Strategy Type: Initiative

What We Heard: People in Southeast Michigan are looking for better connectivity for all users to access transit, including more options for commuters, like park-and-ride lots, and more comfortable facilities at transit stops, like lighting and shelter, which contribute to safety.

Transit accessibility is important to maintain and attract ridership, and is a key metric for understanding how the current and future system serves the people of the region. People combine different modes to reach their destination, such as walking, cycling, and using e-scooters and microtransit options.

This strategy aims to increase the safety and accessibility of transit stops to make it easier for users to connect to and use regional transit to reach their destination. Progress toward this indicator can be measured by the gaps in the sidewalk network along transit routes in the region.

Indicator: Gaps in sidewalk infrastructure along fixed-route transit corridors in the region.

Where We Are: 29% of the roadways servicing fixed route transit are missing sidewalks.



ABOVE A SMART Bus Shelter at 12 Mile Road and Woodward Avenue.



STRATEGY #16: PROMOTE MOBILITY ORIENTED DEVELOPMENT (MOD)

Deliver transit capital projects that promote housing and job centers that support transportation options beyond a personal vehicle.

Strategy Type: Initiative

What We Heard: Thinking holistically about transit and development is important for creating attractive transit options and supporting growth in the region. Southeast Michigan's residents are supportive of the benefits of MOD and the potential for economic returns when transit is included in development.

The RTA prepared a MOD Study and Action Plan for a selection of stations along key regional corridors in Oakland, Wayne, and Washtenaw Counties to help promote and encourage coordination among strategic mobility and transit investments and collaborative economic development. The Action Plan is based on studies conducted by the RTA, that include MOD/transit oriented development (TOD) best practices, an Existing Conditions and Market Analysis, a Mobility Gap Analysis, and an MOD Readiness Analysis. The RTA used these assessments to identify priority actions that will allow the station areas to become more accessible, connected, and vibrant while staying true to the community's identity.

Indicator: The number of frequent transit route corridors that have been assessed for MOD.

Where We Are: Three routes in the region have been assessed for MOD opportunities.



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4 | ENGAGEMENT FRAMEWORK

To improve transit and mobility in Macomb, Oakland, Washtenaw and Wayne Counties, the RTA, transit providers, transit customers, local governments, business community, healthcare community, education community and advocates must work in partnership to determine a path to achieve our regional vision. This Briefing Book is the first step in bringing the diffuse and diverse conversations together. The next step is to develop and execute an engagement program that will guide the RTA's development of project and program recommendations into a final 20-year RMTP that reflects the values of the region's residents.

To do this, we need to have community conversations about various tradeoffs that are inherent to the development of a modern transit network in a fiscally constrained environment. The goal is to gather community input on the preferred design of the local transit network, and discuss trade-offs to be considered as revenue limitations may



ABOVE 2016 Engagement Event, downtown Detroit.

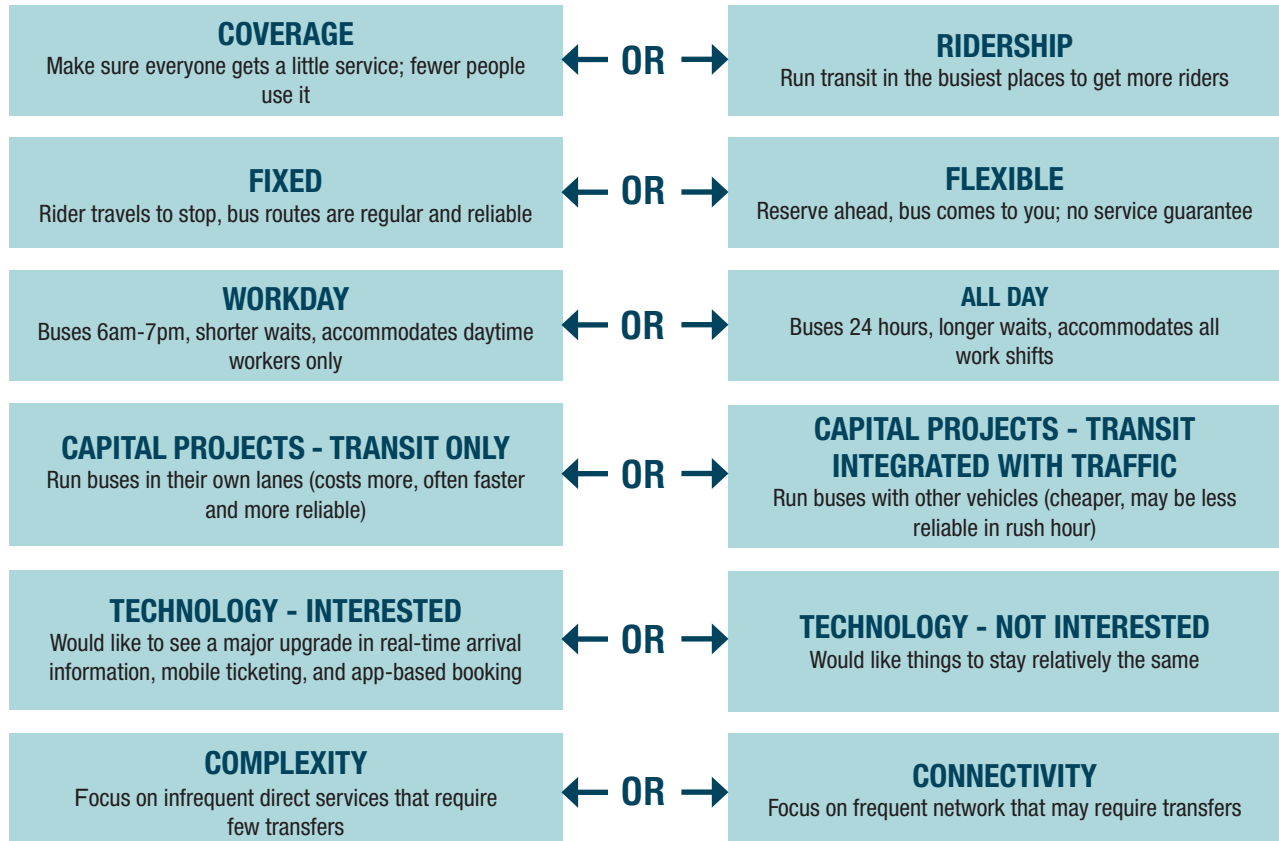
OPPOSITE PAGE A FAST bus in downtown Detroit

result in having to choose getting more of one service at the expense of others.

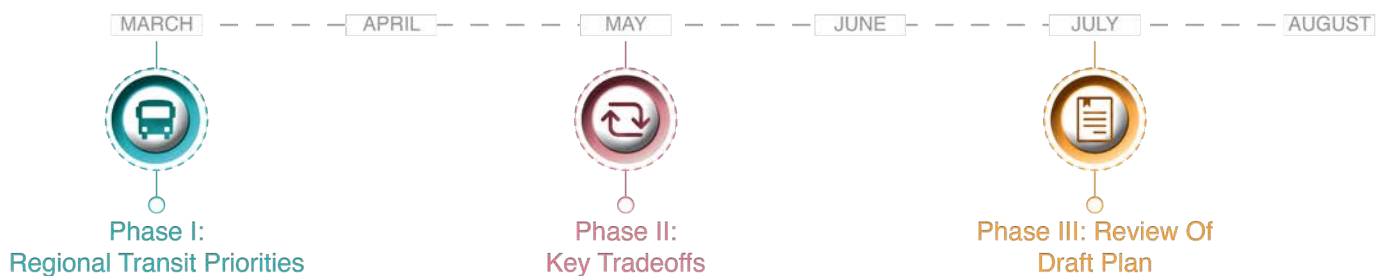
Below are key trade-offs, and communities' responses to them will help shape the direction of the recommendations in the RMTP.

The RTA engagement process is still under development. The general phases laid out below are aimed to provide a broad guide to what the public should expect throughout the engagement period. The ability to do in-person engagement will be limited due to COVID-19 restrictions and health concerns. The RTA will remain flexible throughout the process and develop tools that can be used in multiple venues.

KEY TRADE-OFFS



COMMUNITY ENGAGEMENT TIMELINE





1 to DOWNTOWN

1007

1819

15

Acronyms, Abbreviations, and Terminology

TERM	DEFINITION
AAATA	Ann Arbor Area Transportation Authority (The Ride) , provides transit service to the greater Ann Arbor-Ypsilanti area. AAATA operates fixed-route buses, paratransit, commuter, demand-responsive, event, and airport services.
ADA	Americans with Disabilities Act
Alternatives Analysis	A transit study considering various modes, destinations, travel patterns, and station locations to best serve an area or corridor. An alternatives analysis culminates in a Locally Preferred Alternative (LPA).
APTA	American Public Transportation Association
Bike Share	A service allowing participants to rent and return bikes at stations throughout a dedicated service area.
BRT	Bus Rapid Transit , a high capacity transit service that is faster and more frequent than typical local bus. BRT is often characterized by level boarding, premium stations, prepayment, bus only lanes, transit signal priority, limited stops, on-board amenities, next bus information, and unique branding. Stations are typically one mile apart. BRT provides the same benefits as light rail (LRT) at a lower cost per mile.
CIG Program	Capital Investment Grants Program , FTA discretionary grant program that funds transit capital investments including heavy rail, commuter rail, light rail, streetcars, and bus rapid transit.
CPP	Community Partnership Program , a SMART partnership with 76 municipalities and organizations to support local transit service by leveraging federal funding and returning those funds back to local communities to build their own transit programs.
Connected and Automated Vehicles Corridor	A roadway built with infrastructure that supports the implementation of connected and autonomous vehicles as well as traditional transit vehicles, shared mobility and freight and personal vehicles.
Coverage	The transit service area that has a transit stop within a quarter-mile radius.
Dart Card	A regional transit pass that provides access to any DDOT and SMART fixed-route bus and QLINE streetcar. Passes are active from 4 hours to 31 days and can be purchased onboard, at transit centers, online, or through the Dart app.
DDOT	Detroit Department of Transportation , provides transit service throughout the City of Detroit and small portions of neighboring cities. DDOT operates fixed-route buses and paratransit services.
DTC	Detroit Transportation Corporation (People Mover) , operates the Detroit People Mover, which is a fully automated light rail system that operates on an elevated single track loop in Downtown Detroit.

TERM	DEFINITION
First/Last Mile	The beginning or end of a person's trip including the leg of their journey to and from a transit stop.
Fixed Route	Transit service that operates on regular routes at scheduled times.
Flex Routes	Flex routes combine the features of fixed-route transit services and dial-a-ride services by operating in a regular pattern but deviating on request to serve nearby residences or destinations.
Frequency	How often a bus or train will come (and therefore how long you will wait for transit). A frequency of 30 minutes means a maximum wait of 30 minutes for a bus or train. A high frequency means you will wait less, while a low frequency means you will wait longer. Frequency is typically lower on evenings and weekends.
High Frequency Route	A transit route with service operating every 15 minutes or sooner between 6 am and 6 pm.
FTA	Federal Transit Administration , a federal agency that regulates public transit systems and assists with funding and technical needs.
Heavy Rail	Type of transit used in large urban regions, where it provides high-capacity service and a strong development catalyst. The use of track structures that separate trains from traffic surface streets contributes to a very high capital cost per mile compared to regional rail, LRT, and BRT. Stations are typically 0.75 to 1.5 miles apart.
High Transit Propensity	A measure of how inclined a population or area is to utilize transit services.
LBO Funding	Local Bus Operating Funding , a category of state transit funding.
Level Boarding	No step up or down between the platform and transit vehicle. Allows for faster and easier boarding. Level boarding is especially beneficial to persons with disabilities, the elderly, and people using strollers.
LRT	Light Rail Transit , connects downtowns with suburban job centers. The use of tracks at the same level as cross streets makes LRT less expensive than heavy rail. Stations are typically 0.75 to 1.5 miles apart.
LPA	Locally Preferred Alternative , describes the selected mode, route and station locations to provide the best transit option for the location under study in an alternatives analysis
M-1 RAIL	Operator of the QLINE, a 6.6-mile circulating streetcar loop serving locations along Woodward Avenue from Downtown Detroit to New Center. (See Streetcar and QLINE)
MDOT	Michigan Department of Transportation

TERM	DEFINITION
MSA	Metropolitan Statistical Area , a US Census defined geographic consisting of a core area with a population center and the adjacent communities that have a high degree of social and economic integration with the core.
Millage	A type of property tax. The millage rate is expressed as the amount owed per \$1,000 of taxable property value.
MOD	Mobility Oriented Development , a type of community development that expands upon the concept of TOD by creating “mobility hubs” that can facilitate needed connections in a broader geography via a variety of different transportation modes. (See TOD)
Mode	Specific type of transit—such as bus, regional rail, heavy rail, LRT, and BRT—or transportation, such as bike and automobile.
NOTA	North Oakland Transportation Authority , provides essential transportation services in Orion, Oxford, and Addison Townships, and the villages of Leonard, Oxford, and Lake Orion.
OMI	City of Detroit Office of Mobility Innovation
Opt-in/ Opt-out	Communities that do or do not choose to fund and participate in transit.
Paratransit	Specialized door-to-door service for people with qualifying disabilities who are unable to use fixed-route transit.
Passenger Trips	The number of times passengers board public transportation vehicles. Passengers are counted each time they board, no matter how many vehicles they use complete their trip.
Peak Hours	The peak traffic period caused by higher volumes of traffic on the road.
Provider	Transit service provider such as AAATA, DTC, DDOT, M-1 RAIL, or SMART.
QLINE	Opened in 2017, a 6.6-mile circulating streetcar loop serving locations along Woodward Avenue from Downtown Detroit to New Center. (See M-1 RAIL)
Ride-Hailing Services	Services, such as Uber or Lyft, allowing riders to request a ride, often through a smartphone app.
Ridership	The number of rides taken on public transit during a given time period (year, day, rush hour).
RMTP	Regional Master Transit Plan
RLEMS	Richmond-Lennox EMS , a municipally owned EMS agency that has been providing service to the City of Richmond, City of Memphis, Village of New Haven, Casco Township, Columbus Township, Riley Township and Wales Township. Richmond Township and Lenox Township are the joint owners.
RTA	Regional Transit Authority of Southeast Michigan , created to plan for and coordinate public transportation in Oakland, Macomb, Washtenaw, and Wayne counties, and to deliver rapid regional transit in a region where none exists.

TERM	DEFINITION
SEMOG	Southeast Michigan Council of Governments , a regional planning partnership accountable to member local governments in Southeast Michigan. SEMCOG's membership includes counties, cities, villages, townships, intermediate school districts, public universities, and community colleges in Livingston, Macomb, Monroe, Oakland, St. Clair, Washtenaw, and Wayne Counties.
SMART	Suburban Mobility Authority for Regional Transportation , provides transit services in all of Macomb County, and portions of Oakland, and Wayne Counties. SMART operates fixed-route buses, paratransit, commuter, and demand-responsive services.
Southeast Michigan	The RTA's four county service area, which includes the entirety of Macomb, Oakland, Washtenaw, and Wayne Counties.
Specialized Services	Transportation services designed primarily elderly people and people with disabilities.
STAR	Senior Transportation with Advanced Reservation , provides transportation to medical appointments, shopping and recreational activities within Romeo, Washington and Bruce. Transportation to medical appointments available up to 5 miles outside area limits.
Streetcar	Street-running rail transit in congested urban areas that serves stations spaced every few blocks (typically 1/4 to 1/2 mile). Streetcars can be a strong development catalyst for urban neighborhoods. (See M-1 RAIL)
TAMP	Transit Asset Management Plan , a federally required plan for capital improvements that prioritizes funding based on condition and performance to achieve and maintain a state of good repair on public transportation assets.
TheRide	See AAATA
TOD	Transit Oriented Development , a type of community development that combines residential, retail, and office to maximize nearness to a transit station. TOD is used to increase ridership.
TNC	Transportation Network Company , services, such as Uber or Lyft, allowing riders to request a ride, often through a smartphone app.
TVM	Ticket Vending Machine for purchasing transit fares.
ULB	Useful Life Benchmark , the expected lifecycle of a capital asset for a particular transit provider's operating environment, or the acceptable period of use in service for a particular transit provider's operating environment.
WAVE	Western Washtenaw Value Express , a non-profit service organization that exists to provide affordable transportation to older adults, persons with disabilities, and other transit-dependent individuals in western Washtenaw County.

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