



**REGIONAL
TRANSIT AUTHORITY**
OF SOUTHEAST MICHIGAN

Update on 2045 Regional Master Transit Plan Development

July 18, 2019

RTA Board of Directors

2045 Vision

Providing the people of Southeast Michigan with seamless mobility services offered by a collaborative network of providers.

To better meet the needs of the people of the Southeast Michigan region, requires the implementation of a regional mobility vision that seeks to achieve the following:

Moving R People

- Provides people with reliable, efficient, frequent, and affordable transit services across a core transit network.
- Supports access to jobs, education, health care, special events and other daily needs for people who are more likely to use transit based on ability, age or income.
- Is flexible enough to keep pace with people’s ever-changing needs as it relates to service frequencies and hours.

Investing in R Future

- Increases the attractiveness of investment in Southeast Michigan by providing sufficient mobility services that employers, businesses, the development community, and the education system can depend upon.
- Supports a talent pipeline in the transportation services sector and other core economic sectors that are needed to deliver mobility services today and into the future.
- Establishes a framework that assures the region is a national leader in the implementation of new mobility services including the deployment of connected and autonomous vehicles.
- Ensures sustainability of existing and expanded mobility services through the year 2045, allowing transit providers and other stakeholders to unlock additional federal and state funding opportunities.

Enhancing R Quality of Life

- Connects to the abundance of entertainment, parks, open spaces and other recreational activities that exist across the region, giving people more access and mobility choices to live, work and play across the region.
- Makes transit and other mobility services more user-friendly for all people choosing to use.
- Improves bicycle and pedestrian accessibility, giving people more choices to walk, bike and connect across the region.
- Improves the economic stability of the region and adds potential for more growth.

Connecting R Communities

- Eliminates existing mobility deserts and connects people in communities across the region with new transit and mobility services that today are often very limited.
- Leverages the region’s existing transportation assets, including the world-class Detroit Metropolitan Wayne County Airport to allow more people to connect to and through our region.

Overview

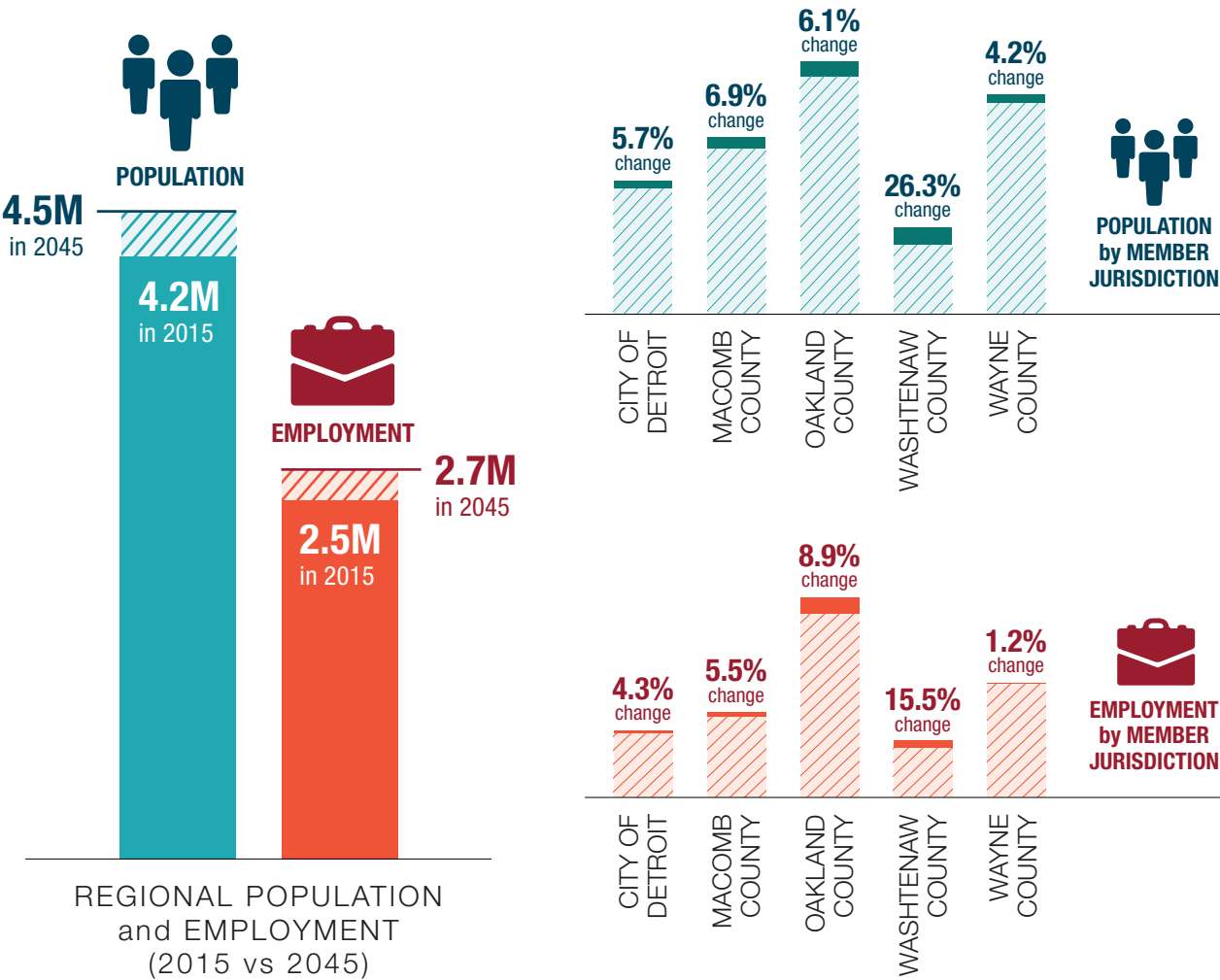
Five transit systems currently provide service to people across southeast Michigan: the Ann Arbor Area Transportation Authority (AAATA a.k.a. TheRide), the Detroit Department of Transportation (DDOT), the Detroit Transportation Corporation (DTC aka The People Mover), M1 Rail (operator of the QLINE streetcar), and the Suburban Mobility Authority for Regional Transportation (SMART). In total these transit systems provide nearly 33 million trips in the region per year (Source: 2017 National Transit Database).

The Regional Transit Authority of Southeast Michigan (RTA) was established by the Michigan Legislature in 2012 to coordinate transit investments and service within four counties – Wayne, Macomb, Oakland, and Washtenaw. Spanning over 2,600 square miles, the RTA area includes over 4 million residents and nearly 2.5 million jobs.

The Region today

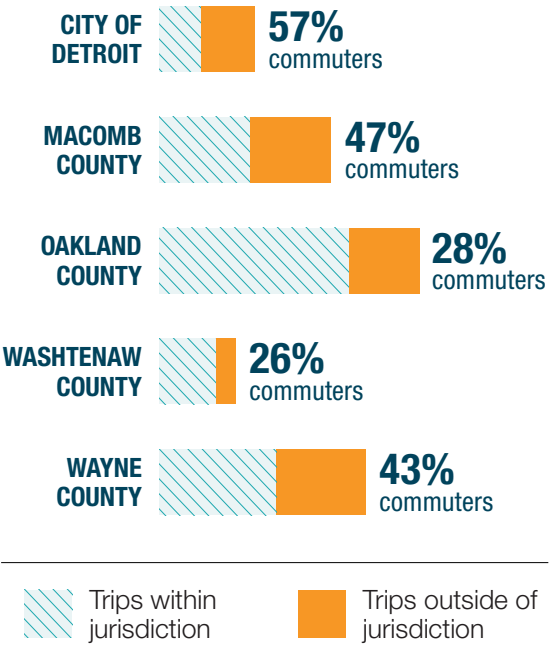
Southeast Michigan is home to roughly 4.2 million residents, which is expected to grow to 4.5 million by 2045. There were approximately 2.5 million jobs in 2015, and it is expected to grow to 2.7 million by 2045. Residents of Southeast Michigan are looking for continued transit growth to match and support regional population and employment growth. People currently use transit to get to work, school, medical appointments, shopping, and for recreational activities. There are many areas in the region that would benefit from additional service, catered to the people that live there and the kind of service that would be a good fit for their needs.

Change in population and employment (2015-2045)



HOW PEOPLE ARE
COMMUTING

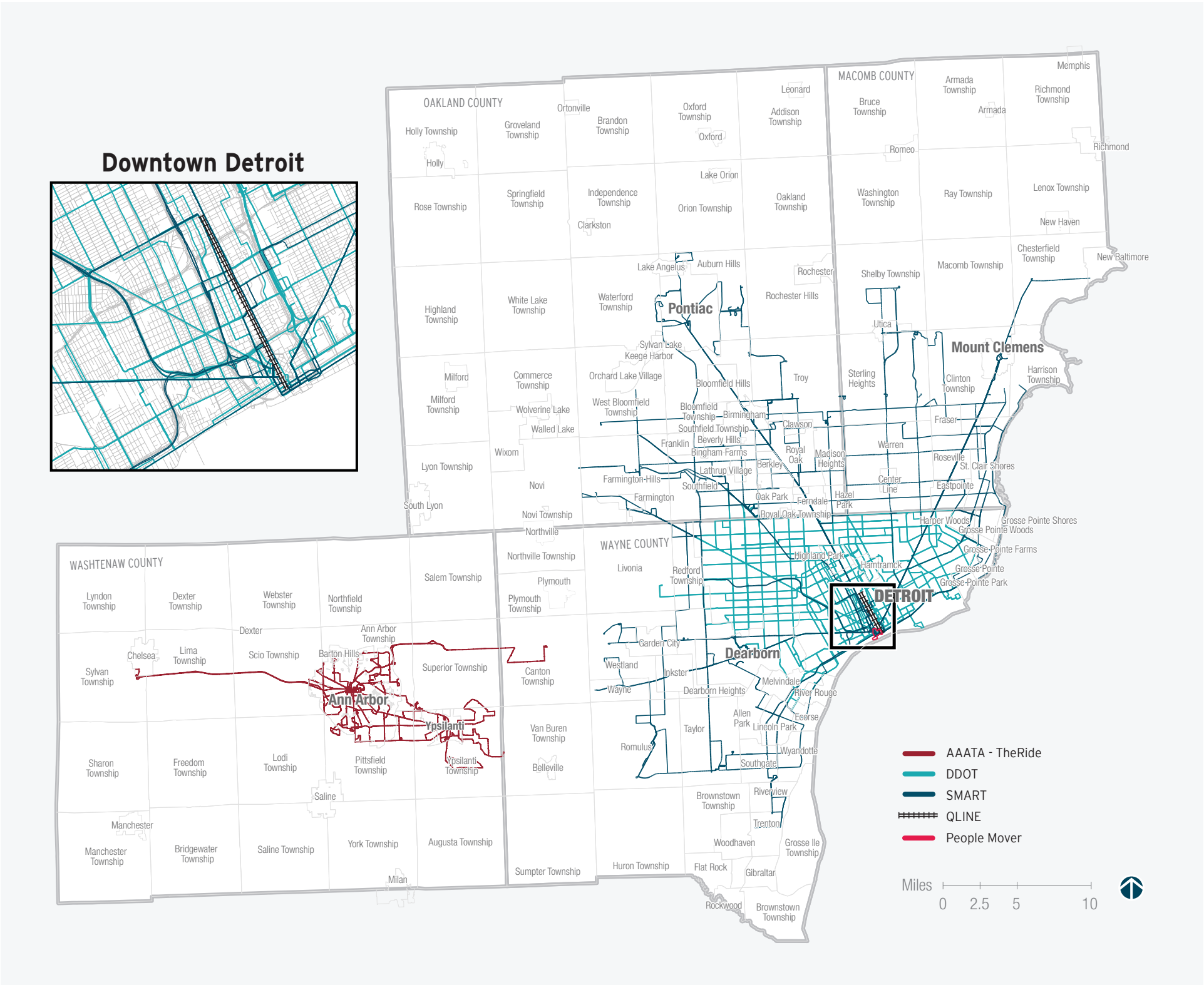
In 2015, there were 2.5 million commute trips that had origins and destinations within the region. 39% of those trips crossed a county or City of Detroit boundary. Detroit had the largest share of commuters (57%), that traveled across county boundaries for work.



	2015	2045 estimated
Senior population (over 65)	15% of total population	22% of total population
Young adult population (18–25)	10% of total population	8% of total population
Low-car households	15% of households	15% of households
Workforce (leading sectors)	(1) Professional services, (2) retail trade, and (3) manufacturing	(1) Professional services, (2) medical facilities, and (3) leisure and hospitality

Transit and Mobility Today

Transit systems people use today



	AAATA	DDOT	SMART	DTC	M-1 RAIL
Service Area (Square Miles)	81	114	1,074	3	3
Annual Operating Budget	\$45,857,698	\$135,072,500	\$131,999,141	\$18,459,629	\$8,996,404
Number of Routes	37	43	49	1	1
Fleet Size (Fixed Route Buses or railcars)	133	288	249	11	6
Annual Revenue Hours	442,968	1,043,153	531,559	47,889	27,457
Annual Revenue Miles	5,616,860	13,633,306	8,845,468	555,462	183,644
Annual Ridership	6,865,774	23,449,636	8,570,187	2,102,000	1,192,110
Average Weekday Ridership	25,000	85,000	29,000	5,000	3,500
Full Adult Fare	\$1.50	\$2.00	\$2.00	\$0.75	\$1.50
Farebox Recovery	19%	17%	14%	8%	8%

Transit and Mobility Today

Transit systems people use today (continued)

AAATA



ROLE: AAATA exists to provide access to destinations throughout the Ann Arbor-Ypsilanti Area for increasing numbers of residents, workers and visitors via transportation options that contribute to the Area’s social, environmental and economic vitality at a cost that demonstrates value and efficient stewardship of resources. *(Source: 2019 Strategic Business Plan)*

The Ann Arbor Area Transportation Authority (AAATA, aka TheRide) provides public transit service for the City of Ann Arbor, the City of Ypsilanti, and Ypsilanti Township, and contracts service with the townships of Superior and Pittsfield. Additionally, AAATA operates express commuter transit service to the communities of Canton and Chelsea and contracts for service to Detroit Metro Airport (AirRide) through a partnership with the Michigan Flyer. AAATA also provides a suite of additional transportation services for specialized populations and trip types. In 2019, AAATA plans to modernize its internal processes, enhance the customer experience, develop ideas for the future, and collaborate with the community.

To learn more about AAATA visit: <https://www.theride.org/AboutUs>

DDOT



ROLE: DDOT is Detroit’s transit provider! As the largest public transit agency in Michigan, DDOT primarily serves the city of Detroit, but offers service connecting to neighboring cities including Dearborn, Hamtramck, Highland Park, Harper Woods, Livonia, Redford Township, River Rouge and Southfield. *(Source: DDOT Website)*

The Detroit Department of Transportation (DDOT) has 48 fixed bus routes, including 11 24-hour routes, and 6 express routes, connecting neighborhoods across the city to major job centers in Downtown and Midtown. In 2018 alone, DDOT updated its brand, replaced 30 buses, adjusted its fare structure, deployed its ConnectTen routes (frequent, 24-hr service on the top ten DDOT routes) and several pilot programs (i.e. Free WIFI, Night Shift, etc.). DDOT also provides a suite of additional transportation services for specialized populations and trip types. In 2019, DDOT plans to engage neighborhoods as part of its *Your Routes, Your Ideas* initiative, continue upgrades to its technology, replace an additional 30 buses, deploy new bus stop signage and shelters, implement fare changes, rehabilitate the Coolidge Terminal, and relocate its administrative offices.

To learn more about DDOT visit:
<https://detroitmi.gov/departments/detroit-department-transportation>

SMART



ROLE: SMART buses keep the suburbs moving. SMART, created in 1967, operates transit services in Wayne, Oakland, and Macomb counties. SMART provides the southeast Michigan region with high-quality, safe and cost-effective public transit to meet the needs of all citizens, including seniors, people with disabilities, choice riders and those that are dependent upon public transit. *(Source: SMART website)*

SMART currently serves various communities throughout Wayne, Oakland, and Macomb counties. SMART runs 48 fixed routes in the metro Detroit suburbs and into the City of Detroit that connect popular community destinations such as the Detroit Institute of Arts, the Detroit Zoo, Henry Ford Medical Center, the Detroit Metro Airport (DTW), Wayne State University, etc. Small bus Connector and ADA service provided by SMART are designed for seniors and people with disabilities who want to maintain their independence and stay healthy. SMART also has over 40 partnerships with community transit providers in 76 communities. In 2019, SMART created a new regional fare program with DDOT; will finalize a comprehensive operations analysis of its system; launch analyses of Connector, transit signal priority, and park and ride strategies; and modernize its internal processes.

To learn more about SMART visit:
http://smartpathplan.org/wp-content/uploads/2019/02/SMART_ExistingConditionsDraft-v12.pdf

DTC



ROLE: DTC’s mission is to provide safe, reliable, efficient and accessible rail transportation services that will serve to enhance business development and quality of life functions in Detroit by augmenting pedestrian travel and by supporting both private conveyances and other modes of public transportation. *(Source: DTC Website)*

The Detroit Transportation Corporation (DTC), an agency of the City of Detroit, owns and operates the Detroit People Mover (DPM). DPM is a fully-automated light rail system that operates on an elevated, one-way loop connecting major employment centers and destinations within Detroit’s central business district (CBD). DPM serves 13 stations with 12 driverless vehicles. The integration of eight of the thirteen People Mover stations into pre-existing structures links over 9 million square feet that can be traversed unimpeded by outside elements.

To learn more about DTC visit:
<https://www.thepeoplemover.com/>

M-1 RAIL



ROLE: Providing convenient transportation to key destinations in the downtown, midtown and New Center areas of Detroit.

M-1 RAIL is a non-profit organization formed in 2007 that developed, owns, and operates the QLINE streetcar project in partnership with local, state, and federal agencies. QLINE is a 6.6-mile circulating streetcar loop with 12 stops within Detroit on Woodward Avenue, providing service to the Downtown, Midtown, New Center, and North End neighborhoods.

To learn more about M-1 RAIL visit:
<https://qlinedetroit.com/about/>

Transit and Mobility Today

Other mobility options people use today

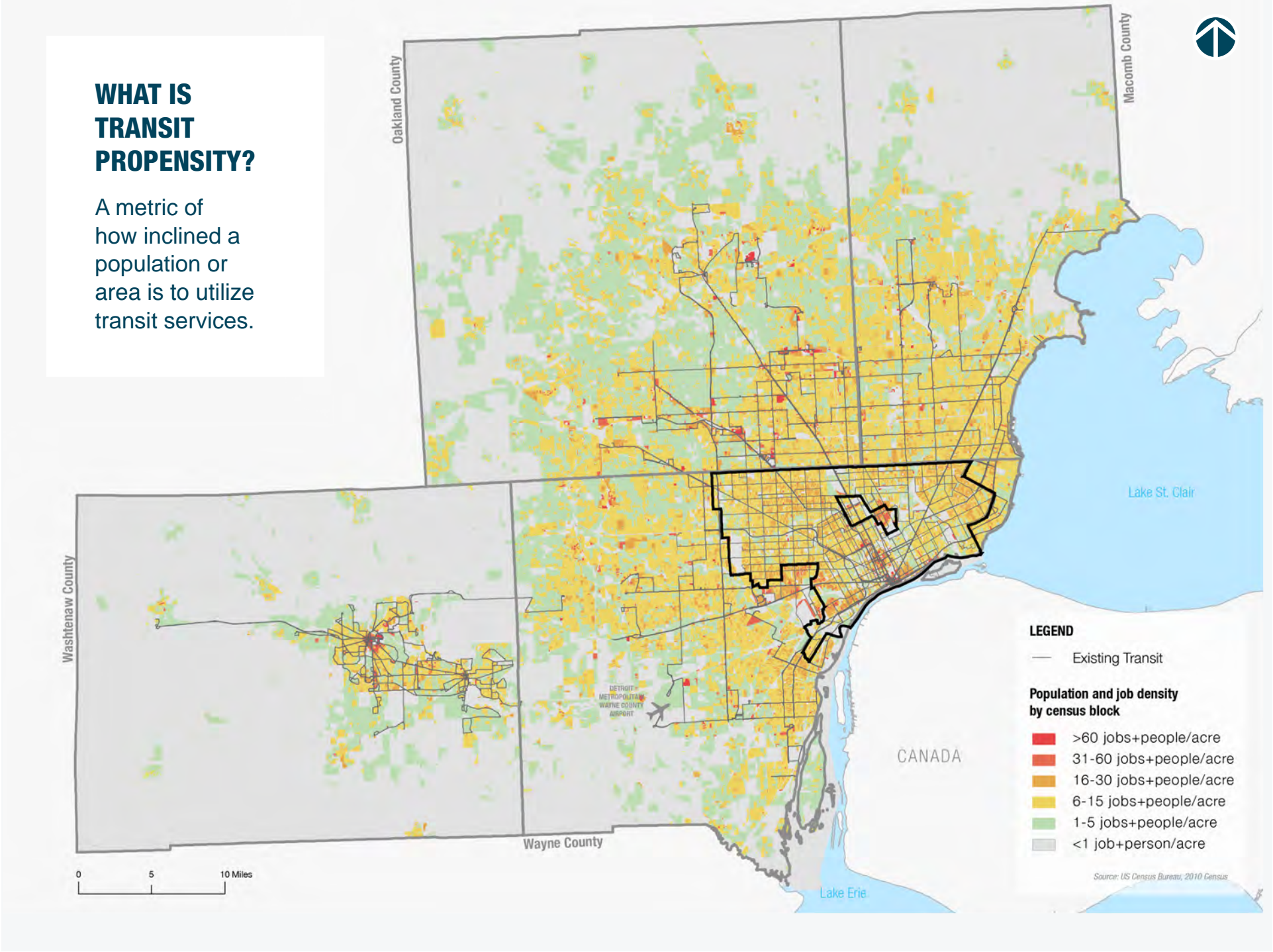
There is a large eco-system of additional mobility services that exist beyond major transit providers. This includes on-demand services operated by dozens of municipalities, many of them in direct partnership with SMART; several non-profit providers; employee shuttle services; transportation network companies (e.g. Uber, Lyft, etc.); bike sharing services (e.g. MOGO, ArborBike); and e-scooters (e.g. Bird, Lime, Spin). There are over 100 different providers that include North Oakland Transportation Authority, Richmond-Lenox EMS, Western-Washtenaw Area Value Express, Jewish Family Services, Quicken Employee Shuttles, and Detroit Public Schools/Trinity Transporation.

The majority of the municipal and non-profit providers are focused on delivering service to seniors and people with disabilities within their communities.

Transit propensity and frequent transit network

The transit propensity map below highlights areas where market demand supports additional transit services. The areas highlighted in dark red and blue have high concentrations of populations that traditionally use transit services such as individuals over the age of 65, under the age of 18, those with disabilities, individuals in poverty, households with no or one vehicle and veteran status.

Demand in SE Michigan is concentrated in urban centers throughout the region, but the map demonstrates the need for additional services in the urban fringe to for local trips or connections to the larger regional transit system.



Challenges people face today when using available transit and mobility options

The Region’s current transit providers are doing a great job providing a breadth of services that meets many of the needs of its current customers. However, they are hampered by several challenges that can only be solved through a coordinated regional plan and investment program:

Challenge #1 – Regional coverage is not maximized

There are large gaps in transit availability throughout the region, which limits people’s access to job opportunities and vital services. Many of these are in areas that have a decent amount of propensity for transit, but have elected to opt-out of the existing regional transit system. There are over 250,000 jobs in the communities that currently opt-out of the SMART services. Many of these areas are key regional job centers, include large medical facilities, and include major education institutions.

Challenge #2 – Increased service frequency, service hours and reduced travel times are needed to meet regional needs

There are few frequent routes (e.g. a bus every 15 minutes), limited evening services, and very low travel speeds on routes throughout the region, which make transit inconvenient for those who rely on it and discourages most with other travel options from using it. 12.5% of the existing service could be considered frequent. There are some frequent services in higher density urban areas and along some major regional corridors, but there are none that cross the region east to west to meet that large travel market and there is a steep drop-off between frequent routes and other routes (e.g. bus every 60 minutes). Similarly, the level of transit availability during the evening drops outside of the City of Detroit. Finally, options for express trips are limited to peak commute periods or a few regional corridors.

Challenge #3 – The region lacks premium mobility choices

There are limited premium transit choices at the regional level, which dampens the attractiveness of the service for potential new riders and diminishes transit’s utility as an economic development tool. Premium services could include things like arterial rapid transit, bus rapid transit, branded airport services, commuter rail, light rail, or streetcar expansions.

Challenge #4 – A comprehensive regional solution for serving Detroit Metropolitan Airport is needed

Most people in the region don’t have access to a transit connection to the airport. This lack of connection forces travelers and residents into expensive options like private taxis, transportation network companies, and paying for long-term parking. In 2015, an estimated 8.9 million passengers boarded flights at the airport.

Challenge #5 – A sustainable funding model is needed to support expanded mobility options

There is limited funding available to build and operate the transit system that the region needs. The funding that does exist is subject to frequent millage renewals, or annual budget approvals, which limits the long-term sustainability of funding. This also constrains the providers’ ability to make necessary long-term capital investments needed to modernize vehicles, equipment, and facilities.

Challenge #6 – Major demographic trends require action today to be ready for the mobility needs of tomorrow

Seniors are 15% of the region’s population today, and they will be 25% of the region’s population by 2045. This will put pressure on the transit providers to continue to support and expand specialized services like ADA paratransit and other senior oriented services. These services are expensive and require a high degree of coordination and management.

Challenge #7 – Lack a clear plan to integrate emerging and mobility options

There is a large global shift underway in how mobility services are delivered, which presents an opportunity for our region to be the leader in integrating new mobility services into our mobility ecosystem. Companies like Uber and Lyft are becoming popular alternatives to driving and taking transit for people throughout the region. Studies have shown that only 78% of young adults own vehicles, compared to 91% of older generations, and the trends also show that young adults are more apt to use new services.

Challenge #8 – A stable and growing workforce is needed to deliver expanded service

There are over 2,000 people currently employed at the transit providers. There is a persistent challenge in hiring willing transit operators and trained mechanics, which constrains the providers’ ability to deliver existing service and will be a hindrance to providing any expanded service.

Challenge #9 - A need to modernize our system making transit and mobility options more accessible to all people of southeast Michigan

Technology is driving change across the region whether we like it or not. The way people procure services, goods and amenities is evolving at such a rapid pace; our transit and mobility services need to stay current with consumer expectations to remain competitive.

Challenge #10 - A one-size fits all mobility solution does not work given the geographic size and development patterns of the region

Providing high quality, reliable and frequent transit service requires more dense land uses in order to be sustainable. The outer fringes of metro Detroit region with low transit propensity are not conducive to being efficiently served by traditional transit and do not have a need for expanded regional transit services.



Local Bus

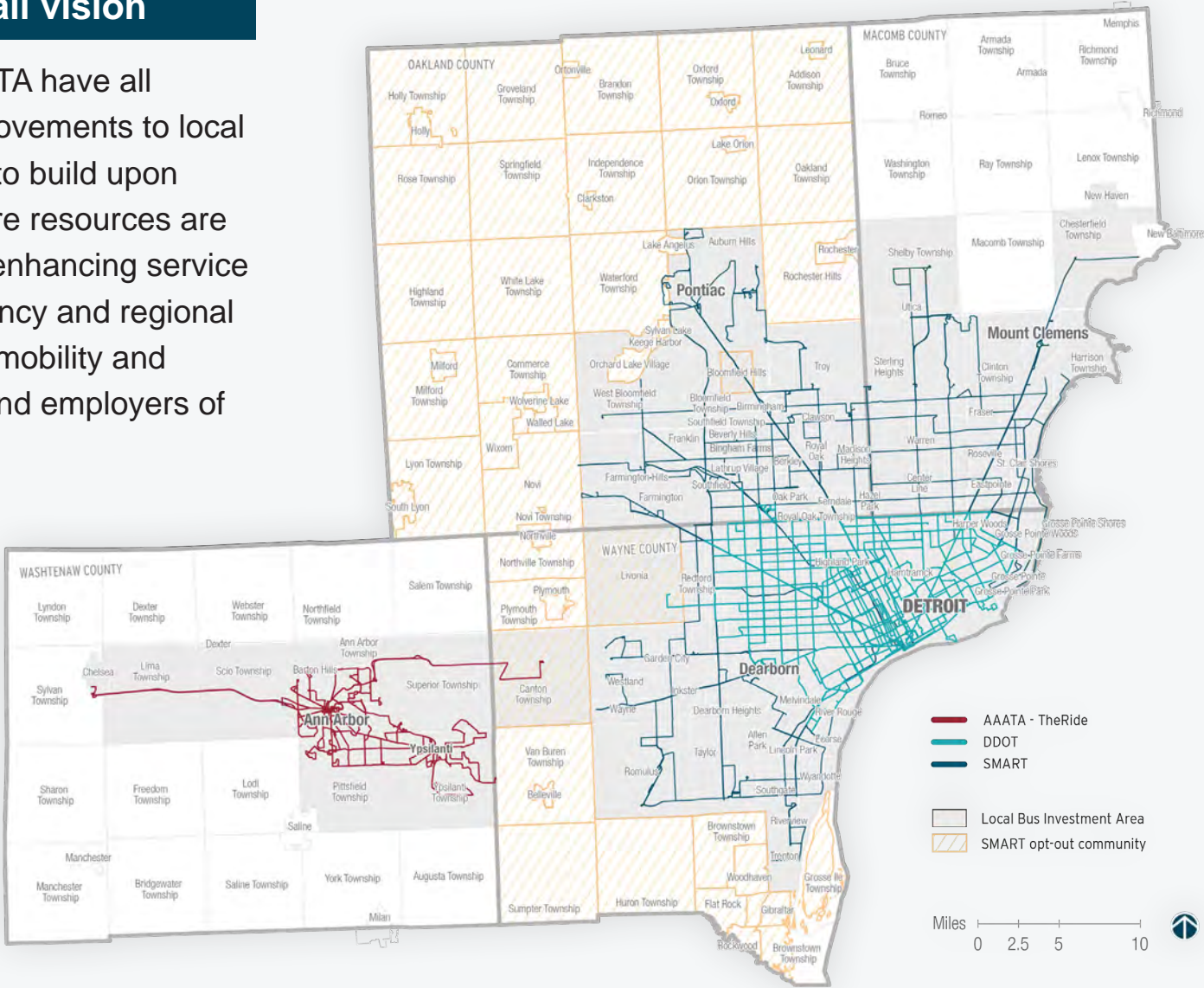
For Public Review
Summer 2019

Moving **R** People

Supporting the overall vision

DDOT, SMART, and AAATA have all implemented recent improvements to local bus service. To continue to build upon these improvements, more resources are needed. Expanding and enhancing service through increased frequency and regional connectivity will improve mobility and better serve the people and employers of Southeast Michigan.

Recent improvements on the system include the roll out of improved service on major regional routes and the implementation of ConnectTen service on high demand corridors in the City of Detroit.



Delivering more value across the region



AAATA — TheRide, which is celebrating its 50th anniversary in 2019, continues to evaluate its fixed-route service. TheRide will implement new approaches to address growth while continuing their commitment to serve customers, who remain at the center of all decisions.



DDOT Connect Ten — In 2018, DDOT rolled out expanded service on its ten most popular routes used by 60% of its riders. ConnectTen routes are the backbone of the DDOT system. Routes feature 24/7 service and improved frequency. DDOT intends to focus service improvements and infrastructure improvements around ConnectTen routes, stops and transfer points. DDOT is also evaluating local bus services that serve neighborhoods with a goal of ensuring that community needs are at the heart of new, improved transit services. The City of Detroit’s General Fund is the source of 40% of DDOT’s budget



SMART — SMART is currently completing a Comprehensive Operational Analysis (COA) study that will identify future priorities.

Today SMART operates 48 routes on the weekday for 1,793 revenue hours, and over 1,900 trips. Saturdays operate with 28 routes for 982 revenue hours, and over 1,100 trips. Sundays operate with 19 routes and 463 revenue hours, and approximately 600 trips. On average, there are about 16 passengers per trip on weekdays, 15 passengers per trip on Saturdays, and 17 passengers per trip on Sundays.

Current funding sources

The local providers spend the majority of their operating costs on local buses. Percentages of total annual budgets each provider spends on local bus is as follows:

AAATA

75% \$30M annually

DDOT

92% \$108M annually

SMART

39% \$40M annually

Source: SMART, Existing Conditions Report, 2019



REGIONAL TRANSIT AUTHORITY
OF SOUTHEAST MICHIGAN

Moving **R** People Investing in **R** Future Enhancing **R** Quality of Life Connecting **R** Communities

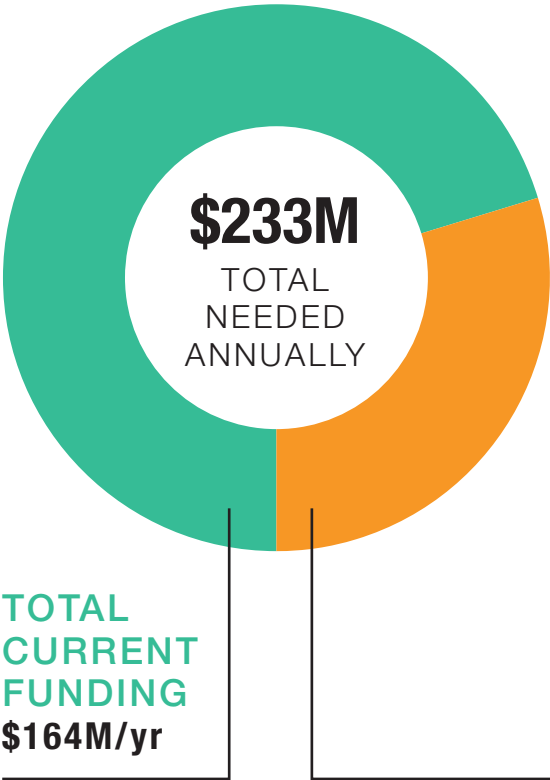




Funding needs for
near-term priorities



An additional **\$69 million** is needed annually to support local bus improvements.



Near-term priorities

- Harnessing the power of Big Data to make route modifications more efficiently
- Implementing recommendations from SMART’s Comprehensive Operations Analysis
- Implementing recommendations from DDOT Your Routes, Your Ideas Program
- Implementing recommendations from AAATA’s revised master plan
- Expansion of local bus service into underserved areas of our region
- Activate more bus routes with service every 15 minutes on major corridors
- Make it easier to pay for trips
- Seamless coordination with first mile/ last mile connections between job centers and major transit routes
- Expanded security presence
- Educate local officials on how to be transit supportive and build transit friendly environments
- Upgrade bus stop basic infrastructure (curbs, pads, signs, lighting etc.)
- Increase awareness and utilization of existing service

Aspirational goals

- Expansion of local bus services into current opt-out communities
- Evaluation of underperforming routes regularly and pilot alternative forms of mobility (i.e. microtransit, public private partnerships service models, etc.)
- Evaluation of Alternative Propulsion Systems (i.e., electric fleets)
- Continue to monitor and test the future of connected and autonomous vehicle technology to serve existing local bus services
- Comprehensive integration of services
- Identify funding specifically for non-regional services

**ADDITIONAL
FUNDING NEEDED FOR
ASPIRATIONAL GOALS
\$36.9M/yr**



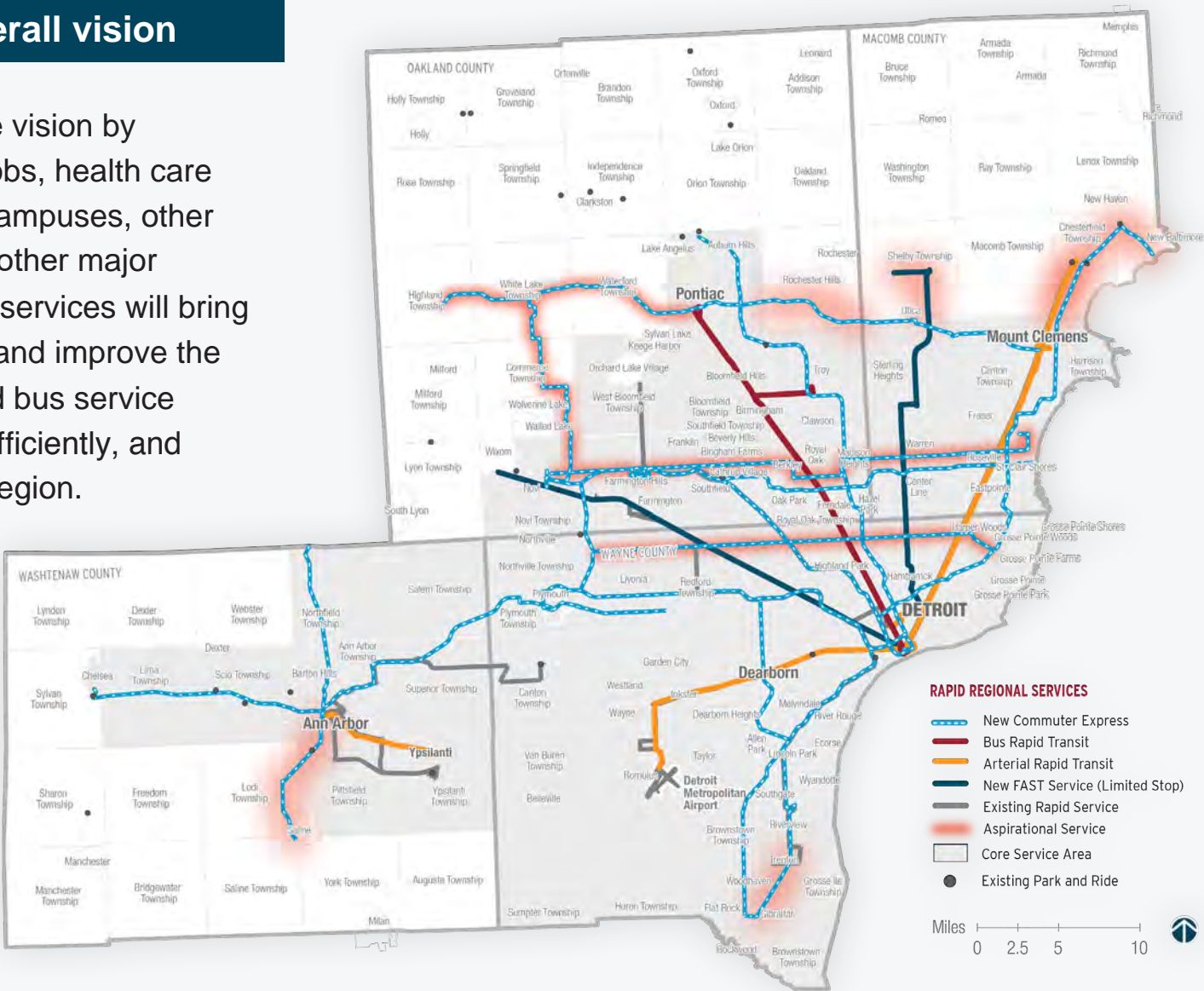
Rapid Bus

For Public Review
Summer 2019

Moving **R** People

Supporting the overall vision

Rapid bus supports the vision by connecting people to jobs, health care facilities, educational campuses, other urban core areas, and other major destinations. Premium services will bring transit to more people and improve the rider experience. Rapid bus service moves people faster, efficiently, and easier throughout the region.



The vision supports adding new rapid bus routes, extending current routes and maintaining a minimum level of service of 30 minute frequencies from 6am to 8pm on weekdays and adding weekend service on routes only operating Monday through Friday.

How do people use RAPID BUS services today?

Rapid bus service, provided by SMART, DDOT and AAATA, provide a layer of service operating faster than local bus service.

AAATA rapid services include:

- Canton
- Chelsea
- Ypsilanti Township Express

DDOT rapid services include:

- Rosedale
- Ryan
- Joy
- Villages Direct
- Southwest Direct

SMART rapid services consist of Park-and-Ride, FAST and Commuter services. In total there are seven routes that provide faster service than those offered by local bus service.

- Rapid buses often include **enhanced amenities**, like wifi on board.
- Riders use rapid services to **connect to major destinations and job centers**.
- Rapid buses provide **more options for riders** to conveniently use transit.

Current operating costs

AAATA

1% \$0.4M annually

DDOT

4% \$4.4M annually

SMART

40% \$41M annually



REGIONAL TRANSIT AUTHORITY
OF SOUTHEAST MICHIGAN

Moving **R** People Investing in **R** Future Enhancing **R** Quality of Life Connecting **R** Communities



<p>FAST SERVICE is a limited-stop, high-frequency service, with enhanced shelters, provided by SMART. Buses operate at up to 15-minute frequency during the peak periods, and operate 7 days a week including late-nights.</p> <p>CAPITAL COST PER MILE: \$0.0</p>	<p>ARTERIAL RAPID TRANSIT (ART) provides certain aspects of BRT, such as traffic signal priority, wide stop spacing (½ to one mile or more), enhanced stops with shelters that provide more protection and next bus information, and specific branding of buses and stops.</p> <p>CAPITAL COST PER MILE: \$2.0M</p>	<p>BUS RAPID TRANSIT (BRT) is a premium service characterized by level boarding, premium stations, prepayment, bus only lanes, transit signal priority, frequent all-day service, and limited stops.</p> <p>CAPITAL COST PER MILE: \$7.0M</p>	<p>COMMUTER EXPRESS is a commuter oriented bus service providing weekday rush-hour service to commuters traveling to and from employment centers. Routes are fitted for longer distances with fewer stops. This type of service often utilizes the freeway system.</p> <p>CAPITAL COST PER MILE: \$0.0</p>
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Near-term priorities

- Expanded FAST Service (Grand River, Van Dyke/Mound)
- Implement ART Service on Gratiot, Michigan, and Washtenaw
- Expand FAST along Woodward Avenue as federal discretionary dollars become available to implement BRT service
- Secure funding to implement additional regional routes with 15-minute peak frequency including: 8 Mile, 9 Mile, 12 Mile, 15 Mile, Fort/Eureka, Greenfield, Jefferson, John R, 23 Mile, and Telegraph.
- Prioritize increasing cross-county connections to job centers operating at high-frequencies.
- Construct 15 new park and ride lots in strategic locations in the core service area

- Leverage New Mobility Solutions and First and Last Mile investments to increase ridership to Express Service Lines.
- Commuter Express Service
 - Ann Arbor-Plymouth-Livonia
 - Canton Express
 - M-59
 - I-75 Chrysler Express
 - I-96 Express
 - M-10 Lodge Express
 - I-75 Fisher Express
 - US-23 Express
 - I-696 Express
 - I-94 Express
 - M-39 Southfield Express
 - I-275 Express
 - Ann Arbor to Chelsea

Aspirational goals

- Full implementation of MOD Study recommendations from 2019 RTA study
- New FAST or Commuter Express Services within the urban core and to fringe communities outside of the urban core

- Evaluation of Connected & Autonomous Vehicles to provide Express Services
- Coordinate Commuter Express service with state and local resources, such as MDOT, to consider park and ride opportunities and bus on shoulder service

ADDITIONAL
FUNDING NEEDED FOR
ASPIRATIONAL GOALS
\$5.8M/yr

Funding needs for near-term priorities

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20 YEAR

FUNDING SOURCE NEEDED

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ANNUAL FUNDING NEEDED TO SUPPORT RAPID BUS SERVICE

	ANNUAL OPERATIONS	TOTAL CAPITAL
FAST	\$17M	—
ART	\$2M	\$133M
BRT	\$2.2M	\$168M
Commuter express	\$11.3M	—



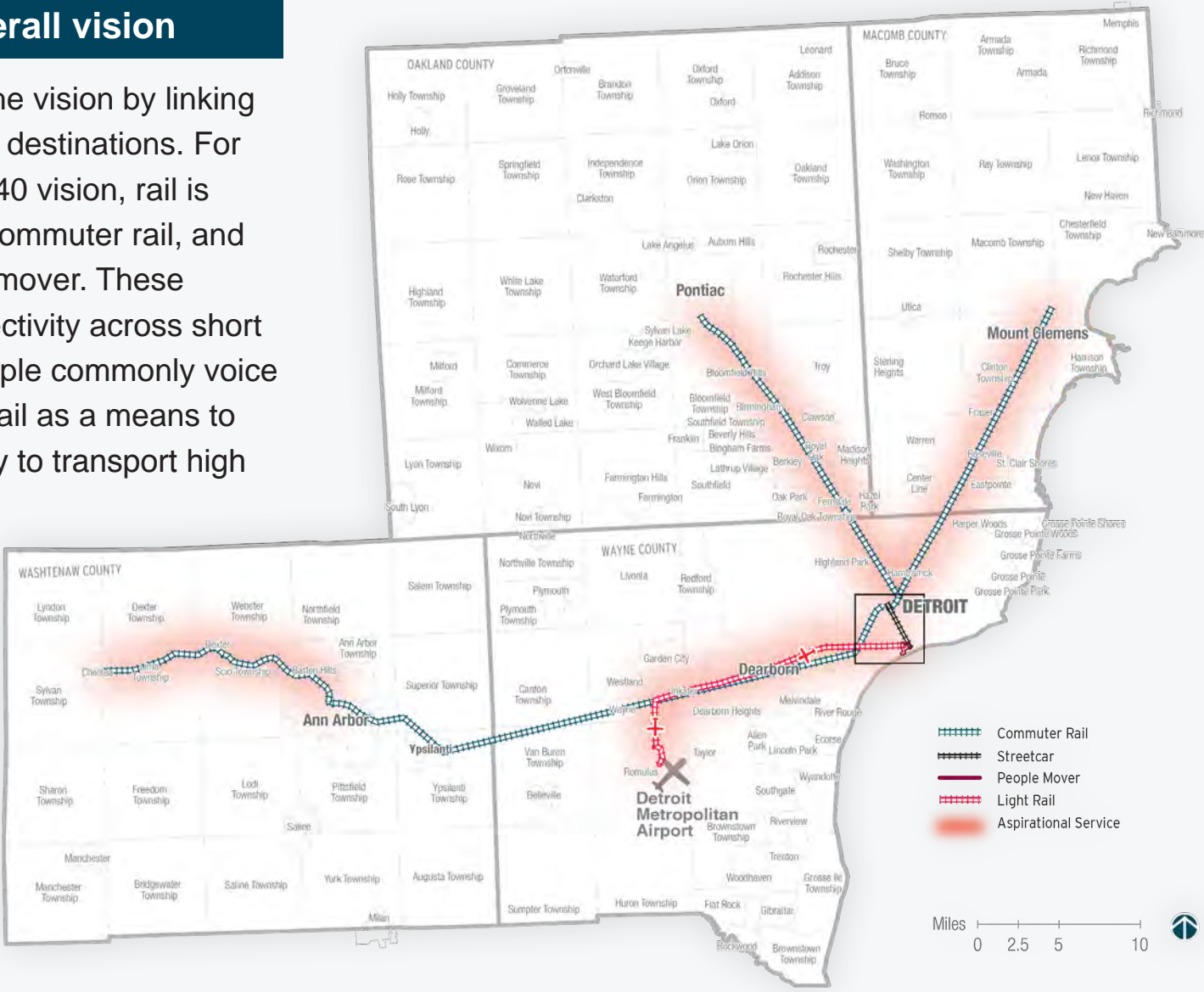
Rail Service

For Public Review
Summer 2019

Connecting **R** Communities

Supporting the overall vision

Rail service supports the vision by linking people, jobs and major destinations. For the purposes of the 2040 vision, rail is inclusive of streetcar, commuter rail, and the automated people mover. These services provide connectivity across short and long distance. People commonly voice their desires for more rail as a means to provide an efficient way to transport high volumes of people to employment and special events around the region.



How do people use RAIL services today?



Source: <https://qlinedetroit.com>



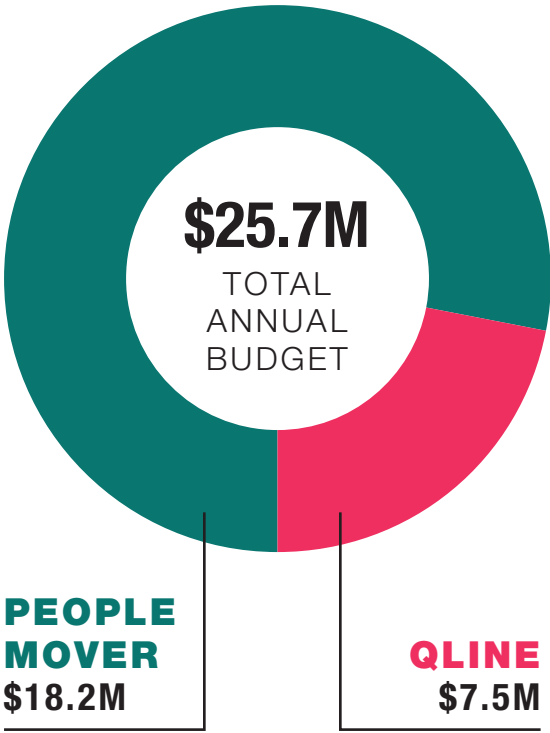
Source: <https://www.flickr.com/photos/kenlund/14223986033>

Currently, there is no commuter rail service within the region. Amtrak operates passenger rail through the state, but the service frequencies are not conducive for shorter trips. In Detroit, there are two operational systems, the People Mover, an automated 2.9-mile light rail system that operates on an elevated single-track loop in Detroit’s central business district, and the QLINE, a 3.3-mile streetcar running along Woodward Avenue.

The fully-automated People Mover serves 13 downtown stations in a one-way loop. It provides important connections that allow people to access downtown businesses, the Chemical Bank Cobo Center, and the other major sporting and entertainment facilities downtown.

The QLINE connects downtown Detroit with Midtown and New Center. The streetcar provides people the ability to connect with jobs, major destinations, universities, and medical facilities, as well as, transfers to DDOT, People Mover and SMART services.

Current funding sources



REGIONAL TRANSIT AUTHORITY
OF SOUTHEAST MICHIGAN

Moving **R** People Investing in **R** Future Enhancing **R** Quality of Life Connecting **R** Communities





Funding needs for
near-term priorities

\$7.5M ANNUALLY
QLINE OPERATIONS

\$9.0M ANNUALLY
ANN ARBOR TO DETROIT
COMMUTER RAIL OPERATIONS

\$135M
ANN ARBOR TO DETROIT
CAPITAL FUNDING

\$5.0M
FUTURE RAIL PLANNING FUNDS



Above: The RTA's current and future goals include the construction of additional rail lines to serve the region.

Near-term priorities

- Commuter rail between Ann Arbor and Detroit.
- Streetcar improvements to include Transit Signal Priority technology targeting areas of high congestion.
- Evaluation of expanded Commuter Rail from Chelsea to Downtown Detroit/Corktown.
- Planning and design services for implementation of light rail to Detroit Metro Airport.

ADDITIONAL FUNDING
NEEDED FOR NEAR-TERM
PRIORITIES
\$16.5M/yr + \$140M Capital Cost

Aspirational goals

- Additional commuter rail lines in Macomb and Oakland counties, connecting them by rail to new destinations in the region.
- Expansion of the streetcar service in Downtown Detroit.
- Implementation of Light Rail (LRT) to Detroit Metropolitan Airport.
- Commuter rail from Ann Arbor to Chelsea.

ADDITIONAL
FUNDING NEEDED FOR
ASPIRATIONAL GOALS
\$181.9M/yr



Airport

For Public Review
Summer 2019

Connecting **R** Communities

Supporting the overall vision

Airport service supports the RTA vision by connecting Detroit Metro Airport to major destinations in Southeast Michigan. These services can offer convenient access for people traveling to the airport to travel as well as the nearly 20,000 people who work at the airport. Improving airport service benefits:

- International and domestic travelers visiting the Region
- Local travelers who want more choices
- A workforce that needs access to the airport



How do people use AIRPORT services today?

Airport service, currently provided by SMART and AAATA, includes routes from Ann Arbor and downtown Detroit directly to Detroit Metro Airport terminals.



AAATA — AAATA's AirRide provides frequent, quick, and convenient express bus service connecting Ann Arbor to Detroit Metro Airport. Daily round trips serve downtown Ann Arbor to both Detroit Metro Airport terminals.



SMART — SMART offers three routes that provide service to Detroit Metro Airport. The Michigan FAST route provides high-frequency, limited-stop service from downtown Detroit to Detroit Metro Airport. The route provides service to both airport terminals, seven days a week, including late night and weekends. Additionally, route 280 Middlebelt and 125 Fort street provide local bus services.

Current funding sources

AAATA

4% \$1.7M annually

Currently the region has one direct airport express route from Ann Arbor to the Detroit Metropolitan Airport. SMART also provides service to the airport via the Michigan Ave FAST service and two local routes.

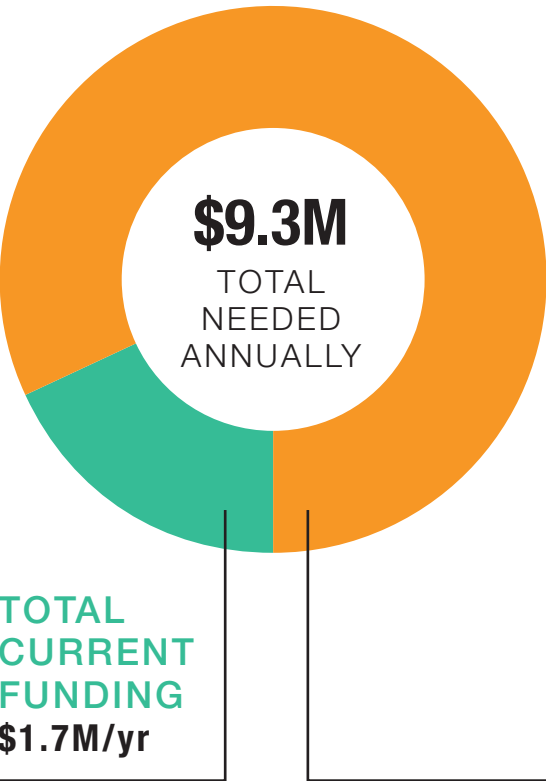


REGIONAL TRANSIT AUTHORITY
OF SOUTHEAST MICHIGAN

Moving **R** People Investing in **R** Future Enhancing **R** Quality of Life Connecting **R** Communities



Funding needs for
near-term priorities



Source: Michigan Flyer (www.michiganflyer.com)

Near-term priorities

- Implementing Airport Express Service that provides direct service to the airport from important centers all over Southeast Michigan, including direct to Downtown Detroit.
- Supporting FAST Service to increase frequency and coverage area.
- Working in partnership with Wayne County Airport Authority to evaluate an intermodal facility that will meet the needs of regional transit and the airport.

Aspirational goals

- Implement light rail (LRT) and bus rapid transit (BRT) to the airport from Downtown Detroit.
- Commuter rail option or shuttle to the airport's Consolidated Car Rental Facility.
- Work in partnership with the Wayne County Airport Authority to plan and construct a future Intermodal hub to better facilitate access to and from the airport.

ADDITIONAL
FUNDING NEEDED FOR
ASPIRATIONAL GOALS
\$24.5M/yr

Cost of LRT to Detroit Metro Airport
included in aspirational costs for Rail.



Community Transit

For Public Review
Summer 2019

Moving **R** People

Supporting the overall vision

Community Transit Services are an essential element of the transit options available to the region. Traditional fixed-route transit service does not meet the transportation needs of all the members of the community due to cognitive or physical disabilities and, in some cases, age.



Individuals may need Community Transit Services for their entire life or just temporarily due to injury or illness. Community Transit services provide origin-to-destination service (door-to-door) to meet federal Americans with Disabilities Act (ADA) requirements within 3/4 of a mile of fixed route services or local community services to provide transportation for those in need that do not meet ADA eligibility criteria. Community Transit Service transportation is a key life line service for many in the region and is a key component to maintaining quality of life for all community members regardless of age or ability.

How do people use COMMUNITY TRANSIT today?

Community Transit Services are used much like traditional transit services and serve transportation needs that include, entertainment, medical, work and education. Both ADA and community-based services typically require a minimum one-day notice to schedule a trip, in some cases 48 hours are needed. Scheduling is typically done over the phone.

Most trips are completed with a one-seat ride, but there are circumstances when a transfer between vehicles is required for a trip of long distance.

The hours of service vary by service provider. ADA paratransit services provide the same service span as nearby routes, running early in the morning, late into the evening and over weekends. Community transit services are not only provided by the primary transit providers in the region (AAATA, SMART and DDOT) but there are up to 150 organizations in the region providing these services through community partnerships and non-profit agency participation. Community based services frequently have minimal service hours and restricted service areas due to budget constraints a typical service span in between 8am and 5pm on weekdays with little to no service on the weekends.



Current funding sources

The three primary transit providers spend the majority of their operating costs on local bus however the demand for Community Transit services is growing as is the cost to provide the services.

AAATA

19% \$7.5M annually

DDOT

4% \$8.5M annually

Source: DDOT

SMART

20% \$20.5M annually

Source: National Transit Database, 2017 Agency Profile



REGIONAL TRANSIT AUTHORITY
OF SOUTHEAST MICHIGAN

Moving **R** People Investing in **R** Future Enhancing **R** Quality of Life Connecting **R** Communities

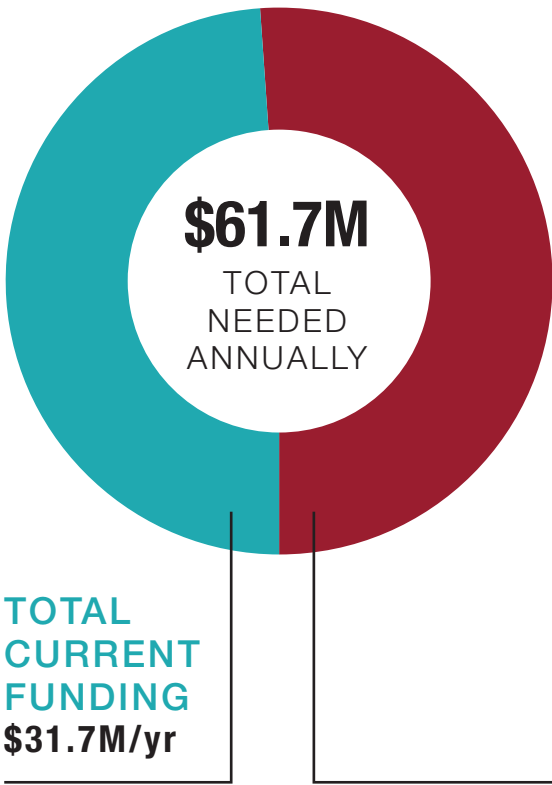




Funding needs for
near-term priorities



An additional **\$30 million** is needed annually to improve the current level of service and keep up with increasing demand, roughly double the annual amount being spent today.



Source: SMART

Near-term priorities

- Electronic fare payment
- Implementing a one-click one call system that provides one location for trip booking and trip information for users of the system
- Expansion of service areas and hours that align with people’s emerging needs (i.e., expanded hours for dialysis trips)
- Shrinking down the trip booking time in order to offer more flexibility to users, including offering same day scheduling
- Adding resources for trip booking and management services to improve the quality of the trip booking process

Aspirational goals

- Incorporation of Community Transit Programs into a future one regional fare and a seamless fare payment system
- Improved passenger booking process
- Integration with new mobility service and public/private delivery models
- On-line same day booking for ADA and community connector service trips
- Comprehensive integration of services
- Autonomous shuttle service models where appropriate

**ADDITIONAL
FUNDING NEEDED FOR
ASPIRATIONAL GOALS
\$1.8M/yr**



New Mobility Services

For Public Review
Summer 2019

Investing in **R** Future

What are NEW MOBILITY SERVICES?

New Mobility services leverage technology to provide on-demand (passengers call it when they need it), dynamically routed (no fixed routes or schedules), shared rides. On-demand mobility provides the ultimate passenger convenience as vehicles are routed directly to meet existing demand; and shared rides lower the cost to the passenger. Technology is also used to improve existing fixed route service and other shared ride services deployed by public and private providers.

As more mobility technologies become available through the private market place, they can fill gaps in our public transit services, especially if public transit and private providers align their services properly. Ensuring that the public and private sectors coordinate services is essential to filling current mobility gaps and improving the transportation options for seniors, and persons with disabilities. These gaps exist for making first and last mile connections, accessing jobs and services that require crossing geographic boundaries, and simply getting to the local grocery store or doctor’s office. The gaps are caused by limitations in available services, and by a variety of barriers.

These services can be deployed to provide mobility options in geographic areas that do not have dense populations or are not easily served by a traditional fixed-route transit service. New Mobility solutions are an effective approach to solving transportation challenges such as first/last mile connections, serving senior populations and providing late night service. Mobility as a Service (MaaS) applications are being developed to integrate the various forms of new mobility into a single mobility service that provides a diverse menu of transportation options in one location and, in some cases, the ability to pay for them.

WHAT IS MaaS?

Mobility as a Service (MaaS) harnesses the power of technology and combines it with drivers, vehicles, and operations management practices to provide trips when people want them. Trips are generally on-demand, and customers get rides that are fully dynamic, meaning there are no static routes or schedules. This type of flexible service, which is continuously optimized based on real-time conditions, provides maximum flexibility for the region.

WHAT IS SaaS?

Software as a Service (SaaS) provides access to data from any device that has a connection to the Internet and a browser. It is a web-based model that allows remote access to applications and data.

How do people use NEW MOBILITY services today?



Source: Shutterstock

New Mobility services are used today by people to get to work, reach entertainment venues, access healthcare and to get to school. Currently in Southeast Michigan there is no one-stop Mobility as a Service solution to pay for a trip, but the Transit app allows potential users to view all their transportation options in one location from the convenience of their phone. Options include bus, Uber, Lyft, MoGO Bikeshare and a growing list of electric scooter companies.

Current funding sources

New Mobility services today are generally funded through private ventures and are at times subsidized with public funds as pilot projects to support larger transit and mobility initiatives.

\$0 in dedicated funds are made available for implementing New Mobility services today.





Funding needs for
near-term priorities



\$8 million in annual funding is needed to keep pace with the evolving concept of New Mobility to implement new service delivery models and pilot emerging technologies.

Near-term priorities

- Facilitating first and last-mile connections to employment hubs and frequent transit services.
- Expanding public/private pilot programs to evaluate new service models.
- Developing new MaaS programs that support all mobility options.
- Ensuring equitable access to new mobility platforms.
- Foster pilot project that funds innovative MaaS and SaaS pilot projects.

**ADDITIONAL FUNDING
NEEDED FOR NEAR-TERM
PRIORITIES**
\$8M/yr

Future priorities and
opportunities for
improvement

Exploring the role of on-demand service options in the region that include improving mobility for seniors and persons with disabilities, establishing connections with first and last mile services, and providing better access to jobs and other services like healthcare are a part of the regional vision of mobility.

These goals and objectives are aligned with emerging New Mobility solutions in other communities. It is a regional priority to pilot new mobility service models in specific areas throughout the region and document the outcomes of the pilots so the region can choose the most effective solutions applicable to our communities.

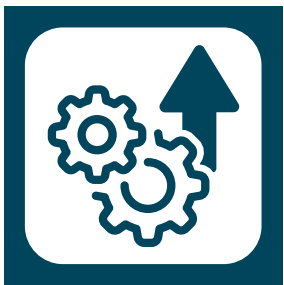
Aspirational goals

- Southeast Michigan to be a leader in the development and deployment of autonomous vehicles shuttles.
- Deploy intelligent transportation system infrastructure on all major roadways.
- Deploy connected vehicle infrastructure.

**ADDITIONAL
FUNDING NEEDED FOR
ASPIRATIONAL GOALS**
\$5.7M/yr

**GREATER USE OF
SHARED MODES
IS ASSOCIATED
WITH GREATER
LIKELIHOOD TO USE
TRANSIT FREQUENTLY
AND REDUCED
TRANSPORTATION
SPENDING.**

— Transit Cooperative Research
Program (TCRP) Report 188



Enhancing the System

For Public Review
Summer 2019

Enhancing **R** Quality of Life

What is ENHANCING THE SYSTEM?

Enhancing the System means to provide **efficient, modern, reliable and safe service for the people of the region**. Eligible expenses under this investment category will ensure transit and mobility assets in our region meet performance expectations (e.g., service reliability, customer friendly and comforts, safety, and other current industry standard(s)).



Source (all photos): DDOT

Adding enhancements to the transit system will keep transit services modern by using funding to implement new technologies to adequately keep pace with the changing mobility demands of the region.



How are SYSTEM ENHANCEMENTS implemented today?

Federal programs are available to assist with the costs associated with keeping a transit system in good repair, however a local funding match is required for federal funds. Historically MDOT funds have been used for the local match. Despite the federal and MDOT funding, it is difficult for transit agencies to keep place with their needs and changing technologies.

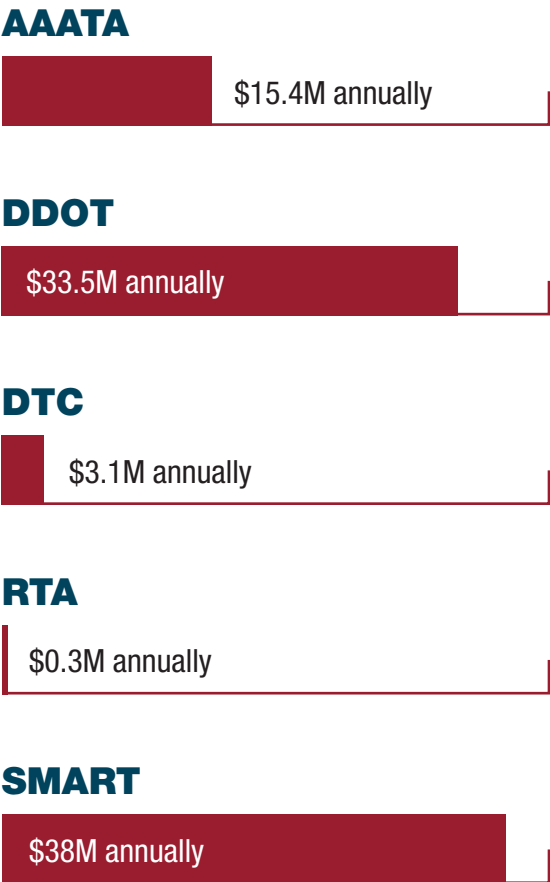
Today local providers, SMART, DDOT and AAATA all leverage the federal dollars mentioned above and have recently paid particular attention to reducing the age of their bus fleets. In the past year all agencies have added to their fleets. SMART has reduced the average age of their fleet from 11.7 years to 6 years, and DDOT has replaced 30 buses in the past year with more replacements on the horizon. DDOT has also received special funding for repairs to their Coolidge facility.

Transit agencies develop asset management plans, incorporating the condition of their facilities and fleets. These plans help the agencies and FTA access funding needs. These plans, which were recently completed by local providers, help the agencies and FTA access funding needs.

Supporting the overall vision

Enhancements to the transit system can be a gauge for the health of services provided in the region. It is critical that the existing fleet and facilities be maintained in good condition to support further growth. Aging fleets discourage ridership and investment that is needed to provide service. Building upon the existing transit infrastructure and assets, the region can provide more transit to more places, supporting the vision of moving people, investing, and improving quality of life.

Current funding sources



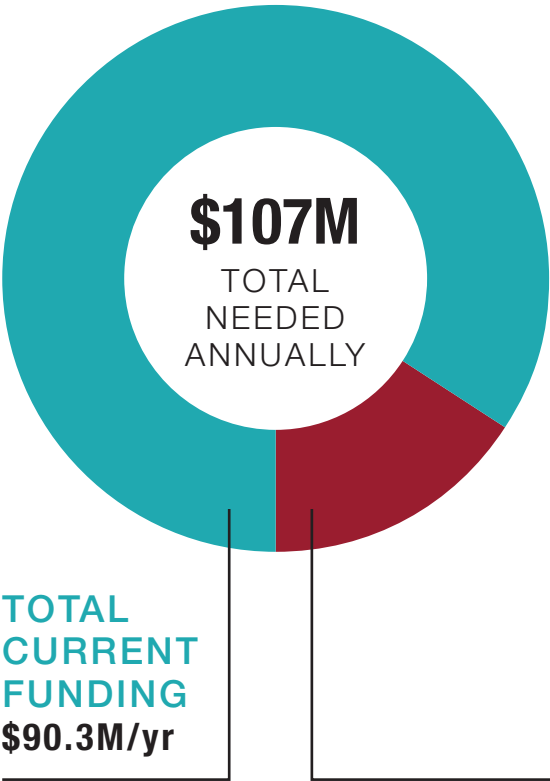


Enhancing the System

Funding needs for near-term priorities



An additional **\$335 million** over 20 years is needed to maintain existing equipment, modernize the system to keep pace with innovation, and provide amenities to improve the passenger experience.



Source: Shutterstock

Near-term priorities

- Station upgrades.
- Shelter upgrades.
- New regional fare collection system and regional fare card.
- Implementation of passenger amenities, such as wifi.
- Continued effort to reduce the average fleet age.
- Continued funding of big data analytics.
- Continued effort to modernize and scale facility investments to optimize service performance.
- Facility expansion plans.

Aspirational goals

- Provide more regional services, such as a call center.
- Develop a long-term strategy to maintain the State of Good Repair for fleet vehicles and facilities.
- Introduce alternative fuel vehicles.
- Upgrade technology and security features.
- Maintenance and replacement work on the People Mover's Automatic Train Control (ATC) system and driverless vehicles.

ADDITIONAL FUNDING NEEDED FOR ASPIRATIONAL GOALS
\$30M/yr



Workforce Development

For Public Review
Summer 2019

Investing in **R** Future

Supporting the overall vision



Investing in workforce development with an emphasis on maintaining highly skilled workers plays a vital role in supporting the RTA’s vision for improving access and performance of transit in southeast Michigan. A talented workforce of bus drivers, mechanics, software developers, community transit customer support/trip booking support, connected and autonomous, rail operators, and rail maintenance staff are the backbone to the success of mobility in our region. Focusing on these issues ensures that workforce development does not limit future expansion opportunities.

How are WORKFORCE NEEDS being met today?



Attracting, developing and retaining a diverse workforce is critical to the continued success of public transit in southeast Michigan. A concerning trend impacting the regions service providers has been difficulty in recruitment and retention of qualified employees. Providers today work with local community colleges and organizations to attract new talent, such as Wayne County Community college. Providers also regularly attend and host job fairs.

Current spending

Approximately **\$200K** is spent on training and workforce development programs today across all of the public transit agencies.



Workforce Development

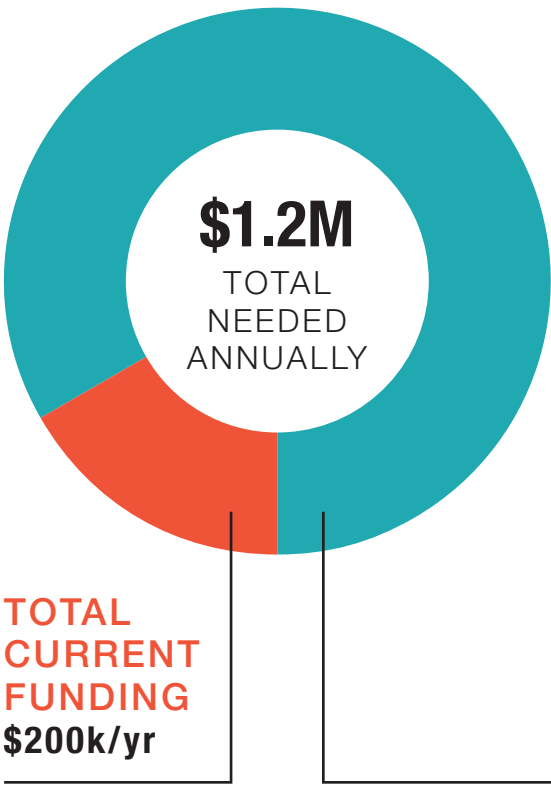
Funding needs for near-term priorities



An additional **\$1M per year** is needed to develop, retain, and continually educate a workforce to support our transit services.

Community Colleges are increasingly closing transit-centered programs in order to expand programs such as HVAC and other vocational careers. Funding would allow partnerships with community colleges to develop training programs to improve the region’s transit and mobility workforce. These programs can be implemented in cooperation with community partners such as Goodwill Industries, Focus Hope, and United Way.

These funds could also be used to leverage additional federal and state funding for our region.



Near-term priorities

- Creation of regional taskforce to investigate and develop plans that improve recruitment and retention of qualified operators and mechanics.
- Work collaboratively with the Workforce Intelligence Network and the Community Colleges across the region to develop transit and mobility training programs and modules that are flexible and responsive to today’s learning environment.
- Develop effective recruitment and retention strategies including employee referral programs, social networking sites (LinkedIn), overall job enrichment and Improving connections with VA and affiliates.

Future priorities and opportunities for improvement

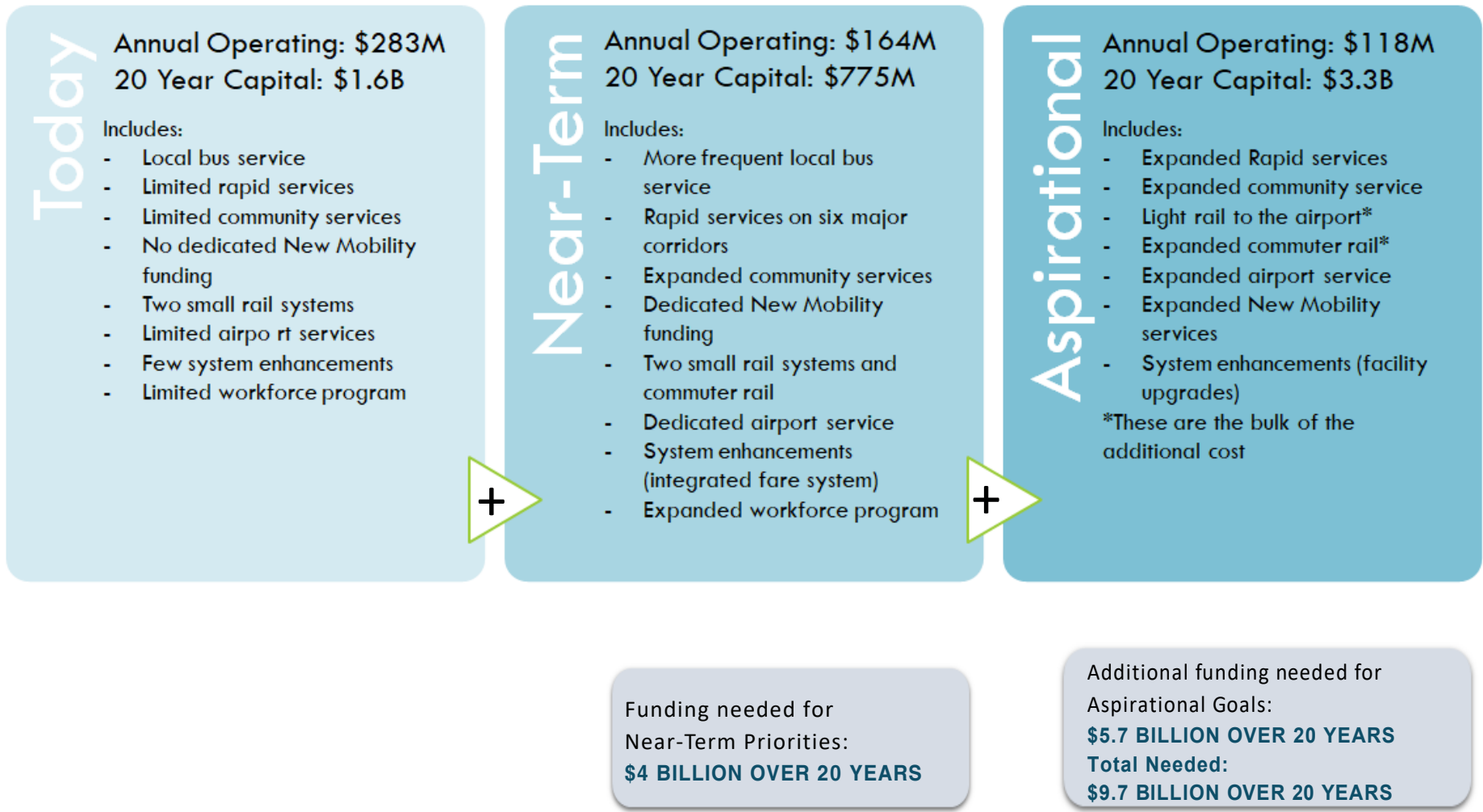
The pursuit of talent is something that is a region-wide need and not something specific to the transit and mobility industry. Our region’s workforce is not growing through organic measures, nor are we experiencing a net migration of new employees entering the region’s workforce. As a result the supply of employees trained and ready to work is not keeping pace with the demand. To address this labor shortage, a concentrated effort is needed to identify those individuals not currently in the workforce and provide them with the training and opportunities to fill future transit and mobility jobs. Many are already working in this space, as such we should seek to partner with those already delivering these services to implement both near-term and aspirational goals.



Aspirational goals

- Improve the overall image of a transit career.
- Develop performance metrics for recruitment and retention strategies.
- Development of a benchmarking process that encourages continues improvement.
- Evaluate regional employee incentive programs that can be used to help retain excellent workers exceeding customer expectations.

20 Year Investment Priority Comparison



What Level of Future Investment Is Appropriate?

The RTA is seeking feedback on the appropriate investment levels that should be included in the region's 20-year Master Transit Plan. The diagram above illustrates the three different scenarios of investment that the RTA has heard to date:

- 1.) existing levels of investment
- 2.) two levels of expanded investment
 - a.) near-term priorities
 - b.) aspirational goals

When combined the 8 broad investment priorities presented on the previous pages make up the basis of a regional mobility program that can be implemented over the duration of the Master Plan horizon (20 years). Of course, implementation requires financial resources that would need to be secured from a number of potential sources and many other administrative, regulatory, and other governance approvals actions that would need to be spelled out clearly in a future Comprehensive Implementation Plan.

Provide Your Feedback

Provide your input by visiting this link to rank the 8 different investment priorities and provide your feedback on the draft vision:

<https://semirtamasterplan.metroquest.com/>