



State of the System

EXECUTIVE SUMMARY

OCTOBER 2015

Letter from RTA CEO Michael Ford

Dear Friend,

Southeast Michigan has struggled with the issue of reliable public transportation for decades. We remain the only major urban area in the country without a viable, coordinated public transit system. If we are going to be competitive in a 21st Century global economy, developing a transit system that meets the needs of a changing world is absolutely essential.

That is why the Regional Transit Authority of Southeast Michigan was created by the Governor and the Legislature in 2012. Our mission is to plan for and coordinate public transportation in the four-county Southeast Michigan region, including developing a plan for rapid transit.

The first step in that process is an empirical documentation of the current condition of public transit in this region. While it is accepted wisdom that transit in the region needs improvement, a successful effort has to begin with detailing the current situation with data and evidence. This State of the System report fulfills that goal.

What this report documents is that the existing public transit service in Southeast Michigan is generally unreliable, uncoordinated, and too often infrequent. It too often does not connect people with the destinations such as getting to work, school, shopping, or the doctor that they need to access.

There are four transit providers in the region—soon to be five—who operate independently of one another with little coordination of services. The result is a region that is underserved by public transit and in which many parts of the region are totally unserved by public transit.

As a whole, the region spends \$67 per capita per year on transit, by far the lowest of any major metropolitan area in the country. Two of the four current providers lack any dedicated funding source to finance their operations, leaving their continued funding in a steady state of uncertainty. Because of chronic underfunding, many vehicles in the system are operated beyond their recommended service life of 500,000 miles.

Add to that the fact that transit serves only about half the people in the region with any level of service and that many employment centers are not well-served by transit and you do not have a pretty picture.

The result of inadequate, unreliable service on lines that do not serve peoples' needs using vehicles often operated beyond their useful life is that the vast majority of riders who use public transportation in Southeast Michigan are those who simply can't afford anything else. Those riders lose considerable time in their day because of the inadequacy of the transit service available to them.

This study shows that there is a demand for better service in the areas currently being

RTA

served and that an improvement in service would generate more riders. It also shows that there are large areas of the region in all four counties that have a demand for service if it were available.

Experience around the country shows that transit must be frequent, fast and easy to access to be successful. Potential transit riders should be no more than a quarter to a half mile from a transit stop, since as a general rule this is the distance people are willing to walk to ride transit. The more riders who use transit, the more frequent the service. The more frequent the service, the more riders are attracted to it.

This study shows that our current system does not meet those goals. If anything, the current level of service in most of the region seems designed to fail.

There are bright spots. There are areas of Ann Arbor and Ypsilanti where the Ann Arbor Area Transit Authority has experienced robust growth, proof of the fact that when service is frequent and reliable it generates more discretionary riders, not just those who have no alternative.

As we move forward in developing our plan for the region, our challenge is to design a system that addresses the needs that are outlined in this State of the System report. Our goal is a system that will provide riders with reliable, frequent service on modern vehicles that will attract new riders who help make the system even more successful.

This State of the System report has provided us with a framework on which to move forward in designing that new system to finally bring this region into a more competitive position with other comparable urban areas throughout the country. More importantly, it will help us develop a modern, efficient system that will provide the citizens of Southeast Michigan with reliable, efficient public transit that serves their needs.



A handwritten signature in black ink that reads "Michael Ford". The signature is fluid and cursive.

MICHAEL FORD, CEO

**REGIONAL TRANSIT AUTHORITY
OF SOUTHEAST MICHIGAN**

RTA

What is the State of the System Report?

The State of the System serves as the foundation for building a regional transit vision for all of Southeast Michigan.

The Regional Transit Authority of Southeast Michigan (RTA) was established to coordinate transit investments and service throughout Wayne, Macomb, Oakland, and Washtenaw counties, and the City of Detroit. The Regional Master Transit Plan (RMTP) will provide a long-term regional transit vision guiding transit improvements in Southeast Michigan.

Before a long-term vision is possible, an understanding of the state of the current transit system is necessary. This allows an understanding of:

- The existing transit system—where it does and does not go, what its strengths and weaknesses are, how it compares to that of similar cities, and how many people use it;
- Where people go on a daily basis—and where they will be going in the future;
- Where are transit needs not currently being met; and
- What parts of Southeast Michigan can support transit in the future.

The role of listening and understanding the demands driven by sound data provides the RTA the opportunity to help connect the dots in the development of a concrete regional plan that fulfills the transit needs while creating a vision for the short and longer term.

This Executive Summary offers key findings from the State of the System report, which can be found online at www.rtamichigan.org.

Southeast Michigan is a vast region, home to 4.2 million residents and 1.9 million jobs while spanning over 2,600 square miles.

The region's current public transit providers serve approximately half the region (1,300 square miles) and collectively carry more than 156,000 riders on the average weekday—roughly 50 million trips annually.

While there are four transit providers in the region, they generally operate independently of each other. This leaves **MANY AREAS UNSERVED** or underserved by transit. The existing transit network does **NOT EASILY CONNECT PEOPLE WITH THE DESTINATIONS THEY WANT AND NEED TO ACCESS** (such as work, school, shopping, entertainment, and the doctor). Additionally, when compared to peer regions across the country, Southeast Michigan's transit network is **WOEFULLY UNDERFUNDED**. Ultimately, transit in Southeast Michigan is **NOT A VIABLE OPTION** for most residents. It is generally used only by those with no other choice.

ADA/PARATRANSIT options include over 420,000 federally-required ADA paratransit trips and over one million non-ADA trips for seniors and low-income job seekers provided each year by AAATA, DDOT, and SMART.

NON-PUBLIC TRANSIT options include the substantial University of Michigan transit network in Ann Arbor and private shuttles in Detroit's downtown and Midtown areas.

FUTURE TRANSIT options include the M-1 RAIL streetcar which is set to open on Woodward Avenue in late 2016. The RTA is also studying rolling rapid transit on the Michigan, Woodward, and Gratiot avenue corridors.

Transit Providers in Southeast Michigan



Detroit Department of Transportation (DDOT)

Serving Detroit, Hamtramck, Highland Park, and some additional jurisdictions that border Detroit.



Detroit Transportation Corporation (DTC)

The People Mover elevated monorail system in downtown Detroit.



Suburban Mobility Authority for Regional Transportation (SMART)

Serving areas of suburban Metro Detroit that have opted-in to the SMART system.



Ann Arbor Area Transportation Authority (AAATA)/TheRide

Serving parts of Washtenaw County, including Ann Arbor and Ypsilanti.

Existing Transit System

We need better transit throughout the region.

Everyone should have equitable access to jobs, health care, school, and other destinations.

Existing transit does not meet the expressed desires of Southeast Michigan.

Transit in Southeast Michigan **IS NOT USEFUL** for those with other transportation options. Even during peak periods **ONLY A FEW LINES PROVIDE SERVICE THAT IS FULLY RESPONSIVE TO MARKET DEMAND**, and service levels during the midday and on weekends are even worse. **REQUIRED TRANSFERS** between providers makes regional trips during midday and weekends **INCONVENIENT** for riders.

Inadequate Performance and Service Levels

MIDDAY, EVENING, AND WEEKEND TRANSIT OPTIONS ARE VERY LIMITED

Too many services are infrequent, and relatively little evening and weekend service is available. A midday trip from Detroit to the suburbs (and vice-versa) is not possible without transferring from one transit provider to another at the county line. Even on transit lines providing high midday frequency, this transfer adds considerable time to the overall trip.

THE TRANSIT SYSTEM IS OFTEN UNRELIABLE

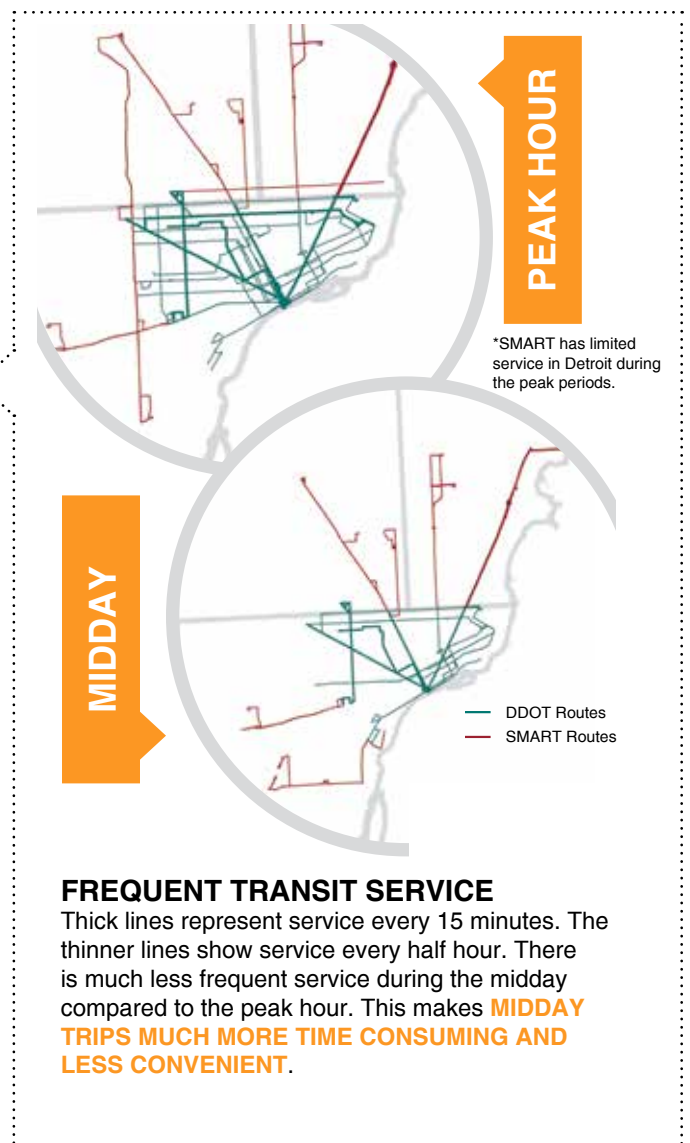
Historically, DDOT service has had issues with on-time performance, which discourages many from using transit within the city and other areas DDOT serves.

RIDERSHIP VARIES ACROSS THE REGION, BUT HAS REMAINED STEADY

Ridership is expected to grow. Some areas have seen declines due to drops in population and employment, while Ann Arbor and Ypsilanti have experienced robust growth. Ridership is highest on weekdays, but demand still remains high on weekends, especially in the urban core(s). DDOT serves the most riders in spite of recent service cuts.

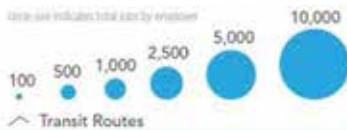
THE REGION'S TRANSIT FLEET IS OLD

With the exception of AAATA, many vehicles continue operating beyond their recommended service life of 500,000 miles.

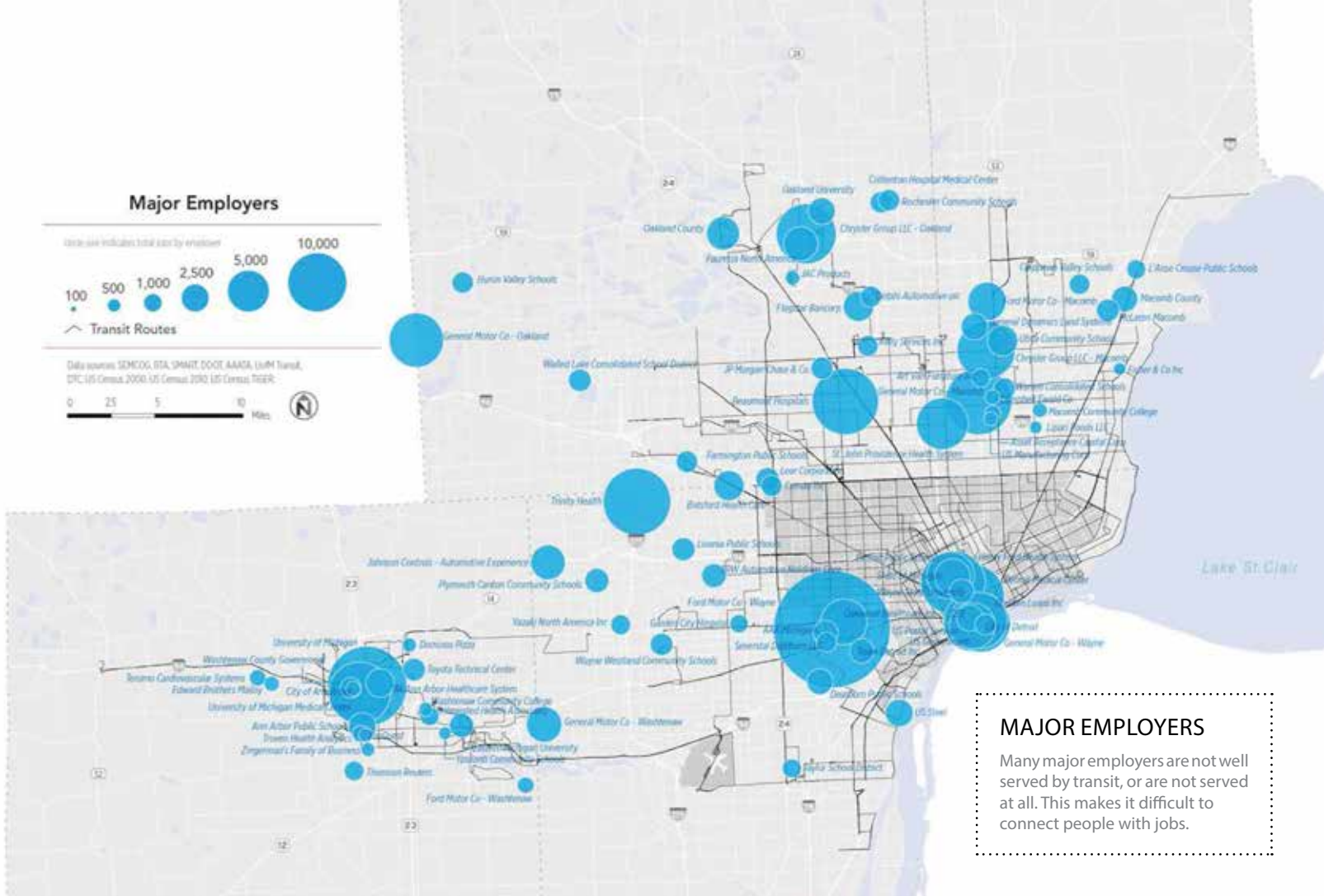


Major Employers

Circle size indicates total jobs by employer



Data sources: SEMCOG, BTA, SMART, DOOT, AAATA, UAM Transit, DPC, US Census 2000, US Census 2010, US Census, TIGER



MAJOR EMPLOYERS

Many major employers are not well served by transit, or are not served at all. This makes it difficult to connect people with jobs.

Geographic Limitations

TRANSIT ONLY SERVES ABOUT HALF THE PEOPLE OF SOUTHEAST MICHIGAN

Those who are served by transit may not have convenient service or connections to the places they want and need to go.

MANY EMPLOYMENT CENTERS ARE NOT WELL SERVED BY TRANSIT

While two-thirds of jobs are within one-quarter mile of transit, and over 70% are within one half mile, this does not mean service is convenient, nor does this mean the necessary connections are available where workers live to take them to and from work. Additionally, few transit connections exist between employment centers unless they are located along the same corridor.

TRANSIT ACROSS THE REGION IS DISCONNECTED

The Ann Arbor/Ypsilanti area and Detroit metro area have no transit connections between them. Only very limited service is available to the airport from Detroit, the surrounding suburbs, and Ann Arbor.

Lack of Regional Coordination

LACK OF SYSTEMATIC COORDINATION MAKES REGIONAL TRANSIT TRIPS MORE DIFFICULT

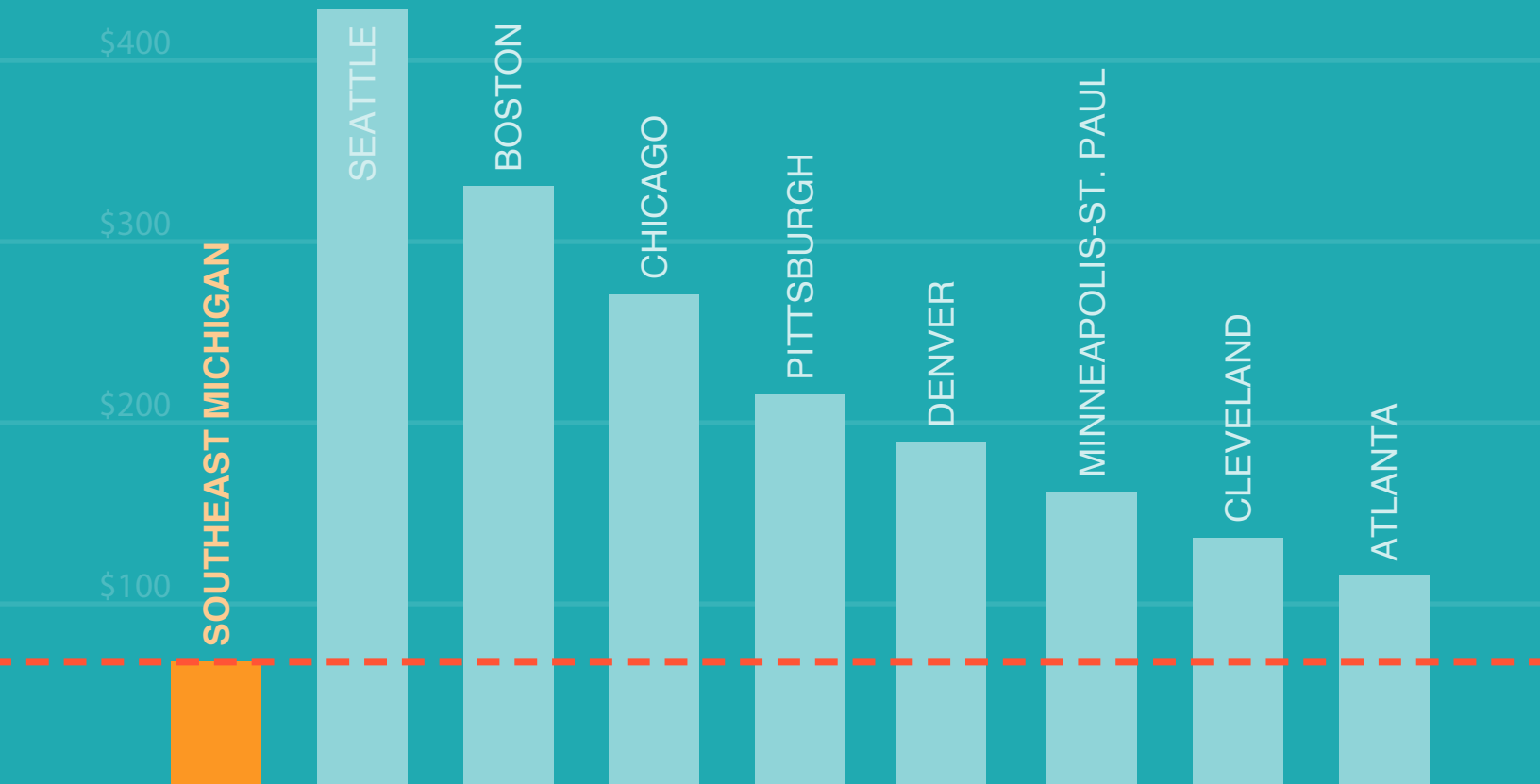
Regional trips into and out of Detroit (spanning DDOT and SMART service areas) require riders to transfer from one provider to another at the city line during midday, evenings, and weekends. This makes regional travel inconvenient and time consuming.

PARATRANSIT AND DEMAND-RESPONSE SERVICES ARE UNEVEN

AAATA well exceeds ADA requirements for senior, late night, and mobility management services. DDOT provides "reverse commute" services allowing low-income city residents to access suburban job centers. DDOT also offers curb-to-curb ADA paratransit service anywhere within its service area. SMART offers Connector service to the public in addition to ADA-required services. Ride dispatching and scheduling for these services is disconnected between providers. The region lacks a holistic and integrated mobility management strategy.

REGIONAL TRANSIT SPENDING

Per Capita



Transit Spending

TRANSIT SPENDING IS SIGNIFICANTLY LOWER THAN PEER REGIONS

Even peer regions with substantially less population and economic activity outspend Southeast Michigan on transit. Each year the region spends just over \$270 million providing transit services, which roughly equals only **\$67 SPENT ON TRANSIT PER CAPITA**. The eight peer regions studied spend an average of \$231 per capita on transit.

Additionally, two of the four providers lack any dedicated funding sources capable of ensuring delivery of services. This contributes to unreliable and limited service which has eroded over the years.

Southeast Michigan's limited service, inadequate performance, and low ridership can, in part, be attributed to the region's low transit spending.

REGION	POPULATION	TRANSIT SPENDING	PER CAPITA
Seattle	3,059,393	\$1,309,322,839	\$428
Boston	4,181,019	\$1,381,464,229	\$330
Chicago	8,608,208	\$2,337,179,496	\$272
Pittsburg	1,733,853	\$374,173,666	\$216
Denver	2,374,203	\$448,336,187	\$189
Minneapolis-St. Paul	2,650,890	\$427,550,984	\$161
Cleveland	1,780,673	\$243,413,127	\$137
Atlanta	4,515,419	\$517,414,859	\$115
Southeast Michigan	4,040,112	\$272,610,181	\$67

Source: National Transit Database

Demand for Transit

Areas with a higher density of residents and/or jobs and a mix of uses close together typically support a higher level of transit service.

Public Input

PUBLIC INPUT IS A FUNDAMENTAL PART OF THE PLANNING PROCESS FOR REGIONAL TRANSIT IN SOUTHEAST MICHIGAN

The RTA officially launched a program to engage **4.2 MILLION STAKEHOLDERS THROUGHOUT THE FOUR-COUNTY, 2,752 SQUARE MILE-REGION OF SOUTHEAST MICHIGAN** in a community conversation about their vision for a future regional transit system.

The RTA CEO, Michael Ford, has attended dozens of public meetings to increase awareness of the RTA and obtain feedback from the public. The RTA has also held public meetings and engaged in an online social media campaign. Throughout the process the public has been encouraged to provide their input.

Current Demand for Transit

THERE ARE SIGNIFICANT MISMATCHES BETWEEN TRANSIT DEMAND AND SUPPLY

Communities which can support a higher level of transit include the downtown core, Midtown and New Center, Hamtramck, Grosse Point Park, Ann Arbor, Ypsilanti, Plymouth, Northville, Pontiac, Berkley, Birmingham, Royal Oak, Ferndale, Farmington, Rochester, Dearborn, Mt. Clemens, Eastpointe, Lincoln Park, and Wyandotte.

Large areas in Southeast Michigan show significant demand for transit, but currently have little or no service. These communities include Belleville, Livonia, Northfield, Plymouth,

Keys to Transit Success

Transit must be **FREQUENT, FAST, AND EASY TO ACCESS** to succeed. High population and employment density is important, as transit must serve high volumes of travelers to also be cost-effective.

Potential transit riders should be concentrated within one-quarter to a half mile of a transit stop. This is generally considered the distance people are willing to walk to ride transit. The potential riders within this area make up the transit market. **LARGER TRANSIT MARKETS SUPPORT MORE FREQUENT SERVICE.** In turn, more frequent service attracts more riders.

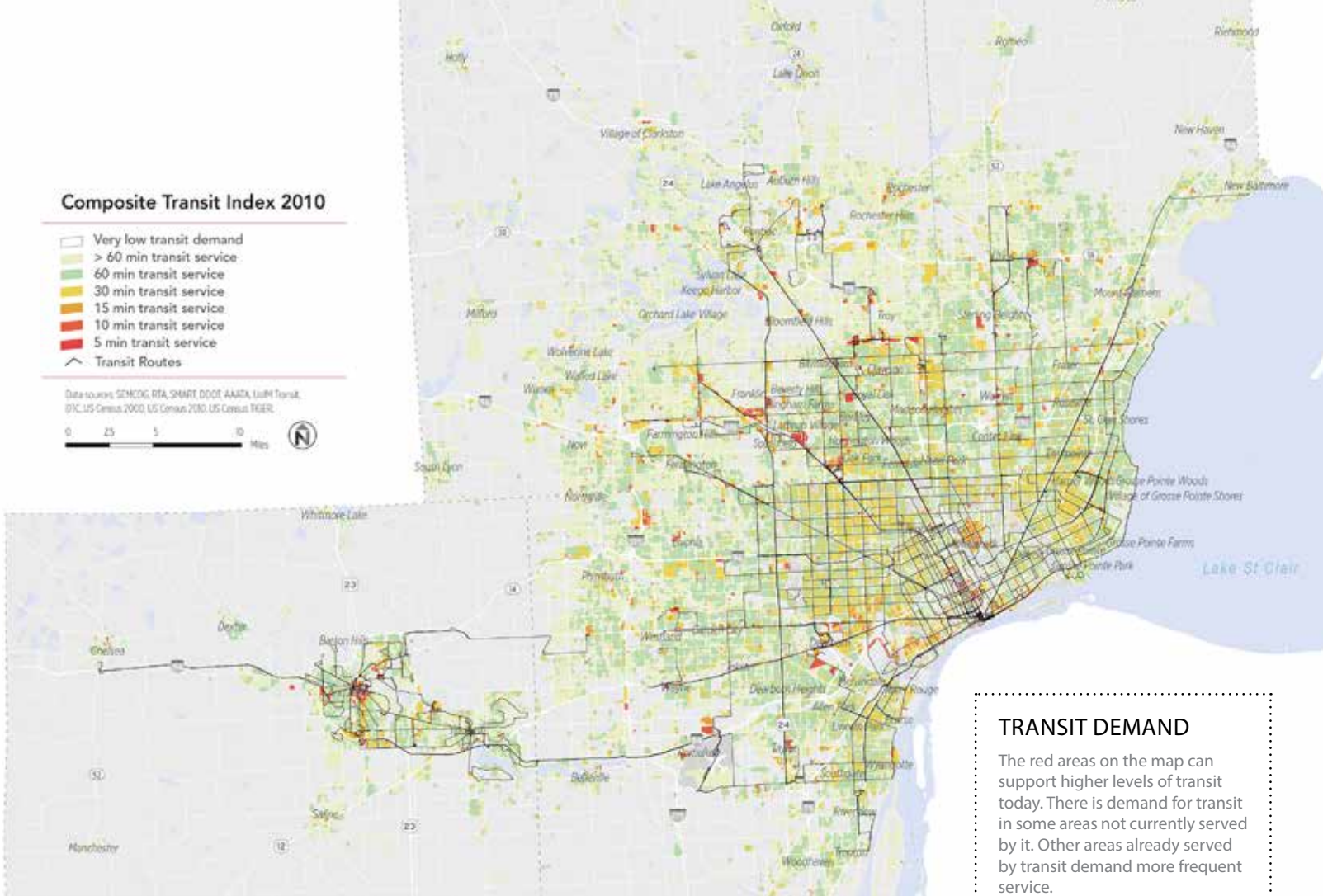
TO ATTRACT RIDERS WHO COULD OTHERWISE DRIVE transit must be relatively frequent, coming at least every 30 minutes, though service every 10 to 15 minutes is preferable.

Composite Transit Index 2010

- Very low transit demand
- > 60 min transit service
- 60 min transit service
- 30 min transit service
- 15 min transit service
- 10 min transit service
- 5 min transit service
- Transit Routes

Data sources: SEMCOG, RTA, SMART, DDC, AAJCA, LHM Transit, DTC, US Census 2000, US Census 2010, US Census TIGER.

0 2.5 5 10 Miles



TRANSIT DEMAND

The red areas on the map can support higher levels of transit today. There is demand for transit in some areas not currently served by it. Other areas already served by transit demand more frequent service.

and Woodhaven in Wayne County; the Van Dyke Freeway corridor north of Utica to Washington Township in Macomb County; Novi, Rochester Hills, Rochester, eastern Troy (for Beaumont Hospital), and Wixom in Oakland County; and Chelsea, Dexter, Milan, and Whitmore Lake in Washtenaw County.

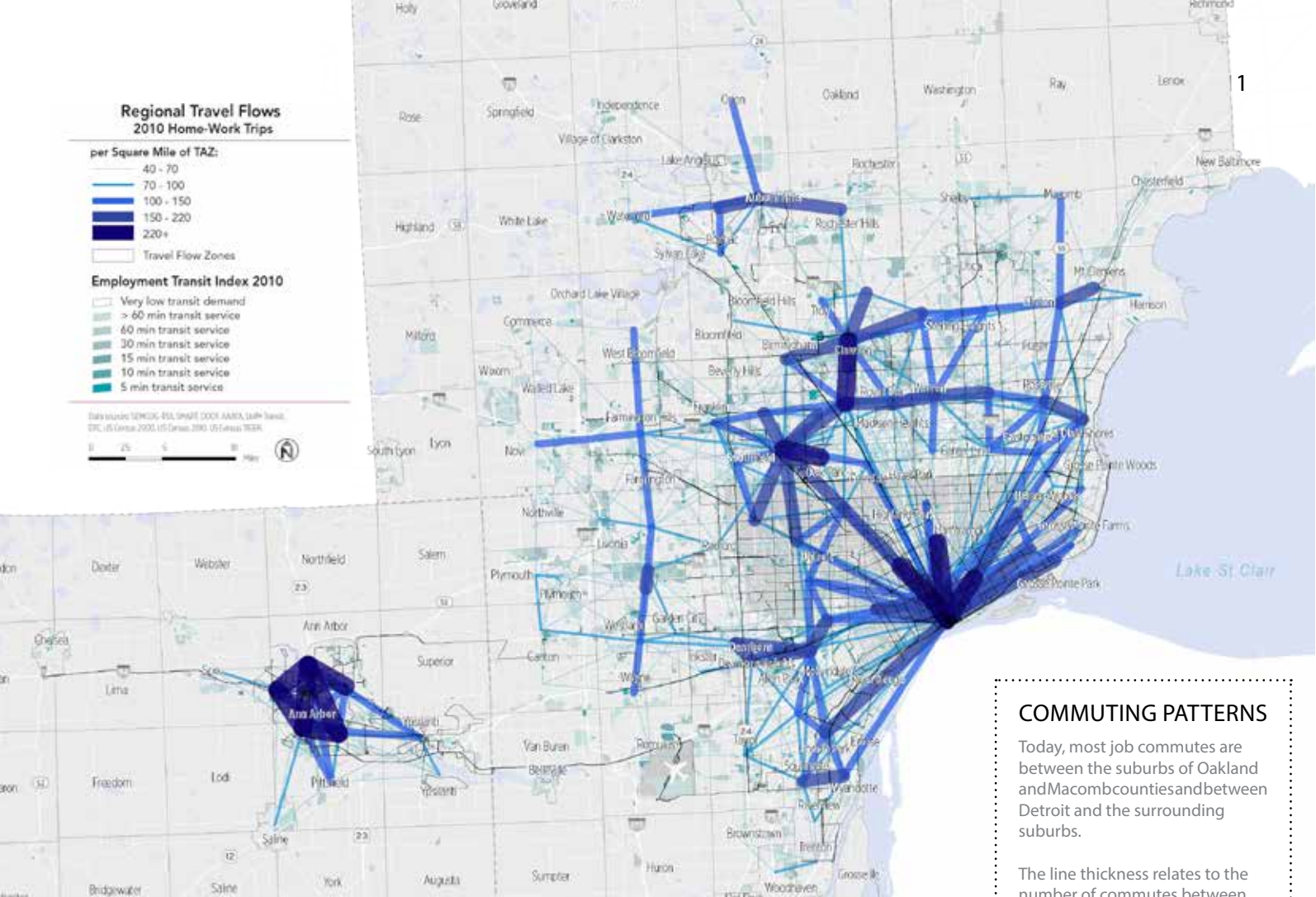
When employment, population and socio-economic factors are considered together, transit demand is highest in the cities of Ann Arbor, Detroit, and Ypsilanti; along the M-10/John Lodge Freeway and 16 Mile Road corridors, and in the town centers along Woodward Avenue out to Pontiac; as well as the communities of Dearborn, Hamtramck, Livonia, Plymouth, Rochester, Romulus (to and around the airport), and Utica. In general, with the exception of Ann Arbor and Ypsilanti, transit demand is highest in Detroit's core and decreases outward. Few areas in the outer portions of Macomb, Oakland, and Washtenaw counties have sufficient demand to support productive transit service.

Future Demand for Transit

Based on SEMCOG forecasts, Southeast Michigan will grow very slowly. Many fundamental efforts are underway, however, to reposition the region and achieve more robust population growth. For example, in the wake of the City of Detroit's historic bankruptcy, unprecedented efforts are underway to improve city services, enhance public safety, combat blight, reinvest in neighborhoods, and improve DDOT's performance. Multiple initiatives have been launched to address mortgage financing challenges and enable more people to move into Detroit's neighborhoods. Subtle shifts include:

- Continued declining demand in many residential neighborhoods of Detroit, with steady or slightly increasing demand in focused revitalization areas.
- Slight increases in demand in major suburban employment centers as employment continues to grow in these suburban centers.
- Increased demand in Ann Arbor and Ypsilanti and other walkable town center areas such as Dearborn.

Top Image: The service frequencies indicated on the map above (which relate to population and employment density) should only be used as a guide. The results do not indicate definite success or failure of a service operated at that frequency.



COMMUTING PATTERNS

Today, most job commutes are between the suburbs of Oakland and Macomb counties and between Detroit and the surrounding suburbs.

The line thickness relates to the number of commutes between two areas. The thicker the line, the higher the number of commutes.

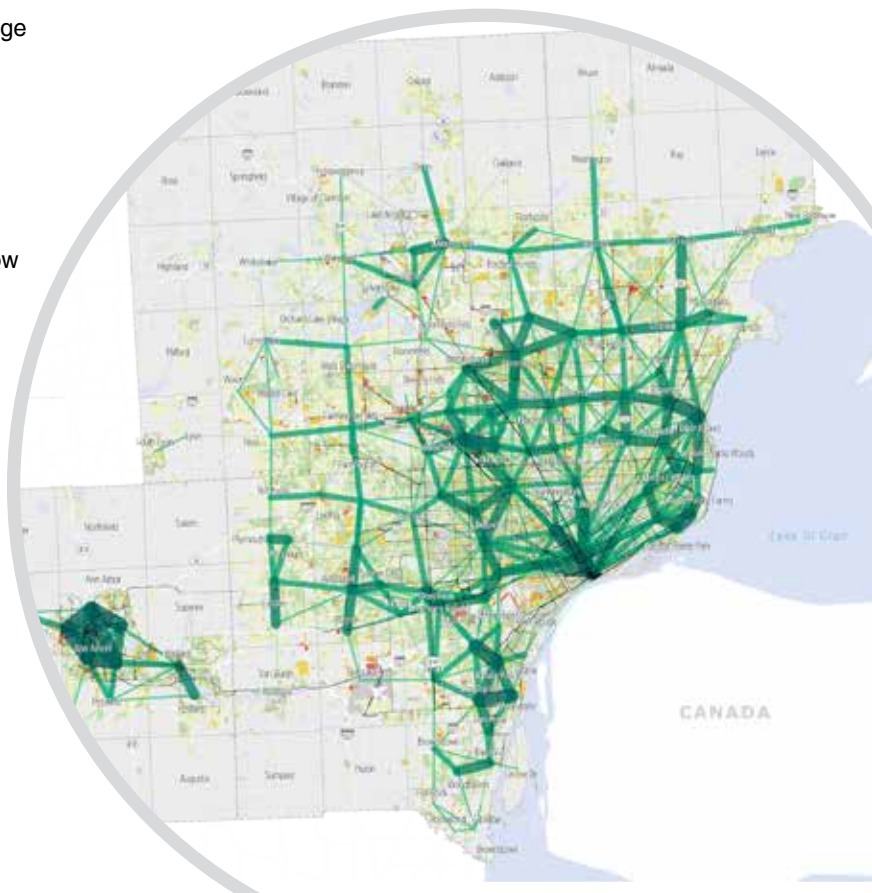
Where People are Going

Travel flows, like transit demand, are not expected to change dramatically over the next 25 years. Travel patterns will continue to be very **DISPERSED AND POLYCENTRIC**. Travel between suburban centers will rival travel between Detroit's urban core and the surrounding suburbs.

If the work travel flows **ALONG SOUTHERN MACOMB COUNTY, TO AND FROM SOUTHEASTERN OAKLAND COUNTY** continue to grow they will rival the work travel flow to and from Detroit.

FUTURE TRAVEL FLOWS

Overall travel, including commute and non-work trips, in Southeast Michigan is dispersed throughout the region and will continue to be so in the future. People will travel just as much, if not more so, between different suburban centers as they will to and from Detroit.



Conclusions

The RTA provides the opportunity for seamless and integrated services that would significantly transform regional transit in Southeast Michigan.

1

Transit service is limited

Limited service coverage, low frequencies, and limited midday, evening, and weekend services make transit inconvenient. Because of this, transit is typically utilized only by those with no other transportation options.

2

Many areas are underserved by transit or not served at all

Nearly half the region's population and 30% of its jobs are not accessible by transit, but the service that is available for residents and jobs near transit is often inconvenient. Many areas with significant transit demand are unserved or underserved by transit.

3

Transit services are not aligned with regional travel patterns

Transit does not take people where they need and want to go. While the existing system is oriented toward providing service to and from downtown Detroit, many regional trips are not well served by transit. More transit connections are needed between regional centers and to the surrounding suburbs from Detroit.

4

Transit service is not reliable enough to be convenient

Unreliable service discourages those with other transportation options from using transit.

5

Regional transit is not well coordinated

The region's four transit providers operate independently of each other with little coordination of services. During midday and off-peak hours, riders are forced to transfer from one provider to another when crossing into and out of Detroit. Additionally, there is no transit link between Ann Arbor/Ypsilanti and the Detroit metro area.

6

No premium transit services are offered

While M-1 RAIL is under construction and rapid transit studies along Gratiot, Michigan, and Woodward avenues are underway, no premium transit is currently offered.

7

Transit funding is insufficient and much lower than peers

Southeast Michigan only spends \$67 per capita on transit while peer regions average \$231 per capita (ranging between a high of \$428 in Seattle to a low of \$115 in Atlanta). Increases in transit spending are needed to improve the system and make Southeast Michigan a more competitive region.

8

Paratransit services are not well coordinated

Much like transit service, paratransit and demand-response services are not well coordinated between providers. This specifically limits the mobility of seniors and low-income residents throughout the region.

**For a copy of the full State of the System report,
or to ask questions and offer comments about the
report or the RMTP, please contact the RTA.**

PHONE: 313-402-1020

EMAIL: info@rtamichigan.org

ADDRESS: 1001 Woodward Ave, Suite 1400, Detroit, MI 48226

WEB: www.rtamichigan.org

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