# CONNECT SOUTHEAST MICHIGAN

## Framework Summary

March 15, 2018



## **CONTENTS**

THE VISION	. 1
Improve Frequency and Reliability	2
Modernization and Innovation	3
Local Input on Expanded Local Services	3
Seamless Rider Experience	3
STATE OF TRANSIT IN THE REGION	. 4
DELIVERING VALUE	. 5
THE PLAN	. 6
15 Routes @ 15-Minute Frequencies	6
15 New Express Regional Routes Connecting Major Destinations Across the Four Counties	7
Commuter Rail Service Connecting Ann Arbor and Detroit	8
Hometown Service and Core Area Flexible Mobility	8
Technology, Infrastructure and Systems Investments	9

#### THE VISION

An effective regional transit system is essential to the economic vitality of Southeast Michigan and the quality of life for our residents. The vision for transit in the region is to go beyond the services and infrastructure we have today to create the foundation for an innovative system for tomorrow.

Since the 2016 transit referendum's narrow loss, elected, business and philanthropic leaders have worked diligently with transit advocates, outside experts and the Regional Transit Authority of Southeast Michigan (RTA) to review and update the 2016 Regional Master Transit Plan (RMTP), adopted by the RTA. We began by listening and taking into account the most consistent feedback to the 2016 Master Plan. We heard residents repeatedly ask for the following:

- · More service in more places;
- Local, nontraditional transit service in less urbanized areas;
- A seamless customer experience in a system that unifies disparate transit providers;
- A larger role for local leaders to influence service in their communities; and
- Acknowledgment that technology is evolving, and the mobility systems of today must be flexible enough to evolve during the course of the plan's implementation.

Connect Southeast Michigan builds on and modifies the 2016 plan with those insights. The plan provides \$170 million per year in operations funding (in 2019 dollars) – a total investment of \$696 million over 20 years in transit supporting infrastructure – and addresses the feedback to provide a more robust, regional solution to transit and mobility for Southeast Michigan. A voter-approved tax of 1.5 mill in 2018 will raise \$5.4 billion over 20 years and leverage an additional \$1.3 billion in farebox, state and federal revenues.

Connect Southeast Michigan will connect people to jobs and services efficiently. The plan leverages a holistic regional planning approach to increase efficiency and reduce redundancy. It increases the number of regional "one-seat" rides by upgrading successful routes delivered today. These route upgrades, new regional services and innovative programs will deliver the transit system that our residents deserve, and that our region requires to be truly competitive on the national and global stages. With Connect Southeast Michigan, we will be poised to integrate new technologies and services to compete with — and lead — our peers.











# Four-Part VISION

Improve Frequency and Reliability

Modernization and Innovation

Local Input on Expanded Local Services

Seamless Rider Experience



# 1 | Improve Frequency and Reliability

**Connect Southeast Michigan** will add the following transit routes and services across the four-county region:

- 15 @ 15. Fifteen routes with at least 15-minute rush-hour frequency across the region. The 15 routes dramatically expand the current frequent transit network and improve job access by providing an additional 1,400 hours of frequent service every weekday, which is a 62 percent increase in service on these corridors.
- Five Premium Routes. Mound/Van Dyke Road and Gratiot, Woodward, Grand River and Michigan avenues will receive \$210 million in infrastructure upgrades to make transit faster and improve the flow of traffic. Traffic signal improvements and

dedicated transit lanes that benefit transit mean improvements for drivers as well as transit riders.

- **Fifteen Express Routes.** New regional express routes for commuters and airport travelers.
- Commuter Rail. Leverage existing rail line for more frequent service between Ann Arbor and Detroit, with new complementary feeder bus service to rail stations in Ann Arbor and Ypsilanti.

Connect Southeast Michigan will also provide an additional \$25 million per year investment to reduce chokepoints through transit supporting infrastructure across the region. Other capital investments will include a single, universal smart fare card, technology to reduce congestion at intersections and stops, new bus maintenance facilities, and enhanced shelters and transit centers to provide safe, comfortable transit waiting areas.

## 2 | Modernization and Innovation

Mobility innovation is happening rapidly. Our region is a national leader in connected and autonomous vehicle technology. The future of how we move will completely change during the next 20 years, offering safe, efficient travel and expanded mobility benefits. Transit service will also benefit greatly from this emerging technology. **Connect Southeast Michigan** will deploy a ground-breaking program called Advanced Mobility to ensure our region is at the leading edge of technology by investing \$20 million per year to implement tomorrow's mobility strategies to solve today's mobility challenges.

Building off the lessons learned from our Amazon proposal and recognizing that today's fixed-route transit needs will need to change as our socioeconomic base evolves over time and new economic opportunities present themselves, the revised plan also includes \$143 million to plan and design future high-quality transit solutions that are needed to support regional economic prosperity.

## 3 | Local Input on Expanded Local Services

Traditional fixed-route transit services do not meet the needs of all communities in Southeast Michigan. As a result, individual communities now spend millions providing necessary local paratransit, senior and other non-traditional mobility services to their residents. **Connect Southeast Michigan**'s Advanced Mobility, Hometown Service and Core Area Flexible Mobility programs will all be locally designed based on the needs of each community. **Connect Southeast Michigan**'s support for these programs will increase more than seven-fold, from \$10 million to \$70 million, compared with the 2016 RMTP.

#### **4** | Seamless Rider Experience

A seamless transit experience for riders begins with a new level of support for and coordination between the current transit providers. **Connect Southeast Michigan** proposes aggregation of administrative, planning and procurement functions of all agencies through joint operating agreements. This will allow for the reduction of redundancy and optimization of service to drive efficiency and enhance customer service. Ultimately, this regional approach will achieve financial savings that will allow them to reinvest into additional transit service. Also included is a unified regional fare system, a new regional transit call center, common branding opportunities, and consistent service policies.









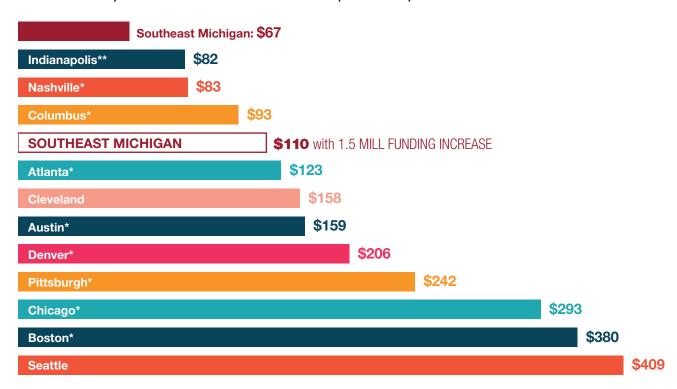


# STATE OF TRANSIT IN THE REGION

Over the past five years, DDOT, SMART and The Ride-Ann Arbor have dramatically improved system performance. They have modernized much of their equipment, expanded services and have taken coordination to unprecedented levels.

Despite the recent improvements, support for transit in our region still lags behind almost every other region for which we compete for economic development as exhibited in the graphic below. More investment is needed to develop a regional transit system that meets our communities core mobility needs, provides better access to jobs, improves our economic vitality and makes our region attractive to new residents and businesses.

### Transit Operation Investment per Capita



<sup>\* =</sup> Finalist for Amazon H2Q

Source: 2016 National Transit Database

<sup>\*\* =</sup> Estimated per capita operating costs in Indianapolis include a recently approved income tax to expand transit by up to 60 percent over existing 2016 service levels.

#### **DELIVERING VALUE**

It is not just about the dollars.

We need a cohesive vision that galvanizes the broad desire for improved regional transit to greater connectivity and economic prosperity. **Connect Southeast Michigan** provides more fixed-route service, smarter infrastructure investment and more commuter support. It encompasses "forward-flexibility" to adapt to future mobility solutions. It proposes localized transit solutions to drive value throughout the entire region.

Connect Southeast Michigan is fiscally responsible — particularly with respect to federal grants. Through increased transit investment, the region will capture additional federal and state transit dollars through formula fund allocations. Each of the four counties will receive back more than 105 percent of the funds it collects through strategic deployment of these leveraged funds. The benefits of spending those dollars will bring still greater economic benefits. According to the American Public Transportation Association, every \$1 spent on public transportation generates \$4 in economic returns.<sup>1</sup>

## CONNECT SOUTHEAST MICHIGAN ...



Supports 67,000 new jobs



Generates \$6.6 billion in additional Gross Regional Product



Generates \$4.5 billion growth in personal income

Source: MDOT Regional Economic Models Inc. modeling results

<sup>1</sup> American Public Transportation Association. "Economic Impact of Public Transportation Investment," accessed January 11, 2018, http://www.apta.com/resources/reportsandpublications/Documents/Economic-Impact-Public-Transportation-Investment-APTA.pdf.











#### THE PLAN

Connect Southeast Michigan will enhance mobility in the region, both today and tomorrow, by connecting people to jobs and services. The plan leverages a holistic regional approach to increase the number of regional "one-seat" rides by upgrading successful routes delivered today. These route upgrades, new regional services and innovative programs build a regional transit system that will quickly be comparable with peer cities, and they create the platform to easily integrate new types of technologies and services.

The plan will deliver the vision through the five key elements detailed next.

# 1 | 15 Routes @ 15-Minute Frequencies

Operational investment: \$70 million per year; Capital investment: \$210 million

These 15 routes operate at 15-minute frequencies, or better, on 15 regional corridors during rush hour, giving riders greater predictability for their trips.

 Three limited-stop routes on Gratiot, Woodward and Michigan avenues will receive infrastructure improvements to enhance the current FAST service provided by SMART. All three routes will receive infrastructure investment totaling \$124 million that will include elements such as traffic signal upgrades, passenger shelter enhancements and other investments to improve travel time and reliability.

- » Michigan Avenue will be upgraded to the same 15-minute service as Woodward and Gratiot avenues.
- » Gratiot and Woodward avenues will continue to offer 20 hours of service, with 15-minute service from 6 a.m. to 9 p.m., and 30-minute service from 5 to 6 a.m. and 9 p.m. to 1 a.m.
- New one-seat ride-regional routes on Mound/ Van Dyke Road and Grand River Avenue. Each route will expand 24-hour service beyond the city limits into the suburbs, with service at least every 15 minutes for 15 hours per day, and a bus at least every 30 minutes overnight. Both routes will receive infrastructure upgrades such as traffic signal upgrades, passenger shelter enhancements and other investments to improve travel time and reliability, totaling \$85 million.
- Ten upgraded and consolidated cross-county routes with service at least 20 hours per day and a bus at least every 15 minutes during rush hour. Three routes will run 24 hours per day and offer 15-minute service throughout the day and at least every 30 minutes overnight.



#### 2 | 15 New Express Regional Routes Connecting Major Destinations Across the Four Counties

Operational investment: \$17 million per year; Capital investment: \$13 million

- Eleven Commuter Express routes with 15 new Park and Ride lots connecting commuters to job centers across the region, such as downtown Detroit, Ann Arbor and the I-696 and M-59 corridors.
- Four Airport Express routes serving Ann Arbor/ Ypsilanti, Western Oakland County (I-275), Eastern Oakland County (M-39), and Macomb/Wayne Counties (via I-94), including four Park and Ride lots.



What we heard: Direct service to jobs centers are needed.

What we did: Added 11 new highway-based Express services with Park and Ride lots to the 2016 plan improving access to jobs.











# 3 | Commuter Rail Service Connecting Ann Arbor and Detroit

Operational investment: \$9 million per year; Capital investment: \$135 million

Eight round trips per day (three morning, two midday, three afternoon) connecting Ann Arbor, Ypsilanti, Wayne, Dearborn and Detroit.

# 4 | Hometown Service and Core Area Flexible Mobility

Operational and capital funds available: \$50 million per year

Each community will guide forward-flexible transit service that best meets the mobility needs of their residents for today and in the future.

- Hometown Service Program, delivered in 60 communities not serviced by fixed transit routes, will support existing local services. The program will identify creative mobility solutions where traditional service does not meet the needs of the community. Funds can be banked by communities for up to three years, and unused funds will be rolled into the county's Advanced Mobility program to ensure funds stay within the county. The program allows community designed services and infrastructure projects such as:
  - » On-demand call-in service expansion.
  - » Regional corridor connections.
  - » Volunteer operator grants.



What we heard: Local transit services are necessary to meet the unique mobility needs of individual communities.

What we did: Provided an allocation of \$30 million per year to every one of the Hometown Service communities in the region to support mobility in a flexible manner, and \$20 million annually in the Core Area Flexible Mobility Program.

- » Homebound service support (e.g. meal delivery).
- » Ride-sharing partnerships (e.g. Uber, Lyft, taxis).
- » Medical campus connections.
- » Downtown connections and circulators.
- » Technology deployments.
- Core Area Flexible Mobility Program will enhance transit service in communities receiving fixedroute service with traditional, American Disabilities Act complementary paratransit and senior mobility services and first-/last-mile connections to core areas that are not within walking distance. Locally designed and administered as a reimbursement program with the ability to bank funds, services and projects eligible for the Hometown Service program would be eligible for the Core Area Flexible Mobility program. The program allows service and infrastructure projects such as:

- » On-demand call-in service expansion.
- » Volunteer operator grants.
- » Ride-sharing partnerships.
- » Medical campus connections.
- » Technology deployments.
- » Autonomous and connected vehicle infrastructure that benefits transit.
- » Transit service pilot programs using cutting-edge technology.

# 5 | Technology, Infrastructure and Systems Investments

Operational and capital funds available: \$52 million per year

Technology, infrastructure and systems investments will allow transit to run faster and more reliably as well as improve traffic conditions for all users. Technology is rapidly changing in the industry, and innovation is the cornerstone of a transit system that is ready to grow as technology changes.

- Transit Supporting Infrastructure to reduce chokepoints. Transit supportive infrastructure funds will invest in assets that directly reduce transit travel time and improve transit reliability, as compared to other modes of travel.
  - » Infrastructure upgrades to support safe and efficient transit operations in the roadway.
  - » Buses that can communicate with traffic signals and move more quickly in and around traffic.

- » Fares that customers can pre-purchase at busy bus stops resulting in faster boarding and reduced travel times.
- » Dedicated transit lanes at select locations.
- » A universal, single, smart fare card and mobile app that works for all services (SMART, DDOT, AAATA, QLine, People Mover, private services).
- » A One-Click/One-Call center to coordinate on-demand transit services.
- » Modern transit vehicles with improved security and amenities such as Wi-Fi, as well as modern facilities to operate and maintain the fleet.
- Future Rapid Corridor infrastructure planning and design including:
  - » Expanded commuter service between Ann Arbor and Detroit.
  - » Light rail connection between Detroit and Detroit Metropolitan Airport.
  - » Streetcar network expansion.
  - » Dedicated transit-only lanes.
- Investments in Advanced Mobility Program. Southeast Michigan has long been the epicenter for mobility innovation. This program continues that tradition, funding mobility improvements and leveraging private-sector investment. This county-led program will fund projects centered around a future, innovative mobility system including connected and autonomous vehicle pilots, ride-sharing partnerships and modern transit supportive infrastructure.

# CONNECT SOUTHEAST MICHIGAN

#### 15 ROUTES AT 15-MINUTE FREQUENCIES

\$70M PER YEAR OPERATING COSTS PLUS \$210M IN CAPITAL COSTS

15-Minute Service (6am - 8pm) \$1.5M PER MILE IN INFRASTRUCTURE UPGRADES

15-Minute Rush Hour Service (Peak)

#### 15 NEW EXPRESS REGIONAL SERVICES

\$17M PER YEAR PLUS \$13M IN CAPITAL COSTS



Airport Express

Commuter Express with Park and Ride

#### COMMUTER RAIL CONNECTING ANN ARBOR AND DETROIT

\$9M PER YEAR PLUS \$135M IN CAPITAL COST, 8 DAILY TRIPS TO NEW CENTER

#### **FASTER COMMUTES ACROSS THE REGION**

Reducing Chokepoints with Transit Supporting Infrastructure \$25M PER YEAR

Implementing Advanced Mobility \$20M PER YEAR

Planning and Desiging Future Rapid Transit \$143M TOTAL

#### LOCAL SERVICES

New Local Bus \$4.5M PER YEAR

Existing Local Bus

#### Streetcar

#### HOMETOWN SERVICES AND FLEXIBLE MOBILITY



Hometown Service in 60 Communities \$30M PER YEAR, DESIGNED BY LOCAL OFFICIALS



<sup>\*</sup> All costs are 2019 dollars, reflecting the first year of the program. Actual costs in the years of implementation will be different due to inflation.



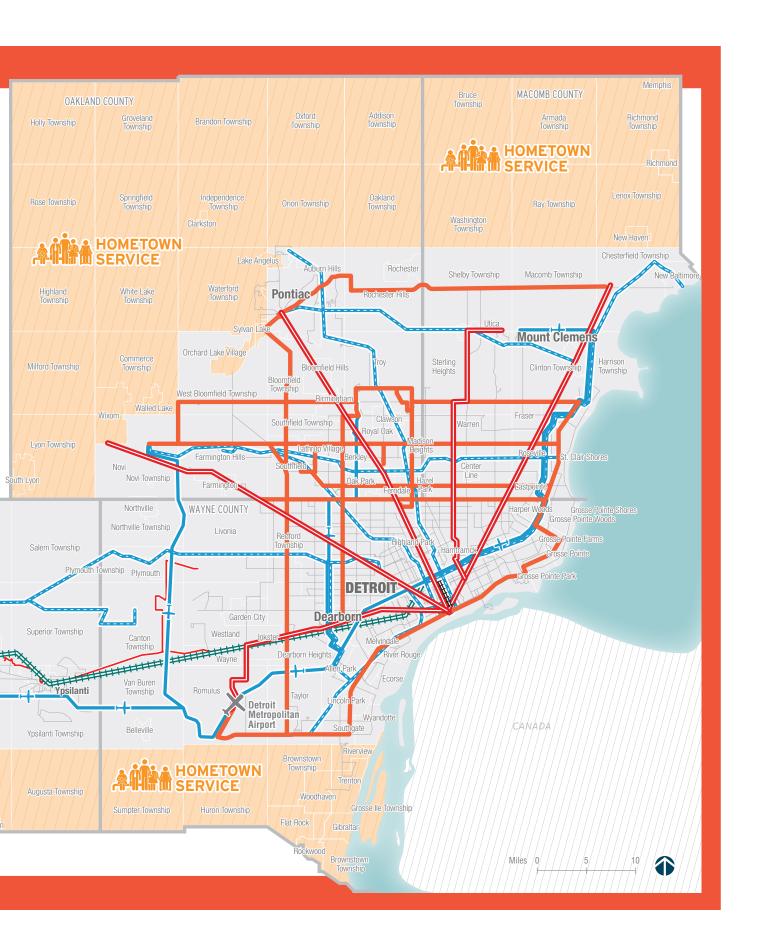
Hometown Service is specifically designed to enhance local decision-making for transportation services. Sixty communities outside the fixed-route service area will have the opportunity to design and implement local services that best meet the specific mobility needs of their residents.

Potential community-designed services include the following:

- · Dial-A-Ride Expansion
- · Rapid Corridor Connections
- · Homebound Service Support
- Ride-Sharing Partnerships
- Medical Campus Connections
- Office Park Circulation
- Downtown Connections
- Technology Deployments
- Services will be funded through revenues generated as part of the Connect Southeast Michigan plan, and funds will be allocated on a per capita basis.



March 2018













**Table 1: 2018 RTA Revision Services** 

Route	<b>Terminal A</b>	<b>Terminal B</b>	<b>Peak Frequency</b>
	15 ROUTES AT 15-MINUTE FREQUEN	CIES	
	15-Minute Service		
Woodward (Infrastructure Only)	Troy and Pontiac	Downtown Detroit	15 Minutes
Gratiot (Infrastructure Only)	Gratiot/23 Mile and North River Park and Ride	Downtown Detroit	15 Minutes
Michigan (Infrastructure and Frequency)	DTW (via Merriman)	Downtown Detroit	15 Minutes
Grand River	12 Mile/Grand River/Beck	Downtown Detroit	10 Minutes
Mound/Van Dyke	Utica	Downtown Detroit	10 Minutes
	15-Minute Rush Hour Service		
8 Mile	8 Mile and Grand River	8 Mile and Mack	15 Minutes
9 Mile	12 Mile and Telegraph	9 Mile and Mack	15 Minutes
12 Mile East	12 Mile and Harper	Lawrence Tech	15 Minutes
12 Mile West	OCC Royal Oak	Twelve Oaks Mall	15 Minutes
15 Mile	Twelve Oaks Mall (via Haggerty)	15 Mile and Harper	15 Minutes
Fort/Eureka	Downtown Detroit	DTW	15 Minutes
Greenfield	Michigan and Schaefer	Somerset Collection	12 Minutes
Jefferson	Downtown Detroit	Gratiot and 15 Mile	10 Minutes
John R	State Fair TC	16 Mile	15 Minutes
23 Mile	Pontiac- Phoenix Center	23 Mile and Gratiot	15 Minutes
Telegraph	Pontiac- Phoenix Center	Southland Center	15 Minutes
	15 NEW REGIONAL EXPRESS SERVI	CES	
	Airport Express		
Ann Arbor/Ypsilanti	Downtown Ann Arbor	DTW	60 Minutes
Oakland Co (Novi via I-275)	Twelve Oaks Mall	DTW	60 Minutes
Oakland Co / Dearborn	Pontiac- Phoenix Center	DTW	60 Minutes
Macomb Co / WSU	Lakeside Mall	DTW	60 Minutes
	Commuter Express		
Ann Arbor-Plymouth-Livonia	Downtown Ann Arbor	Livonia	60 Minutes
Canton Express	Downtown Ann Arbor	Canton	4 Trips
M-59	Pontiac- Phoenix Center	Mt Clemens	60 Minutes
I-75 Chrysler Express	Great Lakes Crossing/Pontiac	Downtown Detroit	60 Minutes
I-96 Express	Plymouth	Downtown Detroit	60 Minutes
M-10 Lodge Express	Twelve Oaks Mall	Downtown Detroit	60 Minutes

Route	<b>Terminal A</b>	<b>Terminal B</b>	<b>Peak Frequency</b>	
I-75 Fisher Express	Woodhaven	Downtown Detroit	60 Minutes	
US-23 Express	8 Mile	Downtown Ann Arbor	60 Minutes	
I-696 Express	Twelve Oaks Mall	St. Clair Shores	60 Minutes	
I-94 Express	New Baltimore	Downtown Detroit	60 Minutes	
M-39 Southfield Express	Twelve Oaks Mall	Lincoln Park	60 Minutes	
15 Park and Ride Lots	Regionwide	Regionwide	N/A	
COMMUTER	R RAIL SERVICE CONNECTING ANN	ARBOR AND DETROIT		
	Regional Rail			
Commuter Rail	Detroit	Ann Arbor	8 Trips Daily	
Ann Arbor Feeder Bus	Ann Arbor Amtrak	Ann Arbor	60 Minutes	
Ypsilanti Feeder Bus	Ypsilanti	Ann Arbor	60 Minutes	
HOMET	OWN SERVICE AND CORE AREA F	LEXIBLE MOBILITY		
Core Area Flexible Mobility	Regionwide	Regionwide	N/A	
Hometown Service	Regionwide	Regionwide	N/A	
	FASTER COMMUTES ACROSS TH	IE REGION		
Transit Supporting Infrastructure	Regionwide	Regionwide	N/A	
Advanced Mobility	Regionwide	Regionwide	N/A	
Regional Integrated Fare System	Regionwide	Regionwide	N/A	
One-Click/One-Call Center	Regionwide	Regionwide	N/A	
Facilities Improvements	Regionwide	Regionwide	N/A	
Streetcar				
Qline	Downtown Detroit	New Center	15 Minutes	
Local				
Ypsilanti Connector	Ypsilanti	Ford Livonia Plant	60 Minutes	
Ypsilanti Connector	Ypsilanti	Michigan and Merriman	30 Minutes	











Table 2: Comparison of 2016 RMTP and 2018 Connect Southeast Michigan Plan

Feature	2016 RMTP	2018 Connect Southeast Michigan Plan	Additional Value
Ann Arbor-Detroit Commuter Rail	Eight trips per day	Eight trips per day. PLUS	Congestion relief along commuter routes – plan for expansion.
		Funds to study 20 trips per day to Downtown.	
High-Frequency Corridors	Four capital-intensive bus rapid transit corridors combined with 11 cross-county connections.	Fifteen routes at 15-minute frequencies blanketing the region.	More routes running at higher frequency throughout the day
		PLUS	coupled with flexible infrastructure
		\$25 million per year dedicated to reducing chokepoints with Rapid Infrastructure such as signal priority, off-vehicle fare vending, a single regional fare card, and funds to plan and design future Rapid Corridors.	dollars to reduce congestion means benefits for transit riders and commuters alike. Planning and design funds allow leaders to stay ahead of the curve and plan for the region's future.
Regional Express Routes	Four Commuter Express routes plus five Airport Express routes.	15 New Express Regional Routes including 11 Commuter Express routes with 15 Park and Ride lots connecting jobs across the region, as well as four Airport Express routes.	Provides more options for commuters to conveniently access transit to major job hubs in the region.

Feature	2016 RMTP	2018 Connect Southeast Michigan Plan	Additional Value	
Flexible Transit Funding	\$10 million per year for additional paratransit services and local mobility throughout the four-county region.	THREE innovative programs to deliver forward-flexible transit service customized to the local needs.  • \$30 million per year for Hometown Service, available to communities outside the fixed route service area to determine their needs	Overlays the fixed route transit network with flexible, community-guided services that maximize value for each taxpayer. Funds also allow the region to be forward-flexible to changing technologies while utilizing current available resources.	
		<ul> <li>\$20 million per year for Core Area Flexible Mobility, available to communities within the fixed route service area to enhance flexible mobility.</li> </ul>		
		• \$20 million per year for Advanced Mobility, a county-controlled program dedicated to innovative solutions like connected/ autonomous vehicles, first-/ last-mile connections, and transit supporting infrastructure.		
Federal and State Funding	Relied heavily on discretionary federal and state grants to complete corridor projects (\$735 million).	Significantly reduced dependence on discretionary grants (\$160 million).  Provides better return on investment through capture of \$850 million in formula funds which would otherwise go to areas outside our region (\$182 million federal; \$434 million state).	Reduces implementation risk of the plan by reducing reliance on discretionary grants while capturing more of our tax dollars back in Southeast Michigan in formula funds.	
85% Rule	All counties provided at least 85 percent return of their tax revenue.	All counties are provided at least 85 percent return of their millage revenue and all counties receive greater than 105 percent return on their investment through leverage of farebox, state and federal funding.	Spending transit tax dollars in Southeast Michigan not only invests in jobs and mobility, but also captures more of our tax revenue currently going elsewhere.	