



**REGIONAL
TRANSIT AUTHORITY**
OF SOUTHEAST MICHIGAN

Board of Directors Meeting

Friday, September 11, 2015

2:00 pm

Regional Transit Authority of Southeast Michigan

1001 Woodward Avenue, Suite 1400

Detroit, MI 48183

AGENDA

1. Call to order
2. Approval of Agenda
3. Approval of the July 16, 2015 Meeting Summary
4. Public comment
5. Reports from standing committees
 - a. Executive and Policy Committee
 - i. FTA Triennial Certification Review – Update
 - ii. Directors and Officers Insurance – Update
 - b. Finance and Budget Committee
 - i. Treasurer’s Report July 2015 – Action
 - ii. Treasurer’s Report August 2015 – Action
 - iii. Proposed Budget Amendment for FY 2016 – Action
 - c. Planning and Service Coordination Committee
 - i. Purpose and Need Documents
 1. Gratiot Avenue – Action
 2. Michigan Avenue – Action
 - ii. State of the System Report – Information
 - iii. Federal Funding Allocation – Update
 - iv. Major Project Report - Updates
 1. Regional Master Transit Plan
 2. Woodward Avenue
 3. Gratiot Avenue
 4. Michigan Avenue
 - d. Transit Providers Advisory Committee Report
 - i. Performance Metrics
 - ii. Fare Study
 - iii. Fold-Up Maps
 - e. Citizens Advisory Committee Report
6. New Business

7. Adjourn

The Committee may, at its discretion, revise this agenda or take up any other issues as need and time allow.

Request for reasonable accommodations at RTA meetings require advance reservations.

Individuals with disabilities requiring assistance should contact RTA Information Services at least 48 hours in advance of the meeting. Contact Virginia Lickliter at 313-402-1020.

Documents and information are available in a variety of formats. Contact the RTA Information Center at info@rtamichigan.org or call 313-402-1020 to discuss your format need. Further information can be found at www.rtamichigan.org or by calling Virginia Lickliter at 313-402-1020.

Proposed Meeting Summary
Regional Transit Authority
Board of Directors
July 16, 2015

1. Call to order 2:02 p.m.

Committee Members Present:

Paul Hillegonds, Board Chairperson; Freman Hendrix; Dr. Curtis Ivery; Elisabeth Gerber; Alma Smith; Tim Soave; Roy Rose; Mark Gaffney

RTA Representatives Present:

Michael Ford; Tiffany Gunter; Virginia Lickliter; Benjamin Stupka; Travis Gonyou; Lucas Reigstad; Shannon Bradley

2. Approval of Agenda

Moved by Elisabeth Gerber and supported by Alma Smith to approve the agenda. The agenda was approved unanimously.

3. Approval of Meeting Summary

Moved by Alma Smith and supported by Tim Soave to approve the June 18, 2015 Meeting Summary. The meeting summary was approved unanimously.

4. Public Comments

John Waterman and James Kleimola

Mr. Kleimola is a disabled user of public transportation. He expressed his support for a regional transit system that would allow him to remain independent by providing him with transportation to and from work and to run errands. He expressed his desire to not have to rely on his mother for transportation. Mr. Waterman is the Executive Director of PEAC. He commented that for individuals like James, the ability to travel from place to place is the difference between being independent or not. He also commented that the idea that he, an independent man with a job who lives on his own, pays taxes and makes a difference, had to get a ride from his mother to speak to the RTA Board is the reason that the RTA exists. Mr. Waterman commented that the RTA's vision is very important. He commented that for people like James with cognitive impairments, the barrier to using transit is knowledge and education. Mr. Waterman cited SMART's travel training project and its importance to individuals like James. Mr. Waterman also commented that a small percentage of special education students have hearing, visual or physical impairments while over half have cognitive impairments. He commented that those students also need to be considered when providing public transportation.

Brian Colfer, Macomb County Resident

Brian noted that he attended weeklong sessions in Detroit with Gil Penalosa, the President of 8-80 Cities based in Toronto. He emphasized the urgency to acquire the State Fairgrounds property right now. He stated that politicians need to have the political will to make this happen. He continued by stating that the RTA needs to own this land, and use a portion of it as the main regional transportation hub, and also as a revenue generator.

Jim Casha, Norwich, Ontario

Jim noted that he also attended the weeklong sessions with Gil Penalosa, from the Toronto based, 8-80 Cities. He noted that he invited the RTA Board members to attend his talk that evening and no one attended. The presenters spoke negatively of the the M1-Streetcar project and explained that in three years, rebuilt the City of Bogota's transportation system with state of the art Bus Rapid Transit (BRT) lines, while at the same time preserving and creating great public spaces.

He noted there was no RTA representation at Tuesday's Community Meeting in Southwest Detroit, regarding the 'state paid for study' on what to do with the 'City neglected' Historic Fort Wayne property, except for Brian, and Todd Scott. Todd was the only CAC member who opposed last year's CAC resolution to not have a Fairgrounds discussion. Brian said he was misled by other members of the CAC. He wants reconsideration.

He asked why didn't the State pay for a similar study for the 'state-neglected' Historic MI State Fairgrounds before abandoning it to the 'vultures'? He also asked,

- 1) Why didn't the RTA Board make them or fund it themselves?
- 2) Why is the Fort Wayne project relevant to the RTA? Because, this 83 acres, sits at the foot of the new International, Canadian paid for,, Gordie Howe Bridge. This historic site could easily be connected to an ICONIC, Multi-modal Transportation Center at the 163 acre, historic MI State Fairgrounds via I-75 (17 minutes) or right-up Livernois (32 minutes).

He provided a bio of Kumar Kintala, with HR & A. He is leading the Fort Wayne Study. He is more than qualified to advise the RTA, the State of MI and the City of Detroit on how to create a Grand Vision.

5. Reports of Standing Committees

a. Executive and Policy Committee Meeting (EPC)

Michael Ford reported that the RTA presented the following documents to the Executive and Policy Committee for recommendation to the Board of Directors for adoption. Mr. Ford stated that the adoption of these policies will bring the RTA into compliance with Federal requirements for standing policies.

i. Title VI Non-Discrimination Plan – Action

Michael Ford presented the Title VI Non-discrimination Plan as provided in the meeting packet.

Moved by Roy Rose and supported by Tim Soave to adopt the title VI Non-discrimination Plan as written. The policy was adopted unanimously.

ii. Limited English Proficiency Plan – Action

Michael Ford presented the Limited English Proficiency Plan as provided in the meeting packet.

Moved by Alma Smith and supported by Freman Hendrix to adopt the Limited English Proficiency Plan as written. The policy is adopted unanimously.

Mark Gaffney shared that he had learned at the SMART board meeting that SMART already publish material in both Spanish and Arabic.

Paul Hillegonds stated that he assumes the policy is meant to apply to the operation of transit, which the RTA currently does not do, and asked if this is a requirement, from a management standpoint. Michael Ford stated that as the RTA continues outreach and engagement there is the possibility for requests and the RTA wants to make sure that people needing translation assistance can have the information they need translated.

iii. Freedom of Information Act Policy – Action

Michael Ford presented the Freedom of Information Act Policy as provided in the meeting packet.

Moved by Elisabeth Gerber and supported by Mark Gaffney to approve the Freedom of Information Act Policy. The policy is adopted with the understanding that the document will be reformatted to highlight that fees will be waived unless a request creates an unreasonable burden to RTA staff and the process for calculating fees as well as adding an executive summary.

Freman Hendrix asked how often the RTA receives Freedom of Information Act requests. Michael Ford indicated that at this time it is not very often.

Alma Smith expressed concern at the volume of the policy and associated forms and documents. She also expressed concern for the fees for providing information under the Act given that most of the RTA's documents are on the website or electronic. She stated that the RTA should charge fees should a request become burdensome for staff. Ms. Smith stated that the policy should be recast in a way that provides easier

access to documents. Michael Ford stated that other agencies and providers had been consulted and the policy follows standard practice and is consistent with their policies. He also stated that he is willing to look at ways to streamline the document and policy.

Tim Soave stated that the policy clearly states what procedures need to be followed to obtain documents. He stated that it does provide a lot of information on the cost factor but that providing detail of the cost is important and does provide provisions for discounts and waivers. Ms. Smith stated that who gets a discount or waiver is in question as well as how time is calculated. She stated that the policy should state that the information is free unless providing them becomes burdensome. Mr. Soave clarified with Ms. Smith that her suggestion is that all documents be provided for free unless they fall under burdensome criteria. She stated that yes that is her suggestion.

Freman Hendrix stated that he wanted to echo Ms. Smith's sentiment. He stated that historically for FOIA, before the advances of electronic transmission of documents, FOIA was a major burden to government and agency staff.

Mark Gaffney suggested that an executive summary be created and added that gives a brief, overall description of how a request will be addressed. Ms. Smith stated that although, as Mr. Ford had stated, the policy is consistent with policies of other agencies, the RTA has the opportunity to create a policy that is true to the FOIA legislation which is to provide information to the public. She stated that the policy should state that, in general, the RTA's documents are free until certain triggers are hit that creates a cost to the RTA.

Elisabeth Gerber stated that she does have a concern regarding the staff time that might be required for an excessive request even when transmitting documents electronically. She stated that a statement of what types of cost would be waived or reduced but still allows a fee when a request involves staff time over a certain amount. She stated that staff time would be the most likely cost. Ms. Smith stated that the policy already requires that RTA staff create an estimate when it is anticipated that a request will be excessive. She is asking that the policy state that documents are free until staff recognizes that a request will become burdensome.

Roy Rose stated his organization represents several municipalities and that often a municipality will request FOIA request information. He stated that some FOIA requests involve costs associated with getting information from vendors and suppliers in addition to the cost of his organization's staff. Ms. Smith stated that she does not believe that a cost charged by a vendor for information can be passed on to the requestor.

Michael Ford referred to the summary document of the policy, it states how the RTA calculates processing fees and states that "a fee will not be charged for the cost of search, examination, review and the deletion and separation of exempt or non-

exempt information unless failure to charge a fee would result in an unreasonably high cost to the RTA.” He asked if highlighting that area would address Ms. Smith’s concerns as well as adding Mr. Gaffney’s suggestion of a one page summary.

Elisabeth Gerber asked if there is a time requirement for having a policy in place. Tiffany Gunter stated that a draft version of the policy must be posted to the RTA’s website before July 31st.

Freman Hendrix stated that Mr. Gaffney’s suggestion leads in the right direction to meet the timetable which is to have an extended document that addresses the many scenarios possible as well as an executive summary that highlights the process. Ms. Smith stated that Mr. Gaffney’s suggestion is helpful as were Mr. Ford’s and Ms. Gerber’s comments. She stated that the statement Mr. Ford referred to seems inconsistent with the document. She suggested that a draft policy be adopted for the purpose of meeting the timeline and that the draft be posted to the website with the understanding that the policy will be recast to state that access is free unless it becomes burdensome. Michael Ford stated that he is open to Ms. Smith’s suggestion and to review the language of the policy and to highlight specific areas so that the policy is not burdensome for the public to understand how the process works and their role in the process.

iv. Drug-Free Work Place Policy – Action

Michael Ford presented the Drug-Free Work Place Policy as provided in the meeting packet.

Moved by Roy Rose and supported by Alma Smith to adopt the Drug-Free Work Place Policy as written. The policy is adopted unanimously.

b. Finance and Budget Committee (FBC)

i. Treasurer’s Report – June 2015 – Action

Dr. Curtis Ivery presented the Treasurer’s Report.

Moved by Alma Smith and supported by Elisabeth Gerber to approve the Treasurer’s Report for June 2015. The report was approved unanimously.

c. Planning and Service Coordination Committee (PSCC)

i. Purpose and Need documents

Michael Ford reported that a purpose and need document is the first step in the development of a corridor planning project that will be completed for Federal funding as it sets the baseline for evaluation of project alternatives. The purpose and need documents were developed through public outreach, work with the technical

committees and research in the following areas: socio/economic; demographic conditions; existing transportation conditions; existing and future land use; current and recent completion of planning; and environmental conditions. The documents have been presented to the RTA committees and to the technical and policy committees for both the Michigan Avenue and Gratiot Avenue projects for review as well as posting them to the RTA website for public review. The RTA is requesting written comments by July 24th. A revised version will be redistributed to the committees by August 6th. The RTA is planning to request approval of the documents at the next Board of Directors meeting.

1. Michigan Avenue

Jeromie Winsor with AECOM gave a presentation on the Michigan Avenue Purpose and Need document.

Elisabeth Gerber asked how the planned airport service fits into the plan as a destination as well as a job center. She also asked what role the existing rail along Michigan Avenue plays in the plan. Mr. Winsor stated that the purpose and need document is meant to be mode neutral but also stated that based on public involvement and conversations with RTA staff, that rail will definitely be considered. He also stated that concerning the airport, there was little data available but that AECOM had just received additional data from the airport and that from a stakeholder and public involvement perspective, service to the airport is important to the plan.

2. Gratiot Avenue

Sarah Binkowski with Parsons Brinckerhoff gave a presentation on the Gratiot Avenue Purpose and Need document.

Elisabeth Gerber stated that expanding the effective corridor to include the areas where people live and work that includes I-94, especially through Eastpointe and St. Clair Shores, would be valuable. Ms. Binkowski stated that Parsons Brinckerhoff did look beyond the typical one mile buffer along Gratiot to capture the commute patterns of those areas and in particular, those who might use park and ride service.

ii. **Survey Research Consultant recommendation – Action**

Benjamin Stupka reported that the RTA had assembled a selection committee comprised of members of the Board of Directors, Transit Providers Advisory Committee and the Citizens Advisory Committee. The committee chose a joint venture between Fairbank, Maslin, Maullin, Metz & Associates and Emma White Research to

complete the Survey Research project. Mr. Stupka also presented a recommendation letter from the committee as provided in the meeting packet.

Freman Hendrix confirmed with Mr. Stupka that FM3 proposed using a database of cell phone numbers and asked how that list was obtained. Emma White with Emma White Research stated that her proposal suggested using a list of voters. Through previous research, they have discovered that about 40% of the phone numbers on voter files are cell phone numbers. Those numbers can be run through screening that can predict which three digit prefixes are cell phone numbers.

Roy Rose indicated that one thing discussed during the Planning Committee meeting is the fact that, from an economics perspective, the proposals were very close.

Alma Smith thanked the selection committee for their work and Ben Stupka for overseeing the process.

Moved by Alma Smith and supported by Elisabeth Gerber to adopt the recommendation of the selection committee to award the Survey Research contract to the joint venture between Fairbank, Maslin, Maullin, Metz & Associates and Emma White Research. The recommendation was adopted unanimously.

iii. Master Agreement timeline

Michael Ford reported that the Master Agreement timeline will be extended to February 2016. He noted that the Master Plan needs to be completed first but that discussions with the providers will begin in November or December of 2015 to discuss the changes and updates to the Master Agreement.

iv. Federal Fund Allocation – Update

Michael Ford reported that information had been received from both DDOT and SMART on the proposed Federal Fund Allocation. He noted that RTA staff will hold discussions with the providers regarding the methodology and plan to bring a recommendation back to the Planning and Service Coordination committee and the Board .

d. Transit Providers Advisory Committee (PAC)

i. Fare Study and Sub-committees.

Tiffany Gunter reported that the ITS sub-committee met to discuss implementation of tier one of the recommendations. She noted that one of the major considerations of the tier one recommendation is that the People Mover system is the most unique system amongst the providers and the sub-committee discussed ways to test a swipe card on the People Mover system to help get to a universal RTA fare card. She noted

that fare structure policy and reciprocity formulas have not yet been discussed but that this is a great step forward toward testing on the full system.

Ms. Gunter also reported that a bid was approved for the proofing and editing of the regional folding maps. The winning bid was from Toni Martin for \$4,000 and they have been given notice to proceed.

e. Citizens Advisory Committee (CAC) – Update

Elisabeth Gerber reported that the CAC has been doing a good job of engaging members in the public outreach work that the RTA is doing so the majority of the meeting concentrated on a presentation on the RTA's public outreach work. She also noted that the CAC has transitioned into a new phase in its support of the RTA. She stated that many of the members of the CAC who are passionate about transit are also donating their time to the RTA effort to attend public events and get the word out regarding what the RTA is doing.

6. New Business

Michael Ford reported that proposals for External Communications and Legislative Service are currently being evaluated.

Michael Ford also reported that the Michigan House of Representatives and Senate are discussing two different transportation funding plans. The board was presented with a memo detailing both plans. Mr. Ford reported that the House plan provides no new revenue; is only constitutionally required to fund transit through gas tax; relies on general fund allocation for road funding competing with all other priorities and requires reallocation of the already approved 2015 budget. The Senate plan proposes a 15 cent increase in gas tax at 5 cents per year with 10% of the first 8 cents going toward transit; requires a 50-Year Lock Box Fund that bypasses the CTF; and requires a reallocation of the budget beginning in 2016. He also reported that on the Federal level that July 31st is the deadline for MAP-21. An extension until December is expected.

7. Meeting was adjourned at 3:48



REGIONAL TRANSIT AUTHORITY OF SOUTHEAST MICHIGAN

As created under Public Act 387 of 2012

Treasurer's Report

Report for the month of: July 2015

RTA BOARD

CHAIR
Paul Hillegonds

VICE CHAIR
Elisabeth Gerber

SECRETARY
Mark Gaffney

TREASURER
Dr. Curtis Ivery

Freman Hendrix
Don Morandini
Chuck Moss
Roy Rose
Alma Wheeler Smith
Timothy Soave

	Beginning Balance FY 15				\$ 571,381.00
REVENUES	Monthly	Obligated	YTD	Budget	Remaining
Beginning Balance FY 15	-	-	-	571,381	571,381
Federal Grants (Administration)	15,915.00	-	35,398	259,200	223,802
State Match (Administration)	3,978.75	-	8,849	64,800	55,951
State Revenue	-	-	400,000	900,000	500,000
Other	-	-	-	100,000	100,000
TOTAL REVENUE:	19,894	-	444,247	1,895,381	1,451,134
EXPENSES:	Monthly	Obligated	YTD	Budget	Remaining
Salary	68,635	-	373,408	571,367	197,958
Fringe	31,238	-	154,779	258,063	103,284
Total Compensation	99,873	-	528,188	829,430	301,242
Administrative Contracts					
D&O Liability Insurance	-	-	-	20,000	20,000
Legal	650	-	60,838	75,000	14,162
ASO	-	-	-	3,000	3,000
Accounting Services	-	-	5,360	15,000	9,640
Audit	-	-	-	15,000	15,000
Website	-	-	4,500	12,500	8,000
Communications	-	-	30,400	50,000	19,600
Public Education Initiatives	-	-	2,737	100,000	97,264
User Satisfaction Survey	-	-	-	150,000	150,000
IT Support	-	-	-	7,600	7,600
Other Contract	-	-	12,726	25,000	12,274
Total Administrative Contracts	650	-	116,560	473,100	356,540
Marketing/Printed Materials*	-	24,253	7,296	200,000	168,451
Rent	-	-	-	20,000	20,000
Hardware/Software	-	-	2,266	20,000	17,734
Phone Equipment	-	-	-	2,500	2,500
Phone and Internet Service Fees	970	-	3,155	5,780	2,625
Supplies	564	-	3,265	5,000	1,735
Utilities	-	-	-	1,200	1,200
Furniture	-	-	-	15,000	15,000
Meetings/Retreats	694	-	9,356	40,000	30,644
Travel/Professional Development	3,882	-	30,276	35,000	4,724
Subscriptions/Memberships	2,750	-	8,306	10,000	1,694
Board Reimbursement	261	-	1,969	15,000	13,031
Miscellaneous Expense	779	-	1,623	-	(1,623)
TOTAL EXPENSES:	109,644	24,253	712,259	1,672,010	937,120

Treasurer's Signature:

Dr. Curtis L. Ivery

* Future obligation of Marketing/Printed Materials - Maps - \$24,253



REGIONAL TRANSIT AUTHORITY OF SOUTHEAST MICHIGAN

As created under Public Act 387 of 2012

Treasurer's Report

Report for the month of: August 2015

RTA BOARD

CHAIR
Paul Hillegonds

VICE CHAIR
Elisabeth Gerber

SECRETARY
Mark Gaffney

TREASURER
Dr. Curtis Ivery

Freman Hendrix
Don Morandini
Chuck Moss
Roy Rose
Alma Wheeler Smith
Timothy Soave

	Beginning Balance FY 15				\$	571,381.00
REVENUES	Monthly	Obligated	YTD	Budget	Remaining	
Beginning Balance FY 15	-	-	-	571,381	571,381	
Federal Grants (Administration)	16,343.00	-	51,741	259,200	207,459	
State Match (Administration)	4,085.75	-	12,935	64,800	51,865	
State Revenue	-	-	400,000	900,000	500,000	
Other	-	-	-	100,000	100,000	
TOTAL REVENUE:	20,429	-	464,676	1,895,381	1,430,705	
EXPENSES:	Monthly	Obligated	YTD	Budget	Remaining	
Salary	46,853	-	420,261	571,367	151,106	
Fringe	24,219	-	178,998	258,063	79,065	
Total Compensation	71,072	-	599,259	829,430	230,171	
Administrative Contracts						
D&O Liability Insurance	1,289	-	1,289	20,000	18,711	
Legal	9,745	-	70,583	75,000	4,417	
ASO	-	-	-	3,000	3,000	
Accounting Services	-	-	5,360	15,000	9,640	
Audit	-	-	-	15,000	15,000	
Website	-	-	4,500	12,500	8,000	
Communications	-	-	30,400	50,000	19,600	
Public Education Initiatives	-	-	2,737	100,000	97,264	
User Satisfaction Survey	-	-	-	150,000	150,000	
IT Support	-	-	-	7,600	7,600	
Other Contract	3,000	-	15,726	25,000	9,274	
Total Administrative Contracts	14,034	-	130,594	473,100	342,506	
Marketing/Printed Materials*	-	24,253	7,296	200,000	168,451	
Rent	-	-	-	20,000	20,000	
Hardware/Software	-	-	2,266	20,000	17,734	
Phone Equipment	-	-	-	2,500	2,500	
Phone and Internet Service Fees	-	-	3,155	5,780	2,625	
Supplies	1,868	-	5,133	5,000	(133)	
Utilities	-	-	-	1,200	1,200	
Furniture	-	-	-	15,000	15,000	
Meetings/Retreats	1,068	-	10,424	40,000	29,576	
Travel/Professional Development	722	-	30,998	35,000	4,002	
Subscriptions/Memberships	-	-	8,306	10,000	1,694	
Board Reimbursement	154	-	2,123	15,000	12,877	
Miscellaneous Expense	-	-	1,623	-	(1,623)	
TOTAL EXPENSES:	88,917	24,253	801,176	1,672,010	848,203	

Treasurer's Signature:

Dr. Curtis L. Ivery

* Future obligation of Marketing/Printed Materials - Maps - \$24,253



**REGIONAL
TRANSIT AUTHORITY**
OF SOUTHEAST MICHIGAN

DATE: Friday, September 11, 2015
TO: Board of Directors
FROM: Michael G. Ford
SUBJECT: FY2016 Proposed RTA Budget Amendment

Attached is the proposed budget amendment for FY2016.

Please take a moment to review the worksheet. The following provides a brief narrative on the structure of the attached document and a high level summary of changes being proposed for the FY2016 budget.

The document is divided into three sections grouped by FY2015, FY2016, and FY2017.

The first through fourth columns of the worksheet provide details related to the current 2015 fiscal year.

- The first column under FY2015 illustrates the initial budget presented in November 2014 planned for the fiscal year,
- The second and third columns detail the anticipated dollar amount and percentage spent relative to the original budget by line item.
- The fourth column calculates the difference between the budget and projected year end actuals.

During the FY2015, the RTA is pleased to report that the organization has remained \$742,000 under budget. Significant savings were realized with regard to total compensation, fewer administrative contracts, marketing materials, and office space related savings.

The fifth through seventh columns of the worksheet provide details related to the 2016 fiscal year.

- The fifth column illustrates the proposed budget for FY2016 as presented in the three year budget in November 2014.
- The sixth column (shown in green) identifies opportunities for adjusting the FY2016 budget.

- The seventh column represents the difference between the original budget for FY16 and the proposed amendment.

During the FY2016, the RTA proposes to increase the legal fees line item by \$25,000. The line item was utilized 100% in the previous year and the RTA anticipates further legal questions will arise in the ballot year. The RTA added a line item to support the legislative services contract. Additionally, the entire user and general satisfaction survey expenditure will be realized in FY2016. The Other Contract line item was increased by \$25,000 to provide some flexibility in preparing for the unknowns in the coming year. Finally, all expenses related to office space have been eliminated. The RTA has been extended an invitation to remain in the existing office space, provided by SEMCOG until a long term funding source has been secured.

The eighth and ninth columns of the worksheet provide details related to the 2017 fiscal year. The committee may recall, the first three year budget projected a deficit of just over \$1 million in FY2017. The team has significantly reduced the projected deficit for FY2017, which is now \$166,740.

The RTA will continue the stated commitment of reducing the deficit in FY2017 as we operate through the FY2016. The committee is asked to review the worksheet and offer a recommendation to the Board of Directors to approve the budget amendment as proposed.

2015-2016 Proposed Administrative Budget Amendment

	1	2	3	4	5	6	7	8	9
	10/1/2014-9/30/2015				10/1/15 - 9/30/2016			10/1/16-9/30/17	
	FY2015 Proposed Budget	FY2015 Close Out \$ Projection	FY 2015 Close Out % Projection	Difference/ Savings	FY2016 Budget Projection	FY2016 Proposed Amendment	Difference	FY2017 Budget Projection	FY 2017 Proposed Amendment
Revenue									
Beginning Balance	571,381				223,371	965,129		196,081	1,156,610
Federal Revenue (Administration)	259,200				276,000	276,000		-	
State Match (Administration)	64,800				55,200	55,200		-	
State Revenue	900,000				1,100,000	1,100,000		-	
Other Revenue/Contributions	100,000				200,000	200,000		200,000	0
Total Revenue	1,895,381				1,854,571	2,596,329		396,081	1,156,610
Expenditures									
Salary	571,367	468,084	71%	103,283	631,013	631,013	-	643,633	643,633
Fringe	257,083	188,571	56%	68,512	315,506	315,506	-	321,817	321,817
Worker's Compensation Insurance	980	980	100%	-	1,200	1,200	-	1,400	1,400
Total Compensation	829,430	657,635		171,795	947,719	947,719	-	966,850	966,850
D & O Liability Insurance	20,000	19,433	97%	567	20,000	20,000	-	22,000	22,000
Legal	75,000	75,000	100%	-	75,000	100,000	(25,000)	50,000	50,000
ASO	3,000	-	0%	3,000	3,000	-	3,000	3,000	3,000
Accounting Services	15,000	7,000	47%	8,000	10,000	10,000	-	10,000	10,000
Audit	15,000	-	-	15,000	15,000	15,000	-	15,000	15,000
Website	12,500	5,000	40%	7,500	2,500	2,000	500	2,500	0
Legislative Services (New Line Item)	-	6,000	-	(6,000)	-	40,000	(40,000)	-	28,000
Communications	50,000	34,900	70%	15,100	50,000	54,000	(4,000)	50,000	42,000
Public Education Initiatives	100,000	8,737	9%	91,263	200,000	-	200,000	25,000	-
User Satisfaction Survey	150,000	-	0%	150,000	-	150,000	(150,000)	-	-
IT Support	7,600	-	0%	7,600	17,100	10,000	7,100	11,400	5,000
Other Contract	25,000	15,226	61%	9,774	-	50,000	(50,000)	25,000	10,000
Administrative Contracts	473,100	171,296		301,804	392,600	285,500	107,100	213,900	185,000
Marketing/Printed Materials	200,000	32,049	16%	167,951	150,000	100,000	50,000	100,000	75,000
Rent (no move pre ballot initiative)	20,000	-	0%	20,000	42,000	-	42,000	42,000	-
Hardware/Software*	20,000	9,266	46%	10,734	10,000	10,000	-	7,500	3,000
Phone Equipment*	2,500	-	0%	2,500	1,000	-	1,000	1,000	-
Phone and Internet Service Fees	5,780	3,755	65%	2,025	6,572	5,500	1,072	5,033	5,500
Supplies	5,000	3,665	73%	1,335	3,000	5,000	(2,000)	2,500	2,000
Utilities (no move)	1,200	-	0%	1,200	3,600	-	3,600	3,600	-
Furniture (no move)	15,000	-	0%	15,000	2,000	-	2,000	1,500	-
Meetings/Retreats	40,000	10,056	25%	29,944	40,000	30,000	10,000	40,000	40,000
Travel/Professional Development	35,000	30,776	88%	4,224	35,000	35,000	-	35,000	25,000
Subscriptions/Memberships	10,000	8,506	85%	1,494	10,000	6,000	4,000	10,000	6,000
Board Reimbursement	15,000	2,469	16%	12,531	15,000	15,000	-	15,000	15,000
Miscellaneous	-	779		(779)	-	-	-	-	-
Total Expenditures	1,672,010	930,252		742,537	1,658,491	1,439,719	218,772	1,443,883	1,323,350
Ending Balance	223,371	965,129			196,081	1,156,610		(1,047,802)	(166,740)



RTA



Building Equitable Sustainable Transit

Gratiot Avenue

PURPOSE AND NEED STATEMENT

AUGUST 2015

Acknowledgements

FEDERAL TRANSIT ADMINISTRATION

REGIONAL TRANSIT AUTHORITY OF SOUTHEAST MICHIGAN

BEST: GRATIOT POLICY AND TECHNICAL ADVISORY COMMITTEES

MUNICIPAL MEMBERS

CITY OF DETROIT

CITY OF EASTPOINTE

CITY OF ROSEVILLE

CLINTON TOWNSHIP

CITY OF MT. CLEMENS

LOCAL/STATE AGENCY AND STAKEHOLDER MEMBERS

ADVANCING MACOMB

DETROIT REGIONAL CHAMBER OF COMMERCE

DETROIT DEPARTMENT OF TRANSPORTATION

DETROIT PLANNING COMMISSION

DETROIT TRAFFIC ENGINEERING DEPARTMENT

DETROIT TRANSIT CORPORATION

M-1 RAIL

MACOMB COUNTY

MACOMB COUNTY DEPARTMENT OF ROADS

MICHIGAN DEPARTMENT OF TRANSPORTATION

REGIONAL TRANSIT AUTHORITY OF SOUTHEAST MICHIGAN CITIZENS ADVISORY COMMITTEE

SOUTHEAST MICHIGAN COUNCIL OF GOVERNMENTS

SUBURBAN MOBILITY AUTHORITY FOR REGIONAL TRANSPORTATION

WAYNE COUNTY

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1.0 Introduction

1.1 Project Description

The Building Equitable Sustainable Transit (BEST): Gratiot Avenue Corridor Study represents a crucial early step in the development of enhanced transit along Gratiot Avenue. This 12-month study is being led by the Regional Transit Authority of Southeast Michigan (RTA) and will include the development and evaluation of multiple rapid transit alternatives between Downtown Detroit and M-59. BEST: Gratiot Avenue was initiated in April 2015 with an anticipated selection of a Locally Preferred Alternative (LPA) in March 2016. The study area spans the 23-mile Gratiot Avenue corridor that serves portions of Wayne and Macomb counties.

The corridor communities along Gratiot Avenue include the following cities and townships within Wayne and Macomb Counties:

- Clinton Township
- Detroit
- Eastpointe
- Mount Clemens
- Roseville

As represented in Figure 1-1, the study area includes a one-mile area on each side of Gratiot Avenue for the development of the Purpose and Need. This multi-phase, iterative alternative development and evaluation process is supported by input from study's Technical and Policy Committees comprised from all of the municipalities, counties, transit agencies and other key institutional stakeholders. After extensive public engagement activities, the RTA Planning and Service Coordination Committee will recommend the Locally Preferred Alternative (LPA) to the RTA Board of Directors (Board) for adoption. The LPA will include a recommendation of mode, alignment and generalized station locations and will be the transit investment alternative that best meets the purpose and need for the project (as defined in this report) and ideally will be competitive for funding through the FTA's New/Small Starts capital funding program. The RTA Board will submit the LPA to the Southeast Michigan Council of Governments (SEMCOG) for adoption into its 2040 Regional Transportation Plan for Southeast Michigan.

1.2 Gratiot Corridor Overview

Gratiot Avenue (M-3) is one of the oldest and most significant transportation corridors in southeast Michigan and continues to serve as a main artery that extends northeastward from Downtown Detroit to Macomb and St. Clair counties. Prior to the development of the interstate highway system, Gratiot Avenue was the main route connecting communities along Lake St. Clair cities and townships of Detroit, Eastpointe, Roseville, Clinton Township, Mount Clemens, New Haven, Richmond, Marysville, and Port Huron. Much of the development of these communities is due to the existence of the Gratiot Avenue corridor. Given its importance to southeast Michigan, travel along the corridor has increased throughout the years, and it remains one of the primary routes connecting Downtown Detroit to Port Huron and Canada.

Streetcars were introduced on Gratiot Avenue in 1863, which served as a very popular route. Service remained until 1956 when the transit system converted to bus only operations in parallel with the construction of Interstate I-94 at that time. Gratiot Avenue is currently served by buses by the Detroit Department of Transportation (DDOT) and Suburban Mobility Authority for Regional Transportation (SMART) and remains one of the highest ridership transit corridors in southeast Michigan.

HISTORIC GRATIOT STREETCAR



Source: RTA

The corridor changes significantly between Downtown Detroit, Mount Clemens, and up through M-59 in Clinton Township. Gratiot Avenue transitions from a seven-lane roadway with a wider outer lane for parking along its southern section to a median-divided boulevard between 8 Mile Road in Eastpointe and Mount Clemens, to a one-way pair in Mount Clemens, and finally to a five-lane roadway near M-59. Typically, heavy traffic flows occur southbound in the morning and northbound in the evening.

Prior to the opening of I-94, Gratiot Avenue was the major route between Downtown Detroit and Port Huron and required a wide roadway to accommodate heavy traffic volumes. Today, I-94 provides faster travel time than Gratiot. However, when I-94 is congested, several points along Gratiot Avenue serve as an efficient alternate route. The planned widening of I-94 is expected to occur during the next 25 years and will likely result in reduced traffic volumes on Gratiot Avenue.

Residential density varies along the Gratiot Avenue corridor. The southern portion of the corridor is characterized by higher densities within Greater Downtown Detroit, including the Paradise Valley district, Lafayette Park, and Eastern Market. The middle portion of the corridor (between Eastern Market and Conner Street) is characterized by the lowest densities within the corridor. Densities normalize north of Conner Street and are consistent through Macomb County to the northern terminus of the study area. In contrast transit dependency is much higher in the City of Detroit than in Macomb County. Major destinations along the corridor include Eastern Market, Macomb Mall, Downtown Mount Clemens, a variety of shopping centers, several schools, and multiple religious institutions.



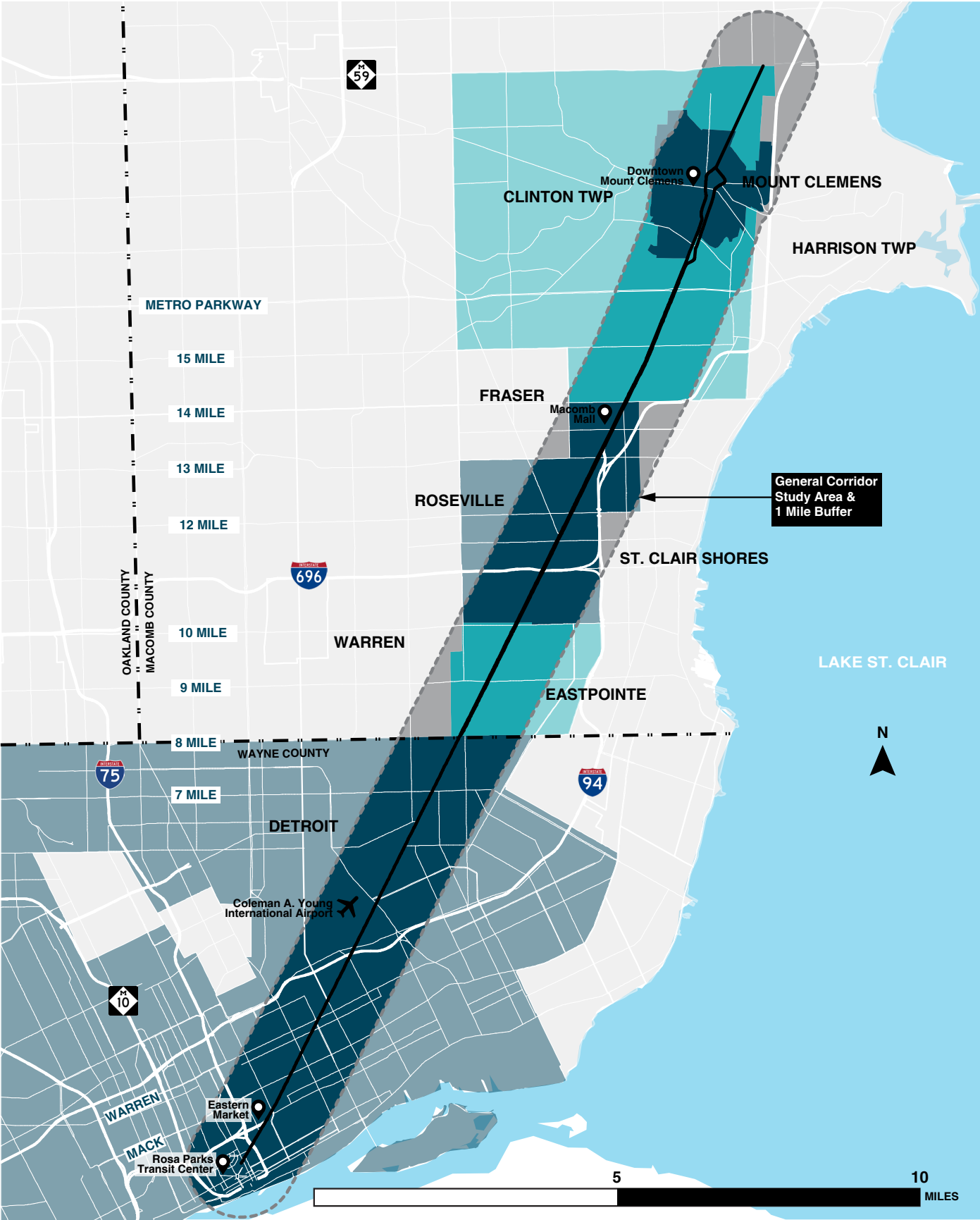


FIGURE 1-1. BEST: GRATIOT STUDY AREA



1.3 Summary of Project Purpose and Need

PURPOSE

The purpose of this study is to identify the most feasible alternative(s) for high-capacity rapid transit along the Gratiot Avenue corridor from Downtown Detroit to Mount Clemens and M-59. The objectives are to provide additional mobility options for both dependent and choice transit users, improve transit capacity and reliability, support ongoing economic development efforts within the region, encourage additional investment along the corridor, and connect with other rapid transit corridors that have been identified.

NEED #1 – IMPROVE AND INCREASE MOBILITY OPTIONS ALONG THE CORRIDOR

Transit along the Gratiot Avenue corridor serves several population segments that are currently dependent on transit for their daily mobility needs. The current fixed routes along the corridor are operating at or near capacity and operated by two different transit providers: DDOT and SMART. The gaps in service coverage, both in terms of area of coverage and in frequencies of these fixed routes, create a less viable travel option among other transit sensitive population groups that could benefit from a frequent, reliable one seat ride. These groups include, but are not limited to, those without access to vehicles, residents living in poverty, senior citizens, students, and many others.

These additional unmet transit needs along the corridor that, along with established transit ridership, creates the need for high-capacity rapid transit service along Gratiot Avenue. Such a system would support current users while providing new, viable transportation alternatives for the corridor's residents, employees, and visitors.

- The proportion of zero-car households within the study area is currently 14%, well above the regional average.
- Residents living in poverty account for over 25% of the study area's population, a rate that is nearly double the RTA region. This rate is nearly double the RTA region and continues to rise, based on trends in the last decade.
- The senior population is expected to grow by over 50% through to 2040, Elderly populations are generally more reliant on transit or other alternative forms of personal transportation for their daily mobility needs.
- Most of the communities within the study area are also expected to lose population through 2040 with the largest decrease occurring within the City of Detroit. The remaining population in the corridor will be disproportionately more dependent on public transit as a result of the compounding effect of the aging demographic.
- Gratiot Avenue has a high number of pedestrian and bicycle crashes along the corridor, approximately 4.3% of all crashes along the corridor involve a pedestrian or bicyclist. This number could be reduced by attracting additional motorists to transit, focusing bus service in exclusive guideways, providing safe pedestrian connections to and from stations and transfer points, and promoting the use of transit by bicyclists.

NEED #2 – PROVIDE FREQUENT, RELIABLE, ONE-SEAT TRANSIT SERVICE THAT GENERATES ADDITIONAL TRIPS AND ATTRACTS NEW RIDERS TO TRANSIT

There are two main transit routes along Gratiot Avenue between Mount Clemens and Downtown Detroit. DDOT Route 34 operates from Downtown Detroit to 8 Mile Road, SMART Route 560 provides local service between 23 Mile Road in Macomb County and Downtown Detroit. SMART Route 565 mimics the 560 route but is a commuter route service that has three morning inbound and three afternoon outbound trips. The function of these routes, both individually and as a system, can be inefficient and lack the ability as a mode to compete with automobiles.

- Current bus service can be slow, unreliable and crowded during peak hours. Users have noted that service could be more frequent. Even with headways of 10-minutes for DDOT Route 34 and SMART Route 560, there are crush loads during peak times.
- There is currently not continuous SMART service between Macomb County and Detroit throughout the entire day. During the weekday mid-day, SMART service arrives every 15 minutes, indicating that the most a person would wait to transfer from DDOT to SMART is 15 minutes. DDOT service during the weekday mid-day is every 12 minutes, indicating that the most a person would wait to transfer from SMART to DDOT is 12 minutes. Transfer times for Saturday and Sunday increase to 20 to 30 minutes between the two services.



- The average travel time for DDOT Route 34 is 45 minutes between 8 Mile Road and Downtown Detroit, while the average travel time for SMART Route 560 is 31 minutes between M-59 and 8 Mile and 62 minutes between M-59 and Downtown Detroit. The average travel time for automobiles is 45 minutes between M-59 to Downtown Detroit.
- While there is limited traffic congestion along Gratiot Avenue, there is considerable congestion along neighboring I-94. During the mid-day, a trip along I-94 between M-59 and Downtown Detroit takes around 25 minutes; however, during rush hour, this trip can easily take 70 minutes, with congestion mainly within the City of Detroit. Reconstruction along I-94 is expected to begin in 2017, causing further delay and congestion within the area. Provision of rapid transit can increase the “person” capacity of Gratiot Avenue.

NEED #3 - STIMULATE ECONOMIC DEVELOPMENT ALONG THE CORRIDOR

The Gratiot Avenue corridor within the City of Detroit has been hit hard during the last fifteen years, resulting in population loss along the Gratiot Avenue corridor and in the cities of Detroit and Mount Clemens. However, there have been employment gains along the corridor. Nationally, rapid transit investment has been shown to increase economic development within a corridor by \$3-4 dollars for every \$1 dollar spent (American Public Transit Association - Public Transportation: Moving America Forward, 2010). A transit investment in the corridor will assist in increasing the economic development along this corridor.

- The number of homes within the City of Detroit has decreased by nearly 35,000 in the last 15 years. As a result, population density along the corridor is lower in Detroit than in Macomb County.
- Residential vacancy in the City of Mount Clemens nearly doubled, from 6.2 percent to 11.4 percent, between 2000 and 2010, coinciding with the recession and housing crisis of 2008.
- While population is expected to decrease in the corridor, employment within the Gratiot Avenue corridor is expected to increase by nearly 7 percent. Employment growth is expected to be higher in various communities along the corridor, with a 14 percent increase in Clinton Township and a 13 percent increase in Mount Clemens.

NEED #4 - RETAIN AND ATTRACT PEOPLE OF ALL AGES TO THE AREA BY INCREASING THE QUALITY OF LIFE

The communities along the Gratiot Avenue corridor have lost approximately 26 percent of their population during the last fifteen years. Studies have shown that adding enhanced transit along a corridor, with the placement of stations in strategic locations will retain and attract more people to a corridor.

- According to an American Public Transit Association survey, most millennials prefer to utilize transit or biking over utilizing a car. Communities that attract this specific demographic offer a multitude of transportation choices, including access to good public transit.
- More millennials are also looking for ways to reduce their footprint on the environment by choosing multi-modal means of transportation, with a larger percentage utilizing non-motorized transportation than any other age group that has access to an automobile.
- With an increasing senior population expected within the corridor, it is important to provide additional transportation options to retain and also assist that growing demographic.



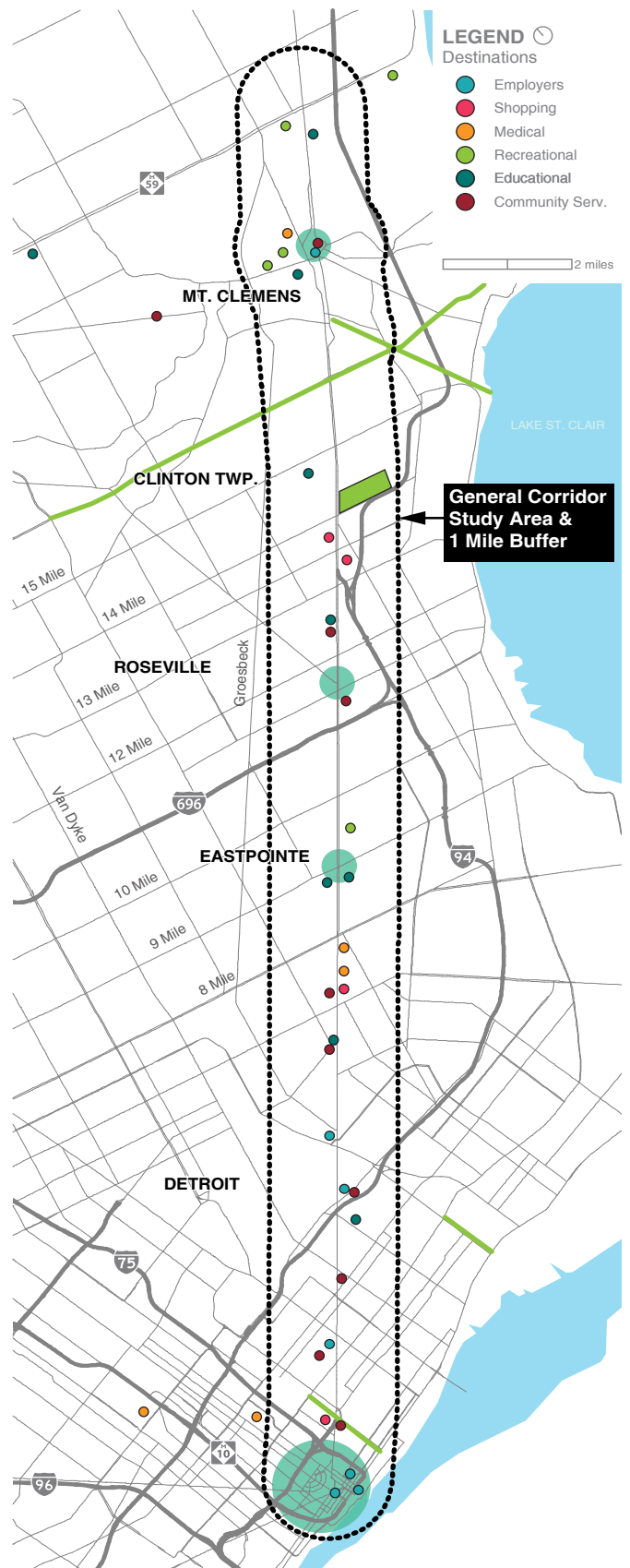
NEED #5 - DEVELOP A TRANSIT SYSTEM THAT IMPROVES CONNECTIVITY BETWEEN ORIGINS AND KEY DESTINATIONS, INCLUDING MAJOR REGIONAL EMPLOYERS

There are many significant destinations along Gratiot Avenue between Downtown Detroit and M-59 which could be better served by improved transportation options, including:

- **Major Employers:** General Motors, Blue Cross/Blue Shield, Quicken Loans, Macomb County, Faygo, Better Made Snack Foods
- **Downtown Districts:** Detroit, Eastpointe, Roseville, Mount Clemens, Gratiot DDA in Clinton Township
- **Major Shopping:** Eastern Market, Macomb Mall, Gratiot Plaza Shopping Center, The Shops at Northeast Village Shopping Center
- **Recreational:** Dequindre Cut Greenway, Conner Creek Greenway, Metro Parkway Trail, Clinton River Spillway Trail, Lincoln Memorial Park, Better Made Snack Foods, Michigan Military Technical & Historical Society, Michigan Transit Museum, Sanders Chocolate & Ice Cream Shoppe, Selfridge Military Air Museum, Crocker House Museum
- **Educational:** Detroit Public Library, Roseville Public Library, Eastpointe Public Library, Baker College, Oakland Community College, Macomb Community College, East Detroit High School, Mount Clemens High School, Catherine C. Blackwell Institute, Dianne M. Pellerin Center
- **Medical Facilities:** Detroit Medical Group, Henry Ford Macomb Hospital, Select Specialty Hospital, Professional Medical, StoneCrest Center
- **Community Services:** Smart Senior Services, Matrix Human Services, Michigan Department of Human Services, Operation Get Down, Bethlehem House, Franklin-Wright Settlements, Detroit Housing Commission, Clinton Township Senior Center, Roseville Senior Center, Macomb County Action Center

FIGURE 1-2. GRATIOT AVENUE DESTINATIONS

Source: Parsons Brinckerhoff, 2015



2.0 Public and Stakeholder Involvement

The process of community engagement began with the strategic selection of community leaders, staff, and stakeholders that would serve as members of the project's Technical and Policy Advisory Committees. The project team held targeted meetings with leadership from each corridor community to provide an overview of the planning process, confirm their participation on the Policy Advisory Committee, determine key staff to include on the Technical Advisory Committee, and uncover additional stakeholder groups within their community to engage in the planning process. The project officially launched on May 12, 2015 with a public rally in Campus Martius Park in Downtown Detroit that included an introduction to the RTA and all four BEST projects that will be occurring simultaneously. The event also featured multiple keynote addresses provided by local, state, and federal transit policy advocates. Attendees of the event were provided with general information on each project and methods for their continued engagement, including a schedule of upcoming public events along with written and digital outlets for providing input throughout the process.

The RTA hosted events in each of the four counties between May 18 and May 21 to further introduce the RTA and all four BEST projects to attendees. The events included targeted information on each project through a variety of displays and multimedia presentations. An additional meeting was held along Gratiot Avenue in Detroit on June 9, 2015. Attendees were able to engage directly with RTA staff and the project team to learn more about each project and provide corresponding input. Several exercises were developed by the project team to determine the components of transit that attendees value most, which directly informed the purpose and need statements of each project. Additional exercises provided an opportunity for attendees to pinpoint the location of their home, work, and frequent destinations, providing the project team with an initial understanding of population and employment centers along the corridor and

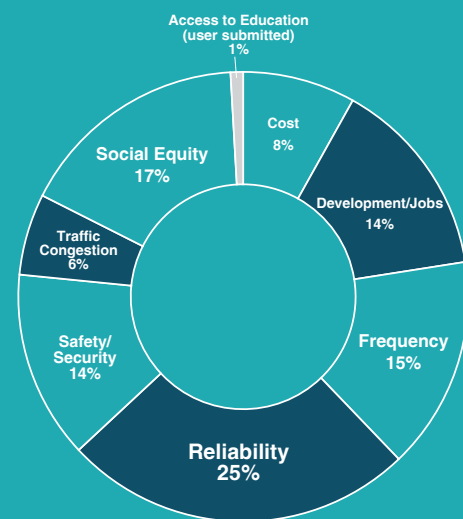


FIGURE 2-1. COMMUNITY NEEDS EVALUATION

Source: Parsons Brinckerhoff

typical travel patterns throughout. This series of events were attended by over 500 residents, who provided input through discussions with the project team, written comments, and digital comments via mySidewalk and social media. Figure 2-1 illustrates a summary of digital and written responses on community needs to date.

Through each public event, targeted stakeholder meetings, and engagement with the project's Technical and Policy Advisory committees, "reliability" consistently surfaced as the most important component of future rapid transit service. Reliability was identified as critical by many public event attendees that depend on transit service for their daily commute and other needs, and was additionally found to be important to policy-makers and technical stakeholders who viewed it as the factor that could potentially encourage more choice riders. Other themes that surfaced as part of initial outreach efforts included Social Equity, Frequency, Safety/Security, and Development/Jobs.

3.0 Goals and Objectives

The following goals and objectives were developed in response to public and stakeholder input gathered throughout the first phase of the planning process along with technical analysis that examined the current and future conditions of the Gratiot Avenue Corridor.

TABLE 3-1. BEST: GRATIOT GOALS AND OBJECTIVES

GOAL	OBJECTIVE
Provide a reliable alternative to driving	Improve on-time performance and frequency of service
Provide transportation options for people that cannot drive or do not have access to a car	Increase transit accessibility
Stimulate economic development along the corridor	Provide transit service that can influence more mixed-use development along the corridor.
Retain and attract people of all ages to the area	Provide flexible, reliable transportation options
Provide a service that is competitive with vehicular travel times	Improve transit travel times and speeds within the study area
Provide one-seat transit service between Macomb County and Detroit during the mid-day	Reduce the number of transit trips that require a transfer
Develop a transit system that improves connectivity between origins and key destinations, including major regional employers	Provide convenient and accessible transit service to activity centers
Improve safety for all users along the corridor including those using transit, non-motorized, and vehicular.	Identify improvements at high crash locations and separate modes where feasible, provide a system with security features at stations
Reduce traffic congestion within the region	Provide additional transit options that are competitive with the automobile to promote a mode-shift
Develop a rapid transit system that is economically viable for the region	Provide transit service that can be constructed, operated and maintained at low costs
Provide a transit service that is integrated with a multi-modal transportation network	Provide connections to non-motorized facilities that are along or cross the corridor and design a system that can enhance the non-motorized experience along Gratiot Avenue.

4.0 Evaluation Criteria

In order to evaluate the different transit modes and alignment options and identify the appropriate mode-alignment pairings that will define the detailed alternatives, the BEST: Gratiot Avenue study will follow a three-step method:

- The first step (“Tier 1: Mode Analysis”) is an assessment of each mode relative to overall implementation viability.
- The second step (“Tier 2: Detailed Evaluation”) is an assessment of the mode(s) that passed the Tier 1 Analysis. Alignment/station options will be developed and evaluated.
- The third step will result on the identification of the Locally Preferred Alternative (LPA). The alternative(s) that fare(s) best against the detailed criteria in the second step will be further refined in the third step (“Tier 3: Refine the LPA”).

The evaluation criteria associated with each step combine quantitative and qualitative performance measures. The Tier 1 phase will apply fewer and broader measures, including information from previous corridor/area studies, than Tier 2. The Tier 2 phase will apply more and finer performance measures and will identify the Preferred Alternative(s); the third step will evaluate the Preferred Alternative(s) against federal New Starts criteria to determine the Locally Preferred Alternative. This three-step process will result in the identification of an LPA that not only meets locally-identified project purpose and needs, but is also eligible and competitive for federal funding.

TABLE 4-1. BEST: GRATIOT EVALUATION CRITERIA

GOAL	TIER 1: FATAL FLAW ANALYSIS (QUALITATIVE)	TIER 2: DETAILED EVALUATION (QUALITATIVE AND QUANTITATIVE)	TIER 3: REFINE THE LPA
Provide a reliable alternative to driving	Flexibility in Routing / Improve on-time performance	Service Plan Opportunities Transit travel time	Congestion relief*
Provide transportation options for people that cannot drive or do not have access to a car	Accessibility	Proximity to/number of zero car and transit dependent households	Mobility improvements*
Stimulate economic development along the corridor	Economic development potential	Land use and economic development opportunities	Economic development* Land use*
Retain and attract people of all ages to the area	Reliability	Service Plan Opportunities Transit travel time Connections to multi-modal systems	Economic development*
Provide a service that is competitive with vehicular travel times	Potential for Mode Shift	Transit travel times Ridership	Congestion relief*
Provide one-seat transit service between Macomb County and Detroit during the mid-day	Frequency	Service Plan Opportunities	Mobility improvements*
Develop a transit system that improves connectivity between origins and key destinations, including major regional employers	Local and Regional Connectivity	Connections to key origins and destinations along corridor Connections to Transit Centers and other routes	Mobility improvements*
Improve safety for all users along the corridor including those using transit, non-motorized, and vehicular.	Safety / Security	Safety impacts to transit, non-motorized and vehicular Security enhancements	Mobility improvements*
Reduce traffic congestion within the region	Potential for Mode Shift	Potential for reduction in traffic congestion	Environmental benefits* Congestion relief*
Develop a rapid transit system that is economically viable for the region	Cost to Build, Operate and Maintain	Cost to Build, Operate and Maintain Cost effectiveness Community Support	Financial capacity analysis* Cost effectiveness*
Provide a transit service that is integrated with a multi-modal transportation network	Multi-modal connectivity	Connections to non-motorized system Existing and Potential Walkability	Environmental benefits* Congestion relief*

*Consistent with FTA New Starts/Small Starts criteria



5.0

Project Need #1

Project Need #1 - Improve and increase mobility options along the corridor

Transit along the Gratiot Avenue corridor serves several population segments that are currently dependent on transit for their daily mobility needs. The current fixed routes along the corridor are operating at or near capacity and operated by two different transit providers: DDOT and SMART. The gaps in service coverage, both in terms of area of coverage and in frequencies of these fixed routes, create a less viable travel option among other transit sensitive population groups that could benefit from a frequent, reliable one seat ride. These groups include, but are not limited to, those without access to vehicles, residents living in poverty, senior citizens, students, and many others.

These additional unmet transit needs along the corridor that, along with established transit ridership, creates the need for high-capacity rapid transit service along Gratiot Avenue. Such a system would support current users while providing new, viable transportation alternatives for the corridor's residents, employees, and visitors.

5.1 The proportion of zero-car households within the study area is currently 14%, well above the regional average.

In absence of adequate transit or non-motorized transportation options, residents must rely on automobiles for virtually all of their work and non-work trips. It is estimated that it costs drivers nearly \$9,000 annually to operate a typical vehicle (Source: AAA Driving Cost Study), which would represent over 18% of the average Michigan resident’s income. Low-income households are particularly vulnerable to this transportation cost, as it represents a larger share of their overall income with less funds available for other household needs. It is critical to ensure that the needs of transit-dependent residents while developing rapid transit solutions, as those without access to vehicles tend to rely more heavily on public transportation to access employment, education, medical facilities, and other daily needs.

Within the study area, the current percentage of zero car households is 14.5%, well above the regional average of 7.8%. The areas with the largest concentration of transit dependent populations are within the City of Detroit. By 2040, the percentage of zero-car households is expected to decrease to 12.4%, primarily due to projected decline in population along Gratiot Avenue between I-94 and 8 Mile Road.

FIGURE 5-1. ZERO CAR HH

Source: 2010 Census

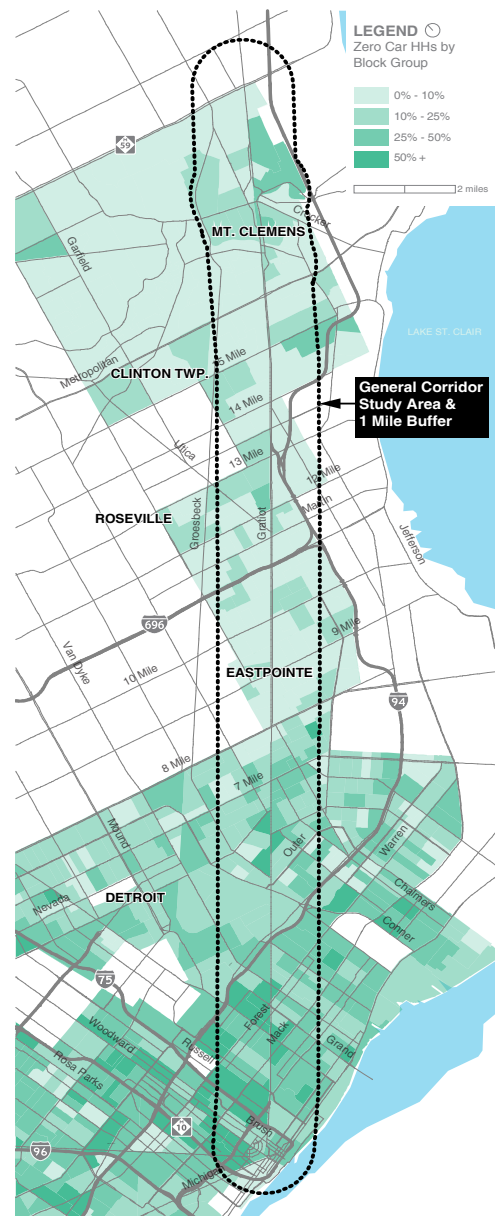


TABLE 5-1. ZERO CAR HOUSEHOLDS BY COMMUNITY

Source: 2010 Census and SEMCOG 2040 Forecast Report

COMMUNITY	2010	% TOTAL	2040	% TOTAL	% CHANGE
CLINTON TOWNSHIP	2,331	5.5%	3,248	7.1%	39.3%
DETROIT	56,580	21.0%	52,947	20.7%	-6.4%
EASTPOINTE	583	7.2%	572	6.5%	-1.9%
MT. CLEMENS	527	7.8%	544	8.0%	3.2%
ROSEVILLE	1,155	7.5%	1,247	7.9%	8.0%
STUDY AREA	11,163	14.5%	9,502	12.4%	-14.9%
CORRIDOR COMMUNITIES	61,176	17.9%	58,588	17.6%	-4.2%
RTA REGION	143,358	7.8%	167,249	8.6%	16.7%



5.2 Residents living in poverty account for over 25% of the study area’s population. This rate is nearly double the RTA region and continues to rise, based on trends in the last decade.

Poverty status is determined by comparing annual income to a set of dollar values (poverty thresholds), which are updated annually to allow for changes in the cost of living using the Consumer Price Index (CPI-U). (US Census Bureau)

The percentage of the population living in poverty within Gratiot Avenue corridor communities is much higher than the national average of 15.3%, and continues to rise. As illustrated in Table 5-2, each corridor community experienced a rise in residents living below the poverty level in the last decade. Communities at both the north (Mount Clemens) and south (Detroit) termini of the study area saw the most drastic increases, and populations living in poverty comprise over 1/5 of their total population. This increase is consistent with the densities illustrated in Figure 5-2, where the highest concentrations of people living in poverty can be found in most Detroit neighborhoods and select areas of Mount Clemens. Reliable rapid transit service and better mobility options along Gratiot are critical to connecting residents living in poverty to jobs, education, and their daily needs.

FIGURE 5-2. POPULATION LIVING IN POVERTY Source: 2010 Census

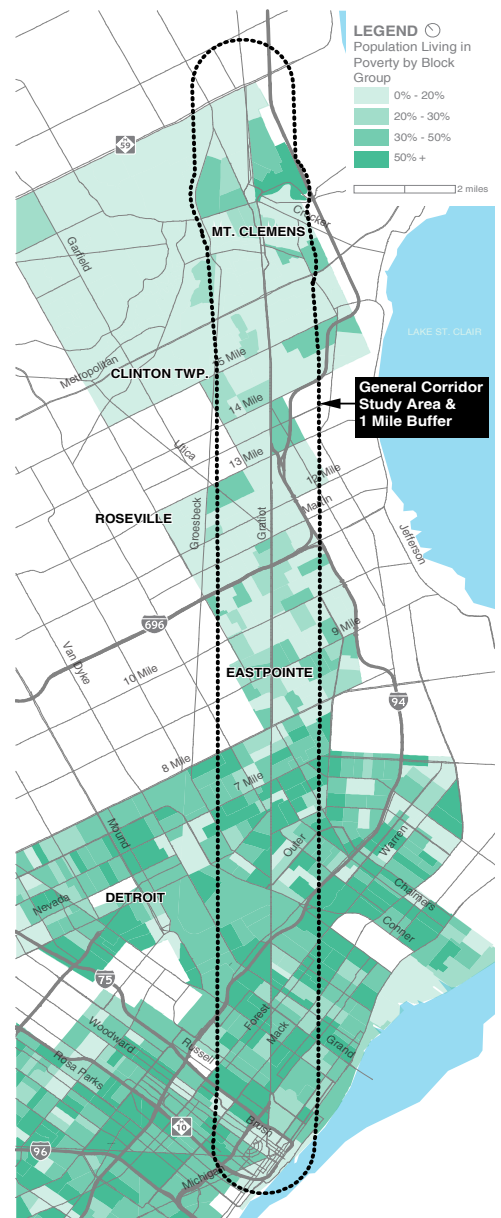


TABLE 5-2. POPULATION LIVING IN POVERTY BY COMMUNITY

Source: 2000 Census and 2010 ACS

COMMUNITY	2000	% TOTAL	2010	% TOTAL	% CHANGE
CLINTON TOWNSHIP	5,500	5.8%	9,933	10.3%	4.5%
DETROIT	243,153	26.1%	258,295	34.5%	8.4%
EASTPOINTE	2,174	6.4%	4,242	12.9%	6.5%
MT. CLEMENS	2,206	14.1%	3,139	21.5%	7.4%
ROSEVILLE	3,781	7.9%	6,169	13.0%	5.0%
STUDY AREA	63,272	17.9%	78,463	26.3%	24.0%
CORRIDOR COMMUNITIES	256,814	22.4%	281,778	31.1%	8.7%
RTA REGION	475,536	10.9%	623,803	14.8%	31.2%



5.3 The senior population along Gratiot is expected to grow by over 50% through 2040. Elderly populations are generally more reliant on transit or other alternative forms of personal transportation for their daily mobility needs.

As residents age, lifestyle changes and changes in their abilities result in gradual decline in the use of single-occupant vehicles as their primary means of transportation. While some residents over the age of 65 are still able to arrange for other options, many in that age group rely on public transportation for their daily mobility needs. Rapid transit investments along Gratiot Avenue must not only be a reliable option for seniors, but be designed and managed with their specific needs in mind. This includes the ability to locate transit stops near services that are important to seniors, such as housing, medical facilities and social and recreation centers. If reliable, convenient transit options are provided for seniors within corridor communities, those residents will be much more apt to “age in place” and maintain their quality of life.

As Table 5-3 illustrates, many Gratiot Avenue corridor communities are expected gain senior populations rapidly through 2040 with each expected to grow by at least 40%. Overall, senior populations within Gratiot Avenue corridor communities are expected to grow by a staggering 55% through 2040. As Figure 5-3 illustrates, the highest densities of senior populations occur in Clinton Township, with several similar concentrations spaced intermittently throughout the corridor. As suggested by current projections, concentrations of seniors are expected to become much more consistent along the corridor as baby boomers age, further establishing the need to provide better, more sustainable mobility options to prepare for this demographic shift.

FIGURE 5-3. SENIOR POPULATION

Source: 2010 Census

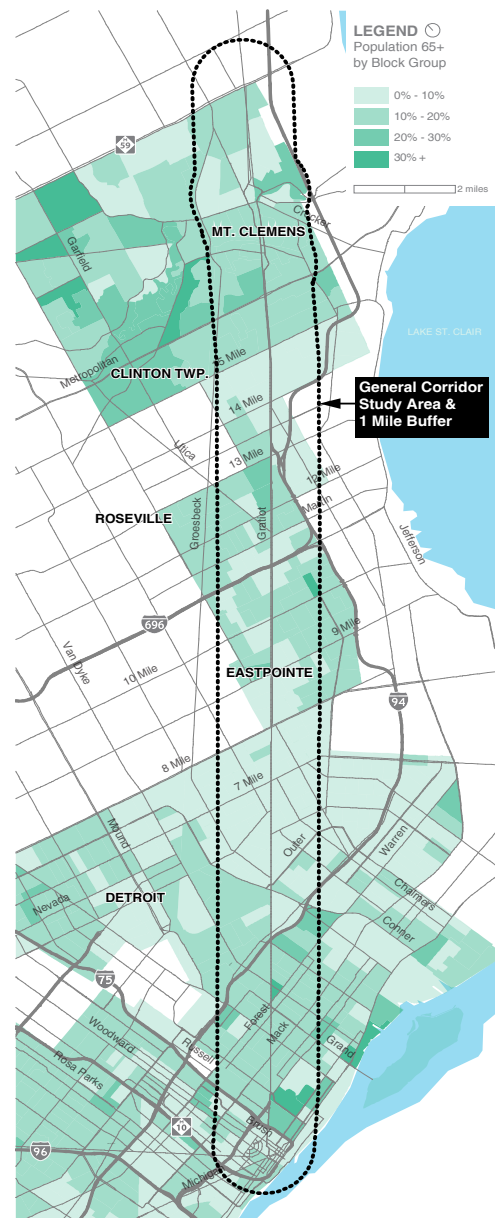


TABLE 5-3. SENIOR (AGE 65+) POPULATION BY COMMUNITY

Source: 2010 Census and SEMCOG 2040 Forecast Report

COMMUNITY	2010	2040	ANTICIPATED CHANGE	% CHANGE
CLINTON TOWNSHIP	15,677	28,179	12,502	79.75%
DETROIT	81,925	118,756	36,831	44.96%
EASTPOINTE	3,677	7,987	4,310	117.22%
MT. CLEMENS	2,120	3,683	1,563	73.73%
ROSEVILLE	6,198	10,894	4,696	75.77%
STUDY AREA	40,364	N/A	N/A	N/A
CORRIDOR COMMUNITIES	109,597	169,499	59,902	54.66%
RTA REGION	544,958	993,704	448,746	82.30%

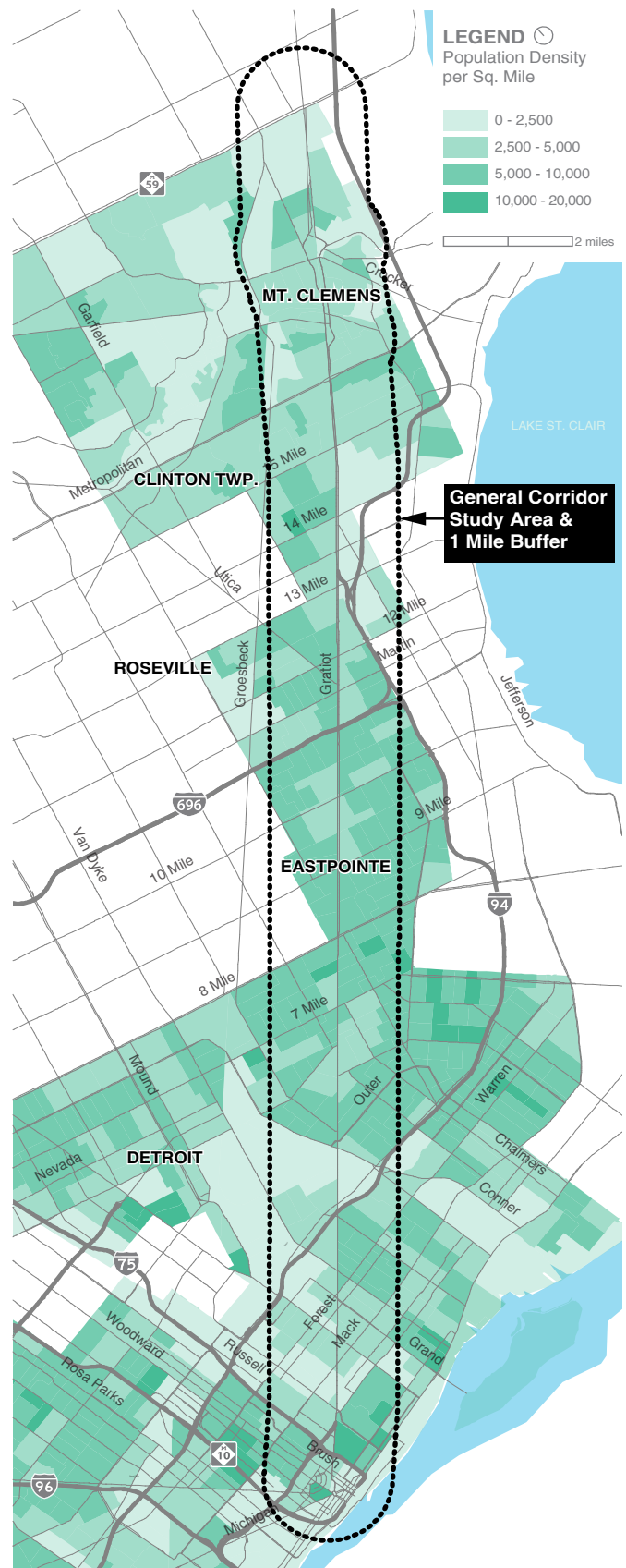
5.4 Most of the study area communities are also expected to lose population through 2040 with the largest decrease occurring within the City of Detroit. The remaining population in the corridor will be disproportionately more dependent on public transit as a result of the compounding effect of the aging demographic.

Despite dramatic population loss over the previous decade, Detroit is witnessing renewed investment and economic activity in downtown and midtown area; the effects of reinvestment and economic activities are yet to trickle down to the neighborhoods. As Figure 5-4 illustrates, densities near Downtown Detroit (especially within neighborhoods directly adjacent to the east) are some of the highest within the study area. A large segment of the corridor within Detroit, particularly from the Eastern Market area to Outer Drive, is characterized by vacancy (both land and housing) that contributes to lower densities within the area.

Population density tends to stabilize from the northern portion of Detroit to Mount Clemens, where most neighborhoods within this segment have densities between 2,500 and 10,000 per square mile. Forecasts through 2040 suggest that population trends from 2000 to 2010 will continue, with the exception of Eastpointe, which is expected to gain population back that was lost during the 2000s. Detroit will remain the largest community in the Gratiot Avenue corridor, but it is projected to continue to lose population through 2040, declining by nearly 100,000 residents.

FIGURE 5-4. POPULATION DENSITY

Source: 2010 Census



Overall, communities within the Gratiot corridor are expected to lose population at a more accelerated pace than the four county RTA region, which is projected to decline only slightly through 2040. Rapid transit investments along this corridor can play a critical role in stabilizing population trends in the short term. It can also help to reverse the expected population decline in the long term by attracting new residents through coordinated land use plans that encourage residential, employment, and mixed-use development at transit stations, and by locating transit stations at key employment nodes.

TABLE 5-4. POPULATION CHANGE [2010-2040] BY COMMUNITY

Source: 2010 Census and SEMCOG 2040 Forecast Report

COMMUNITY	2010	2040	ANTICIPATED CHANGE	% CHANGE
CLINTON TOWNSHIP	96,796	103,823	7,027	7.30%
DETROIT	713,862	614,969	-98,893	-13.85%
EASTPOINTE	32,442	34,467	2,025	6.20%
MT. CLEMENS	16,314	15,461	-853	-5.20%
ROSEVILLE	47,299	45,263	-2,036	-4.30%
STUDY AREA	302,409	278,578	-23,831	-7.90%
CORRIDOR COMMUNITIES	906,713	813,983	-92,730	-10.23%
RTA REGION	4,208,715	4,195,419	-13,296	-0.30%



5.5 Gratiot Avenue has a high number of pedestrian and bicycle crashes along the corridor, approximately 4.3% of all crashes along the corridor involve a pedestrian or bicyclist. This number could be reduced by attracting additional motorists to transit, focusing bus service in exclusive guideways, providing safe pedestrian connections to and from stations and transfer points, and promoting the use of transit by bicyclists.

Facilities created for use by pedestrians and bicyclists are generally considered active or non-motorized transportation facilities. These facilities are particularly important for transit riders for travel to and from stations at the beginning and end of their trips. The Gratiot Avenue corridor and the one mile buffer around the corridor include a few non-motorized facilities including separated pathways, on-road bike lanes and shared-use paths, but the bulk of the non-motorized facilities along the corridor are limited to sidewalks.

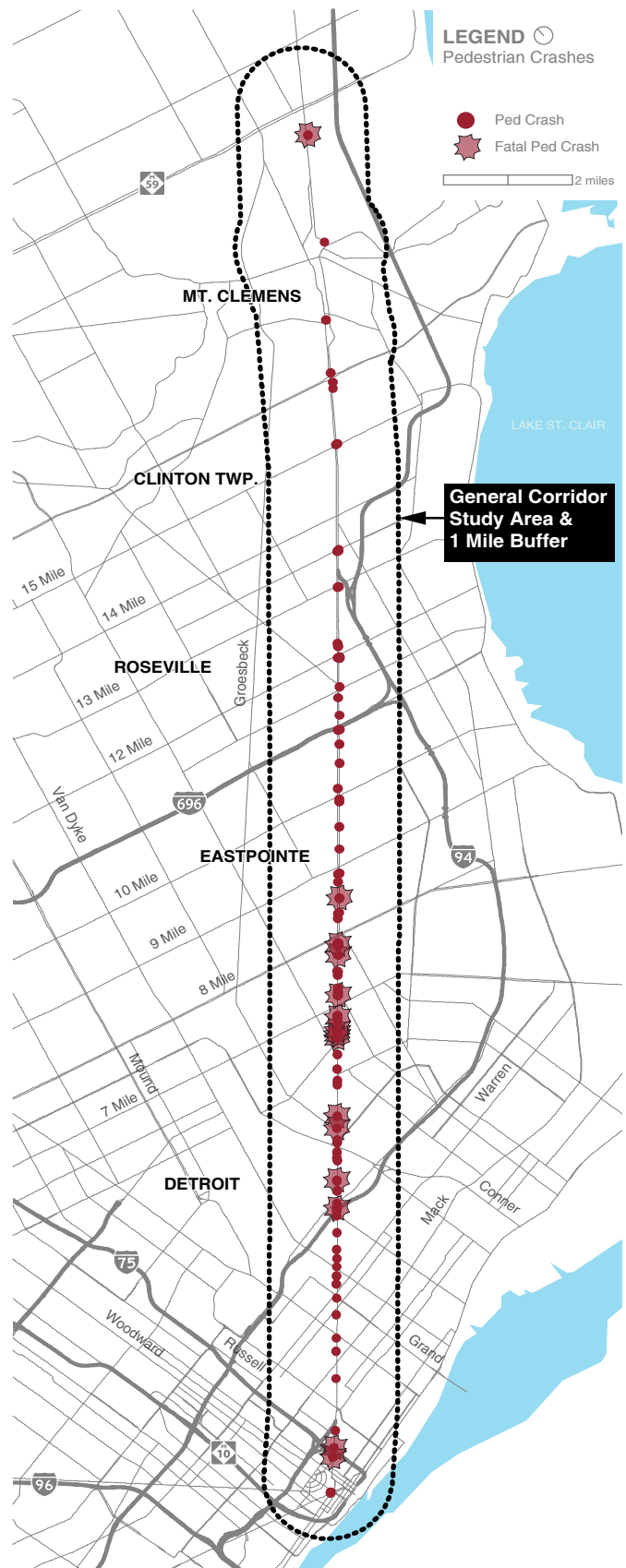
PEDESTRIAN TRAVEL

The Gratiot corridor experiences pedestrian activities due to both active town centers and high frequency transit service. A summary of some of these activity centers can be viewed at: <http://maps.semcog.org/Gratiot/>. Since almost every transit trip begins and ends with a pedestrian trip, it is vital that pedestrian infrastructure be maintained and where possible, improved to support transit.

Safety and security are major concerns for pedestrian activity within the corridor. Between 2012 and 2014 there were approximately 130 pedestrian crashes along Gratiot Avenue between Downtown Detroit to M-59; this accounts for 2.5% of the crashes along the corridor. Of those pedestrian crashes, 45 were either

FIGURE 5-5. PEDESTRIAN CRASHES

Source: Parsons Brinckerhoff, 2015



fatal or very serious. Within the SEMCOG region, approximately 1% of the crashes involve a pedestrian. Within our corridor communities approximately 2.2% involve a pedestrian. In the City of Detroit, there is a high incidence of pedestrian crashes between Randolph Street and Vernor Highway, north and south of the I-75 interchange, south of the I-94 interchange, and between 7 Mile Road and 8 Mile Road. As a result, MDOT has performed three road safety audits within the corridor:

- Conner Street / Outer Drive
- Van Dyke Avenue
- Mt. Elliott Street

SEMCOG also performed two walkability/bikeability assessments as part of the study, 'Creating Successful Corridors – Gratiot Avenue Pilot Corridor' that identified recommendations for improving pedestrian (and bicycle) travel in Downtown Detroit and Clinton Township. The same study also includes neighborhood assessments that include connectivity recommendations at 8 Mile Road and in Mount Clemens.

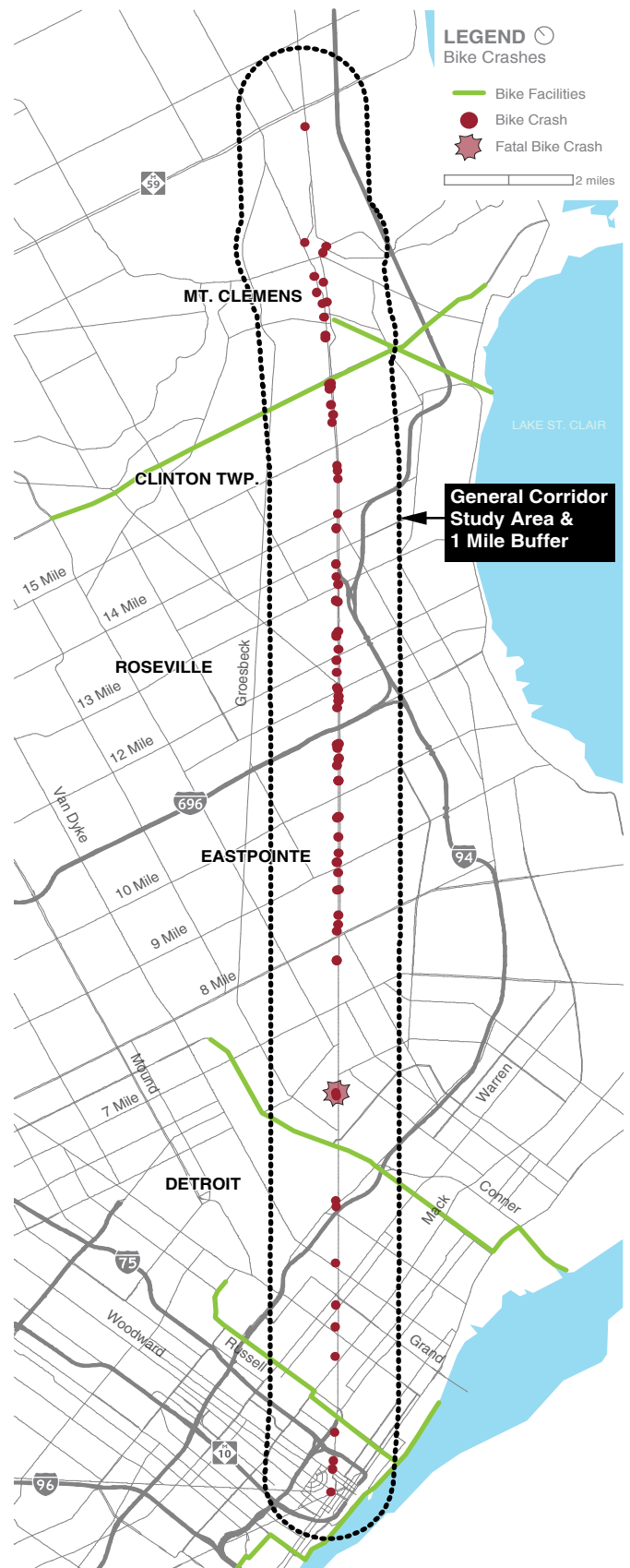
Gratiot Avenue from Downtown Detroit to Downtown Mount Clemens has sidewalks on at least one side of the road. Between Downtown Mount Clemens and M-59, sidewalks are located only sporadically; there is no continuity in this area. Major cross roads are also lined with sidewalks. Many residential neighborhoods within one mile of Gratiot Avenue have sidewalks to easily access the corridor, though due to high levels of blight and vacancy, some areas do not have a fully connected system of sidewalks. Some sidewalks are badly damaged, missing or overgrown with greenery, leaving an incomplete network.

BICYCLE TRAVEL

Bicycles allow transit users to travel beyond the five-minute walking threshold for pedestrians, thereby expanding their reach to destinations accessible from transit stops. The SEMCOG Bicycle and Pedestrian Plan for Southeast Michigan outlines specific bicycling stress levels based on roadway conditions. The Gratiot Avenue corridor includes roadways in all Tiers, including Tier 1: No Stress and High Comfort, Tier 2: Low Stress and High Comfort, Tier 3: Moderate Stress and Comfort, and Tier 4: High Stress and Low Comfort. Nearly all of Gratiot Avenue itself is identified as Tier 4: High Stress and Low Comfort, due to high traffic volumes, high posted speeds and a lack of bicycle facilities. Major roadways crossing Gratiot Avenue also fall into this category. The majority of local/neighborhood roads within one mile of Gratiot Avenue are Tier 1: No Stress and High Comfort roads. These roads are typically in residential areas and are suitable for both bicyclists (of all levels) and pedestrians. Tier 1

FIGURE 5-6. BICYCLE CRASHES

Source: Parsons Brinckerhoff, 2015



roads are typically low speed roads. Tier 2 and Tier 3 roads are scattered throughout the corridor. Many bicyclists generally feel comfortable on these roads, although, some non-motorized facilities would help reduce stress on Tier 3 roadways, depending on context and actual travel speeds. Currently there are no marked bicycle lanes along Gratiot Avenue or that cross Gratiot Avenue.

While existing conditions are not ideal for bicycling; Gratiot Avenue serves as the primary north-south route within the corridor, due to a lack of other favorable options—there are no other parallel roads or trails that serve bicyclist wishing to travel north or south. There is one marked bike route that crosses Gratiot Avenue at East Grand Boulevard in the City of Detroit. There were approximately 85 bicycle/vehicle crashes along Gratiot Avenue from 2012 to 2014, accounting for 1.7% of all crashes along the corridor. Of those 85 crashes, one involved a fatality and 11 had a serious injury. Within the SEMCOG region, 0.7% of crashes involve a bicyclist. Within our corridor communities, about 0.7% involve a bicyclist.

As mentioned in SEMCOG's *Creating Successful Corridors – Gratiot Avenue Pilot Corridor*, the lack of bicycling facilities creates erratic bicycling behavior and potential safety concerns. Multiple agencies including MDOT, Detroit Department of Public Works, Detroit Economic Development Corporation, Eastern Market Corporation, Macomb County Planning, Clinton Township, and the Cities of Roseville and Mount Clemens have called for increased bicycling amenities within the corridor. For these reasons and more, SEMCOG and MDOT's *Bicycle and Pedestrian Plan for Southeast Michigan* identifies the road as a regional bicycle and pedestrian corridor. In addition the City of Detroit *Non-motorized Plan* and the *Detroit Greenways Coalition* have identified Gratiot Avenue as a primary non-motorized route.

Any enhancements to transit service should be sensitive to the need of bicyclists, creating a truly multi-modal corridor.



6.0 Project Need #2

Project Need #2 - Provide frequent, reliable, one-seat transit service that generates additional trips and attracts new riders to transit

There are two main transit routes along Gratiot Avenue between Mount Clemens and Downtown Detroit. DDOT Route 34 operates from Downtown Detroit to 8 Mile Road, SMART Route 560 provides local service between 23 Mile Road in Macomb County and Downtown Detroit. SMART Route 565 mimics the 560 route but is a commuter route service that has three morning inbound and three afternoon outbound trips. The function of these routes, both individually and as a system, can be inefficient and lack the ability as a mode to compete with automobiles.

6.1 Current bus service can be slow, unreliable and crowded during peak hours. Users have noted that service could be more frequent. Even with headways of 10-minutes for DDOT Route 34 and SMART Route 560, there are crush loads during peak times.

Primary fixed bus routes operating along Gratiot Avenue include DDOT Route 34 and SMART Route 560, which are two of the busiest bus routes in the region. DDOT Route 34 carries over 5,600 passengers during an average weekday, over 4,000 on Saturdays, and nearly 3,000 on Sundays (DDOT, 2014). SMART Route 560 (in combination with the express Route 565) carries over 5,500 passengers during an average weekday, over 3,000 on Saturdays, and over 2,000 on Sundays (SMART, 2014). By comparison, ridership on these two routes are higher than any crosstown service that intersects the corridor and carry more riders than all routes within the region, with the exception of those on Woodward Avenue.

Due to the ridership on these routes, significant overcrowding can occur, especially during rush hours. Investments in rapid transit along this corridor that can carry more riders will help to relieve these strained local bus routes, providing more comfortable conditions and reliable service for existing users.

6.2 There is currently not continuous SMART service between Macomb County and Detroit throughout the entire day. During the weekday mid-day, SMART service arrives every 15 minutes, indicating that the most a person would wait to transfer from DDOT to SMART is 15 minutes. DDOT service during the weekday mid-day is every 12 minutes, indicating that the most a person would wait to transfer from SMART to DDOT is 12 minutes. Transfer times for Saturday and Sunday increase to 20 to 30 minutes between the two services.

Due to the geographical boundaries serviced by DDOT and SMART service, transfers between the two systems is a daily need for many transit users. While SMART Route 560 is supplemented during rush hour by Route 565 to provide service into Downtown Detroit, these buses do not service any stops south of 8 Mile until they reach downtown. Similarly, DDOT Route 34 extends from Downtown Detroit to 8 Mile, but does not service any locations within Macomb County.

These conditions require transfers along the Gratiot Corridor for more localized trips coming into Detroit during rush hour, all trips coming into Detroit during off-peak hours, and all reverse commute trips from Detroit to Macomb County. Transfer times of up to 15 minutes during the week and up to 30 minutes during the weekend create an additional burden for transit users that are forced to use the two systems for a single trip. In addition, the lack of a dedicated transfer facility at Gratiot and 8 Mile makes transfers less comfortable and more challenging for transit users, especially during winter months.



6.3 The average travel time for DDOT Route 34 is 45 minutes between 8 Mile Road and Downtown Detroit, while the average travel time for SMART Route 560 is 31 minutes between M-59 and 8 Mile and 62 minutes between M-59 and Downtown Detroit. The average travel time for automobiles is 45 minutes between M-59 to Downtown Detroit.

During the mid-day, transit connections between M-59 and Downtown Detroit take over two times longer than the same trip made by automobile. During rush hour, transit connections between M-59 and Downtown Detroit are more comparable to automobiles, but are still slightly higher on average. Table 6-1 illustrates the comparison of travel times between automobiles and transit along the corridor.

TABLE 6-1. TRAVEL TIMES FOR AUTOS AND TRANSIT (M-59 TO DETROIT)

MODE	MID-DAY	RUSH HOUR
AUTOMOBILES ALONG GRATIOT	40 MINUTES	55 MINUTES
AUTOMOBILES ALONG I-94	28 MINUTES	25 - 85 MINUTES
TRANSIT ALONG GRATIOT	90 MINUTES	60 MINUTES

Source: RITIS and SMART, 2015

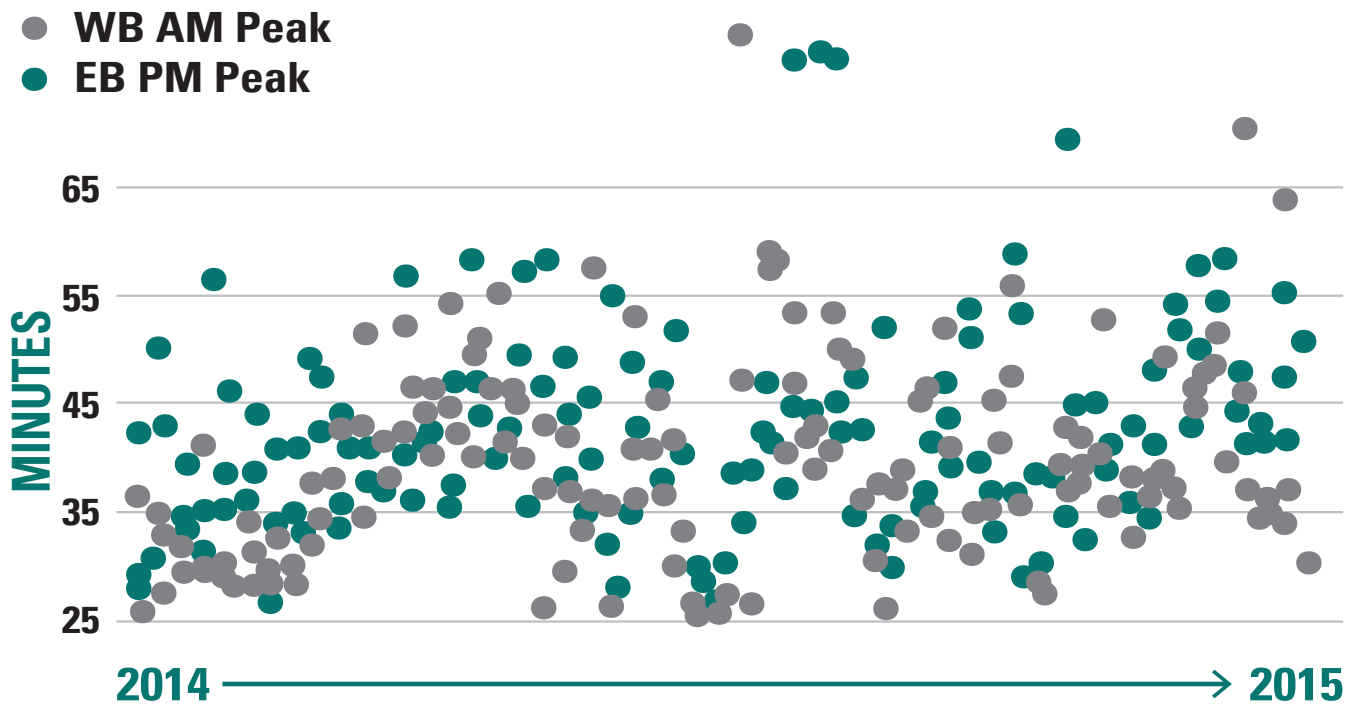
6.4 While there is limited traffic congestion along Gratiot Avenue, there is considerable congestion along neighboring I-94. During the mid-day, a trip along I-94 between M-59 and Downtown Detroit takes around 25 minutes; however, during rush hour, this trip can easily take 70 minutes, with congestion mainly within the City of Detroit. Reconstruction along I-94 is expected to begin in 2017, causing further delay and congestion within the area. Provision of rapid transit can increase the “person” capacity of Gratiot Avenue.

Most traffic traveling along this corridor utilizes I-94, a major expressway that runs parallel to Gratiot Avenue along the entire length of the study corridor to the east. In operation for over 50 years, I-94 provides an alternate route to travel on other than Gratiot Avenue for commuters living along the corridor. The increased travel speed and absence of signalized intersections makes it a faster and more attractive travel option for auto users.

However, travel conditions along I-94 vary greatly throughout the day. Typically, westbound travel is congested in the morning rush hour and eastbound travel is congested in the evening rush hour. Figure 6-1 illustrates the travel time along I-94 between M-59 and Downtown Detroit during the morning and afternoon rush hours. As this figure illustrates, travel time is inconsistent and can fluctuate considerably from day to day. This variability creates challenges for commuters who rely on this route for their daily commute.



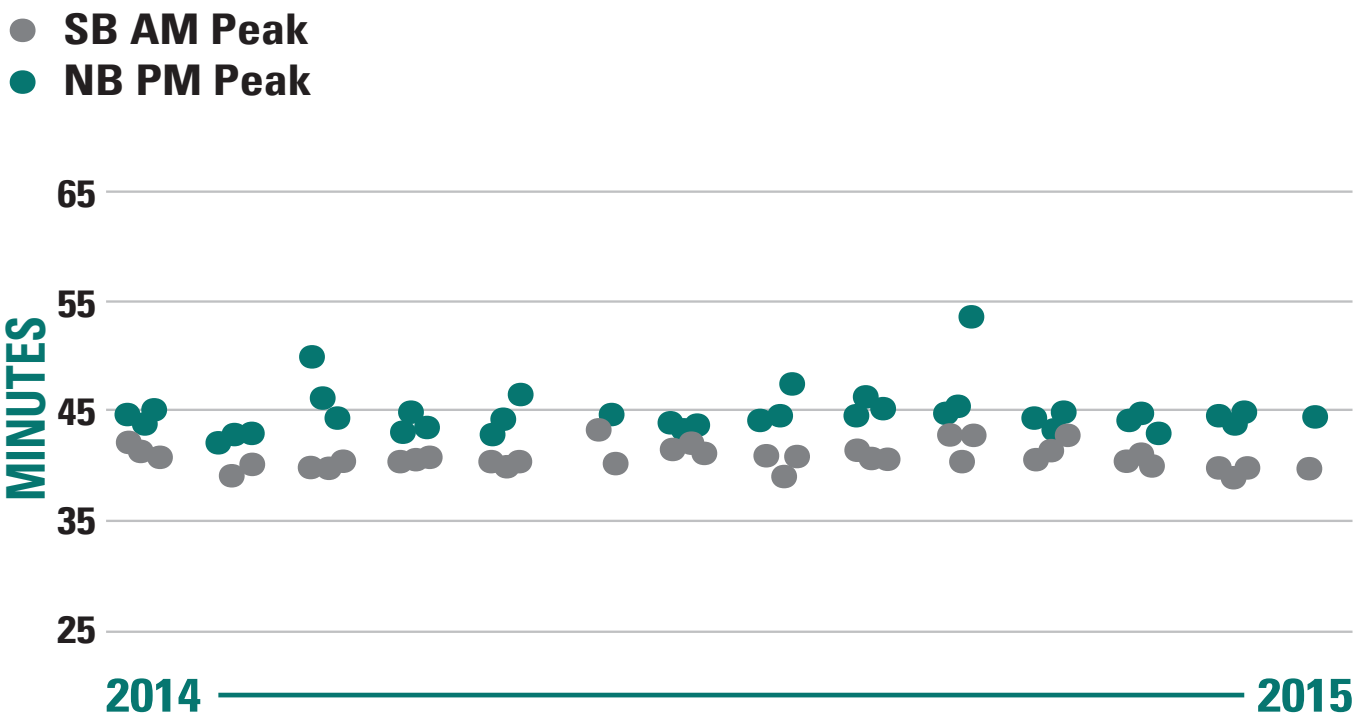
FIGURE 6-1. TRAVEL TIMES FOR AUTOS AND TRANSIT ON I-94 (M-59 TO DETROIT)



Source: RITIS, 2015

While the average travel times along Gratiot Avenue (40 minutes during the mid-day and 55 minutes during rush hour) are higher than those of I-94 (28 minutes during the mid-day and 25-85 minutes during the rush hour), it provides an attractive alternative to I-94 because travel times fluctuate very little from day to day. In comparison, Gratiot Avenue provides more consistent travel times throughout the day, as illustrated in Figure 6-2.

FIGURE 6-2. TRAVEL TIMES FOR AUTOS AND TRANSIT ON GRATIOT (M-59 TO DETROIT)



Source: RITIS, 2015



7.0

Project Need #3

Project Need #3 - Stimulate economic development along the corridor

The Gratiot Avenue corridor within the City of Detroit has been hit hard during the last fifteen years, resulting in population loss along the Gratiot Avenue corridor and in the cities of Detroit and Mount Clemens. However, there have been employment gains along the corridor. Nationally, rapid transit investment has been shown to increase economic development within a corridor by \$3-4 dollars for every \$1 dollar spent (American Public Transit Association - Public Transportation: Moving America Forward, 2010). A transit investment in the corridor will assist in increasing the economic development along this corridor.

7.1 The number of homes within the City of Detroit has decreased by nearly 35,000 in the last 15 years. As a result, population density along the corridor is lower in Detroit than in Macomb County.

Table 7-1 illustrates the number of homes by community over the past 15 years. Between the years 2000 to 2010, the number of housing units decreased in the City of Detroit and the City of Eastpointe. The City of Detroit had the most significant decreases with approximately 35,000 housing units demolished over the past fifteen years. While the City of Detroit has issued almost 10,000 building permits in the last fifteen years, the number of units being demolished is almost at 40,000 between the year 2000 and 2015. Figure 7-1 illustrates that some areas along Gratiot Avenue north and south of I-94 has lower population densities compared to those areas in the cities of Eastpointe and Mount Clemens. Over the next 25 years, the City of Detroit is expected to lose an additional 100,000 people, further reducing the population density.

FIGURE 7-1. POPULATION DENSITY

Source: 2010 Census

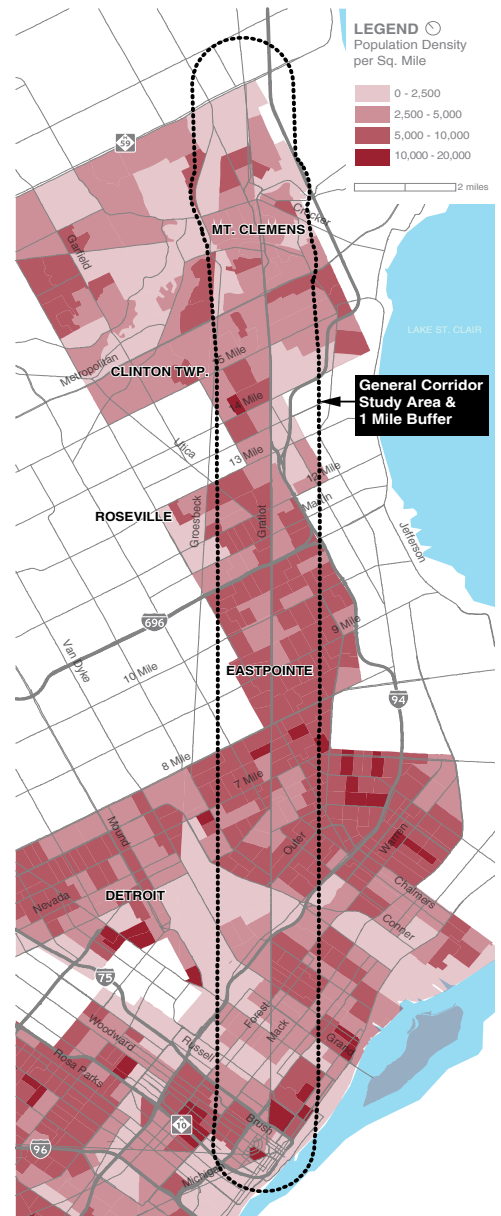


TABLE 7-1. NUMBER OF HOUSING UNITS BY COMMUNITY

Source: 2015 SEMCOG Community Profile

COMMUNITY	TOTAL HOUSING 2000	TOTAL HOUSING 2010	CHANGE (2000 – 2010)	TOTAL HOUSING 2014	CHANGE (2000 – 2014)
CLINTON TOWNSHIP	41,803	45,288	3,485	46,150	4,347
DETROIT	375,096	349,170	-25,926	340,694	-34,402
EASTPOINTE	13,965	13,796	-169	13,775	-190
MT. CLEMENS	7,546	7,582	36	7,573	27
ROSEVILLE	20,519	21,260	741	21,216	697

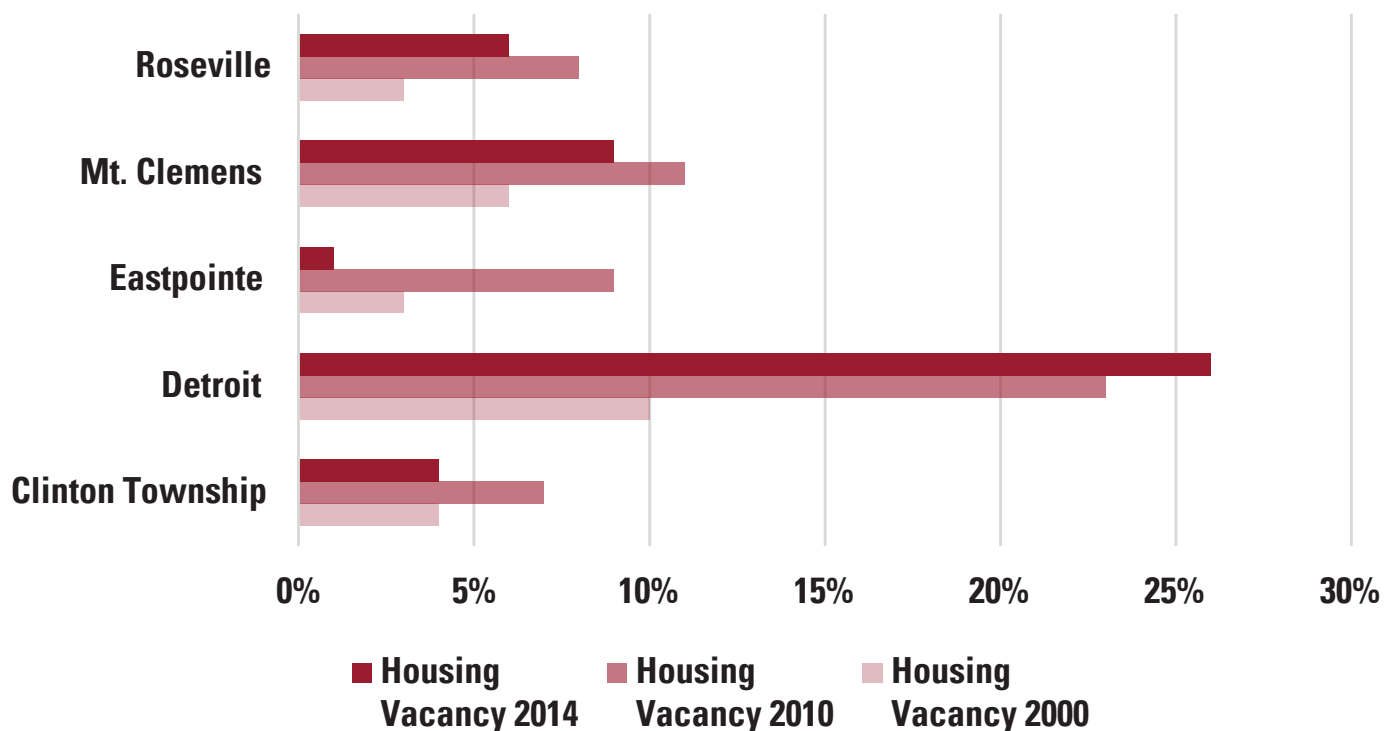


7.2 Residential vacancy in the City of Mount Clemens nearly doubled, from 6.2 percent to 11.4 percent, between 2000 and 2010, coinciding with the recession and housing crisis of 2008.

This trend not only occurred in the City of Mount Clemens, but was consistent for all of the communities along the Gratiot Avenue corridor. Between 2000 and 2010, all communities saw an increase in residential vacancies, in fact most communities doubled in vacancies, despite increases in total housing units during that same time. However, most of the communities have started to bounce back in the last few years with the exception of the City of Detroit. This percentage will continue to decrease as more vacant homes are being demolished. But with the continued decrease in population expected in the City of Detroit, more homes will continue to become vacant.

TABLE 7-2. NUMBER OF HOUSING VACANCIES BY COMMUNITY

COMMUNITY	VACANT 2000	VACANT 2010	VACANT 2014
CLINTON TOWNSHIP	1,504 (4%)	3,252 (7%)	1,897 (4%)
DETROIT	38,668 (10%)	79,725 (23%)	88,521 (26%)
EASTPOINTE	370 (3%)	1,239 (9%)	88 (1%)
MT. CLEMENS	473 (6%)	868 (11%)	663 (9%)
ROSEVILLE	543 (3%)	1,707 (8%)	1,350 (6%)



Source: 2015 SEMCOG Community Profile

7.3 While population is expected to decrease in the corridor, employment within the Gratiot Avenue corridor is expected to increase by nearly 7 percent. Employment growth is expected to be higher in various communities along the corridor, with a 14 percent increase in Clinton Township and a 13 percent increase in Mount Clemens.

Table 7-3 summarizes the employment in 2010 and anticipated employment in 2040 within the study area and within the RTA region. This study area, anchored by Detroit as the region's major employment center, represents a major source of employment within the RTA region. As the economies of each corridor community continue to rebound, each is expected to add jobs consistently through 2040. Overall, corridor communities will gain over 17,000 jobs, a 3.98% increase from 2010 to 2040. Detroit is expected to gain jobs at a slower pace, but due to its size in the region's economy will contribute over 7,000 jobs by 2040.

TABLE 7-3. EMPLOYMENT BY COMMUNITY

COMMUNITY	2010	2040	ANTICIPATED CHANGE	% CHANGE
CLINTON TOWNSHIP	43,322	49,476	6,154	14.21%
DETROIT	347,545	354,792	7,247	2.10%
EASTPOINTE	7,803	8,274	471	6.00%
MT. CLEMENS	16,601	18,752	2,151	13.00%
ROSEVILLE	22,241	23,634	1,393	6.30%
STUDY AREA	190,188	203,089	12,901	6.80%
CORRIDOR COMMUNITIES	437,512	454,928	17,416	3.98%
RTA REGION	2,298,819	2,563,493	264,674	11.50%

Source: SEMCOG 2040 Forecast Report



8.0

Project Need #4

Project Need #4 - Retain and attract people of all ages to the area by increasing quality of life

The communities along the Gratiot Avenue corridor have lost approximately 26 percent of their population during the last fifteen years. Studies have shown that adding enhanced transit along a corridor, with the placement of stations in strategic locations will retain and attract more people to a corridor.

8.1 According to an American Public Transit Association survey, most millennials prefer to utilize transit or biking over utilizing a car. Communities that attract this specific demographic offer a multitude of transportation choices, including access to good public transit.

Communities nationwide are competing to retain and attract millennials. This demographic segment is known to gravitate to more urban- and transit-oriented activities, expand entrepreneurial activities, and helps off-set the trend toward an increasingly aging population. A recent Crain's Detroit Business article estimated that 73% of millennials "want better access to mass transit in metro Detroit", which requires a mixture of land uses, housing types, transit-oriented development and a multi-modal transportation system. Millennials are the segment of the population that was born from the early 1980s to the early 2000s, with ages between 20 and 40. Table 8-1 illustrates the population of 20 to 40 year olds in the year 2000 compared to 2010 and found that this demographic has been decreasing. In addition, the total percentage of 20 to 40 year olds has been decreasing as well, indicating that population is either younger or older. One way to reverse this trend is to offer more transportation choices to this demographic.

TABLE 8-1. POPULATION AGED 20 TO 40 BY COMMUNITY

COMMUNITY	2000	2010	CHANGE 2000 - 2010	% TOTAL	
				2000	2010
CLINTON TOWNSHIP	28,210	24,877	-3,333	29%	26%
DETROIT	277,524	187,195	-90,329	29%	26%
EASTPOINTE	9,806	8,793	-1,013	29%	27%
MT. CLEMENS	5,643	4,727	-916	33%	29%
ROSEVILLE	14,848	12,965	-1,883	31%	27%

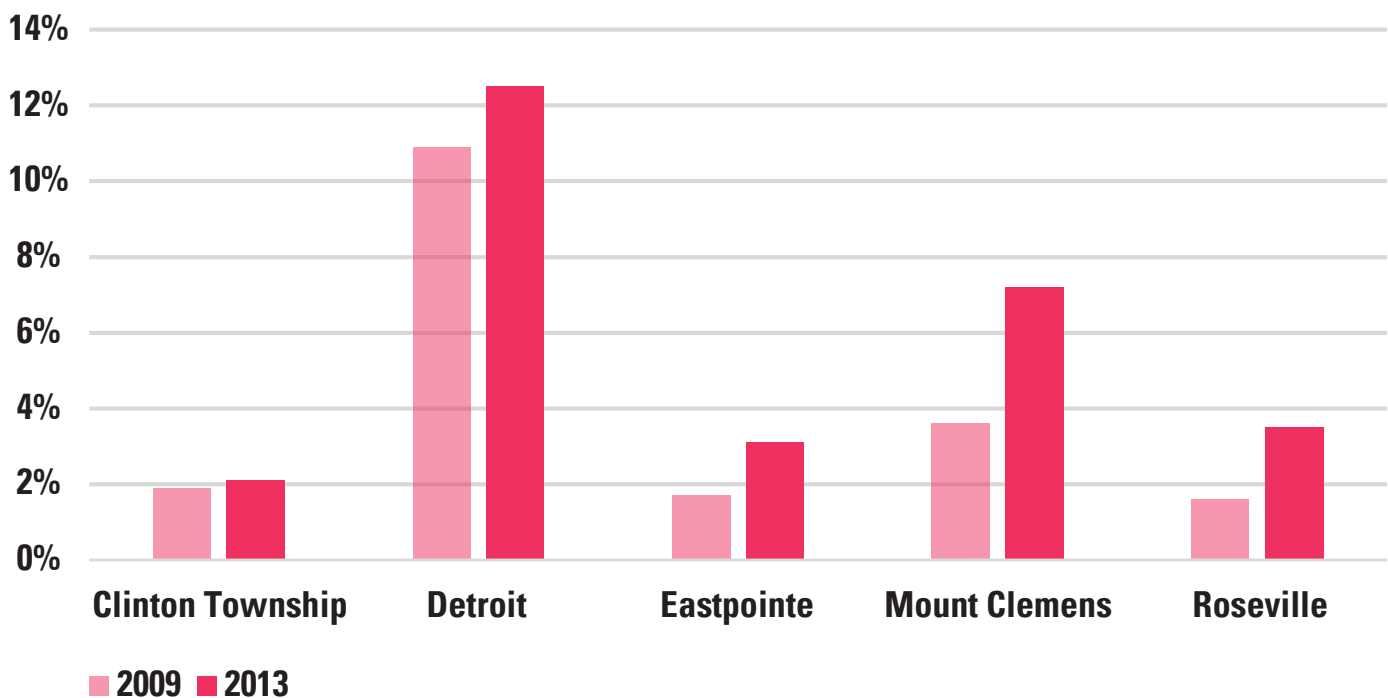
Source: 2015 SEMCOG Community Profile



8.2 More millennials are also looking for ways to reduce their footprint on the environment by choosing multi-modal means of transportation, with a larger percentage utilizing non-motorized transportation than any other age group that has access to an automobile.

During the last ten years there have been three greenways have been built or improved that cross Gratiot Avenue. These greenways connect to other areas within the region, including Eastern Market, Eastern Riverfront, Belle Isle, and Metropolitan Beach. It is vital that any improvement in transit along Gratiot Avenue also connect to other non-motorized facilities that are either along the corridor or connect to the corridor. According to the American Community Survey, all of the communities along the Gratiot Avenue corridor have increased in walking, biking, and transit use over the past five years, reducing dependence on the automobile.

FIGURE 8-1. PERCENTAGE OF POPULATION THAT WALK, BICYCLE OR TAKE TRANSIT BY COMMUNITY



Source: 2009, 2013 ACS

The ULI Survey on Housing, Transportation and Community (2013) found that these commuting behaviors change by generation, illustrating that the millennial generation prefers utilizing other modes other than the car. Table 8-2 summarizes that information.

TABLE 8-2. COMMUTING BEHAVIOR BY GENERATION

GENERATION	CAR	PUBLIC TRANSIT	WALK/BIKE
MILLENNIALS / GEN Y	77%	18%	7%
GEN X	92%	4%	5%
BABY BOOMERS	90%	9%	2%
WAR BABIES / SILENT GENERATION	91%	3%	6%
TOTAL	85%	11%	5%

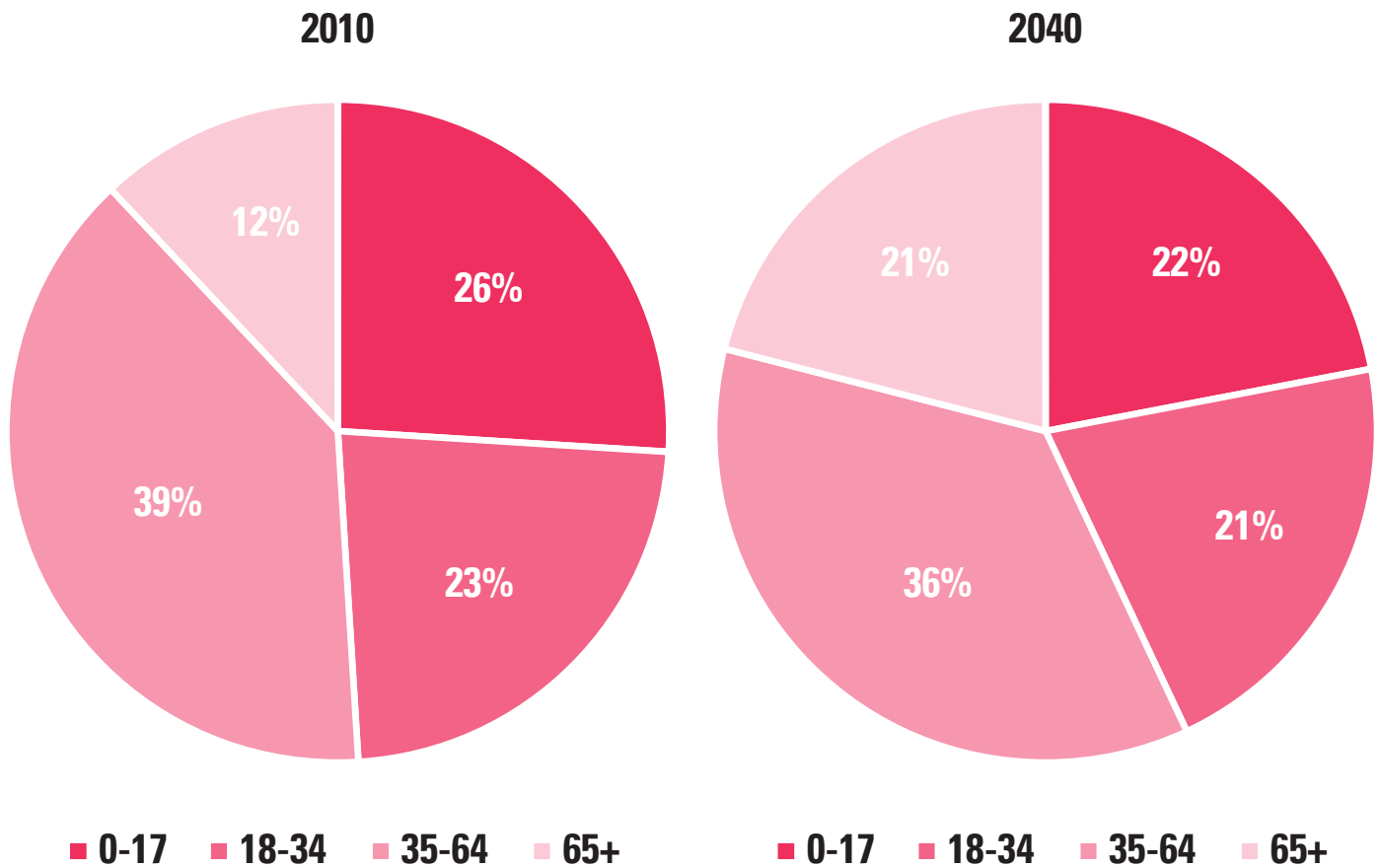
Source: ULI Survey, 2014



5.3 With an increasing senior population expected within the corridor, it is important to provide additional transportation options to retain and also assist that growing demographic.

Nearly 90% of adults 65 and over say they want to live independently as long as possible and 80% believe their current home is where they will always live. A 2002 study in the American Journal of Public Health found that men in their early 70s who stop driving will need access to transportation alternatives, such as public transportation, for an average of six years; women in the same age group will, on average, need transportation alternatives for ten years. Within the corridor communities, it is expected that the population aged 65 and over will increase by more than 50% between the years 2010 and 2040, especially in areas within Macomb County. Additional transportation options within the corridor will assist in retaining and assisting that demographic in the region.

FIGURE 8-2. CHANGE IN AGE OF POPULATION FROM 2010 TO 2040



Source: 2010 Census and 2040 SEMCOG Forecast Report



9.0 Project Need #5

Project Need #5 - Develop a transit system that improves connectivity between origins and key destinations, including major regional employers

There are many significant destinations along Gratiot Avenue between Downtown Detroit and M-59 which could be better served by improved transportation options, including:

MAJOR EMPLOYERS

General Motors, Blue Cross/Blue Shield, Quicken Loans, Macomb County, Faygo, Better Made Snack Foods

DOWNTOWN DISTRICTS

Detroit, Eastpointe, Roseville, Mount Clemens, Gratiot DDA in Clinton Township

MAJOR SHOPPING

Eastern Market, Macomb Mall, Gratiot Plaza Shopping Center, The Shops at Northeast Village Shopping Center

RECREATIONAL

Dequindre Cut Greenway, Conner Creek Greenway, Metro Parkway Trail, Clinton River Spillway Trail, Lincoln Memorial Park, Better Made Snack Foods, Michigan Military Technical & Historical Society, Michigan Transit Museum, Sanders Chocolate & Ice Cream Shoppe, Selfridge Military Air Museum, Crocker House Museum

EDUCATIONAL

Detroit Public Library, Roseville Public Library, Eastpointe Public Library, Baker College, Oakland Community College, Macomb Community College, East Detroit High School, Mount Clemens High School, Catherine C. Blackwell Institute, Dianne M. Pellerin Center

MEDICAL FACILITIES

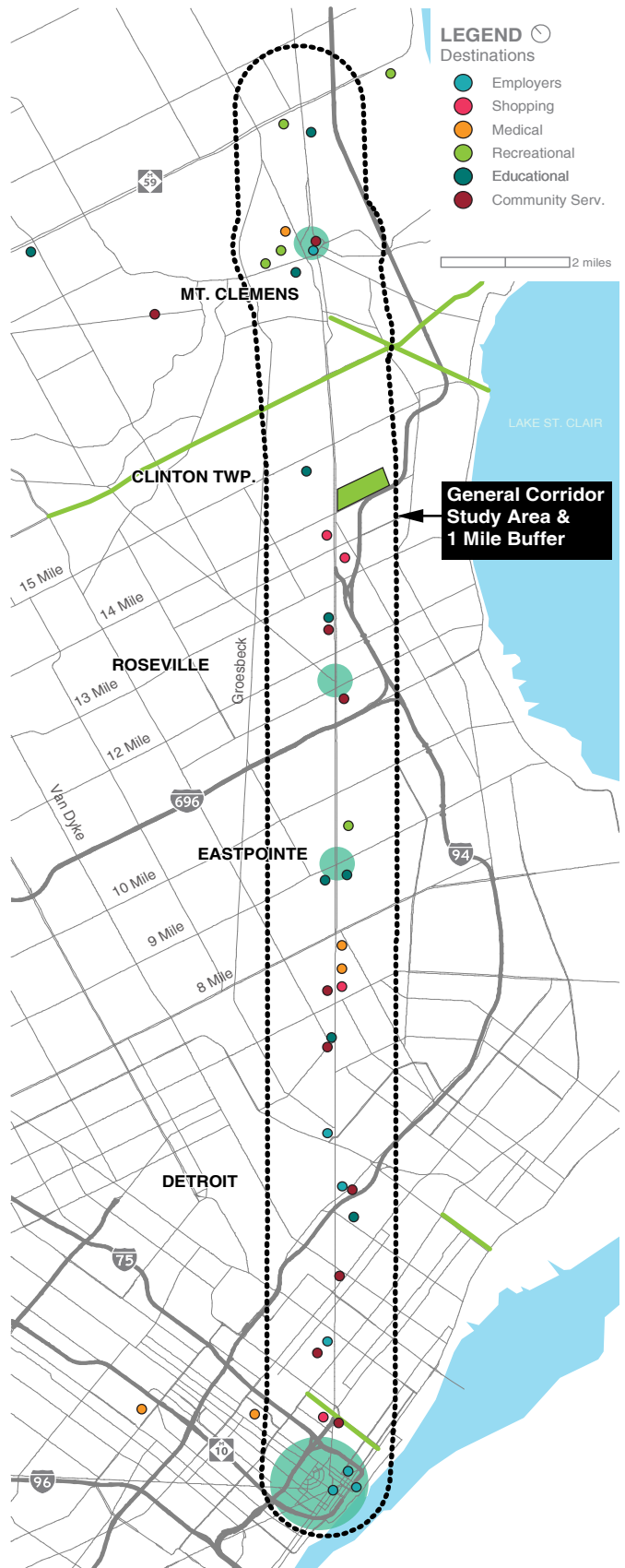
Detroit Medical Group, Henry Ford Macomb Hospital, Select Specialty Hospital, Professional Medical, StoneCrest Center

COMMUNITY SERVICES

Smart Senior Services, Matrix Human Services, Michigan Department of Human Services, Operation Get Down, Bethlehem House, Franklin-Wright Settlements, Detroit Housing Commission, Clinton Township Senior Center, Roseville Senior Center, Macomb County Action Center

FIGURE 9-1. GRATIOT AVENUE DESTINATIONS

Source: Parsons Brinckerhoff, 2015





**REGIONAL
TRANSIT AUTHORITY**
OF SOUTHEAST MICHIGAN



Building Equitable Sustainable Transit



RTA

Michigan Avenue

PURPOSE AND NEED STATEMENT

AUGUST 2015

Acknowledgements

FEDERAL TRANSIT ADMINISTRATION

REGIONAL TRANSIT AUTHORITY OF SOUTHEAST MICHIGAN

BEST: MICHIGAN AVENUE POLICY AND TECHNICAL ADVISORY COMMITTEES

MUNICIPAL MEMBERS

CITY OF ANN ARBOR

CITY OF DEARBORN

CITY OF DEARBORN HEIGHTS

CITY OF DETROIT

CITY OF INKSTER

CITY OF ROMULUS

CITY OF WAYNE

CITY OF WESTLAND

CITY OF YPSILANTI

ANN ARBOR TOWNSHIP

CANTON TOWNSHIP

PITTSFIELD TOWNSHIP

SUPERIOR TOWNSHIP

VAN BUREN TOWNSHIP

YPSILANTI TOWNSHIP

LOCAL/STATE AGENCY AND STAKEHOLDER MEMBERS

ANN ARBOR AREA TRANSIT AUTHORITY

ANN ARBOR DOWNTOWN DEVELOPMENT AUTHORITY

AMALGAMATED TRANSIT UNION

DETROIT DEPARTMENT OF TRANSPORTATION

DETROIT TRANSPORTATION CORPORATION

DETROIT FUTURE CITY

EASTERN MICHIGAN UNIVERSITY

THE HENRY FORD

HENRY FORD COLLEGE

M-1 RAIL

MICHIGAN DEPARTMENT OF TRANSPORTATION

MICHIGAN MUNICIPAL LEAGUE

REGIONAL TRANSIT AUTHORITY OF SOUTHEAST MICHIGAN CITIZENS
ADVISORY COMMITTEE

SOUTHEAST MICHIGAN COUNCIL OF GOVERNMENTS

SOUTHWEST DETROIT BUSINESS ASSOCIATION

SPARK

SUBURBAN MOBILITY AUTHORITY FOR REGIONAL TRANSPORTATION

UNIVERSITY OF MICHIGAN

WASHTENAW COUNTY

WASHTENAW AREA TRANSPORTATION STUDY

WAYNE COUNTY

WAYNE COUNTY AIRPORT AUTHORITY

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1.0

Introduction

1.1 Project Description

The Building Equitable Sustainable Transit (BEST): Michigan Avenue Corridor Study is a 12-month study that is being led by the Regional Transit Authority of Southeast Michigan (RTA). The study, which is being funded through a combination of federal (Federal Transit Administration) and state (Michigan Department of Transportation) funds, will identify and evaluate a series of transit investment alternatives to initiate and improve transit service between Detroit, Ann Arbor, Detroit Metropolitan Wayne County (Metro) Airport, and intermediate communities. The Corridor is roughly 40 miles in length, as measured from the Blake Transit Center in Ann Arbor to Campus Martius in downtown Detroit (four blocks east of the Rosa Parks Transit Center). This corridor currently is not served by regional transit connections.

The study area (Figure 1-1) includes all areas within one mile of Michigan Avenue, Washtenaw Avenue, Merriman Road, and other streets that are candidate locations for arterial transit between Detroit and Ann Arbor. The study area includes most of the parallel state-owned railroad corridor along which Amtrak Wolverine service operates (with stations located in Ann Arbor, Dearborn). The Detroit/New Center Amtrak Station falls outside the study area.

The corridor communities include the following cities and townships within Wayne and Washtenaw Counties:

- Ann Arbor
- Dearborn
- Dearborn Heights
- Detroit
- Inkster
- Romulus
- Wayne
- Westland
- Ypsilanti
- Ann Arbor Township
- Canton Township
- Pittsfield Township
- Superior Township
- Van Buren Township
- Ypsilanti Township

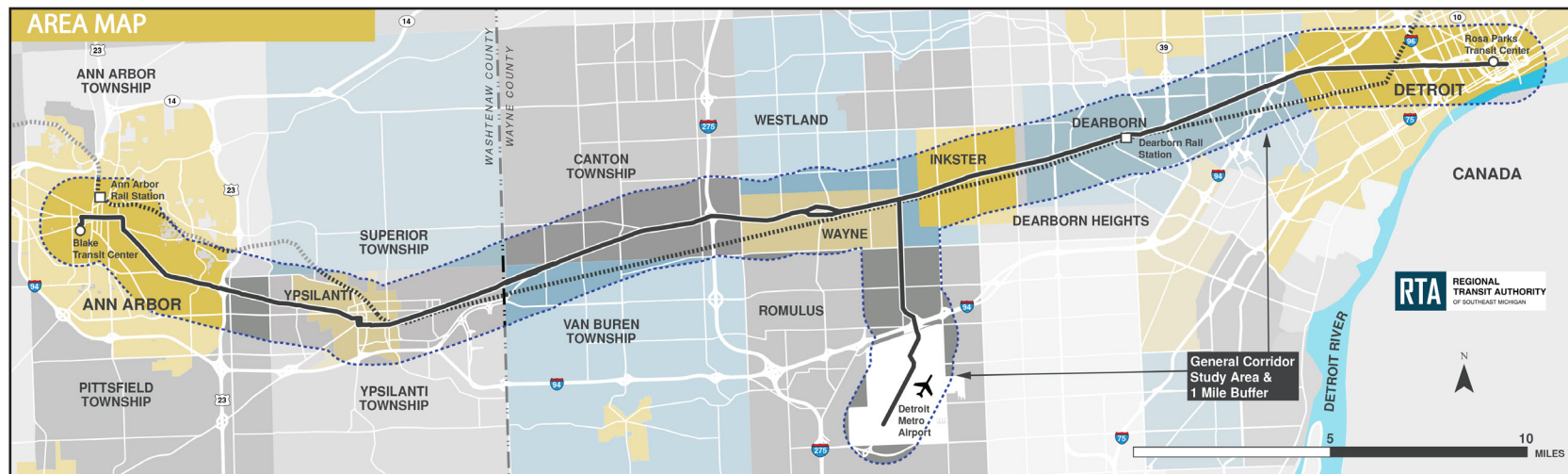
The Regional Transit Authority (RTA) Region refers to Macomb, Oakland, Wayne, and Washtenaw Counties.

The study will expand on previous planning work to identify a locally-preferred transit investment alternative that facilitates safe, efficient and expanded levels of mobility within the study corridor, and to improve connectivity between corridor communities and the region. Additional reasons for this study include improving connections with other local and regional transit routes (including the Gratiot and Woodward Avenue corridors), supporting future development within the corridor, and increasing transit accessibility to Metro Airport.

Following a multi-phase, iterative alternative development and evaluation process that is supported by extensive public engagement activities, the RTA Planning and Service Coordination Committee will recommend the Locally Preferred Alternative (LPA) to the RTA Board of Directors (Board) for adoption. The LPA will be the transit investment alternative that best meets the purpose and need for the project (as defined in this report) and is competitive for funding through the FTA's New/Small Starts capital funding program. The RTA Board will submit the LPA to the Southeast Michigan Council of Governments (SEMCOG) for inclusion in its 2040 Regional Transportation Plan for Southeast Michigan.

The study is scheduled for completion in Spring 2016.

FIGURE 1-1: BEST: MICHIGAN AVENUE STUDY CORRIDOR



1.2 Corridor Context

US 12/Michigan Avenue between Detroit and Washtenaw County follows the approximate alignment of the Old Sauk Trail, a Native American pathway¹. The earliest roadway along the route was known as Chicago Road west of downtown Detroit.² Construction of this road between Chicago and Detroit began in the late 1700s. The name Michigan Avenue was reserved for the wide boulevard in downtown Detroit, designed as part of Judge Augustus B. Woodward's 1806 street plan for the central city.³

One of the Detroit's early horse drawn street railways was constructed along Michigan Avenue between downtown and Corktown in 1863. By 1895, all horse drawn streetcars were replaced by electrified lines. Around this time, an extensive interurban electric railway (the precursor to suburban light rail systems in North America) was constructed outward from Detroit. The Detroit United Railway offered interurban service along the highway corridor that replaced Chicago Road between Detroit, Ann Arbor and Jackson.⁴

In 1924, the newly-formed Detroit Rapid Transit Commission (DRTC) proposed a "Super-Highway System" with expanded roadways featuring rail rapid transit in the median and subway segments.

¹ Forest Preserve District of Cook County (December 4, 1971). "Old Sauk Trail". Forest Preserve District of Cook County. Nature Bulletin No. 436-A. Referenced at https://en.wikipedia.org/wiki/Sauk_Trail, accessed August 4, 2015.

² <http://www.detroittransithistory.info/TheEarlyYears.html>

³ <http://detroitplanninghistory.weebly.com/1700-1900.html>

⁴ <http://www.detroittransithistory.info/TheEarlyYears.html>

The plan called for widening Detroit's radial streets to 120 feet and a downtown Detroit subway network with lines under Michigan, Gratiot, and Woodward Avenues. Coincidentally, interurban street railway service between Detroit, Ann Arbor and Jackson was discontinued in 1929.⁵ The DRTC plan was influential in the city's roadway planning, and in 1930 the state offered to pay half the cost of widening Michigan Avenue in Detroit neighborhoods to 120 feet; within Detroit's Corktown neighborhood, Michigan Avenue was only 66 feet wide. Soon after, Corktown's Victorian-era buildings along the south side of Michigan Avenue were cleared and the roadway was widened.⁶ The proposed rail rapid transit lines were not constructed.

In the subsequent decades, the residential and commercial areas of Corktown and other Southwest Detroit neighborhoods were reduced as interstate highways and industrial areas expanded. Urban renewal efforts also cleared whole blocks in this part of the city.⁷ Simultaneously, most of Michigan Avenue between Dearborn and Ypsilanti were widened to the general configuration seen today. The roadway was designated US 12 in 1962. Today, Michigan Avenue serves as an important connector between the BEST: Michigan Avenue corridor communities, regional access to Detroit Metro Airport, and as a regional alternative to congestion on I-94.

1.3 Purpose of the Purpose and Need Statement

The Purpose and Need Statement is a data-driven demonstration of the transportation problems within a corridor and the need for transit investment to solve those problems. The documented purpose of and need for transit investment lays the groundwork for the development of project goals and objectives that specify, in part, the desired outcomes of corridor transit investment. The statement of purpose and needs frames the subsequent development and evaluation of transit alternatives in that the Locally Preferred Alternative identified at the end of the study must respond back to the problems, goals, and objectives identified at its outset.

FTA requests the opportunity to review and comment upon the Purpose and Need Statement of studies that are likely to result in the selection of a transit project that will seek federal funding (through the New or Small Starts program); the document is also required by the federal government as part of the (National Environmental Policy Act-compliant) environmental clearance process.

Per the FTA, the "purpose and need for a project:

- establishes the problems which must be addressed in the study;
- serves as the basis for the development of project goals, objectives, and evaluation measures; and
- provides a framework for determining which alternatives should be considered as reasonable options in a given corridor.

More fundamentally, the statement of purpose and need serves to articulate – and justify - why an agency is proposing to spend potentially large amounts of taxpayer's money to study and implement a project, which may cause significant environmental and community impacts, and why these impacts are justified."⁸

The BEST: Michigan Avenue Purpose and Need Statement is supported by a series of five technical memorandums that document existing conditions within the study corridor (Tech Memo #1: Planning Studies for the BEST: Michigan Avenue Corridor; Tech Memo #2: Existing Transportation Network; Tech Memo #3: Existing Socioeconomic Data and Conditions; Tech Memo #4: Land Use Analysis; Tech Memo #5: Environmental Resources).

⁵ <http://www.chicagorailfan.com/dsmhist2.html>

⁶ <http://corktownhistory.blogspot.com/2012/11/the-widening-of-michigan-avenue.html>

⁷ <http://detroithistorical.org/learn/encyclopedia-of-detroit/corktown-historic-district>

⁸ Federal Transit Administration, http://www.fta.dot.gov/12304_2599.html



1.4 Summary of BEST: Michigan Avenue Project Purpose and Needs

PURPOSE

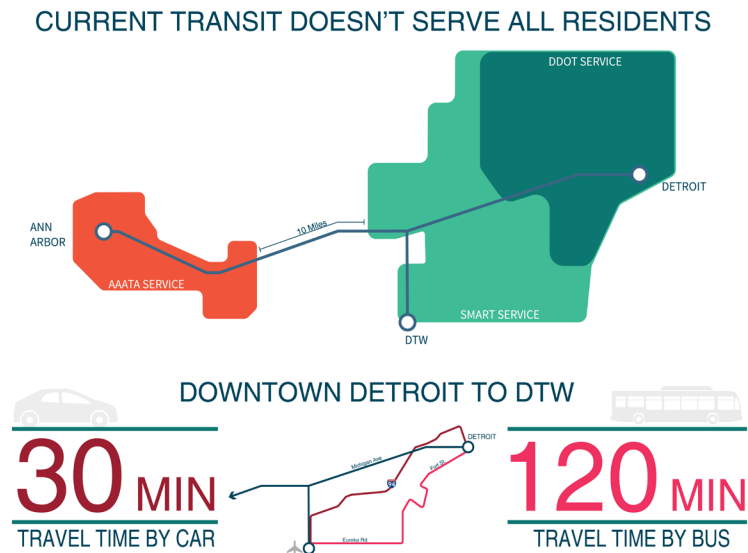
High-capacity transit investment in the BEST: Michigan Avenue corridor will link existing population and employment centers in corridor communities and activity centers to meet existing local and regional transit needs, as well as accommodate anticipated growth in travel demand. This regional service is intended to supplement local transit service and provide mobility options that match emerging demographic trends and preferences, leverage existing transportation infrastructure to improve connectivity, support the mobility of community members who rely on transit, and encourage sustainable development patterns. Transit investment will improve access to a range of corridor-based regional resources, including employment, goods and services, medical care, and educational opportunities. Access to and from the regional transit system will be supported through integration with local fixed route transit, park and ride facilities, and bike and pedestrian infrastructure.

NEEDS

NEED #1: CURRENT BEST: MICHIGAN AVENUE CORRIDOR TRANSIT SERVICE DOES NOT EFFICIENTLY, EFFECTIVELY, OR COMPETITIVELY CONNECT CORRIDOR RESIDENTS, EMPLOYEES, AND VISITORS WITH THEIR DESTINATIONS.

High-capacity regional transit investments are needed to provide transit connections that do not currently exist and leverage existing transit service and infrastructure to support expanded corridor-wide mobility.

- There are strong transit markets at the western and eastern ends of the study corridor but no transit connections between them. The corridor local fixed route transit networks in Wayne and Washtenaw Counties are separated by a 10-mile gap that has no transit service, and there is no existing regional connection between these communities.



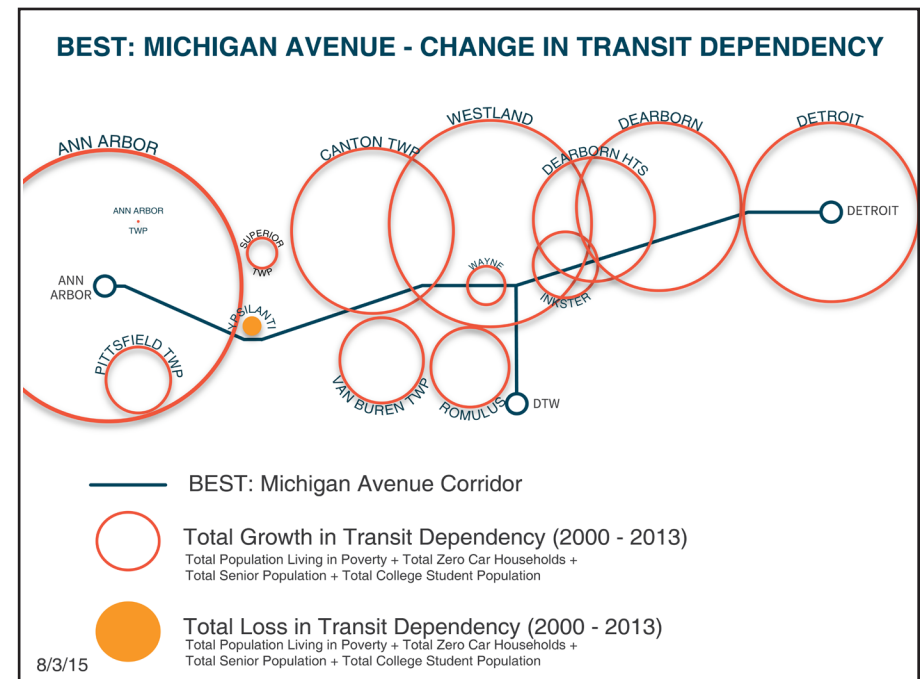
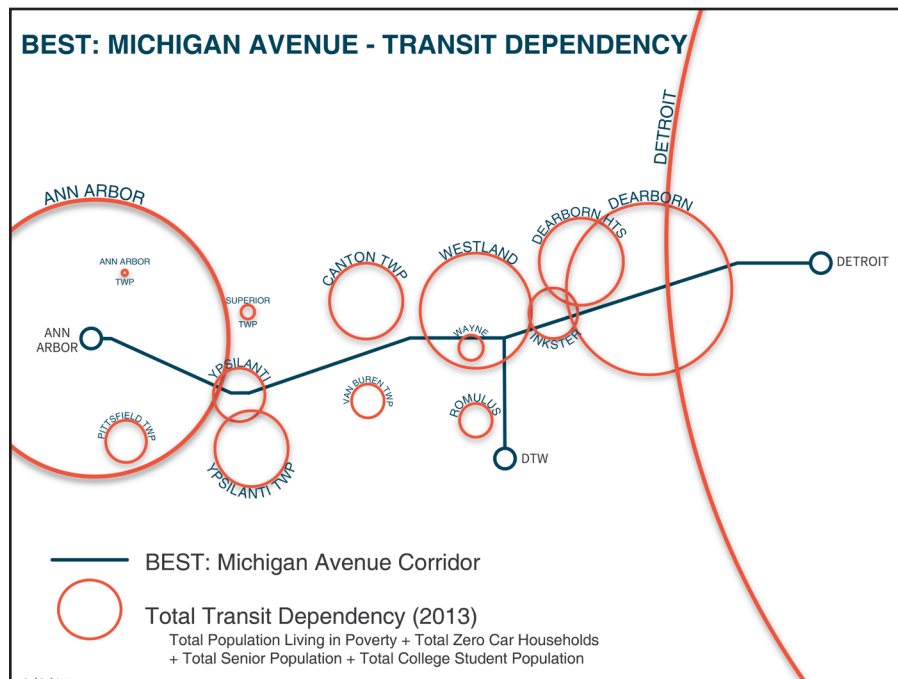
Transit service area along Michigan Ave and travel time to DTW

- Employment destinations are concentrated in Detroit, Dearborn and Ann Arbor, with lower density employment areas spread throughout the corridor; the existing transit network does not link these job centers nor facilitate efficient, auto-competitive service options to match existing corridor commutes. It also does not serve to facilitate growth of other communities along the corridor. Improved regional transit connectivity between homes and jobs across the corridor would expand job access and opportunity, as well as promote increased job development in central cities that are well-connected by high-capacity regional transit systems.
- Transit connections from the eastern half of the corridor to Metro Airport take three to four times longer than the same trip made by car. Transit travel times between Detroit and Metro Airport (100 to 135 minutes) are at least three times longer than the same trip by car (24 to 40 minutes); transit travel times between Central Dearborn and Metro Airport (85 minutes) are four times longer than the same trip by car (16 to 22 minutes).

NEED #2: THE BEST: MICHIGAN AVENUE CORRIDOR INCLUDES MANY POPULATION GROUPS THAT ARE LIKELY TO BE DEPENDENT ON TRANSIT.

Strong growth in transit-dependent populations is occurring in communities that have no or comparatively limited transit service. High-capacity transit investment is essential to support access to opportunities and improved quality of life for transit-dependent residents, including those who are physically or mentally disabled.

- A significantly higher percentage of the study area population lives below the poverty line, compared to the State of Michigan and the US, and that percentage is increasing. Nearly 30 percent of the study area population lives below the poverty line, compared to 16.8 percent in the State of Michigan and 15.4 percent in the US. The percent of study area residents living below the poverty line has grown by more than 77 percent between 2000 and 2013.
- The senior population is growing the fastest in areas with limited or no transit service; the largest senior populations continue to be located in areas with comparatively high levels of transit service. Canton Township’s senior population grew the fastest between 2000 and 2013 (an increase of more than 3,600), but Detroit has a senior population that is more than seven times larger than any other corridor community (almost 84,000).
- The number of zero-car households within the corridor is increasing. The highest rates of growth in number of zero-car households (Pittsfield Township, Superior Township, and Ypsilanti Township) are occurring outside of the communities with the greatest number of zero-car households (Detroit, Ann Arbor, and Westland).
- The corridor college student population is large and growing. The share of study area college student population is double the student share of the population found at the State and US levels.



NEED #3: STUDY AREA POPULATION AND EMPLOYMENT DENSITIES ARE HIGHER THAN REGIONAL DENSITIES, AND GROWTH IS FORECAST TO MORE EVENLY DISTRIBUTE THROUGHOUT THE CORRIDOR.

High-capacity transit investment is necessary to accommodate this growth and to improve multimodal connections between growing communities throughout the corridor.

- Total study area population is forecast to remain steady through 2040, but will redistribute among the corridor communities. Detroit is forecast to remain the largest corridor community (by a factor of five) despite forecast population losses; the communities with the greatest forecast increase in actual population are on the western end of the corridor (Ann Arbor, Pittsfield Township, Superior Township, and Ypsilanti Township).
- Study area employment density is almost four times greater than the four-county RTA region. The highest concentrations of employment density in 2010 were spread throughout the corridor: Ann Arbor, Dearborn, Detroit, Wayne, and Ypsilanti. These communities will continue to have the highest concentrations of employment density through 2040.

NEED #4: THE COMMUNITIES IN THE STUDY AREA HAVE DEMONSTRATED A COMMITMENT TO SUSTAINABLE GROWTH STRATEGIES IN THEIR ADOPTED PLANS AND POLICIES.

Detroit, Dearborn, Ann Arbor, Wayne, and Ypsilanti are among corridor communities whose plans identify targeted, transit-supportive development patterns as priorities for the community and the BEST: Michigan Avenue corridor. High-capacity regional transit system investment that leverages existing transportation facilities while reducing reliance on single-occupant vehicles will be necessary to achieve these goals.

STUDY AREA POPULATION AND EMPLOYMENT DENSITIES ARE HIGHER THAN REGIONAL DENSITIES



2.0

Public and Stakeholder Involvement

The public involvement preparation process for the BEST: Michigan Avenue corridor study began with internal team meetings with the RTA to select Policy and Technical committee members, compile stakeholder lists and to organize website and publicity activities.

Phase one of project public involvement officially launched on May 12, 2015 with a project rally in Campus Martius in Downtown Detroit. The event featured stakeholder speakers and an introduction to the project by the CEO of the RTA. Attendees were provided with multiple outlets to provide feedback including both written and online interaction.

Following the launch Rally the project team participated in five full-day public outreach events, one held in each of the four counties (Wayne, Oakland, Macomb and Washtenaw) and the City of Detroit.

The events were held in an open house style, offering attendees the opportunity and flexibility to come and go as they please to learn about the projects and to give feedback.

The initial outreach events attracted about 500 attendees. We received 229 in-person comments and 55 virtual comments. During the County sessions, informational boards for the BEST: Michigan Avenue Corridor included area demographic information, a project schedule, rapid transit definitions/explanations and two public input activities. We asked attendees to map destinations of interest the corridor and to vote on transit goals and priorities. The results of the activities can be found below.

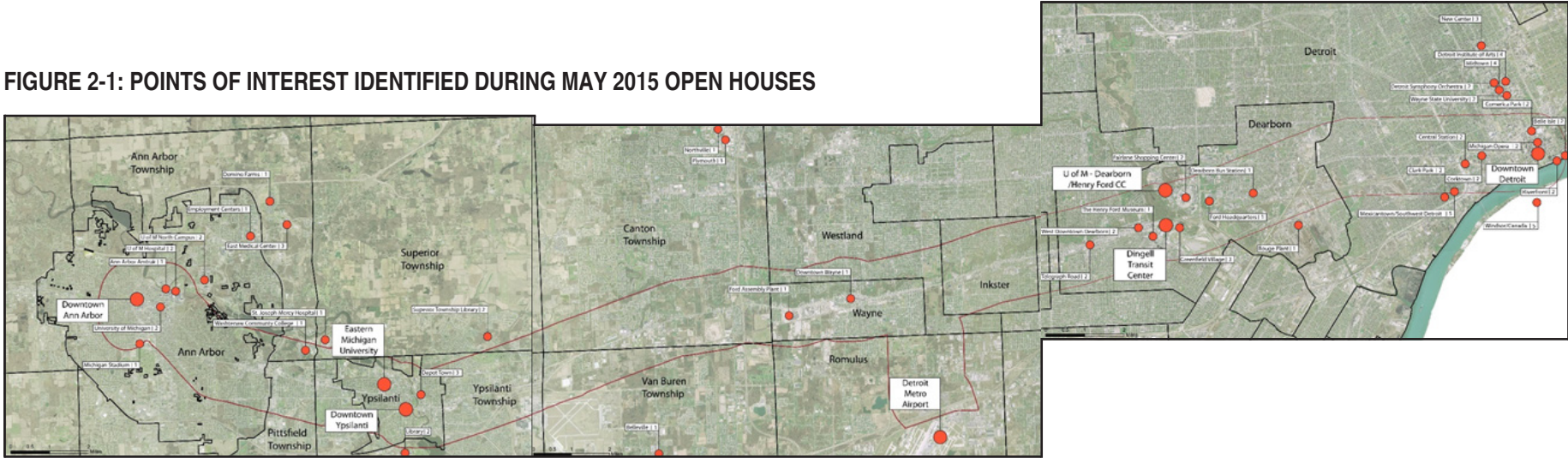
Overall, equity, better connections and economic development were repeated themes throughout the outreach effort. The airport and urban areas loomed as desired destinations, while large employment and entertainment district also were popular selections.

Following the broad public outreach events the project team reached out to local communities and stakeholders to host location targeted meetings. These meetings included presentations for Downtown Development Authorities, Chambers of Commerce, the Airport Authority, local governments, farmers markets and community events. These smaller meetings allowed the project team to narrow in from the larger concepts received from the public on specific needs and goals of the project.

TABLE 2-1: MAY 2015 OPEN HOUSE ACTIVITY RESULTS: PRIORITIZED NEEDS FOR TRANSIT INVESTMENT

	1 (LEAST IMPORTANT)	2	3	4	5	6 (MOST IMPORTANT)
Corridor Connections	1	0	1	2	2	27
Speed	4	1	2	3	0	22
Economic Development	2	2	3	3	2	24
Efficiency	4	4	2	0	2	13
Airport Access	7	1	5	2	1	16

FIGURE 2-1: POINTS OF INTEREST IDENTIFIED DURING MAY 2015 OPEN HOUSES



3.0

Goals and Objectives

Based on public involvement input and analyses of existing conditions, the following six goals and related objectives have been established for the BEST: Michigan Avenue corridor. These will be utilized for the development of evaluation criteria used in comparing the alternatives for the corridor.

TABLE 3-1: BEST: MICHIGAN AVENUE GOALS AND OBJECTIVES

GOALS	OBJECTIVES
Increase the efficiency, attractiveness and utilization of corridor and regional transit for all users	<ul style="list-style-type: none"> • Provide reliable, frequent service that improves the experience of existing customers • Provide capacity for future growth • Provide improved passenger amenities and infrastructure • Ensure safe and comfortable transit services and facilities for all users
Improve multi-modal connectivity between the activity centers including primary cities at the eastern and western ends of the study area with intermediate communities	<ul style="list-style-type: none"> • Provide frequent, high-capacity, one-seat transit connections between key study area activity generators • Improve pedestrian and non-motorized access to corridor transit stops/stations • Ensure sufficient park-and-ride access to the system
Enhance connectivity of the corridor to the regional transportation network	<ul style="list-style-type: none"> • Support regional planning efforts for a more balanced, multi-modal transportation network in the region • Coordinate with existing and planned transit services • Ensure connectivity to services connecting travelers to destinations within and beyond the study area • Consider existing infrastructure, including low-density and underutilized freight and passenger rail corridors, as an alternative to competing for capacity on crowded regional highways and local arterials • Provide for acceptable traffic operations and parking options in the study area • Enhance connections to non-motorized transportation

TABLE 3-1: BEST: MICHIGAN AVENUE GOALS AND OBJECTIVES (CONT'D)

GOALS	OBJECTIVES
<p>Support land use and development patterns that reflect the vision for growth contained in local and regional plans and policies</p>	<ul style="list-style-type: none"> • Maximize the economic development and revitalization efforts of local communities • Improve access to employment concentrations to support regional economic development • Support institutional and key stakeholder planning efforts, particularly strategic growth planning for study area educational institutions and major employers • Support local and regional goals for transit-friendly development within the study area
<p>Contribute to regional equity, sustainability and quality of life</p>	<ul style="list-style-type: none"> • Promote a more efficient and sustainable local and regional transportation system that reduces energy usage, pollution and costs of living • Minimize impacts to the natural environment • Increase mobility and accessibility for transit-dependent populations • Maximize opportunities for place making and enhanced character in study area communities
<p>Develop and select an implementable and community-supported project</p>	<ul style="list-style-type: none"> • Define and select regional transit improvements with strong public, stakeholder and agency support • Define and select regional transit improvements that are cost-effective and financially feasible, both in the short- and long-term • Define and select transit improvements that are competitive for Federal Transit Administration funding



4.0

Evaluation Criteria

In order to evaluate the different regional transit modes and alignment options and identify the appropriate mode-alignment pairings that will define the detailed alternatives, the BEST: Michigan Avenue study will follow a three-step method.

- The first step (“Tier 1: Pass/Fail Analysis”) will entail the assessment of each mode and alignment relative to overall implementation viability.
- The second step (“Tier 2: Detailed Evaluation”) will assess the mode/alignment pairing that passed the Tier 1 Analysis.
- The alternative(s) that fare(s) best against the detailed criteria in this second step will be identified as Preferred Alternative(s) and further refined in the third step (“Tier 3: Refine the LPA”). The Locally Preferred Alternative will be identified at the conclusion of the third step.

TABLE 4-1: BEST: MICHIGAN AVENUE PRELIMINARY EVALUATION CRITERIA

PROJECT GOALS	TIER 1: PASS/FAIL ANALYSIS (QUALITATIVE)	TIER 2: DETAILED EVALUATION (QUALITATIVE AND QUANTITATIVE)	TIER 3: REFINE THE LPA (QUALITATIVE AND QUANTITATIVE)
Increase the efficiency, attractiveness and utilization of corridor and regional transit for all users	Ridership capacity	Ridership Number of passengers per service-hour Estimated vehicle hours travelled (VHT) Ability to provide appropriate transit capacity	Mobility improvements*
Improve multi-modal connectivity between the activity centers at the eastern and western ends of the study area with intermediate communities	Multi-modal connectivity	Connections between activity centers Community mobility improvements	Mobility improvements* Congestion relief*
Enhance connectivity of the corridor to the regional transportation network	Regional connectivity	Potential right-of-way impacts Bicycle and pedestrian safety Parking and traffic impacts	Congestion relief*

TABLE 4-1: BEST: MICHIGAN AVENUE PRELIMINARY EVALUATION CRITERIA (CONT'D)

PROJECT GOALS	TIER 1: PASS/FAIL ANALYSIS (QUALITATIVE)	TIER 2: DETAILED EVALUATION (QUALITATIVE AND QUANTITATIVE)	TIER 3: REFINE THE LPA (QUALITATIVE AND QUANTITATIVE)
Support land use and development patterns that reflect the vision for growth contained in local and regional plans and policies	Economic development Compatibility with local and regional plans	Compatibility with local and regional plans Land use and economic development opportunities	Economic development* Land use*
Contribute to regional equity, sustainability and quality of life	Environmental impacts	Consistent with existing or planned community character Environmental impacts/benefits	Environmental benefits*
Develop and select an implementable and community-supported project	Capital cost Community support	Capital and operating and maintenance costs Cost effectiveness Community support	Financial capacity analysis* Cost effectiveness*

* consistent with FTA New Starts/Small Starts criteria

The evaluation criteria associated with each step are a combination of quantitative and qualitative performance measures.

- The Tier 1 phase will apply fewer and broader measures, including information from previous corridor/area studies.
- The Tier 2 phase will apply more and finer performance measures and will identify the Preferred Alternative(s)
- The Tier 3 phase will evaluate the Preferred Alternative(s) against federal criteria to determine the Locally Preferred Alternative.

This three-step process will result in the identification of an LPA that not only meets locally-identified project purpose and needs, but is also competitive for federal funding.

Table 4-1 presents the evaluation criteria that are likely to be used during the three steps of alternative evaluation, and how they are linked to the project goals listed in Section 3.0. Note that each successive step builds upon the criteria from the previous step, ensuring a consistent rating throughout. Details regarding the criteria (including metrics and thresholds) will be defined at the beginning of each tier.



5.0 Project Need #1

Current BEST: Michigan Avenue corridor transit service does not efficiently, effectively, or competitively connect corridor residents, employees, and visitors with their destinations.

High-capacity regional transit investments are needed to provide transit connections that do not currently exist and leverage existing transit service and infrastructure to support expanded corridor-wide mobility.

5.1 There are strong transit markets at the western and eastern ends of the study corridor but no transit connections between them.

The corridor local fixed route transit networks in Wayne and Washtenaw Counties are separated by a 10-mile gap that has no transit service, and there is no existing regional connection between these communities. As shown in Figure 5-1 and Table 5-1, Ann Arbor and Detroit both have existing local fixed route

FIGURE 5-1: BEST: MICHIGAN AVENUE CORRIDOR TRANSIT NETWORK

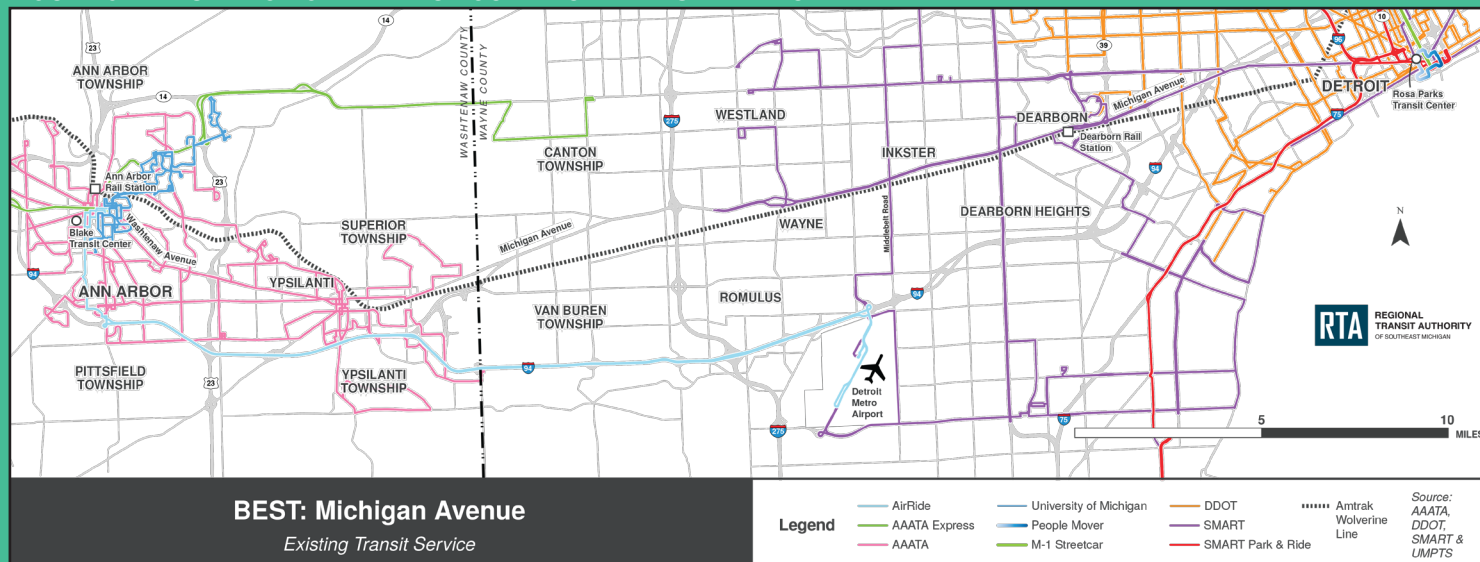


TABLE 5-1: BEST: MICHIGAN AVENUE EXISTING TRANSIT ROUTES

PROVIDER	ROUTE NUMBER	ROUTE NAME	AVERAGE WEEKDAY RIDERSHIP
People Mover	n/a	n/a	5,124
SMART	140	Southshore	366
	280	Middlebelt	398
	250	Ford Road	435
	275	Telegraph	1,652
	200	Michigan	1,993
DDOT	54	Wyoming	972
	46	Southfield	1,027
	30	Livernois	1,174
	41	Schaefer	1,133
	37	Michigan	2,141
	60	Evergreen	2,900
	22	Greenfield	5,002
AAATA	4	n/a	5,372
AAATA - AirRide	n/a	AirRide	198

Source - Detroit People Mover (2013), SMART, DDOT, AAATA (October 2014)

transit networks comprised of multiple providers, but the current network gap effectively reduces the full benefit of each community’s transit unity’s transit investments by preventing connectivity between them.

This gap in the corridor transit network limits the mobility of the residents within that gap, limits access to the businesses that operate within and on either side the gap, and prevents the expanded access to opportunity that would result from a corridor-wide transit network.

More detail about the corridor’s existing transit and transportation network can be found in Technical Memorandum #2: Existing Transportation Network.

5.2 Employment destinations are concentrated in Detroit, Dearborn and Ann Arbor, with lower-density employment areas spread throughout the corridor; the existing transit network does not link these job centers nor facilitate efficient, auto-competitive service options to match existing corridor commutes. It also does not serve to facilitate growth of other communities along the corridor.

Improved regional transit connectivity between homes and jobs across the corridor would expand job access and opportunity, as well as promote increased job development in central cities that are well-connected by high-capacity regional transit systems.

As shown in Figure 5-2, the largest corridor community commute flows (or direction of travel) are directed towards the employment centers of Ann Arbor on the western end of the corridor and Dearborn and Detroit on the eastern end of the corridor. Residents of Canton Township are the only corridor commuters that comprise comparatively large flows to both ends of the corridor; corridor workers living on the eastern end of the corridor tend to work on the eastern end of the corridor, and corridor workers living on the western end of the corridor tend to work on the western end of the corridor.

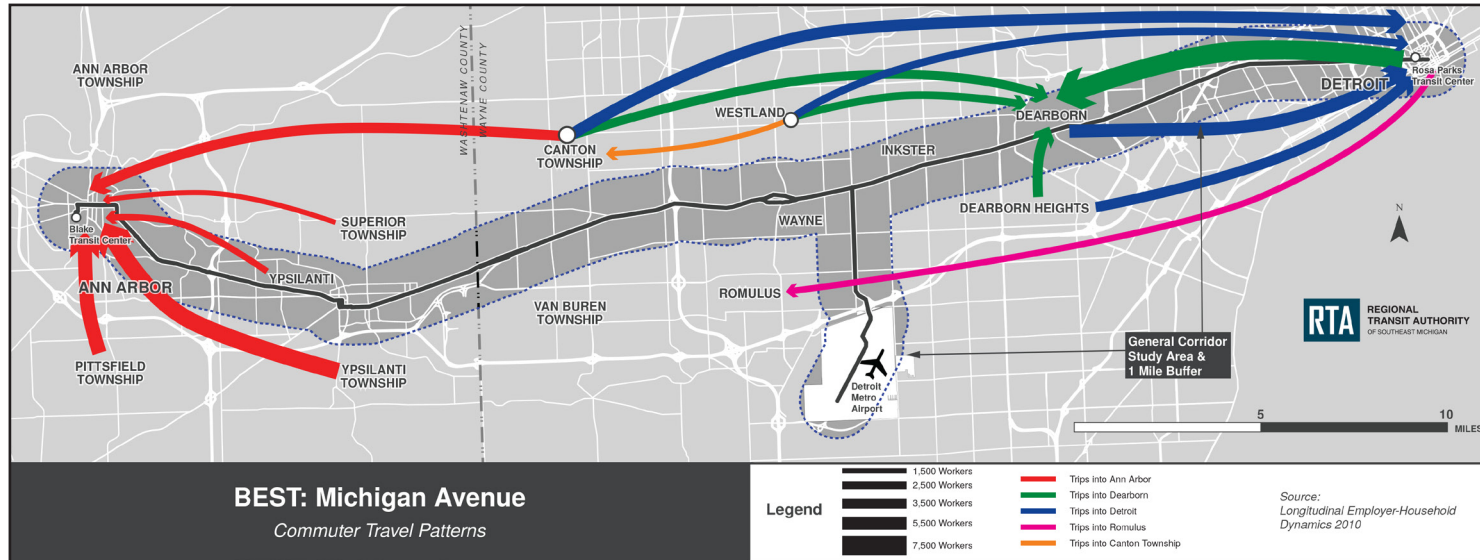
As shown in Table 5-2, only 3,385 corridor resident commuters (1.5 percent) travel from one end of the corridor to the other for work, despite the fact that Ann Arbor, Dearborn and Detroit are major centers of both population and employment. The low commute flow between these three centers of population and employment likely is not reflective of market potential, but instead is indicative of deficiencies in the corridor transit and transportation network. Connecting the transit networks on each end of the corridor will support existing commuter demand for cross-corridor trips and enable the growth of that market by improving access to job opportunities across the corridor.

As shown in Table 5-3, transit travel times between centers of population and employment often compare unfavorably to the same trip made by car – and are not an option for cross-corridor commuters or those commuting to or from the mid-corridor transit network gap.

Transit travel times between Wayne and downtown Detroit (60 to 110 minutes) are at least twice as long as the same trip by car (30 to 50 minutes) and many residents have no access from their homes to employment centers.



FIGURE 5-2: BEST: MICHIGAN AVENUE CORRIDOR COMMUTE FLOWS



The reverse commute market – those that live in a major employment center (like Detroit, Dearborn or Ann Arbor) but commute to another community for work – is not well-served by the existing transit network, which is oriented towards moving people into large employment centers during the peak hour. Federal transit funding programs that could be leveraged to support these reverse commute transit trips (including Job Access and Reverse Commute and New Freedom) are subject to fluctuations in federal funding levels, which make them unstable as a viable, long-term option to fund commuter-oriented service.

The connection of and investment in the corridor transit network will make transit an alternative that commuters choose over driving because it is faster, saves them money, reduces their carbon footprint, and creates additional time to work, email, read, or relax; it will also expand access to job opportunities for workers who need transit to commute.

More detail about the corridor’s commuting patterns and commuting travel times can be found in Technical Memorandum #2: Existing Transportation Network.

TABLE 5-2: COMMUTE FLOWS BETWEEN EASTERN AND WESTERN ENDS OF CORRIDOR

PLACE OF RESIDENCE	PLACE OF WORK	NUMBER OF COMMUTERS
Ann Arbor	Detroit	1,099
Ann Arbor Township	Detroit	56
Pittsfield Township	Detroit	407
West End of Corridor to East End of Corridor Commuting		1,562
Detroit	Ann Arbor	1,324
Dearborn	Ann Arbor	499
Commuting from Eastern Wayne County to Ann Arbor		1,823
Total number of people who both live and work in the corridor		232,458

Source: Longitudinal Employer-Household Dynamics, 2010



5.3 Transit connections from the eastern half of the corridor to Metro Airport take three to four times longer than the same trip made by car.

Transit travel times between Detroit and Metro Airport (100 to 135 minutes) are at least three times longer than the same trip by car (24 to 40 minutes); transit travel times between Central Dearborn and Metro Airport (85 minutes) are four times longer than the same trip by car (16 to 22 minutes).

Transit travel times from the western end of the corridor (Ann Arbor, in particular) are competitive with auto travel times, unlike the same trip made to or from the eastern end of the corridor (Table 5-4).

Each day, more than 51,500 people travel to Detroit Metro Airport for work or travel; the majority (42,322 trips) are for travel. 90% of all trips to the airport are coming from the RTA region⁹:

- Wayne County and Detroit account for 45% of all airport trips (this likely includes thousands of commuters to airport jobs)
- Oakland County accounts for 22%
- Macomb County accounts for 14%
- Washtenaw County accounts for 8%

Ensuring equitable levels of efficient and effective transit access to the airport from across the corridor will improve multi-modal connectivity to destinations beyond the corridor and may expand airport-related job opportunities for transit-reliant residents on the eastern end of the corridor.

It is important to note that the RTA will be studying improved regional transit connections between Detroit and Metro Airport through a separate project.

More detail about the corridor’s travel options to Detroit Metro Airport can be found in Technical Memorandum #2: Existing Transportation Network.

⁹ SECMOG Traffic Analysis Zone data

TABLE 5-3: TRANSIT TRAVEL TIME COMPARISON TO/FROM EMPLOYMENT CENTERS

ORIGIN/ DESTINATION PAIR	TRANSIT SERVICE PROVIDER	TRANSIT TRIP TIME (MINUTES)	TYPICAL TRANSIT HEADWAY (MINUTES)	AUTOMOBILE DRIVING TIME
Wayne to Central Dearborn	SMART	30	30 - 60	20 - 30
Wayne to Downtown Detroit	SMART	60	30	30 - 50
Wayne to Downtown Detroit	SMART and DDOT (Transfer)	65 - 110	30	
Central Dearborn to Downtown Detroit	SMART	25	30	18 - 30
Central Dearborn to Downtown Detroit	DDOT	35	45	
Ann Arbor to Detroit	N/A	N/A	N/A	40 - 60

Source: Peak Hour Travel Times provided by DDOT, SMART, TheRide, and Google Maps

TABLE 5-4: TRANSIT TRAVEL TIME COMPARISON TO METRO AIRPORT

ORIGIN/DESTINATION PAIR	TRANSIT SERVICE PROVIDER	TRANSIT TRIP TIME (MINUTES)	AUTOMOBILE DRIVING TIME
Ann Arbor to Metro Airport	AirRide	45 - 55	40 - 60
Downtown Detroit to Metro Airport	SMART	100	34 - 50
Metro Airport to Downtown Detroit	DDOT and SMART (Transfer)	125 - 135	
Central Dearborn to Metro Airport (McNamara Terminal)	SMART (2 Transfers)	85	26 - 32

Source: Peak Hour Travel Times provided by DDOT, SMART, TheRide, and Google Maps *Note: this includes 10 minutes to account for parking and taking a shuttle to the terminal



6.0

Project Need #2

The BEST: Michigan Avenue corridor includes many population groups that are likely to be dependent on transit.

Strong growth in transit-dependent populations is occurring in communities that have no or comparatively limited transit service. High-capacity transit investment is essential to support access to opportunities and improved quality of life for transit-dependent residents, including those who are physically or mentally disabled.

6.1 A significantly higher percentage of the study area population lives below the poverty line, compared to the State of Michigan and the US, and that percentage is increasing.

Nearly 30 percent of the study area population lives below the poverty line, compared to 16.8 percent in the State of Michigan and 15.4 percent in the US. The percent of study area residents living below the poverty line has grown by more than 77 percent between 2000 and 2013.

Reliable, effective and efficient transit service is a critical link to connect those living below the poverty line with employment opportunities, education and services that otherwise may not be accessible without a car. While the percent of population living below the poverty line has grown for every community along the corridor, some of the higher rates of growth are found in communities with little or no transit service, including Westland, Canton and Van Buren Townships, and Dearborn Heights, as shown in Table 6-1.

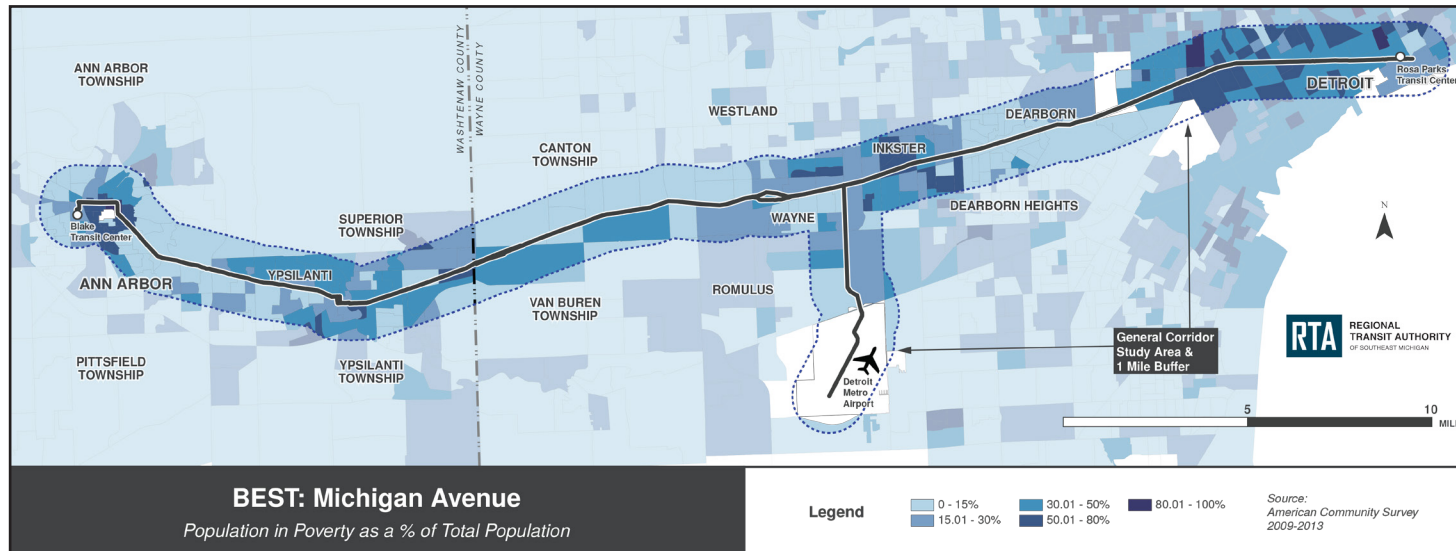
TABLE 6-1: PERCENT OF POPULATION BELOW POVERTY LINE, 2003 - 2013

COMMUNITIES ALONG CORRIDOR	2000	2013	% CHANGE
Ann Arbor	16.6%	22.1%	34.9%
Ann Arbor Township	3.2%	6.0%	92.6%
Canton Township	3.7%	6.0%	90.0%
Dearborn	16.1%	27.5%	69.7%
Dearborn Heights	6.1%	19.0%	206.3%
Detroit	26.1%	39.3%	11.9%
Inkster	19.5%	38.2%	64.0%
Pittsfield Township	9.1%	10.7%	37.6%
Romulus	12.6%	21.4%	75.7%
Superior Township	9.6%	10.3%	31.6%
Van Buren Township	6.3%	12.4%	138.5%
Wayne	9.1%	17.5%	75.9%
Westland	6.8%	15.5%	119.7%
Ypsilanti	25.8%	30.2%	3.4%
Ypsilanti Township	10.5%	20.6%	113.9%
Study Area	19.2%	29.9%	77.6%
Corridor Communities	20.2%	29.4%	25.1%
Wayne + Washtenaw Counties	15.7%	23.0%	32.6%
RTA Region	11.1%	17.2%	50.2%
Stae of Michigan	10.5%	16.8%	59.2%
United States	12.4%	15.4%	37.5%

Source: Census 2000 and 2009-2013 ACS 5-Year Estimates

Note: Census data includes resident college student population, which may skew data

FIGURE 6-1: BEST: MICHIGAN AVENUE CORRIDOR: PERCENT OF POPULATION BELOW THE POVERTY LINE



While the percent of residents in these communities living in poverty is comparatively lower than other corridor communities, the strong growth rate in that population indicates a growing demand to make transit network investments that support each resident’s mobility and quality of life. Poverty rates within the study area and corridor communities exceed the poverty rates of Wayne and Washtenaw Counties, the RTA Region, the State of Michigan, and the US.

As shown in Figure 6-1, some of the highest concentrations of people living below poverty can be found in communities that do have multi-route transit service – Detroit, Ypsilanti, and Ann Arbor. Expanding the mobility of these residents outside of their communities through a corridor-wide transit network will also improve their access to employment, education and services that are currently inaccessible other than by car.

Moreover, as incomes increase, the share spent on transportation decreases. As shown in Table 6-2, low-income households spend a significantly larger percentage of their income on transportation in comparison to wealthy households.

TABLE 6-2: NATIONAL DATA ON HOUSEHOLD SPENDING ON TRANSPORTATION (2013)

	LOW INCOME HOUSEHOLD INCOME	AVERAGE HOUSEHOLD INCOME	WEALTHY HOUSEHOLD INCOME
	\$17,508	\$63,784	\$238,345
% of Annual Income	21.3%	14.1%	8.4%
% of Annual Expenditures	14.6%	17.6%	15.8%

Based on Data from the Bureau of Labor Statistics



For low-income households who acutely experience the cost of car ownership, expanding transit options may help to decrease household transportation expenses and allow for additional spending on other household budget items like food and healthcare and better access to job opportunities.

More detail about the corridor's population living below the poverty line can be found in Technical Memorandum #3: Existing Socio-Economic Data and Conditions.

6.2 The senior population is growing the fastest in areas with limited or no transit service; the largest senior populations continue to be located in areas with comparatively high levels of transit service.

Canton Township's senior population grew the fastest between 2000 and 2013 (an increase of more than 3,600), but Detroit has a senior population that is more than seven times larger than any other corridor community (almost 84,000).

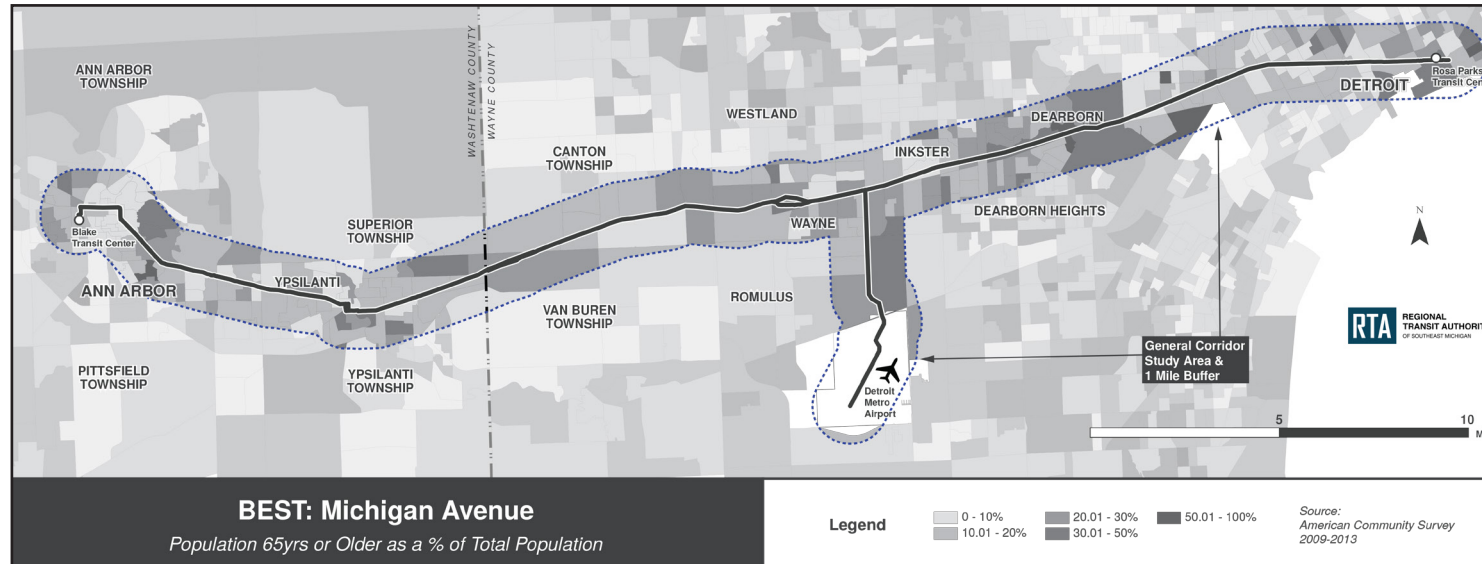
TABLE 6-3: Population Age 65 and Older, 2000 - 2013

COMMUNITIES ALONG CORRIDOR	2000		2013		ABSOLUTE (#) CHANGE (00 - 13)	% CHANGE (00 - 13)
	TOTAL	% OF POP	TOTAL	% OF POP		
Ann Arbor	9,017	7.9%	11,393	9.9%	2,376	26.4%
Ann Arbor Township	719	16.4%	787	17.5%	68	9.5%
Canton Township	4,534	5.9%	8,212	9.2%	3,678	81.1%
Dearborn	15,232	15.6%	11,519	11.9%	-3,713	-24.4%
Dearborn Heights	10,914	18.7%	9,156	16.0%	-1,758	-16.1%
Detroit	99,056	10.4%	83,573	11.8%	-15,483	-15.6%
Inkster	3,251	10.8%	2,795	11.1%	-456	-14.0%
Pittsfield Township	1,722	5.7%	3,013	8.5%	1,291	75.0%
Romulus	1,804	7.9%	2,731	11.5%	927	51.4%
Superior Township	834	7.8%	1,627	12.4%	793	95.1%
Van Buren Township	1,551	6.6%	2,532	8.9%	981	63.2%
Wayne	2,230	11.7%	2,488	14.3%	258	11.6%
Westland	11,456	13.2%	12,095	14.5%	639	5.6%
Ypsilanti	1,571	7.1%	1,658	8.4%	87	5.5%
Ypsilanti Township	3,536	7.2%	4,717	8.8%	1,181	33.4%
Study Area	25,027	10.0%	29,342	10.6%	4,315	17.4%
Corridor Communities	167,427	10.5%	158,296	11.5%	-9,131	-5.5%
Wayne + Washtenaw Counties	275,253	11.5%	270,796	12.6%	-4,457	-1.6%
RTA Region	517,863	11.9%	561,310	13.3%	43,447	8.4%
Stae of Michigan	1,219,018	12.3%	1,405,233	14.2%	186,215	15.3%
United States	34,991,753	12.4%	40,267,984	12.9%	5,276,231	15.1%

Source: Census 2000 and 2009-2013 ACS 5-Year Estimates



FIGURE 6-2: BEST: MICHIGAN AVENUE CORRIDOR: PERCENT OF POPULATION AGE 65 AND OLDER



Study area residents over age 65 will become less reliant on cars either by choice or because they are unable to continue to drive themselves. Having transit options readily available to all age groups will ensure a well-utilized system and continued mobility through all stages of life.

While the percent of study area population over age 65 is slightly lower than at the region, state or national level, it has grown by more than 17 percent between 2000 and 2013 (Table 6-3), including pockets of strong growth in areas of low/no transit service - such as Canton Township.

This demonstrates a need for transit service to support aging in place and quality of life for the study area's seniors.

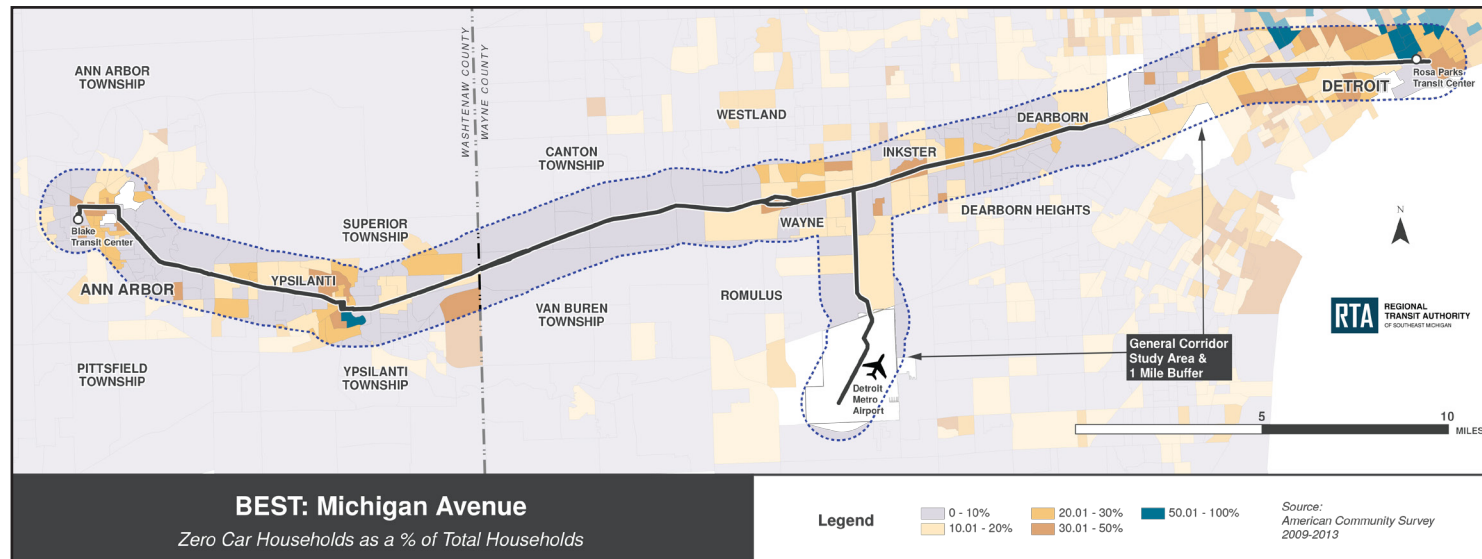
Transit investment and increased corridor connectivity will also benefit the majority of corridor community seniors, who are living in Detroit and have access to a multi-route transit system. Expanding transit connectivity along the length of the corridor will increase their access to health care and recreational opportunities that are currently only accessible by car.

As shown in Figure 6-2, high-density pockets of residents over age 65 can be found throughout the corridor, including in areas not currently served by transit.

While they may comprise a smaller number of seniors than is found in Detroit, they face the same age-related transportation challenges, which can be mitigated through effective and efficient corridor-wide transit investment.

More detail about the corridor's population over age 65 can be found in Technical Memorandum #3: Existing Socio-Economic Data and Conditions.



FIGURE 6-3: BEST: MICHIGAN AVENUE CORRIDOR: PERCENT OF ZERO CAR HOUSEHOLDS

6.3 The number of zero-car households within the corridor is increasing.

The highest rates of growth in number of zero-car households (Pittsfield Township, Superior Township, and Ypsilanti Township) are occurring outside of the communities with the greatest number of zero-car households (Detroit, Ann Arbor, and Westland).

A zero-car household is one that does not have access to a car, either by financial necessity or by choice. For those who cannot afford a car, effective and efficient transit is particularly critical, as it is often the only transportation option that is available to them. Expanding corridor transit access will better connect these zero-car households to additional job and educational opportunities and services throughout the corridor and region.

Research has increasingly focused on the role that age plays in making the choice to become a zero-car household. The Millennial generation (born between 1980 and 2003) is leading trends toward lifestyles that are less dependent on driving. Literature shows that Millennials are more likely to want to live in urban and walkable neighborhoods, they are eager to take other modes of transportation (especially transit), and they embrace technologies that open up new and non-driving transportation options.¹⁰

Attracting this generation to live and work within the study area will contribute to sustainable economic growth, as these are the workers that are increasingly driving the locational choices of major employers, as described in more detailed in Section 7.2. Transit investment will be a key tool in creating the transportation network and quality life that is attractive to this generation.

As shown in Table 6-4, the number of study area zero-car households increased by more than 20 percent between 2000 and 2013, compared to declines at the county, region and national levels. The State of Michigan saw a modest increase during that time period.

¹⁰ U.S. PIRG Education Fund and Frontier Group, Millennials in Motion: Changing Travel Habits of Young Americans and the Implications for Public Policy, October 2014.

TABLE 6-4: ZERO CAR HOUSEHOLDS, 2000 - 2013

COMMUNITIES ALONG CORRIDOR	2000		2013		ABSOLUTE (#) CHANGE (00 - 13)	% CHANGE (00 - 13)
	TOTAL	% OF HH	TOTAL	% OF HH		
Ann Arbor	4,361	9.5%	5,405	11.8%	1,044	23.9%
Ann Arbor Township	38	1.9%	19	1.1%	-19	-50.0%
Canton Township	935	3.4%	1,120	3.6%	185	19.8%
Dearborn	3,909	10.6%	2,607	8.1%	-1,302	-33.3%
Dearborn Heights	1,582	6.8%	1,428	6.7%	-154	-9.7%
Detroit	73,682	21.9%	61,752	24.1%	-11,930	-16.2%
Inkster	1,664	14.9%	1,518	16.0%	-146	-8.8%
Pittsfield Township	578	4.9%	927	6.7%	349	60.4%
Romulus	598	7.1%	695	7.7%	97	16.2%
Superior Township	282	7.1%	410	8.3%	128	45.4%
Van Buren Township	406	4.1%	479	4.2%	73	18.0%
Wayne	695	9.4%	860	12.6%	165	23.7%
Westland	2,840	7.8%	3,301	9.6%	461	16.2%
Ypsilanti	1,209	14.1%	1,354	17.6%	145	12.0%
Ypsilanti Township	1,264	6.3%	1,695	7.7%	431	34.1%
Study Area	13,718	14.1%	22,913	15.3%	9,195	20.4%
Corridor Communities	94,043	16.1%	83,570	16.2%	-10,473	-11.1%
Wayne + Washtenaw Counties	114,673	12.8%	103,449	12.8%	-11,224	-9.8%
RTA Region	157,664	9.4%	152,514	9.4%	-5,150	-3.3%
State of Michigan	290,240	7.7%	299,812	7.8%	9,572	3.3%
United States	10,861,067	10.3%	10,483,007	9.1%	-378,060	-3.5%

Source: Census 2000 and 2009-2013 ACS 5 Year Estimates

The largest growth in number of zero-car households is found at the western end of the corridor – in Ann Arbor, Westland and Ypsilanti Township – while the largest declines can be found at the eastern end of the corridor – in Detroit and Dearborn.

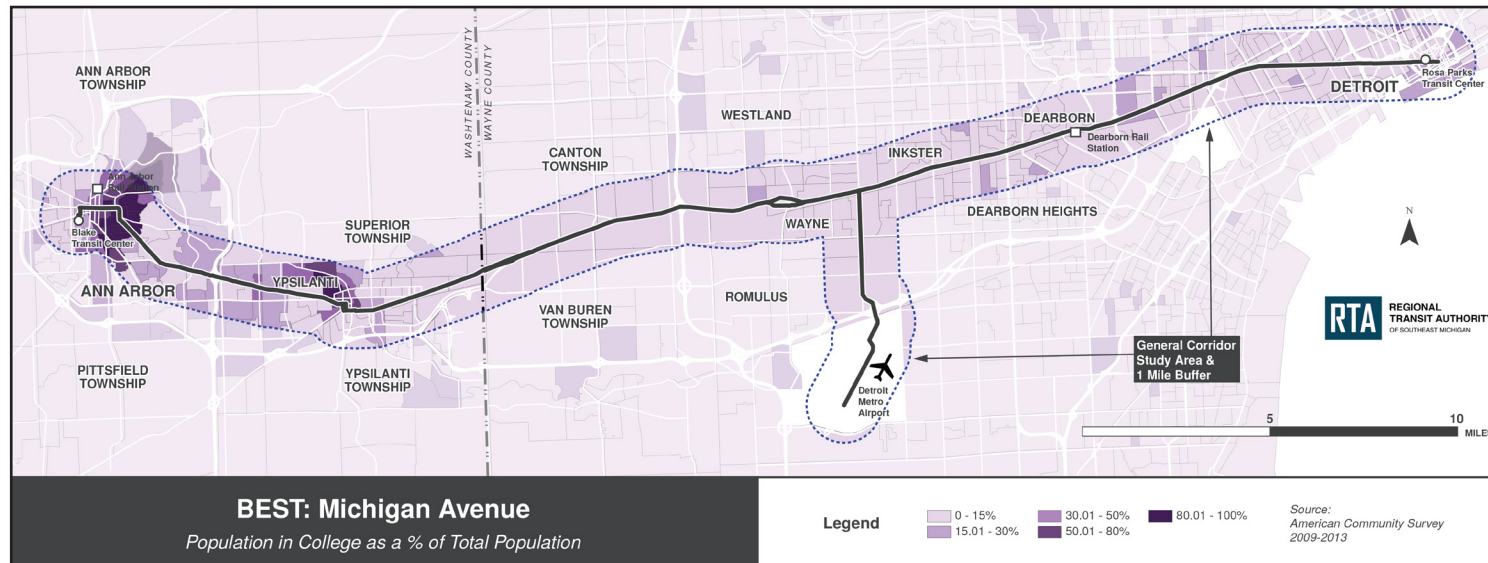
As shown in Figure 6-3 and Table 6-4, however, the highest densities of zero-car households are found in Detroit and Ypsilanti. Parts of many communities along the study corridor, including Ann Arbor, Ypsilanti, vSuperior Township, Van Buren Township, Wayne, Romulus, Inkster, and Dearborn, have a greater percent of zero-car households than region, state, or national averages.

This data shows that whether a household is car-free by choice or necessity, the percentage of those households within the study area is comparatively high, the number of them is growing, and the growth is occurring fastest in areas that currently have limited or no transit service. An expanded corridor-wide transit network will positively impact the mobility of zero-car households throughout the corridor.



More detail about the corridor's population living in zero-car households can be found in Technical Memorandum #3: Existing Socio-Economic Data and Conditions.

FIGURE 6-4: BEST: MICHIGAN AVENUE CORRIDOR: PERCENT OF POPULATION IN COLLEGE/UNIVERSITY



6.4 The corridor college student population is large and growing.

The share of study area college student population is double the student share of the population found at the State and US levels.

While the greatest concentration of college students is found in and around the University of Michigan in Ann Arbor, there are also concentrations of students around Eastern Michigan University in Ypsilanti, the University of Michigan's Dearborn campus, Henry Ford College's Dearborn campus, and Wayne State's campus in Detroit (see Table 6-5 and Figure 6-4).

While the University of Michigan offers its own campus transit service (see Figure 5.1), college students across the corridor rely on public transit to access their campuses from off-campus housing and to access destinations - including employment opportunities - in communities that surround the campuses.

A corridor-wide transit network would not only allow existing students to access destinations outside of their campuses, it would also enable residents living within the study area to consider educational opportunities that were previously unavailable to them because of transportation challenges.

In addition to college and university students, some study area high school students may benefit from increased educational opportunities as a result of corridor transit investment. Detroit Public Schools (DPS) provides City of Detroit Department of Transportation bus passes to regular education students in grades 9 through 12, provided that the student attends his/her neighborhood school and resides more than two miles from that school, and the student meets low-income guidelines traditionally used for free or reduced meal eligibility.¹¹

¹¹ Detroit Public Schools, Office of Transportation, <http://detroit.k12.mi.us/admin/operations/transportation/>



According to the City of Detroit Department of Transportation, DPS purchased 5,500 daily bus passes and 2,000 student reduced fare cards for the 2014-2015 school year.¹² Increased corridor connectivity may improve student access to their existing schools, and may improve connectivity to educational opportunities beyond his/her neighborhood school.

More detail about the corridor's student population can be found in Technical Memorandum #3: Existing Socio-Economic Data and Conditions.

¹² Email from Casey McNeill, Grants Administrator for the City of Detroit Department of Transportation.

TABLE 6-5: COLLEGE/UNIVERSITY STUDENT POPULATION, 2000 - 2013

COMMUNITIES ALONG CORRIDOR	2000		2013		ABSOLUTE (#) CHANGE (00 - 13)	% CHANGE (00 - 13)
	TOTAL	% OF HH	TOTAL	% OF HH		
Ann Arbor	36,892	32.4%	40,814	35.4%	3,922	10.6%
Ann Arbor Township	377	8.6%	347	7.7%	-30	-8.0%
Canton Township	5,405	7.1%	7,490	8.4%	2,085	38.6%
Dearborn	6,741	6.9%	9,476	9.8%	2,735	40.6%
Dearborn Heights	3,436	5.9%	4,362	7.6%	926	26.9%
Detroit	48,926	5.1%	56,084	7.9%	7,158	14.6%
Inkster	1,574	5.2%	1,837	7.3%	263	16.7%
Pittsfield Township	3,749	12.4%	4,555	12.9%	806	21.5%
Romulus	848	3.7%	1,844	7.8%	996	117.5%
Superior Township	758	7.1%	1,229	9.3%	471	62.1%
Van Buren Township	1,579	6.7%	2,942	10.3%	1,363	86.3%
Wayne	848	4.5%	1,196	6.9%	348	41.0%
Westland	4,737	5.5%	7,125	8.5%	2,388	50.4%
Ypsilanti	8,827	39.7%	7,459	38.0%	-1,368	-15.5%
Ypsilanti Township	4,637	9.4%	5,358	10.0%	721	15.5%
Study Area	37,535	15.4%	48,092	17.7%	10,557	28.1%
Corridor Communities	129,334	8.1%	152,118	11.1%	22,784	17.6%
Wayne + Washtenaw Counties	170,878	7.2%	205,286	9.5%	34,408	20.1%
RTA Region	292,330	6.7%	357,699	8.5%	65,369	22.4%
State of Michigan	635,836	6.4%	804,956	8.1%	169,120	26.6%
United States	17,483,262	6.2%	23,454,805	7.5%	5,971,543	34.2%

Source: Census 2000 and 2009-2013 ACS 5-Year Estimates



7.0

Project Need #3

Study area population and employment densities are higher than regional densities, and growth is forecast to more evenly distribute throughout the corridor.

High-capacity transit investment is necessary to accommodate this growth and to improve multimodal connections between growing communities throughout the corridor.

7.1 Total study area population is forecast to remain steady through 2040, but will redistribute among the corridor communities.

Detroit is forecast to remain the largest corridor community (by a factor of five) despite forecast population losses; the communities with the greatest forecast increase in actual population are on the western end of the corridor (Ann Arbor, Pittsfield Township, Superior Township, and Ypsilanti Township).

As shown in Table 7-1, total study area population is forecast to change by just 0.1% through 2040, but communities along the corridor are forecast to fluctuate between 19% losses and 33% gains in population. Forecast population losses are clustered in the communities on the eastern end of the corridor, while population gains are forecast to occur along the western half of the corridor. The majority of corridor community population is forecast to live on the eastern side of the corridor, anchored by Detroit.

Downtown Detroit is experiencing a residential boom that can serve as an anchor for regional population growth and demonstrates Millennial-driven interest in urban living. In 2013, downtown Detroit's residential occupancy rates stood above 95%, driven by an influx of companies and entrepreneurs¹³; by 2015, the residential rental occupancy rate in downtown Detroit was 98%¹⁴.

More detail about the corridor's population and employment growth can be found in Technical Memorandum #3: Existing Socio-Economic Data and Conditions.

¹³ Nick Carey and Paul Liener, Reuters, "Bankrupt Detroit's downtown renaissance creates a trickle of hope," July 22, 2013.

¹⁴ Amy Haimerl, Crain's Detroit Business, "35,037 people call greater downtown Detroit home – and other data you can use," March 23, 2015.

TABLE 7-1: 2010 POPULATION AND 2040 FORECAST POPULATION

COMMUNITIES ALONG CORRIDOR	2010 POPULATION	2040 POPULATION	ABSOLUTE CHANGE (10 - 40)	% CHANGE (10 - 40)
Ann Arbor	113,934	123,786	9,852	8.6%
Ann Arbor Township	4,067	5,414	1,347	33.1%
Canton Township	90,173	91,820	1,647	1.8%
Dearborn	98,146	95,436	-2,710	-2.8%
Dearborn Heights	57,774	57,967	193	0.3%
Detroit	713,862	614,969	-98,893	-13.9%
Inkster	25,369	20,612	-4,757	-18.8%
Pittsfield Township	34,663	39,376	4,713	13.6%
Romulus	23,989	22,685	-1,304	-5.4%
Superior Township	13,058	17,021	3,963	30.3%
Van Buren Township	28,821	30,265	1,444	5.0%
Wayne	17,593	16,250	-1,343	-7.6%
Westland	84,094	78,602	-5,492	-6.5%
Ypsilanti	19,435	19,937	502	2.6%
Ypsilanti Township	53,362	60,031	6,669	12.5%
Study Area	290,796	290,472	-324	-.1%
Corridor Communities	1,378,340	1,294,171	-84,169	-5.6%
Wayne + Washtenaw Counties	2,165,375	2,043,166	-122,209	-5.1%
RTA Region	4,208,715	4,195,419	-13,296	-3.9%
State of Michigan	4,704,809	4,742,083	37,274	0.4%
United States	4,704,809	4,742,083	37,274	0.4%

7.2 Study area employment density is almost four times greater than the four-county RTA region.

The highest concentrations of employment density in 2010 were spread throughout the corridor: Ann Arbor, Dearborn, Detroit, Wayne, and Ypsilanti. These communities will continue to have the highest concentrations of employment density through 2040.

The study area is one of the employment engines for the four-county RTA region. From Metro Airport to Ford Motor Company World Headquarters to mom-and-pop shops, the study area includes a density of job opportunities that draws employees from within the corridor, from throughout the region, and beyond. Corridor-wide transit service will give employers access to a broader employment pool while giving study area residents increased access to job opportunities throughout the corridor. This expanded connectivity to a larger talent pool will help study area businesses to stay competitive and can help to provide study area employees with a foundation for economic sustainability.



As discussed in Section 6.3, Millennials – the 18- to 34- year olds whose age group will rival the Baby Boomers in size and cultural influence – have repeatedly stated a preference for built environments that support a car-light or car-free urban-style existence. These Millennials are the rising “creative class” – those workers whose career orientation is towards ideas and innovation rather than heavy manufacturing and assembly lines. As businesses – particularly tech-oriented businesses – look for lower-cost and more Millennial-friendly environments than auto-centric suburban office parks, study area communities can increase their attractiveness through transit investment. Improved connectivity will not only improve access to Detroit- and Ann Arbor-based talent, but can draw these “creative class” workers (and the companies that want to hire them) to communities throughout the study corridor.

More detail about the corridor’s population and employment growth can be found in Technical Memorandum #3: Existing Socio-Economic Data and Conditions.

TABLE 7-2: EMPLOYMENT DENSITY (JOBS PER MILE), 2010 AND 2040

	2010	2040
Study Area	3,175	3,465
Corridor Communities	1,628	1,785
Wayne + Washtenaw Counties	817	883
Four County RTA Region	842	939

Source: SEMCOG



8.0

Project Need #4

The communities in the study area have demonstrated a commitment to sustainable growth strategies in their adopted plans and policies.

Detroit, Dearborn, Ann Arbor, Wayne, and Ypsilanti are among corridor communities whose plans identify targeted, transit-supportive development patterns as priorities for the community and the BEST: Michigan Avenue corridor. High-capacity regional transit system investment that leverages existing transportation facilities while reducing reliance on single-occupant vehicles will be necessary to achieve these goals.

While existing development patterns and land uses vary along the length of the study area, communities have adopted plans and policies that explicitly call for transit and/or include strategies to create transit-friendly environments through infrastructure investments and policy guidance, including:

- For the portion of the corridor in the City of Detroit, Detroit Future City has identified Michigan Avenue as a Tier 1 corridor for bus rapid transit investment; citywide Tier 1 bus rapid transit routes are planned to comprise a network of dedicated center- or side-running, high-speed connections to regional employment centers.
- Dearborn's 2030 Master Plan identified opportunities along Michigan Avenue for walkability improvements, transit network connections to the new Amtrak station, promotion of transit-oriented design, and recommends the adoption of a Complete Streets Plan in the near future.
- The City of Inkster's Comprehensive Plan 2025 references the need for lane reductions, on-street parking, bike lanes, and enhanced pedestrian crossings along Michigan Avenue.
- The Wayne Downtown Plan outlines the community's desire to increase density, support transit, and promote walkability. Planned development patterns along Michigan Avenue are geared towards transit-oriented development: mixed-use, well-connected, and multi-modal friendly. Narrowing of roads is emphasized, especially along the Michigan Avenue one-way pair, and non-motorized access and transit services are emphasized.
- Canton Township's 2012 Comprehensive Master Plan highlights Michigan Avenue as a future mixed-use area that may support office, light industrial and regional commercial uses.

- The Ypsilanti Township Master Plan calls for transit-friendly higher-density residential with mixed-use infill along Michigan Avenue.
- The Shape Ypsilanti Plan highlights transit and multi-modal transportation goals as a priority for the community, and outlines plans for non-motorized transportation improvements along Michigan Avenue, increasing TheRide service, and potential transit-oriented development around a planned future commuter train station.
- The City of Ann Arbor’s Master Plan and the ReImagine Washtenaw Plan include goals of transforming the Michigan Avenue corridor into a multi-modal transit hub, encouraging mixed-use development and transit-oriented development, and adding higher density residential uses with mixed-use infill development.
- Ann Arbor’s Transportation Plan emphasizes the need for signature and express transit services along the corridor, with the possibility of bus rapid transit or streetcars, and also supports the implementation of commuter rail services to and from the City Center.
- The Romulus Master Plan calls for enhanced transit connections to the airport.

Transit investment can create a synergy with the development opportunities in these communities to further progress towards realizing their stated visions for growth and economic development, and will help transform Michigan and Washtenaw Avenues into “main streets” for each of these communities.

More detail about the corridor’s plans for growth can be found in Technical Memorandum #4: Land Use Analysis.





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