

Ann Arbor Area Transportation Authority

Title VI Program Update

December 2017

**Ann Arbor Area Transportation Authority
Title VI Update
December, 2017**

General Requirements

<i>Review and Approval of Title VI Program Submission</i>	page 5
Attachment A - Includes a letter from the AAATA Chief Executive Officer (CEO), approving the Title VI Program submission. This letter documents the CEO's review and approval of results from the Service Standard and Policies Monitoring analysis.	
<i>Title VI Notice to the Public</i>	page 7
Attachment B - Includes a copy of the notice and a list of locations where posted.	
<i>Title VI Complaint Procedure</i>	page 8
Attachment C - Includes a copy of the complaint procedure.	
<i>Title VI Complaint Form</i>	page 10
Attachment D - Includes a copy of the complaint form.	
<i>List of Transit-Related Title VI Investigations, Complaints, and Lawsuits</i>	
Since the last Title VI Program submission in September, 2014 there have been no Title VI investigations or lawsuits, and two complaints.	
<i>Public Participation Plan</i>	page 13
Attachment E - Includes a copy of the public participation plan with outreach efforts since the last Title VI Program submission in September, 2014.	
<i>Language Assistance Plan for Persons with Limited English Proficiency (LEP)</i>	page 24
Attachment F - Includes a copy of the current LEP plan.	
<i>Membership of Non-elected Committees and Councils</i>	page 37
Attachment G - Includes a table depicting the composition of non-elected committees and councils, the membership of which are selected by the AAATA, as well as a description of the selection process.	
<i>Title VI Monitoring of Subrecipients</i>	page 38
Attachment H – Includes a list of the six sub-recipients for which AAATA has monitored Title VI planning. Since the last Title VI Program submission in September, 2014 there have been no Title VI complaints, investigations, or lawsuits for AAATA subrecipients.	
<i>Title VI Equity Analysis for Facility Location</i>	
The AAATA has not selected a new location for a facility since the last Title VI submission in September, 2014, and is not in the process of doing so. A decision to locate a second bus storage facility in the Ann-Arbor Ypsilanti area may be made in the next three years. If so, an equity analysis will be conducted before site selection.	

Requirements of Transit Providers for Large Urbanized Areas

<i>Service Standards and Policies</i>	page 39
Attachment I - Includes current service standards and service policies.	
<i>Demographic and Service Profile</i>	page 43
Attachment J - Includes demographic and service profile maps and charts.	
<i>Demographic Ridership and Travel Patterns</i>	page 48
Attachment K - Includes ridership and travel pattern information based on data from an on-board survey of riders in October, 2015.	
<i>Service Standard and Policies Monitoring</i>	page 87
Attachment L - Includes results of the monitoring program for the Service Standards and Policies. The evidence that the board considered, and approved the results of the analysis is included in the Board resolution in Attachment H.	
<i>Major Service Change, Disparate Impact, and Disproportionate Burden Policies</i>	page 100
Attachment M - Includes a copy of each of the policies and the Board resolution adopting the policies. The attachment also includes a description of the public engagement process during the development of the policies.	
<i>Service and Fare Equity Analyses</i>	page 118
Attachment N - During the period since the last Title VI Program Submission in 2014, the AAATA implemented a Five-Year Transit Improvement Program (5YTIP) and major service changes in January 2015, August 2015, May 2016, August 2016, and August 2017. A copy of the equity analysis for each and the Board resolution adopting the change including acknowledgment of the equity analysis is included.	

Table of Figures

Figure A-1	A-1 Approval of Title VI Program submission	-	-	-	-	-	-	page 6
Figure D-1	Title VI Complaint Form	-	-	-	-	-	-	page 11
Figure E-1	5YTIP Excerpt: Final Phase of Public Participation	-	-	-	-	-	-	page 16
Figure E-2	5YTIP Public Input Meetings and Outreach Events	-	-	-	-	-	-	page 19
Figure F-1	Language Assistance Plan for Persons with Limited English Proficiency (LEP)	-	-	-	-	-	-	page 25
Figure F-2	LEP population concentration maps	-	-	-	-	-	-	page 33
Figure I-1	AAATA Fixed-Route Service Standards and Policies for Title VI	-	-	-	-	-	-	page 40
Figure J-1	AAATA Fixed-Route System Map – August 2017	-	-	-	-	-	-	page 44
Figure J-2	Minority Population Service Coverage for AAATA Local Fixed Route	-	-	-	-	-	-	page 45
Figure J-3	Low-Income Population Service Coverage for AAATA Local Fixed Route	-	-	-	-	-	-	page 46
Figure J-4	Summary Table - Population Percentages and Coverage Designation by Route	-	-	-	-	-	-	page 47
Figure K-1	AAATA On-Board Survey Form – October 2015	-	-	-	-	-	-	page 50
Figure K-2	AAATA 2015 On-Board Survey Results Summary	-	-	-	-	-	-	page 52
Figure K-3	AAATA 2013 Commuter Service Survey Results Summary	-	-	-	-	-	-	page 74
Figure K-4	AAATA 2014 Airport Service Survey Results Summary	-	-	-	-	-	-	page 75
Figure L-1	Weekday headway monitoring analysis	-	-	-	-	-	-	page 90
Figure L-2	Saturday headway monitoring analysis	-	-	-	-	-	-	page 91
Figure L-3	Sunday headway monitoring analysis	-	-	-	-	-	-	page 92
Figure L-4	Weekday on-time performance monitoring analysis	-	-	-	-	-	-	page 93
Figure L-5	Saturday on-time performance monitoring analysis	-	-	-	-	-	-	page 94
Figure L-6	Sunday on-time performance monitoring analysis	-	-	-	-	-	-	page 95
Figure L-7	AAATA local fixed-route service availability	-	-	-	-	-	-	page 96
Figure L-8	Vehicle Standing Loads	-	-	-	-	-	-	page 97
Figure L-9	Fleet Roster Vehicle Assignment	-	-	-	-	-	-	page 98
Figure L-10	AAATA Shelter Locations 2014	-	-	-	-	-	-	page 99
Figure M-1	AAATA Public Input Policy for Service and Fare Changes	-	-	-	-	-	-	page 101
Figure M-2	AAATA Board resolution: Adoption of Revised Public Input Policy	-	-	-	-	-	-	page 105
Figure M-3	AAATA Equity Analysis Policy	-	-	-	-	-	-	page 106
Figure M-4	Public Input Notice on Disparate Impact and Disproportionate Burden	-	-	-	-	-	-	page 115
Figure M-5	Public Notice Distribution List	-	-	-	-	-	-	page 116
Figure M-6	AAATA Board resolution: Approval of Service Equity Analysis Policy	-	-	-	-	-	-	page 117
Figure N-1	Route #5 service increase – AAATA Board resolution and equity analysis	-	-	-	-	-	-	page 122
Figure N-2	Route #12 service changes – AAATA Board resolution and equity analysis	-	-	-	-	-	-	page 136
Figure N-3	Urban Core 5YTIP – AAATA Board resolution and equity analysis	-	-	-	-	-	-	page 146
Figure N-4	Service Equity Analysis for 5YTIP	-	-	-	-	-	-	page 147
Figure N-5	Urban Core 5YTIP Service Equity Maps	-	-	-	-	-	-	page 162
Figure N-6	Express service fare changes – AAATA Board resolution and equity analysis	-	-	-	-	-	-	page 165
Appendix		-	-	-	-	-	-	page 170

Attachment A

Review and Approval of Title VI Program Submission

The Ann Arbor Area Transportation Authority's CEO letter approving AAATA's 2017 Title VI submission is attached as Figure A-1. Public Comments in response to the Title VI Program Update in 2014 are included in the Appendix Part III on page 286.



Dawn Gabay Operations Center
2700 S. Industrial Highway
Ann Arbor, MI 48104

734-973-6500 **Phone**
734-973-6338 **Fax**
TheRide.org **Online**

Ms. Marisol Simon
Regional Administrator
Region 5 Office
Federal Transit Administration
200 West Adams St.
Suite 320
Chicago, IL 60606

December 6, 2017

Dear Regional Administrator Marisol Simon,

On behalf of the Ann Arbor Area Transportation Authority (AAATA), I am pleased to share with you our 2017 Title VI Program Update for submission to the Federal Transit Administration.

As the Chief Executive Officer, it is my responsibility to review and approve this report as a top executive representative of our organization. We are proud to continue AAATA's compliance with FTA requirements regarding the Civil Rights Act of 1964, in supporting non-discrimination of transit service. AAATA provides ongoing programs and services without regard to race, color, or national origin in accordance with Title VI of the Civil Rights Act.

Staff has prepared this update in accordance with FTA Circular 4702.1B requirements to revise our Title VI Program every three years. AAATA's Board has also delegated authority to me, as the CEO, to review and approve official agency matters under Section 4 of the AAATA Governance Policy, approved in June 2017. I received this Title VI Program Update for review prior to submission, including the results of the service standard monitoring program. With consideration and review of the results, I approve the analysis for submission to you of our 2017 Title VI Program Update.

Please feel free to contact me with questions you may have or for any clarifying information, and thank you for your review.

Sincerely,


Matthew Carpenter
CEO

Attachment B

Ann Arbor Area Transportation Authority Title VI Notification Procedure

The notice below is provided:

- As a poster on-board each AAATA bus
- On the AAATA website on the Home Page and Customer Service section.
- On the Table of Contents page of each edition of the printed RideGuide. The RideGuide is the principal publication of the AAATA and includes all routes and schedules as well as information on all AAATA services, fares, accessibility, contact information, news and riding tips. The RideGuide is published 3 times per year and more than 100,000 copies are distributed free of charge.
- As a poster in the AAATA Headquarters lobby, Blake Transit Center, and Ypsilanti Transit Center

Ann Arbor Area Transportation Authority (AAATA/TheRide) is committed to ensuring that no person is excluded from participation in, or denied the benefits of its programs and services on the basis of race, color, and national origin in accordance with Title VI of the Civil Rights Act of 1964. For information about TheRide's non-discrimination obligations, or to file a complaint if you believe you have been subjected to unlawful discrimination, please contact TheRide by mail at Ann Arbor Area Transportation Authority - Attn: Title VI, 2700 S. Industrial Hwy., Ann Arbor, MI 48104, or by Email: at the "Contact Us" section of TheRide's website, www.theride.org.

Attachment C

Title VI Complaint Procedure

The notice below is used to inform the public. See notification procedure in Attachment A.

Ann Arbor Area Transportation Authority (AAATA/TheRide) is committed to ensuring that no person is excluded from participation in, or denied the benefits of its programs and services on the basis of race, color, and national origin in accordance with Title VI of the Civil Rights Act of 1964. For information about TheRide's non-discrimination obligations, or to file a complaint if you believe you have been subjected to unlawful discrimination, please contact TheRide by mail at Ann Arbor Area Transportation Authority - Attn: Title VI, 2700 S. Industrial Hwy., Ann Arbor, MI 48104. By Email: at the "Contact Us" section of TheRide's website, www.theride.org.

A copy of AAATA's Title VI Complaint Form is available in print at AAATA's main office, as well as posted online at www.TheRide.org on the Customer Service page within the Title VI Notification Procedure section.

Each complaint which is received that alleges discrimination on the basis of race, color, or national origin will be investigated using the procedure below, whether it specifically references Title VI or not. The complainant will be notified within 7 days that their complaint has been received and is being investigated. This notice may include a request for additional information necessary to investigate the complaint (e.g. date or specific time of an incident). A written response of the determination will be provided to the complainant within 30 days whenever possible. If the investigation and determination cannot be completed within 30 days, the complainant will be provided with written notice including an explanation of the reason a longer time is required, and a deadline for a determination.

If the allegation concerns a specific incident involving a driver or information specialist, a preliminary investigation of the facts will be conducted by the AAATA Transportation Department management staff. It should be noted that all of AAATA's buses and facilities are equipped with cameras. These cameras have proved to be extremely useful in resolving complaints about specific incidents. Transportation Management Staff will make a preliminary determination about the facts, recommend any disciplinary measures, and transmit the complaint to the Chief Executive Officer (CEO) or Deputy CEO.

For more general allegations – e.g. regarding AAATA service design or fares – the CEO or Deputy CEO will determine the appropriate member of senior staff to conduct the preliminary investigation and report the findings and recommendations for corrective action to the CEO or Deputy CEO.

The CEO or Deputy CEO will review all complaints alleging discrimination on the basis of race, color, or national origin and the results of the preliminary investigation. The CEO or Deputy CEO will make a determination as to whether the allegation of discrimination on the basis of

race, color, or national origin was valid, and any corrective action that will be taken. Note that even if the allegation of discrimination is determined to be invalid, corrective action may still be warranted in some cases.

The CEO or Deputy CEO will provide her or his findings in writing to the complainant, including whether the allegation of discrimination was found to be valid, and corrective actions that the AAATA has taken or promises to take. The letter will inform the complainant of the opportunity to provide additional information that may lead the AAATA to reconsider its decision, and of the complainant's right to file a complaint with the Federal Transit Administration (FTA).

Attachment D

Title VI Complaint Form

The Ann Arbor Area Transportation Authority Complaint Form for Title VI is attached as Figure D-1. Please see Attachment C for complaint procedures.

Section IV		
Have you previously filed a Title VI complaint with this agency?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Section V		
Have you filed this complaint with any other Federal, State, or local agency, or with any Federal or State court?		
<input type="checkbox"/> Yes <input type="checkbox"/> No		
If yes, check all that apply:		
<input type="checkbox"/> Federal Agency: _____		
<input type="checkbox"/> Federal Court _____	<input type="checkbox"/> State Agency _____	
<input type="checkbox"/> State Court _____	<input type="checkbox"/> Local Agency _____	
Please provide information about a contact person at the agency/court where the complaint was filed.		
Name:		
Title:		
Agency:		
Address:		
Phone:		
Section VI		
Name of agency complaint is against:		
Contact person:		
Title:		
Phone number:		

You may attach any written materials or other information that you think is relevant to your complaint.

Signature and date required below

Signature

Date

Please submit this form in person at the address below, or mail this form to:

Ann Arbor Area Transportation Authority
Attention: Title VI Coordinator
2700 South Industrial Highway
Ann Arbor, MI 48103

Attachment E

Ann Arbor Area Transportation Authority

Public Participation Plan

The AAATA uses a variety of means and methods to communicate regularly with the public to inform and encourage input and participation. In addition to these ongoing efforts, the AAATA undertakes more focused and concerted efforts for particular issues.

The AAATA Board of Directors meets monthly, with all meetings open to the public and televised on local cable television. Time is provided for the public to comment on any issue at each meeting. The AAATA maintains a list of persons and organizations that wish to receive information from the AAATA. Information sent to those on the list includes Board meeting agenda and minutes, which include performance reports, service standard reports, notices of public hearings, capital purchase programming, budget development, and proposed service changes. Persons and organizations can be added to the list at their request and there is no charge for this service. Email is used for most persons and organizations, but hard copies are mailed to persons and organizations that prefer this method. This information is also posted on the AAATA website, www.theride.org

AAATA's Community Relations Department maintains an extensive list of organizations and individuals to receive information, including press releases and other announcements. The list includes local print and broadcast media outlets as well as elected officials, civic and educational organizations, and public and private organizations. Organizations include those representing senior citizens, people with disabilities, and low-income and minority persons. Community Relations staff continually update the list and actively seek out organizations to include. In addition, individuals and organizations can be added to the list at their request.

Several methods are used to communicate directly with riders:

1. The Ride Guide is a printed booklet with comprehensive information about AAATA services, and also includes general information on AAATA including making suggestions, complaints, and providing input to AAATA. Up to 200,000 copies of the RideGuide are printed and distributed free of charge each year. RideGuides are distributed on-board AAATA buses, at AAATA facilities, and at a wide range of public buildings apartment complexes, public housing, schools, and other locations including organizations primarily providing services for low-income, minority, senior and disabled persons.
2. The AAATA website includes the same information, and additionally provides current information on upcoming meetings and participation opportunities. It provides a quick, easy way to submit complaints, suggestions, and other input.

3. Information Guides are printed in Spanish, Simplified Mandarin, Korean, as well as English, and the distribution includes organizations specifically serving persons with limited English proficiency.
4. RideLines is a newsletter published several times a year for riders with news and current information, including information on proposed service and fare changes and any other proposals for which public input is sought. RideLines is distributed on-board buses as a hanger, on the AAATA website, at transit centers, and the information is distributed to the list of organizations and individuals on the list described in the previous paragraph.

Proposed service and fare changes are announced to the public by means described above, and public input is solicited far enough in advance for the AAATA to consider the comments, and make revisions based on the comments. The AAATA follows the Public Input Policy for Service and Fare Changes (see Figure L-1) adopted by the Board of Directors. In soliciting public input, the AAATA provides opportunities for interaction. That is, the AAATA does not just receive comments, but engages in conversation to understand any concerns, and to investigate ways to reduce or eliminate any negative impacts.

Persons and organizations are afforded an opportunity to provide input in several ways:

- By email
- By telephone to a service change hotline
- By fax
- In writing
- In person at public meetings conducted by AAATA. Meetings are typically held in several locations
- Through AAATA's website TheRide.org/ContactUs
- Online via Facebook, Twitter, YouTube, Instagram, and Pinterest @CatchTheRide

The AAATAs' public input process emphasizes two-way communication. The intention is not just to receive comments, but to discuss the effect of the proposed change. A response is provided to each person who makes a comment or suggestion or asked a question. In many cases several messages or a conversation take place. Meetings are typically drop-in sessions several hours in duration at which people can come when it is convenient for them, review materials, talk about the proposed changes with AAATA staff, have questions answered, and receive a response to specific concerns.

The AAATA has taken specific steps to solicit input on proposed changes from organizations serving minority, low-income and limited English proficiency persons. This includes distributing the notice to organizations serving these groups, and choosing

public meeting sites at locations such as community centers within neighborhoods with a high African-American population.

The most recent series of AAATA outreach efforts were for the last round of public meetings in the development of the AAATA's 5-Year Transit Improvement Program. Thirteen meetings were conducted, primarily in the evening, at locations throughout the service area. A list of the meeting times and places is at the end of this section. A person fluent in Spanish attended each meeting to greet attendees, and provide language assistance.

A primary element in the public participation plan is to maintain an on-going relationship with a wide variety of groups and organizations through regular contact and participation in events sponsored by the group. This keeps lines of communication open for AAATA to provide information, and for them to raise issues, ask questions, or make requests. This begins with the AAATA CEO who had hundreds of individual meetings in the last three years with elected officials and leaders of business, community, religious, and social service organizations. Staff is required to follow up on any issues raised during these meetings. Over the last three years, AAATA staff members have attended events, festivals, and fairs throughout the community to talk to attendees, provide information and collect feedback. Finally, AAATA staff made presentations on plans and services to many neighborhood groups and organizations and collected feedback. From all of these sources, staff records comments, questions, and issues, and follows up on any that cannot be resolved at the time.

A few pages from the 5-Year Transit Improvement Plan are included in **Figure E-1**, as a summary of the final phase of public participation. Also, an extensive list of public input opportunities following implementation of the 5YTIP, and related outreach events from 2014 to 2017 is included in **Figure E-2**. Attached in the **Appendix**, for reference, is a copy of the full report for the Urban Core's final 5-Year Transit Improvement Plan, approved by AAATA's board in May, 2014.

SYTIP Excerpt: Final Phase of Public Participation

Making It Your Plan

The draft Five Year Transit Improvement Plan for the Urban Core of Washtenaw County was developed in late summer 2013 and based on discussions with the Urban Core Working Group and many others. The contents of the draft Five Year Transit Improvement Plan were shared with the public in a number of ways to obtain feedback on any final adjustments.

Public Outreach & Citizen Engagement

An extensive program of public outreach & citizen engagement included:

Community Meetings

13 public meetings were held throughout Ann Arbor, Ypsilanti and Ypsilanti Township during a period beginning mid-October through mid-November, 2013.



8 meetings were held in Ann Arbor

3 meetings were held in Ypsilanti

2 meetings were held in Ypsilanti Twp

- Ann Arbor Library – Main Branch
- Ann Arbor Library – Traverwood Branch
- Peace Neighborhood Center
- Ann Arbor Area Transportation Authority
- Michigan League
- Ypsilanti Township Hall
- Tappan Middle School
- Clark Community Center
- Hamilton Crossing Meeting Room
- Heritage Park Neighborhood Association
- Ann Arbor Library – Mallets Creek Branch
- U-M Towsley Conference Center
- Ypsilanti Senior Center
- SPARK – Ypsilanti Office

Media Outreach

A press release and weekly media alerts resulted in multiple interviews and several articles in major local media outlets annarbor.com, Chronicle, Ann Arbor Journal, Ypsilanti Courier and WEMU.

Paid Advertising

Paid advertisements were placed in local print media outlets including annarbor.com, Business to Business, etc.

Internet

Public meeting notices were posted on MovingYouForward.org, and at TheRide.org.

Social Media

@CatchTheRide Facebook, Twitter and Instagram were used to promote each public meeting.

Partner Promotion

Many community partners posted notices about the public meetings on their websites and in their newsletters.

Posters

Posters with public meeting dates and locations, and a list of routes with improvements were posted at high volume bus stops, the Blake Transit Center, the Ypsilanti Transit Center, at many local businesses and organizations.

Postcards

Postcard size notices with public meeting dates and locations were distributed at area businesses and organizations.

Email Blast

Email blasts were distributed to past public meeting attendees, businesses and other key stakeholders.

MyAlerts Subscription Notification

Notices were distributed to all subscribers of MyAlerts, the agency's email and text subscription notification system.



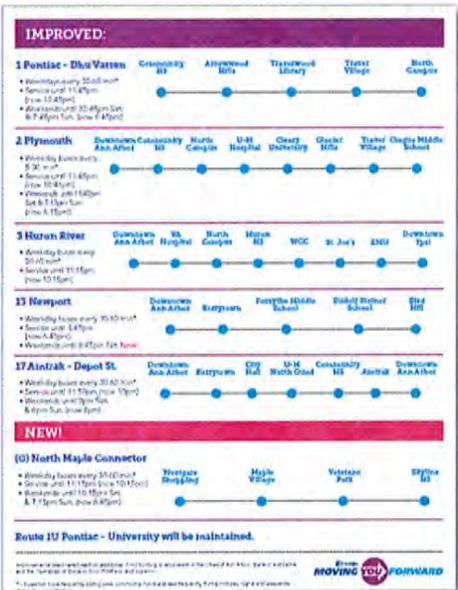
Inside Bus Announcements

Bus Cards were posted inside all buses along with RideLines, a passenger newsletter, alerting and encouraging customers to provide comments either at one of 12 different scheduled public meetings, online at movingyouforward.org, by telephone, mail or in person.



Community Benefits Brochure

A brochure was distributed describing the impacts more public transportation has on the local economy, transportation costs, public safety, parking costs, and environmental benefits.



Service Improvements by Community

Informational handouts describing detailed service improvements including earlier and later service hours, more direct services, and more places served.

Changes to the Service Program as the Result of Citizen Engagement

Citizens provided a generous response to the call for public input with hundreds of comments and suggestions. The majority of the comments received about the Proposed Five Year Transit Improvement Program fell into three broad categories, agreeing with the program, clarifying items, or introducing items unrelated to the program.

Based on the comments received, the specific changes shown the table below have been included in the final Five Year Transit Improvement Program. In addition, a number of comments will be considered in TheRide’s continuous improvement program. Comments that were not incorporated into the program because they require agreements with other parties and/or additional funding beyond what had been established in the program. However, these suggestions will be considered as part of the TheRide’s continuing service review process.

A separate document – entitled “Results of Urban Core Transit Public Input Sessions - October / November 2013” includes a complete list of the suggestions received.

Changes Made to the Five Year Transit Improvement Program Based on Public Input

Route	Name	Improvements Ahead
1	Pontiac	<ul style="list-style-type: none"> ▪ Begin 1st trip at Plymouth Mall at 6:22 a.m. rather than at 6:34 am as originally planned. ▪ Extend Sunday service to entire route (Sunday service currently ends at Food Gatherers). ▪ Increase the frequency of weekday service midday (between 9 and 3) to every 30 minutes.
2C	Plymouth (South Neighborhood)	<ul style="list-style-type: none"> ▪ Add weekday evening service to 8:40 pm rather than current 7:40 pm. ▪ Extend route to the BTC. ▪ Continue last trip of route 2A in service from the Green Rd. Park and Ride lot to Glazier Way/Earhart to provide later trip to Green Rd. south of Baxter Rd. and to Glazier Way and Earhart.
3	Huron River	<ul style="list-style-type: none"> ▪ Extend evening service which will provide direct service between WCC and both BTC and YTC in the evening.
4	Washtenaw	<ul style="list-style-type: none"> ▪ Begin Saturday westbound service with a 7:30 a.m. trip from the Ypsilanti Transit Center (YTC)
6	Ellsworth	<ul style="list-style-type: none"> ▪ Add hourly Sunday service between Ypsilanti Transit Center and the Meijer store at Ellsworth and Carpenter. ▪ Continue current 6B routing on Hewitt and Congress Streets (planned, but not included on proposed route map). ▪ Add Sunday service to Ypsilanti Township library in the first year of implementation instead of second year as originally planned.
M	Whittaker-Huron River Dr	<ul style="list-style-type: none"> ▪ Continue route on Huron River Dr. to Textile rather than turning on Tuttle Hill Rd. ▪ Change route to use Dean Rd. to improve access to Paint Creek Shopping Center (Kroger).
N	First-Congress	<ul style="list-style-type: none"> ▪ Pull into Walmart (already planned but not shown on route maps).

AAATA Public Input meetings October 2014 - September 2017

Proposed August 2015 Service Changes

3/5/15
6:00PM
Ypsilanti Dist. Library - Whittaker Branch

3/10/15
6:00PM
SPARK - East
215 W. Michigan Ave - Ypsilanti

3/18/15
6:00PM
Pittsfield Township Hall
6201 W. Michigan Ave. - Ann Arbor

3/19/15
5:00PM
Ann Arbor District Library
343 S. Fifth Ave - Ann Arbor

3/26/16
6:00PM
EMU McKenny Hall, Tower Rm, Floor 3
W. Cross Street – Ypsilanti

Proposed May 2016 Service Changes

9/22/16
6pm
Parkridge Community Center, Ypsilanti

9/23/16
6pm
Ypsilanti Township All, Ypsilanti

9/30/16
6pm
SPARK East

10/5/16
6pm
Peace Neighborhood Center, Ann Arbor

Proposed May 2016 Service Changes (continued)

10/6/16

6pm

Slauson Middle School, Ann Arbor

10/7/16

12pm

Ypsilanti City Hall, Ypsilanti

10/8/16

11:30am

Maple Rock / Alano Club, Ann Arbor

10/14/16

6pm

Scio Township Hall, Ann Arbor

10/15/16

4pm

AADL Downtown Branch, Ann Arbor

Proposed Fall 2017 Service Changes

5/3/17

4-7pm

AADL Westgate Branch, Ann Arbor

5/9/17

4-7pm

Ypsilanti District Library, Ypsilanti

FY 2015 Outreach Events

District	Event	Type	Start Date
Ann Arbor	Conquer the Cold - Month of January	Commuters	Jan 2015
Ann Arbor	AAATA Board	Meeting	2/26/15
Ann Arbor	AAATA Board	Meeting	3/11/15
Ann Arbor	AAATA Board	Meeting	3/19/15
Ypsi	YTC Renovations Public Input Meeting	Community	4/14/15
Ypsi	Ride Guide Focus Group	Meeting	4/14/15
Ann Arbor	AAATA Board	Meeting	4/16/15
Ann Arbor	Ride Guide Focus Group	Meeting	4/22/15
Saline	Saline City Council Budget	Meeting	4/27/15
Ann Arbor	Commuter Challenge - Month of May	Commuters	May 2015
Ann Arbor	AAATA Board	Meeting	5/20/15
Scio Twp	Service Updates	Presentation	6/9/15
Ann Arbor	Mayor's Green Fair – getDowntown! bus station display	Community	6/12/15
Ann Arbor	AAATA Board	Meeting	6/25/15
Ypsi	YTC Business Outreach	Meeting	7/7/15
Ann Arbor	Pedestrian Safety and Access Task Force	Meeting	7/8/15
Ann Arbor	Urban Core Working Group	Meeting	8/27/15

FY 2016 Outreach Events

District	Event	Type	Start Date
Ann Arbor	AAATA Board	Meeting	10/29/15
Ann Arbor	AAATA Board	Meeting	11/19/15
Ypsi	YTC Winter Warm-Up	Community	12/10/15
Ann Arbor	AAATA Board	Meeting	12/17/15
Ann Arbor	Conquer the Cold - Month of January	Commuters	Jan 2016
Ypsi	Eastern Leaders Group	Meeting	1/13/16
Ann Arbor	AAATA Board	Meeting	1/21/16
Ann Arbor	AAATA Board	Meeting	2/18/16
Ann Arbor	WCC Michigan Ability Parnters	Festival/Fair	3/9/16
Ypsi Twp	Ypsi Twp Board Service Updates	Presentation	3/15/16
Ann Arbor	AAATA Board	Meeting	3/17/16
Ypsi	OCED Community Action Board	Meeting	3/23/16
Ann Arbor	Connector Alternatives Analysis	Community	3/24/16
Ann Arbor	TheRide Service Extravaganza	Festival/Fair	3/30/16
Ann Arbor	TheRide Service Extravaganza	Festival/Fair	4/4/16
Ypsi	TheRide Service Extravaganza	Festival/Fair	4/11/16
Ann Arbor	Environmental Excellence Partners	Presentation	4/14/16
Ypsi	Ypsi City Council	Presentation	4/19/16
Ann Arbor	Washtenaw County Commission	Presentation	4/20/16
Ann Arbor	Commuter Challenge - Month of May	Commuters	May 2016
Ann Arbor	AAPS State of the Schools	Meeting	5/18/16
Ann Arbor	AAATA Board	Meeting	5/19/16
Ypsi	YCS @ Work Community Showcase	Expo/Seminar	6/3/16
Ann Arbor	AAATA Board	Meeting	6/8/16
Ann Arbor	Nixon Rd. Corridor Study	Public Meeting	6/8/16
Ann Arbor	Mayor's Green Fair – getDowntown! bus station display	Festival/Fair	6/10/16
Ann Arbor	AAATA Board	Meeting	6/20/16
Ann Arbor	AAATA Board	Meeting	6/23/16
Ypsi	A2Y Chamber – Water Street millage forum	Community	6/30/16
Ann Arbor	Nixon Rd. Corridor Study	Public Meeting	7/13/16
Ann Arbor	AAATA Board	Meeting	8/18/16
Ypsi Twp	YCS AACE Orientation	Presentation	8/24/16
Ann Arbor	AAATA Board	Meeting	9/15/16
Ypsi	Ypsi City Council	Meeting	9/20/16

FY 2017 Outreach Events

District	Event	Outreach Type	Start Date
Ann Arbor	AAATA Board	Meeting	10/20/16
Northfield Twp	North-South Rail Feasibility Study	Community	11/9/16
Ann Arbor	AAATA Board	Meeting	11/14/16
Howell	North-South Rail Feasibility Study	Community	11/14/16
Ann Arbor	North-South Rail Feasibility Study	Community	11/15/16
Ann Arbor	AAATA Board	Meeting	11/17/16
Ann Arbor	AAATA Board	Meeting	12/15/16
Ypsi	Parkridge Community Center	Meeting	12/19/16
Ann Arbor	Barrier Busters	Meeting	12/21/16
Ann Arbor	Conquer the Cold - Month of January	Commuters	Jan 2017
Ann Arbor	AAATA Board	Meeting	1/19/17
Scio Twp	Service Updates	Presentation	1/24/17
Ypsi	Washtenaw County OCED Open House	Community Expo	1/31/17
Ann Arbor	UM Orientation	College Expo/Seminar	2/13/17
Ann Arbor	AAATA Board	Meeting	2/16/17
Ann Arbor	AAATA Board	Meeting	3/16/17
Howell	North-South Rail Feasibility Study	Community	3/20/17
Northfield Twp	North-South Rail Feasibility Study	Community	3/21/17
Ann Arbor	North-South Rail Feasibility Study	Community	3/22/17
Ann Arbor	AAATA Board	Meeting	4/20/17
Pittsfield Twp	Pittsfield Twp Service Update	Presentation	4/26/17
Ann Arbor	Commuter Challenge - Month of May	Commuters	May 2017
Ann Arbor	AAATA Board	Meeting	5/18/17
Ann Arbor	AAATA Board	Meeting	6/15/17
Ann Arbor	AAATA Board	Meeting	7/6/17
Scio Twp	Scio Twp Service Update	Presentation	7/25/17
Ann Arbor	AAATA Board	Meeting	8/17/17
Ann Arbor	AAATA Board	Meeting	9/28/17

Attachment F

**Language Assistance Plan for Persons with
Limited English Proficiency (LEP)**

The Ann Arbor Area Transportation Authority LEP Plan for Title VI is attached as Figure F-1.

Language Assistance Plan for Persons with Limited English Proficiency (LEP)

Part I: Four Factor Analysis

LEP guidance requires a four factor analysis to determine the level of assistance required to provide meaningful access. The analysis performed by the Ann Arbor Area Transportation Authority (AAATA) is contained below.

1. The Number and Proportion of LEP Persons Served or Encountered in the Eligible Service Population

Based on data from the 5-year American Community Survey for 2013, the population of the AAATA service area is 226,495 persons. Of this total, an estimated 12,668 (5.6%) indicated that they speak English less than “very well”, which is 0.3 percent lower than the previous LEP analysis for this area based on 2010 Census data. The figures and percentages for the total population and for top three LEP populations by native language are shown in Figure 1.

Figure 1 - LEP Population

Demographics	Population	% of Total
Total Population	226,495	100%
Speak English less than Very Well	12,668	5.6%
Chinese speaking LEP persons	2,988 (+336)	1.3% (-0.1%)
Spanish speaking LEP persons	2,072 (+7)	0.9% (-0.2%)
Korean speaking LEP persons	1,466 (-344)	0.6% (-0.3%)

Persons who speak English “less than ‘very well’” are considered to have limited English proficiency (LEP) for the purposes of this report. Two types of maps are included at the end of the report. The first map shows the concentration of LEP persons by Census tract in the AAATA service area, with higher than average concentrations being those above 5.6 percent. A second set of maps is included which shows the concentration of LEP persons by Census tract in the AAATA service area for each of the top three language groups – Chinese, Spanish, and Korean LEP populations – where concentrations greater than 173 LEP persons is considered higher than average. 27 census tracts have 100 or

more LEP persons. 11 census tracts have more than 200 LEP persons. Two census tracts have over have over 300 LEP persons.

This is indicative of stabilization in the concentration of LEP persons in the AAATA service area following a period of growth for a few particular languages. From 2000 to 2010, LEP population in the AAATA service area nearly tripled, from 4,121 to 12,079 LEP persons, increasing by only 589 in the next three years, or less than half a percent. The estimated number of Chinese, Spanish, and Korean speaking LEP persons at 6,527 in 2010 exceeded the total LEP population a decade ago, and has not changed significantly since then.

2. The Frequency with which People of Limited English Proficiency Come into Contact with AAATA's Programs, Activities, and Services

AAATA has received no requests for translated materials in a foreign language and no requests for interpreters to date.

The primary locations where the public comes into contact with AAATA are as follows:

- Main Office and Telephone Line (fare media sales, ID cards, general information)
- Downtown Information Center (fare media sales, route and schedule information)
- Paratransit Coordinator (ADA eligibility and paratransit information)
- Paratransit Telephone (paratransit reservations)
- On-board fixed-route buses (specific trip information)
- AAATA website (TheRide.org)

AAATA conducted a survey of employee contact with LEP persons in February to March of 2012. Only the headquarters office and drivers on fixed-route buses reported any direct contact. Drivers reported having noticeably more contact with persons with limited English language skills over the past few years, especially Spanish and Asian language speakers. Drivers specified that they were able to communicate to provide assistance as needed. At the headquarters reception area, contact with an individual with limited or no English occurred from five to ten times per week. Based on information specialists' feedback, in about 4 out of 5 cases the individual was accompanied by family or a friend who spoke English, and approximately 90% were senior citizens applying for an identification card. Chinese and Korean were the most common languages for these individuals. In October 2015, AAATA distributed surveys with a translated version available to the community at large and to riders on-board fixed route service system-wide. AAATA used the same option for translated surveys in October 2017, which will be used to measure the demand for surveys as a key transit document in the Ann Arbor urbanized area.

AAATA works with a variety of governmental and human service agencies to assist in meeting the needs of their clients. Of particular importance in this context are the University of Michigan Office of International Programs (UMOIP) and Jewish Family

Services (JFS). UMOIP provides services for foreign students, including families for married students. Jewish Family Services is the agency designated to provide services for refugees, migrants, and new arrivals in Washtenaw County. AAATA works closely with each of these agencies, and has not received any requests for additional assistance with LEP persons in the use of AAATA service. AAATA originally worked with Casa Latina, a non-profit organization working to connect local Hispanics with community resources, to produce a Spanish Ride Guide, effective April 29, 2012. AAATA reviewed and updated this key document to produce TheRide's Spanish Information Guide, along with simplified Mandarin and Korean versions beginning January 24, 2016. This is the preferred method of sharing information for major limited English speaking populations in the area. A more complete description of these agencies' services is included in Section 4.

No written correspondence regarding limited English proficiency has been received. The internet has become the dominant medium for people seeking general information about AAATA as well as specific information on routes and schedules. According to Google Analytics, out of 1,574,820 visitors online from October 2016 to September 2017, other than English speakers, AAATA's website has been predominantly used by:

- 44,413 Chinese speakers, up 3,700% from 1,200 in 2011,
- 6,325 Korean speakers, up 1,660% from 380 in 2011, and
- 5,371 Spanish speakers, and
- 5,266 Japanese speakers, up 1,170% from 450 in 2011.

A new website was implemented in 2013 including language options for translation. No internet inquiries have been received.

3. The Importance of AAATA's Programs, Activities, and Services to Persons of Limited English Proficiency

AAATA operates scheduled fixed-route bus service, and provides demand-response service for people with disabilities and senior citizens that is operated by RideCorp and Blue Cab, under contract to AAATA.

98% of AAATA riders are on fixed-route service and 2% use demand responsive service. Trip planning and in-trip information are the two most important areas which involve language skills in using fixed-route service. Essentially, in order to use fixed-route service, an individual first needs to determine bus stops, time, and bus routes to accomplish a particular trip, and then needs to wait at the correct bus stop, board the correct bus, and get off at the correct bus stop. A person who does not speak English very well may require assistance in trip planning, but this can occur before the time of the trip. During the trip, speaking and understanding English is not typically necessary, but may be required to deal with unusual situations.

Demand-responsive service has different requirements. In order to qualify, an individual must submit an application and, if approved, receive a picture identification card.

English language skills are necessary for this process, and several social service agencies provide assistance in this process. In addition, family members provide assistance in this process for many applicants. Once approved, an individual must make a telephone reservation for each trip. Language skill is required for this process, but another person can make the reservation. Once again, agencies and family members make reservations for clients. No additional language skills are necessary during the trip. The service is designed to provide service for persons with a wide variety of disabilities, including persons with severe cognitive disabilities who do not speak or understand any language. The rider must have their identification card to ride, and their pick-up and drop-off locations are provided to the driver. Also available to RideCorp drivers and staff are information on each rider including if they do not speak or understand English, and an emergency contact person.

A final important area is participation in AAATA's public input process. Whenever an increase in fares or significant changes in service is being considered, the AAATA actively seeks input from riders and other members of the public. Language skills are necessary for participation. However, the AAATA procedure provides a range of ways to make comments, ask questions, or make a suggestion. The most frequent method these days is via email.

4. Resources Available to Customers and the Associated Costs

At this time, AAATA has not translated written materials other than TheRide Information Guides, or provided translation assistance. Given the relatively small number of overall LEP individuals, the variety of languages, and the online as well as community resources available, additional alternative print services are not necessary at this time. Most language groups, especially Chinese and Korean native speakers, show a greater preference for seeking information through AAATA's website (details in the Outreach Techniques of Part II). AAATA will be evaluating telephone interpreter services by September 2018 and will continue to use I-Speak cards to collect more information on individuals who could benefit from greater language assistance.

There are significant resources available to assist persons in using AAATA service. Agencies such as the University of Michigan Office of International Programs (UMOIP) for students and their families, and Jewish Family Services (JFS) for immigrants in the community, referenced above in Section 2, all provide assistance to persons with limited or no English as a central part of their mission. UMOIP provides cultural immersion, intensive language learning, and participation in another educational system for foreign students. JFS provides a wide range of services for refugees, migrants, and new arrivals in Washtenaw County including case management, acculturation, English as a Second Language (ESL) classes, document translation services, employment services, language partnership service, and accompanied transportation. The transportation service is particularly important in this context as it is used to provide a bridge for persons to the use of public transit service provided by AAATA.

AAATA works with these agencies. For example, AAATA staff participates each fall in a session to assist new foreign students in using AAATA fixed-route service. Both agencies provide assistance in the critical areas of using AAATA service described in Section 3, above, including fixed-route trip planning, and applying for eligibility for demand-responsive service.

AAATA also distributes TheRide's translated Information Guides to local businesses, faith centers, and central offices in addition to transfer facilities, with community locations listed online at www.TheRide.org/Customer-Service.

In addition to these agencies, AAATA has a relationship with many other human service, religious, and governmental agencies that provide assistance in the use of AAATA service for their clients, which includes LEP persons on occasion.

Conclusions

Based on the analysis above, AAATA has decided to further investigate additional translation or new language assistance services including telephone interpreter services, and continue working with agencies that have specific expertise to provide assistance. An increased level of effort and assistance is warranted to identify persons with limited English proficiency, to enhance the website, and to prepare additional services to meet identified future needs. Specific actions are defined in detail in Part II, below.

Part II: AAATA Limited English Proficiency Plan

(Please refer to resource document)

Identifying LEP Individuals who need language assistance

- AAATA will continue to provide the United States Census Bureau’s “I Speak” cards at AAATA headquarters and downtown information center
- AAATA will continue to have copies of the “I Speak” cards at the sign-in table for public meetings to ascertain a possible future need for interpreter services
- AAATA will continue to keep records of persons with whom we come into contact who need language assistance
- AAATA will continue to proactively seek information from public and private agencies about their experience with people with limited English proficiency
- AAATA will continue to include information about contacts for language assistance on TheRide.org website

Language Assistance Measures

AAATA’s selection of the following procedures is based on the relatively low need for language service and the limited resources available for this purpose.

- Provide enhanced language translation capabilities on the AAATA’s website at TheRide.org since implementation in July, 2013
- Provide information on TheRide.org website on options for where to obtain community language assistance
- Supply an updated copy of AAATA emergency icon forms and basic key phrases translated for transit employees into simplified Mandarin, Spanish, and Korean to motor coach operators and transportation supervisors
- Distribute in print and online versions of transit Information Guides translated in simplified Mandarin, Spanish, and Korean for to LEP persons and agencies in the AAATA service area as of January, 2016
- Prepare printed information on where to obtain language assistance to give or send to riders, provided to motor coach operators and information specialists, specifically with contact cards for outside organizations and community partners like UMOIP and JFS by September, 2018
- Implement phone interpreter service recommendations such as language line opportunities by September, 2018

Employee Training

- AAATA conducts refresher training annually for all existing motor coach operators and information specialists. A section on providing assistance to persons with limited English Proficiency was added to the training curriculum for 2009, incorporated in the 2012 session, and will be reviewed by the Planning Manager in 2018.
- The training includes the following elements, at a minimum:
 - A summary of AAATA's responsibilities under the DOT LEP guidance
 - A summary of AAATA's language assistance plan
 - A summary of the number and proportion of the LEP persons in the service area and the frequency of contact
 - A description of the language assistance that AAATA is currently providing
 - A description of AAATA's cultural sensitivity policies and practices
- Management staff has been provided with an overview in the areas listed above as part of an annual organizational meeting
- All employees are directed to keep a record of any language assistance requests. AAATA monitors LEP contact through employees to watch for indicators of the need for more formal data collection. AAATA collects data every 3 years, or more often if there is reason to believe from employee monitoring procedures that change is occurring which requires added attention.

Outreach Techniques

Based on the four-step analysis, above, contact by LEP persons directly with AAATA is limited. The most noticeable change between larger language groups and the way they interact with AAATA service information is that Chinese and Korean speakers who have mostly used online resources in the past through the AAATA website at TheRide.org, have taken advantage of TheRide's newer print-based translated information guides. Whereas, Spanish speakers who have mainly used paper resources such as the TheRide's Information Guide, are recently using the AAATA website much more than before. As a result, it appears that the best techniques to reach LEP persons are to maintain service information in other languages through the AAATA website, and continue to work with the agencies that provide assistance to LEP persons, including production and distribution of the Information Guides. Links to electronic copies of these key documents for Chinese, Spanish, and Korean LEP populations are also available online at www.TheRide.org/Schedules-Maps-and-Tools/Route-Maps-and-Schedules.

In particular, the University of Michigan Office of International Programs (UMOIP) and Jewish Family Services (JFS) are designed to provide assistance in any language needed. This is important because the overall population of LEP persons speaks a variety of languages. Continuing and expanding the cooperative relationship with these agencies and others is the most cost-effective way to reach LEP populations throughout AAATA's service area.

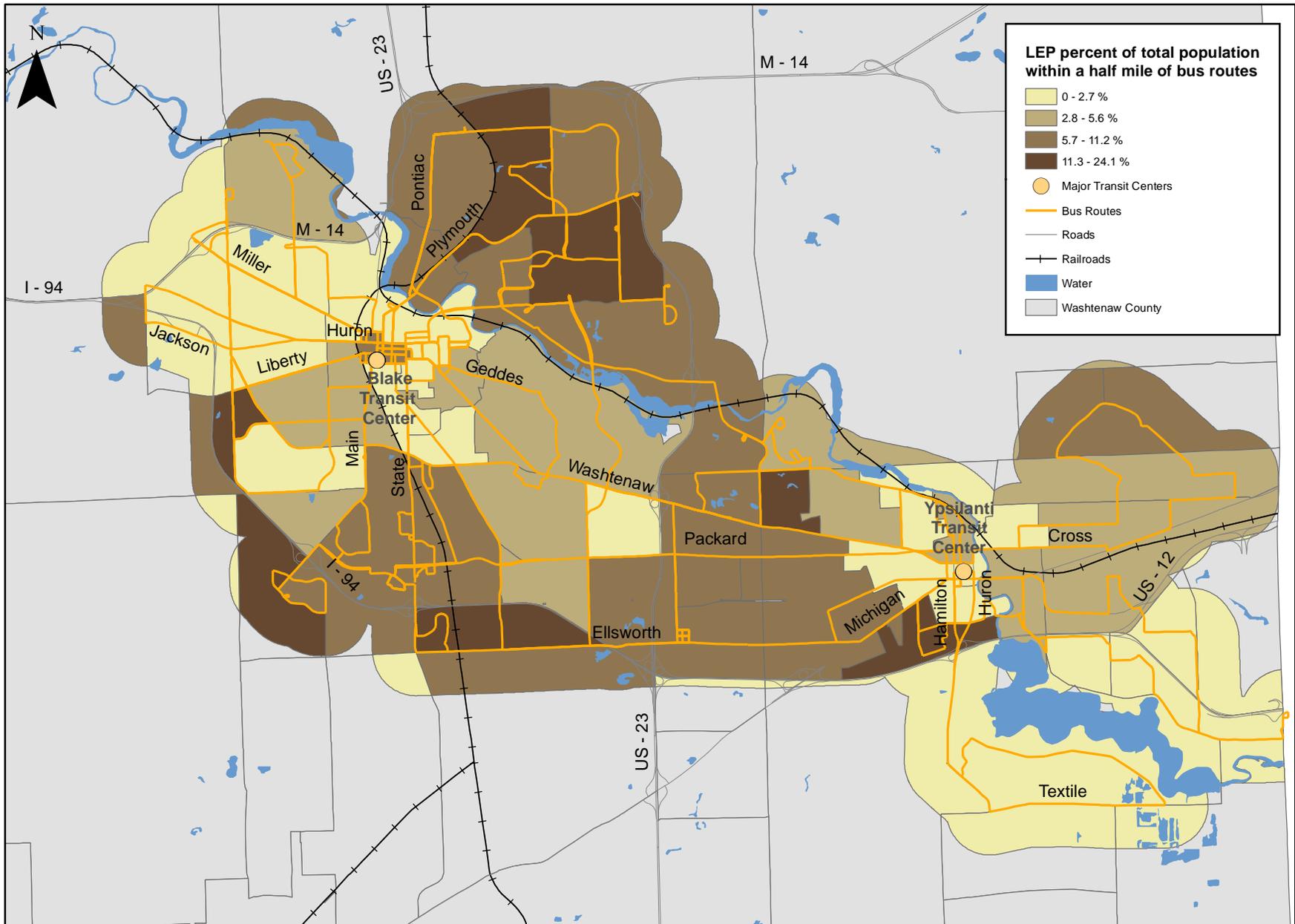
Monitoring and Updating the LEP Plan

The action steps above are designed to produce increased assistance for LEP persons and continuous feedback on the frequency of contact with LEP persons both within AAATA and from external agencies. This feedback will be used to determine if there is a significant change in the frequency of contact or a marked increase in any specific language group population in the service area, which could impact the use of AAATA information and service accessibility for LEP persons, requiring additional resources.

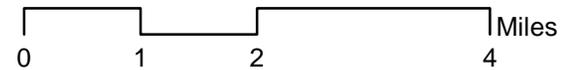
AAATA will continue to use subsequent sessions of the periodic refresher training for motor coach operators and information specialists to keep monitoring the experience in implementing the action steps.

If there are noticeable changes, AAATA will perform an evaluation and determine if the plan needs to be updated. Absent any noticeable change, AAATA will perform an evaluation and revise the plan with the next Title VI update in 2020.

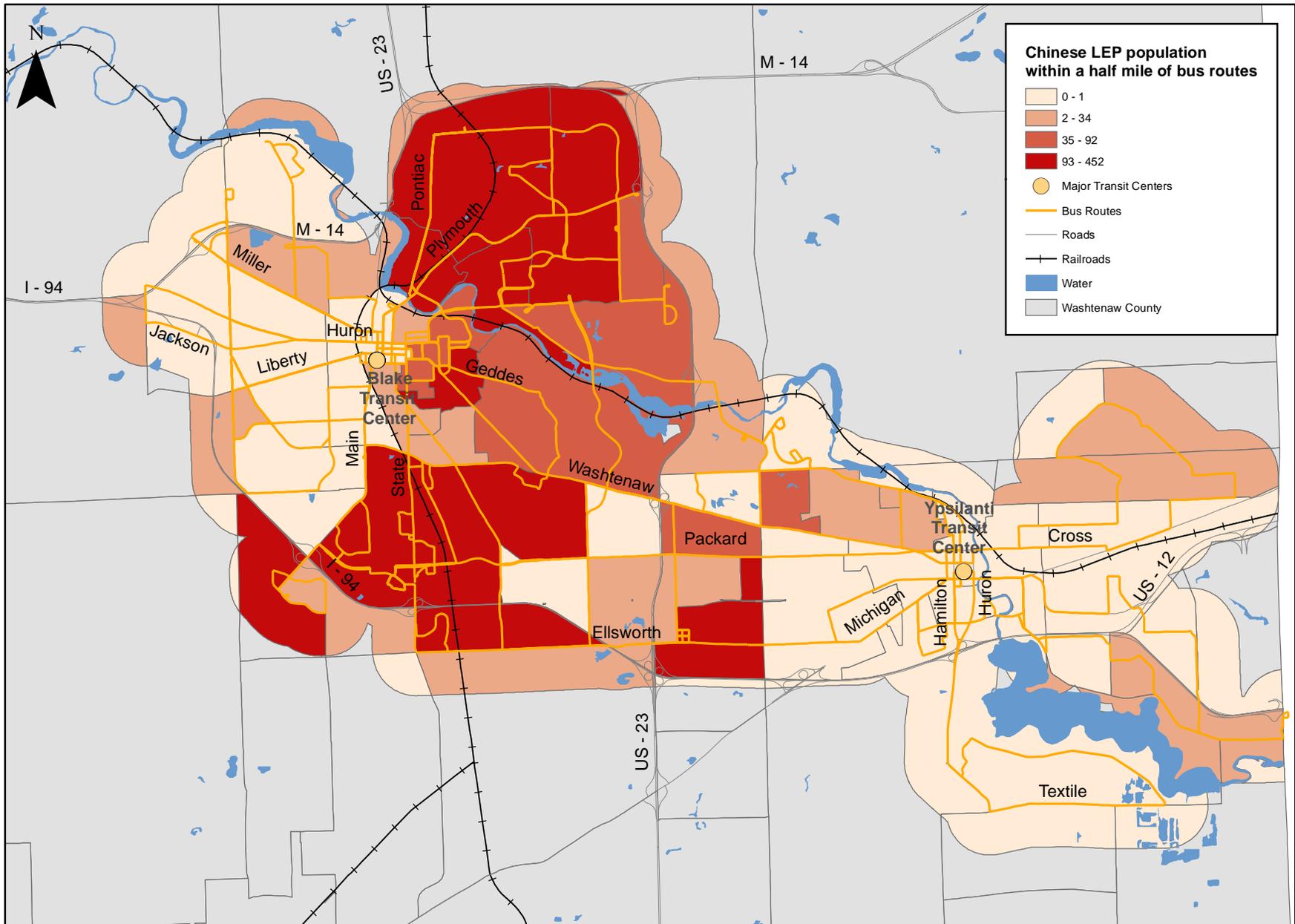
Limited English Proficiency (LEP) Population Concentration for TheRide Service Area in 2013



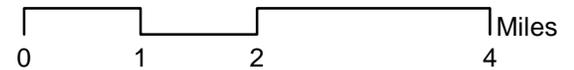
Source: 2013 ACS 5-year estimates



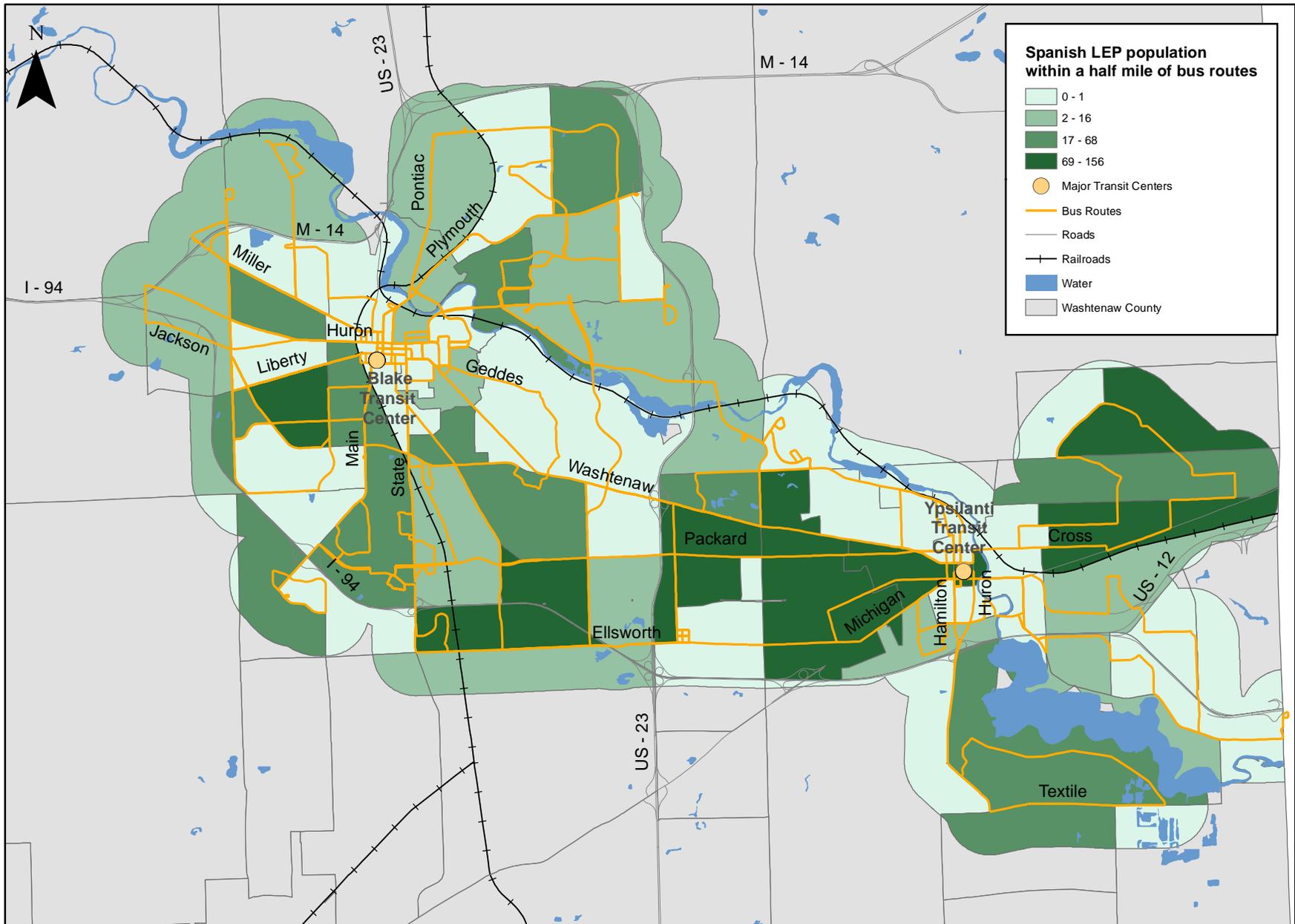
Chinese Limited English Proficiency (LEP) Population Concentration for TheRide Service Area in 2013



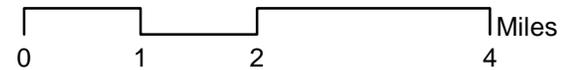
Source: 2013 ACS 5-year estimates



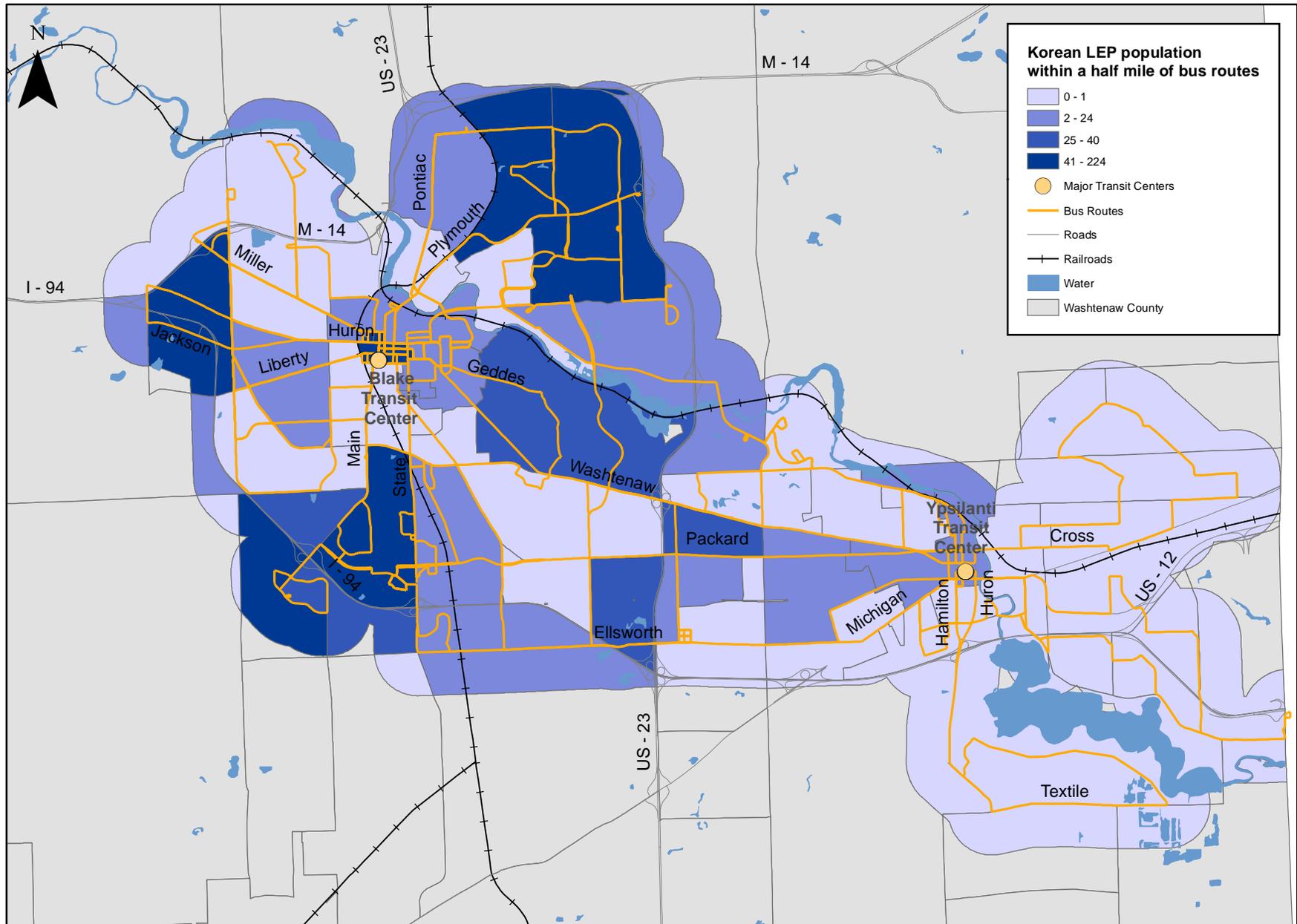
Spanish Limited English Proficiency (LEP) Population Concentration for TheRide Service Area in 2013



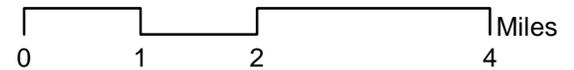
Source: 2013 ACS 5-year estimates



Korean Limited English Proficiency (LEP) Population Concentration for TheRide Service Area in 2013



Source: 2013 ACS 5-year estimates



Attachment G

Minority Representation of Non-elected Committees and Councils

The only transit-related, non-elected planning board, advisory council, or committee for which the Ann Arbor Area Transportation Authority (AAATA) selects the members is the Local Advisory Council (LAC) Executive Committee. The LAC is advises the AAATA Board of Directors on issues of concern to people with disabilities and senior citizens. Monthly meetings are open to anyone who wishes to attend, and all who attend are encouraged to participate. LAC membership is conferred on anyone who attends more than one meeting. The AAATA Board appoints up to ten people to the LAC executive committee for two-year terms. Any member can apply to serve on the executive committee. There are currently nine members of the Executive Committee. In each of the past three years, the Board has appointed everyone who applied.

**Ann Arbor Area Transportation Authority
Minority Representation on Committees
and Councils Selected by AAATA**

	Caucasian	Hispanic	African American	Asian American	Native American
Local Advisory Council (LAC)	89%	11%	0%	0%	0%

Attachment H

Title VI Monitoring of Subrecipients

AAATA monitored adherence to Title VI planning requirements for six subrecipients since the previous Title VI update in 2014.

AAATA's subrecipients included:

- Western Washtenaw Area Value Express
- People's Express
- Avalon Housing
- Jewish Family Services
- Programs to Educate All Cyclists
- Clean Energy Coalition

There have been no Title VI complaints, investigations, or lawsuits for AAATA subrecipients over the past three years.

Attachment I

Service Standards and Policies

The Service Standards and Policies for Title VI are attached as Figure I-1. The results of monitoring the service standards and policies are included in Attachment L.

Fixed-Route Service Standards and Policies - PROPOSED

Modes of Service (September 30, 2017)

	Local Fixed-Route Service	Commuter Service	AirRide Airport Service
Number of routes	33	2	1
Method of operation	operated by AAATA	operated by AAATA	contracted service
Annual riders (FY17)	6,596,905	26,212	84,752
Annual service hours (FY17)	280,887	2,081	8,998

1. Service Frequency (headway)

Local fixed-route service – The minimum service frequency is every 30 minutes during weekday peak hours and every 60 minutes at other times (midday, evenings and weekends). Weekday peak hours are from 6:00 – 9:00 a.m. and 3:00 – 6:00 p.m.

Commuter bus – The minimum service level is two trips in the peak direction during both the morning and afternoon peak periods.

AirRide regional airport service – The minimum service frequency is every 120 minutes.

2. On-Time Performance

All Modes – A minimum of 90% of scheduled trips will be completed within 5 minutes of the scheduled time.

3. Service Availability

Local fixed-route service – A minimum of 90% of the population of the fixed route service area in the member jurisdictions (Ann Arbor, Ypsilanti, and Ypsilanti Township) will have service within 0.5 mile. All of the cities of Ann Arbor and Ypsilanti are included in the 5YTIP fixed route service area, as well as most of Ypsilanti Township north of Textile Road. The majority of Ypsilanti Township south of Textile Rd. is not included in the 5YTIP fixed-route service area because the population density is relatively low. The 5YTIP designates this area to be served by a Dial-a-Ride

Plus service, which began September 27, 2017, called FlexRide, available to the general public, as well as seniors and people with disabilities.

Commuter service – A minimum of 40 park-and-ride parking spaces will be available for each morning trip to the regional employment center in Ann Arbor.

AirRide regional airport service - Service will be provided between the Blake Transit Center and both domestic terminals at Detroit Metropolitan Airport.

4. Vehicle Load Factor

Local fixed-route service – The number of riders exceeds the number of seats on 1% of trips or fewer. A frequency higher than this threshold warrants further investigation into the regularity of the occurrences on particular trips, the number of standees, and the duration of standing to determine if corrective action is needed.

Commuter service – The number of riders exceeds the number of seats less than two days per year. (<0.4% of trips). This service operates on the highway, so standing loads should occur very infrequently.

AirRide airport service - The number of riders exceeds the number of seats less than two days per year. (<0.4% of trips). This service operates on the highway, so standing loads should occur very infrequently.

Fixed-Route Service Policies

5. Vehicle Assignment Policy

Local fixed-route service – Service is operated from a single facility. All buses are low-floor and have the same environmental, security, and accessibility features. Over 50% of the fleet has a hybrid-diesel propulsion system, while the remainder are low-emission biodiesel buses. Hybrid buses are used throughout the fixed-route system on daily, long-duty cycles (12-16 hours), so that these buses operate a higher share of service miles than their numerical proportion in the fleet. More than 80% of buses are 40-foot long, while the remainder of the buses are 25- to 35-foot long. The smaller buses are used on local routes with lower ridership.

Commuter service – Service is operated from the same facility. 40-foot low-emission biodiesel buses are used on these two routes. Hybrid buses are not used because most of the service miles are on the expressway where there is little or no advantage to the use of hybrid buses.

AirRide airport service – This service is operated by a subcontractor using 45-foot long highway coaches.

6. Transit Amenities Policy

The location of transit amenities along bus routes is based on the number of passenger boardings at individual bus stops. Passenger shelters shall be provided at bus stops with 50 or more boardings per day where there is no other shelter available, and a shelter is physically and legally feasible. Seating, information, and a trash receptacle are also provided at these bus stops. A trash receptacle is provided near the front door of every bus. In addition, a trash receptacle is installed at bus stops at which a third-party agrees to service it. Electronic information displays are provided at the three AAATA transit centers.

Attachment J

Demographic and Service Profile

Maps and charts showing service coverage for minority and low-income populations are included in Attachment J, profiling service demographics. Below is a list of the Figures and what each details:

- Figure J-1: AAATA Fixed Route System Map
- Figure J-2: Minority Population Service Coverage for AAATA Local Fixed Route
- Figure J-3: Low-Income Population Service Coverage for AAATA Local Fixed Route
- Figure J-4: Summary Table - Population Percentages and Coverage Designation by Route

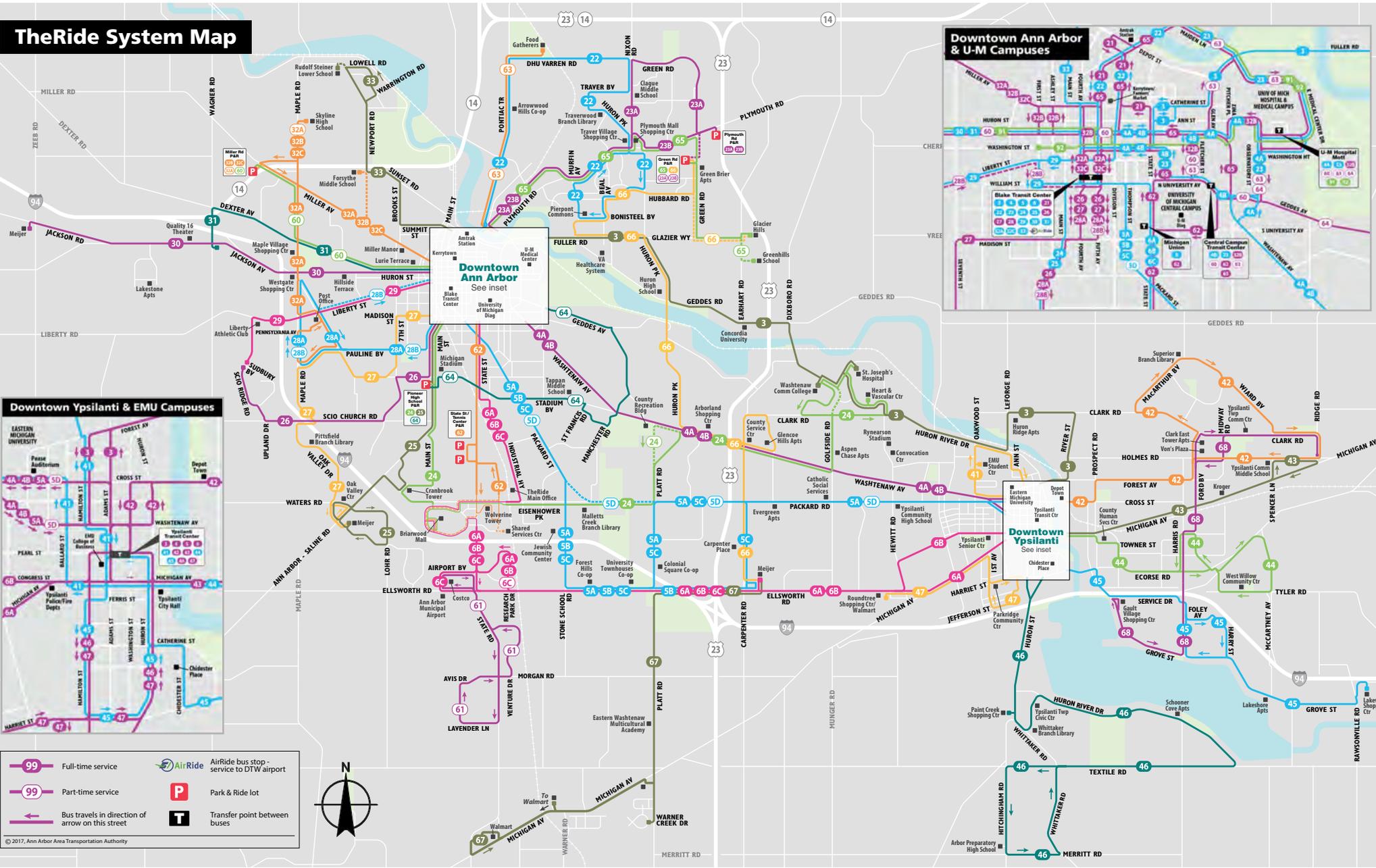
Half of AAATA's local bus routes are considered minority routes, when at least one third of the revenue distance per route covers Block Groups where minority population is higher than average, for the service area within a quarter mile of local fixed routes. Please see Figure J-2 for visual representation.

All except eight of AAATA's local bus routes are categorized as low-income routes, when at least one third of the revenue distance per route covers Block Groups where low-income population is higher than average, for the service area within a quarter mile of local fixed routes. Please see Figure J-3 for visual representation.

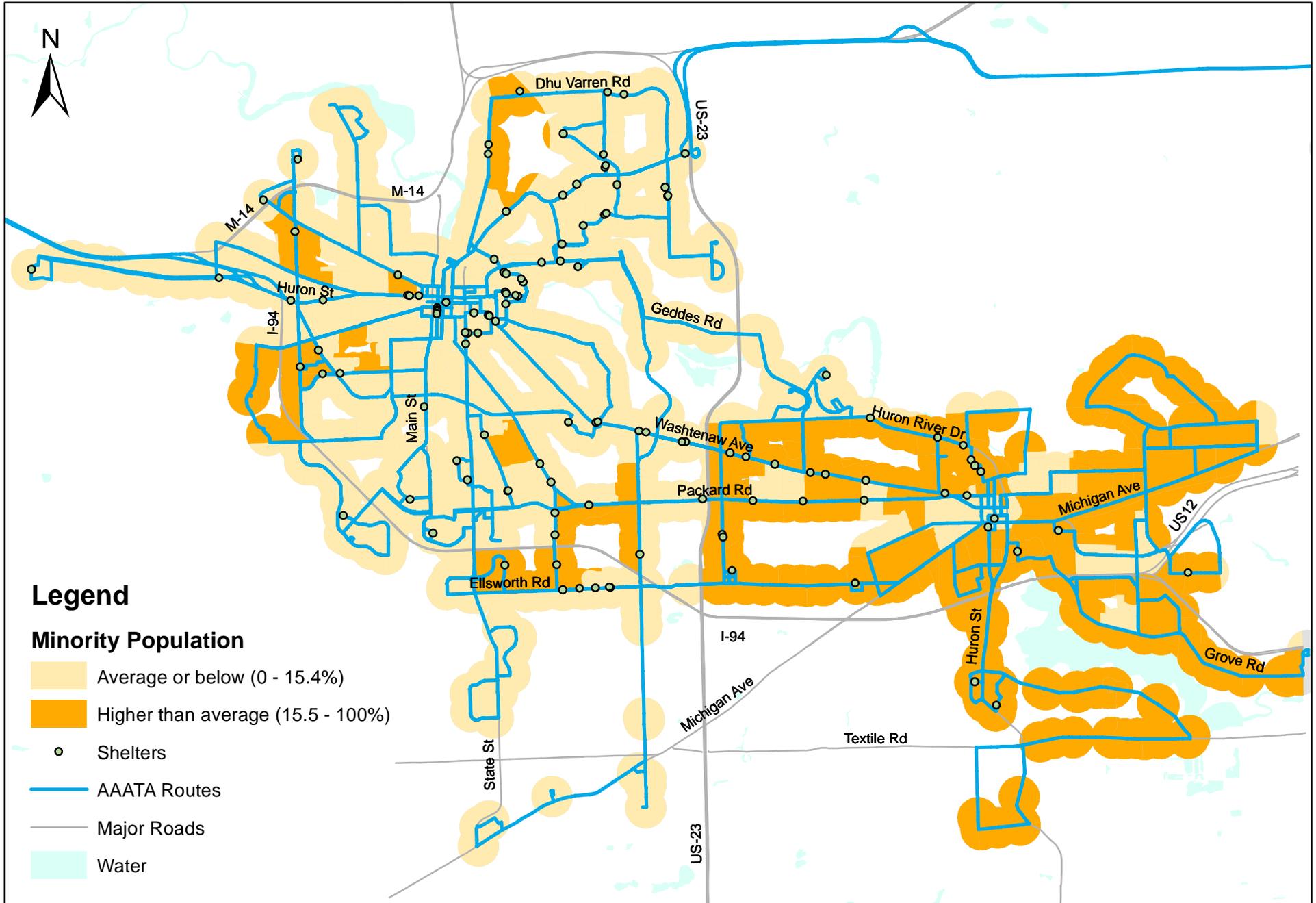
Over a third of the routes are both low-income and minority routes, and all but three minority routes are also low-income routes. More detailed information is summarized in Figure J-4.

Figure J-1

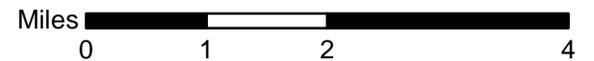
TheRide System Map



AAATA Fixed Route Minority Service Coverage - November 2017

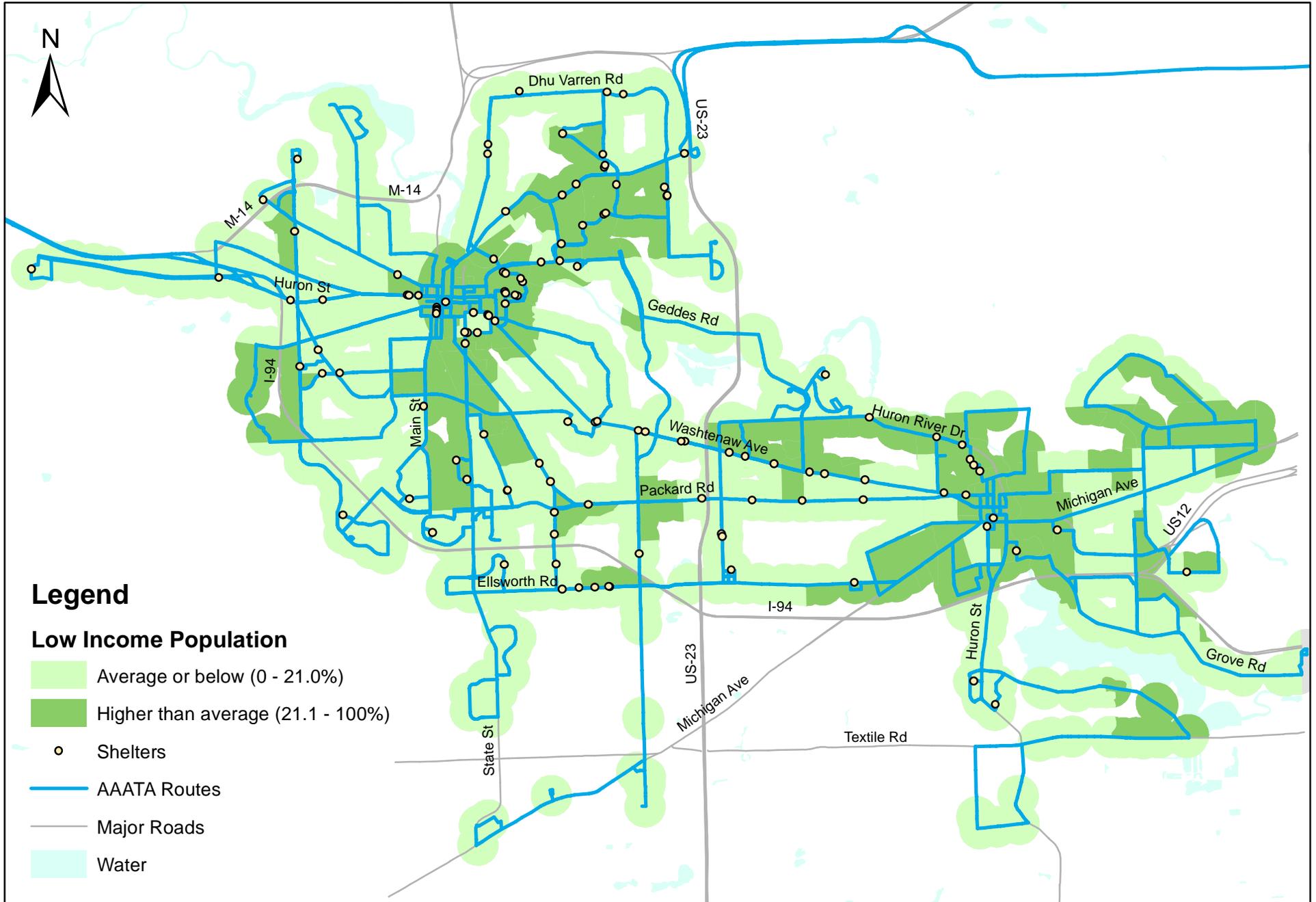


Data Source: ACS 2015 5-Year Estimates, Block Groups

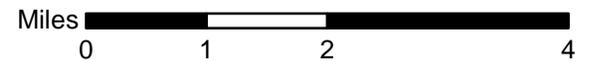


AAATA Fixed Route Low Income Service Coverage - November 2017

Figure J-3



Data Source: ACS 2015 5-Year Estimates, Block Groups



Demographic and Service Profile: Summary Table

Title VI Population percentage within a quarter mile of AAATA local fixed service bus stops

	Minority	Low-Income
Population*	27,830	46,956
Total population*	180,714	223,600
Average Percent	15.4%	21.0%

*based on 2015 ACS 5-Year Block Group estimates from separate tables with different total population estimates

	Minority	Non-Minority
Low-Income	13	12
Non-Low-Income	3	6

Total Minority Routes: 16 (48%)
 Total Low-Income Routes: 25 (76%)

Route #	Minority* Route	Low-Income* Route	Both
3	no	yes	no
4	yes	yes	yes
5	yes	yes	yes
6	yes	yes	yes
21	no	yes	no
22	no	yes	no
23	no	yes	no
24	no	yes	no
25	no	no	neither
26	no	yes	no
27	no	no	neither
28	yes	yes	yes
29	yes	yes	yes
30	no	no	neither
31	yes	yes	yes
32	yes	yes	yes
33	no	no	neither
41	yes	yes	yes
42	yes	yes	yes
43	yes	yes	yes
44	yes	yes	yes
45	yes	yes	yes
46	yes	no	no
47	yes	yes	yes
60	yes	no	no
61	no	no	neither
62	no	yes	no
63	yes	no	no
64	no	yes	no
65	no	yes	no
66	no	yes	no
67	no	no	neither
68	no	yes	no

Routes in which at least one-third of the revenue miles are located on a Block Group, where minority and/or low-income population percentage is higher than average for the service area.

yes-no-neither 16-17 25-8 13-14-6

Attachment K

Demographic Ridership and Travel Patterns

Mode - Local Fixed Route Service

The AAATA conducts a rider survey every 2-3 years for local fixed-route service. The survey conducted in October, 2015 was the first time that questions about race and ethnicity were included.

The survey was conducted onboard AAATA buses from October 23 through November 1, 2015. Temporary workers conducted the survey under the supervision of an experienced survey research firm, CJI Research from Columbus, Ohio. Surveyors rode buses for a run (a set period of time) and approached all riders, rather than a sample of riders. Thus, the bus was in effect a sample cluster point within which all were surveyed. Surveyors handed a survey to each rider with a free pen. Because the AAATA has used the same methodology to conduct onboard surveys before, many riders are familiar with the process and take and readily accept and complete the survey. Surveyors are trained to provide assistance. Surveyors also provided Spanish version of the survey, as needed.

A copy of the survey instrument is included as **Figure K-1**. The survey forms were serial numbered so that records could be kept for the route and day of the week on which the survey was completed. This is a more accurate method than asking riders to provide information on the route, day, and time.

A random sample of runs was drawn from a list of all AAATA runs. The resulting total sample size is 3,383 complete surveys. The sample has a sample error level of +/- 1.6%. For a sub-sample, the sample error would be somewhat greater, though with such a large overall sample, this would affect the findings only in circumstances in which a very small sub-segment of the total was being examined separately.

Surveyors reported instances where a survey was not completed and the apparent reason was a language barrier, which occurred 3% of the time.

Spreadsheet results of the survey in required areas in total and by route are included at **Figure K-2**.

- Page 1 Household income
- Page 2-13 Details by route groups and fixed route system totals
- Page 14-21 Demographic information including:
 - Income and employment status
 - Race and ethnicity
 - Limited English proficiency
 - Fare payment method
 - Card type possession
 - Alternative modes of travel

Regarding household income on page 2, it should be noted that the AAATA service area is home to more than 65,000 college students, more than 25% of the total population. A large proportion of these students have a very low household income, which is reflected in this survey.

The information on fare payment method warrants some explanation. The first chart (page 3) shows the method of payment. Fares for a majority of AAATA riders are paid by a third party, with the University of Michigan the largest by far. By Board policy, the amount paid per boarding by U-M and other third parties is as much or more than the amount per boarding paid by a member of the general public who purchase a 30-day pass. The rationale is that the 30-day pass offers a volume discount available to anyone, and the volume discount to third parties should not exceed this rate.

AAATA provides a discount (1/2) fare for low-income persons which is substantially lower than the fare paid by third parties. The final chart (page 4) shows the AAATA I.D. cards which provides a discount fare for the use of local fixed-route bus service as follows:

- ADA Card – ADA Paratransit Eligibility. Local fixed-route service is free at all times.
- Good as Gold Card (senior) – Senior ages 65+. Local fixed-route service is free at all times.
- Fare Deal Card (disability) – Person with a disability not qualifying for ADA Paratransit Eligibility. Local fixed-route service half-fare (\$0.75) at all times.
- Fare Deal Card (low-income) – At or below poverty level certified by one of 30+ local social service agencies. Local fixed-route service half-fare (\$0.75) at all times.
- Fare Deal Card (senior) – Ages 60-64. Local fixed-route service half-fare (\$0.75) at all times.

Mode - Commuter Service

Commuter service consists of two routes which provide service for commuters to Ann Arbor from the outlying towns of Chelsea to the west and Canton to the east. On each route, there are two trips during the weekday morning peak period, and two trips in the weekday afternoon peak period. There is one bus stop at a park-and-ride location in Chelsea, and two bus stops at park-and-ride locations in Canton. There are 6 bus stops in Ann Arbor in the downtown/campus area. Most riders use the service regularly. From fare data, we know that more than 80% of riders use the service 4-5 days per week.

A rider survey was conducted in January, 2013 as part of the public input process for a potential fare increase. For a two-week period, the drivers gave a survey form to each individual rider. A total of 109 surveys were distributed, and 78 (72%) were completed. The results of the race and income questions is attached as **Figure K-3**.

Mode – Airport Service

AirRide service operates between Ann Arbor and Detroit Metropolitan Airport. Thirteen round trips are operated seven days a week. There are two bus stops in Ann Arbor, one at the AAATA's main transit center in downtown Ann Arbor. There is a stop at the two terminals at Detroit Metro. Service is operated by a private provider. An email survey was conducted by Michigan Flyer in December, 2014. A summary of findings is attached as **Figure K-4** and full results are listed in the **Appendix** on page 215.



TheRide Passenger Survey

Please let TheRide know how to serve you better!

- Where were you before you went to the bus stop for this trip?
 - Home
 - Work
 - Shopping
 - School / college
 - Social visit or recreation
 - Doctor / medical
 - Church
 - Other _____
- What are the cross streets at that location?
Street: _____
Cross street: _____
What city? (Circle one): Ann Arbor area Ypsilanti area
Other: _____
- How did you get to your stop?
 - Walked
 - Wheelchair/scooter
 - Bike
 - Drove
 - Got a ride
- How many minutes did it take you to get to the bus stop? _____
- What is your FINAL destination for this trip?
 - Home
 - Work
 - Shopping
 - School / college
 - Social visit or recreation
 - Doctor / medical
 - Church
 - Other _____
- What are the cross streets at your final destination?
Street: _____
Cross street: _____
What city? (Circle one): Ann Arbor area Ypsilanti area
Other: _____
- How many separate one-way bus trips will you make today? (For example, even if you transfer, going to work is only one trip; going home from work is a second trip)
 - 1 trip
 - 2 trips
 - 3 trips
 - 4 trips
 - Other _____ (how many?)
- How did you pay for this trip?
 - Cash
 - MCard
 - Transfer
 - 30-Day pass
 - golpass
 - Token
 - EMU Pass
 - Other _____
- Do you have one of the following:
 - An ADA (green) card
 - Good as Gold (senior card)
 - Fare Deal Card (for disability)
 - Fare Deal card (for low income)
 - Fare Deal Card (age 60-64)
- Which TheRide routes do you use regularly? (choose up to 4)
 Routes: 1U 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
 16 17 18 20 22 33 36 46 67 609
- Including today, on which of the past seven days have you ridden on TheRide? (All that apply)
 - Mon
 - Tue
 - Wed
 - Thurs
 - Fri
 - Sat
 - Sun
- On which of the past seven days have you used TheRide after 8:00 PM? (All that apply)
 - Mon
 - Tue
 - Wed
 - Thurs
 - Fri
 - Sat
 - Sun
- If TheRide were not available for this trip, what would you have done instead?
 - Driven alone
 - Gotten a ride
 - Taken a U of M bus
 - Taken a carpool or vanpool
 - Walked
 - Bicycled
 - Used Uber or Lyft
 - Used Zipcar
 - Gone somewhere else
 - Not made this trip at all
- Do you have a valid driver's license?**
 - Yes
 - No
- Was a car (or truck or motorcycle) available to you to make this trip?
 - Yes
 - No
- For how long have you been using TheRide?
 - Less than a year
 - 1-2 years
 - 3-5 years
 - 6-10 years
 - 11-15 years
 - more than 15 years
- In the past 30 days, about how many times, if at all, have you used Zipcar?
 - Not at all
 - Once or twice
 - Two or three times
 - Four or five times
 - More than five
- In the past 30 days, about how many times, if at all, have you used Uber or Lyft?
 - Not at all
 - Once or twice
 - Two or three times
 - Four or five times
 - More than five
- If you used Uber or Lyft recently, were those trips you would in the past have made on TheRide?
 - Yes – before Uber/Lyft, would probably have used TheRide for most of those trips
 - No – they were not the kinds of trips I would have taken on TheRide
- How old are you? _____ Years old
- Which one of the following best describes you? Are you (circle only one):
 - Employed for pay outside your home
 - Employed for pay in your home
 - Student
 - Homemaker
 - Unemployed
 - Retired
- Are you a ...
 - High school student
 - College student
 - Not a student
 a. If you are a college student, which college?
 - U of M
 - EMU
 - WCC
 - Concordia
 - Cleary
 - Cooley
 - Other: _____
- If employed, in a typical week, do you usually?
 - Work after 9:00 PM on any day?
 - Yes
 - No
 - Work Saturday and/or Sunday
 - Yes
 - No
 - Start work before 7:00 am on any day?
 - Yes
 - No
- Are you?
 - Male
 - Female
- What is your total combined annual household income?
 - Less than \$10,000
 - \$10,000 to \$14,999
 - \$15,000 to \$19,999
 - \$20,000 to \$24,999
 - \$25,000 to \$34,999
 - \$35,000 to \$49,999
 - \$50,000 to \$74,999
 - \$75,000 to \$100,000
 - More than \$100,000
- How many people live in your household?
 - 1
 - 2
 - 3
 - 4
 - 5 or more

Please turn the survey over and complete the questions on the back

27. Which do you consider yourself (Circle all that apply):
 1 African-American/Black 2 Asian 3 Caucasian/white 4 Native-American Indian
 5 Pacific Islander/Hawaiian 6 Other _____
28. Are you Hispanic/Latino(a)? 1 Yes 2 No
29. How well do you speak English... 1 Very well 2 Well 3 Not Well
30. What language do you most often speak at home?
 1 English 2 Spanish 3 Other: _____
31. **Are you using TheRide buses ...**
 1 More often than a year ago 2 About the same as a year ago 3 Less often than a year ago
32. Are you using TheRide buses after **8:00 PM in the evening ...**
 1 More often than a year ago 2 About the same as a year ago 3 Less often than a year ago
33. A year from now, would you prefer to:
 1 Keep using TheRide 2 Get a car but keep using TheRide also 3 Get a car and stop using TheRide
 4 Move away from this area 5 Stop using TheRide for other reason
34. Do you usually carry a mobile phone?
 1 Yes- conventional cell phone 2 Yes - Smart phone with Internet access 3 No – No mobile phone
35. **If you usually carry a mobile phone...**
 a. Do you text on it? 1 Often 2 Occasionally 4 Rarely or never
 b. Do you access the Internet on it? 1 Often 2 Occasionally 4 Rarely or never
 c. Do you access information about TheRide on it? 1 Often 2 Occasionally 4 Rarely or never
36. Do you use social media? 1 Often 2 Occasionally 4 Rarely or never
 a. If you use social media, which of the following do you use regularly?
 (all that apply)
 Facebook Twitter Instagram Pinterest LinkedIn YouTube
37. If you use "Track My Bus," how often do you use...
 0 I do not use "Track my bus."
 a Smartphone 1 Often 2 Occasionally 4 Rarely or never
 b Tablet 1 Often 2 Occasionally 4 Rarely or never
 c Laptop or desktop computer 1 Often 2 Occasionally 4 Rarely or never

38. How satisfied or dissatisfied are you with TheRide service in each of the following areas?

	Don't know/ ☹	Dissatisfied ☹		Neutral ☺				Satisfied ☺
a. Drivers' skill	<input type="checkbox"/>	1	2	3	4	5	6	7
b. Drivers' courtesy with passengers	<input type="checkbox"/>	1	2	3	4	5	6	7
c. Drivers' knowledge of the TheRide system	<input type="checkbox"/>	1	2	3	4	5	6	7
d. Overall quality of customer information	<input type="checkbox"/>	1	2	3	4	5	6	7
e. Bus cleanliness	<input type="checkbox"/>	1	2	3	4	5	6	7
f. Safety from accidents	<input type="checkbox"/>	1	2	3	4	5	6	7
g. Personal security	<input type="checkbox"/>	1	2	3	4	5	6	7
h. Quality of bus stops you use	<input type="checkbox"/>	1	2	3	4	5	6	7
i. Locations of bus stops you use	<input type="checkbox"/>	1	2	3	4	5	6	7
J. On-time performance	<input type="checkbox"/>	1	2	3	4	5	6	7
k. Frequency of service	<input type="checkbox"/>	1	2	3	4	5	6	7
l. Dependability of making transfers	<input type="checkbox"/>	1	2	3	4	5	6	7
m. Directness of routes	<input type="checkbox"/>	1	2	3	4	5	6	7
n. Service to areas where you want to go	<input type="checkbox"/>	1	2	3	4	5	6	7
o. TheRide Service overall	<input type="checkbox"/>	1	2	3	4	5	6	7

39. Have you any comments or suggestions for TheRide?

Title VI Tables

TheRide Onboard Survey 2015

Income, household size and federally defined levels of poverty

(% of Total Sample)

Q25 What is your total annual household income?

\$75,000

(Assume mid-point of income ranges for incomes over \$10,000)		Less than	\$10,000 to	\$15,000 to	\$25,000 to	\$35,000 to	\$45,000 to	\$55,000 to	to	\$100,000
		\$10,000	\$14,999 \$12,500	\$24,999 \$20,000	\$34,999 \$30,000	\$44,999 \$40,000	\$54,999 \$50,000	\$74,999 \$65,000	\$99,999 \$87,500	or more \$100,000
Q26 How many people live in your household?	1	8.8%	4.2%	2.4%	4.1%	3.6%	3.4%	1.6%	0.9%	0.2%
	2	7.7%	2.5%	1.5%	3.1%	4.2%	3.7%	4.2%	2.3%	2.7%
	3	4.9%	1.7%	0.9%	2.3%	1.7%	1.7%	2.0%	1.5%	1.2%
	4	3.4%	1.0%	0.5%	1.1%	1.1%	1.0%	1.1%	1.1%	1.3%
	5	3.4%	0.8%	0.2%	1.1%	0.8%	0.6%	0.5%	1.1%	0.8%
Total		28.2%	10.2%	0.7%	1.1%					
				4.8%	10.6%	11.4%	10.4%	9.4%	6.9%	6.2%
		40.2% in poverty level income households				59.7% in non-poverty level households				

		ROUTE							
		1	1U	2	3	4	5	6	7
		Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %
Poverty level income adj for hh size	Poverty level household	42%	5%	39%	33%	44%	39%	48%	39%
	Above poverty level household income	58%	95%	61%	67%	56%	61%	52%	61%
Q25 income grouped	Less than \$25,000	57%	20%	54%	46%	59%	56%	68%	56%
	\$25,000 to \$49,999	16%	37%	22%	26%	26%	21%	20%	24%
	\$50,000 to \$74,999	11%	12%	10%	14%	6%	11%	5%	8%
	\$75,000 or more	15%	31%	14%	13%	9%	12%	7%	11%
Employment status	Employed for pay outside	26%	61%	32%	33%	46%	41%	36%	28%
	Employed for pay in home	1%	1%	2%	3%	4%	4%	3%	5%
	Student	55%	36%	55%	36%	25%	33%	37%	40%
	Homemaker	1%	0%	1%	2%	1%	2%	2%	0%
	Unemployed	2%	0%	1%	6%	5%	5%	4%	4%
	Retired	5%	0%	3%	7%	5%	3%	8%	2%
	Student who is also employed	9%	1%	5%	13%	15%	12%	9%	21%
	Q22 student or not	HS (5%) or college (46%) student	66%	41%	62%	54%	44%	48%	49%
Ethnicity	Not a student	34%	59%	38%	46%	56%	52%	51%	35%
	African-American / Black	21%	6%	11%	42%	36%	29%	33%	34%
	Asian	45%	24%	38%	15%	12%	14%	16%	15%
	Caucasian / white	30%	68%	42%	42%	45%	50%	43%	39%
	Native-American Indian	1%	0%	0%	0%	2%	2%	1%	4%
	Pacific Islander / Hawaiian	0%	0%	0%	0%	0%	0%	0%	0%
	Other	2%	2%	3%	0%	1%	2%	2%	2%
	Multi-Racial	1%	0%	1%	1%	1%	0%	1%	2%
	Arab / Middle Eastern	1%	0%	0%	1%	1%	1%	1%	1%
	Hispanic only	0%	0%	4%	0%	2%	2%	4%	2%

		ROUTE							
		1	1U	2	3	4	5	6	7
Hispanic / Latino	Yes	4%	3%	9%	6%	8%	9%	12%	6%
	No	96%	97%	91%	94%	92%	91%	88%	94%
English proficiency	Very well	64%	94%	71%	91%	83%	86%	83%	85%
	Well	29%	5%	23%	8%	15%	13%	14%	13%
	Not well	7%	2%	6%	1%	2%	1%	3%	2%
Primary language	English	78%	87%	76%	92%	90%	89%	88%	90%
	Spanish	2%	2%	4%	0%	2%	2%	4%	4%
	Other	20%	11%	20%	8%	8%	9%	9%	6%
Fare medium	Cash	14%	0%	11%	34%	37%	32%	35%	41%
	MCard	66%	100%	80%	33%	37%	36%	40%	29%
	Transfer	1%	0%	0%	5%	1%	1%	1%	4%
	30 day pass	5%	0%	1%	5%	8%	7%	10%	7%
	go!pass	8%	0%	4%	9%	12%	16%	5%	9%
	Token	3%	0%	1%	5%	3%	2%	4%	2%
	EMU Pass	0%	0%	0%	1%	1%	1%	0%	0%
Card possession	Other	3%	0%	2%	10%	1%	6%	6%	9%
	ADA (green) card	2%	1%	2%	2%	1%	3%	4%	5%
	Good as Gold (senior)	8%	1%	3%	4%	3%	2%	1%	4%
	Fare deal-disability	1%	0%	0%	2%	3%	2%	3%	1%
	Fare deal-low income	5%	0%	3%	9%	10%	10%	16%	6%
	Fare deal-60-64	0%	0%	1%	0%	0%	0%	2%	0%
	None of these	85%	97%	92%	83%	83%	82%	74%	85%
Alternate mode of travel	Driven alone	12%	27%	19%	21%	17%	17%	5%	13%
	Gotten a ride	22%	12%	15%	25%	26%	29%	22%	30%
	Taken a U of M bus	15%	14%	28%	9%	3%	2%	5%	1%
	Taken a carpool	1%	3%	1%	4%	4%	2%	2%	1%
	Walked	27%	32%	19%	8%	17%	19%	19%	20%
	Bicycled	4%	8%	2%	4%	7%	8%	3%	4%
	Used Uber or Lyft	8%	0%	6%	10%	8%	7%	14%	8%
	Used Zipcar	0%	0%	1%	1%	0%	0%	0%	1%
	Gone somewhere else	1%	3%	1%	3%	1%	3%	1%	4%
	Not made the trip	10%	2%	8%	16%	18%	13%	29%	19%

		ROUTE							
		1	1U	2	3	4	5	6	7
Drivers License	Yes	60%	96%	66%	59%	58%	59%	55%	49%
	No	40%	4%	34%	41%	42%	41%	45%	51%
Vehicle availability	Yes	29%	80%	35%	34%	27%	34%	14%	29%
	No	71%	20%	65%	66%	73%	66%	86%	71%
Availability of non-transit alternative (Q14 & Q15)	No license (may or may not have a vehicle, most do not)	41%	4%	34%	41%	42%	41%	46%	51%
	Licensed driver, but no vehicle	34%	17%	35%	28%	37%	31%	47%	29%
	Licensed driver with vehicle available	25%	78%	30%	31%	21%	28%	7%	20%

		8	9	10	11	12	13	14	15
		Col %							
Poverty level income adj for hh size	Poverty level household	37%	26%	65%	76%	41%	6%	14%	18%
	Above poverty level household income	63%	74%	35%	24%	59%	94%	86%	83%
Q25 income grouped	Less than \$25,000	61%	45%	82%	88%	59%	28%	42%	35%
	\$25,000 to \$49,999	22%	26%	13%	12%	13%	19%	27%	12%
	\$50,000 to \$74,999	5%	14%	2%	0%	10%	11%	19%	9%
	\$75,000 or more	12%	15%	3%	0%	17%	42%	12%	44%
Employment status	Employed for pay outside	42%	52%	47%	35%	42%	59%	45%	39%
	Employed for pay in home	7%	3%	7%	5%	4%	2%	0%	5%
	Student	25%	18%	10%	25%	24%	27%	45%	46%
	Homemaker	1%	1%	3%	3%	3%	0%	0%	0%
	Unemployed	6%	7%	13%	13%	7%	0%	0%	0%
	Retired	5%	7%	10%	10%	11%	2%	0%	2%
	Student who is also employed	14%	12%	11%	10%	8%	10%	9%	8%
Q22 student or not	HS (5%) or college (46%) student	46%	34%	27%	36%	38%	39%	56%	58%
Ethnicity	Not a student	54%	66%	73%	64%	62%	61%	44%	42%
	African-American / Black	22%	20%	70%	61%	20%	11%	7%	5%
	Asian	7%	4%	0%	3%	8%	9%	41%	5%
	Caucasian / white	60%	70%	22%	24%	64%	80%	52%	84%
	Native-American Indian	2%	1%	3%	5%	0%	0%	0%	0%
	Pacific Islander / Hawaiian	2%	0%	0%	0%	0%	0%	0%	0%
	Other	2%	2%	3%	3%	5%	0%	0%	2%
	Multi-Racial	0%	0%	3%	3%	1%	0%	0%	0%
	Arab / Middle Eastern	2%	0%	0%	0%	0%	0%	0%	0%
	Hispanic only	3%	2%	0%	3%	1%	0%	0%	4%

		8	9	10	11	12	13	14	15
Hispanic / Latino	Yes	15%	9%	8%	10%	10%	6%	7%	9%
	No	85%	91%	92%	90%	90%	94%	93%	91%
English proficiency	Very well	88%	87%	90%	93%	88%	89%	81%	91%
	Well	11%	12%	10%	5%	9%	11%	19%	7%
	Not well	1%	1%	0%	2%	3%	0%	0%	2%
Primary language	English	90%	94%	100%	100%	96%	88%	87%	93%
	Spanish	7%	3%	0%	0%	2%	0%	0%	5%
	Other	3%	3%	0%	0%	2%	12%	13%	2%
Fare medium	Cash	26%	25%	59%	55%	25%	15%	0%	17%
	MCard	41%	29%	8%	0%	30%	58%	97%	62%
	Transfer	1%	2%	3%	2%	0%	0%	0%	2%
	30 day pass	8%	14%	10%	17%	16%	0%	0%	0%
	go!pass	17%	20%	5%	7%	19%	13%	0%	18%
	Token	1%	2%	4%	7%	3%	3%	3%	0%
	EMU Pass	0%	2%	0%	0%	1%	5%	0%	0%
Card possession	Other	6%	6%	11%	12%	8%	8%	0%	2%
	ADA (green) card	3%	3%	8%	9%	3%	0%	0%	0%
	Good as Gold (senior)	2%	4%	6%	0%	5%	12%	0%	2%
	Fare deal-disability	3%	3%	0%	6%	2%	0%	0%	0%
	Fare deal-low income	9%	8%	21%	23%	17%	0%	0%	0%
	Fare deal-60-64	4%	0%	3%	4%	1%	2%	0%	0%
	None of these	79%	83%	62%	57%	72%	86%	100%	98%
Alternate mode of travel	Driven alone	19%	13%	3%	3%	14%	40%	36%	27%
	Gotten a ride	17%	26%	41%	22%	26%	10%	12%	32%
	Taken a U of M bus	2%	0%	0%	0%	1%	0%	15%	0%
	Taken a carpool	1%	2%	2%	0%	1%	0%	0%	10%
	Walked	28%	32%	27%	32%	29%	30%	24%	22%
	Bicycled	10%	7%	2%	5%	7%	8%	6%	7%
	Used Uber or Lyft	11%	12%	6%	3%	7%	10%	3%	0%
	Used Zipcar	0%	0%	0%	0%	1%	0%	0%	2%
	Gone somewhere else	1%	0%	0%	3%	1%	0%	0%	2%
	Not made the trip	11%	7%	20%	32%	13%	3%	3%	0%

		8	9	10	11	12	13	14	15
Drivers License	Yes	69%	64%	31%	36%	54%	85%	88%	92%
	No	31%	36%	69%	64%	46%	15%	12%	8%
Vehicle availability	Yes	33%	25%	13%	10%	29%	63%	64%	46%
	No	67%	75%	87%	90%	71%	37%	36%	54%
Availability of non-transit alternative (Q14 & Q15)	No license (may or may not have a vehicle, most do not)	32%	36%	70%	66%	46%	15%	12%	9%
	Licensed driver, but no vehicle	38%	40%	28%	30%	31%	27%	24%	51%
	Licensed driver with vehicle available	30%	23%	1%	5%	22%	59%	64%	40%

		16	17	18	20	22	33	36	46
		Col %							
Poverty level income adj for hh size	Poverty level household	41%	0%	13%	63%	30%	87%	32%	49%
	Above poverty level household income	59%	100%	87%	37%	70%	13%	68%	51%
Q25 income grouped	Less than \$25,000	53%	17%	21%	79%	54%	100%	45%	78%
	\$25,000 to \$49,999	22%	0%	16%	15%	27%	0%	25%	13%
	\$50,000 to \$74,999	10%	67%	26%	4%	9%	0%	13%	5%
	\$75,000 or more	16%	17%	37%	2%	11%	0%	17%	4%
Employment status	Employed for pay outside	36%	71%	68%	34%	29%	5%	27%	28%
	Employed for pay in home	2%	0%	2%	8%	3%	5%	1%	8%
	Student	38%	0%	23%	19%	49%	75%	61%	23%
	Homemaker	0%	0%	0%	8%	5%	0%	0%	3%
	Unemployed	2%	14%	0%	8%	5%	0%	0%	14%
	Retired	5%	14%	0%	6%	4%	0%	1%	11%
	Student who is also employed	16%	0%	7%	16%	7%	15%	10%	13%
Q22 student or not	HS (5%) or college (46%) student	54%	0%	30%	45%	57%	95%	73%	38%
Ethnicity	Not a student	46%	100%	70%	55%	43%	5%	27%	62%
	African-American / Black	23%	0%	7%	62%	21%	53%	17%	57%
	Asian	13%	0%	3%	0%	30%	12%	13%	0%
	Caucasian / white	55%	100%	90%	34%	39%	24%	64%	41%
	Native-American Indian	0%	0%	0%	2%	1%	0%	0%	0%
	Pacific Islander / Hawaiian	0%	0%	0%	0%	0%	6%	0%	0%
	Other	4%	0%	0%	2%	4%	6%	3%	0%
	Multi-Racial	0%	0%	0%	0%	1%	0%	0%	2%
	Arab / Middle Eastern	0%	0%	0%	0%	1%	0%	1%	0%
	Hispanic only	5%	0%	0%	0%	3%	0%	1%	0%

		16	17	18	20	22	33	36	46
Hispanic / Latino	Yes	13%	0%	2%	8%	11%	12%	7%	6%
	No	88%	100%	98%	92%	89%	88%	93%	94%
English proficiency	Very well	88%	100%	97%	86%	65%	82%	97%	92%
	Well	9%	0%	3%	14%	24%	18%	2%	8%
	Not well	4%	0%	0%	0%	11%	0%	1%	0%
Primary language	English	83%	100%	98%	98%	72%	88%	92%	100%
	Spanish	13%	0%	0%	0%	7%	0%	3%	0%
	Other	4%	0%	2%	2%	21%	13%	5%	0%
Fare medium	Cash	27%	14%	2%	59%	21%	20%	2%	58%
	MCard	45%	71%	90%	9%	47%	5%	91%	11%
	Transfer	0%	0%	0%	0%	2%	0%	0%	1%
	30 day pass	11%	0%	3%	12%	9%	0%	3%	8%
	go!pass	13%	0%	5%	6%	5%	0%	4%	8%
	Token	0%	0%	0%	6%	2%	0%	0%	3%
	EMU Pass	0%	0%	0%	3%	1%	60%	0%	1%
Card possession	Other	5%	14%	0%	5%	13%	15%	0%	9%
	ADA (green) card	2%	0%	0%	4%	4%	4%	0%	9%
	Good as Gold (senior)	5%	14%	0%	4%	1%	0%	0%	5%
	Fare deal-disability	6%	0%	0%	4%	3%	0%	0%	5%
	Fare deal-low income	3%	0%	0%	20%	7%	0%	2%	19%
	Fare deal-60-64	2%	0%	0%	0%	0%	0%	0%	0%
	None of these	83%	86%	100%	67%	85%	96%	98%	61%
Alternate mode of travel	Driven alone	20%	14%	59%	3%	10%	0%	40%	8%
	Gotten a ride	20%	0%	7%	33%	19%	25%	8%	27%
	Taken a U of M bus	7%	0%	7%	2%	12%	0%	12%	0%
	Taken a carpool	4%	0%	0%	2%	1%	0%	0%	0%
	Walked	20%	57%	14%	32%	23%	40%	17%	28%
	Bicycled	4%	14%	5%	0%	5%	10%	5%	2%
	Used Uber or Lyft	9%	14%	0%	2%	7%	20%	6%	1%
	Used Zipcar	0%	0%	0%	0%	1%	0%	0%	0%
	Gone somewhere else	2%	0%	7%	2%	1%	0%	2%	3%
	Not made the trip	15%	0%	2%	25%	21%	5%	9%	30%

		16	17	18	20	22	33	36	46
Drivers License	Yes	54%	86%	93%	32%	46%	52%	91%	42%
	No	46%	14%	7%	68%	54%	48%	9%	58%
Vehicle availability	Yes	26%	43%	88%	10%	23%	9%	67%	11%
	No	74%	57%	12%	90%	77%	91%	33%	89%
Availability of non-transit alternative (Q14 & Q15)	No license (may or may not have a vehicle, most do not)	46%	14%	7%	69%	54%	48%	9%	58%
	Licensed driver, but no vehicle	32%	43%	7%	26%	32%	48%	25%	34%
	Licensed driver with vehicle available	22%	43%	87%	5%	14%	5%	66%	8%

		67	609	710	711	All routes
		Col %				
Poverty level income adj for hh size	Poverty level household	33%	0%	0%	4%	40%
	Above poverty level household income	67%	100%	100%	96%	60%
Q25 income grouped	Less than \$25,000	50%	35%	4%	4%	57%
	\$25,000 to \$49,999	33%	19%	12%	11%	21%
	\$50,000 to \$74,999	0%	8%	24%	18%	9%
	\$75,000 or more	17%	38%	60%	68%	13%
Employment status	Employed for pay outside	57%	67%	97%	94%	39%
	Employed for pay in home	0%	3%	0%	0%	4%
	Student	0%	27%	0%	6%	36%
	Homemaker	0%	0%	0%	0%	1%
	Unemployed	14%	0%	0%	0%	4%
	Retired	14%	0%	0%	0%	5%
	Student who is also employed	14%	3%	3%	0%	11%
Q22 student or not	HS (5%) or college (46%) student	14%	32%	3%	6%	51%
Ethnicity	Not a student	86%	68%	97%	94%	49%
	African-American / Black	33%	0%	0%	17%	29%
	Asian	0%	22%	4%	34%	17%
	Caucasian / white	67%	74%	93%	48%	48%
	Native-American Indian	0%	0%	0%	0%	1%
	Pacific Islander / Hawaiian	0%	0%	0%	0%	0%
	Other	0%	4%	4%	0%	2%
	Multi-Racial	0%	0%	0%	0%	1%
	Arab / Middle Eastern	0%	0%	0%	0%	1%
	Hispanic only	0%	0%	0%	0%	2%

		67	609	710	711	All routes	
Hispanic / Latino	Yes	0%	10%	4%	4%	9%	
	No	100%	90%	96%	96%	91%	
English proficiency	Very well	100%	92%	100%	94%	84%	
	Well	0%	8%	0%	6%	14%	
	Not well	0%	0%	0%	0%	3%	
Primary language	English	100%	86%	100%	90%	88%	
	Spanish	0%	5%	0%	0%	3%	
	Other	0%	10%	0%	10%	9%	
Fare medium	Cash	71%	16%	3%	17%	28%	
	MCard	14%	77%	0%	0%	46%	
	Transfer	14%	0%	0%	0%	1%	
	30 day pass	0%	0%	86%	83%	7%	
	go!pass	0%	3%	3%	0%	9%	
	Token	0%	0%	0%	0%	2%	
	EMU Pass	0%	3%	0%	0%	2%	
	Other	0%	0%	7%	0%	5%	
	Card possession	ADA (green) card	13%	0%	0%	0%	3%
		Good as Gold (senior)	0%	0%	3%	0%	3%
Fare deal-disability		0%	0%	0%	0%	2%	
Fare deal-low income		13%	0%	0%	0%	9%	
Fare deal-60-64		0%	0%	0%	0%	1%	
None of these		75%	100%	97%	100%	83%	
Alternate mode of travel	Driven alone	14%	45%	86%	84%	18%	
	Gotten a ride	29%	26%	0%	6%	22%	
	Taken a U of M bus	0%	6%	3%	0%	8%	
	Taken a carpool	0%	3%	7%	10%	2%	
	Walked	43%	13%	0%	0%	21%	
	Bicycled	0%	0%	0%	0%	5%	
	Used Uber or Lyft	0%	0%	0%	0%	8%	
	Used Zipcar	0%	0%	0%	0%	0%	
	Gone somewhere else	0%	3%	0%	0%	2%	
	Not made the trip	14%	3%	3%	0%	15%	

		67	609	710	711	All routes
Drivers License	Yes	57%	84%	100%	97%	61%
	No	43%	16%	0%	3%	39%
Vehicle availability	Yes	14%	71%	100%	94%	32%
	No	86%	29%	0%	6%	68%
Availability of non-transit alternative (Q14 & Q15)	No license (may or may not have a vehicle, most do not)	43%	16%	0%	3%	40%
	Licensed driver, but no vehicle	43%	13%	0%	3%	34%
	Licensed driver with vehicle available	14%	71%	100%	94%	27%

ROUTE	Poverty level income		Q25 income grouped			
	Poverty level household income	Above poverty level household income	Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$74,999	\$75,000 or more
	Col %	Col %	Col %	Col %	Col %	Col %
1	4%	4%	4%	3%	5%	5%
1U	0%	1%	0%	1%	1%	1%
2	12%	12%	12%	13%	14%	14%
3	3%	5%	3%	5%	6%	4%
4	23%	19%	21%	25%	13%	14%
5	9%	9%	9%	9%	11%	8%
6	11%	8%	11%	9%	5%	5%
7	5%	5%	5%	5%	4%	4%
8	3%	4%	4%	4%	2%	3%
9	2%	3%	2%	3%	4%	3%
10	4%	1%	4%	2%	0%	1%
11	2%	0%	2%	1%	0%	0%
12	4%	4%	4%	2%	4%	5%
13	0%	1%	0%	1%	1%	3%
14	0%	1%	1%	1%	1%	1%
15	0%	1%	1%	1%	1%	4%
16	2%	2%	2%	2%	2%	2%
17	0%	1%	0%	0%	4%	1%
18	1%	3%	1%	2%	7%	7%
20	3%	1%	3%	1%	1%	0%
22	2%	4%	3%	4%	3%	3%
33	4%	0%	4%	0%	0%	0%
36	5%	7%	4%	7%	8%	7%
46	1%	1%	1%	1%	1%	0%
67	0%	0%	0%	0%	0%	0%
609	0%	1%	1%	1%	1%	3%
710	0%	1%	0%	0%	1%	1%
711	0%	1%	0%	0%	1%	2%

ROUTE	Employment status							Q22 student or not	
	Employed for pay outside home	Employed for pay in home	Student	Home-maker	Un-employed	Retired	Student who is also employed	HS (5%) or college (46%) student	Not a student
	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %
1	3%	2%	6%	2%	2%	4%	3%	5%	3%
1U	1%	0%	0%	0%	0%	0%	0%	0%	0%
2	10%	7%	19%	10%	4%	8%	6%	15%	9%
3	4%	3%	4%	5%	6%	6%	5%	5%	4%
4	24%	22%	14%	16%	22%	20%	26%	17%	23%
5	10%	11%	8%	12%	10%	6%	10%	8%	9%
6	9%	9%	9%	12%	9%	17%	7%	9%	10%
7	4%	7%	6%	0%	5%	3%	10%	7%	4%
8	4%	7%	2%	3%	5%	4%	5%	3%	4%
9	4%	2%	1%	2%	5%	4%	3%	2%	4%
10	3%	5%	1%	5%	8%	5%	2%	1%	4%
11	1%	2%	1%	2%	4%	3%	1%	1%	2%
12	4%	4%	2%	6%	6%	9%	3%	3%	5%
13	1%	1%	1%	0%	0%	0%	1%	1%	1%
14	1%	0%	1%	0%	0%	0%	1%	1%	1%
15	1%	2%	2%	0%	0%	0%	1%	1%	1%
16	2%	1%	2%	0%	1%	2%	3%	2%	2%
17	1%	0%	0%	0%	2%	2%	0%	0%	1%
18	4%	1%	1%	0%	0%	0%	1%	1%	3%
20	2%	5%	1%	12%	5%	3%	3%	2%	3%
22	2%	2%	4%	10%	4%	3%	2%	4%	3%
33	0%	2%	4%	0%	0%	0%	2%	3%	0%
36	4%	2%	10%	0%	1%	1%	5%	8%	3%
46	1%	2%	1%	2%	3%	2%	1%	1%	1%
67	0%	0%	0%	0%	0%	0%	0%	0%	0%
609	1%	1%	1%	0%	0%	0%	0%	1%	1%
710	1%	0%	0%	0%	0%	0%	0%	0%	1%
711	1%	0%	0%	0%	0%	0%	0%	0%	1%

ROUTE	Ethnicity									Hispanic /Latino	
	African-American /Black Col %	Asian Col %	Caucasian /white Col %	Native-American Indian Col %	Pacific Islander /Hawaiian Col %	Other Col %	Multi-Racial Col %	Arab /Middle Eastern Col %	Hispanic only Col %	Yes Col %	No Col %
	1	3%	10%	2%	3%	0%	3%	4%	5%	0%	2%
1U	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
2	5%	27%	11%	0%	0%	18%	20%	7%	20%	12%	12%
3	6%	4%	4%	0%	0%	0%	6%	7%	0%	3%	4%
4	25%	15%	18%	27%	22%	12%	20%	18%	22%	18%	19%
5	9%	7%	9%	16%	13%	8%	0%	16%	9%	10%	9%
6	11%	9%	9%	9%	0%	9%	7%	8%	17%	13%	9%
7	6%	5%	4%	17%	0%	5%	13%	11%	5%	4%	5%
8	3%	1%	5%	5%	24%	4%	0%	14%	5%	6%	3%
9	2%	1%	4%	3%	0%	3%	0%	0%	3%	3%	3%
10	6%	0%	1%	7%	0%	3%	10%	0%	0%	2%	3%
11	3%	0%	1%	6%	0%	2%	5%	0%	2%	2%	1%
12	2%	2%	5%	0%	0%	8%	5%	0%	2%	4%	4%
13	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	1%
14	0%	2%	1%	0%	0%	0%	0%	0%	0%	1%	1%
15	0%	0%	2%	0%	0%	1%	0%	0%	2%	1%	1%
16	2%	2%	2%	0%	0%	3%	0%	0%	5%	3%	2%
17	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
18	1%	0%	4%	0%	0%	0%	0%	0%	0%	0%	2%
20	5%	0%	2%	3%	0%	2%	0%	0%	0%	2%	2%
22	2%	6%	3%	3%	0%	6%	4%	5%	5%	4%	3%
33	3%	1%	1%	0%	41%	4%	0%	0%	0%	2%	2%
36	4%	5%	8%	2%	0%	9%	3%	8%	3%	5%	6%
46	2%	0%	1%	0%	0%	0%	3%	0%	0%	1%	1%
67	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
609	0%	1%	1%	0%	0%	1%	0%	0%	0%	1%	1%
710	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%
711	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%

ROUTE	English proficiency			Primary language		
	Very well Col %	Well Col %	Not well Col %	English Col %	Spanish Col %	Other Col %
	1	3%	8%	10%	3%	2%
1U	0%	0%	0%	0%	0%	1%
2	10%	19%	27%	10%	17%	26%
3	5%	3%	2%	5%	0%	4%
4	20%	21%	15%	20%	13%	18%
5	9%	8%	5%	9%	7%	9%
6	9%	10%	11%	9%	12%	9%
7	5%	5%	4%	5%	7%	4%
8	4%	3%	2%	4%	10%	1%
9	3%	2%	1%	3%	3%	1%
10	3%	2%	0%	3%	0%	0%
11	2%	0%	1%	2%	0%	0%
12	4%	2%	4%	4%	3%	1%
13	1%	1%	0%	1%	0%	1%
14	1%	1%	0%	1%	0%	1%
15	1%	1%	1%	1%	2%	0%
16	2%	1%	3%	2%	9%	1%
17	0%	0%	0%	0%	0%	0%
18	2%	1%	0%	2%	0%	0%
20	2%	2%	0%	3%	0%	0%
22	3%	6%	14%	3%	8%	8%
33	2%	2%	0%	2%	0%	2%
36	7%	1%	2%	6%	6%	4%
46	1%	1%	0%	1%	0%	0%
67	0%	0%	0%	0%	0%	0%
609	1%	0%	0%	1%	1%	1%
710	0%	0%	0%	0%	0%	0%
711	0%	0%	0%	0%	0%	0%

ROUTE	Fare medium							
	Cash	MCard	Transfer	30 day pass	go!pass	Token	EMU Pass	Other
	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %
1	2%	6%	2%	3%	4%	6%	0%	3%
1U	0%	1%	0%	0%	0%	0%	0%	0%
2	5%	21%	3%	2%	5%	5%	0%	6%
3	5%	3%	19%	3%	4%	9%	2%	9%
4	26%	16%	18%	21%	26%	23%	17%	4%
5	10%	7%	5%	9%	15%	8%	3%	11%
6	12%	8%	8%	13%	5%	16%	0%	12%
7	7%	3%	17%	5%	5%	4%	0%	9%
8	4%	3%	5%	4%	7%	1%	0%	5%
9	2%	2%	5%	5%	6%	2%	3%	3%
10	5%	0%	6%	3%	2%	5%	0%	6%
11	3%	0%	3%	3%	1%	4%	0%	3%
12	3%	2%	0%	8%	7%	5%	1%	6%
13	0%	1%	0%	0%	1%	1%	2%	1%
14	0%	2%	0%	0%	0%	1%	0%	0%
15	1%	2%	2%	0%	2%	0%	0%	0%
16	2%	2%	0%	3%	3%	0%	0%	2%
17	0%	1%	0%	0%	0%	0%	0%	1%
18	0%	4%	0%	1%	1%	0%	0%	0%
20	5%	0%	0%	4%	2%	7%	4%	2%
22	2%	3%	5%	4%	2%	3%	2%	8%
33	1%	0%	0%	0%	0%	0%	62%	5%
36	0%	11%	0%	2%	2%	0%	0%	0%
46	2%	0%	1%	1%	1%	1%	1%	2%
67	0%	0%	0%	0%	0%	0%	0%	0%
609	0%	1%	0%	0%	0%	0%	2%	0%
710	0%	0%	0%	4%	0%	0%	0%	0%
711	0%	0%	0%	3%	0%	0%	0%	0%

ROUTE	Card possession					
	ADA (green)	Good as Gold	Fare deal-	Fare deal-low	Fare deal-60-	None of these
	card	(senior)	disability	income	64	Col %
	Col %	Col %	Col %	Col %	Col %	Col %
1	3%	11%	3%	2%	0%	4%
1U	0%	0%	0%	0%	0%	0%
2	11%	11%	2%	4%	9%	13%
3	3%	7%	4%	5%	0%	5%
4	9%	19%	26%	23%	13%	19%
5	10%	8%	11%	10%	4%	9%
6	14%	5%	13%	18%	24%	8%
7	10%	7%	1%	4%	0%	5%
8	5%	3%	6%	4%	20%	4%
9	3%	4%	4%	2%	0%	3%
10	8%	6%	0%	6%	9%	2%
11	5%	0%	5%	4%	8%	1%
12	4%	6%	4%	7%	5%	3%
13	0%	3%	0%	0%	2%	1%
14	0%	0%	0%	0%	0%	1%
15	0%	1%	0%	0%	0%	1%
16	1%	3%	6%	1%	4%	2%
17	0%	2%	0%	0%	0%	0%
18	0%	0%	0%	0%	0%	2%
20	4%	4%	5%	6%	0%	2%
22	5%	1%	6%	3%	0%	3%
33	3%	0%	0%	0%	0%	2%
36	0%	0%	1%	1%	0%	6%
46	3%	2%	2%	2%	0%	1%
67	0%	0%	0%	0%	0%	0%
609	0%	0%	0%	0%	0%	1%
710	0%	0%	0%	0%	0%	0%
711	0%	0%	0%	0%	0%	0%

ROUTE	Alternate mode of travel									
	Driven alone	Gotten a ride	Taken a U of M	Taken a	Walked	Bicycled	Used Uber or	Used Zipcar	Gone	Not made the
	Col %	Col %	bus	carpool	Col %	Col %	Lyft	Col %	else	trip
	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %	Col %
1	3%	4%	8%	3%	5%	3%	4%	0%	3%	3%
1U	1%	0%	1%	1%	1%	1%	0%	0%	1%	0%
2	14%	8%	47%	7%	11%	6%	9%	23%	9%	6%
3	5%	5%	5%	8%	2%	3%	6%	13%	8%	5%
4	18%	22%	8%	35%	16%	27%	20%	16%	9%	24%
5	8%	11%	3%	8%	8%	13%	8%	0%	15%	8%
6	3%	9%	6%	10%	9%	5%	17%	15%	9%	19%
7	4%	7%	1%	3%	5%	4%	5%	10%	12%	7%
8	4%	3%	1%	1%	5%	7%	5%	0%	3%	3%
9	2%	3%	0%	3%	4%	4%	4%	0%	0%	1%
10	0%	4%	0%	2%	3%	1%	2%	0%	0%	3%
11	0%	1%	0%	0%	2%	1%	0%	0%	2%	3%
12	3%	4%	1%	2%	5%	5%	3%	6%	1%	3%
13	2%	0%	0%	0%	1%	1%	1%	0%	0%	0%
14	2%	0%	2%	0%	1%	1%	0%	0%	0%	0%
15	2%	2%	0%	6%	1%	2%	0%	7%	1%	0%
16	2%	2%	2%	3%	2%	1%	2%	0%	2%	2%
17	0%	0%	0%	0%	1%	1%	1%	0%	0%	0%
18	7%	1%	2%	0%	1%	2%	0%	0%	9%	0%
20	0%	3%	0%	2%	3%	0%	0%	0%	2%	4%
22	2%	3%	5%	2%	4%	3%	3%	10%	2%	5%
33	0%	2%	0%	0%	3%	3%	4%	0%	0%	1%
36	13%	2%	9%	0%	5%	5%	5%	0%	9%	3%
46	0%	1%	0%	0%	1%	0%	0%	0%	2%	2%
67	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
609	2%	1%	1%	1%	1%	0%	0%	0%	2%	0%
710	2%	0%	0%	1%	0%	0%	0%	0%	0%	0%
711	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%

ROUTE	Drivers License		Vehicle availability		Availability of non-transit alternative		
	Yes Col %	No Col %	Yes Col %	No Col %	(may or may not have a vehicle, most do not Col %	Licensed driver, but no vehicle Col %	Licensed driver with vehicle available Col %
1	4%	4%	4%	4%	4%	4%	4%
1U	1%	0%	1%	0%	0%	0%	1%
2	13%	11%	13%	12%	11%	13%	14%
3	4%	5%	5%	4%	5%	4%	5%
4	19%	21%	17%	21%	21%	21%	16%
5	8%	9%	9%	8%	9%	8%	9%
6	9%	11%	4%	12%	11%	13%	3%
7	4%	7%	5%	5%	7%	4%	4%
8	4%	3%	4%	4%	3%	4%	4%
9	3%	2%	2%	3%	2%	3%	2%
10	1%	4%	1%	3%	4%	2%	0%
11	1%	2%	0%	2%	2%	1%	0%
12	3%	4%	3%	4%	4%	3%	3%
13	1%	0%	2%	0%	0%	1%	2%
14	1%	0%	2%	0%	0%	1%	2%
15	2%	0%	2%	1%	0%	2%	2%
16	2%	2%	2%	2%	2%	2%	2%
17	1%	0%	1%	0%	0%	1%	1%
18	3%	0%	6%	0%	0%	0%	7%
20	1%	4%	1%	3%	4%	2%	0%
22	2%	4%	2%	4%	4%	3%	2%
33	2%	2%	1%	3%	2%	3%	0%
36	8%	1%	12%	3%	1%	4%	14%
46	1%	1%	0%	1%	1%	1%	0%
67	0%	0%	0%	0%	0%	0%	0%
609	1%	0%	2%	0%	0%	0%	2%
710	1%	0%	1%	0%	0%	0%	1%
711	0%	0%	1%	0%	0%	0%	1%

ExpressRide Commuter Service

Route	Racial / Ethnic Group					Annual Income						Fare Payment Method		
	African American	Asian	Caucasian	Other	Hispanic	Less than \$15,000	\$15,001 to \$25,000	\$25,001 to \$35,000	\$35,001 to \$50,000	\$50,001 to \$75,000	More than \$75,000	30-Day Pass	10-Ride Ticket	Single Ride Fare
710 Chelsea	5%	0%	95%	0%	0%	0%	7%	12%	42%	34%	5%	76%	17%	7%
720 Canton	55%	18%	27%	0%	0%	0%	9%	19%	45%	27%	0%	79%	17%	4%
Total	26%	7%	67%	0%	0%	0%	8%	15%	43%	31%	3%	78%	17%	5%

Michigan Flyer

Marketing 618
Prof. Anocha Aribarg
Ross School of Business
University of Michigan

December 9, 2014

Sebastian Ferrari
Kruthi Sabnis Krishna
Malcolm MacLachlan
Cristina Pellerano
Lily Samimi
Jacqueline Wolf

Table of Contents

Background and problem definition	1
Secondary research	2
Findings	4
Recommendations.....	8
Limitations	9

Background and problem definition

[Michigan Flyer](#) is an airport bus service founded in 2006 and is a subsidiary of Indian Trails, Inc., an inter-city bus company based in Michigan. Michigan Flyer provides daily airport shuttle service to and from East Lansing, Ann Arbor, and the Detroit Metro Airport (DTW). As of early 2012, Michigan Flyer entered into a public-private partnership with the Ann Arbor Transportation Authority to provide even more frequent service and extended hours of operation. It is one of only two public transportation options to DTW (the other being the SMART bus system servicing Macomb, Oakland and Wayne counties) and it is the only available public transportation to the airport for Ann Arbor and Lansing residents. Michigan Flyer serves over 100,000 passengers a year and has a (self-reported) 98% on-time arrival rate.

Decision Problem

There are many factors that constitute a customer's experience with Michigan Flyer. This can broadly range from the ticket booking experience to adjusting to the recent changes in Michigan Flyer service. We would like to focus on the following decision problem and narrow down the scope, if required.

In a single statement, our decision problem is to understand "How satisfied are customers with the Michigan Flyer experience?"

Research questions

There are many research aspects to understand customer satisfaction with Michigan Flyer. Below we have listed the ones that we decided to pursue.

1. Are customers currently satisfied with airport pickup and dropoff locations in the McNamara and North Terminals?
2. Will the change in airport pickup location affect customer satisfaction?
3. Are customers currently satisfied with bus pick-up and drop-off times?

4. What is the customer experience in purchasing tickets and checking for bus schedules on Michigan Flyer's website? Would this experience be enhanced by a native mobile application or an improved, fully-responsive website?
5. Are customers satisfied with the current routes and stops to and from the airport?
6. Are customer's satisfied with the current pricing scheme?

Secondary research

Airport Pick-up/Drop-off Stops

The North Terminal bus stop is located at the North Terminal's Ground Transportation level. Before September 22, the McNamara Terminal bus stop was located at the McNamara's International Arrivals level. Both of these stops were conveniently located near their terminal entrances and allow the customers to wait indoors during cold weather. But as of September 22, the Wayne County Airport Authority has changed the bus stop for the McNamara Terminal as they claim it will increase safety and decrease congestion at the International Arrivals stop¹. While these locations may not be convenient for airport movement, they are accessible for Michigan Flyer passengers, especially disabled passengers, to get to and from their terminal. The new location for the McNamara Terminal stop is located at McNamara's Ground Transportation level. This new location is outdoors and approximately 500 feet away from the terminal entrance (see Figure 1 in Appendix).

According to a study done by the Transportation Research Board's Airport Cooperative Research Program, passengers identified the most stressful parts of the airport experience as check-in and security.² Therefore, minimizing any inconvenient experiences that lead up to these to stressful experiences will help improve overall airport customer experience.

Bus Schedule and Non-Airport Pick-up/Drop-off Stops

According to Michigan Flyer, the company has a 98 percent on-time record. The bus stops in two locations within Ann Arbor - Blake Transit Center and Kensington Court Hotel. Buses from Ann

¹ http://www.mlive.com/lansing-news/index.ssf/2014/09/why_is_detroit_metro_airport_m.html

² <http://www.trb.org/Publications/Blurbs/170867.aspx>

Arbor to DTW run approximately every hour starting from 3:55am to 6:45pm. From DTW to Ann Arbor, the buses run every hour starting from 6:00am to 10:30pm.³

Yelp reviews indicate frustration from customers about the bus schedule. One user says:

“Beware also if you prepay DTW to Ann Arbor and your plane is delayed. Buses don't run very often and dispatch can't or won't contact individual buses to ask them to hold. I literally watched my bus pull away as I was on the phone with dispatch yesterday pleading for them to ask the bus to hold for the 30 seconds it took me to dash down the escalator.”⁴

Given that delayed flights occur regularly, especially during high season travel times and during inclement weather, the research team will identify if customers would like later drop-off and pick-up times.

Mobile Website User Experience

There are several options for customers to purchase reservations and look up bus schedule besides the [Michigan Flyer website](#) or the [AirRide website](#) (Figs. 2 & 3). Purchase options include phone reservations or cash in exact change given to the driver at the time of departure⁵. Hard copies of the Air Ride bus schedule, including the Michigan Flyer routes, are distributed at local libraries⁶. Bus schedule and route information is also available to callers by telephone⁷.

We want to discover if the Internet is the primary mode of information retrieval for customers, and we also want to identify if customers use their computer or mobile devices to access schedules and complete purchases. The follow up questions will ask about their satisfaction with the mobile experience and will examine their ability to navigate the site using a heat-map running on Qualtrics Survey Software.

³ <http://michiganflyer.com/ScheduleRoute.aspx>

⁴ <http://www.yelp.com/biz/michigan-flyer-air-ride-ann-arbor/>

⁵ <http://www.michiganflyer.com/FAQsPolicies.aspx>

⁶ <http://www.aadl.org/aboutus>

⁷ <http://www.michiganflyer.com/FAQsPolicies.aspx>

The desktop user interface of myairride.com advertises the Michigan Flyer service, and offers scheduling information in a modern colorful graphic rich environment. There is a large button to attract users to book their trip, but the destination is the booking page of the Michigan Flyer website. The Michigan Flyer booking interface is utilitarian in design, composed of dropdown boxes and radio buttons on a white background. Though the website is responsive, when viewed in a mobile device the features appear in small text with magnification options (Fig. 4). The technology savvy customer can be surveyed to highlight opportunities to improve usability. The mobile interface for AirRide, myairride/mobile, does not include Michigan Flyer route information (Fig. 5). It offers only local bus route information.

Price

To date Michigan Flyer is the top value in airport transportation in Ann Arbor at \$12 advanced purchase price. Students at the University of Michigan have a \$7 advanced purchase option through the student government airbus service. The highest rated shuttle service on Ann Arbor Yelp is Bill's Van Service which operates door-to-door 24 hours a day, 7 days a week for \$39. Michigan Flyer does not offer door-to-door service or 24 hour availability, but round trip reservations can be made at a discount. The research team will need to identify the perceived value of the available amenities/service options and whether they are consistent across the captured customer demographics.

About the Survey

The survey was conducted November 14-21 using Qualtrics, and was distributed through social media (including retweets by [Michigan Flyer](#) and the [Ann Arbor Area Transportation Authority](#)), posted to the Craigslist community forums in Ann Arbor and Lansing, to our class at the Ross School of Business, and to a listserv of students, faculty and alumni of the University of Michigan School of Information. We received 116 responses; of those, 90 said they had used the Michigan Flyer service. The rest of the respondents were exited out of the survey.

Findings

Finding #1: Overall Satisfaction and Demographics of survey respondents

A primary goal of the survey was to find out how satisfied users are with the Michigan Flyer service. We asked survey participants to rate their satisfaction with the service and their willingness to recommend it to friends and family, and combined those two ratings into one overall measure. Their responses showed high overall satisfaction with Michigan Flyer (4.6 out of 5)(Fig. F1A). Time of last use of the service did not have a significant effect on overall satisfaction with Michigan Flyer (Fig. F1B).

Most respondents were aged 21-30 and nearly all of respondents (89%) fell within the 21-40 range. 32% percent of participants reported annual income $\leq 20,000$, 30% percent reported 20,001-60,000, and 19% declined to give income. Our analysis showed that neither age nor income had a significant effect on the overall satisfaction with the service (Fig. F1C).

Finding #2: Pricing Satisfaction

We asked users for the price at which a refundable round-trip ticket would begin to look expensive. The result showed 42% of respondents selecting \$30, and 36% selecting a price point below that (\$26 and \$28) (Fig. F2A). Based on our survey results, customers are moderately satisfied with the current pricing scheme for tickets, given that a refundable round trip ticket is the higher tier pricing for trips originating in Ann Arbor (a non-refundable, round trip ticket is \$22) (Fig. F2B).

Finding #3: Mobile experience

Mobile satisfaction and usability often contribute to a user's overall experience with a product or service. To gauge mobile experience, we asked users to rate their use of the Michigan Flyer mobile site.

The results showed that the site was easy to read and purchase tickets, and that the information was comprehensive. However, users agreed that there were too many fields and the site was unattractive (Fig. F3A). When shown an image of the Michigan Flyer mobile interface, users predominantly chose the correct action to complete the task we asked of them (which was to find the schedule) (see heatmap in Fig. F3B).

Finding #4: Terminal Satisfaction Finding

Satisfaction with the terminal dropoff and pickup locations forms an important part of the Michigan Flyer service. We asked respondents about their overall satisfaction with the terminal locations, and they also rated each location based on several factors: distance to the terminal security gate, amount of seating, comfort of location, cleanliness, and climate control.

There is no significant difference in overall satisfaction with the Michigan Flyer service between users of the two terminals, McNamara (N=49, M=4.65, SD=0.38) and North (N=27, M=4.54, SD=0.83) ($\alpha = 0.498$ - see Fig. F4A). Users of each terminal were almost equally satisfied with their terminal location: McNamara users rated their satisfaction with the terminal at 3.7 (N=44 M=3.7 SD= 1.09) and North terminal users rated their satisfaction at 4.0 (N=28 M=4.0 SD=1.05) (Fig. F4B). Overall, users gave an average terminal satisfaction rating of 3.82 (N=72, SD=1.08).

In their ratings of terminal factors, users of the two groups overall rated distance at 2.97 (where 5 is strongly agree that the distance is *too long*), amount of seating at 2.6 (where 5 is strongly agree that there is *enough seating*), comfort at 3.23 (where 5 is strongly agree that the location is *uncomfortable*), cleanliness at 3.51 (where 5 is strongly agree that location is *clean*), and climate control at 3.57 (where 5 is strongly agree that climate control is *insufficient*). The only significant differences between McNamara and North terminal users were in comfort and cleanliness: McNamara users gave a worse comfort rating (3.5 versus 2.63 for North; higher rating is worse here) and worse cleanliness rating (3.27 versus 3.92 for North terminal; higher rating is better here)(Fig. F4C).

From our secondary research we knew that the recent change in drop-off and pickup location at McNamara Terminal was something we wanted to investigate - was there any significant difference in overall satisfaction or in terminal satisfaction before and after this change? In order to investigate this question, we asked respondents (who, for the purpose of the survey, were rating their satisfaction on their *most recent* use of Michigan Flyer) who had used McNamara whether or not they did so before or after September 22. 52 respondents said they had used McNamara. Of those 52, 20 said yes, they had used Michigan Flyer since Sept. 22, 30 said no, 2 said not sure. We have a terminal satisfaction rating from 44 of those 52, and we found a

significant decrease in satisfaction among users who had used the Michigan Flyer at McNamara terminal, with satisfaction dropping a full point from 4.12 (N=25, SD=0.88) to 3.12 (N=17, SD=1.16) ($\alpha = 0.006$) (Fig. F4D). Overall satisfaction with Michigan Flyer, though, remained the same between the two groups (Fig. F4E).

Finding #5: On-Time Ratings and Schedule Satisfaction

Michigan Flyer has impressive on-time ratings for airport pickup (83% rated their last trip's pickup as on-time) and dropoff (73% rated their last trip's dropoff as on-time). The difference between these two ratings is statistically significant ($\alpha = 0.000$), but there might be a positive reason for this difference: 21.3% said they got to their dropoff location early (Fig. F5A).

Users are only moderately satisfied with the convenience of the Michigan Flyer schedule of pickups and dropoffs with respect to their flight departure times (N=75, M=3.49 (where 5 is Very Convenient), SD=1.03) and arrival times (N=71, M=3.3, SD=0.95) (Fig. F5B). And we noticed an almost statistically significant difference ($\alpha = 0.122$) *between* users of the two terminals for pickup times in relation to arrival times: McNamara passengers gave a 3.42 rating (N=48, SD=.942) whereas North passengers gave a 3.04 (N=23, SD=.928) (Fig. F5C). While this difference does not reach a rigorous level of statistical significance, it might be something worth exploring in the future.

Finding #6: What people have to say about Michigan Flyer in their own words

Near the end of the survey we gave respondents a chance to write whatever thoughts they had about Michigan Flyer. People expressed a lot of enthusiasm for Michigan Flyer: "It's the best way to get to and from DTW"; "Very useful service. Students often need to get to the airport and taxis are expensive."; "Great service!"; "Seats are clean, comfortable, and drivers are nice. Very reliable."; "I love the free wifi on the bus. Last time I was traveling my bus driver gave us Halloween candy."; "I have had a really good experience with them, and think the price is very reasonable. The buses are comfortable and on time" (see Fig. F6A for a word cloud based on comments).

The most common complaint mentioned the desire to have more frequent trips and trips at later hours. There were also several complaints about the recent change of the McNamara terminal dropoff/pickup location. Respondents also requested improved signage at the Blake Transit Center and at the airport locations, along with easy physical access to the schedule for those arriving from abroad without Internet access upon landing. Lastly, there were also calls for an improved mobile website user experience.

Recommendations

Recommendation #1: Increase frequency of service and add more evening and late-night trips

Michigan Flyer has an excellent overall satisfaction rating (4.6 - see Finding #1) but still has areas of service that could be improved. The biggest weakness we encountered in our findings was the schedule, which was rated relatively low in comparison to the overall satisfaction rating (the convenience of the schedule with respect to flight departure was 3.49; for flight arrival it was 3.3 - see Finding #5). Comments we received from respondents also brought attention to the need to expand hours of services and increase trip frequency (Finding #6).

Recommendation #2: Increase seating and improve climate control to contribute to comfort and ambiance of Michigan Flyer DTW terminal stops

The change in location of the McNamara dropoff/pickup location dragged down terminal satisfaction ratings. But it could very well be that Michigan Flyer's vociferous advocacy on behalf of its customers has increased customer loyalty - at least one comment demonstrated an awareness that it was airport officials, and not Michigan Flyer, that was at fault for this change ("The new location sucks. The airport folks don't care about customers"). For now, the terminal change has not produced a significant change in respondents' overall satisfaction with Michigan Flyer.

While Michigan Flyer cannot reduce the distance passengers must walk to get to their bus or to the terminal, our survey revealed other areas of possible improvement. Factors that could be improved include increased seating, better comfort, and improved climate control (Finding #4). Michigan Flyer has already announced that, in partnership with the airport authority, upgrades

and improvements are coming. If they come soon enough, it is likely that overall satisfaction ratings will remain high.

Recommendation #3: Pricing is stable - only increase fees if upgrading amenities and services

Current pricing appears to be acceptable to customers (Finding #2). We recommend only increasing prices if there is a concomitant increase in amenities (for example, better climate control and seating at the terminal) and/or services (more frequent trips, expanded hours of service).

Recommendation #4: Improve user interface design of website and develop a mobile application to improve customer access to booking and scheduling information.

Only some aspects of the website experience are currently optimized for mobile devices. For instance, the purchasing process is only partially optimized - halfway through the process, the site reverts back to a desktop experience. The display of the schedule could also be more mobile-friendly (Finding #3). We recommend doing usability testing and user research as a starting point for coming up with a better user experience for mobile users.

Secondarily, we also recommend considering developing a native app for Michigan Flyer which could provide benefits such as: giving offline access to the schedule for customers who arrive from abroad without Internet access upon landing; sending out push notifications alerting customers to delays; streamlining the purchase process by using integrated payment systems such as Apple Pay; providing realtime tracking of buses, and step-by-step directions to bus pickup locations; quickly adding reservation dates and details to customer's calendars.

Limitations

Limitation #1: Lack of data on non-users of Michigan Flyer

We had 116 total responses, and received data only from the 90 respondents who had used Michigan Flyer. Instead of immediately exiting out non-users, it would have been valuable to have asked them how they get to the airport, why they haven't taken Michigan Flyer, and captured their demographic data. Our sample size probably disproportionately represents a

university-based population (students and faculty). Finally, most of our respondents are from the Ann Arbor area, though we did get some respondents from Lansing. (see Figs. L1A-L1D for maps based on respondent's zip codes and IP addresses).

Limitation #2: An in-depth survey of Michigan Flyer customers who use mobile booking would inform preferred enhancements to the customer's experience with information access points.

Relatively few of our survey respondents had used the mobile site and were able to answer the mobile satisfaction questions. These questions were limited by the length and scope of the survey.

Conducting a new survey focused specifically on the mobile experience would yield stronger recommendations for the mobile site and user experience. This survey could provide detailed insight into useful functionality for customers and where the current system is falling short.

Limitation #3: Importance ratings, better worded questions, and additional questions could have uncovered more satisfaction factors and points of improvement for Michigan Flyer.

The inclusion of importance ratings would have enabled us to run a regression analysis on satisfaction ratings. The terminal satisfaction questions could have been reworded in order to have a consistent scale where 5 is always positive and 1 is always negative. And given more time, we would have liked to have gained a greater depth of understanding with regards to the new terminal location and the mobile website experience.

Attachment L

Service Standards and Policies Monitoring

The Service Standards and Policies for Title VI are included in Attachment I as Figure I-1. Following are the results of the monitoring of the service standards and policies:

Service Standards

Vehicle Headway

The results of the analysis of headway by route are attached:

- Weekdays – **Figure L-1**
- Saturdays – **Figure L-2**
- Sundays – **Figure L-3**

For local fixed-route service on weekdays, headways are shown for four periods, AM peak, midday, PM peak, and evening. All routes meet the minimum headway of 60 minutes during midday and evening. During the peak period, two routes do not meet the minimum headway of 30 minutes, and one is a minority routes (#63). The number of minority and non-minority routes which fall below the standard is the same, and no disparate impact is found. The route #63 runs in the northern Ann Arbor area. It was originally a deviation of the previous route, and with the implementation of the 5-Year Transit Improvement Program (5YTIP), this schedule option was separated from the original route. Duplicate service runs along the same path as the Route #22, which doubles the frequency in this corridor during peak periods. Funding for the 5YTIP was approved by voters in May 2014 after a two-year effort by AAATA to develop the service plan and governance which was required to make the effort successful. A more complete description of the effort to make the service consistent throughout the service area with the 5YTIP is included as part of the public participation plan section (Attachment D).

The analysis shows no disparity on weekends for local fixed-route service. Service on all local routes operates every 60 minutes on Sunday. On Saturday morning, one minority route operates every 30 minutes while the remaining routes operate every 60 minutes. Throughout Saturdays, two routes operate more frequent service, every 45 minutes on average, of which one is a minority route.

Service on the other two modes of fixed-route service meets or exceeds the service standard for each route as of September, 2017.

On-Time Performance

The results of the analysis of headway by route for local fixed-route service are attached:

- Weekdays – **Figure L-4**
- Saturdays – **Figure L-5**
- Sundays – **Figure L-6**

On weekdays, performance on twenty routes falls below the standard of 90%, nine of which are minority routes. On Saturdays, performance on sixteen routes falls below the standard of 90%, eight of which are minority routes. The number of minority and non-minority routes which fall below the standard is the same, and no disparate impact is found for meeting weekday and Saturday on-time performance standards.

On Sundays, performance on seven routes falls below the standard of 90%, five of which are minority routes including #4, #5, #28, #31, and #32. This is a disparate impact. As called for in the standard, the service will be analyzed further to determine frequency of on-time performance issues on specific trips, impact on riders, and the potential causes in order to plan corrective action. However, some action is already implemented or planned. As of 2012 and 2013, AAATA has doubled frequency on routes #4 and #5 respectively, including expanded weekend hours system-wide as part of the 5YTIP service improvements, and demand has since increased further reducing on-time reliability. The remaining three routes operate on the western side of Ann Arbor, and will be reviewed in greater detail along with the two inter-city routes for further improvements to mitigate this disparity as part of the 5YTIP service analysis over the next few years.

Service on the other two modes of fixed-route service meets or exceeds the service standard for each of the three routes as of September 30, 2017.

Service Availability

Local fixed-route service availability is shown in **Figure L-7**. The 90% standard is met in the three member jurisdictions or Ann Arbor, Ypsilanti, and Ypsilanti Township. In Ypsilanti Township, 92.8% of the population is within a half-mile of a fixed route in the portion of the township north of Textile Rd. The population south of Textile Road is served by a new, dial-a-ride plus service, FlexRide, which began operation in September, 2017.

Vehicle Load

Figure L-8 shows weekday standing loads by mode. Drivers record standing loads electronically when they occur so the sample is the total population of weekday trips. The data show that standing loads occur rarely on weekends and weekend data was not analyzed further.

- The data shows that standing loads occur on less than the standard of 1.0% of trips on all routes except for routes #4, #5, #23, #41, #60, #62, #65 and #66. Four of the eight are minority routes, and the number of minority and non-minority routes which fall below the standard is the same,

and no disparate impact is found. Routes #4, #5, and #23 already have the highest number of daily trips, and each has very frequent service as shown on Figure L-1.

No standing loads were recorded on the other two modes of fixed-route service (commuter and airport) for the period through September, 2017.

Service Policies

Vehicle Assignment

A fleet roster is included as **Figure L-9**. As noted in the standard, service is operated from a single facility. All buses are low-floor and have the same environmental, security, and accessibility features. 86% of buses are 40' long, 12% of buses are 35' long, and the remaining 2% are 25' long. Over 50% of the fleet has a hybrid-diesel propulsion system, while the other buses are low-emission biodiesel buses. All of the hybrid buses are ten years old or less, and the average age of the entire active fleet is 5 years old, comprised of a great majority of newer buses.

Buses are assigned to blocks by age. Newer buses are used for heavy duty cycles – 16 hours on weekdays and 12 hours on weekends. The smaller, 25' and 35' buses are used on routes with lower ridership, primarily routes, #24, #33, #64, and #66, none of which are minority routes.

Transit Amenities

A map of locations of shelters owned by AAATA is included as **Figure L-10**. There are a total of 123 shelters of which 45 (37%) are in or adjacent to minority block groups. Seating, a trash receptacle, and route information are provided by AAATA at shelter locations. A trash receptacle is also available near the front door of each bus, and riders are encouraged to use these rather than leaving trash at a bus stop.

The AAATA works with community partners (e.g. colleges and universities and commercial areas) to provide their own shelters. **Figure L-11** includes shelters provided by AAATA as well as shelters provided by other entities.

Figure L-1

Span of Service and Headways

WEEKDAYS		Does not meet standard						
Route	Minority?	Start time	End Time	Span of Service	AM Peak Headway	Midday Headway	PM Peak Headway	Evening Headway
Local Fixed Route								
3	no	6:18 AM	10:42 PM	16:24	30	30	30	60
4	yes	6:08 AM	12:30 AM	18:22	8	15	8	30
5	yes	6:10 AM	12:00 AM	17:50	10	15	12	30
6	yes	6:28 AM	11:45 PM	17:17	15	15	15	60
21	no	6:48 AM	11:00 PM	18:41	30	30	30	60
22	no	6:22 AM	11:45 PM	17:50	30	30	30	60
23	no	6:19 AM	11:46 PM	17:27	15	15	15	30
24	no	6:05 AM	10:54 PM	16:49	30	30	30	60
25	no	6:18 AM	11:14 PM	16:56	30	30	30	60
26	no	6:32 AM	11:15 PM	16:43	30	30	30	60
27	no	6:23 AM	10:53 PM	16:30	30	30	30	60
28	yes	6:11 AM	11:45 PM	17:34	15	30	15	60
29	yes	6:32 AM	11:15 PM	16:43	30	30	30	60
30	no	6:09 AM	11:30 PM	17:21	30	30	30	60
31	yes	6:15 AM	11:30 PM	17:15	30	30	30	30
32	yes	6:18 AM	11:45 PM	17:27	15	15	15	30
33	no	6:48 AM	8:45 PM	13:57	30	60	30	60
41	yes	7:38 AM	9:58 PM	17:12	20	20	20	20
42	yes	5:59 AM	11:00 PM	17:01	30	30	30	60
43	yes	6:03 AM	11:28 PM	17:25	30	30	30	60
44	yes	6:03 AM	11:15 PM	17:12	30	30	30	60
45	yes	6:23 AM	10:45 PM	16:22	30	30	30	60
46	yes	6:18 AM	10:45 PM	16:27	30	30	30	60
47	yes	6:03 AM	11:00 PM	16:57	30	30	30	60
60	yes	6:30 AM	6:02 PM	11:32	30		30	
61	no	7:00 AM	5:55 PM	10:55	30		30	
62	no	6:41 AM	6:45 PM	12:04	9	12	13	38
63	yes	6:59 AM	6:26 PM	11:27	35		40	
64	no	6:36 AM	7:20 PM	12:44	30		30	
65	no	6:59 AM	8:40 PM	13:41	30	30	30	60
66	no	6:30 AM	11:47 PM	17:17	30	30	30	60
67	no	7:00 AM	6:58 PM	11:58	60	60	60	
68	no	6:30 AM	6:47 PM	12:17	30	30	30	
Commuter Express Service								
91	no	6:08	5:47 PM	11:39	67		93	
92	yes	6:00	5:57 PM	11:57	72		98	
Airport Service								
98	yes	2:45	11:45 PM	21:00	60	60	60	60

Figure L-2

Span of Service and Headways

SATURDAYS

Route	Minority?	Start time	End Time	Span of Service	AM Headway	PM Headway
Local Fixed Route						
3	no					
4	yes	7:33 AM	11:00 PM	15:27	30	60
5	yes	8:33 AM	10:30 PM	13:57	60	60
6	yes	8:25 AM	11:01 PM	14:36	45	45
21	no	8:48 AM	10:00 PM	13:12	60	60
22	no	7:52 AM	10:45 PM	14:53	60	60
23	no	8:48 AM	10:13 PM	13:25	45	45
24	no	7:59 AM	10:40 PM	14:41	60	60
25	no	8:03 AM	10:45 PM	14:42	60	60
26	no	7:48 AM	10:15 PM	14:27	60	60
27	no	8:33 AM	10:53 PM	14:20	60	60
28	yes	8:18 AM	10:45 PM	14:27	60	60
29	yes	7:48 AM	10:15 PM	14:27	60	60
30	no	7:48 AM	11:30 PM	15:42	60	60
31	yes	8:18 AM	10:30 PM	14:12	60	60
32	yes	8:18 AM	10:15 PM	13:57	60	60
33	no	8:18 AM	6:45 PM	10:27	60	60
41	yes					
42	yes	7:18 AM	11:00 PM	15:42	60	60
43	yes	8:03 AM	10:28 PM	14:25	60	60
44	yes	7:48 AM	10:15 PM	14:27	60	60
45	yes	8:03 AM	9:45 PM	13:42	60	60
46	yes	8:18 AM	10:45 PM	14:27	60	60
47	yes	8:33 AM	10:00 PM	13:27	60	60
60	yes					
61	no					
62	no					
63	yes					
64	no	9:00 AM	5:20 PM	8:20	40	40
65	no					
66	no	8:15 AM	10:54 PM	14:39	60	60
67	no					
68	no					
Commuter Express Service						
91	no					
92	yes					
Airport Service						
98	yes	2:45	11:45 PM	21:00	60	60

Figure L-3

Span of Service and Headways

SUNDAYS

Route	Minority?	Start time	End Time	Span of Service	Headway
Local Fixed Route					
3	no				
4	yes	8:10 AM	7:30 PM	11:20	60
5	yes	8:18 AM	7:15 PM	10:57	60
6	yes	8:18 AM	7:15 PM	10:57	60
21	no	9:48 AM	7:00 PM	9:12	60
22	no	8:18 AM	7:45 PM	11:27	60
23	no	8:48 AM	7:13 PM	10:25	60
24	no	8:18 AM	7:15 PM	10:57	60
25	no	9:03 AM	7:45 PM	10:42	60
26	no	9:02 AM	6:32 PM	9:30	60
27	no	8:33 AM	6:53 PM	10:20	60
28	yes	8:18 AM	7:45 PM	11:27	60
29	yes	8:18 AM	6:45 PM	10:27	60
30	no	8:48 AM	7:30 PM	10:42	60
31	yes	9:18 AM	7:30 PM	10:12	60
32	yes	8:18 AM	7:18 PM	11:00	60
33	no				
41	yes				
42	yes	8:18 AM	7:00 PM	10:42	60
43	yes	9:03 AM	7:28 PM	10:25	60
44	yes	8:48 AM	7:15 PM	10:27	60
45	yes	9:03 AM	7:45 PM	10:42	60
46	yes	9:18 AM	7:15 PM	9:57	60
47	yes	8:33 AM	7:00 PM	10:27	60
60	yes				
61	no				
62	no				
63	yes				
64	no				
65	no				
66	no				
67	no				
68	no				
Commuter Express Service					
91	no				
92	yes				
Airport Service					
98	yes	2:45	11:45 PM	21:00	60

Figure L-4

On-Time Performance**WEEKDAYS**Does not
meet standard

Route	Minority?	Total Trips	Late Arrivals	Pct. On-time Arrivals
Local Fixed Route				
3	no	115,078	15,181	87%
4	yes	253,740	43,557	83%
5	yes	218,794	43,024	80%
6	yes	190,262	30,893	84%
21	no	15,787	855	95%
22	no	65,712	9,213	86%
23	no	163,287	19,848	88%
24	no	80,200	14,132	82%
25	no	34,134	3,896	89%
26	no	30,316	2,667	91%
27	no	50,360	4,615	91%
28	yes	46,342	6,904	85%
29	yes	48,699	3,727	92%
30	no	71,117	6,397	91%
31	yes	41,097	6,862	83%
32	yes	132,832	11,624	91%
33	no	19,131	2,821	85%
41	yes	26,634	1,070	96%
42	yes	52,927	4,765	91%
43	yes	28,836	2,122	93%
44	yes	52,123	6,694	87%
45	yes	78,866	8,979	89%
46	yes	28,122	2,151	92%
47	yes	37,289	1,708	95%
60	yes	20,193	5,074	75%
61	no	6,490	430	93%
62	no	48,155	9,147	81%
63	yes	6,064	783	87%
64	no	22,787	5,306	77%
65	no	65,308	14,650	78%
66	no	95,669	17,507	82%
67	no	16,581	2,359	86%
68	no	31,986	3,185	90%
Commuter Express Service				
91	no	13,377	204	98%
92	yes	12,826	764	94%
Airport Service				
98	yes	61,904	92	99.9%

* Not separate data for weekdays/weekends

Figure L-5

On-Time Performance

SATURDAYS 10/1/16 - 9/30/17

 Does not
meet standard

Route	Minority?	Total Trips	Late Arrivals	Pct. On-time Arrivals
Local Fixed Route				
3	no			
4	yes	17,264	3,716	78%
5	yes	9,700	1,964	80%
6	yes	14,288	2,862	80%
21	no	1,286	84	93%
22	no	6,771	901	87%
23	no	10,190	2,776	73%
24	no	8,248	2,144	74%
25	no	2,773	349	87%
26	no	4,805	283	94%
27	no	5,011	489	90%
28	yes	3,149	468	85%
29	yes	5,563	438	92%
30	no	7,344	919	87%
31	yes	4,544	649	86%
32	yes	9,666	1,152	88%
33	no	2,382	303	87%
41	yes			
42	yes	4,940	666	87%
43	yes	2,992	159	95%
44	yes	4,755	954	80%
45	yes	7,224	804	89%
46	yes	3,022	227	92%
47	yes	3,680	100	97%
60	yes			
61	no			
62	no			
63	yes			
64	no	3,960	530	87%
65	no			
66	no	8,526	1,771	79%
67	no			
68	no			
Commuter Express Service				
91	no			
92	yes			
Airport Service				
98	yes	10,515	92	99%

* Not separate data for weekdays/weekends

Figure L-6

On-time Performance

SUNDAYS

10/1/16 - 9/30/17

Does not
meet standard

Route	Minority?	Total Trips	Late Arrivals	Pct. On-time Arrivals
Local Fixed Route				
3	no			
4	yes	6,650	1,801	73%
5	yes	5,907	2,364	60%
6	yes	8,073	576	93%
21	no	1,018	21	98%
22	no	4,925	435	91%
23	no	5,280	1,550	71%
24	no	4,899	1,016	79%
25	no	2,562	184	93%
26	no	3,048	106	97%
27	no	3,190	107	97%
28	yes	2,227	499	78%
29	yes	4,079	174	96%
30	no	4,982	178	96%
31	yes	2,784	457	84%
32	yes	6,480	375	85%
33	no			
41	yes			
42	yes	3,191	331	90%
43	yes	2,101	193	91%
44	yes	3,395	314	91%
45	yes	5,414	374	93%
46	yes	2,136	219	90%
47	yes	2,719	183	93%
60	yes			
61	no			
62	no			
63	yes			
64	no			
65	no			
66	no			
67	no			
68	no			
Commuter Express Service				
91	no			
92	yes			
Airport Service				
98	yes	12,333	92	99%

* Not separate data for weekdays/weekends

Figure L-7

Service Area Availability - Local Fixed-Route Service

All population and household data from 2015 ACS 5-year estimates.

As of 2017

3 Member Jurisdictions

Block Groups		
	Households	Population
Total	61,644	161,787
Quarter (Count)	52,845	141,597
Quarter (%)	85.73%	87.52%
Half (Count)	59,662	159,616
Half (%)	96.78%	98.66%
No Coverage (Count)	1,982	2,171
No Coverage (%)	3.22%	1.34%

YPSILANTI

Block Groups		
	Households	Population
Total	3,831	19,435
Quarter (Count)	3,729	18,618
Quarter (%)	97.34%	95.80%
Half (Count)	3,827	19,430
Half (%)	99.90%	99.97%
No Coverage (Count)	4	5
No Coverage (%)	0.10%	0.03%

ANN ARBOR

Block Groups		
	Households	Population
Total	41,353	112,955
Quarter (Count)	37,841	102,845
Quarter (%)	91.51%	91.05%
Half (Count)	40,492	112,899
Half (%)	97.92%	99.95%
No Coverage (Count)	861	56
No Coverage (%)	2.08%	0.05%

YPSILANTI TOWNSHIP (in AAATA service area)

Block Groups		
	Households	Population
Total	16,460	29,397
Quarter (Count)	11,275	20,134
Quarter (%)	68.50%	68.49%
Half (Count)	15,343	27,287
Half (%)	93.21%	92.82%
No Coverage (Count)	1,117	2,110
No Coverage (%)	6.79%	7.18%

Figure L-8

Standing Loads

WEEKDAYS 10/1/16 - 9/30/17

Does not
meet standard

Route	Minority?	Daily No. of trips	No. of days in sample	Total Trips	Standing load trips	Pct. of standing load trips
Local Fixed Route						
3	no	57	254	14,478	119	0.8%
4	yes	162	254	41,148	3,233	7.9%
5	yes	133	254	33,782	687	2.0%
6	yes	106	254	26,924	209	0.8%
21	no	30	254	7,620	1	0.0%
22	no	61	254	15,494	84	0.5%
23	no	121	254	30,734	1,378	4.5%
24	no	60	254	15,240	56	0.4%
25	no	31	254	7,874	5	0.1%
26	no	53	254	13,462	2	0.0%
27	no	30	254	7,620	19	0.2%
28	yes	39	254	9,906	38	0.4%
29	yes	53	254	13,462	9	0.1%
30	no	60	254	15,240	39	0.3%
31	yes	31	254	7,874	4	0.1%
32	yes	116	254	29,464	76	0.3%
33	no	20	254	5,080	4	0.1%
41	yes	44	254	11,176	308	2.8%
42	yes	30	254	7,620	8	0.1%
43	yes	61	254	15,494	4	0.0%
44	yes	30	254	7,620	15	0.2%
45	yes	57	254	14,478	8	0.1%
46	yes	57	254	14,478	1	0.0%
47	yes	30	254	7,620	4	0.1%
60	yes	19	254	4,826	67	1.4%
61	no	9	254	2,286	0	0.0%
62	no	66	254	16,764	213	1.3%
63	yes	8	254	2,032	3	0.1%
64	no	24	254	6,096	6	0.1%
65	no	48	254	12,192	150	1.2%
66	no	60	254	15,240	260	1.7%
67	no	24	254	6,096	2	0.0%
68	no	25	254	6,350	2	0.0%
Local Fixed Route AVG.			254	445,770	7,014	1.6%
Commuter Express Service						
91	no	4	231	924	2	0.2%
92	yes	4	231	924	0	0.0%
Airport Service						
98	yes	26	231	6,006	0	0.0%

ANN ARBOR TRANSPORTATION AUTHORITY

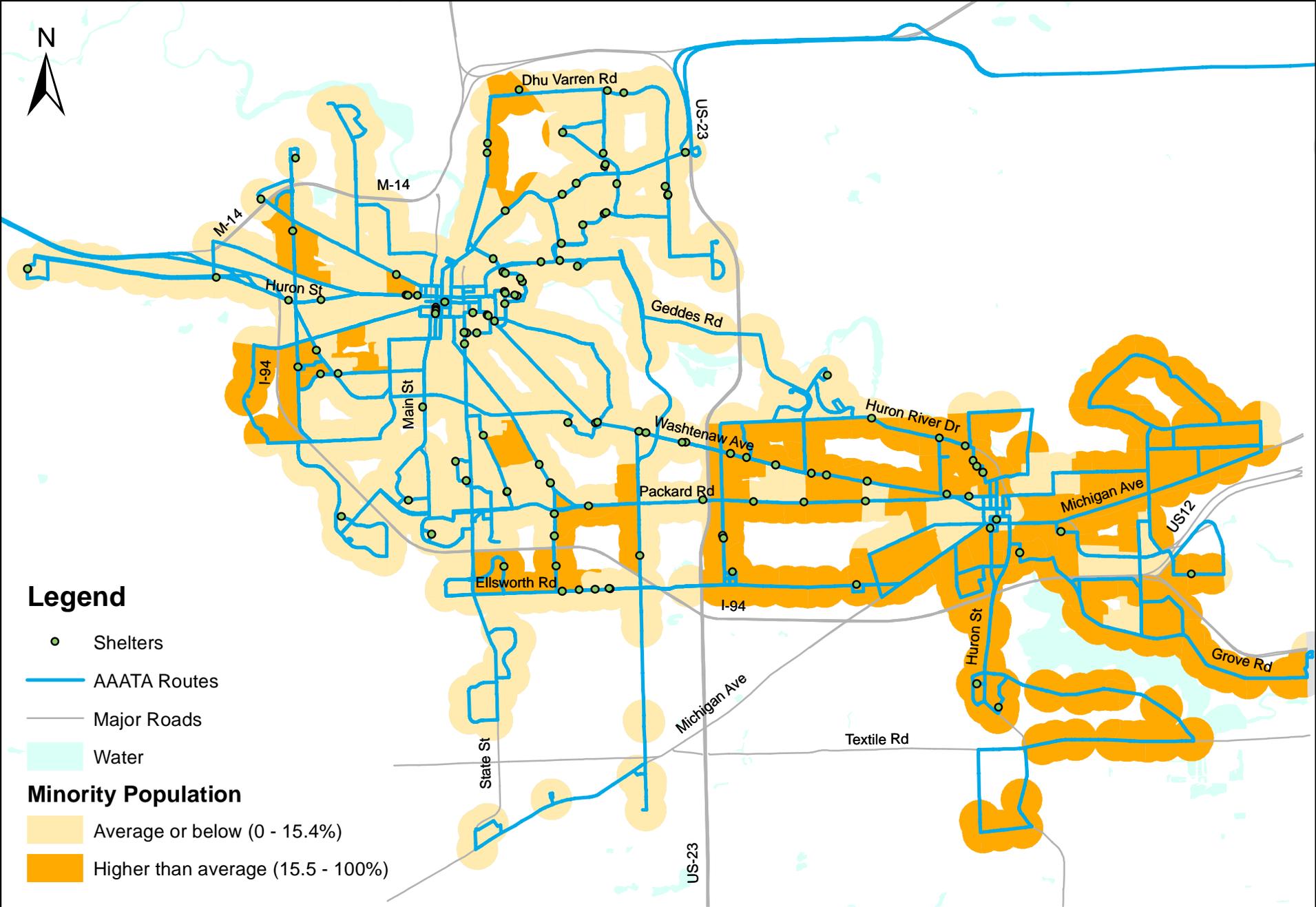
Figure L-9

VEHICLE LIST

9/30/2017

Vehicle Numbers	No. of Vehicles	Model Year	Model & Manufacturer	Length	Seats	Accessibility
ACTIVE FLEET						
From #	To #					
411	416	6	2003	Gillig Low-Floor	40'	36 Ramp
430	444	15	2007	Gillig Hybrid Low-Floor	40'	38 Ramp
445	449	5	2008	Gillig Hybrid Low-Floor	40'	38 Ramp
450	456	7	2009	Gillig Hybrid Low-Floor	40'	38 Ramp
457	460	4	2010	Gillig Hybrid Low-Floor	35'	32 Ramp
461	470	10	2011	Gillig Hybrid Low-Floor	40'	36 Ramp
471	481	11	2013	Gillig Hybrid Low-Floor	40'	36 Ramp
482	486	5	2013	Gillig Low-Floor	40'	38 Ramp
487	490	4	2015	Gillig Low-Floor	35'	32 Ramp
491	497	7	2015	Gillig Low-Floor	40'	36 Ramp
498	501	4	2015	Gillig Low-Floor	35'	32 Ramp
502	504	3	2015	Gillig Hybrid Low-Floor	40'	36 Ramp
649	650	2	2015	Champion on Chevy Chassis	25'	14 Lift
505	513	9	2016	Gillig Low-Floor	40'	36 Ramp
514	520	7	2017	Gillig Low-Floor	40'	36 Ramp
523	525	<u>3</u>	2017	Gillig Hybrid Low-Floor	40'	36 Ramp
		102		TOTAL ACTIVE FLEET		
EMERGENCY CONTINGENCY						
417	424	8	2003	Gillig Low-Floor	40'	36 Ramp
425	425	1	2003	Gillig Low-Floor	35'	32 Ramp
427	427	<u>1</u>	2003	Gillig Low-Floor	35'	32 Ramp
		10		TOTAL CONTINGENCY FLEET		
LEASED TO SUBCONTRACTOR FOR PARATRANSIT SERVICE						
640	644	5	2013	Champion	25'	15 Lift
639	639	<u>1</u>	2008	Champion	25'	12 Lift
		6		TOTAL LEASED FLEET		
AWAITING SALE						
426	426	1	2003	Gillig Low-Floor	35'	32 Ramp
428	429	<u>2</u>	2003	Gillig Low-Floor	35'	32 Ramp
		3		TOTAL FLEET AWAITING SALE		

AAATA Shelter Locations - November 2017



Data Source: ACS 2015 5-Year Estimates, Block Groups



Attachment M

Ann Arbor Area Transportation Authority

Major Service and Fare Change, Disparate Impact, and Disproportionate Burden Policies

Two policies which have been adopted by the AAATA Board of Directors are attached:

- Public Input Policy for Service and Fare Changes for major service and fare changes (**Figure M-1**)
- Equity Analysis Policy for disparate impact and disproportionate burden (**Figure M-3**)

The Service and Fare Change policy was adopted by the AAATA Board of Directors in November, 2011. A copy of the resolution follows as **Figure M-2**. The public process was documented in the Title VI Program submitted in December, 2011. This policy was discussed in conjunction with the Fare Equity Policy, and revision to the Service and Fare Change policy was not determined to be necessary.

The Equity Analysis Policy was adopted in April, 2014. A draft policy was developed in 2013. In December, 2013, the AAATA published a notice of the draft policy in the local newspaper, posted it on the website, and emailed the notice to contacts at organizations representing minority and low-income residents. A copy of the notice and the distribution list follows as **Figure M-4** and **Figure M-5**.

The draft policy was discussed by staff and members of the Board of Directors at the January, 2014 meeting of the board Planning and Development Committee (PDC), which is open to the public. Staff made extensive revisions to the draft policy based on public comments and the Board discussion. The revised draft policy was provided to the Board and other interested parties before further discussion at the March meeting of the PDC. Following minor revisions, the PDC recommended approval in April, and the Board of Directors adopted the policy at their meeting on April 17, 2014 which was open to the public for comments before the board vote. A copy of the adopted resolution follows as **Figure M-6**.

Ann Arbor Area Transportation Authority

Public Input Policy for Service and Fare Changes

This policy supersedes the previous policy which was most recently revised in July, 2009.

The intention of this policy is to listen to and act on public input before the AATA makes a decision to change service or fares with the following goals:

1. To inform riders and others affected by a proposed change;
2. To provide affected people with opportunities to ask questions, and understand the reasons why changes are being proposed;
3. To provide AATA with a better understanding of how riders use service and the effects of a proposed change;
4. To encourage affected people to state objections to proposed changes and make suggestions for revisions;
5. To provide AATA with the opportunity to revise proposed changes based on public input to reduce negative effects.

The methods and level of effort to accomplish these goals depends on the size of the proposed change and the number of people affected.

Types of Service Changes

Major Service Change

- Change affecting more than 25% of riders of a route, or
- Change affecting more than 25% of the miles of a route, or
- Change on multiple routes affecting more than 10% of riders or route miles of overall fixed-route service.

Minor Service Change

- A change which is less than a major service change, but exceeds the threshold of a service adjustment, as defined below.

Service Adjustment

- Adjusting timepoints along a route by 5 minutes or less with no effect on coordinated transfers, or
- Change(s) in routing affecting a total of less than 100 daily riders.

Types of Fare Change

Major Fare Change

- Change in the base fare (i.e. full adult cash fare)
- Any change affecting the fare of more than 10% of fare-paying riders (i.e. not including riders whose fare is paid by a third party such as an employer or university)

Minor Fare Change

- Any change in fare which is less than the threshold for a major fare change

Notification of Proposed Changes

People must first know about proposed changes in order to have the opportunity to provide input. The public input period is a minimum of 30 days. The notification methods to be used include the following:

- MyRide email subscription. AATA riders subscribe to MyRide to receive information on specific routes. This provides a unique opportunity to inform them of any change which is proposed for their route, and how to provide input.
- RideLines – RideLines is AATA’s printed brochure designed to provide information on service, events, and other news. Copies of RideLines are available on AATA buses, transit centers, libraries and other community outlets. A complete description of proposed changes and how to provide input are included in RideLines.
- AATA Website. The AATA website provides multiple opportunities to provide notification. Notice of proposed changes appear on the front page and in a section for rider notices. In addition, for service changes, visitors to the website who access the schedule or real-time information for a specific route are informed of proposed changes to the route, and for fare changes, riders who access fare information are informed of the proposed changes.
- Social Media. AATA regularly participates in social media such as Facebook and Twitter. Social media are used to get the word out about proposed changes and direct people to sources of complete information and how to provide input.

- Bus Stop Notices – AATA posts notices at bus stops which would be affected by proposed changes. This is particularly useful for service adjustments which affect only a small number of bus stops.
- Press Releases – AATA issues a press release for all proposed major service changes and major fare changes which describe the proposed change and how to provide input. Press releases are distributed to all media outlets including those minority and non-English publications. Notification is also sent to more than 50 organizations including those serving housing, educational, civic, and social services, and senior, disabled, minority, and non-English speaking persons.
- Individual Notice – AATA evaluates locations affected by a proposed change and provides individual notice to significant generators such as high schools and colleges, senior citizen housing, apartment complexes, libraries, government offices, recreation centers and shopping centers.

All of these methods would be used for major service changes and major fare changes. For minor service and fare changes and service adjustments, the methods used will be tailored to the scale of the proposed change. In addition, paid media may be used for some proposed changes.

Opportunities for Public Input

AATA's intention is to make it possible for people to choose how they wish to provide input and whether they want to only comment or whether they desire a response or to engage in a conversation. As part of the notification methods above, people are provided with several possibilities for making comments and asking questions including:

- E-Mail – E-Mail goes to a mailbox set up specifically to receive input. E-mail has been the most frequently used method.
- Telephone – A hotline is set up to receive comments with a callback by AATA staff upon request.
- Written – Letters provide a means for more formal communication.
- Social Media – Facebook, Twitter, and other media will be used.
- Face –to–Face – At meetings and by appointment. For major service changes and fare changes, meetings are provided at multiple times and locations, with an emphasis on meeting locations in the area(s) affected by the proposed change. Meetings are typically scheduled as drop-in sessions for a 2-5 hour period to permit people to attend at their convenience and to encourage dialogue.

Whatever method is used, AATA staff provides a response to all comments except those that request to not receive a response. The nature of AATA's response depends on the comments. AATA answers questions, explains the rationale for the aspects of the proposed change that is the subject of the comments, and replies to suggestions. In some cases, AATA's response includes questions to make sure staff understands the input and suggestions. In many cases, input and response is a dialogue, rather than a single communication.

In addition, public time is provided at all meetings of the AATA Board of Directors. For major service changes and fare changes, a specific opportunity will be provided on the agenda at the Board meeting that takes place during the public input period. While an opportunity for dialogue

is not available at these meetings, staff follows up with people who comment about proposed service and fare changes.

Use of Public Input

During the public input period, AATA staff, led by the Manager of Service Development, considers the input that is being received. Depending on both the quantity as well as the specific concerns that are raised, potential alternatives may be developed.

At the end of the public input period, the input is compiled. Recommended service or fare changes are developed taking into consideration the public input. The public input summary is provided to the decision makers along with the recommended changes.

For minor service changes and service adjustments, the CEO makes the final decision on implementation of the recommended changes. Major service changes and all fare changes are adopted by the AATA Board of Directors. Board meetings are open to the public and include a public comment period at the beginning of the meeting specifically for items on the agenda.

Revised Procedures for Exceptional Circumstances

Under exceptional circumstances which require a service change or fare change to be adopted and implemented on short notice, the procedures above may be altered to the extent necessary. However, at a minimum, the public will be afforded an opportunity to be heard at the AATA Board meeting at which any action is taken and a notice of the proposed change with the date and time of the Board meeting will be published on the AATA website before the Board meeting. [NOTE: Such exceptional circumstances have never arisen in the past.]

Adopted by AATA Board of Directors - November 2011

Resolution 5/2012

ADOPTION OF REVISED PUBLIC INPUT POLICY FOR SERVICE AND FARE CHANGES

WHEREAS, the Ann Arbor Transportation Authority (AATA) is required to have a policy for public input before major service and fare changes as a condition of federal assistance, and

WHEREAS, the current policy meets the minimum requirements, but is out of date and is no longer consistent how AATA uses public input , and

WHEREAS, staff has prepared a revised policy that reflects the importance that AATA places on soliciting and receiving public input before making service and fare changes, and

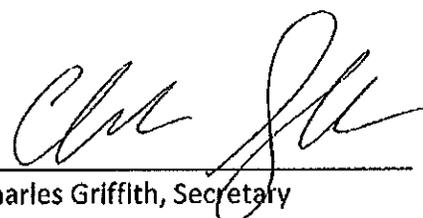
WHEREAS, AATA has taken notice of proposed Federal Title VI requirements and guidelines and developed the policy to comply,

NOW THEREFORE, BE IT RESOLVED that the Ann Arbor Transportation Authority Board of Directors hereby adopts the attached *Public Input Policy for Service and Fare Changes* dated November, 2011.



Jesse Bernstein, Chair

November 17, 2011



Charles Griffith, Secretary

November 17, 2011

Ann Arbor Area Transportation Authority**Equity Analysis Policy****Adopted April, 2014**

The Ann Arbor Area Transportation Authority (AAATA) has been identified by the Federal Transit Administration (FTA) as a transit provider that operates 50 or more fixed-route vehicles in peak service and is located in an Urbanized Area of 200,000 or more in population. As a result the AAATA is subject to more rigorous requirements to evaluate the equity of proposed major service and fare changes as described in FTA Circular 4702.1B. In promulgating these requirements and guidelines, the FTA is acting under authority of federal law (Title VI of the Civil Rights Act of 1964 42 U.S.C §2000 et. seq.) and regulations (49 CFR part 21).

In the development of proposed service and fare changes in the past, the AAATA has reviewed the positive and negative effects, analyzed these effects on minority and low-income populations, and made modifications to reduce or eliminate the concentration of effects in one or more population groups. This has generally been done before any proposed change is announced for public input. The AAATA will continue this effort. In addition, AAATA will now undertake a more formal equity analysis of the proposed change, as required by FTA Circular 4702.1B. Using the following methodology, staff will:

- Measure the impact of proposed major service changes and proposed fare changes - positive and negative - on minority and low-income populations,
- Compare the impact with that on non-minority and non-low-income populations,
- Determine if a disparate impact on minority riders and/or disproportionate burden on low-income riders would result. If so, measures to avoid or mitigate the disparate impact and/or disproportionate burden will be identified and considered,
- This equity analysis will be made available to the public as part of the public input process carried out as described in the AAATA Public Input policy for Service and Fare Changes (2011).

Definitions

Definitions for the terms used in this document appear in Appendix 1, at the end.

Equity Analysis

FTA Circular 4702.1B does not specify a methodology for measuring disparate impacts. It requires that the AAATA Board adopt a policy to establish the methodology and a threshold for determining when adverse effects are borne disproportionately by minority or low-income populations. This policy is required to be included as one element in a Title VI program submitted to FTA by October, 2014. After reviewing the program, the FTA will inform AAATA whether the policy and other elements of the program are in compliance or require revision.

In the interim, the AAATA is making a good-faith effort to comply with the revised requirements and guidelines in Circular 4702.1B. This is particularly important because the AAATA has just completed development of a 5-Year Transit Improvement Program which includes a substantial increase in service. In the development of this program to expand service, care has been taken to avoid adverse impacts. However, it is also important that AAATA analyze the program to determine if the benefits of the service improvement are unequally distributed which could result in disparate impact or disproportionate burden. The first phase of the 5-Year Transit Improvement Program is scheduled to be implemented in August, 2014 if a funding initiative is successful.

No other major service changes or fare changes are being considered during this period before submission of the Title VI Program.

Data Sources

For each rider boarding a fixed-route bus, the AAATA records the method of fare payment. This information is used to calculate the cumulative effect of any proposed fare increase.

In October, 2013, CJI Research Inc. conducted a survey of riders on-board AAATA buses. The sample size is 3,522 riders and the survey has a sample error of plus or minus 1.6% for the sample as a whole. The survey included questions to identify the percentage of minority persons and household income for the system as a whole, and for routes, but not for route segments.

The 2010 Decennial Census includes basic information on population and race in relatively small geographic areas (block groups), but the census no longer includes information on income. Block groups will be used to determine which routes are minority transit routes, and for analysis of the effect on minority populations of changes to portions of routes. The American Community Survey (ACS) is an on-going statistical survey conducted by the Census Bureau which data on both race and income for census tracts, which are larger geographic units than block groups. ACS data will be used to determine low-income routes and the effect on low-income populations of proposed changes to portions of routes.

Determination of Disparate Impact/Disproportionate Burden

Fare Change Analysis and Thresholds

For any proposed change in fares, the effect on minority and non-minority riders will be calculated for each fare category by multiplying the amount of increase times the annual riders using the fare category times the percentage of minority riders and non-minority riders. The additional payment for all fare categories will be totaled and compared for minority and non-minority riders. For illustration, the chart below shows a simplified version of the chart that will be used to perform this analysis.

Fare Category	Annual Riders	Current Fare	Proposed Increase	Pct. Minority Riders	Minority Cost Increase	Pct. Non-Minority	Non-Min. Cost Increase	Total Cost Increase
Full Fare	100,000	\$1.25	\$0.25	20.0%	\$5,000	80.0%	\$20,000	\$25,000
Student Fare	15,000	\$0.25	\$0.75	50.0%	\$5,625	50.0%	\$5,625	\$11,250
Total	115,000			23.9%	\$10,625	76.1%	\$25,625	\$36,250
Pct. Of Total					29.3%		70.7%	

Disparate impact exists if the minority population will bear 5% or more of the cumulative increase in fares than would be expected based on the percentage of minority persons in the population of riders. The 5% threshold was chosen to allow for a small difference in impact, but yield a finding of disparate impact if there is a significant difference in impact. In the simplified example above, minority riders are a larger percentage of students, and the student fare is proposed for a larger increase. The result is that minorities constitute 23.9% of total riders, but would pay 29.3% of the total increase. Because this difference is greater than the 5% threshold, a finding of disparate impact would be made.

The method of analysis for determining the relative impact of a proposed fare increase on low-income and non-low-income persons will be the same as the method described above for minority and non-minority riders. However, for AAATA it is appropriate to set the threshold for disproportionate burden lower. For many years, the AAATA fare structure has included a discount fare for low-income persons. The cash fare for low-income persons is half the rate of the full cash fare for the general population (In 2014, \$0.75 for low-income persons and \$1.50 for the general population). This policy ameliorates the effect of any proposed fare increase. As a result, the cumulative effect of any proposed fare increase on low-income persons is expected to be less than the cumulative effect on the non-low-income population. A finding of disproportionate burden will be made if low-income population will bear -10% or more of the cumulative increase in fares than would be expected based on the percentage of low-income persons in the population of riders. That is, low income riders must bear at least 10% less of the impact than their proportion of riders to avoid a finding of disproportionate burden.

Route Change Analysis and Thresholds

The most common type of service change is a change on a particular route such as changing the streets used on a portion of the route or adjusting the timepoints. Such changes may have adverse effects on riders in portions of the route, even if the overall effect is positive. While the AAATA may know the number of riders adversely affected, the AAATA does not have data on minority or low-income ridership for portions of routes. For this reason census block data from the ACS will be used to analyze the effect on minority populations adjacent to the route. A finding of disparate impact is made if the percentage of minority population in block groups adjacent to the portion of the route with adverse effect is higher than the minority population in block groups adjacent to the route as a whole. For low-income populations, census tract data must be used. Disproportionate burden exists if the percentage of low-income population in census tracts adjacent to the portion of the route with adverse effect is more than 10% higher than the low-income population in census tracts adjacent to the route as a whole. The higher threshold is applied for this analysis because the larger size of the census tracts makes the areas affected less precise.

Analysis and Thresholds for Improvements in Service Level (including new or expanded routes):

For service improvements at the route level, the basis for comparison is between the route(s) to be improved and the non-minority and non-low-income routes in the system as a whole.

- Increase in the frequency of a route or routes: A finding of disparate impact is made if a) the service improvement is on non-minority route(s), and b) after the change, the route(s) with changed service have a greater frequency of service than the majority of minority routes. Similarly, disproportionate burden exists if a) the service improvement is on non-low income route(s), and b) after the change, the route(s) with improved service have greater frequency of service than the majority of low-income routes.
- Increase in the span of service of a route or routes: A finding of disparate impact is made if a) the service improvement is on non-minority route(s), and b) after the change, the route(s) with increased span of service have a longer span of service than the majority of minority routes. Similarly, disproportionate burden exists if a) the service improvement is on non-low income route(s), and b) after the change, the route(s) with improved service have a longer span of service than the majority of low-income routes.
- Increase in the days of operation of a route or routes: A finding of disparate impact is made if a) the service improvement is on non-minority route(s), and b) after the change, the route(s) with increased days of service operate on days on which the majority of minority routes do not operate. Similarly, disproportionate burden exists if a) the service improvement is on non-low income route(s), and b) after the change, the route(s) with increased days of service operate on days on which the majority of low-income routes do not operate.

Analysis and Thresholds for Reductions in Service Level:

For service reductions at the route level, the basis for comparison is between the route(s) to be reduced and the non-minority and non-low-income routes in the system as a whole.

- Decrease in the frequency of a route or routes: A finding of disparate impact is made if a) the service reduction is on minority route(s), and b) after the change, the route(s) with changed service have less frequent service than the majority of non-minority routes. Similarly, disproportionate burden exists if a) the service reduction is on low-income route(s), and b) after the change, the route(s) with reduced service have less frequent service than the majority of non-low-income routes.
- Decrease in the span of service of a route or routes: A finding of disparate impact is made if a) the service reduction is on minority route(s), and b) after the change, the route(s) with decreased span of service have a shorter span of service than the majority of non-minority routes. Similarly, disproportionate burden exists if a) the service reduction is on low-income route(s), and b) after the change, the route(s) with reduced service have a shorter span of service than the majority of non-low-income routes.
- Decrease in the days of operation of a route or routes: A finding of disparate impact is made if a) the service reduction is on minority route(s), and b) after the change, the route(s) with decreased days of service do not operate on days on which the majority of non-minority routes do operate. Similarly, disproportionate burden exists if a) the service reduction is on low-income route(s), and b) after the change, the route(s) with decreased days of service do not operate on days on which the majority of non-low income routes do operate

Response to Finding Disparate Impact or Disproportionate Burden

If disparate impact or disproportionate burden is found to exist in a proposed major service change or proposed fare change, staff will:

1. Review the objectives of the proposed change to determine if the evidence supports the legitimacy of the objectives. A lack of factual support would indicate that there is not a substantial legitimate justification for the disparate effects. In that case, the AAATA will revisit the proposed changes and make adjustments that will eliminate disparate or disproportionate effects.
2. Analyze the proposed change to determine if there are modifications or alternatives that will still accomplish the legitimate objectives while minimizing or eliminating the disparate impact or disproportionate burden. If such modifications or alternatives exist, the AAATA will revise the

proposed change to have no disparate impact or disproportionate burden, or the minimum level that will achieve the legitimate objectives.

3. Document the process above for review by the public and Board of Directors. Where disparate or disproportionate effects remain, the AAATA will provide a written description which includes the substantial legitimate justification for the proposed service change and the analysis which shows that no alternatives exist that would accomplish the legitimate objectives with less disparate or disproportionate effects. The AAATA will provide a meaningful opportunity for public comment on this written description. Any comments will be considered by staff and all comments will be provided to the AAATA Board of Directors before a decision is made on the service or fare change.

Public Input in Development of Equity Analysis Policy

The AAATA provided a draft copy of the Equity Analysis Policy for review and comment in December, 2013 and January, 2014 as follows:

- Posted on AAATA Website with a link and notice on the front page
- Published in the [Ann Arbor News](#) on December 15, 2013
- Sent to the following people and organizations
 - Ann Arbor NAACP
 - Ypsilanti NAACP
 - Another Ann Arbor (Participatory community that reflects the culture and concerns of African- Americans in Washtenaw County)
 - Washtenaw Housing Alliance (The Washtenaw Housing Alliance (WHA) is an unique coalition of thirty-five community-based organizations that serve those experiencing homelessness or those at risk of homelessness)
 - Jewish Family Services (Designated refugee and immigrant resettlement agency)
 - Barrier Busters of Washtenaw (a group of over 50 social service provider agencies that are committed to increasing communication and coordination between its member agencies, and improving services for Washtenaw County residents in need)
 - Jim Mogensen (citizen who has expressed an interest in AAATA's Title VI compliance)

The draft policy was discussed at the public meeting of the Planning and Development Committee of the AAATA Board of Directors. The board members made comments and recommendations on the draft policy. Detailed written comments were received from Mr. Mogensen, and oral comments from two other members of the public. The AAATA considered the comments, and made revisions which are included in this revised the draft policy.

Definitions (from FTA Circular 4702.1B)

- a. Disparate impact refers to a facially neutral policy or practice that disproportionately affects members of a group identified by race, color, or national origin, where the recipient's policy or practice lacks a substantial legitimate justification and where there exists one or more alternatives that would serve the same legitimate objectives but with less disproportionate effect on the basis of race, color, or national origin.
- b. Disproportionate burden refers to a neutral policy or practice that disproportionately affects low-income populations more than non-low-income populations. A finding of disproportionate burden requires the recipient to evaluate alternatives and mitigate burdens where practicable.
- c. Discrimination refers to any action or inaction, whether intentional or unintentional, in any program or activity of a Federal aid recipient, subrecipient, or contractor that results in disparate treatment, disparate impact, or perpetuating the effects of prior discrimination based on race, color, or national origin.
- d. Disparate treatment refers to actions that result in circumstances where similarly situated persons are intentionally treated differently (i.e., less favorably) than others because of their race, color, or national origin.
- e. Fixed route refers to public transportation service provided in vehicles operated along pre-determined routes according to a fixed schedule.
- f. Low-income person means a person whose median household income is at or below the U.S. Department of Health and Human Services (HHS) poverty guidelines.
- g. Low-income population refers to any readily identifiable group of low-income persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who will be similarly affected by a proposed FTA program, policy or activity.
- h. Minority persons include the following:
 - (1) American Indian and Alaska Native, which refers to people having origins in any of the original peoples of North and South America (including Central America), and who maintain tribal affiliation or community attachment.
 - (2) Asian, which refers to people having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.
 - (3) Black or African American, which refers to people having origins in any of the Black racial groups of Africa.

- (4) Hispanic or Latino, which includes persons of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.
- (5) Native Hawaiian or Other Pacific Islander, which refers to people having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
- i. Minority population means any readily identifiable group of minority persons who live in geographic proximity and, if circumstances warrant, geographically dispersed/transient populations (such as migrant workers or Native Americans) who will be similarly affected by a proposed DOT program, policy, or activity.
- j. Minority transit route means a route that has at least 1/3 of its total revenue mileage in a Census block or block group, or traffic analysis zone(s) with a percentage of minority population that exceeds the percentage of minority population in the transit service area. A recipient may supplement this service area data with route-specific ridership data in cases where ridership does not reflect the characteristics of the census block, block group, or traffic analysis zone.
- k. National origin means the particular nation in which a person was born, or where the person's parents or ancestors were born.
- l. Predominantly minority area means a geographic area, such as a neighborhood, Census tract, block or block group, or traffic analysis zone, where the proportion of minority persons residing in that area exceeds the average proportion of minority persons in the recipient's service area.
- m. Service standard/policy means an established service performance measure or policy used by a transit provider or other recipient as a means to plan or distribute services and benefits within its service area.

Definitions (AAATA)

- n. Fare Change: Any change in fare level or fare eligibility except short-term promotional fares.
- o. Major Service Change:
- Change affecting more than 25% of riders on a fixed route, or
 - Change affecting more than 25% of the miles on a fixed route, or
 - Change on multiple routes affecting more than 10% of riders or route miles of overall fixed-route service.
- p. Types of Routes (The FTA definitions above includes a definition of 'minority transit route.' This definition includes various alternative ways to determine a minority route. The AAATA definition below is consistent with the FTA definition, but is more specific.)

Minority route - a fixed route with a higher percentage of minority riders or serving an area with a higher percentage of minority residents than the average for the fixed-route service as a whole.

Non-Minority route - a fixed route with an equal or lower percentage of minority riders or serving an area with a lower percentage of minority residents than the average for the fixed-route service as a whole.

Low income route - a fixed route with a higher percentage of low-income riders or serving an area with a higher percentage of low-income residents than the average for the fixed-route service as a whole.

Non-low income route - a fixed route with an equal or lower percentage of low-income riders or serving an area with a lower percentage of low-income residents than the average for the fixed-route service as a whole.

q. Service Periods and Days

The AAATA operates service on weekdays, Saturdays, and Sundays with different service levels on each. On weekdays, AAATA operates different service levels during four periods:

- Morning peak (6 a.m. – 9 a.m.)
- Midday (9 a.m. – 3 p.m.)
- Afternoon peak (3 p.m. – 6 p.m.)
- Evening (6 p.m. – 12 a.m.).

In determining impacts from a service or fare change it is important to compare service during the appropriate service period.

r. Objectives

Objectives refer to the purposes which a major service change or fare change is proposed to accomplish. For a fare change, the objective may be to increase fare revenue by a specific amount or percentage, or to increase fare revenue from a category of users by a specific amount or percentage while keeping the loss of ridership less than a specific amount or percentage. For major service changes, the objective may be to increase the total population served, improve on-time performance by a specific percentage, or reduce service hours by a specific amount to reduce expenses.

ANN ARBOR AREA TRANSPORTATION AUTHORITY (AAATA)

**AAATA NOTICE OF PUBLIC INPUT ON DRAFT POLICY ON DISPARATE IMPACT
AND DISPROPORTIONATE BURDEN**

Federal Title VI and Environmental Justice requirements provide protection from discrimination based on race, color, national origin and low-income in the provision of public transit service. New regulations require the AAATA Board of Directors to adopt a policy to define when a proposed service or fare change would have a disparate impact on members of a group identified by race, color, or national origin or disproportionate burden on low-income persons.

The AAATA has developed a draft policy, a copy of which is available for review by visiting the AAATA website, www.theride.org. The notice and link to the draft policy is on the front page. Interested persons or groups can obtain a copy by email to aaatainfo@theride.org (use “Title VI Policy” for the subject) or by mail to AAATA Title VI Policy, 2700 S. Industrial Hwy., Ann Arbor, Michigan 48104.

Persons or organizations may comment on the draft policy in writing on or before January 15, 2014 to the AAATA at the address above or by email to aaatainfo@theride.org (use “Title VI Policy” for the subject).

ANN ARBOR AREA TRANSPORTATION AUTHORITY (AAATA)

DISTRIBUTION LIST for NOTICE OF PUBLIC INPUT ON DRAFT POLICY ON
DISPARATE IMPACT AND DISPROPORTIONATE BURDEN

Posted on AAATA Website with a link and notice on the front page.

Published in the Ann Arbor News on December 15, 2013

Ann Arbor NAACP

Ypsilanti NAACP

Another Ann Arbor (Participatory community that reflects the culture and concerns of African Americans in Washtenaw County)

Washtenaw Housing Alliance (The Washtenaw Housing Alliance (WHA) is an unique coalition of thirty-five community-based organizations that serve those experiencing homelessness or those at risk of homelessness)

Jewish Family Services (Designated refugee and immigrant resettlement agency)

Barrier Busters of Washtenaw (a group of over 50 social service provider agencies that are committed to increasing communication and coordination between its member agencies, and improving services for Washtenaw County residents in need).

Jim Mogensen (citizen who has expressed an interest in AAATA's Title VI compliance)

Resolution 22/2014

APPROVAL OF SERVICE EQUITY ANALYSIS POLICY

WHEREAS, the Ann Arbor Area Transportation Authority (AAATA) conducts an equity analysis prior to adopting major service changes or fare changes, and

WHEREAS, AAATA adopted a revised Public Input Policy for Service and Fare Changes in November 2011 which defines what constitutes a major service change, and

WHEREAS, new Federal guidance requires the AAATA to define thresholds for when a proposed service change will have a disparate impact on minorities protected under Title VI of the Civil Rights Act of 1964, as amended, and

WHEREAS, new Federal guidance also requires the AAATA to define thresholds for when a proposed service change will have a disproportionate burden on low-income persons, and

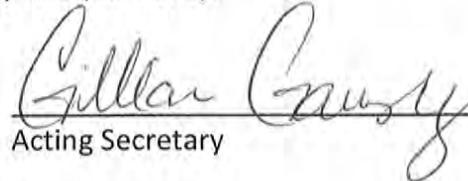
WHEREAS, the AAATA has developed the required thresholds as part of the attached Service Equity Analysis Policy, and

WHEREAS, the AAATA published the draft policy, solicited comments from the public and groups, and revised the draft policy based on the input,

NOW, THEREFORE, BE IT RESOLVED, that the Ann Arbor Area Transportation Authority Board of Directors hereby adopts the attached Service Equity Analysis Policy.


Charles Griffith, Chair

April 17, 2014


Acting Secretary

April 17, 2014

Attachment

Attachment N

Service and Fare Equity Analysis

Major Service Changes

The AAATA may implement service changes up to three times a year, in January, May, and August. Typically major changes are made only once a year.

Major service changes occurred in:

- August 2014 Implementation of first year of 5-Year Transit Improvement Program (5YTIP) including additional service on 19 routes and service one new route. The 5YTIP was adopted by the AAATA Board of Directors in January, 2014 at the end of a public input process of over two years. This full process is described in the Public Participation Plan included as Attachment D. The final phase of public input is described in three pages excerpted from the full plan document which are attached. In addition to a variety of other means, thirteen public meetings were held throughout the service area. Five were specifically located in minority communities (Peace Neighborhood Center, Clark Community Center, Hamilton Crossing Meeting Room, Heritage Park Neighborhood Association, and Ypsilanti Senior Center). At each meeting, the greeter was an individual fluent in Spanish from our partner agency, Casa Latino. The excerpt also includes a list of the final changes made to the plan in response to public input. Prior to adoption of the plan, AAATA staff conducted an equity analysis of the plan as a whole and each of the implementation phases. A copy of the board resolution, the public input excerpt, and the equity analysis is included as **Figure N-1**.
 - Service Equity Analysis for 5YTIP – A copy of the board approved analysis of service equity for the 5-Year Transit Improvement Plan is included in **Figure N-2**. The 5YTIP final phase of public participation is summarized in Figure D-1, and the full 5YTIP program is included in the Appendix.
 - Urban Core Service Equity Maps – Geographic analysis of minority and low-income population coverage changes for the 5YTIP are included in **Figure N-3**.

This publicly approved set of major service changes had the following milestones from January 2015 through August 2017, with final 5YTIP improvements coming in January 2017:

- January 2015 Service Improvements
 - Route 4 – a new trip was added on Sunday morning leaving Washtenaw & Golfside at 8:10am and arriving at the Blake Transit Center at 8:45am. The

trip was added to help reduce crowding on the trip that leaves the Ypsilanti Transit Center at 8:30am.

- Route 7 – Weekday trips currently leaving Washtenaw Community College at 3:50pm, 4:20pm, 4:50pm, 5:20pm, 5:50pm, and 6:20pm, depart 3 minutes later to more accurately reflect on-street conditions.
- Route 14 – to University of Michigan Hospital
 - The first weekday morning trip was adjusted to coordinate more closely with the Pioneer HS morning start time. This trip leaves UM Hospital at 6:50am (no change from the current time) and will arrive at Pioneer HS at 7:20am (10 minutes later than the current time).
 - The second weekday morning trip was adjusted to coordinate more closely with the Pioneer HS morning start time. This trip leaves Pioneer HS at 7:20am (7 minutes later than the current time) and arrives at UM Hospital at 7:40am (7 minutes later than the current time).
- Route 22 – North Connector

The trip that departs Meijer on Carpenter Rd at 6:30pm extended to end at the Green Rd Park & Ride at 7:10pm.
- Route 36 – Wolverine Tower Shuttle

Timepoints on all trips adjusted to accommodate new service to a bus stop near the University of Michigan’s Shared Service Center. Trips leaving Wolverine Tower at the following times serve a new bus stop near Victors Way & Boardwalk Dr: 7:15am, 7:23am, 7:33am, 7:42am, 4:35pm, 4:49pm, 5:02pm, and 5:16pm.
- Route 609 – to Miller Rd Park & Ride

The second weekday morning trip was through-routed with route 14, so it was adjusted to leave UM Hospital at 7:40am (7 minutes later than the current time) and arrives at the Miller Rd Park & Ride at 8:00am (7 minutes later than the current time).
- August 2015 Service Improvements
 - new later weekend hours
 - later Saturday and Sunday service on routes
 - new Sunday Service in Ypsilanti on routes
 - new #67 Route Platt - Michigan Ave.
 - more frequent service on routes
 - new Sunday service to Ypsilanti on route
 - new Sunday Service to U-M North Campus on route
 - A-Ride service hours extended to 10:45 pm on Saturdays and 7:45 pm on Sundays.
 - NightRide began service at 11:00 pm on Saturdays and 8:00 pm on Sundays.

- May 2016 Service Improvements
 - New route names and numbers
 - More routes to serve more places
 - More frequent service
 - More direct routes in Ann Arbor & Ypsilanti
 - Expanded A-Ride service
 - New service in Scio & Pittsfield Township

- August 2016 Service Improvements
 - System route re-numbering
 - New route #61 added at Airport-Avis Farms.

- Jan 2017 Service Improvements
 - Route 32B: Miller – Maple
routing on 32B trips adjusted to U-M Medical Center
 - Route 24: S Main – East
to improve on-time performance, at Stone School & Eisenhower, Briarwood Mall, Northbrook & Oakbrook, and the Pioneer HS Park & Ride lot, timepoints were adjusted two minutes earlier.
 - Route 67: Platt – Michigan to Meijer (Carpenter Rd)
Timepoint at Platt & Ellsworth adjusted three minutes earlier to :19 minutes past the hour.

- August 2017
 - Route 32 Miller–Maple routing changed to serve Maple southbound between Stadium and Liberty and will end near Maple and Pennsylvania. 32A trips to Blake Transit Center will start near Maple & Pennsylvania, and will serve Pennsylvania, Commerce, and Federal, and will provide northbound service on Stadium. Schedule adjustments made to improve timing between 32A/B/C trips on Miller Rd.
 - Route 43 E. Michigan Ave and Route 68 Harris-Ford
Through-route service at Holmes & Ridge. Riders connects between the two routes without changing buses. Riders in the Route 68 area can ride to downtown Ypsilanti without a transfer.
 - Route 46 Huron–Textile
Route revised to provide service in both directions on Huron River Dr and Textile Rd. Route expanded to serve Hitchingham, Merritt, and Whittaker Roads. Weekday & Saturday trip leaving Ypsilanti Transit Center at 10:18pm to end at Merritt & Whittaker at 10:45pm.

These service changes were adopted by the Board in November, 2011 and approved by community voters in May 2014, so documentation for this service change was also included in the previous Title VI Program submission in 2014.

Fare Changes

The AAATA does not implement regularly-scheduled fare increases. During the period covered by the Title VI update, no fare changes were scheduled or proposed by AAATA.

Resolution 5/2013

SERVICE INCREASE ON THE #5 PACKARD ROUTE

WHEREAS, the Ann Arbor Transportation Authority (AATA) has proposed a service increase on the #5 Packard route, and

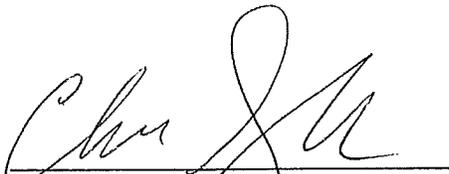
WHEREAS, AATA staff disseminated information to riders and the public about the proposed service change, solicited comments and questions, provided multiple and diverse opportunities for riders and the public to understand the proposed changes and provide comments, objections, and suggestions, and

WHEREAS, all of the comments for this particular change supported the proposal, and

WHEREAS, AATA staff considered the public input, and determined that no revision to the proposed change was warranted based on the input, and

WHEREAS, AATA staff developed a Title VI, Environmental Justice, and Limited English Proficiency Analysis which did not find a disparate impact as a result of the change on protected populations,

NOW, THEREFORE, BE IT RESOLVED that the Ann Arbor Transportation Authority Board of Directors hereby adopts the revised service for the #5 Packard route recommended on November 15, 2012 to be effective January 27, 2013.



Charles Griffith, Chair

November 29, 2012



Anya Dale, Secretary

November 29, 2012

Ann Arbor Transportation Authority (AATA)
Service Equity Analysis
Proposed January, 2013 Service Change on the #5 Packard Route

Description of Proposed Service Change

The #5 Packard route operates between Ann Arbor and Ypsilanti primarily on Packard Rd. Weekdays, 5 buses provide service every 30 minutes on a trunk route, and each of two branches:

- A. Between downtown Ann Arbor and downtown Ypsilanti
- B. Between downtown Ann Arbor and the Meijer store on Carpenter Road.

Service is provided every 15 minutes on the trunk (about 40% of the route) and every 30 minutes on each of the two branches.

The number of riders on this route has grown 35% since 2004. During peak hours, buses on several trips are crowded with standees. The increasing ridership is also increasing the operating time and on-time performance has declined to 89% in the a.m. peak period and to 63% in the p.m. peak period.

In response, AATA is proposing to add two buses to the route during the morning and afternoon peak for a total of 7 buses in operation. This is expected to reduce crowding and improve on-time performance all trips. On the trunk of the route, the number of trips is proposed to increase from four to six per hour. On the branch from downtown Ypsilanti, the number of trips will continue to be two per hour, but the trip time will be reduced by 8 minutes (18%) by a more direct routing. On the other branch, the number of trips will increase from 2 to 4 per hour.

Major Service Change Policy

The AATA's Public Input Policy for Service and Fare Changes was adopted by the AATA Board of Directors in November, 2011 following input from the public. Under the policy, the proposed service change meets the criteria of a major service change as it affects more than 25% of the riders and more than 25% of the miles of the route. The AATA prepared and submitted a Title VI update in December, 2011, which includes the adopted public input policy.

Impact of Proposed Service Change on Minority and Low-Income Community

The analysis included in the update showed that the #5 Packard route served census tracts with higher than average minority population on 79% of the route, and higher than average low-income population on 77% of the route (9.9 of 12.6 total miles and 9.7 of 12.6 total miles respectively) as shown on the map.

The proposed service change will have a significant positive effect on the minority and low-income communities on the entire route. The increased number of peak-hour trips will increase

options, reduce passenger loads on the route and improve on-time performance. The increased service frequency will provide improved access to employment centers in Ann Arbor including the University of Michigan and downtown Ann Arbor.

Because the route includes a trunk portion which is served by all trips, and branches which are served by only some trips, the impact varies. On the enclosed maps, the route is divided into three sections, A, B, and C which correspond to differing areas of impact. The specific impact by area is as follows:

Area A (trunk):

- Increase from 4 trips per hour to six trips per hour in each direction
- No change in travel time
- Reduced passenger loads
- Improved on-time performance

Area B (all trips serve area B, but with different routing):

- Increase from 4 trips per hour to six trips per hour eastbound in the a.m. peak and westbound in the p.m. peak. No change in frequency at other times.
- Decrease in travel time by 8 minutes to and from UM campus and downtown for riders boarding on Packard St.
- Reduced passenger loads
- Improved on-time performance

Area C (only some trips service Area C):

- No change in number of trips (2 per hour)
- Decrease in travel time by 8 minutes to and from UM campus and downtown
- Reduced passenger loads
- Improved on-time performance

The service change was designed to make sure that no portion of the route had fewer trips or longer trip times as a result of the proposed service change.

Four maps of the route and the surrounding area are included:

1. Showing adjacent census tracts with higher than average minority population
2. Showing $\frac{1}{4}$ and $\frac{1}{2}$ mile buffers overlaid on census tracts with higher than average minority population.
3. Showing adjacent census tracts with higher than average low-income population.
4. Showing $\frac{1}{4}$ and $\frac{1}{2}$ mile buffers overlaid on census tracts with higher than average low-income population.

Analysis of Benefits of Proposed Service Improvement

The AATA is using population of affected census tracts as the basis for evaluation. AATA has not yet conducted surveys to determine information on minority ridership by route.

Total Population of Service Area	Minority Population	Percent Minority	Low-income Population	Percent Low-Income
192,797	36,610	19.0%	15,125	7.8%

Route #	Change type	Total Population affected Census blocks	Minority Population	Percent Minority	Low-Income Population	Percent Low-Income
Route 5	Additional Service	65,969	9,027	13.7%	5,830	8.8%
Total		65,969	9,027	13.7%	5,830	8.8%

As shown above, the #5 Packard route serves a lower percentage of minority and higher percentage of low-income riders than live in the total service area. The AATA has not yet established a disparate impact and disproportionate burden threshold policy. However, as this change has positive rather than adverse effects, no disparate impact or disproportionate burden is found.

Public Input Processes and Procedures

The public input process and public comments are included in the attached public input summary.

November 2012

Public Input Summary

Proposed Service Change:

Route - #5 Packard

Proposed Effective Date: 1/27/2013

Beginning of Input Period: 10/2/2012

End of Input Period: 11/4/2012

The steps taken to disseminate information include:

- MyRide email subscription. AATA riders subscribe to MyRide to receive information on specific routes. Subscribers to the route received notice of the proposed change, and how to provide input.
- Printed Notices. A complete description of proposed changes and how to provide input were posted at bus stops and passenger shelters on the route and passed out to riders by drivers on the route.
- AATA Website. The AATA website featured notice of proposed change on the front page and in a section for rider notices. Visitors to the website who access the schedule or real-time information for the route were informed of the proposed changes to the route.
- Social Media. AATA used Facebook and Twitter to get the word out about the proposed changes and to direct people to sources of complete information and how to provide input.
- Press Releases – AATA issued a press release which described the proposed change and how to provide input. The press release was distributed to all media outlets and more than 50 organizations including those serving housing, educational, civic, and social services.

The information included a description of the proposed changes, a description of the process for asking questions and making comments and suggestions. Available methods include:

- By email
- By telephone to a service change hotline
- By fax
- In writing
- In person at public drop-in sessions. These were 3 hours in length at two locations on the route.

The AATAs' public input process emphasizes two-way communication. The intention is not just to receive comments, but to discuss the effect of the proposed change. A response was provided to each person who made a comment or suggestion or asked a question.

The AATA has taken specific steps to solicit input from minority and low-income groups. This included distributing the notice to organizations serving primarily protected groups and choosing public meeting sites in the areas proposed for service reduction and at a variety of times. In particular, one of the two drop-in sessions was held at a Bryant Community Center, that provides services in a neighborhood with a high proportion of low-income and minority persons. The drop-in session was coordinated with staff to be at a time when many people were coming in for services.

This route serves census tracts with a higher than average number of Spanish-speaking persons with limited English capability. AATA has been working with Casa Latina to provide Spanish language translations of printed material and communicate with Spanish-speaking population. Notices were provided for translation and distribution.

Comments received concerning proposed change:

Email - 26

Public meetings - 3

Phone Message - 9

A summary of the comments which were received follows. The messages have been edited to remove information that could be used to identify the sender.

Public Input - Proposed Changes to #5 Packard Route for January, 2013

November 2, 2012

Name, first	Name, last	Method	Response?	Comments
Drew	Steding	email	yes	<p>To whom it may concern:</p> <p>I would just like to take a moment of my time to offer a comment in support of the increase in buses for Route #5. I take the bus to work (Michigan Union) 3 times per week at least, and the majority of the time the buses are quite crowded. I appreciate AATA's efforts in analyzing statistics and coming to this conclusion. I would suggest that the increase in routes be in effect during the morning as proposed, but should continue through perhaps 7pm. I usually leave work between 5-7pm every day, and I've been on crowded buses as late as 8pm as well.</p> <p>Thank you for your time!</p>
Joel	Bryant	email	yes	<p>To Whom It May Concern:</p> <p>I use the Route 5 buses regularly, and I strongly support the proposed changes.</p> <p>Regards,</p>
Cheryl	Fields	email	yes	<p>I would like to see more buses added to Route 5, in the am and pm, as buses are packed during these times.</p>
Sharona	Ginsberg	email	yes	<p>Hello,</p> <p>I saw the proposed changes listed on the website and I think these are a great idea. I take the 5 to and from campus on a daily basis and I have learned at this point that I can't trust the official schedule because the bus is so unreliable. This morning, my bus was 10+ minutes late, and that is unfortunately not such an uncommon occurrence. It would be great to have more buses on the route so that hopefully it can become more reliable and predictable, which is very important to me, as I use the bus to get to work and class. Thank you!</p>
Marina	Kounkel	email	yes	<p>Hello!</p> <p>I would like to thank you for the changes that you are trying to introduce into route 5, primarily the addition of 5AX service. It was always very annoying to walk all the way across the block in order to catch a bus that is supposed to go across Packard. I would hope that in future that they were a tad more frequent and regular, as missing a bus means much more if they go once an hour as opposed to 15 minutes, but still this is perfect. But perhaps that it would be possible to add an extra bus stop near the intersection of Eisenhower and Packard to go along with this new route?</p> <p>Thank you very much,</p>
Heather	Neylon	email	yes	<p>Hello AATA,</p> <p>First, I think you provide a great bus service. I absolutely think that the proposed route 5 changes will be beneficial, particularly if trips are added at peak times on weekends as well. I work on the weekend, so I need bus service to travel to and from work.</p>

Kristin Sumrall	email	yes	<p>Dear AATA:</p> <p>I have been considering writing a letter about service on the #5 bus for some time now, but I wasn't sure if it was really worth making the effort. Then today I saw on your website that you're considering increasing service on this line.</p> <p>I am so happy to hear this!! Please do make it so! I live less than a 5-minute walk from a #5 stop, as opposed to 10 minutes from a #6 stop, but lately I have been catching the #6 because the #5 is always so crowded and so late. I used to catch the #5 every day because its more frequent running times were better for my work schedule, but now I just leave earlier and get in to work earlier and hang around waiting for the day to start because I know the #5 between 8am-9am is going to be (1) terribly late and (2) terribly crowded.</p> <p>I am sure there are hundreds of #5 riders who can't just ride the #6 instead; I hope you hear from them also because I am sure many of them would really appreciate extra buses on the route too.</p> <p>Thank you very much!</p>
Laura Holladay	email	yes	<p>Regarding the proposed changes to Route 5:</p> <p>I am writing in STRONG support of adding additional bus service during peak hours on the Route 5. I use this route to commute to/from my downtown job during the week, and riding the bus has been a *terrible* experience so far this year. In past years, I can remember Route 5 always being "full" during peak times, but I was usually able to get a seat. This year, more often than not, I spend my ride to work standing in the aisles, usually crushed between other people, with the drivers politely asking over & over for people in the aisles to move back and pack together even tighter in order to pick up additional passengers. It is extremely uncomfortable and feels unsafe to be squished up against people like that -- falling into people every time the bus slows or starts suddenly. Plus, the Route 5 consistently runs at least 6 minutes late and as much as 15 minutes late (running the *next* bus's time points) during these peak hours -- I'm learning to adapt my schedule to it, but it seems silly for AATA to post a time table that the buses can almost never adhere to.</p> <p>I do want to add that most of the drivers on the route are very courteous -- they try to remain friendly and polite as they ask riders to crush closer together, so kudos to them for good handling of a bad situation.</p> <p>I want to continue riding the bus in order to have a more eco-friendly and sustainable commute than I would if I were to start driving downtown (which is also cost-prohibitive for me), but my discomfort riding the Route 5 is making me seriously consider other alternatives to the bus. I would greatly appreciate additional service on the Route 5 during peak times to make my rides more comfortable, safer, and on-time.</p> <p>Thanks for your consideration!</p>
Gary Richard	email	yes	<p>All comments were about other routes. Referred him to the TMP.</p>

Mary	Qin	email	<p>Dear AATA officers,</p> <p>I commute to /back from work on U-M central campus every day although I have experienced many problems with that. I am happy to see the improvement is on the way.</p> <p>I am sorry I did not see Route 5B for the morning hours to Ann Arbor in proposed service changes, it only appears in the afternoon hours.</p> <p>[Route 5] issues on Packard/ Platt</p> <p>There are two buses proposed to stop at the exactly same time on Packard/ Platt Rd during peak hours. One starts from Meijer (5C), the other runs from Ypsilanti (5AX). It is entirely unnecessary! If AATA could let the one from Meijer (which picks up few passengers on Carpenter Rd) skip Packard/ Platt, it could save people who get onto the bus at Meijer (by Ellsworth/Carpenter) at least 10 minutes without going around from Ellsworth/ Carpenter to Packard/ Platt , then back to Ellsworth so that it can go through Stone School Rd. and connect to Packard again to the U of M central campus. Currently, Route 5B runs from Ann Arbor to Meijer without going around Packard/ Platt, why can't Route 5C run the same route, just for an opposite direction from Meijer to Ann Arbor?</p> <p>[Route 4] Can it be extended to Meijer (Carpenter Rd) ?</p> <p>I am not sure if AATA authorities are aware that people do not take a bus simply because they can't find the service they want. it does not mean people in the area do not need public transportation.</p> <p>My neighborhood is off Ellsworth Rd, walking distance to Meijer. I know quite a number of my neighbors work in UM Medical centers/ hospitals. 90 percent of them drive to work because there is no convenient/ direct bus to Medical centers/ hospitals from Meijer.</p> <p>I sometimes drive and park at Washtenaw Ave (in front of Dollar Tree store inappropriately), then take Route 4 (I commute this way instead because it is more frequent than Route 5 at present), I found Route 4 very crowded during rush hours. If AATA could add a couple of more buses (just for peak hours) to Route 4, and let it extend to Meijer (Carpenter Rd), it can not only connect people from southeast side of Ann Arbor to Medical campus, but release the overloaded problem during peak hours at Washtenaw Ave.</p> <p>A few my neighbors asked me to put forward the issues/concerns for them. I am happy to do that. We hope AATA will work out better plans to help more with the neighborhoods on the southeast side of Ann Arbor, especially those who want public transportation to commute to work.</p> <p>Thanks a lot for your work.</p>
Kerri	Covey	email	<p>i support more buses, more routes, all of it and any of it. more!</p>

Susan	Yasi	email	yes	<p>Hello 'Ride' ;</p> <p>Yes! If you'd like to have more #5 to Ypsilanti runs during peak hours, I certainly think it would be a great idea. Even right now, we're packed like sardines in there.</p> <p>Thanks,</p>
Sydney	Krueger	email	yes	<p>I appreciate the thought and I guess it doesn't effect my trip so much (unless in the future I need to take earlier buses) but your schedule seems kind of confusing? 4 buses with the same name basically? So I need to think about if I can take the 5C or do I need the 5AX or am I okay with the 5B instead.</p> <p>This is really selfish but I loved that I didn't have to worry about if a 5 bus went past my house or not. If I got on the 5AX bus only to realize that skips my stop (stop 6) I would PISSED. And if I had to get off the bus or wait for the next one I would be ALSO PISSED.</p> <p>Also these buses are to deal with space issues right? The buses I take in the morning (9:05 and 9:20 if I'm feeling lazy) are always late and always crowded with students. I mean it's cool that they're late, that's why I take an earlier bus so that I won't have to worry about time, but why are all the extra buses right before this?</p> <p>Wow this email sucked, sorry.</p>

Chen	Zhang	email	yes	<p>Hello Sir/Madam,</p> <p>I would like to provide comments on the proposed service change on AATA Route 5. I am a UM student living on Packard near Stone School& Eisenhower and I mostly staying on central campus. I have discussed things in this email with about 5 friends taking Route 5 (I have done survey on Route 2 and thought it was very helpful, so why do not do it for Route 5?).</p> <p>1) Overall I welcome more buses on Route 5 because I take it daily... Thanks for the proposal!</p> <p>2) I think it might be better to change some of the 5Cs in the morning into 5Bs (to Ann Arbor). I did not understand why 5B to Ann Arbor is more in the afternoon, but to Ypsilanti is more in the morning. I think people are more stringent on time when going to work than coming home, and shortcuts would be more welcomed.</p> <p>3) I hope the 5C at becomes a little earlier (2-4 minutes is enough) after 9:30 am (maybe till noon). This is because students often need to arrive at destinations at o'clocks and :30s (9:30 am, 10 am, 10:30am etc.) and do not necessarily go to UM in the early morning; but bus stops for this route is often far away from central campus, requiring ~5 minute's walk to the destination. This is still fine if the bus was on time, but if the on-time performance is not largely improved after the service change, to me it is in an awkward situation like now... For now, if I take the 5C leaving Meijer at 9:25 am, arrive at Thompson&Madison at 9:52 am (and I usually take off two stops after that, say 9:55 am because there are often many people take off among those stops), then walk 5 minutes to my destination, it is right at 10 am. It seems OK, but given that the bus is usually late for at least 2 minutes, sometimes 5 minutes or more, I cannot risk being late. So I have to take the earlier bus, which has a longer route so is often severely delayed (5 minutes at least I would say). Then it is very inefficient for me to wait at bus stop (on Packard) for 5-10 minutes, take the bus, then go to my classroom or lab and wait another 5-10 minutes before starting to do something. Sorry this sounds more like a complaint, but I think if 5C was 2-4 minutes earlier, or it is very likely to be on time, it will be much much better.</p> <p>3) I hope there could be a little more buses in the evening and during weekends. One hour per bus is too low for this long route. I was thinking ~4 more buses on Saturday afternoons and ~2 buses in the early evening on weekdays to make it every half an hour. I think it might be even more helpful than the many increased buses in the afternoon, since so many undergrads, grads and post-docs stay on campus after 7 pm.</p> <p>In general I am still quite happy with AATA, and I think our buses are much more useful than those in other cities I have been to, bigger or smaller. So please see if you can make use of any of these comments, but please keep up your great work!</p> <p>Thanks,</p>
James	Roane	email	yes	<p>I ride the number 5 bus most days. You cannot add more buses soon enough! That bus is usually way over capacity which makes getting on and off difficult and usually causes the bus to run late also. This is long overdue.</p>

Tom McCormack	email	yes	<p>It would be great if Route 5 (Packard) had more service, especially during rush hour.</p> <p>I take the bus to and from work (downtown) every weekday, and it would be nice to know that buses are only, say, 7 minutes apart during rush hour.</p> <p>Thanks!</p>
Courtney Hewitt	email	yes	<p>To Whom this May Concern:</p> <p>I would be in favor of adding additional buses to Route 5. In the past few months, Route 5 has been increasingly more busy. People are being packed into the bus like sardines during rush hour time. This change would make peoples commute a lot more comfortable, less of a hassle, and overall a better experience. Please add more buses to this route!</p>
Ruxandra-Ana Iacob	email	yes	<p>As a commuter on bus #5 I have two suggestions:</p> <p>(1) ask the people with backpacks to take them off, to avoid hurting people when they turn around in crowded buses</p> <p>(2) ask people to keep their bags on their laps, especially the corpulent ones (there are at least two regular commuters on 'my' bus who fit this description) who are already occupying almost two seats, unless you can designate special seats for them (tricky).</p> <p>Thanks.</p>
Alfreda Onimo	email	yes	<p>It would be great if they added two trips between Ann Arbor and Ypsilanti during the morning and afternoon peak hours for the #5. I'm looking forward to that happening.</p> <p>Hello,</p>
Georgia Reum	email	yes	<p>I was looking at the proposed changes on Route 5. It looks like you will have an express bus between the regular Ypsi and Meijer bus. I believe that wouldn't be necessary if your bus drivers were close to the schedule times listed. I have experienced the Meijer bus being ten minutes or more off the printed schedule. The bus was crowded and it was standing room only. My feeling is that it wouldn't have been standing room only if the bus had been relatively on time. Being as late as it was, it picked up the passengers that were waiting on the bus coming from Ypsi as well as the passengers that had been waiting for the bus coming from Meijer. This meant that the bus coming from Meijer's picked up twice the amount of passengers and the bus coming from Ypsi had a light load.</p> <p>Being that you have some drivers who have a "being relatively on time" issue, wouldn't that make the Express bus and Meijer or Ypsi bus show up at the stops they would share at the same time? I can see it happening.</p> <p>Georgia Reum</p>

Robin	Wilson	email	yes	<p>As a person whose closest bus stop is for the #5 bus and who works at the U, these changes would be wonderful.</p> <p>The infrequency of the 5 makes it often impractical to take the bus to work, given how long it takes and how seldom it comes. Missing the bus can mean at least another 20 minute wait for a 25 minute ride to work and then another 20 minute walk to my actual job location.</p> <p>While the #4 bus trip is a mere 10-15 minutes long from the Rec Center to the Central Campus Bus station, and much closer to my office, that requires a 35minute walk from my home. This is less than encouraging or practical, especially when traveling in inclement weather or at night.</p> <p>Have you thought about postponing the 1 bus per hour schedule until after 6:30 or 7?</p> <p>Thank you so much, Hi, AATA manager</p> <p>I'm an exchange student lived in Arbor Village. As my office is located at the cross of Packard and Division, and the bus 4 is always busy around 8:30 AM, I prefer to take bus 14 to Stadium& Packard firstly and then catch up the bus 5. However almost every time, when I get off the bus 14 and walk up to the bus 5 stop very quickly, the bus 5 is still leaving thus I should wait for 15 mins for the next bus. This has been lasted for several weeks. I know I might cross the street much quicker or even run to the stop, but it's a rush hour and I really don't want to break the traffic regulations, I'm a good student,+:) more important, it's dangerous. so I want to say It's really a short time to take transfer. Secondly, even if I catch up the bus 5, it's so crowd. Sometimes people stand nearly the yellow line at the front. I hope more buses and the transfer time will be taken into consideration. That's to say, more frequently buses, more flexible and comfortable travelling. And what's important, the driver will be much more patient, the passengers will much safer. Thanks.</p>
Changzhe	Wang	email	yes	<p>after reviewing your propse plan I notice that AATA currently there are from Ann Arbor 29 trips to Ypsilanti and 22 trips from Ann arbor to Meijers. However there will be 31 trips to meijers (9 trips added) and 30 trips to Ypsilanti (1 trip added) please add more trips to Ypsilanti.</p> <p>Currently there is 28 trips from Ypsilanti to Ann Arbor and 23 trips from Meijers to Ann Arbor. however under then new plan there would be 28 trips from Ypsilanti to Ann arbor (the same) and 33 trips from Meijers to ann arbor (10 TRIPS ADDED) please add more trips From Ypsilanti to Ann Arbor.</p> <p>Then what about the weekend will there be not trips to Ypsilanti on Sunday (ADD MORE TRIPS TO YPSILANTI ON SUNDAYS)</p> <p>AND STILL NO TRIPS TO MEIJERS ON SATURDAYS ADD TRIPS TO MEIJERS ON SATURDAYS WITH OUT TAKING AWAY FROM THE TRIPS TO YPSILANTI.</p>
William	Teepen	email	yes	<p>Dear Sir or Madam,</p> <p>I am a first year graduate student in Umich living in Mill Creek Townhouses. I found it is very inconvenient for me to go shopping or go to school during weekends. So I am writing to see if it is possible to have route 5 bus every half an hour instead of one hour during weekends.</p> <p>Thank you very much for your great service!</p> <p>Best,</p>
Jiahua	Gu	email	yes	<p>Dear Sir or Madam,</p> <p>I am a first year graduate student in Umich living in Mill Creek Townhouses. I found it is very inconvenient for me to go shopping or go to school during weekends. So I am writing to see if it is possible to have route 5 bus every half an hour instead of one hour during weekends.</p> <p>Thank you very much for your great service!</p> <p>Best,</p>

Jianwei	Wang	email	yes	<p>Hi AATA,</p> <p>The proposed schedule is not consistent with the aata's statement. The schedule actually reduces service frequencies for some areas. For instance, from Ann Arbor to Ellsworth, the service time from 5:00PM to 6:00 PM time frame is changed from 4 to 3, Monday to Friday.</p> <p>The improved service for Route 5 should not sacrifice some areas for the benefit of others.</p>
Jessica	Young	email	yes	<p>Hi,</p> <p>I live along the #5 route and just wanted to email with my support for the suggested changes (increased morning and peak buses).</p> <p>In addition, I would love if there were more evening buses. Having only hourly buses after 7pm is very difficult for those of who work late into the evening. If you miss it by 5 minutes--or even 30!--you still have to wait quite a while.</p> <p>And, as always, more weekend bus services would be great. I'd love to see a movie some Saturday evening without getting stranded!</p> <p>Many thanks, I really love the service you provide and the generosity with which you do so,</p>
Paul	Sutter	phone	yes	Wanted to know proposed start date. No problem with proposal
Gustavo	Pitino	phone	yes	Supports proposed plan
Robert	Stevens	phone	voicemail	Requested that each trip go to Meijer
Georgia	Rumm	phone	voicemail	Question about how service will operate
Angela	Doughty	phone	not requested	Expressed pleasure with the proposed increase in the number of trips
Joe	Wagner	meeting	yes	Express support for propped changes
James	Harris	meeting	yes	Support for proposed changes. He currently has to take an earlier bus to make sure he gets to work on time.
Derrick	King	meeting	yes	Uses #5 between Ann Arbor and Ypsilanti. Very happy with the proposed faster trip during peak hours.
Nancy	Stevens	phone	not requested	Thinks it is a good idea to provide additional trips; it's needed badly
Latrice		phone	not requested	"Great idea" This will be very helpful
Christine	Cappidone	phone	not requested	Nurse on call. Concerned about Saturday service frequency and the early end to service on Saturday.
Michael	Jenrick	phone	voicemail	Takes #5 bus scheduled to arrive at BTC at 9:45 to transfer to #8. Usually misses this transfer because of late #5 bus. Requests that increased service extend until this trip (which it does).

Resolution 24/2012

LOCAL FIXED-ROUTE SERVICE CHANGES FOR AUGUST, 2013

WHEREAS, the Ann Arbor Transportation Authority (ATA) proposed service changes on several local fixed routes, and

WHEREAS, AATA staff disseminated information to riders and the public about the proposed service changes, solicited comments and questions, provided multiple and diverse opportunities for riders and the public to understand the proposed changes and provide comments, objections, and suggestions, and

WHEREAS, AATA staff considered the public input, revised the proposed service based on the input, and provided the results of public input to the AATA Board for consideration before making a decision, and

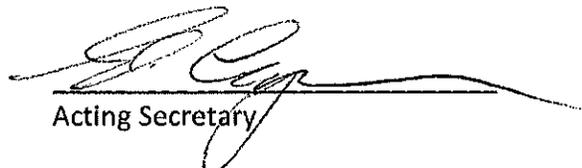
WHEREAS, AATA staff developed a Title VI, Service and Fare Equity Analysis of the one proposed major change on route #12 for review by the Board of Directors before making a decision,

NOW THEREFORE, BE IT RESOLVED that the Ann Arbor Transportation Authority Board of Directors hereby adopts the revised service changes effective August 2013 briefly described as follows:

- Route 12: Change weekday departure time for 12B from BTC to 18 and 48 minutes after the hour
- Route 6, 7, 36: Change Briarwood routing and boarding location
- Route 6: Change 6A variation to use Michigan Ave. to and from YTC
- Route 7, 22: Revise portion of routes northeast of Washtenaw and Hogback.


Anya Dale, Acting Chair

June 20, 2013


Acting Secretary

June 20, 2013

Ann Arbor Transportation Authority (AATA)
Service Equity Analysis
***Proposed August, 2013 Service Change to Weekday Service on the #12
Liberty-Miller Route***

Description of Proposed Service Change

The #12 route consists of a 5.5 mile, 27-minute loop beginning and ending at the Blake Transit Center (BTC) in downtown Ann Arbor. The primary streets served are Miller, Maple, and Liberty. Service is operated on the loop in both directions. The #12A variation operates the loop counter-clockwise. The #12B variation operates the loop clockwise. Weekdays, service operates from the BTC every 30 minutes at 18 and 48 minutes after the hour on both the #12A and #12B. The only change proposed is a 15-minute shift in the time for the #12B service to depart the BTC at 3 and 33 minutes after the hour weekdays.

This proposed change affects every weekday rider on the #12B variation of the route as they have to shift their travel time either 15 minutes earlier or later, or use the #12A counterclockwise loop.

No change is proposed for evening and weekend service. Evenings and weekend service operates every 60 minutes, with buses on the #12B route departing the BTC at 18 minutes after the hour, and buses on the #12A route departing the BTC at 48 minutes after the hour.

The great majority (91%) of riders on the #12 route are travelling to or from the BTC in downtown Ann Arbor.

Major Service Change Policy

The AATA's current Public Input Policy for Service and Fare Changes was adopted by the AATA Board of Directors in November, 2011 following input from the public. This was a revision of the existing policy first adopted in 2004 which already met the requirements of Circular 4702.1B. Under the previous and current policy, a proposed service change on a route meets the criteria of a major service change if it affects more than 25% of the riders or more than 25% of the miles of the route.

The purposes of the 2011 revision were to:

- reflect the use of electronic media for notifying people of proposed changes and for receiving input.
- reflect current practice by including input procedures for proposed changes that do not meet the threshold of a major change. Because the former policy only described the solicitation and use of public input for "major" changes, an incorrect conclusion could have been drawn that AATA was not interested in input for smaller scale changes.

It has long been the practice at AATA to actively solicit input from riders and seriously consider their comments before making major changes. Talking to riders before the changes are decided

upon provides an important opportunity for staff to explain the reasons why changes are proposed and learn how the proposed changes will affect riders. In most cases, the changes that were adopted were revised based on the input received.

The 2011 policy revision was discussed by the AATA Board in public session for 3 months before adoption. The Board agenda and supporting materials were published in advance on the AATA website, and emailed or mailed to anyone who requested it. The mailing list includes 30 organizations and individuals. Board meetings are televised live and rerun at scheduled times on local public access television, reported in print and electronic media, and published on the AATA website

The need for revision was first included in the August, 2011 meeting of the Board's Performance Management and External Relations (PMER) committee and August Board of Directors meeting. The Board directed staff to prepare a revised policy. The proposed revised policy was included in the October PMER and Board meeting. At the October meeting, the PMER committee recommended adoption and the proposed revised policy was discussed at the October Board meeting. The revised policy was adopted at the November, 2011 Board of Directors meeting, a month later. A copy of the policy and board resolution is attached.

Impact of Proposed Service Change on Minority and Low-Income Community – Adverse Effects

The proposed service change does not change the routing or frequency of service. The proposed change only shifts the time of the clockwise service on route #12B by 15 minutes. Riders can continue to use the #12B either 15 minutes earlier or later, and continue to use the #12A at the same time as before. This change benefits riders by increasing the options for all riders by making service available every 15 minutes on either the #12A or #12B. There will be some individuals for whom the proposed change is less convenient because shifting their trip time 15 minutes earlier or later does not fit their schedule as well. However, it will better fit the schedule of others. Thus, the adverse effects are minor, and affect individuals not based on geography or time of day, but on their individual schedule. Overall, this is a positive change.

It is also worth noting that all areas within ¼ mile of the #12 route have at least one other route within ¼ mile that also provides service to and from the BTC in downtown Ann Arbor.

Disparate Impact Policy

The AATA is in the process of developing a disparate impact policy and does not yet have an adopted policy. During this interim period, the AATA will assess the impacts, compare them for minority and non-minority populations and assume disparate impact unless it is clear that it does not exist.

Population information for the AATA fixed-route service area is shown in Table 1, below. Population information for the portion of the service area within ½ mile of the #12 route is shown in Table 2.

Total Population of Service Area	Minority Population	Percent Minority	Low-income Population	Percent Low-Income
192,797	36,610	19.0%	15,125	7.8%

Route #	Change type	Total Population affected (within 1/4 mile)	Minority Population	Percent Minority	Low-Income Population	Percent Low-Income
Route #12B	Shift trip times	23,602	1,622	6.9%	5,787	24.5%
Total		23,602	1,622	6.9%	5,787	24.5%

As shown above, the 12B Liberty-Miller route serves a lower percentage of minority riders than live in the total service area and a significantly higher percentage of low-income riders than live in the total service area.

Since this is overall a positive change, and the route has a low percentage of minority riders, the potential of disparate impact exists because minority riders will receive less of the benefit. However, we do not believe that a disproportionate burden exists because of the nature of the change. This is the only loop route with service in both directions, so it is the only opportunity to provide this particular type of improvement. However, the AATA similarly seeks ways to improve the design of other routes to achieve overall improvements. For example, two minority routes have service changes proposed for this period which do not rise to the level of a major change

May 2013

Disproportionate Burden Policy

The AATA is in the process of developing a disproportionate burden policy and does not yet have an adopted policy. During this interim period, the AATA will assess the impacts, compare them for low-income and non-low income populations and assume disproportionate burden unless it is clear that it does not exist.

Analysis Framework

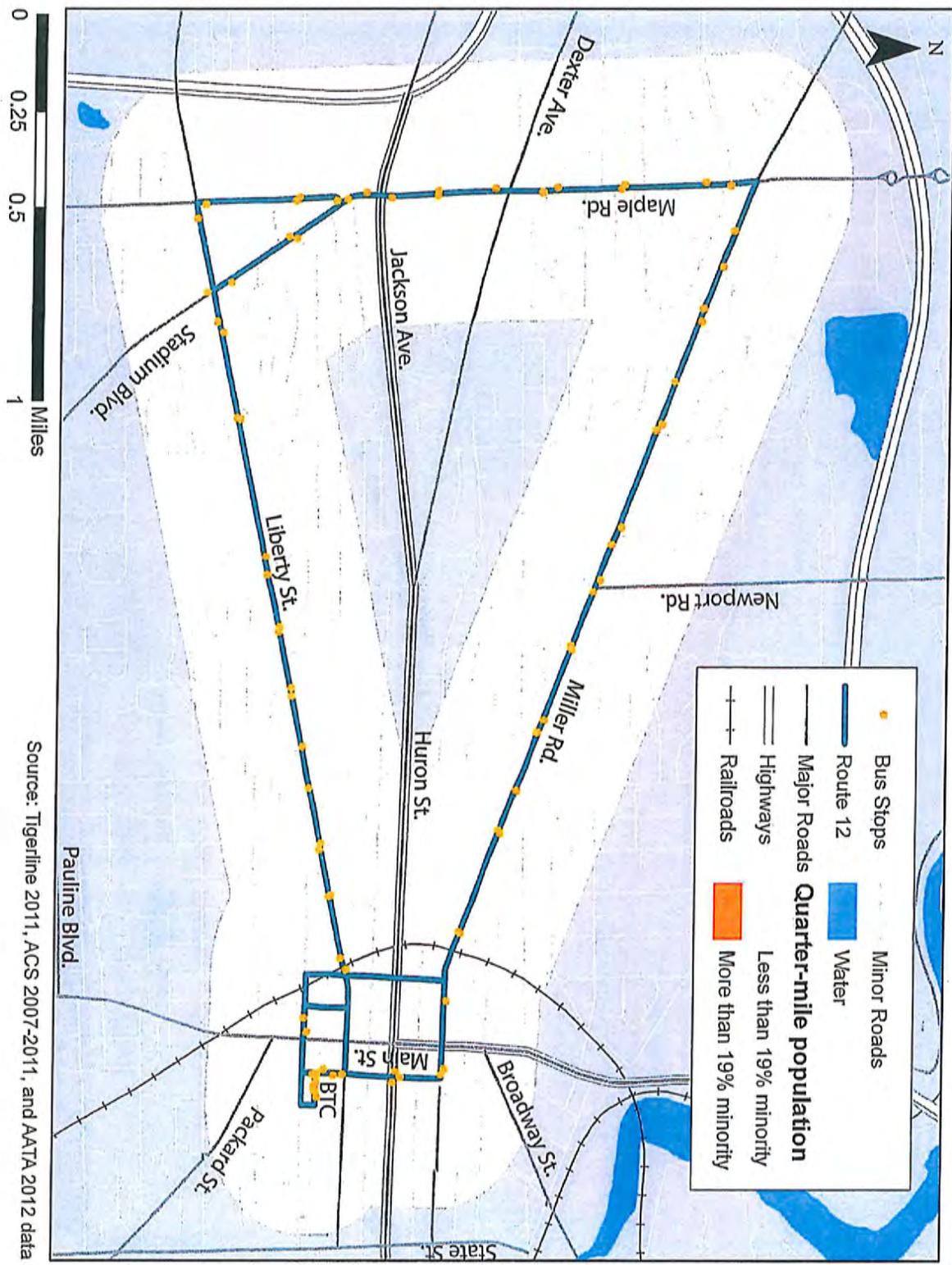
The AATA is using census data from the American Community Survey (ACS) to determine the number of households affected by the proposed change, and the percentage of minority and low-income households within the total affected. GIS software was used to create a $\frac{1}{4}$ and $\frac{1}{2}$ mile buffer around the route, and the households in the buffer was determined from the proportion of the census tract within the buffer. The data for the two buffers was not substantially different. Data for the $\frac{1}{2}$ mile buffer is shown below.

AATA has not yet conducted surveys to determine information on minority ridership by route. A survey will be conducted in October 2013 to include this information.

Assessing Impacts of Proposed Service Change

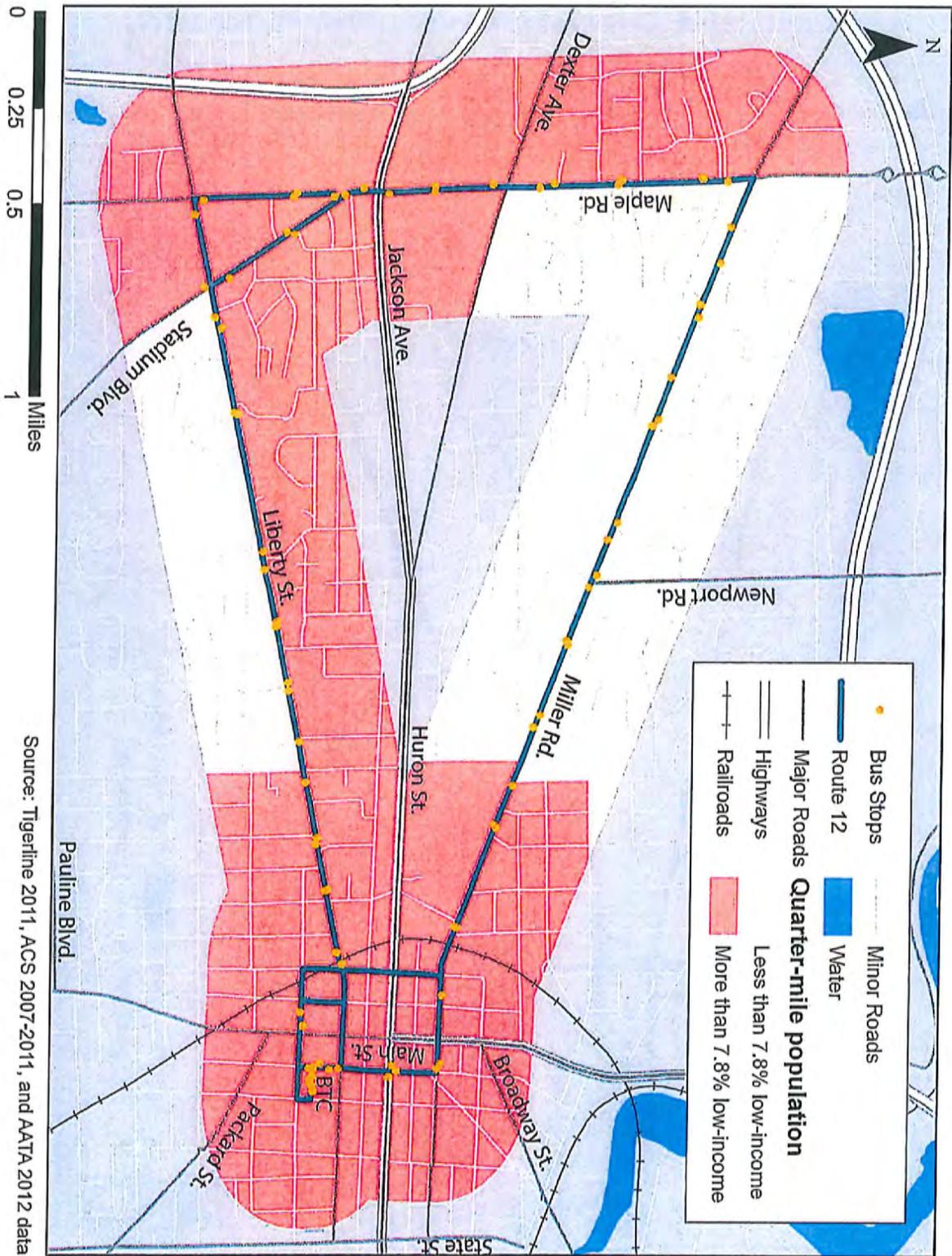
The #12 Liberty-Miller route serves no census tracts with higher than average minority population of the service area as a whole. This is 3% of the route. The route serves census tracts with higher than average low-income population on 38% of the route (2.1 of 5.5 total miles). The minority and low-income census tracts are shown on the map of the route on the following pages.

AATA Title VI: Route 12 Minority Accessibility



Source: Tigerline 2011, ACS 2007-2011, and AATA 2012 data

AATA Title VI: Route 12 Low-Income Accessibility



Public Input on Proposed Fixed-Route Service Changes for August, 2013

Date Rec.	Medium	Primary Change	Comment	Name	Response	Resp. Date
16-May	email	Rte. 12B	I am very pleased that you are planning the new schedule for the 12B route (adjustment by 15 minutes). This should have been done many years ago. Thanks for your service.	Joseph A. Placek	Thank you for writing about the proposed time shift of the #12B route. We know that the current schedule provides duplicative service on S. Maple. However, the current schedule also provides service for people on Miller and Liberty that fits many people's schedule. So we're trying to figure out which way to go.	17-May
	email	Rte. 12B	I oppose the proposed changes in departure times for the 12 B buses. This would add 15 minutes to my commute, all of which will be wasted waiting for my connecting bus at the Blake. And even on the best of days, waiting at the Blake is unpleasant. The current schedule should remain unchanged.	Gordon Berry	Thank you for writing about the proposed time shift of the #12B route. We know that this shift would move the time away from the prime work times. On the other hand, having the 12A and 12B at the same time provides duplicative service on Maple. Rd. Would you give me some additional information about your trip? Are you going to/from Liberty or Miller? What time of day?	17-May
	email	Rte. 12B	I use the 12B to get home from downtown sometimes. Seeing as I work until 5pm and have to walk about 8 minutes to get to the bus stop. changing the times to :03 and :33 will mean I'll have to leave work early to actually catch the bus on time. I'd be interested in understanding why this change is being contemplated.	Nancy Shore	Hi Nancy, I waited to respond until you weren't commuting anymore. Normally, I try to get a response out in a day or two. For this proposed change, we know that the proposed shift in time of the #12B route would move the time away from prime work times. On the other hand, the current schedule with the #12A and #12B at the same time provides duplicative service on S. Maple. There are also some safety concerns, as people waiting for one bus on S. Maple will dash across the street if they see the other bus coming. So we're trying to figure out which way to go with this. Since you live near the west end of the Liberty portion of the route, what do you think of the added flexibility of having one of the #12 buses every 15 minutes?	17-May
	email	Rte. 12B	I would love to see the 12B schedule shifted 15 minutes. That would be fantastic. It always seemed such a waste to me to have the 12A & 12B running concurrently like they do now.	Laura Fisher	Thank you for writing about the proposed time shift of the #12B route. We know that the current schedule provides duplicative service on S. Maple. However, the current schedule also provides service for people on Miller and Liberty that fits many people's schedule. So we're trying to figure out which way to go.	17-May
	email	Rte. 12B	I wanted to take a moment to voice my thoughts regarding the proposed time change to Route 12B. Moving the time from :18 and :48 to :03 and :33 does not align with the schedules of Downtown employees who leave work on the hour, or at the half hour, leaving no time to catch the :03 or the :33 bus, making them wait Downtown 30 minutes more for the next bus for a ride home from work. Many folks work until 5:00! This adds an entire extra hour of commute time to an already long nine hour work day. Please reconsider this proposed change and leave the 12B route as is. Changes like this will make Downtown workers have to consider other options than The Ride, which is a shame, because I love taking the bus.	Amanda Schott	Thank you for writing about the proposed time shift of the #12B route. I'm sorry it took so long to respond. We know that this shift would move the time away from the prime work times. On the other hand, having the 12A and 12B at the same time provides duplicative service on Maple. Rd. Would you give me some additional information about your trip? Are you going to/from Liberty or Miller? What time of day?	17-May

Public Input on Proposed Fixed-Route Service Changes for August, 2013

Date Rec.	Medium	Primary Change	Comment	Name	Response	Resp. Date
	email	Rte. 12B	<p>I am writing in regards to the proposed service changes. Specifically, I am concerned about the change to Route 12B. For people who take the bus from BTC home after work, the time change poses a problem. Most people end work on the hour or half hour (i.e. 4:30 or 5). If the bus departs BTC at :03 and :33 after the hour, it wouldn't give people any time to get to the bus center, so they'd have to wait a full 30 minutes after getting off work to get the next bus. In my case (as an example), I get off work at 4:30 PM. I work on UM's campus and I take the 2 to BTC, which typically gets me there around 4:45, so I can take the 4:48 bus and be home around 5. I realize that 15 minutes is not a huge time difference, but since the bus only runs every half hour, it makes a difference for people like me. I commute from W Liberty (stops near intersection w/ Eberwhite) to the Central Campus Transit Center. Typically, I take the 12A to Blake (from SW Liberty east of Eberwhite around 8:06 AM) and then the 4 to CCTC, arriving just before 8:30 AM. Going home, I take the 2 (around 4:36 PM) to BTC and then the 12B (4:48pm). It works out really well for me since I work 8:30 AM - 4:30 PM. I have knee problems, so it's very convenient to be able to ride the buses essentially door-to-door.</p>	Juli Mueller	<p>Thank you for writing about the proposed time shift of the #12B route. I'm sorry it took so long to respond. We know that this shift would move the time away from the prime work times. On the other hand, having the 12A and 12B at the same time provides duplicative service on Maple Rd. Would you give me some additional information about your trip? Are you going to/from Liberty or Miller? What time of day?</p>	17-May
15-May	email	Rte. 12B	<p>Just figured I would give my two cents here on route 12 and night ride. The changes to the 12 are perfect for my personal schedule, so no complaints from me there. While I dislike having to pay more for night ride (a cab home for me is only a dollar or so more than the new fare), I appreciate that you are still willing to provide discounts for go pass holders, so I would still likely use it. I fully understand why you need to raise prices. It is really only fair to you all. Also, the appointment aspect of night ride seems like a phenomenal plan and I hope that it clears up the issues you are having. Thank you for continuing to provide top notch service to the Ann Arbor and ypsi area.</p>	Jes	<p><i>Response with Night Ride responses</i></p>	17-May
16-May	email	Rte. 12B	<p>I like the proposed change in time for the 12B. This would make a bus running near my house every 15 minutes instead of every 30. It would be nice to only have to wait 15 minutes for the 12B if I missed the 12A and vice versa.</p>	Sue Geissler	<p>Thank you for writing and letting us know how the proposed change to the #12B route would affect you. We will be considering all the input before making a decision.</p>	24-May
22-May	Meeting - Alano	Rte. 12B	<p>Change in time of the #12B route would be cool Makes sense. He just tured 65</p>	Bob Weber	<p>Response in person at meeting</p>	22-May
22-May	Meeting - Alano	Rte. 12B	<p>I think the change in time of the #12B would work better. When I lived downtown, I used the 12B all the time. People have to leave meetings early to catch the bus; it won't be necessary after this change</p>	Steve Nichols	<p>Response in person at meeting</p>	22-May
22-May	Meeting - Alano	Rte. 12B	<p>More frequent service with the change will help at Alano. People now leave meetings early to catch the bus</p>	Betsy Rizzo	<p>Response in person at meeting</p>	22-May

Public Input on Proposed Fixed-Route Service Changes for August, 2013

Date Rec.	Medium	Primary Change	Comment	Name	Response	Resp. Date
22-May	Meeting - Alano	Rte. 12B	Would be happy if time changed for the #12B	Cathleen Burns	Response in person at meeting	22-May
10-May	email	Rte. 12B and B'wood bus stop	I support the 12B change. It makes a lot of sense to have 12A and 12B on different schedules. I'm disappointed that Briarwood is requiring a change to the bus stop, as it will make bus rides longer. I know that The Ride really can't do anything about this.	Sarah E. Christensen	Thank you for writing about the proposed time shift of the #12B route. We know that the current schedule provides duplicative service on S. Maple. However, the current schedule also provides service for people on Miller and Liberty that fits many people's schedule. So we're trying to figure out which way to go.	17-May
21-May	email	Rte. 12B	I ride the 12B when I travel during the day from the main UM hospital to my home on Mulholland. I connect at Blake Transit center. A change in this route would not affect me much since I can also take the 9 bus to my destination during my trip. In addition, I often stop at the library and having a bus leaving 15 minutes later that I can also take to my destination would be a positive for me.	Kim Ives	Thank you for writing with your comments. It is helpful to understand how people use the service.	31-May
22-May	email	Rte. 12B	I hope you will not change the 12B times to .03 and .33 each hour. I get off of work on the hour, and cannot walk to the transfer station in 3 minutes. Since the buses only run every half hour in the evening, I'd have a long wait for the next bus and would be more likely to drive into downtown. Please keep them closer to .18 and .48. Thanks!	Amelia Hefferlin	Thank you for letting us know how the proposed change in the #12B route would affect your trip. We are considering this change because it will provide a trip on either the #12A or #12B every 15 minutes. Many riders can use either one - particularly those in the middle of the route. Some of the people who are going to a destination along Liberty closer to downtown can use another route that also leaves at 18 and 48 after the hour like the #9 or #15. But we know this doesn't work for everyone, and we'll be considering the comments before making a decision.	31-May

Resolution 10/2014

Urban Core Five-Year Transit Improvement Program

WHEREAS, the Ann Arbor Area Transportation Authority (AAATA) has developed a 5-Year Transit Improvement Program (5YTIP) for the Urban Core of Washtenaw County, and

WHEREAS, the 5YTIP is the result of more than three years of a concerted effort to reach out and engage the public, community leaders, and elected officials on the future of transit in Washtenaw County, and

WHEREAS, the 5YTIP is designed to respond to identified needs and desire for increased transit service, and

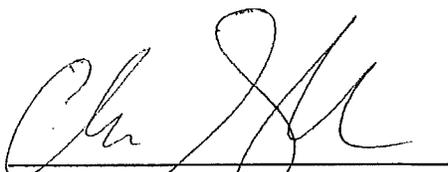
WHEREAS, the AAATA staff developed public information to describe the service plan including route maps and timetables for new and revised routes, and

WHEREAS, AAATA staff disseminated information to riders, the public, community leaders and organizations, and elected officials about the proposed service change, solicited comments and questions, provided multiple and diverse opportunities for people to understand the proposed changes and to their input, and

WHEREAS, AAATA staff considered the public input, analyzed specific suggestions, and revised the services in the plan to incorporate many of the suggestions, and

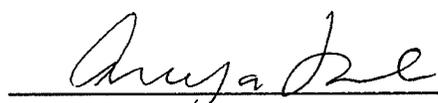
WHEREAS, AAATA staff analyzed the 5YTIP consistent with the draft Service Equity Analysis Policy and provided the analysis to the AAATA Board of Directors for review,

NOW, THEREFORE, BE IT RESOLVED that the Ann Arbor Area Transportation Authority Board of Directors hereby adopts the Five-Year Transit Improvement Program for implementation when local funding is secured.



Charles Griffith, Chair

January 16, 2014



Anya Dale, Secretary

January 16, 2014

Ann Arbor Area Transportation Authority

January 2014

Service Equity Analysis for Five-Year Transit Improvement Program

Introduction

Under Title VI and Environmental Justice regulations, the Ann Arbor Area Transportation Authority (AAATA) is required to assess the impact of proposed major service and fare changes on protected populations.

- Measure the impact of proposed major service changes and proposed fare changes - positive and negative - on minority and low-income populations,
- Compare the impact with that on non-minority and non-low-income populations,
- Determine if a disparate impact and/or disproportionate burden would result. If so, measures to avoid or mitigate the disparate impact and/or disproportionate burden will be considered and appropriate steps, will be taken in response.

Major Service Change Policy

The AAATA's adopted Public Input Policy for Service and Fare Changes was adopted by the Board of Directors in November, 2011. It defines a major service change:

- Change affecting more than 25% of riders of a route, or
- Change affecting more than 25% of the miles of a route, or
- Change on multiple routes affecting more than 10% of riders or route miles of overall fixed-route service.

The subject of this analysis is the service increase in the Five-Year Transit Improvement Program (5YTIP). The 5YTIP is a large-scale increase to the local fixed-route service, an increase of about 82,000 annual service hours. While some of the changes included in the 5YTIP do not pass the threshold for a major service change individually, the overall effect of a 42% increase in annual service hours clearly constitutes a major change. It makes sense to perform the equity analysis on the effect of the changes, as a whole. A complete description of the planned improvements, the public process used in the development of the 5YTIP, and the extensive public input process is included in the *Five-Year Transit Improvement Program for the Urban Core of Washtenaw County*, which is herein incorporated by reference.

Service Equity Analysis Policy

This policy which was adopted by the Board of Directors in January, 2014, defines how to determine when a disparate impact or disproportionate burden occurs in the context of a major service change. For service increases, it defines a process whereby the effect of changes on the service frequency, or span of service are compared before and after the service change to determine if there is an inequitable distribution of the benefits of the service increase.

The policy also defines types of routes, which will be important for the analysis, as follows:

- Minority route - a fixed route with a higher percentage of minority riders or serving an area with a higher percentage of minority residents than the average for the fixed-route service as a whole.
- Non-Minority route - a fixed route with an equal or lower percentage of minority riders or serving an area with a lower percentage of minority residents than the average for the fixed-route service as a whole.
- Low income route - a fixed route with a higher percentage of low-income riders or serving an area with a higher percentage of low-income residents than the average for the fixed-route service as a whole.
- Non-low income route - a fixed route with an equal or lower percentage of low-income riders or serving an area with a lower percentage of low-income residents than the average for the fixed-route service as a whole.

Analysis Framework

The service changes in the 5YTIP are in the following categories:

- Later weekday service
- More frequent weekday service
- Later Saturday service
- Saturday service frequency
- Later Sunday service
- Service extended to new areas not currently served

The dataset used in the analysis is 2008-2012 American Community Survey, 5-year data (tracts served by routes). The AAATA has survey data on minority and low-income ridership for existing routes. However, the 5YTIP includes reorganization of many routes, so ridership is not available for this analysis.

Equity Analysis

For current AAATA local fixed-route service, Figure 1 shows the percent of minority households and low-income households for each route. Consistent with the definition, routes with a higher than average percentage are designated as minority and/or low-income routes respectively. Figure 2 shows the same information for the Five-Year Transit Improvement Program.

AAATA Current Service - Local Fixed-Route Service

Figure 1

Rte. #	Route Name	% Minority Population	Minority Route?	% Low-Income Population	Low-Income Route ?
1	Pontiac	34.1%	yes	32.8%	yes
1U	Pontiac University (peak-hour service only)	30.3%	yes	40.7%	yes
2	Plymouth	31.8%	yes	36.0%	yes
3	Huron River	32.7%	yes	36.8%	yes
4	Washtenaw	29.9%	yes	32.2%	yes
5	Packard	29.2%	no	27.1%	no
6	Ellsworth	32.6%	yes	30.9%	yes
7	S. Main - East	30.7%	yes	24.6%	no
8	Pauline	20.3%	no	29.2%	no
9	Jackson	20.4%	no	27.3%	no
10	Ypsilanti Northeast	41.6%	yes	23.1%	no
11	Ypsilanti South	41.9%	yes	28.4%	no
12	Miller Liberty	20.8%	no	25.9%	no
13	Newport	20.6%	no	32.9%	yes
14	Geddes- E. Stadium	23.4%	no	32.4%	yes
15	Scio Church - W. Stadium	20.0%	no	25.2%	no
16	Ann Arbor - Saline Rd.	25.9%	no	30.6%	no
17	Amtrak - Depot	23.4%	no	45.5%	yes
18	Miller - University	23.7%	no	37.5%	yes
20	Ypsilanti Grove - Ecorse	45.3%	yes	23.8%	no
22	North - South Connector	37.9%	yes	18.0%	no
33	EMU Coll. of Bus. Shuttle	38.8%	yes	29.4%	no
36	Wolverine Tower Shuttle	26.7%	no	44.8%	yes
609	Jackson University	23.5%	no	35.0%	yes
	AVERAGE	29.2%		30.8%	

AAATA 5-Year Transit Improvement Program - Local Fixed-Route Service

Figure 2

Rte. #	Route Name	% Minority Population	Minority Route?	% Low-Income Population	Low-Income Route ?
1	Pontiac	34.2%	yes	32.8%	yes
1U	Pontiac University (peak-hour service only)	30.2%	yes	40.6%	yes
2	Plymouth	31.9%	yes	35.7%	yes
3	Huron River	32.6%	yes	34.2%	yes
4	Washtenaw	29.9%	yes	32.1%	yes
5	Packard	29.0%	no	27.2%	no
6	Ellsworth	32.7%	yes	29.3%	no
7	S. Main - East	30.4%	yes	25.0%	no
8	Pauline	20.3%	no	29.2%	no
B	Jackson-Zeeb	21.0%	no	28.3%	no
C	Dexter	20.5%	no	29.4%	no
I	Forest - MacArthur	42.5%	yes	22.8%	no
J	E. Michigan Ave.	37.0%	yes	27.9%	no
L	Grove Rd.	44.8%	yes	24.7%	no
M	Huron - Whittaker	43.8%	yes	25.6%	no
N	First - Congress	42.8%	yes	27.9%	no
A	Liberty - Scio Ridge	21.6%	no	30.0%	yes
D	Miller - Skyline	21.0%	no	31.9%	yes
G	N. Maple Connector	21.7%	no	11.2%	no
13	Newport	20.9%	no	33.6%	yes
14	Geddes- E. Stadium	23.4%	no	32.4%	yes
E	W. Stadium - Oak Valley	23.4%	no	24.1%	no
F	Scio Church	19.5%	no	28.2%	no
16	Ann Arbor - Saline Rd.	25.8%	no	30.5%	yes
17	Amtrak - Depot	24.1%	no	46.1%	yes
K	Ecorse - W. Willow	44.6%	yes	24.5%	no
O	Harris-Ford Crosstown	39.5%	yes	23.3%	no
22	North - South Connector	37.2%	yes	17.7%	no
H	EMU- LeForge	39.9%	yes	32.2%	yes
36	Wolverine Tower Shuttle	26.7%	no	44.7%	yes
609	Jackson University (peak-hour service only)	23.5%	no	35.0%	yes
P	Platt - Michigan Ave.	33.2%	yes	9.7%	no
Q	Saline - Maple Rd.		no		no
	AVERAGE	29.8%		29.6%	

Later Weekday Service

Figure 3 shows the weekday end time for each route in the 5YTIP with changed end time. Most routes – existing routes and reorganized routes have later end times in the 5YTIP. For the equity analysis, the question is whether after the change, routes with an earlier end time are inequitably distributed. In Figure 3, the 5 routes which end before 10:30 p.m. are highlighted. Of these routes, 2 of the 5 are minority routes and 2 of the 5 are low-income routes. This does not indicate disparate impact or disproportionate burden with regard to later weekday service.

AAATA 5-Year Transit Improvement Program - Local fixed-route service

Change in Weekday End Time

Figure 3

Rte. #	Route Name	Revised End Time (p.m.)	Minority Route?	Low-Income Route ?
1	Pontiac	11:15	yes	yes
2	Plymouth	11:46	yes	yes
3	Huron River	11:15	yes	yes
4	Washtenaw	12:30 a.m.	yes	yes
5	Packard	11:45	no	no
6	Ellsworth	11:45	yes	no
7	S. Main - East	11:22	yes	no
8	Pauline	11:45	no	no
B	Jackson-Zeeb	11:30	no	no
C	Dexter	11:30	no	no
I	Forest - MacArthur	11:00	yes	no
J	E. Michigan Ave.	11:30	yes	no
L	Grove Rd.	10:45	yes	no
M	Huron - Whittaker	11:15	yes	no
N	First - Congress	11:00	yes	no
A	Liberty - Scio Ridge	11:15	no	yes
D	Miller - Skyline	11:03	no	yes
G	N. Maple Connector	11:15	no	no
13	Newport	8:45	no	yes
14	Geddes- E. Stadium	7:45	no	yes
E	W. Stadium - Oak Valley	10:55	no	no
F	Scio Church	11:00	no	no
16	Ann Arbor - Saline Rd.	11:45	no	yes
17	Amtrak - Depot	11:59	no	yes
K	Ecorse - W. Willow	11:15	yes	no
O	Harris-Ford Crosstown	6:30	yes	no
22	North - South Connector	11:45	yes	no
H	EMU- LeForge	10:40	yes	yes
P	Platt - Michigan Ave.	7:30	yes	no
Q	Saline - Maple Rd.	7:00	no	no

More Frequent Weekday Service

Figure 4 shows the weekday frequencies for each route in the 5YTIP with changed frequency. Some routes have more frequent service as a result of the service changes. Two new routes have less frequent service than most other routes. For weekdays, there are three periods for analysis, peak hours, midday, and evening. For the equity analysis, the question is whether after the change, routes with more or less frequent service are inequitably distributed.

In Figure 4, the routes with higher or lower frequencies by time period are highlighted.

- **Weekday Peak.** There are 8 routes with more frequent service. Of these 4 are minority routes and 4 are non-minority routes. 5 of these routes are low-income routes and 3 are non-low-income routes. 2 new routes have less frequent service, one of which is a minority route and neither of which is a low-income route. Neither disparate impact nor disproportionate burden is found with regard to weekday peak service frequency.
- **Weekday Midday.** There are 7 routes with more frequent service. Of these 4 are minority routes and 3 are non-minority routes. 5 of these routes are low-income routes and 2 are non-low-income routes. Three routes have less frequent service, one of three of which is a minority route and one of three of which is a low-income route. Neither disparate impact nor disproportionate burden is found with regard to weekday midday service frequency.
- **Weekday Evening.** There are 4 routes with more frequent service. Of these 3 of 4 are minority routes and all 4 are low-income routes. Neither disparate impact nor disproportionate burden are found with regard to weekday evening service frequency.

AAATA 5-Year Transit Improvement Program - Local fixed-route service

Weekday Service Frequency

Figure 4

Rte. #	Route Name	Peak Frequency (min.)	Midday Frequency (min.)	Evening Frequency (min.)	Minority Route?	Low-Income Route ?
1	Pontiac	30	30	60	yes	yes
1U	Pontiac University (peak-hour service only)	35	na	na	yes	yes
2	Plymouth	7	12	30	yes	yes
3	Huron River	30	30	60	yes	yes
4	Washtenaw	7	15	30	yes	yes
5	Packard	7	15	60	no	no
6	Ellsworth	15	15	60	yes	no
7	S. Main - East	30	30	60	yes	no
8	Pauline	15	30	60	no	no
B	Jackson-Zeeb	30	30	60	no	no
C	Dexter	30	30	60	no	no
I	Forest - MacArthur	30	30	60	yes	no
J	E. Michigan Ave.	30	30	60	yes	no
L	Grove Rd.	30	30	60	yes	no
M	Huron - Whittaker	30	30	60	yes	no
N	First - Congress	30	30	60	yes	no
A	Liberty - Scio Ridge	30	30	60	no	yes
D	Miller - Skyline	12	15	60	no	yes
G	N. Maple Connector	30	30	60	no	no
13	Newport	30	60	60	no	yes
14	Geddes- E. Stadium	30	na	60	no	yes
E	W. Stadium - Oak Valley	30	30	60	no	no
F	Scio Church	30	30	60	no	no
16	Ann Arbor - Saline Rd.	30	30	60	no	yes
17	Amtrak - Depot	30	30	60	no	yes
K	Ecorse - W. Willow	30	30	60	yes	no
O	Harris-Ford Crosstown	30	30	na	yes	no
22	North - South Connector	30	30	60	yes	no
H	EMU- LeForge	20	20	20	yes	yes
36	Wolverine Tower Shuttle	9	12	38	no	yes
609	Jackson University (peak-hour service only)	30	na	na	no	yes
P	Platt - Michigan Ave.	60	60	60	yes	no
Q	Saline - Maple Rd.	60	60	60	no	no

Later Saturday Service

Figure 5 shows the Saturday end time for each route in the 5YTIP with changed end time. Most routes – existing routes and reorganized routes have later end times in the 5YTIP. There are several routes that do not have Saturday service before or after the change which are not included. For the equity analysis, the question is whether after the change, routes with an earlier end time are inequitably distributed. In Figure 5, the 4 routes which end before 9:00 p.m. are highlighted. Of these routes, 1 of the 4 is a minority route and 2 of the 4 are low-income routes. This does not indicate disparate impact or disproportionate burden with regard to later Saturday service.

AAATA 5-Year Transit Improvement Program - Local fixed-route service

Change in Saturday End Time

Figure 5

Rte. #	Route Name	End Time (p.m.)	Minority Route?	Low-Income Route ?
1	Pontiac	11:15	yes	yes
2	Plymouth	11:13	yes	yes
4	Washtenaw	11:30	yes	yes
5	Packard	10:30	no	no
6	Ellsworth	10:45	yes	no
7	S. Main - East	9:45	yes	no
8	Pauline	10:45	no	no
B	Jackson-Zeeb	11:30	no	no
C	Dexter	10:30	no	no
I	Forest - MacArthur	10:00	yes	no
J	E. Michigan Ave.	10:30	yes	no
L	Grove Rd.	9:45	yes	no
M	Huron - Whittaker	10:15	yes	no
N	First - Congress	10:00	yes	no
A	Liberty - Scio Ridge	10:15	no	yes
D	Miller - Skyline	10:03	no	yes
G	N. Maple Connector	10:15	no	no
13	Newport	6:45	no	yes
14	Geddes- E. Stadium	5:40	no	yes
E	W. Stadium - Oak Valley	10:25	no	no
F	Scio Church	9:00	no	no
16	Ann Arbor - Saline Rd.	9:45	no	yes
17	Amtrak - Depot	9:00	no	yes
K	Ecorse - W. Willow	10:15	yes	no
22	North - South Connector	9:25	yes	no
P	Platt - Michigan Ave.	7:30	yes	no
Q	Saline - Maple Rd.	7:00	no	no

More Frequent Saturday Service

Figure 6 shows the weekday frequencies for each route in the 5YTIP with Saturday service. There are several routes that do not have Saturday service before or after the change which are not included. Two routes have more frequent service as a result of the service changes. For the equity analysis, the question is whether after the change, routes with more frequent service are inequitably distributed. Both routes are minority routes and low-income routes, so no disparate impact or disproportionate burden is found.

AAATA 5-Year Transit Improvement Prog. - Local fixed-route service

Change in Saturday Service

Figure 6

Frequency

Rte. #	Route Name	Frequency (min.)	Minority Route?	Low-Income Route ?
1	Pontiac	60	yes	yes
2	Plymouth	30	yes	yes
4	Washtenaw	30	yes	yes
5	Packard	60	no	no
6	Ellsworth	60	yes	no
7	S. Main - East	60	yes	no
8	Pauline	60	no	no
B	Jackson-Zeeb	60	no	no
C	Dexter	60	no	no
I	Forest - MacArthur	60	yes	no
J	E. Michigan Ave.	60	yes	no
L	Grove Rd.	60	yes	no
M	Huron - Whittaker	60	yes	no
N	First - Congress	60	yes	no
A	Liberty - Scio Ridge	60	no	yes
D	Miller - Skyline	60	no	yes
G	N. Maple Connector	60	no	no
13	Newport	60	no	yes
14	Geddes- E. Stadium	60	no	yes
E	W. Stadium - Oak Valley	60	no	no
F	Scio Church	60	no	no
16	Ann Arbor - Saline Rd.	60	no	yes
17	Amtrak - Depot	60	no	yes
K	Ecorse - W. Willow	60	yes	no
22	North - South Connector	60	yes	no
P	Platt - Michigan Ave.	60	yes	no
Q	Saline - Maple Rd.	60	no	no

Later Sunday Service

Figure 7 shows the Sunday end time for each route in the 5YTIP. Many routes – existing routes and reorganized routes - have later end times in the 5YTIP. There are several routes that do not have Sunday service before or after the change, which are not included. For the equity analysis, the question is whether after the change, routes with an earlier end time are inequitably distributed. In Figure 7, all routes have a new end time between 6:45 and 7:55 p.m. Highlighted is one new route (H) that does not have Sunday service in the 5YTIP which serves an area a portion of which currently has Sunday service on route #15. Route H is neither a minority or low-income route. The current route #15 is neither a minority or low-income route. This does not indicate disparate impact or disproportionate burden with regard to later weekday service.

AAATA 5-Year Transit Improvement Program - Local fixed-route svc.

Change in Sunday End Time

Figure 7

Rte. #	Route Name	End Time (p.m.)	Minority Route?	Low-Income Route ?
1	Pontiac	7:45	yes	yes
2	Plymouth	7:13	yes	yes
4	Washtenaw	7:30	yes	yes
5	Packard	7:15	no	no
6	Ellsworth	7:55	yes	no
7	S. Main - East	7:39	yes	no
8	Pauline	7:45	no	no
B	Jackson-Zeeb	7:30	no	no
C	Dexter	7:30	no	no
I	Forest - MacArthur	7:00	yes	no
J	E. Michigan Ave.	7:30	yes	no
L	Grove Rd.	7:45	yes	no
M	Huron - Whittaker	7:15	yes	no
N	First - Congress	7:00	yes	no
A	Liberty - Scio Ridge	7:15	no	yes
D	Miller - Skyline	6:45	no	yes
G	N. Maple Connector	7:15	no	no
E	W. Stadium - Oak Valley	7:25	no	no
F	Scio Church		no	no
16	Ann Arbor - Saline Rd.	7:45	no	yes
17	Amtrak - Depot	7:00	no	yes
K	Ecorse - W. Willow	7:15	yes	no

Service extended to new areas not currently served

Several routes in the Five Year Transit Improvement Program extend service into areas of the County which are currently not served by AAATA. For each of these routes, a portion of the route is in the existing service area and a portion is in an area not currently served. For the equity analysis, the question is whether the percentage of minority and low-income households of the new area is equal to or greater than the percentage of minority and low-income households of the total unserved area of the County. As shown in Figure 8, the new service area has 34.9% minority households compared to 16.2% minority households in the total current unserved area. The new service area has 14.2% low-income households compared to 6.8% low-income households in the total current unserved area. This does not indicated disparate impact or disproportionate burden with regard to the new area into which service will be extended.

AAATA 5-Year Transit Improvement Program - Local fixed-route svc. Service to New Areas Not Currently Served

Figure 8

Minority	Washtenaw County	Current Service	No Current Service	5YTIP Service Additions
Total households	346,010	192,237	153,773	18,041
Minority households	90,472	65,586	24,886	6,300
Percent Served	26.1%	34.1%	16.2%	34.9%

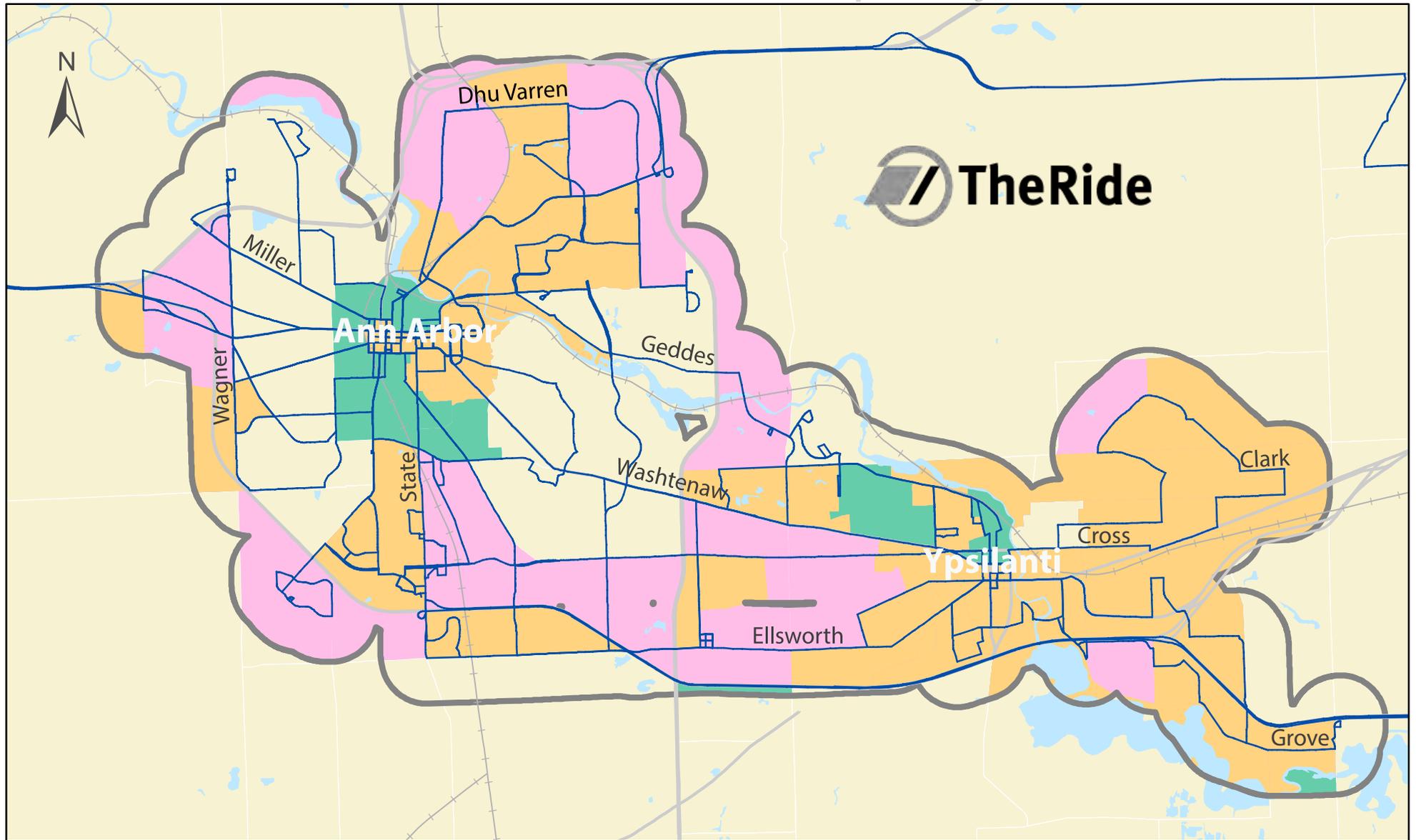
Low-Income	Washtenaw County	Current Service	No Current Service	5YTIP Service Additions
Total households	326,040	175,451	150,589	17,937
Low-Income Households	47,743	37,525	10,218	2,552
Percent Served	14.6%	21.4%	6.8%	14.2%

In the American Community Survey data, the total number of households is different for the minority database and low-income database

Conclusion

No instance of disparate impact or disproportionate burden was found in this analysis. During the development of the 5YTIP, care was taken to analyze the impacts of the revised service. In addition, the extensive public involvement during the development and review of the draft plan acted as another check on the inclusion of inequitable distribution of the benefits. So this outcome is not surprising, but rather a final check on the plan.

Current Service Equity 2013



0 1 2 4 Miles

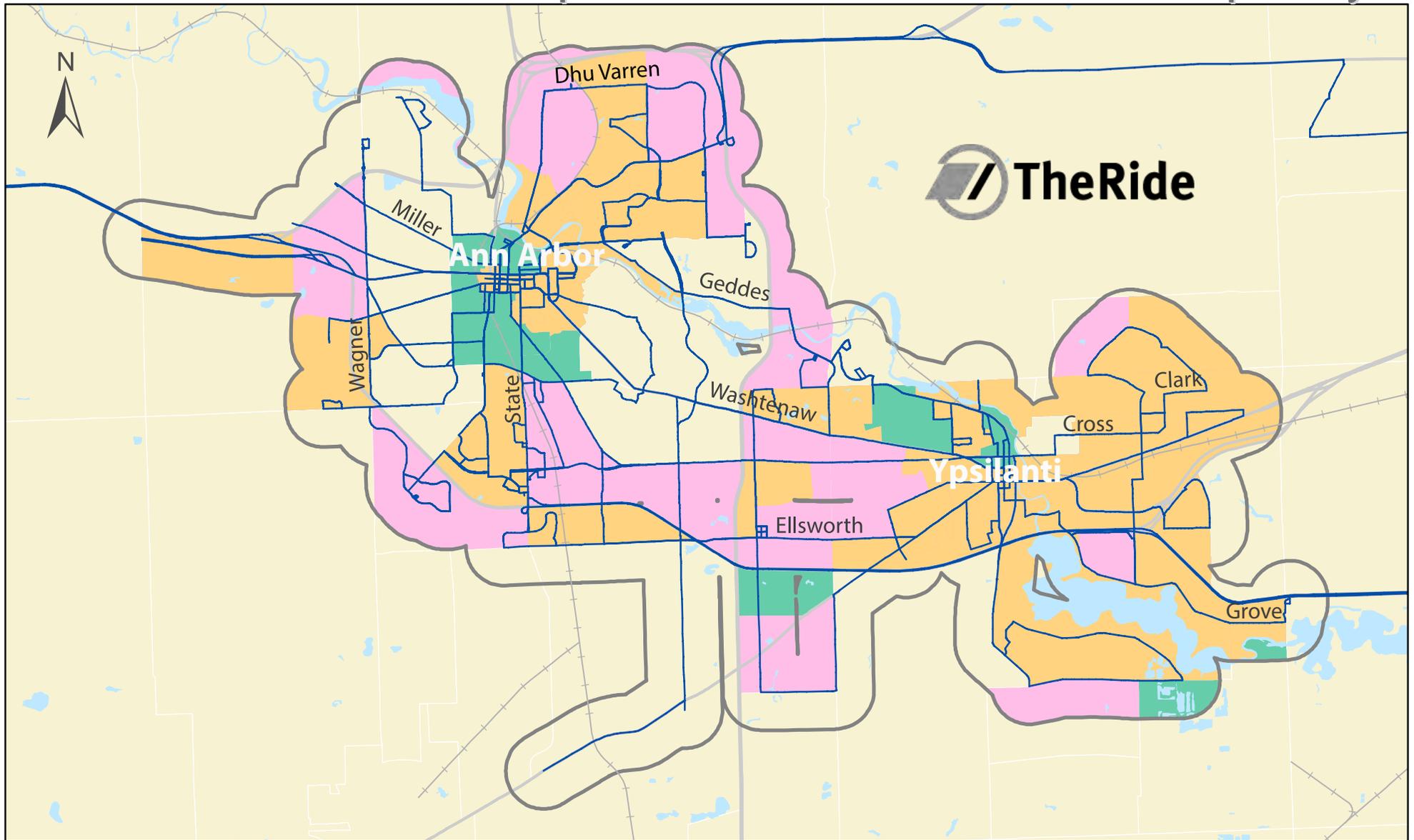
Sources: Census 2010 geography and American Community Survey 2008-2012 data

- Bus Routes
- Railroad
- Highway

- ▭ Service Area
- ▭ Census Tracts 2010
- ▭ Water

- ▭ Minority households higher than average (>26.1%)
- ▭ Low income households higher than average (>14.6%)
- ▭ Both minority and low income households higher than average

Urban Core Expansion Service Equity

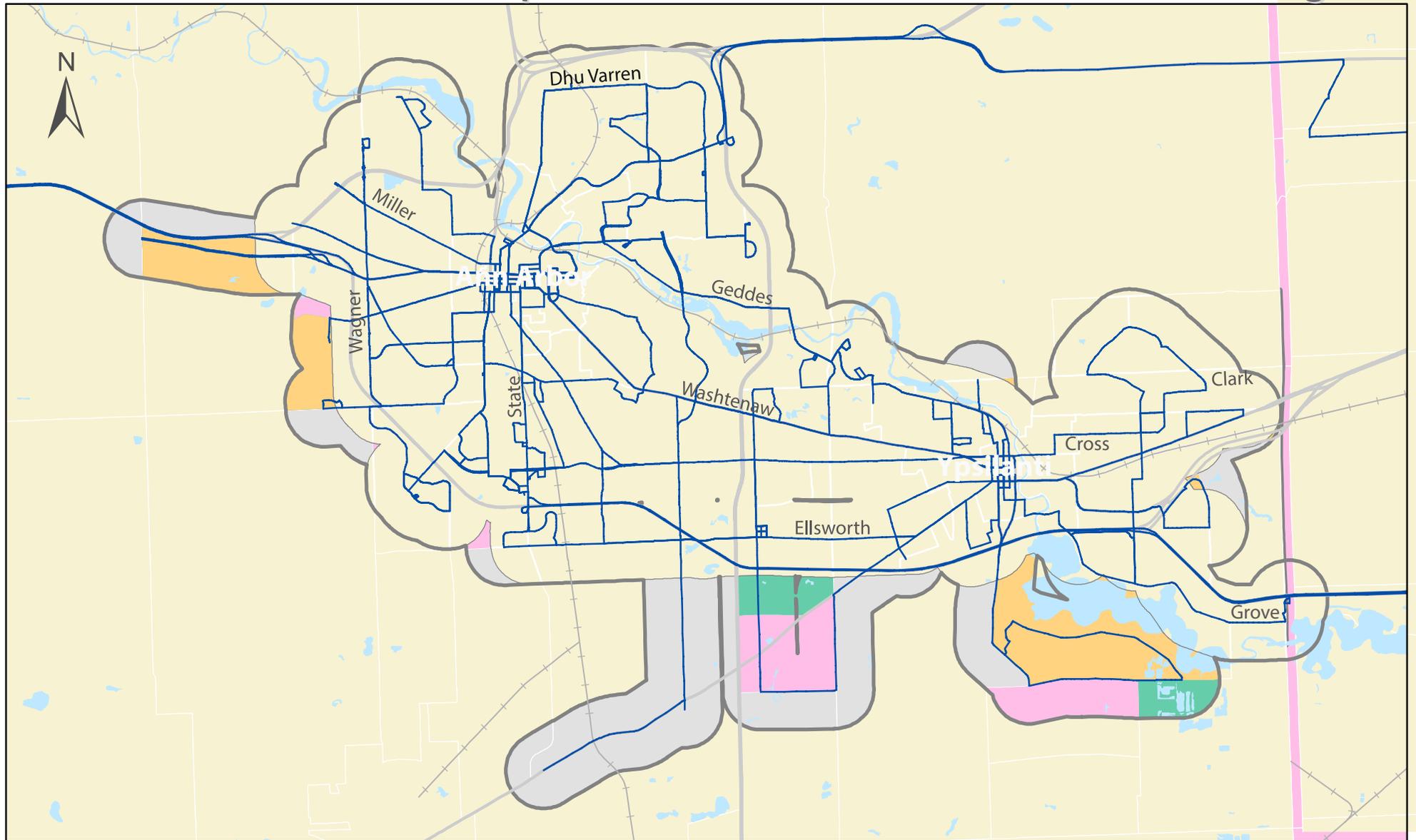


0 1 2 4 Miles

Sources: Census 2010 geography and American Community Survey 2008-2012 data

- Bus Routes
- Railroad
- Highway
- Service Area
- Census Tracts 2010
- Water
- Minority households higher than average (>26.1%)
- Low income households higher than average (>14.6%)
- Both minority and low income households higher than average

Urban Core Expansion Service Changes



0 1 2 4 Miles

Sources: Census 2010 geography and American Community Survey 2008-2012 data

- Bus Routes
- +— Railroad
- Highway
- Service Area
- Census Tracts 2010
- Water
- Minority households higher than average (>26.1%)
- Low income households higher than average (>14.6%)
- Both minority and low income households higher than average
- Neither minority nor low income households higher than average

Resolution 25/2013

EXPRESS RIDE FARE CHANGES FOR AUGUST, 2013

WHEREAS, for more than a year staff has worked to secure additional funding to support the continuation of ExpressRide service from Chelsea and Canton, and

WHEREAS, the funding plan that has been developed includes an increase in fares for riders and a contribution from the local communities, and

WHEREAS, AATA staff has worked closely with riders to develop and advocate for the funding plan throughout the process, and

WHEREAS, staff has discussed the progress of the funding plan with the Board throughout the process, and

WHEREAS, nearly all riders have half of their fare paid by their employer (University of Michigan or DDA/downtown employers), and these supporters have agreed to the increased cost, and

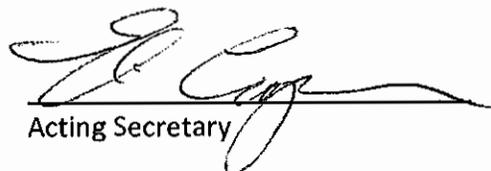
WHEREAS, AATA staff developed a Title VI, Service and Fare Equity Analysis for review by the Board of Directors before making a decision,

NOW THEREFORE, BE IT RESOLVED that the Ann Arbor Transportation Authority Board of Directors hereby adopts the following fare change effective August, 2013:

- Increase the fare for ExpressRide
 - \$125 for 30-day pass
 - \$62.50 for 10-ride ticket
 - \$6.25 for single one-way trip


Anya Dale, Acting Chair

June 20, 2013


Acting Secretary

June 20, 2013

Ann Arbor Transportation Authority (AATA)
Service Equity Analysis
***Proposed August, 2013 Fare Change to Weekday Service on the #701
 Chelsea Express and #702 Canton Express***

Description of Proposed Service/Fare Change

ExpressRide service operated by the AATA consists of two routes, the #701 Chelsea Express and #702 Canton Express which provide weekday peak period service between two outlying communities and downtown Ann Arbor / University of Michigan central and medical campuses. Two trips are operated from Chelsea and Canton into Ann Arbor in the morning peak period and two return trips are operated from Ann Arbor in the afternoon peak period. A single bus stop is served in Chelsea, which is about 15 miles west of Ann Arbor. Two bus stops are served in Canton, which is about 18 miles east of Ann Arbor. There are no intermediate stops. Service is operated using the same transit buses used by AATA for local fixed-route service.

Local funding has been an issue for this service for some time. The Chelsea route started in May, 2008 and the Canton route in August, 2009. Grant funding was used to pay for the first two years of service on each route. Since the end of this demonstration grant, local funding has come entirely from property tax revenues from the City of Ann Arbor, with no funding from the originating communities of Chelsea and Canton. AATA has worked to increase the number of riders which has increased fare revenue, and applied other revenues where possible. Part of the financial plan to fund the service is a 25% fare increase.

The current fare structure has been in place since the beginning of this service. The proposed fare increase to reduce the local payment required to support this service as shown below:

	Current	Proposed
One-way cash fare	\$ 5.00	\$ 6.25
Ten-ride ticket	\$40.00	\$ 62.50
30-day pass	\$99.00	\$125.00

Service and Fare Change Policy

The AATA's current Public Input Policy for Service and Fare Changes was adopted by the AATA Board of Directors in November, 2011 following input from the public. This was a revision of the existing policy first adopted in 2004 which already met the requirements of Circular 4702.1B. Under the previous and current policy, a proposed service change on a route meets the criteria of a major service change if it affects more than 25% of the riders or more than 25% of the miles of the route.

The purposes of the 2011 revision were to:

- reflect the use of electronic media for notifying people of proposed changes and for receiving input.
- reflect current practice by including input procedures for proposed changes that do not meet the threshold of a major change. Because the former policy only described the

solicitation and use of public input for “major” changes, an incorrect conclusion could have been drawn that AATA was not interested in input for smaller scale changes.

It has long been the practice at AATA to actively solicit input from riders and seriously consider their comments before making major changes. Talking to riders before the changes are decided upon provides an important opportunity for staff to explain the reasons why changes are proposed and learn how the proposed changes will affect riders. In most cases, the changes that were adopted were revised based on the input received.

The 2011 policy revision was discussed by the AATA Board in public session for 3 months before adoption. The Board agenda and supporting materials were published in advance on the AATA website, and emailed or mailed to anyone who requested it. The mailing list includes 30 organizations and individuals. Board meetings are televised live and rerun at scheduled times on local public access television, reported in print and electronic media, and published on the AATA website

The need for revision was first included in the August, 2011 meeting of the Board’s Performance Management and External Relations (PMER) committee and August Board of Directors meeting. The Board directed staff to prepare a revised policy. The proposed revised policy was included in the October PMER and Board meeting. At the October meeting, the PMER committee recommended adoption and the proposed revised policy was discussed at the October Board meeting. The revised policy was adopted at the November, 2011 Board of Directors meeting, a month later. A copy of the policy and board resolution is attached.

Impact of Proposed Service Change on Minority and Low-Income Community – Adverse Effects

For all riders, the adverse effect is a 25% fare increase. More than 905 of riders for this service use a 30-day pass, the price for which is proposed to increase from \$99 to \$125, a 26% increase. The adverse effect is mitigated for about 95% of riders who have half of their fare paid by their employer. For these riders, the effect is an increase in monthly cost of \$13, from \$49.50 to \$62.50.

Disparate Impact Policy

The AATA is in the process of developing a disparate impact policy and does not yet have an adopted policy. During this interim period, the AATA will assess the impacts, compare them for minority and non-minority populations and assume disparate impact unless it is clear that it does not exist.

Disproportionate Burden Policy

The AATA is in the process of developing a disproportionate burden policy and does not yet have an adopted policy. During this interim period, the AATA will assess the impacts, compare them for low-income and non-low income populations and assume disproportionate burden unless it is clear that it does not exist.

Analysis Framework

The primary dataset is information on the composition of the ExpressRide riders from rider surveys. Since the proposed change is to raise fares on the Chelsea route, but eliminate service on the Canton route, the first analysis is to compare the impact on the two services.

Rider information for all riders is shown in table 1.

Total Express Ride Riders	Minority Riders	Percent Minority	Low-income Population	Percent Low-Income
37,161	6,912	18.6%	2,527	6.8%

The analysis to be performed is to compare the impact on Express Ride with AATA's local fixed-route service. This is necessary as the proposed changes produce an adverse impact on all the ExpressRide riders, but not on local fixed-route riders. Local fixed-route service carries the great majority of AATA fixed-route riders:

FY 2012 riders - Local Fixed Route: 6,324,551 ExpressRide: 37,161

Rider survey data will not be available for local fixed-route until a complete survey is done in October, 2013. As a result, the primary data set used will be census data from the American Community Survey (ACS). It is awkward to compare the population of the local fixed-route service area to the rider composition of ExpressRide. However, it is necessary, as the service area of the ExpressRide service is not comparable.

Total Population of Service Area	Minority Population	Percent Minority	Low-income Population	Percent Low-Income
192,797	36,610	19.0%	15,125	7.8%

Assessing Impacts of Proposed Service Change

In comparing ExpressRide riders to local fixed-route riders using table 1 and table 2, as noted above, this change produces adverse impact on ExpressRide riders, but not local fixed-route riders. The percentage of minority riders on ExpressRide is slightly lower than the population of the local fixed-route service area, so we assume that no disparate impact exists. The percentage of low-income ExpressRide riders is lower than the low-income population of the local fixed-route service area. As a result, AATA has determined that disproportionate burden does not exist for this comparison.

Examining Alternatives and Mitigating Adverse Impact

This service is used primarily by a relatively small number of total riders, who use the service regularly to commute. AATA worked with these riders during the past year both in the development of the financial plan which included the fare increase, and as they advocated for their local jurisdiction to provide funding to continue the service.

Regarding the fare increase, part of the financial plan included mitigating the adverse impact of the fare increase. More than 90% of current riders use a monthly pass and have half of their fare paid by their employer, either the University of Michigan, or, for downtown employees, the DDA as part of the getDowntown Program. In developing the financial plan, AATA negotiated with the UM and DDA to continue to pay half of the increased fare. As a result, the fare increase for the great majority of riders will be \$13.00 per month, rather than the full \$26.00.

Finally, the AATA also operates a regional vanpool program. These riders are primarily regular commuters who are already commuting at the same time and many even know each other from the bus. AATA has made riders aware of the vanpool alternative, and will work with a group that wishes to switch modes.

June, 2013

Appendix

I. TheRide Five-Year Transit Improvement Plan

The full 5YTIP for AAATA is attached as Appendix part I on page 171.

II. AirRide Survey Detailed Results

The full results and forms for the AirRide survey appendices are attached as Appendix part II on page 215.

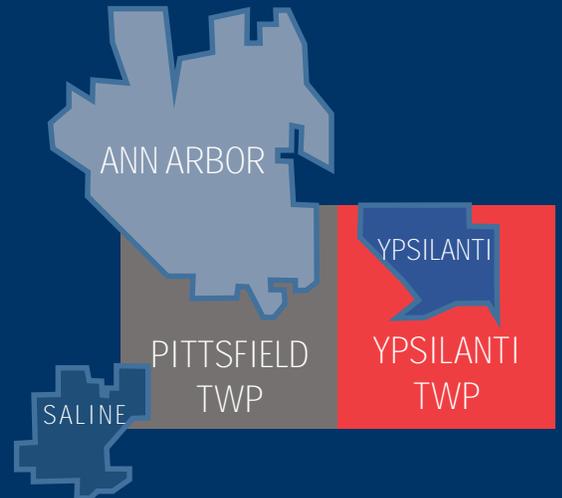
III. Public Comment

In response to AAATA's 2014 Title VI Program Update, James Mogensen submitted comments and maps, attached as Appendix part III on page 286.



TheRide Your Way Five-Year Transit Improvement Plan

for the Urban Core of
Washtenaw County



Prepared by: The Ann Arbor Area Transportation Authority
Date: 9/9/2014

THE ANN ARBOR AREA TRANSPORTATION AUTHORITY

Board of Directors



L to R: Charles Griffith, Chair; Anya Dale, Secretary; Eli Cooper, Treasurer; Susan Baskett, Jack Bernard, Sue Gott, Roger Kerson, Eric Mahler, Gillian Ream Gainsley, and Larry Krieg

Urban Core Working Group

- City of Ann Arbor:** John Hieftje, Mayor
Council Members: Sabra Briere - Ward 1
Sally Hart Petersen - Ward 2
Stephen Kunselman - Ward 3
Chuck Warpehoski - Ward 5
- City of Ypsilanti:** Paul Schreiber, Mayor
Peter Murdock, Councilman, Ralph Lange, City Manager
- City of Saline:** Brian Marl, Mayor
Linda TerHaar, Mayor Pro Tem
- Ypsilanti Township:** Brenda Stumbo, Supervisor
Karen Lovejoy Roe, Clerk
- Superior Township:** David Phillips, Clerk
- Pittsfield Township:** Mandy Grewal, Supervisor
Alan Israel, Clerk
Gerald Krone, Trustee
- Village of Dexter:** Shawn Keough, Village President
Jim Carson, Trustee
- Scio Township:** Spaulding Clark, Supervisor
- Ann Arbor Township:** Michael Moran, Supervisor
- Washtenaw County:** Yousef Rabhi, Chair, Board of Commissioners

Special thanks to...

Daniel Cherrin and his partner, Brian Pappas, who donated their facilitation services to the Urban Core Work Group. Daniel comes to us from North Coast Strategies. Brian Pappas is a professor at MSU College of Law. Both serve (Brian chairs) on the Governmental Dispute Resolution section of the Michigan Bar Association.

TheRide Team

- Michael Ford**, Chief Executive Officer
Karen Wheeler, Executive Assistant to the CEO
Michael Benham, Strategic Planner
Chris White, Manager of Service Development
William DeGroot, Financial Analyst / Planner
Phil Webb, Controller
Sarah Pressprich, Business Analyst

- Mary Stasiak**, Manager of Community Relations
Deborah Freer, Community Outreach Coordinator
Ken Anderson, Service Development & Comm. Coord.
Julia Roberts, Grants Planning Coordinator
Don Kline, Integrated Marketing Coordinator
Becky Ashcraft, Graphic Designer

TABLE OF CONTENTS

THE ANN ARBOR AREA TRANSPORTATION AUTHORITY	2
LETTER FROM THE CEO AND BOARD CHAIR.....	4
EXECUTIVE SUMMARY	5
BACKGROUND AND HISTORY.....	6
TRANSIT SERVICES TODAY: HOW ARE WE DOING	10
WHY SHOULD TRANSIT SERVICES BE IMPROVED.....	13
PROPOSED SERVICE IMPROVEMENTS	17
SERVICE OVERVIEW BY COMMUNITY.....	22
IMPLEMENTATION SCHEDULE	24
GOVERNANCE	26
FUNDING	27
WHO BENEFITS FROM IMPROVED URBAN CORE TRANSIT IMPROVEMENTS.....	29
APPENDIX 1.....	32
APPENDIX 2.....	33-61

LETTER FROM THE CEO AND BOARD CHAIR

Though we measure ridership, service hours and fare box revenues, management and staff at the Ann Arbor Area Transportation Authority (TheRide) always remember that service to people is at the core of our mission. It is the people of Washtenaw County's urban core communities that have consistently requested more night and weekend service, more direct bus routes and better bus stops. Seniors and people with disabilities have been thankful for the fixed-route and A-Ride service available to them, but request more service to be able to reach lifeline destinations like doctors' offices, pharmacies and grocery stores, as well as destinations that allow them to remain active members of the community no matter their circumstances and no matter where in the urban core these destinations are. We have heard numerous stories of people who have not been able to take jobs or promotions because the current bus service does not allow them the flexibility needed for the position. The Five-Year Transit Improvement Plan, consisting of the service program, governance changes and a funding measure - is detailed in this document, and is dedicated to our riders, future riders, and those in the community who have put forth the time and effort to send suggestions, comments and requests to better serve the Greater Ann Arbor area.

The commitment of elected officials in the cities of Ann Arbor, Ypsilanti, Saline and townships of Ypsilanti, Pittsfield, Scio, Ann Arbor and Superior and the Village of Dexter has been remarkable. They have worked hard to find regional solutions to the growing transit needs in the Greater Ann Arbor Area. They have recognized that issues such as economic activity and air pollution know no jurisdictional boundaries. They have considered the transit needs of their residents and proposed transit improvements at a series of Urban Core Work Group meetings. As a result of this unprecedented multijurisdictional cooperation, the Ann Arbor Area Transportation Authority has the great honor to put forth this Five-Year Transit Improvement Plan that will meet the needs of transit- dependent and choice riders in the Ann Arbor/Ypsilanti area and ultimately benefit all citizens and visitors to our unique communities.

In the process of creating this plan, TheRide has made every attempt to be responsive, inclusive, transparent and effective. We trust you will find the services and strategies outlined in this plan to be an invaluable tool to the people of Washtenaw County's urban core communities, as well as the visitors, businesses, and communities at large.

Sincere thanks,



Michael Ford, CEO
Ann Arbor Area Transportation Authority



Charles Griffith, Chairman of the Board
Ann Arbor Area Transportation Authority

EXECUTIVE SUMMARY

This document lays out TheRide Your Way: Five Year Transit Improvement Plan for the urban core communities in Washtenaw County. This plan for service, governance, and funding is the result of numerous drafts, public outreach, and citizen engagement. It reflects the comments and questions from public discussions over the years, including those from the thirteen most recent public input sessions in October and November of 2013. The service program details those service improvements that TheRide offers to the citizens of the greater Ann Arbor Area, that will be implemented if a proposed funding package for the plan is approved by the voters in the TheRide’s member jurisdictions of Ann Arbor and Ypsilanti and the township of Ypsilanti. This document details the service program, how TheRide’s governance has become more regional, and what funding is required to make service improvements a reality.

TheRide Your Way involves:

Service

The service plan section details numerous improvements to fixed-route bus services and dial-a-ride (or demand response) services for seniors and people with a disability. The proposed services consist of improvements to existing routes (e.g. serving more places, more often with more hours on both weekdays and weekends) as well as redesigned, more direct routes to improve travel times and convenience, and completely new routes serving areas that currently do not have service. Overall, the program proposes to increase fixed-route services provided by TheRide by 44% over the next five years.

Governance

The governance section describes the recent changes to the Authority’s composition.

Funding

The funding section describes the costs of the services proposed and how those costs might be covered by a combination of federal and state grants, passenger fares, a local property tax millage levied by the authority and Purchase of Service Agreements (POSA) with non-authority member communities. The overall annual additional local cost of these services is approximately \$5.4M, which are proposed to be funded by a combination of a new authority millage of 0.7 mils (yielding approximately \$4.3 million annually) and Purchase of Service Agreements with non-authority members.

Additional sections describes the history of the planning effort, the need for these transit improvements, how transit supports the goals of the greater community, and reviews the reasons why the plan has strong support in the community.



BACKGROUND AND HISTORY

30-Year Transit Master Plan

The idea to improve transit services throughout Washtenaw County has been around for many years. As a response to public demand and the need to connect destinations throughout the urbanized area and Washtenaw County, in its 1999 “Destination 2010 – AATA Strategic Plan,” TheRide recognized the need to “expand its services outward as the urbanized area continues to grow.” In 2004, Washtenaw County published “A Comprehensive Plan for Washtenaw County” that included objectives for expansion of transit service in the county and identification of a need for a “dedicated source of funds for county-wide transit services.” In December 2007, the Washtenaw Area Transportation Study adopted the “Transit Plan for Washtenaw County” including a countywide service program. In 2009, the City of Ann Arbor updated their transportation plan to include a number of transit improvements that ultimately influenced many of the proposed service improvements.

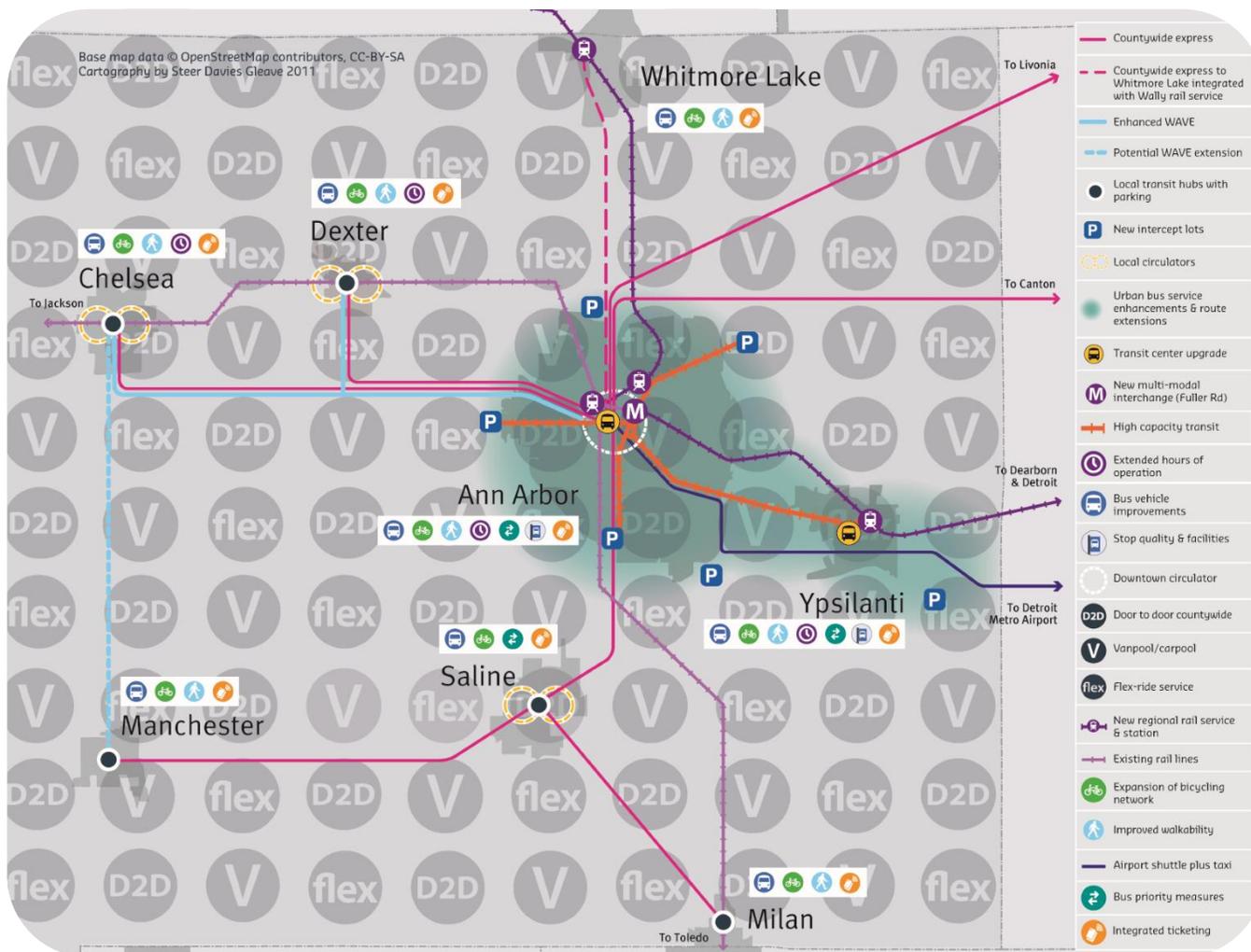
TheRide developed, and gained a broad consensus on, a 30-Year Transit Master Plan for Washtenaw County in 2010 and 2011. TheRide Board had realized the need for a master plan after identifying the gaps in current service coverage, both geographically and temporally. In particular, SEMCOG continues to forecast dispersed population growth in the county while at the same time employment growth is and will be increasingly concentrated in cities and villages. Due to social and environmental implications of land use policy, as well as challenges such as poverty, traffic congestion, an aging population, ensuring youth mobility and retention, and economic development, the county needed a strong public transit vision for the next 30 years.

TheRide initiated the master plan early in 2010 using a multi-phase planning process supported by an extensive program of public outreach and citizen engagement including over 100 meetings throughout the county. The *30-Year Transit Master Plan for Washtenaw County*, published in April 2011, defines the countywide transit vision for the next 30 years. The plan provided an overview of a robust, feasible, and integrated package of transit investments and services, designed to make transit a realistic and attractive transportation choice for Washtenaw County residents, businesses and visitors. Reports and analysis that supported the conclusions of the vision preceded the 30-Year Transit Master Plan. Those documents included The Visioning report; the Transit Needs Assessment report, and the Scenarios and Options report. TheRide used each document to promote discussion during successive rounds of public information meetings. In addition, a number of the proposals in the Transit Master Plan were directly adapted from similar proposals in the City of Ann Arbor’s Transportation Plan.

The *30-Year Transit Master Plan for Washtenaw County* has since been adopted by the new Regional Transportation Authority of Southeast Michigan as the Washtenaw County component of the Southeast Michigan Transit Plan, and forms a base for transit planning in Washtenaw County. (See Map Page 7)

This countywide process generated a great deal of enthusiasm in the County regarding the need for more public transportation, so much so that a group of leaders formed an unincorporated board (U-196 Board) to further discuss and advance the Transit Master Plan. With support from throughout the county, an

effort was undertaken to incorporate a countywide Act 196 transit authority to plan and provide the proposed services. Ultimately, only a few of the involved communities felt sufficiently comfortable with the proposed funding options to commit to the new authority, and the planning effort was refocused on the more densely developed areas of the county.



Building Consensus to Focus on the Urban Core of Washtenaw County



In November 2012, the Ann Arbor City Council voted to opt out of the Countywide planning process, and urged the **TheRide to focus its planning efforts on the ‘urban core’ of Washtenaw County**, that is, those communities where population density is highest and transit needs are the greatest. This urban core includes the cities of Ann Arbor, Ypsilanti and Saline, the Townships of Ypsilanti, Pittsfield, Superior, Scio, Ann Arbor and the Village of Dexter. During 2013, elected leaders of these communities met as an “Urban Core Working Group” to find a way to meet the transit needs identified in the *30-Year Transit Master Plan* for each of the these communities.

Building Consensus on Services

On March 28, 2013, the first meeting of the Urban Core Working Group focused on building a consensus of what transit services were needed in each community and how to connect them. Elected leaders who participated in the meeting reviewed alternatives for sustaining, improving, expanding or improving and expanding transit services in the Greater Ann Arbor area. A general agreement was made by the Cities of Ann Arbor, Ypsilanti and Saline, and the Townships of Ypsilanti and Pittsfield of which services were needed. Other participating communities such as the Townships of Superior, Scio and Ann Arbor and the Village of Dexter expressed interest in continuing to be involved in the discussions, but have not yet made a commitment to further pursue additional transit services.

This initial service program was shared with hundreds of people in one-on-one and small group meetings, with refinements made with each step. A proposed draft service program, reviewed by the Urban Core Working Group, was then presented in a month-long series of **13 public outreach and citizen engagement meetings held throughout the Urban Core Area during October and November 2013**. After this input had been incorporated in January 2014, TheRide Board approved a final Five Year Transit Improvement Program for service.

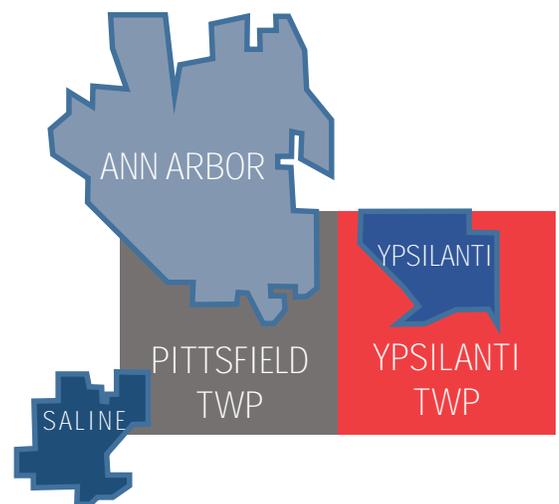
Building Consensus on a Governance Structure

On April 25, 2013, the second meeting of the Urban Core Work Group focused on the governance and organizational structure of TheRide and began the discussion of funding sources needed to implement the agreed-upon service. Discussions included the merits of becoming a member of TheRide authority and contracting service through a Purchase-of-Service Agreement (POSA.)

Pursuant to these discussions, The City of Ypsilanti joined TheRide authority on August 15, 2013 and Ypsilanti Township joined TheRide authority on December 17, 2013. These additions to TheRide were approved unanimously by TheRide Board, the City of Ann Arbor, and the joining municipalities. These actions represent the first geographic expansion of TheRide in the 40 years of its existence. Associated with this action, TheRide’s official name was changed to the “Ann Arbor Area Transportation Authority” and both the City of Ypsilanti and Ypsilanti Township each have a member on TheRide Board, in addition to one new member from the City of Ann Arbor. In addition, a new Purchase-of-Service Agreement model has been developed in accordance with the governance model and proposed service improvements.

Building Consensus on a Funding Model

On June 27, 2013, the third meeting of the Urban Core Working Group discussed the inability to improve service in one area without reducing service in another area unless additional funding is generated. Currently, a property millage is the only method allowed by law to fund the local portion of transit services. TheRide is incorporated under Michigan’s Act 55 which permits transit authorities to levy a millage on property within the Authority area with voter approval. Urban Core Working Group members considered the current taxable values within their communities, funds raised at different millage amounts, and the costs of services requested by their



constituents. Ultimately a 0.7 millage proved to be the rate across the entire area that would yield the necessary local funding to implement the agreed upon service plan.

The Urban Core Working Group arrived at a general consensus that, a 0.7 millage in the member jurisdictions would be the most feasible way to pay for services in the program. These findings were shared widely in public outreach, including one-on-one conversations with area residents and officials, small group meetings and large events. A Financial Task Force of local leaders was also convened to review the financial analysis leading to these conclusions.

Notably, TheRide has never levied a millage itself before and this is an important milestone. **TheRide Board decision on this matter takes into account not only the technical questions related to adding this to the TheRide's funding mix, but also the issue of voter support** for such a funding package and the services that will be enabled as the result.

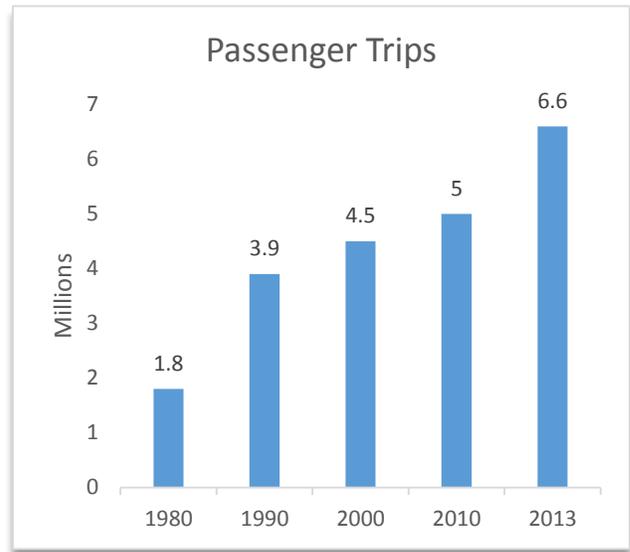
TRANSIT SERVICES TODAY: HOW ARE WE DOING

Transit Ridership is Strong

More and more people in our community are finding public transportation to be a convenient and affordable option for getting to and from the places where they live, work, and play. Since the mid-1980s, ridership on TheRide has increased more than 88%.

Ridership Trends

TheRide provided a record 6.6 million rides in calendar year 2012, an increase of 6.6 percent over 2011. This growth is broken down into the family of services THERIDE provides in the following way:



SERVICE

RIDERSHIP CHANGE (Since 2011)*



8.9%



40.6%



-0.4%



89.6%



95%



92.4%



47.6%



15,000 trips

The increase in transit ridership was driven by adding service frequency, adding new services, expanding service into areas previously not served, high and volatile gas prices, changing demographics, and a recovering economy with more people returning to work. TheRide's record ridership included both fixed-route and demand response service, and garnered national attention.

* Figures for Van Ride and AirRide are for the past year only

The 2012 public transportation record ridership growth in the United States shows that there is a growing demand for public transportation. Ridership grew in all areas of the country – in small, medium and large communities. Public transportation saves people money, and people save even more when gas prices spike. Since nearly 60 percent of trips taken on public transportation are for work commutes, it makes sense that ridership increases in areas where the economy has improved and new jobs have been created.

Ease of accessibility to TheRide’s fixed-route service was also a contributing factor, with 91 percent of Ann Arbor residents living within a quarter mile of a bus route (based on 2010 census data). In addition, TheRide’s overall on-time performance (92 percent of trips were completed on time) and high interior/exterior cleanliness standards (96 percent of TheRide’s fleet met or exceeded customer satisfaction standards) helped contribute towards the rise in ridership.

Transit ridership on the rise

Public transit systems nationwide are breaking records for ridership in the first three months of 2012 compared with first quarter 2011:

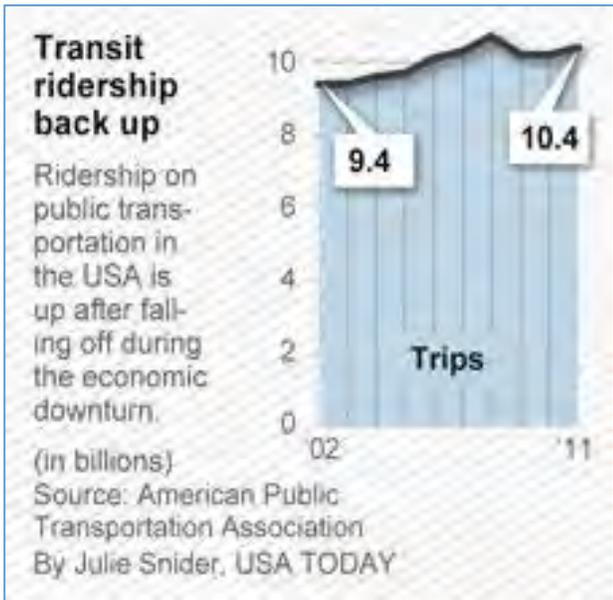
City, 2012 ridership, Increase from 2011:

- Indianapolis, 2.5 million, 20%
- Fort Myers, Fla., 1 million, 17%
- Charlotte, 6.8 million, 10%
- **Ann Arbor, Mich., 1.7 million, 9%**
- Boston, 99.2 million, 8%
- Dayton, Ohio, 2.4 million, 8%
- Ithaca, N.Y., 1.09 million, 6%
- Tampa, 3.7 million, 6%
- Olympia, Wash., 1.3 million, 4%
- San Diego, 21.8 million, 2%

Source: American Public Transportation Association

USA Today 6/4/2012

USA TODAY | News



USA Today 3/12/2012

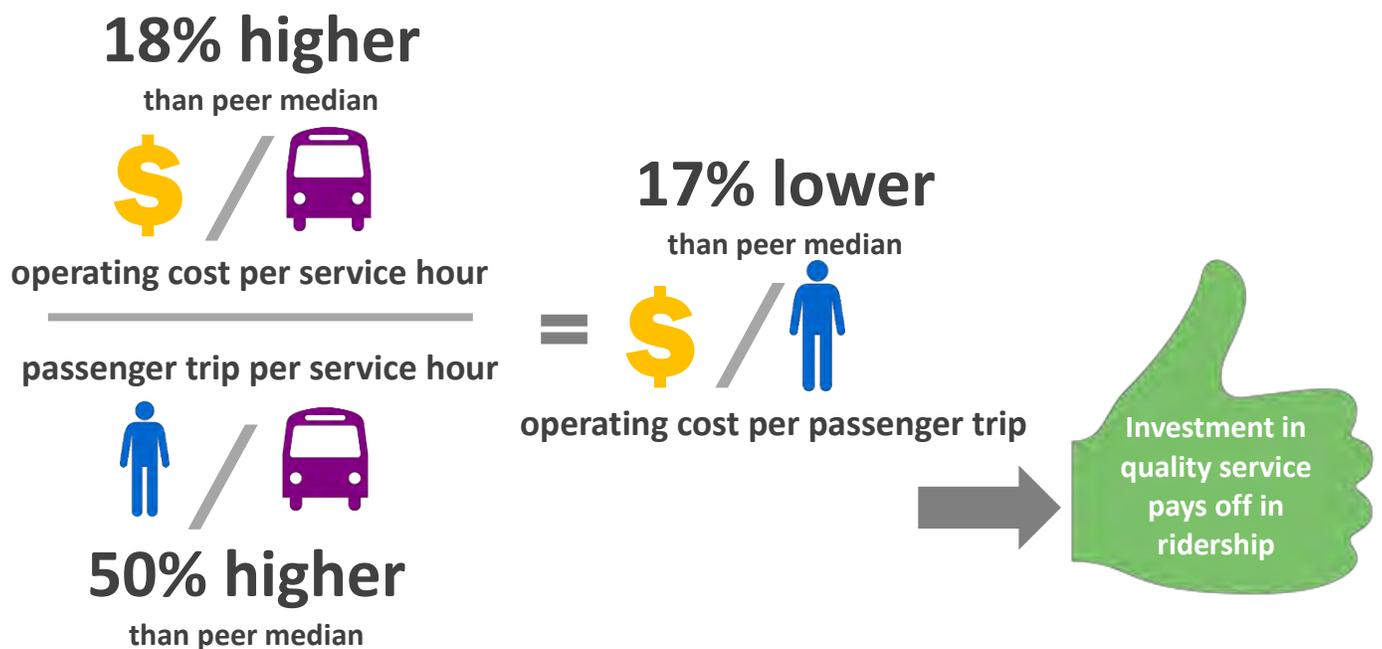
According to a 2011 University of Michigan study, more than half of all licensed drivers in the U.S. were under age 40 in 1983. That number has fallen to less than 40 percent, with only about 22 percent comprised of drivers under 30. This is a trend that has been widely reported, including the report entitled Transportation and the New Generation: Why Young People are Driving Less and What It Means for Transportation Policy by the Frontier Group and U.S. PIRG Education Fund.

Preview: Peer Comparison

TheRide regularly measures how it performs on a broad range of metrics while gauging current performance and identifying opportunities for improvement through objective peer comparisons with similar mid-sized public transportation agencies. In the latest National Transit Database report, TheRide, whose cost per passenger is approximately 17% lower than the peer median, led 20 peers in a variety of categories. The report confirmed that TheRide is meeting or exceeding its mission of delivering affordable, efficient, and environmentally friendly transportation to a record number of customers.

For this report, a methodology developed for the National Transit Cooperative Research Program (TCRP) was used to identify the 20 transit agencies most similar to TheRide, including two other large urban systems in Michigan. Those peer communities included: Peoria, IL; Lexington, KY; Moline, IL; Lansing, MI; Syracuse, NY; Savannah, GA; Champaign-Urbana, IL; Roanoke, VA; Concord, CA; Erie, PA; Kalamazoo, MI; Harrisburg, PA; Fort Wayne, IN; Rockford, IL; Shreveport, LA; Hartford, CT; Fort Collins, CO; Scranton, PA; Gainesville, FL; and South Bend, IN. The TCRP peer identification process uses 12 types of data from the most current National Transit Database (2011) to select peers. While it might appear as though Ann Arbor's closest peers would include the agencies in Grand Rapids, Flint, or Detroit, comparisons of TheRide's network with those communities would be misleading. In fact, most of Michigan's fixed route systems are not comparable to Ann Arbor for many reasons.

The survey data from this latest peer comparison reinforces that TheRide is an outstanding mid-size public transportation system which carries over twice as many passengers per year than the peer median, and over four million more passengers than the Michigan median. Over the past year, USA Today, CNN, and independent national transportation associations published reports that included TheRide in Best-of-Class rankings based on ridership, operational efficiency, financial stability and technological innovation.



WHY SHOULD TRANSIT SERVICES BE IMPROVED

Key Planning Principles

The key principles governing the creation of the *30-Year Transit Master Plan for Washtenaw County* have been carried forward into the Urban Core efforts and *Five Year Transit Improvement Plan*.

Goals and Objectives

The original Goals and Objectives of the Transit Master Plan reflect the importance of transit to the community as a whole and remain pertinent to the Five Year Transit Improvement Plan for the Urban Core of Washtenaw County. These include:

Support
Economic
Growth



Attracting investment
Improving travel times and reliability, and
Improving access to labor markets

Promote
Livability



Supporting sustainable housing and employment growth
Improving access to leisure facilities, and
Protecting the natural landscape

Improve Access



Improving access to employment opportunities and key services, particularly for underprivileged groups, people with disabilities, seniors, young people, and children

Protect the
Environment



Reducing air, noise, and water pollution from transportation;
Reducing the demands on the water supply, and
Tackling climate change through reduced carbon emissions

Improve Safety
and Security



Improving safety and security for all transportation users, particularly pedestrians, young people, children, seniors, people with disabilities, and bicyclists

Facilitate a
Healthier
Communities



Enabling healthier and more active lifestyles

Unmet Transit Needs

The *Five Year Transit Improvement Program* is specifically designed to meet the many unmet transit needs that exist in the Urban Core and greater Ann Arbor Area. The transit planning process gathered information on the needs of riders and potential riders, in addition to the needs articulated by community leaders:

Insufficient access to lifeline destinations

Limited access to vital destinations, such as grocery stores and medical facilities, can have serious health implications. This is especially relevant in low-income areas and areas with large senior and disabled populations. In addition, many of these vital destinations also represent key employers.



Limited accessibility of these destinations creates a barrier between transit-dependent residents and desirable jobs, which is a negative for both residents and employers.

Accessibility of lifeline destinations within the City of Ann Arbor, which contains approximately a third of Washtenaw County residents, is fairly robust. Access to grocery stores, medical offices, and other essential destinations outside of the City of Ann Arbor are more limited. The majority of the 6% of county residents that live in the City of Ypsilanti have service to most lifeline destinations during weekdays, but limited service at night and on weekends.

If transit access to key destinations is not improved, it is likely that the existing income gaps between different parts of the Urban Core may widen, as areas with limited access will continue to be seen as less desirable places to live and work.

Please continue to consider the transportation needs of seniors, & those with disabilities. Later weekday & weekend service, as well as the library, grocery stores, Arborland & Briarwood malls, would also be appreciated. (Wayne)

Public Input

Increasing road congestion

As the demand for travel across Washtenaw County continues to increase, roads in the area are expected to become significantly more congested, increasing travel time for all road users. **SEMCOG forecasts that in Ann Arbor, population will increase by 1.1% from 2010 to 2035, while employment will increase by 13.3%, indicating that an increasing number of people will be traveling to and within Ann Arbor for work.**



Your long term vision for enhancing transit and improving air quality in our community is inspiring!

Public Input

Among the most prominent corridors/areas of expected congestion growth are I-94 west of Ann Arbor, US 23 north of Ann Arbor, Michigan Avenue between Saline and Ypsilanti, many of the corridors between Ann Arbor and Ypsilanti, and western Ann Arbor. These are key travel corridors, and if increasing congestion is not addressed, connectivity throughout the Urban Core will suffer considerably. Unchecked increases in congestion will also drive dispersed development, particularly of employment locations, and have a negative impact on economic efficiency.

Lack of transit connectivity

Improved connectivity will allow the Urban Core communities to strengthen economic ties with each other and make it easier for these locations to market themselves as ‘destinations.’ This will support the local economy. On the other hand, if connectivity does not improve, many residents will remain isolated from other activity and employment centers in the in the Urban Core.

Increasing mobility needs due to an aging population

Seniors 65 and above currently make up 9% of Washtenaw County’s population, and seniors over the age of 85 account for 1% of County population. In 2035, the percentage of seniors 65 and above and over 85 are expected to grow considerably. As the population ages and seniors become more dispersed throughout the region, there will an increasing need for transportation options for this market segment, in order to maintain current standard of living and independence.



As drivers age, vision loss, hearing loss, reduced reaction times, as well as more serious conditions such as dementia frequently detract from the ability to safely drive a car. According to the National Institute on Aging, more than 600,000 American seniors stop driving every year; at this point, these seniors are completely dependent on others for their transportation needs. To the extent that **public transit** is viewed as a reliable means of transportation, it **can play a major role in allowing seniors to maintain a sense of independence and social connections with others.**

I am a senior citizen and do not own a car. Currently, I walk to and from Wagner at times when the WAVE bus is not available. If the #9 bus went at least to Zeeb and ran during evening hours, it would be much easier for me to go shopping at Jackson and Zeeb, go out to a restaurant, or get home from downtown Ann Arbor shopping, doctor appts, etc. (Edna)

Public Input

Transit can increase its appeal to choice riders

Among the additional benefits of improving transit service, and in turn attracting more riders, are increased safety and positive environmental impacts. Collision rates for public transit vehicles are much lower than for private autos. As a result, **fewer crashes result when more people opt to take transit instead of driving.** In addition, efficiently run bus service produces fewer emissions per passenger trip than private autos. To the extent travelers choose to use TheRide instead of driving, the negative environmental impacts of transportation in the County will be reduced.

It will be extremely useful for me to have AATA service extended to Jackson & Zeeb [Roads], and for adding late evening service to same. I work on UM Campus and do not have a car, so this will be of great benefit to me.

Public Input

Automobile trips may often have a significant travel time advantage over transit trips. However, this is offset by the ability to use the time riding for other things such as reading or napping.

37% of TheRide riders own or have access to a car but choose to ride the bus. (2009 TheRide Onboard Survey)

As TheRide looks to increase its share of these choice riders, it will need to continue to make improvements to make transit more competitive with private auto.



PROPOSED SERVICE IMPROVEMENTS

The final proposed service plan has come about as the result of numerous reviews of draft documents circulated for comment by the Urban Core Working Group and the public. Overall, the public outreach and citizen engagement resulted in important changes that are reflected in this final service program. As noted before, proposed improvements are contingent on a new source of funding.

Highlights of Service Improvements

Fixed Route Services

More Service Hours – 44% Increase

The service plan includes having buses run later on weekdays and weekends. Weekday service will end 1 to 1.5 hours later on most routes. Routes on weekends will end much later and start earlier. The frequency of service will change to run more often. New and redesigned routes will provide more direct service to key destinations and offer service to places where service is currently not available.



Paratransit Services for Seniors and People with Disabilities

(Demand Response/Dial-a-Ride)

More locations and longer service hours

The Dial-a-Ride services for seniors and people with disabilities will operate later on weekdays and weekends and provide transportation to more places throughout TheRide and POSA communities. More service will be available for seniors in the Ypsilanti area. The general population not near fixed-route service will be able to use the Dial-a-Ride services to travel to the nearest fixed route bus service.



The millage would generate approximately \$4.3 million to pay for improved services: \$3.3 million from Ann Arbor, \$800,000 from Ypsilanti Township and \$200,000 from the city of Ypsilanti. Funds raised by the millage would leverage dollars from the state and federal governments (every dollar of local funds generates approximately \$2 additional dollars from these sources). These funds, along with fares from passengers and funds received from purchase of service agreements (POSAS) from non-member local governments, would pay for the improved services.

Complete details of the proposed service improvements can be found in Appendix 2 “FYTIP Service Details”

What’s Not in the Program

- Rail (or other high-capacity) services of any kind. The 30-Year Plan calls for possible high-capacity services, e.g.:
 - Ann Arbor to Detroit
 - Connector
 - North-South Rail (WALLY)
- Ann Arbor subsidies for ExpressRide services outside of the Urban Core area.

Making It Your Plan

The draft Five Year Transit Improvement Plan for the Urban Core of Washtenaw County was developed in late summer 2013 and based on discussions with the Urban Core Working Group and many others. The contents of the draft Five Year Transit Improvement Plan were shared with the public in a number of ways to obtain feedback on any final adjustments.

Public Outreach & Citizen Engagement

An extensive program of public outreach & citizen engagement included:

Community Meetings

13 public meetings were held throughout Ann Arbor, Ypsilanti and Ypsilanti Township during a period beginning mid-October through mid-November, 2013.



8 meetings were held in Ann Arbor

3 meetings were held in Ypsilanti

2 meetings were held in Ypsilanti Twp

- Ann Arbor Library – Main Branch
- Ann Arbor Library – Traverwood Branch
- Peace Neighborhood Center
- Ann Arbor Area Transportation Authority
- Michigan League
- Ypsilanti Township Hall
- Tappan Middle School
- Clark Community Center
- Hamilton Crossing Meeting Room
- Heritage Park Neighborhood Association
- Ann Arbor Library – Mallets Creek Branch
- U-M Towsley Conference Center
- Ypsilanti Senior Center
- SPARK – Ypsilanti Office

Media Outreach

A press release and weekly media alerts resulted in multiple interviews and several articles in major local media outlets annarbor.com, Chronicle, Ann Arbor Journal, Ypsilanti Courier and WEMU.

Paid Advertising

Paid advertisements were placed in local print media outlets including annarbor.com, Business to Business, etc.

Internet

Public meeting notices were posted on MovingYouForward.org, and at TheRide.org.

Social Media

@CatchTheRide Facebook, Twitter and Instagram were used to promote each public meeting.

Partner Promotion

Many community partners posted notices about the public meetings on their websites and in their newsletters.

Posters

Posters with public meeting dates and locations, and a list of routes with improvements were posted at high volume bus stops, the Blake Transit Center, the Ypsilanti Transit Center, at many local businesses and organizations.

Postcards

Postcard size notices with public meeting dates and locations were distributed at area businesses and organizations.

Email Blast

Email blasts were distributed to past public meeting attendees, businesses and other key stakeholders.

MyAlerts Subscription Notification

Notices were distributed to all subscribers of MyAlerts, the agency’s email and text subscription notification system.



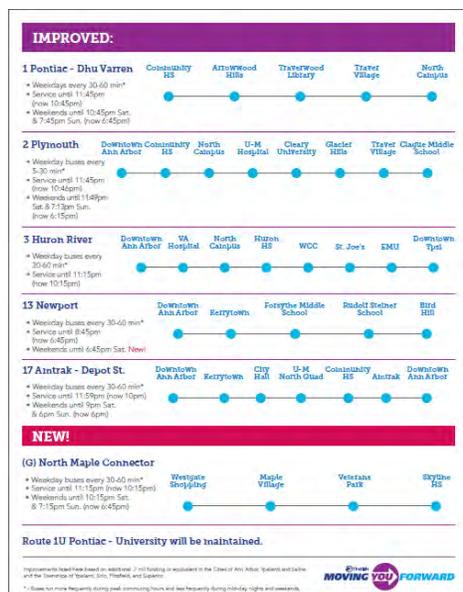
Inside Bus Announcements

Bus Cards were posted inside all buses along with RideLines, a passenger newsletter, alerting and encouraging customers to provide comments either at one of 12 different scheduled public meetings, online at movingyouforward.org, by telephone, mail or in person.



Community Benefits Brochure

A brochure was distributed describing the impacts more public transportation has on the local economy, transportation costs, public safety, parking costs, and environmental benefits.



Service Improvements by Community

Informational handouts describing detailed service improvements including earlier and later service hours, more direct services, and more places served.

Changes to the Service Program as the Result of Citizen Engagement

Citizens provided a generous response to the call for public input with hundreds of comments and suggestions. The majority of the comments received about the Proposed Five Year Transit Improvement Program fell into three broad categories, agreeing with the program, clarifying items, or introducing items unrelated to the program.

Based on the comments received, the specific changes shown the table below have been included in the final Five Year Transit Improvement Program. In addition, a number of comments will be considered in TheRide’s continuous improvement program. Comments that were not incorporated into the program because they require agreements with other parties and/or additional funding beyond what had been established in the program. However, these suggestions will be considered as part of the TheRide’s continuing service review process.

A separate document – entitled “Results of Urban Core Transit Public Input Sessions - October / November 2013” includes a complete list of the suggestions received.

Changes Made to the Five Year Transit Improvement Program Based on Public Input

Route	Name	Improvements Ahead
1	Pontiac	<ul style="list-style-type: none"> Begin 1st trip at Plymouth Mall at 6:22 a.m. rather than at 6:34 am as originally planned. Extend Sunday service to entire route (Sunday service currently ends at Food Gatherers).
2C	Plymouth (South Neighborhood)	<ul style="list-style-type: none"> Increase the frequency of weekday service midday (between 9 and 3) to every 30 minutes. Add weekday evening service to 8:40 pm rather than current 7:40 pm. Extend route to the BTC. Continue last trip of route 2A in service from the Green Rd. Park and Ride lot to Glazier Way/Earhart to provide later trip to Green Rd. south of Baxter Rd. and to Glazier Way and Earhart.
3	Huron River	<ul style="list-style-type: none"> Extend evening service which will provide direct service between WCC and both BTC and YTC in the evening.
4	Washtenaw	<ul style="list-style-type: none"> Begin Saturday westbound service with a 7:30 a.m. trip from the Ypsilanti Transit Center (YTC)
6	Ellsworth	<ul style="list-style-type: none"> Add hourly Sunday service between Ypsilanti Transit Center and the Meijer store at Ellsworth and Carpenter. Continue current 6B routing on Hewitt and Congress Streets (planned, but not included on proposed route map).
M	Whittaker-Huron River Dr	<ul style="list-style-type: none"> Add Sunday service to Ypsilanti Township library in the first year of implementation instead of second year as originally planned. Continue route on Huron River Dr. to Textile rather than turning on Tuttle Hill Rd. Change route to use Dean Rd. to improve access to Paint Creek Shopping Center (Kroger).
N	First-Congress	<ul style="list-style-type: none"> Pull into Walmart (already planned but not shown on route maps).

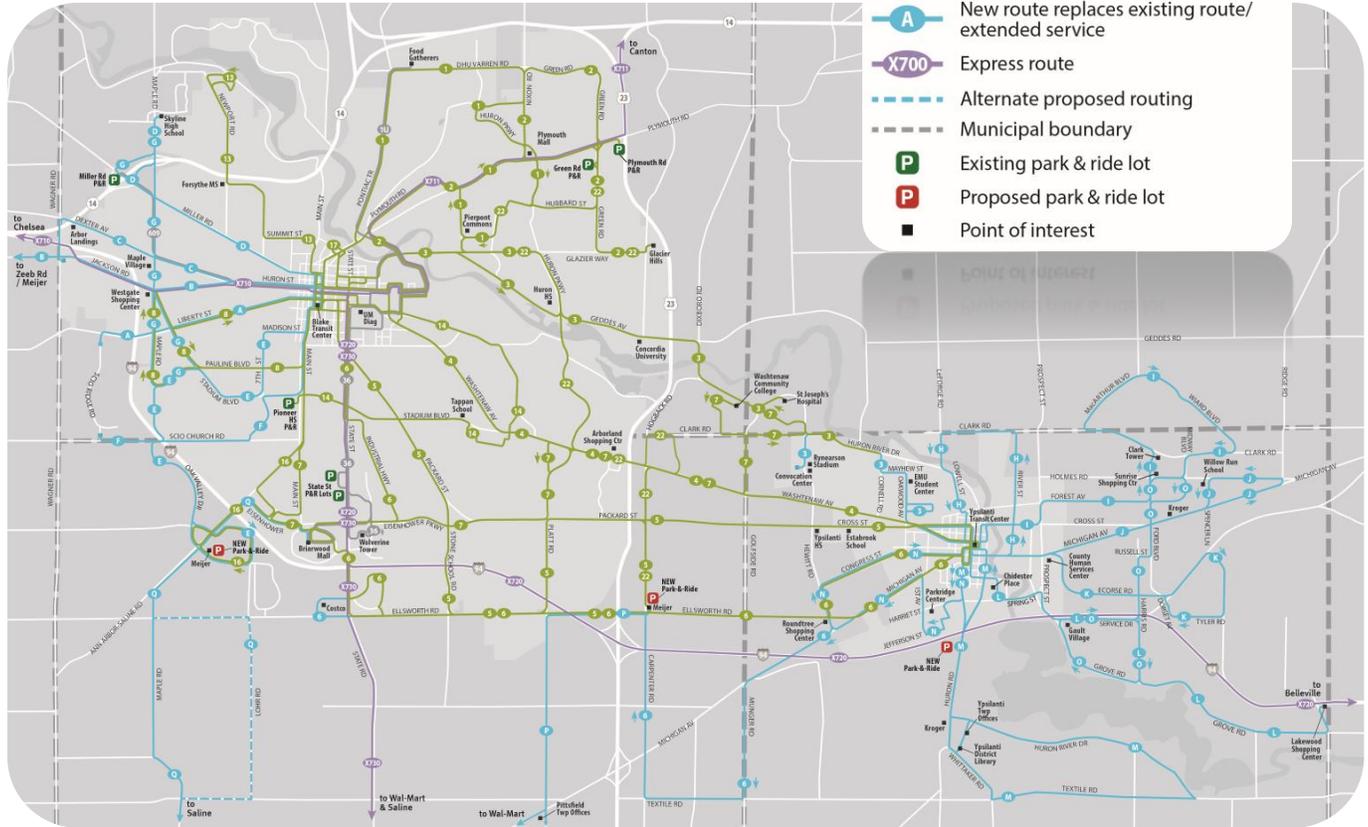
The Final Program

The final service program, adopted by TheRide Board is the proposed Five Year Transit Improvement Program as modified by recent public comments. *Figure A* depicts the proposed transit fixed route network. The complete and detailed list of service improvements is included as an appendix.

Figure A

Five Year Transit Improvement Program: Bus Network

- 1 Extended evening & weekend hours on existing route
- A New route replaces existing route/extended service
- X700 Express route
- Alternate proposed routing
- Municipal boundary
- P Existing park & ride lot
- P Proposed park & ride lot
- Point of interest



We are very excited about the possibility of taking the bus downtown for dinner, which is not possible with the current schedule with last bus on weekdays at 6:15! Going to the Farmers' Market on Saturday morning will also now be possible, so we can leave the car at home.

Public Input

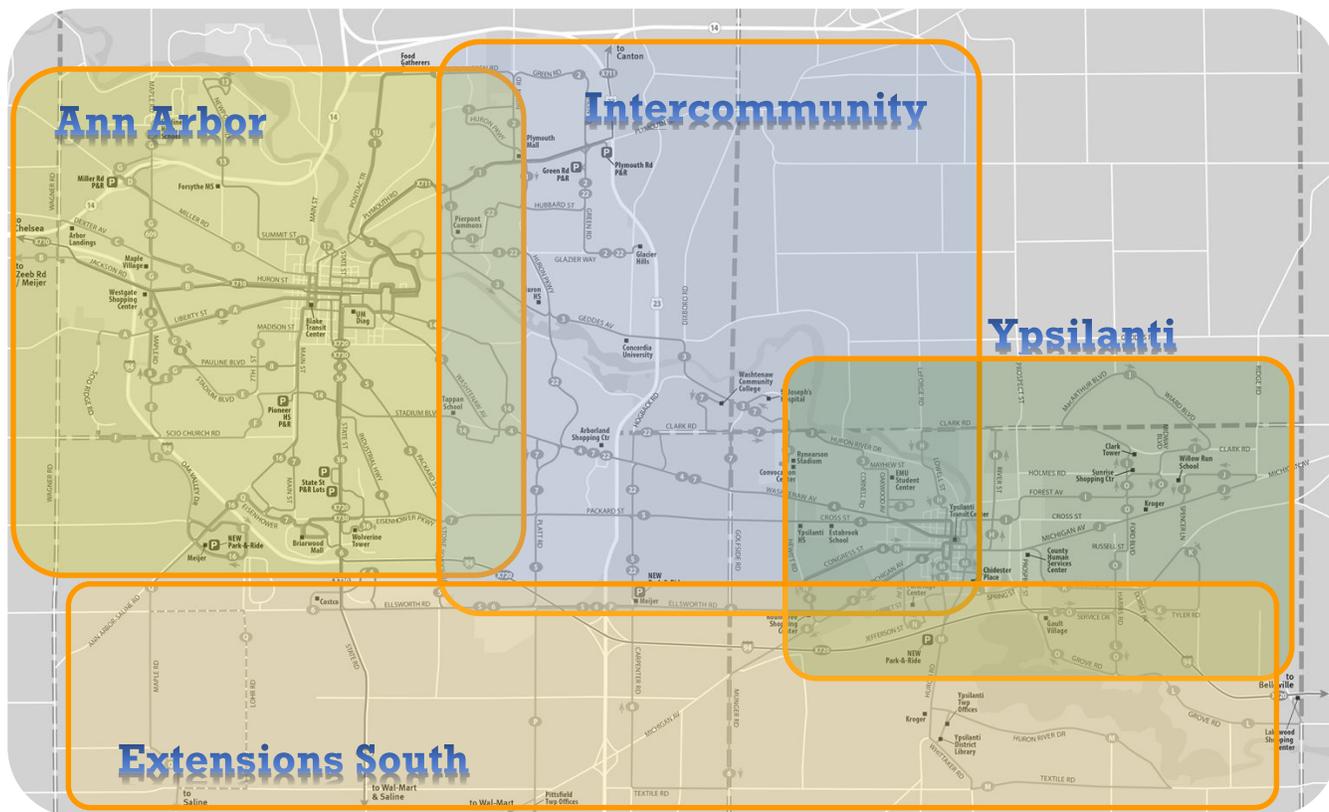


SERVICE OVERVIEW BY COMMUNITY

Description of Services by Community

Figure B depicts the map of proposed fixed route services in the 5-Year Transit Improvement Plan. The service descriptions have been organized into several categories that recognize the communities served, although many of the routes cross through multiple jurisdictions.

Figure B



Ann Arbor Area

Service on almost every route that serves the City of Ann Arbor has been improved. All routes except one will run later on evening weekdays, typically an hour later but sometimes more. Selected Ann Arbor routes will also start earlier on weekdays. Many routes will run more frequently, reducing crowding and wait times for riders. The entire west side of Ann Arbor will see a restructured route system, with several routes split into 2 or 3 new route, making the resulting new routes more direct and convenient. In some cases, the redesigned routes expand into neighborhoods not previously served.



Weekend services will be greatly expanded, with buses running 3-5 hours later into the evenings, on Saturdays and an hour on Sundays, so that workers, movie-goers, restaurant customers, and many others will be better able to use the bus for these types of trips. Paratransit: A-Ride for people with disabilities and Good as Gold for seniors already provides an extraordinarily high level of service. Service hours will be expanded until 11:30 p.m. on weekdays and 10:30 p.m. on Saturday and 7:30 p.m. on Sunday. Service

will be available to more destinations including Meijer on Jackson Rd. and Quality 16 movies, and the Walmart on Michigan Avenue.

Ypsilanti Area

Service throughout the Ypsilanti area will be improved significantly. Currently, 3 local routes in the City of Ypsilanti and northern Ypsilanti Township operate only every 60 minutes on circuitous routes, some have no Saturday service and there is no Sunday service. Initial improvements include extending weekday service to end after 11 p.m. on each route, providing Saturday service on each route, and extending Saturday service into the evening. Subsequent improvements are to replace the current routes with 8 new routes to provide more direct and convenient with service every 30 minutes weekdays. Service will be added on most of the new routes. Paratransit: Existing A-Ride for people with disabilities and seniors will have service hours expanded until 11:30 p.m. on weekdays and 10:30 p.m. on Saturday. Sunday service will be provided for the first time. The availability of trips for seniors will be expanded. Service will be available to more destinations including the Ypsilanti District Library, Ypsilanti Civic Center, and Kroger at Paint Creek Shopping Center. For people with disabilities, seniors, and the general public with no fixed-route service nearby, dial-a-ride plus will provide service to connect to TheRide fixed-route service.



Intercommunity Service

Four routes connect Ann Arbor and Ypsilanti, with service to the townships in between. In 2012, weekday service was doubled on the busiest route, #4 Washtenaw, as an advance element of the Urban Core plan. Service frequency was increased on the #5 Packard route in 2013. With the implementation of the 5-year Transit Improvement Program, service on all four routes will have extended hours weekdays, Saturdays, and Sundays. Weekday service frequency will be increased on the #3 Huron River and #6 Ellsworth. Paratransit: Service hours will be expanded until 11:30 p.m. on weekdays and 10:30 p.m. on Saturday and 7:30 p.m. on Sunday in the entire area. The availability of trips for seniors will be expanded. Service will be available to more destinations on Sundays including WCC, Walmart on Ellsworth, and the Ypsilanti District Library.



Extensions South

Several new or revised routes are proposed that significantly extend services to the south of the present service area, in response to the needs of the growing residential and commercial populations of these areas. These include a new route serving the Ypsilanti District Library Whittaker Road branch, Civic Center and other points, an extension of Route 6 further into Pittsfield Township, a new route across Pittsfield Township, connecting commercial areas and residences to each other and to the Township Service Center. An express route serving Saline, Pittsfield Township and Ann Arbor is also proposed. Paratransit: The availability of service for people with disabilities and seniors and the hours of service will be expanded, similar to the expansion of fixed-route service. Service will be available to new destinations including Pittsfield Township hall, and Walmart on Michigan Avenue. For people with disabilities, seniors, and the general public with no fixed-route service nearby, dial-a-ride plus will provide service to connect to TheRide fixed-route service.

IMPLEMENTATION SCHEDULE

The proposed improvements in the Five Year Transit Improvement Program are significant and cannot all be implemented at once. Several principles have guided the development of an implementation schedule for the Service Program:

- Make some immediate improvements as soon as possible after funding. It is important that TheRide provides valuable, visible and evident improvements early to the public
- Service should be introduced evenly in all parts of the service area
- New buses will be required for some services and the 18-month lead time to acquire buses will push the start-up of some services to later years
- Improvements to the structure of existing service may take longer because of the inter-relationship between services
- Discussions with POSA communities on priorities for implementation will be on-going. TheRide will work with communities regarding bus stops, turnarounds, parking facilities and other considerations.

With these principles in mind, the following implementation schedule for fixed-route services was developed:

Year 1 Implementation Details

Later weekday service on existing routes (including current Ypsi. local routes)

One hour later service on Saturdays on existing routes (including Ypsilanti Local routes)

#4 Washtenaw Route Saturday morning service every 30 minutes

Saturday service on current #20 Grove / Ecorse

NEW #M Huron – Whitaker Route weekdays, weekday evenings, Saturdays and Sundays (hourly service only)

Expanded capacity midday on #2 Plymouth Route

NEW #P Platt / Michigan Ave weekday service hourly (determined by discussions with Pittsfield)

Peak hour express service hourly between Ann Arbor and Saline



Year 2 Implementation Details

Route M - service every 30 minutes weekdays

Later Saturday service on existing routes (including Ypsilanti locals)

Later Sunday service on existing routes (including Ypsilanti locals)

NEW Implement weekday service on Route Q, between Saline and Briarwood

Saturday service on route #13

Saturday service on route #14

EMU service change

- Eliminate route #33 College of Business Shuttle and #34 West Campus Shuttle. Replace with route H and expanded service on route #3. (With agreement from EMU)



Year 3 Implementation Details

NEW Full implementation (7 days a week) of reorganized routes and expanded service on new Ypsilanti local routes (H, I, J, K, L, N)

NEW Full implementation (7 days a week) of reorganized routes and expanded service on west side of Ann Arbor (A, B, C, D, E, F, G)



Year 4 Implementation Details

Increased service frequency on route #6 and service extension to serve Munger, Textile, and Carpenter Roads

Express service between Ann Arbor and Belleville and Ypsilanti Township

Double frequency of express service between Ann Arbor and Saline to every 30 minutes

Extend weekday evening service on route P by one hour

Add Saturday service on routes P and Q



Public Input

Thank you for expanding later into the evening hours on weekdays and adding service on the weekends! ...If the proposed expansion passes with later coverage in the evening, I can ride the bus more often. The weekend service is a great addition also, as we have wanted to take the bus downtown on the weekends as a family for various reasons, but were unable to with the previous service limited to weekdays.

GOVERNANCE

As the service program was being developed, changes to the actual structure of the Authority were being discussed in parallel. The City of Ypsilanti and Ypsilanti Township both expressed their desire early on to become part of the Authority. In particular, the Urban Core Working Group devoted a session to governance issues, notably concluding that Act 55 provided the best way to expand the Authority at this time. Consistent with the process requirements of Act 55, and consistent with the general consensus of the Working Group, the governance structure of the Authority was developed over the course of the past year, with the following specific developments:

- [City of Ypsilanti Joins Authority – approved August 15, 2013](#)
- [Ypsilanti Township Joins the Authority – approved December 17, 2013](#)

Additions to the Authority were approved unanimously by the joining jurisdictions and the Cities of Ann Arbor and Ypsilanti, and TheRide, and it is noteworthy that these actions represent the first geographic expansion of the authority in the 40 years of its existence.

The new organization is known as the [Ann Arbor Area Transportation Authority \(TheRide\)](#) and now has 10 members, including one new member each from the City of Ypsilanti, the City of Ann Arbor and Ypsilanti Township.

Changes to TheRide governance also include the development of a new model for 5-Year Purchase-of-Service Agreements (POSAs) and potentially new POSA partnerships with other communities in the area.



FUNDING

The Urban Core Working Group found a general consensus that a 0.7 millage in the member jurisdictions would be the most feasible way to pay for services in the program. These findings were shared widely in public outreach, including one-on-one conversations with area residents and officials, small group meetings and large events.

Funding Principles

The funding proposal has been carefully devised to ensure adherence to these principles:

- 1) The level of service is determined by payments received – that is, each community pays for their service and the plan is generally equitable in terms of equating benefit received to funding contributed.
- 2) TheRide operates with a balanced budget – that is, the funding the TheRide currently has is devoted to current services. If any community wants more service, funding has to increase.

Funding Sources

The following is a description of funding sources for the AAATA. A budget with revenues by source is included as appendix 1.

Passenger Fares

Fares paid by riders or a third party including the University of Michigan, Washtenaw Community College, Eastern Michigan University, Ann Arbor Public Schools, Ann Arbor Downtown Development Authority, and other employers and schools.

Current Property Taxes

Ann Arbor Millage – A transit millage is included in the Ann Arbor city Charter, approved by voters in 1973. Funds from this existing millage will continue to be used to pay for existing service in Ann Arbor.

Ypsilanti Millage – Ypsilanti voters approved a transit millage in 2001. Funds from this existing millage will continue to be used to pay for existing service in Ypsilanti.

Other Operating Revenues

This is a small funding source, primarily revenue from paid advertising on buses.

New Property Tax

The AAATA is proposing a 0.7 mill new property tax in member jurisdictions, City of Ann Arbor, City of Ypsilanti, and Ypsilanti Township. If voters approve this millage, the funds will be used to pay the operating costs of the 5-Year Transit Improvement Program (5YTIP) and the cost of some new buses required for service expansion.

The millage recommendation is consistent with the conclusions of the of the Urban Core Working Group and the Financial Task Force, which determined that a millage is the only available option at this time.

Purchase of Service Agreements

The local cost of service in non-member communities (Pittsfield Twp., Saline, Superior Twp.) will be paid by direct 5-year agreements with the AAATA. The cost will be based on the full-allocated cost including all support, administrative, and planning expenses.

Federal Funding

Under Federal law, transit operators receive an allotment of federal funds each year which are distributed according to a formula based on area population and the amount of transit service provided and consumed. These funds can be used for either operating or capital expenses at AAATA's discretion, subject to certain requirements. The AAATA adopts an annual program to plan the use of these funds for the next five years. All of the funds programmed to be used for operating expenses are for operating expenses of existing service, none for the service expansion in the 5YTIP. AAATA's top priority for the use of these funds is for replacement capital. All of AAATA's existing buses and facilities were funded 80% by federal funds and 20% by matching state funds. Replacement of the capital assets to continue existing service are programmed to be funded from Federal formula funds expected to be available. While these funds are subject to an annual appropriation by Congress, it has been a reliable source of funding since the 1970s. The AAATA is also eligible for other federal grant funds which are awarded based on a competitive process. AAATA will continue to apply for funds as appropriate, but no competitive grant funds are included in the budget in appendix 1.

State Funding

The Comprehensive Transportation Fund (CTF) of the Michigan Transportation Fund (MTF) provides operating and capital assistance for public transit. Operating assistance is based on a percentage of eligible operating expenses, 30.86% in FY 2014. State operating assistance will increase with the expanded cost of service of the 5YTIP. State funds from the CTF also provide the 20% match for federal capital funding. State funds are subject to an annual appropriation by the Legislature and the level varies somewhat from year to year, but funding has been consistently available since the 1970s.

Annual Audit

The Authority hires a public accounting firm to conduct an annual audit of its financial statements and Federal programs to provide assurance to the public that the financial statements accurately reflect the financial position of the Authority under generally accepted accounting principles. The auditors also test that the Authority's management is complying with the numerous Federal and State laws, regulations, contracts and grant agreements. The audit for September 30, 2013 is available at theride.org and it shows that the Authority is healthy financially and is managing its Federal and state programs appropriately.

More funding details can be found in Appendix 1.



WHO BENEFITS FROM THE URBAN CORE TRANSIT IMPROVEMENTS

In the many public discussions of the service program, both riders and non-riders in the community expressed support for the proposed transit improvements.

Riders & Potential Riders

Riders and would-be riders of the system support the plan because they will:

- Experience faster, more direct trips all day long
- Be able to work, play, eat, shop later in the evening
- See a significant increase in weekend service
- Have more connections to jobs and schools

Tables A and B provide a measure of just how much more accessible the Urban Core will become with implementation of the proposed service improvements.

Table A: Additional Households Within ½ Mile of a Route – SATURDAY, SUNDAY, or BOTH

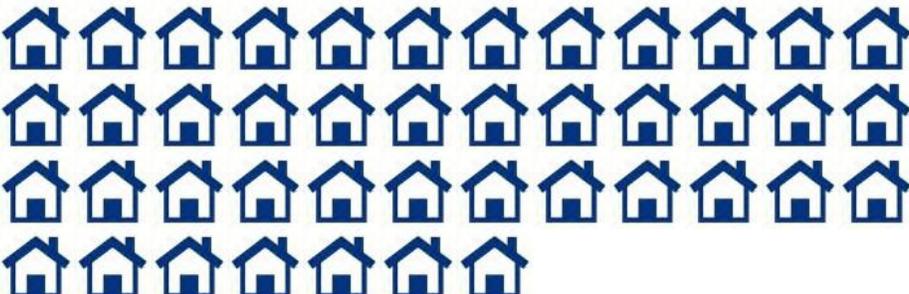
Demographic Group	Additional Households Served
All Households	43,000 
Senior Citizens Households	4,000 
Low Income Households	7,800 

Table B: Additional Households Within ½ Mile of a Route – WEEKDAYS

Demographic Group	Additional Households Served
All Households	35,500 
Senior Citizens Households	3,400 
Low Income Households	2,800 

More places. More hours. More often.



Non-Riders

While the riding public benefits directly from this plan, there is widespread recognition that transit service is a benefit to the community even if you are not a rider. As a non-rider, these service improvements benefits you by:

- Promoting economy activity by providing more access to job and educational opportunities
- Providing a lifeline for seniors, people on low incomes, and people with disabilities, perhaps a friend, relative or neighbor
- Reducing parking demand and congestion on local roadways
- Being your back-up plan: we're here if you need us! (60% of households surveyed indicated that they had used TheRide at least once in the past two years)
- Creating a welcome mat for visitors who come to the area and would otherwise have to rent a car to get around
- Creating a community that is attractive to new college graduates and young families who increasingly prefer not to own a car

Whether you are a rider or not, another reason to support improvements to transit service is that **you can be assured that your tax dollars will be spent wisely and fairly—each dollar is accounted for in each service improvement.** In addition, TheRide is fiscally responsible and well-managed. Recent reports include:

- Financial Task Force (*See Page 27-28*)
- Annual Audit (*See Page 28*)

TheRide has been recognized as a top-notch organization both locally, regionally and nationally. In a recent survey of nearly 1000 registered voters in the greater Ann Arbor area, nearly 80% of those surveyed had a favorable view of the organization. At the regional, State and Federal levels, TheRide has often been cited as an example of how transit brings value to the community.

How the Business Community Benefits From Quality Transit

- Your workers depend on it.
- Your customers depend on it.
- Your tenants depend on it.
- Your visitors depend on it.
- Transit promotes economic investment.
- Transit is vitally important for the economic vitality of the community.

**Some of us ride it,
all of us need it.**

**APPENDIX 1
PROGRAM BUDGET**

FY 2012 Existing Service	Improvement Program - 2019	
	Increment Improvement Program	FY 2019 Improvement Program

A E-A E

Annual Expenditures

Operating Costs

Urban Bus Fixed Route Network	\$ 22,324,417	\$ 11,594,307	\$ 33,918,724
Expanded A-Ride			
ADA Service	\$ 4,061,648	\$ 1,086,038	\$ 5,147,686
Non-ADA Service	\$ 735,745	\$ 401,742	\$ 1,137,487
Expanded Night ride	\$ 141,257	\$ 349,668	\$ 490,925
Express Services			
AirRide	\$ 710,793	\$ (435,793)	\$ 275,000
Saline Express		\$ 319,000	\$ 319,000
'New Partnership' services:			
Chelsea / Canton Express	\$ 252,272	\$ 28,924	\$ 281,196
Ypsilanti Express		\$ 329,000	\$ 329,000
3 Month Reserve Requirement		\$ 800,000	\$ 800,000

Operating Costs, Average Annual

\$ 28,226,131	\$ 14,472,887	\$ 42,699,018
---------------	---------------	---------------

Annual Capital Investment Included

Vehicles			
Full size transit coaches (19 buses over 5 years)		\$ 1,710,000	\$ 1,710,000
A-Ride Vehicles (5 demand response vehicles over 5 years)		\$ 80,000	\$ 80,000
Park and Ride facilities - *predominantly included in the CCG		\$ 20,000	\$ 20,000
Bus stops, hubs and shelters - *predominantly included in the CCG		\$ 20,000	\$ 20,000
System Support (Real time info, CAD/AVL, Ticketing, Bus Priority) - *predominantly included in the CCG		\$ 20,000	\$ 20,000

Capital Costs, Annualized

0	\$ 1,850,000	\$ 1,850,000
---	--------------	--------------

Total Expense = Capital Cost plus Operating Costs

\$ 28,226,131	\$ 16,322,887	\$ 44,549,018
---------------	---------------	---------------

Revenues, Annual

"Ongoing" revenues, as follows:

Federal formula	\$ 3,709,421	\$ 795,364	\$ 4,504,785
State formula	\$ 8,471,253	\$ 4,439,632	\$ 12,910,884
Passenger Fares	\$ 5,852,775	\$ 2,948,425	\$ 8,801,200
Third Party contributions (Expressride Local Support)	\$ 783,611	\$ 420,585	\$ 1,204,196
Advertising	\$ 120,000	\$ 255,000	\$ 375,000
2.056 AA millage	\$ 9,019,447	\$ 1,960,812	\$ 10,980,259
.9789 Ypsi millage	\$ 292,978	\$ 20,820	\$ 313,798

Total Revenues, Annual

\$ 28,249,485	\$ 10,840,638	\$ 39,090,123
---------------	---------------	---------------

Estimated Funding Need

Amount (dollars)	\$ 23,353	\$ (5,482,249)	\$ (5,458,896)
Estimated millage rate to close gap (All Communities)	0.000		0.700
Ann Arbor City Millage - 0.70			\$ 3,545,812
Ypsilanti City Millage - 0.70			\$ 203,574
Ypsilanti Township Millage - 0.70			\$ 791,153
POSA (based on increased service hours in Pittsfield, Saline, and Superior)			\$ 918,357
Total Local Revenue			\$ 5,458,896



Ann Arbor Area Transportation Authority
2700 S. Industrial Hwy.
Ann Arbor, MI 48104
734.973.6500



SAVE FOR LATER

REWORD UPON POST-BOARD-VOTE

(It is important to note that this funding proposal is approved by the TheRide Board. It will be put before the voters in the form of a ballot referendum, subject to approval, before the funds are actually available to pay for the services in the plan.)

Increased A-Ride Paratransit/Dial-A-Ride Service for People with Disabilities and the General Public (Dial-a-Ride Plus)

A-Ride service for people with disabilities and seniors will have service extended until about 11:30 p.m. on weekdays, 10:30 p.m. on Saturdays, and 7:30 p.m. on Sundays. Sunday service will be provided in the Ypsilanti area for the first time. Service will be provided to and from more destinations including the Ypsilanti District Library, Kroger store in Paint Creek Shopping Center, Meijer on Jackson Rd., Quality 16 movies, Pittsfield and Ypsilanti Township offices, and the Walmart on Michigan Ave. The availability of trips for seniors in the Ypsilanti area will be expanded. And, for people with disabilities, seniors and the general public in Ypsilanti or Pittsfield Township with no fixed-route service nearby, dial-a-ride plus will provide service to connect to TheRide routes.

State Operating Assistance

Operating funds are provided to carriers in the State out of a State of Michigan fund called the Comprehensive Transportation Fund (CTF). The CTF is funded primarily by the State of Michigan gasoline tax, in addition to other small sources. These funds are allocated pursuant to Michigan Public Act 51. The total CTF available funds have not seen an increase from \$166 million dollars in many years. The funds are distributed to public transportation operating agencies by a formula that MDOT administers yearly. MDOT has calculated this percentage to be 30.86 percent. This percentage is not expected to change unless the State CTF changes.

Federal Operating Assistance

Operating funds are provided to carriers in the Country under a plan called MAP 21. This is an appropriations law allowing the transportation industry to draw funding for many things from capital purchases to operating assistance. Map 21 is funded by the Federal gasoline tax and allocated by the Federal Transit Authority (FTA). Each year transportation agencies supply the FTA with actual miles traveled by eligible public transit services and the percent of populations serviced by those services. The FTA calculates the amount of funding available throughout the Country and redistributes the funding based on the supplied information to each transit provider. The Authority does not anticipate significant reductions because transportation is still a high priority for the Federal Government.

Local Funding Sources

- A 0.7 mil new property tax levy put in place by TheRide for the five-year life of the plan, and
- Revenues from purchase-of-service- agreements (POSA's) executed with non-authority communities, and

- Passenger Fares

Property Tax Millage

The .7 mil property tax levy will yield about \$4.3 M annually, with the balance coming from POSA revenues, and passenger fares.

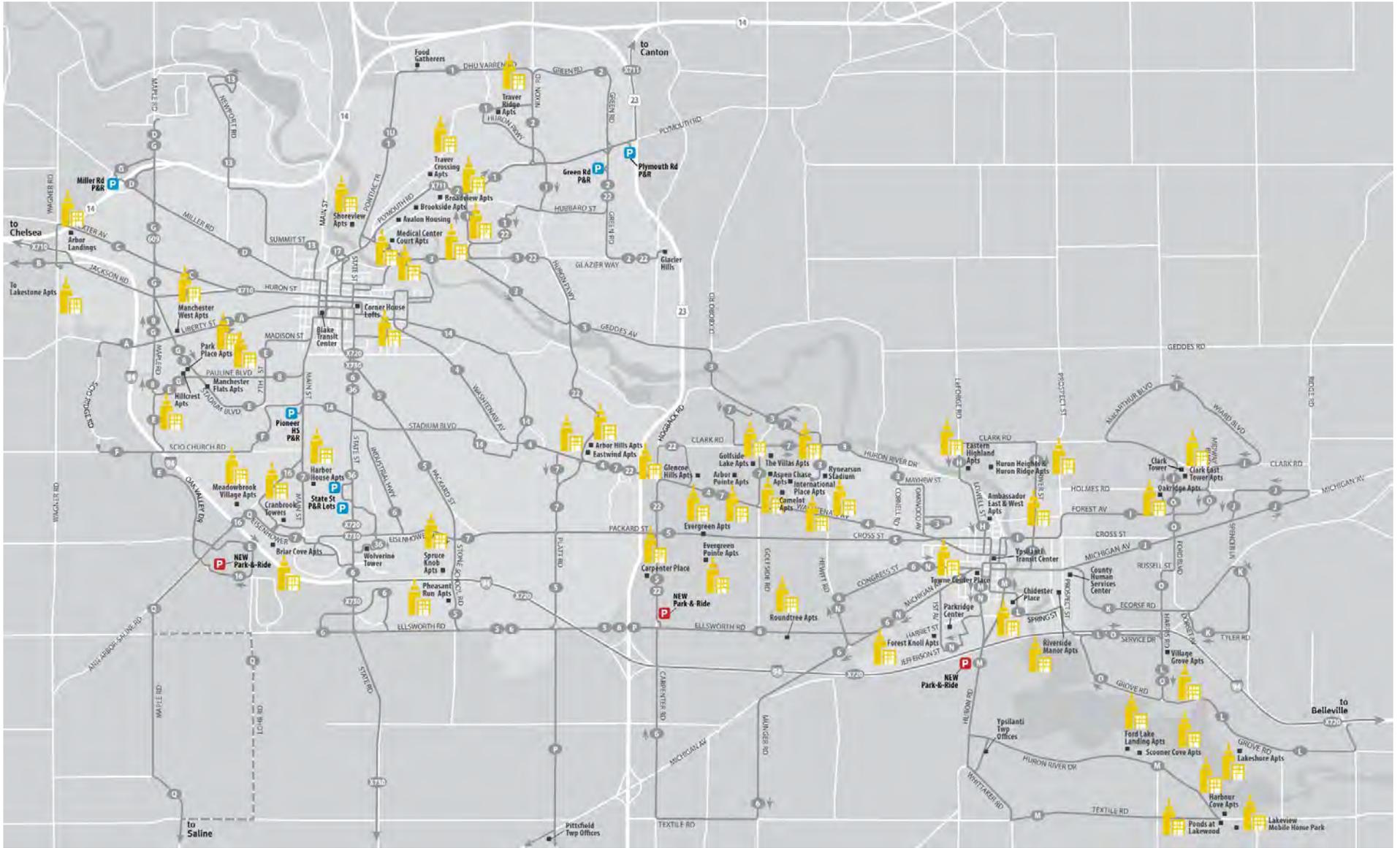
The millage recommendation is consistent with the conclusions of the of the Urban Core Working Group and the Financial Task Force, which determined that a millage is the only available option at this time, and that 0.7 mills would pay for the services in the plan not covered by POSA payments. Act 55 permits TheRide itself to levy a millage on property within the authority area, and no other funding mechanisms are currently available for an Act 55 Authority.

Purchase of Service Agreements (POSA)

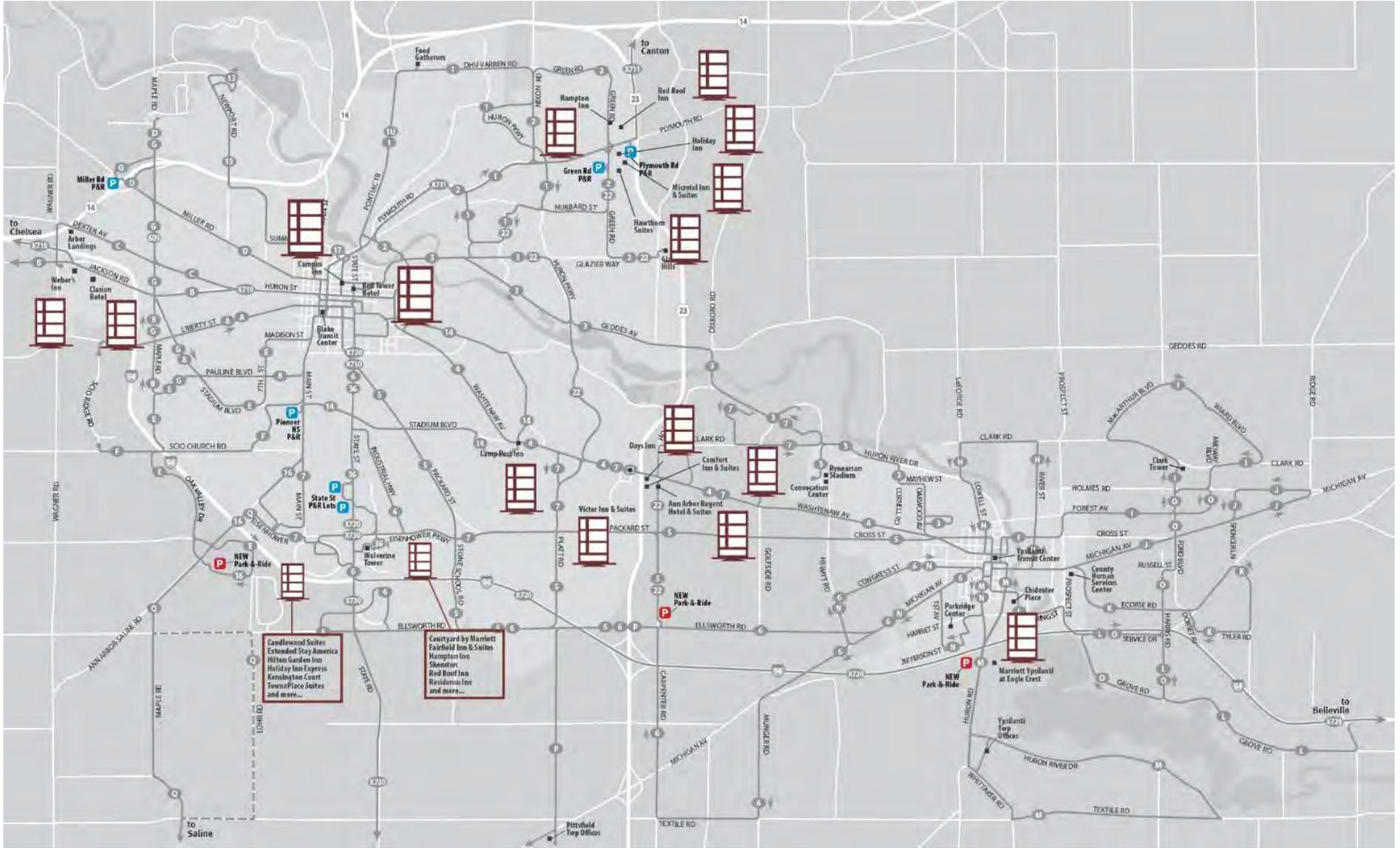
As for the POSA communities, their services will be paid for using direct contracts in which payments are based on service hours in that community. Service hour costs include all support, administrative and planning expenses.

Passenger Fares

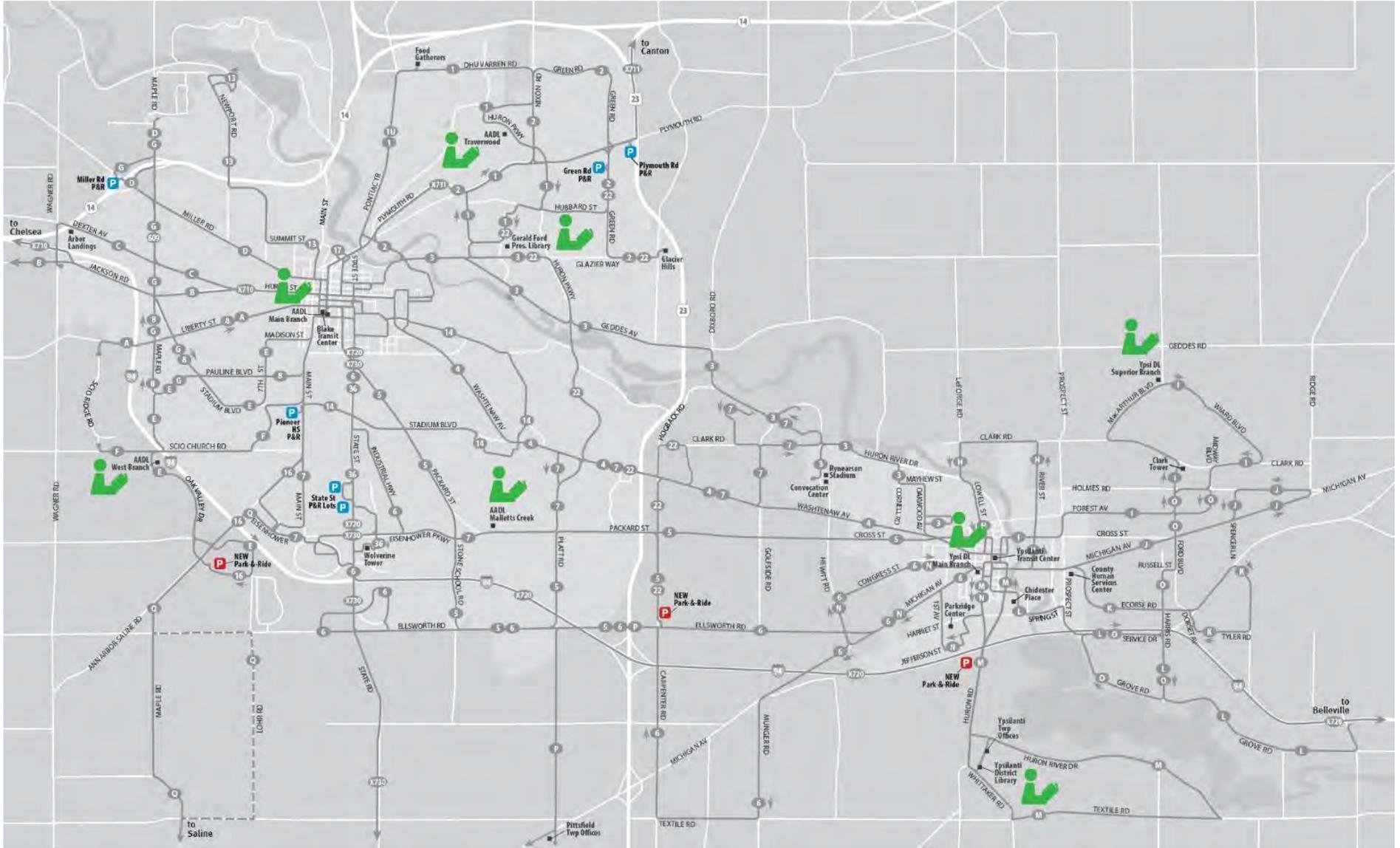
These are fares paid directly by the passenger or a third party institution such as Washtenaw Community College, the University of Michigan, Eastern Michigan University, and the Ann Arbor Downtown Development Authority. *More funding details can be found in Appendix 1.*



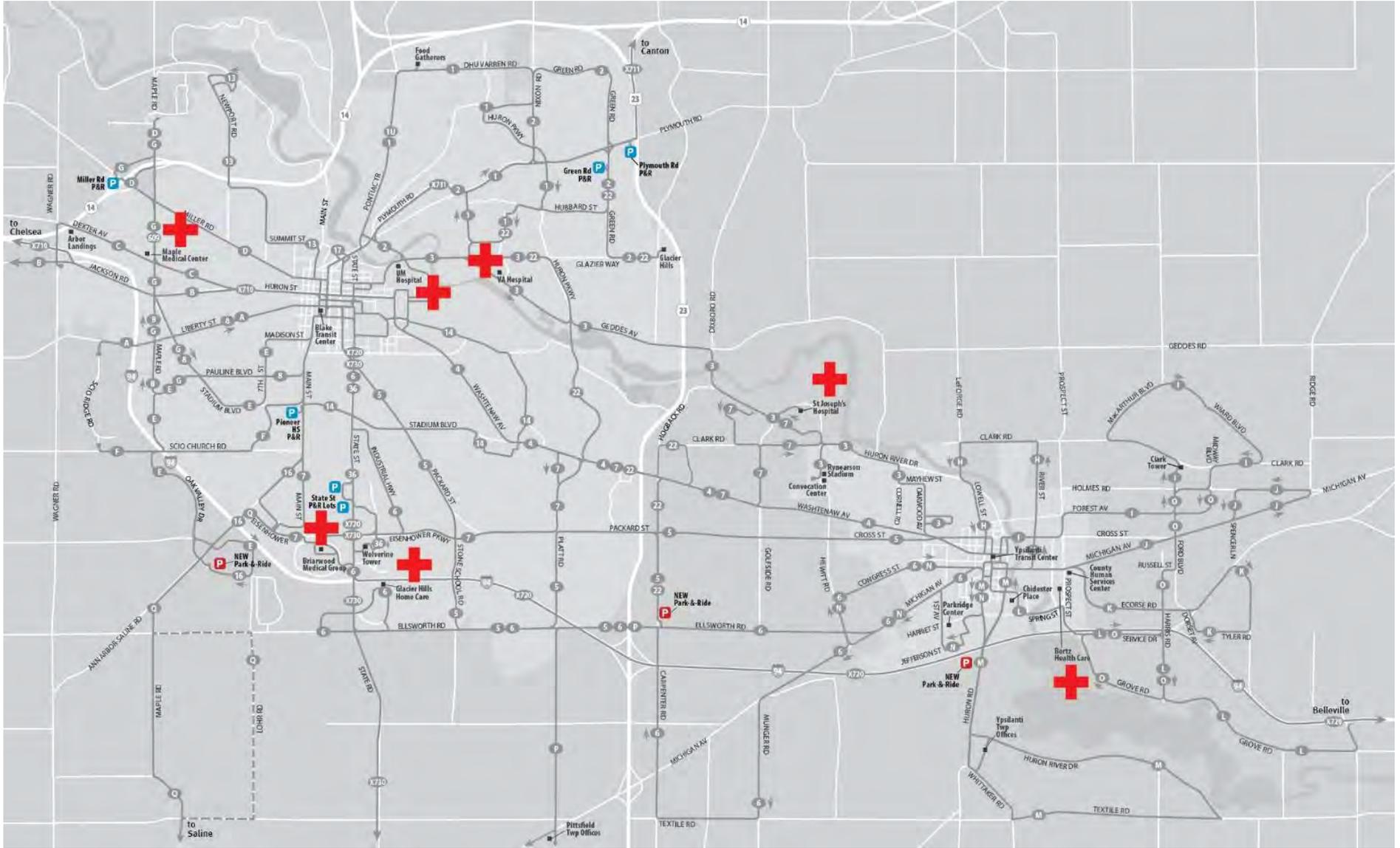
APARTMENTS



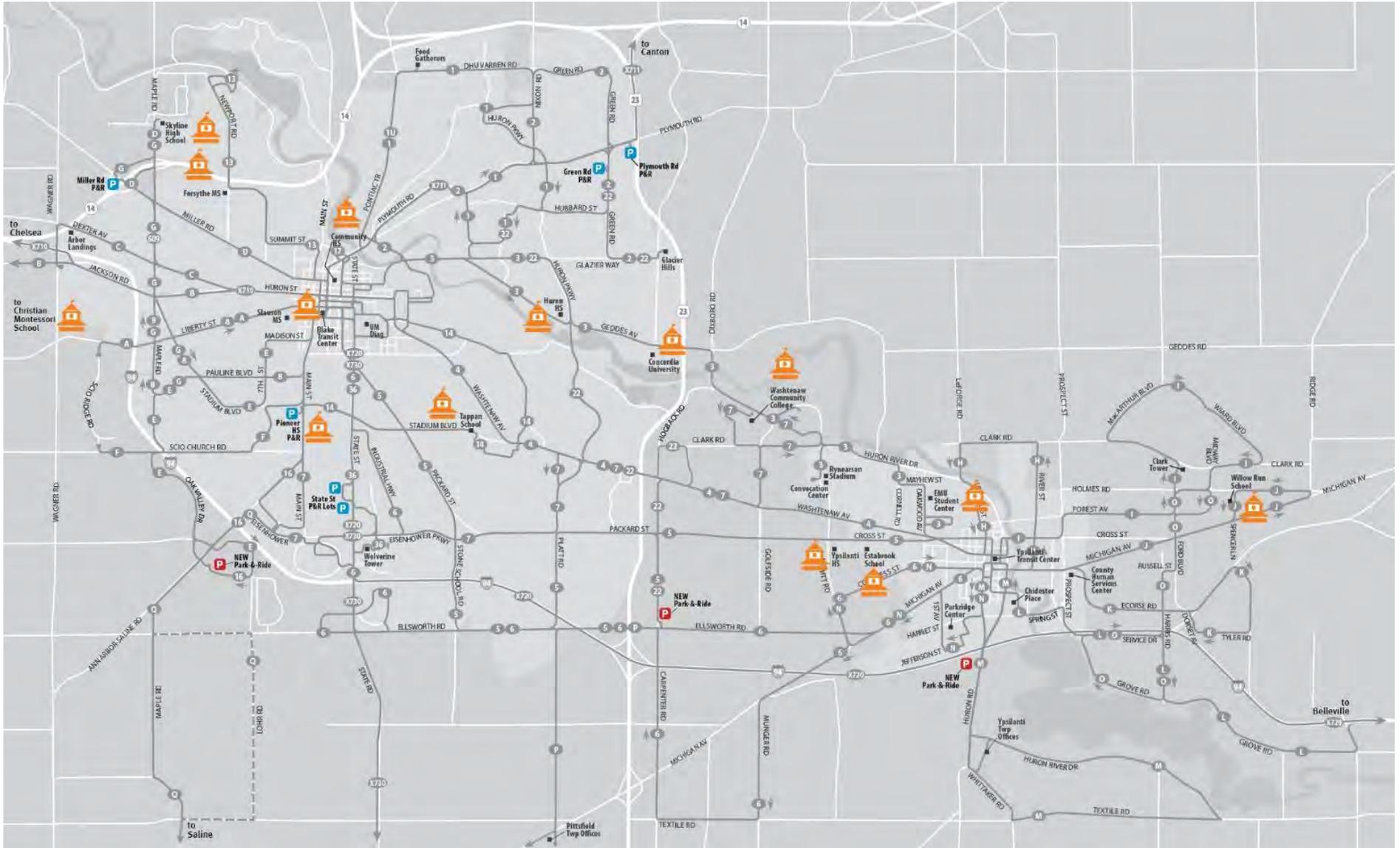
HOTELS



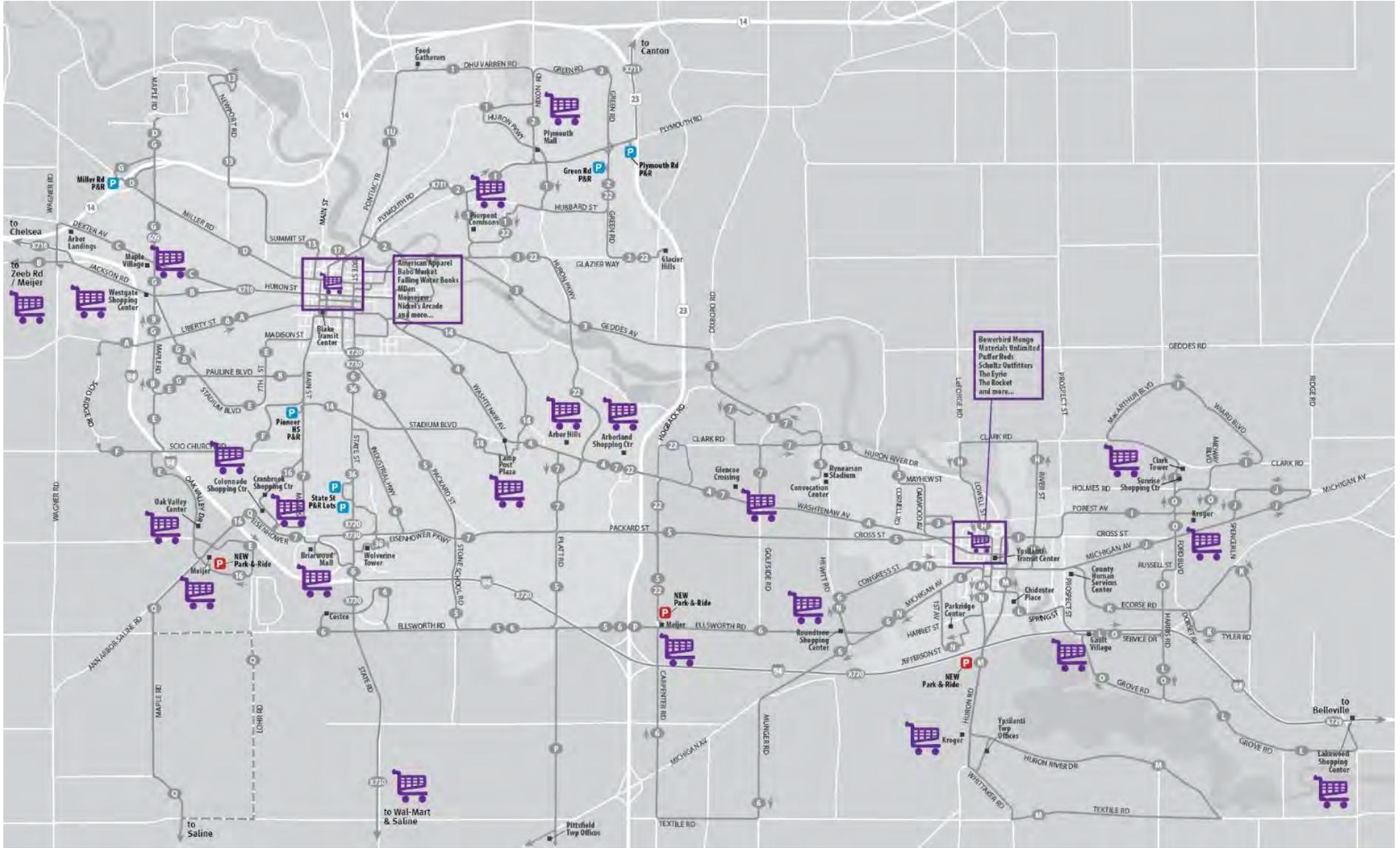
LIBRARIES



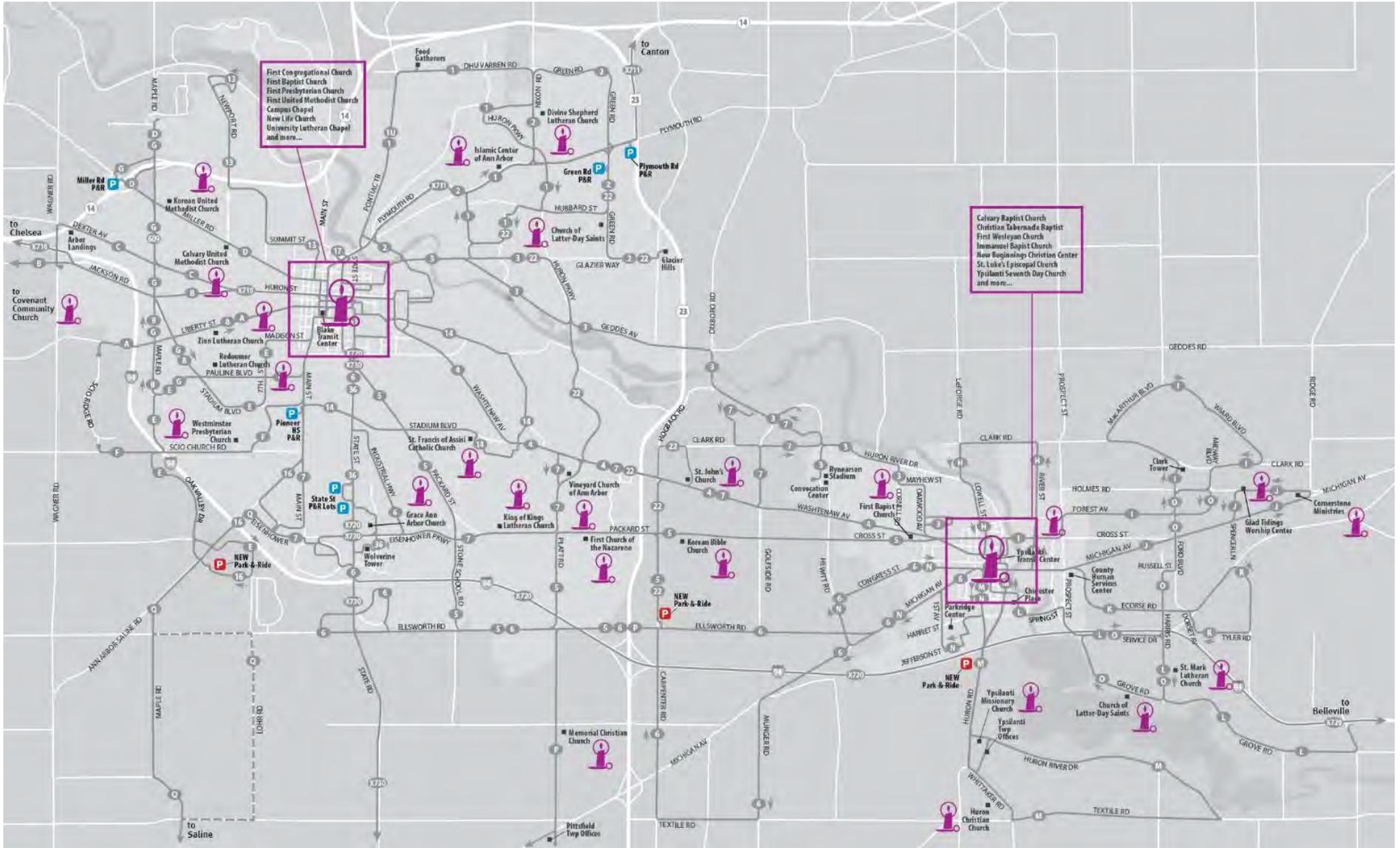
MEDICAL FACILITIES



SCHOOLS



SHOPPING



PLACES OF WORSHIP

Appendix Part II

Appendices for Michigan Flyer

Appendix A – Survey Questions

Appendix B – Figures, Tables, and Charts

Appendix C – References

Appendix D – Survey Statistics

Appendix E – Summary of Survey Responses

Appendix A: Survey Questions

We are conducting a survey on customer's experience with Michigan Flyer. Your participation is valuable and your input will be used to improve the existing service. For the purpose of this survey, Michigan Flyer and AirRide refer to the same service. The survey will take approximately ten minutes.

1. Have you ever used Michigan Flyer or AirRide to travel to or from the Detroit Metro Airport? (Please answer "No" if you only used the service for transportation between East Lansing and Ann Arbor).

Yes No

If you answered no, you have finished the survey. If you answered yes, please continue.

2. When did you last use Michigan Flyer?

the past week

more than a week ago but within the past month

more than a month ago but within the last six months

more than six months ago but within the past year

over a year ago

3. How many times did you use the Detroit Metro Airport (DTW) for travel in the past year?

(Please consider a round-trip as one time).

1– 2 times 3– 5 times 6-10 times 11– 20 times > 20 times

4. How many times did you use Michigan Flyer for transportation to DTW in the past year?

1 – 2 times 3 – 5 times 6 -10 times 11 – 20 times > 20 times

5. Please rate your overall satisfaction with Michigan Flyer.

Very Dissatisfied 1 2 3 4 5 Very Satisfied

6. How likely are you to recommend Michigan Flyer to friends and family?

Very Unlikely 1 2 3 4 5 Very Likely

7. How do you purchase tickets with Michigan Flyer? (select all options that apply)

Michigan Flyer's website Phone reservation At the bus-stop
or My AirRide's website

If you did not select Michigan Flyer's website or My AirRide's website, please skip to question #10

8. On your last online purchase for Michigan Flyer please indicate what device you used to complete the transaction?

- Desktop interface
- Mobile interface
- Started transaction on desktop then switched to mobile
- Started transaction on mobile then switched to desktop

9. Please rate your experience using the mobile interface to purchase your ticket. (See picture to help refresh your memory)

	Strongly Disagree				Strongly agree
The site is easy to use in purchasing a ticket	1	2	3	4	5
The design of the site is not attractive	1	2	3	4	5
Information is comprehensive	1	2	3	4	5
There are too many fields to fill out	1	2	3	4	5

10. How do you check Michigan Flyer's bus schedule? (select all options that apply)

- Michigan Flyer's website
- Phone
- Ann Arbor District Library
- My AirRide's website

If you did not select Michigan Flyer's website or My AirRide's website, please skip to question #14.

11. Have you used Michigan Flyer's mobile site to check your bus schedule?

- Yes
- No
- Don't Remember

12. If you came to Michigan Flyer's mobile site, how would you find the bus schedule (see picture of mobile site)? **[Use Heatmap function in Qualtrics]**

-
-
-



Menu
button
Book A
Trip
Don't
Know

you find the mobile bus-schedule to be easy to read (see picture of mobile site)? Please rate.

Very easy to read 1 2 3 4 Not at all easy to read



13. Do

14. At what price would a refundable, round-trip service from Ann Arbor begin to look expensive?

\$26 \$28 \$30 \$32 \$34

15. Which stop did you use for pick up transportation to DTW on your last trip?

- East Lansing Marriott Blake Transit Center Kensington Court Hotel
 Not Applicable

If you checked Not Applicable, please skip to question #19.

16. How convenient was your pick-up location in relation to your home?

Very Inconvenient 1 2 3 4 5 Very Convenient

17. On your last trip, when did the bus leave your pickup location?

- early on time late

18. How convenient was your scheduled pickup time in relation to your flight departure time?

Very Inconvenient 1 2 3 4 5 Very Convenient

19. The last time you took Michigan Flyer, did you use the drop-off and pick-up location at McNamara Terminal [only Delta, Air France, KLM flights use this terminal] or North Terminal? If you don't remember, please refer to the chart for assistance.

Terminals	Airlines
McNamara Terminal	Delta, Air France and KLM Royal Dutch Airlines
North Terminal	Air Canada <input type="radio"/> , AirTran <input type="radio"/> , Alaska Airlines <input type="radio"/> , American Airlines <input type="radio"/> , Continental Airlines <input type="radio"/> ,

	<input type="radio"/> Frontier Airlines <input type="radio"/> JetBlue Airways <input type="radio"/> <input type="radio"/> Royal Jordanian <input type="radio"/> Southwest Airlines <input type="radio"/> <input type="radio"/> Spirit Airlines <input type="radio"/> United Airlines <input type="radio"/> US Airways <input type="radio"/> USA 3000
--	---

- McNamara Terminal North Terminal

If you selected McNamara proceed to questions #20 & #21 and skip question #22. If you selected the North Terminal proceed to question #22.

20. On September 22, Michigan Flyer began using a new pick-up and drop-off location at McNamara Terminal. Have you taken the Michigan Flyer since September 22, 2014?

- Yes No Not sure

21. Please rate your overall satisfaction with the pickup and drop-off location at McNamara Terminal the last time you used Michigan Flyer:

Very Unsatisfying [1 2 3 4 5] Very Satisfying

22. Please rate your overall satisfaction with the pickup and drop-off location at North Terminal the last time you used Michigan Flyer:

Very Unsatisfying [1 2 3 4 5] Very Satisfying

23. Please rate the airport pick-up/drop-off location on the following: (please check "Not Applicable" if you were not able to evaluate the location).

	Strongly Disagree				Strongly Agree
The walking distance between the location and the security checkpoint is too long	1	2	3	4	5
The airport pick-up/drop-off location has enough seating	1	2	3	4	5
The airport pick-up/drop-off location is uncomfortable	1	2	3	4	5
The airport pick-up/drop-off location is clean	1	2	3	4	5
The airport pickup/drop-off location has insufficient climate control	1	2	3	4	5

24. How convenient was your scheduled airport pick-up time in relation to your flight arrival time?

Very Inconvenient 1 2 3 4 5 Very Convenient

25. On your last trip, when did the bus arrive to your drop-off location?

early on time late

26. If you have any comments on your experience with Michigan Flyer that you would like to share, please enter them below.

27. What is your zip code?

28. What is your age?

<=20 21 -30 31-40 41-50 >=51

29. In what range does your yearly household income fall?

<=\$20,000 \$20,001-\$60,000 \$60,001-\$100,000 >=\$100,001 Prefer not to answer

Appendix B: Figures for Michigan Flyer Report

- Figure 1 2
- Figure 2 3
- Figure 3 3
- Figure 4 4
- Figure 5 4
- Figure 6 5
- Figure F1A 6
- Figure F1B 7
- Figure F1C 8
- Figure F2A 9
- Figure F2B 9
- Figure F3A 10
- Figure F3B 11
- Figure F4A 12
- Figure F4B 13
- Figure F4C 14
- Figure F4D 15
- Figure F4E 15
- Figure F5A 16
- Figure F5B 17
- Figure F5C 17
- Figure F6A 18
- Figure L1A 18
- Figure L1B 19
- Figure L1C 19
- Figure L1D 20

Figure 1



New proposed bus stop for Michigan Flyer.

Figure 2



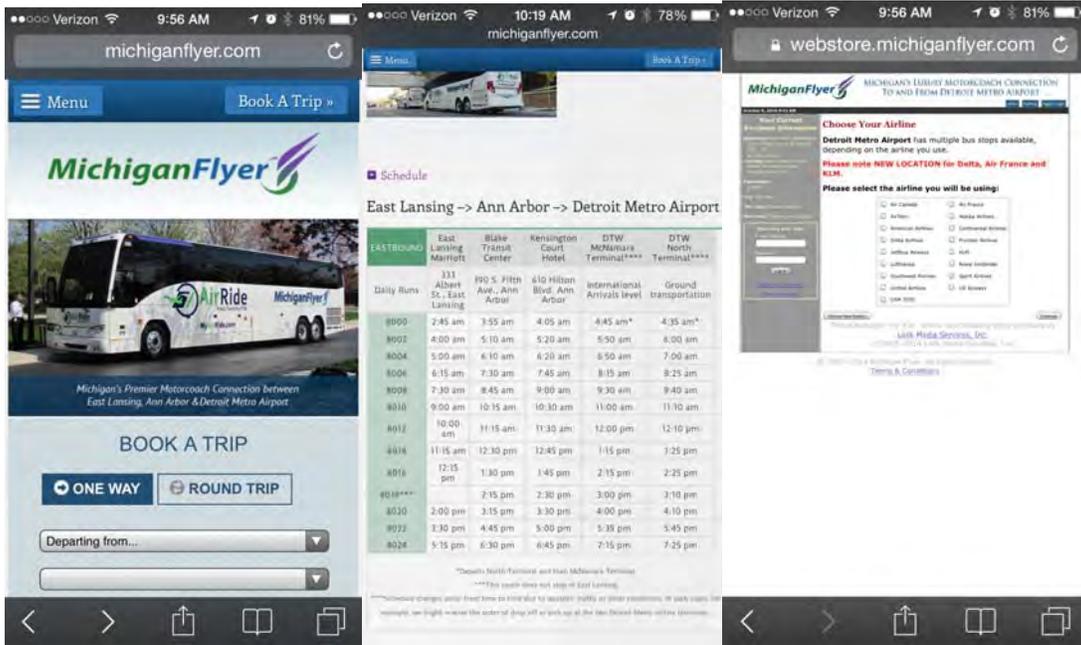
Michigan Flyer Scheduling Page (on desktop browser)

Figure 3



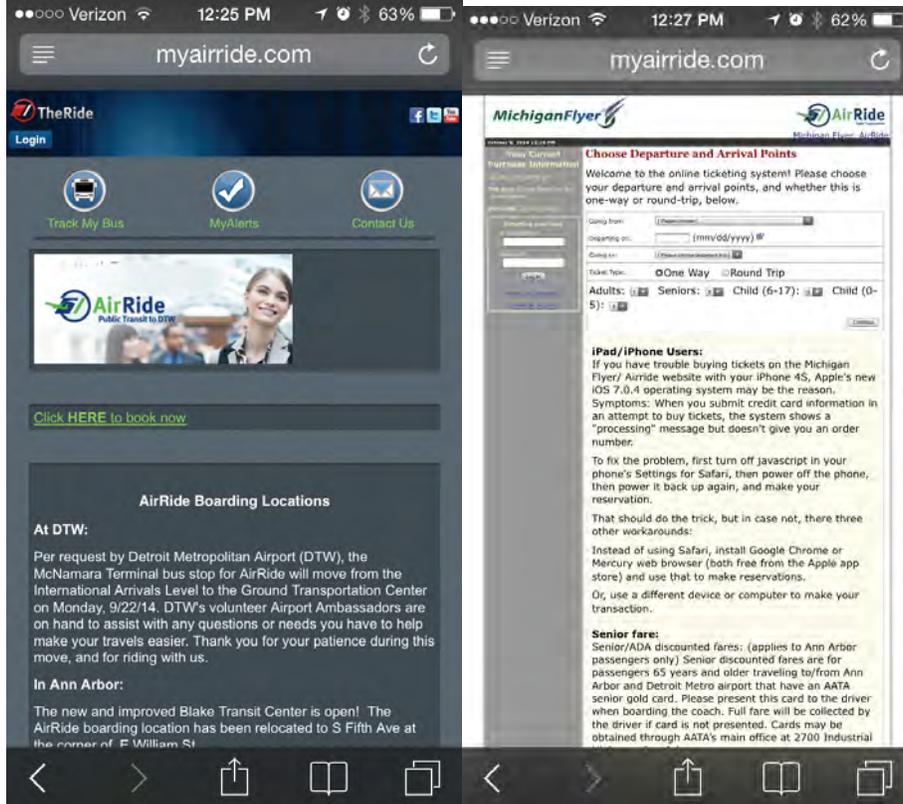
My AirRide Homepage (on desktop browser)

Figure 4



Current Michigan Flyer mobile site.

Figure 5



Current My AirRide mobile site.

Figure 6

Comparison of transportation services to DTW

Name	# A2 Stops	Door to Door option? (Y/N)	Availability	One Way Fees	Restrictions
Amazing Blue Taxi ¹	Unlimited	Yes	24/7	\$49 UMich to DTW	None
Bill's Van Service ²	unlimited	Yes	24/7	\$39	None
Reliable Airport Service ³	unlimited	Yes	24/7	\$65 metered or \$75 flat rate	None
UM CSG Airbus ⁴	3	No	UMich Holiday Breaks limited days/times	\$11 or \$7 Advanced Reservation	Valid UMich ID
Ann Arbor Airport Shuttle ⁵	unlimited	Yes	5:30am - 2am	\$32/\$45 Late night	None

¹ <http://www.amazingbluetaxi.com/>

² <http://www.billsvanservice.com/>

³ <http://www.reliableairportservice.com/>

⁴ <https://csg.umich.edu/airbus/fares.htm>

⁵ <http://www.annarborairportshuttle.net/4.html>

Figure F1A

Respondents' satisfaction rating, willingness to recommend rating, and the combination of the two.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Please rate your overall satisfaction with Michigan Flyer.- Overall Satisfaction	81	1.00	5.00	4.5185	.65405
How likely are you to recommend Michigan Flyer to friends and family?-	80	1.00	5.00	4.6750	.61160
Combined_Satisfaction	79	1.00	5.00	4.6139	.57707
Valid N (listwise)	79				

Figure F1B

There is no significant change in satisfaction rating depending on when people last used the service.

→ Oneway

Descriptives

Combined_Satisfaction								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
In the past week	7	4.6429	.47559	.17976	4.2030	5.0827	4.00	5.00
More than a week ago but within the past month	17	4.7647	.35872	.08700	4.5803	4.9491	4.00	5.00
More than a month ago but within the past six months	33	4.5909	.44114	.07679	4.4345	4.7473	4.00	5.00
More than six months ago but within the past year	14	4.7143	.37796	.10102	4.4961	4.9325	4.00	5.00
Over a year ago	8	4.1875	1.33463	.47186	3.0717	5.3033	1.00	5.00
Total	79	4.6139	.57707	.06493	4.4847	4.7432	1.00	5.00

ANOVA

Combined_Satisfaction					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.006	4	.501	1.548	.197
Within Groups	23.969	74	.324		
Total	25.975	78			

Figure F1C

Income and Age do not affect overall satisfaction

Group Statistics

	MF_INCOME	N	Mean	Std. Deviation	Std. Error Mean
OVERALL_SAT	1	20	4.6250	.45523	.10179
	2	22	4.5909	.45346	.09668

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
OVERALL_SAT	Equal variances assumed	.004	.949	.243	40	.809	.03409	.14036	-.24959	.31777
	Equal variances not assumed			.243	39.591	.809	.03409	.14039	-.24973	.31792

Group Statistics

	MF_AGE	N	Mean	Std. Deviation	Std. Error Mean
OVERALL_SAT	2	48	4.5417	.66711	.09629
	3	15	4.7000	.41404	.10690

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
OVERALL_SAT	Equal variances assumed	.361	.550	-.866	61	.390	-.15833	.18288	-.52403	.20736
	Equal variances not assumed			-1.100	38.401	.278	-.15833	.14388	-.44949	.13283

Figure F2A

Respondents' ratings for what price point begins to look expensive for a refundable, round-trip ticket from Ann Arbor to the Detroit airport.

17. At what price would a refundable, round-trip service from Ann Arbor begin to look expensive?

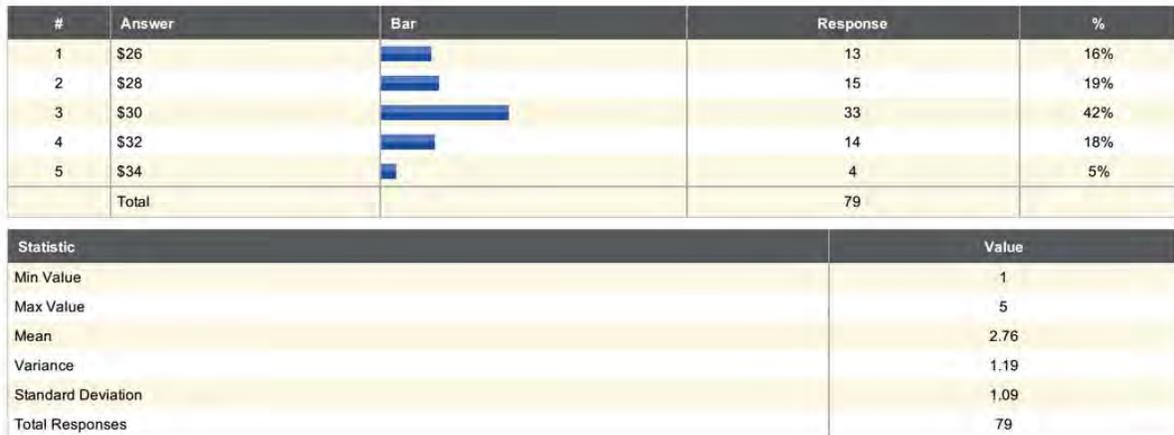


Figure F2B

Pricing scheme for trips between Ann Arbor and the Detroit airport

From Ann Arbor

From Ann Arbor ... to Detroit Metro Airport "AirRide"***

Advance Reservation – Purchased online, discounted* (Restricted - can be cancelled and refunded up to 48 hours before departure prior to the first travel date of the reservation)		
to Detroit Metro	One Way	Round Trip
Standard	\$12	\$22
Senior or ADA	\$6	\$11
Youth (6-17)	\$7.50	Free
Children (5 or Under)	Free	Free

Advanced Reservation – Unrestricted (Fully refundable up to time of departure)		
to Detroit Metro	One Way	Round Trip
Standard	\$15	\$30
Senior or ADA	\$7.50	\$15
Youth (6-17)***	\$7.50	Free
Children (5 or Under)***	Free	Free

*For phone reservations or cash walk-on fares paid to the driver -same as one-way fares above; Cash must be exact change.

Figure F3A

Mobile Satisfaction

Q9: Means of all those satisfaction ratings. (ease of use, design, comprehensive info, too many fields)

Rate how much you agree with statement (1-5)

a. The site is easy to use in purchasing a ticket

i. **Average: 4.0 - Very Good**

ii. stdev: 1.10

iii. # of responses: 21

b. The design of the site is not attractive

i. **Average: 2.79 - Not bad, not good**

ii. Stdev: 1.13

iii. # of responses: 19

c. Information is comprehensive

i. **Average: 3.86 - Good**

ii. Stdev: 0.85

iii. # of responses: 21

d. There are too many fields to fill out

i. **Average: 2.59 - Bad**

ii. Stdev: 1.06

iii. # of responses: 17

Figure F3B

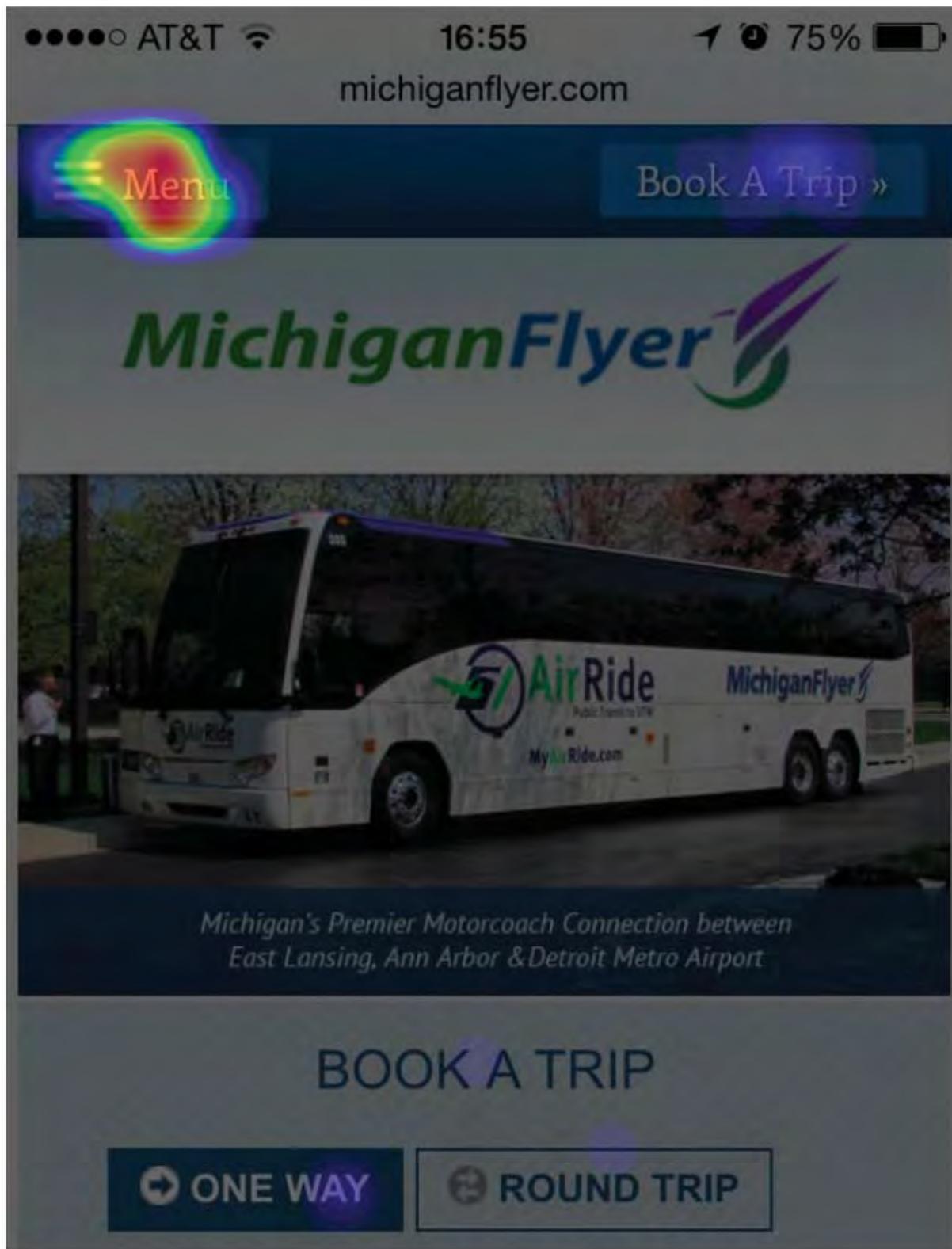


Figure F4A

Overall Satisfaction not affected by terminal used

Group Statistics

	MF_DTW_TERMINAL	N	Mean	Std. Deviation	Std. Error Mean
OVERALL_SAT	1	49	4.6531	.38465	.05495
	2	27	4.5370	.83119	.15996

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
OVERALL_SAT	Equal variances assumed	4.982	.029	.832	74	.408	.11602	.13949	-.16192	.39397
	Equal variances not assumed			.686	32.255	.498	.11602	.16914	-.22839	.46044

Figure F4B

Average Terminal Satisfaction ratings for McNamara and North Terminal

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
Please rate your overall satisfaction with the pickup and drop-off location at McNamara Terminal...- Overall Satisfaction	44	37.9%	72	62.1%	116	100.0%
Please rate your overall satisfaction with the pickup and drop-off location at North Terminal the...- Overall Satisfaction	28	24.1%	88	75.9%	116	100.0%

Report

	Please rate your overall satisfaction with the pickup and drop-off location at McNamara Terminal...- Overall Satisfaction	Please rate your overall satisfaction with the pickup and drop-off location at North Terminal the...-Overall Satisfaction
Mean	3.7045	4.0000
N	44	28
Std. Deviation	1.09075	1.05409

Figure F4C

Average ratings of different factors of terminal locations

Group Statistics

MF_DTW_TERMINAL	N	Mean	Std. Deviation	Std. Error Mean
MF_TERMINAL_LONG_DISTANCE	44	3.00	1.181	.178
MF_P/U_D/O_ENOUGH_SEATING	38	2.61	1.242	.201
MF_P/U_D/O_UNCOMFORTABLE	42	3.50	1.274	.197
MF_P/U_D/O_CLEAN	44	3.27	.997	.150
MF_P/U_D/O_CLIMATE_CONTROL	41	3.51	1.186	.185

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
MF_TERMINAL_LONG_DISTANCE	Equal variances assumed	.434	.513	.297	63	.767	.095	.320	-.545	.735
	Equal variances not assumed			.291	37.220	.773	.095	.328	-.569	.759
MF_P/U_D/O_ENOUGH_SEATING	Equal variances assumed	.360	.551	.074	55	.941	.026	.355	-.685	.737
	Equal variances not assumed			.073	34.561	.942	.026	.361	-.706	.759
MF_P/U_D/O_UNCOMFORTABLE	Equal variances assumed	.734	.395	2.559	59	.013	.868	.339	.189	1.548
	Equal variances not assumed			2.691	39.443	.010	.868	.323	.216	1.521
MF_P/U_D/O_CLEAN	Equal variances assumed	1.314	.256	-2.718	67	.008	-.647	.238	-1.123	-.172
	Equal variances not assumed			-2.830	56.205	.006	-.647	.229	-1.105	-.189
MF_P/U_D/O_CLIMATE_CONTROL	Equal variances assumed	.211	.648	-.522	63	.604	-.154	.296	-.746	.437
	Equal variances not assumed			-.534	51.647	.596	-.154	.290	-.735	.427

Figure F4D

Significant dropoff in McNamara terminal satisfaction after Sept. 22

T-Test

Group Statistics					
		N	Mean	Std. Deviation	Std. Error Mean
Please rate your overall satisfaction with the pickup and drop-off location at McNamara Terminal... - Overall Satisfaction	Yes	17	3.1176	1.16632	.28287
	No	25	4.1200	.88129	.17626

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Please rate your overall satisfaction with the pickup and drop-off location at McNamara Terminal... - Overall Satisfaction	Equal variances assumed	.220	.642	-3.173	40	.003	-1.00235	.31595	-1.64091	-.36380
	Equal variances not assumed			-3.007	28.020	.006	-1.00235	.33329	-1.68505	-.31966

Figure F4E

No change in Overall Satisfaction before and after September 22

T-Test

Group Statistics					
		N	Mean	Std. Deviation	Std. Error Mean
Combined_Satisfaction	Yes	20	4.6750	.37258	.08331
	No	27	4.6667	.39223	.07549

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Combined_Satisfaction	Equal variances assumed	.170	.682	.074	45	.942	.00833	.11330	-.21987	.23654
	Equal variances not assumed			.074	42.212	.941	.00833	.11242	-.21851	.23518

Figure F5A

On-time ratings

On your last trip, when did the bus leave your pickup location?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Early	3	2.6	3.9	3.9
	On Time	63	54.3	82.9	86.8
	Late	10	8.6	13.2	100.0
	Total	76	65.5	100.0	
Missing	System	40	34.5		
Total		116	100.0		

On your last trip, when did the bus arrive to your drop-off location?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Early	16	13.8	21.3	21.3
	On Time	55	47.4	73.3	94.7
	Late	4	3.4	5.3	100.0
	Total	75	64.7	100.0	
Missing	System	41	35.3		
Total		116	100.0		

Figure F5B

Schedule Convenience Ratings

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
How convenient was your scheduled pickup time in relation to your flight departure time?--Pick Up Time Convenience	75	1.00	5.00	3.4933	1.03157
How convenient was your scheduled airport pick-up time in relation to your flight arrival time?--Pick Up Time Convenience	71	1.00	5.00	3.2958	.94709
Valid N (listwise)	68				

Figure F5C

Schedule convenience rating between users of the two terminals for pickup times in relation to arrival times.

Group Statistics

	MF_DTW_TERMINAL	N	Mean	Std. Deviation	Std. Error Mean
MF_P/U_D/O_TIME_CONVENIENCE	1	48	3.42	.942	.136
	2	23	3.04	.928	.194

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower		Upper
MF_P/U_D/O_TIME_CONVENIENCE	Equal variances assumed	.751	.389	1.570	69	.121	.373	.238	-.101	.847
	Equal variances not assumed			1.578	44.030	.122	.373	.237	-.103	.850

Figure L1B

National map based on respondent's IP address data



Figure L1C

State map based on respondent-provided zip codes

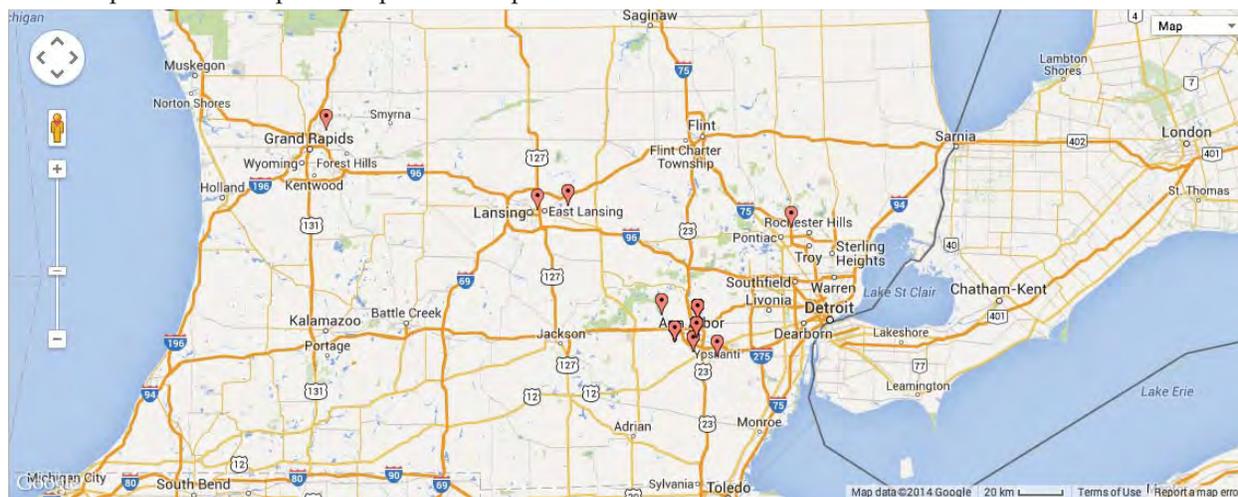
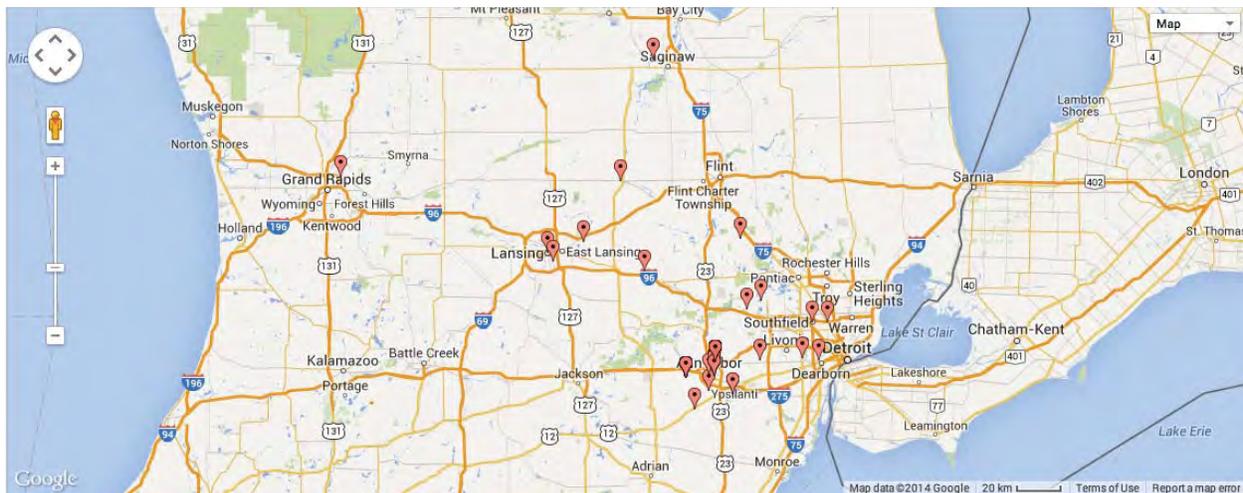


Figure L1D

State map based on respondent's IP address data



Appendix C: References

- "Airport Shuttles Ann Arbor, MI." *Airport Shuttles Ann Arbor, MI*. N.p., n.d. Web. 08 Oct. 2014.
<http://www.yelp.com/search?cflt=airport_shuttles&find_loc=Ann+Arbor%2C+MI#find_desc&l=p:MI:Ann_Arbor:>.
- "Airport Transportation Services. Ann Arbor, MI." *Airport Transportation Services. Ann Arbor, MI*. N.p., n.d. Web. 07 Oct. 2014. <<http://www.reliableairportservice.com/>>.
- " Amazing Blue Taxi." *Ann Arbor Taxi » Amazing Blue Taxi*. N.p., n.d. Web. 09 Oct. 2014.
<<http://www.amazingbluetaxi.com/>>.
- "Ann Arbor Taxi | Bill's Van Service, LLC." *Ann Arbor Taxi | Bill's Van Service, LLC*. N.p., n.d. Web. 09 Oct. 2014. <<http://www.billsvanservice.com/>>.
- ": CSG AirBus :: Fares & Reservations :." : *CSG AirBus :: Fares & Reservations :*. N.p., n.d. Web. 09 Oct. 2014. <<https://csg.umich.edu/airbus/fares.htm>>.
- Holland, Meegan. "Why Is Detroit Metro Airport Moving Its Michigan Flyer Bus Stop?" *Mlive.com*. N.p., 18 Sept. 2014. Web. 7 Oct. 2014. <http://www.mlive.com/lansing-news/index.ssf/2014/09/why_is_detroit_metro_airport_m.html>.
- "Late Night Pickups." *Ann Arbor Airport Shuttle*. N.p., n.d. Web. 09 Oct. 2014.
<<http://www.annarborairportshuttle.net/4.html>>.
- "Michigan Flyer Air Ride." - *Downtown Ann Arbor*. N.p., n.d. Web. 07 Oct. 2014.
<<http://www.yelp.com/biz/michigan-flyer-air-ride-ann-arbor/>>.
- "Michigan Flyer FAQs & Policies." *Michigan Flyer FAQs & Policies*. N.p., n.d. Web. 07 Oct. 2014.
<<http://www.michiganflyer.com/FAQsPolicies.aspx>>.
- "Michigan Flyer Schedule & Route." *Michigan Flyer Schedule & Route*. N.p., n.d. Web. 07 Oct. 2014. <<http://michiganflyer.com/ScheduleRoute.aspx>>.

Transportation Research Board. Rep. N.p., n.d. Web. 09 Oct. 2014.

<<http://www.trb.org/Publications/Blurbs/170867.aspx>>.

"Who We Are | Ann Arbor District Library." *Ann Arbor District Library*. N.p., n.d. Web. 07 Oct.

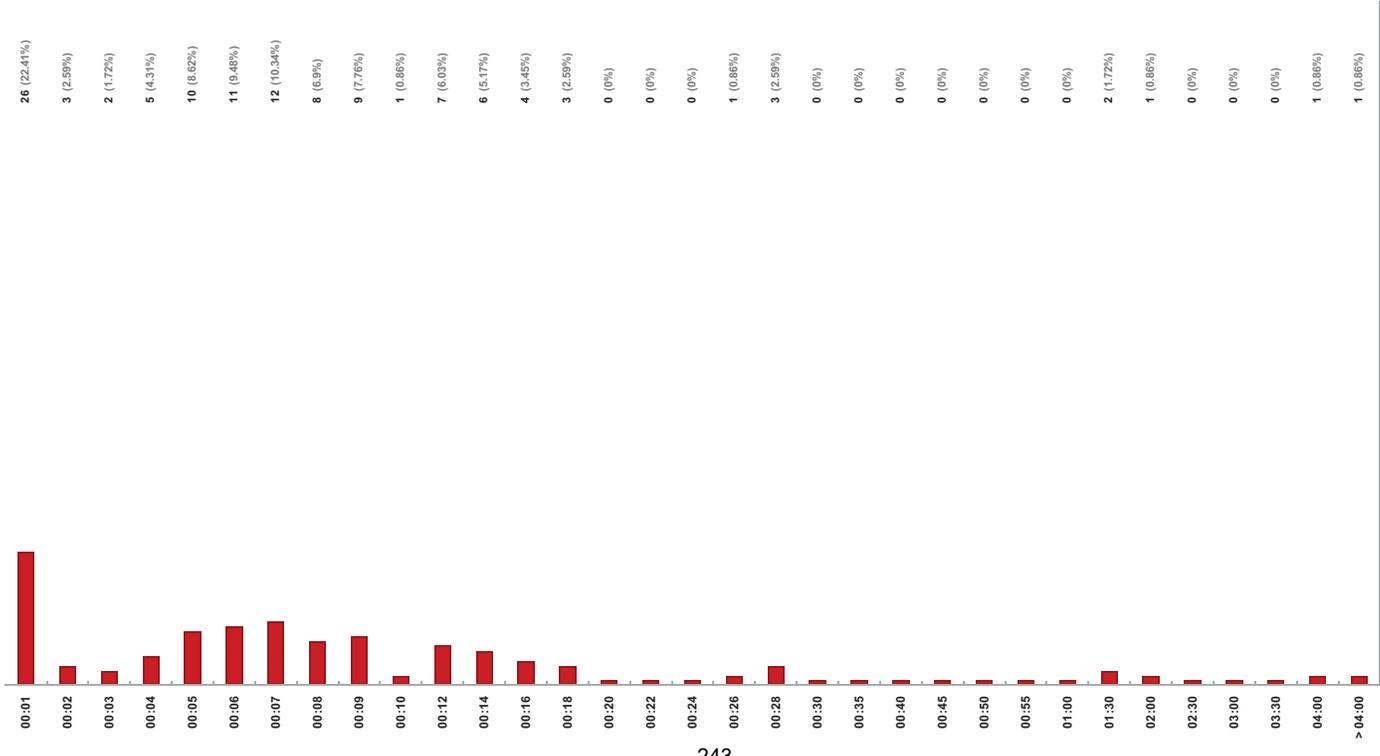
2014. <<http://www.aadl.org/aboutus>>.

"Www.myairride.com." *Www.myairride.com*. N.p., n.d. Web. 08 Oct. 2014.

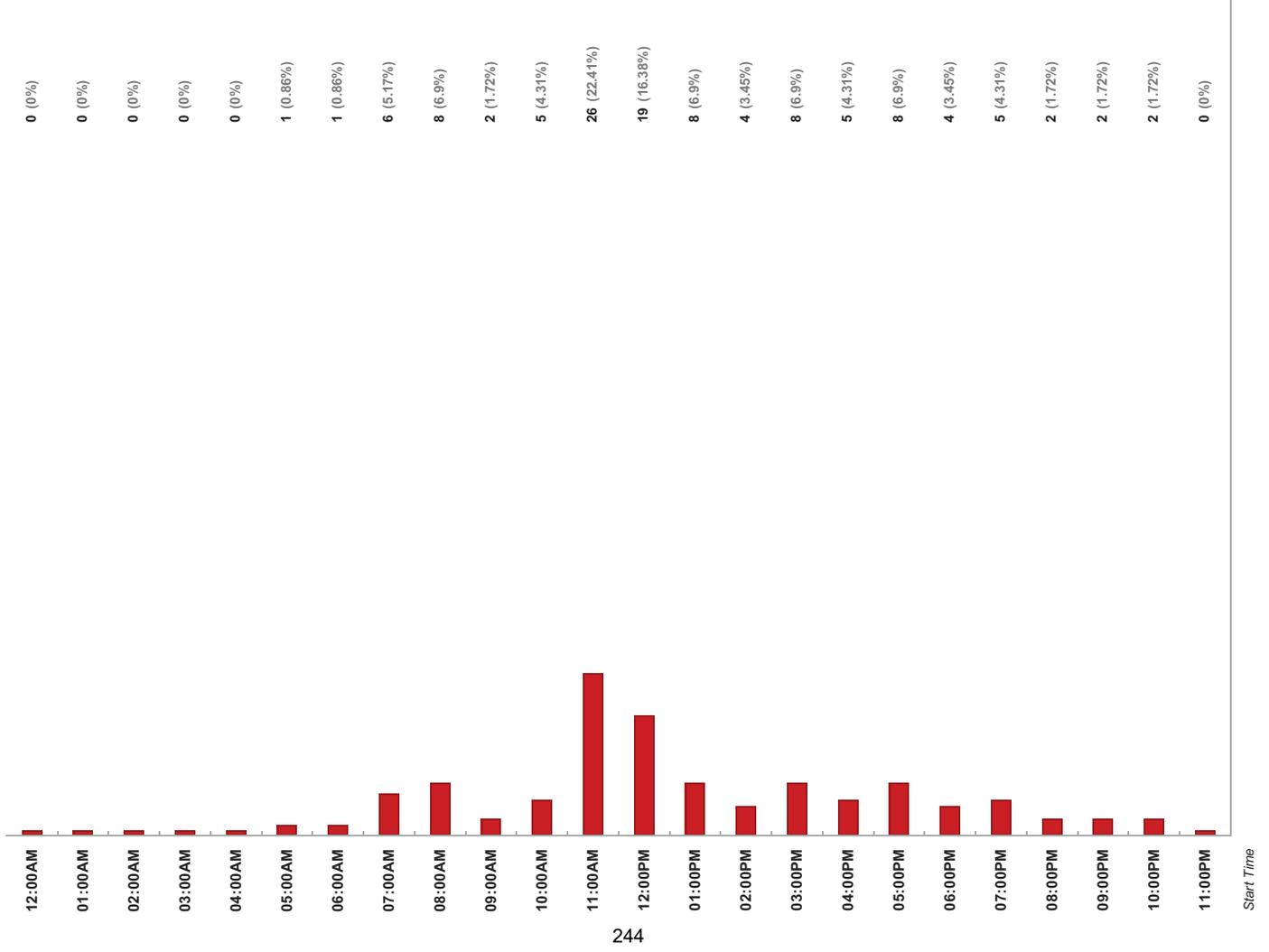
<<http://www.myairride.com/>>.

Appendix D - Survey Statistics

Survey Durations



Survey Start Times



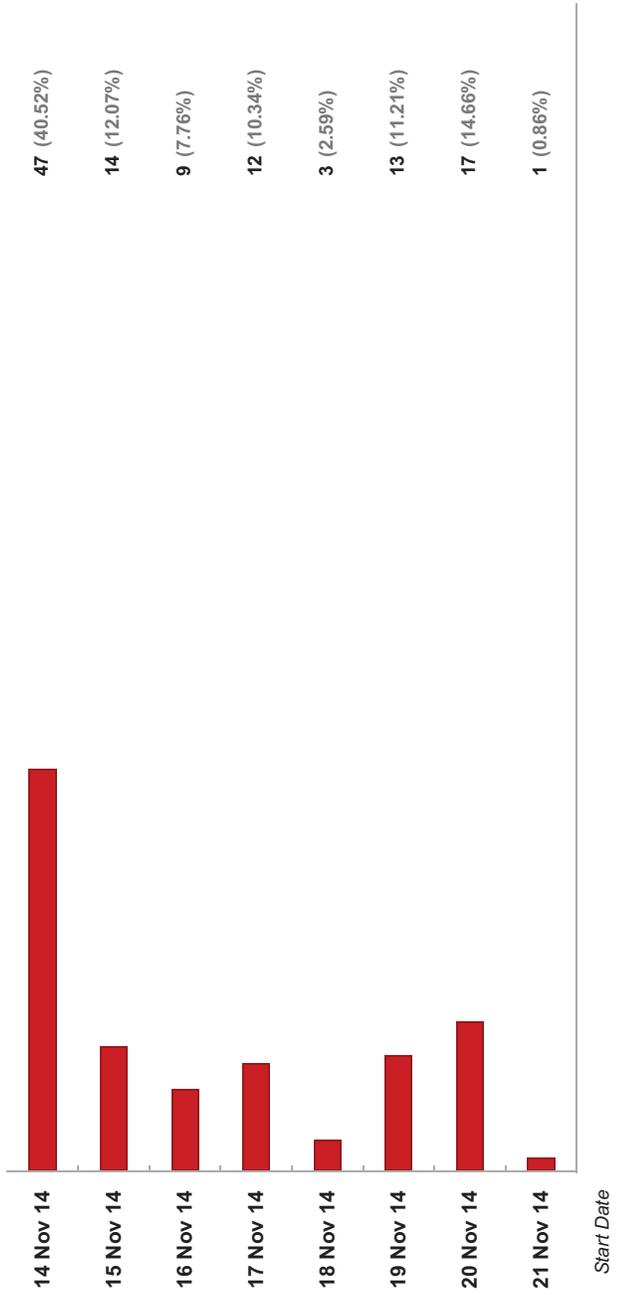
244

Start Time

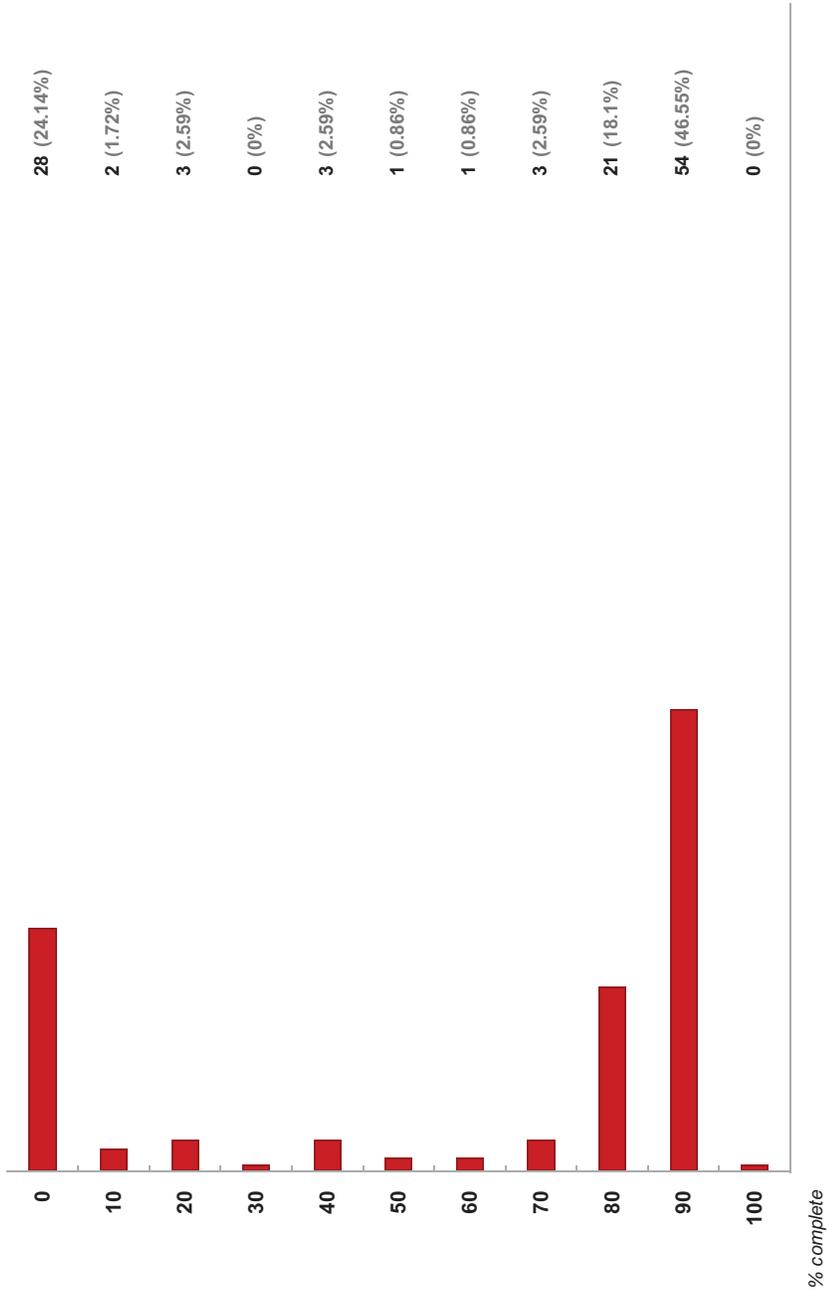
Total Responses

116

Survey Start Dates



Survey Completion Percent



Appendix D - Summary of Survey Responses

My Report

Last Modified: 11/23/2014

1. Browser Meta Info

Browser	Version	Operating System	Screen Resolution	Flash Version	Java Support	User Agent
Chrome	38.0.2125.104	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_9_5) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.104 Safari/537.36
Chrome	38.0.2125.111	Windows NT 6.1	1920x1080	15.0.0	1	Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	38.0.2125.111	Windows NT 6.3	1920x1080	15.0.0	1	Mozilla/5.0 (Windows NT 6.3; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Firefox	33.0	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10.9; rv:33.0) Gecko/20100101 Firefox/33.0
Firefox	33.0	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10.8; rv:33.0) Gecko/20100101 Firefox/33.0
Chrome	38.0.2125.111	Windows NT 6.1	1920x1080	15.0.0	1	Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Firefox	33.0	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10.10; rv:33.0) Gecko/20100101 Firefox/33.0
Safari	8.0	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_10_1) AppleWebKit/600.1.25 (KHTML, like Gecko) Version/8.0 Safari/600.1.25
Chrome	38.0.2125.111	Windows NT 6.3	1366x768	15.0.0	1	Mozilla/5.0 (Windows NT 6.3; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	38.0.2125.111	Windows NT 6.1	1920x1080	15.0.0	1	Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	38.0.2125.111	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_10_0) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Safari	7.0.6	Macintosh	1440x900	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_9_5) AppleWebKit/537.78.2 (KHTML, like Gecko) Version/7.0.6 Safari/537.78.2
Chrome	38.0.2125.111	Windows NT 6.1	1920x1080	15.0.0	1	Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	38.0.2125.111	Windows NT 6.1	1680x1050	15.0.0	1	Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Firefox	33.0	Ubuntu	2560x1600	11.2.202	1	Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:33.0) Gecko/20100101 Firefox/33.0
Chrome	38.0.2125.111	Macintosh	1440x900	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_10_0) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	38.0.2125.111	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_9_5) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	38.0.2125.111	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_9_4) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	38.0.2125.122	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_9_5) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.122 Safari/537.36
Chrome	38.0.2125.122	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_8_5) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.122 Safari/537.36
Chrome	38.0.2125.122	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_10_0) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.122 Safari/537.36
Firefox	33.0	Windows NT 6.1	1920x1080	15.0.0	1	Mozilla/5.0 (Windows NT 6.1; WOW64; rv:33.0) Gecko/20100101 Firefox/33.0
Chrome	38.0.2125.122	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_9_5) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.122 Safari/537.36
Chrome	38.0.2125.111	Macintosh	1050x1680	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_10_0) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	38.0.2125.122	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_9_5) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.122 Safari/537.36
Firefox	33.0	Windows NT 6.3	1536x864	15.0.0	1	Mozilla/5.0 (Windows NT 6.3; WOW64; rv:33.0) Gecko/20100101 Firefox/33.0
Safari iPad	8.0	iPad	768x1024	-1		Mozilla/5.0 (iPad; CPU OS 8_0_2 like Mac OS X) AppleWebKit/600.1.4 (KHTML, like Gecko) Version/8.0 Mobile/12A405 Safari/600.1.4
Chrome	38.0.2125.111	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_9_5) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	38.0.2125.111	Windows NT 6.1	1680x1050	15.0.0	1	Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
MSIE	10.0	Windows Phone 8.0	383x638	-1	1	Mozilla/5.0 (compatible; MSIE 10.0; Windows Phone 8.0; Trident/6.0; IEMobile/10.0; ARM; Touch; NOKIA; Lumia 920)
Chrome	38.0.2125.101	Windows NT 6.1	1366x768	15.0.0	1	Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.101 Safari/537.36
Safari	8.0	iPhone	375x667	1		Mozilla/5.0 (iPhone; CPU iPhone OS 8_1 like Mac OS X) AppleWebKit/600.1.4 (KHTML, like

iPhone	33.0	iPhone	1440x900	15.0.0		Gecko) Version/8.0 Mobile/12B411 Safari/600.1.4
Firefox	33.0	Macintosh	1440x900	15.0.0		Mozilla/5.0 (Macintosh; Intel Mac OS X 10.9; rv:33.0) Gecko/20100101 Firefox/33.0
Chrome	38.0.2125.104	Macintosh	1440x900	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_8_5) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.104 Safari/537.36
Chrome	38.0.2125.122	Macintosh	1440x900	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_9_4) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.122 Safari/537.36
Chrome	38.0.2125.111	Windows NT 6.1	1920x1080	15.0.0	1	Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Firefox	33.0	Ubuntu	1440x900	11.2.202		Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:33.0) Gecko/20100101 Firefox/33.0
Chrome	38.0.2125.122	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_6_8) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.122 Safari/537.36
Firefox	30.0	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10.9; rv:30.0) Gecko/20100101 Firefox/30.0
Chrome	39.0.2171.59	Linux	360x640	-1	1	Mozilla/5.0 (Linux; Android 4.4.2; HTCONE Build/KOT49H) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/39.0.2171.59 Mobile Safari/537.36
Chrome	38.0.2125.111	Windows NT 6.1	1366x768	15.0.0	1	Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	38.0.2125.111	Windows NT 6.1	1600x900	15.0.0	1	Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Safari	7.1	Macintosh	1440x900	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_9_5) AppleWebKit/600.1.17 (KHTML, like Gecko) Version/7.1 Safari/537.85.10
Chrome	38.0.2125.111	Windows NT 6.1	1600x900	15.0.0	1	Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	38.0.2125.122	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_10_0) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.122 Safari/537.36
Chrome	36.0.1985.125	Windows NT 6.1	1366x768	14.0.0	1	Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/36.0.1985.125 Safari/537.36
Chrome	38.0.2125.122	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_9_5) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.122 Safari/537.36
Chrome	37.0.2062.124	Windows NT 6.1	1366x768	15.0.0	1	Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/37.0.2062.124 Safari/537.36
Chrome	38.0.2125.111	Macintosh	1366x768	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_9_5) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	38.0.2125.111	Windows NT 6.1	1366x768	15.0.0	1	Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
MSIE	10.0	Windows NT 6.3	1438x808	15.0.0.223	1	Mozilla/5.0 (compatible; MSIE 10.0; Windows NT 6.3; WOW64; Trident/7.0; .NET4.0E; .NET4.0C; Media Center PC 6.0; .NET CLR 3.5.30729; .NET CLR 2.0.50727; .NET CLR 3.0.30729; InfoPath.3)
MSIE	10.0	Windows NT 6.1	1366x768	15.0.0.223	1	Mozilla/5.0 (compatible; MSIE 10.0; Windows NT 6.1; WOW64; Trident/7.0; SLCC2; .NET CLR 2.0.50727; .NET CLR 3.5.30729; .NET CLR 3.0.30729; Media Center PC 6.0; InfoPath.2; .NET4.0C; .NET4.0E)
Chrome	38.0.2125.111	Windows NT 6.1	1600x900	15.0.0	1	Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	38.0.2125.122	Macintosh	1440x900	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_9_4) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.122 Safari/537.36
Chrome	38.0.2125.111	Windows NT 5.1	1366x768	15.0.0	1	Mozilla/5.0 (Windows NT 5.1) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Safari	7.0.6	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_9_4) AppleWebKit/537.78.2 (KHTML, like Gecko) Version/7.0.6 Safari/537.78.2
Chrome	38.0.2125.111	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_9_4) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Firefox	33.0	Windows NT 6.1	1600x900	15.0.0	1	Mozilla/5.0 (Windows NT 6.1; WOW64; rv:33.0) Gecko/20100101 Firefox/33.0
Chrome	38.0.2125.111	Windows NT 6.1	1440x900	15.0.0	1	Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	38.0.2125.111	Windows NT 6.1	1920x1080	15.0.0	1	Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	38.0.2125.111	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_9_5) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	38.0.2125.111	Windows NT 6.1	1280x1024	15.0.0	1	Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	38.0.2125.122	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_9_5) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.122 Safari/537.36
Chrome	38.0.2125.111	Windows NT 6.1	1366x768	15.0.0	1	Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	38.0.2125.111	Windows NT 6.1	1680x1050	15.0.0	1	Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	40.0.2214.6	Macintosh	1440x900	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_10_1) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/40.0.2214.6 Safari/537.36
Chrome	38.0.2125.111	Windows	1366x768	15.0.0	1	Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko)

Chrome	38.0.2125.111	NT 6.1	1366x768	15.0.0	1	Chrome/38.0.2125.111 Safari/537.36
Chrome	38.0.2125.111	Windows NT 6.3	1600x900	15.0.0	1	Mozilla/5.0 (Windows NT 6.3; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	38.0.2125.122	Macintosh	1440x900	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_10_0) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.122 Safari/537.36
Chrome	38.0.2125.104	Macintosh	1440x900	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_9_2) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.104 Safari/537.36
Chrome	38.0.2125.111	Windows NT 6.1	1366x768	15.0.0	1	Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	38.0.2125.122	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_9_5) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.122 Safari/537.36
Safari	8.0	Macintosh	1440x900	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_10_1) AppleWebKit/600.1.25 (KHTML, like Gecko) Version/8.0 Safari/600.1.25
Chrome	38.0.2125.111	Windows NT 6.3	1920x1080	15.0.0	1	Mozilla/5.0 (Windows NT 6.3; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	38.0.2125.111	Windows NT 6.1	1366x768	15.0.0	1	Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	38.0.2125.111	Windows NT 6.1	1366x768	15.0.0	1	Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	38.0.2125.122	Macintosh	1440x900	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_9_5) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.122 Safari/537.36
Chrome	38.0.2125.122	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_6_8) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.122 Safari/537.36
Chrome	38.0.2125.111	Windows NT 6.1	1920x1200	15.0.0	1	Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	38.0.2125.122	Macintosh	1440x900	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_9_5) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.122 Safari/537.36
Chrome	39.0.2171.59	Linux	360x640	-1	1	Mozilla/5.0 (Linux; Android 4.4.2; VS980 4G Build/KOT49I.VS98026A) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/39.0.2171.59 Mobile Safari/537.36
MSIE	10.0	Windows NT 6.3	1366x768	15.0.0.223	1	Mozilla/5.0 (compatible; MSIE 10.0; Windows NT 6.3; WOW64; Trident/7.0; .NET4.0E; .NET4.0C; InfoPath.3)
Chrome	38.0.2125.111	Windows NT 6.1	1366x768	15.0.0	1	Mozilla/5.0 (Windows NT 6.1) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	38.0.2125.111	Windows NT 6.1	1280x800	15.0.0	1	Mozilla/5.0 (Windows NT 6.1) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	38.0.2125.122	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_9_4) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.122 Safari/537.36
Firefox	33.0	Windows NT 6.1	1024x768	15.0.0	1	Mozilla/5.0 (Windows NT 6.1; WOW64; rv:33.0) Gecko/20100101 Firefox/33.0
Safari iPhone	8.0	iPhone	320x568	-1		Mozilla/5.0 (iPhone; CPU iPhone OS 8_1 like Mac OS X) AppleWebKit/600.1.4 (KHTML, like Gecko) Version/8.0 Mobile/12B411 Safari/600.1.4
Chrome	28.0.1500.94	Linux	360x640	-1	1	Mozilla/5.0 (Linux; Android 4.4.2; en-us; SAMSUNG SCH-I545 Build/KOT49H) AppleWebKit/537.36 (KHTML, like Gecko) Version/1.5 Chrome/28.0.1500.94 Mobile Safari/537.36
Chrome	39.0.2171.65	Windows NT 6.1	1280x800	15.0.0	1	Mozilla/5.0 (Windows NT 6.1) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/39.0.2171.65 Safari/537.36
Mozilla	5.0	iPad	768x1024	-1		Mozilla/5.0 (iPad; CPU OS 7_1_2 like Mac OS X) AppleWebKit/537.51.2 (KHTML, like Gecko) Mobile/11D257
Chrome	38.0.2125.111	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_9_4) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	39.0.2171.59	Linux	360x640	-1	1	Mozilla/5.0 (Linux; Android 4.4.2; SAMSUNG-SM-N900A Build/KOT49H) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/39.0.2171.59 Mobile Safari/537.36
Chrome	39.0.2171.65	Windows NT 6.3	1280x800	15.0.0	1	Mozilla/5.0 (Windows NT 6.3) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/39.0.2171.65 Safari/537.36
Chrome	38.0.2125.111	Windows NT 6.3	1280x720	15.0.0	1	Mozilla/5.0 (Windows NT 6.3; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36
Chrome	38.0.2125.122	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_10_0) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.122 Safari/537.36
Chrome	38.0.2125.104	Windows NT 6.3	1366x768	15.0.0	1	Mozilla/5.0 (Windows NT 6.3; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.104 Safari/537.36
Chrome	39.0.2171.65	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_10_0) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/39.0.2171.65 Safari/537.36
Chrome	38.0.2125.122	Macintosh	1280x800	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_10_0) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.122 Safari/537.36
Chrome	38.0.2125.122	Macintosh	1440x900	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_7_5) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.122 Safari/537.36
Firefox	33.0	Windows NT 6.3	1366x768	15.0.0		Mozilla/5.0 (Windows NT 6.3; WOW64; rv:33.0) Gecko/20100101 Firefox/33.0
Chrome	38.0.2125.111	Macintosh	1440x900	15.0.0	1	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_8_5) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/38.0.2125.111 Safari/537.36

					1	
					1	
					1	
					1	
					1	
					1	
					1	

Statistic	Value
Total Responses	116

2. Timing

#	Answer	Average Value	Standard Deviation
1	First Click	90.44	334.40
2	Last Click	90.52	334.39
3	Page Submit	96.58	335.32
4	Click Count	1.07	0.41

3. Have you ever used Michigan Flyer or AirRide to travel to or from the Detroit Metro Airport? (Please answer "No" if you only used the service for transportation between East Lansing and Ann Arbor).

#	Answer	Bar	Response	%
1	Yes		90	78%
2	No		25	22%
	Total		115	

Statistic	Value
Min Value	1
Max Value	2
Mean	1.22
Variance	0.17
Standard Deviation	0.41
Total Responses	115

4. When did you last use Michigan Flyer?

#	Answer	Bar	Response	%
1	In the past week		9	10%
2	More than a week ago but within the past month		17	20%
3	More than a month ago but within the past six months		36	41%
4	More than six months ago but within the past year		17	20%
5	Over a year ago		8	9%
	Total		87	

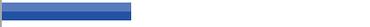
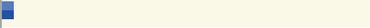
Statistic	Value
Min Value	1
Max Value	5
Mean	2.98
Variance	1.19
Standard Deviation	1.09
Total Responses	87

5. How many times did you use the Detroit Metro Airport (DTW) for travel in the past year?(Please consider a round-trip as one time).

#	Answer	Bar	Response	%
1	1-2 times		29	33%
2	3-5 times		41	47%
3	6-10 times		13	15%
4	11-20 times		1	1%
5	> 20 times		1	1%
6	Did not use DTW for travel in the past year.		2	2%
	Total		87	

Statistic	Value
Min Value	1
Max Value	6
Mean	1.97
Variance	1.01
Standard Deviation	1.01
Total Responses	87

6. How many times did you use Michigan Flyer for transportation to or from DTW in the past year?(Please consider a round-trip as one time).

#	Answer	Bar	Response	%
1	1-2 times		45	52%
2	3-5 times		30	35%
3	6-10 times		3	3%
4	11-20 times		0	0%
5	> 20 times		1	1%
6	Did not use Michigan Flyer in the past year.		7	8%
	Total		86	

Statistic	Value
Min Value	1
Max Value	6
Mean	1.87
Variance	1.97
Standard Deviation	1.40
Total Responses	86

7. Timing

#	Answer	Average Value	Standard Deviation
1	First Click	8.05	8.31
2	Last Click	37.93	22.77
3	Page Submit	42.05	23.36
4	Click Count	3.86	1.53

8. Please rate your overall satisfaction with Michigan Flyer.

#	Answer	Min Value	Max Value	Average Value	Standard Deviation	Responses
1	Overall Satisfaction	1.00	5.00	4.52	0.65	81

9. How likely are you to recommend Michigan Flyer to friends and family?

#	Answer	Min Value	Max Value	Average Value	Standard Deviation	Responses
1		1.00	5.00	4.68	0.61	80

10. How have you purchased tickets with Michigan Flyer? (select all options that apply)

#	Answer	Bar	Response	%
1	Michigan Flyer's website or My AirRide's website		83	98%
2	Phone reservation		3	4%
3	At the bus-stop		12	14%

Statistic	Value
Min Value	1
Max Value	3
Total Responses	85

11. On your last online purchase for Michigan Flyer please indicate what device you used to complete the transaction:

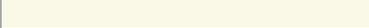
#	Answer	Bar	Response	%
1	Desktop/laptop computer		74	88%
2	Mobile device (smartphone or tablet)		5	6%
3	Started transaction on desktop then switched to mobile		0	0%
4	Started transaction on mobile then switched to desktop		3	4%
5	Not Applicable (did not purchase online)		2	2%
	Total		84	

Statistic	Value
Min Value	1
Max Value	5
Mean	1.26
Variance	0.70
Standard Deviation	0.84
Total Responses	84

12. Please rate your experience using the mobile interface to purchase your ticket. (See picture below to help refresh your memory. Select Not Applicable if you have not used the mobile interface)

#	Answer	Min Value	Max Value	Average Value	Standard Deviation	Responses
1	The site is easy to use in purchasing a ticket	1.00	5.00	4.00	1.10	21
2	The design of the site is not attractive	1.00	5.00	2.79	1.13	19
3	Information is comprehensive	3.00	5.00	3.86	0.85	21
4	There are too many fields to fill out	1.00	5.00	2.59	1.06	17

13. How do you check Michigan Flyer's bus schedule? (select all options that apply)

#	Answer	Bar	Response	%
1	Michigan Flyer's website or My AirRide's website		83	100%
2	Phone		9	11%
3	Ann Arbor District Library		0	0%

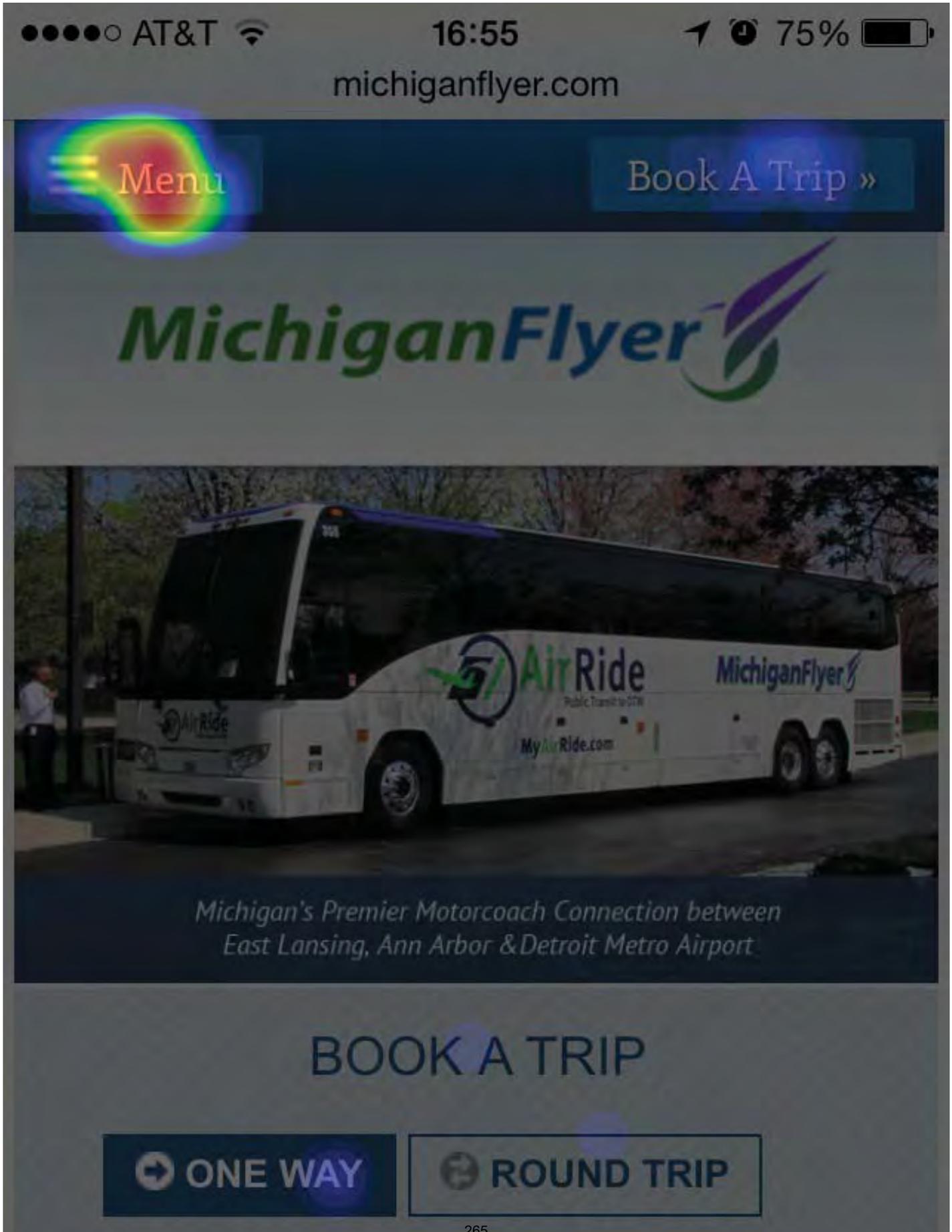
Statistic	Value
Min Value	1
Max Value	2
Total Responses	83

14. Have you used Michigan Flyer's mobile site to check your bus schedule?

#	Answer	Bar	Response	%
1	Yes		26	31%
2	No		45	54%
3	Don't Remember		12	14%
	Total		83	

Statistic	Value
Min Value	1
Max Value	3
Mean	1.83
Variance	0.43
Standard Deviation	0.66
Total Responses	83

15. If you came to Michigan Flyer's mobile site, how would you find the bus schedule? (Tap or click on the image to indicate how you would find the bus schedule).





Region	Bar	Response	%
Menu Button		58	74%
Book A Trip		9	12%
Other		11	14%

Statistic	Value
Total Responses	78

16. Do you find the mobile bus-schedule to be easy to read (see picture of mobile site below)?

#	Answer	Min Value	Max Value	Average Value	Standard Deviation	Responses
1	Mobile Bus Schedule	1.00	5.00	3.57	0.92	79

17. At what price would a refundable, round-trip service from Ann Arbor begin to look expensive?

#	Answer	Bar	Response	%
1	\$26		13	16%
2	\$28		15	19%
3	\$30		33	42%
4	\$32		14	18%
5	\$34		4	5%
	Total		79	

Statistic	Value
Min Value	1
Max Value	5
Mean	2.76
Variance	1.19
Standard Deviation	1.09
Total Responses	79

18. Which stop did you use for pick up transportation to DTW on your last trip?

#	Answer	Bar	Response	%
1	East Lansing Marriot		5	6%
2	Blake Transit Center		64	80%
3	Kensington Court Hotel		7	9%
4	Not Applicable		4	5%
	Total		80	

Statistic	Value
Min Value	1
Max Value	4
Mean	2.13
Variance	0.34
Standard Deviation	0.58
Total Responses	80

19. How convenient was your pick-up location in relation to your home?

#	Answer	Min Value	Max Value	Average Value	Standard Deviation	Responses
1	Pick Up Location Convenience	2.00	5.00	3.55	1.05	73

20. On your last trip, when did the bus leave your pickup location?

#	Answer	Bar	Response	%
1	Early		3	4%
2	On Time		63	83%
3	Late		10	13%
	Total		76	

Statistic	Value
Min Value	1
Max Value	3
Mean	2.09
Variance	0.16
Standard Deviation	0.41
Total Responses	76

21. How convenient was your scheduled pickup time in relation to your flight departure time?

#	Answer	Min Value	Max Value	Average Value	Standard Deviation	Responses
1	Pick Up Time Convenience	1.00	5.00	3.49	1.03	75

22. The last time you took Michigan Flyer, did you use the drop-off and pick-up location at McNamara Terminal [only Delta, Air France, KLM flights use this terminal] or North Terminal? If you don't remember, please refer to the chart for assistance.

#	Answer	Bar	Response	%
1	McNamara Terminal		52	65%
2	North Terminal		28	35%
	Total		80	

Statistic	Value
Min Value	1
Max Value	2
Mean	1.35
Variance	0.23
Standard Deviation	0.48
Total Responses	80

23. On September 22, Michigan Flyer began using a new pick-up and drop-off location at McNamara Terminal. Have you taken the Michigan Flyer since September 22, 2014?

#	Answer	Bar	Response	%
1	Yes		20	38%
2	No		30	58%
3	Not Sure		2	4%
	Total		52	

Statistic	Value
Min Value	1
Max Value	3
Mean	1.65
Variance	0.31
Standard Deviation	0.56
Total Responses	52

24. Please rate your overall satisfaction with the pickup and drop-off location at McNamara Terminal the last time you used Michigan Flyer:

#	Answer	Min Value	Max Value	Average Value	Standard Deviation	Responses
1	Overall Satisfaction	1.00	5.00	3.70	1.09	44

25. Please rate your overall satisfaction with the pickup and drop-off location at North Terminal the last time you used Michigan Flyer:

#	Answer	Min Value	Max Value	Average Value	Standard Deviation	Responses
1	Overall Satisfaction	1.00	5.00	4.00	1.05	28

26. Please rate the airport pick-up/drop-off location on the following criteria (please check "Not Applicable" if you were not able to evaluate the location).

#	Answer	Min Value	Max Value	Average Value	Standard Deviation	Responses
1	The walking distance between the airport pick-up/drop-off location and the security checkpoint is too long	1.00	5.00	2.97	1.20	65
2	The airport pick-up/drop-off location has enough seating	1.00	5.00	2.60	1.25	57
3	The airport pick-up/drop-off location is uncomfortable	1.00	5.00	3.23	1.28	61
4	The airport pick-up/drop-off location is clean	1.00	5.00	3.51	0.99	69
5	The airport pickup/drop-off location has insufficient climate control	1.00	5.00	3.57	1.15	65

27. How convenient was your scheduled airport pick-up time in relation to your flight arrival time?

#	Answer	Min Value	Max Value	Average Value	Standard Deviation	Responses
1	Pick Up Time Convenience	1.00	5.00	3.30	0.95	71

28. On your last trip, when did the bus arrive to your drop-off location?

#	Answer	Bar	Response	%
1	Early		16	21%
2	On Time		55	73%
3	Late		4	5%
	Total		75	

Statistic	Value
Min Value	1
Max Value	3
Mean	1.84
Variance	0.24
Standard Deviation	0.49
Total Responses	75

29. If you have any comments on your experience with Michigan Flyer that you would like to share, please enter them below.

Text Response

Great service! The new location at McNamara sucks though..

I use the paper version of the AATA bus schedule to check the Michigan Flyer schedule; that was not an option in the survey. When I was waiting at the Delta pickup location at DTW (within the last month, but not the most recent time I've used MichiganFlyer) the noise level was very high (something with the fans to the parking garage?) and I had a long time to wait (over an hour, I think). If I fly out of that terminal again, I will be trying to find somewhere quieter to wait for the bus inside the airport.

Did not realize there was a mobile site. Does this only happen on iPhones? Why cant the website just be responsive instead?

We used to have a late bus pick up from Ann Arbor at 7:30 or 7:45. But it is not available since Fall semester. It is causing lot of inconvenience, because many evening classes at University of Michigan end at 7:00 pm. If we miss the last bus, we have to wait till morning to go to airport. I think if the service from Ann Arbor to DTW is extended at least until 7:30 it would be very helpful. Also, while coming from DTW, the gap between last two pick ups is nearly 2 hours. If we have a service in between like around 9 pm to 9:30 it would be very helpful

The signage at Blake about where to go to wait for the Flyer could be improved. Same while at the airport.

I know the pickup-dropoff point was moved. I have not used this new point, but from what I've seen in various online articles, the new location would be incredibly inconvenient.

I have had a really good experience with them, and think the price is very reasonable. The buses are comfortable and on time. I am not a huge fan of their mobile site though. It would be nice if there were more information within the airport somewhere about it, because I've had times when I returned from out of the country and didn't have access to the internet, but needed to find out the schedule.

The original location for drop-off was great - I would not change it because it made things very convenient.

I like Michigan Flyer but it definitely adds extra travel time to my trip. I love the free wifi on the bus. Last time I was traveling my bus drive gave us Halloween candy.

Added a couple more busses to the schedule would be great. My last few trips, I had was dropped off about an hour and a half before I wanted to be at the airport and pick up was also about an hour and a half after I got off the plane had my luggage. Otherwise, I like taking Michigan Flyer.

Customer service was good when I called about a missed bus. Seats are clean, comfortable, and drivers are nice. Very reliable.

My ownly difficulty was trying to get the parking pass for my car. There was a substitute driver and he had no idea how to supply parking passes for the city structure. I spent time on the phone trying to straighten things out after the fact. It would be nice if the parking pass was accessible through the website at the time of booking (I took this trip over a year ago, so maybe things have changed already).

Very useful service. Students often need to get to the airport and taxis are expensive.

I appreciate this service very much. I'd like more frequent shuttles during the day and some later at night. This week, a friend had to take a more expensive shuttle from DTW to Ann Arbor because the last scheduled Michigan Flyer left shortly before the friend's flight arrived. In the survey, you list several options for checking the Michigan Flyer schedule, but you left one out: the printed AAATA schedule! Sometimes that's more convenient than online.

the bus stop is cold.

I carry around a copy of the Ride's paper schedule booklet. I check the Michigan Flyer schedule there first before going to the website.

I was suppose to take the Michigan Flyer to DTW but the bus was so late that the Michigan Flyer called us to tell us it'd be an hour late. So we all got a refund and took a taxi to the airport.

I thought it was quite important that the pick-up/drop-off location in McNamera terminal was close, convenient, and indoors

1, Michigan Flyer could increase the shuttles. 2, Michigan Flyer could consider set the stops close to public parking.

YPSI YPSI YPSI!! I would use airride for multiple round trips annually if there were a boarding point in ypsilanti. (Not necessarily downtown, but east of US23.) When i used air ride, i found it remarkably convenient only because, on that trip, i happened to have a ride from Kensington court -- for most of my travel, backtracking to ann arbor to use airride would more than double my travel time to DTW. Also, consider opportunities for a Lansing (as opposed to / in addition to East Lansing) boarding point. I travel between ann arbor and Lansing weekly, and would gladly pay (\$20-30+ round trip) to have a transit option.

Have more available times later at night on busy days of the week, maybe till 1am. Have sign posts to say where the pick-up location is at the different terminals. Usually ppl are late to the bus bc they cannot find the pickup locations. Also have an icon on the webpage that bring you straight to the schedules. Do not partner with green cab, they are so bad (they forgot to pick me up one time even after I scheduled for it)

It's the best way to get to and from DTW

The new location sucks The airport folks don't care about customers

Improve frequency and mobile app.

It's possible I've used Michigan Flyer more than anyone else (more than 20 times in 2014, more than 60 overall).

Statistic	Value
Total Responses	25

30. Timing

#	Answer	Average Value	Standard Deviation
1	First Click	2.82	5.74
2	Last Click	25.81	70.76
3	Page Submit	41.40	84.10
4	Click Count	1.50	4.63

31. What is your zip code?

Text Response
48103
48104
48103
48104
48104
48104
48103
48197
48105
48104
48104
48130
48840
48103
48103
48103
48108
48105
48105
48103
48103
48103
48104
48103
48104
97302
48104
48104
19050
49525
48130
48105
48108
48105
48104
48103
48104
48104
48105
48105
48104
48104
48104
48105
48103
48104
48104
48103
48103
48105
48105
48326

11215
48105
48197
48104
94608
48105
48840
48104
48105
48104
48105
48104
48108
48105
48104
48105
48912

Statistic	Value
Total Responses	69

32. What is your age?

#	Answer	Bar	Response	%
1			0	0%
2	21-30		51	69%
3	31-40		15	20%
4	41-50		5	7%
5	51-60		2	3%
6	61-70		1	1%
7	=>70		0	0%
	Total		74	

Statistic	Value
Min Value	2
Max Value	6
Mean	2.47
Variance	0.72
Standard Deviation	0.85
Total Responses	74

33. In what range does your yearly household income fall?

#	Answer	Bar	Response	%
1			23	32%
2	\$20,001-\$60,000		22	30%
3	\$60,001- \$100,000		10	14%
4	>=\$100,001		4	5%
5	Prefer Not to Answer		14	19%
	Total		73	

Statistic	Value
Min Value	1
Max Value	5
Mean	2.51
Variance	2.17
Standard Deviation	1.47
Total Responses	73

Appendix Part III

**Comments on:
Ann Arbor Area Transportation Authority
Title VI Update
September, 2014**

**by James Mogensen
September 29, 2014**

General Requirements

Title VI Notice to the Public page 5

Attachment A - Includes a copy of the notice and a list of locations where posted.

Comments: None

Title VI Complaint Procedure page 6

Attachment B - Includes a copy of the complaint procedure.

Comments: Need to make sure that the job category exists during transition periods.

Title VI Complaint Form page 8

Attachment C - Includes a copy of the complaint form.

Comments: The complaint procedure acknowledges the potential for “general allegations – e.g. regarding service design or fares” but the form - which follows the FTA version- doesn’t accommodate this type of complaint very well.

List of Transit-Related Title VI Investigations, Complaints, and Lawsuits

Since the last Title VI Program submission in December, 2011 there have been no Title VI investigations, complaints, or lawsuits.

Comments: None

Public Participation Plan page 11

Attachment D - Includes a copy of the public participation plan with outreach efforts since the last Title VI Program submission in December, 2011.

Comments: The public has the opportunity to comment on issues at the regularly scheduled Board of Directors meeting but it is limited to three minutes on agenda items at the beginning of the meeting and three minutes for any item at the end. This report was passed onto the Board through two daytime committee meetings only one of which is open to the public. The AAATA staff are very helpful to the “regulars” (this includes me) but the information on the website is hard to find if you don’t already know where it is. Proposed service changes are very well publicized and AAATA makes an extra effort to reach out to riders.

Language Assistance Plan for Persons with Limited English Proficiency (LEP) page 23

Attachment E - Includes a copy of the current LEP plan.

Comments: This section is very well done. How the AAATA determines the population of the service area is never well described. It should be noted that the AAATA has not received any requests for additional assistance for LEP persons. Whether this is because there are no problems or if people don’t really know that assistance is available is unclear.

Membership of Non-elected Committees and Councils

page 36

Attachment F - Includes a table depicting the composition of non-elected committees and councils, the membership of which are selected by the AAATA, as well as a description of the selection process.

Comments: None

Title VI Monitoring of Subrecipients

The AAATA does not have any subrecipients.

Comments: None

Title VI Equity Analysis for Facility Location

The AAATA has not selected a location for a facility since the last Title VI submission in December, 2011, and is not in the process of doing so. A decision to locate a second bus storage facility in the Ypsilanti area may be made in the next three years. If so, an equity analysis will be conducted before site selection.

Comments: None

Review and Approval of Title VI Program Submission

page 37

Attachment G - Includes a copy of the resolution by the AAATA Board of Directors approving the Title VI Program submission. This resolution documents Board review and approval of results from the Service Standard and Policies Monitoring analysis.

Comments: *There needs to be a narrative of the steps involved in approving the parts of the Title VI program. In addition, there should be incorporation of any comments received into the body of the plan document. Minutes should include more than just a copy of the Board resolution.*

Requirements of Transit Providers for Large Urbanized Areas

Service Standards and Policies

page 39

Attachment H - Includes revised service standards and service policies.

Comments: *I believe that the service frequency standard for local fixed-route service should be every 30 minutes during daytime weekday service and every 60 minutes on evenings and weekends.*

Demographic and Service Profile

page 43

Attachment I - Includes demographic and service profile maps and charts.

Comments: *Given the history of structural racism in the Ann Arbor/Ypsilanti area it is astonishing that the AAATA did not include maps breaking out the minority racial groups (e.g. African American, Asian). The maps in the LEP section illustrate the strong pattern of Asians living in Northeast Ann Arbor. When you only include maps labeled "minority" you don't present an adequate picture of the racial patterns in the AAATA service area. The AAATA may choose to combine them for route analysis but also need to include the breakout by different racial groups to provide a clearer picture. Note that there is a difference in population estimates (Total population 204,079 in LEP section (page 24) ; 164,543 for minority (page 47); and 149,789 for low-income). The reasons for these different estimates of total population need to be explained in a clearer manner. The population for which total and minority counts are made should be available at the block level.*

Demographic Ridership and Travel Patterns

page 48

Attachment J - Includes ridership and travel pattern information based on data from an on-board survey of riders in October, 2013.

Comments: *Glad that this information has been made available to the general public with this report.*

Service Standard and Policies Monitoring

page 57

Attachment K - Includes results of the monitoring program for the Service Standards and Policies. The evidence that the board considered, and approved the results of the analysis is included in the Board resolution in Attachment G.

Comments: *There should have been an additional analysis of my proposal for 30 minute weekday service with 60 minute service weekday evenings and on weekends. Only a few of the Ann Arbor Routes don't meet this service standard and all have legitimate business reasons why they don't meet the standard. I have included 4 maps that overlay Census 2010 data on African Americans with AAATA bus routes.*

Major Service Change, Disparate Impact, and Disproportionate Burden Policies

page 71

Attachment L - Includes a copy of each of the policies and the Board resolution adopting the policies. The attachment also includes a description of the public engagement process during the development of the policies.

Comments: *Note that the setting of service standards is not included as a separate policy process from the Title VI Plan process.*

Service and Fare Equity Analyses page 89

Attachment M - During the period since the last Title VI Program Submission in December, 2011, the AAATA adopted and implemented a fare change for commuter service routes (#710 and #711) and major service changes in January 2013, August 2013, and August 2014. A copy of the equity analysis for each and the Board resolution adopting the change including acknowledgment of the equity analysis is included.

Comments: *Not all of the analyses have been readily available to the general public.*

Comment Attachments

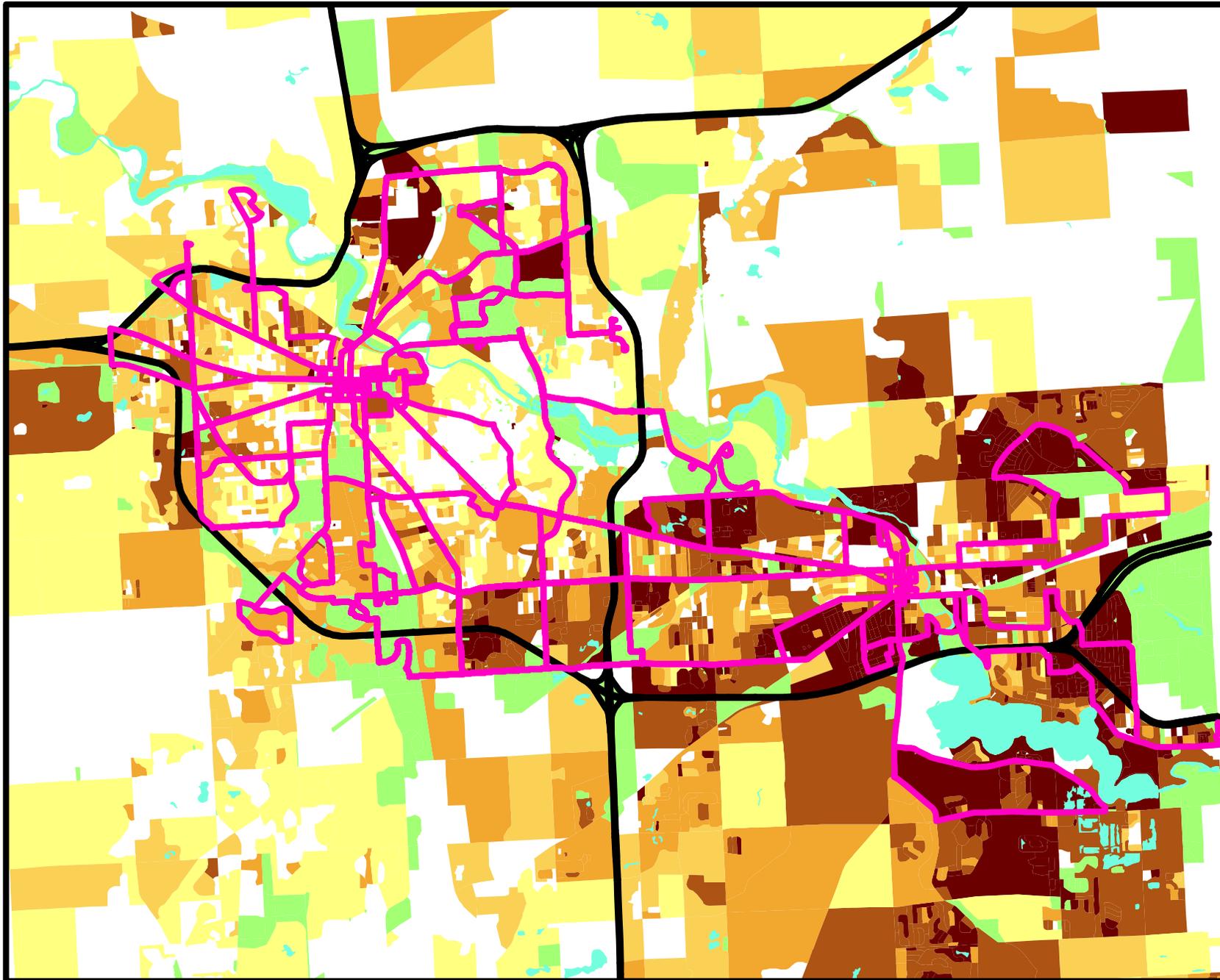
Map #1. AAATA August 2014 Routes with Census Data – African American

Map #2. AAATA August 2014 Fixed Routes with Census Data – African American and Headway Information

Map #3. AAATA Five Year Transit Improvement Plan (FYTIP) Fixed Routes with Census Data – African American

Map #4. AAATA FYTIP Fixed Routes with Census Data – African American and Headway Information

Map #1. AAATA August 2014 Routes with Census Data - African American



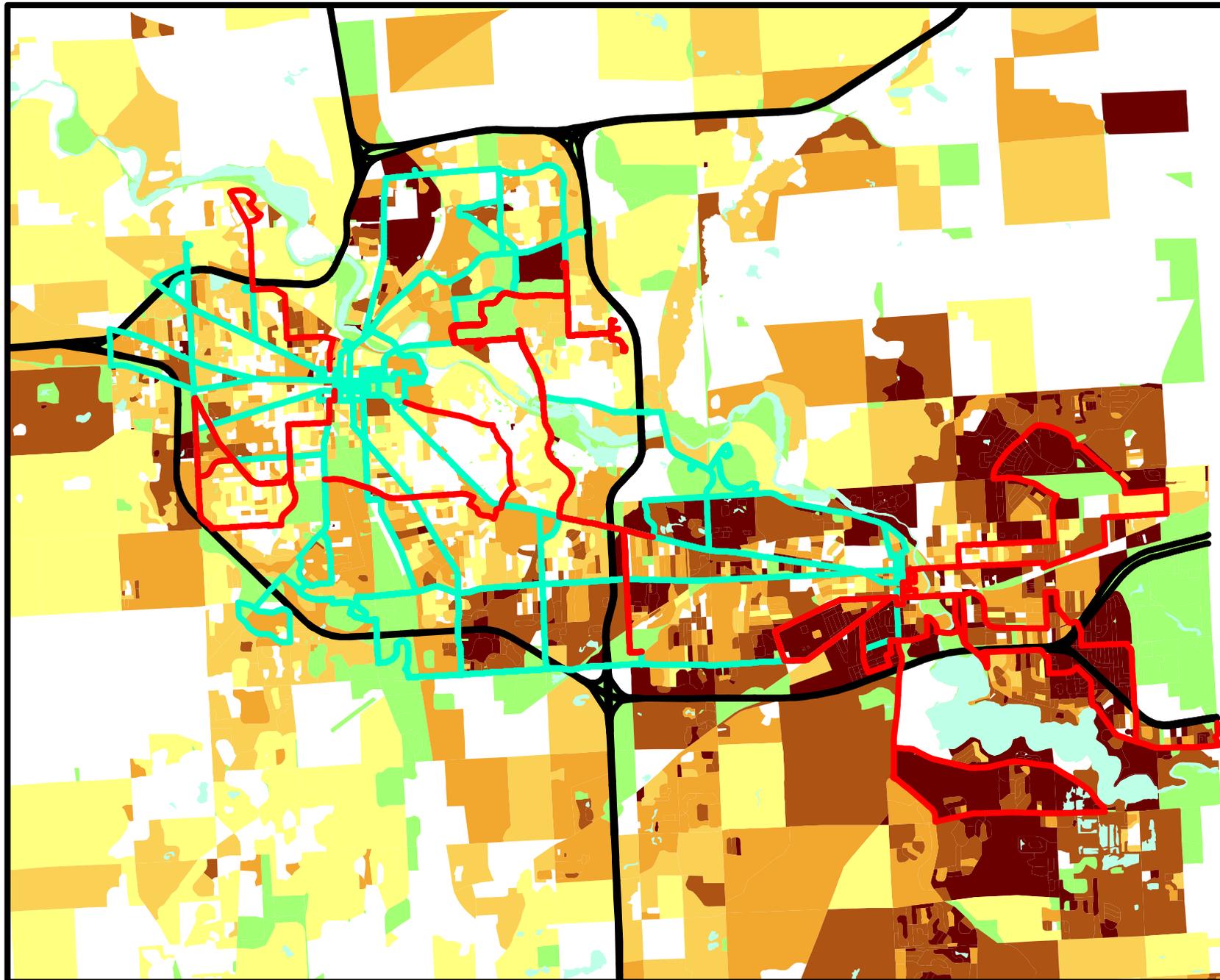
- Legend**
- AAATA Fixed Routes
 - Highway
 - Water
 - Areas without population
- Percent African American
- | | |
|---|----------------|
| — 1st Quantile | >0 - 3.24 |
| — 2nd Quantile | >3.24 - 7.2 |
| — 3rd Quantile | >7.2 - 14.63 |
| — 4th Quantile | >14.63 - 31.13 |
| — 5th Quantile | >31.13 |



0 1 2 Miles

Data Source: Census Blocks 2010 SF1 Created by Jim Mogensen
September 2014

Map 2. AAATA August 2014 Fixed Routes with Census Data - African American and Headway Information
Buses come more than every 30 minutes apart in Red (Ann Arbor Routes 2C,13,14,15,22 Ypsilanti Routes 10,11,20,46)
Buses come every 30 minutes in Blue (All other Routes)



Legend

- Headway Greater than 30 minutes
- 30 Minute Headway
- Highway
- Water

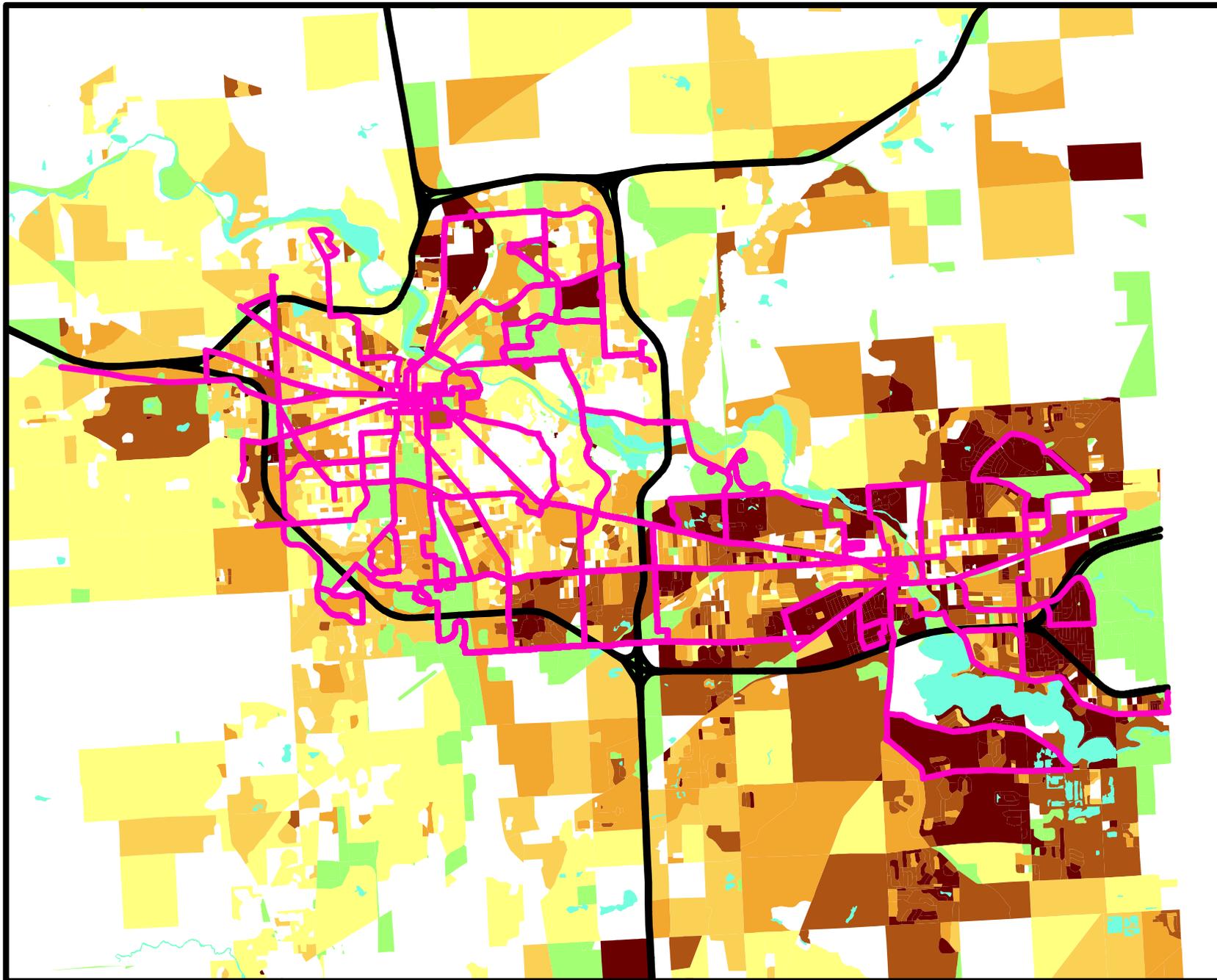
Percent African American

■ 1st Quantile	>0 - 3.24
■ 2nd Quantile	>3.24 - 7.2
■ 3rd Quantile	>7.2 - 14.63
■ 4th Quantile	>14.63 - 31.13
■ 5th Quantile	>31.13
■ Areas without population	

0 1 2 Miles

Data Source: Census Blocks 2010 SF1 Created by Jim Mogensen
 September 2014

Map 3. AAATA Five Year Transit Improvement Plan Fixed Routes with Census Data - African American



Legend

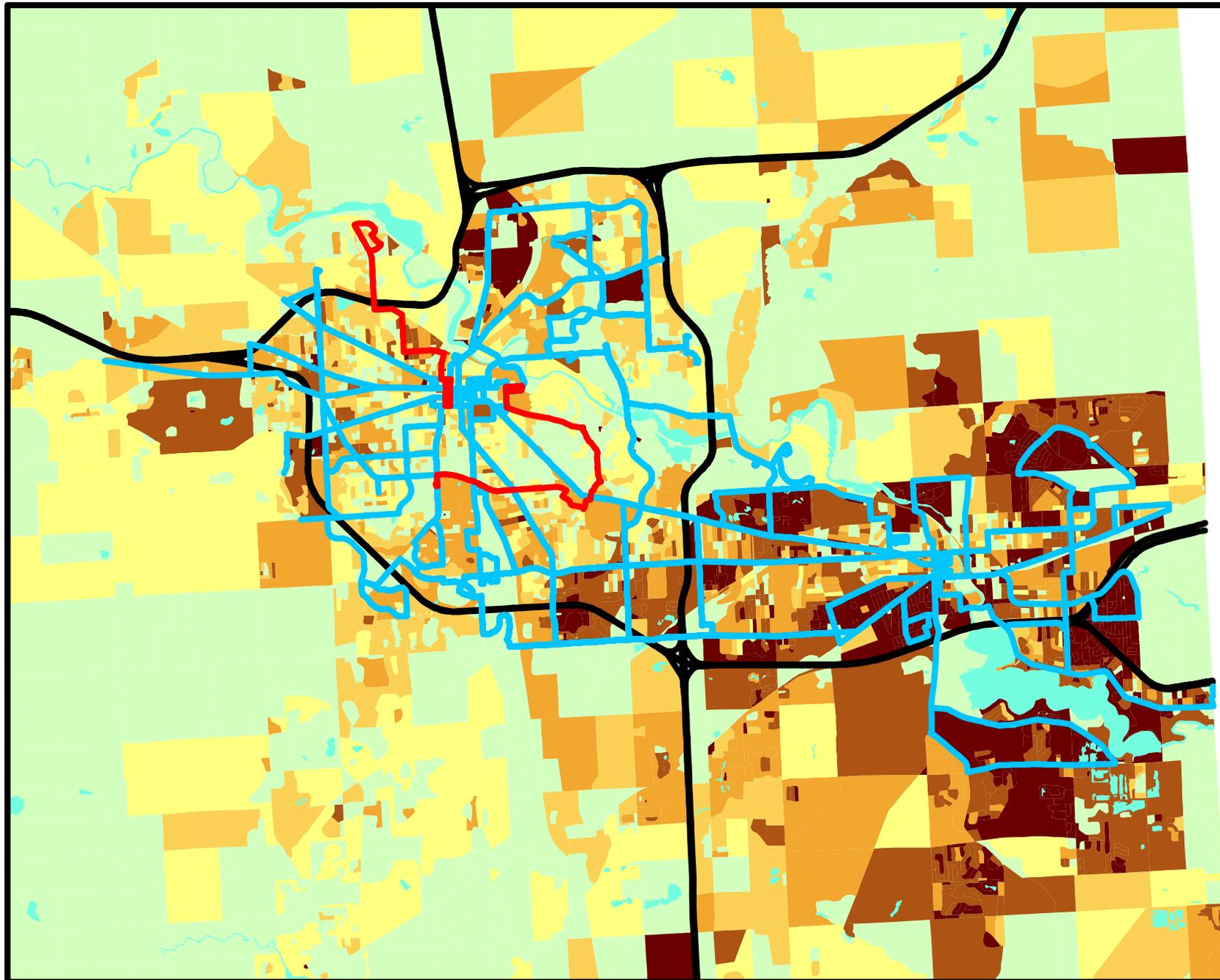
- Five Year TIP Routes
- Highway
- Water
- Percent African American
- 1st Quantile >0 - 3.24
- 2nd Quantile >3.24 - 7.2
- 3rd Quantile >7.2 - 14.63
- 4th Quantile >14.63 - 31.13
- 5th Quantile >31.13
- Areas without population



0 1 2 Miles

Data Source: Census Blocks 2010 SF1 Created by Jim Mogensen
September 2014

Map 4. AAATA FYTIP Fixed Routes with Census Data - African American and Headway Information
Buses come more than every 30 minutes apart in green (Ann Arbor Routes 13,14)
Buses come every 30 minutes in blue (All other Routes)



Legend

- FYTIPGT30minRoutes
- FYTIP30minRoutes
- Highway
- Water

Percent African American

1st Quantile	>0 - 3.24
2nd Quantile	>3.24 - 7.2
3rd Quantile	>7.2 - 14.63
4th Quantile	>14.63 - 31.13
5th Quantile	>31.13
Areas without Population	



Data Source: Census Blocks 2010 SF1 Created by Jim Mogensén²⁹²
 September 2014