



# August 2024 Service Proposal Equity Analysis

October 2023

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# Introduction

## Background

The Federal Transit Administration (FTA) requires every transit agency with more than 50 fixed-route buses and which receives federal funding—to conduct a service equity analysis for all major service changes. The purpose of the analysis is to determine whether the service changes will have a disparate impact on minorities protected by Title VI of the Civil Rights Act of 1964 or will place a disproportionate burden on persons with low income, as defined in Presidential Executive Order 12988. Title VI specifically states, “No person in the United States shall on the grounds of race, color or national origin be excluded from participation in, be denied the benefits or, or be subject to discrimination under any program or activity receiving federal financial assistance.”

Ann Arbor Area Transportation Authority (AAATA), TheRide, proposes implementing service changes in April and August 2024 as part of the millage proposals passed in August 2022. Several of the proposed changes meet the locally defined threshold for a major service change, as required by Federal Transit Administration Circular 7402.1B. This service equity analysis report will assess the proposed major service changes and identify any disparate impacts or disproportionate burdens that may be created.

AAATA defines a major service change as

- A change affecting more than 25% of weekly revenue service hours or miles for any transit route or service at one time or cumulatively within a period of thirty-six months, or
- Implementation of a new route, or
- Elimination of a route.

AAATA has set its disparate impact’s threshold at 10% or greater, where the minority population is defined as all persons who self-identify as not being white or white and Hispanic, or Latino. AAATA has set its disproportionate burden at 10% or greater, where the low-income individuals are those persons whose income is at or below 150% of the poverty guidelines defined by the Department of Health and Human Services of the poverty thresholds used by the US Census Bureau.

## Proposed Service Changes

As announced in AAATA’s Press Release the proposed service updates include:

- A new limited-stop express bus route between Ann Arbor and Ypsilanti along Washtenaw Avenue operating Monday – Friday.
  - Service will operate every 30 minutes, making four stops between Ypsilanti and Ann Arbor.
  - Express service may begin operation as early as April 2024.
- Weekdays:
  - Extended hours of fixed-route bus service: 6:00 a.m. – 12:00 a.m. (first/last departures).
  - Routes affected: 3, 4, 5, 6, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 42, 44, 45, 46, 47, 62, 66, 68.

- Saturdays:
  - Extended hours of fixed-route bus service: 7:00 a.m. – 11:50 p.m. (first/last departures).
  - 30-minute frequency from 7:00 a.m. – 6:00 p.m.
  - 60-minute frequency after 6:00 p.m.
  - Routes affected: 3, 4, 5, 6, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 42, 43, 44, 45, 46, 47, 66.
- Sundays:
  - Extended hours of fixed-route bus service: 8:00 a.m. – 9:45 p.m. (first/last departures).
  - 30-minute frequency from 8:00 a.m. – 6:00 p.m.
  - 60-minute frequency after 6:00 p.m.
  - Routes affected: 3, 4, 5, 6, 22, 23, 24, 25, 26, 27, 28, 30, 31, 32, 42, 43, 44, 45, 46, 47.
- Adjustments to routings or timings:
  - Fixed-routes: 4, 6, 24, 43.
- FlexRide Late Night & Holiday Service:
  - Expanded service to include all of Ypsilanti City and Ypsilanti Township, north of Textile Road, to match the fixed-route bus service area.
  - Extended hours of service to complement new fixed-route hours of service.
  - Additional vehicles to reduce wait times.

To determine if these changes were considered major or not, AAATA took the weekly (Monday – Sunday) service hours and mileage of current August 2023 bid for each fixed route and compared it against the projected service hours and mileage of the proposed services listed above. Per AAATA's Equity Analysis Policy for Service and Fare Changes, if any route had a percent change of 25% or higher, it was flagged for major service change (see chart below). The Washtenaw Express is a proposed new route, which automatically is a major service change. The additional current fixed routes 6 and 68 are considered a major service change. An equity analysis is required to be completed for these routes to determine there is no disparate impact or disproportionate burden to the listed AAATA's fixed route services.

Route	Current Miles	Proposed Miles	% Change	Current Hours	Proposed Hours	% Change	Major Service Change
Rt 3	4,116	5,067	23%	341	417	22%	No
Rt 4	7,547	7,632	1%	682	689	1%	No
Rt 5	5,867	6,624	13%	461	525	14%	No
Rt 6	4,563	6,629	45%	339	511	51%	Yes
Rt 22	2,641	3,115	18%	195	231	18%	No
Rt 23	4,928	5,490	11%	444	497	12%	No
Rt 24	4,552	3,780	-17%	365	311	-15%	No
Rt 25	1,510	1,809	20%	134	159	19%	No
Rt 26	1,067	1,314	23%	74	90	22%	No
Rt 27	1,896	2,232	18%	135	156	15%	No
Rt 28	1,361	1,541	13%	113	128	13%	No
Rt 29	803	875	9%	56	57	2%	No
Rt 30	2,004	2,354	17%	161	187	16%	No
Rt 31	1,249	1,470	18%	85	101	18%	No
Rt 32	1,693	2,004	18%	173	205	18%	No
Rt 33	1,060	1,216	15%	101	116	15%	No
Rt 34	345	345	0%	27	27	0%	No
Rt 42	1,845	2,176	18%	132	156	18%	No
Rt 43	1,244	1,430	15%	88	109	24%	No
Rt 44	1,358	1,613	19%	86	103	19%	No
Rt 45	1,235	1,513	23%	88	108	22%	No
Rt 46	2,086	2,456	18%	132	155	18%	No

Rt 47	1,047	1,237	18%	87	103	18%	No
Rt 61	1,036	1,036	0%	92	92	0%	No
Rt 62	2,157	2,366	10%	210	229	9%	No
Rt 63	338	338	0%	30	31	4%	No
Rt 64	525	525	0%	40	40	0%	No
Rt 65	1,958	1,958	0%	179	181	1%	No
Rt 66	2,955	3,268	11%	231	252	9%	No
Rt 68	1,411	1,719	22%	63	83	32%	Yes
Washt Express	-	1,951	100%	0	60	100%	Yes
<b>System</b>	<b>66,398</b>	<b>77,081</b>	<b>16%</b>	<b>5,345</b>	<b>6,110</b>	<b>14%</b>	

Table 1: This table compares August 2023 service hours and miles to proposed service hours and miles with millage changes to determine which routes have major service changes.

## Analysis

AAATA's Equity Analysis Policy for Service and Fare Changes determines disparate impact and disproportionate burden by either

- Comparing the proportion of the minority/low-income population within a quarter mile of the changed route or segment of the bus route with the proportion of the population that is a minority for the entire service area, or
- Comparing the proportion of minority/low-income riders on the route or segment of the route being changed with the proportion of minority/low-income riders on the entire system.

A possible disparate impact or disproportionated burden is deemed to occur when the difference between the two measurers (existing ridership, or the population and system-wide ridership or the service area population) is 10 percent or greater.

Based on AAATA's definition of major service change, explained above, this is the break-down of upcoming major service changes. The route that is affected by the proposed changes in service miles as a major service change is route 6. The routes that are affected by the proposed changes in service hours are 6 and 68. The implementation of a new route, Washtenaw Express, is considered as an additional major service change. This is outlined in the table below.



Major Service  
Change based on

Route	Miles	Hours	Minority Route	Low Income Route
Rt 3	No	No	No	Yes
Rt 4	No	No	No	Yes
Rt 5	No	No	No	Yes
Rt 6	Yes	Yes	No	Yes
Rt 22	No	No	Yes	Yes
Rt 23	No	No	Yes	Yes
Rt 24	No	No	Yes	Yes
Rt 25	No	No	No	Yes
Rt 26	No	No	No	Yes
Rt 27	No	No	No	No
Rt 28	No	No	No	Yes
Rt 29	No	No	No	No
Rt 30	No	No	No	Yes
Rt 31	No	No	No	No
Rt 32	No	Yes	No	Yes
Rt 33	No	No	No	Yes
Rt 34	No	No	No	Yes
Rt 42	No	No	Yes	Yes
Rt 43	No	No	No	Yes
Rt 44	No	No	Yes	Yes
Rt 45	No	No	Yes	Yes
Rt 46	No	No	Yes	Yes
Rt 47	No	No	Yes	Yes
Rt 61	No	No	No	Yes
Rt 62	No	No	No	Yes
Rt 63	No	No	No	Yes
Rt 64	No	No	No	Yes
Rt 65	No	No	Yes	Yes
Rt 66	No	No	Yes	Yes
Rt 68	No	Yes	Yes	Yes
Washt Exp	Yes	Yes	No	Yes

**System** **38.50%** **24.60%**

Table 2: This table explains if the April/August 2024 service change is a major service change via service hours or miles as shown in table 1. It also explains if the route is a minority or low-income population as presented in AAATA's 2023 Title VI Program. The system average for minority routes is 38.5% and for low income is 24.6%.



## Major Service Change via Service Miles

### Route 6

Route 6 is the only proposed route that triggered a major service change via weekly service miles. The change in the route design is that it will go from one route to two branches. The first branch, 6A will continue to use current route 6 between Blake Transit Center to Ypsilanti Transit Center. This branch will operate Monday through Sunday. The second branch, 6B, will run between Blake Transit Center and Briarwood Mall. 6B will operate Monday through Friday from 6am – 6pm. During the weekdays, the 6A and 6B will alternate, and provide 15-minute frequency between Blake Transit Center and Briarwood. This will replace the route 24 service in this corridor.

The reason for the proposed two branches is to modify route 24, where it will extend its coverage to Washtenaw Community College and Saint Joseph's Hospital on Sundays. Routes 6 and 24 have duplicated coverage between Blake Transit Center and Briarwood Mall. Proposed modifications to routes 6 and 24 are to improve efficiency, on-time performance issues, and expand coverage. Proposed route 24 will become a crosstown route with a connection between Briarwood Mall to Saint Joseph's Hospital seven days a week. Current service is only provided east of Ann Arbor on this route Monday – Saturday.

Route 6 weekly service miles has increased 45% with the introduction of the new branch, but it is also substituting a portion of route 24 structure, to counterbalance its -17% change. The population served currently between the two routes and the population served in the proposed 2024 August service changes is the same.

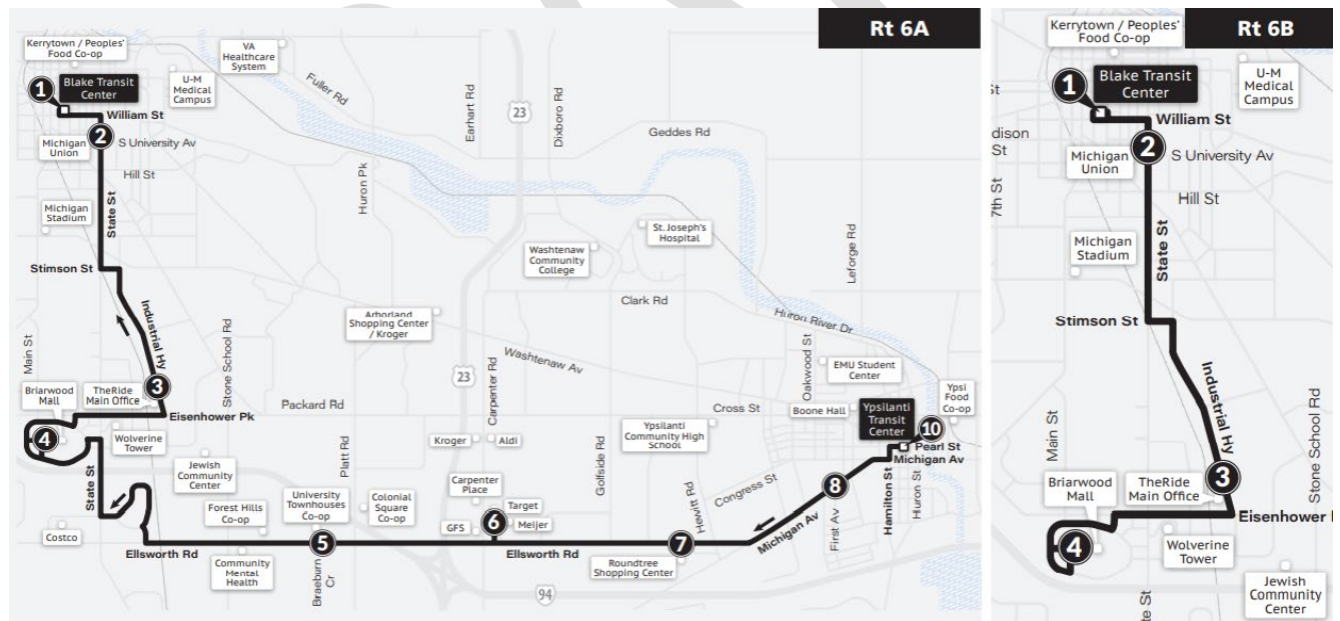


Figure 1: This is the proposed map of 6A and 6B branches for August 2024 service changes.

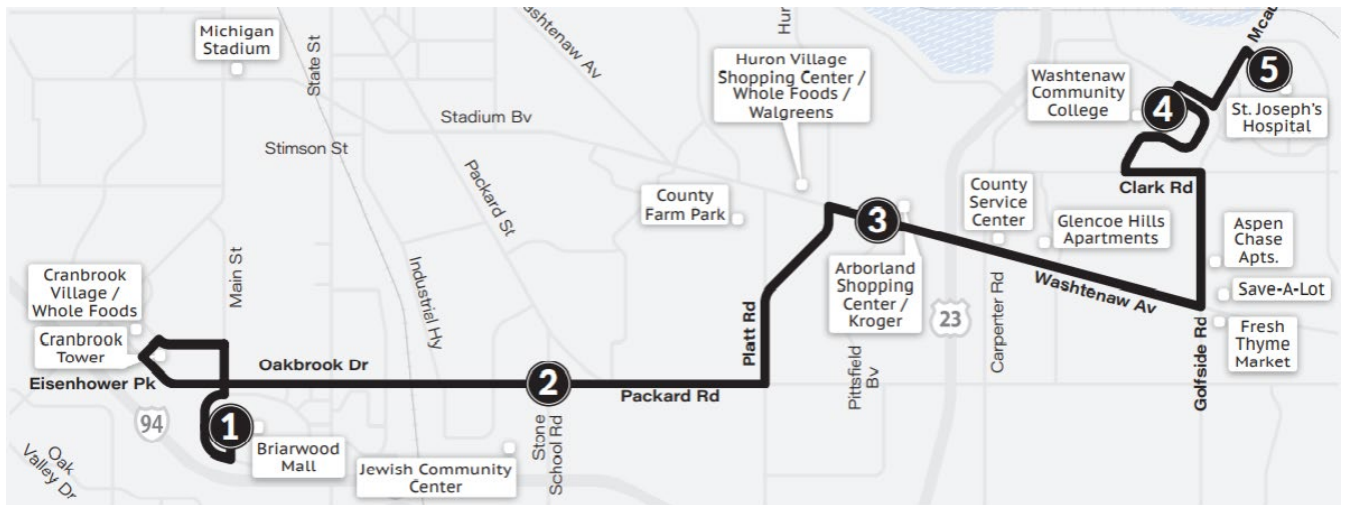


Figure 2: This is the proposed map of route 24, that will operate 7 days a week.

## Major Service Change via Service Hours

### Routes 6

The additional service hours added to route 6 is due to the modifications of route 24. This is explained in the section above about via Service Miles.

### Route 68

AAATA received several requests while collecting feedback for TheRide 2045 Long-Range Plan to have longer hours of operations, including earlier start time and later end time 7 days a week and to increase frequency of routes on Saturdays and Sundays. When the 2022 millage proposal was passed, one of the items it funds was to extend its hours of operations Monday – Sunday, and to increase frequency of trips on the weekend. This service is slated to start late August 2024.

Weekday's hours of operation will extend to 6am – 12am. Saturday's hours of operations will extend to 7am – 11:50pm. Sunday's hours of operations will extend to 8am – 9:45pm. These hours are reflective of the approximate first/last trip departure times. All routes that already operate on Saturday and Sunday will operate every 30 minutes before 6pm and every 60 minutes after 6pm. Routes which currently operate every 30 minutes after 6pm will continue this.

Routes 68 were triggered as a major service change due to service hours adjustments based on this proposed millage expansion. This is an expansion of the current service, applied to all Ann Arbor and Ypsilanti routes. Most current line-up times will remain the same. The line-up times, and proposed schedules are posted on the website for review. The additional trips have been built around the current schedule to minimize the impact of the current passengers. These new schedules are to provide an increase of flexibility and reliability of AAATA service to the public. This means all minority, low-income, non-minority and non-low-income routes saw an increase in service. The goal was to ensure all routes have similar hours of operation and similar frequencies.

Route 68 current hours of operation is 6:15am to 6:45pm Monday-Friday. In the proposed service changes, it will operate from 6:00am to 11:45pm.

## Major Service Change via Implementation of New Route

### Washtenaw Express Route

This is a limited stop express bus route between Ann Arbor and Ypsilanti along Washtenaw Avenue, AAATA's most heavily traveled corridor. The route is a response to requests for accelerated service between AAATA's two transit centers generally following the system's highest ridership route. The passage of a 2022 millage proposal will fund express service every 30 minutes between 6am – 6pm. The express service routing and bus stop locations can be seen on the map below. This new route's bus stops were chosen based on the highest ridership bus stops off the comparative local route 4 along with modeling to determine the highest potential areas of future ridership: Blake Transit Center, U-M Central Campus Transit Center, Washtenaw Avenue and Arborland Mall, Washtenaw Avenue and Golfside Road, Washtenaw Avenue and Summit Street, and Ypsilanti Transit Center. This way the service could capture and benefit the largest amounts of potential passengers, both current and future. This service is slated to start at the end of April 2024, unless there is a shortage of either vehicles or motor coach operators.

Using American Community Survey 2021 data, AAATA has determined that the new Washtenaw Express will cover 30.7% of minority population and 45.10% of low-income population. However, route 4 and now the Washtenaw Express captures a population of transfer passengers, that come from other census tracts that are not associated within the ACS data. Future internal on-board survey data will display a more realistic demographic of this route, to demonstrate that it serves a larger minority and low-income population. At the moment, AAATA is generating this new route based off the positive feedback and requests from public comments during TheRide 2045 long-range plan development, and the analysis of AAATA's current and future fixed route ridership. If this limited-stop express is successful, this will pave way for additional limited-stop expresses based on other fixed routes, as laid out within TheRide 2045 Long-Range Plan.

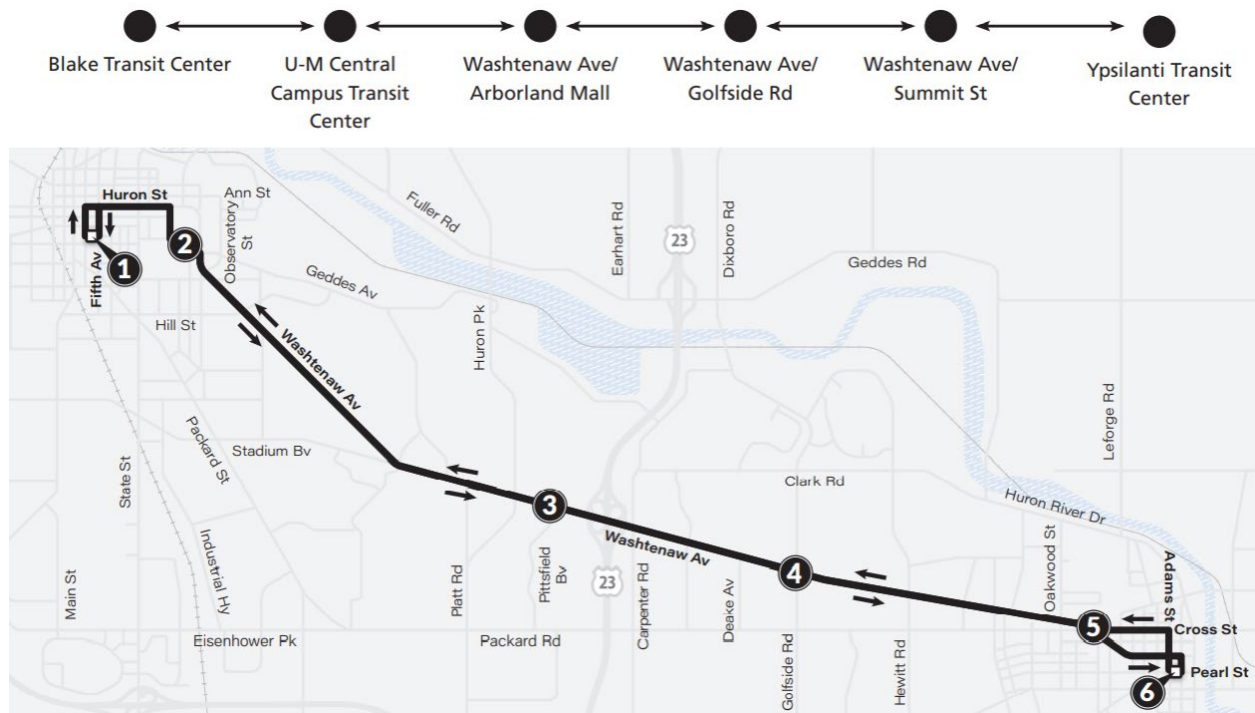


Figure 3: This is a map of the proposed Washtenaw Express Route, and its proposed limited bus stops.

## Findings & Mitigation

### Findings

AAATA ran analytics comparing the current August 2023 population for routes 6, 24<sup>1</sup>, 68 and Washtenaw Express against the population of these routes for proposed August 2024 services within Remix. Remix presents a statistic called “people-trips” which takes the population within ¼ mile of the service route multiplied by the number of trips the route takes for a calendar year, to demonstrate potential ridership population. This service adjustments captures 259,589,616 annual people-trips for routes 6, 24, 68 and Washtenaw Express. Out of these people-trips 36.9% (93,321,999) represent low-income people trips, and 36.9% (95,728,296) represent minority-people trips. Compared to the local average where low-income represents 24.6% and minority represents 38.5%. There is a difference of positive 11.4% for low-income population and a negative difference of -1.6% for minority population. According to AAATA’s Equity Analysis Policy for Service and Fare Changes this means that the proposed service change does not create a disparate impact on the minority population, since -1.6% is below the 10% threshold. Since the low-income population is at 11.4% difference with additional services provided to the affected population, which hopefully is considered beneficial instead of a burden.

	Low Income	Minority
Change Borne By	35.9%	36.9%
Area Average	24.6%	38.5%
<b>Delta</b>	<b>11.4%</b>	<b>-1.6%</b>

Table 4: Remix calculation of equity analysis change for routes 6,24, 68, and Washtenaw Express.

### Mitigation

#### Route 6 & 24

The coverage between Blake Transit Center and Briarwood Mall remains constant, while passengers will have to adapt utilizing route 6A or 6B instead of catching either 6 or 24.

While route 24 is not flagged as a major service change or needing additional equity analysis, here are a few things to consider with the adjustment between routes 6 and 24: If there were passengers that were connecting to St. Joseph’s Hospital from the State Street/Stimson Street/northern end of Industrial Hwy area, they will either need to transfer to route 24 at Briarwood Mall or to route 3 at Blake Transit Center. Additionally, Sunday passengers may have been getting on route 24 near the entrance to County Farm Park. These passengers will have to walk down Platt Road to catch route 24 or walk to Washtenaw Avenue to catch route 4.

#### Route 68 & Service Hours

All populations within ¼ mile of fixed routes with increased service hours will continue to be served and have no negative impact of the proposed service change. The expansion of service hours was applied to all routes, to streamline AAATA’s hours of operation. No mitigation is required for route 68.

<sup>1</sup> Even though route 24 is not considered a major service change route, as explained in analysis its service change added coverage in miles and hours to route 6. AAATA wanted to add it to its equity analysis equations to confirm nothing was untoward.

*Washtenaw Express*

There could be a potential to utilize different limited bus stops that captures populations with higher minority and low-income. However, capturing the highest current and future ridership bus-stops and having few stops will allow the express route to travel faster. Additionally, as previously explained, route 4 is a high transfer route, where demographics are pulled for the Washtenaw Express. AAATA will continue to monitor public feedback, bus stop requests, and on-time performance and ridership after the implementation of the route.

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## Public Comment and Input

AAATA's open feedback period is between October 23 – November 23, 2023. The public may provide feedback via the following methods:

- Attend a virtual meeting via Zoom
  - November 8 at 12 – 1pm
  - November 9 at 7 – 8pm
- Attend an in-person meeting
  - November 14, 2 – 6pm at Ypsilanti District Library- Whittaker branch
  - November 15, 2 – 6pm at Blake Transit Center
  - November 16, 2 – 6pm at Ypsilanti Transit Center
- Visit [bit.ly/TheRideService2024](https://bit.ly/TheRideService2024)
- Email: [Planning@TheRide.org](mailto:Planning@TheRide.org)
- Call: 734-794-1882
- Mail:
  - AAATA  
c/o August 2024 Proposed Millage Changes  
2700 S. Industrial Hwy.  
Ann Arbor, MI. 48104

After the public input session has been completed, this section will be completed to summarize feedback and detail any changes made to proposal.



# Appendix

This section is reserved to insert all materials presented to the public.

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