

Board of Director’s Meeting Agenda

Meeting Date/Time: December 21, 2023 - 6:30 – 9:00pm

Members: Kathleen Mozak (Chair), Mike Allemang (Treasurer), Jesse Miller (Secretary), Chris Allen, Simi Barr, Rich Chang, Monica Ross-Williams, Susan Pollay, Kyra Sims

Location: Ann Arbor District Library (4th Floor)
 Virtual attendance available via [Zoom](#)
 Passcode: 983308

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9.2 Topics for Next Meetings Ends (Policy 1.0) Review Zero-Emission Bus Decisions		Thursday, January 25, 2024	
9.3 Public Comment	O		
9.4 Adjournment			

* M = Monitoring, D = Decision Preparation, O = Other

ZEB PPT
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If additional policy development is desired:

Discuss in Board Agenda Item 3.0 Policy Monitoring and Development. It may be appropriate to assign a committee or task force to develop policy language options for board to consider at a later date.

Emergent Topics

Policy 3.1.3 places an emphasis on distinguishing Board and Staff roles, with the Board focusing on “long term impacts outside the organization, not on the administrative or programmatic means of attaining those effects.” Policy 3.1.3.1 specifies that that Board use a structured conversation before addressing a topic, to ensure that the discussion is appropriately framed:

1. What is the nature of the issue? Is the issue within the scope of the agency?
2. What is the value [principle] that drives the concern?
3. Whose issue is this? Is it the Board’s [Policy, 3.0 and 4.0] or the CEO’s [running the organization, 1.0 and 2.0]?
4. Is there already a Board policy that adequately covers the issue? If so, what has the Board already said on this subject and how is this issue related? Does the Board wish to change what it has already said?

Board of Director's Meeting Minutes

Meeting Date/Time: November 16, 2023 - 6:30 – 9:00pm

Members: Kathleen Mozak (Chair), Mike Allemang (Treasurer), Jesse Miller (Secretary), Chris Allen, Simi Barr, Rich Chang, Susan Pollay, Kyra Sims

Location: Ann Arbor District Library (4th Floor)
Virtual attendance available via Zoom

Chairwoman Mozak called the meeting to order at 6:30pm

Agenda Item
1. OPENING ITEMS
1.1 Approve Agenda <p>Mr. Chang motioned to accept the agenda, seconded by Ms. Sims.</p> <p>All in favor of approving the agenda:</p> <p>Mr. Mike Allemang: Yes Mr. Chris Allen: Yes Mr. Simi Barr: Yes Mr. Rich Chang: Yes Mr. Jesse Miller: Yes Ms. Susan Pollay: Yes Ms. Kyra Sims: Yes Chairwoman Kathleen Mozak: Yes</p> <p>The approval of the agenda passed unanimously.</p>
1.2 Public Comment <p>Jim Mogensen shared his thoughts on the recent creation of a climate executive limitation and how it might conflict with executive limitations related to financial responsibility. He encouraged the organization to consider the impact of those executive limitations and issues that might arise in the future.</p> <p>Charles Griffith, of the Ecology Center and former Board member, shared his thoughts on the CEO's ZEB recommendation and encouraged the Board to continue to research battery electric technology.</p> <p>Elizabeth Kurtz, a local advocate for the unhoused community, shared her experiences riding public transportation and had concerns about a lack of space/design for adequate space on buses for luggage or belongings. She encouraged the Board to investigate this further.</p>
1.3 General Announcements <p>Chairwoman Mozak shared that the annual Audit Task Force is being assembled and 3-4 Board members are needed. The first meeting is planned to be in early December.</p>

2. CONSENT AGENDA

2.1 Board Meeting Minutes October 19, 2023

2.2 Committee Meeting Summaries

2.3 Annual Public Transit Agency Safety Plan (2023)

Mr. Miller motioned for a wording amendment to the October 19, 2023 Board Meeting Minutes to include an update to the past paragraph of Item 4.1, seconded by Ms. Sims.

Amend wording to:

After the vote Mr. Allemang also shared that at the October task force meeting discussed the proposal of Governance Coach, Rose Mercier, that policy 2.8 CEO Succession be incorporated into 2.4 Financial Planning and Budgeting and that policy 2.4 be broadened to include all planning. The task force concluded that these two policies not be revised at this time. Instead, it recommended that these policies be considered by the Governance Committee, along with other policies, when they determine which 2-3 policies should receive a full review each year. This recommendation will be discussed at the next Governance Committee meeting along with the suggestion that the task force be concluded after 3 years of work.

All in favor of approving the wording amendment to the October 19, 2023 Board Meeting Minutes:

Mr. Mike Allemang: Yes
Mr. Chris Allen: Yes
Mr. Simi Barr: Yes
Mr. Rich Chang: Yes
Mr. Jesse Miller: Yes
Ms. Susan Pollay: Yes
Ms. Kyra Sims: Yes
Chairwoman Kathleen Mozak: Yes

The approval of the wording amendment passed unanimously.

Ms. Pollay motioned to make a 2nd wording amendment to the October 19, 2023 Board Meeting Minutes to revise a question listed under item 7.1, seconded by Mr. Miller.

Amend wording to:

“Has the organization looked at issuing bonds?”

All in favor of approving the 2nd wording amendment to the October 16, 2023 Board Meeting Minutes:

Mr. Mike Allemang: Yes
Mr. Chris Allen: Yes
Mr. Simi Barr: Yes
Mr. Rich Chang: Yes
Mr. Jesse Miller: Yes
Ms. Susan Pollay: Yes
Ms. Kyra Sims: Yes
Chairwoman Kathleen Mozak: Yes

The approval of the 2nd wording amendment passed unanimously.

Mr. Barr then motioned to approve the Consent Agenda, seconded by Ms. Sims.

All in favor of approving the Consent Agenda:

Mr. Mike Allemang: Yes
Mr. Chris Allen: Yes
Mr. Simi Barr: Yes
Mr. Rich Chang: Yes
Mr. Jesse Miller: Yes
Ms. Susan Pollay: Yes
Ms. Kyra Sims: Yes
Chairwoman Kathleen Mozak: Yes

The approval of the Consent Agenda passed unanimously.

3. OWNERSHIP LINKAGE

3.1 Open Dialogue Task Force Updates

Mr. Chang updated the Board on progress being made by the ODTF and meetings with local government. He is currently working on scheduling a meeting with Ypsilanti Mayor Brown. He also shared that he would be joining Mr. Carpenter in December at the Ann Arbor City Council meeting for a bi-monthly update.

4. MONITORING

4.1 Treatment of the Traveling Public (2.1)

Mr. Carpenter introduced the monitoring report for Treatment of the Traveling Public (Policy 2.1) – six board members had positively responded to the monitoring report survey. The Service Committee reviewed the report and survey findings at their November meeting and recommended that the Board accept the monitoring report as (A) Compliant.

Mr. Miller motioned to accept Treatment of the Traveling Public (2.1) as (A) Compliant, seconded by Mr. Chang.

All in favor of accepting Treatment of the Traveling Public (2.1) as (A) Compliant:

Mr. Mike Allemang: Yes
Mr. Chris Allen: Yes
Mr. Simi Barr: Yes
Mr. Rich Chang: Yes
Mr. Jesse Miller: Yes
Ms. Susan Pollay: Yes
Ms. Kyra Sims: Yes
Chairwoman Kathleen Mozak: Yes

The motion to accept Treatment of the Traveling Public (2.1) as (A) Compliant, passed unanimously.

4.2 Compensation & Benefits (2.3)

Mr. Carpenter introduced the monitoring report for Compensation & Benefits (Policy 2.3) – five board members had favorably responded to the monitoring report survey. The Finance Committee reviewed the report and survey findings at their November meeting and recommended that the Board accept the monitoring report as (A) Compliant.

Mr. Allemang motioned to accept Compensation & Benefits (2.3) as (A) Compliant, seconded by Mr. Allen.

All in favor of accepting Compensation & Benefits (2.3) as (A) Compliant:

Mr. Mike Allemang: Yes
Mr. Chris Allen: Yes
Mr. Simi Barr: Yes
Mr. Rich Chang: Yes
Mr. Jesse Miller: Yes
Ms. Susan Pollay: Yes
Ms. Kyra Sims: Yes
Chairwoman Kathleen Mozak: Yes

The motion to accept Compensation & Benefits (2.3) as (A) Compliant, passed unanimously.

5. POLICY

5.1 Policy Development / Public Safety

Mr. Miller shared that after Ypsilanti citizens raised concerns regarding public safety and policing at the August Board meeting, he wanted to explore how riders perceive safety on buses and at transit facilities. While there are policies that address ridership safety, he recommended the board look at the questions/issues surrounding the topic to determine if those policies need to be addressed more thoroughly. After Board discussion, it was determined that the Service Committee would begin the work of policy development for this matter starting at their December meeting.

6. BOARD EDUCATION/DISCUSSION

7. OPERATIONAL UPDATES

7.1 FY23 Q4 Finance Report

Ms. Reed provided the Board with the FY2023 Q4 Preliminary Finance Report. Highlights for Q4 initial close of the yearly budget included expenses being approximately 1.5% below budget – once final adjustments are made, the surplus will be added to the capital reserve. Approximately \$6.8 million of federal pandemic relief funds remain and will be spent in FY24. Operating capital insurance and insurance reserves are being maintained and investments remain stable. The financial statement review with the audit task force and final financial statements will be shared with the Board in February/March once the audit has been completed.

7.2 Zero-Emissions Bus Discussion

Mr. Carpenter presented to the Board his initial ZEB recommendation presentation in October and had staff compile questions from the meeting that required more in-depth information. He provided a presentation ([Board packet, pg. 127](#)) that responded to Board member questions ([October 19, 2023 Board Minutes, pg. 3](#)) that had been raised in October. He shared that there had been robust discussion at the committee level, and he continues to receive public comments on his ZEB recommendation.

Upon concluding his presentation, Mr. Carpenter fielded various questions / comments / insight from Board members.

Questions to be answered in more detail for December Board meeting:

- Has the increased weight of ZEB buses been considered? What are the impacts to roads?
- Will investing in the Long-Range Plan do more to decrease the overall carbon footprint than investing in a pilot project?
- What is the risk of not doing the pilot project?
- Are we able to see examples of grant proposals?
- Can we contact agencies that have been awarded grants to receive details on their grant submissions?
- What are other emission reduction options?
- What are the metrics for gauging success on the pilot project?
- Can we sell the buses if the pilot project isn't successful?
- Would changing smaller fleet vehicles to EV be a quicker/ more visible commitment to the community and federal government?
- Is there an EV transition plan for smaller vehicles?
- How are battery chargers evolving / improving (range)
- Are high-speed charging stations being created for larger vehicles?
- Is the policy impacts chart understandable / helpful to non-PG stakeholders?
- Could CEO create a chart w/ broader categories for hydrogen vs. battery - rank in order of most important
- Could this decision be delayed a year to gather more information and reduce risks with changing technologies?
- Like FTA grants, will ZEB Grants require 12 yrs. of bus usage? What are the grant requirements?
- Are there any transit agencies that are in a similar climate that have transitioned to battery or hydrogen?

Discussions will continue at the December Board meeting.

7.3 CEO Report

Mr. Yang provided an update on the 2024 service improvement public engagement meetings that are taking place virtually, in-person around the community and with staff. Comments and input are being gathered with schedules and maps planned to be finalized by spring. He also shared that a consultant team had been hired for the Ypsilanti Transit Center project planning.

Mr. Carpenter shared of a recent meeting with the University of Michigan planning group to discuss their campus master plan and will be scheduling another upcoming meeting. He also shared of recent discussions at the AA Transportation Commission and other continued opportunities to advocate for transit.

Several Board members discussed their perspectives and methods related to expanding local advocacy for transit and Ms. Pollay suggested the Board develop a resolution or statement in support of prioritization for local initiatives that support public transportation as other community advocates have done. After a discussion, Chairwoman Mozak determined that the Governance Committee would explore the idea and bring it back before the Board in December or January.

8. EMERGENT ITEMS

8.1 Alternative Board Meeting Locations

Mr. Carpenter shared that Board members had raised the idea of having the Board meetings occasionally at an alternative location Ypsilanti or Ypsilanti Township. Staff explored locations and determined the Riverside Arts Center in Ypsilanti would be an amenable meeting space and had availability to reserve in one of the first 3 months of the new year. The Governance Committee will add to their agenda to discuss the alternative meeting location and planning details to be shared with the Board in December.

9. CLOSING ITEMS

9.1 Action Item Recap

Safety policy development will go before the Service Committee, zero-emission bus questions will be noted (from the meeting) and answered by Mr. Carpenter and staff as the discussion continues in December, Governance Committee will discuss alternative meeting location planning.

9.2 Topics for Next Meetings

Ends (1.0)
FY23 Q4 Service Report
Zero-Emission Bus
Long-Range Plan Update

9.3 Public Comment

Elisabeth Kurtz encouraged the Board to keep in mind the needs of the local unhoused population and find ways to be inclusive of marginalized riders as they plan and expand services.

9.4 Adjournment

Ms. Pollay motioned to adjourn the meeting, seconded by Mr. Barr.

All in favor of adjourning the meeting:

Mr. Mike Allemang: Yes
Mr. Chris Allen: Yes
Mr. Simi Barr: Yes
Mr. Rich Chang: Yes
Mr. Jesse Miller: Yes
Ms. Susan Pollay: Yes
Ms. Kyra Sims: Yes
Chairwoman Kathleen Mozak: Yes

Chairwoman Mozak adjourned the meeting at 9:46pm.

Respectfully Submitted by Deborah Holt

Governance Committee Meeting Notes

Meeting Date/Time: Tuesday, November 28, 2023 – 9:00-11:00am

Members: Kathleen Mozak (Chair), Mike Allemang, Jesse Miller

Staff: Dina Reed, Forest Yang, Troy Lundquist, Rosa-Maria Njuki, Deb Holt
Matt Carpenter (Absent)

Location: REMOTE – Via Zoom

Chairwoman Mozak called the meeting to order at 9:03am

Agenda Item
1. OPENING ITEMS
<p>1.1 Agenda (Additions, Approval)</p> <p>No additions or changes noted in the agenda.</p> <p>1.2 Communications</p> <p>No new communications.</p>
2. BOARD DEVELOPMENT
<p>2.1 Recruitment / Training</p> <p>Chairwoman Mozak provided an update on the status of the one vacant position on the Board – the committee is continuing to monitor Ann Arbor City Council agendas for candidate nominations.</p> <p>2.2 Advocacy/Roles & Resolutions</p> <p>Committee members discussed Ms. Pollay’s suggestion of public resolution / statement for the prioritization of local initiatives that support public transit that had been raised at the November Board meeting. The committee determined the conversation should include Mr. Carpenter and discuss the topic again at the December Governance Committee.</p> <p>2.3 Task Force Coordination (ODTF, Procurement, Audit)</p> <p>Chairwoman Mozak shared that ODTF continues to work on scheduling a meeting with Ypsilanti Mayor Brown. The Legal Procurement Task Force had concluded their work in October, and the legal contract was awarded to Dykema. The Governance Coach Procurement Task force is assembled and has upcoming meetings arranged. The Audit Task Force is being assembled and an email was sent asking for participation from board members as work will begin in December.</p>

2.4 Board Meeting Locations

Ms. Holt shared that space was available to reserve at the Riverside Arts Center for the January, February or March Board meetings – after a discussion, the committee members determined that the meeting would be in February. Chairwoman Mozak requested that location change information begin to be updated on the website and shared on social media

3. POLICY MONITORING & DEVELOPMENT

3.1 Annual Plan of Work

The committee discussed work plan topic suggestions:

Current work plan – Ends Review, Propulsion, Equity and Sustainability

General Education Topics - Multi-jurisdictional consideration (local and regional), Differences between AAATA communities (POSAs), Environmental Standards (policy development?), RTA, Advocacy Under Policy Governance, Policy Development Education, Post Pandemic Trends, Ridership

3.2 Annual Policies for Review

The committee reviewed a list of policies that had been reviewed/developed in the last 3 years and suggested policy reviews over the next 3 years. The committee determined that at the December Governance committee they also wanted to review areas of concerns from Policy 3.0 survey responses.

4. STRATEGY & OPERATIONAL UPDATES: CEO

4.1 ZEB Discussion

Mr. Carpenter (not present) had provided an update to Chairwoman Mozak – staff are working on answering additional board questions and concerns raised at the November board meeting. Many of the questions raised were related to concern for the overall financial impact to the capital reserve with the two options being discussed, hydrogen fuel cell and battery electric buses. Board members wish to have more explanation comparing short-term and long-term cost impacts for hydrogen and battery.

5. CLOSING ITEMS

5.1 Committee Agendas

Mr. Miller approved the draft agenda for the Service Committee meeting – no changes or additions. Mr. Allemang requested an update on the Finance Committee agenda for item 3.1 by changing the topic title to “Bond Financing Discussion” (update on Board agenda) and add “Audit Update” for January topics. Chairwoman Mozak added “Long-Range Plan Update” to December Board meeting agenda under Operational Updates (7.2). The committee decided that Ends will be introduced in December and reviewed in January and added “ID/Compensation” for January meeting agenda topics. Global Executive Limitations (2.0) monitoring timeline at the next Governance meeting. The committee also requested from staff that the Q4 Service Report presentation under Operational Updates at the Board meeting be brief with the intent of allowing more time for other agenda items.

5.2 Action Item Recap

- February Board meeting at Riverside Arts Center
- Update annual policies review chart and move 2.3 to 2025 and 2.4 to 2024.
- Send Governance Committee 3.0 policy survey comments add to governance agenda
- Issue brief outlining the usage of Bus passes for board members for an upcoming Board meeting
- Staff will be answering board questions related to ZEB from November meeting
- Service Committee agenda – no changes
- Finance Committee agenda - change 3.1 to Bond Financing, add Audit Update for January topics
- Board Agenda - change 7.2.1 to Bond Financing Discussion, add LRP Update under operational updates 7.2, introduce Ends and review in January, add ID/Compensation to January agenda topics
- Discuss Global Executive Limitations (2.0) monitoring timeline at the next Governance meeting
- Audit Task Force members needed

5.3 Topics for Next Meeting

ZEB Discussion
CEO Expense Report
Global Executive Limitations (2.0) monitoring timeline

5.4 Adjournment

Chairwoman Mozak thanked the committee and staff and adjourned the meeting at 10:42 am.

Respectfully Submitted by Deborah Holt

Service Committee Meeting Notes

Meeting Date/Time: December 5, 2023, 9:00-11:00am

Members: Jesse Miller (Chair), Simi Barr, Rich Chang, Susan Pollay

Staff: Matt Carpenter, Dina Reed, Forest Yang, George Brooks, Rosa-Maria Njuki, Deb Holt

Location: [REMOTE – Via Zoom](#)

Mr. Miller called the meeting to order at 9:03am

Agenda Item
1. OPENING ITEMS
<p>1.1 Agenda (Additions, Approval)</p> <p>No additions or changes noted for the agenda.</p> <p>1.2 Communications</p> <p>Mr. Carpenter shared with the committee that the vacant position of Manager of Community Relations position has recently been filled and will be publicly announced in the next few weeks.</p>
2. POLICY MONITORING & DEVELOPMENT
<p>2.1 Public Safety Policy</p> <p>Policy Governance Coach Rose Mercier provided to the committee points of consideration should they develop a new public safety policy:</p> <ul style="list-style-type: none"> - Some members of the traveling public feel personal safety is at risk in transit centers and while using transit service - Some members of the traveling public avoid transit at night and/or are subjected to unwanted attention/harassment - How/when to involve law enforcement in/around services and facilities <p>She also suggested that possible policy development might fall under Treatment of the Traveling Public, Treatment of Staff, or Ends.</p> <p>Staff provided the committee with an overview on de-escalation and safety protocols that staff engage in when incidents occur on buses or in/around facilities.</p> <p>The committee had a robust discussion on how a policy might be developed to address the perception of safety / security concerns with public transportation.</p> <p>The committee determined they would continue to discuss this topic at the January Service Committee meeting.</p>

3. STRATEGY & OPERATIONAL UPDATES: CEO

3.1 FY2023 Q4 Service Report

Mr. Brooks shared an overview of the FY2023 Q4 Service Report with the committee – highlights included ridership increases still trending upward and is nearing 80% of pre-covid ridership numbers. He mentioned that flex-ride denials continue to decline after staff had made a focused effort to address the reasons behind denial of service. Mr. Miller noted that with the upcoming holidays, flex ride services would increase, and Operations will continue to monitor denials.

3.2 ZEB Discussion

Mr. Carpenter thanked the committee for their questions from the November Board meeting discussion. He and staff are working on providing answers at the December Board meeting.

Committee members inquired and discussed with staff the details and timeline of the auxiliary fleet (light/facilities vehicles) transition to zero emissions which had been outlined in the Business Plan and how/if the transition might be done in conjunction with the ZEB pilot.

4. CLOSING ITEMS

4.1 Action Item Recap

Transit public safety programs
Continue Public Safety Policy discussion at January Service Committee meeting
Share Transition Plan with Board

4.2 Topics for the Next Meeting

ZEB Discussion
Global Executive Limitations (2.0)
Public Safety Policy Discussion

4.3 Adjournment

Mr. Miller thanked the committee and staff and adjourned the meeting at 11:04am.

Respectfully Submitted by Deborah Holt

Finance Committee Meeting Notes

Meeting Date/Time: December 12, 2023, 3:00 – 5:00pm

Members: Mike Allemang (Chair/Treasurer), Chris Allen

Staff: Matt Carpenter, Dina Reed, Forest Yang, George Brooks, Rosa-Maria Njuki, Vivi Nguyen, Deb Holt

Location: REMOTE – Via Zoom

Mr. Allemang called the meeting to order at 3:02pm.

Agenda Item
1. OPENING ITEMS
<p>1.1 Agenda (Additions, Approval)</p> <p>No additions or changes noted to the agenda.</p> <p>1.2 Communications</p> <p>Mr. Carpenter shared that the Public Affairs Manager position has been filled and the new manager will be joining the organization in January.</p>
2. POLICY MONITORING & DEVELOPMENT
3. STRATEGY AND OPERATIONAL UPDATES
<p>3.1 Bond Financing Discussion</p> <p>Board members had requested information on the feasibility of utilizing debt financing (bond financing, etc.) for capital projects during the ZEB proposal discussion. Ms. Reed provided a summary recommendation of avoiding debt financing as follows:</p> <ul style="list-style-type: none"> - State law limits the Authority’s debt financing options <i>only</i> to the issuance of self-liquidating revenue bonds, - Revenue bonds must be secured by operating revenues, which for this purpose are narrowly defined and exclude all grants and millage revenue, - Creditworthiness would need to be established and is not guaranteed, and - Revenues needed to pay for debt service on bonds would require an increase in millage rates or other funding source to balance the budget. <p>She also recommended continuing to pursue grant opportunities, and federal and state funding for capital projects.</p> <p>Committee members thanked Ms. Reed for sharing the information and agreed with her findings and recommendation. The issue brief will be shared with the Board at the December Board meeting.</p>

3.2 ZEB Discussion

Mr. Carpenter shared that staff are continuing to work on answering questions Board members have raised at the October and November Board meetings. The committee had no new questions.

4 CLOSING ITEMS

4.1 Action Item Recap

Include Bond financing issue brief / recommendation in December Board packet
Continue ZEB discussion

4.2 Topics for Next Meeting

ZEB Discussion
Audit Update

4.3 Adjournment

Mr. Allemang thanked the committee and staff and adjourned the meeting at 3:38pm.

Respectfully Submitted by Deborah Holt

DRAFT

Annual Approval of Public Transit Agency Safety Plan

Meeting: Board of Directors

Meeting Date: December 21, 2023

INFORMATION TYPE:
Decision
RECOMMENDED ACTION(S):
That the Board approve the meeting minutes in which the AAATA Safety Committee approved 2023 Public Transportation Agency Safety Plan (PTASP) Version 4.0.
PRIOR RELEVANT BOARD ACTIONS & POLICIES
<p>3.4.8 – “Mandatory Approvals” required by outside organizations are placed on the Consent Agenda.</p> <p>2.0 & 2.5.2 – Comply with laws and federal regulations, do not jeopardize funding.</p>
ISSUE SUMMARY:
<p>TheRide has successfully developed and obtained approval for this year's Public Transportation Agency Safety Plan (PTASP). This essential document has already been reviewed and approved by the Safety Committee, the CEO, and the Board of Directors, ensuring adherence to federal regulations.</p> <p>In a new requirement set by the Federal Transit Administration (FTA), we have been asked to further document PTASP completion by getting Board approval of meeting minutes from the Safety Committee discussion during which the PTASP was initially approved. This additional step, documenting the formal recognition of these minutes by the Board of Directors, is critical for maintaining our compliance with federal guidelines and access to federal funds.</p> <p>The attached meeting minutes are presented for Board approval. Staff affirm that the PTASP is in full alignment with all federal regulations, upholding our commitment to safety and regulatory adherence.</p>
IMPACTS OF RECOMMENDED ACTION(S):
<ul style="list-style-type: none"> • Budgetary/Fiscal: Board approval necessary to ensure federal funding. • Social: NA • Environmental: NA • Governance: The federal government required approval by the Board. Policy Governance requires such approvals be placed in the Consent Agenda.
ATTACHMENTS:
<ol style="list-style-type: none"> 1. Meeting Minutes from the Safety Committee meeting (09/21/2023) in which the PTASP was approved. 2. Meeting Minutes from the Safety Committee meeting (10/19/2023) in which the Meeting Minutes from 09/21/2023 were formally approved by the Safety Committee. 3. Signature sheet signed by all members of the Safety Committee, confirming their approval .



SAFETY COMMITTEE MEETING MINUTES

Date: Thursday 09/21/2023
Time: 2:00 PM – 3:00 PM
Location: Virtual/In-Person

Present: Eli Boddy (Chair), Larry Gibson (Non-Union), Delisa Brown (Union), Aaron Zimmerman (Union), Adam Chmiel (Non-Union), William Fowler (Non-Union), Monica Boote (Non-Union), Kenworth Robin (Union)

Not Present: Jimmy Spangler (Non-Union), Howard Whiteside (Union),

A. Call to Order

Chairman Boddy called the meeting to order at 2:04 PM.

B. Review and Approval of Agenda

A motion to approve the agenda was made by Delisa Brown and seconded by William Fowler. The agenda was unanimously approved.

C. Review and Approval of Minutes: 08/03/2023

A motion to approve the meeting minutes dated 08/03/2023 was made by Adam Chmiel and seconded by Delisa brown.

The meeting minutes dated 08/03/2023 were unanimously approved.

D. New Business Items

1. OJI Review

Chairman Boddy explained that we have had three slips/trips and falls since the last meeting. One was due to residual water left in the bus barn. Chairman Boddy explained that the other one was due to the driver seat not being able to go backwards and they hurt their back.

Chairman Boddy explained that we will have an ergonomics study taking place from a company called Atlas to better support the drivers.

2. Flu Shot Clinic 09/26/2023.

Chairman Boddy explained that we are not doing a wellness fair this year. Chairman Boddy explained that we are having the annual flu shot clinic, you just need your insurance card, and it is no cost to you.

3. Safety Committee Guidelines

Chairman Boddy explained that we will need to create a Safety Committee Charter that will be taking place of the current Safety Committee Guidelines. Chairman Boddy will be sending out via email the current guidelines and asked each committee member to please review and as a committee we will work on updating the guidelines.

4. Fire Extinguisher Locations

Chairman Boddy discussed the removal of the fire extinguishers behind the drivers seats due to the possibility of a disgruntled passenger using that as a weapon to attack the driver.

Delisa Brown asked how accessible the extinguisher needs to be? Chairman Boddy advised that it cannot be in a locked cabinet. It must be accessible to quickly grab and use to put out a fire. Delisa Brown asked if they could be placed in the overhead cabinets that are above the drivers' heads? Chairman Boddy explained that they will discuss with Fleet Manager Troy Lundquist to see the feasibility of moving them to the driver cabinets.

Adam Chmiel expressed that they think the extinguisher is too large to fit in those cabinets. Delisa Brown stated that they think whatever is stored now in those cabinets could be removed and the extinguisher could be added.

5. State and Williams Intersection

Chairman Boddy explained that he and Larry did a safety assessment at the intersection. He explained that a large white X was painted by the City of Ann Arbor and now cars are currently stopping about 10 feet short of the intersection so the bus can now complete the turn. Chairman Boddy explained that they will do a follow up investigation on the intersection 6 months from now.

6. Parking Brake Examples

Chairman Boddy brought samples of various parking brake knobs. Chairman Boddy met with Troy Lundquist to get some different examples. Chairman Boddy explained that they can add a rubber outer piece to the knob to make it easier to grab and more comfortable to handle. Delisa Brown explained that it's really the pull up on the parking brake as it hits your hands with the air pushing up the release.

SAFETY COMMITTEE MEETING MINUTES

Chairman Boddy explained that drivers can fill out the issue with parking brakes on the VC cards and Fleet will go about replacing them. Delisa Brown advised that they get would get the word out to the other MCO's.

7. Parking Brake Report/Review

Chairman Boddy passed out the parking brake failure review report to each participant, so they review.

8. PTASP Clarifications

Chairman Boddy distributed supplementary documents related to the PTASP to all committee members. These documents include a comprehensive list of Safety Programs managed by the Safety Office at AAATA. Chairman Boddy emphasized that the list outlines all safety initiatives overseen by the Safety Office, including the Contagious Virus Response Plan. This particular plan is cited in the PTASP as a reference because it is too extensive to be fully incorporated.

Chairman Boddy then opened the floor for any concerns or questions about the PTASP as it stands.

Delisa Brown mentioned that she is still reviewing the red-lined version against the updated one and is not ready to sign off yet. When asked about a timeline, Delisa committed to completing her review and being ready to sign by the following Friday.

Aaron Zimmerman and Adam Chmiel expressed their comfort with the plan and are ready to sign. Kenworth Robin had no additional concerns but chose to wait for Delisa Brown's final review.

Chairman Boddy and Delisa Brown scheduled a meeting for the following Friday to finalize the PTASP. Once Delisa approves, the remaining committee members will sign, thereby officially approving the PTASP.

Update (9/29/2023): Chairman Boddy met with Delisa Brown, Kenworth Robin, and Howard Whiteside to collect the remaining signatures. The PTASP has been formally approved by the Safety Committee as of September 29, 2023. The signature document is attached.

9. Ergonomics Study and Proposal

Atlas will be coming on-site to complete an ergonomics study to make it safer for the drivers to drive the bus.

10. Construction Issues

Chairman Boddy explained that in the past three days the Safety Office has received numerous complaints about the black pilons that the City of Ann Arbor has installed to protect bike lanes is causing the busses to have to complete a turn into oncoming traffic.

Chairman Boddy explained that AAATA planning department and the City of Ann Arbor work together to talk about the construction, but the city makes changes to the plans after AAATA planning sign off on them.

Chairman Boddy explained that they will be involved in the meetings with planning and the City of Ann Arbor in the future to bring more of a safety perspective to these changes.

Delisa Brown expressed some concerns in general about the difference between preventable and non-preventable accidents, especially regarding the ongoing construction on the routes.

E. Old Business

NOVA Bus Seat Updates

No real update as Jimmy Spangler is out of the office.

F. Education/Training

- **Contagious Virus Response**

Chairman Boddy passed out the policy to the whole committee so they can review it.

G. Committee Comments

Nothing additional.

H. Department Reports

1. Administration

Nothing to report.

2. Facilities Services

Nothing to report.

3. Fleet Services

Nothing to report.

4. Operations

Delisa Brown brought up a concern about routing and the Safety Committee meeting once a year, but that has yet to happen. Chairman Boddy explained that this specific line was added during the previous PTASP meetings so it will happen in the future.

Delisa Brown is looking forward to hopefully scheduling this meeting with routing before the end of the year.

Kenworth Robin stated that we have over 170 drivers and it's impossible to tell everyone to do or not do something, in relation to the timepoints on the route. Kenworth Robin stated they have spoken to many of the new drivers, and they are ready to vacate their positions due to the broken and poor time points. Kenworth Robin continued discussion about the poor routing and planning of the routes.

Kenworth Robin asked if the City of Ann Arbor will add "except buses" to their no turn on red signs downtown.

Chairman Boddy stated they will be following up the City of Ann Arbor to get a status update.

Delisa Brown brought up a concern about the bus barrier shutting on the drivers and getting their shoes stuck in the door.

Delisa Brown brought a concern about the route announcer not picking up a few routes in between the routes. Adam Chmiel stated that Jim Kulczyk and the electronics crew from Fleet handle the planning of those.

5. Service Crew

Nothing to report.

SAFETY COMMITTEE MEETING MINUTES

I. Adjournment,

A motion to adjourn was made by William Fowler and seconded by Delisa Brown. Adjournment was unanimously approved, and the meeting adjourned at 3:02 PM.

Respectfully Submitted,

Matthew Schultz
AAATA HR Administrative Assistant

Reviewed by,

Eli Boddy
AAATA Safety Officer

Approved

Matthew Carpenter
AAATA CEO



SAFETY COMMITTEE MEETING MINUTES

Date: Thursday 10/19/2023

Time: 2:00 PM – 3:00 PM

Location: In-Person

Present: Eli Boddy (Chair), Larry Gibson (Non-Union), Delisa Brown (Union), Kenworth Robin (Union), Howard Whiteside (Union), Jimmy Spangler (Non-Union), Adam Chmiel (Non-Union), Bill Fowler (Non-Union)

Not Present: Aaron Zimmerman (Union)

A. Call to Order

- **Chair:** Chairman Boddy
- **Time:** 2:02 PM

B. Review and Approval of Agenda

- **Motion By:** Delisa Brown
- **Seconded By:** Howard Whiteside
- **Result:** Unanimously approved

C. Review and Approval of Minutes: 09/21/2023

- **Motion By:** Delisa Brown
- **Seconded By:** Jimmy Spangler
- **Result:** Unanimously approved

D. New Business Items

1. **OJI Review**
 - Issue with a bus mirror getting broken and causing injury to the driver.
2. **Flu Shot Clinic Results**
 - 22 flu shots administered at the annual clinic.
3. **Safety Committee Guidelines**
 - Waiting for new rules from the FTA.
4. **Safety Updates**
 - Various topics including route safety, near misses, and YTC security.
5. **Space Heater Safety**
 - Guidelines sent organization-wide.
6. **Planning Updates**
 - Discussion on route planning and safety.
7. **Seat Updates**
 - Discussion on retrofitting fleet seats.
8. **Mirrors**
 - Reports of mirrors being smashed or hit.

SAFETY COMMITTEE MEETING MINUTES

9. **Overhead Garage Door**
- Incident under investigation.
-

E. Education/Training

- **Bloodborne Pathogens**
 - Discussion on OSHA requirements and categorization.
-

F. Committee Comments

- None
-

G. Department Reports

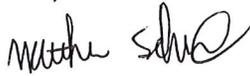
1. **Administration: None**
 2. **Facilities Services: None**
 3. **Fleet Services: None**
 4. **Operations: Updates on road work and driver compartment barriers.**
 5. **Service Crew: None**
-

H. Adjournment

- **Motion By: Delisa Brown**
 - **Seconded By: Howard Whiteside**
 - **Time: 3:10 PM**
-

Respectfully Submitted,

Matthew Schultz



X

Matt Carpenter
CEO

X

Jesse Miller
Board Secretary

X

Kathleen M
Board President

Attachment 3

Agency Safety Plan - Safety Committee - Approval of Plan/Update

Ann Arbor Area Transportation Authority is a transit agency that receives Section 5307 funding and serves a large, urbanized area. Therefore, in accordance with the Bipartisan Infrastructure Law, the Ann Arbor Area Transportation Authority is comprised of equal numbers of frontline employee representatives selected by TWU-171 and management representatives.

Below are signatures from each committee member validating their approval of version 4.0.

Eli Boddy – Committee Chairperson (Safety Officer)

Signature: 

Date: 9/18/2023

Adam Chmiel (Operations Supervisor)

Signature 

Date 9-21-23

Jimmy Spangler (Fleet Assistant Manager)

Signature 

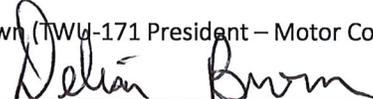
Date 9-06-23

Bill Fowler (Facilities Assistant Manager)

Signature 

Date 9/19/2023

Delisa Brown (TWU-171 President – Motor Coach Operator)

Signature 

Date 9/29/23

Kenworth Robin (TWU-171 Vice President – Motor Coach Operator)

Signature 

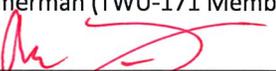
Date 9-29-2023

Howard Whiteside (TWU-171 Vice President – Service Crew)

Signature 

Date 9-29-2023

Aaron Zimmerman (TWU-171 Member – Senior Fleet Mechanic)

Signature 

Date 9/21/23

**Monitoring Report:
Ends (Policy 1.0)**

Monitoring Period: FY 23 (October 2022 to September 2023)

**Board of Directors Meeting Dates
Introducing Report: December 21st, 2023
Monitoring Report: January 25th, 2023**

INFORMATION TYPE
Monitoring
RECOMMENDED ACTION(S)
<p>That the Board review this monitoring report and consider accepting it as one of the levels below:</p> <p>(A) a reasonable interpretation for all policy items and that the evidence demonstrates compliance with the interpretations.</p> <p>(B) a reasonable interpretation for all policy items and that the evidence demonstrates compliance with the interpretations, except for the CEO’s stated non-compliance with item(s) x .x, which the Board acknowledges and accepts the proposed dates for compliance.is making reasonable progress towards compliance.</p> <p>(C) 1. For policy items x.x.x – there is evidence of compliance with a reasonable interpretation 2. For policy items x.x.x – the interpretation is not reasonable 3. For policy items x.x.x – the interpretation is reasonable, but the evidence does not demonstrate compliance 4. For policy items x.x.x – the Board acknowledges and accepts the CEO’s stated non-compliance and the proposed dates for compliance</p>
PRIOR RELEVANT BOARD ACTIONS & POLICIES
<p>Monitoring Reports are a key Policy Governance tool to assess organizational/CEO performance in achieving Ends (1.0) within Executive Limitations (2.0). A Policy-Governance-consistent Monitoring Process is:</p> <ol style="list-style-type: none"> 1. CEO sends Monitoring Report to all board members 2. At Board meeting, board accepts Monitoring Report through majority vote (or if not acceptable, determines next steps)

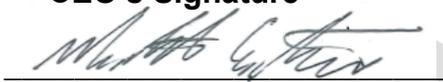
ISSUE SUMMARY

TheRide’s Board of Directors establish policies that define what is to be achieved for who and at what cost, called Ends policies. This monitoring report provides the CEO’s interpretations of those policies, evidence of achievement, and an assertion on compliance with the Board’s written goals. As with other monitoring reports, the Board decides whether the interpretations are reasonable, and the evidence is convincing.

Per Appendix A of the Board Policy Manual, this report was scheduled for monitoring in December. It was introduced to the Board in December and presented for monitoring in January as recommended by the Governance Committee.

I certify that the information is true and complete, and I request that the Board accept this as indicating an acceptable level of compliance.

CEO’s Signature



Date

12/15/2023

ATTACHMENTS

- 1. Monitoring report for Ends (Policy 1.0)

Table of Contents

POLICY TITLE: ENDS	Pg #	Comp.
1.0 AAATA exists so that an increasing proportion of residents, workers and visitors in the Ann Arbor-Ypsilanti Area utilize public transportation options that contribute to the Area’s social, environmental and economic vitality at a cost that demonstrates value and efficient stewardship of resources.	4	
1.1. Residents in the area have equitable access to public transportation services that enables full participation in society.	8	
1.1.1. People with economic challenges have affordable public transportation options.	13	
1.1.2. People with disabilities or mobility impairments, seniors, minors, and non-English speakers have equitable access to opportunities and destinations in the area.	14	
1.2. Public transportation positively impacts our environment.	17	
1.2.1. Public transportation options are increasingly chosen over use of a personal car.	18	
1.2.2. Public transportation options produce conditions favorable to more compact and walkable land development.	19	
1.2.3. Relevant public policy is transit supportive.	21	
1.3. Public transportation positively impacts the economic prosperity of the area.	22	
1.3.1. Public transportation facilitates labor mobility.	23	
1.3.2. Students can access education opportunities without need of a personal vehicle.	25	
1.3.3. Visitors use public transportation in the area.	26	
1.3.4. Public transportation connects the area to the Metro Detroit region.	27	
1.4. Passengers are highly satisfied with public transportation services.	28	
1.5. Residents of the area recognize the positive contributions of public transportation to the area’s quality of life.	30	



Fully Compliant



Partially Compliant



Non-Compliant

Preliminary CEO Interpretations and Evidence

POLICY 1.0

AAATA exists so that an increasing proportion of residents, workers and visitors in the Ann Arbor-Ypsilanti Area utilize public transportation options that contribute to the Area’s social, environmental and economic vitality at a cost that demonstrates value and efficient stewardship of resources.

Degree of Compliance: Compliant

Interpretation

Measure/Standards & Achievement

Compliance with this policy will be demonstrated when

- A. The agency’s fixed route ridership grows in line or above national and regional peers.
- B. The agency’s fixed route ridership per capita grows in line with or above national and regional peers.
- C. The agency’s fixed route cost per trip is in line with or above national and regional peers.
- D. Lower-level policies are compliant.

Rationale

This is reasonable because

- A.-C.
 - Fixed route ridership is a good proxy of overall achievement as it makes up 90% of all riders of all our services.
 - TheRide’s national transit peers are based on similar area population, mode type, total annual vehicle miles operated, annual operating budget, population density and population growth rate and hence creates reasonable context against which to judge TheRide’s performance. Regional peers operate within the same state and provide additional context through which performance is compared.
- A. An increase in ridership indicates that an increasing population of our community is using our services
- B. An increase in ridership per capita indicates that the community is increasing its reliance on transit.
- C. Cost per trip in line or above national and regional peers demonstrates cost-effectiveness (cost per hour of service) within the norms of the transit industry over time. This is reasonable because, as a public service, no transit agency breaks-even or turns a profit and all users and services are subsidized. Without a profit motive, financial performance becomes difficult to judge aside from peer benchmarking.
- D. Compliance with this policy constitutes compliance with lower-level policies.

Evidence

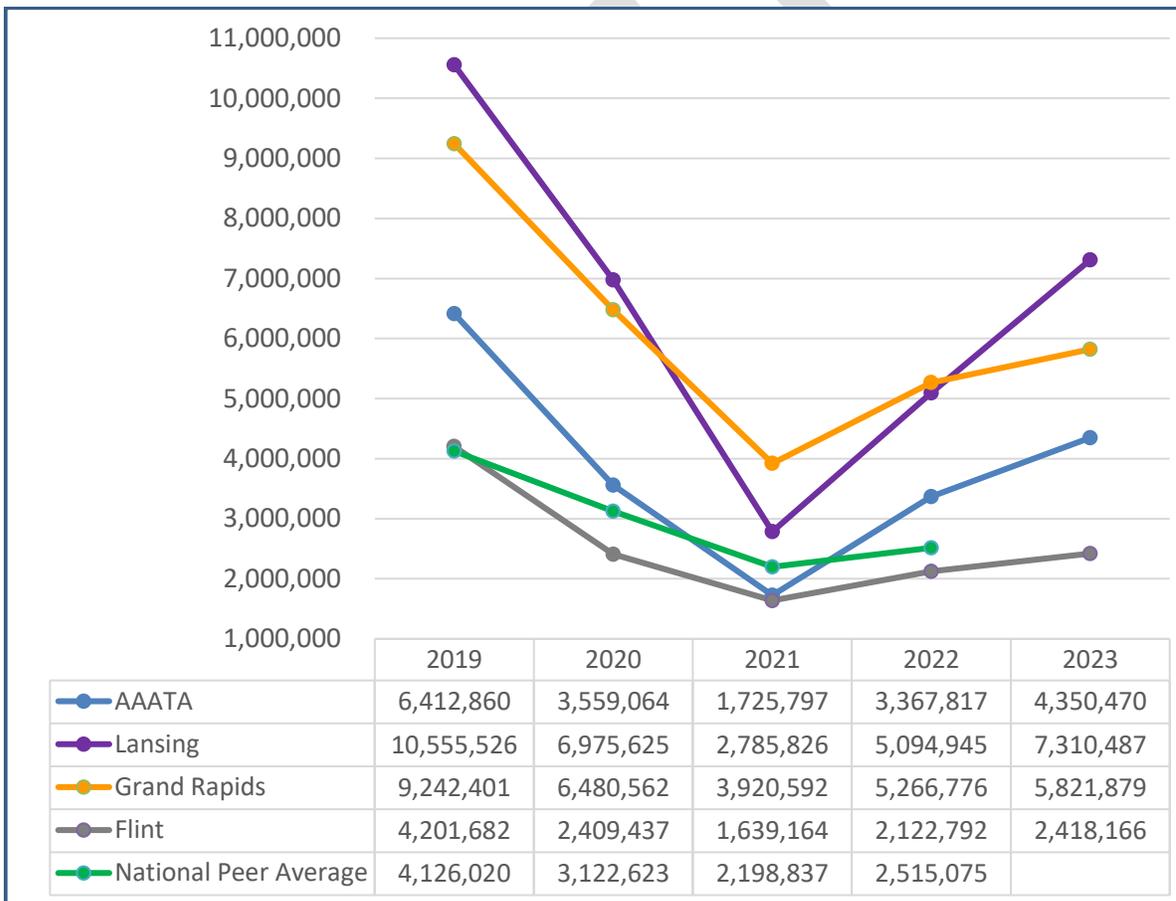
Source of Data: Lower-level policies, peer agency data from respective agencies and the National Transit Database.

Date of Data Review: 11/27/23 as verified by the Corporate Strategy & Performance Officer.

Data:

A. Annual Ridership

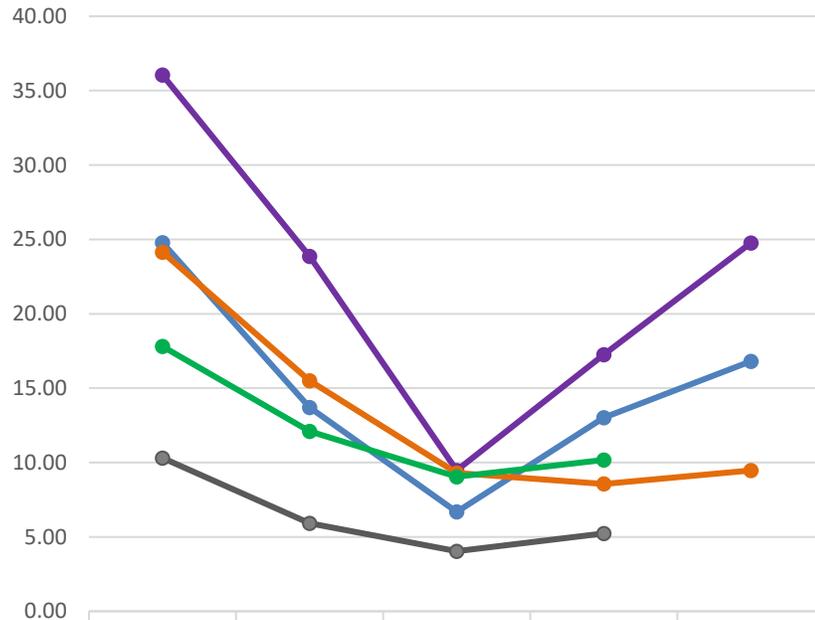
On average ridership increased among regional peers by 24% from FY22 to FY23. The Ride’s ridership increased by 29% within this same period. Since 2019 (pre-pandemic) TheRide has recovered about 68% of its ridership. This is in line with and slightly higher than regional peers who have experienced a 64% recovery. See the graph below for detail.



Source: National Transit Database for FY 2019-2022.
 National peer data is currently available until FY 2022.
 FY 2023 numbers are collected directly from peer agencies and are preliminary.

B. Ridership per capita

The Ride’s ridership per capita increased by 29% in FY 23 from FY22. Based on available data, there was no change in capita during this period. Similar trends are observed among regional peers. See graph below for detail

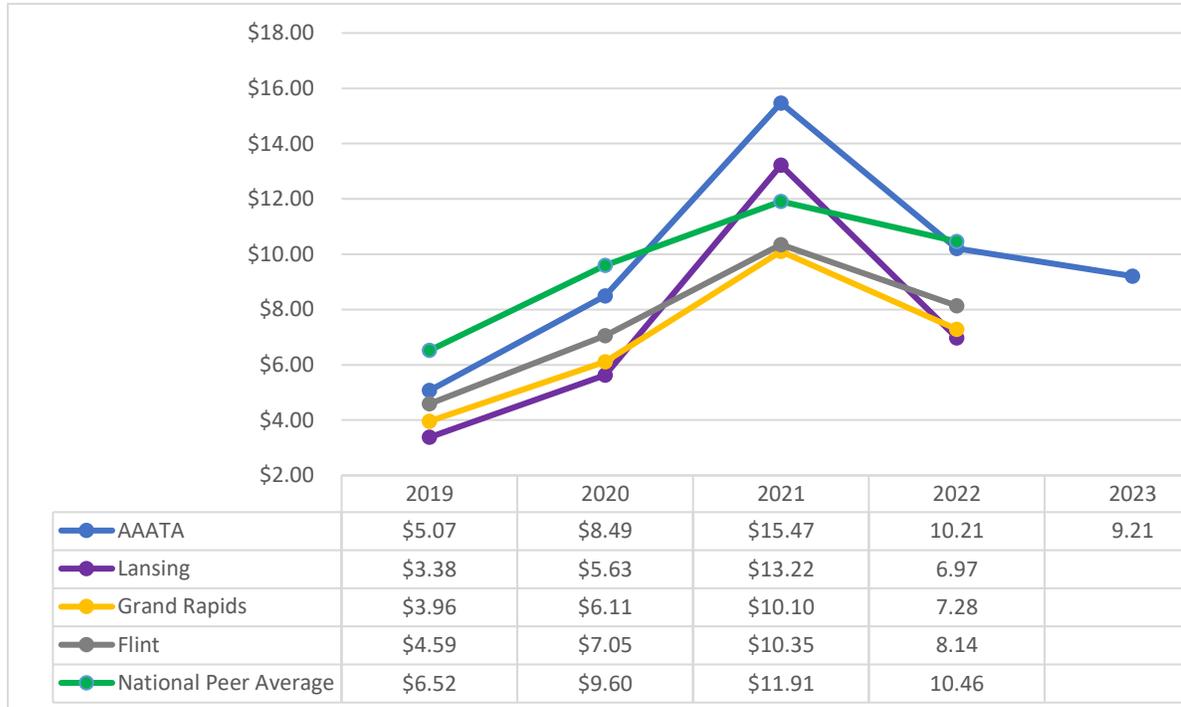


	2019	2020	2021	2022	2023
AAATA	24.78	13.70	6.68	13.01	16.81
Lansing	36.06	23.86	9.48	17.26	24.77
Grand Rapids	24.15	15.50	9.30	8.56	9.46
Flint	10.31	5.91	4.04	5.23	
National Peer Average	17.81	12.09	9.05	10.18	

Source: National Transit Database for FY 2019-2022.
 National peer data is currently available until FY 2022.
 FY 2023 numbers are collected directly from peer agencies and are preliminary.

C. Cost per trip

During the pandemic, operational costs increased, and ridership significantly decreased leading to high operational costs per trip that peaked in FY21 as shown below. Operational costs per trip are slowly decreasing in the agency and among peers but still about twice pre-pandemic numbers. Increased inflation may be a contributing factor. See the graph below for that detail.



Source: National Transit Database for FY 2019-2022.
 National peer data is currently available until FY 2022.
 FY 2023 numbers are preliminary.
 FY2023 peer data was not available when authoring this report.

D. Not all lower-level policies are compliant. Therefore, the CEO reports partial compliance with this policy. Compliance timelines are provided in respective policies.

POLICY 1.1

Residents in the area have equitable access to public transportation services that enables full participation in society.

Degree of Compliance: Partially Compliant

Interpretation

Measure/Standards & Achievement

Compliance with this policy will be demonstrated when:

- A. At least 80% of the population in the membership area is within 0.25 miles of a fixed route bus stop.
- B. There is a bus stop within a 0.25-mile walk of all major service facilities (i.e., Hospitals, grocery stores, post offices. Access to jobs and education institutions is addressed in later policies) in the area.
- C. Paratransit serves all destinations within ¾ miles of a bus route.
- D. Policy 1.1.1 and 1.1.2 are compliant

Rationale

This is reasonable because

- A.-B. As a requirement for service coverage, walking distance standards are the industry norm for setting acceptable limits. A 0.25-mile walking distance is reasonable per industry standards. Accessibility to 80% of the population allows the majority of the residents in the area to use transportation services to access jobs, medical facilities, grocery stores etc., that are also 0.25 miles from a fixed route bus stop. A target of 80% is possible within the agency resources. Fixed route ridership is a good proxy for overall achievement as it makes up 90% of all riders of all our services
- C. Federal law requires that ADA complementary paratransit service be provided within 3/4 of a mile of a bus route in order to provide access for persons with disabilities. Congress has determined that this is sufficient.
- D. Compliance of this policy constitutes compliance with lower-level policies

Evidence

Source of Data: Lower-level policy compliance, agency planning data

Date of Data Review: 11/06/23 as verified by the Senior Transit Planner

Data:

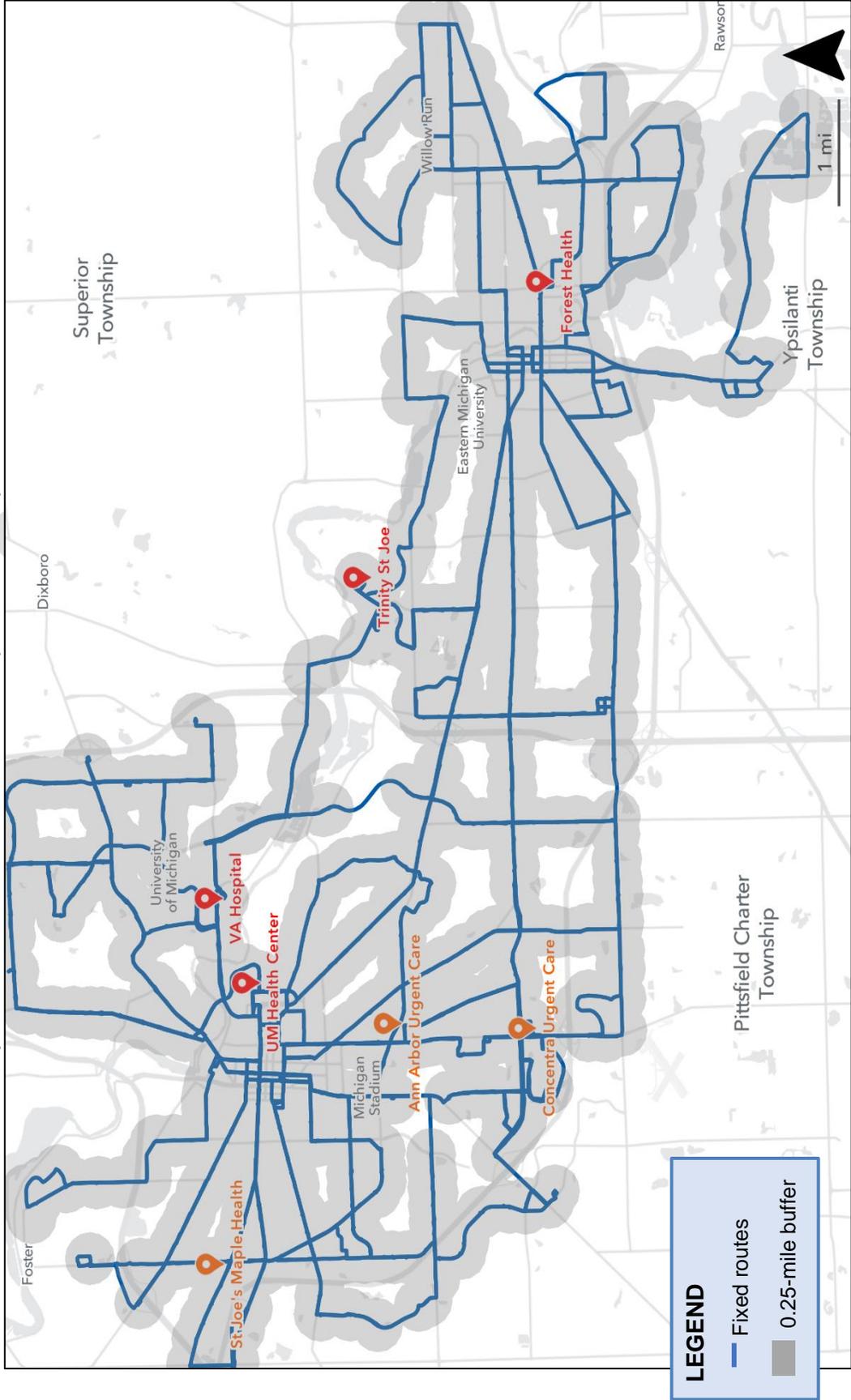
A. Residential Coverage

During the monitoring period, fixed route service covered 82% of the population within a quarter mile. The table below provides an analysis of the quarter mile coverage.

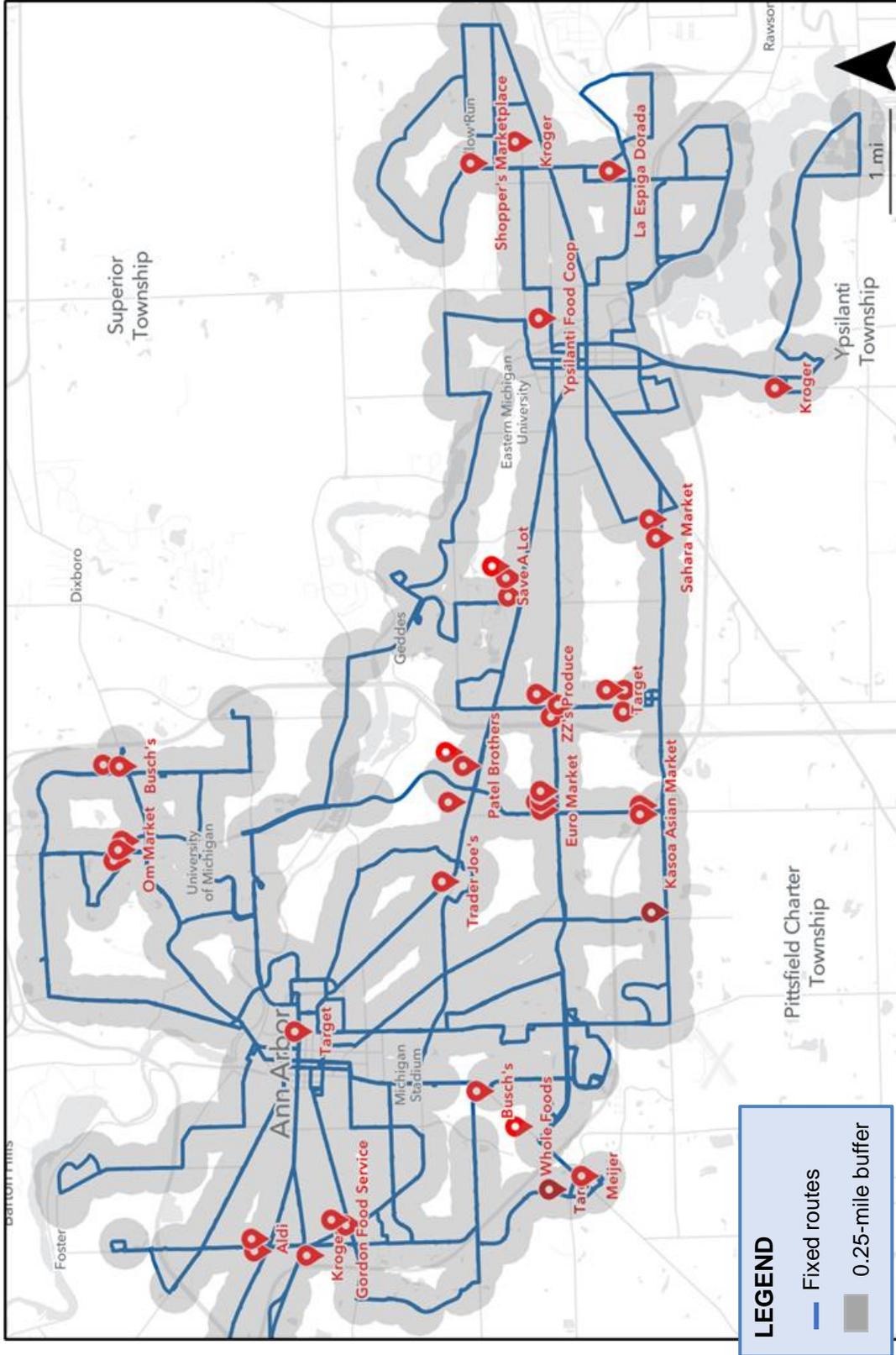
	Population	Target	Target met
Area	199,440	80%	Yes
Quarter mile	163,115		
Quarter mile %	82%		

B. Service coverage to destinations within 0.25 mile of a bus stop.

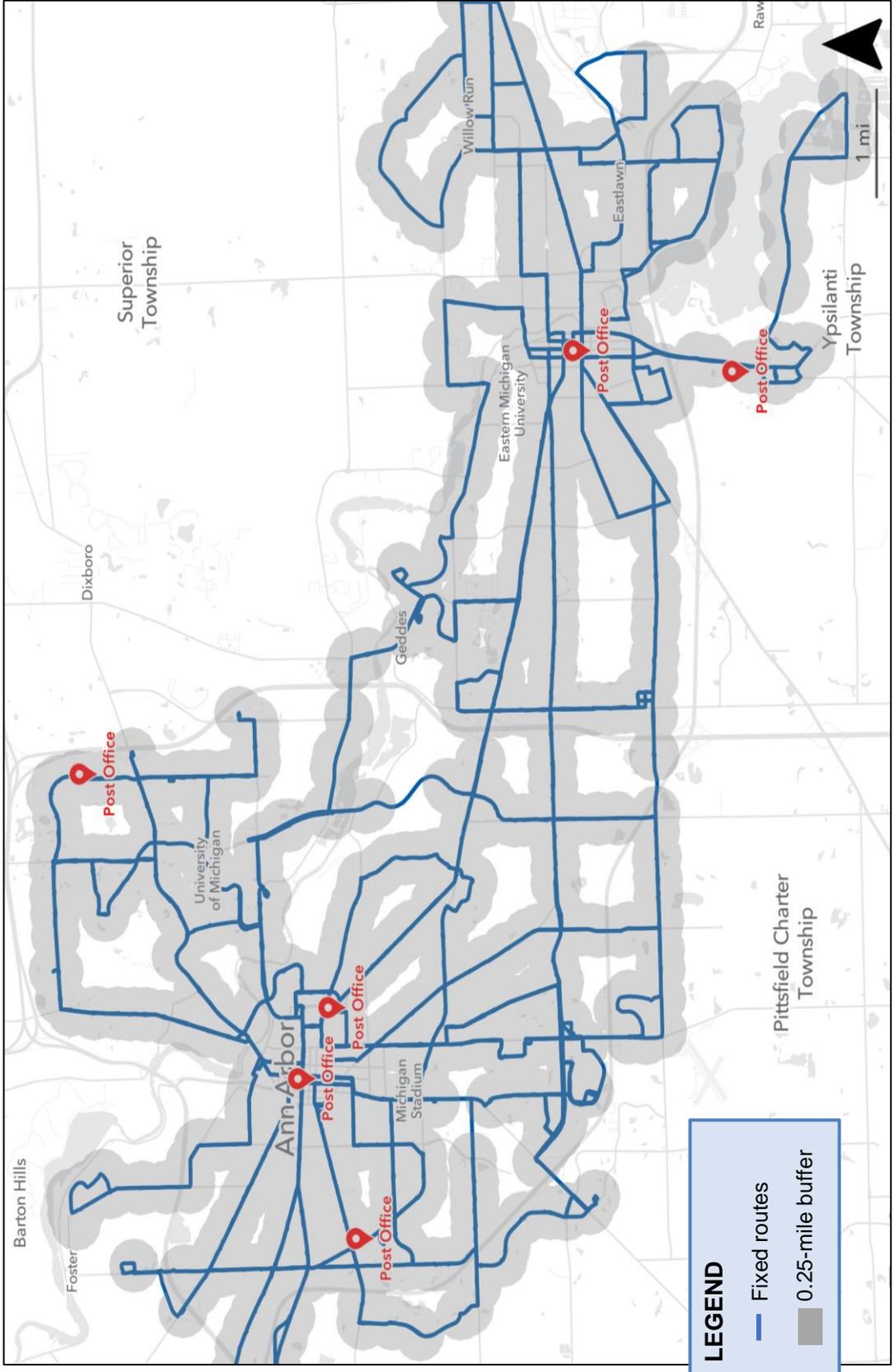
1. Fixed route covers all major medical facilities in the membership area. Bus stops are available within a 0.25-mile walk.



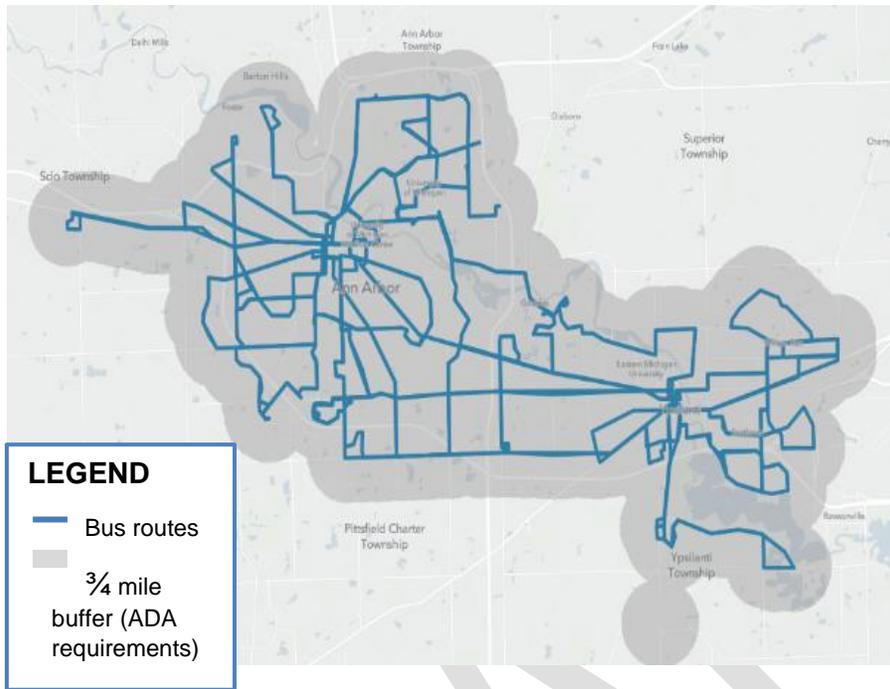
2. Fixed route covers major grocery stores in the membership area. Bus stops are available within a 0.25-mile walk.



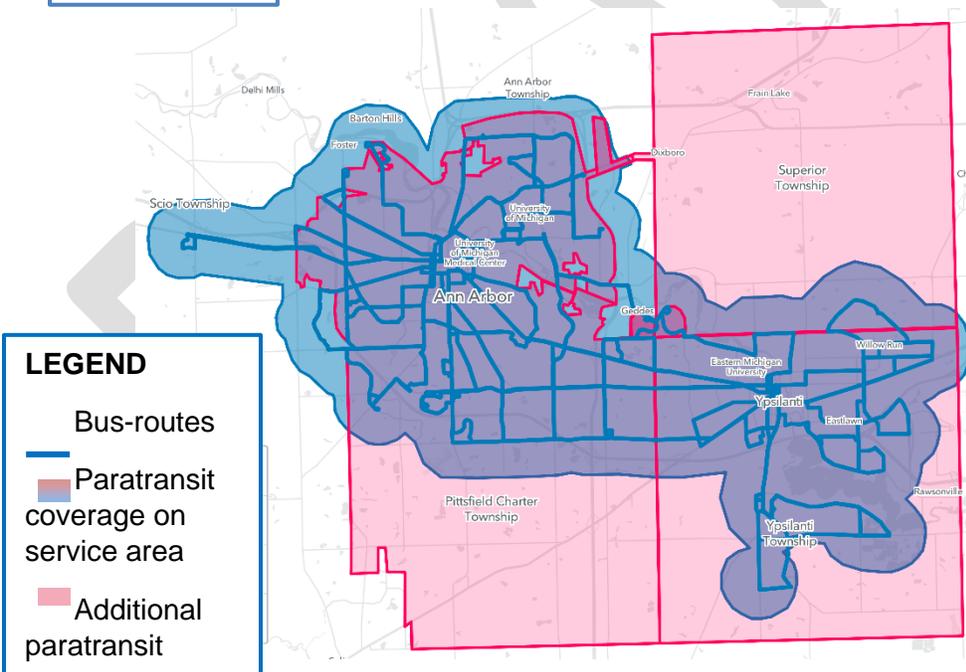
3. Fixed route covers all post offices in the membership area. Bus stops are available within a 0.25-mile walk.



C. Paratransit services



The Americans with Disabilities Act (ADA) requires that paratransit services be offered within 3/4 mile from the fixed route service. This area is indicated on the graphic on the left.



TheRide provides service within the required 3/4 mile of the service area and also extends these provisions to Ypsilanti, Superior and Pittsfield townships as shown on the graph on the left.

D. Policy 1.1.2 is not compliant and hence this policy is partially compliant. See the policy for a compliance timeline.

POLICY 1.1.1

People with economic challenges have affordable public transportation options.

Degree of Compliance: Compliant

Interpretation

Measure/Standards & Achievement

Compliance will be demonstrated when the CEO recommends a fare structure that includes a 50% discount of the regular fixed route fare when there is a fare change.

Rationale

This interpretation is reasonable because the Board has reserved the right to decide on fare changes (3.2.9). The role of the CEO during fare changes is to make a recommendation to the Board (2.5.12). Unless fares are free, there will always be a need to establish a threshold for discounts. A threshold based on income is the most effective way to target the additional subsidy specifically to persons with economic challenges. A 50% discount is reasonable as that is what the Federal Transit Act requires of all transit agencies.

Evidence

Source of Data: Fare structure used during monitoring period

Date of Data Review: 11/06/23 as verified by Corporate Strategy and Performance Officer

Data: The fare structure in the monitoring period did not change and includes a 50% discount for low-income passengers. Since there were no changes to fares, the CEO did not make any fare structure recommendation.

POLICY 1.1.2

People with disabilities or mobility impairments, seniors, minors, and non-English speakers have equitable access to opportunities and destinations in the area.

Degree of Compliance: Partially Compliant

Interpretation

Measure/Standards & Achievement

Compliance will be demonstrated when

- A. Anyone using an ADA-compliant wheelchair is able to access all buses and passenger terminals.
- B. All terminals have functional audio and visual departure announcements.
- C. All buses have audio and visual stop announcements.
- D. All accessible bus stops adjacent to sidewalks are wheelchair accessible.
- E. Residents and visitors who are not physically able to use the fixed route service due to a mobility limitation have access to door-to-door paratransit service that meets ADA minimum requirements.
- F. Minors are allowed on the bus, there is no age limit to ride the bus. We do expect that young children, toddlers and infants be accompanied by an adult.
- G. Printed and electronic translations of passenger information are available in Korean, Spanish and Chinese (Mandarin).
- H. TheRide is found to have no deficiencies in the FTA review for all legal requirements that pertain to accommodating anyone with disabilities.

Rationale

- A. This is reasonable because if a wheelchair can be accommodated, most other physical mobility limitations can be accommodated; and because mobility limitations, not age, are the barrier to access. (Other accommodations to non-physical mobility limitations are addressed in other areas of this report).
- B.-C. This is reasonable in order to accommodate passengers who have audio and visual limitations.
- D. This is reasonable because some bus stops have no adjacent sidewalks and the TheRide cannot make them accessible in those circumstances.
- E. This is reasonable as it is consistent with federal law.
- F. This is reasonable because it allows the bus driver to exercise discretion based on circumstance.
- G. Limiting non-English access to the most commonly spoken languages in the area is reasonable because it meets minimum federal requirements and is cost effective.
- H. This is reasonable as it's an external regulation providing an objective review.

In this context I interpret seniors to be a subset of persons with mobility limitations, not a separate group. This is reasonable because it is the mobility limitation, not age, which suggests the need for additional consideration.

Evidence			
<p>Source of Data: Operational data for facilities (including bus stops), buses, paratransit and fixed route services</p> <p>Date of Data Review: 11/06/23 as verified by Mobility Services Manager, DCEO Planning and Innovation, Manager of Fleet and Manager of Facilities</p>			
Data:	Current Status	Target	Target achieved
A. % of buses and passenger terminals that are wheelchair accessible	100%	100%	Yes
B. % of buses with audio and visual stop announcements	100%	100%	Yes
C. % of terminals with functional visual departure announcements	100%	100%	Yes
D. % of bus stops with sidewalks that are accessible	34%. See below for more information and a compliance timeline.	100%	No
E. Access to origin to destination paratransit services that meet ADA requirements	Paratransit services are origin to destination and door to door upon request. Meets ADA requirements.	Paratransit services are origin to destination and meet ADA requirements	Yes
F. Age limit	There is no age limit to use the bus. Infants, toddlers, and young children need to be accompanied	No age limit to ride the bus.	Yes
G. Availability and accessibility of travel information in common non-English languages	Printed and electronic travel information is available and easily accessible in Mandarin, Korean and Spanish.	Travel information should be available and accessible in Mandarin, Korean and Spanish.	Yes
H. Paratransit compliance with ADA (determined by FTA)	No ADA-related deficiencies found. <i>A table with detailed ADA provisions is provided below.</i>	No ADA-related deficiencies found	Yes
<p>Compliance timeline: During the monitoring period, 10 bus stop permits were issued, and construction completed. Pending the issuance of permits, NEPA studies and funding, TheRide intends to complete this work by 2033. This timeline is realistic within agency resources.</p>			

(E) Below is a comparison of ADA minimum requirements for paratransit and what TheRide provides today.

	ADA Minimum Standards	TheRide's Current Level of Service	Compliant?
Coverage area	¾ mile from fixed routes	Covers all fixed route service areas beyond ¾ mile. Additionally, paratransit services are extended to parts of Pittsfield, Ypsilanti, and Superior townships beyond the service area.	Yes
Trip denials for advanced booking	None, within one-hour negotiation window	None, within one-hour window.	Yes
Fare	A maximum of 2x the fixed route cost.	Paratransit fares are \$3.00, twice the fixed route fare of \$1.50.	Yes
Vehicles	All buses are wheelchair accessible.	All vehicles (including paratransit vehicles) are wheelchair accessible.	Yes
Assistance	Personal Care Attendant (PCA) allowed free of charge; guest fare equal to client	PCA free of charge on paratransit vehicles as well as fixed route buses, guest fare equal to client.	Yes
Advance booking	Allow up to 14 days in advanced booking.	TheRide allows up to 3-days in advanced booking.	Yes
Scheduling window	Allow for 30 minutes before or after scheduled time.	Allow for 30 minutes after scheduled time.	Yes
Origin to destination	Origin to destination	Origin to destination and door to door as requested.	Yes
Reservations	Trip reservation services should be available during administration's office hours.	Administration hours are 8:00AM-5:00PM. Trip reservation services are provided beyond service hours. i.e., Mon-Fri at 8:00AM – 5:30PM and on Weekends at 8:00AM-5:00PM	Yes
Reasonable modification	Reasonable modification at customer request.	Reasonable modification at customer request.	Yes
Will-call return trips	No stipulation provided	Medical trips, Secretary. of State, Dept. Human Services and Social Security office they can call to activate the will-call return.	Yes
Service Animals	Service animals are permitted to accompany service users.	Service animals are permitted to accompany service users.	Yes
Trip Purpose	There are no restrictions or priorities based on trip purpose.	There are no restrictions or priorities based on trip purpose.	Yes

POLICY 1.2

Public transportation positively impacts our environment.

Degree of Compliance: Partially Compliant

Interpretation

Measure/Standards & Achievement

Compliance with policy will be demonstrated when policies 1.2.1 through 1.2.4 are compliant.

Rationale

The Board has fully interpreted this policy in lower-level policies. Achievement of those policies constitutes achievement of this policy.

Evidence

Source of Data: Lower-level policies

Date of Data Review: 11/30/2023 as verified by Corporate Strategy and Performance Officer

Data:

Not all lower-level policies are compliant. See that detail and respective compliance timelines in the policies below.

POLICY 1.2.1

Public transportation options are increasingly chosen over use of a personal car.

Degree of Compliance: Compliant

Interpretation

Measure/Standards & Achievement

Compliance with this policy will be demonstrated when data reported by SEMCOG indicates increased transit use from year to year as compared to driving alone options.

Rationale

This is reasonable because mode share(similar to market share) is an industry-standard measure of how people travel and can be consistently measured over time. Data collected by a third party (SEMCOG) provides objective measures.

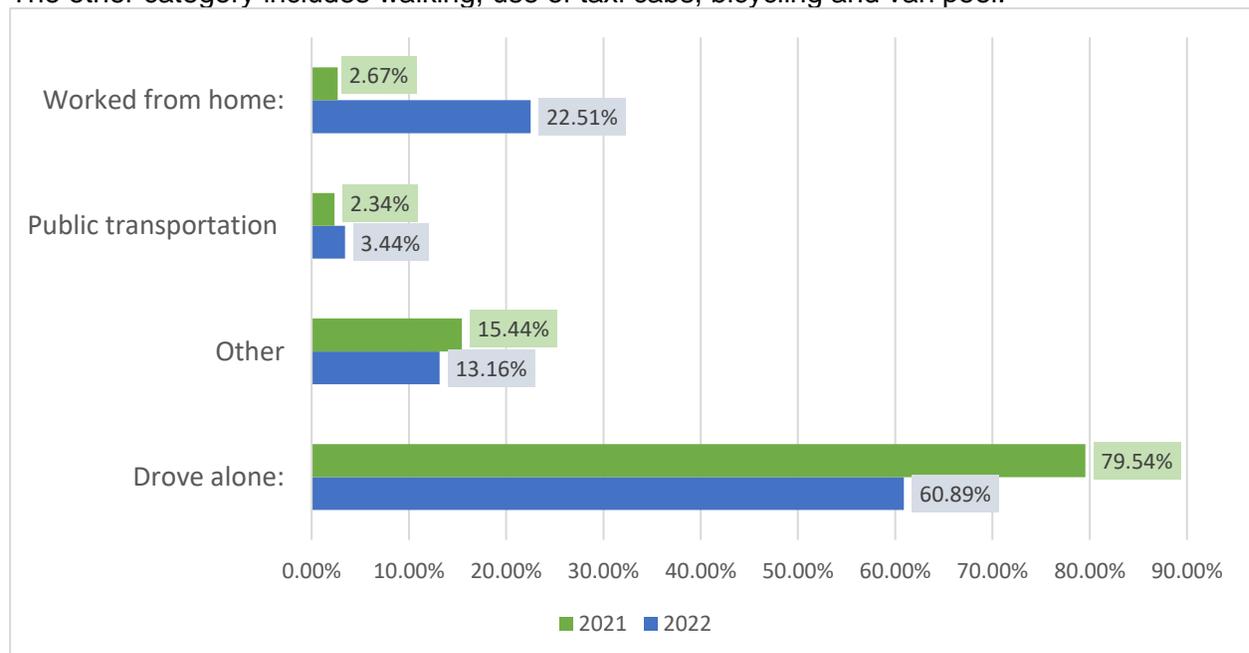
Evidence

Source of Data: SEMCOG data

Date of Data Review: 11/06/23 as verified by the Corporate Strategy and Performance Officer

Data:

Transit use increased between 2021 and 2022 from 2.34% to 3.44%. Between the same years, less people chose to drive alone and that may be attributed to an increase of people working from home. The other category includes walking, use of taxi cabs, bicycling and van pool.



POLICY 1.2.2

Public transportation options produce conditions favorable to more compact and walkable land development.

Degree of Compliance: Partially Compliant

Interpretation

Measure/Standards & Achievement

Compliance during this period will be demonstrated when the frequency of fixed route services on suitable corridors achieves set targets which make them competitive to personal automobiles. Suitable corridors are ones where high frequency service is already somewhat viable and where intensification of land development is possible. Specifically, this corridors are Washtenaw Avenue, Plymouth Road, Huron, State Street, Main Street, Packard.

Rationale

This is a reasonable interpretation because (a) increasing the frequency of services is the most important step TheRide can take to encourage land-development decisions that do not rely on cars and parking and (b) only certain corridors have the combination of potential land development and increasing frequency.

Evidence

Source of Data: Route information

Date of Data Review: 11/06/23 by Senior Transit Planner

Data:	Targets	Current Frequencies (Evidence)	Compliant?
Washtenaw Ave	Weekdays Peak: 10 minutes or better Mid-day: 20 minutes or better Evenings: 30 minutes or better Weekends: 30 minutes or better	Weekdays Peak: 8 minutes Mid-day: 15 minutes Evenings: 30 minutes Weekends: 30 minutes	Yes
Plymouth Road	Weekdays Peak: 15 minutes Mid-day: 15 minutes Evenings: 30 min Weekends: 30 minutes or better	Weekdays Peak: 15 minutes Mid-day: 15 minutes Evenings: 30 minutes Weekends: Saturdays: 30 minutes; Sundays: 60 minutes	Partially since Sunday does not meet target

	Targets	Current Frequencies (Evidence)	Compliant?
Huron	Weekdays Peak: 15 min or better Mid-day: 30 min or better Evenings: 30 min or better Weekends: 30 min or better	Weekdays Peak: <10 minutes Mid-day: <10 minutes Evenings: 30 minutes Weekends: 30 minutes	Yes
State Street	Weekdays Peak: 15 min or better Mid-day: 30 min or better Evenings: 30 min or better Weekends: 30 min or better	Weekdays Peak: <10 minutes Mid-day: <15 minutes Evenings: 30 minutes Weekends: 30 minutes	Yes
Main Street	Weekdays Peak: 30 min or better Mid-day: 30 min or better Evenings: 30 min or better Weekends: 30 min or better	Weekdays Peak: 15 minutes Mid-day: 30 minutes Evenings: 30 minutes Weekends: 30 minutes	Yes
Packard	Weekdays Peak: 15 min or better Mid-day: 15 min or better Evenings: 30 min or better Weekends: 30 min or better	Weekdays Peak: 15 minutes Mid-day: 15 minutes Evenings: 30 minutes Weekends: Saturdays: 30 minutes; Sundays: 60 minutes	Partially since Sunday does not meet target.
<p>Since Packard and Plymouth Road Sunday services do not meet targets, the CEO notes partial compliance to this policy.</p> <p>Compliance timeline: Per the Long-Range Plan timeline and pending funding, all fixed routes will have 30-minute frequencies on the daytime by 2024. And by 2030, the night time schedule for all routes will also be at a 30-minute frequency.</p>			

POLICY 1.2.3

Relevant public policy is transit supportive.

Degree of Compliance: Not Compliant

Interpretation

Measure/Standards & Achievement

Compliance will be demonstrated when

- A. the CEO annually shares with the Board an advocacy agenda for the coming year detailing general goals and objectives for policies changes as well as the outside bodies responsible for changing the policies (e.g. local, state, or federal governments). The agenda must explain how its goals and targets will further the advancement of Board policies or the Long-Range Plan.
- B. meaningful efforts are made to affect change in these outside policies.

Rationale

This is reasonable because TheRide cannot control the decisions of outside actors, but it can demonstrate organization, focus, and effort towards advancing relevant goals. Meaningful effort is defined by action or progress made by policy-making bodies in relation to agendas that TheRide has influenced/advocated for.

Evidence

Source of Data: Board meeting minutes. Staff and board member travel itineraries and meeting appointments.

Date of Data Review: 11/06/2023 as verified by the CEO

Data: The CEO did not present an advocacy agenda to the Board during the monitoring period, although the agency did undertake efforts (with board member participation) at the local, state and federal levels.

Compliance Timeline: TheRide plans to present the Board with a clear advocacy agenda by June 2024.

POLICY 1.3

Public transportation positively impacts the economic prosperity of the area.

Degree of Compliance: Compliant

Interpretation

Measure/Standards & Achievement

Compliance will be demonstrated when policy 1.3.1 to 1.3.4 are compliant.

Rationale

The Board has fully interpreted this policy in policies 1.3.1 through 1.3.4 below.

Evidence

Source of Data: Lower-level policies

Date of Data Review: 11/16/23 as verified by Corporate Strategy and Performance Officer

Data:

Policies 1.3.1 through 1.3.4 are compliant

POLICY 1.3.1

Public transportation facilitates labor mobility.

Degree of Compliance: Compliant

Interpretation

Measure/Standards & Achievement

Compliance with this policy will be demonstrated when:

- A. Riders can access 80% of jobs in the service area within 0.25 miles walk from a bus stop.
- B. Transit mode share (percent of people commuting to work by transit) in the Ann Arbor-Ypsilanti area ranks top five as compared to other cities and townships in the South Eastern Michigan region.
- C. Vanpool options are available outside the fixed route service area and operational during the monitoring period.

Rationale

The interpretation is reasonable because

- A. As a requirement for service coverage, walking distance standards are the industry norm for setting acceptable limits. A 0.25-mile walking distance is reasonable per industry standards. Providing accessibility of 80% to all essential jobs is reasonable within the agency resources.
- B. Comparing the percentage of people who use transit to commute with other cities and townships provides context and a reasonable benchmarking platform. Being top five indicates TheRide’s desires to be a leader in facilitating labor mobility in the region. This target is reasonable with the agency’s resources.
- C. The availability of Vanpool services provides additional job accessibility based on market demand.

Evidence

Source of Data: SEMCOG data and agency planning and ridership data.

Date of Data Review: 11/06/2023 as verified by the Senior Transit Planner and the Corporate Strategy and Performance Officer

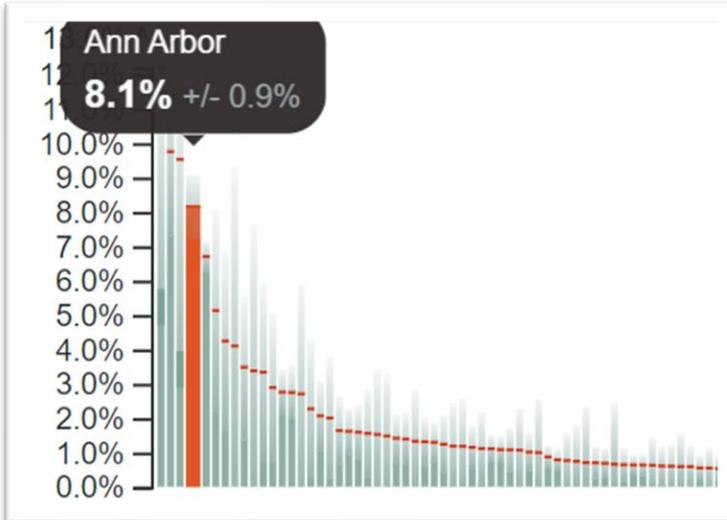
Data:

A. Job Accessibility

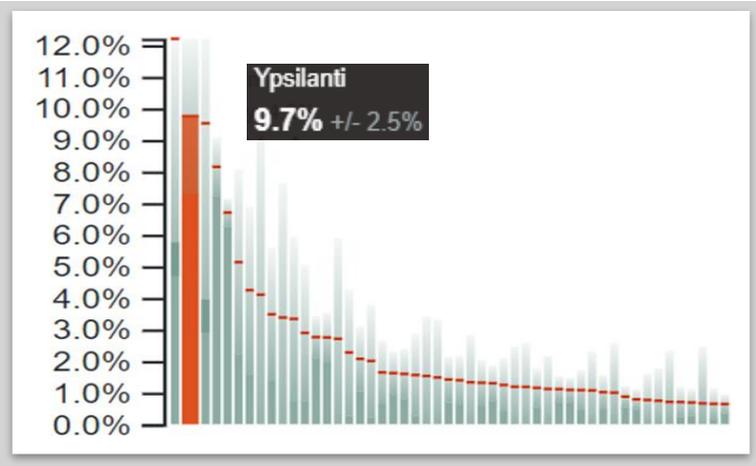
The traveling public can access 82% of jobs within 0.25 miles of fixed route. See evidence for 1.1A for more information.

B. Commute to Work by Transit, Southeast Michigan Region

Based on SEMCOG data that ranked percent commute by transit, Ypsilanti ranked second and Ann Arbor fourth. See graphs below for detail.



Ann Arbor is fourth after Highland Park (13.6%), Ypsilanti (9.7%) and Royal Oak (9.5%).
Source: SEMCOG, Community Explorer, **2023**.



Ypsilanti had the second highest average transit mode share (commute to work) rate after Highland Park (13.6%)
Source: SEMCOG, Community Explorer, **2023**.

C. Van Pool Availability

TheRide’s vanpool program was available to any group making regular trips in our service area. TheRide has vanpools originating from Toledo, Detroit, and other distant points.

POLICY 1.3.2

Students can access education opportunities without need of a personal vehicle.

Degree of Compliance: Compliant

Interpretation

Measure/Standards & Achievement

Compliance will be demonstrated when riders can access all post-secondary educational campuses in the Ann Arbor, Ypsilanti, and Ypsilanti Twp. areas within a reasonable walk from a bus stop (0.25 miles) using fixed route services.

Rationale

This is a reasonable interpretation because 1) mode share data for student travel is not available, 2) fixed route access to campuses is a reasonable proxy for ability to use the service, and 3) these targets are realistic within our existing resources. Access to high schools is not included in this interpretation because those trips are the responsibility of the local school board. However, TheRide does incidentally transport many riders to high school.

Evidence

Source of Data: Route information

Date of Data Review: 11/06/2023 as verified by the Senior Transit Planner.

	Adjacent Routes	Campus within 0.25 miles of a bus stop? Yes/No
UM Main Campus	3, 4, 5, 6, 23, 24, 61, 62, 63, 64, 65	Yes
UM North Campus	3, 22, 66	Yes
EMU	3, 4, 5	Yes
WCCC	3, 24	Yes
Concordia	3	Yes

POLICY 1.3.3

Visitors use public transportation in the area.

Degree of Compliance: Compliant

Interpretation

Measure/Standards & Achievement

Compliance with this policy during the monitoring period will be demonstrated when:

- A. People arriving in the membership area via inter-city carriers (i.e., Detroit Metro Airport, intercity rail, or bus) have reasonable access to fixed route and paratransit services.
- B. Availability of temporary eligibility provisions for visiting paratransit service users.
- C. Fixed-route service between Ann Arbor and Metro Detroit Airport.

Rationale

This interpretation is reasonable because we have no way of knowing whether passengers are visitors to the area and therefore cannot directly measure the number of riders who are visitors. These targets are realistic within the agency's existing resources.

Evidence

Source of Data: Route information

Date of Data Review: 11/06/2023 as verified by the Senior Transit Planner.

Data: A. Connections with Inter-City Carriers

	Target	Service during monitoring period (Evidence)	Compliant?
Amtrak (Ann Arbor on Fuller St.)	Accessible via fixed route or paratransit.	Served by Routes 22, 33, and Paratransit	Yes
Greyhound (Ann Arbor on Fuller St.)	Accessible via fixed route or paratransit.	Served by Routes 22, 33, and Paratransit	Yes
Greyhound & other bus (Ypsilanti Twp. on Huron Road)	Accessible via fixed route, FlexRide, or paratransit.	Served by Route 46 and Paratransit	Yes
Detroit Metro Airport	Accessible via AirRide.	Served via AirRide	Yes

(B) Temporary eligibility for visiting paratransit service users,

TheRide's paratransit service, ARide, does allow temporary eligibility for visitors with disabilities that are eligible for ADA paratransit in other jurisdictions.

(C) Connection between Ann Arbor and Detroit Metro Airport.

Service between Ann Arbor and Detroit Metro Airport was fully operational during the monitoring period.

POLICY 1.3.4

Public transportation connects the area to the Metro Detroit region.

Degree of Compliance: Compliant

See CEO Notes

Interpretation

Measure/Standards & Achievement

Compliance with this policy will be demonstrated when a scheduled transit service exists between Ann Arbor and Metro Detroit.

Rationale

This is reasonable because that's what the policy calls for.

Evidence

Source of Data: Operational records

Date of Data Review: 11/06/2023 as verified by Manager of Operations

Data:

Detroit-to-Ann Arbor (D2A2) service was operational during the monitoring period.

POLICY 1.4

Passengers are highly satisfied with public transportation services.

Degree of Compliance: Compliant

Interpretation

Measure/Standards & Achievement

Compliance with this policy will be demonstrated when

- A. 85% or more of passengers participating in onboard surveys that take place every other year indicate that they are satisfied with the services offered.
- B. TheRide achieves a quality-of-service composite score of service 1 or better.

Rationale

- A. High numbers of passengers indicating satisfaction is a proxy for passengers being highly satisfied with our services. This is reasonable because the survey does not ask for the level of satisfaction and instead asks if they are satisfied, neutral or dissatisfied with TheRide's services. Conducting the survey once every two year is reasonable because customer satisfaction does not change a lot within a short period of time to warrant more frequent surveys. Given that the surveys responses are subjective, 85% is a realistic target per agency resources.
- B. The composite score provides a snapshot of the leading indicators for quality-of-service components that address reliability of service, safety and courtesy. It is based on a weighted average with pre-pandemic numbers as baseline targets or other preferred/already established targets e.g., those in the Transit Asset management Plan. A score of 1 (100%) indicates that we have achieved our target in aggregate.

Evidence

Source of Data: Operational performance data

Date of Data Review: 11/16/2023 as verified by Corporate Strategy and Performance Officer

Data:

A. 92% of passengers who participated in the onboard survey in April 2022 indicated that they were satisfied with the services offered.

B. The customer service composite score for FY23 was 1.111 (111.1%)

	Baseline or preferred target	FY23 performance	% of target achieved	Weight	Weighted
Reliability: On-time performance	Above 80%	78%	97%	0.3	29.1%
Miles between road calls	Above 28,500*	28786	101%	0.2	20.2%
Average age of fleet	6-8 years	7.31	100%	0.1	10.0%
Safety: Preventable accidents per 100k passengers	Below 1.85*	0.99	146%	0.2	29.2%
Courtesy: Complaints per 100k passengers	Below 2*	1.77	113%	0.2	22.6%
*-pre pandemic baseline.				Total:	111.1%

A target of 80% for on-time performance is a stretch target as the industry average is 75%. However, TheRide is committed to providing the best services to its customers and intends to have service on all fixed routes be on time at least 80% of the time. Last year overall on-time performance was at 78%, at the writing of this report (November 2023), it was at 82%.

POLICY 1.5

Residents of the area recognize the positive contributions of public transportation to the area’s quality of life.

Degree of Compliance: Compliant

Interpretation

Measure/Standards & Achievement

Compliance with this policy will be demonstrated when:

- (A) Within two years, service area residents (riders and non-riders) respond to an anonymous telephone survey conducted by a third party and 60% or more express generally positive impressions of TheRide.
- (B) Approval of transit favorable millage requests by more than 60% of the participating resident voters every five years.

Rationale

These interpretations are reasonable because both provide objective measures (or proxies) of resident’s appreciation for transit and TheRide. A 60% target is realistic as it is more than half of participating service area residents. Conducting the telephone surveys every two years is reasonable within the resources of the agency. Additionally resident perceptions do not change significantly within shorter periods to warrant annual surveys.

Evidence

Source of Data: Telephone survey results and millage results

Date of Data Review: 11/06/23 as verified by DCEO, Planning and Innovation.

Data:

- A. A telephone survey was conducted in December 2021 to January 2022, and 81% of participating residents indicated having a favorable/positive impression of TheRide.
- B. Resident voters approved TheRide’s request to expand and improve transit services with a majority of 61% in August 2022.

Policy Trendlines

Policy	FY23	FY24 (preliminary)
1	Yellow	Yellow
1.1	Yellow	Yellow
1.1.1	Green	Green
1.1.2	Yellow	Yellow
1.2	Yellow	Yellow
1.2.1	Red	Green
1.2.2	Yellow	Yellow
1.2.3	Yellow	Red
1.3	Yellow	Green
1.3.1	Yellow	Green
1.3.2	Green	Green
1.3.3	Green	Green
1.3.4	Green	Green
1.4	Green	Green
1.5	Green	Green
	Green	Green

LEGEND	
Green	Policy is compliant
Yellow	Policy is partially compliant
Red	Policy is not compliant

CEO Notes

Policy 1.3.4 may be more appropriate as an advocacy item as TheRide cannot force the creation of such a service. Inter-County services is the responsibility of the RTA.

Guidance on Determining “Reasonableness” of CEO Interpretations

Are the interpretations reasonable?

An interpretation is reasonable if the following are provided,

1. a measure or standard,
2. a defensible rationale for the measure or standard,
3. a level of achievement necessary to achieve compliance and
4. a rationale for the level of achievement.

Is evidence verifiable?

Evidence is verifiable if there is

1. actual measurement/data,
2. the source of data and
3. the date when data was collected is provided.

Board’s Conclusion on Monitoring Report

Board’s conclusion after monitoring the report.

Following the Board’s review and discussion with the CEO, the Board finds that the CEO:

- (A) a reasonable interpretation for **all** policy items and that the evidence demonstrates compliance with the interpretations.
- (B) a reasonable interpretation for all policy items and that the evidence demonstrates compliance with the interpretations, except for the CEO’s stated non-compliance with item(s) x .x, which the Board acknowledges and accepts the proposed dates for compliance.is making reasonable progress towards compliance.
- (C)
 1. For policy items x.x.x – there is evidence of compliance with a reasonable interpretation
 2. For policy items x.x.x – the interpretation is not reasonable
 3. For policy items x.x.x – the interpretation is reasonable, but the evidence does not demonstrate compliance
 4. For policy items x.x.x – the Board acknowledges and accepts the CEO’s stated non-compliance and the proposed dates for compliance

Board Notes: (If Applicable)

Board’s Annual Work Plan

Meeting: Board of Directors

Meeting Date: December 21, 2023

INFORMATION TYPE:
Decision Preparation
RECOMMENDED ACTION(S):
Begin discussion of a Board plan of work for FY 2024.
PRIOR RELEVANT BOARD ACTIONS & POLICIES
Board policy 3.4 (Attachment 1).
ISSUE SUMMARY:
To keep a focus on the future, at the beginning of every fiscal year the Board decides what proactive issues it wants to spend time on, and which may lead to the development of new policy. Board members have discussed various items in the past, and a few new ideas have been suggested (Attachment 2). In FY2023 the Board decided to discuss propulsion, advocacy, and equity. Additional items are possible, but organizational capacity is a concern.
BACKGROUND:
The Board’s annual work plan is an inherent part of Policy Governance. This is a key mechanism for ensuring that the Board is driving its own agenda and not merely reacting to staff or outside issues. Policy 3.4 outlines how the board sets its agenda. Excerpts of the relevant passages are provided in Attachment 1.
IMPACTS OF RECOMMENDED ACTION(S):
<ul style="list-style-type: none"> • Budgetary/Fiscal: NA • Social: NA • Environmental: NA • Governance: The annual work plan is how the Board sets the direction for the organization.
ATTACHMENTS:
<ol style="list-style-type: none"> 1. Excerpt Policy 3.4 – Agenda Planning Policy 2. Potential Work Plan & Education Ideas (FY2024)

Attachment 1: Board Policy 3.4: Agenda Planning (Excerpt v2.13)

(Emphasis added)

3.4 AGENDA PLANNING

To accomplish its job products with a governance style consistent with Board policies, the Board will follow an annual agenda cycle which:

- (a) completes a re-exploration of Ends Policies annually,*
- (b) continually improves Board performance through Board education and enriched input and deliberation, and*
- (c) re-examines for relevance the underlying values that support existing policy.*

3.4.1 The cycle will conclude each year so that administrative planning, strategic planning, and budgeting can be based on accomplishing a one-year segment of the Board's most recent statement of long-term Ends.

3.4.2 The cycle will start with the Board's development of its agenda for the next year.

A. Consultations with selected groups in the ownership, or other methods of gaining ownership input will be determined and arranged in the first quarter, to be held during the balance of the year.

B. Governance education, and education related to Ends determination, (e.g., presentations by researchers, demographers, advocacy groups, staff, etc.) will be arranged in the first quarter, to be held during the balance of the year...

Attachment 2: Suggested Board Work Plan & Education (FY2024)

Current work plan:

<i>Policy Topics or Decisions</i>	<i>Status</i>
<i>1. Ends review</i>	<i>Annual task</i>
<i>2. Propulsion</i>	<i>Ongoing – in plan of work</i>
<i>3. Equity</i>	<i>Never discussed last year</i>
<i>4. Sustainability</i>	<i>Ongoing in plan of work</i>

General education topics previously suggested by Board:

<i>Education Topics</i>
<i>Multi-jurisdictional consideration (local and regional)</i>
<i>Differences between AAATA communities (POSAs)</i>
<i>Environmental Standards (policy development?)</i>
<i>RTA</i>
<i>Advocacy under policy governance</i>
<i>Policy Development Education</i>
<i>Post Pandemic Trends</i>
<i>Ridership</i>

Policy Review Recommendations

Governance Committee Meeting: November 28, 2023

Board of Director’s Meeting: December 21, 2023

INFORMATION TYPE
Other
RECOMMENDED ACTIONS
Adopt the recommended policy review timeline
BACKGROUND
The monitoring taskforce recommended that the Board through the Governance Committee identify 2-3 policies to review each year. The Governance has requested staff to review and make recommendations for the policies to be reviewed in CY 2024
ISSUE SUMMARY
<p>In developing this recommendation, staff considered the following:</p> <ul style="list-style-type: none"> • 2-3 policies to be reviewed each year • An even spread of policy review for each of the three committees where possible. Where not possible, not more than two policy reviews assignments for any given committee in any given year. • Policies that have always been found compliant and have had minimal policy content discussions were pushed further out to later years. • Policies that were reviewed or developed in the last three years were not considered for review in the next three years • Based on the monitoring taskforce recommendations, it was determined that Ends policies do not change as often and hence were recommended to be reviewed in 2025 (meeting dated 5/15/23). • Policies that require full board participation were limited to one each year as this may require extended time commitments. E.g., workshops or retreats.
IMPACTS OF RECOMMENDED ACTION(S)
Governance: Policy development.
ATTACHMENTS
1. Recommended policy review timeline.

Attachment 1

	Year of review or development			
	Past 3 years	Proposed		
		2024	2025	2026
1.0 ENDS			Full Board	
2.0 GLOBAL EXECUTIVE CONSTRAINT				Full Board
2.1 TREATMENT OF THE TRAVELING PUBLIC				
2.2 TREATMENT OF STAFF		Serv		
2.3 COMPENSATION AND BENEFITS			Fin	
2.4 FINANCIAL PLANNING/BUDGETING		Fin		
2.5 FINANCIAL CONDITION AND ACTIVITIES				Fin
2.6 CASH AND INVESTMENTS			Fin	
2.7 ASSET PROTECTION				
2.8 EMERGENCY CEO SUCCESSION		Gov		
2.9 COMMUNICATION AND SUPPORT TO THE BOARD				
2.10 CONSTRUCTION				

CEO Compensation

Meeting: Board of Director’s Meeting

Meeting Date: December 21, 2023

INFORMATION TYPE:
Decision Preparation
RECOMMENDED ACTION(S):
That the Board approve an adjustment to the CEO’s compensation as recommended by the Governance Committee (Attachment 1).
PRIOR RELEVANT BOARD ACTIONS & POLICIES
Policy 3.2.6 “Accordingly, the Board has a direct responsibility to create ... Annual performance review and appropriate adjustment of CEO salary.”
BACKGROUND:
By policy, the Board of Director’s has assigned itself the responsibility to conduct and annual performance evaluation of the CEO and make any adjustments to their compensation as per Policy 3.2.6 “Accordingly, the Board has a direct responsibility to create ... Annual performance review and appropriate adjustment of CEO salary.”
IMPACTS OF RECOMMENDED ACTION(S):
<ul style="list-style-type: none"> • Budgetary/Fiscal: Accommodated in annual Operating Budget • Social: N/A • Environmental: N/A • Governance: The CEO is the Board’s only employee
ATTACHMENTS:
<ol style="list-style-type: none"> 1. Attachment 1: Resolution 07/2023 Adoption of Adjustment to Compensation of Chief Executive Officer

ATTACHMENT 1

Resolution 07/2023

ADOPTION OF ADJUSTMENT TO COMPENSATION OF CHIEF EXECUTIVE OFFICER

WHEREAS, the Board of Directors of the Ann Arbor Area Transportation Authority has conducted and concluded a positive performance appraisal of the Chief Executive Officer, Matthew Carpenter for the fiscal year of 2023 as of June 2023. and

WHEREAS, in light of the fact that the CEO has received only one raise in 5 years, and

WHEREAS, the Board of Directors desires to adjust the total compensation of Mr. Carpenter, and

WHEREAS, the adjustment must be approved through the Board of Directors by a resolution;

NOW THEREFORE, BE IT RESOLVED that the Board of Directors hereby approves an adjustment to Mr. Carpenter's for the fiscal year 2024, as follows:

- A 4.9% cost of living increase to his base salary
- A 3.1% merit increase to his base salary
- The increase retroactive to October 1, 2023
- All other terms per Mr. Carpenter's employment agreement remain unchanged.

Kathleen M. Mozak, Chair

December 21, 2023

Jesse Miller, Secretary

December 21, 2023

TheRide 2045 Long-Range Plan

Meeting: Board of Directors

Meeting Date: December 21, 2023

INFORMATION TYPE
Other
RECOMMENDED ACTION(S)
Receive for information
PRIOR RELEVANT BOARD ACTIONS & POLICIES
<p>The Board approved TheRide 2045 Long-Range Plan in July 2022.</p> <p>The Board defines the outcomes/goals that TheRide is supposed to be achieving in the future (Ends policy). The Long-Range Plan made recommendations about the best way to achieve the Board’s goals.</p> <p>The Board has also created constraints that apply to this planning process. These constraints are primarily focused on funding and defining the planning process itself. Executive Limitations policies: 2.0, 2.1.3, 2.1.4, 2.2.1, 2.4-2.4.8, 2.4, 2.4.3, 2.4.5, 2.4.8, 2.5,2.9, 2.9.4, 2.9.5, and 2.10.1.3,</p>
ISSUE SUMMARY
<p>TheRide 2045 is a Long-Range Plan for transit in the Ann Arbor-Ypsilanti area. The plan lays out a shared vision and strategy for transit up to 2045. The plan will guide the development of future projects and budgets as TheRide’s activities are aligned to achieve the vision outlined in the plan.</p> <p>The plan focuses on addressing social equity gaps by improving affordable and accessible transportation to jobs, education, services, and housing, improving our environment by giving travelers efficient transportation alternatives, and supporting a strong economy by better connecting businesses and people. The result will be a more competitive transit system that will grow ridership, resulting in a more sustainable and vibrant community.</p> <p>TheRide 2045 will effectively advance the organization toward these key goals defined by the Board and echoed by the broader community. It is a transformational plan that will make transit faster and more attractive, and fundamentally change how transit is provided in the Ann Arbor-Ypsilanti area.</p> <p>Key benefits of this plan include:</p> <ul style="list-style-type: none"> • Growing ridership by providing an attractive and convenient transit service, designed to reduce travel times, make travel more direct, better match service to demand, and provide access throughout the week with longer hours of operation.

- Addressing socio-economic equity gaps by improving accessible and affordable transportation to work, education, medical, shopping, and social destinations for lower opportunity communities that rely on transit and through focusing enhancements on low opportunity areas.
- Improving environmental outcomes by attracting more people out of their cars and introducing low-emissions buses.
- Enhancing economic vitality by growing access to jobs and retail, incentivizing more walkable, vibrant, and healthy communities, and by reducing overall community costs for transportation.
- Advancing the goals of municipal policy documents.

The plan can deliver these benefits through a series of improvements and expansions to transit services and infrastructure.

Significant public and stakeholder engagements were held throughout the planning process. During the engagement, the community generally communicated a strong desire for transformational change and a strong support of the recommendations included in this plan. This included a vision of enhancing transit's role in overall mobility options for the community with a particular focus on improving transportation equity.

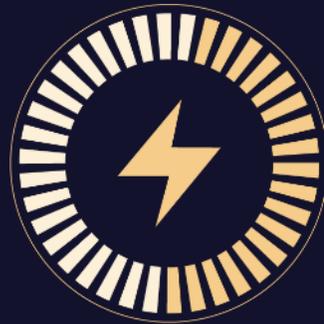
TheRide 2045 responds to the growing needs of our communities with a blueprint for preserving and expanding transit services and access to local and regional destinations. It is an ambitious vision that will require partnerships, additional investment, and leadership. Through this vision, TheRide can help lead our communities toward a future with greater social equity, environmental benefits, and access to jobs.

ATTACHMENTS

1. TheRide 2045 Long Range Plan Presentation



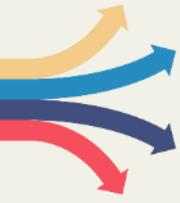
A Shared Vision for transit



Outline

- Goals for the Plan
- Outcomes and Benefits
- Community Engagement
- Recommendations
- Implementation and Financial plan





Goals for the Plan

Community Values Drive Transit's Goals:

-  Improving social equity
-  Improving environment
-  Supporting a strong economy
-  Growing ridership





Service Outcomes



100% increase in the level of service experienced by the average rider



123% increase in the level of service experienced by those in low and very low Opportunity Index Areas⁷



39% faster travel time for the average trip taken by transit



97% of jobs will be near high-frequency transit⁸



7-11% reduction of transportation-related emissions



150-165% ridership growth expected



6.9 million car trips avoided



100% accessible services⁹



Benefits of the Plan



More equitable access to high-quality transportation for jobs, education and housing



Reduces transportation costs



More walkable, vibrant communities



Less infrastructure required for parking



Healthier environment for everyone



Reduces car dependency

Community Engagement

- Three successful rounds of engagement through in-person and virtual events
- Public Advisory Group met 7 times
- Project website, social media and stakeholder partners helped to reach community

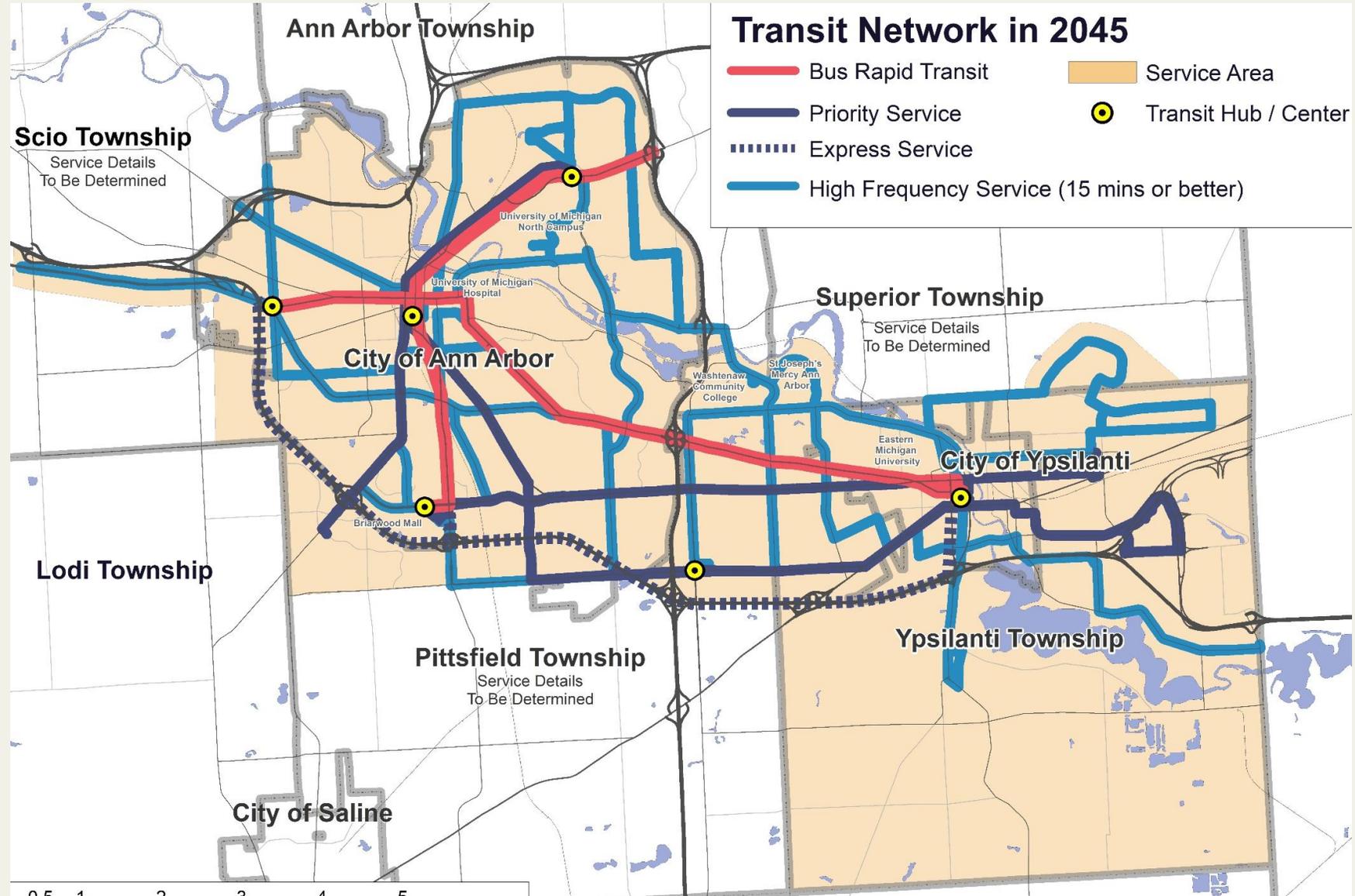


4,475 community interactions

Over 80% of responses support the draft plan!

Services

- Extensive fixed-route network
- Better off-peak services
- Enhanced on-demand services
- A-Ride service improvements

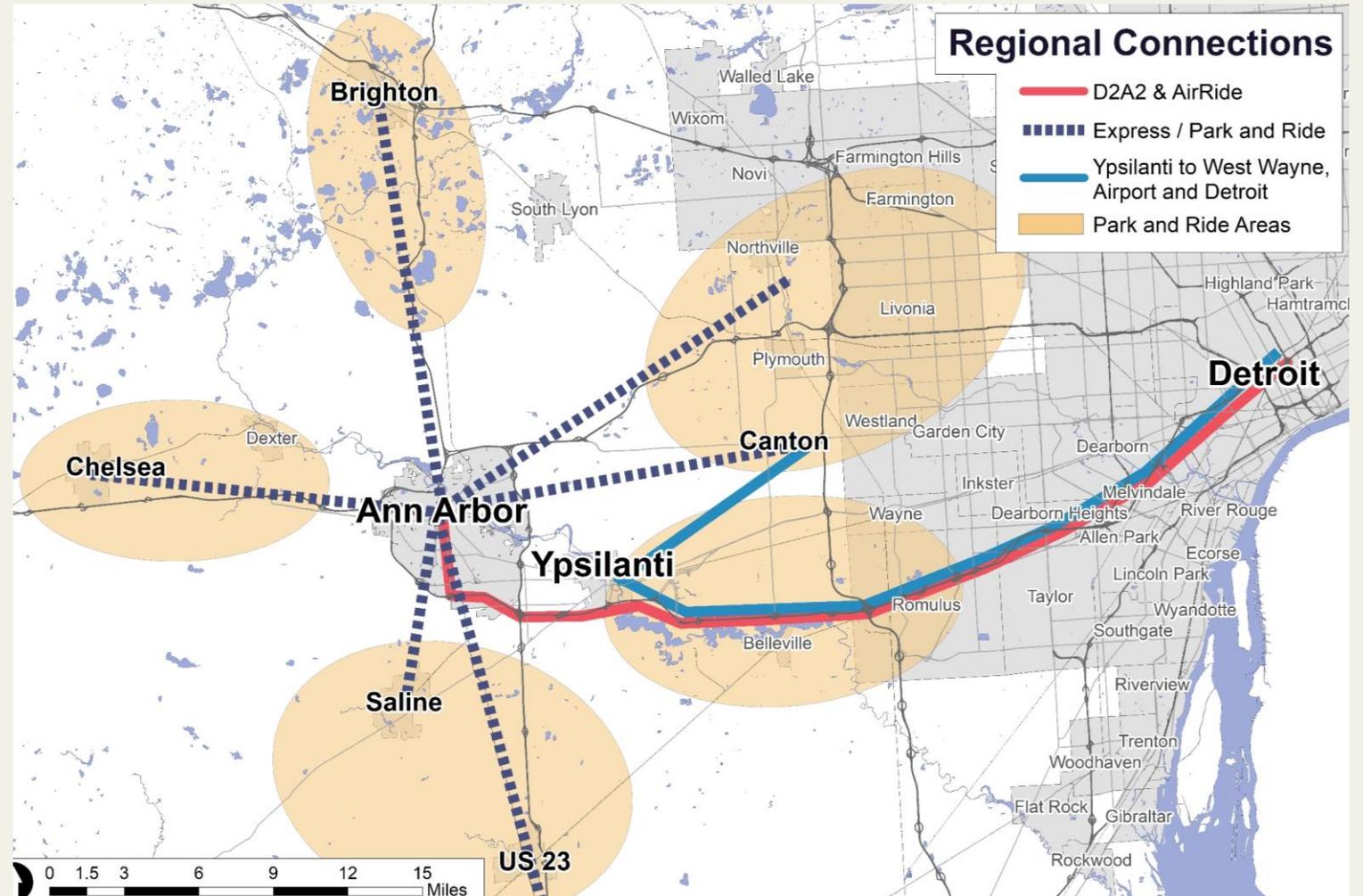


Supporting Infrastructure



Collaborations

1. Regional Transit Connections
2. Transit Supportive Policy
3. Advocacy and Partnerships





Implementation Plan

2023–2028

- Plan foundations and off-peak enhancement

2029–2033

- Big increase in service, focused on busiest corridors

2034–2038

- Transit Spine Enhancement

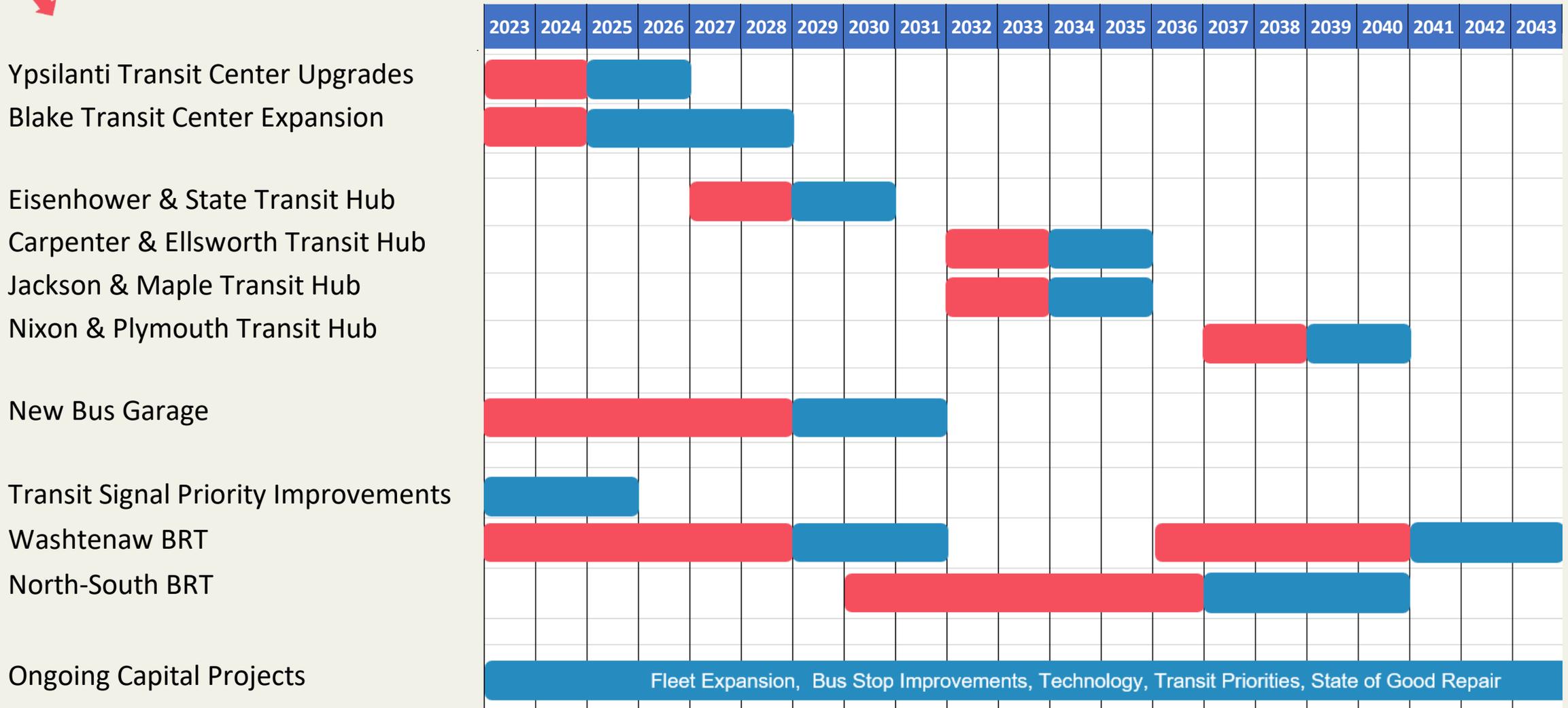
2039–2045

- High-frequency network expansion

S



Major Project Timeline





Financial Plan

	2023- 2028	2029- 2033	2034- 2038	2039- 2045
Annual Operating Cost*	\$63 M	\$72 M	\$81 M	\$90 M
Increase in operating cost (from previous)	13%	14%	13%	11%
Capital Cost	\$115 M	\$201 M	\$161 M	\$174 M

Note: all figures are in 2021 dollars



Summary

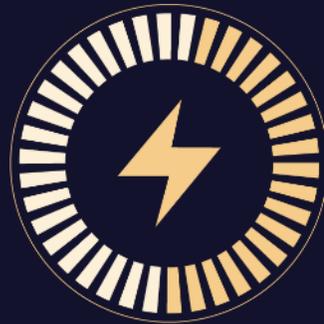
The plan will advance the organization toward the goals and vision laid out by the Board and echoed by the broader community:

-  Improving social equity
-  Improving environment
-  Supporting a strong economy
-  Growing ridership





A Shared Vision for transit



Bond Financing Discussion

Finance Committee Meeting: December 12, 2023

Board of Director’s Meeting: December 21, 2023

INFORMATION TYPE:
Other
RECOMMENDED ACTION(S):
Receive information and accept staff recommendations to avoid using debt financing (bond financing, etc.) to fund capital projects.
ALTERNATIVE OPTION(S):
The Board could instruct staff to pursue debt financing to fund capital projects. Staff advises that if the Board chooses the alternative option, staff recommends the Board give that instruction through an adoption of policies for debt financing to establish the appropriate framework to be followed and monitored.
PRIOR RELEVANT BOARD ACTIONS & POLICIES
<ul style="list-style-type: none"> • Executive Limitation: Policy 2.4.8 “The CEO shall not cause, allow or fail to address budgeting that ... funds ongoing operations via debt or creates unfunded future obligations.” • Executive Limitation: Policy 2.5.11 “The CEO shall not ... encumber the agency with financial debt without previous authorization from the Board.”
ISSUE SUMMARY:
<p>Staff have researched regulatory requirements for the use of debt, GFOA Debt Management Best Practices, and FTA regulations as a basis of understanding what debt financing options may legally be pursued. Four key factors influencing the recommendation are:</p> <ul style="list-style-type: none"> • State law limits the Authority’s debt financing options <i>only</i> to the issuance of self-liquidating revenue bonds, • Revenue bonds must be secured by operating revenues, which for this purpose are narrowly defined and exclude all grants and millage revenue, • Creditworthiness would need to be established and is not guaranteed, and • Revenues needed to pay for debt service on bonds would require an increase in millage rates or other funding source to balance the budget. <p>By providing legal and regulatory reports and in consideration of historical, current, and future operational and financial trends, staff is providing the Board with contextualized information regarding the ability and feasibility of utilizing bond financing to fund capital projects (see the BACKGROUND section of this Issue Brief for feasibility contextualization).</p>
BACKGROUND:
<p>The Board has, on occasion, suggested staff explore the viability of issuing bonds, or other debt financing to fund capital projects. In 2018 there was a detailed review on this subject. Since the approval of the Long-Range Plan (LRP) in 2022 there has been an increased focus on how to fund projects in the capital plan and the LRP to advance the Board’s Ends. In recent months discussions about additional costs related to advancing environmental sustainability and carbon neutrality have . As a result, staff were asked to review and provide current information regarding the Authority’s ability to issue bonds to fund capital projects.</p>

Staff have completed a comprehensive review of the topic over the last few months and are providing information and recommendations to the Board for consideration. The review began by reviewing materials provided in 2018 and confirmed that the information collected at that time is still valid and applicable to the current state. Specifically:

- Legal counsel has confirmed that the memorandum provided at that time continues to reflect current conditions regarding state limitations on debt incurred by local governmental units generally and laws applicable to the Authority specifically. Legal counsel's memorandum is provided as Attachment B.
- Information provided regarding best practices of debt management as published by the Government Finance Officers Association (GFOA), a leading association advancing excellence in public finance since 1906, and an organization of which the Authority is a member. That information was validated to reflect current best practices, which are consistent with what was provided in 2018. GFOA guidance is provided as Attachment C.
- FTA guidelines regarding the use of debt were reviewed and confirmed to be unchanged. FTA guidance is provided as Attachment D.

Additionally, staff operational and financial trends were reviewed in context of the rules outlined in the documents listed above and the capital plan to summarize the feasibility of issuing revenue bonds backed by operating revenues to fund capital projects in the capital plan. Key information to consider regarding feasibility are:

- Operational revenues for this purpose would primarily be generated by passenger revenues, which have fluctuated significantly over the last five years. Fluctuations of operational revenues experienced at the Authority could be problematic for establishing a reliable funding source for bond financing and would impact the ability to establish creditworthiness required to be successful in the bond issuance process. It is important to consider that for the last few years the Authority has relied on additional federal funding to operate full services and has had to intermittently reduce operations, which directly influences the perceived stability of passenger revenues for the purposes of establishing creditworthiness.
- Current and projected operational revenues would not be sufficient to provide funding for all the projects in the current capital plan or the LRP. It is possible to select a single project or group of small projects and seek bond financing for those projects, but it would increase the costs of the projects more significantly on a smaller scale. Additional administration costs and costs of issuance, including staff resources, financial advising, establishing a debt service reserve, establishing creditworthiness, interest for borrowing, and fees associated with issuing bonds are more cost effective with large-scale capital projects.
- Act 55, the Authority's enabling legislation limits the length of millages to five years and the Authority relies significantly on millage revenues to fund operations. Using passenger revenues to fund debt service would require an increase to current millage rates. Current or increased millages cannot be guaranteed beyond any five-year period. The nature of short-term millages in the context of bond financing, which would typically span longer terms to be effective in spreading costs over time, could introduce the Authority to an unacceptable risk profile as defined in the Board's Ends. If successive millages are not approved, the Authority may have to reduce services to balance the budget, which would impact (a) the ability to balance the operating budget, and (b) passenger revenues pledged for debt service payments and risking default on the bonds. This risk could also affect overall creditworthiness.

By reviewing the listed reports, and considering historical, current, and future operational and financial trends, staff is providing the Board with contextualized information regarding the ability and feasibility of utilizing bond financing to fund capital projects.

IMPACTS OF RECOMMENDED ACTION(S):

- **Budgetary/Fiscal:**
 - Avoid increased costs capital projects which would be required for bond financing (debt service reserve, financial advising, interest costs and additional costs of issuance) with minimal impact to advancing significant portions of the capital plan and the LRP.
 - Avoid millage increases to balance the operating budget for interest and principal payments of debt service.
 - Avoid creating financial liabilities.
- **Social:** Avoid any risk of service reductions or limit service improvements due to operating revenues being used for debt service; debt repayment would reduce funds otherwise directly eligible to provide service for riders (an opportunity cost).
- **Governance:** Eliminate the need for additional policies to be created and monitored. Debt management policies are needed to restrict and guide debt issuance and financing practices.

ATTACHMENTS:

- A. Legal Review of State Laws Governing Municipal Debt
- B. Government Finance Officers Association (GFOA) Best Practices on Debt Management
- C. FTA Guidelines on Use of Debt

Attachment A:

Legal Review of State Laws Governing Debt

A legal review of state laws governing debt financing for AAATA as a State of Michigan public transportation agency under Act 55 was completed by corporation counsel (Dykema) and included a review of debt instruments which may be exercised by the Authority, including municipal bonding. Dykema has prepared a briefing on this topic which is included in this attachment and summarized here:

1. Act 55 authorizes public transportation authorities to issue “self-liquidating revenue bonds” only for capital improvements. No other form of debt is permitted under Act 55.
 - a. Self-liquidating revenue bonds are bonds payable from revenues. Legal counsel understands these to be operating revenues such as passenger fares (and bus advertising contracts, purchase of fare agreements, and purchase of service agreements).
 - b. Revenue from state/federal grants and millage revenue is not considered operating revenue. While FTA does allow the use of federal funds for reimbursement of principal and interest payments on bonds for capital projects (see Attachment 4), it appears state law does not. Further legal review is needed for clarification.
 - c. Conventional mortgages, land contracts, and capital leases are not allowed under state law.
2. Revenue bonds may be further secured by the full faith and credit of the municipality, which would, of course, require the willingness of the municipality to participate.
3. Revenue bonds are subject to Act 94 (the Revenue Bond Act), which would require public notification of the intent to issue bonds and the right of the public to call for referendum on the issuance by petition of at least 10% of electors.
4. Revenue bonds must be privately placed with a banking institution via a competitive sale under Act 34, or a negotiated non-competitive sale to an underwriting/investment banking firm. Another option is the sale of the bonds to the Michigan Finance Authority.
5. Retainage of a municipal finance advisor to advise on the structure, timing, and method of sale of bonds is a common practice. There are about four active firms in Michigan providing this service.

Dykema’s memorandum is a general introduction which could use more narrow focus as capital plans develop. The memorandum was reviewed in November 2023 by current staff and legal counsel for clarity and confirmed all legal opinions are valid and applicable.

Attachment B:

Best Practices for Debt Management

The Government Finance Officers Association (GFOA) has published best practices recommendations for debt management. Debt management best practices cover a wide range of topics related to debt issuance and debt management, including:

- Use of Advisors
- Techniques
- Debt Issuance
- Disclosure
- Debt Management/Post Issue Compliance

A key recommendation of Debt Management is to adopt comprehensive written debt management policies that reflect applicable local, state and federal laws and regulations. These policies should be established with the issuer's specific needs and be approved by the issuer's governing body. Debt Management Policies should address the following topics the following topics, at minimum:

1. **Debt Limits:** Specific limits or acceptable ranges should be established for each type of debt according to legal/regulatory restrictions, public policies, and financial or planning restrictions.
2. **Debt Structuring Practices:** Specific guidelines for debt structuring practices should be established including maximum term, average maturity, debt service, and capitalization of interest payments for construction projects.
3. **Debt Issuance Practices:** Policy should guide the issuance process including use of professional service providers such as financial advisors, banks, and legal counsel, and use of credit ratings or minimum bond ratings.
4. **Debt Management Practices:** Guidance for ongoing administrative activities to manage debt financing should be stated including disclosure and legal compliance practices.
5. **Use of Derivatives:** The Debt Management Policy should clearly state whether the entity can or should use derivatives. If the policy allows for the use of derivatives, a separate and comprehensive derivatives policy should be developed (see GFOA's Advisory: [Use of Debt-Related Derivatives Products](#)).

The Board needs to consider its Executive Limitations policies on debt financing to align with these best practices. While current limitations require Board authorization for use of debt (2.5.11) and prohibits debt-funding for operations (2.4.8), a comprehensive policy framework which includes debt limits and structuring, issuance, and management practices are advised for debt to be an acceptable method of financing capital projects.

Attachment C:

FTA Guidelines on Use of Debt

Federal guidelines for any restrictions upon the use of federal funds to make capital improvements upon properties secured with debt financing were also reviewed. The Federal Transit Administration (FTA) can authorize Federal investment upon real estate that has been purchased with debt financing. FTA has provided the following guidance to transit authorities on the use of debt in several publications:

1. FTA's Grant Management Requirements (Circular 5010.1E) provides guidance on use of bonds. Transit agencies that use bonding are typically required by the terms of bond issuance to establish a Debt Service Reserve (DSR) to cover one year's worth of debt service payments. If debt service is paid as prescribed, the DSR remains untouched for the term of the bond and would only be used to make debt service payments when there is a risk of default. The balance of the DSR is used to make the last debt service payment at the expiration of the bond. DSRs may be financed with FTA assistance to pay principal and interest on bonds, however this does not appear to be allowable under Michigan law. Additional information on the DSR is available on FTA's website.
2. FTA's Guidance for Transit Financial Plans requires that debt financing be incorporated into capital planning and budgeting. A schedule that presents details on debt financing for the term of debt financing must be incorporated into the capital plan for the term of debt financing.
3. Debt financing is a valid financial consideration in FTA's Small Starts Program (Section 5309), the discretionary Capital Investment Program which provides funding for new bus rapid transit investments with costs below \$100 million. If a real estate acquisition is necessary for the BRT project (for expanded vehicle maintenance and storage, for example) use of debt financing could be considered as part of the total financial package in a competitive funding request.

Zero-Emission Buses – Updated CEO Recommendation

Meeting: Board of Directors

Meeting Date: December 21, 2023

INFORMATION TYPE
Decision Preparation
RECOMMENDED ACTION(S)
Receive information and discuss. Prepare for January decision.
PRIOR RELEVANT BOARD ACTIONS & POLICIES
<p>Policy 2.11 requires staff to consider opportunities to reduce emissions. Policy 2.4 requires prudent financial planning and risk management. Ends policy 1.0 outlines the Board’s goals and priorities.</p>
ISSUE SUMMARY
<p>The CEO is returning with their recommended approach to reducing emissions from the AAATA bus fleet. After consultation with staff, the CEO is amending their earlier recommendation to add a second part:</p> <ol style="list-style-type: none"> 1. The proposal pilot project with two hydrogen buses remains unchanged. 2. CEO is adding hybrid diesel-electric buses to the proposed grant application. This would results in a more aggressive reduction in emissions. <p>As detailed in the attachments below, adding hybrids eliminates more emissions sooner, and could bring in enough additional grant funding to offset TheRide’s local contribution to the hydrogen pilot, eliminating any concerns about competition between local capital projects.</p>
ALTERNATIVE OPTION(S)
<p>Although the CEO has submitted a formal recommendation in compliance with all policies, the Board is not obligated to approve it. There are alternatives available. By January the Board can authorize the CEO to submit a grant that:</p> <ol style="list-style-type: none"> A. Is the CEO’s recommendation, as presented (below Attachments 1). B. Is a modified version of the CEO Recommendation, per Board deliberation and vote. C. Is any other decision moved and approved by Board vote. D. Defer the decision either intentionally or by not providing any direction in time for grant preparation. <p>Only a majority vote is required.</p>
ATTACHMENTS
<ol style="list-style-type: none"> 1. Final Draft Scope and Cost Proposal - CEO Recommendation 2. Consolidated Responses to Board Questions 3. “What We Heard” summary report of public comments

Attachment 1: Final Scope and Cost Proposal

In January the CEO will ask the Board for support to submit a grant application to help purchase new buses via the federal Low-No Emissions grant program. A second Board approval will be needed in February-March 2024. A grant award would likely occur in October 2024.

The final draft scope and costs of the grant proposal is outlined below. This recommendation now includes two parts:

- **Part I:** The proposal for a hydrogen pilot project (unchanged since October), and
- **Part II (NEW):** The addition of hybrid diesel-electric buses to the proposal will reduce emissions sooner and bring in additional funds, thereby enabling other capital projects.

Together these pieces create a stronger grant proposal. The CEO feels that this approach provides the best balance for TheRide's numerous priorities, risks, and opportunities – reducing emissions, demonstrating visible progress, compliance with Board policies, and maximizing financial resources for other capital projects.

Part I: Hydrogen Pilot

Scope

This is unchanged from the original October recommendation and includes:

- a. 2 hydrogen fuel-cell buses,
- b. An outdoor fueling station,
- c. Workforce training, and
- d. 12 months of operations in all seasons.

As described before, the intent of this initial deployment is to learn how to operate this new technology and increase confidence for a complete phase-out of fossil fuel buses. Based on the best information available staff believe that hydrogen fuel-cell technology represents the best option for eventually replacing 103 fossil fuel buses without negatively impacting passengers or the agency's finances.

This 4-5 year initial deployment also mitigates risks by allowing additional time for outside market and technology developments to provide a clearer picture of green energy costs and battery technology advancement. Should another technology prove superior during this period, a change in direction is possible. We anticipate another Board decision in 2029/2030 to confirm a final technology choice for full deployment of zero-emissions bus technology.

Costs for Learning Deployment with Hydrogen

Earlier cost proposals for the hydrogen initial learning deployment presented ranges of costs to convey the inherent uncertainty. Staff are now presenting firmer cost estimates where the ranges have been replaced with single figures.

The draft final total costs for the hydrogen pilot project are \$9.3 million over 4-5 years. The majority of this would come from outside sources, mostly the federal Low-No grant program. Local contribution from TheRide would be about \$2.2 million which would need to come from TheRide's Capital Reserve.

There is still an amount of uncertainty with many of these estimates, and we need to tell the Board that we will continue to make small adjustments until the grant is submitted. We need to

make sure that we help the Board understand that in approving this recommended approach, they would be supporting an approximate dollar figure, not approving a not-to-exceed amount.

Timeline

This initial deployment is expected to take 4-5 years, largely due to procurement and manufacturing timelines, with the buses delivered in 2027/2028. A final decision on ZEB propulsion types would be made once the pilot is completed around 2029/2030. The anticipated timeline is illustrated in later attachments.

Background on Technology Recommendation

The table below attempts to summarize the key differences between the technologies and why staff are recommending hydrogen. We are basing the assessment of a full deployment of 103-160 buses, not a 2-bus pilot project.

As has been noted before, the range limited of battery electric buses restricts their ability to replace an entire fleet. While many of these challenges may be overcome in the future, we cannot know when. Further, beyond range anxiety there are other serious challenges such as fire risk and black outs that would also need to be resolved. Hydrogen’s challenges are fewer and are focused on the fuel itself; when will affordable green hydrogen be available? Batteries have more, and more serious, hurdles to overcome than hydrogen.

Pros & Cons of Larger Bus Deployment, by Propulsion Technology

	<u>BATTERY</u>	<u>HYDROGEN</u>	<u>ADVANTAGE</u>
Public/political familiarity	High	Low	BEB
Future energy costs	Unknown	Unknown	TBD
Future emissions from energy production	Unknown	Unknown	TBD
Tailpipe Emissions	None	None	Tie
Expense of back-up energy supply	High	None	Hydrogen
Charging time	4 Hours	15 Minutes	Hydrogen
Range Implications	Too low	Adequate	Hydrogen
-Fleet growth (for same service)	30-40%	None	Hydrogen
-Costs for additional garage space	Very High	None	Hydrogen
-Operational complexity	High	Low	Hydrogen
-Hidden costs	Likely	None	Hydrogen
Expensive garage modifications	Yes	Yes	Tie
Risk of fire	High	Low	Hydrogen
Risks to passenger services (via operating costs)	Mid	None	Hydrogen
Speed of Implementing	2+ years	2+ years	Tie
Costs for small deployment	Lower	Higher	BEB
Costs for large deployment (ie scalability)	High	Lower	Hydrogen

There continues to be differing opinions on whether battery electric buses (BEB) or hydrogen fuel cell electric buses (FCEB) would be a better approach for reducing emissions. The public comments and Board questions received to date illustrate this (see later attachments). The uncertainty stems from the reality that neither technology has decisively demonstrated that it is

superior to the other, or ready to replace fossil fuels. This lag between readiness and need stands in contrast to the urgency many stakeholders feel, and the pressure being exerted on the transit industry to be seen taking action – even at the risk of misallocating limited financial resources.

Staff continue to have confidence in their recommendation for hydrogen fuel cells. Mechanics, management, and the CEO are in agreement on this point. We have reviewed available research in detail, spoken with other agencies, considered local factors, and visited agencies using both technologies. In our consensus opinion - given the state of the today's technology, battery buses lack the necessary range, cannot meet minimum operational requirements, and will likely incur additional costs that could threaten service to passengers and the agencies finances. Hydrogen fuel cell buses do not carry these risks and are more cost-effective for the scale of full deployment we anticipate (103-160 buses). We acknowledge that battery technology breakthroughs or costs for clean hydrogen in the future *could* change this conclusion, but these are factors that cannot be accurately predicted today among the fog of competing speculative information available.

We expect that there will likely be continued disagreement about these technology choices for the next several years, regardless of which one TheRide decides to test in the short term. Responses to many questions are provided in the attachments below or on our project webpage. We anticipate continued discussion and questions on these points in December and January. We will be going into this grant proposal with less than 70% of the information we would prefer to have. This will likely still be true if we deferred this decision for another 12-24 months.

There are inherent risks in taking action, but there are also risks in failing to act. The CEO and staff feel that we have enough information to take a calculated, reasonable risk on hydrogen. We are made more comfortable by the inclusion of Part II of this proposal which reduces financial risks.

The Board asked why we are recommending an initial hydrogen pilot that costs more (short-term) than a similar battery bus pilot. Our response illustrates an important, perhaps unspoken, element of our thinking – *we are prioritizing the potential for long-term success ahead of short-term costs or public reactions.* We do this because A) Board policies require us to make stewardship decisions more than political decisions, and B) although we understand the passion to reduce emissions, a failure meets no one's needs. We have directly experienced the challenges of technologies failing to deliver on early hype, the credibility and financial implications, the impacts on low-income passengers, and what it takes to clean up the resulting mess of disappointment and wasted resources. We also know that it will be us, not outside advocates, who will be held accountable should this recommendation not meet expectations. These factors tend to make us give more weight to proven technologies and operational and financial considerations, than to calls for immediate action. Some may see this as risk-aversion, other may see it as being prudent. Ultimately it is a question of priorities.

Advancing Board Goals & Policy Compliance

As detailed in the [November board packet \(p. 67\)](#), a hydrogen pilot project does a better job of advancing the Board's Ends goals while complying with executive limitations policies.

Part II (NEW): Addition of Hybrid Diesel-Electric Buses

The CEO is adding 20 hybrid diesel-electric buses (four per year over five years) to the recommended grant application. Hybrids are being added as a “bridging strategy” to reduce emissions sooner until a finalized decision on zero-emissions technology can be made. These would replace older diesel buses in 2025-2030. The hybrids are a quick-start complement to the zero-emissions technology, *not* a replacement for it. The two key reasons for this late addition are:

- **Practical Low-Emissions Technology:** Using the new hybrids will allow us to reduce emissions faster (during the hydrogen pilot) and phase out conventional diesels years earlier. The newest generation of hybrid diesel-electric buses can reduce emissions by 25% from the diesel buses in the fleet today, and do *not* suffer from the mechanical weaknesses that made earlier generations of hybrids so problematic. They require no expensive retooling or facility changes. They have no range challenges and are no risk to passenger services or operations practices.
- **Tapping New, Larger Grant for Replacements:** There is a strong financial incentive to add hybrids to the grant proposal. Conventional diesel buses are not eligible for the Low-No grant program, but hybrids *are*. By replacing diesel buses with hybrid buses and pursuing the generous Low-No grant funding, we can increase the overall outside capital funding. This would generate approximately \$6 of additional grant revenue for every \$1 spent on hybrids. In other words, we increase the size of the funding pie. A larger pie is easier to split as we would have more total funds to pay for other capital projects (TBD). This reduces the perceived competition for capital funds somewhat. In this manner the hybrids could be seen as helping pay for the hydrogen pilot, for example.

As illustrated in the table below, if we received Low-No grant funding for 4 hybrid buses per year over the next five years for a total of 20 hybrid buses, the net additional funding we would receive would be approximately \$19 million (these are new monies). After accounting for the local share required for the grant, this would free up approximately \$14 million of capital formula funding we have currently programmed for diesel buses that could then be re-programmed to fund other projects in the capital plan. However, we may need to use Capital Reserve funding to provide a portion of the local match, which in this illustration would be approximately \$2.2 million. The net impact is that we would have an additional \$12 million to fund other capital projects, which represents approximately 6:1 return on investment from the capital reserve.

<i>Estimate of Capital Funding Impact of Hybrid Bus Replacement</i>						
<i>(\$ in thousands)</i>	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total
Numbe of Buses	4	4	4	4	4	20
Diesel Replacement Scenario						
Cost Per 40' Diesel Bus	\$ 750	\$ 810	\$ 870	\$ 940	\$ 1,020	
Total Bus Cost	\$ 3,000	\$ 3,240	\$ 3,480	\$ 3,760	\$ 4,080	\$ 17,560
<i>Funding Sources</i>						
<i>Federal Formula Funding (5307), 80%</i>	\$ 2,400	\$ 2,592	\$ 2,784	\$ 3,008	\$ 3,264	\$ 14,048
<i>State Match, 20%</i>	600	648	696	752	816	3,512
Hybrid Replacement Scenario						
Cost Per 40' Hybrid Bus	\$ 1,020	\$ 1,100	\$ 1,190	\$ 1,290	\$ 1,390	
Total Bus Cost	\$ 4,080	\$ 4,400	\$ 4,760	\$ 5,160	\$ 5,560	\$ 23,960
<i>Funding Sources</i>						
<i>Federal Low-no Funding Opportunity, 80%</i>	\$ 3,264	\$ 3,520	\$ 3,808	\$ 4,128	\$ 4,448	\$ 19,168
<i>State Match, 10% (TBD, could be up to 20%)</i>	408	440	476	516	556	2,396
<i>Local Funding, 10%</i>	408	440	476	516	556	2,396
Summary of Impacts to Capital Funding						
Federal Formula Funding Decommited	\$ 2,400	\$ 2,592	\$ 2,784	\$ 3,008	\$ 3,264	\$ 14,048
Local Funding Cost (<i>likely the Capital Reserve</i>)	(408)	(440)	(476)	(516)	(556)	(2,396)
Net Additional Funding Available for Capital Projects	\$ 1,992	\$ 2,152	\$ 2,308	\$ 2,492	\$ 2,708	\$ 11,652

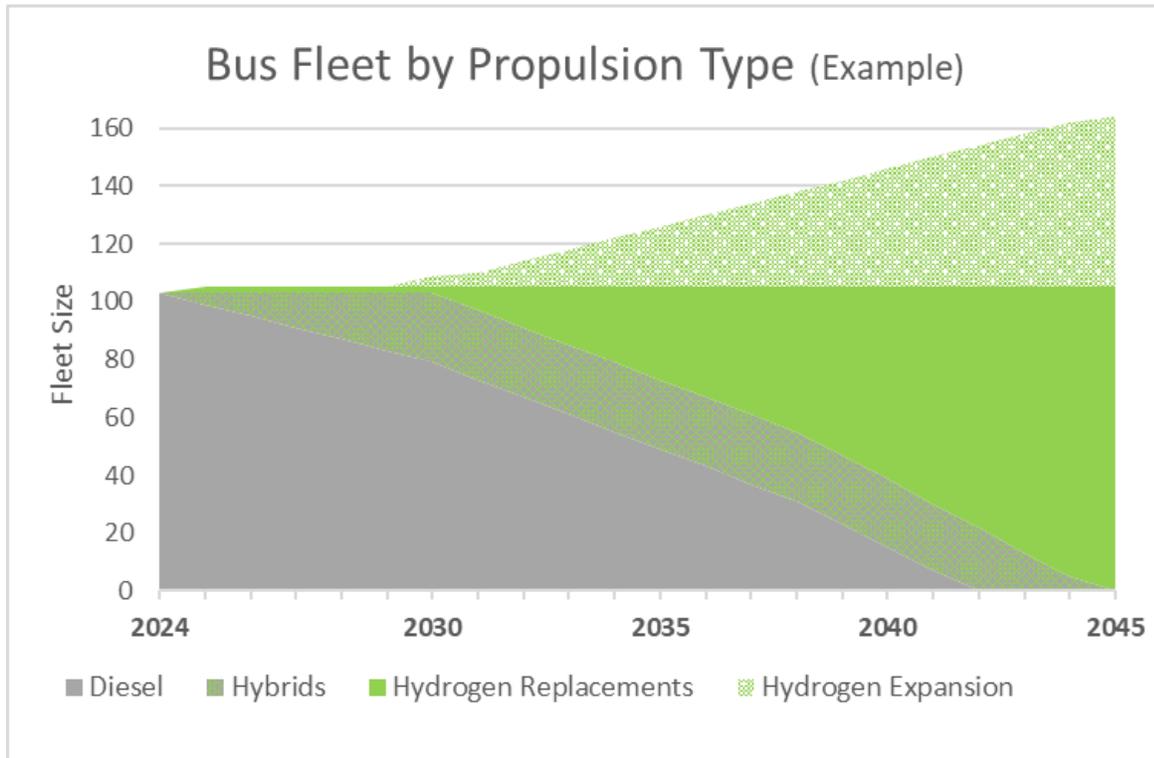
A downside of this approach is that we would need to spend more funds from our flexible local Capital Reserve. These are the funds we are trying to preserve to act as a local match in competitive grant situations. But the 6:1 return on that investment is still a good deal.

Although complicated, this adjusting funding sources in order to maximize outside funding is a common approach. However, using hybrids instead of conventional diesels is only affordable with additional outside grant subsidies for hybrids. If TheRide cannot find such grants in the future, it would need to revert to lower priced conventional diesels.

Certainly, packaging both a hydrogen pilot and hybrids into a single grant makes for a more complicated application. However, we've reviewed two years of Low-No grant awards and found that the FTA has already approved earlier grants which have mixed hybrids with zero-emissions buses. It would also allow the FTA to announce an award of 22 buses rather than only two. We believe this approach is viable and have started requesting copies of those earlier grant applications to study.

Long-Term Fleet Implications

Should this approach be embraced, hybrids would begin delivering emissions reductions as early as 2025/2026, conventional diesels would be entirely phased out 3-4 years earlier than without hybrids, and the fleet would become fully zero-emission by 2045 (same as in earlier projections). A graph illustrating how this approach might unfold is provided below. It illustrates how hybrids could replace about 1/5 of diesels over the span of the change.



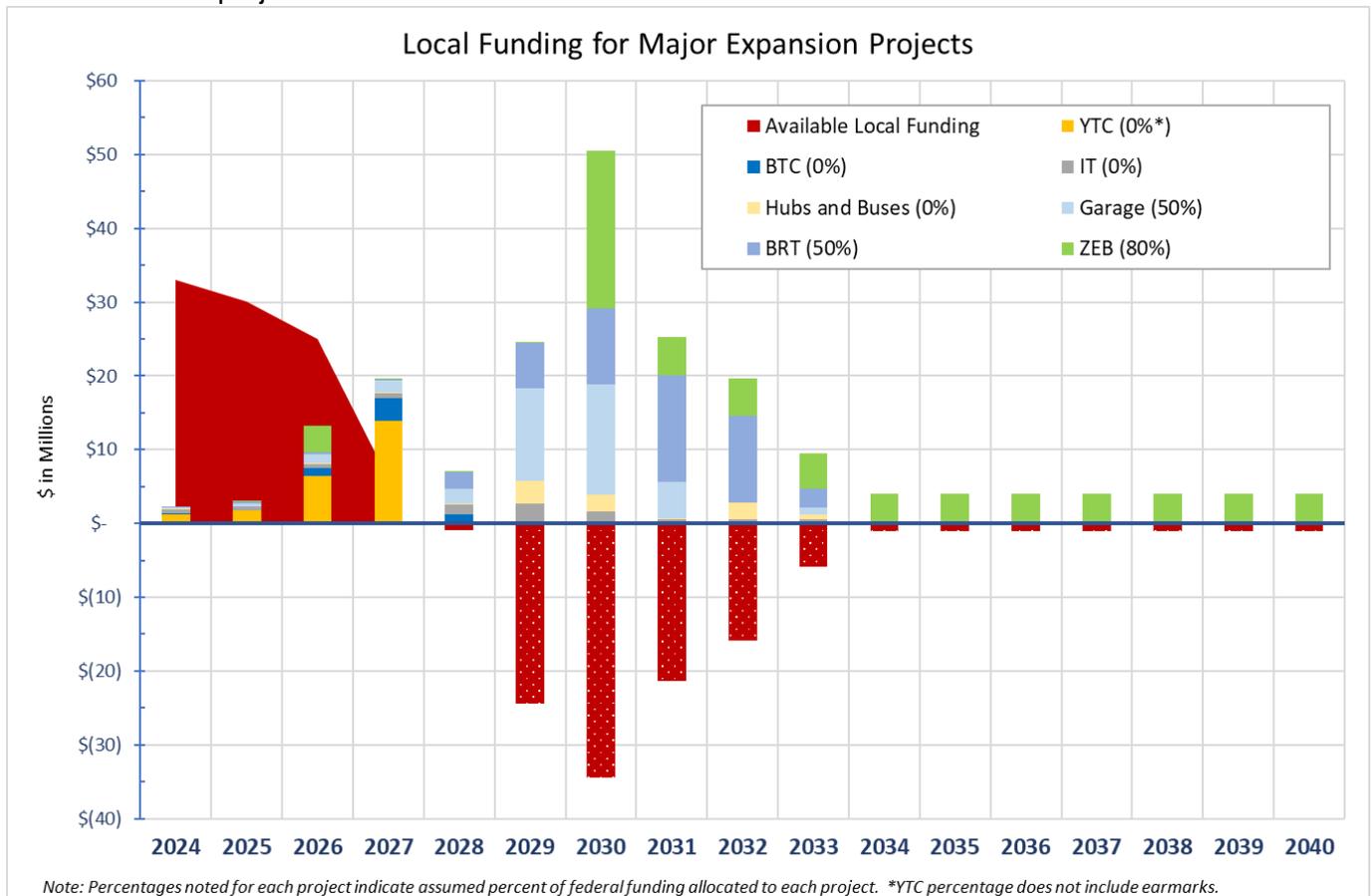
Consolidated Responses to Board Questions

Could we skip the pilot and accelerate ZEB purchases?

Yes, but this is a question of *priorities*. In addition, the CEO would not recommend this approach due to its impacts on other projects. The pilot project is intended to minimize the financial outlay and operational risks stemming from uncertainty with new technologies.

The graph below illustrates the estimated cost of major projects from the long-range plan (terminal, frequent services, BRT, etc) as well as ZEBs. These projects also have the potential to reduce emissions by increasing ridership. The red *area* illustrates the local funding currently available to use as local match for competitive grants (2024-2027). The red *bars* illustrate the deficit of local funding still unaccounted for to win additional grants. Once TheRide's Capital Reserve is depleted, there is no clear strategy yet to provide local match for future projects. *If TheRide accelerated ZEB purchases, this would require more local matching funds from the Capital Reserve and could divert funds from other projects such as the Ypsilanti Transit Center, or Blake Transit Center.*

This graph emphasizes the need to set priorities. Although somewhat intimidating, this sort of projected funding gap is common for infrastructure programs. Our focus should be on identifying the most cost-effective projects, sequencing/prioritize them, and controlling costs. We will then need to turn to our federal and state partners to help identify new funding sources. For example, if we can identify more outside funding for the Ypsilanti Transit Center, less local match from the Capital Reserve will be available for other projects.



Equity Impacts

As long as any ZEBs are rotated throughout TheRide's service area, there shouldn't be any discrimination concerns (Title VI). The equity impacts would accrue through the re-prioritization of limited capital funds as described above. It would be important to understand which parts of the population benefit from each project.

Can we bond to help finance capital projects?

Yes, but there are many complications, limited benefits, and better alternatives available. TheRide is limited to using bonds linked to non-millage revenues. Only fares and advertising revenues are legally available and since both are used to pay for operations today, if they were redirected to pay for bonds, additional sources of revenue would be needed to back-fill the resulting hole in the operational budget. The yield of such bonds isn't known but may not be larger enough to make a substantial contribution. However, there may be some limited utility. The CFO will be briefing the Finance Committee in detail.

Would it be faster to implement Battery Electric or hydrogen buses?

There seems to be no meaningful difference any longer.

- **Timelines:** Timeline for delivery of both bus types are both about 18-24 months. The bus manufacturing industry was not prepared for the large increase in ZEB orders stemming from additional federal funding and does not have enough manufacturing capacity to deliver quickly, resulting in backlogs. The bankruptcy of Proterra has created additional confusion. There are also lingering supply-chain and labor shortage disruptions. If charging/fueling systems are installed while the buses are being built, they shouldn't cause delay.

The CEO would also suggest that our focus should be on the timeline of a *full* deployment, not rushing for a rapid start. The emissions savings will accrue as the ZEB fleet gets larger and after full deployment, and there is little emissions savings at the beginning.

- **Perception:** In small deployments, BEBs avoid the high fixed costs of a hydrogen fueling station. This probably explains their initial popularity and may have given the impression that they were faster to implement when they were just cheaper in small numbers which made approval easier/faster.

As a fleet grows, the economies of scale for the single hydrogen station *reduce* the per bus cost, while a new charger for each new BEB *increases* the per bus cost. This factor along with range anxiety appear to be responsible for an growing interest in hydrogen for large deployments.

Could we have a mixed fleet of BEBs and hydrogen buses?

Yes, but there are no tangible advantages and many disadvantages. Staff strongly recommend against this approach.

- Even with proven technologies, switching between any propulsion systems is a *major* effort for a transportation operation. The change increases complexity and overhead costs (eg fueling/charging equip, training, tools, etc) while the redundant systems are in transition. Ensuring the transition is successful and doesn't distract from other projects can challenge any agency. Having *two* new and unproven systems more than doubles these challenges and increases risks with few obvious benefits.
- We cannot ignore economic pressures. Pressures from always-tight budgets will eventually force the agency to eliminate duplicative costs and standardize to a single propulsion system. The remaining system will have to be the one that meets minimum operational requirements (such as minimum range) in order to avoid costs for a larger fleet or garage.
- If both systems reduce emissions roughly the same, there would be no improved reduction in emissions by using multiple systems.
- Since staff need 3-5 years to become proficient at maintaining new systems, there is no point in piloting something unless we are reasonably certain it will be the final selection.
- There is no value in testing BEBs as the key limitation, battery range, will be resolved (or not) by technology and economic breakthroughs outside our area. Local experience with BEB will have no impact on its viability either way. In addition, the UM is already testing a few BEBs and we can learn from their experience without incurring our own costs.
- TheRide has space to store two battery buses outdoors. Any additional BEBs would have to be stored off-site (real-estate costs) or TheRide would have to incur a significantly increased risk of fire destroying the bus fleet or garage, imperiling service to all customers.
- While a few agencies do have mixed fleets, it does not appear intentional and may not be viable in the longer term.
- It is better to identify the final system in advance with less costly methods. The CEOs recommendation foresees this and is attempting to avoid "throw away costs" from systems with foreseeable flaws.

The only hypothetical operational advantage for a mixed fleet would be if there was a large difference in price or emissions between electricity and hydrogen which persisted long enough (6-10 years) to influence the purchase of a 12-year asset (bus lifespan). Staff do not believe that there is enough difference in the price or emissions to justify the additional risks, and that these differences may converge in the future.

Given all these considerations, staff feel that it is a better direction to make a limited investment (pilot project) in the most likely final system (hydrogen) than to incur the costs of multiple systems.

Carbon Emissions from Electricity and Hydrogen Generation – Ongoing

Staff are continuing to work to better quantify the difference in the amount of emissions created by the generation of electricity and hydrogen respectively.

- *TheRide has found a source of green hydrogen fuel at a rate that appears affordable for the pilot project.* If this source of green hydrogen, or another, proves viable, hydrogen may already be less polluting than electricity.
- DTE uses a large amount of fossil fuels to generate electricity, as seen in the table at right. Although the Michigan legislature has just passed a bill to require 100% “clean” energy by 2040, it acknowledges that this deadline may not be met. It is not clear how this will impact the price of electricity.
- It is true that “grey” hydrogen made with fossil fuels creates more emissions than solar or wind energy, and that the carbon capture technology behind “blue” hydrogen has not yet proven truly viable. It is not yet known how the hydrogen facility at the Willow Run Airport will generate hydrogen.
- How energy is generated *today* is less important than how it will be generated in a few years. Part of the logic of proceeding with a pilot project is to allow some time for markets and technologies to evolve and become more predictable.
- TheRide presently generates less than 0.5% of the total carbon emissions in the area. These modest benefits do not seem to warrant taking extreme risks.

Fuel Source for the 12-Month Period Jan. - Dec. 2022	DTE Electric's Fuel Mix Used to Supply Electricity
Coal	54.16%
Nuclear	18.16%
Natural Gas	14.22%
Oil	0.20%
Hydroelectric	0.15%
Renewable Fuels Total	13.11%
Biofuel	0.09%
Biomass	0.82%
Solar	0.60%
Wind	11.55%
Wood	0.06%
Solid Waste Incineration	-

Fossil Plant Emission or Nuclear Plant Waste in Pounds per MWh Jan. - Dec. 2022	DTE Electric Average per Megawatt-Hour (MWh)
Sulfur Dioxide	4.38 lb/MWh
Carbon Dioxide	2,189.4 lb/MWh
Nitrogen Oxides	1.79 lb/MWh
High-Level Nuclear Waste	0.005916 lb/MWh

Source: Cited from DTE website 11/6/2023.

Success Metrics for hydrogen pilot

Below are initial metrics. All relate to Board policies or operational impacts.

Effectiveness:

- Implications for passengers – ie no range limitations that will impact service design, on-road reliability, customer services, etc)
- Mechanical performance (vehicles and fueling systems)
- Ability to reduce GHG – availability of reliable, affordable, green hydrogen or superior performance to alternatives, timeline
- Suitability to replace all diesel buses – fleet size implications

Efficiency/Cost

- Availability of affordable green hydrogen
- Maintenance costs
- Other costs (training, facility modifications, hidden operational costs, etc)
- Availability of outside funding

Why does the Pilot Timeline require 5 years?

The actual operation of the pilot buses only requires 12 months, just to get experience in all driving seasons. The rest of the time is taken up by grant applications, federally required procurement processes, and manufacturing. We are exploring a procurement work-around to bypass competitive bidding which could knock a year off the delivery timeline, but I don't want to commit to that until I am more confident that we can deliver.

The main time consumer is the bus manufacturing process which is taking 18-24 months right now. This is the same for BEB and hydrogen. Buses are all built-to-order, and it is first-come, first-served at the manufacturing plants. OEMs (original equipment manufacturers) are also still working through labor, parts, and pandemic delays. There is a chance this could move faster by the time we get in the queue, but I can't make any promises. If we luck out and get our buses faster, we'll be prepared to start the pilot ASAP.

There is little we can do to shorten this timeline because grant awards, manufacturing, and regulated processes are not under our control. When working with federal DOT programs, these sorts of timelines are normal. It is not meant to be fast.

	2023	2024	Mid-2025	2026	Early 2027	Mid-2027	2028	2029
Decision and Funding								
Board Discussion	■							
Board Approval		▲						
Grant Submission		▲						
Grant Award (tent)		▲						
Implementation								
Staff Training			■	■	■	■	■	■
Fueling Tank			■	■	■	■	■	■
Buses			■	■	■	■	■	■
Order Buses			■	■	■	■	■	■
Building				■	■	■	■	■
Delivered					■	■	■	■
In operation (pilot)						■	■	■
Full Deployment								■

Risks of not submitting a Transition Plan

Key federal grants for low/no emission buses and garages now require a board to approve a "transition plan" which constitutes a soft commitment to convert a fleet. We would not be able to qualify for those grants without the transition plan. However, we won't *need* garage grants for 2-3 years, so delaying the approval of a plan will not impact our long-range plan projects for 2 years or so. Also, this is a Biden Administration rule and could be changed after Nov 2024.

Case studies from other agencies:

A member asked for case studies from other agencies. We have tried to include three outside reports that tell some of these stories. I would also add that our own report by Stantec provides a peer experiences review c 2022. [Pages 29-41](#) provide a quick summary of earlier experiences. Undoubtedly there are many other examples across the country. There is no central reporting for such information so we are limited to anecdotal case studies and a few meta-studies. There is no final conclusion either way but there is a risk of [confirmation bias](#) that we should all be aware of (including staff). If there is a specific example you are interested in, please let us know and we'll see what we can find. Email with pdfs of case studies and information was sent on 12/11/23 as follows:

- Antelope Valley Transit Authority
- Tokyo Hydrogen costs
- Edmonton Proterra 2023
- Politico – Interest rates
- Minneapolis

Staff in the AAATA Fleet, Facilities and Safety departments Input

Emailed to Board on 11/13/23

What is the risk of fire?

There is not enough reliable data to say for certain what the probability of a diesel, BEB or hydrogen bus fire is. There are not enough individual incidents or reliable incident data to use to create statistics. However, we can say that there are approximately 71,000 fossil-fuel transit buses currently in the USA and fires have been historically considered very rare. There are presently about 1,300 ZEBs in the country and BEB fires are reported with some regularity. Anecdotally, industry professionals perceive an unusually high risk of fire from BEBs. BEBs are often being stored outdoors to counter this risk. We are only aware of one report of a fire with a hydrogen bus.

Just as important is the damage caused by different types of fires. Batteries burn more intensely, creating a higher risk. There have been numerous examples of BEBs igniting while charging or without warning, a trend also seen in e-scooters and e-bikes. Battery fires cannot easily be extinguished with water and would certainly overwhelm the existing garage sprinkler system. Fire fighters can extinguish an indoor diesel bus fire, but the local Chief has told us that they would hesitate to send staff into a building filled with water and high voltage batteries. The perceived risk for batteries is that an indoor bus fire could happen without warning and there could be no clear way to stop it. Given

how tightly packed bus garages are overnight, there is a reasonable concern that enough buses could burn to cause service cancellations or make the garage unusable for a time.

Bus lifespan & can we sell pilot buses if they don't work out?

Yes, but not without some red tape. All buses purchased with FTA funds have lifespan requirements (12 years or 500,000 miles). After that point, the "federal interest" is considered expanded. We can sell or transfer them before then too. However, since all agencies design buses slightly differently, it is not clear what the demand for our buses would be.

Are bus weights a concern?

Yes, this is an emerging area of concern. Battery buses are considerably heavier (up to 40%) than diesel or hydrogen buses. This has implications for maintenance hoists, concrete floors at garages and terminals, and road pavement. At this time, it appears that the maintenance hoists will likely not be able to safely lift battery buses. Renovating maintenance bays with stronger lifts may cost about \$1.5 - \$2 million per bay (we have 10 bays) in addition to earlier cost estimates. We may be able to avoid these costs for a small-scale pilot, but not for permanent fleet changes. We will be adjusting BEB costs accordingly. We do not yet know whether our existing floors can handle the weight. We are working with the City of Ann Arbor to clarify road weight limits. While we haven't found clear regulations about weight limits for buses on roads, we suspect buses may be exempt. However, the additional weight will likely damage roads faster than lighter vehicles. Those costs would accrue to the municipalities or road authorities.

Mining impacts and battery disposal

We do not have good information on these matters, or how the impacts will change in the future. We will likely not be able to answer this issue fully before January. We can assume that more batteries will have larger impacts in these categories, and BEBs have much larger batteries than hydrogen buses.

Charging speed

Staff want to be clear with the board - comparisons with electric cars are fundamentally incorrect. Light-duty passenger cars and heavy-duty buses are so different that the technologies cannot be applied the same ways. While fast charging is becoming more prevalent for light-duty cars, the 4-hour charge time we've shared with you is the fast-charge option for buses. Bus batteries are much larger than car batteries. Also, the scale of a 103-bus fleet will require industrial-scale fueling/energy systems, not individual chargers. What works for cars will not work for bus fleets with today's technologies.

When will TheRide start investigations into electrifying our support fleet (i.e. vans, trucks, etc.) and facilities?

Staff have already committed to investigating the electrification of our support fleet once a decision on bus propulsion has been made. This is illustrated in the Gantt chart in our most recent Business Plan where these projects are expected in 2024-2025. Once we've reached a decision on buses in January, our intent is to begin reviewing and planning for electrification of our support fleet. I do not anticipate the same degree of study that we have put into buses. This should be much faster. Once that 2nd project is progressing, we'll look into emissions from facilities. Whether we settle on hydrogen, batteries or even doing nothing for now for buses, staff are committed to beginning these next steps as soon as practical in 2024.

This sequence of projects is partially because buses are the critical path and what we do for them may influence how we approach the other decisions. It is also a practical reality driven by bandwidth; staff can only handle so many queries at once. While we see great potential for electrifying our vans and other support vehicles (we think batteries make sense here), we do not yet have a clear understanding of how much it will cost to modify the garage to support charging those vehicles. An initial evaluation from earlier in 2023 found expensive upgrades to the electrical room and wiring would be needed. Of course, the chargers themselves also bring costs. Once we have confidence in those figures, we can make accurate grant applications with less risk of over-promising and under-delivering. However, at present we intend to pursue grants to fund this work, so we are not certain about an implementation timeline.

The facilities will require much more engineering review as they pull in the potential for geothermal systems and solar arrays. We will need to hire a consulting team to help us unpack the opportunities to eliminate emissions from the garage, terminals, and park n ride lots. I expect this will take a few years to sort out.

We understand the urgency of climate action and are trying to balance real progress with prudence. We understand that there is some frustration with our pace, and we appreciate your patience as we work through these big questions.

Attachment 3

What We Heard – Summary Report of Public Comments

This is a very small step, and likely the wrong technological one, to advance what TheRide says are its climate goals. Steps like this feel tokenizing to those of us working tirelessly to advance equitable climate action. While I'm glad to see some movement, this is far too little, far too late. It's a shame that this is the best we can get from the leadership at TheRide.

Missy Stultz 10/16/23

No, not for that cost. You and other city leaders want this, but you also want affordability. How much more is this going to cost the taxpayers and add to the issue of unaffordability? You're just going to tax even more middle income people out of the city. And btw, where will that battery be recycled? Hard to tell in writing, I'm not "yelling", just stating the obvious that no one wants to talk about. Maybe we focus on making sure our young citizens have access to food, a safe city to walk around in, and a decent education before we sink millions into 2 buses.

Sandy Rabidoux 10/17/23

I would rather have better, more frequent service with diesel busses. We need to establish BRT routes, or that electric trolley y'all used to talk about.

Eric Dennis 10/18/23

Hydrogen powered buses represent only a very small improvement in overall emissions, especially while we remain dependent on DTE's dirty grid. Furthermore, Hydrogen power is essentially unproven technology. We don't need a "gadgetbahn" when low emissions solutions already exist in cities all over the world.

Build directly powered electric trains, or at least trolley buses instead. The Stantec report dismissed these solutions out of hand because "overhead lines are ugly," which is both ludicrous and totally untrue. Cities all over the world have found ways to make the supports for overhead lines beautiful, and the technology for them is extremely robust with over 100 years of demonstrated success.

This proposal is a total waste of resources.

Brian Ferguson 10/18/23

Given the limited resources of AAATA, I believe the goal of reducing carbon emissions is better served by improving bus service, reliability, and speed. Reducing total vehicle miles travelled is a more scalable solution with more positive impacts (traffic, congestion, safety) than improving emissions for buses that don't have as good ridership.

Nishant Kheterpal 10/18/23

I understand there is a lot of external funding for this project, but spending any transit money on transit infrastructure becoming zero carbon is a misdirection of carbon responsibility. Ditching cars for more use of transit itself is the truly impactful action on earth resources and the climate--reducing the load on roads so they don't need to be fixed as often, reducing pedestrian and cyclist collisions, and reducing the carbon footprint per person per trip...all the standard benefits we know transit to impart. The Ride should be spending all available money to make people want to ride the bus: getting buses every 15 minutes, extending schedules later into the night, most of the things that are in your 2045 Plan. These are harder, cultural, collaborative problems to tackle than just making a bus purchasing switch, but the basic use of the The Ride needs to be bolstered first before going for fancier equipment.

Rosie Pahl Donaldson 10/19/23

I am disheartened by the extremely slow pace presented here. It does not align with the urgency of the climate crisis, A2ZERO goals within our own city, or the transformational visions set forth by the federal administration. It does not align with science. Science tells us we need to stop burning fossil fuels now. Not later. Please do better. Our kids are watching.

Julie Roth 10/19/23

Hydrogen is currently produced from fossil fuels which negates the benefit received from decreased carbon emissions of not using gas. In addition, the supply chain around hydrogen fuel cells is expensive and not as well developed. Also the energy generated from hydrogen fuel cells is less efficient than electric.

For these reasons, please consider an alternative for powering The Ride for a sustainable A2 future.

Annie Ye 10/21/23

I support the city's zero emissions plan, and I am glad to see TheRide making an effort to compliment that with this initiative, and previous work, like the "alternative bus propulsion" study of 2022. Personally, I think the pilot program is a good investment, not jsut for us, locally, but for the industry and society as a whole, because any lessons of our experience can be used by others.

I am also an advocate for public power in Ann Arbor. While it is not directly related to this initiative, it is germane in many ways. Note that Mr. Carpenter acknowledged in his presentation of this initiative that "there is an uncertainty from ongoing conversations about the ownership of the electrical grid in Ann Arbor. While we don't really have a perspective on whether a public utility would be better than a private utility, the fact that ownership of the grid is uncertain, introduces more challenges into this equation."

Energy costs under public utilities in Michigan, and in other states, are lower than under DTE and Consumer's Energy (non-public companies). Public utilities also have the power to choose green energy production sources that aren't possible under DTE. This would make a huge difference for carbon use in the process of battery charging. I want to suggest that TheRide develop a perspective to support the switch to public power, for the common good, but especially for the direct benefits and impact it would bring to AAATA's efforts at zero emissions. Also, the timeline for a transition to public power can potentially be shortened with institutional support for the grassroots, citizen-based

effort to municipalize our energy distribution network. Please consider this either as part of this initiative or independent of it entirely.

Full disclosure, I work for AAATA (Motor Coach Operator)

Chai Montgomery 10/22/23

Well researched and presented. Before going through the presentation I was a battery bus advocate but with this information I see why batteries are not yet the best solution. Lately there has been more data on battery performance at extreme temperatures showing the decrease in performance which is highlighted as a major concern. Rather than just jumping in with a full on transition to one platform the time and learning from a pilot of hydrogen fuel cells is a wise decision which I support.

Charles Colson 10/23/23

As a former AAATA board member and chair, as well as in my role at the Ecology Center as an advocate for action on climate and clean energy, I am very happy to see that AAATA is seriously pursuing options for the transition to a cleaner, low-carbon fleet of buses. I was also asked by Mr. Carpenter to serve as a reviewer of the agency's [bus propulsion study](#) completed late last year, and have had numerous follow-up conversations with Matt, other experts, and several board members about the propulsion strategy options now being considered.

Mr. Carpenter clearly put a lot of thought into his proposal for the board's consideration to pursue a hydrogen bus pilot and transition plan. While I do support moving forward with a zero-emission bus pilot, I do take issue with a number of the arguments made in support of the CEO's recommendation and would like to offer a different perspective on the relative merits and risks of the two technology choices that the agency is now considering.

Role of Hydrogen and Electrification as Climate Solutions

While there is a now rapid transition to electrification occurring in the transportation sector, there are a number of applications--like heavy-duty trucking, aviation and shipping--where battery range limitations and re-charging times make electrification more difficult. Hydrogen fuel cells are now being pursued as an alternative clean propulsion technology for some these more demanding segments, including transit buses. While the technology is not new, many of these deployments are, and evaluation of the ongoing role of hydrogen in these new applications is still in the early stages.

As noted in the CEO's proposal background materials, as well as the agency's propulsion study, hydrogen buses have several advantages over battery electric (e.g. range and similarity of the fueling system), but they also have some important caveats as well. I believe these caveats have been somewhat downplayed in the agency's proposal, and will address a couple of them below.

Hydrogen Costs

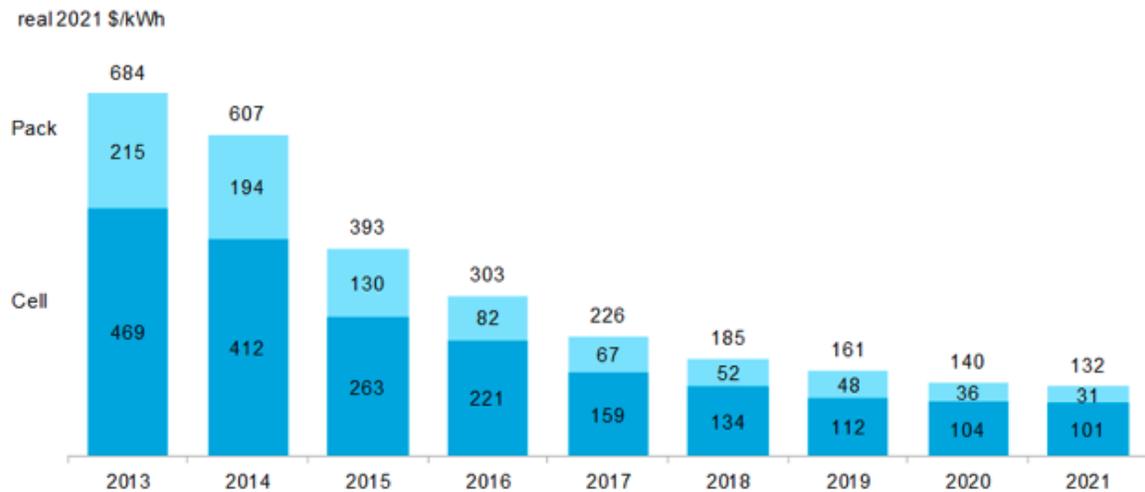
First and foremost is the cost of hydrogen fuel. Green hydrogen fuel prices have been cited as costing as much as 5x more than diesel. While there is a strong hope that pending federal IRA incentives for production of green hydrogen will spur innovation and production scale that brings those costs closer to parity with diesel, this is not at all guaranteed. These fuels are still at an early

stage of development, and will need time to mature. I would posit that bringing down green hydrogen costs closer to that of diesel is a better example of a needed breakthrough in technology than what the CEO suggests is needed for batteries.

Battery-electric Costs

In contrast, battery electric buses already provide an opportunity for fuel cost -savings compared to diesel. And while range is still a sticking point today, steady progress in battery technology and cost reductions along the trajectory we've seen over the last 10 years, not a breakthrough, could essentially solve these range limitations (e.g., see Bloomberg/NEF graphic below). This anticipated battery technology progress was a key point in the agency's propulsion study in support of a potential BEB deployment, along with recommendations to employ other strategies that could help manage BEB range limitations in the near-term. Even without these strategies, the study found that BEBs could be deployed cost-effectively today meeting more than 60% of the agency's bus routes, or blocks. The study recommended replacing buses operating longer routes/block assignments toward the latter end of a transition while BEB technology improves. At no point was it suggested that the agency operate multiple BEBs to replace a single diesel bus, which would significantly increase overall costs of a BEB deployment.

Figure 1: Volume-weighted average pack and cell price split



Source: BloombergNEF.

GHG Emissions

Another caveat regarding hydrogen buses is their relative ghg emission benefit. While both hydrogen and electricity for buses can be produced with green renewable resources, resulting in much lower ghg emissions compared to conventional diesel, it's still significantly more efficient to use those renewable resources for battery electric propulsion, versus converting water to hydrogen via electrolysis, and then converting that hydrogen back to electricity again in the fuel cell. This "conversion efficiency" is already reflected in the cost difference between the two fuels, but it also represents an opportunity cost for the use of limited renewable resources. In other words, it makes more sense to use these resources where they will provide the most ghg benefit at the lowest cost. The UM's Hydrogen Center is completing some research on this topic that should be available early

next year, but a [recent study](#) from the International Council for Clean Technology (ICCT) is illustrative in comparing the life cycle ghg emissions from alternative urban bus powertrain technologies. Note in the diagram below that the blue bars representing the fuel/electricity production are significantly lower for the BEB buses. The study also considers the manufacturing stage for the buses, including both batteries and hydrogen fuel tanks. Hydrogen buses fare somewhat better in this regard, offsetting some of the electric battery advantage, but not all.

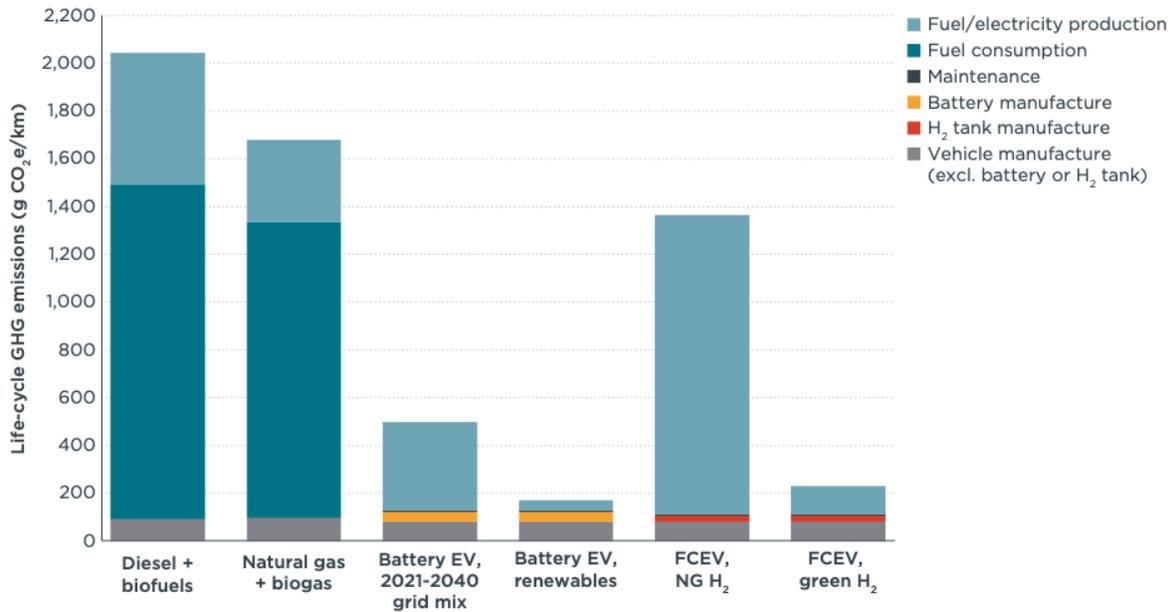


Figure 5. Life-cycle GHG emissions of urban buses driven in the EU in 2021 to 2040.

As suggested in above study, it is somewhat unfair to compare emissions from the use of green hydrogen with electricity from current grid energy, as was suggested in the agency’s recent board packet. It is more appropriate to compare the use of electricity from the current grid with the current standard practice of producing hydrogen from natural gas. In this comparison, BEBs have a much larger ghg advantage. But the agency can also just as easily purchase green renewable electricity today to fuel its BEB fleet, as was recommended in the agency’s recent propulsion study. The study specifically points to the availability of DTE’s MIGreenPower program that can be enrolled in for a modest premium to the electricity rate the agency now pays. The UM currently purchases green power from DTE for a portion of its energy use, and the City of Ann Arbor has also contemplated a green power purchase along with its plans to produce renewable energy on various city properties. The agency should consider these green power options for addressing its current facility energy use regardless of its bus propulsion decision.

Proposed Pilot Recommendations

Given the above caveats, I believe it is too early and would be unwise to rule battery electric buses out. Does AAATA really want to dismiss a technology strategy that has clear opportunities to reduce emissions and save the agency money, potentially allowing those savings to be spent on other important priorities? And on the flip side of the coin, does the agency really want to bet its bus propulsion strategy on a needed break-through in green hydrogen production costs and associated fuel prices?

if it was my decision, I would find a way to pilot *both technologies* to provide the agency with the best information possible to make an informed decision. I realize this would provide logistical, financial, and staffing challenges, but this is exactly what a number of transit agencies around the country are already doing. The deployments could potentially be planned in succession of each other to reduce workload requirements.

If the agency does not feel it is able to conduct a dual fuel pilot, however, my strong preference would be to choose a BEB pilot. In addition to the cost and emission advantages of BEBs noted above, the differences in fueling approach and technology for BEBs compared to current practices suggest that the agency would have more to learn from a pilot deployment of BEBs. A hydrogen bus deployment, in contrast, seems more straightforward and similar in fueling approach and technology to the current diesel fleet. Also, the biggest risk for a hydrogen bus pilot are the likely high future fueling costs which are largely beyond the agency's control.

I know it has been suggested that the agency would be able to learn about BEBs from the pilot deployment of transit buses at the UM. But would this provide the same level of learning as AAATA conducting its own pilot, and perhaps sharing learnings back with the UM? Probably not. It could perhaps come close if there was a more formal, dedicated partnership with the UM that involved gaining first-hand experience with their buses and gathering data that would be relevant for evaluating a potential deployment for AAATA's own fleet. This would need to include active engagement of agency mechanics and drivers that could get firsthand mechanical and driving experience with the buses and associated charging infrastructure. My concern is that without direct hands-on experience with the technology and its day-to-day operations, the agency would still be ill-prepared for a BEB deployment in the future should that pathway be determined the most promising.

Conclusion and Additional Thoughts about a Potential Mixed Fleet

In summary, I want to stress that the agency should not rule BEBs out and should re-consider choosing Hydrogen buses as the preferred pilot project. In my view, BEBs still hold the promise of being the most cost-effective, low-carbon propulsion solution.

At the same time, though, don't rule out Hydrogen either, and consider a dual-fuel pilot if the agency can figure out a way to overcome logistical and staffing concerns. While there is still significant risk re: future green hydrogen fuel prices, there is also a lot of excitement and innovation ramping up in this space that gives this technology promise. The range advantages of Hydrogen buses could also make the technology a useful supplement to the fleet, even if fuel prices remain high.

Regarding the longer-term technology strategy, I would therefore suggest that instead of making a hard determination one way or another on propulsion technology preference, leave that decision open until the pilot has concluded and you have more information available. The agency should have a clear backup plan if BEB battery technology doesn't continue to improve and thus offer a more cost-effective option, or alternatively, if Hydrogen production costs don't come down significantly.

There is also still a reasonable chance that a mixed fleet approach could end up being an optimum one, combining the low-cost advantages of BEBs with the higher cost but higher range advantage of Hydrogen. This is likely why a number of transit agencies around the country are pursuing a dual-fuel

strategy, in addition to hedging bets on which technology will ultimately win out. Despite all the reasons that were suggested for why dual-fuel strategy would not be optimal, the CEO did say there was one potential reason why it could — if significant cost differences between the two technologies persisted. This is exactly right. While there may be a hope that these cost differences converge, there are again plenty of reasons to suggest why they may not, particularly due to the conversion inefficiencies with the production of green hydrogen.

In closing, I appreciate the opportunity to share my perspective and alternative recommendations for the agency's propulsion strategy. I'm happy to discuss further with anyone who would like to dig deeper, and I am grateful that the agency is now taking a serious step toward the decarbonization of its bus fleet.

Charles Griffith (Ecology Center) 11/29/23

2023 Q4 Service Report

Service Committee Meeting Date: December 5, 2023

Board Meeting Date: December 21, 2023

RECOMMENDED ACTION(S)
<p>Receive as CEO Operational Update.</p>
PRIOR RELEVANT BOARD ACTIONS & POLICIES
<ul style="list-style-type: none"> 2.11.1.5 CEO shall not...Let the Board be unaware of...operational... [and] customer satisfaction metrics... Appendix A: Informational Reports schedule specifies quarterly Customer Satisfaction and Service Performance reports in Dec, March, June, Sept
ISSUE SUMMARY
<p>In accordance with the Board’s Policy Manual, I present the Quarterly Satisfaction and Service Report. I certify that the information is true and complete with exceptions noted, and I request that the Board accept this as an operational update.</p> <p>This report is populated with currently available and reportable data / targets for Fixed Route, A-Ride / Paratransit, VanRide, and FlexRide services.</p> <p>The impact of the COVID-19 Emergency, which emerged in the latter part of Q2 of FY2020, has significantly influenced the collection and reporting of data. Therefore, the comparison of Q4 figures from FY2023 with those of FY2019 serves as a benchmark to gauge performance metrics in a pre-pandemic context. Moreover, juxtaposing the data between Q4 of FY2023 and Q1 of FY2022 provides valuable insights into our journey through the pandemic and subsequent stages of recovery. This analysis allows us to discern the trajectory of progress amid the evolving landscape of these challenging times.</p> <p>The data from Q4 of FY2023 illustrates a system that is still recuperating from reduced services, which were marked on January 29th due to labor shortages. These services were gradually reinstated between October and December 2022. Nationally, the resurgence of public transit usage has been slow as remote work continues to shape post-pandemic work culture. Simultaneously, labor shortages persist in service sector jobs, further impacting the recovery process.</p> <p>Readers should note, numbers reported at the end of the quarter have undergone validation and confirmation required through the NTD process. Some numbers were quarterly estimates based on reported financial and operating data. Historic numbers presented in this document have been updated to reflect the validated data submitted to NTD.</p>
ATTACHMENTS
<ol style="list-style-type: none"> 1. Highlights Brief 2. FY 2023 Q4 Service Report



Ann Arbor Area Transportation Authority

Operations Report

For the Period Ended September 30, 2023

Q4 Service Report

Fixed Route

Fixed Route Measure	FY 2023 Q1	FY 2023 Q2	FY 2023 Q3	FY 2023 Q4	Q4 19 - Q4 23	Q4 20 - Q4 23	Q4 21 - Q4 23	Q4 22 - Q4 23
Boardings	1,111,811	1,141,926	1,002,837	1,093,896	-32%	70%	39%	11%
Boardings/Revenue Hour	16.1	16.8	15.1	16.4	-30%	56%	23%	7%
Cost/Revenue Hour	\$132.05	\$151.08	\$156.35	\$156.80	16%	-3%	6%	1%
Cost/Boarding	\$8.21	\$8.98	\$10.38	\$9.55	79%	-130%	-22%	-7%
Preventable Accidents Injury/100,000 miles	1.0	1.0	1.2	0.8	-57%	-160%	-76%	-37%
On-time Performance	NA	NA	81%	76%	6%	NA	2%	NA
Percent of Passengers on an On-time Bus	NA	NA	NA	NA	NA	NA	NA	NA
Avg Miles Between Road Calls	23,825	26,996	31,387	32,937	24%	15%	17%	7%
Average Age of Fleet	6.99	6.4	7.99	7.86	21%	22%	19%	4%
Complaints/100,000 Boardings	0.6	1.9	2.6	1.9	48%	19%	69%	31%
Compliments/100,000 Boardings	0.8	3.9	2.0	1.9	-38%	-94%	14%	41%

<p> Fixed Route Boardings at the end of Q4 were 1,093,896</p> <p> Preventable Accidents were lower at the end of Q4 compared to Q3</p> <p> Complaints were lower at the end of Q4 compare to Q3</p>	<p>Boardings for Q4 of 2023 Boardings for Q4 of 2023 are up compared to Q3, and when compared to Q4 of 2022 we see that ridership is still up</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: right;">Boardings Q4 of 2023</td> <td style="text-align: right;">1,093,896</td> </tr> <tr> <td style="text-align: right;">Boardings Q4 of 2022</td> <td style="text-align: right;">977,164</td> </tr> <tr> <td style="text-align: right;">Growth in Boardings</td> <td style="text-align: right;">116,732</td> </tr> </table>	Boardings Q4 of 2023	1,093,896	Boardings Q4 of 2022	977,164	Growth in Boardings	116,732
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Growth in Boardings	116,732						



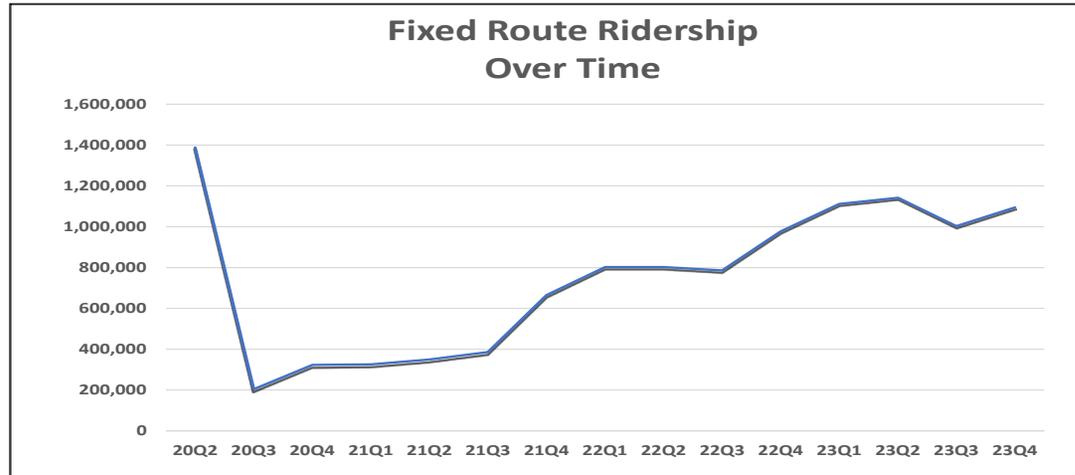
Ann Arbor Area Transportation Authority

Operations Report

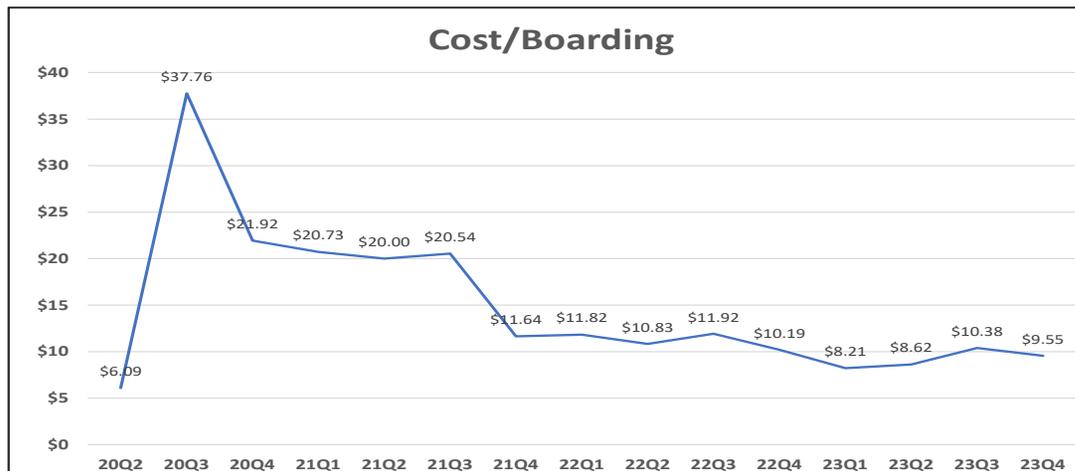
For the Period Ended September 30, 2023

Q4 Service Report

Fixed Route Ridership Comparison



Fixed Route Cost Per Boarding





Ann Arbor Area Transportation Authority

Operations Report

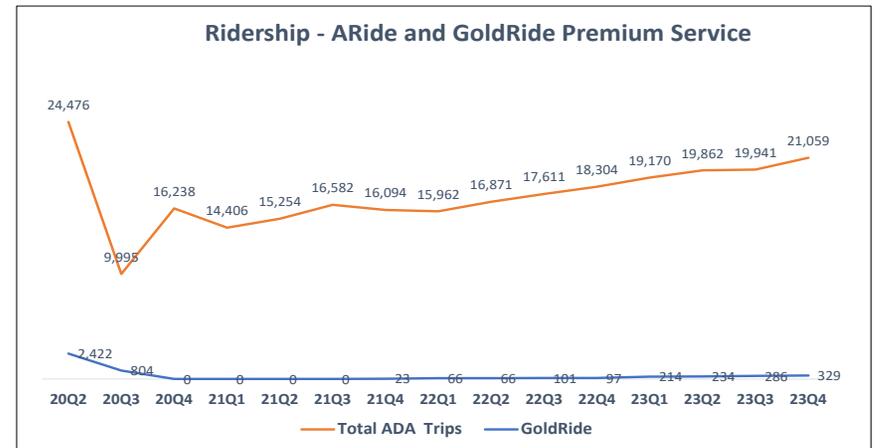
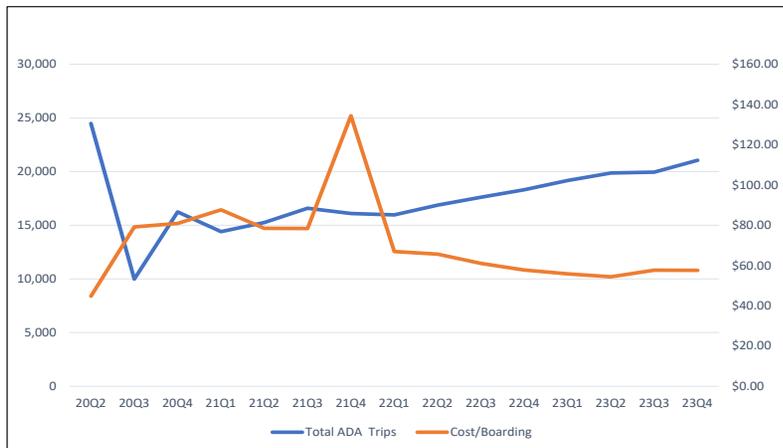
For the Period Ended September 30, 2023

Q4 Service Report

Arise / ParaTransit

MV - ARide/ParaTransit Measure	FY 2023 Q1	FY 2023 Q2	FY 2023 Q3	FY 2023 Q4	Q4 19 - Q4 23	Q4 20 - Q4 23	Q4 21 - Q4 23	Q3 22 - Q3 23
Revenue Miles	175,900	182,223	187,814	186,852	2%	43%	29%	7%
Revenue Hours	11,954	12,237	13,539	14,145.30	-48%	-17%	33%	18%
Operational Cost	\$1,070,335	\$2,115,524	\$14,145	\$1,717,443	27%	31%	-21%	63%
Senior Trips	214	234	286	329	-777%	NA	1330%	262%
Total ADA Trips	19,170	19,862	19,941	21,059	-38%	30%	31%	15%
Cost/Revenue Hour	\$89.54	\$172.88	\$1.04	\$121.41	51%	58%	-40%	38%
Boardings/Revenue Hour	1.62	1.64	1.49	1.51	-1%	59%	18%	-1%
Cost/Boarding	\$55.83	\$54.36	\$57.65	\$57.58	32%	-29%	-57%	0%
Ontime Performance with 30 Minute Service Window	96%	95%	98%	97%	1%	2%	0%	0%
Complaints/100,000	31.3	85.6	90.3	76.0	5%	106%	-47%	39%
Compliments/100,000	104.33	120.83	30.09	37.99	NA	-56%	104%	-71%
ADA Service Denials/ADA Boardings	13	5	14	7	100%	NA	NA	NA

(MV) Arise Ridership Cost Per Boarding





Ann Arbor Area Transportation Authority

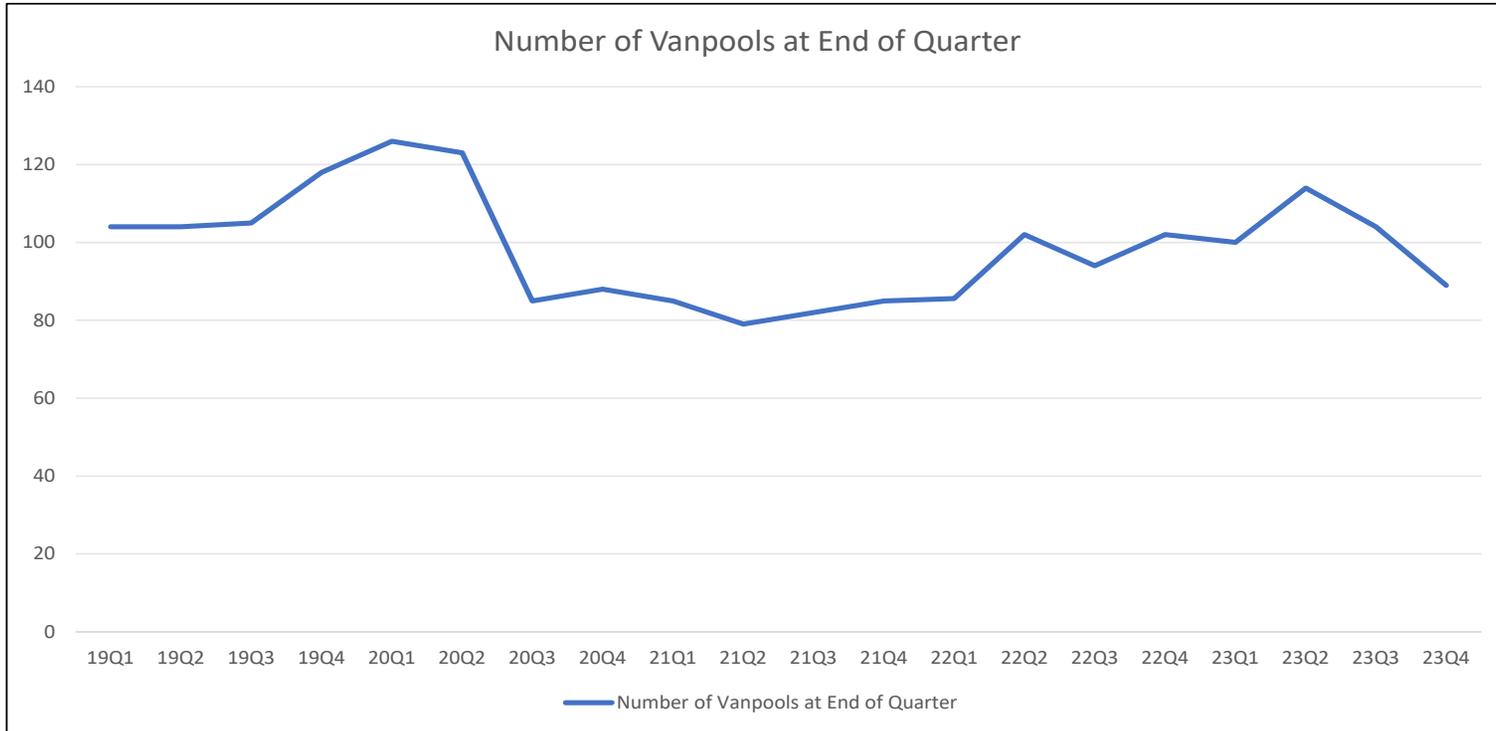
Operations Report

For the Period Ended September 30, 2023

Q4 Service Report

Vanpool

VanPool Measure	FY 2023 Q1	FY 2023 Q2	FY 2023 Q3	FY 2023 Q4	Q3 19 - Q3 23	Q4 19 - Q4 23	Q4 20 - Q4 23	Q4 21 - Q4 23	Q3 22 - Q3 23
Number of Vanpools at End of Quarter	100	114	104	89	-1%	-24%	1%	5%	-13%
Number of Rider Trips Taken	37,778	40,025	41,856	41,270	-30%	-36%	19%	12%	195%
Avg Fuel Cost to Rider	\$37.12	\$61.55	\$54.52	\$62.44	66%	102%	100%	34%	39%
Avg Monthly Rider Miles	154,033	152,580	162,418	157,248	14441%	13978%	13444%	12185%	57367%
Federal Subsidy/Rider Trip	\$3.32	\$3.96	\$3.22	\$3.81	10%	43%	-18%	3%	NA
Rider Miles/Gallon	10.24	25.29	29.47	28.54	-67%	-71%	-64%	-68%	182%





Ann Arbor Area Transportation Authority

Operations Report

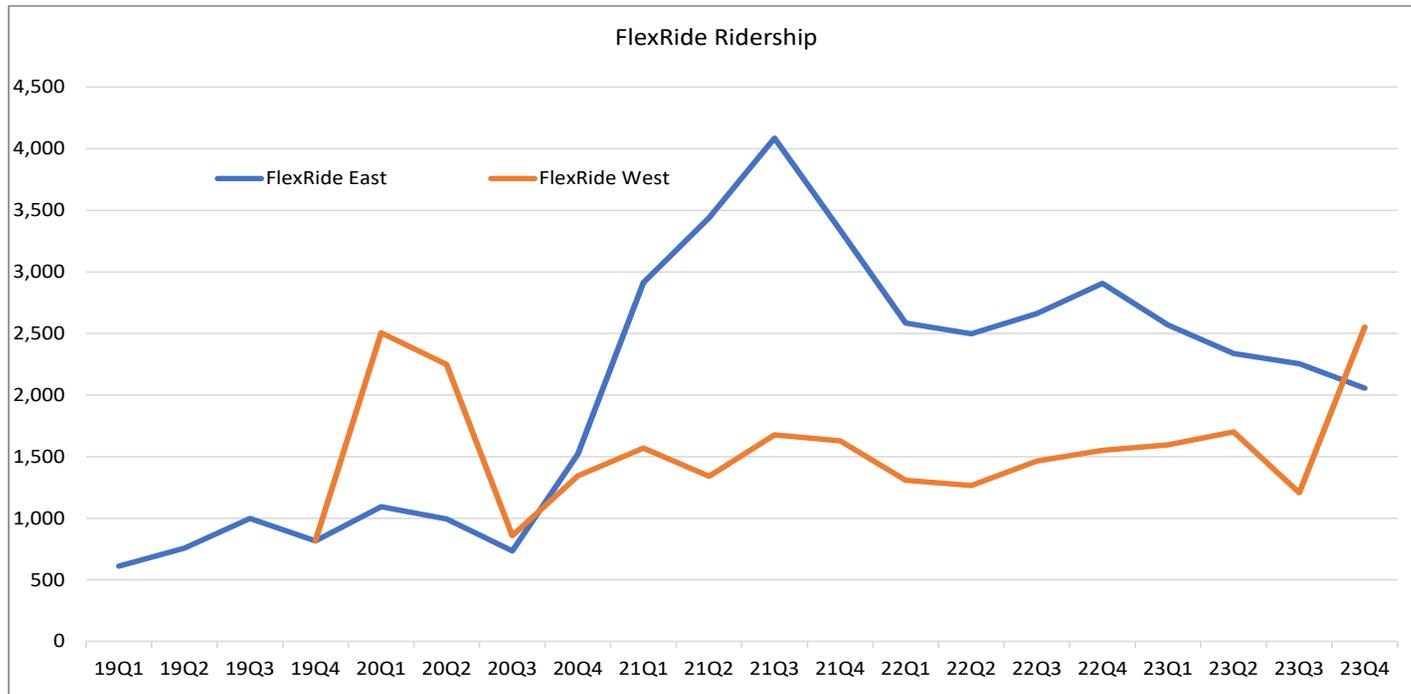
For the Period Ended September 30, 2023

Q4 Service Report

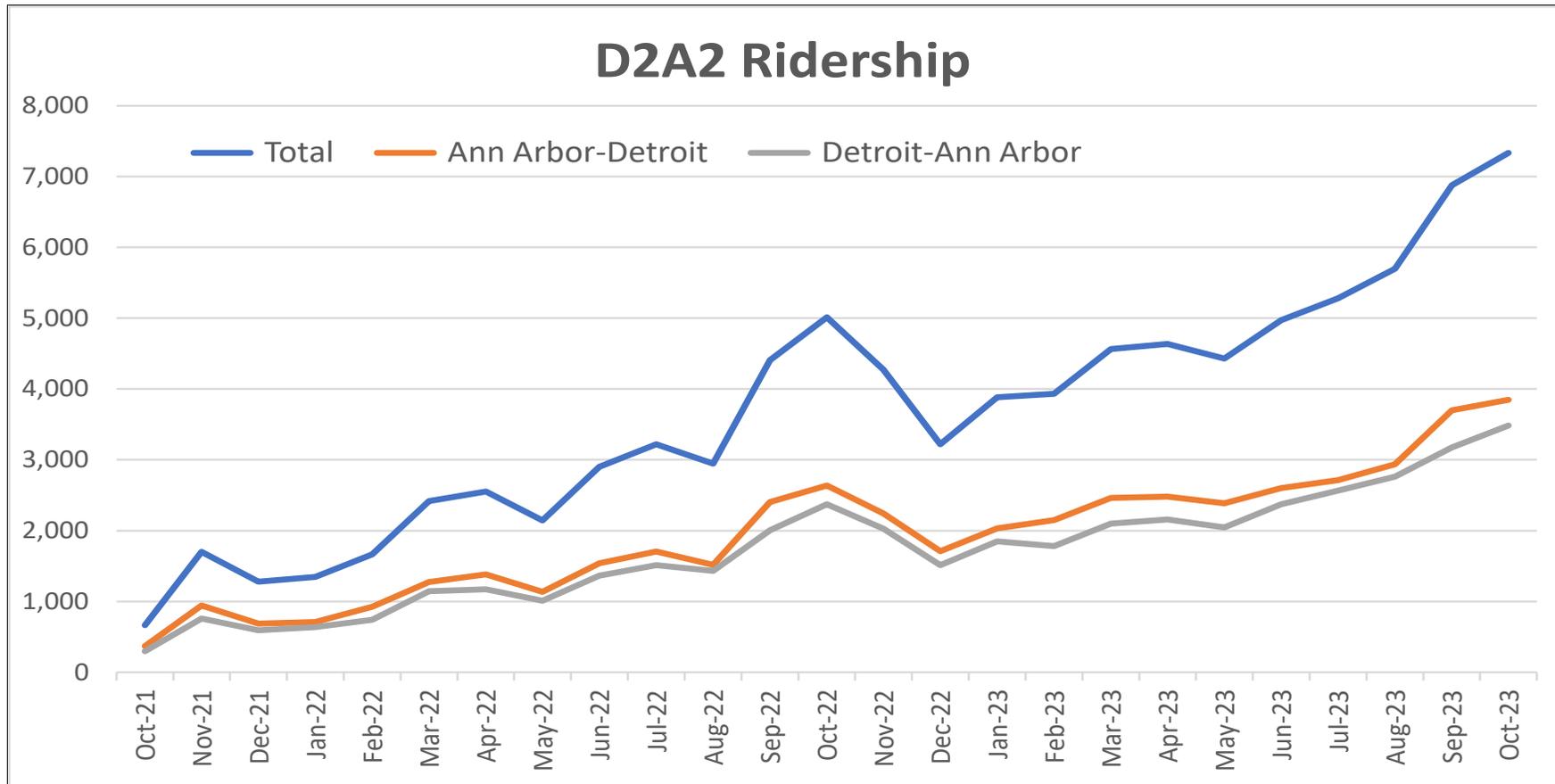
FlexRide

Golden - FlexRide Measure	FY 2023 Q1	FY 2023 Q2	FY 2023 Q3	FY 2023 Q4	Q4 19 - Q4 23	Q4 20 - Q4 23	Q3 21 - Q3 23	Q3 22 - Q3 23
Operational Cost (Contractor)	\$153,851	\$351,330	\$99,050	\$200,307	281%	NA	-2%	30%
Trips - East Service Area	2,568	2,337	2,254	2,055	152%	35%	-38%	-29%
Trips - West Service Area	1,595	1,701	1,206	2,553	212%	90%	57%	64%
Cost/Boarding	\$36.96	\$87.01	\$28.63	\$43.47	35%	NA	6%	26%
Complaints	NA	NA	2	1				
Compliments	NA	NA	0	0				
Denials East	NA	11	29	9				
Denials West	NA	6	3	0				
Denials Late Night/Holiday	NA	21	36	34				
Boardings	NA	6402	5980	5639				
Trip Denials	NA	38	68	43				

Data for Q1 of FY23 is unavailable as it was not requested or measured until Q2 of FY23



D2A2



CEO Report

Meeting: Board of Directors

Meeting Date: December 21, 2023

INFORMATION TYPE

Other

LONG-RANGE PLAN STATUS UPDATES

2022 MILLAGE SERVICES

Public input for the 2024 Millage Services was conducted from October 23 - November 23, 2023. Approximately 200 people attended public and employee drop-in sessions, and many people provided feedback through website submissions or social media.

Messages received are being summarized into categories of content. Comments received on the millage services were generally positive, with praise given to the expansion of weekend hours and frequency. Comments regarding current services were also given, providing potential areas of concern for analysis moving forward.

YPSILANTI TRANSIT CENTER PLANNING

DLZ, HDR, and TheRide conducted an official project kickoff the week of November 13, 2023. AAATA and the consultant team met with the project working group, held open meetings with each department, conducted drop-in listening sessions for all internal employees, visited and toured the current site, and discussed the project with the City of Ypsilanti. The team will now move into validating and updating the work from the 2018 Needs Assessment, including facility programming, confirming the site, and working with the FTA to ensure we are following all federal guidelines. We will also begin planning the stakeholder and public engagement opportunities that will be held in spring 2024.

MDOT WASHTENAW AVENUE and US-23 STUDIES

Staff from MDOT and TheRide met on December 8, 2022 to discuss transit needs along these corridors. Various alternatives were reviewed, and feedback was provided to the consulting team for their consideration. TheRide reemphasized strong needs for dedicated bus lanes/queue jump lanes at some congested intersections along Washtenaw Ave including the US-23 bridge to facilitate the implementation of Washtenaw Bus Rapid Transit that was recommended by both the RTA's Regional Master Transit Plan and TheRide 2045 Long-Range Plan. TheRide will continue working with MDOT on these studies to ensure transit needs are incorporated into the final design.

BLAKE TRANSIT CENTER EXPANSION

TheRide continues to work with the Ann Arbor Housing Commission and City staff on the joint development of the old Y-Lot site adjacent to the BTC. Plans and agreements between the partners have not changed and the project is making steady if slow progress. The Housing Commission issued an RFP on December 12, 2023 to attract a co-developer to provide additional design support for the project. A separate study led by the DDA to redesign 4th Avenue from Liberty St. to William St. is ongoing. The goal is to make 4th Avenue more transit/pedestrian friendly along with the BTC expansion project. Initial designs were submitted in summer 2023 to City staff, and the consultant has now

submitted the next phase of design documentation to the City. TheRide's internal staff is also reviewing these plans and associated costs. TheRide will ensure that various stakeholders, including drivers, customers, and other staff, among others, have continuing opportunities to provide input.

ZERO EMISSIONS BUS PROPULSION

TheRide continues to welcome public participation and comments during public time at the Board of Director's meetings in November regarding the CEO's recommendation. Staff gave completed multiple Peer to Peer site visits including, Champaign Urbana, Flint MTA (Hydrogen) Peer to Peer site visit complete., SEPTA, U of M, DDOT, SARTA. Staff have also reached out to WCC and EMU about a potential partnership in developing a work force development plan for hydrogen technology.

OPERATIONAL UPDATES

LOCAL ADVISORY COMMITTEE (LAC)

Active recruitment for new LAC members is underway.

TRANSPORTATION COMMISSION (ANN ARBOR)

The Commission met in November. On the agenda was routine updates, including a downtown circulator study conducted by the DDA/ The Commission is starting to assemble an annual workplan and AAATA staff requested that bus lanes be added as an item for the Commission to discuss.

WATS POLICY COMMITTEE UPDATE

The Policy committee met in November and transacted normal business, including routine calls for TIP amendments and modifications. The TIP is a shorter-range listing of potential transportation projects hoping to receive federal funding. AAATA projects are routinely included in the TIP.

STAFFING UPDATES

We are thrilled to announce the hiring of Jeffrey Pfeiffer as the Manager of Public Affairs he will begin in early January 2024. The Community Relations department has been renamed to Public Affairs. Seven Motor Coach Operators graduated training on December 1st. Eight Motor Coach Operators celebrated their 1-year in service on November 29th. A class of 12 Motor Coach Operators will begin training on December 19th. Motor Coach Operator, Sania Coleman will retire after 19 years of service on December 19th. All current FTE's have been filled in the maintenance department marking a first in over eight years.

HOLIDAY CELEBRATION

A holiday luncheon was held on December 15 to celebrate the season and the team, the first time in several years due to the pandemic.

SAFETY TRAINING

The safety team is planning for the 2024 annual refresher training for operations staff, including an enhanced de-escalation training, and is partnering with external experts to complete an ergonomics review of the driving area for Motor Coach Operators.

VEHICLE DISPOSAL

Staff is working with procurement and Finance to dispose of 12 vehicles and awaiting FTA Approval to start Auction process. (6 Fixed route/ 5 A-ride/ 1 facilities)

Alternative Board Meeting Location

Board of Director’s Meeting Date: December 21, 2023

INFORMATION TYPE
Decision
RECOMMENDED ACTIONS
Approve an alternative meeting location for February 22, 2024 Board meeting.
BACKGROUND
Board members representing Ypsilanti and Ypsilanti Township had requested staff investigate the feasibility of alternative meeting locations within their represented areas. Meetings are currently held at the Ann Arbor District library in downtown Ann Arbor.
ISSUE SUMMARY
<p>Staff have been researching meeting locations in Ypsilanti and Ypsilanti Township that could potentially host a future Board of Director’s meeting. Considerations for meeting location included:</p> <ul style="list-style-type: none"> • ADA accessibility • Willingness to accommodate a night-time meeting • Technological capacity to support a board meeting • Physical space to support our board members and attendees (along with a space that could support a potential closed session) • Distance from fixed route service • Availability of later-evening bus service back to the Ann Arbor area <p>After several site visits to various locations, staff determined that the Riverside Arts Center (76 N Huron Street, Ypsilanti) met the required considerations. This meeting site is fully accessible and located down the street from the YTC which has late night service. The building/meeting space has a projector and screen, and ample space for our meeting, along with adequate technology, parking and an elevator to support any ADA concerns. The meeting space is also available until midnight.</p>

Zero-Emissions Bus Propulsion

CEO Recommendation

December 2023

Agenda

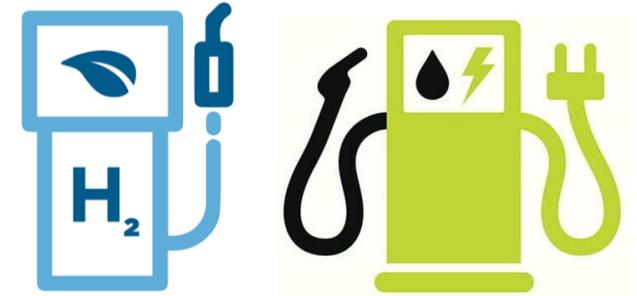
- I. Recap
 - I. Zero-emission: Hydrogen
 - II. Addition of Hybrids
- II. Next Steps & Decisions
- III. Closing
- IV. Discussion



CEO Recommendation Recap

CEO has changed recommendation to include two parts:

- **Part I: Hydrogen Pilot**
- **Part II: Hybrid Bus Replacements (New)**



Part I: Hydrogen Pilot Project

- Pilot project (4 years)
- 2 hydrogen fuel-cell buses
- 1 outdoor tank/fueling station
- Workforce Training

- Final cost to TheRide: \$2.2 million
- Total Cost: \$9.3 million
- Dependent on Fed/State grant (Low-No)



Battery / Hydrogen Comparison

	<u>BATTERY</u>	<u>HYDROGEN</u>	<u>ADVANTAGE</u>
Public/political familiarity	High	Low	BEB
Future energy costs	Unknown	Unknown	TBD
Future emissions from energy production	Unknown	Unknown	TBD
Tailpipe Emissions	None	None	Tie
Expense of back-up energy supply	High	None	Hydrogen
Charging time	4 Hours	15 Minutes	Hydrogen
Range Implications	Too low	Adequate	Hydrogen
-Fleet growth (for same service)	30-40%	None	Hydrogen
-Costs for additional garage space	Very High	None	Hydrogen
-Operational complexity	High	Low	Hydrogen
-Hidden costs	Likely	None	Hydrogen
Expensive garage modifications	Yes	Yes	Tie
Risk of fire	High	Low	Hydrogen
Risks to passenger services (via operating costs)	Mid	None	Hydrogen
Speed of Implementing	2+ years	2+ years	Tie
Costs for small deployment	Lower	Higher	BEB
Costs for large deployment (ie scalability)	High	Lower	Hydrogen

Public feedback: What We Heard

11 comments (10 in October)

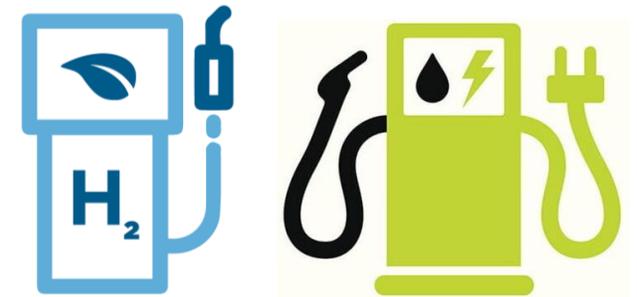
- Service-first (4), pro ZEB (2)
- Pro hydrogen (1), BEB (1), unclear (2), Trolley-bus (1)
- Other: Go faster (1), Pro pilot (1),
- Little social media feedback (3 posts)
- Have not heard from any elected officials or institutions
- No sign of huge interest or political pressure



CEO Recommendation Recap

CEO has changed recommendation to include two parts:

- **Part I:** Hydrogen Pilot
- **Part II:** Hybrid Bus Replacements (New)
- Why the change?



Part II: Hybrid (Diesel/Electric)

What is a hybrid diesel/electric bus?

- Small motor charges battery
- Mechanically better than early hybrids
 - Engine off much of time
 - Batteries better
 - Problematic components engineered out
- No range limits, facility upgrades, new skills or tools
- About 25% less emissions than diesels, older hybrids
- About 25% more expensive than diesels. Still cheaper than ZEBs.



Part II: Hybrid (Diesel/Electric)

Initial Recommendation:

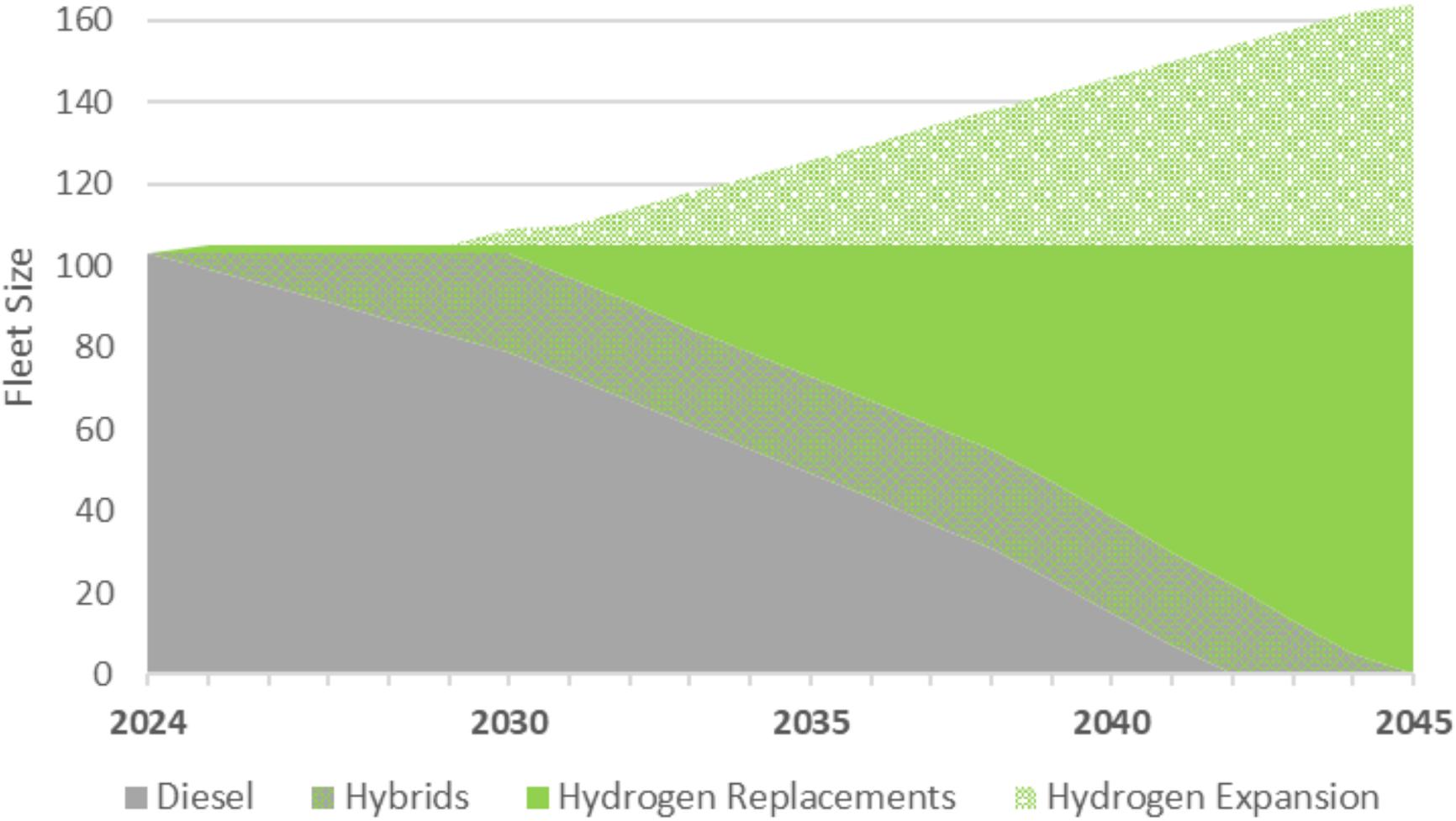
- Replace old buses w/diesels during pilot
- Lower total cost, but no outside grants

New approach:

- Replace w/ hybrids not full diesel
- Outside funding is high
- More emission reductions faster



Bus Fleet by Propulsion Type (Example)



Part II: Hybrid (Diesel/Electric)



Strong financial incentive

- Two funding pots:
 - Formula capital and Low-No grant (competitive)
 - Low-No will pay 80% of hybrids but not diesels
 - Could pay 100% of diesels from formula, or 10%-20% for hybrids (new money) freeing up formula funds
- \$2.4m from Capital Reserve for hybrids frees up \$12m (1:6 ROI)
- Supports other capital projects, pays for hydrogen pilot



Estimate of Capital Funding Impact of Hybrid Bus Replacement

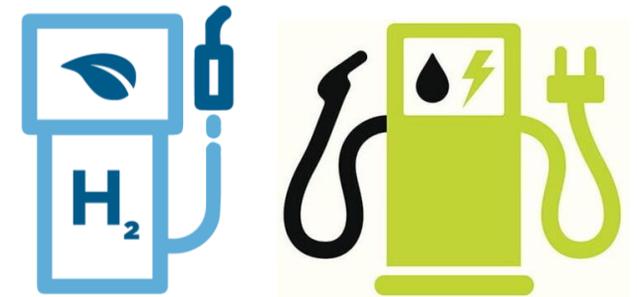
(\$ in thousands)

	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total
Number of Buses	4	4	4	4	4	20
Diesel Replacement Scenario						
Cost Per 40' Diesel Bus	\$ 750	\$ 810	\$ 870	\$ 940	\$ 1,020	
Total Bus Cost	\$ 3,000	\$ 3,240	\$ 3,480	\$ 3,760	\$ 4,080	\$ 17,560
<i>Funding Sources</i>						
<i>Federal Formula Funding (5307), 80%</i>	\$ 2,400	\$ 2,592	\$ 2,784	\$ 3,008	\$ 3,264	\$ 14,048
<i>State Match, 20%</i>	600	648	696	752	816	3,512
Hybrid Replacement Scenario						
Cost Per 40' Hybrid Bus	\$ 1,020	\$ 1,100	\$ 1,190	\$ 1,290	\$ 1,390	
Total Bus Cost	\$ 4,080	\$ 4,400	\$ 4,760	\$ 5,160	\$ 5,560	\$ 23,960
<i>Funding Sources</i>						
<i>Federal Low-no Funding Opportunity, 80%</i>	\$ 3,264	\$ 3,520	\$ 3,808	\$ 4,128	\$ 4,448	\$ 19,168
<i>State Match, 10% (TBD, could be up to 20%)</i>	408	440	476	516	556	2,396
<i>Local Funding, 10%</i>	408	440	476	516	556	2,396
Summary of Impacts to Capital Funding						
Federal Formula Funding Decommited	\$ 2,400	\$ 2,592	\$ 2,784	\$ 3,008	\$ 3,264	\$ 14,048
Local Funding Cost <i>(likely the Capital Reserve)</i>	(408)	(440)	(476)	(516)	(556)	(2,396)
Net Additional Funding Available for Capital Projects	\$ 1,992	\$ 2,152	\$ 2,308	\$ 2,492	\$ 2,708	\$ 11,652

CEO Recommendation Recap

CEO has changed recommendation to include two parts:

- **Part I:** Hydrogen Pilot
- **Part II:** Hybrid Bus Replacements (New)



Summary of Estimated Zero and Low Emissions Project Costs and Funding Sources

(\$ in thousands)

Funding	Federal	State	Local	Total
Zero Emissions - Hydrogen Fuel Cell Bus Project				
Capital Costs	\$ 7,113	\$ -	\$ 1,778	\$ 8,891
Operating Costs*	-	-	452	452
<i>Subtotal</i>	<u>\$ 7,113</u>	<u>\$ -</u>	<u>\$ 2,230</u>	<u>\$ 9,343</u>
Low Emissions - Hybrid Bus Replacements				
Capital Costs	\$ 19,168	\$ 2,396	\$ 2,396	\$ 23,960
Operating Costs	-	-	-	-
<i>Subtotal</i>	<u>19,168</u>	<u>2,396</u>	<u>2,396</u>	<u>23,960</u>
Total Zero and Low Emissions				
Capital Costs	\$ 26,281	\$ 2,396	\$ 4,174	\$ 32,851
Operating Costs	-	-	452	452
<i>Total</i>	<u>\$ 26,281</u>	<u>\$ 2,396</u>	<u>\$ 4,626</u>	<u>\$ 33,303</u>

*Local operating costs do not reflect the impact of state funding for eligible operating expenses.



Agenda

- I. Recap
 - I. Zero-emission
 - II. Addition of Hybrids
- II. Next Steps & Decisions
- III. Closing
- IV. Discussion



Decision Timeline (Not Tonight)

1. **January 2024:** Congress appropriates grant funds. Initial Board Decision (AAATA)
2. **February:** Grant opens
3. Feb-March: Final Board approval
4. March: Staff submits application
5. **April:** Grant Deadline
6. **July-Oct:** Grant Awards
7. **Post Fed Award:** MDOT finalizes their local share. AAATA Costs finalized



Board options

Board can:

- A. Approve CEO Recommendation
- B. Modify recommendation
- C. Create new direction
- D. Defer decision



Board Authorizations

January 2024:

Need soft decision on scope and costs

1. To submit a construction grant
2. To use Capital Reserve in future (2.5.7)

Feb/March 2024:

Firmer financial commitment to feds

3. Approve “Transition Plan”



Closing

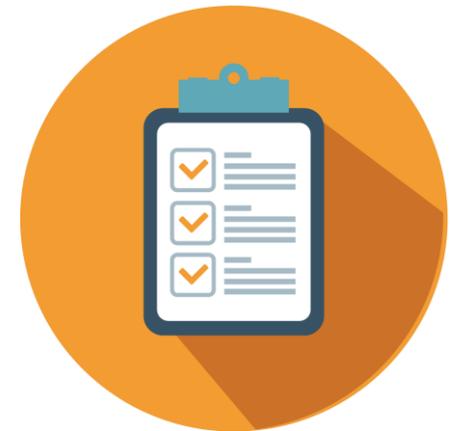
- Deadlines approaching but still time for deliberation
- Board has choices, staff need clear decision
- Hard to set priorities, judge risk in fast changing and uncertain times



Closing

CEO Recommendation

- Staff are confident and in agreement
- Hydrogen is best option
 - Visible zero-emission progress
 - Better chance for full deployment
 - Risks and impact to other priorities reduced
- More emissions reductions sooner
- Improved financial benefit
- Best policy compliance



Continuing Public Feedback

- Visit www.TheRide.org for information and feedback opportunities
- Submit written comments via web form or email
- Attend TheRide board meeting to make public comment



Zero-Emissions Bus Propulsion

CEO Recommendation

December 2023