TheRide

1.0 Ends

Monitoring Report for the Period: October 1, 2017 – September 30, 2018

Date of Report: December 6, 2018
Board Meeting: December 20, 2018

TheRide board;

In accordance with the Board’s Policy Manual; I present a preliminary Monitoring Report on Ends Policies. This report consists of internal report information from staff. Though this version of policies were not in effect until June 2018, I have assembled this report as if they were (where feasible). I certify that the information is true, but not yet complete.

In preparing this report, it has become clear that much more work will be necessary to truly provide compelling evidence on advancement towards outcomes. We have learned that interpreting and measuring Ends are more difficult than measuring compliance with Executive Limitations policies. Challenges we’ve encountered include:

- Creating meaningful interpretations that can be used to reveal the agency’s impact on outside situations.
- Inadequate and outdated data available, often not at a scale that is useful in measuring agency impacts.
- Reliance on proxy measures when outcome measures are not readily possible.

I have chosen to focus on developing interpretations and potential evidence measures in this draft. Actual evidence of compliance will need to come later. Striking a balance between comprehensiveness and conciseness is a concern. Even without evidence, this report is already almost 30 pages long and contains about 50 different metrics.

Nevertheless, I believe this report is the starting point of developing true measures of the AAATA’s impact in our communities. It will benefit from feedback from the Board, staff and the public. We may wish to bring back an interim Ends report for additional review in six months.

Matt Carpenter,
CEO
Ann Arbor Area Transportation Authority
**POLICY TITLE: Ends**

1.0 AAATA exists to provide access to destinations throughout the Ann Arbor-Ypsilanti Area for increasing numbers of residents, workers and visitors via transportation options that contribute to the Area’s social, environmental and economic vitality at a cost that demonstrates value and efficient stewardship of resources.

1.1. All residents of the Area can participate fully in society without a personal vehicle.
   1.1.1. People with low incomes can afford to travel in the Area.
   1.1.2. People, including those with disabilities or mobility impairments, seniors, minors, and non-English speakers, have equitable access to opportunities in the Area.
   1.1.3. People with access to a personal car find public transit to be an attractive alternative.
   1.1.4. Passengers are highly satisfied with public transportation services that are safe, reliable, courteous, comfortable, convenient, and fast.

1.2. The Area’s natural environment is enhanced.
   1.2.1. The Area’s overall transportation system minimizes energy use and pollution.
   1.2.2. The Area’s carbon footprint is reduced.
   1.2.3. The Area’s air is cleaner.
   1.2.4. The Area’s natural resources are conserved.
   1.2.5. Land development can become more compact and walkable in part because of transportation options.
   1.2.6. Agency operations make efficient use of energy, water, materials, and other natural resources; and minimize waste.

1.3. The Area prospers economically.
   1.3.1. Workers and students can access employment opportunities without need of a personal vehicle.
   1.3.2. Employers have access to a diverse labor pool.
   1.3.3. Visitors have access to the Area.
   1.3.4. The Area’s economy grows despite limited parking and auto congestion.
   1.3.5. The Area is connected to the Metro Detroit region.
   1.3.6. Local leaders are aware of the contribution public transportation makes to the community.
   1.3.7. The Authority will remain economically viable in the long term.
Policy 1.0

AAATA exists to provide access to destinations throughout the Ann Arbor-Ypsilanti Area for increasing numbers of residents, workers and visitors via transportation options that contribute to the Area’s social, environmental and economic vitality at a cost that demonstrates value and efficient stewardship of resources.

Compliance:

Interpretation and Rationale:

- **Access** - I interpret “access” in this context to mean the ability to reach desired goods, services, activities, and physical locations. This is the primary goal of any transportation system. Making access the primary focus of transportation stands in contrast to traditional 20th Century paradigms that emphasized mobility and reducing traffic congestion – both of which favored road construction rather than movement of people.

  This approach will have important implications for AAATA activities and measures of performance. Primary measure of success in this area will be ridership and ridership per capita¹.

  For a concise discussion on the different transportation approaches, please read Measuring Transportation: Traffic, Mobility and Accessibility” from the Victoria Transport Policy Institute.

- **Geographic Scope** - I interpret the “Area” to be the municipal limits of the City of Ann Arbor, City of Ypsilanti, and Ypsilanti Township; as well as the northern section of Pittsfield Township that are north of Ellsworth Road, and other specific outlying areas for which there are contracted arrangements. At the same time, the larger area from which workers commute to our Area extends into neighboring counties and even states (we have vanpools originating from Toledo, OH). The focus of achieving our Ends will be within the Area, but may sometimes extend beyond the Area’s boundaries in order to achieve those Ends.

- **Any Mode of Travel** - I interpret the words “...provide access to destinations...via transportation options” to mean that the AAATA can provide, use or promote any type of vehicle, include none at all, that best facilitates access to destinations. While the AAATA’s history is as a bus company, this approach frees us to become a mobility agency. This also suggests a continuing diversification of our portfolio of services and likely an intensification of those services in the most populated parts of the Area. Different modes are better suited to different circumstances, and not all services may be provided uniformly throughout the Area.

¹ To increase ridership per capita means growing ridership faster than general population growth (presently at around 1.5% annually). This would suggest an increasing share of the travel market. However, with many services already experiencing crowding and resources limited, it future planning will be needed if this goal is to be achieved.
• **Social, and Environmental and Economic Vitality** - All of these objectives are fully defined, interpreted and evidenced below, in the sub policies of this section. It is important to note that all of these objectives as derived from overall ridership. If ridership increases, then we will be advancing these objectives as well.

• **Shaping the Future** - Providing access to destinations can be improved by providing more services or by increasing the number of destinations in an existing area. Increasing the numbers of *all* destinations (jobs, housing, shopping, recreation, etc) near existing services holds much great potential to meet the Board’s Ends outcomes of ensuring access. Influencing land development decision is the most proactive way to shape the future of transportation demand. This approach can affect the performance of all agency services and policy compliance. However, it is more fully discussed and evidenced under policy 1.2.5.

• **Cost and Value** - I interpret the requirements for cost and value to mean that the means and tactics the AAATA uses to advance the Ends must be used in the most cost-effective manner possible, so as to maximize the benefits and Ends results of the agency’s limited resources. Financial means are further limited by eh Board’s executive Limitations policies, and can best be measured with benchmarking against similar agencies for metrics such as cost per hour and cost per trip.

**Evidence:**

1. Total Ridership by type of service (fixed-route, paratransit, vanpool, bikeshare, etc)
2. Ridership/Capita (Benchmark)
3. Cost Efficiency (Maybe cost per trip and benchmarked)

**Ridership**

<table>
<thead>
<tr>
<th>Ridership by Service</th>
<th>FY 2013</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016</th>
<th>FY 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Route: Local+ Event</td>
<td>6,428,724</td>
<td>6,376,611</td>
<td>6,327,729</td>
<td>6,291,695</td>
<td>6,596,905</td>
</tr>
<tr>
<td>ExpressRide</td>
<td>37,083</td>
<td>40,164</td>
<td>34,249</td>
<td>29,414</td>
<td>26,212</td>
</tr>
<tr>
<td>Demand Response</td>
<td>135,029</td>
<td>131,215</td>
<td>130,978</td>
<td>140,820</td>
<td>148,493</td>
</tr>
<tr>
<td>AirRide</td>
<td>59,008</td>
<td>72,394</td>
<td>80,350</td>
<td>84,429</td>
<td>84,752</td>
</tr>
<tr>
<td>NightRide</td>
<td>39,284</td>
<td>37,338</td>
<td>31,043</td>
<td>25,654</td>
<td>23,634</td>
</tr>
<tr>
<td><strong>Total Ridership</strong></td>
<td><strong>6,699,128</strong></td>
<td><strong>6,657,722</strong></td>
<td><strong>6,604,349</strong></td>
<td><strong>6,572,012</strong></td>
<td><strong>6,879,996</strong></td>
</tr>
</tbody>
</table>

**Change in Ridership year to year**

<table>
<thead>
<tr>
<th>Ridership by Service</th>
<th>FY 2013 Baseline</th>
<th>FY 2014 vs FY13</th>
<th>FY 2015 vs FY14</th>
<th>FY 2016 vs FY15</th>
<th>FY 2017 vs FY16</th>
<th>Total Change 2013 vs 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Route: Local+ Event</td>
<td>--</td>
<td>-1%</td>
<td>-1%</td>
<td>-1%</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>ExpressRide</td>
<td>--</td>
<td>8%</td>
<td>-15%</td>
<td>-14%</td>
<td>-11%</td>
<td>-29%</td>
</tr>
<tr>
<td>Demand Response</td>
<td>--</td>
<td>-3%</td>
<td>0%</td>
<td>8%</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td>AirRide</td>
<td>--</td>
<td>23%</td>
<td>11%</td>
<td>5%</td>
<td>0%</td>
<td>44%</td>
</tr>
<tr>
<td>NightRide</td>
<td>--</td>
<td>-5%</td>
<td>-17%</td>
<td>-17%</td>
<td>-8%</td>
<td>-40%</td>
</tr>
<tr>
<td><strong>Total Ridership</strong></td>
<td>--</td>
<td>-1%</td>
<td>-1%</td>
<td>0%</td>
<td>5%</td>
<td>3%</td>
</tr>
</tbody>
</table>
Policy 1.1

All residents of the Area can participate fully in society without a personal vehicle.

Compliance:

Interpretation and Rationale:
I interpret this policy to mean that 90% of residences will be within 0.5 mile walk of most major destinations necessary to sustain a fullfilling life.

I believe this policy is more fully interpreted and evidenced in the sub policies below.

Evidence:

1. Fixed-route Coverage - Within a 0.5 mile walk from a bus stops the fixed-route bus service will provide access to:
   a. 90% of residences
   b. 90% of employment locations
   c. 100% of hospitals
   d. 90% of other medical facilities
   e. 100% of universities
   f. 100% of high schools
   g. 100% of customer-serving government facilities and municipal headquarters
   h. 90% of grocery stores
   i. 90% of public recreation facilities & libraries

2. Complementary Service for Residents Unable to Use the Fixed-Route Bus Service - Paratransit services are available and meet minimum ADA standards within ¾ mile of all fixed-routes – Presently ARide service exceeds ADA standards for coverage with paratransit being provide beyond ¾ mile and essentially the entirety of each member jurisdiction.

[INSERT ARIDE SERVICE AREA MAP]
Policy 1.1.1

People with low incomes can afford to travel in the Area.

Compliance: Compliance unclear.

Interpretation and Rationale:

I interpret this policy to mean that residents of the Area that meet a means test for low income (TBD) are provided with a reduce-price for travel via AAATA fixed-route services.

I interpret this policy to mean that the Board sees the low-income population as a particular population (for whom) that can receive a higher per trip subsidy than other groups (at what cost). This reflects a long-standing priority for public transit services – facilitating access to opportunity for persons unable to afford to use a personal automobile. It also helps advance labor mobility goals outlined in later policies.

I will note that affordability for passengers is not the only factor in setting fares. This is done in the context of policy 1.3.7 and 2.4 regarding the financial health and viability of the AAATA. Such pricing must also be sensitive to the perceptions of other passengers.

Finally, the CEO cannot set fare prices. This is a responsibility the Board has reserved for itself (Policy 2.5.8). With that in mind, I interpret this policy to mean that the CEO is responsible for recommending a fare structure and pricing to the Board that would achieve the desire affect – reducing barrier to access for persons with low incomes.

Evidence:

1. Fare Study – In 2018 the AAATA conducted a study of the agency’s fare structure. This was the first such study in many years. The results are still being reviewed by administration, but first impressions suggest that the fare structure is not optimized for ensuring affordable travel. While there is a low-income fare program (Fare Deal) it may not be effectively organized or targeting the additional subsidy efficiently. The study suggests partial compliance with this policy, at best. However, further review is necessary.

2. Need for Updating the Fare Structure – To adequately comply with this policy may require significant changes to the AAATA’s overall fare structure. This may take 2-3 years.
**Policy 1.1.2**

*People, including those with disabilities or mobility impairments, seniors, minors, and non-English speakers, have equitable access to opportunities in the Area.*

**Compliance:** In compliance.

**Interpretation and Rationale:**

I interpret this policy to mean that potential travelers will not encounter unreasonable barriers to using AAATA services that disproportionately affect persons with mobility limitations or ability to use the English language.

- All AAATA buses, bus stops, buildings and services will be physically accessible and compliant with relevant regulatory laws regarding physical accessibility.
- AAATA information will be available in languages other than English, as per federal legal requirements.

Federal laws represent the minimum acceptable standards for public transit in these areas. The ADA component covers fixed route and complementary paratransit services; vehicles; facilities; information provided; operational policies; training; function, availability, and maintenance of equipment; changes in service or policies; performance measures of contractors, etc. The Title VI component includes provisions regarding Limited English proficiency, public participation, equity analysis, service standards, service change policies, disparate impacts, disproportionate burdens, etc.

Further, I interpret that seniors and minors require no additional accommodation in order to have equitable access – the same opportunity to use AAATA services as anyone else. Economic considerations and fare pricing should be addressed in policy 1.1.1. Any mobility limitations are addressed herein.

*(Note: This policy may overlap with 2.1.2)*

**Evidence:**

1. **Federal Regulatory Compliance:** Minimum legal standards for this policy are established in federal legislation, specifically the Americans with Disabilities Act (ADA) and Title VI. Together these pieces of legislation cover aspects of disparate treatment based on physical and cognitive mobility limitations, age, and language. The Federal Transit Administration conducted a Triennial Review in 2018 and found no issues of non-compliance with relevant laws in these areas. The 2018 FTA Report is available upon request. The AAATA’s most recent Title VI submission was in 2017 and is still being reviewed by the Federal Transit Administration. The full Title VI submission is available upon request.

2. **Paratransit Service** – The ARide service complies with the ADA’s requirement for a paratransit service that complements the fixed-route service. The recent FTA Triennial Review found no compliance issues with our paratransit service, suggesting it is meeting minimum federal requirements. In addition, a recent study of ARide is being concluded. It found that ARide
generally exceeds minimum ADA requirements. The FTA report is available upon request. The Paratransit study is forthcoming in early 2019.

3. **Fleet:** The AAATA bus fleet is highly accessible for anyone with physical mobility limitations. All of the AAATA’s buses are wheelchair accessible and most are low-floor. All have wheelchair ramps that are deployed upon request for any reason. All AAATA buses can lower themselves, or “kneel”, to make boarding and alighting easier, a feature that is activated at all stops without request. All AAATA fixed-route buses include auditory and visual “next stop” announcements.

4. **Buildings:** Both AAATA passenger terminals, (Blake Transit Center and Ypsilanti Transit Center) are wheelchair accessible and meet local building codes for access, bathroom access, braille signage.

5. **Non-English:** TBD

6. **Bus Stops:** During the monitoring period, the AAATA had about 1,270 total bus stops. Of those, 1,065 are near sidewalks and could be made wheelchair accessible. Of those near sidewalks, 59% (626) were already wheelchair accessible by the end of the monitoring period. Each year more stops are made accessible. Sidewalks are a municipal responsibility.
Policy 1.1.3

People with access to a personal car find public transit to be an attractive alternative.

Compliance:

Interpretation and Rationale:
I interpret this policy to mean that fixed-route bus service is seen as competitive in terms of end-to-end travel time and price for trips to:

- downtown Ann Arbor,
- UM main campus,
- UM north campus, and
- downtown Ypsilanti.

These are the areas where the demand for travel is highest, auto parking is expensive enough, and bus routes direct and frequent enough for transit services to be competitive in terms of end-to-end travel time.

Our auto-oriented land development has produced widely diffused, low density trip patterns. It is difficult or impossible for mass transit to serve individual trips cost effectively in these environments, and other modes may be more appropriate. For many residents, bus service in these types of trips will take far longer than by car and will not be an attractive alternative in terms of travel time. Areas where fixed-route transit can be an attractive alternative to car use will be areas with limited parking, such as downtown Ann Arbor and UM campus.
Evidence:

1. **Overall Mode Share** - Mode share is a measure of market penetration for transit. Of all the travel (trips) that were made in a day, how many were made on public transit? During

![Transportation to Work, 2015](image)

* Resident workers age 16 and over
**Policy 1.1.4**

*Passengers are highly satisfied with public transportation services that are safe, reliable, courteous, comfortable, convenient, and fast.*

**Compliance:**

**Interpretation and Rationale:**

I interpret this policy to mean that all AAATA services are to be delivered in a manner that:

- minimizes the potential for harm or injury (safe),
- is consistent with published promises of availability (reliable),
- meets local expectations for politeness of staff (courteous),
- meets or exceeds industry standards for attractiveness (comfort, convenience), and
- not unduly delayed by factors within the control of the AAATA.

**Evidence:**

**Safe:** AAATA services will be considered safe when:

- There are less than 3.5 preventable collisions or passenger injuries per 100,000 miles for fixed route services.
- Riders report *feeling* reasonably safe from physical or mental harm while using AAATA services during regular surveys.

**Reliable:** AAATA services will be considered reliable when AAATA delivers the promised level of performance for each service, within allowable tolerances:

1. Fixed Route buses will depart from timepoints no earlier than 0 minute early or 5 minutes late at least ___ of the time. Transit industry research (TCQSM 3rd ed. p.5.30) indicates that for small and medium-sized cities with transit in mixed traffic that system on-time performance will average between 80-89%.
2. Riders are satisfied with AAATA services reliability during regular surveys.

**Courteous:** AAATA staff are perceived as behaving in polite, respectful, and considerate manner towards riders and others as measured by:

- An average rating of courtesy measures on the fixed route passenger survey of 5+ out of 7.
- Complaints regarding courtesy per 100,000 boardings are ___ or below.

**Comfortable:** The condition and operation of AAATA infrastructure does not cause disappointment and is kept in an attractive condition.

- [Crowding/Standing metrics in development]
- ___% of qualifying, possible bus stops have shelters
- Buses and facilities must be reasonably clean and tidy, with
  - o over 80% of buses scoring over 80/100 bus condition points.
  - o Passenger report satisfaction with cleanliness measures.
    - Cleanliness of bus interiors, terminals, shelters/benches,
Convenient: AAATA services are perceived as reasonably convenient by riders and the public.

3. Riders are highly satisfied with TheRide’s ease of using AAATA services.
   - Distance to bus stop you use most often
   - Sufficient Service to areas you want to go to
   - Directness of Routes
   - Total Duration of your trip

Fast: AAATA services are perceived as competitive with automobiles in terms of travel times.

   - Mean transit travel time / Overall Mean travel time
   - In-service delays due to mechanical fault, driver error, or passenger issue
Meeting: Board of Directors  Date: December 20, 2018

Item 4.1

Policy 1.2

The Area’s natural environment is enhanced.

Compliance:

Interpretation and Rationale:

I interpret compliance with this policy to be demonstrated by compliance with the following sub policies.

Evidence:

See sub policies below.
Policy 1.2.1

The Area’s overall transportation system minimizes energy use and pollution.

Compliance:

Interpretation and Rationale:

I interpret this policy to mean that the AAATA should be working to reduce the prevalence of automobile trips with only a single occupant (the driver) in favor of any alternative transportation option that is more energy efficient and creates less pollution, including reducing demand for travel entirely. This is best measured by overall mode share trends.

Attempting to measure the overall energy use and pollution created by the overall transportation system (the sum total of all trips and all modes) is beyond the AAATA’s ability to calculate. We can assume that most modes produce less GHG emissions per passenger trip than single-occupant vehicles. Therefore, increasing the proportion of trips happening by other modes should have the effect of reducing overall energy use and pollution.

Evidence:

1. Overall mode share trends
Policy 1.2.2

The Area’s carbon footprint is reduced.

Compliance:

Interpretation and Rationale:

I interpret this policy to mean that Green House Gas (GHG) emissions are reduced. This can be via:

- **Direct emissions** - Direct emissions from AAATA operations, for example with greater fuel efficiency and cleaner engines. Rather than attempt to measure the total GHG output of AAATA operations, I suggest focusing on the chief source of GHG emissions - fuel consumption – as a proxy measure for our likely GHG emissions. While there are other operational activities that contribute to GHG production, they are smaller and not worth the effort to track.

- **Displaced emissions** - Emissions from trips that previously were on more polluting modes and have switched to less polluting modes. With great effort we could attempt to measure overall displaced GHG emissions. However, a better measure is mode share for various transportation options. We can assume that most modes produce less GHG emissions per passenger trip than single-occupant vehicles.

Reducing direct emissions from AAATA operations is important and steps are being made in this direction. However, the cumulative effect of reducing the number of single-occupant vehicles is a much larger impact of carbon reduction, and where we should focus our energy.

Evidence:

1. Gallons of Diesel fuel per Passenger Trip (Fixed Route)
2. Overall mode share trends (see above)
Policy 1.2.2

The Area’s air is cleaner.

Compliance:

Interpretation and Rationale:

I interpret this policy to mean that particulate matter in the atmosphere is reduced. This can be via:

- Direct emissions - Direct emissions from AAATA operations, for example with greater fuel efficiency and cleaner engines. Rather than attempt to measure the total particulate output of AAATA operations, I suggest focusing on the chief source of emissions - fuel consumption – as a proxy measure for our likely particulate emissions. While there are other operational activities that contribute to particulate emissions, they are smaller and not worth the effort to track.

- Displaced emissions – Emissions from trips that previously were on more polluting modes and have switched to less polluting modes. With great effort we could attempt to measure overall displaced particulate emissions. However, a better measure is mode share for various transportation options. We can assume that most modes produce less emissions per passenger trip than single-occupant vehicles.

Reducing direct emissions from AAATA operations is important and steps are being made in this direction. However, the cumulative effect of reducing the number of single-occupant vehicles is a much larger impact of particulate reduction, and where we should focus our energy.

Evidence:

1. Gallons of Diesel fuel per Passenger Trip (Fixed Route)
2. Overall mode share trends (see above)
Policy 1.2.4.

The Area’s natural resources are conserved.

Compliance:

Interpretation and Rationale:

Evidence:
Policy 1.2.5

Land development can become more compact and walkable in part because of transportation options.

Compliance:

Interpretation and Rationale:

I interpret this policy to mean that land can be developed at a greater density in part because trips are made by modes of travel that require less space than automobiles.

Fixed-route mass transit requires less physical space than single occupant automobiles for mid-distance trips and can enable higher-density development (commercial and residential) at a more affordable price because less parking is required. Supplemental, short-range transport options (e.g. bike share, scooters, walking, etc) can facilitate as much travel, without consuming space for automobiles, parking, etc. These concepts are illustrated in the picture below:

Evidence:

1. Population & Employment Density (People/square mile)
2. Mode share
3. Downtown transit ridership
Policy 1.2.6

*Agency operations make efficient use of energy, water, materials, and other natural resources; and minimize waste.*

**Compliance:**

**Interpretation and Rationale:**

I interpret this policy to mean that services provided by the AAATA minimize the consumption of physical inputs per each unit of output. This can be measured by (Unit of Consumption)/Unlinked Passenger Trip on the fixed-route bus service. This can be done for various types of energy and water, and then measuring waste in a similar manner. This approach also internalizes a cost/benefit requirement.

**Evidence:**

**Energy**

1. Gallons of Diesel Fuel/Passenger Trip (Fixed Route)
2. Electricity Use/Passenger Trip (Fixed Route)
3. Natural Gas Use/Passenger Trip (Fixed Route)
4. Gallons of Water/Passenger Trip (Fixed Route)
5. Cubic yards of waste/Passenger Trip (Fixed Route)
6. Cubic yards of recycling/Passenger Trip (Fixed Route)
Policy 1.3

The Area prospers economically.

Compliance:

Interpretation and Rationale:

I interpret this policy to mean that the median household income and Gross Domestic Product of the Area remain stable or increase.

As a transportation agency, the primary way the AAATA can help support the local economy is by facilitating labor mobility and reducing transportation barriers (i.e. time and cost) that impede the easy movement of people and their skills within the labor market. For example, when potential workers cannot access a job site due to lack of affordable transportation options, this constrains the employer (who has an unfilled need) and the employee who may not be able to maximize their income. If the AAATA’s service can provide a viable transportation option, the employer and the employee both benefit, as does the local economy.

There are many measures of overall economic prosperity, such as GDP, median household income, unemployment, etc. The most authoritative measurements of the local economy come from the University of Michigan’s Research Seminar on Quantitative Economics (RSQE). Their annual report provides analyzed information on recent and forecasted economic activity in Washtenaw County (equivalent to the Ann Arbor Metropolitan Statistical Area). SPARK provided a similar report.

However, many of these statistics are only available at a county-wide level, obscuring the condition of the AAATA’s Area. In addition, the local economy is largely driven by State spending at local universities, auto sales, and even larger macro-economic trends such as trade tariffs. Amid all these variables and incomplete data, it is very difficult to discern the contributions of transportation to economic prosperity.

The field of transportation economics continues to develop but has not yet generated methodologies that are easy to use at a scale as small as our Area. For these reasons, I am choosing to interpret this policy narrowly, and to focus on economic factors where the AAATA can hope to make an impact that can be seen. This may risk criticism of missing a bigger picture and this may be true. However, we will continue to refine our interpretations and evidence to provide the best gauge of achieving this End as we can.

Further I believe that this policy is more fully interpreted and evidenced in the sub policies below.

Evidence:

1. Median Household Income in the Area
2. Gross Domestic Product in the Area
Policy 1.3.1

Workers and students can access employment opportunities without need of a personal vehicle.

Compliance:

Interpretation and Rationale:

I interpret this policy to mean that Area residents should have reasonable access to XX% or more of the Area’s employment opportunities via bus and paratransit, and by other modes as appropriate.

[Greater review of available transportation data may provide more ideas for measuring job access directly.]

Evidence:

1. % of Area jobs within the Area that are within walking distance (0.25 miles) to a bus stop.
2. % of jobs within the Area accessible via paratransit.
3. % of no-car households that are within walking distance to a bus stop.
4. Travel to work mode share (a subset of overall mode share specific to work trips)
**Policy 1.3.2**

*Employers have access to a diverse labor pool.*

**Compliance:**

**Interpretation and Rationale:**

I interpret this policy to mean transportation barriers should not unreasonably impede local employers within the Area from accessing the local labor force, even if those workers are arriving from outside the Area. ....

This policy is the flip side of ensuring Area residents can get to jobs – reducing barriers to accessing the labor force for employers. This policy is intended to help ensure the local economy can continue to deliver prosperity to residents and Owners.

The existing labor pool is determined by the size of the population, characteristics of the population (e.g. education levels, etc), and the overall unemployment rate. There is no universal definition of the phrase “labor shortage”. However, as can be seen below, the local unemployment rate is at a near-historic low of about under 4%. According to the RSQE, the the national unemployment rate has been dropping since about 2009, and the local economy is paralleling this trend. Anecdotal evidence during the monitoring period suggests a tight labor market is already affecting hospitality businesses in downtown Ann Arbor.

![Figure 2](image-url)

**Unemployment Rates for Washtenaw County and for the United States, 1990–2017**

Within this context, lack of reasonable access to employment locations, for example due to high parking costs or excessive travel times, can further reduce the size of the labor pool realistically available to employers. This also harms the employee since desirable jobs are less accessible and they may not be able to maximize their income.
The AAATA can help to reduce the costs of physically accessing employment locations by providing cost-effective, subsidized mass transportation between large and diverse (i.e. different income levels) residential areas and major employment locations. This provides a less costly alternative to owning or using a personal automobile to commute to work. While we can work to improve labor mobility in general, we also recognize that some geographic locations will always be easier to get to than others (e.g. downtown vs a peripheral area) and we cannot provide the same level of type of services or access to every employer.

I further interpret this policy to mean that the geographic scope of the AAATA’s activities can extend beyond the municipal boarders of member jurisdictions, if those activities help to deliver employees to local work sites. For example, the AAATA’s vanpool programs is used by commuters coming to Ann Arbor from Jackson, Michigan and Toledo, Ohio. However, this must be done within reason considering financial and political limitations.

Evidence:

1. **Access to Area Labor Pool** - % of workforce within 30 minute bus trip to:
   a. downtown Ann Arbor,
   b. downtown Ypsilanti,
   c. UM central and main campuses,
   d. EMU campus
   e. % of all employment locations within walking distance to bus stops, and accessible via paratransit

2. **Access to Broader Labor Force** –
   a. Weekday Boardings at peripheral park n ride lots
   b. Scale and use of vanpool and carpool programs
   c. Overall travel to work mode share trends
Policy 1.3.3

Visitors have access to the Area.

Compliance: In compliance

Interpretation and Rationale:

I interpret this policy to mean that occasional travelers (not regular commuters) arriving in Ann Arbor and Ypsilanti via public, scheduled passenger transportation services (e.g. Greyhound, Amtrak, Megabus, etc) have a reasonably easy connection to AAATA services.

I further interpret this policy to mean that there should be a public transit connection between the area Metro Detroit Airport.

Evidence:

1. Access to Intercity Service: 100% of local intercity bus and train stations served by local bus and paratransit. All these intercity stops are within walking distance to an AAATA bus stop:
   a. There is one Greyhound stop and one Amtrak stop in the service area (Ann Arbor). Both are located on Fuller Road and are immediately adjacent to AAATA Route 21 and paratransit services.
   b. Mega Bus stops in the parking lot of the Briarwood Mall in Ann Arbor. The AAATA serves the Mall with routes 6A, B and C; route 24, and route 62. Paratransit service is available.
   c. Intercity buses services for Ypsilanti (Greyhound, Barons, Trailways, etc) stop at the Shell gas stop on Huron Street south of I-94. AAATA route 46 serves nearby stops.
   d. There are no scheduled intercity or airport services available in the area.
   e. There were no other known scheduled passenger transportation services

2. Temporary Paratransit Eligibility: The AAATA paratransit service allow temporary eligibility and use of paratransit for out of town visitors.

3. Access to Metro Detroit Airport: The AAATA’s AirRide service provides hourly service between downtown Ann Arbor and Metro Detroit Airport. Annual Riders is growing and there were an average of 225/daily rides during the monitoring period.
Policy 1.3.4

The Area’s economy grows despite limited parking and auto congestion.

Compliance:

Interpretation and Rationale:

I interpret this policy to mean that the Area’s median household income and GDP both increase regardless of increasing levels of Vehicle Miles Traveled (VMT) and limited parking at key locations.

Economic and residential development in the Area is growing faster than roadway infrastructure (little expansion), and parking growth is constrained in certain areas (downtown, campuses). The result is greater traffic congestion and higher prices for parking. Mass transit requires less physical space than single occupant automobiles and can enable higher density development (commercial and residential) at a more affordable price. For example, about a thousand people a day use AAATA bus service to travel to downtown Ann Arbor. This is roughly equivalent to the number of parking stalls in the nearby 4th Avenue parking garage.

VMT is a readily available figure that may be a good proxy for traffic congestion. Because the number of lane miles (traffic lanes) in the Area is not increasing as fast as population or job growth, an increase in VMT should suggest an increase in traffic congestion.

Mass transit’s economic impacts are likely to be higher in built-up areas that have more expensive parking. These areas also have a disproportionate influence on the health of the local economy. In this case it makes sense to try to measure impacts in certain built-up areas as well as in the overall Area.

Evidence:

1. Income and GDP growth compared with VMT (or delay hours) (TBD)
2. Income and GDP growth compared with number of parking stalls at:
   a. Downtown Ann Arbor
   b. UM campuses
   c. EMU campus
3. # of GetDowntown users per downtown Ann Arbor parking stall
Policy 1.3.5

The Area is connected to the Metro Detroit region.

Compliance: Not in compliance.

Interpretation and Rationale:

I interpret this policy to mean that the Ann Arbor/Ypsilanti area should be connected to downtown Detroit via a scheduled, fixed-route mass transit service with adequate frequency to be a viable daily commuting option.

Evidence:

There is presently no service that meets the definition outlined above. An unknown number of people commuter between Ann Arbor and Detroit via Amtrak, however, these figures are expected to be very low due to inconvenient schedule and high fares.

Aside from continuing to support the Regional Transit Authority, it is unclear what the AAATA can do to increase compliance with this policy. There is no timeline for anticipated compliance.

Should the RTA be successful at a vote in November 2020, a bus service that meets the above definition could be in place by August 2021. Commuter rail service envisioned in the RTA plan would be several years later.
Policy 1.3.6

Local leaders are aware of the contribution public transportation makes to the community.

Compliance: Unknown

Interpretation and Rationale:
I interpret this policy to mean that elected officials and senior administrate officials in Ann Arbor, Ypsilanti and Ypsilanti Township generally believe that public transit is an economic benefit to their communities.

Evidence:
1. Local Leaders Perspective Survey: TBD A survey of local leaders will be conducted before the next monitoring report.

(CEO Note: Does this overlap with the Board’s Ownership Linkage plans or Executive Limitations policy 2.10?)
Policy 1.3.7

The Authority will remain economically viable in the long term.

Compliance: In compliance.

Interpretation and Rationale:
I interpret this policy to mean that foreseeable expenses will not outstrip reasonable forecasts of revenue, and that the agency will use its limited resources efficiently.

The greatest risks to the long-term financial viability of public transit agencies typically relate to over-committing (promising more than can be delivered), over-extending resources, and underfunding maintenance of existing assets in order to fund new initiatives. I believe that these matters are addressed via the detailed policies in policy 2.4 Financial Planning/Budgeting, and 2.8 Asset Protection.

Evidence:
1. See Monitoring Reports for Executive Limitations on policies 2.4 and 2.8.