Incentivizing Public Transportation Use

The current transportation department, Mobile GR, was created by integrating six separate department functions: traffic safety, lighting, signals, parking, transportation and planning (Schwartz 2020, pp 13 - 14). This unification was recognized in 2015 as an outcome of the GR Forward Community Plan (DGRI 2015) in order to shift the focus of the city government toward public transport and thereby create the demand for a public transit system. The City’s mobility plans and fiscal investment focus reveal extensive stakeholder consultations undertaken in the past to draw inputs from businesses, real estate, financial institutions, workers, and neighborhood associations among others to help guide plan priorities. GR Forward is a specific case of comprehensive and prolonged community engagement with four thousand citizens, along with businesses and institutions, engaged over an 18-month period to shape the plan.

One of the goals of the City Strategic Plan is to enhance micro mobility and innovate 21st century mobility options. The mobility objectives of the plan are four-fold: reduce single occupant travel, increase biking networks and facilities, increase sidewalk networks, and generate transportation related employment.

Statistics regarding mobility in Grand Rapids (GR)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>% of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual trips to work using either transit, biking, walking, ride sharing</td>
<td>20.9</td>
</tr>
<tr>
<td>Annual trips to work exclusively using public transit</td>
<td>4.2</td>
</tr>
<tr>
<td>Population within ¼ mile or 15 minutes or less distance to transit service</td>
<td>19.5</td>
</tr>
</tbody>
</table>

Source: City Strategic Plan, 2017-18 data

DASH ridership data from the Fiscal Plan (2022-23) show that the number of riders on the downtown fare-free ride to GR has continued to decline in the last three years (2019-2021). Discussion with the Transportation Planning Supervisor and the Director of Mobile GR reveals the structural flaws with the current public transit system. The current infrastructure has not worked well in improving ridership because of the following main reasons:

- The frequency of public transit reduces drastically during non-peak (evening and night) hours on any given day.
- The current network does not cater to commuters who reside outside the city.
- Interventions to change behavioral choices of commuters in the city have not shown noticeable success in the past.
Existing Public Transportation Initiatives

**Vital Streets program**<sup>1</sup> (2014): GR voters established the Vital Streets fund. This fund dedicated its focus to improving the street conditions. Vital Streets were defined as complete streets<sup>2</sup> with green infrastructure<sup>3</sup>. One of the primary goals of the program was to improve the condition of the roads and secondly, to create safe and comfortable sidewalks for pedestrians. The 2022 annual fiscal report shows that major investments have been undertaken to improve the street conditions. In 2021, 25% of the streets were in good condition compared to just 8% in 2013. However, there has been a lack of focus on green infrastructure for the completed streets.

**GR Driving Change** (2014): A playbook that outlines the tasks the city undertook along with sample messages and materials that would help people understand rules of the road. Messaging occurred through community education, billboards, posters, television and radio spots.

**Best design practices for walking and bicycling** (2014): A toolbox for designers and planners that outlines best practices and guide designs for non-motorized street improvements. There were three categories of guidance: signalized intersections, non-signalized pedestrian crossings, and corridor improvements.

**Disincentivizing parking and garage facilities** (2017): A list of recommendations were created through the Rose Center Fellowship for Public Leadership for Land Use (Biochini 2017). The proposed framework outlined specific incentives to strengthen the local community through inclusive growth and sustainable development strategies in a way such that they would cost little to no monetary resources to implement. One of the recommendations was disincentivizing parking and garage infrastructure from transportation development initiatives. The priority was to shift towards projects that could make the city more walkable, bikeable, and navigable by mass transit.

**Bicycle Action Plan** (2019): The Bicycle Action Plan has information on the City’s current bicycling conditions, programs, policies and culture. It also includes a vision for bicycling in GR in the near future. The goals of the plan were: connectivity, safety, comfort, ridership, equity, health, and strong biking community in GR.

**Public private partnerships**<sup>4</sup> (2018): The Michigan Street corridor fare-free ride program was initiated in partnership between the City Commission, the Interurban Transit Partnership (“The

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<sup>1</sup> https://www.grandrapidsmi.gov/Government/Programs-and-Initiatives/Vital-Streets-Program

<sup>2</sup> Complete streets are accessible, safe, functional and attractive that serve the entire community.

<sup>3</sup> Green infrastructure uses vegetation and engineering to protect and restore water systems.

Rapid”) and Spectrum Health. The route, referred to as Rapid Route 19 had three main features:

- Fare-free service to reduce traffic and parking congestion along Michigan Street.
- Expanding the service to during a given day from 5:30 am to 10:00 pm, 5 days a week.
- Increased frequency during the day - every 10 minutes for peak hour periods (3 hours in the morning starting 5:20, and 2 hours in the evening starting 3:20) and every 15 minutes for non-peak hour periods.

The objective of this pilot initiative was to change travel behavior, ease parking congestion and reduce traffic which all contribute towards lowering GHG emissions from private vehicle transport.

Climate Change focus (2022): As of FY 2022, the City commission has invested $3.4 million in improving DASH operations (fare-free ride to downtown GR), upgraded 64 miles of sidewalks, 494 ADA ramps and finalized the e-bike/e-scooter pilot assessment. The sectoral focus on public transit, and pedestrian infrastructure is part of the city’s strategies towards fulfillment of the objectives of the City’s Strategic Plan (Mobility) and towards meeting carbon reduction goals from municipal operations by 2030.

Proposed Mitigation Activity

The objective is to level the field in terms of resources available to citizens when deciding to choose between single vehicular transport and public transit options. The diversion of resources from parking infrastructure, parking policy, and making roads more vehicle friendly, need to be directed towards making ‘Complete Streets’ that are accessible to all users. The suggested mitigation activity therefore aims to put resources and knowledge towards diverting people away from vehicle use. This activity is based on the “push and pull” approach. At the same time, the constraints and extent of control of Mobile GR on transport. The Mobile GR department is constrained by human bandwidth, but the proposed activity has the least incremental time cost engagement. Mobile GR has made significant inroads by expanding their social media communications, promoting micro mobility, and sponsorship of events.

This approach thus emphasizes the persuasion of using the public transit system on one hand while at the same time deterring commuters from using single occupant transport modes (Pardo et al., pp. 10 - 12).

In order to create an accessible multi-modal transportation experience (as outlined in the Strategic Plan) the suggestion is to organize and implement community workshops. These workshops will act as tutorials for the community to provide them and inspire:

1. Information on the mobility strategic plan of the city.

6https://www.transportation.gov/mission/health/complete-streets - Streets that are designed to operate and enable safe use and mobility for all users. It includes all age groups and of all abilities, whether it is driving, pedestrian, cycling, or public transport use.
2. Interest among citizens regarding the bicycle network in the city and sidewalk network.
3. Inputs and comments on how to expand the fare–free transit network (i.e. DASH, Route 19).

The first step focuses on sharing data about ridership, awareness of public transport options, such as bike-share, e-scooter, new mobility options, bus timings and routes, etc. The use of visual tools during the workshops will aid in understanding the proposed bike routes, sidewalks and fare-free routes.

The second and third step would be to shift behavioral choices through active participation of citizens in those workshops. By providing them information on current and planned expansion of modes of transport, the City is creating the space for engagement. Citizens would be able to directly communicate their perception, apprehensions regarding micro mobility, bike safety, neighborhoods that are least accessible through transit and how to improve them, etc.

These workshops can be conducted in hybrid format on a monthly basis so that citizens of all age groups with and without access to internet services can attend. Hybrid model provides benefits in terms of reduced cost of engaging with audiences, higher outreach, flexibility, and reduced environmental costs.

A few specific activities that could be conducted within the workshop are:

- Biking classes for citizens with the help of volunteers from neighborhood associations. These classes will work as opportunities to persuade people into adopting cycling and provide them with resources on how they can be made to feel safe on the road.
- Using visual tools such as flyers, posters, and videos of the 21st century mobility model of GR that can “pull” commuters (Citizens Research Council of Michigan 2019) towards the mobility goal of the City Strategic Plan.

**Example of effective persuasive messaging**

“Real Riders of the Rapid” was a marketing campaign that was launched in 2012, in which staff members of the Rapid bus transit service recorded videos of riders who spoke about their experience using the City’s bus transportation. They were asked questions such as: “How do you use the bus?” or “What impact does it have on your life?” This advertising campaign was aimed to create a sense of pride in use of public transit by local commuters.

**Challenges to Public Transit Initiatives**

- The bandwidth and resource constraints of Mobile GR make the implementation of any additional program challenging given their core function of ensuring smooth operations of transit options and interdepartmental collaborations. In order to overcome this, neighborhood associations can provide the resources – in terms of physical space for conducting the workshops (in the community buildings), volunteers to help the
department conduct the workshop, and act as liaison between Mobile GR and the community.

- The nature of transportation with the city municipality is such that the department has limited control over transit options. The bus facility is provided by RAPID, a private company while e-scooters are provided by Spin, another private company. Behavioral change through a given set of public initiatives is limited unless the private sector is involved in such activities.

- A regional Transport Demand Management (TDM) process for GR was initiated in 2022 to look into the issues ailing the current declining use of public transport options. The TDM will address the larger questions of gaps in the current infrastructure and suggest solutions. This proposed activity attempts to use the educational strategy of a TDM (Washington State Department of Transportation 2021). The education strategies are least cost prohibitive and work on the framework of the “push and pull” approach using information and persuasive messaging.


