
Subject: NRT OnDemand - Update

Report to: Public Works Committee

Report date: Tuesday, November 10, 2020

Recommendations

1. That Report PW 46-2020 **BE RECEIVED** for information; and
2. That Report PW 46-2020 **BE CIRCULATED** to the municipalities of Pelham, Lincoln, Grimsby, West Lincoln and Wainfleet for information.

Key Facts

- The purpose of this report is to provide an update on the NRT OnDemand pilot service reflecting its first two months of operation.
- NRT OnDemand launched in West Niagara on August 17, 2020 with a second deployment area in Niagara-on-the-Lake targeted for a November 23, 2020 launch.
- Initial estimates indicate that the pilot program is on track to remain within budget.
- In the first two months of service, the program has seen significant growth in ridership and increased connectivity for the residents of West Niagara.
- A public-facing dashboard is being developed to enable transparency and will soon be available through the Region's website.
- A reporting timeline has been established to ensure that staff can execute the will of Council with respect to the potential renewal of the contract.

Financial Considerations

Over the first two months of service, the service is on track to stay within the approved operating budget based on 8 months of operation (May through December) of \$1,604,688 gross budget cost and \$1,521,013 net budget cost after fare revenue inclusion. This success can partially be credited to the decision to pay an hourly rate instead of a per trip rate as was done in the Niagara Specialized Transit contract. It should also be noted that as the service becomes more popular and more rides are taken, there is the potential that the service could finish under budget due to higher than forecasted revenues.

Pilot Objectives

In the presentation to Public Works Committee on July 14, 2020, staff shared its intended goals for the NRT OnDemand pilot. For ease of reference, these have been restated below and additional context provided.

1. Assess to Via Mobility's software for an on-demand service – there are two components of this assessment. The first is whether Via is able to provide the type of service that was requested per the terms of the service agreement. Additionally, various service metrics, including but not limited to Cost per Trip, Vehicle Utilization and On-time Performance, will be measured and compared to existing contracted/similar services such as Niagara Specialized Transit.
2. Balance customer satisfaction with service parameters – the assessment of this goal will be partially anecdotal and partially based on the Driver/Ride rating submitted by the riders at the end of their trips. Staff will review the overall ratings with the subjective/anecdotal comments received from riders and staff at the local municipalities.
3. Maximize coverage areas and increase connectivity to provide access for everyone – this particular goal will only be fully applicable to the West Niagara service area and not the newly added Niagara-on-the-Lake service area due to the extremely different nature of the service areas. West Niagara covers entire municipal boundaries; whereas Niagara-on-the-Lake opted for a limited service area leaving areas such as St. David's and Queenston without access to the service. However, in both cases, staff will compare inter- versus intra-municipal trips as well as review origin and destination trip patterns.
4. Ensure cost containment – ensuring that the service stays within the approved budget is a priority for this pilot. NRT OnDemand utilizes a fixed per hour rate which allows for a set number of service hours thus ensures greater budget certainty. Whereas, the NST service utilizes a per trip pricing structure which has, in past years, created budget pressures when ride demand out paces the budget. Additionally, service parameters for NRT OnDemand, such as maximum wait time or maximum detour time, could be adjusted to increase capacity.
5. Strong service utilization – this objective refers to two main metrics; one being overall ridership which is simply the total number of riders that utilized the service. These numbers will be compared to existing services as well as assessed against the total cost of delivering the service. The second is vehicle utilization which is a combination of trips that were requested for more than one person at a time, and the number of times that a vehicle was re-routed to pick up additional passengers.

6. Assess potential for combining NRT OnDemand with Niagara Specialized Transit – as part of the Niagara Transit Governance Study, Niagara Region engaged IBI Group to conduct a Specialized Transit Service Review during 2018-2019. A number of recommendations came from this review for Niagara Region to consider as part of the overall transit consolidation efforts. Some of these recommendations included:
- Provide a web-portal for trip booking
 - Use computer aided dispatch and routing
 - Allow for same day, potentially on-demand booking
 - Evaluate the potential for eliminating applications
 - Connect riders to existing fixed route services where applicable

Currently, NRT OnDemand has implemented four out of five of these Specialized Transit recommendations with the fifth, the web portal, currently in development. However, the NRT OnDemand pilot is effectively permitting riders to book trips directly using a smartphone application.

It is important to reiterate that although total ridership is a metric, it is not the singularly defining metric of the pilot's success. Access to safe, convenient, and affordable transit is key to providing opportunities to residents of all demographics and is a Strategic Priority of Council.

Promotion Efforts

A number of communications and marketing tactics were undertaken by Niagara Region and our partner Via Mobility to launch NRT OnDemand service in West Niagara, with input from our municipal partners. The objective was to introduce the service to the community while allowing a new start-up transit service an opportunity to begin operations. The following is a summary of the promotion efforts undertaken thus far:

- Newspaper advertising: on August 20th and August 27th advertisements were placed in both Grimsby's News Now, which has approximately 27,000 home distributions and the Voice of Pelham, which has 7,000 home distributions and 14,000+ readership.
- Social Media: regular posts have been made on the Niagara Region Twitter and Facebook feeds in addition to Via Mobility's paid advertising on Facebook and Instagram.
- Advertising Campaign: promotions on Spotify to engage a younger rider demographic.
- Media / Public Relations: media events were hosted in Grimsby, Lincoln and Pelham and media coverage and interviews with local agencies including, 610 CKTB and CHCH-TV.

- Print media: postcards and posters were distributed throughout West Niagara by our local municipal partners and Niagara Region staff

Niagara Region, in consultation with its local municipal partners and Via Mobility is developing a communications and marketing plan to promote and attract riders to NRT OnDemand over the remaining year of the pilot project, specifically through Q4 2020 and into 2021. The objective is to raise awareness and increase ridership in the target demographics of youth and seniors. There will also be efforts to develop partnerships with local community agencies and groups who could benefit from transit in their community. The following is a list of some of the items being considered for future promotional efforts:

- Development of video media (i.e. instructional and/or promotional)
- Digital advertising at local area municipality facilities (i.e. libraries, community centres, etc.)
- Widespread mail campaign to ensure coverage in rural areas
- Second rounds of advertising campaigns (i.e. newspaper, Spotify, social media)

Community Engagement

For this pilot to be successful, it is imperative that there be sustained collaboration between not only Regional and local staff, but also with community agencies and programs. There have been a number of efforts to ensure that there is support across the service area, from conference calls to workshops to presentations. These efforts have provided a significant amount of local expertise that the Region's transit team would otherwise not have access to (i.e. points of interest, distribution channels, etc.). These collaborative efforts have also been effective in creating local content experts, as often residents will direct their inquiries to those they are most familiar with. A great example of this has been with Halee Braun at Pelham's Meridian Community Centre who has been providing firsthand triaging support for both drivers and riders since the service launched. Through these partnerships, transit staff were able to quickly identify an issue with call-in wait times in the first week of the service, whereby the service provider was able to pivot and reallocate additional staff.

Staff at Niagara Region is committed to ongoing community engagement efforts with regular updates and conference calls. Moreover, staff is currently developing additional plans to reach potential riders through services which they already access. Examples of this include local foodbanks, employment help centres, long-term care facilities, and secondary schools. Through the community engagement process, it was identified that a number of caregivers are booking trips for riders. As a result, a web-portal to assist third parties in booking trips is currently in development with the service provider. This will also provide an option for those that have access to the internet but not necessarily a smart phone.

There has also been some interest in reaching more of the community through various BIA's to create partnerships and promotional opportunities with local businesses, festivals and events. This is still very much in its infancy, but may present a wide range of avenues to promote the various aspects of the service as well as local businesses.

Ridership Statistics

As of October 10, NRT OnDemand completed 1,873 trips of which 15 (0.8%) were accessible and had transported 2,109 riders. Given the fact that 30% of the NRT OnDemand fleet is wheelchair accessible, the service has significant capacity to deliver additional accessible trips.

The average ridership for NRT OnDemand has continued to grow week over week from 17 passengers to 61 passengers. From the first week to eighth week, there was a 259% growth in average rides taken (Figure 1).

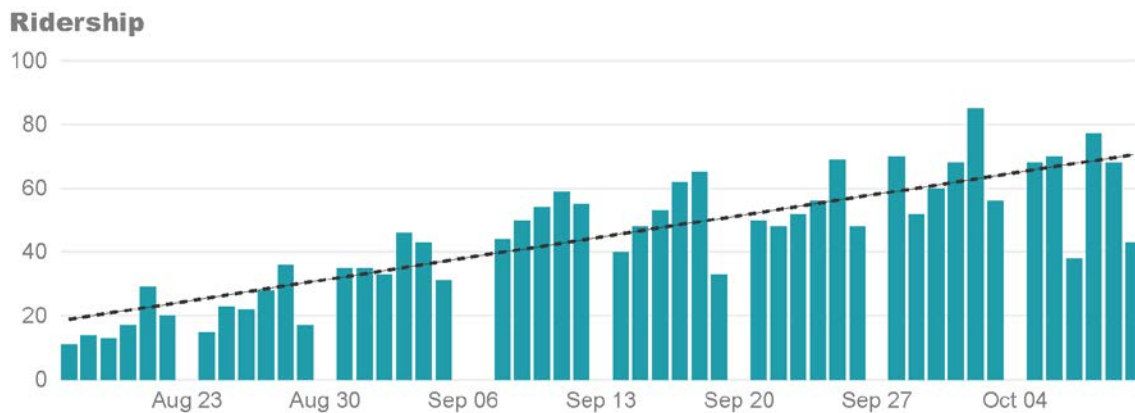


Figure 1 – Ridership by Week

As part of the program, staff are also tracking the ridership within and between municipalities to ensure that the local municipal partners have a sense of where their residents are traveling. Figure 2 highlights Grimsby being the most popular in both origin and destination, and that both Pelham and Lincoln are approximately equal. It is also important to note that riders are making connections to the satellite hubs in St. Catharines and Welland. This evidence highlights the need to ensure connection for residents to all parts of Niagara with travel that occurs west-east across the region.

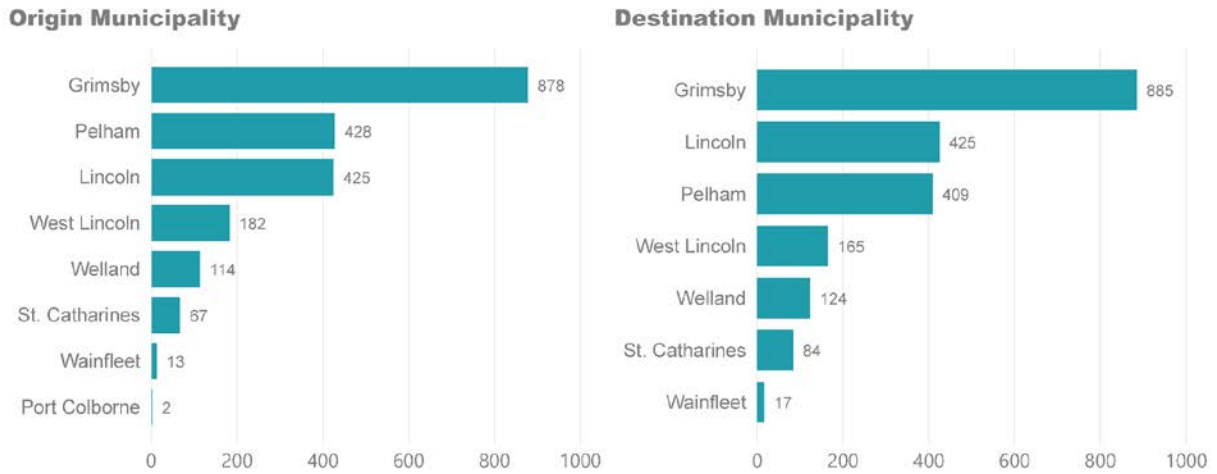


Figure 2 – Origin: Destination by Municipality

Figure 3 highlights the number of rides are essentially equal when comparing inter-municipal and intra-municipal trips. This is indicative of the fact that residents in rural communities often need to travel inter-municipally to access jobs and services. Furthermore, it shows that of the 50% intra-municipal trips, Grimsby is taking the majority at 56%, followed by a relatively even split between Lincoln and Pelham for the remainder.

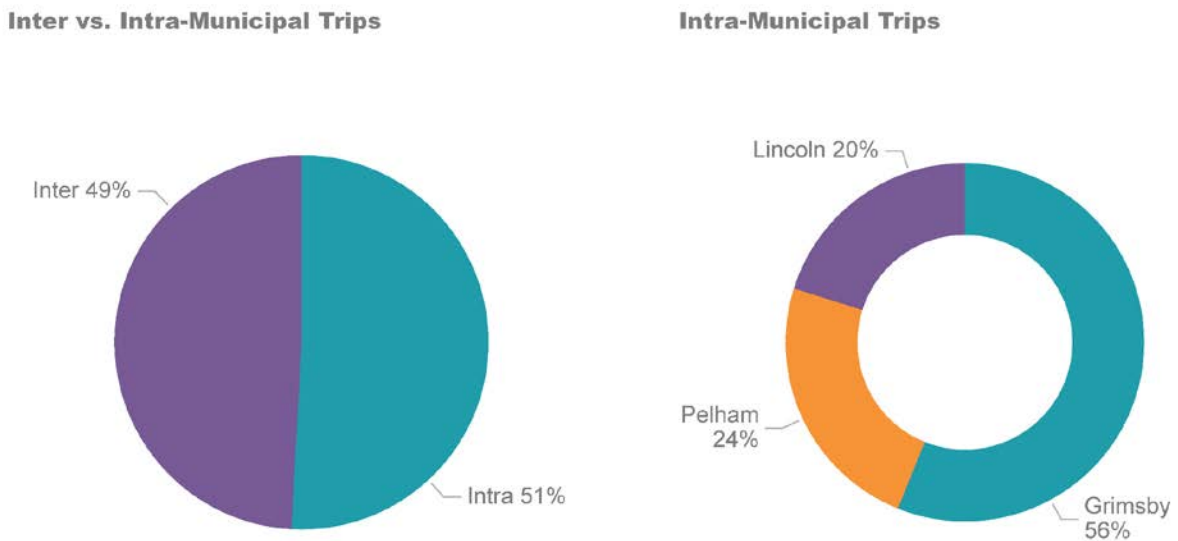


Figure 3 – Comparison and Distribution of Inter-municipal and Intra-municipal Trips

Additionally, trip time of day metrics are being reviewed to ensure that the service hours are relevant and beneficial. Figure 4 shows that there the service is being utilized throughout the entirety of the service hours from 7 a.m. through to 10 p.m. with the hours between 2 and 3 p.m. and 5 and 6 p.m. having the highest demand.

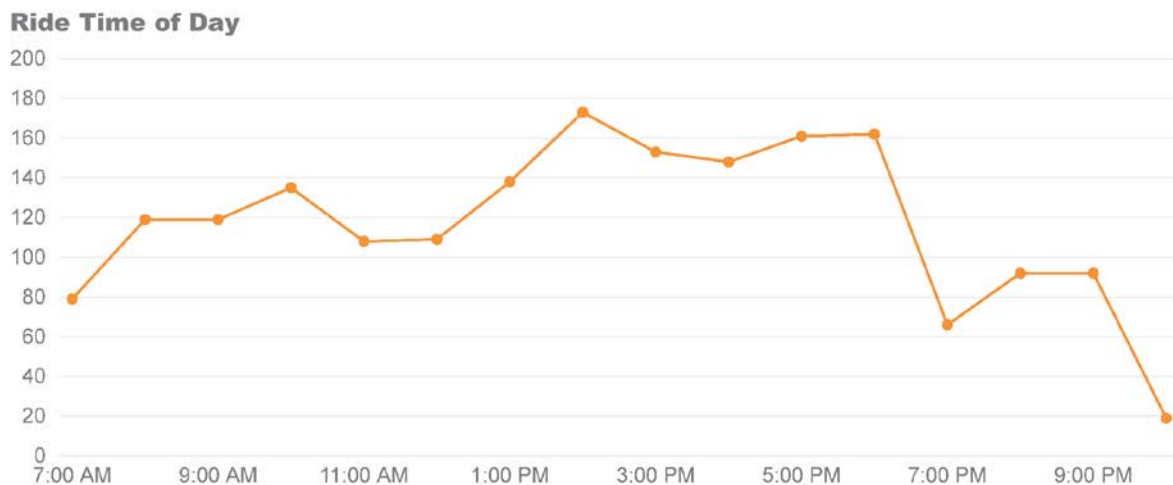


Figure 4 – Ridership by Time of Day

For more in-depth service metrics and mapping, refer to Appendix 1.

Operational Changes/ Improvements

One of the key reason for selecting Via Mobility as the service provider for NRT OnDemand was their ability to make nimble changes throughout the pilot. For example, since the launch of the program, a car seat/booster seat policy has been implemented to further support families wanting to utilize the service.

As the pilot matures and staff are able to assess travel demand patterns, decisions will be made around providing additional connections between municipalities. These could include providing more direct connections from current service areas to existing satellite connection hubs in St. Catharines, Welland and Port Colborne, or providing additional connections to the St. Catharines and Welland Hospitals. Any decision to provide enhanced connections must be weighed against its potential effect on the existing systems ability to continue delivering trips on time and within budget. One item of specific note is the potential for a connection at the Winona Crossing Shopping Centre (Stoney Creek Costco). Niagara Region staff has connected with staff at Hamilton

Street Railway (HSR) who will be bringing a report for approval to their local Council in November.

While preparing for the launch in West Niagara, staff continued to have discussions with other local area municipalities in order to assess their interest in bringing an on-demand transit service to their residents. In that time, the Town of Niagara-on-the-Lake formally requested that Niagara Region permit a secondary service area in the town to operate under the NRT OnDemand brand. This was approved by Niagara Region Council on September 17, 2020 and is tentatively set to launch in mid-late November. In addition, the City of Port Colborne has shown a renewed interest in the pilot and is evaluating potential opportunities. Just recently, the Town of Thorold inquired about the potential to service some of its newest developments locations although, those discussions are in their infancy. In a previous presentation, Niagara Region staff was asked to re-engage with the Town of Fort Erie and while the Town is interested in on-demand transit, its staff have elected to pursue an RFP sometime in early 2021 for introduction later that year.

As was identified in the Community Engagement section, a web portal for booking trips is currently in development, although at the time of finalizing this report there is not a definitive launch date available.

Reporting Frequency

Since the inception of this pilot, Niagara Region transit staff has committed to regular and transparent reporting. This will help to ensure that each partnering municipality will have a fulsome understanding of how the program has fared, but to also ensure that adjustments can be made to the service in a timely manner.

Niagara Region is currently developing a public facing dashboard to facilitate the aforementioned goals. This dashboard will ensure that transparency is maintained while also providing timely access to the data. Staff is working to automate the update process to minimize the lag between the data being submitted by Via and it being available to the public. Until that process is finalized, staff will be posting statistics on the [NRT OnDemand Pilot Project's webpage](https://www.niagararegion.ca/projects/nrt-on-demand/default.aspx) (https://www.niagararegion.ca/projects/nrt-on-demand/default.aspx) and providing the data directly to staff at the local area municipalities on a monthly basis. At the timing of finalizing this report, the tentative deployment date for the dashboard is November 1, 2020; however this date has yet to be confirmed by Niagara Region's IT department nor by Via's data science team.

In addition to the publicly available dashboard, Niagara Region transit staff intends to bring at least three reports to the Public Works Committee (PWC) of which this report is

the first. The next planned report will be brought to PWC during the January meeting. In addition to containing a summary of the pilot project during the first four months of operation, the January report will be a report for consideration to provide direction to staff on whether to seek renewal of the pilot with Via Mobility for year two of the pilot, or to proceed with a Request for Proposal (RFP).

Although additional details will be provided in that report, the January meeting was identified as the latest possible date to determine whether the contract with Via Mobility should be renewed because the RFP process, including RFP preparation, procurement and accommodating time needed for a new proponent to mobilize operations and fleet, is expected to require approximately six months. The original service agreement (and approval from Council) with Via Mobility was for a 12 month term, but also contains a provision to extend the pilot for another 12 months, at which time the pilot would be reviewed and an RFP would be issued for a longer term on-demand delivery partner.

The current state of the Niagara Transit Governance Study will be another major factor in this decision. While the final transit governance decision will not be available by January, Niagara Region Council and the CAO working group will have a stronger indication of the impacts of the Study's recommendations and the potential for transition of the new governance model.

Alternatives Reviewed

As this report is for information purposes only, there were no alternatives considered.

Relationship to Council Strategic Priorities

The NRT OnDemand Pilot Project directly aligns with the Council Strategic Priority: Responsible Growth and Infrastructure Planning (Objective 3.1) through advancing regional transit and GO rail services and facilitating the movement of people and goods.

Other Pertinent Reports

- CAO 8-2017 Niagara Region's Transit Service Delivery and Governance Strategy
- LNTC-C 21-2018 Inter-Municipal Transit (IMT) Service Implementation Strategy
- LNTC-C 22-2018 Inter-Municipal Transit Financial Impact Analysis
- LNTC-C 23-2018 Inter-Municipal Transit Capital Plan, 2019
- PW 60-2019 On-Demand Transit – Pilot Authorization (Simulation Results)
- PW 41-2020 Niagara Regional Transit OnDemand – Niagara-on-the-Lake Inclusion

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Public Works Department

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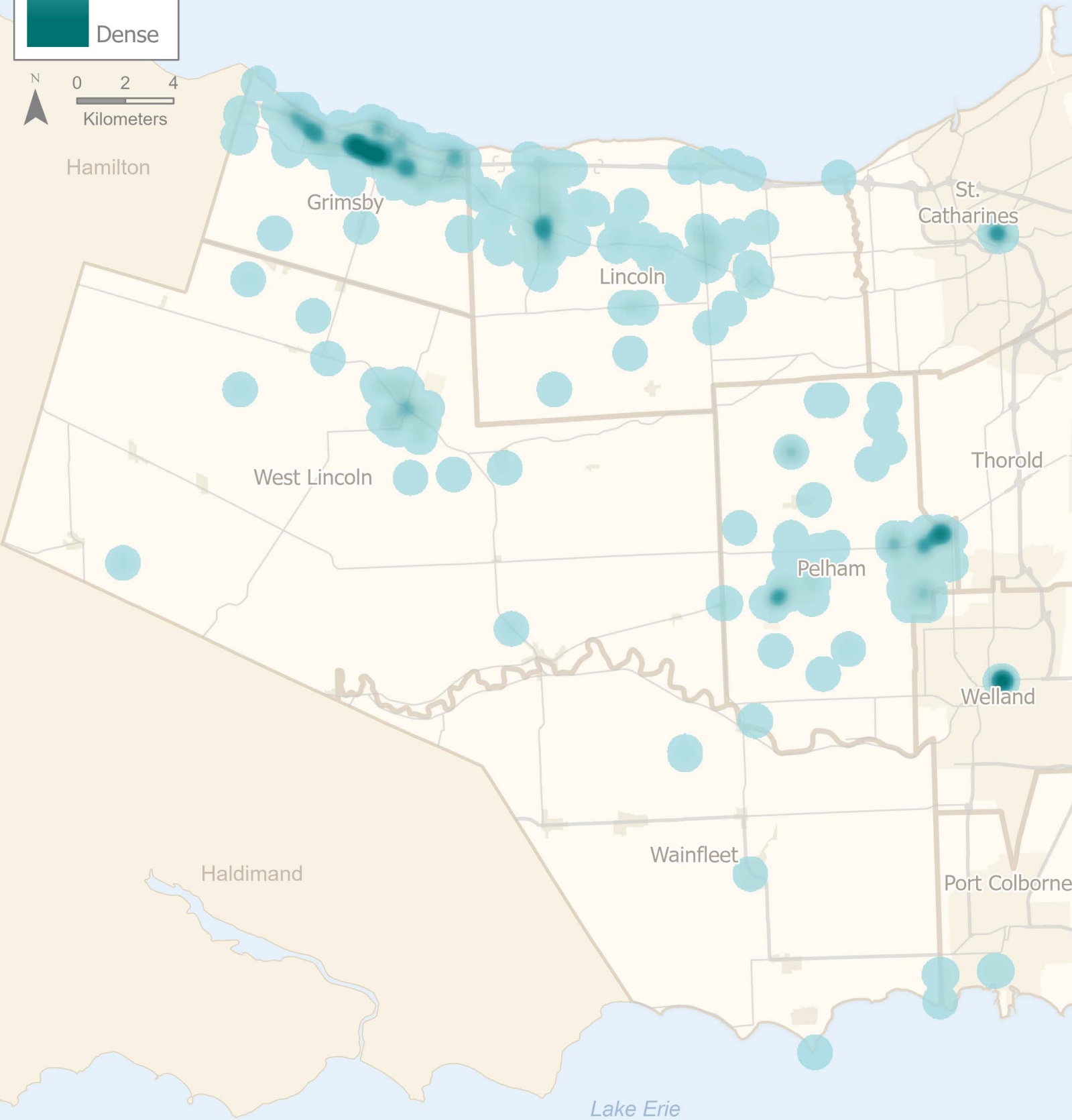
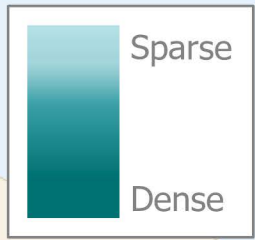
Appendices

Appendix 1 PW 46-2020 - Appendix 1 - Overview and Municipality Specific Maps and Metrics

PW 46-2020 - Appendix 1
Overview and Municipality Specific Maps and Metrics

NRT OnDemand Distribution of Ridership by Trip Origin

Based on data from 2020-08-14 - 2020-10-10



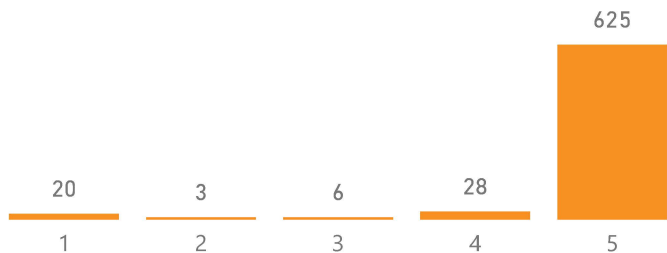
NRT OnDemand Metrics: Overall

Number of Riders
2109

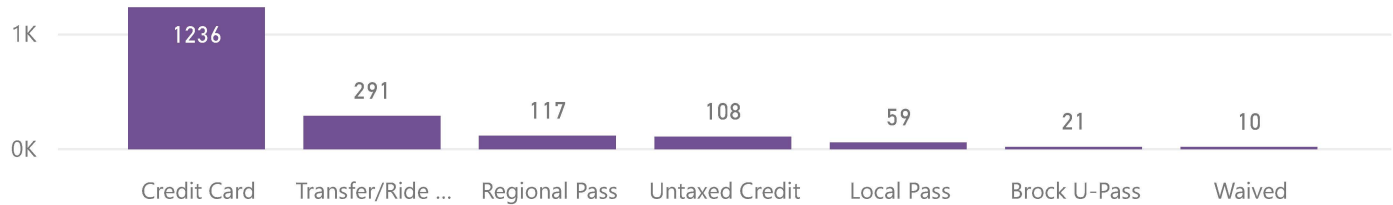
Number of Accessible Trips
15

Number of Trips
1873

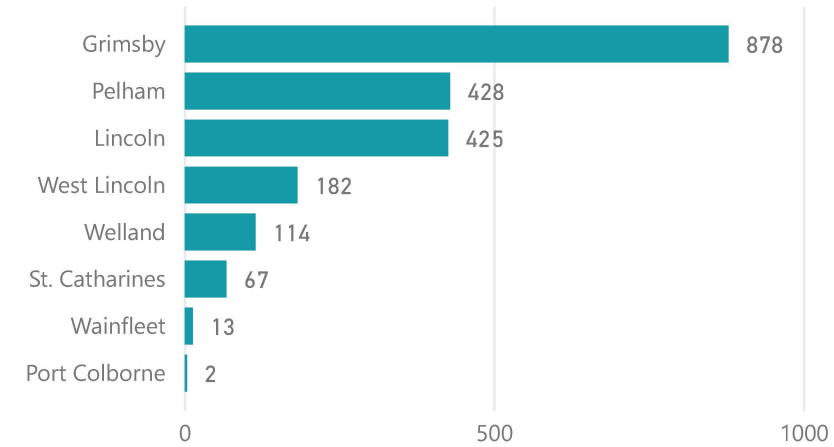
Trip Rating



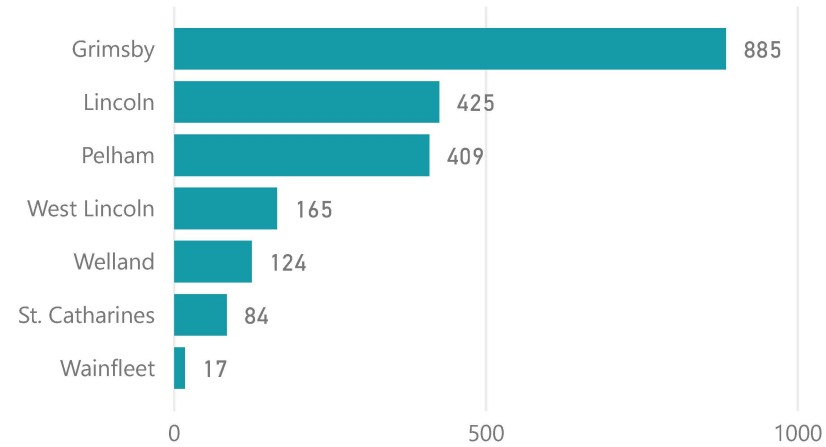
Payment Method



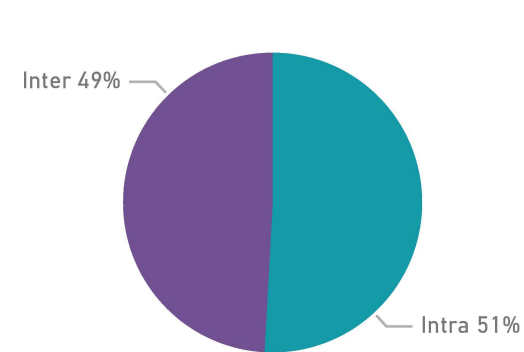
Origin Municipality



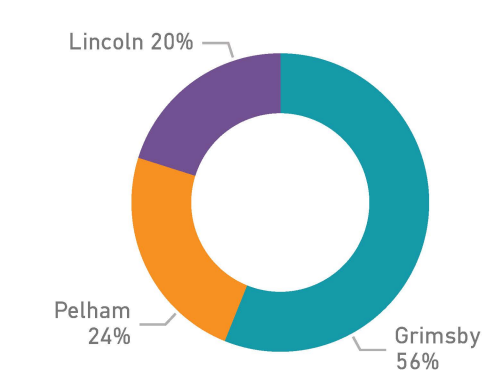
Destination Municipality



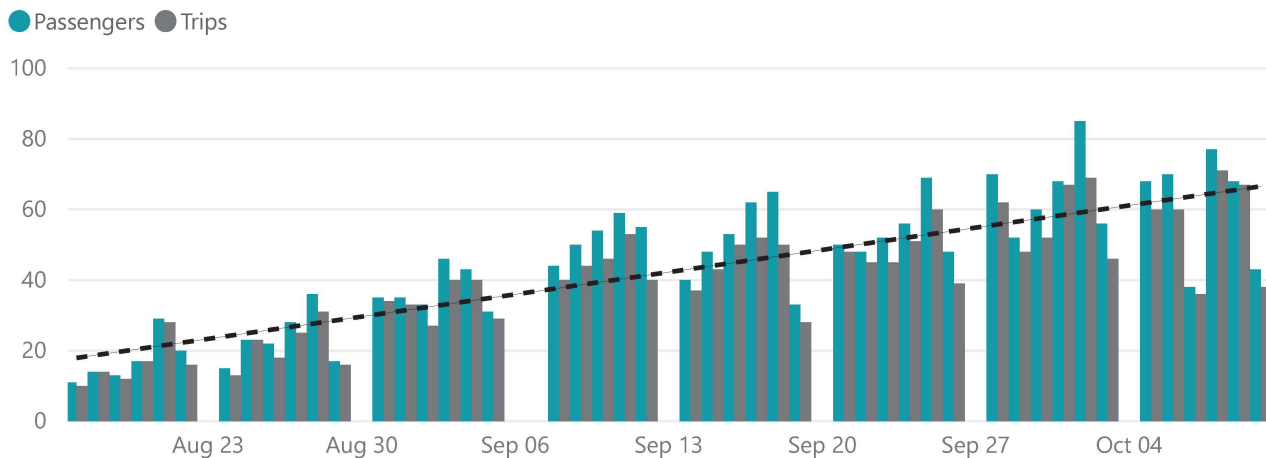
Inter vs. Intra-Municipal Trips



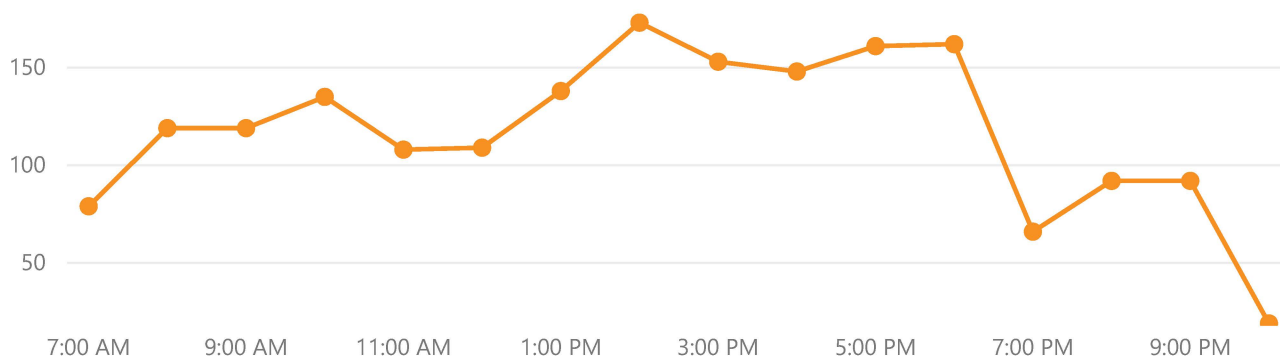
Intra-Municipal Trips



Ridership



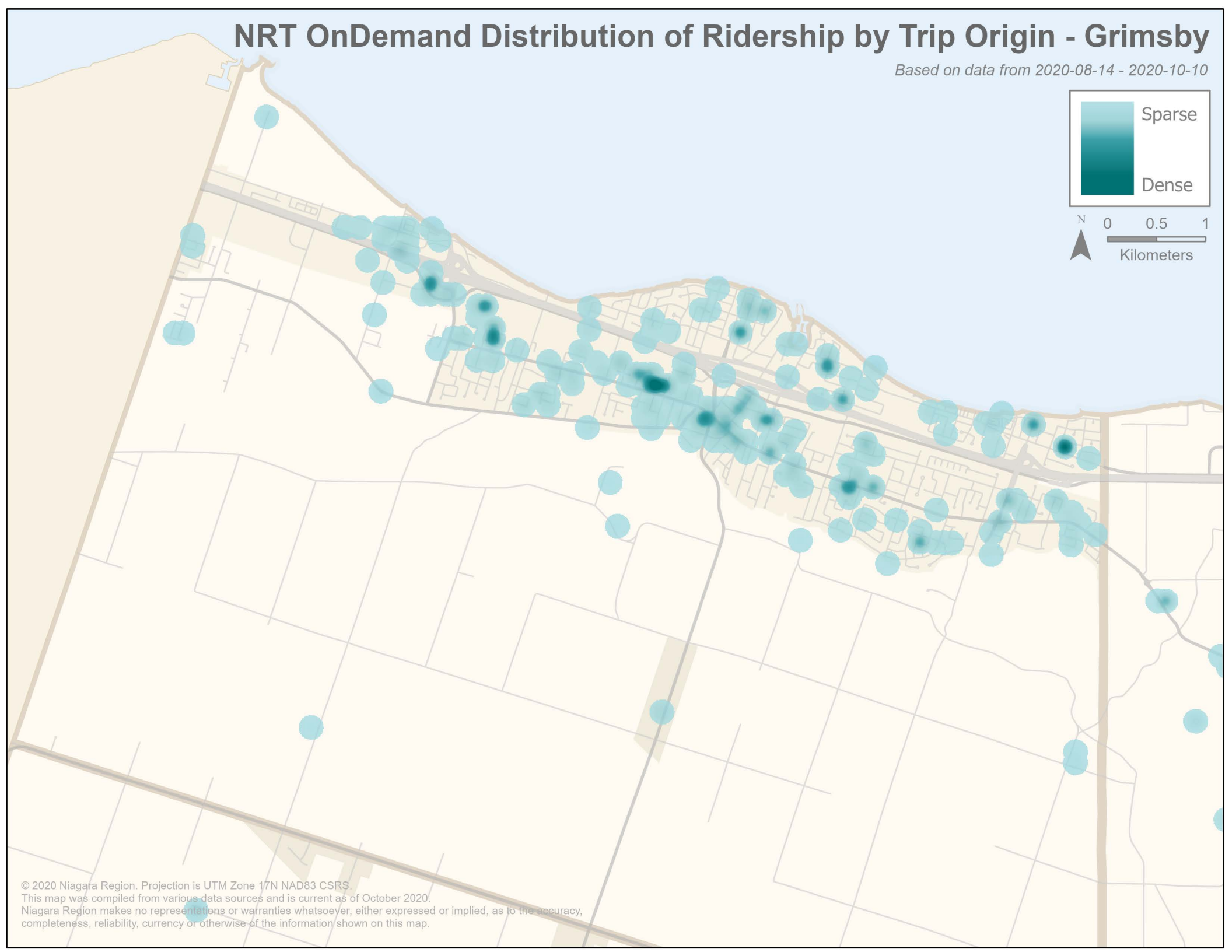
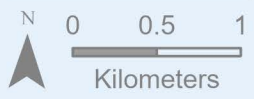
Ride Time of Day



Data from 2020-08-17 to 2020-10-10

NRT OnDemand Distribution of Ridership by Trip Origin - Grimsby

Based on data from 2020-08-14 - 2020-10-10



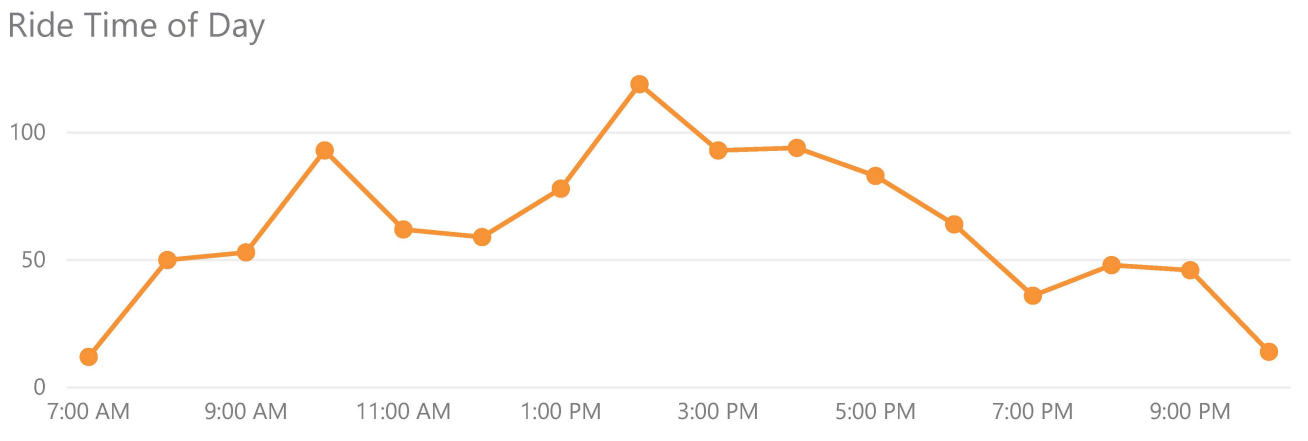
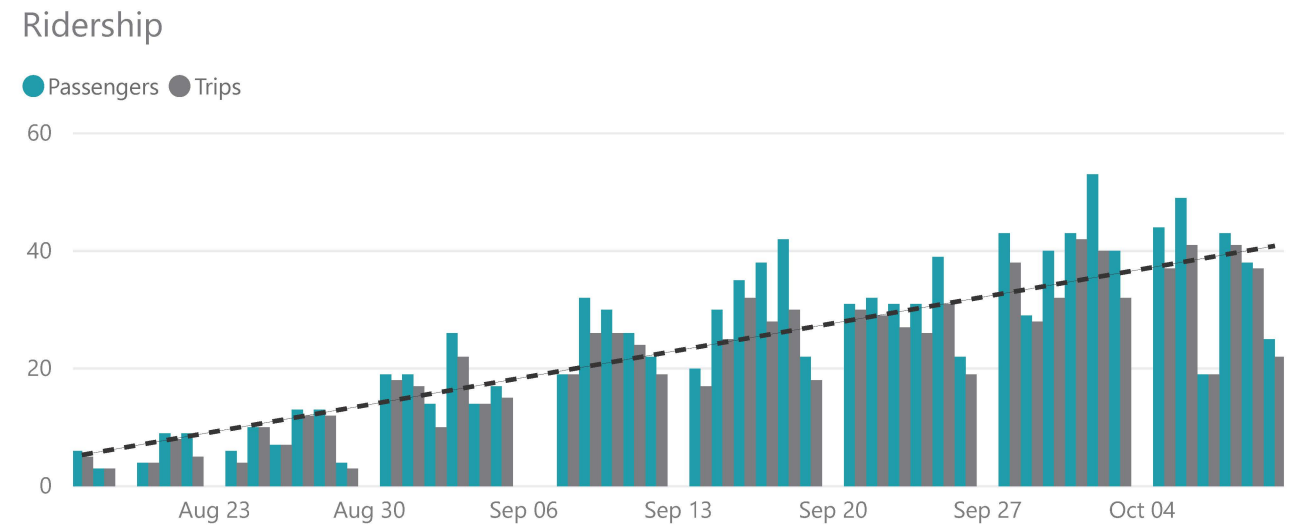
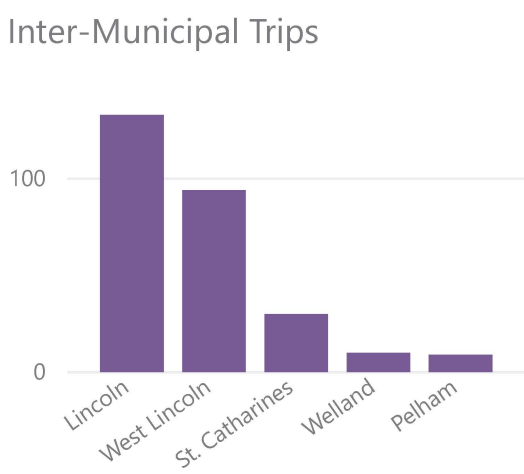
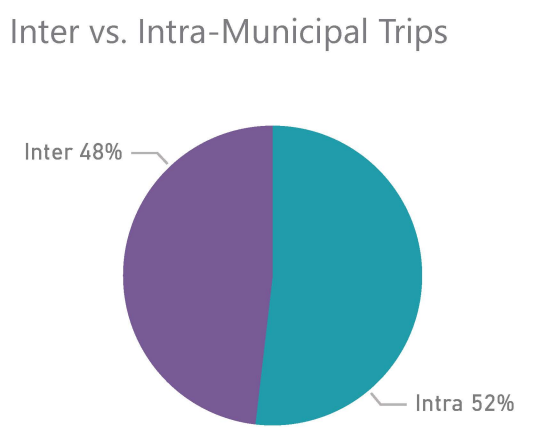
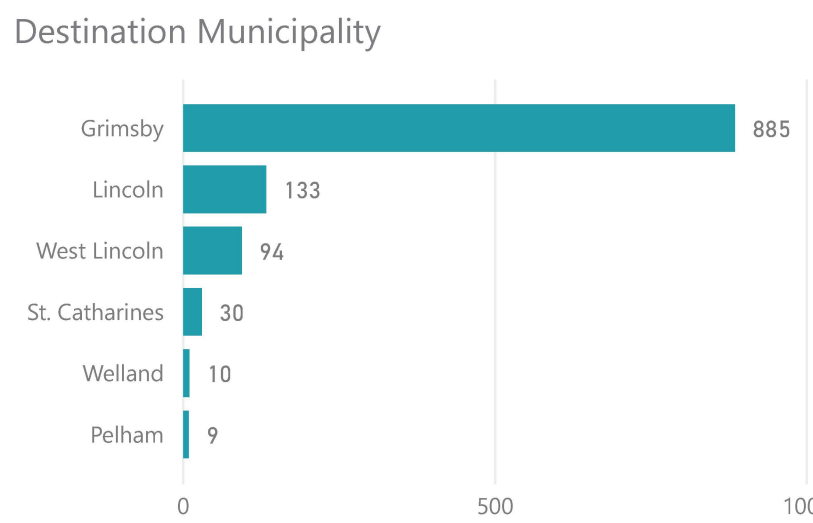
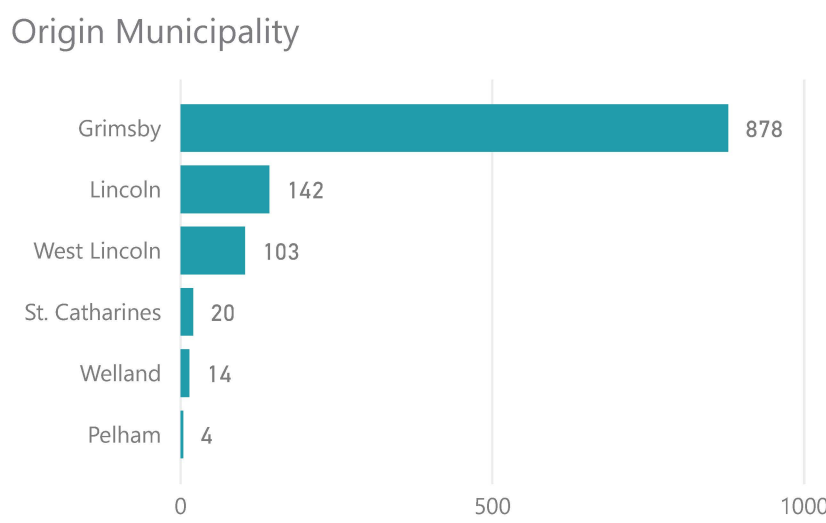
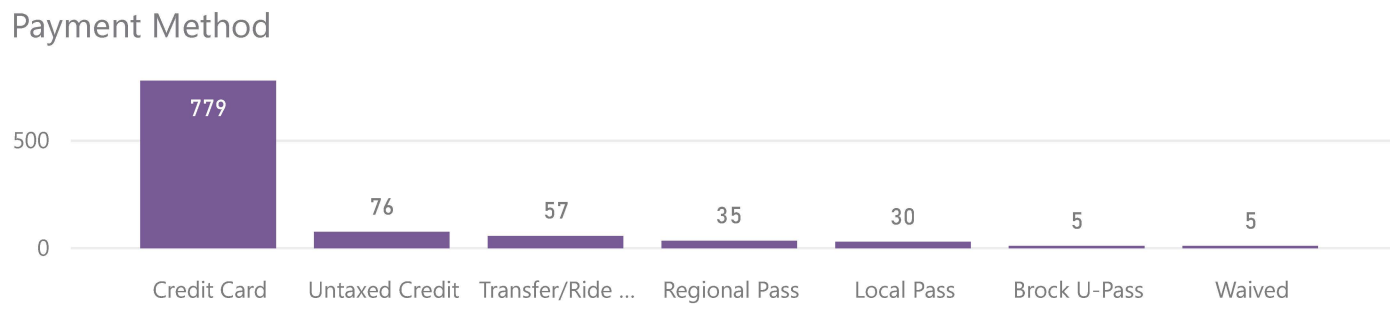
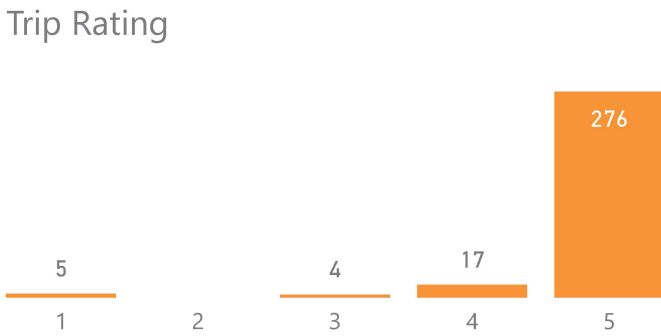
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NRT OnDemand Metrics: Grimsby

Number of Riders
1161

Number of Accessible Trips
12

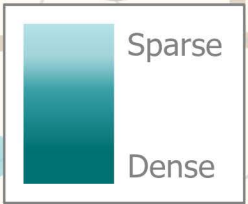
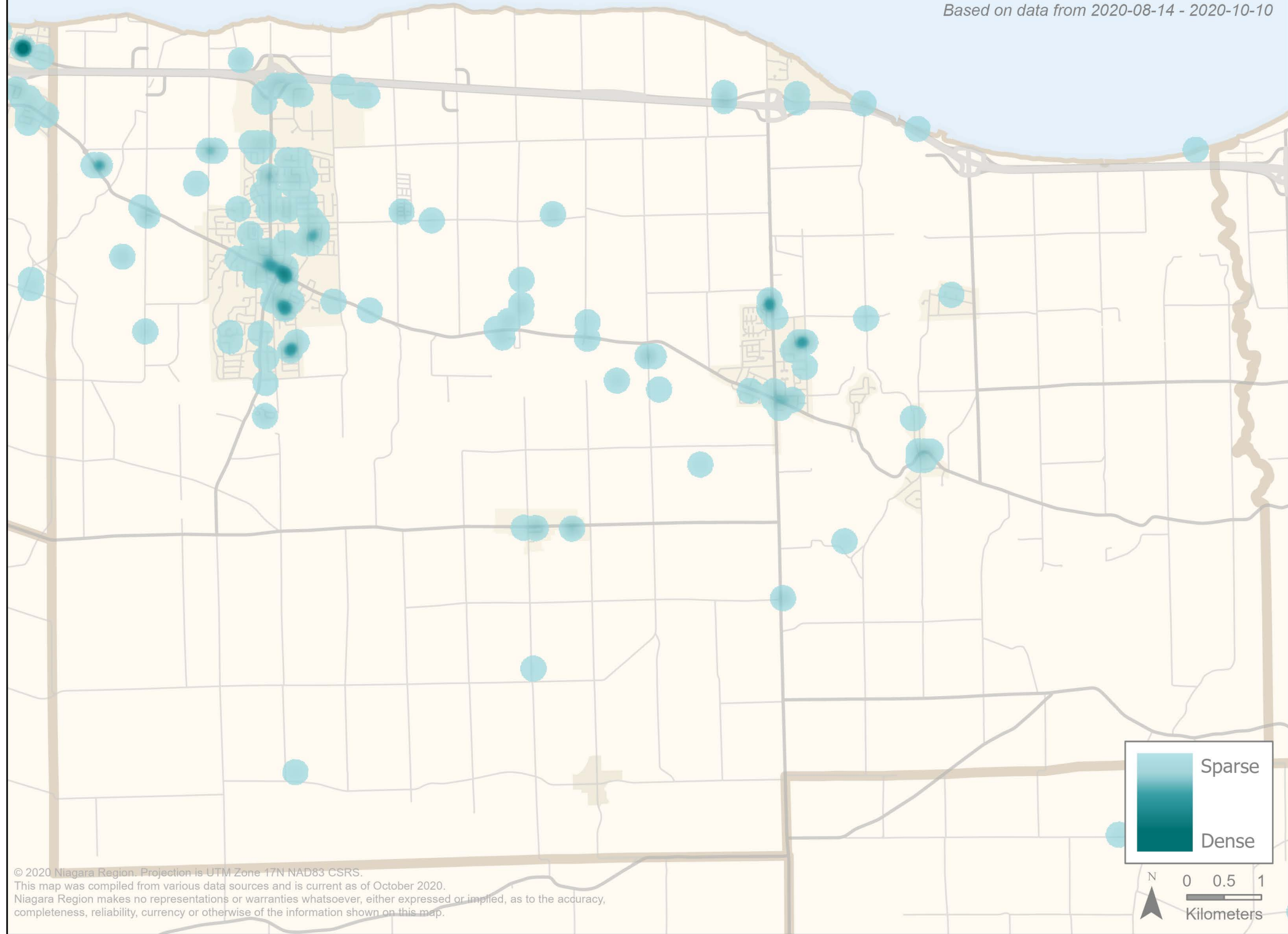
Number of Trips
1004



Data from 2020-08-17 to 2020-10-10

NRT OnDemand Distribution of Ridership by Trip Origin - Lincoln

Based on data from 2020-08-14 - 2020-10-10



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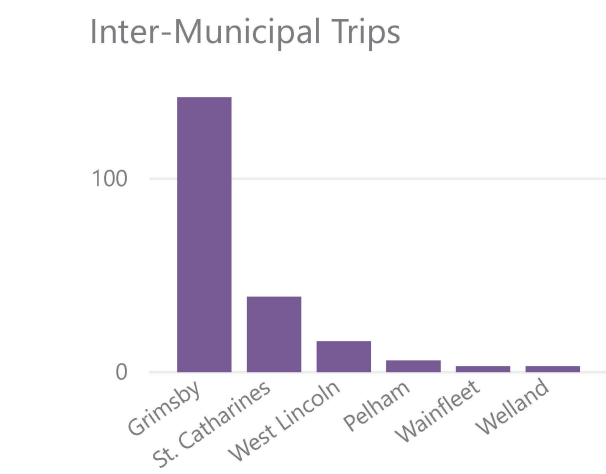
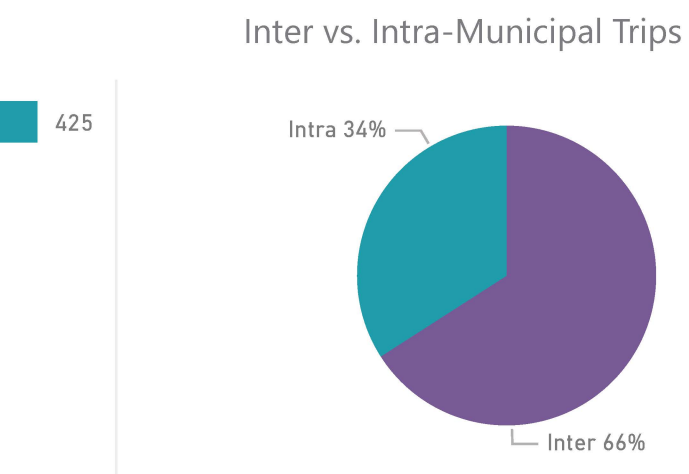
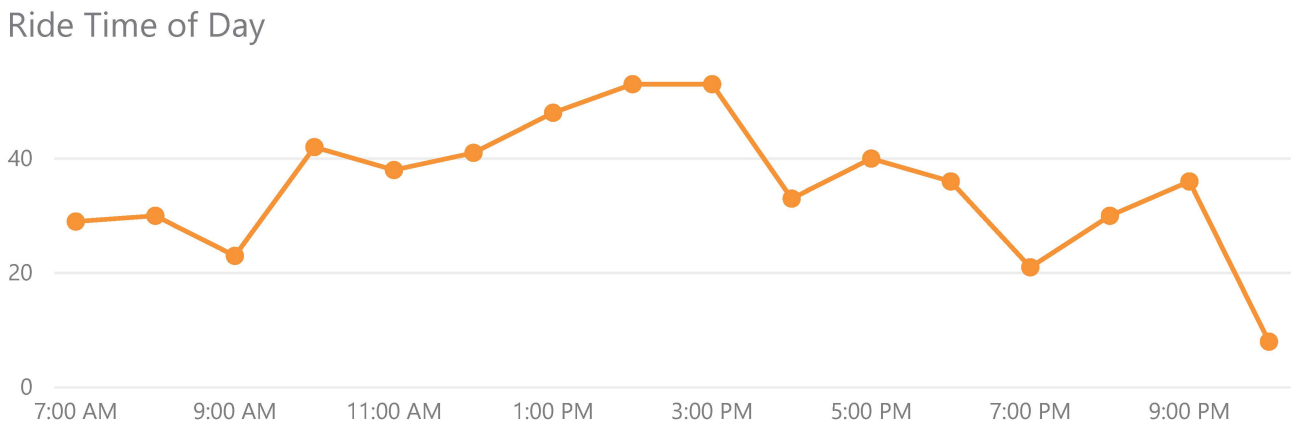
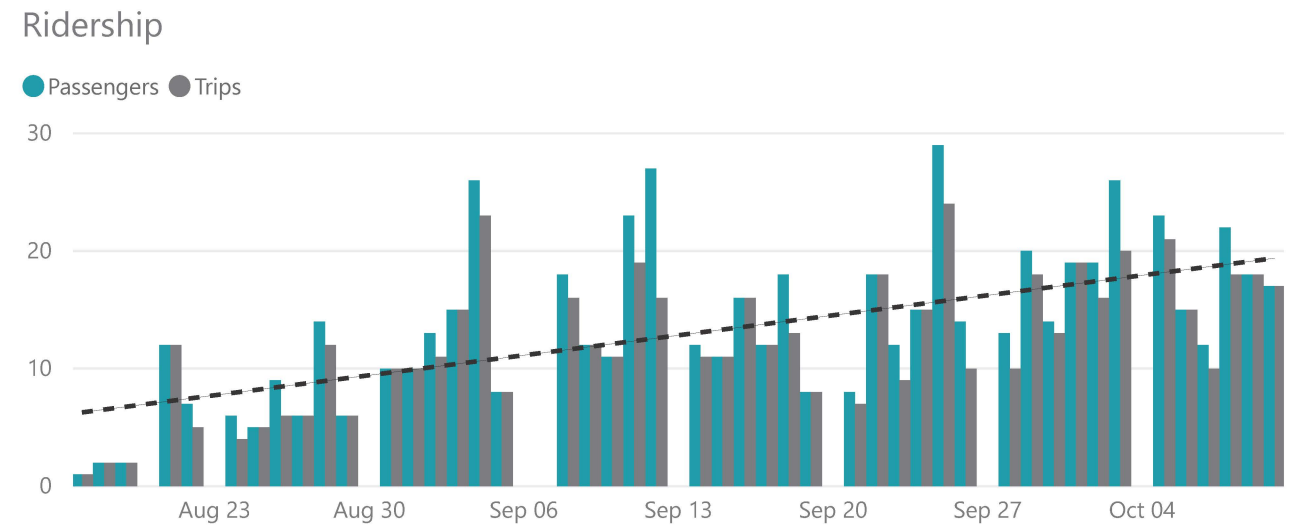
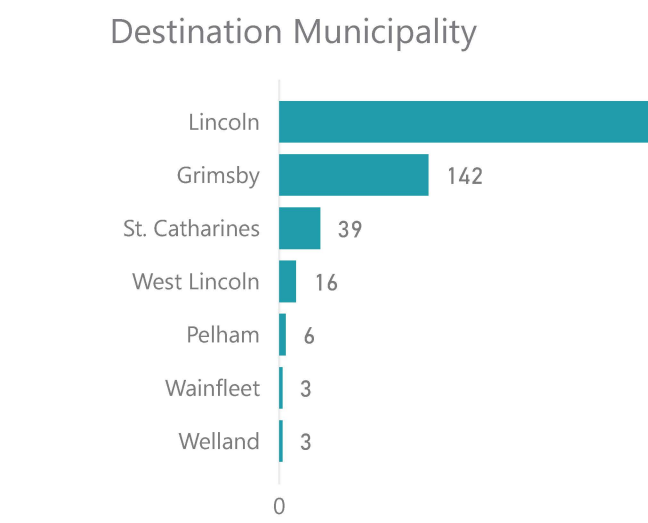
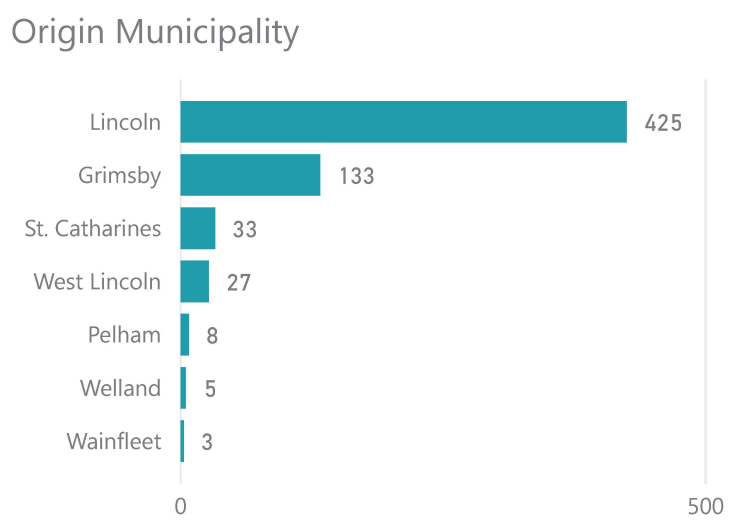
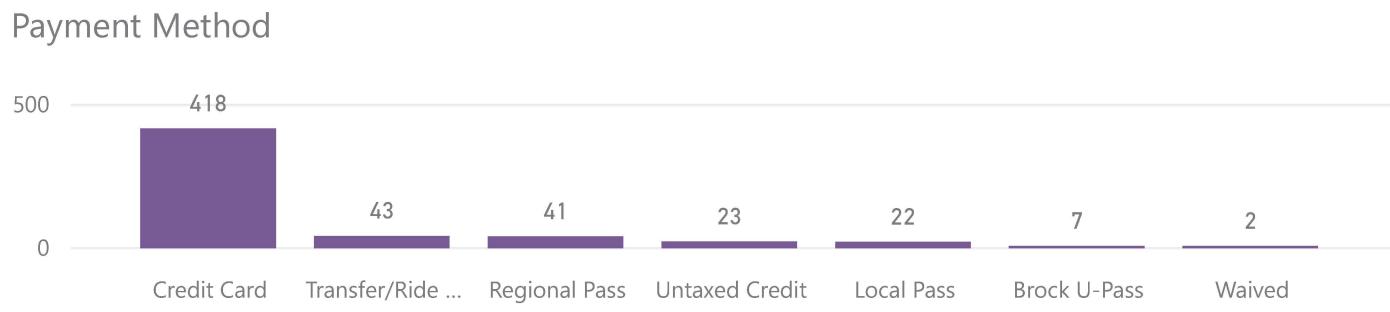
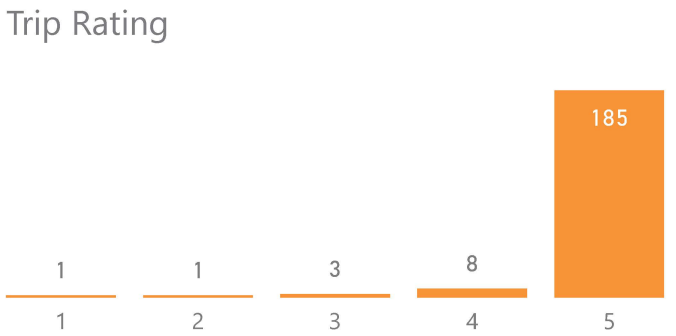
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NRT OnDemand Metrics: Lincoln

Number of Riders
634

Number of Accessible Trips
12

Number of Trips
561



Data from 2020-08-17 to 2020-10-10

NRT OnDemand Metrics: NRT OnDemand vs. uLinc

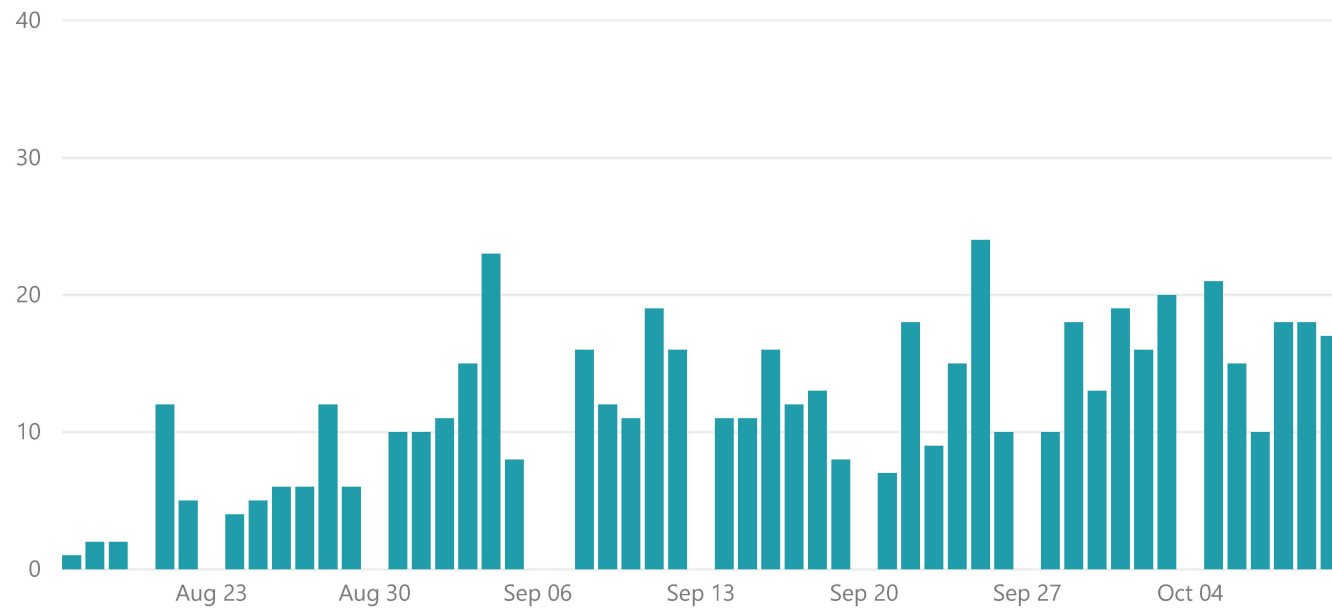
NRT OnDemand Ridership

634

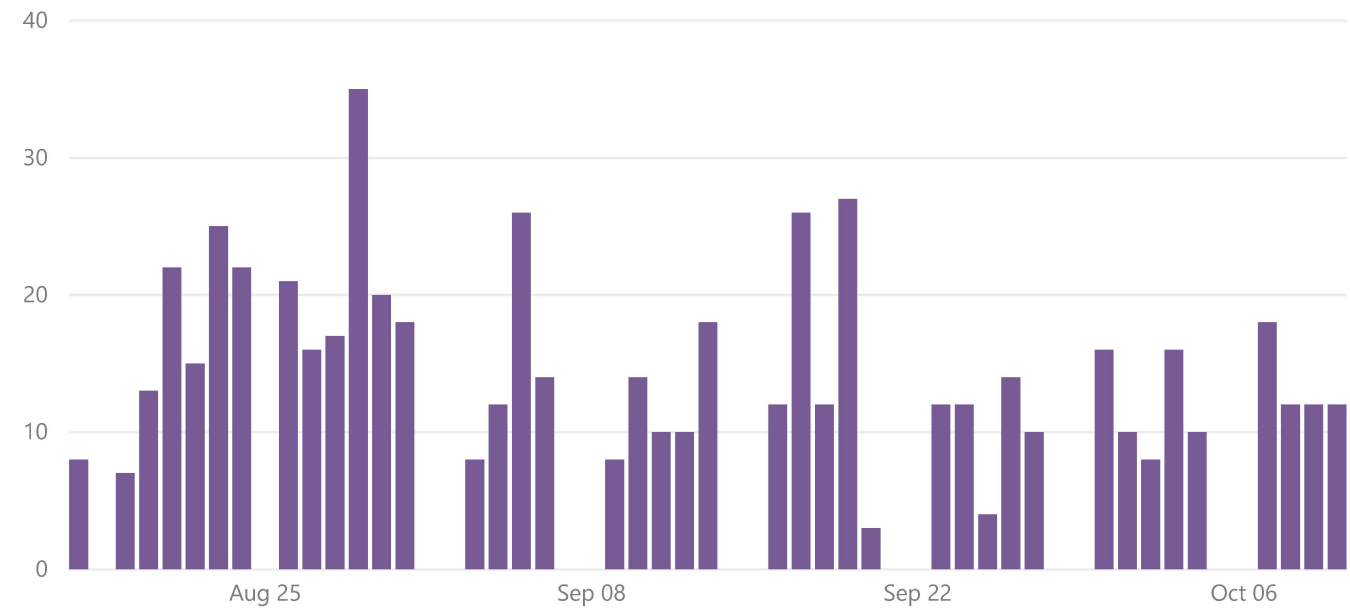
uLinc Ridership

605

NRT OnDemand Ridership - August 17th - October 10th 2020

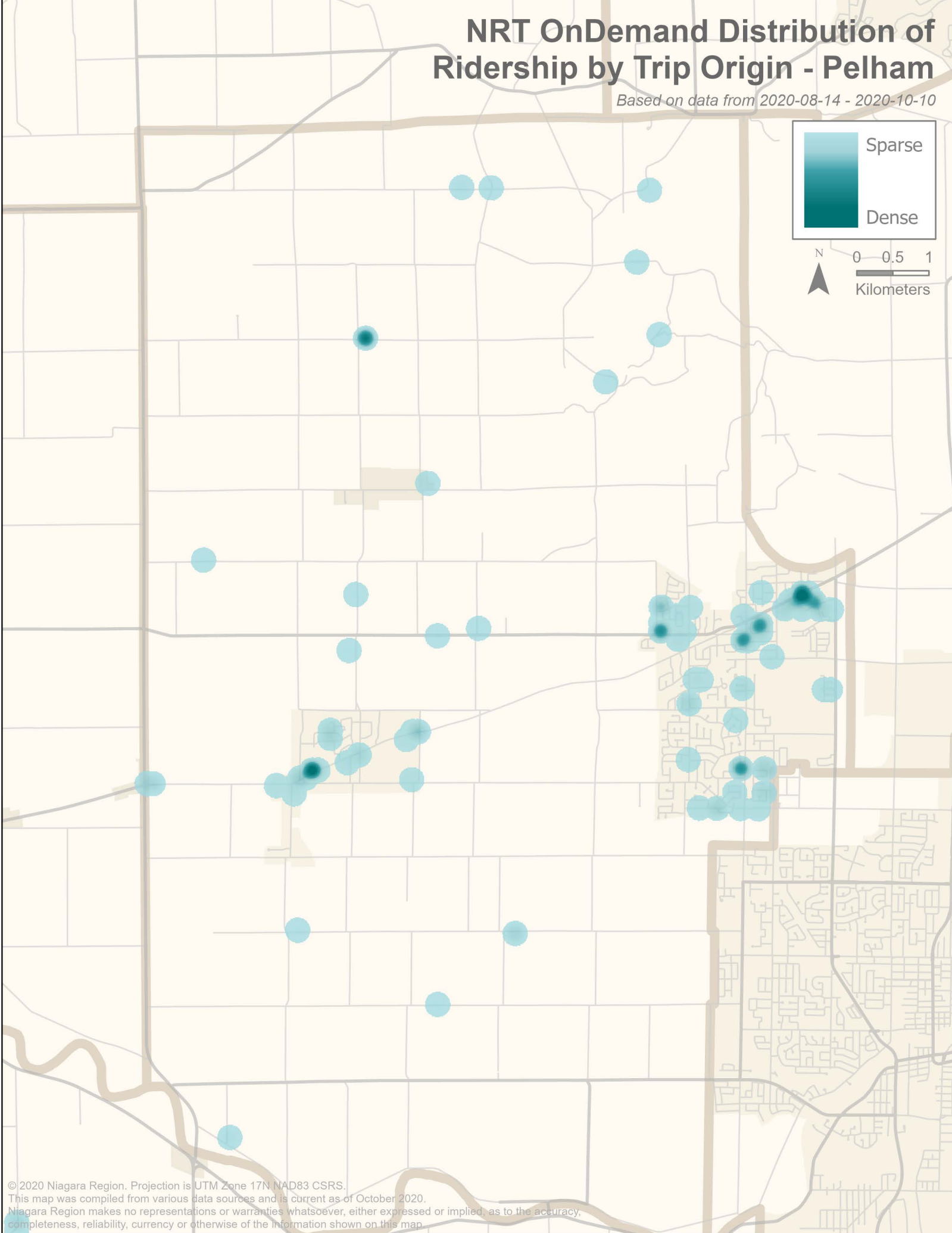
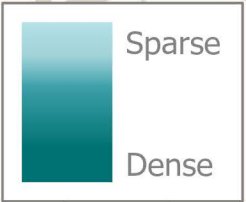


uLinc Ridership August 17th - October 10th 2019



NRT OnDemand Distribution of Ridership by Trip Origin - Pelham

Based on data from 2020-08-14 - 2020-10-10



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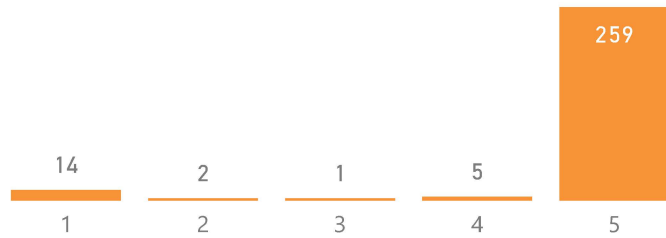
NRT OnDemand Metrics: Pelham

Number of Riders
582

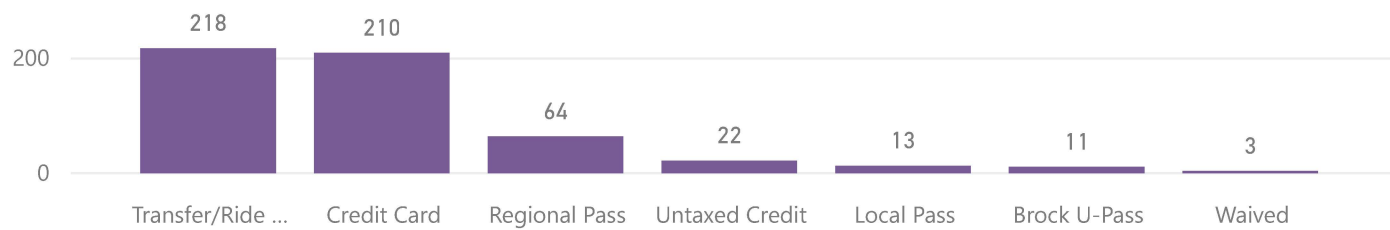
Number of Accessible Trips
0

Number of Trips
551

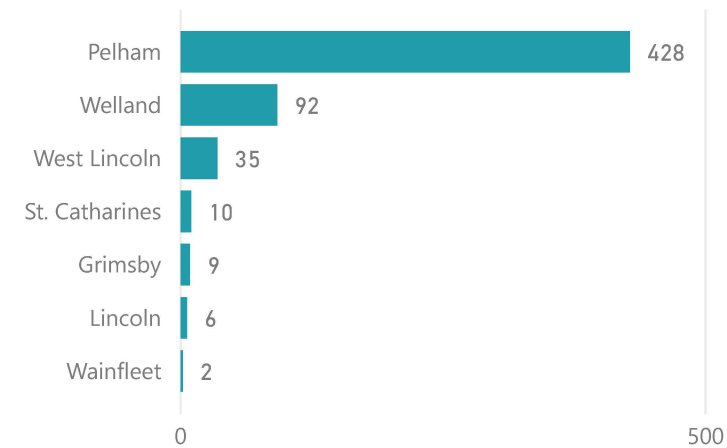
Trip Rating



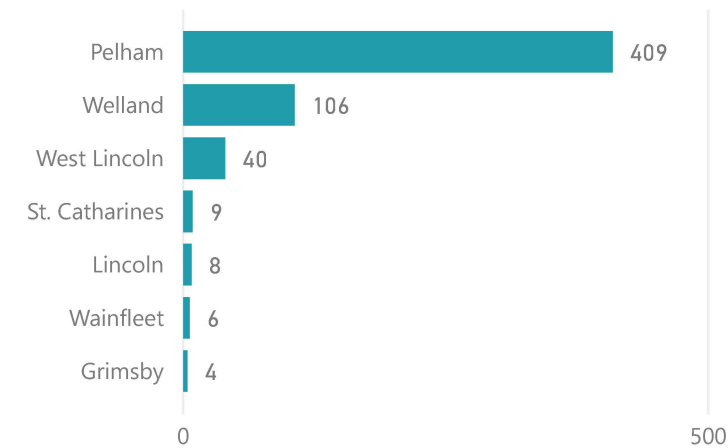
Payment Method



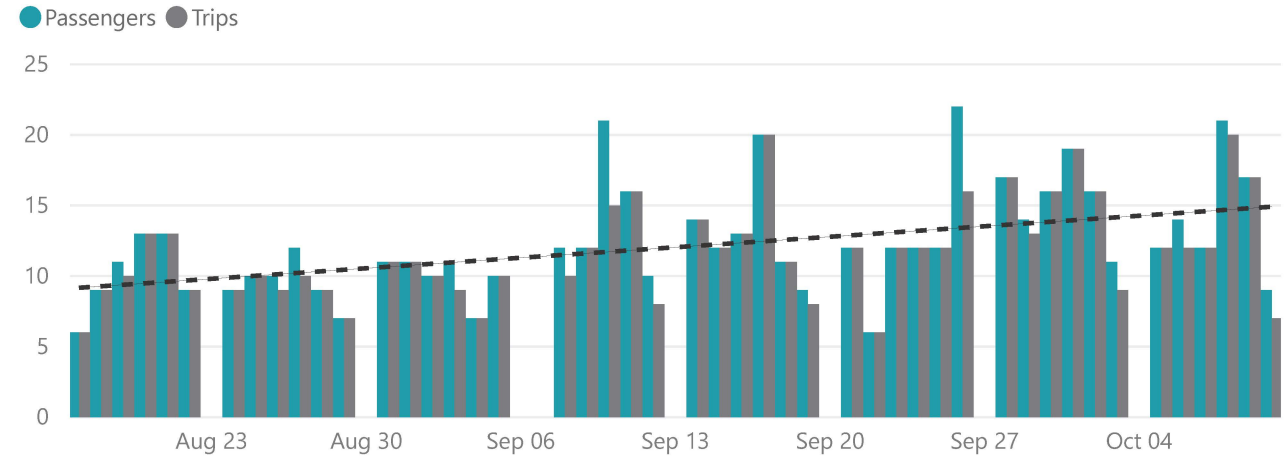
Origin Municipality



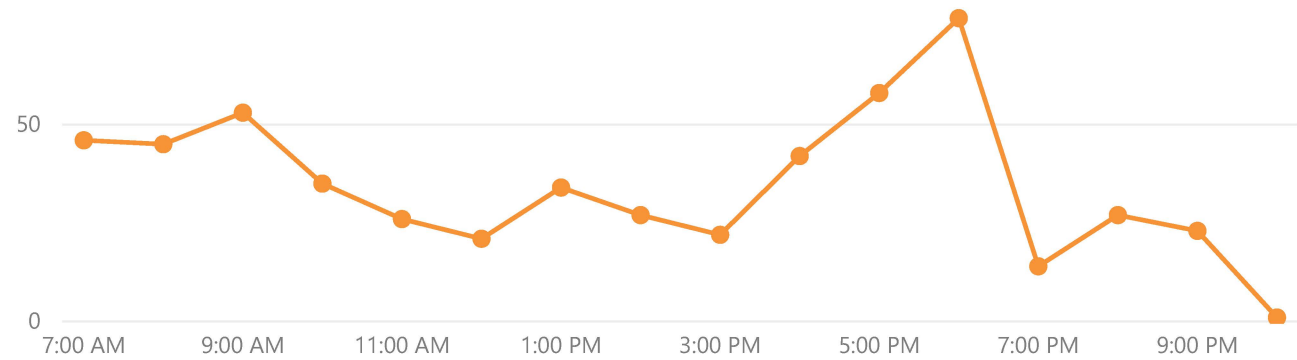
Destination Municipality



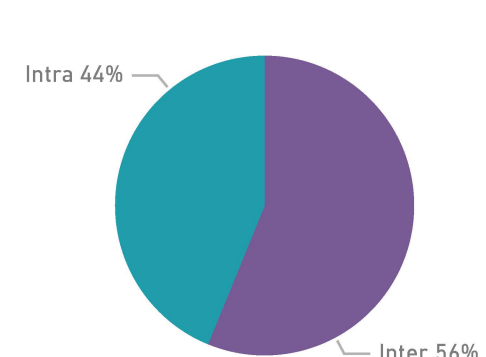
Ridership



Ride Time of Day



Inter vs. Intra-Municipal Trips



Inter-Municipal Trips

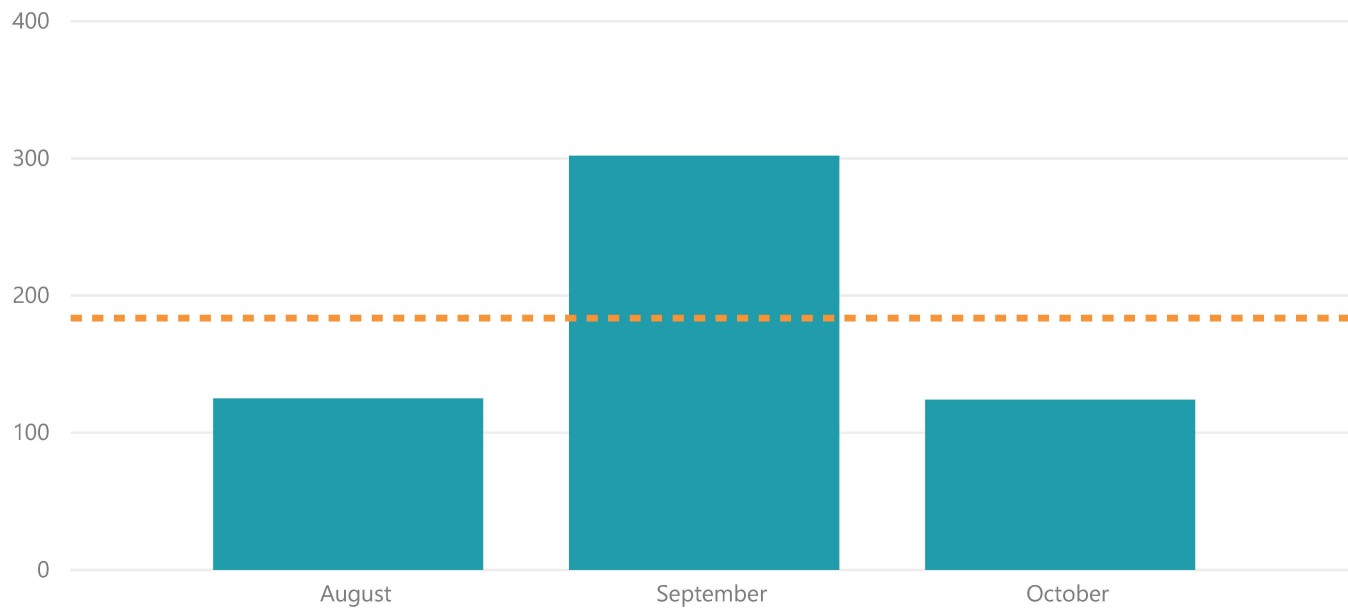


NRT OnDemand Metrics: NRT OnDemand vs. Pelham Transit

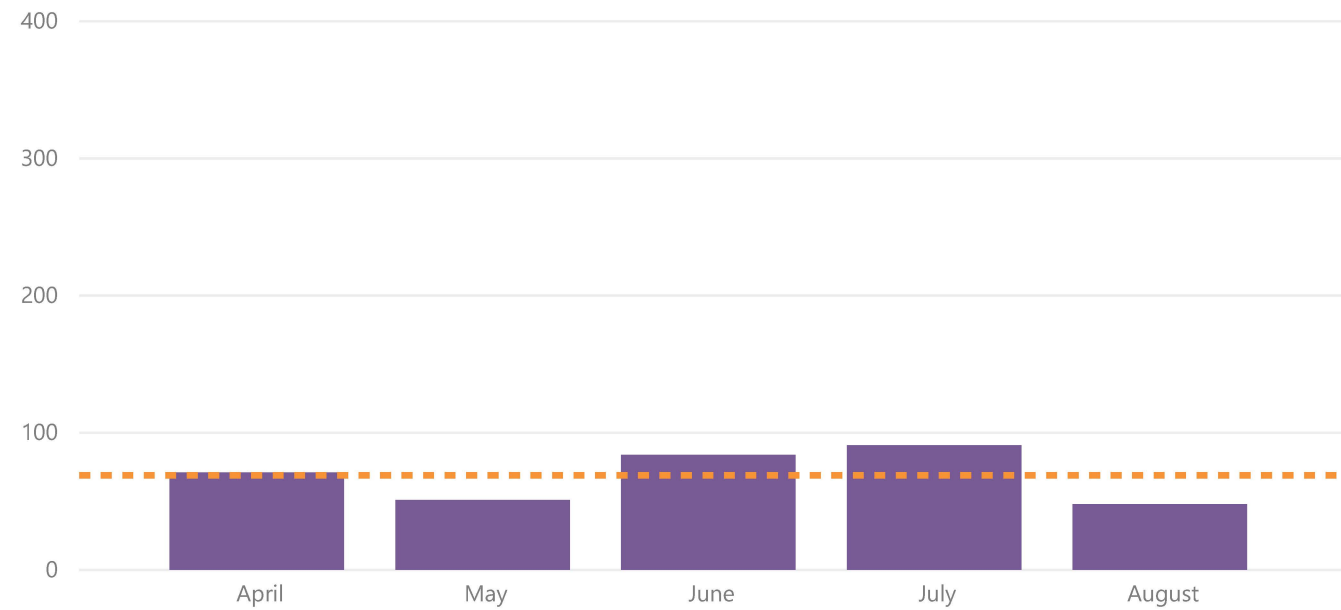
NRT OnDemand Ridership
582

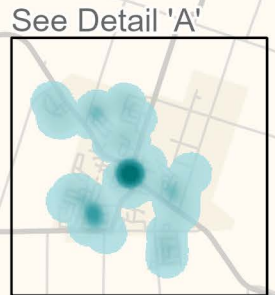
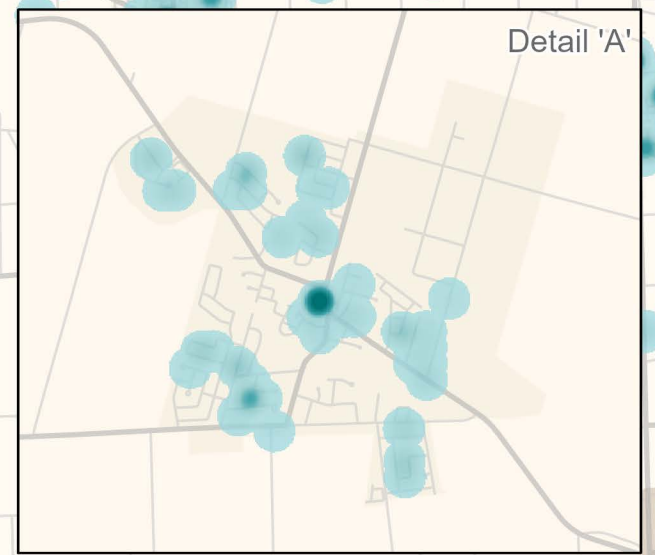
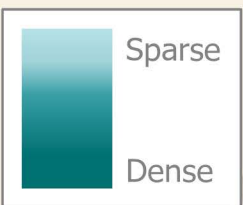
Pelham Transit Ridership
345

NRT OnDemand Ridership - August 17th - October 10th 2020



Pelham Transit Ridership - April - August 2020





NRT OnDemand Distribution of Ridership by Trip Origin - Wainfleet

Based on data from 2020-08-14 - 2020-10-10

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NRT OnDemand Metrics: Wainfleet

Number of Riders
30

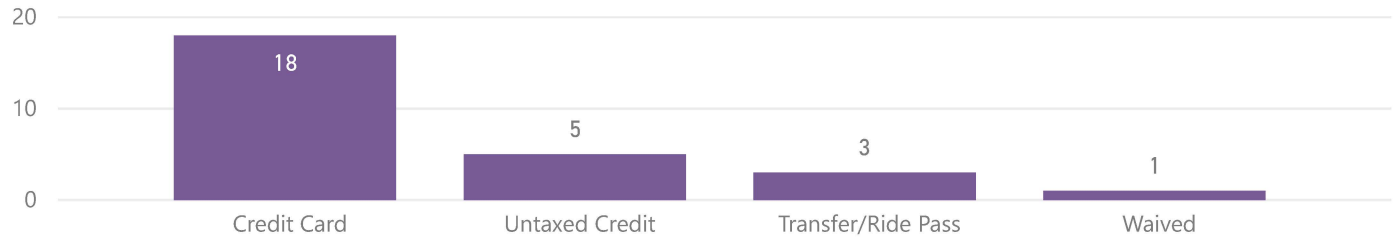
Number of Accessible Trips
0

Number of Trips
27

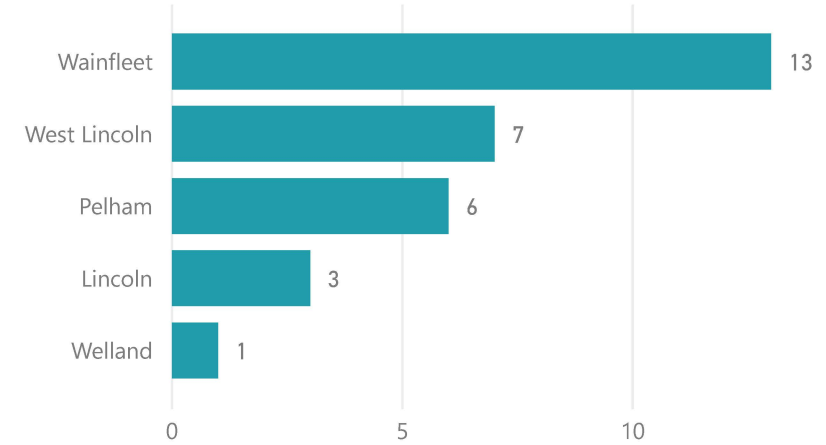
Trip Rating



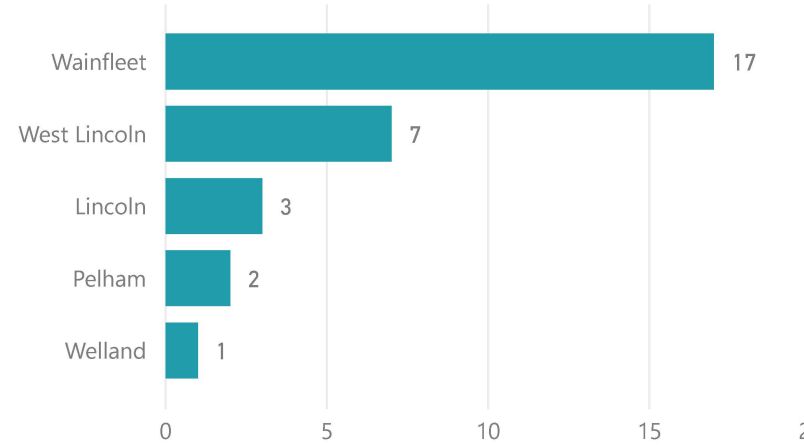
Payment Method



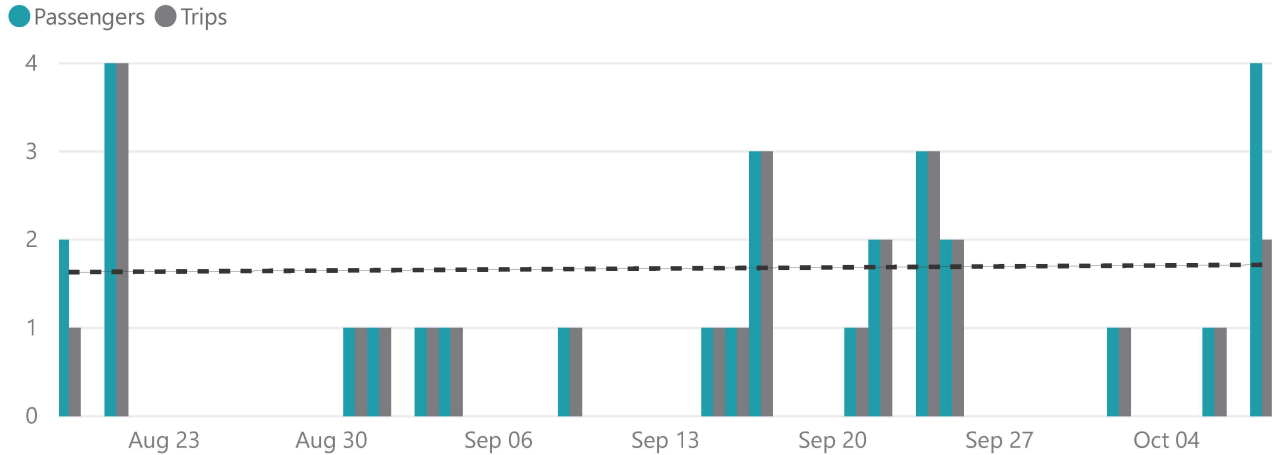
Origin Municipality



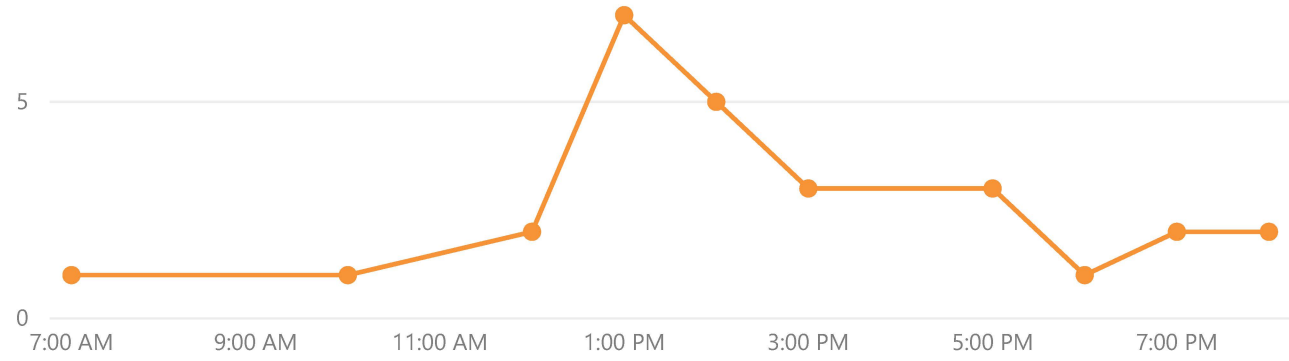
Destination Municipality



Ridership

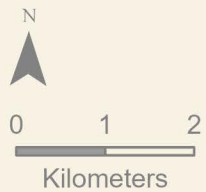


Ride Time of Day

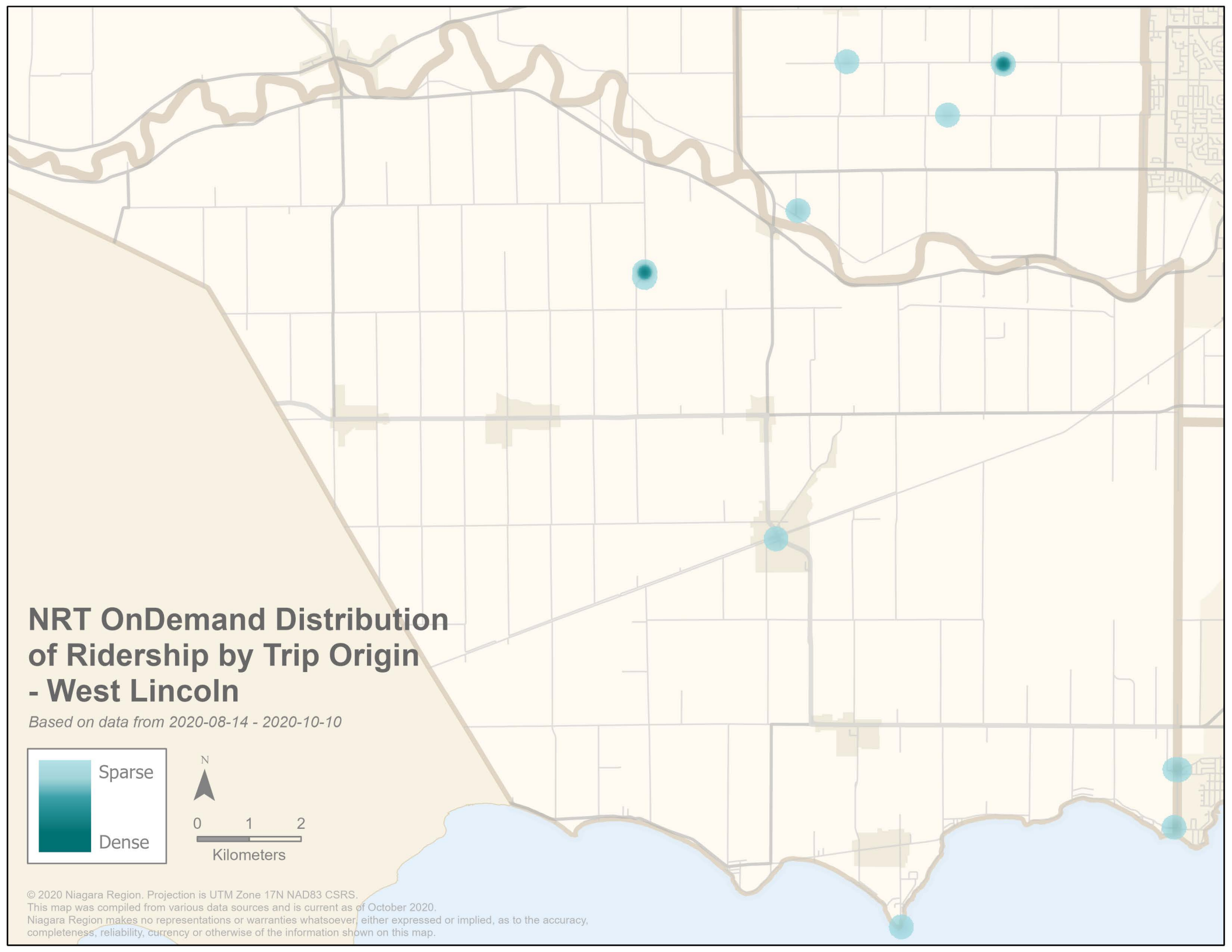


NRT OnDemand Distribution of Ridership by Trip Origin - West Lincoln

Based on data from 2020-08-14 - 2020-10-10



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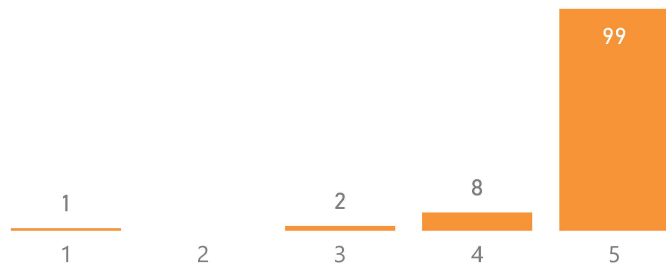
NRT OnDemand Metrics: West Lincoln

Number of Riders
347

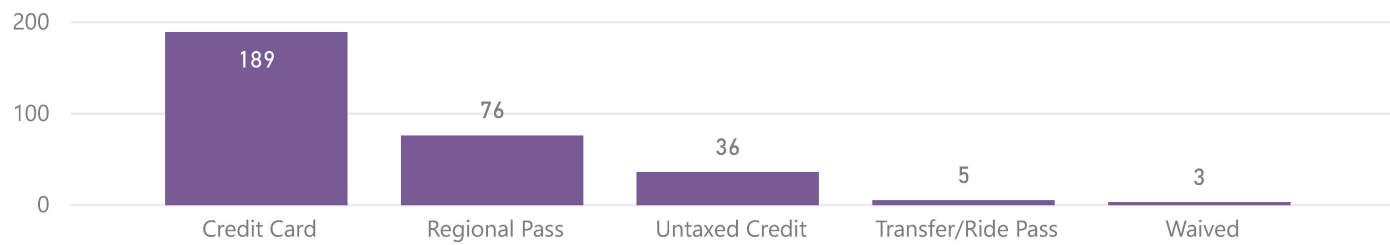
Number of Accessible Trips
2

Number of Trips
319

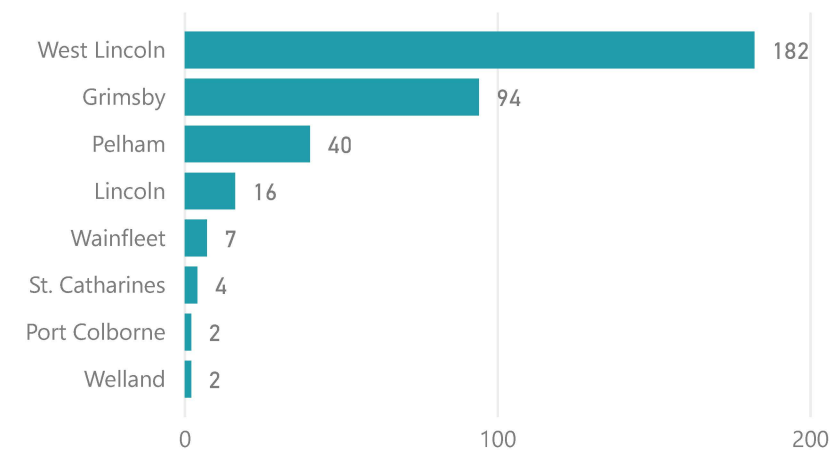
Trip Rating



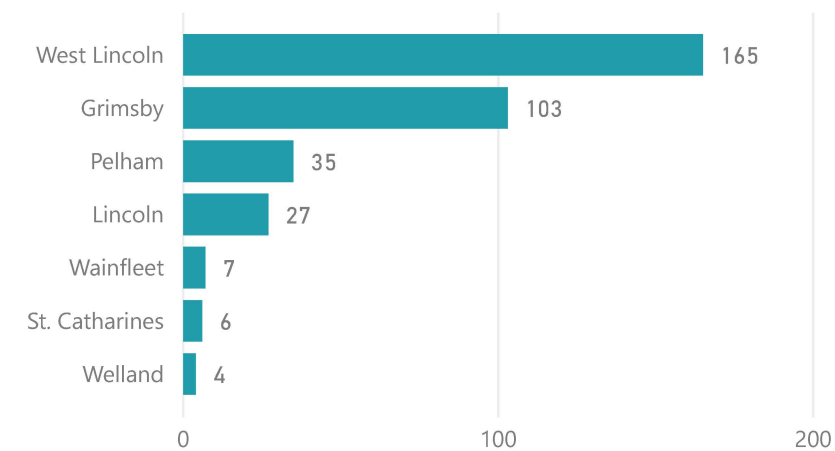
Payment Method



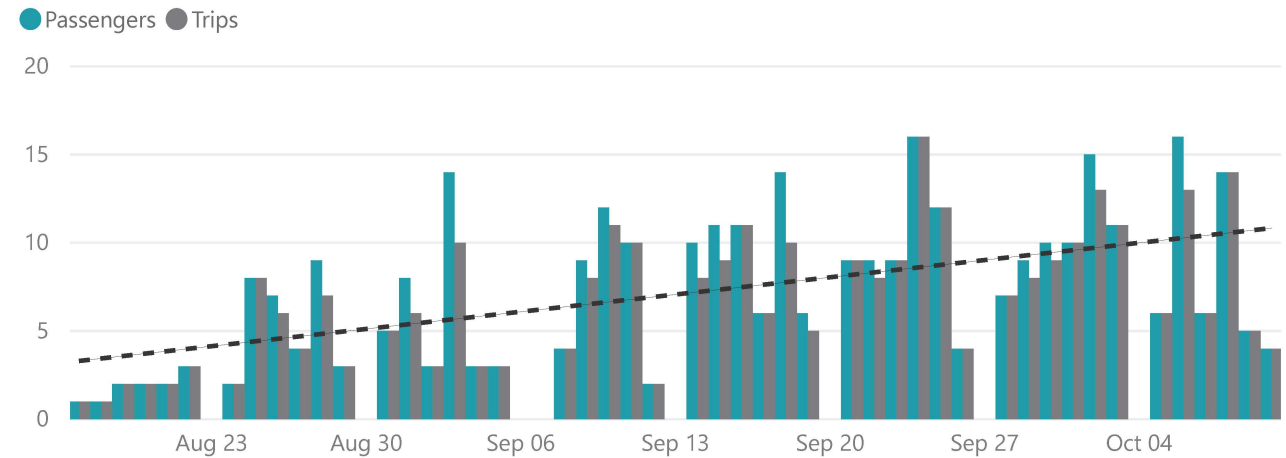
Origin Municipality



Destination Municipality



Ridership



Ride Time of Day

