DILLON CONSULTING

CITY OF HUMBOLDT

Transit Services Study

Final Report

March 2023 – 22-4986

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1.0 Introduction

The City of Humboldt is exploring public transportation options and models to meet the needs of residents of Humboldt. Before the start of the COVID-19 pandemic, taxi service was offered by a single local small business. During the pandemic, the taxi company stopped operation in the city and has not intended to return, leaving residents without a transportation service aimed at the general population. The City operates a specialized service (the Mobility Van), which was recently opened members of the public with limited transportation options.

Humboldt City Council and residents have voiced concerns about the lack of transportation options within and outside of Humboldt. As a result, the City has initiated a study to determine the optimal public transportation solutions and models for Humboldt. The purpose of this report is to review the transportation demands and needs within the Humboldt and the surrounding area, and recommend an optimal service option. The report includes the results of engagement efforts with the community and key stakeholders, the major expected destinations, the service alternatives, and a detailed service plan including funding models.

2.0 Analysis of Existing Service

This section presents information about the City and surrounding communities (i.e. demographic information, travel data, growth), relevant community plans, existing transportation options (i.e. Mobility Van), and other peers.

2.1 Humboldt Background

Humboldt is a smaller community with no existing fixed-route or on-demand transit services that are available to all residents of the City. Many residents and councillors have voiced their concern over the limited mobility options available, and their desire for a public transportation service to allow them to access essential goods, services and medical appointments within Humboldt and the broader region.

The City of Humboldt is located in central Saskatchewan, approximately 115 kilometres east of Saskatoon. Other similar sized communities in this larger region include Lanigan, Watrous, Wynyard, Melfort, Wadena, and Warman. The City has experienced a 2.8% population growth between 2016 and 2021. As of the 2021 census, the City has an existing population of 6,033 residents and 2,940 employees spread over a geographic area encompassing 11.66 square kilometres.

Highway 20 and Highway 5 are the major corridors that connect Humboldt to the rest of the province. Commercial uses are concentrated along these corridors. Residential neighbourhoods that surround these two highway corridors mostly consist of single-detached dwellings. The city is also home to other various land uses including, parks, three elementary schools, a high school, the Carlton Trail Regional College, and the Humboldt Uniplex.

2.2 Policy Framework

The Province of Saskatchewan and City of Humboldt have created various plans and policies that impact the potential for a transit service. Provincial and City level plans dictate development and guide future transportation network plans. These plans need to be considered when developing corresponding local plans. The following documents were reviewed:

2.2.1 Province of Saskatchewan

2.2.1.1 Saskatchewan's Growth Plan

Saskatchewan has developed a Growth Plan that governs the province's direction until 2030, so that it can efficiently grow to a population of 1.4 million people, and into a stronger economy with 100,000 more jobs. It directs the province's development strategy in a wide range of sectors, including infrastructure, finance, environmental protection, and tourism. In terms of transportation infrastructure, Section 7 directs the province to:

> "Build an integrated transportation network by efficiently managing the transportation system through integrated planning of initiatives at the provincial, regional and municipal levels that result in future population and private sector growth."

This highlights the importance of improving transportation planning across all levels of government to increase the province's competitiveness. The Growth Plan explicitly states that the Government of Saskatchewan will encourage greater co-operation between municipalities in the development of municipal infrastructure projects. Therefore, working with neighbouring municipalities to expand transit service is encouraged by the provincial government's plan.

2.2.1.2 The Proposed Accessible Saskatchewan Act

The Accessible Saskatchewan Act is a pending legislation governing the removal and prevention of accessibility barriers for persons with disabilities. According to Part 5 of the bill (Accessibility Standards), the Act authorizes the Lieutenant Governor in Council of Saskatchewan to make regulations respecting transportation. The United Nations Convention on the Rights of Persons with Disabilities will be referenced in developing a proposed accessibility standard. The Act also authorizes any inspector to enter a vehicle and conduct an inspection for the purpose of determining whether there is compliance with the Act. Therefore, in developing a transit service, it is important to remove any barrier for people with disabilities to use the service.

2.2.2 City of Humboldt

2.2.2.1 Official Community Plan 2035

Humboldt 2035 is the Official Community Plan which establishes direction in areas such as land use planning, growth management, infrastructure, economic development, housing, transportation, community facilities and services, and more. This Plan sets out the goals of the City as follows:

- Active
- Welcoming
- Prosperous
- Creative
- Green
- Connected
- Sustainable
- Cooperative

Section 5.1.3.1 Policy (f) states that:

> "The City shall continue to monitor the population and transportation system needs of the community to evaluate the need and feasibility of developing a transit system in the future".

This highlights the support of the City in exploring public transit services to meet the transportation needs of the Humboldt community. Intensification is also supported by the City, particularly in the City Centre and areas adjacent to the City Centre. This type of higher-density built form is intended to be supportive of multiple modes of transportation including walking, cycling, transit, as well as private automobiles. Providing transportation choices, including sustainable options, is of high priority for the City.

2.3 Existing Transportation Options

This section reviews the Mobility Van service, which is the only existing transportation option in Humboldt. Currently, there are no taxi services or transportation network companies (TNCs) operating in the city.

2.3.1 Mobility Van Service

A paratransit service is provided for persons with disabilities and other eligible residents with limited mobility options called the Mobility Van. This service was originally designed and operated as a specialized transit service for individuals who could not access conventional taxi services due to disability. When the privately-operated taxi service ceased operations in 2021, it was decided to expand Mobility Van service to all individuals who required it due to lack of a private vehicle or other transportation options. **Figure 1** indicates the types of locations where registrants for the service lived. About one-fifth of registrants do not have a registered address. For the permanent Mobility Van service, nearly half of the registrants lived in large senior housing complexes. St. Mary's Villa (located near 12 Ave and Centennial Way) was by far the most common location for registrants (**Figure 2**), with additional registered seniors located in other housing in Humboldt, Middle Lake, and Watson. For the temporary service introduced in 2021 for the broader population, a larger share of residents live within the inner part of Humboldt, with smaller shares from outer parts of Humboldt and senior housing.

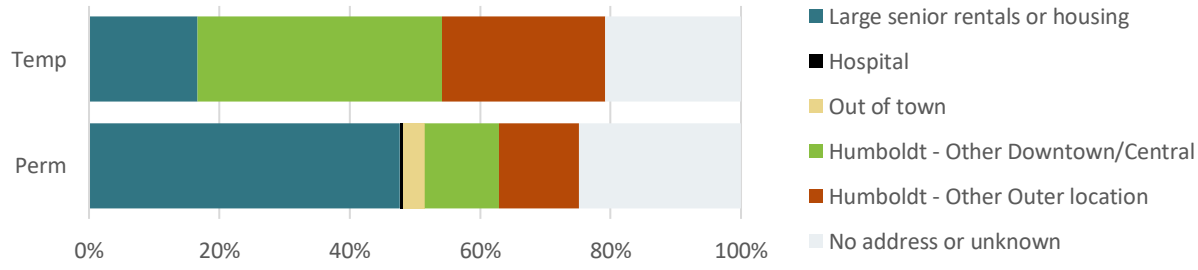


Figure 1: Registered Location Types

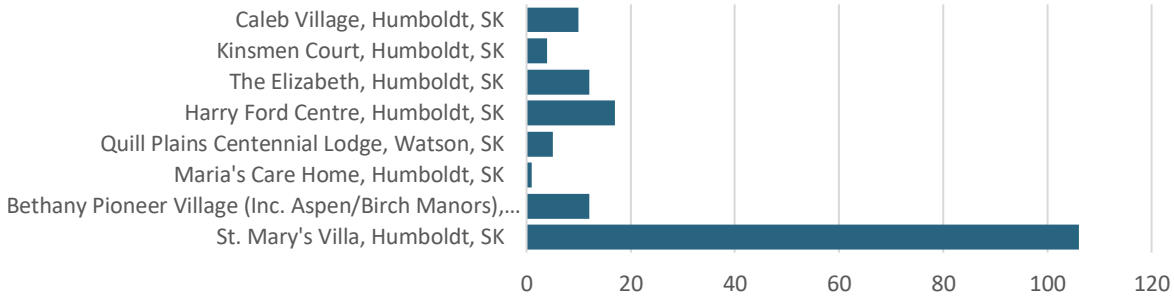


Figure 2: Registered Location Counts for Senior Housing

Mobility Van clients are charged a fare of $4.50 per passenger for a one-way trip, or $9.00 per passenger for a two-way trip within the city limits. Outside city limits, clients are charged a flat fee of $22.00 per passenger and an additional $0.80 per kilometre. The per-kilometre rate may be shared by a group or by sponsors of a group. If the Mobility Van operator is requested to wait for a client at an appointment or function, a standby charge of $22 per hour will be applied.

The Mobility Van operates Monday to Friday between 8:00 a.m. and 5:00 p.m. Humboldt requests that clients provide as much advance-notice as possible (recommending 24 hours). Priority is given to clients taking essential travel, which includes work and medical trips. The service operates within a 50-kilometre radius around Humboldt, but is able to travel outside the radius for medical trips. The City's service standard uses a 30-minute pick-up window (15 minutes on either side of the scheduled pick-up time).

The service contracts the former taxi operator to drive the Mobility Van, which typically costs around $55,000 per year. Each year, there are between 1150-1350 trips taken using the service, except for in 2020, when there was a sharp decrease in ridership because of the COVID-19 pandemic. **Figure 3** shows the distribution of trip purposes for each of the last five years of service. Trips were predominantly medical, aligning with the priority of the service, although the proportion of shopping-related trips has slowly increased.

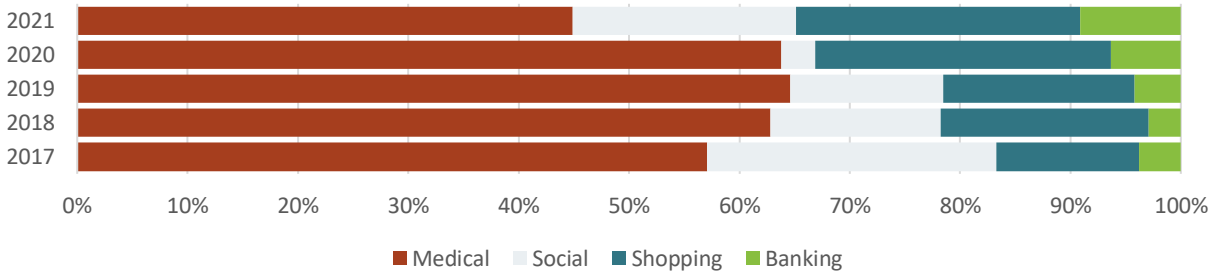


Figure 3: Share of Known Trip Purposes

2.4 Peer Review

When developing a transit system, there needs to be an understanding of travel demand and the number of trips that would be taken by transit. In most rural and small community environments where transit is available, transit represents between 0.5 to 1.5% of all trips taken (mode share). This is due in part because:

- a large majority of people that move to less urban areas own their own vehicle;
- travel distances to destinations are long and densities are low, making convenient fixed-route transit less cost effective; and
- access to stops can be a challenge, with many smaller community roads lacking pedestrian infrastructure.

While these challenges result in a much lower demand for transit service, it also increases the 'need' for members of the community that do not have access to a private automobile. One of the first steps to understanding the potential demand for transit in the City was to look at other similar-sized rural municipalities that operate specialized transit. Conducting a peer review of other rural specialized transit systems allowed us to gather benchmark data on ridership per capita, ridership per service hour and service hours per capita. The peer review as illustrated in **Table 1** reflects rural municipalities in across Canada. The data was taken from the 2021 Canadian Urban Transit Association (CUTA) Specialized Transit Services Fact Books for Canada and Ontario. Five municipalities were studied, all in the smallest population group (<50,000 people) and were the closest fits to Humboldt in the Fact Books:

- **Bracebridge, Ontario:** Bracebridge is a small municipality in Ontario with a similar service area population to Humboldt.
- **Cobourg, Ontario:** Cobourg has a similar area to Humboldt, and only operates on-demand service and specialized service.
- **Fort Frances, Ontario:** Ingersoll is another small municipality in Ontario with a similar population and area to Humboldt.
- **Hinton, Alberta:** Hinton is a municipality in Western Canada with under 10,000 people with both fixed-route and specialized service.
- **Yellowknife, NWT:** Yellowknife has a large operating area but a rural profile.

Limited information was available for municipalities of Humboldt's size in Western Canada, so similarly-sized municipalities in Ontario were selected based on land use profiles and service areas. Compared to peer agencies, Humboldt's Mobility Van service has relatively few passengers per resident, and a much higher revenue/cost ratio. This because the average fare is 9 times higher than the average from the peer agencies, but the cost of providing service per passenger is in line with other agencies. The higher average fare may be partially due to the trips external to Humboldt, which pay a steeper mileage rate. Humboldt also has fewer service hours per capita, but the number of passengers per capita is similar to the peer systems. With 19.9% of system costs covered by revenue, Humboldt is an outlier, with a lower net operating cost per passenger than the system average.

Table 1: Peer Review of Rural Specialized Transit Data and Performance (2021)

	Humboldt	Avg.	Cobourg	Hinton	Fort Frances	Bracebridge	Yellowknife
Municipal Population	6,033	14,620	19,440	9,882	7,739	15,405	20,636
Service Area Population	6,033	12,526	19,440	9,882	7,739	6,000	19,569
Area (km^2)	13.3	37.3	13.0	33.7	7.3	26.8	105.5
Ridership (excl. Support Trips)	1,159	4,911	6,606	695	9,849	1,412	5,993
Support Trips[1]	69	657	2,505	549	0	62	169
Revenue / Cost Ratio	19.9%	5.2%	3.4%	5.1%	16.8%	0.3%	0.6%
Net Operating Cost / Capita	$8.51	$11.66	$13.59	$1.67	$16.29	$20.83	$19.64
Total Cost / Passenger	$52.22	$41.43	$30.01	$13.97	$15.39	$85.04	$62.72
Passengers / Capita	0.20	0.45	0.47	0.13	1.27	0.25	0.31
Passengers / Service Hour	2.64	1.42	1.95	Not Provided	Not Provided	0.47	1.59
Service Hours / Capita	0.08	0.21	0.24	Not Provided	Not Provided	0.52	0.20
Average Fare (excl. Supports)	$11.01	$1.18	$1.41	$1.28	$2.59	$0.27	$0.36
Fare (local trip)	$4.50	$2.30	$2.00	$3.00	$2.00	$2.50	$2.00
Monthly Pass, adult	No Pass	$57.50	$60.00	$70.00 (30-day)	No Pass	$50.00	$50.00
Monthly Pass, senior	No Pass	$47.50	$30.00	$70.00 (30-day)	No Pass	$40.00	$50.00
Vehicles	1	1-2	1	1	2	1	2
Weekday Service	8:00 a.m. to 5:00 p.m.	7:30 a.m. to 6:00 p.m.	6:15 a.m. to 10:00 p.m.	9:00 a.m. to 2:30 p.m. (T-Th)	8:00 a.m. to 4:00 p.m.	7:30 a.m. to 6:30 p.m.	6:40 a.m. to 7:10 p.m.
Saturday Service	None	None	6:15 a.m. to 6:45 p.m.	None	None	None	6:40 a.m. to 7:10 p.m.
Sunday Service	None	None	8:45 a.m. to 3:45 p.m.	None	None	None	None
Holiday Service	None	None	9:00 a.m. to 5:00 p.m.	None	None	None	None

Note 1: Support trips refer to trips made by attendants and companions together with primary paratransit passengers

3.0 Community Engagement

Multiple stakeholders in the community were engaged to better understand transportation needs in Humboldt. Residents were invited to complete an online survey, where they identified their broad priorities for public transportation and their primary reasons for travel. A workshop was also held with key community organizations, who expressed their perspectives on transportation needs, and a presentation was given to Humboldt City Council.

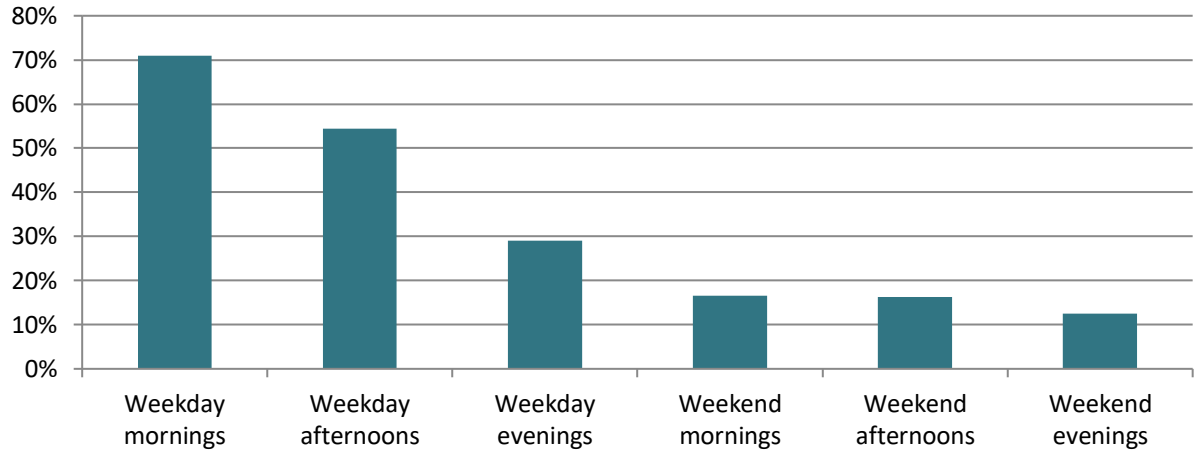
3.1 Online Survey

The resident survey was designed and shared using SurveyMonkey, and was available to complete from November 16 to December 2, 2022. 282 respondents completed the online survey, and a further 39 respondents completed it using a paper alternative. The survey covered three main areas: demographics, personal transportation characteristics, and perspectives on Humboldt's transportation services.

Respondents came from a range of demographic backgrounds. The survey sampled residents from each quadrant of Humboldt (measured from the intersection of Highways 5 and 20), in nearly even proportions (22-27% from each quadrant). 30% of respondents were seniors (65 and older), 48% were middle-aged (35-64), and 19% were young adults (20-34). The remainder were either 19 and under, or did not identify their age. 22% of respondents identified as having personal mobility challenges.

Questions concerning personal transportation characteristics identified what transportation was available to each respondent and asked about their primary reason for regular travel. 81% of respondents had an active driver's licence, and 79% owned or had regular access to a personal vehicle. Respondents mostly travelled by driving (70%), walking (13%), or as a passenger in a personal vehicle (10%). Working (46%), grocery shopping (27%), and health appointments (7%) were the primary travel purposes for regular trips, and these trips were made frequently (56% made at least 4 round trips a week) on weekday mornings (71%) and afternoons (54%). **Figure 4** shows the full spread of trip times for participants' most popular trips. Outside of Humboldt, 73% of respondents expressed Saskatoon as a key destination for regular travel, and 33% made regular trips to towns east of Humboldt. Trips to towns in other directions were regularly made by 15-20% of respondents. For what residents considered most important in a transit service, affordability and accessibility were ranked higher than other attributes, door-to-door service and safety were ranked lower, and frequency was ranked in the middle.

Figure 4: Trip Times for Participants' Most Common Trips



Other questions related to Humboldt's service offering. 10% of respondents were prior passengers of the Mobility Van. Of the 90% remaining respondents, 65% did not use it because they owned a car and preferred to drive, 23% did not know the service existed, 10% did not know it was temporarily available to others due to the lack of taxi service, and 9% needed to travel at times that the Mobility Van doesn't operate. Respondents were generally willing to use a more widely available transportation service (70% indicated "likely" or "very likely"), and would intend to use it for health appointments (61%), grocery shopping (59%), recreational activities (52%), social travel (45%), banking (43%) and retail shopping (41%). A larger share of respondents (86%) were supportive of a service available to all residents.

If Humboldt offered a new service, residents were split on the type of service given the provided options: 40% preferred a shuttle bus, 30% preferred a private taxi service, 22% preferred a shared-ride taxi service, and 9% preferred other options (e.g., fixed-route buses). They were also split on their preferred costing model: 33% preferred a traditional transit funding model (small user fee with large municipal subsidy), 33% preferred a 50-50 split between the user and the City, and 25% preferred a completely fee-supported model. Even though the individual options were split, this indicated at least two-thirds of respondents desired a system with at least partial municipal subsidy. Respondents were also generally supportive of reduced fares for seniors (73%), and mixed concerning reduced fares for people with a limited or reduced ability to drive (56%), and children (49%). Otherwise, respondents generally indicated a concern for ensuring any transportation alternative to driving is available for seniors, children, people with disabilities, and people without a licence or vehicle.

3.2 Stakeholder Workshop

A workshop was held in Humboldt in December 2022 with members from Caleb Village Retirement Living, the Humboldt and District Hospital Foundation, Humboldt and District Community Services, the Humboldt Housing Authority, and the Newcomer Centre Settlement Services. From this workshop, themes for what stakeholders are looking for in a transportation service emerged:

- **Travel to Saskatoon:** Stakeholders from all organizations have a strong desire to see trips to Saskatoon. Many disability services are only available in Saskatoon. The Saskatchewan Health Authority is expected to consider rural and regional transportation to health services in Humboldt and Saskatoon, but trips for other purposes were also highly wanted.
- **Lack of Private Interest:** Uber, URide, and taxi companies that operate elsewhere in Saskatchewan were previously contacted and did not express interest in servicing Humboldt because of its small size.
- **Expanded Service Hours:** Some stakeholder organizations already operate their own service during weekday hours, or provide tokens for use on the Mobility Van. The most important request across many stakeholder groups is for service on weekday evenings and weekends. Reasons for expanding service hours include access to Humboldt Broncos games, transportation for appointments outside of existing hours, and access to employment.
- **Inability to Drive:** Two-thirds of community housing residents do not drive, and most female newcomers are unable to drive since they do not have a licence. Since newcomers tend not to have financial stability, even if they can drive they may not have consistent access to cars. Providing service to areas surrounding Humboldt is considered important to ensure surrounding areas have medical and social access and are included in the community.
- **Specific Service Needs:** On days with colder weather, demand increases for the Mobility Van. Some clients with mobility needs have expressed concerns with being unable to use the service on days with poor weather due to the demand from the general public. Some clients for community services prefer being dropped off by a smaller vehicle since they are more discreet than a conventional bus. For caregivers of people with mobility needs, transit was viewed as a one way to lower their workload and provide relief.
- **Cost:** Before COVID-19, the $10 in-City taxi fare was considered expensive. Residents who chained their trips or attended short-term social events viewed the fare even more negatively since they either had to pay the fare multiple times or paid a fare they viewed as relatively high compared to the length of the event they were attending. Some stakeholders would prefer to provide a pass instead of relying on individual payments for some clients.
- **Operational Considerations:** Stakeholder organizations expressed concerns over the potential use of volunteer drivers, both whether or not the driver base would be large enough or reliable. For medical trips to Saskatoon, a smaller volunteer base was considered sufficient while for local service, a larger reliable volunteer base was considered better. The City would also be expected to have to manage this volunteer base. For any service the City chooses, it was emphasized that the service needed to have clear signage, vehicle livery, and advertisements to ensure it's visible.

3.3 Council Session

Dillon presented their in-progress findings to Humboldt City Council on January 9, 2023. Council requested further information and research into specific topics, which are further explored in the review

in **Appendix A**. Specifically, councillors were interested in the service models in similarly-sized municipalities in Saskatchewan, regulatory requirements, and the potential for attracting partners to help provide service in the City. Councillors desired to see the chosen solution provide service to the entire population, and wanted to ensure that there were alternatives to app-booking for residents that are uncomfortable with that option.

3.4 Summary of Travel Need and Demand

From the characteristics of the existing service and the consultations with community members, a series of general origins and destinations were developed to guide the development of the preferred mobility option.

Residents and stakeholders identified key destinations in and around Humboldt that were of interest to them. These were combined with locations where the Mobility Van has previously operated. **Figure 5** provides a visual summary of the registration locations and identified destinations within Humboldt. The City was split into 8 divisions for counting registration locations, first split by quadrant from the main intersection at the City's core (Highways 20 and 5), then further subdivided by proximity to the core.

Major shopping areas were identified throughout the engagement process at the west end of the City (Quill Centre and Humboldt Mall), which are also near Humboldt's grocery stores. The Humboldt Uniplex and a large majority of existing Mobility Van registrants are also located on the west side of the city, north of the railway. The east side of Humboldt is both relatively less populated and has fewer destinations. Businesses on the east side along Highway 5 are less densely organized and predominantly cater to farmers and others that would likely be using a personal vehicle to move larger purchases or equipment.

Outside of senior housing, there are some neighbourhoods that may have potential for generating trips:

- The northwest quadrant of the City is mostly residential, with commercial districts focused along the highway corridors.
- The Downtown neighbourhood extends west and east of Highway 20 (between Highway 5 and the railway)
- There is a growing neighbourhood in the south end of the City (south of the railway), primarily centred around Highway 20.

Similarly, there are areas in the City where there is lower potential for attracting trips. The northeast quadrant of the City has a small neighbourhood near the core, the Hospital, and the previously mentioned equipment-oriented shopping strip, but most of the land is part of Water Ridge Park. In the engagement process, residents and stakeholders frequently identified the shopping at the west end of the city, the Uniplex (for Broncos games), or the Hospital as destinations.

Figure 6 presents external destinations identified through the engagement process and from the existing registration locations. Other than Saskatoon, locations were filtered to fall within a reasonable service distance from Humboldt (within a 50 km distance from the city centre). Saskatoon was by far the most desired external destination across the online survey and the stakeholder workshop, and was frequently mentioned prior to the start of the study to City staff. Of the remaining destinations, travel to towns east of Humboldt (e.g., Muenster) was more desired than travel in other directions.

Outside of possible destinations, there were other service attributes discussed in the engagement process that were considered when choosing alternatives:

- **Cost:** Reduced fares for seniors, and an affordable transportation alternative for people, recognizing the perceived expense of the prior taxi service for quicker trips or social events. Affordability was one of the most important attributes in the survey, and most survey participants agreed to a subsidized fare of at least 50% of the cost of providing the trip.
- **General Availability:** A transportation alternative for groups for people who are unable to drive. Because of the loss of taxi service, many members of the community have no reliable way to travel inside or outside of the City.
- **Service Hours:** Available and reliable service during expected peak times (weekday mornings and afternoons). The ability to provide service during weekday evenings or on weekends will be explored in the service plan, particularly for employment, appointments, and Broncos games at the Uniplex.

Figure 5: Internal Registration Locations and Destinations

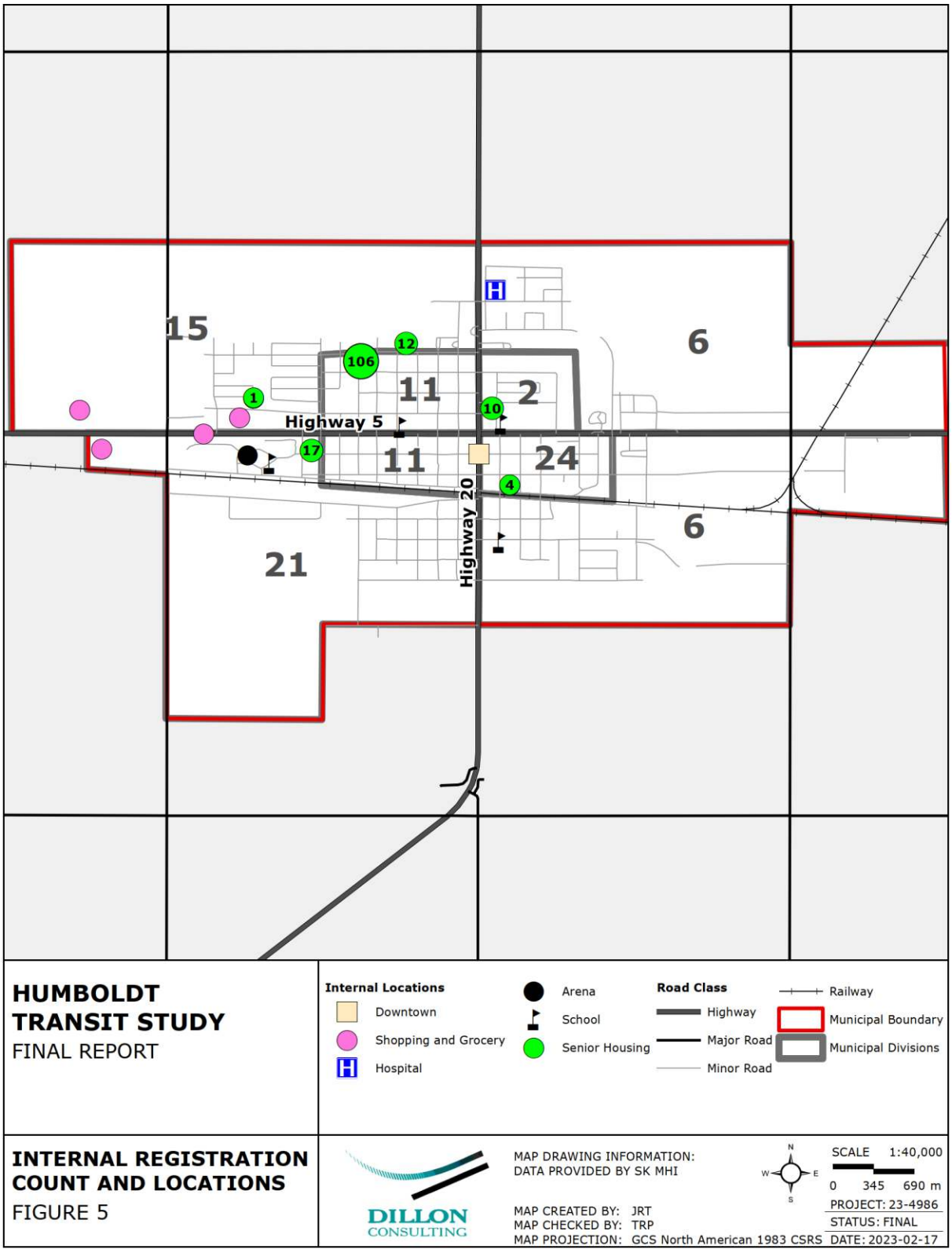
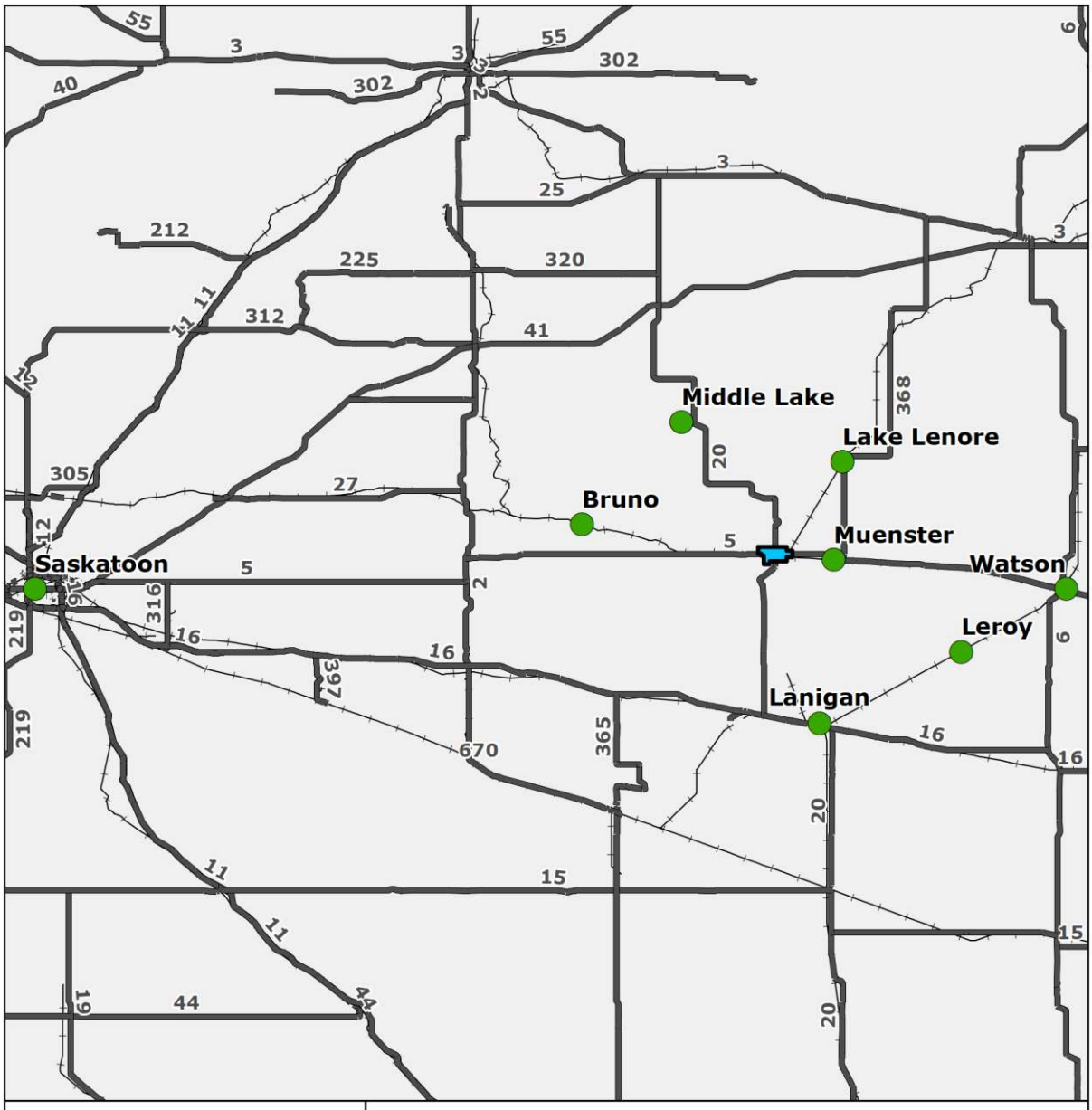


Figure 6: External Destinations



4.0 Internal Mobility Options

Humboldt intends to continue operating the specialized service (Mobility Van) in some form, but is looking for alternatives for the general population. This section outlines the possible alternatives, including some of the benefits and drawbacks of pursuing each approach. Mobility options focus on internal travel, which is Humboldt's immediate concern, but external travel options are considered as part of the discussion for the preferred option and service plan.

4.1 Taxi Service

Taxi service provides quick and reliable service to residents who are willing to pay more. In this model, a private operator would operate the taxi service entirely and choose costs independently. This is the model that was used in Humboldt prior to 2021, when the last taxi operator in the City stopped offering service. If Humboldt found a willing and reliable operator, there are models that other municipalities have used to subsidize rides for specific passenger groups. For example, taxi vouchers could be provided to subsets of the passenger base (e.g., seniors) or for designated events (e.g., Broncos games) to make some taxi rides cheaper and stimulate demand.

However, Humboldt has not had success attracting new taxi companies. Compared to large cities with a competitive taxi market and multiple taxi operators, small municipalities tend to rely on independent taxi operators varying from family owned-and-operated to single-driver businesses. Operators in small municipalities in some cases do not operate as fully-sanctioned "taxis", and passengers may rely on the personal availability of the owner-operator to provide rides. A review of taxi service in Saskatchewan is provided in **Appendix A**, which summarizes the main challenges for attracting and operating taxi service in small municipalities like Humboldt:

- Established taxi markets tend to have a limited number of taxi licences (e.g., medallions), which ensure a narrow but profitable taxi market. In smaller municipalities like Humboldt, there is a much larger risk for new entrants which may be why there have not been parties interested in providing this service. This risk is stronger in areas without regulations and restrictions on providing service, and successful companies require a consistent and sizeable client base to provide regular revenue.
- Independent taxi operators have limited resources, and services that they provide are vulnerable to changes in their personal lives. There is a significant risk of losing the service if taxi operators opt to relocate out of the city or are otherwise no longer able to operate the service;
- If a member of the community is willing to operate a taxi service, it would take time for that member to establish a business and obtain funding to do so, including dispatching and building a reliable driver base.

4.2 Fixed-Route Service

Fixed-route is the most conventional mode of transit service. It is common in larger cities and where residential and business density is high, generating sufficient ridership and making it an efficient and cost-effective method for moving people. It also provides a consistent route and schedule for residents, which is simple to understand. Most fixed-route systems have the transit vehicle operate on a fixed schedule along a fixed path, stopping at designated stops where passengers are expected to make their own way a short distance to access the transit service.

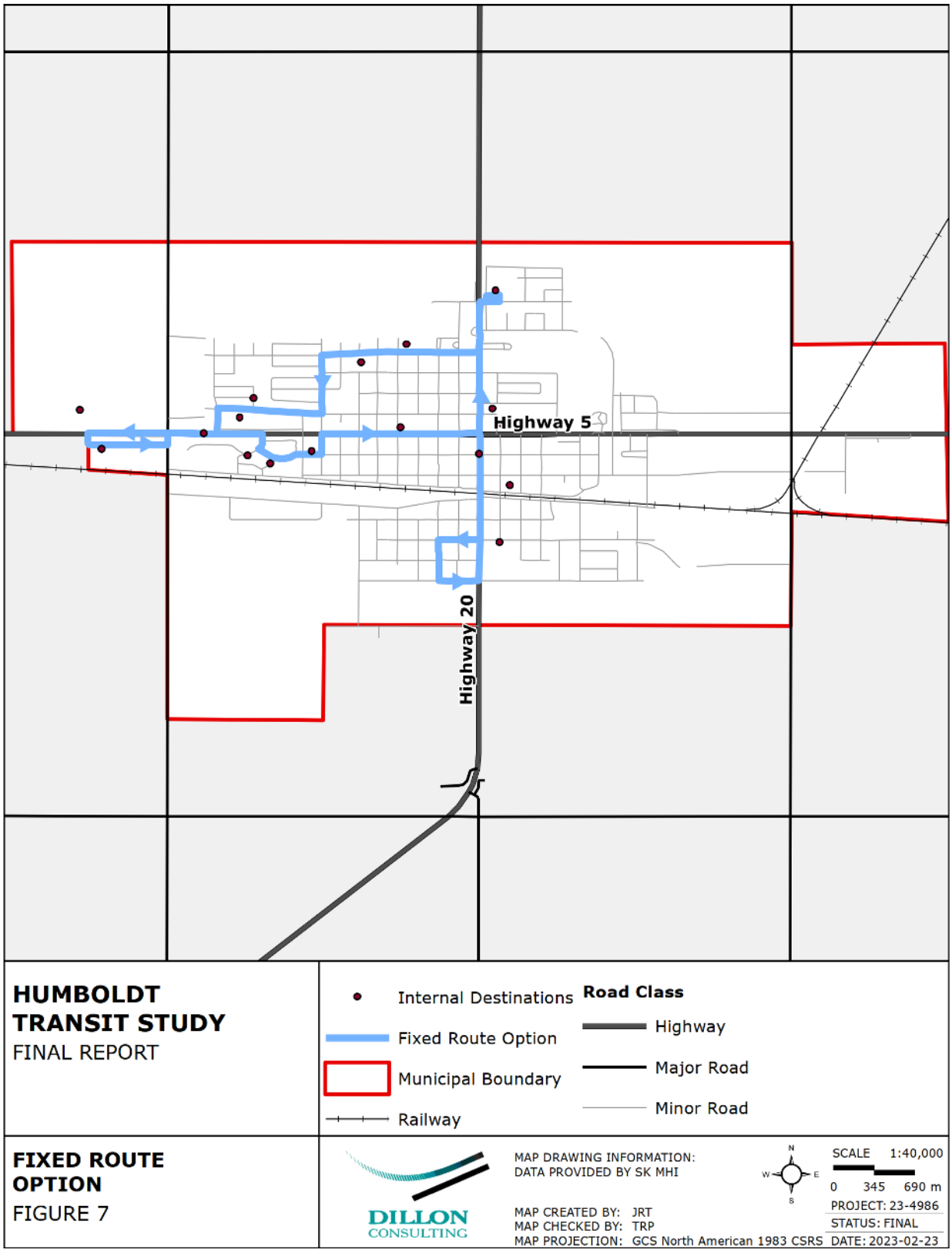
A route internal to Humboldt (**Figure 7**) was designed based on the major expected destinations in the city and to cover most of the major corridors. The route was designed to be repeat on a clockface schedule, using only one vehicle to limit operating cost. The route tries to find a balance between City coverage, as well as travel time and directness. With one vehicle, a unidirectional loop was considered the most realistic option. Because the built area of Humboldt is relatively small by area, the travel time of the loop was set to a maximum of 30 minutes. This helps to keep trips not too long compared to alternatives, and allows the service to run every 30 minutes. The proposed route connects the major locations identified through the existing service and the engagement process, including the Humboldt District Health Complex, large senior housing complexes, the Humboldt Mall, the Quill Centre, the Humboldt Uniplex, Downtown Humboldt, and south Humboldt. A sample travel time schedule is provided in **Table 2**, which identifies major stop locations along the proposed route.

Table 2: Sample Schedule for Fixed-Route Option

Major Stop	Time (hours)
Humboldt District Health Complex	0:00
12 Ave / St. Mary's Villa	0:02
9 Ave / Humboldt Mall	0:05
Quill Centre	0:08
Leo Parker / Humboldt Uniplex	0:12
Main / 7 Ave (southbound)	0:16
Saskatchewan / Main	0:20
Main / 7 Ave (northbound)	0:23
Main / 11 Ave	0:25
Humboldt District Health Complex	0:26

While the route aims to serve as many people and destinations as possible and maintain directness between locations, some areas would not be served. The east side of Humboldt and the periphery of the south end residential areas would not fall within the catchment area for this service. However, expanding the fixed-route service to include these areas would make it less desirable due to lengthened trip times and lower service frequency. Humboldt also has relatively low potential for ridership since the land uses in the city have low densities, so it is likely that fixed-route service will be relatively expensive to operate per passenger and inefficient for travel within the city.

Figure 7: Fixed-Route Option



4.3 On-Demand Transit

On-demand transit service has emerged as an option in small cities and rural areas in recent years, where population density and transit demand are low. On-Demand transit offers shared rides with vehicles that do not use fixed routes or schedules. Passengers are paired with others that have requested a similar ride in the same timeframe. Once they were paired, an estimated departure and arrival time will be provided to the passengers. It provides flexible routing and scheduling with service adjusted based on transit demand. On-Demand systems can choose to use a series of "virtual" stops, where passengers have to walk to access service, or can operate door-to-door. When densities are low and destinations are spread out, it is able to provide more flexibility for where and when to offer service, and may be able to achieve faster travel times.

For low density areas, it is more responsive to different origin-destination pairs than fixed-route transit, and has a greater likelihood for attracting riders if the travel in the service area is not focused along corridors. Compared to full cost-recovery, private, door-to-door service like taxis, on-demand rides are shared by nature, and the trips are less direct since the driver will pick up and drop off other passengers along the way. This sharing allows the service to operate more efficiently, with less cost per passenger, than private services. The price is generally cheaper than a taxi would be, since it is not private service, offering a more affordable alternative to taxi service for price-conscious passengers.

However, on-demand transit requires routing software to pair up passengers making trip requests. This cost would need to be considered if exploring this option. Depending on the popularity of the service and the number of vehicles provisioned, it is more susceptible to being overburdened and having longer wait times. Choosing on-demand transit requires continuous monitoring of the trip patterns and booking times to ensure that the service remains adequately provisioned, so that passengers can expect reasonable wait times and reliable service.

5.0 Service Plan

This section recommends a service plan for Humboldt, outlining the preferred option, the fare structure, considerations for how to operate the service, recommended key performance indicators, funding opportunities, marketing tasks, an implementation plan with phasing, and a financial overview from the City's perspective.

5.1 Preferred Option

Humboldt has an existing specialized service, and is looking to fill in the gaps covered by the loss of taxi service in the City in an efficient and cost-effective manner. To meet the community's diverse needs, it is recommended that Humboldt provides three services:

- An accessible paratransit service, continuing the current Mobility Van service;
- An on-demand shared-ride service, offering rides that are shared with other passengers and are partially subsidized, and;
- A premium door-to-door service, emulating the taxi service that was previously offered.

Due to Humboldt's small size, and to ensure the services launch smoothly, it is recommended to operate all three of these services using one operator, platform, and vehicle type. By making use of the same operator-side infrastructure, the service and platform would have higher utilization and allow more trip sharing. Sharing would also provide better cost recovery for each of these components and more efficiently make use of these investments. Whether the operator is the City or a private partner, using one operator, platform, and vehicle type at the start of service will be simpler for the City to manage and adjust as service evolves.

5.1.1 Accessible Paratransit Service

Accessible paratransit would continue the policies of the existing Mobility Van, including the option to provide service to areas outside of Humboldt. The accessible paratransit service should have the highest priority for trip requests. It is recommended to allow bookings for accessible service more than 24 hours in advance, while restricting the booking of other trip types until the day of travel to ensure that paratransit trips are able to be provided to those who need them. Like today, this tier of service would require advance registration to confirm eligibility, and should be provided at the same subsidized cost as, or less than, the on-demand shared-ride service. Rides may be shared with other paratransit or on-demand passengers, depending on the passengers' needs and accommodations.

5.1.2 On-Demand Shared-Ride Service

On-Demand shared-ride service would aim to make the most efficient use of the City's limited resources by providing partially personalized rides to passengers travelling in the same direction at the same time. This service would be shared, by default, and passengers may have to wait for others to be picked up or

dropped off before going to their final destination. To minimize travel time, this service would require residents to get themselves a short distance (e.g. across the street or to the end of a cul-de-sac) to access the service, minimizing delays and keeping the vehicle moving. Some systems use a set of virtual stops and require all passengers to walk to a designated location (e.g., a specific intersection or point of interest), but this may not be necessary in a small city like Humboldt.

This tier of service should be subsidized to encourage residents to share rides and use the more efficient service option. Additionally, offering a cost-effective way to get around Humboldt will help the City to be economically competitive and attractive to residents and businesses. While a premium door-to-door service (see next section below) can provide some mobility, it is unsuitable for regular travel such as commuting and shopping for essentials. This tier is a key mobility element to facilitate employment, access to services, and an aging population.

It is recommended to initially offer this service only within Humboldt and slowly expand to other destinations following the recommendations in the next section. Bookings for this service should be allowed at most 24 hours before the trip time.

5.1.3 Premium Door-to-Door Service

Humboldt residents previously relied on taxi service, which is no longer available. Recognizing that a private partner has not stepped in to offer this service, the City could offer this style of service with minimal additional investment for the residents that are looking for a service of this scale. Success of this type of system may be an example for other taxi operators that service in Humboldt is a viable business opportunity, and the City may choose to spin off this part of service later depending on the market environment.

The proposed premium door-to-door service would not be shared with others, and would pay higher fare than the other two alternatives. When the door-to-door service is booked, passengers seeking other services would not be able to book that vehicle, and vice versa. This service would pick people up at their door step and take them directly to their destination.

Like the shared-ride service, it is recommended to initially offer this service only within Humboldt, and slowly expand to other destinations following the recommendations in the next section. Bookings for this service should be allowed at most 24 hours before the trip time.

5.2 External Travel

External travel is desired by residents, and has been considered in three categories: travel to Muenster, travel to the greater rural area, and travel to Saskatoon. External travel presents operational and financial challenges that should be considered by the City before expanding.

5.2.1 Travel to Muenster

Muenster is a village with 430 residents, located 9 km (9 min) east of Humboldt along Highway 5. Compared to other external destinations, Muenster is relatively close and would be a quick addition to Humboldt's service area. On-demand service would be fairly fast, with round trips taking at most 30 minutes. While Humboldt should focus on ensuring trips are well-served within the City first, Muenster is the next logical addition, given its proximity and Humboldt's role as a regional centre.

Short-Term Recommendations:

- Explore opportunities for funding from Muenster to subsidize trips to and from Muenster.
- Expand shared-ride and premium door-to-door service to Muenster. Shared-ride service should be charged at a higher fare than internal travel within Humboldt.
    - Shift the paratransit service to Muenster to the same flat fare as the shared-ride service.

5.2.2 Travel to Other Rural Towns

Bruno, Lake Lenore, Lanigan, Leroy, Middle Lake, and Watson were also identified as destinations of interest in the engagement process or through the existing trip database. Middle Lake and Watson have senior housing complexes that have previously used the Mobility Van. Round trips to these destinations can take an hour or longer, which has potential to put strain on the new system, depending on its popularity. Service expansions to these areas could be introduced in different phases to each town to ensure that the system is not overburdened with the addition of new destinations.

Short-Term Recommendations:

- Explore opportunities for funding from other municipalities to subsidize trips to and from those municipalities.
- Continue accessible paratransit service within a 50 km radius of Humboldt.

Mid-Term Recommendations:

- Add premium door-to-door service within a 50 km radius of Humboldt, depending on the popularity of the existing service and the availability of the vehicle fleet.
- Add shared-ride service within a 50 km radius of Humboldt, at a higher fare than internal travel.
    - Shift the paratransit service within a 50 km radius to the same flat fare as the shared-ride service.

5.2.3 Travel to Saskatoon

The most commonly requested external destination in the engagement process was Saskatoon. A round trip to Saskatoon would take over 2.5 hours from Humboldt. A service of this length would take a significant amount of the vehicle and driver's daily service hours, and likely needs a dedicated vehicle. It is recommended for the City to find a private partner that is willing to provide this service, because a

service of this scale is not realistic given the City's current budget or fleet, and would divert financial and operational resources from building the local network. If there are passenger vehicles already travelling from Humboldt or surrounding areas to Saskatoon with some regularity, the City may be able to access capacity on these vehicles at a significantly lower cost than providing a dedicated service.

In the long term, Humboldt may be able to work with other municipalities between Humboldt and Saskatoon to build a fixed-schedule service. The fixed-schedule service could leave at the same time daily but have deviating stops in Humboldt and in Saskatoon, depending on where passengers are travelling, and/or designated fixed stops where passengers could expect the vehicle to arrive. This service would work to both provide access to Humboldt from other municipalities and access to Saskatoon from Humboldt. The City could explore limited service offerings (e.g., 1 round trip per day) to determine whether the service is successful, and provide a minimal subsidy.

Short Term Recommendations:

- Search for private partners to offer this service with minimal investment from the City, recognizing the strain a service of this magnitude would place on the City's existing resources.
  - Investigate which entities may already be regularly operating passenger vehicles between Saskatoon and the Humboldt area to see if spare capacity may be available.

Long-Term Recommendations:

- If there is no interest from other transportation companies, explore a fixed-schedule service between Saskatoon and Humboldt, with funding from other municipalities along the Highway 5 corridor, and a higher fare reflecting the cost of providing the service.

5.3 Fare Structure and Ridership Forecast

An appropriate fare structure needs to balance the ability to fund transit with passenger affordability. Humboldt currently has two pricing schemes:

- Internal rides are charged $4.50 per direction (e.g., $4.50 for one-way, $9.00 for return trips)
- External rides are charged $22.00 per passenger, plus $0.80 per km shared between the passengers

If the driver is requested to wait at an appointment, there is a $22.00/hour standby charge. Recognizing that the current fare is significantly higher on average than in peer agencies (even for trips within Humboldt), it is recommended to keep the fare at or below the existing rate for accessible paratransit service and shared-ride service. For these services, the remaining cost should be covered by the City, either through local or external funding.

A summary of the recommended fare structure is provided in **Table 3**. On-demand shared-ride transit is recommended to start at the current Mobility Van fare of $4.50. For accessible paratransit, a lower fare of $4.00 is recommended, reflecting the community's support for cheaper fares for seniors. For both a

timed-fare system is recommended, so that passengers can avoid paying double fares for shorter return trips. Timed fares would alleviate the concern identified during engagement where passengers felt it was too expensive to travel to shorter activities. Under a timed fare system, once passengers pay their initial fare, any other trip in the next period of time (e.g., 90 minutes) would be free.

At launch, accessible paratransit should be the only service that leaves the city limits, maintaining the current offering whilst minimizing the strain on the overall system. It is recommended to keep those fares similar to the current Mobility Van structure, with changes in the per kilometre rate as fuel prices change. If new external areas are added to the shared-ride service, a flat fee could be considered for travel to exterior destinations (e.g., travel to Muenster would be the same price every time). As destinations are added to the shared-ride service, the City should consider transitioning the accessible paratransit service fares to a similar rate structure.

For premium rides, it is recommended to operate these trips at or exceeding full cost recovery, for both internal and external trips. A combined per minute and mileage rate could be determined that reflects the general cost of providing that trip, which would target complete cost recovery for the premium part of the service. The difference in cost ensures that passengers are encouraged to take the more efficient shared-ride service, while providing an alternative taxi-like offering for residents that does not impact municipal financial resources.

Table 3: Recommended Fare Structure

Service	Internal (within Humboldt)	External (outside of Humboldt)
Accessible paratransit	$4.50 (timed fare, $4.00 for seniors)	$22.00 per passenger + $0.80 / km (transition to flat rate similar to on-demand shared-ride)
On-demand shared-ride	$4.50 (timed fare, $4.00 for seniors)	Flat fare per destination, to be determined
Premium door-to-door	Per minute rate + mileage rate	Per minute rate + mileage rate

Some agencies introduce fare cards or other fare media. For a municipality of Humboldt's size, it is recommended to rely on app-based purchases and cash, since introducing and operating fare cards can introduce a lot of overhead relative to the size of Humboldt's budget. Multiple ride passes should be considered, reflecting the stakeholder desire to distribute passes instead of cash for rides. Such passes could also offer discounts to encourage ridership (e.g. 10 rides for $40.50 instead of $45.00). Premium door-to-door services could be paid in a similar way to taxi services – dependent on each journey, with payment through the app or by cash or card in the vehicle.

Annual passenger revenue was calculated by estimating the ridership on each of the service. Ridership was estimated assuming gradual growth over five years, as it often takes time for passengers to adapt to service changes. The ridership figures were estimated based on the following methodologies and assumptions:

- **Accessible Paratransit**: The rides in the first year were assumed to be the same as the Mobility Van in 2021, and it is expected the ridership would grow by 20% from year 1 to 5, which is closer to the pre-COVID ridership value. It was also assumed that:
  - 50% of passengers are seniors paying a discounted fare of $4.00
  - 20% of all internal trips are short return trips that fell within the duration of a timed fare
  - 5.5% of all trips are external to Humboldt, using the average external trip rate from 2017 to 2021. The average external fare for 2019 to 2021 (which is the travel period with the current fare structure) was $136, and was applied to any external trips in the forecast
- **On-Demand Shared-Ride**: The number of rides on the on-demand transit system of Wawa, Ontario retrieved from the CUTA Fact Book were used to project the ridership in Humboldt. Wawa has a population of 2,905, a service area of 3.5 km^2, and a ridership of 2,302 in 2019. The following assumptions were made on Humboldt's on-demand shared-ride service:
  - By reaching the full potential of Humboldt's transit system, it is expected it will have two times of the ridership of Wawa
  - 10% of the passengers are seniors paying a discounted fare of $4.00
  - 20% of all internal trips are short return trips that fell within the duration of a timed fare
  - Internal rides are 100% of the ridership of Wawa in year 1 and 175% in year 5
  - 50 trips are taken externally in year 5, with the same average external fare as paratransit ($136)
- **Premium Door-to-Door**: The following assumptions were made, conservatively estimating minimal uptake of the taxi service relative to the other services.
  - 576 trips are taken internally, assuming the Saskatoon taxi rates ($3.75 + $2.14/km) and an average trip length of 7 km ($18.71), and the service grows 20% by year 5.
  - 25 trips are taken externally in year 5, with an average external fare of $200, representing a generally higher rate than the shared services.

The resulting estimated ridership and annual revenue are illustrated in **Table 4**. The resulting expected revenue for year 1 is $22,617 and for year 5 is $43,488.

Table 4: Estimated Ridership and Revenue of Accessible Paratransit and Shared-Ride Services

	Paratransit (Year 1)	Paratransit (Year 5)	Shared (Year 1)	Shared (Year 5)	Premium (Year 1)	Premium (Year 5)
Internal Trips	1,145	1,375	2,302	4,028	576	692
- Adult Paid Trips	*458*	*550*	*1,658*	*2,901*	*N/A*	*N/A*
- Senior Paid Trips	*458*	*550*	*185*	*323*	*N/A*	*N/A*
- Short Return Trips	*229*	*275*	*461*	*806*	*N/A*	*N/A*
Internal Revenue	$3,893	$4,672	$8,201	$14,347	$8,619	$10,354
External Trips	14	17	0	50	0	25
External Revenue	$1,904	$2,312	0	$6,800	0	$5,000
Total Trips	**1,159**	**1,392**	**2,302**	**4,604**	**100**	**225**
Total Revenue	**$5,797**	**$6,987**	**$8,201**	**$21,147**	**$8,619**	**$15,354**

It is recommended that Humboldt should procure two vehicles. One vehicle should be placed into service immediately, replacing the Mobility Van, and the other should be used as a spare and gradually placed into service when a second driver is added. Fleet and driver requirements are further discussed in **Section 5.8**. Based on the trips expected in year 1, across 45 service hours per week and 51 weeks per year (accounting for holidays), there are 2295 available service hours in year 1 to accommodate 4,039 expected trips, or 34.1 minutes per trip. Given that most trips are forecasted to be internal to Humboldt, and that those trips should be 10 minutes or less, 1 vehicle should be able to complete the forecasted trips in the first year. By the fifth year, service growth and external trips would be more easily accommodated with a second vehicle.

5.4 Operating Plan

The City has multiple options for how to operate the service. In all scenarios, the fare structure would remain the same and the City would provide a subsidy for accessible paratransit and on-demand shared-ride service, while operating the premium door-to-door service at full cost-recovery.

Table 4 reviews the primary operating structures available to Humboldt. Option 1 is for the City to completely operate the service. Under this option, the City would procure software, purchase vehicles, hire drivers, and would need to provide call support for passengers who do not use the software. The City-operated model is used in many traditional transit systems. Software platforms that are willing to service municipalities of Humboldt's size are unlikely to have call support as a standard feature. The City could choose to contract out the driver (Option 2, which is the current structure for the Mobility Van), and optionally also contract the vehicle (Option 3). The City would manage the routing and the call support, but would procure the driver (and vehicles, in Option 3) through a private agreement. The City could alternatively contract out the services but manage the fleet (Option 4). In this scenario, the City hires their own driver and/or purchases their own vehicles, but contracts out the software and call support to a private transportation provider, who then procures a software platform and operates call support in-house. Option 5 is for the City to operate the entire system through the private sector. Under this option, the City would either provide a per-ride subsidy to operate the system or provide a contract rate as determined by the private operator.

Table 4: Operating Structures

Option	Vehicles	Driver	Routing Software	Call Support
1. City operation	City-owned	Hired by City	Procured by City	City employee / software vendor
2. Driver contracted	City-owned	Private	Procured by City	City employee / software vendor
3. Fleet contracted	Private	Private	Procured by City	City employee / software vendor
4. Services contracted	City-owned	Hired by City	Private	Private
5. Private operation	Private	Private	Private	Private

Similarly, the City may choose to contract some of the services out to drivers, as a hybrid of the previous options. For example:

- The City may look for volunteer drivers, non-profit agency, or public agency to operate the accessible paratransit service, reflecting the health-oriented nature of the service
- The City may use a private driver and fleet for the premium door-to-door service element, but maintain the dispatch (software and call support) through the same platform

As demand grows, the City could consider whether to add more vehicles or make new efforts to attract private industry for specific parts, like the premium door-to-door service. This could allow the City to ultimately subsidize paratransit and/or on-demand shared rides, but provide service through a private operator with the resources to manage typical taxi demands and routing. In cases where the fleet and/or drivers come from multiple sources, the City would need to ensure these are routed and treated separately in the platform.

Short-Term Recommendations

- The City pursue Options 1 or 2 when launching the system, which supports three further sub-recommendations:
  - The City procures their own routing software, and provide call support in-house similar to how it is currently provided through the Mobility Van. The automated dispatch software and client management should minimize some of the manual effort previously required to operate the service, freeing up more time to serve any call-in requests (supported by Options 1-3)
  - The City purchases at least two vehicles with external funding support from provincial and federal government programs, and either hires and trains a driver or contracts it out to a private driver with adequate licensing (supported by Options 1-2)
  - The City provides all three services at launch through public operation, to ensure that the service launches smoothly with minimal issues (supported by Options 1-3)

Mid-Term Recommendations

- The City explores private interest in operating the door-to-door service through the private operator's own fleet, and adds the private operator and fleet into the routing software.

5.5 Key Performance Indicators

To ensure high-quality service, it is important to have a set of key performance indicators (KPIs) with measurable and achievable targets. The following KPIs are suggested to monitor service performance:

- **Wait time:** All three services require passengers to make a trip request to use the service. Passengers can either book in advance or choose to depart immediately. It is important for the booking system to respond quickly and provide instructions to transit operator to pick-up the passenger as soon as possible. It is important for passengers to have a reasonable estimate of how long to wait for the service, while being competitive enough to ensure people take the service. It is recommended that

an initial standard of 1 hour be set as the maximum expected wait time for service, if only one vehicle is used, and 30 minutes if two vehicles are used. Estimated pick-up and drop-off time shall be notified to the passenger upon trip confirmation.

- **Revenue / cost ratio:** The revenue / cost ratio is the quotient of operating revenue divided by operating cost, reflecting the economic performance of a transit operation. A high revenue / cost ratio indicates that most of the funding is raised from the passenger, while a low one indicates that there is a high subsidy. Conventional fixed-route systems tend to have higher ratios (between 30-70%), while specialized paratransit systems have lower ones because of the higher cost of providing service (0.6-6% in peer systems). Humboldt's specialized system had a revenue / cost ratio of almost 20% in 2021. It is recommended to start at a standard of 20% for the accessible paratransit and shared-ride parts of the service, and target 100%+ for the premium door-to-door component.
- **Passengers per capita:** This indicator reflects the popularity of the system relative to its population. Peer systems had between 0.1 and 0.5 passengers per capita, and Humboldt was near the lower end of this metric. However, the ridership performance of peer systems in the peer review may have been negatively affected by the COVID-19 pandemic. Following the ridership forecast, it is recommended for Humboldt to set an initial standard of 0.6 passengers per capita.
- **Total cost per passenger:** Total cost per passenger reflects the cost per passenger of operating the transit service. It indicates whether the transit service is cost-efficient and ensures the municipal budget is spent wisely. Humboldt's current cost per passenger, which only considers the Mobility Van, is nearly $52 per passenger, which is higher than other peer specialized systems. However, this also reflects the longer trips taken under Humboldt's system for external travel. The average total cost per passenger of the peer systems (except Hinton where statistics were not available) in 2019 were $27.8. Given that the average service area of these peer systems is three times of Humboldt's and Humboldt will offer an initial in-town service only, Humboldt should aim for an initial cost closer to $25 per passenger, and should evaluate what is reasonable for the accessible paratransit and premium door-to-door service. Lower costs may be achievable by attracting a larger number of trips within Humboldt.
- **Average vehicle occupancy (for shared-ride service):** The average number of passengers in a vehicle at any given time. For shared-ride service, it is more desirable to have more people taking trips together. Humboldt should aim to have an average vehicle occupancy of 1.25 passengers per trip as an initial standard (i.e., 25% of the on-demand trips have more than one person)
- **Vehicle utility:** The share of hours where the vehicles are servicing requests versus the number of service hours being offered. A share of 0% indicates the vehicle is not being used at all, and a share of 100% indicates the vehicle spends the entire service period serving passengers. A higher utility is good from the perspective of ensuring the system is being used, but a utility of over 90% for a given time period indicates that there may be room for an additional vehicle to provide service.

The systems included in the peer review were specialized paratransit systems, which have differing characteristics from conventional (general public) systems. The recommended standards are intended

as conservative starting points, and should be adjusted after the initial operation period to reflect what a more realistic service standard is given the system's context.

5.6 Funding Opportunities

As part of the investment in establishing a new transit service, the City could seek external financial support, including funding provided by the provincial and federal government, and the Federation of Canadian Municipalities. **Table 5** lists the funding available for application.

Capital funding applications can cover a significant amount of the cost of a vehicle, and it would be prudent for the City to consider purchasing more than one vehicle at launch. A second vehicle not only allows for the City to continuously offer service if the primary vehicle needs maintenance, but allows for service expansion more quickly, particularly when some external trips are up to an hour in length.

Apart from seeking external financial support from the federal and provincial government and the Federation of Canadian Municipalities, funding can also be obtained through partnership with surrounding municipal government. Other municipalities have been identified as potential expansion areas for all three services, and could be approached to partially fund the service. Expansion outside of Humboldt's existing service area should be paired with pursued funding from other governments (municipal or provincial) or organizations that generate higher numbers of trips (e.g. housing complexes or medical facilities), recognizing that Humboldt only has so much capacity to fund service outside of its city limits.

Table 5: Sources of External Transit Funding

Source	Name of Funding	Types of Project Subsidized	Maximum Funding Allotted
Federal Government	Investing in Canada Infrastructure Program (ICIP) – Public Transit Infrastructure Stream	Construction, expansion, and improvement of public transit infrastructure, for projects that improve infrastructure capacity, quality or safety, and access to a public transit system.	• Allocated according to a formula based on ridership and population • Provides up to 40% of new public transit construction and expansion projects.
Federal Government	Rural Transit Solutions Fund – Capital Projects Stream	Fixed-route buses, ride-share vehicles, on-demand vehicles (minivans, small craft, zero-emission fleets, shared fleets), construction of intermodal hubs, installation of charging stations or the purchase of software.	• Accepts applications for up to $3 million to help cover the capital costs of a new or expanded transit solution • Maximum program contribution is 80% of capital expenses.
Government of Saskatchewan	Transit Assistance for People with Disabilities Funding (TAPD) – Operating Assistance	Operating support to municipalities who offer paratransit services for persons with disabilities.	• Performance-based program allotting municipalities funding based on public service trips provided in previous year, and per trip amount based on population
Government of Saskatchewan	Transit Assistance for People with Disabilities Funding (TAPD) – Capital Assistance	Capital support to municipalities who offer paratransit services for persons with disabilities.	• Participating municipalities can apply for 75% of the cost of a paratransit vehicle to a maximum amount of $55,000.
Federation of Canadian Municipalities	Green Municipal Fund – Capital project: Transportation networks and commuting options	A capital project for an initiative that reduces pollution in Canadian communities by improving transportation systems and networks or encouraging people to switch to less polluting transportation options.	• Low-interest loan of up to $5 million ($10 million for high-ranking projects), grant worth up to 15% of the loan; up to 80% of the eligible cost.
Federation of Canadian Municipalities	Green Municipal Fund - Pilot project: Transportation networks and commuting options	A pilot project for an initiative that reduces pollution in Canadian communities by improving transportation systems and networks or encouraging people to switch to less polluting transportation options.	• Up to $500,000 grant to cover up to 50% of the eligible costs (80% for municipalities with populations under 20,000 under some conditions)

5.7 Communications and Marketing

Communicating the new service to the residents of Humboldt is critical so that there is a good understanding and awareness of the service as it launches. Humboldt will need to ensure a reliable mobile application is available that passengers can use for booking that is easy to use and understandable. A section on Humboldt's website should be added to provide passengers with useful, up-to-date, and accurate service information, and serve as a location for interested passengers to find answers for questions they may have about the service. To cater for the needs of residents who might not have consistent access to or comfort with the Internet or mobile applications, a phone option should be provided where passengers can book service.

In terms of marketing, as this new service mode involves the use of technology and does not have a traditional high-visibility fixed-route service, it is necessary to educate the public on how to use the service with a simple and clear passenger guide. Service may be promoted online, including on the City of Humboldt website, and through non-digital means so that residents without consistent access to the Internet can be reached. Promotional materials with service details may be circulated to residents up to and after the service launches, and through tourism outlets like the Humboldt Visitor Information Centre. It may also be useful to brand the service vehicle, as it will be the most visible element of the service throughout Humboldt.

5.8 Financial Plan

A high-level financial estimate was provided for the first and fifth years of operation. Fleet size, drivers, software costs, maintenance and fuel, and revenue sources were considered.

5.8.1 Fleet

It is recommended for Humboldt to procure at least two vehicles, to ensure that a spare is available and to more easily expand service or fill in service when one vehicle is busy. For on-demand services, the following vehicle types are most common:

- **Cutaway minibuses:** Tend to be relatively expensive ($300,000 to $320,000) but have space for a larger number of ambulatory and non-ambulatory passengers (e.g., Ford E-Series Cutaway, GMC Savana Cutaway).
- **Purpose-built wheelchair accessible vans:** Larger 10-15 passenger vans that have been configured for wheelchair access. Less expensive than cutaway minibuses ($100,000-$170,000), and can typically hold one or two wheelchairs with additional space for ambulatory passengers (e.g., Ford Transit, Ram ProMaster).
- **Converted wheelchair accessible minivans:** Minivans that have been reinforced and have ramps added for wheelchair access. Less expensive than accessible vans ($65,000-$100,000), but typically have shorter lifespans as they are not purpose built for this function (e.g., Chrysler Grand Caravan).

Vehicles with more than one wheelchair space are recommended for trips external to Humboldt, to minimize service delays if multiple non-ambulatory passengers are picked up from an external destination. It is unlikely that two separate paratransit trips with multiple non-ambulatory passengers external to Humboldt operate at the same time, so the second vehicle could be configured to accommodate fewer non-ambulatory passengers. Wheelchair accessible vans and minivans can be procured from companies that have dedicated conversion services (e.g., Move Mobility, Silver Cross Automotive, Humberview Mobility), and the City may choose to contact these companies directly or issue an RFP.

If the City purchases a wheelchair accessible van or minivan, it will be important to consider:

- **Access:** Vans may be equipped with ramps or lifts that allow for rear-entry (i.e., through the trunk) or side-entry. A side-entry vehicle is recommended so that residents can more easily get in and out of the vehicle from the curb (which is typically to the side of a vehicle). If a van with capacity for multiple wheelchairs is used, there should be unimpeded access for each wheelchair to enter or exit without needing other passengers to exit.
- **Ramps:** Vans may be installed with manual or automatic lifts or ramps. Automatic ramps or ramps equipped with mechanisms to reduce ergonomic impacts on operators are recommended.
- **Durability:** A more rugged model may need to be procured depending on which roads the vehicle is expected to travel on. If it is expected to travel on roads with higher maintenance and design standards, then a less rugged model may be needed.
- **Build Implementation:** The City may buy a stock van and have a ramp package installed after purchasing, or may purchase a purpose-built van. Purpose-built vans traditionally have longer delivery times, but are designed with reinforced frames which can support the heavier weight of motorized mobility devices. Any van procured by the City should meet the D409 CSA standard (Motor Vehicles for the Transportation of Persons with Physical Disabilities).
- **Restraints:** Some buses are designed to be operated without restraints (e.g., vehicles with compartmentalized seats). In Saskatchewan, if the chosen vehicle requires restraints to meet the regulatory standards, passengers with children would be required to bring a child seat. This requirement could deter some passengers from taking the service, since they would need to carry their child seat with them after arriving at their destination. The City could elect to maintain one child seat per vehicle to accommodate child transportation, however these would need to be regularly replaced and may not suit the needs of all children. Under current regulations, child seats must be appropriate for each individual occupant. This would likely require several different seats to appropriately cater to the different sizes and shapes of potential child passengers. The City should weigh these options when choosing a van or minibus.

Recommendations

- Purchase one wheelchair accessible van with capacity for 2 or more wheelchairs, to accommodate external paratransit trips.

- Purchase a second wheelchair accessible van or minivan (optionally with capacity for more than 1 wheelchair, if it is cost-effective)
- Consider vehicles that allow for side-entry, have automatic ramps or ramps equipped with mechanisms to reduce ergonomic impacts on operators, and meet the D409 CSA standard.
- Include durability and child restraint requirements in an RFP, if the RFP process is used to purchase a vehicle, or determine appropriate requirements before purchasing a vehicle.

5.8.2 Drivers and Hours

To minimize costs in the initial year of service, it is recommended to start service using the same hours as the current Mobility Van (weekdays from 8:00 a.m. to 5:00 p.m.), which require only one driver. Multiple stakeholders and residents expressed interest in additional service outside of these hours, so Humboldt should plan for additional service on weekends and weeknights. **Table 6** identifies the recommended driver count and service hours in years 1 and 5 of service. Broncos game nights were identified as a popular and reliable destination that should attract service outside of current hours, so are included in the recommended plan. On weeks that the Broncos aren't playing, the City could choose 3 other evenings during which they could provide additional service. Assuming 40 hours per week per driver (80 hours total in year 5), three options for further service expansions were generated to fill the remaining 12.5 hours and meet resident and stakeholder needs: provisioning for weekend service, provisioning for complete weeknight evening service, and provisioning for additional drivers during expected peak times during the week (**Table 7**). It is recommended to add one of the options by year 5, depending on the initial demands of the service: heavy demand during the expected busy periods (weekday mornings and afternoons) may require choosing Option 3 to alleviate demand, while less busy service may accommodate options that expand service hours like Options 1 or 2. If the City elects to hire a third full-time driver equivalent, 40 more service hours would be able to be added, which would cover all three options and leave room for an additional 16 hours of service to be provisioned as the City chooses. Hiring a third driver would require a third additional vehicle, and is not recommended in the short-or mid-term of the service.

Table 6: Recommended Driver Count and Service Hours in Years 1 and 5

Service Period	Drivers (Year 1)	Service Hours (Year 1)	Drivers (Year 5)	Service Hours (Year 5)
Weekday morning (8:00–9:30 a.m.)	1	7.5	2	15
Weekday late morning (9:30–11:00 a.m.)	1	7.5	1	7.5
Weekday midday (11:00 a.m.–2:00 p.m.)	1	15	1	15
Weekday afternoon (2:00–4:00 p.m.)	1	10	1	10
Weekday late afternoon (4:00–5:00 p.m.)	1	5	1	5
Evening service (5:00–10:00 p.m., 3 nights per week), aligns with Broncos games	0	0	1	15
Subtotal	**1**	**45**	**2**	**67.5**
Additional service (options in Table 7)	0	0	1	12.5
Total	**1**	**45**	**2**	**80**

Table 7: Options for Additional Service in Year 5

Service Period	Drivers (Year 5)	Service Hours (Year 5)
Option 1: Weekend Service		
- Saturday daytime (9:00 a.m. –3:30 p.m.)	1	6.5
- Sunday daytime (9:00 a.m. –3:00 p.m.)	1	6
Option 2: Weeknight Evening Service		
- Weeknight evening service (5:00–9:15 p.m., 3 nights per week)	1	12.5
Option 3: More Drivers on Weekdays		
- Additional weekday late morning service	1	7.5
- Additional weekday late afternoon service	1	5
Total	**1**	**12.5**

5.8.3 Software

The use of a mobile application is recommended for operating the three recommended transit services. Humboldt should partner with an existing vendor to find a suitable on-demand routing platform. Depending on the solution chosen, Humboldt would likely need to pay an annual subscription fee ranging from $10,000 to $50,000 a year. The estimates provided in this report are inflated in year 5 to account for potential inflation or other changes in service cost by year 5. Fees vary greatly depending on the vendor, and the City should therefore make efforts to procure a vendor that can cater to the needs and budget of a smaller municipality with few active vehicles. Software purchases may be recoverable for up to 80% of the cost through the Rural Transit Solutions Fund (**Table 5**).

Requesting services with a mobile application might be a challenge for seniors who might not have the technological background to effectively use the app. It is therefore recommended to set up a dedicated phone number with a service agent receiving calls and making requests for passengers. To minimize the

financial and human resources of operating the phone service, targeted training could be arranged in senior housing complexes to educate seniors on how to use the app and request for service without needing to call. City employees could provide this training, and potentially coordinate with these locations to provide a centralized booking computer or tablet.

In addition to the app and phone service line, Humboldt might also want to install cameras and a global positioning system tracker on each of the service vehicles for safety and service monitoring purposes. This installation is optional and the cost of having both would vary from $500 to $2,000 depending on the models chosen.

5.8.4 Maintenance and Fuel

The costs of maintenance and fuel are variable costs directly proportional to vehicle mileage. In general, the larger the fleet size is, the lower the average cost of maintenance per vehicle will be. For a small transit system like the one recommended to Humboldt, the cost of maintenance would likely be higher than urban transit systems that run a service depot shared by all vehicles. To calculate the cost of maintenance and fuel, the statistics of a transit system with a similar scale were referenced. Wawa currently operates an on-demand system with a small community bus for 30 hours per week, reaching 2,705 residents in a 3.5 km^2 service area. In 2021, it operated over 4,869 revenue kilometres, with a fuel cost of $2,275 and a maintenance cost of $1,048. Based on the recommended solution, Humboldt would have a longer daily service hours and an additional service vehicle, over a larger service area than Wawa. Therefore, it is expected the costs of maintenance and fuel of Humboldt would be higher than that of Wawa, ranging from $8,000 to $10,000 in Year 1. Humboldt has previously paid between $6,700 to $11,350 annually for maintenance and fuel, with an older vehicle that has required more repairs. When the service expands and makes use of the second vehicle, it is predicted that the costs would increase to $16,000 to $20,000 by Year 5.

5.8.5 Passenger Revenue and Ridership

Based on the forecasts in **Section 5.3**, it is recommended the accessible paratransit and on-demand share-ride services charge an adult fare of $4.50 and a senior fare of $4.00. It is also assumed half of the passengers on the accessible paratransit service and 10% of the passengers on the on-demand shared-ride service would be seniors. It was determined that the revenue for the first year would be expected to be $15,497 and for the fifth year would be $36,979.

5.8.6 Summary

Table 8 summarizes the expected revenue and expenses for the first and fifth year of operation. A large share of the initial cost is for vehicle purchasing, which could be offset up to 80% by the Rural Transit Solutions Fund from the federal government, and with further offsets from TAPD capital funding. TAPD funding applies to vehicles used for paratransit. Driver wages were assumed based on equivalent operator rates for Saskatoon and Regina, and multiplied by the number of expected service hours. Rates

for items in year 5 were increased based on generally assumed inflation and increases in ridership or system use.

Table 8: Summary of System Costs in Years 1 and 5

Item	Year 1	Year 5
Wheelchair accessible vans (2)	$320,000	
Drivers	$51,000	$110,000
Software	$13,000	$15,000
Maintenance and fuel	$10,000	$20,000
Marketing and communications	$5,000	$5,000
Subtotal	**$399,000**	**$150,000**
Potential federal funding – Vehicles and software	-$266,400	
Potential provincial funding – Vehicles	-$55,000	
Potential provincial funding – TAPD	-$6,000	-$10,000
Potential external subsidies		-$10,000
Estimated fare revenue	-$22,617	-$43,488
Total	**$48,983**	**$86,512**

5.9 Implementation Plan and Phasing

The City should first aim to secure funding for the system. Many capital grant applications only allow for funding for items purchased after the funding has been granted, so this is the most important initial step. The City should have general estimates for the costs of capital purchases to prepare grant applications. The City should prioritize completing the Rural Transit Solutions Fund application, which would grant a significant portion of the required initial funding, and explore provincial funding through the TAPD Capital Assistance stream to offset the remainder of their vehicle.

Once funding is secured, Humboldt should purchase two vehicles meeting the recommended criteria. The City should also prepare a request for proposals for a routing and customer-facing platform that can meet the budget and needs of a small municipality, and the needs outlined in the preferred option. A driver will need to be hired or contracted for the first year, and a city employee will need to be trained in the platform and able to receive calls for phone-in requests.

Once the driver, vehicles, and platform are determined and purchased, the City should aim to transition the Mobility Van service first, then phase in the next two services in the following months. The phased approach to implementing the new service allows for a simple change first (shifting the existing Mobility Van onto a new platform), which allows the City to check for issues or any learning curves with the new platform. The shared-ride service should be added after 1-2 months, which aims at the general population, then the premium service should be added after another 1-2 months. A comprehensive marketing strategy will need to ensure residents understand the phasing and the services being added.

In the first year, Humboldt should focus on ensuring the system runs smoothly, is well understood, and can reliably service requests. Key performance indicators should be monitored and adjusted if needed to ensure that they are realistic for Humboldt's conditions, and provide a good set of metrics against which Humboldt can measure the success of the service. In the second year, Humboldt should explore opportunities for expanding service and develop a strategy to address the mid-term recommendations in this report, including the possibility of privatising elements or all of the service. Before the fifth year, Humboldt should have a second driver hired and have service hours expanded to allow room for the service to grow.

6.0 Conclusions and Next Steps

It is recommended that Humboldt provide an accessible paratransit service (continuing the existing Mobility Van), a subsidized on-demand shared-ride service, and a cost-recovery premium taxi service. Together, these three service types can meet the diverse needs of the Humboldt community while improving the City's liveability, attractiveness, and economic competitiveness. Additionally, Humboldt should continue to seek partners to assist in providing long-distance travel options to Saskatoon. The summarized short-term recommendations include:

Initial Capital and Operation

- Apply for the Rural Transit Solutions Fund and the TAPD Capital Assistance stream to cover bus and software costs, and operating costs, respectively
- Procure routing software, and provide phone support in addition to self-serve booking options
- Purchase at least two vehicles, and either hire and train a driver, or contract out service operation
  - Purchase one wheelchair accessible van or cutaway minibus with capacity for more than 1 wheelchair, which can accommodate external paratransit trips
  - Purchase a second wheelchair accessible van (optionally with capacity for more than 1 wheelchair, if cost-effective)
  - Consider vehicles that allow for side-entry, have automatic ramps or ramps equipped with mechanisms to reduce ergonomic impacts on operators, and meet the D409 CSA standard.
  - Include durability and child restraint requirements in an RFP, if the RFP process is used to purchase a vehicle, or determine appropriate requirements before purchasing a vehicle.
- Launch with paratransit service, quickly building to all three service types, subject to successful operation of the initial services
- Continue accessible paratransit service within a 50 km radius of Humboldt
- Continue providing the adult fare for the paratransit and shared-ride services at $4.50, but provide a discount for seniors at $4.00 and adopt a timed fare so that short trips are not disincentivized
- Determine an locally-appropriate fare for the premium service, covering at least its full cost

Service Expansion

- Explore opportunities for Muenster to subsidize trips to and from their community
- Expand shared-ride and premium door-to-door service to Muenster, with shared-ride service charged at a flat fare higher than internal Humboldt travel
- Apply the same flat fare for shared-ride and paratransit trips to Muenster
- Explore opportunities for neighbouring municipalities to subsidize trips to their communities
- Search for private partners to offer service to Saskatoon with minimal investment from the City, recognizing the strain a service of this magnitude would place on the City's existing resources
  - Investigate which entities may already be regularly operating passenger vehicles between Saskatoon and the Humboldt area to see if spare capacity may be available.

In the mid-term (before year 5), it is recommended for the City to:

- Add premium door-to-door service within a 50 km radius of Humboldt, depending on the popularity of the existing service and the availability of the vehicle fleet
- Explore private interest in operating the premium door-to-door service independently
- Hire and/or contract an additional driver to use the second vehicle to expand service hours
  - Add extended service for Broncos games, and on designated nights during other events
  - Choose one of the three additional service options (weekend service, weeknight service, or additional weekday hours) depending on the growth needs after launch

After the five-year period, it is recommended for the City to:

- Add shared-ride service within a 50 km radius of Humboldt, at a higher fare than internal travel
  - Apply the same flat fare for shared-ride and paratransit trips within a 50 km radius of Humboldt
- If there is no interest from other transportation companies, explore a fixed-schedule service between Saskatoon and Humboldt, with funding from other municipalities along the Highway 5 corridor, and a higher fare reflecting the cost of providing the service

Appendix A

Saskatchewan Municipal Review Memo

Memo

To: City of Humboldt

From: Thomas Pacy

Date: January 20, 2023

Subject: Saskatchewan Municipal Review

Our File: 22-4986

1.0 Introduction

Humboldt wants to understand the community transportation context in other comparable municipalities, specifically for municipalities in Saskatchewan with populations below 10,000 (small municipalities). The taxi market and specialized transit services of the 24 largest small municipalities in Saskatchewan were reviewed. 3 of these municipalities' markets were not explored because they were too close to a larger city, so were covered by their taxi markets (Battleford to North Battleford, and White City and Pilot Butte to Regina). Additionally, 10 cities in Saskatchewan have populations over 10,000 (large cities). In large cities, the taxi market, specialized transit, and conventional transit services were reviewed for comparison. Driver regulations and on-demand software platforms were also reviewed as per Humboldt's request, with sample cases from other provinces where these platforms are used in rural settings.

2.0 Taxi Service Review

A review of taxi services in similar communities in Saskatchewan was undertaken to understand the factors that impact the likelihood of Humboldt being served by a private taxi service in the future.

2.1 Methodology

Multiple resources were used to determine whether municipalities had taxi services. Many operators in smaller municipalities have a very minimal online presence, or operate in an ad-hoc nature based on a single driver's schedule. A mixture of Yellow Pages, Google Business Profiles, listings on municipal websites, Facebook searches, and general web searches were used to find taxi operators in each municipality. Facebook was particularly common among less formal taxi services or taxis in smaller municipalities with smaller budgets. In some cases, taxi operators were called by phone to determine if they were still in service, particularly in cases where there was no web activity in the last year to verify their continued operation.

2.2 Market Summary

All large cities have a taxi market, and most have multiple taxi operators. The largest cities (Saskatoon and Regina) have established taxi operators with a strong web presence, large fleets, and dedicated 24-hour dispatch. Other cities in this category have smaller taxi operators that vary in size from a small fleet owned by an entrepreneur, to a family owned-and-operated, or single-driver business. The legality and formality of some smaller operators could not always be verified, but some operators appeared to be structured more similarly to an informal peer driver ridesharing service with variable hours and structure (e.g., calling one driver's personal phone to ask for ad-hoc rides) versus a formal taxi operation.

Small municipalities under this review ranged in size from Watrous (population 1,842) to Humboldt (population 6,033). While Humboldt does not have taxis, the following six municipalities by population (Melfort, Meadow Lake, Flin Flon, Nipawin, Kindersley, and Melville) had at least one taxi operator. However, the taxis in these municipalities operate on a very small scale with limited resources. Companies had a limited web presence, if any, with limited service hours and drivers. Many of these operators are based out of residents' homes, and would move with the resident or shut down if the resident chose to live elsewhere. Most municipalities with populations below 3000 (e.g., Moosomin) do not appear to have taxi operators. Similar to the smaller "large cities", many operators appeared to be informal operations with variable hours and structure, rather than formal taxi operations.

2.3 Key Factors for Humboldt

2.3.1 Business Viability

Ultimately, small municipalities may have taxis, but it is not entirely a function of market opportunity. First, in established taxi markets there are typically a limited number of taxi licences, which help the operators ensure they have enough business to run a taxi service. In very large cities, ride hailing operators like Uber and Lyft may compete with that network, but the population is large enough that even if operators fully consume another operator's business, at least one operator will still be able to continue serving the city. In small communities like Humboldt, there is a higher risk for new entrants because there may only be enough trips for one or two operators to be busy enough to stay in business. Small taxi operators in other small Saskatchewan communities have expressed concerns over the stability of their businesses when there isn't a restriction on licences, fearing that new entrants would remove enough of their client base that it would not be feasible for them to continue operation.

2.3.2 Service Stability

Second, taxi operators in these communities are generally small-scale with limited resources, and often run by small families or a single owner-operator. If that family or owner moves to a new city, the service is no longer provided or the service moves with them to their new location. If Humboldt does find a resident willing to run a reliable, legal, regulated taxi service with multiple drivers to cover a wide range

of hours, there is a risk that the resident may no longer be able to run the service at some point and Humboldt would need to restart the search for alternative options. Whether Humboldt is large enough to support a "larger" small business that can withstand changes in ownership is uncertain, and it would take time for that business to grow to that point.

2.3.3 Start-Up Burden

Third, there is currently already a need for an alternative to the former taxi service for the general population. The Mobility Van has already had to accept a larger portion of the general population and will continue to need to do so until an acceptable alternative is found. It may be possible that a member of the community is willing to operate a taxi service, but it would take time for that member to build out a business and find the funding to do so, including dispatching and building a reliable driver base. The City starting a premium service in-house, as part of a larger dispatching service that includes the existing Mobility Van, may be quicker and easier to operate for a small community.

3.0 Transit Service Review

3.1 Saskatchewan Municipalities

North Battleford (population 13,836) and larger cities have fixed-route transit networks, except Lloydminster, which is currently exploring transit options. Estevan and Weyburn do not have conventional transit systems of any kind, but Weyburn has previously explored adding a transit system. All large cities have specialized transit, but Estevan and Weyburn rely on a separate organization to provide service (SMILE Services and the Weyburn Care-a-Van Society, respectively).

In the reviewed small municipalities, only Rosetown and Esterhazy did not appear to have specialized transit service. Many other small municipalities receive funding for specialized transit service through the Transit Assistance for People with Disabilities (TAPD) funding, but do not advertise their service on their website. Specialized transit in some of those communities is offered through other organizations or by health care facilities, similar to how it is provided in Estevan and Weyburn.

TAPD funding is provided based on the number of trips operated in the previous calendar year, using a per trip amount based on the population bracket the municipality is in. **Table 1** shows the TAPD operating grants provided by the Government of Saskatchewan for the 2021-2022 budget year for cities between 2,500 and 20,000 residents. Generally, Humboldt serves less specialized trips on a per capita basis compared to its peer municipalities. From a specialized transit perspective, it may of interest to determine why the service has lower uptake than comparable cities in Saskatchewan.

Table 1: TAPD Operating Grants for 2021-2022

City	Population	2021-2022 Operating Grant ($)	Operating Grant per Capita ($/person)
Estevan	10,851	84,538	7.79
Humboldt	6,033	5,669	0.94
Lloydminster	11,843[1]	8,866	0.75
Meadow Lake	5,322	23,364	4.39
Melfort	5,955	30,301	5.09
Melville	4,493	10,787	2.40
North Battleford	13,836	41,851	3.02
Swift Current	16,750	19,463	1.16
Weyburn	11,019	15,092	1.37
Yorkton	16,280	54,596	3.35

3.2 On-Demand Software Platforms

A number of mobility platforms have launched or updated over the last decade, seeking to emulate the ease-of-use of other internet-based mobility applications. While this selection is not exhaustive, three platforms of note have been used by multiple municipalities across Canada in the last five years: RideCo, Spare, and Via. **Table 2** reviews these platforms. All three of these platforms support the booking of the distinct on-demand and paratransit trip types through a single routing and booking platform.

Table 2: Common On-Demand Platforms used in Canada

Platform	RideCo	Spare	Via
Headquarters	Waterloo, ON	Vancouver, BC	New York City, NY
App	White label	White label or Spare Rider app	White label or Via app
Customer Phone Support	Agency-only	Agency or additional cost	Agency or additional cost
Cash Payments	In progress	Not supported	Supported
Website	https://www.rideco.com/	https://sparelabs.com/en	https://ridewithvia.com/
Examples:	Airdrie, AB Cobourg, ON Leduc, AB Okotoks, AB	Chatham-Kent, ON Medicine Hat, AB Saskatoon, SK Strathcona County, AB	Edmonton, AB Niagara Region, ON Quebec, QC Winnipeg, MB

[1] Lloydminster has a total population of 31,582, but the population statistic in this table uses only the Saskatchewan portion

3.3 Small Community Case Studies from Other Provinces

Three sample municipalities were chosen to compare different service formats: on-demand service operated by a rural municipality, fixed-route service operated by a rural municipality, and on-demand service operated by a regionally-sized rural municipality.

Table 3 compares the transit networks for Cobourg, Ontario; Hinton, Alberta; and the County of Brant, Ontario. All three services operate using shared rides.

Cobourg switched to fully on-demand service in 2021, and uses a network of flexible bus stops that residents walk to or from when taking rides. Hinton has had fixed-route service since 2008, and uses a one-way loop oriented around the Yellowhead Highway, which is the major corridor in the municipality. Trips take one hour (30 minutes per direction), taking a south route for eastbound travel and a north route for westbound travel. The County of Brant started their on-demand service in 2019, serving a series of smaller rural communities. The largest population centre is Paris (population 14,956). With Humboldt's population, service could likely be provided through 1 cutaway and 1 spare.

Table 3: Sample Comparator Services

City or Region	Cobourg, ON	Hinton, AB	County of Brant, ON
Type	Municipal on-demand	Municipal fixed-route	Regional on-demand
Population	20,519	9,817	39,474
Platform	RideCo	--	RideCo
Operator	Century Transportation	First Canada	BTS Network
Fare, general ($)	2.25	3.00	5.00
Monthly pass, general ($)	62.50	70.00	--
Fare, senior ($)	2.25	3.00	3.00
Monthly pass, senior ($)	36.25	50.00	--
In-Service Vehicles	3 cutaways plus spare(s)	1 cutaway plus 1 spare	Vans
Revenue (2021, $)	45,415	32,699	Unknown
Expenses (2021, $)	836,505	311,403	554,960 (projected from contract)
Ridership (2021)	33,380	15,607	Unknown
Hours (Weekday)	6:15 a.m. to 9:00 p.m.	8:00 a.m. to 8:00 p.m.	6:00 a.m. to 9:00 p.m.
Hours (Saturday)	8:15 a.m. to 6:45 p.m.	8:00 a.m. to 6:00 p.m.	8:00 a.m. to 6:00 p.m.
Hours (Sunday)	8:45 a.m. to 3:45 p.m.	No service	8:00 a.m. to 6:00 p.m.

4.0 Saskatchewan Driver Regulations

Under Saskatchewan regulation, any vehicle transporting passengers for hire falls under Class PT, Class PB, or Class PC. Taxis that use cars, vans, SUVs, or trucks fall under Class PT, and other for-hire passenger vehicles that use buses, vans, SUVs, trucks, cars, or limousines fall under Class PB or Class PC. Rideshare vehicles may, in some cases, also fall under Class LV. Three licence classes are used for drivers of passenger vehicles:

- Class 5, which includes:
    - Taxis, limousines, or vehicles as part of a vehicle-for-hire service or Class PB vehicles for drivers with specific criteria for experienced drivers, and
    - Class PB and Class PC vehicles that are used exclusively for specialized transport with 24 passengers or less
- Class 4, which includes:
    - Buses, Class PB, and Class PC vehicles that carry 24 passengers or less,
    - Class PT and Class LV vehicles that carry 9 passengers or less,
    - Class PB and Class PC vehicles that are not used exclusively for specialized transport, and
    - Class 5 vehicles
- Class 2, which includes buses that carry more than 24 passengers and all class 3, 4, and 5 vehicles.

Class 4 for-hire drivers require a criminal record check to be lodged with the company they drive for on an annual basis. With proposed solutions that would see smaller (<25 passengers) community transportation vehicles do a mix of trips (not exclusively specialized trips), a Class 4 licence (and associated criminal record check) would be appropriate for City or volunteer drivers.