

Report

Phase 2 – Transit/Mobility Service Plan



Prepared for County of Brant
by IBI Group

September 26, 2018

Document Control Page

CLIENT:	County of Brant
PROJECT NAME:	Phase 2 - Draft Transit Service Plan
REPORT TITLE:	Phase 2 – Transit/Mobility Service Plan - Final
IBI REFERENCE:	106158
VERSION:	Draft
DIGITAL MASTER:	106158/10.0
ORIGINATOR:	Chris Prentice, Steve Wilks
REVIEWER:	Chris Prentice, Steve Wilks
AUTHORIZATION:	Bruce Mori
CIRCULATION LIST:	
HISTORY:	

Table of Contents

1	Introduction	3
1.1	Key Phase 1 Outcomes	3
1.1.1	Survey Research.....	4
1.1.2	Peer Review	5
1.1.3	Travel Demand Estimates	6
1.2	Conclusions – Opportunities for Going Forward	6
1.2.1	A Recommended Approach	6
1.2.2	Report Structure.....	7
2	Transit/Mobility Service Options.....	8
2.1	Public Transit Concept Alternatives	8
2.1.1	Ancillary Considerations.....	11
2.2.1	Fixed Routes:.....	11
2.2.2	Expand STP to a General Public Service.....	12
2.5	<i>A Way Forward</i> – Preferred Approach.....	15
3	Mobility Plan	17
3.1	Service Plan.....	17
3.1.1	Brant <i>e-Ride</i>	17
3.1.2	Subsidized Transportation Program.....	21
3.2	Operations Plan	22
3.3	Infrastructure Plan	23
3.4	AODA Requirements	24
3.5	Management Plan.....	24
3.5.1	Staff Resources.....	24
3.6	Marketing and Communications Plan	24
3.6.1	Marketing Budget.....	25
3.7	Financial Plan	26

Table of Contents (continued)

4	Recommended Plan and Implementation	29
	Exhibit 2.1: Mobility Service Type – Route and Schedule.....	16
	Exhibit 3.1: Brant e-Ride Service Type Summary.....	20
	Exhibit 3.2: Brant e-Ride Ridership Estimate Assumptions and Calculations	21
	Exhibit 3.3: 5-Year Budget Estimate for the <i>Brant e-Ride</i> Services	28
	Exhibit 4.1: Implementation Plan	29

1 Introduction

The County of Brant initiated a study to assess the feasibility of introducing a public transit/mobility service in the County. The study has been conducted in two phases: Phase 1 – analysis of demand for a service and identification of potential service options; and, Phase 2, a detailed service/mobility plan for the preferred service option.

This report represents Phase 2 of the study and provides details and business model for the preferred service concept consisting of a service plan (services, service levels, method of service delivery), financial plan and implementation plan with operations, administrative and infrastructure details. Council considered and received the Phase 1 report on January 8, 2018 and approved proceeding with Phase 2.

In Phase 1 of the study the following work was undertaken:

- Consultation with stakeholders through meetings with key opinion leaders, taxi operators, Transportation Task Force and including on-line and hard copy surveys to determine residents' needs and priorities.
- Peer review of transit services in 17 other Ontario municipalities to learn from their experience.
- Determined the demand, market and potential use for transit services through analysis of demographic, growth and travel trends and feedback from stakeholders.
- Critically reviewed the existing STP service as well as the County taxi by-law with respect to the STP operation and potential separation of public transit service from conventional taxi services.
- Potential transit service concepts were identified.

1.1 Key Phase 1 Outcomes

Key outcomes from the Phase 1 report provided the basis for the development of Transit/Mobility Service Options (Chapter 2) and a Mobility Plan (Chapter 3). Further, in the development of travel demand/ridership estimates, an initial Phase 1 task was a comprehensive (and critical) review of “what we know”. Specifically:

- a. Survey Results - what the community is telling us;
- b. Peer Review - to extrapolate trip incident rates and determine their applicability to the County of Brant operating environment; and

- c. Consideration that STP currently provides over 10,000 annual trips for the senior and disability communities in the County.

1.1.1 Survey Research

Empirical data (from the survey research) suggests the following:

A. On-line & Paper Survey Responses

73% of respondents either strongly agree or somewhat agree that getting around the County of Brant is difficult

61% of respondents either strongly or somewhat agree that there is a need for public transit service *for themselves*

86% of respondents either strongly or somewhat agree that there is a need for public transit service for *somebody else they know*

83% of respondents either strongly or somewhat agree that public transit service is needed within the County of Brant

45% either strongly or somewhat agreeing that transit service is needed to connect to Norfolk County

91% of respondents either strongly or somewhat agree that public transit service is needed between the County of Brant and Brantford

Over 80% of respondents indicated that neither they nor anybody in their household needs accessible transit

The most popular reason for interest in public transit in the County of Brant is “Traffic congestion”, with 15% of responses. This is followed by “Limited access to car”, “Unable to drive”, and “I don’t know” with 11% of responses. A combined 26% of responses chose a reason that had to do with access to a car for transportation. While the largest category (“Other”) had 27% of responses, these varied between reasons such as environment and accessibility

One question provided a matrix to gather responses about parts of the County that should be connected to each other by transit. The most popular starting destination was Paris, followed by Burford and St. George. The most chosen “route” was Burford to Paris, with 138 responses, followed by Paris to Burford, Paris to St. George, St. George to Paris, and internal trips within Paris. The table below provides a summary of the responses (the top 5 responses are indicated in red):

		From							
		Burford	Mount Pleasant	Oakland	Paris	Scotland	St. George	Onondaga	Glen Morris
To	Burford	65	51	52	132	67	54	40	34
	Mount Pleasant	51	37	42	67	43	31	31	26
	Oakland	41	41	26	47	44	25	28	21
	Paris	138	84	69	109	77	126	59	86
	Scotland	49	39	45	58	30	29	27	23
	St. George	63	41	34	132	36	48	36	59
	Onondaga	31	28	26	48	28	28	24	24
	Glen Morris	30	23	21	67	23	45	21	24

B. Telephone Survey - Results

The need for public transit in the County of Brant exists but is somewhat moderate among residents.

Nearly half (49%) of residents think it is difficult to get around the County of Brant.

One-third (35%) strongly agree that they know someone who would need public transit in the County. However, this number is lower when asked about the need for themselves or someone else in their household (19% strongly agree each). One-third (35%) of residents say they would not see a benefit in having access to a public transit service.

More than half of residents (56%) would be willing to pay \$5.00 and 42% report that they would use public transit at least once a week.

Some of the reasons residents say they would need public transit include: no/limited access to a car, unable to drive, inability to rely on friends and family to help them get around, affordability and traffic congestion.

County of Brant residents most frequently travel to Brantford and Paris.

1.1.2 Peer Review

The Peer Review provided valuable information - germane to developing preliminary ridership estimates is focusing on those communities with a service delivery framework linking small urban as well as serving a predominantly rural, low density population areas.

For the purposes of producing travel demand estimates, service characteristics from the peer review looked at population, number of trips provided, trips per capita, etc. Further, based on the need to look at “like characteristics” applicable to Brant, peer averages were recalculated reflecting the exclusion of larger urbanized areas such as Brantford as well as small urban operations restricted to municipal boundaries (not serving a broader regional or county area) such as Brockville. Conversely, Norfolk County¹ service for example

¹ Recognizing that Norfolk County has a population of 63,200, their transit service area population is 30,700.

(generating 0.2 trips per capita), appears to be more analogous with the Brant service area.

Building on the review of peer operating characteristics (as discussed above), consideration of the population characteristics of Brant (36,700) and the population of specific communities including Paris (12,300), St. George (3,250), Burford and Harley (2,100), etc. were also factored into the generating of ridership/travel demand estimates (and the application of trip generation rates).

1.1.3 Travel Demand Estimates

In consideration of what the community has said combined with assessment of peer experience, the following presents preliminary assumptions for calculating annual *general public* travel demand/ridership estimates, or trip generation rates:

Brant County (non-urban): 0.5 trips per capita (x 16,000) = 8,000 per year

Small urban communities: 1.7 trips per capita (x 20,700) = 35,190 per year

The net result is the generation of approximately 43,190 (general public) annual trips (or 3,600 trips/month). Combined with current annual STP ridership, it may be assumed that total travel demand would translate to approximately 53,590 annual trips (4,466 trips/month).

It is important to note that actual ridership will be influenced by transit service design characteristics including service type (fixed route, fixed schedule vs. dynamic route, flex route, ride-share), fare structure, frequency, hours of day, days of week, etc.

1.2 Conclusions – Opportunities for Going Forward

Based on the analysis undertaken, it was concluded that some level of shared-ride public transit or mobility service is feasible and needed in the County. Further, it was concluded that the existing STP service is at capacity and not sustainable operationally or financially. As well, the current user fee for the service at \$8 to \$10 each way, was high and limits the use of the service. Lower user fees would be necessary to encourage use of a public transit or alternate mobility service.

1.2.1 A Recommended Approach

Rationalized in Chapter 2 and detailed in Chapter 3, a recommended approach includes the following two key components:

1. The County of Brant to advance the deployment of **Brant e-Ride** service. **Brant e-Ride** will be a directly subsidized microtransit/ on-demand ride hailing (e-Hailing) of shared ride service.
2. The County of Brant to eliminate the *Subsidized Transportation Program* and through an aggressive marketing and communications

campaign, transition STP registrants to the *Community e-Ride* service.

1.2.2 Report Structure

Chapter 2 presents a series of transit/mobility options and analysis, culminating in the preferred approach.

Chapter 3 presents a detailed Mobility Plan – a blueprint for implementation articulating a detailed service plan addressing service attributes, fares, levels of service, subsidy levels; infrastructure plan; management plan; marketing and communication plan requirements; and a financial plan.

Chapter 4 presents an implementation strategy including timeframe and requisite requirements for implementation of Brant *e-Ride* services.

2 Transit/Mobility Service Options

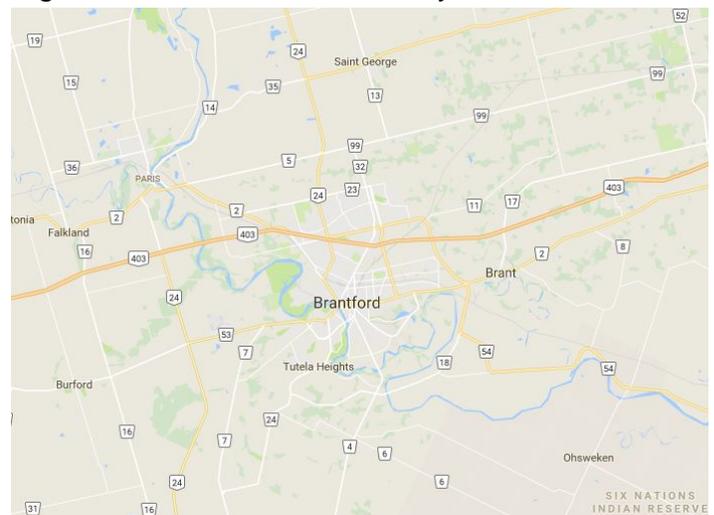
As noted in Chapter 1, the *Transit Feasibility Study – Phase 1* report presented the results of the comprehensive stakeholder consultation and survey research, peer review, critical review of the existing STP, and the generating of travel demand estimates, which provided the foundation for the development of alternate service delivery scenarios, or public transit/mobility service concepts, as presented herein and include:

- Fixed route
- Flex-Zones
- County-wide e-Hailing Service
- Subsidized Transportation Program (STP) Hybrid

2.1 Public Transit Concept Alternatives

While survey research suggests the greatest need for connectivity includes the communities of Paris, St. George and Burford with Brantford, the demand estimates do not justify daily, regularly scheduled (fixed-route, fixed-scheduled) service. That said, there is latent demand for a general public transportation/mobility service, or “broader-based” public transit service.

In short, ‘some’ level of shared-ride public (and specialized) transit service beyond the current STP service is feasible and needed in the County.



The following conceptual alternatives are presented for discussion. The alternatives are not necessarily mutually exclusive and include:

1. Paris to Brantford – fixed-route
 - Operating Monday-Friday
 - 6:00-9:00am and 3:00-6:00pm
 - 1-hour frequency
 - Walk-up service, no pre-booking requirement
 - Enhanced customer information

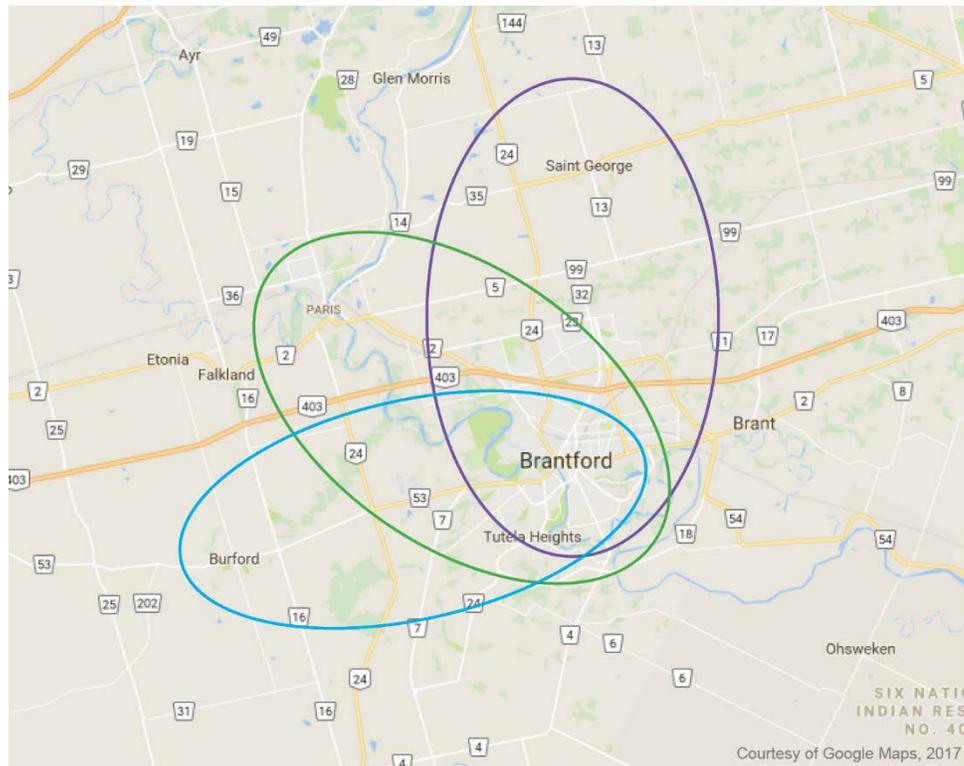
- Use of smaller capacity vehicle – may be a mini-van².
- Potential providers – private, for profit contractor, taxi, TNC
- Approx. 1,500 annual revenue hours.
- Operating cost range from \$60,000 (@t \$40/hr.) to \$90,000. (@\$60/hr.)³

2. Flex-Zones

- Provision of demand-response service on a zonal basis (For illustrative purposes - examples – presented below)
- May provide on specific days of week – for example St. George zone – Mon. & Wed.
- Dynamic itinerary
- Flexible span and frequency – range from defined periods (i.e., commuter peaks) to all-day service
- Reservations required: app based and/or phone reservations/call centre
- Potential providers – private, for profit contractor, taxi, TNC
- Use of smaller capacity vehicle – may be a mini-van

² AODA compliant service may be provided under alternate County-wide e-Hailing service providing accessible transport.

³ This cost methodology may be applied to other alternate scenarios in order to provide preliminary cost estimates/order of magnitude. Specific number of revenue hours will be determined by level of service considerations.



3. County-Wide e-Hailing service – Brant *e-Ride*

- Directly subsidized micro-transit/on-demand ride hailing (e-Hailing)
- Dynamic itinerary
- Flexible span and frequency – range from defined periods (i.e., commuter peaks) to all-day service
- Reservations required: app based and/or phone reservations/call centre
- Potential providers – private, for profit contractor, taxi, TNC
- Use of smaller capacity vehicle – may be a mini-van
- Fare policy may be used to influence travel behaviour and may consider alternate subsidy levels based on time of day, trip purpose, eligibility, etc.

4. STP – Hybrid

- Migrate the current STP program to a hybrid service accommodating both the current registrant population as well as the general public.
- Recognizing that these alternatives are not necessarily mutually exclusive, STP and/or a hybrid may be operated on a flex-zone basis or variation of this concept. For example, shopping trips on Monday and Wednesdays or doctor appointments – Tuesdays and Thursdays.

The underlying rationale reflects travel demand management measures – influencing travel behaviour.

- Fare policy considerations range from maintaining the current STP fare structure (\$8.00 and \$10.00/trip) to a subsidy more closely resembling that of an e-Hailing scenario (“Brant **e-Ride**”).

2.1.1 Ancillary Considerations

In advancing a preferred approach, several ancillary considerations include:

- 3rd party contractor and need for competitive procurement and performance-based contract terms.
- The County may purchase vehicles (capital costs and asset management considerations) and lease back to operator(s).
- The opportunity to implement alternate scenarios on an incremental basis. Evaluate effectiveness, ridership, cost efficiencies, etc. – to make determination of adjusting, eliminating or reallocating resources elsewhere.

2.2 Transit Service Options – Examples

The following are examples of other potential services along with high-level cost estimates.

2.2.1 Fixed Routes:

Paris to Brantford Route

Using the foregoing travel demand estimates and the experience of the peer communities, if a formal route between Paris and Brantford was considered, with the service operating 12 hours a day, six or seven days a week, the estimated annual ridership would be in the order of 20,400 (12,000 x 1.7), or approximately 67 rides per day. For an hourly service using one bus (this is subject to the design of the route), this would be approximately 6 rides per hour. Fare revenue, at \$3.00 per trip if everyone paid the same fare (i.e. no discounts for seniors or children or students, no passes, no tickets) would be approximately \$61,200 (\$3 x 20,400). The cost to provide this service would be in the order of \$291,840 (3,648 operating hours x \$80/hour).

St. George to Brantford, Burford to Paris

As with the above example for Paris to Brantford, a service between St. George and Brantford would likely generate approximately 5,525 trips per year or 18 per day. This is not sufficient to warrant a regular (daily, multiple trip per day) service. Even if the planned residential development in the St. George area proceeded and increased the population to ~5,000, the number of trips would only increase by a proportional amount to ~27 per day. Instead, a limited service with several trips a day, two or three days per week may be sufficient.

Similarly, a Burford/Harley to Paris service may generate approximately 3,570 trips annually, or 12 per day.

An integrated service which alternatively served Paris and St. George linking to Brantford is considered within the context of a flex, e-Hailing mobility service.

Parallel Specialized Service

As noted earlier, with any fixed route service, provision must be made to serve people who would be unable to use the regular (conventional) fixed route service. This represents an added cost.

2.2.2 Expand STP to a General Public Service

An option analyzed but not advanced for further consideration was that of opening up the STP to be used by all residents, not just those with disabilities. However, in practical and financial terms, this option is not feasible for several reasons:

- The required user fare is high thereby people on fixed and low incomes.
- The current arrangement with the taxi operators requires them to subsidize their costs which is a limiting factor to any ability to expand the service.
- It would continue to conflict with regular taxi operations and supply of service.
- Capacity would be limited.
- The cost to provide the service continues to be high on a per trip basis.
- The cost to the County would be high particularly if the fare was reduced with no improvement in travel options or coverage. Estimated cost increase - \$10,000 for every \$1.00 reduction in the user fare.
- Not sustainable going-forward.

2.3 STP – *An Eye on the Future*

While the Subsidized Transportation program (STP) provides a valuable service for its registrant constituency, it is not sustainable. Nor is it a service afforded to the general public. For discussion, there are opportunities to build on the successful program elements to transition it from the current service offering to a hybrid service on the basis of it being a shared-ride public transit service where there are defined trip times and service offerings. Such a hybrid service may include the following characteristics:

- Hybrid serving the general public and the elderly and disability communities.
- Advanced booked (e-Hailing), shared-ride service.

- Multiple-tiered fare structure to reflect reduced fares for services on select times of day and/or days of week and premium fares for other travel.
- Service characteristics may include concepts previously discussed such as provided in flex-zones on specific days of the week.

Deployment would include soliciting contractor/operator interest through a competitive procurement process and incorporating performance-based contract provisions in any contract award. For those whose trips are not served by the public transit service offerings, they would use the regular taxi service at regular, non-subsidized rates.

2.4 Other Considerations

Providing a public transit service compared to the STP will involve more extensive time, resource and financial commitments on the part of the County and its staff. Operating any formal, fixed-route style service also carries with it significant implications from an accessibility and infrastructure standpoint.

The following key issues will need to be considered.

Required Resources – Staff, Vehicles

- Staff will be required to administer, manage and plan the services. Currently, County staff spend approximately 50% of their time on the STP service administration. On an on-going basis, the staff resource requirement would be one person, 100%. Initially with start-up, additional resources would be required.
- Vehicles – The County could purchase the required vehicle(s) for the service in order to ensure that suitable vehicles are available and used. Or, the vehicle could be supplied by a contractor to specifications set by the County.
- Infrastructure – if a fixed route service is implemented, stops will need to be installed at regular intervals (+/- 300 metres) along the route together with supporting by-laws to prevent parking and construction investment to ensure stops are accessible for people using mobility devices
- Marketing/communications – a communications program would need to be needed to support the public transit service by providing information and communications about the services to the public

Budget Implications – Operating, Capital

- Operating, includes costs to operate a service:
 - 1 route/1 bus – annual cost of \$300,000
 - Hybrid STP – estimated at 3,000 revenue-hours/year @ \$60/hour = \$180,000

- Current STP expenditure - \$125,000/year; Administration - \$43,000 (50% resource)
- Future staff and promotional/communications costs - +/- \$125,000/year
- Capital – Small bus and/or accessible van(s) for the services could range from \$55,000 (van) to \$95,000 to \$125,000 each.
- For any fixed route service, need to install bus stops and infrastructure program to make stops accessible (concrete pad, accessible walkway). Costs per stop - \$1,500 average.
- With a fixed route service, a parallel service for people unable to use the regular (conventional) service (example, unable to walk out to bus stop) would have to be provided. Estimated cost - \$50,000 (2,500 trips x \$20).

Provincial Gas Tax

- The County has access to provincial gas tax in the amount of approximately \$91,000/year. This amount could increase as ridership and population increases.

Legal

- Transit/mobility service must be accessible in terms of vehicles as well as any infrastructure (i.e., bus stops) to accommodate people with disabilities (as with current STP) per AODA and Ontario Human Rights Commission (OHRC),
- General compliance with AODA and OHRC regarding employee training, information materials, customer service,
- Any operation outside of the County, such as into Brantford or Norfolk County, would require the operator of the service (if service is contracted) to have a Public Vehicle Licence.

Service Delivery

- The transit services could be contracted to a private sector firm through a competitive bid process. Alternatively, the County could operate the service directly with County staff. However, this would not be the preferred approach given the resource implications.

Taxi Services

- As noted in the foregoing sections, any “public transit service” would not be a subsidized taxi service. As such, it would be a stand-alone service and distinct from the taxi services. The taxi services would similarly become standard taxi services subject to the County taxi by-law and published fares. If a taxi operator bid on the transit service, it

would be on the basis of a separate operation requiring dedicated resources.

Fares

- Fares could be tiered and priced according to service type.
- Fares (or subsidy levels) may be used to influence customer travel behaviour.

2.5 A Way Forward – Preferred Approach

The previously discussed transit/mobility concepts were further considered with the context of the graphic below (Exhibit 2.1: Mobility Service Type – Route and Schedule). Namely, consideration of the most appropriate service delivery type based on travel demand and urban (rural) form. The graphic presents a range of mobility service types (fixed to flexible routes and fixed to flexible schedule); a range of travel demand from high to low; and urban form (“concentrated” to “dispersed”). As illustrated, for low travel demand and dispersed urban form areas, a flexible or demand responsive service is the most appropriate.

The *Transit Feasibility Study – Phase 1* research suggests the absence of an adequate trip density threshold of approximately 6 to 8-trips per hour (common industry performance metric for community-based transit service).

Typically, public transit buses operate in a fixed-route, fixed-scheduled mode: they pass through a series of pre-determined stops that passengers must get to and from on their own. In densely populated places, where the closest bus stop is never too far away, the fixed-route system can work well. But in low-demand areas fixed routes can be terribly inefficient. Stops are typically spaced far apart. On nights and weekends, or during bad weather, this inconvenience is magnified. A scalable, flexibly scheduled, dynamically routed mobility (microtransit) service is more suitable for low-demand areas – a concept that combines the regularity of a fixed-route bus system with the range of a car service. This concept would require an information infrastructure similar to that of a dial-a-ride service. Potential passengers would go use a Smart device app, go to a website or call a central number — and input their point of origin and destination. The app and/or a dispatcher would alert the nearest driver of the request.

From the passenger's perspective the system is no different from a car service. The total ride might take a bit longer than a cab would, but passengers would be paying less. The service is also much more convenient than a typical bus; passengers no longer have to walk great distances to the nearest stop or, once there, wait great lengths of time for the next bus to arrive.

In short, initial deployment of fixed route service was not considered for the following reasons:

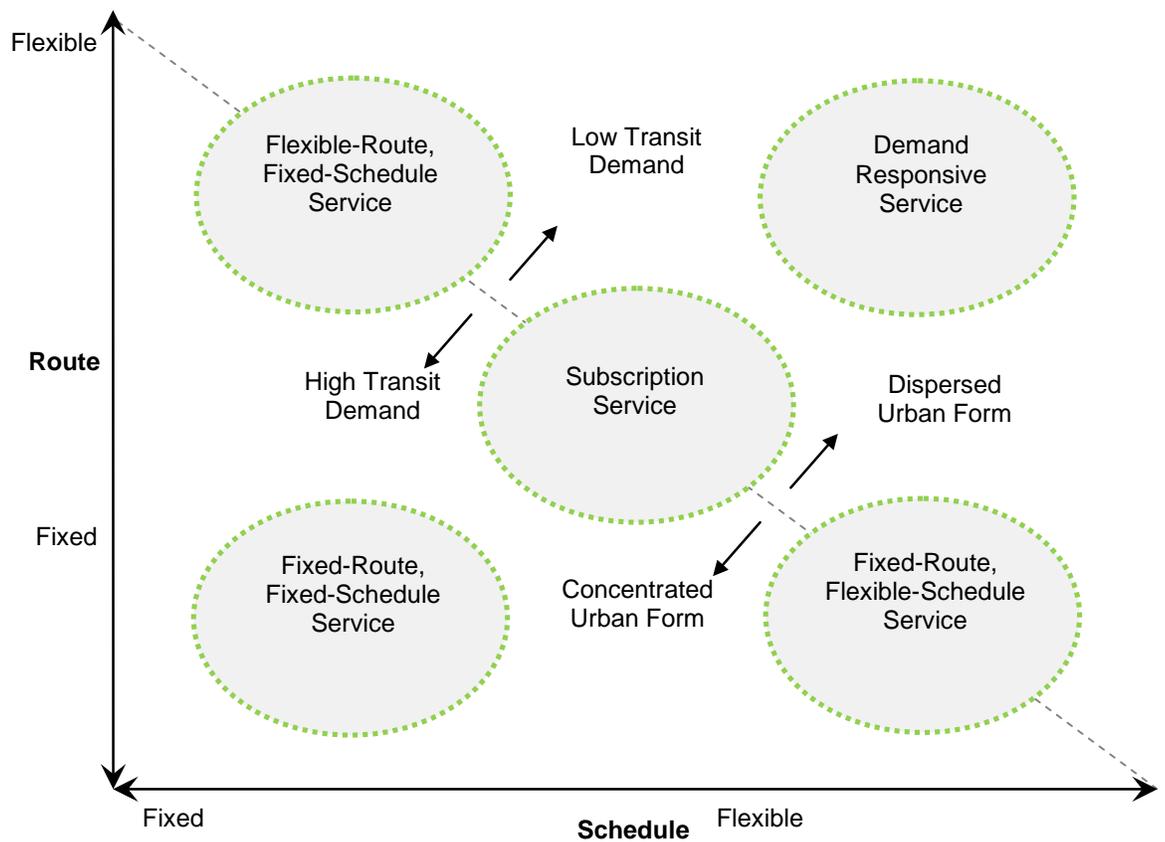
- Opportunity for more scalable solution that can expand and be modified in response to customer demand

- Past history suggested limited demand for fixed route service.
- Evolving customer demand and next-generation mobility solutions can be better synchronized.

The flexible-route bus/mobility concept would blend the regularity of traditional bus service with the range and spontaneity of a taxi or transportation network company (TNC) service.

Chapter 3 presents additional discussion including service attributes of a preferred mobility concept.

Exhibit 2.1: Mobility Service Type – Route and Schedule



3 Mobility Plan

The Mobility Plan presents the recommended approach and describes all the elements associated with establishing and delivering the planned public transit/mobility services. It consists of the following sub-plans:

- **Service Plan:** what the service(s) will look like, where service will be provided, how often it will operate and on what days;
- **Operations Plan:** how it will be operated;
- **Infrastructure Plan:** what vehicles and facilities (stops, shelters, garage, terminals) are required;
- **Management Plan:** how it will be administered, planned and managed and what will be the staffing requirements;
- **Marketing Plan:** how ridership will be encouraged through promotion and communication;
- **Financial Plan:** what the users should pay (fares/fare structure) and what the operating and capital costs will be.

Each of these sub-plans is described below.

3.1 Service Plan

3.1.1 Brant e-Ride

The County of Brant to advance the deployment of **Brant e-Ride** service. **Brant e-Ride** will be a directly subsidized microtransit/ on-demand ride hailing (e-Hailing) of shared ride service in sedans, SUVs or vans.

The County of Brant is served by and has contracted with both Paris Taxi and Grand River Taxi as service providers for their STP. The presence of transportation network companies (TNCs) is growing in communities throughout the province, offering exclusive ride and shared ride services. At its option, the County could enter into partnerships with these or potentially other private companies to encourage an expansion of microtransit services. This approach avoids direct institutional ownership of the service by the County.

Brant e-Ride – Services: It is recommended that two service types be advanced (as summarized in Table 3.1). A third service scenario has been presented for exploratory purposes by the County. For the two recommended service types, a maximum subsidy of \$9.00 has been set. The \$9.00 figure would translate to an approximate eight to ten-kilometer trip, in a shared-ride mode and given prevailing taxi/ride-share/TNC rates. Nine dollars is also consistent with transit agency/TNC partnership industry experience.



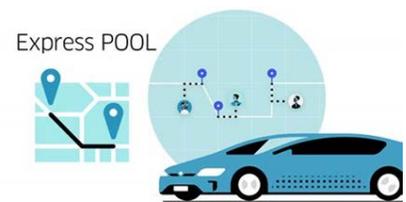
1. **Brant Community e-Ride Program:** This program would provide trips to anybody in the community for trip origins and destinations within the County. Service would be available to accommodate all discretionary and non-discretionary trips (no trip purpose restrictions), operating Monday to Friday between the hours of 6:00am and 9:00pm. However, in order to control costs (subsidies) service would have to be booked within a 15-minute window of 3-hour increments. That is, trips may only be booked for departure times as follows:

- 6:00am
- 9:00am
- 12:00pm
- 3:00pm
- 6:00pm
- 9:00pm

This *Community e-Ride* program will charge a \$3.00 fare with a maximum trip cost of \$12.00, for a net cost to the County of \$9.00 per trip, comparable to the existing STP.

2. **Commuter e-Ride:** Microtransit offers significant potential to address currently unmet needs for commuter trips between Paris and Brantford, and St. George and Brantford.

It is important to note that the cost of a single occupancy, exclusive trip on a taxi or rideshare (Uber, Lyft) service from Paris to Brantford ranges from \$25.00 to \$35.00. This cost would be prohibitive for any individual going forward even with a Brant e-Hailing commuter service. However, with the emerging alternate delivery models from rideshare companies (i.e. *LyftLine*, *Uber Pool* and *Uber Express POOL*) which promote ride-sharing, can result in considerable cost savings.



Commuter e-Ride would operate Monday to Friday, 6:00am – 9:00am and 4:00pm – 7:00pm. Commuter e-Ride fares will be \$1.00 with a maximum trip cost of \$10.00 (hence a subsidy of \$9.00 per trip).

3. **Destination e-Ride:** While not part of the core strategies going forward, this scenario is presented for discussion purposes. Destination *e-Ride* would be contingent upon advancing entrepreneurial partnerships. Building on a County-sponsored *e-Ride* service, the County has an opportunity to facilitate partnerships with large employers (employee shuttle/shared-ride service), hospitals (patient and/or employee access) and/or the County’s hospitality industry (a “Happy Hour” *e-Ride* service for example).

Brant e-Ride would enable residents or visitors to e-hail eligible trips from their smartphones. Using the phone app of the participating transportation company (i.e., taxi or TNC), the rider can input “Brant e-ride” in the payment section in order to receive the discounted rate. The cost for the rider would be \$1.00 or \$2.00 plus the additional fare for rides that exceed \$9.00.

Exhibit 3.1 presents a summary of service characteristics and ridership estimates for the three **Brant e-Ride** services.

Key operating characteristics for the first year of operation of both the **Brant Community and Commuter e-Ride** services include:

- 29,400 - year one (total trips)
- 6.2 trips per hour (equivalent)
- \$264,600 annual deficit (subsidy)
- \$9.00 subsidy per trip (net cost per trip)

Ridership estimates are based on input from the Phase 1 report, community survey results, consideration of peer/industry experiences, and professional judgment. Ridership estimates, as expressed in trips per hour have been calculated by estimating the number of ‘minutes’ per trip, number of trips and presented in 60-minute segments. It is important to note that ridership, as expressed in trips per hour is only for those time periods (number of minutes) that a revenue passenger is being transported (and not for the total period of time that service is available). For example, six trips each taking 10 minutes from origin to destination would translate into 6 trips per hour for performance measurement calculation purposes. Ridership assumptions and calculations are presented in Exhibit 3.2.

Exhibit 3.1: Brant e-Ride Service Type Summary

	Brant Community e-Ride Program	Commuter e-Ride	Destination e-Ride (contingent upon entrepreneurial partnerships)
Area of Service	trip origin and destination within County	trip origin or destination Paris – Brantford St. George – Brantford	trip origin and destination within County
Days of Operation	Mon. – Fri.	Mon. – Fri.	TBD
Hours of Operation	6:00am – 9:00pm (booked in 3-hour increments)	6:00am – 9:00am 4:00pm – 7:00pm	TBD
Markets Served	Entire community (residents & visitors)	Commuters	TBD
Fare Paid (per 1-way trip)	\$3.00	\$1.00	TBD
Maximum Total Trip Cost	\$12.00	\$10.00	TBD
Operating Deficit (subsidy) Per Trip	\$9.00	\$9.00	TBD
Total Annual Operating Deficit (subsidy) (Year 1 Operation)	\$132,300	\$132,300	TBD
Annual Ridership Estimate Months 1 - 12	14,700	14,700	TBD
Annual Ridership Estimate Months 13-24	19,600	29,400	TBD
Average Trips per Hour Months 1 - 12	6.2	6.2	TBD
Average Trips per Hour Months 13-24	10	10	TBD

Exhibit 3.2: Brant e-Ride Ridership Estimate Assumptions and Calculations

	<ul style="list-style-type: none"> 30 people/day 60 trips/day 14,700 annual trips	<ul style="list-style-type: none"> 30 people/day 60 trips/day 14,700 annual trips
	<ul style="list-style-type: none"> 40 people/day 80 trips/day 19,600 annual trips	<ul style="list-style-type: none"> 60 people/day 120 trips/day 29,400 annual trips
	<ul style="list-style-type: none"> 10% ride-share at 7 min. /trip = 6 trips x 7 min. ($\div 60$) = .7 hrs. 90% exclusive ride at 10 min./trip = 54 trips x 10 min. ($\div 60$) = 9 hrs. 6.2 trips/hour	<ul style="list-style-type: none"> 10% ride-share at 7 min. /trip = 6 trips x 7 min. ($\div 60$) = .7 hrs. 90% ride-share at 10 min./trip = 54 trips x 10 min. ($\div 60$) = 9 hrs. 6.2 trips/hour
	<ul style="list-style-type: none"> 50% ride-share at 5 min. /trip = 40 trips x 5 min. ($\div 60$) = 3.3 hrs. 50% exclusive ride at 8 min./trip = 40 trips x 8 min. ($\div 60$) = 5.3 hrs. Average 10 trips/hour	<ul style="list-style-type: none"> 50% ride-share at 5 min. /trip = 60 trips x 5 min. ($\div 60$) = 5.0 hrs. 50% ride-share at 8 min./trip = 60 trips x 8 min. ($\div 60$) = 8.0 hrs. Average 10 trips/hour

3.1.2 Subsidized Transportation Program

The *Subsidized Transportation Program* (STP) is provided in the County as a pre-booked, shared ride, accessible door to accessible door transportation service for persons that have permanent or temporary physical disability, intellectually challenged and such others as may be determined through the County's eligibility and certification processes. The County contracts with two licensed taxi companies to provide the service. The two companies are Grand River Cab and Paris Taxi. STP participants can contact or utilize the company of their choice for service.

Key elements of STP include:

- All trips must start and end within the service area. The current service area includes the County of Brant and City of Brantford.
- Advance booking is required to utilize the STP. Participants are asked to call and schedule their trips by 1:00pm the day before.
- The service is provided 24 hours a day, 7 days a week.
- Participants of the STP are required to pay a fee dependent on the distance travelled per participant trip. One-way trips less than 16 km are charged a fee of \$8.00 per trip. Trips exceeding 16 km are charged a fee of \$10.00 per trip.
- 10,389 STP annual trips
- \$121,815 net operating cost
- \$11.73 net operating cost per trip

For the recommended transit/mobility service, the *Subsidized Transportation Program* will be discontinued and replaced by the new service. This will require an aggressive marketing and communications campaign, and transitioning of STP registrants to the *Community e-Ride* service. In short, the County will no longer provide a subsidized transportation service for individuals. The new service will be supported/funded by the County and open to all residents.

The elimination of STP will afford the county's elderly and disability community the same level of service as the general public. All e-Ride service providers shall provide accessible vehicles and AODA compliant service. The fare structure of the *Community e-Ride* service is significantly less than the current STP fare structure while providing for more spontaneous travel within prescribed parameters.

It is also recommended that the current STP budget be reallocated to **Brant e-Ride** services.

3.2 Operations Plan

The transit/mobility services can be operated in one of two ways:

1. Directly by the County using County staff to drive the vehicles, maintain the vehicles and manage the service; or
2. Indirectly by utilizing a private firm under contract to the County with the private contractor providing people to drive and maintain the vehicles with the County responsible for overall management and administration of the service. This is the situation with the current STP service

Given the established practice with the STP and since a broadening of the public transit service represents a significant level of effort and staff time, it is

recommended that the service be contracted through a competitive Request for Proposal (RFP) process. The RFP process is preferred compared to a Tender process since this provides the County with flexibility to invite respondents to propose “valued added” services to enhance the operation and delivery of the transit service in addition to the cost element to provide the service. The RFP would include a full description of the service to be provided, performance expectations and accountability.

With the proposed transit services having connections with services into Brantford, any service provider will be required to have a valid Public Vehicle License (PVL) in order to cross municipal boundaries.

While it is understood that responses from private contractors to past RFPs and tenders was limited, it is anticipated that with the added scope and associated budget attached to the transit services proposed for the County, it is anticipated that there will be greater competitive interest from private firms in the services. Any contract should be with one firm only to ensure full accountability and responsibility.

Similar to the current STP contract with the two taxi companies, the contractor would be responsible for:

- the operation of the services;
- hiring of drivers and maintenance of the vehicles and ensuring compliance with all applicable license and training requirements of the province;
- cleaning and maintaining the vehicles according to standards set by the County;
- supervision of the transit operation to ensure compliance with County standards and expectations;
- responding to customer feedback;
- reporting regularly to the County concerning the performance of the transit services including provision of written reports;
- working with the County to improve the services including marketing and communications.

As well, the contractor would be responsible for providing insurance to cover all aspects of the operation in accordance with the requirements of the County as specified in the operating agreement.

3.3 Infrastructure Plan

For the recommended service/mobility plan, no specific infrastructure is required. However, the County could consider.

3.4 AODA Requirements

As County staff are familiar through the current STP service, all transit services will need to be AODA compliant. This includes ensuring that all staff, including contractor staff, meet the customer service elements under the AODA through training programs. A certain portion of the vehicles will need to be accessible either low-floor or lift-equipped to accept mobility devices.

3.5 Management Plan

On the basis of contracting the service to one or more private firms and similar to the existing STP operation, the County would be responsible for the following activities:

- Design and purchase of all infrastructure items
- Marketing and communications including preparation of all customer-information and promotional materials
- Printing of any transit tickets and/or passes
- Administration and monitoring of the operations and maintenance contract, similar to the existing STP contract. This will include monitoring the on-street service to ensure compliance and on-time performance and periodic inspection of the vehicles used for the service to ensure maintenance standards and cleanliness
- Responding to customer enquiries and feedback on the mobility service
- Reconciliation of ridership and revenues. Fare revenues should be collected from the contractor and counted on a daily basis and matched against the ridership count for the day, similar to the reconciliation tasks related to STP
- Preparing and filing all necessary reports and documents for Council, the MTO and other agencies that request or require information about the transit service

3.5.1 Staff Resources

To manage and provide oversight for the transit/mobility service, a full-time person will be required.

3.6 Marketing and Communications Plan

To ensure good communications and an understanding of the new service, a marketing and communications plan should be prepared and should be simple and focused on a set of primary functions in order to both efficiently use the available financial and staff resources as well as to be effective.

The primary task is to implement the service and communicate details about the new transit service to all stakeholders. In this regard, the following are the key tasks to be undertaken:

- Corporate/Service Image and Logo – develop a distinctive colour scheme and logo for the transit service incorporating the County name or transit-related creative name building on the **Brant e-Ride** concept. A competition could be held to develop the name.
- New transit brochure – the most important element of customer communication is a transit brochure incorporating information about the service, the fare structure and useful information such as places to purchase fare media and points of interest. The brochure would then be made available on the vehicles, at fare media outlets, County offices and other municipal facilities (recreation centres, etc.). The brochure should be designed using the talents of a marketing and communications professional.
- Media advertising and print materials – work with the Economic Development department and BIA/Chamber to create an annual calendar of community events to advertise with and link to transit use.
- Customer Information – establish a dedicated telephone number for customer information. Ensure that the line is staffed during key time periods to answer questions and to respond to feedback. An email service could also be established for customer feedback.
- Transit Web Page – replace the existing STP information on the County website with a re-designed and expanded transit information page about the transit service as well as links to local events and points of interest.
- Community and Media involvement – work with business leaders and the public at large to promote use of the service; provide information and meet periodically with the local media; provide a regular supply of information to the local media regarding transit activities and issues.
- Council Presentations – staff should provide regular update presentations to Council on the performance of the transit services and any newsworthy occurrences.
- Special Promotion Days – provide regular promotional events focused on the transit services including special fares.

3.6.1 Marketing Budget

To support the marketing plan, financial and staff resources will be required. Initially, a special promotional budget of \$20,000, not including staff costs, is recommended to launch the new service including development and distribution of promotional material and to handle increased customer enquiries during the transition period.

A sustaining annual budget of \$15,000 plus an annual staff time commitment of 500 hours is forecast to successfully manage the marketing and communications plan on an on-going basis. This budget could be supplemented by joint promotions and the trading of advertising opportunities with local businesses.

The implementation of a comprehensive marketing plan is vital to the future success of the transit system and to attracting new users.

3.7 Financial Plan

The financial plan, Exhibit 3.3, provides a multi-year estimate of operating (including administrative and management) expenses and revenue sources, including user fees (fares).

Fare revenues are based on a base rate of \$1.00 for the Commuter e-Ride and \$3.00 for the Community e-Ride for all users. As noted previously, the fare for the Destination e-Ride would be subject to negotiation with funding partners (businesses, agencies).

Ridership, beginning from a base estimate of 3,675 trips for each of the Community e-Ride and Commuter e-Ride services for the three months in 2019 (September 30th start-up), or 14,700 annualized, would increase to 19,600 and 29,400 each in 2020. Thereafter, an annual ridership increase of 5% for each of the two services is projected reflecting increased awareness of the services and consistent with peer community transit use experience.

Expenses are based on the anticipated number of trips and estimated at a gross cost of \$12.00 per trip for the Community e-Ride and \$10.00 for the Commuter e-Ride, subject to proposals from the successful bidders. Net costs are \$9.00 for all trips.

Total County costs in addition to the contracted operational expenses are \$70,500 for the first three months (October to December 2019) and \$111,000 annually thereafter. The contractor costs would increase proportionately with the number of trips taken with revenues increasing as well.

The overall expenditures for the recommended transit plan, before revenues and gas tax, and including the recommended new expenditures for staff time, marketing and communications and miscellaneous costs, would be \$151,350 in 2019 and \$640,200 in 2020, increasing to \$723,400 by 2023 as use of the service (ridership) increases. After revenues and gas tax, the net municipal investment would be \$113,900 (2019), then \$461,000 in 2020 and increasing to \$530,300 by 2023. The gas tax, currently estimated at \$91,000 annually, is shown as constant although it can be expected to increase as ridership (and population) increases in future years.

Based on this forecast, the County's additional transit investment would increase from the current (STP) level excluding staff time (1 FTE) of \$125,000 by \$31,400 in 2019 (including added resources to prepare for implementation), \$336,000 in 2020 and to \$405,300 by 2023.

Fare revenues would be collected by the contractor and netted against the contract cost based on trips taken, with the contractor invoicing the County for the net amount. This relieves the County of the administrative burden of collecting and depositing fare revenues. The contractor would be required, through the operating contract, to provide a daily accounting and reconciliation (summary) of trips taken and fare revenue collected.

It should be emphasized that a key element of the recommended plan is the significantly lower fares for either the commuter or the community services of \$1.00 and \$3.00, compared to the existing \$8.00 and \$10.00 fares.

Exhibit 3.3: 5-Year Budget Estimate for the *Brant e-Ride Services*

Item	Plan Year				
	2019**	2020	2021	2022	2023
Community e-Ride	3,675	19,600	20,580	21,600	22,700
Commuter e-Ride	3,675	29,400	30,800	32,400	34,000
Destination e-Ride	TBD	TBD	TBD	TBD	TBD
Total	7,350	49,000	51,380	54,000	56,700
Operator Contract					
Community e-Ride @ \$12/trip	\$44,100	\$235,200	\$246,960	\$259,200	\$272,400
Commuter e-Ride @ \$10/trip	\$36,750	\$294,000	\$308,000	\$324,000	\$340,000
Total Contract Cost	\$80,850	\$529,200	\$554,960	\$583,200	\$612,400
County Management/ Staffing****	\$43,000	\$86,000	\$86,000	\$86,000	\$86,000
Marketing & Communications	\$20,000	\$15,000	\$15,000	\$15,000	\$15,000
Miscellaneous County Costs	\$7,500	\$10,000	\$10,000	\$10,000	\$10,000
Total Expenses	\$151,350	\$640,200	\$665,960	\$694,200	\$723,400
Fares - Community e-Ride (@ \$3.00)	\$11,025	\$58,800	\$61,740	\$64,800	\$68,100
Fares - Commuter e-Ride (@ \$1.00)	\$3,675	\$29,400	\$30,800	\$32,400	\$34,000
Total Fare Revenue	\$14,700	\$88,200	\$92,540	\$97,200	\$102,100
Gas Tax*****	\$22,750	\$91,000	\$91,000	\$91,000	\$91,000
Net Municipal Investment	\$113,900	\$461,000	\$472,420	\$506,000	\$530,300
Current STP Costs***	\$82,500	\$125,000	\$125,000	\$125,000	\$125,000
Net Increase	\$31,400	\$336,000	\$347,420	\$381,000	\$405,300

*All values in constant 2018 dollars
 **3 months. Effective September 30, 2019
 ***Net cost for STP.
 ****1.0 FTE for six months
 *****Gas tax subject to increase in future years

4 Recommended Plan and Implementation

The **Brant e-Ride Commuter** and **Community** services are the recommended public transit services to be introduced County-wide replacing the STP service.

In consideration of Council and budget approvals as well as the necessary administrative and communications lead times, a target implementation date for introducing the services is proposed to be September 30, 2019. Accordingly, the current STP contracts with the taxi operators would need to be extended to and expire the day before on September 29, 2019.

In order to meet this implementation date, the action steps and timeline as presented in Exhibit 4.1 will be required.

Exhibit 4.1: Implementation Plan

Step	Action	Timeline
1	Present report to Council; Council approval and budget approval; establish implementation date (July 1, 2019)	Winter 2018/2019
2	Public information centre presentations regarding new Brant e-Ride Services	Winter 2019
3	Inform existing STP users of cancellation of program and replacement with Brant e-Ride	Winter 2019
4	Prepare RFP and contract documents	Winter 2019
5	Approve RFP and contract by Council	Late Winter 2019
6	Issue RFP (allow 4 weeks for responses)	Late Winter 2019
7	RFP closes	Spring 2019
8	Evaluate bids and award contract	Spring 2019
9	Finalize contract with successful bidder	Spring 2019
10	Prepare communications and information materials including website	Summer 2019
11	Prepare administrative arrangements for managing and monitoring the service	Summer 2019
12	Launch Brant e-Ride service communications	Summer 2019
13	Conclude STP contracts with Paris Taxi and Grand River Taxi	September 29, 2019
14	Launch new Brant e-Ride service	September 30, 2019
15	Monitor service; work with contractor	On-going