Executive Summary

Dillon Consulting Limited was retained by the Town of Orangeville to evaluate the existing service provided by Orangeville Transit and identify financially sustainable opportunities to optimize service, improve service quality and meet the demands of a growing population.

This study was initiated in response to increasing challenges of providing reliable service and adequate coverage as Orangeville continues to grow, pressures to expand service beyond the current service boundaries, and the upcoming termination of Orangeville Transit's operating contract with First Student Canada Inc.

Consultation with transit passengers was conducted through an on-line survey which probed a number of questions about the existing service, including concerns and opportunities to improve service levels. Various stakeholders were also interviewed to determine their views on the existing transit service as well as opportunities for improvement. Transit data was reviewed to assess operational performance and stops with both high and low passenger activity. A peer review of similar transit systems in Ontario was conducted to assess how Orangeville Transit compares to other transit systems.

Through this review, a number of key issues and opportunities were identified that were addressed as part of the five-year plan.

The following presents the key issues and opportunities identified in the review of existing services and consultation with the public.

- 1. Service Productivity and Financial Performance: The review of transit ridership indicates that overall system resources are being effectively allocated and are operating at a good productivity for a system the size of Orangeville. In general, weekday ridership on the system is generally productive with the exception of certain hours of service during the first few and last few runs. Saturday ridership is generally below target and should be looked at more closely. Since the hours of service provided already fall below the peer group average, service hour reductions are not recommended.
- 2. Crowding on the Orange Route: High ridership is good, but overcrowding at peak times affects the overall quality of service. The Orange Route experiences crowding during two hours of the day, coinciding with school bell times at 8:55am (Westside Secondary and ODSS), 2:50pm (Westside Secondary) and 3:05pm (ODSS). The introduction of the Pilot service has helped mitigate this crowding issue and should be explored as a potential solution moving forward. Other solutions that were considered include purchasing larger vehicles or increasing the number of trips to both schools.



- 3. Schedule Adherence: Schedule adherence is an important component of providing quality service to the customer, particularly for smaller systems were service frequencies are not high. A review of the existing service revealed issues of buses running late, particularly the Blue route. This is concerning because of the high number of transfers at the downtown terminal that rely on having all of the three routes arrive and depart within a small window (2 -3 minutes of staging time build into the schedule). The addition of a fourth route helped to address these schedule adherence issues.
- 4. Expanded Coverage: Currently, Orangeville Transit achieves a service coverage of 66 percent of its urban area (the percentage of population and employment within a 400 m walking distance). This is below the desirable range of 75 to 90 percent that most municipalities target as a standard. Many of the neighbourhoods that are not within proximity of transit are either newly developing or difficult to cost effectively service using a fixed route service design (due to the low density nature of development and/or curvilinear road network not conducive to transit). The existing three route system cannot be expanded further to reach a number of these newly developing neighbourhoods.
- 5. Route Structure: Route design is a balance between coverage and directness. Coverage reflects the accessibility of a transit system while directness refers to the number of deviations a route has between origins and destinations. It reflects the ability of the route to compete with other modes in terms of travel times. Routes that prioritize directness typically have fewer bus stops and more linear routes to reduce overall travel times. Orangeville Transit's existing route structure consists of three large, one-way loops. This type of route structure can increase travel time and discourage new ridership. Methods to increase the directness of routes to key destinations was a focus of this review.
- 6. Weekday Evening Service: The introduction of extended weekday service was identified as the highest priority for service improvement by transit customers that filled out the on-line survey. This is supported by the peer review as well, with all systems ending later in the evening outside of the newly initiated Bradford West Gwillimbury Transit service. Orangeville is a retail hub for the County of Dufferin with a number of major commercial centres including the Orangeville Mall and the Riocan Fairgrounds. The operating hours of the stores within these centres go beyond Orangeville Transit's weekday service hours negating transit as a travel option for employees and late evening shoppers. There are also a number of employees that finish work after 5:45pm and cannot rely on Orangeville Transit to complete their trip home. This is particularly the case for GO Bus users. Extending service later into the evening (e.g. to 9:45pm) would address a number of these needs and provide accessibility.



- 7. **Sunday Service:** The introduction of Sunday service was identified as the second highest priority for service improvement by transit customers that filled out the on-line survey. While the introduction of Sunday service provides improved access to the community, it is difficult to justify the high cost at this time for a small system with minimal ridership. Sunday ridership s is traditionally significantly lower than on weekdays and it is difficult to achieve recommended productivity and financial performance targets to make the service viable. While Sunday service was not identified as a priority for this plan, Saturday ridership should continue to be monitored to assess productivity. If ridership exceeds minimum productivity targets by more than 25 percent, a limited service offering can be explored under a two-year pilot program.
- 8. Weekday Early Morning Service: While the extension of early morning service was not identified as a priority among respondents of the on-line survey (22 percent), there is a potential market to attract riders with an earlier system start. Early morning weekday service currently achieves fairly high ridership, averaging approximately 18 boardings per revenue vehicle hour on all three routes for the first two trips. This is considered a high level of ridership for a system the size of Orangeville. The service starts at 7:15am, which is early enough to capture the start times of a number of employers, but would not accommodate the needs of many industrial/ warehousing jobs or GO Bus users. There is a potential to start the service earlier, targeting specific industrial or GO Bus commuters. While this would likely increase ridership, the extension of evening weekday service is recommended as a priority over early morning service.
- 9. Accessibility for Persons with Disabilities: Orangeville does not provide a separate demand-responsive door-to-door service for persons with disabilities. Instead, the Town operates a fully accessible conventional service which includes the use of lift-equipped, high-floor buses with access to accessible stops. While there is no requirement under the AODA legislation for Orangeville Transit to operate a separate specialized transit service for persons with disabilities, the Town, still runs the risk of having an Ontario Human Rights Complaint issued against them. Equal access by persons with disabilities to adequate, dignified public transit services is a right protected under the Ontario Human Rights Code. For many citizens, providing accessible transit is essential to obtaining education or employment or accessing basic services such as health care and grocery shopping. Lack of access to transit may also lead to isolation. While the conventional service is accessible, a person with a disability has the potential to file a complaint because they do not have the ability to access a public transit stop. While the Town may go on for a number of years without a human rights complaint, it may wish to further address this issue before a complaint is filed.



Conventional Transit Five-Year Service Plan

A five year conventional transit service plan was developed to address the issues and opportunities identified above. The recommended service plan was based on the relocation of the transit terminal to a more central location in the Town at the Westdale Mall. The existing terminal is located on Broadway on the east end of the Town. The location does not service a major destination, forcing additional transfers by passengers. The relocation of the terminal to the Westdale Mall would have several benefits over the existing location, including:

- 1. Orangeville Transit could increase the frequency of service on certain routes to every 20 minutes (compared to 30 minutes today).
- 2. Routes would be shorter in length, potentially reducing travel time for customers.
- 3. Passengers from each route could access a more commonly used destination (grocery store) without the need to transfer.
- 4. Passenger waiting time in the evening periods would be reduced on certain routes if a limited service were introduced (average wait time reduced to 20 minutes instead of 30 minutes at the existing terminal).

A number of steps would need to be completed to move the terminal to this location. This includes an agreement with the Westdale Mall property owner and the Town conducting a detailed design and cost estimate of the terminal to assess its feasibility. While a conceptual design of the terminal demonstrates is feasibility and early discussions held with the Property Manager of the Westdale Mall about this terminal were positive, there is a potential that the relocation of the terminal would not be implemented as recommended. For this reason, a second route structure alternative was developed using the existing transit terminal on Broadway and Fourth. Both options are presented below and it is recommended that the Town further assess each option and recommend a direction moving forward.

Both route structure options include the addition of a fourth bus operating during the weekday daytime periods to expand service coverage, improve schedule adherence and provide more two-way service to key destinations within the Town.

The recommended route structure designed around the new Westdale Mall terminal is based on a six route system, with four buses in operation during regular daytime service hours. Two Primary Routes that service key destinations within the Town operate every 20 minutes while four Feeder Routes that service primarily residential neighbourhoods operate every 40 minutes. Key destinations along Primary Routes include the Orangeville Mall, major retailers such as Walmart and various retailers on Broadway, Headwaters Health Care Centre, Orangeville District Secondary School and the Tony Rose Memorial Sports Centre. All routes converge at the Westdale Mall terminal and are timed to the Primary Routes. The recommended route structure is illustrated in **Section 8.0** below.



The alternative route structure continues to operate from the existing terminal. The structure is based on a four route system, with four buses in operation during regular daytime service hours. The routes are designed so that all buses converge at the Fourth Street Terminal every 30 minutes.

While there are no improvements to frequency, this route structure utilizes a new fourth route to extend service to new neighbourhoods and provide improved service to key destinations, such as Orangeville District Secondary School, Tony Rose Memorial Sports Centre, Walmart, and the Orangeville Mall. Further, the new route structure makes use of components of the existing route structure wherever possible. This has the added benefits of leveraging existing infrastructure (i.e. bus stops and shelters) and reducing the learning curve of the new route structure for Orangeville Transit customers. The recommended route structure is illustrated in **Section 8.0** below.

For both route structure alternatives, it is recommended that conventional service be extended to 9:45pm Monday to Friday using a reduced service structure starting at 6:15pm. This addresses the need to improve service levels as identified in the online survey. It also addresses the need to be productive, by reducing the number of vehicles required to undertake the service during low demand periods.

For both route structure alternatives, the service would be reduced to two buses operating every 40 minutes (Westdale Mall alternative) or 60 minutes (existing terminal alternative. For both alternatives, the route structure was designed to limit the number of passengers that would have to wait extended minutes that the terminal to transfer onto another bus.

The late evening service helps address the growing retail and employment market while maintaining adequate productivity levels by reducing the number of buses required to operate the service. After 9:45pm, a unique late evening drop off service is recommended to accommodate Orangeville Mall and other northeast retail workers that get off work after 9:30pm and would not be able to use Orangeville Transit to get home. After the last run at 9:45pm, one bus would go to the Mall and other retails areas that form part of this partnership and pick up passengers. Passengers would tell the driver their home address and the driver would create a dynamic route to drop Mall employees off at the bus stop closest to their home before going out of service. This dynamic model provides access to transit from retail employees, but limits the number of resources used to deliver the service (only one bus in service).

Saturday service is maintained under the recommended structure, but reduced to 2 to 3 buses (from 4 during the weekday period). This is done to reduce the revenue service hours on the route and improve productivity on the service. Service on Sunday is not recommended at this time. Sunday service ridership is typically half of Saturday service. Until Saturday service performance is improved, the addition of Sunday service should be delayed.



Specialized Transit Service

While there is no requirement under the AODA legislation for Orangeville Transit to operate a separate specialized transit service for persons with disabilities, there was a desire by the project steering committee to explore different options to improve accessibility.

The Town could "Do Nothing" and provide only conventional services and continue to make the service more accessible through the purchase of automated vehicle announcement system, purchase of low-floor buses and gradual conversion of existing stops so they are fully accessible. This option is the least costly, but limits opportunities for persons with disabilities that do not live near a bus stop to travel.

The Town could elect to operate a specialized transit service for persons with disabilities. This would require determining an eligibility criteria and application process consistent with the requirements in the AODA. Service hours and fares would need to be the same as the conventional service.

The third option is for the Town to modify Orangeville Transit's existing conventional service to allow 'flex routing' across the entire system. Flex routing enables buses to deviate off route and provide a curb-to-curb pick for eligible persons upon request. The Town currently has a similar practice for five of its stops; however this could be expanded to include all origins and destinations within a 400m walking distance of the existing service. This concept creates a transit service boundary of 400m around each stop and identifies that any registered person with a disability within this service area would have access to transit service. People living beyond this service boundary would not be eligible for flex route service.

An evaluation of the three options was conducted and it was determined that the introduction of a separate specialized transit serviceis preferred and is recommended moving forward. A specialized transit service would provide mobility options for persons with disabilities to travel within the urban area of Orangeville.

Phasing Plan

A phasing plan was developed to be implemented over the five-year life of the plan. Implementation of the new conventional transit plan is dependent on the ability to purchase a fourth vehicle. For the existing terminal option, September 2016 was identified as the implementation year where 2017 was identified as the implementation year for the Westdale Mall option (due to the time required to design and build the new terminal). The introduction of weekday evening service and reduction of Saturday service should be completed with the weekday daytime service modifications. It is recommended that specialized transit service be implemented in 2018 to provide some additional time for the Town to set up for this service new service offering.



Financial Plan

A five year financial plan was developed to assess the overall ridership growth and municipal investment required to implement the plan. Ongoing municipal investment is based on overall operating cost minus revenues and provincial gas tax contributions (which is expected to increase with ridership and population growth). The financial summary for the first five years is presented in Section 14 of this report.

With the improvements in place, ridership is projected to grow from 112,000 today to 186,000 by 2020. With the recommended service improvements and annual increases in operating costs, municipal investment in the conventional transit service will increase from \$232,000 to between \$504,000 and \$541,000. If the Town elects to implement a specialized transit service, municipal investment for this service could be up to \$334,000 by 2020.

A capital investment is required for the purchase of a new 30ft bus and eventual replacement of existing buses. The cost of a bus is between \$250,000 and \$400,000. If the Town elects to build the new terminal at Westdale Mall, the cost could be between \$150,000 to \$600,000.

The benefits of the service plan will include extended service for residents to access employment, education and recreational opportunities as well as retail and medical services. Ridership is expected to increase significantly due to the improvements in coverage, travel time, schedule adherence and accessibility.

Next Steps

If the Council wishes to move forward with the recommended strategy, the following steps are recommended:

- 1. The Town conducts a more detailed design and costing analysis of the Westdale terminal provided it continues to receive support from the property owner.
- The Town consults with the public regarding the two route structure options to determine the preference of transit customers. A recommended terminal location and associated route structure is recommended.
- 3. A new 30ft buses is purchased to service the new route during the weekday daytime period. New 30ft bus replacement vehicles are ordered as the existing vehicle retire.
- 4. The Town negotiate with the current contractor on the new service and potentially bring out to an RFP.
- 5. Bus stops, pads and shelters are installed where appropriate.
- 6. Town staff plan the specialized transit service, including determining policies and procedures, a booking office and eligibility criteria and an application process.

