



Hamilton

Office of the City Auditor

Accessible Transportation Services (ATS) Eligibility Audit



December 7, 2020

Contents

Executive Summary	3
Introduction and Background	3
Overview of ATS in 2019	6
Key Terms	7
Audit Objective	8
Audit Scope	9
Findings	
Eligibility Outcomes Drive Service Level and Costs	10
Variation Exists in Eligibility Decisions	12
Variation Exists in Safety Considerations	13
Opportunities Exist to Improve the Application Form	15
Opportunities Exist to Improve Processes	17
Opportunities Exist to Improve Staff Training and Oversight	19
Eligibility Reassessments are Recommended	21
Different Service Options Should Be Explored	22
Opportunities Exist to Improve Data Management	25
Waste Identified with the Travel Training Program	26
Control Weakness Identified with Functional Assessment Payments	26
Inadequate Performance Measures	26
Other Administrative Items	27
Recommendations	29
Conclusion	29

Executive Summary

In November 2019, the Public Works Committee requested the City Auditor to complete an accessible transportation services eligibility audit. The City Auditor completed this audit as fulfillment of its planned DARTS-related audit already included on the 2019-2022 Office of the City Auditor Workplan.

As a result, the Office of the City Auditor conducted the audit during which independent third-party expertise was obtained, benchmarking with other municipalities conducted and data analyses performed to assess the accuracy of current eligibility decisions and identify opportunities for process improvement and cost containment. The City Auditor has brought forward 14 recommendations to strengthen controls, increase process efficiencies and explore cost saving opportunities. Management in Accessible Transit Services agreed with all 14 recommendations. Action plan completion dates range from Q4 2020 to Q2 2022.

Introduction and Background

Municipal governments are responsible for providing local public transportation services. The *Ontario Human Rights Code* mandates that every person has a right to equal treatment with respect to services provided by municipal governments, including public transit, without discrimination because of disability. In addition, the *Accessibility for Ontarians with Disabilities Act, 2005* (AODA) provides municipalities with specific accessibility standards that must be adopted in the provision of transportation services.

The City of Hamilton provides both conventional and specialized public transportation services. The City’s conventional bus service is operated by the Hamilton Street Railway (HSR), the Transit Division within the Public Works department. HSR buses are compliant with AODA standards. There are customers who are unable to use HSR service due to functional limitations stemming from their disabilities. In response, the City provides specialized paratransit service for persons with disabilities.

The City’s specialized paratransit service is overseen by Accessible Transportation Services (ATS), a group within the Customer Experience & Innovation section within the Transit Division. ATS is responsible for assessing eligibility for paratransit services and managing providers contracted to perform specific services.

Introduction and Background

ATS provides the following services:

DARTS

The Disabled and Aged Regional Transportation System (DARTS), a nonprofit charitable organization, is contracted by the City to provide assisted accessible door-to-door shared-ride transportation. DARTS fares are the same as those for HSR, which is required by the AODA standards.

Taxi Scrip

The Taxi Scrip Program is available to City residents who are eligible for DARTS service. This program provides subsidized taxi fares allowing passengers to receive a 40% discount when travelling with two local taxi companies. Passengers buy a Taxi Scrip booklet for \$24 which contains \$40 worth of coupons used to pay their taxi fares. Up to three Taxi Scrip coupon booklets may be purchased each month.

Travel Training

The City has provided permanent funding to an outside agency for a Travel Training Program. This program teaches those with cognitive disabilities who are using developmental services in Hamilton to ride the HSR independently. The program consists of both classroom instruction and one-on-one on-bus training to teach skills required to plan a route and use HSR safely. The agency reaches out to student and community partners to recruit candidates for this program.

Eligibility for paratransit services is considered on a case-by-case basis and depends on an applicant’s functional ability to use HSR rather than the person’s disability, medical diagnosis or income level. The eligibility categories outlined in the AODA (which had to be implemented by January 1, 2017) include:

Eligibility	Description
Unconditional	An applicant is unable to use HSR; eligible for all trips on DARTS.
Conditional	An applicant is able to use HSR under certain conditions; eligible for some trips on DARTS as follows: <ul style="list-style-type: none">• Seasonal – Travel during winter only (November 1 to April 30).• Trip by Trip – Travel to approved locations only.
Temporary	An applicant is unable to use HSR due to a temporary condition; eligible for all trips on DARTS for a specific time period.
Not Eligible	An applicant is able to use HSR; not eligible for any trips with DARTS.

Introduction and Background

These eligibility categories were adopted early by the City of Hamilton on November 1, 2012. Prior to this date, applicants who used a mobility device, received dialysis treatment or were diagnosed with Alzheimer’s disease were provided unlimited use of DARTS. The City grandfathered all existing DARTS clients as of November 1, 2012, meaning these clients were automatically given unconditional eligibility without being reassessed under the new eligibility criteria.

An application form must be completed by an applicant and their health care provider to be considered for specialized transit. Applicants may be required to attend a third-party functional assessment in order to determine eligibility. Applicants who are unsatisfied with their eligibility decision may submit an appeal form to ATS. An appeal panel provides a final decision regarding the applicant’s paratransit eligibility.

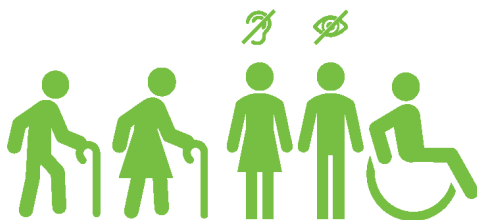
On November 18, 2019, as a result of rising trip counts and costs, the Public Works Committee requested the City Auditor to complete an eligibility audit. This report contains the results of this work.

The City of Hamilton, in accordance with its obligation to ensure that it is providing efficient and fair delivery of City services, has appointed an Auditor General, known as the City Auditor, who is the leader of the Office of the City Auditor (OCA). The City Auditor receives direction from Committee and Council from time to time to perform audits of specific processes. Council requested the City Auditor in 2017 to conduct an annual audit of DARTS, with no specified topic, which was included in the 2019-2022 Office of the City Auditor Workplan. This eligibility audit was carried out to fulfil that request and is intended to provide Council with the OCA’s findings and conclusions regarding potential weaknesses in City processes and opportunities for improvement.

\$22.5M

2019 ATS Actual Net
Operating Cost

This includes DARTS,
Taxi Scrips, and Travel Training



17,000 Registered Clients

~9,000 active clients who take
one or more trips per year



**844,007 Passenger Trips
Completed by DARTS**

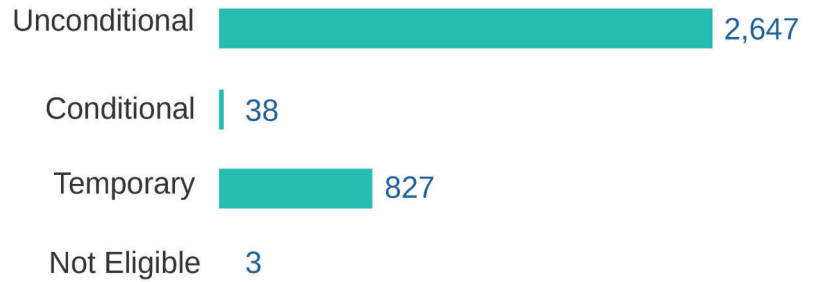
City cost \$26.71/trip



**26,314 Taxi Scrip
Booklets Sold**

City cost \$16/booklet

**Result of Applications
Received and Assessed by ATS**



34

Third party functional assessments performed
City cost \$125/assessment

1

Eligibility decision appeal received

**\$38
and
\$144**

Cost to assess an application in-house plus
additional cost if applicant undergoes a
functional assessment

3,515

Applications received and assessed by ATS

94

Average number of trips taken by active clients



47 Travel Training Recruits

City cost \$175 K

Key Terms

Accessible Transportation Services (ATS): Group within the Transit Division responsible for assessing eligibility for paratransit services and managing providers contracted to perform specific services. Three service options offered by ATS include DARTS, Taxi Scrip and Travel Training.

Accessibility for Ontarians with Disabilities Act, 2005 (AODA): Provincial law that requires municipalities to adopt specific accessibility standards, including those related to public transportation services.

Conditional Eligibility: An applicant can use HSR under certain conditions and is therefore eligible for some trips on DARTS. Seasonal eligibility allows travel during winter only (November 1 to April 30). Trip by trip eligibility allows travel to approved locations only.

Conventional Transportation Service: Scheduled transit service performed by HSR where buses serve identified transit stops at established times along established routes.

Developmental Services: Services provided by agencies which are funded by the Ministry of Children, Community and Social Services. Services include supports to help people take part in their community, person-directed planning, housing supports, respite for caregivers, etc.

Disability: An impairment that makes it more difficult for an individual to do certain activities. This may include either short-term or long-term visual, sensory, cognitive, mental health and physical conditions.

Disabled and Aged Regional Transportation System (DARTS): Nonprofit charitable organization contracted by the City to provide assisted accessible door-to-door shared-ride transportation.

Functional Ability: Individuals need a minimum level of physical, cognitive and social skills to safely access public transportation. Functional ability measures an individual’s capacity to apply these skills to perform certain tasks. Some tasks associated with public transit include being able to get to the stop, boarding and exiting the bus, paying fare, navigating through various environmental conditions, handling unexpected situations, and traveling safely in the community.

Key Terms

Grandfathered Clients: Pre-existing DARTS clients who were automatically provided unconditional eligibility on November 1, 2012 when the City implemented the new AODA eligibility categories.

Specialized Transportation Service or Paratransit: Transit service performed by DARTS where vehicles provide individualized rides without fixed routes or timetables.

Taxi Scrip: Subsidized program where passengers receive a 40% discount when travelling by taxi. Passengers buy a Taxi Scrip booklet for \$24 which contains \$40 worth of coupons to pay their fares.

Temporary Eligibility: An applicant is unable to use HSR due to a temporary condition and is therefore eligible for all trips on DARTS for a specific time period.

Trapeze: System used by ATS to record applicant information and the outcome of eligibility assessments.

Travel Training: Program that teaches those with cognitive disabilities who are using developmental services in Hamilton to ride the HSR independently.

Unconditional Eligibility: An applicant is unable to use HSR and is therefore eligible for all trips on DARTS.

Audit Objective

The overall objective of this audit was to assess current accessible transit eligibility processes and services with an aim to identify opportunities for efficiency, effectiveness and cost containment.

Audit Scope

The scope of work included processes related to the evaluation of accessible transit application forms received from January 1, 2019 to December 31, 2019. As required, more current or historical information was used to carry out specific audit procedures.

What We Did

1. Gained an appreciation of the challenges and needs of persons with disabilities.
2. Gained an understanding of the operational processes, assessment methods, and judgement involved with assessing accessible transit application forms.
3. Assessed the accuracy of current eligibility determinations.
4. Compared ATS’ application form, assessment methods and specialized transit service options to those in other Ontario municipalities.
5. Calculated the cost and amount of time taken to evaluate application forms.
6. Determined how eligibility was assessed before AODA’s eligibility categories existed and the impact of pre-existing clients on current service demands.
7. Gained an understanding of how improvements to the accessibility of conventional transit and changes in clients’ functional abilities impact current service demands.
8. Obtained insights from the Canadian Urban Transit Association (CUTA) 2013 research study *Canadian Code of Practice for Determining Eligibility for Specialized Transit*, and the Nelson Nygaard Consulting Associates 2009 report *Implementation of New Eligibility Policy at Accessible Transportation Services*.

Audit Scope

How We Did It

- Reviewed applicable legislation, reports, agreements and research papers.
- Attended internal training sessions.
- Interviewed various personnel and other City employees.
- Documented pertinent processes in a narrative.
- Examined electronic and paper documents, reports and transactions.
- Performed data analyses.
- Compared operations with other Ontario municipalities.
- Hired an independent third-party expert to re-assess a sample of applications.

Findings

Eligibility Outcomes Drive Service Level and Costs

ATS’ eligibility decision is a critical driver of specialized transportation service levels and costs. Since ATS does not reassess existing clients, those with unconditional or conditional eligibility may remain as such forever (unless a client voluntarily submits another application and triggers a new assessment). If ATS makes a mistake or is too lenient in their assessment, there is a risk that an applicant is provided more eligibility than what is required, creating inequity within the paratransit system and placing a larger burden on the City’s financial resources. From 2017 to 2019, we found there were only seven applications denied out of 8,598 applications received and assessed.

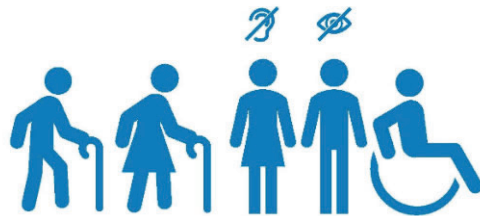
A small number of applicants given eligibility in error has a significant impact. In 2019, DARTS provided about 844,000 trips to 9,000 active clients at a cost of \$26.71 per trip. If only 1% of active clients were incorrectly assessed as eligible for DARTS, this could potentially translate to approximately \$225,000 in average savings each year. We caution that this is a simplified version of a complex calculation to illustrate the extent to which eligibility outcomes drive cost and does not represent guaranteed savings. ATS must carry out more analysis to determine the true financial impact of clients whose service eligibility may be different now as compared to the original assessment.

Findings

Eligibility Outcomes Drive Service Level and Costs

To gain confidence over how well ATS evaluates applications and makes eligibility decisions, the OCA hired Lifemark, an independent third-party with technical expertise and experience evaluating accessible transit applications, to re-evaluate 150 applications assessed by ATS from January 1, 2019 to February 29, 2020.

Lifemark is the rehabilitation division of Lifemark Health Group with over 300 locations across Canada. Lifemark offers a wide range of services including physiotherapy, massage therapy, occupational therapy, kinesiology, chiropractic treatments, acupuncture and sport therapy. The City of Ottawa contracts their determination of accessible transit eligibility to Lifemark. ATS’ applications were re-evaluated by qualified healthcare professionals that possess an understanding of the different types of disabilities and the expertise to review and assess applications to determine an applicant’s functional ability to use conventional transit. The OCA ensured all personal identifying information about the applicant, as well as ATS’ eligibility decision, was redacted from documentation sent to Lifemark to minimize bias and maximize the validity of the results. In addition, Lifemark carried out an internal quality control review to ensure decisions were balanced, consistent, objective and fair before results were provided to the OCA.



150

ATS Applications Assessed
January 1, 2019 to February 29, 2020

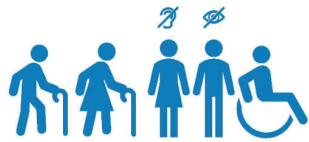
Findings

Variation Exists in Eligibility Decisions

A significant difference exists between how ATS and Lifemark evaluated applications. The following chart compares the eligibility decisions of Lifemark to ATS:

Comparison of ATS and Lifemark Eligibility Decisions

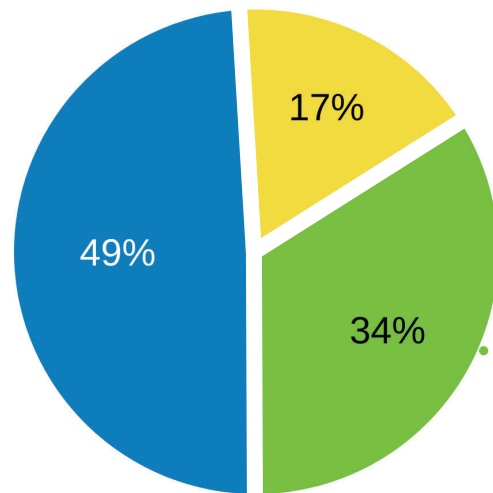
ATS



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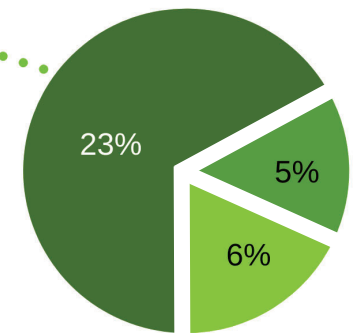
ATS Applications Assessed
January 1, 2019 to February 29, 2020

Lifemark



- Same Result 49%
- More Information Needed 17%
- Different Result 34%

Different Result Breakdown



- Access to Less Service 23%
- Access to More Service 5%
- Not Eligible 6%

Lifemark reached the same eligibility decision for only 49% of the applications. This included applications assessed directly by ATS and those sent to third-party for functional assessment.

Lifemark indicated that they needed more information to assess 17% of the applications. Lifemark wanted more details about the applicant's functional abilities, diagnosis and/or behaviours on public transit. Questions within the application form were answered vaguely or there were inconsistencies between the applicant's responses and those from their health care provider.

Findings

Variation Exists in Eligibility Decisions

Lifemark reached a different eligibility decision for the remaining 34% of the applications. The majority of Lifemark’s eligibility decisions would have resulted in the applicant receiving access to less paratransit service (e.g. ATS provided unconditional eligibility whereas Lifemark assessed as conditional or temporary eligibility). Smaller percentages of Lifemark’s decisions resulted in the applicant receiving more service (e.g. Lifemark decided unconditional eligibility while ATS provided temporary eligibility) or no service at all. As calculated previously, if 1% of active clients use an average of \$225,000 worth of DARTS trips per year, the 6% of applicants Lifemark found to be ineligible may translate to approximately \$1.35 million in average annual savings. We caution that this is an estimate and does not represent guaranteed savings. ATS must carry out more analysis, including reevaluation, to determine the true financial impact of clients whose service eligibility may be different now as compared to the original assessment.

Due to time constraints, the OCA was unable to take a deeper dive into the applications to understand exactly why differences existed between ATS and Lifemark. Instead, the OCA used Lifemark’s comments and knowledge of ATS to identify opportunities related to the application form, processes and people. These are the three main inputs into the assessment and eligibility outcome.

Findings

Variation Exists in Safety Considerations

In addition to the eligibility outcome, the OCA asked Lifemark to provide their opinion on whether an applicant should have a personal care attendant or be classified as “do not leave unattended” at their location. A personal care attendant (PCA) accompanies a passenger who would otherwise be unable to travel on a vehicle by themselves. A PCA provides the passenger with care and assistance beyond what the vehicle operator is required to provide. The requirement “do not leave unattended” (DNLU) describes someone who cannot be left alone safely at their destination. In these cases, the vehicle operator hands off the passenger to another person at their destination.

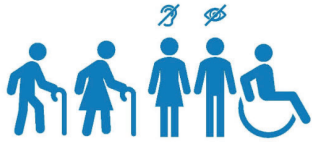
Some differences exist between how ATS and Lifemark evaluated the need for a PCA and the DNLU requirement.

The following charts compare the outcomes reached by Lifemark as compared to ATS:

Comparison of ATS and Lifemark Personal Care Attendant Decisions

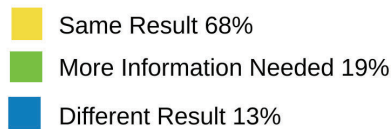
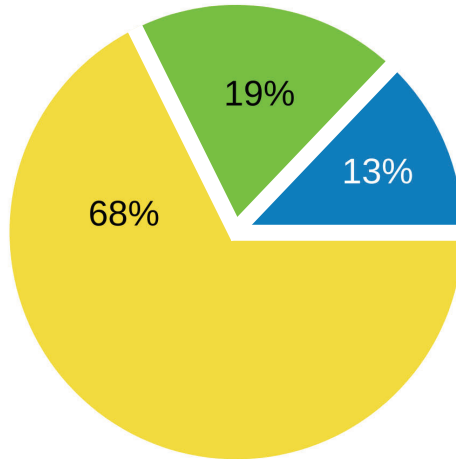
ATS

Lifemark

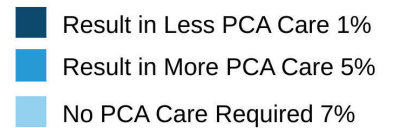
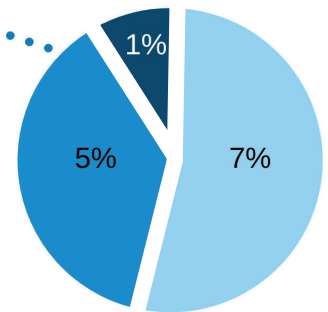


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ATS Applications Assessed
January 1, 2019 to February 29, 2020



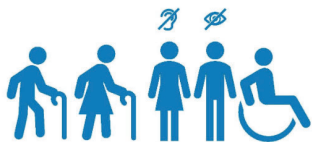
Different Result Breakdown



Comparison of ATS and Lifemark Do Not Leave Unattended Decisions

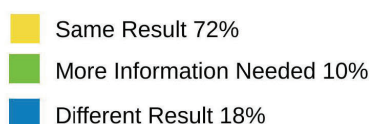
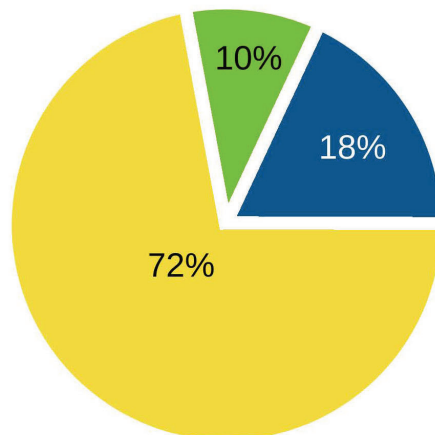
ATS

Lifemark

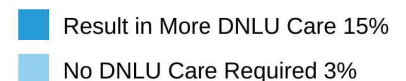
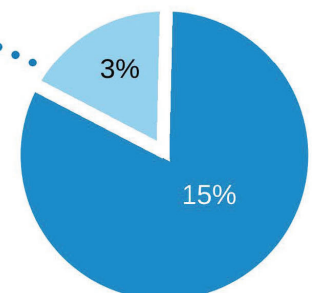


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ATS Applications Assessed
January 1, 2019 to February 29, 2020



Different Result Breakdown



Findings

Lifemark reached a different decision for 32% of PCA related and 28% of DNLU related applications with a higher level of care being required for 5% of the PCA decisions and 15% of the DNLU decisions. The OCA is concerned about the potential impact to these clients’ safety.

Variation Exists in Safety Considerations

Lifemark also indicated that 7% of the applications currently with a PCA do not require a PCA. This has a financial impact because the City pays for the PCA’s trip on accessible transit while accompanying the passenger.

Due to time constraints, the OCA was unable to take a deeper dive into the applications to understand exactly why differences existed between ATS and Lifemark. Such factors may include not having clear definitions and guidelines outlining the functional limitations where a PCA or DNLU would be recommended.

Findings

Opportunities Exist to Improve the Application Form

The application form is the primary tool used by ATS in the evaluation process. Information collected from the applicant and their health care provider must be appropriate and sufficient to make a well-informed decision. Please refer to Appendix “C” to Report AUD20009 for a copy of the current application form.

The OCA compared ATS’ application form to those used by other municipalities and identified the following opportunities for improvement:

Guiding Principles

Several municipalities have published guiding principles that outline what will not be considered when deciding an applicant’s eligibility for specialized transit. Examples include:

- Eligibility is not based on your age, income level, disability, use of an assistive device or the inability to drive.
- Eligibility is not based on how familiar you are with conventional transit or the availability or convenience of conventional transit where you live.
- Not for those who are reluctant or unwilling to use conventional transit.

This is a proactive measure to ensure applicants, and their health care providers, understand and are applying for specialized transit for the right reasons.

Findings

Opportunities Exist to Improve the Application Form

Functional Ability

Several municipalities require the applicant and/or their health care provider to describe the disabilities generated by their condition or diagnosis and how it affects their functional ability to use conventional transit. This is more detailed as compared to ATS’ application. Obtaining more information from either the applicant or their health care provider about functional abilities will help in making more informed eligibility decisions.

Conventional Transit Accessibility Features

Several municipalities describe the accessibility features of their regular buses and bus stops and highlight how these features make traveling easier for those with disabilities. If an applicant or their health care provider is unfamiliar with conventional transit and its accessibility features, they may not realize when the applicant may be capable of using regular transit.

Test Results

Some municipalities ask if the applicant underwent a functional assessment, test or other evaluation related to their disability in the last 24 months that measured their ability to travel independently. Where an evaluation was performed, the application asks for the test date, name, purpose, result and impact. Obtaining previous evaluations provides valuable insight without the added expense for ATS to conduct their own third-party functional assessment.

Travel Distance

ATS asks both the applicant and their health care provider the furthest distance the applicant can travel on the sidewalk in good weather. Other municipalities combine their distance question with reference to the applicant’s assistive device (where applicable), which provides a clearer picture of the distance they can travel.

Personal Care Attendant

ATS asks the health care provider whether the applicant requires a PCA. However, unlike other municipalities, ATS does not define the role of a PCA or describe the functional limitations where a PCA would be recommended. Providing guidelines would help ensure all applicants are held to the same standard, resulting in more consistent and informed responses.

Findings

Opportunities Exist to Improve the Application Form

Health Care Provider's Eligibility Opinion

ATS asks the health care provider to indicate if the applicant's medical diagnosis or condition requires permanent, temporary or seasonal transportation. CUTA warns that health care providers should not be asked whether the applicant is eligible for specialized transit, as this can create problems if ATS has a different opinion. Rather, information requested from the health care provider should focus on the diagnosis and onset of disability, and how this affects the applicant's ability to ride regular transit.

Health Care Provider's Review of the Applicant's Responses

Some municipalities require the health care provider to read the applicant's responses and indicate whether they agree with the information provided by the applicant. The health care provider is asked to explain why they do not agree. This may provide ATS with some perspective when differences or inconsistencies exist between the two sets of responses.

Findings

Opportunities Exist to Improve Processes

There is a fair amount of judgement involved in assessing ATS applications. It is not as simple as seeing which box is checked off and matching it to an eligibility category. It is very easy for personal biases to creep into the decision making. Processes and controls should be in place to ensure staff remain objective and exercise reasonable judgment to arrive at balanced, consistent, fair and objective eligibility decisions.

The OCA identified the following process control improvements:

Guidelines

There are no policies, procedures, instructions or decision trees for staff to reference during the evaluation process, which increases the risk for inconsistent decision making.

Quality Control

There are no peer review or management review processes in place to ensure all factors are considered and that the decision outcome is balanced and objective.

Findings

Opportunities Exist to Improve Processes

Strategies

ATS has developed some strategies, or consistent practices, as to the type of eligibility assigned to applicants with certain medical conditions. For example, applicants unable to mobilize as a result of a knee replacement surgery are given temporary eligibility because their condition is expected to improve within a few months.

However, ATS must take care these practices do not violate AODA requirements, especially those where decisions may not be assessed on a case-by-case basis. For example, staff told the OCA that all dialysis patients are automatically given unconditional eligibility. The OCA validated that 96% of applications received and assessed in 2019 involving dialysis patients received unconditional eligibility. Based on research, it is the OCA’s understanding that not all dialysis patients are similar. There are variations in the lengths of time between treatments and how long it takes a patient to recover and start feeling better after their treatments. As a result, some patients may only need specialized transit on a trip-by-trip basis, after their dialysis treatment.

There are other cases where an evaluation strategy would be helpful. For example, applicants with autism spectrum disorder exhibit a wide variety of skills and abilities. Unless enough information is provided in the application form, ATS should be sending applicants with autism for a functional assessment to gain a better understanding of their functional ability to take conventional transit.

In-Person Contact

Research performed by the OCA suggests that in-person contact, either through an interview, telephone conversation or functional assessment, results in more accurate eligibility outcomes than reviewing a paper application alone. CUTA found that paper applications can provide useful baseline information; however, they are very limited in their ability to make accurate eligibility decisions. Although in-person contact with applicants occurs during functional assessments and when staff call applicants about their application form, the OCA estimates that this is a small proportion of the applicant group. This increases the risk of inaccurate eligibility decisions and higher long-term costs.

Findings

Opportunities Exist to Improve Staff Training and Oversight

ATS applications are evaluated either by staff or an outside party who performs functional assessments. ATS relied on its staff to make eligibility decisions for 99% of applications received in 2019. Therefore, it is important to make sure that staff have the right skills, experience, knowledge and time to make these decisions.

Lifemark always used qualified healthcare professionals (e.g. Occupational Therapists) to both re-evaluate application forms for the OCA and make eligibility determinations for the City of Ottawa. ATS has a mix of short- and long-term staff with various backgrounds whose qualifications matched those for the position when hired, either through a competitive process or successful work accommodation placement.

It is **not** a requirement for ATS staff to have a medical or healthcare qualification to carry out this work. The OCA verified from the job description that staff are responsible for making service eligibility decisions. The two qualifications that related most to this job duty were:

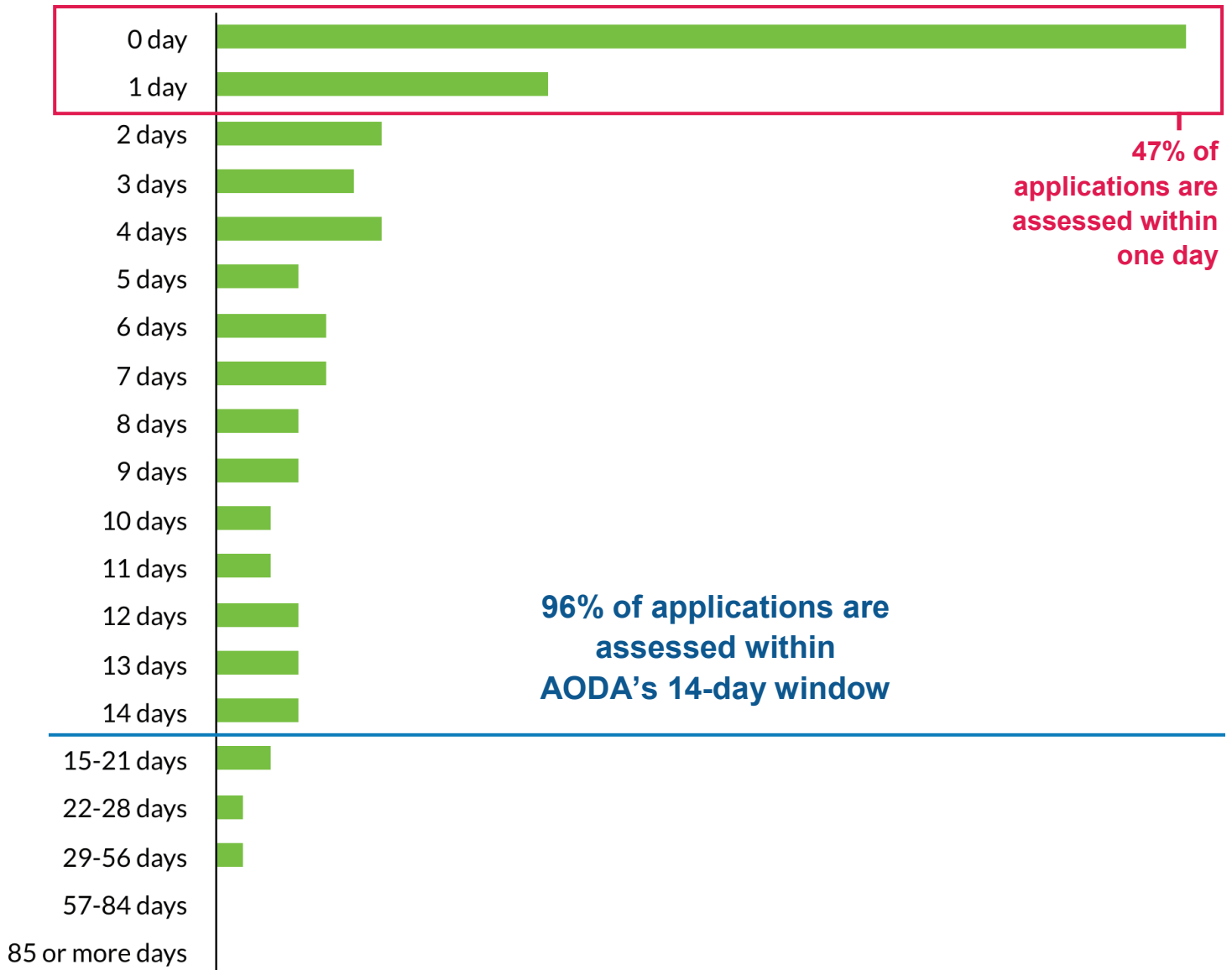
- Experience in and/or knowledge of accessibility and transit is an asset; and
- Strong empathy for, and understanding of the needs of, persons with disabilities and older adults.

It is the OCA's opinion that these two qualifications do not encompass the technical or medical/healthcare expertise that one would expect for medical-related eligibility determinations. A lack of technical knowledge is normally compensated for by a formal training program and quality review process to build skills over time and provide feedback to staff. Apart from staff supporting each other, and a few short technical presentations during monthly staff meetings in early 2020, little training or direct oversight is provided.

From a timing perspective, staff assess applications and come to eligibility conclusions quickly. The AODA outlines that the City has 14 calendar days to make an eligibility decision once they have received a completed application. If more time is needed, the applicant is provided temporary eligibility until a decision is made. As seen in the following chart, ATS evaluates 47% of applications within one day.

Findings

Time to Assess ATS Applications and Reach an Eligibility Determination 2019



Due to time constraints, the OCA was unable to take a deeper dive into these timelines to determine the extent to which applications arrive at ATS with missing information, or if other factors may have pressured staff to process applications quickly. Such factors may include the volume of applications received and those awaiting assessment, the number of available staff and the demand on staff for other non-assessment duties.

Findings

Eligibility Reassessments are Recommended

Opportunities exist to improve the accessible transit application form, processes and staff training and oversight, which all contribute to making the eligibility decision more balanced, consistent, objective and equitable. Over time, changes to the conventional transit system and/or a client's functional abilities may necessitate a review or reassessment of the client's eligibility status.

Significant changes have occurred, and continue to occur, with the conventional transit fleet and related infrastructure that makes HSR more accessible to everyone. The HSR fleet became 100% accessible in June 2009. Some accessibility features include a ramp, ability to kneel (lower) the bus, priority seating, dedicated spaces for passengers with assistive devices and voice and visual announcements for all stops. Approximately 64% of HSR bus stops are accessible (e.g. shelter, benches and larger platform areas and entrance openings) and plans are in place to achieve 100% AODA compliance by 2025.

ATS has approximately 3,800 grandfathered clients who used DARTS and/or Taxi Scrip last year who accounted for approximately 25% of DARTS trips and Taxi Scrip booklets sold. All of these clients were provided unconditional eligibility in November 2012, without considering that the HSR fleet became fully accessible in June 2009.

In addition to changes in the conventional transit system, there is a possibility that existing clients' functional abilities may improve over time with changes in the built environment, new assistive technologies and medical advancements.

Therefore, it is possible that some clients who currently use accessible transit services (both grandfathered clients and those who applied under the current eligibility criteria), may be functionally able to take conventional transit.

The AODA requires that clients with temporary eligibility be reassessed at regular intervals. Clients with temporary eligibility resubmit another application form at the end of their eligibility period if they feel they continue to need specialized transit. The AODA neither requires nor prohibits municipalities from reassessing their entire client population at a reasonable interval.

Findings

Eligibility Reassessments are Recommended

Other municipalities have implemented eligibility renewal or reassessment processes in order to ensure that the people using paratransit services are the ones who need it. In the municipalities we benchmarked, a client’s eligibility is reviewed on a periodic basis in order to capture changes in a timely manner and control administrative costs. This continues to foster equity within the paratransit system and frees up financial resources to provide service to those who are eligible or to continue enhancing the accessibility of the conventional transit system. The cost of reassessment can be significant, so some municipalities have opted to review a certain portion of their client population every year.

Findings

Different Service Options Should be Explored

Services offered by ATS include DARTS, Taxi Scrip and Travel Training. The OCA compared ATS’ services to those provided in other municipalities to identify different service options that may make ATS more financially sustainable. The merits of the following options should be explored further:

Expanded Taxi Scrip Program (for clients who choose to use this service)

Of those who used ATS services last year, 70% of clients used DARTS only. The remaining 30% of clients used Taxi Scrip either alone or in combination with DARTS. The OCA estimates that, on average, it costs the City about 82% less per trip when clients use Taxi Scrip as compared to DARTS in large part due to the cost-sharing nature of the Taxi Scrip Program. ATS may want to explore more ways to expand the Taxi Scrip Program to take advantage of the lower cost Taxi Scrip option for clients who choose to use it. Expansion options may include increasing the number of booklets clients may purchase each month, increasing the portion subsidized by the City, or increasing awareness and promotional activities.

Findings

Different Service Options Should be Explored

Integrated Service Model

The AODA outlines that the City must provide origin to destination services to eligible people with disabilities. Origin to destination refers to a package of transportation services, which may include a combination of specialized and conventional transit, where the specialized service acts as a “feeder” into the accessible conventional system. This recognizes that some people with disabilities can use HSR but may require DARTS for portions of their trip.

Durham, York and Toronto have adopted this integrated service model or family of services approach. In these municipalities, door-to-door service is not necessarily a direct ride. Trips are delivered using more than one accessible vehicle. A portion of the client’s trip may be taken using conventional transit, with specialized service normally at the beginning or end of the trip (as required).

Recognizing that not all clients or trips would benefit from a family of services approach, conditions are factored into the eligibility assessment and trip booking process to help guide when these trips would be appropriate. For example, integrated trips may be scheduled when:

- The destination is more than three kilometres from the trip origin;
- The number of vehicle transfers is within the client’s abilities; and
- Accessible transfer locations are available to provide shelter, seating and/or adequate concrete pad.

ATS may want to explore whether an integrated service model may reduce costs. The more people streamed to conventional public transit, even for part of their trip, reduces the overall cost of transit for the City. This model may work well in areas without HSR service, or within the HSR service area where a client’s most limiting factor is the distance they must travel to the nearest bus stop.

Findings

Different Service Options Should be Explored

Expanded Travel Training

The City’s Travel Training Program teaches those with cognitive disabilities who are using developmental services in Hamilton to ride the HSR independently. There may be an opportunity to provide a different level of training to others within the community who may be unfamiliar with the conventional transit system.

Several municipalities have more inclusive travel training programs for a variety of transit users. Grand River Transit (whose service area includes Kitchener, Waterloo and Cambridge) offers training to people with disabilities (not only cognitive disabilities), older adults and local people new to transit services on how to travel confidently and safely. People can learn how to plan a trip, read and understand route maps and schedules, how to board a bus, how to purchase and pay fare, etc. Different training methods and content are used depending on the needs of the trainee. These activities are meant to support customers, improve travel skills, increase confidence and reduce anxiety or fear of the unknown. A more inclusive training program may be beneficial if ATS implements an eligibility renewal program or adopts an integrated service model.

Shuttles

London has implemented a shuttle service which provides dedicated trips for passengers that require a higher level of service. A vehicle picks up clients from a location, such as a dialysis clinic, drops them off at their destinations, and then returns to the dialysis clinic to pick up more passengers. ATS may explore whether dedicated vehicle use at key locations would provide another service option for clients at a lower cost for the City.

Community Buses

London, Toronto and Ottawa have accessible fixed route community buses that connect clients to various popular destinations along a unique neighborhood route. The bus stops at the front door of various buildings and landmarks (e.g. senior’s homes, community centres, medical centres, shopping malls) according to a schedule. Community buses bring more personalized assistance and the routes minimize walking distance rather than fast, direct travel which is attractive to clients with limited mobility.

Findings

Opportunities Exist to Improve Data Management

In order to further explore different service options, or why Lifemark’s eligibility decisions differ, ATS will need to improve client documentation and data entry into Trapeze to run reports and carry out various analyses. The OCA identified the following data management challenges throughout the audit which provide improvement opportunities:

Electronic Client Files

ATS began saving client documents electronically last year. Staff are supposed to scan and save documents to the client’s electronic folder on ATS’ local drive when their application is closed. The OCA was unable to find documents in the electronic client files. Although paper documents are retained and staff double check to make sure they are scanned electronically before destroying the paper, this happens months afterward. This process is inefficient and increases the risk of maintaining incomplete client records.

Inconsistent Data Input

Application data is not entered into Trapeze consistently by all staff, especially when there is a history of applications and eligibility updates for a client. Without knowing what information must be captured in Trapeze and setting a standard as to how this information is entered, data analysis becomes difficult, time consuming and inaccurate.

Limiting Factor

ATS currently records an applicant’s medical diagnoses or conditions in Trapeze. An applicant’s medical diagnosis does not always reflect the disability or functional ability that limits the applicant from taking conventional transit. By not capturing the applicant’s most limiting factor, which contributed most to their eligibility status, it makes it difficult to identify clients who may benefit from different service options or improvements to conventional transit accessibility that are being considered.

Reports

The Trapeze report wizard contains hundreds, if not thousands, of reports organized in various folders. Commonly used reports are not identified and segregated into a separate folder for use by all staff. This increases the risk that incorrect data will be generated and used for analyses and reporting.

Findings

Waste Identified with the Travel Training Program

The City provides \$175,000 each year to an outside agency to train 100 people with cognitive disabilities how to ride HSR independently. For a four-year period from 2016 to 2019, ATS confirmed that the City paid \$700,000 to this agency to train 400 people. Although the agency only recruited 233 people to the Training Program, they received the full \$700,000. Therefore, ATS effectively overpaid the agency \$292,250 for services not provided.

Control Weaknesses Identified with Functional Assessment Payments

Applicants may be required to attend a third-party functional assessment in order to determine their eligibility. ATS contracted an outside agency to perform these functional assessments. ATS does not track which applicants are sent for functional assessments. When ATS receives an invoice, staff uses the spreadsheet prepared by the vendor to validate that the functional assessment was performed. No steps are taken to verify with staff that the functional assessment was completed or that a report was received before payment occurs. This creates a risk of the agency invoicing ATS for functional assessments that were not performed. The OCA discovered a few discrepancies in the agencies' spreadsheet as well as the invoicing which should be further investigated by ATS and resolved with the agency (this agency is no longer performing functional assessments for ATS).

Inadequate Performance Measures

ATS tracks one performance measure – the percentage of applications assessed with AODA's 14-day window. This is measured each month and included in the Public Works quality assurance dashboard. Although this is an important item to track for AODA compliance purposes, ATS does not have performance measures to track how well their processes are operating or how well their services are impacting the community.

Findings

Other Administrative Items

During the audit, the OCA identified the following administrative issues:

Discrepancy in Eligibility Decision

From the sample of applications sent for third-party re-evaluation, the OCA discovered three clients where the eligibility determination reached by the third-party functional assessment provider was different than the final eligibility outcome for the client. Since ATS normally accepts the functional assessment provider's determination with no question, the OCA is unsure why these differences exist. The OCA was unable to locate documentation to reconcile the difference.

Status of Pending Applications

The OCA observed applicants in Trapeze with the following status codes as at February 29, 2020:

Status	Application Received In		
	2019	2018	2017
Pending Functional Assessment	3	1	1
Pending Orientation	1	1	-
Received	5	19	4
Blank	3	5	14

With the amount of time that has passed, especially with the 2017 and 2018 applications, the OCA is concerned whether these applications were forgotten or misplaced.

Findings

Other Administrative Items

Old Application Forms Submitted

While selecting sample applications for Lifemark to evaluate, the OCA observed that many applicants submitted old versions of the application form which were accepted by staff. If ATS changes the content of its application form significantly, it will be important that staff only accept the most current version of the application form.

Shortened Application Form

The OCA observed that it is common practice for long term care and nursing home applicants to only submit pages 1, 5 and 6 of the application form. Since there are different questions in the applicant and health care provider sections, it is important that the entire form is completed.

More Timely Taxi Scrip Sales Information

Staff selling Taxi Scrip booklets at Municipal Service Centres, Mountain Transit Centre, etc. manually record the sale on a sheet, which is manually entered into the Taxi Scrip database later. As sales are recorded manually at various locations, there is an opportunity for clients to purchase booklets at different locations during the month, thus being able to go over the 3-booklet limit without staff knowing at the time of the sale.

Appeal Process

Staff told the OCA that one appeal was received in 2019. This appeal was not captured on the appeal tracking sheet. Although the application form indicates that appeals are forwarded to the Eligibility Appeal Panel, this appeal was resolved by sending the applicant for a functional assessment. If ATS changes its process and there is an increase in appeals, there should be a clear and consistent process on how appeals are tracked and managed.

Recommendations

Please refer to Appendix “B” to Report AUD20009 for a list of Recommendations and the related Management Responses that will strengthen controls, increase process efficiencies and explore cost saving opportunities.

Conclusion

The OCA has brought forward several observations and recommendations to help identify opportunities for cost savings, strengthen controls and increase process efficiencies in order to ensure eligible residents who need accessible transportation services receive it. Transit and Accessible Transportation Services have an opportunity to undertake transformative change in this area. The OCA is confident that the passion, motivation and dedication shown by staff throughout this audit can be harnessed to undertake courageous change.

The OCA would like to thank Accessible Transportation Services and other participants for their openness, enthusiasm and contributions throughout this project. We look forward to following up with management in the future to see the progress of their action plans and their impact on maintaining equitable and cost sustainable services.

Office of the City Auditor

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Mail: PO Box 91880, West Vancouver, BC V7V 4S4

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Copies of our audit reports are available at:
hamilton.ca/audit

Alternate report formats available upon request

**Accessible Transportation Services**

2200 Upper James Street

P.O. Box 340

Mount Hope, ON L0R 1W0

Phone: 905.529.1212 Fax: 905.679.7305

E-mail: ats@hamilton.ca Website: www.hamilton.ca/ats**APPLICATION FOR ACCESSIBLE TRANSPORTATION SERVICES****I) ELIGIBILITY FOR SERVICE**

Accessible Transportation Services (ATS) are intended for persons with physical or functional disabilities or health conditions who are unable to access fixed-route public transit, such as Hamilton Street Railway (HSR) buses. Eligibility is considered on a case-by-case basis and is not based on a particular disability, nor is it based on income level.

II) ATS PROGRAMS & SERVICES

The following services are available through ATS:

- **DARTS** is an accessible, shared-ride service, providing door-to-door transportation from one accessible building entrance to another accessible building entrance. The Taxi Scrip Program is offered in conjunction with DARTS service, providing subsidized taxi fares to City of Hamilton residents only.
- **HSR Travel Training** – ATS coordinates travel training for persons interested in learning how to travel on HSR buses.

III) HOW TO APPLY FOR SERVICE

To receive an ATS application form, call 905-529-1212 and press "1" for Customer Service, or visit the ATS website at www.hamilton.ca/ats.

All sections of the ATS application must be fully completed:

- Part 1A to 1E (Pages 1 to 4) – to be completed by applicant.
- Part 2A and 2B (Pages 5 & 6) – must be completed by one of the following Health Care Professionals: **Physician, Nurse Practitioner, Registered Nurse (RN), Chiropractor, Physiotherapist, Occupational Therapist or Recreational Therapist.**
- Completed applications may be submitted to ATS by mail or fax.
- Applicants may be required to attend a third party functional assessment in order to determine eligibility.
- ATS will provide a determination of the applicant's eligibility for service, as listed in Section IV) Eligibility Determination.
- **Registrations and orientations for service are conducted by appointment only.**
- Incomplete applications will be returned to you, or you may be contacted by ATS for further information.

**Accessible Transportation Services**

2200 Upper James Street

P.O. Box 340

Mount Hope, ON L0R 1W0

Phone: 905.529.1212 Fax: 905.679.7305

E-mail: ats@hamilton.ca Website: www.hamilton.ca/ats**APPLICATION FOR ACCESSIBLE TRANSPORTATION SERVICES (cont'd)****IV) ELIGIBILITY DETERMINATION**

- **Unconditional Eligibility** - applicant is not able to use HSR service; therefore they are eligible for all trips with DARTS.
- **Conditional Eligibility** - applicant is able to use HSR service under certain conditions; therefore they are eligible for some trips with DARTS as follows:
 - **Seasonal Eligibility** – Winter months only from November 1 to April 30, **and/or**
 - **Trip by Trip Eligibility** – travel to approved locations only.
- **Temporary Eligibility** - applicant is not able to use HSR service at the current time due to a condition that is expected to improve; therefore they are eligible for trips with DARTS on a temporary basis.
- **Not Eligible** - applicant is able to use HSR service; therefore they are not eligible for any trips with DARTS.

V) ELIGIBILITY APPEAL PROCESS

Should the applicant or their caregiver disagree with the ATS decision regarding eligibility determination, there is an appeal process available. In order to appeal an eligibility decision, an Eligibility Appeal Form **must be completed** and submitted to ATS.

In order to obtain an Eligibility Appeal Form, contact ATS at 905-529-1212, Ext. 1829, or visit the ATS website at www.hamilton.ca/ats.

Upon receipt of a completed Appeal Form, ATS will forward the appeal to the Eligibility Appeal Panel, who will render a decision regarding the applicant's eligibility determination.

VI) CONTACT ATS

For further information or assistance with the ATS application process, please call 905-529-1212 and Press "1" for ATS Customer Service.

Completed Applications or Eligibility Appeal Forms must be returned to:

Via Mail: **Accessible Transportation Services**
 P.O. Box 340
 2200 Upper James Street
 Mount Hope, ON L0R 1W0

Via Fax: **905-679-7305**

Via Email: ats@hamilton.ca

Website: www.hamilton.ca/ats



Hamilton

Accessible Transportation Services

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APPLICATION FOR ACCESSIBLE TRANSPORTATION SERVICES**PART 1A: APPLICANT INFORMATION (Please complete pages 1 – 4)****Name of Applicant:** _____Last Name (**Please Print**)

Mr/Miss/Mrs/Ms

First Name

Middle Initial

Date of Birth: _____
YYYY MM DD

Gender:

☐ Male☐ Female**Home Address:** _____ Apt/Unit# _____

City: _____ Province: _____ Postal Code: _____

Telephone: Home (____) _____ Work (____) _____ Ext. _____ Cell (____) _____

E-mail Address: _____

Does applicant reside in a long-term care facility? ☐ Yes ☐ No

Name of Facility: _____ Ward/Room # _____

☐ Permanent☐ Convalescent☐ Respite☐ Short-term**Mailing Address (if different):** _____ Apt/Unit# _____

City: _____ Province: _____ Postal Code: _____

Telephone: Home (____) _____ Work (____) _____ Ext. _____ Cell (____) _____

E-mail Address: _____

Emergency Contact Information: In event of emergency, please provide at least one (1) emergency contact that is different from your home telephone number.

1. Name: _____ Relationship: _____

Address: _____

Telephone: Home (____) _____ Work (____) _____ Ext. _____ Cell (____) _____

2. Name: _____ Relationship: _____

Address: _____

Telephone: Home (____) _____ Work (____) _____ Ext. _____ Cell (____) _____

Additional Contact Information:

Family Doctor: _____ Telephone: (____) _____ Ext. _____

Social Worker/Therapist: _____ Telephone: (____) _____ Ext. _____

NAME OF APPLICANT: _____ **PAGE 2 OF 6****PART 1B: INFORMATION ABOUT YOUR MOBILITY & EQUIPMENT**

1. What is the disability or condition that prevents you from using public transit (HSR)?

2. Which of the following mobility/communication aids do you use? (Please check all that apply)

- ☐ Cane ☐ Crutches ☐ Manual Wheelchair ☐ Portable Oxygen
☐ White/Red Cane ☐ Prosthesis ☐ Power Wheelchair ☐ Communication Aid
☐ Walker ☐ Power Scooter ☐ Service Animal (Copy of Certification Required)
☐ None of the above ☐ Other (please describe): _____

MOBILITY DEVICES:

The standard size for a mobility device (wheelchair or scooter) that can be accommodated on an HSR bus or DARTS vehicle is as follows:

- 76 cm (30 inches) wide
- 122 cm (48 inches) long
- maximum combined weight of mobility device and occupant is 363 kg (800 pounds)

ATS-DARTS policy states that all wheelchairs and scooters must be in good working condition in order to be transported. Scooters must have a lap belt. Wheelchairs must have a lap belt and footrests. Exemptions for lap belts or footrests must be approved by a designated Health Care Professional (Physician, Nurse Practitioner, Registered Nurse (RN), Physiotherapist, Occupational Therapist or Recreational Therapist).

ACCESSIBILITY:

ATS-DARTS policy states that service is provided from one accessible building entrance to another accessible building entrance. Accessible is defined as no more than one (1) step for wheelchairs. Drivers will assist passengers using walkers both up and down stairs.

COMMUNICATION:

The ATS Application and user guides are available in alternate communication formats, including large print and braille (upon request).

NAME OF APPLICANT: _____ **PAGE 3 OF 6****PART 1C: INFORMATION ABOUT YOUR FUNCTIONAL ABILITY**

Answers should be based on how you feel most of the time, under normal circumstances, and whether you can perform this activity without the help of another person. **For each question, provide one answer only (unless otherwise noted).**

Can you independently:

1. Walk up and down three steps if there are handrails on both sides?
☐ Always ☐ Sometimes ☐ Never ☐ Not sure
2. Use the telephone to get information?
☐ Always ☐ Sometimes ☐ Never ☐ Not sure
- 3a. If the weather is good, what is the furthest distance you can walk/travel on the sidewalk?
 An average urban block is 100 metres (328 feet) on a level surface.
☐ Up to half (1/2) level block ☐ Up to one (1) level block
☐ Up to two (2) level blocks ☐ More than two (2) level blocks
☐ None of the above ☐ Not sure
- 3b. If you are able to do this, how long does it take you?
☐ Less than 5 minutes ☐ 5 to 15 minutes ☐ More than 15 minutes ☐ Not sure
4. Cross the street, if there are curb cuts (depressed curbing)?
☐ Always ☐ Sometimes ☐ Never ☐ Not sure
5. Ask for and follow directions/instructions if you have a question or problem?
☐ Always ☐ Sometimes ☐ Never ☐ Not sure
- 6a. Have you ever received training to learn how to use public transit (HSR), or for travel around your community?
☐ Yes ☐ No
- 6b. If you answered "Yes", when and where did you receive the training? _____

- 6c. If you answered "No", do you think you could learn to ride an HSR bus if you received training?
☐ Yes ☐ No ☐ Not sure

NAME OF APPLICANT: _____ **PAGE 4 OF 6****PART 1D: INFORMATION ABOUT CURRENT USE OF PUBLIC TRANSIT (HSR)**

Only answer PART 1D if you have previously used public transit. Answers should be based on your use of fixed-route public transit, such as the Hamilton Street Railway (HSR), or the public transit system in your area.

1. Are you currently able to use public transit (HSR) by yourself?
☐ Always ☐ Sometimes ☐ Never ☐ Not sure
2. Are you currently able to use the HSR riding with someone else?
☐ Always ☐ Sometimes ☐ Never ☐ Not sure
3. Is HSR service available in your area?
☐ Yes ☐ No ☐ Not sure
4. When was the last time you used HSR?
☐ Within 3 months ☐ Within a year ☐ More than a year ☐ Never ☐ Not sure
- 5a. Does the weather effect your ability to use HSR?
☐ Always ☐ Sometimes ☐ Never ☐ Not sure
- 5b. If you answered yes, please explain _____
6. Are you able to wait for an HSR bus? (Check all that apply)
☐ Always ☐ Sometimes ☐ Never ☐ Not sure ☐ Only if there is a bench
☐ Only if there is a shelter ☐ Not more than 15 minutes ☐ More than 15 minutes

PART 1E: APPLICANT SIGNATURE

I certify that the information provided in this application is true and correct. I understand that misinformation or misrepresentation of facts will be cause for disqualification or rejection of my eligibility. I also understand that additional information relating to my disability or health condition may be required to determine eligibility. I hereby consent to the transit operator and their assessment agency to contact my health care professional if additional information or if clarification is required.

Applicant or Preparer's Signature: _____ Date: _____

If someone other than the applicant is preparing this form, please provide the following:

Name of Preparer: _____ Daytime Phone: (____) _____

Address: _____

Relationship: _____

NAME OF APPLICANT: _____ PAGE 5 OF 6

PART 2A: MUST BE COMPLETED BY HEALTH CARE PROFESSIONAL

Pages 5 and 6, must be completed by one of the following Health Care Professionals:
Physician, Nurse Practitioner, Chiropractor, Registered Nurse (RN), Physiotherapist,
Occupational Therapist or Recreational Therapist.

DISABILITY INFORMATION (Please **PRINT**):

1a. Applicant's medical diagnosis(es) and how it compromises their mobility to use HSR service
(public transit); include the **date of onset**, staging and prognosis for each condition.

1b. Currently enrolled in a Treatment Program: ☐ Yes ☐ No

1c. Approximate length required for treatment: ☐ 3 months ☐ 6 months ☐ One year

2a. Does the applicant require the use of a mobility device? ☐ Yes ☐ No

2b. When traveling in the community what is the primary mobility device used?

☐ Walker ☐ Wheelchair ☐ Scooter

3. Does the applicant's medical diagnosis(es) or health condition require permanent, temporary or seasonal transportation?

☐ Permanent

☐ Temporary: _____ Week(s) _____ Month(s) _____ Year(s)

☐ Seasonal: ☐ Spring ☐ Summer ☐ Fall ☐ Winter

4. Is the applicant physically able to climb or descend stairs? ☐ Yes ☐ No

5. If the weather is good, what is the furthest distance the applicant can walk/travel on the sidewalk? (an average urban block is 100 metres on a level surface)

☐ Up to half (1/2) level block ☐ Up to one (1) level blocks

☐ Up to two (2) level blocks ☐ More than two (2) level blocks

☐ None ☐ Not sure

6. Can the applicant wait for up to one (1) hour for a bus? ☐ Yes ☐ No

7. **Behaviour** - In a transportation situation, does the applicant exhibit behaviours (impulsiveness, aggressiveness, etc.) that could be detrimental to his or her own safety, or to the safety of other persons?

HSR Bus Service: ☐ Yes ☐ No DARTS Transportation: ☐ Yes ☐ No

If yes, please explain behaviour: _____

NAME OF APPLICANT: _____ PAGE 6 OF 6

PART 2A: MUST BE COMPLETED BY HEALTH CARE PROFESSIONAL (continued)**8. Safety - Are there conditions which affect the applicant's safety in the community?**

Please specify:

Does the applicant comprehend safety risks in the community? ☐ Yes ☐ NoIs the applicant at risk for wandering or becoming lost in the community? ☐ Yes ☐ NoCan the applicant be safely left unattended at their destination? ☐ Yes ☐ No

Other (please specify): _____

9. Support Persons - DARTS drivers assist passengers door to door, but do not provide on-board care or assist passengers beyond the accessible entrance of their destination. A support person may be required for further assistance.**9a. Does the applicant require the assistance of a Support Person in order to travel on:**HSR Bus Service: ☐ Yes – always ☐ Yes – sometimes ☐ NoDARTS Transportation: ☐ Yes – always ☐ Yes – sometimes ☐ No**9b. If yes, Is a support person required for assistance due to:**Cognitive ability ☐ Yes ☐ No Communication ☐ Yes ☐ NoMobility issues ☐ Yes ☐ No Vulnerability ☐ Yes ☐ NoBehaviour challenges ☐ Yes ☐ No Medical needs ☐ Yes ☐ No

Other (please specify): _____

10. Service Animal - Does the applicant require the assistance of a certified Service Animal in order to travel on DARTS or HSR? (Copy of certification required)☐ Yes ☐ No**PART 2B: CERTIFICATION BY HEALTH CARE PROFESSIONAL**

I hereby certify that the information I have provided is accurate and complete to the best of my knowledge.

Health Care Professional's Signature_____
Date_____
Professional's Name (Please **PRINT**)

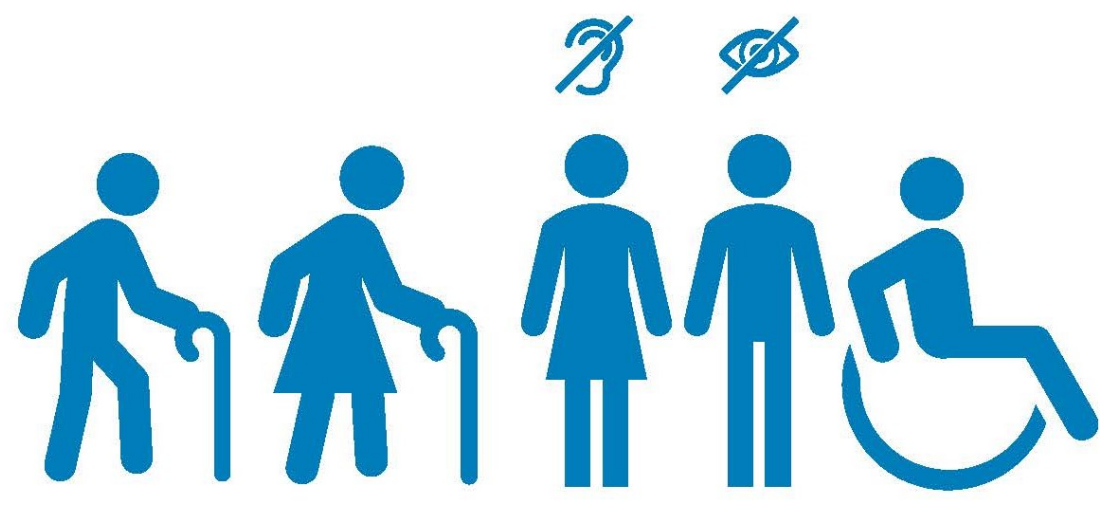
Professional Designation: _____ Telephone: (____) _____ Ext. _____

Address: _____ Fax: (____) _____

REGISTRATION FOR ATS CONDUCTED BY APPOINTMENT ONLY

Personal information on this form is collected under the authority of the *Municipal Act, 2001*, S.O. 2001, c.25 as amended, and is used solely to determine eligibility for specialized transit services offered by the City of Hamilton. This information is held in strict confidence. Questions about this collection should be directed to: Accessible Transportation Services, Attention: Customer Service Coordinator, P.O. Box 340, 2200 Upper James Street, Mount Hope, ON L0R 1W0.

Accessible Transportation Services (ATS) Eligibility Audit



17,000

Registered ATS clients
~9,000 active clients who take one or more trips per year



844,007

Passenger Trips Completed by DARTS
City cost \$26.71 per trip

\$ 22.5M

This includes DARTS,
Taxi Scrips, and Travel Training

2019 ATS Actual Net Operating Costs

Overview of ATS in 2019

26,314

Taxi Scrip Booklets Sold
City cost \$16 per booklet

47

Travel Training Recruits. City cost \$175K

3,515

Applications received and assessed by ATS

34

Third party functional assessments performed. City cost \$125 per assessment

1

Eligibility decision appeal received

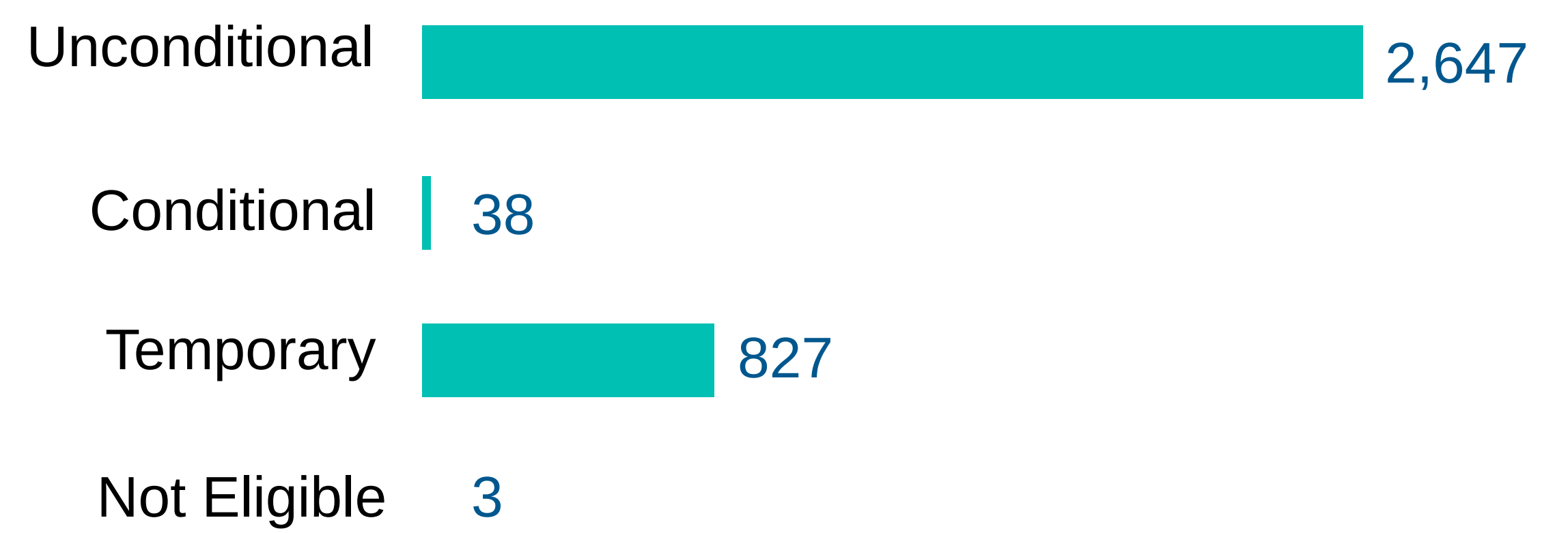
\$38 and \$144

Cost to assess an application in-house plus additional cost if applicant undergoes a functional assessment

94

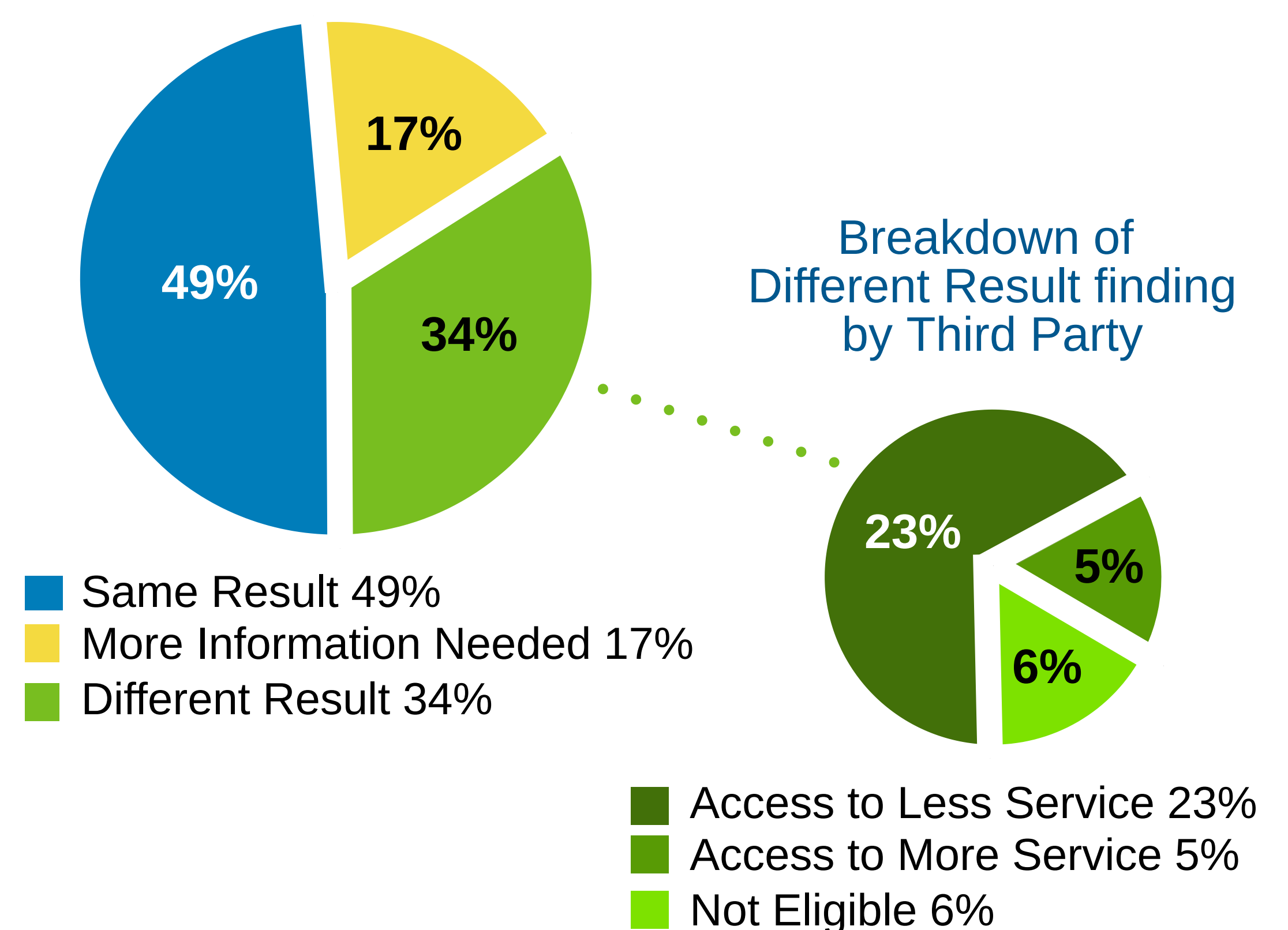
Average number of trips taken by active clients

Result of Applications Received and Assessed by ATS



Findings of ATS Application Samples Assessed by Third Party

150 ATS Applications from January 1, 2019 to February 29, 2020 were assessed by a third party



Audit Themes

- ▶ The eligibility process drives demand and ultimately costs
- ▶ There is a critical need to have quality assurance embedded throughout the eligibility assessment process
- ▶ The eligibility assessment process requires improvement and potential redesign
- ▶ Benchmarking to other municipalities suggests routine reassessment, exploration of service options



Hamilton

Office of the City Auditor

Accessible Transportation Services (ATS) Eligibility Audit

RECOMMENDATIONS AND MANAGEMENT RESPONSES

December 7, 2020

The following 14 recommendations will strengthen controls, increase process efficiencies and help identify cost saving opportunities in order to ensure eligible residents who need accessible transportation services receive it:

Recommendation 1

We recommend that management use the third-party evaluator's results, municipal benchmarking and their own experiences to evaluate and potentially redesign the eligibility assessment process.

Management Response

Agreed. ATS will develop an operational plan (subject to budgetary/resource approvals) to further investigate the differing third-party assessment outcomes and conduct municipal benchmarking. The purpose of the operational plan is to conduct an in-depth assessment of the Lifemark results, review and evaluate the current design, and identify redesign options for an eligibility assessment process.

Anticipated completion date (operational plan): Q2 2022.

Recommendation 2

We recommend that management update the application form by adopting the following: guiding principles, functional ability, conventional transit accessibility features, test results, travel distance, personal care attendant, health care provider's eligibility option, and health care provider's review of the applicant's response.

Management Response

Agreed. ATS will develop a project plan to review the application form and identify immediate, medium, and longer-term improvements. The goal is to improve the effectiveness of the application, address strategic information gaps and optimize the application process.

Anticipated completion date (immediate improvements and project plan): Q2 2021.

Recommendation 3

We recommend that standard operating procedures and assessment guidelines be created for all assessment processes. These procedures may include instructions and evaluation strategies to assist staff in making consistent and supported eligibility decisions.

Management Response

Agreed. The standard operating procedures and assessment guidelines will be in alignment with the development of a redesigned process in recommendation #1.

Anticipated completion date: Q2 2022 (with standard operational procedures to follow).

Recommendation 4

We recommend that management implement a quality control process where all eligibility decisions are reviewed for accuracy and approved by someone with adequate expertise and experience before results are communicated to applicants. Review objectives may also include ensuring timely management of client information.

**Management
Response**

Agreed. The development of a quality control process will be implemented as an interim measure while the eligibility assessment process is reviewed and redesigned in recommendation #1.

Anticipated implementation date: Q2 2021.

Recommendation 5

We recommend that management incorporate more in-person contact into the eligibility assessment process within the next year.

**Management
Response**

Agreed. ATS will incorporate more in-person contact into the eligibility assessment process.

Anticipated implementation date: Q2 2021.

Recommendation 6

We recommend that management assess the need for strengthening the professional qualifications and experience required for making eligibility determinations.

**Management
Response**

Agreed. ATS will include an assessment of the professional qualifications and experience required to make effective eligibility determinations in the operational plan to redesign the eligibility process in recommendation #1.

Anticipated completion date (operational plan): Q2 2022 (with qualification assessment to follow).

Recommendation 7

We recommend that management prepare a business case outlining the costs and benefits of reassessing all existing clients.

**Management
Response**

Agreed. ATS will develop a business case to assess the costs and benefits of reassessing all existing clients and alternative options.

Anticipated completion date (business case): Q2 2021 (with implementation to follow).

Recommendation 8

We recommend that management explore the feasibility, potential savings, costs and benefits of the following service options: expanded Taxi Scrip Program, integrated service model, expanded travel training, shuttles and community buses.

**Management
Response**

Agreed. ATS will develop a business case to assess the costs and benefits of reassessing all existing clients and alternative options.

Anticipated completion date (business case): Q2 2021 (with implementation to follow).

Recommendation 9

We recommend that management enhance which assessment and eligibility data is captured in Trapeze for current and future strategic purposes, including historical application information and the limiting factor that contributed most to the eligibility decision.

**Management
Response**

Agreed. ATS will develop a business case to review and assess the eligibility data captured in Trapeze to enhance the data collected and stored.

Anticipated completion date (business case): Q3 2021 (with implementation to follow).

Recommendation 10

We recommend that a report library be created in Trapeze containing standard and frequently used reports that have been tested and validated for accuracy for more efficient data analysis.

**Management
Response**

Agreed. ATS will develop a business case to investigate the report library options with the goal of creating standard, accurate, valid reports that enable efficient data analysis.

Anticipated completion date (business case): Q3 2021 (with implementation to follow).

Recommendation 11

We recommend that management re-evaluate funds spent on travel training services to ensure that value for money is being obtained.

**Management
Response**

Agreed. The Travel Training program has been suspended since May 2020 (due to COVID) and the terms are being redrafted.

Anticipated completion date: Q2 2021

Recommendation 12

We recommend that ATS maintain a record of clients sent for functional assessment and use this to validate invoices received for payment.

**Management
Response**

Agreed. All functional assessments are suspended (due to COVID). The process to validate invoices will be established.

Anticipated implementation date: Q4 2020.

Recommendation 13

We recommend that management create performance metrics to measure process efficiencies and community impact and report on these regularly.

Management Response

Agreed. The definition of performance metrics will be an added element in the development of the operational plan in recommendation #1. The optimization of the new metrics will be monitored through the existing performance measurement methodology via the divisional balanced scorecard.

Anticipated completion date (operational plan): Q2 2022 (with implementation to follow).

Recommendation 14

We recommend that management address the administrative issues identified by:

- Ensuring adequate document is kept about differences between the eligibility recommendation of the functional assessment provider and ATS' final eligibility decision;
- Reviewing Trapeze status codes at least annually and investigate the state of pending applications;
- Ensuring staff only accept completed current versions of the application form;
- Creating a separate, shortened application for long term care and nursing home applicants that obtains more information from their health care provider;
- Exploring how to use technology to track Taxi Scrip sales in a timelier manner and providing sales locations with access to up-to-date client sales records; and
- Evaluating and potentially redesigning the application appeal process.

Management Response

Agreed. ATS will develop a workplan to assess the feasibility and address the administrative issues identified.

Anticipated completion date (workplan): Q1 2021 (with implementation to follow).

Office of the City Auditor

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City Auditor

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Set Fine Schedule

City of Hamilton
Part I Provincial Offences Act

TEM	Short Form Wording	Provision creating or defining offence	Set Fine
	City of Hamilton Traffic By-law No. 01-215, as amended		
1	Make Prohibited Right Turn	Section 12	\$80.00
2	Make Prohibited Right Turn At Red Signal	Section 13	\$80.00
3	Make Prohibited Left Turn	Section 14	\$80.00
4	Make Prohibited Left Turn At Red Signal	Section 15	\$80.00
5	Make Prohibited U-Turn On Divided Highway	Section 16	\$80.00
6	Make Prohibited U-Turn	Section 17	\$80.00
7	Proceed Contrary To Marked Direction of Travel	Section 18(1)	\$80.00
8	Unauthorized Use of Transit Only Lane	Section 18(3)	\$80.00
9	Drive On Sidewalk	Section 20	\$80.00
10	Ride Bicycle Or Similar Device On Sidewalk	Section 21(1)	\$80.00
11	Ride Skateboard Or Similar Device On Sidewalk	Section 21(1)	\$80.00
12	Ride Skis Or Similar Device On Sidewalk	Section 21(1)	\$80.00
13	Ride Coaster Or Similar Device On Sidewalk	Section 21(1)	\$80.00
14	Ride E-Scooter or Similar Device on Sidewalk	Section 21 (1)	\$80.00
15	Play On Roadway	Section 22	\$80.00
16	Take Part In Game On Roadway	Section 22	\$80.00
17	Take Part In Sport On Roadway	Section 22	\$80.00
18	Ride Skateboard Or Similar Device On Roadway	Section 22	\$80.00
19	Ride Roller Skates Or Similar Device On Roadway	Section 22	\$80.00
20	Ride Coaster Or Similar Device On Roadway	Section 22	\$80.00
21	Ride Skis Or Similar Device On Roadway	Section 22	\$80.00
22	Ride Toy Vehicle Or Similar Device On Roadway	Section 22	\$80.00
23	Fail To Yield Right-Of-Way To Pedestrian On Sidewalk	Section 23	\$80.00
24	Fail To Yield Right-Of-Way To Pedestrian On Footpath	Section 23	\$80.00
25	Fail To Yield Right-Of-Way To Pedestrian On Side Boulevard	Section 23	\$80.00
26	Drive Clockwise Direction In Traffic Circle Or Roundabout	Section 25	\$80.00
27	Drive From Highway Onto Driveway Contrary To Direction Of Operation Of Driveway	Section 26	\$80.00
28	Drive From Driveway Onto Highway Contrary To Direction Of Operation Of Driveway	Section 26	\$80.00
29	Interfere With Procession	Section 29	\$80.00
30	Drive On Closed Highway Or Part Highway	Section 30	\$80.00

Note: The general penalty section for the offences created above is Section 68 of The City of Hamilton Traffic By-Law 01-215, as amended and Section 61 of the Provincial Offences Act, R.S.O. 1990, c.P.33.

TEM	Short Form Wording	Provision creating or defining offence	Set Fine
31	Fail To Stop Before Entering Highway From Private Road	Section 32	\$80.00
Item	Short Form Wording	Provision creating or defining offence	Set Fine
32	Fail To Stop Before Crossing Highway From Private Road	Section 32	\$80.00
33	Fail To Stop Before Entering Highway From Private Driveway	Section 32	\$80.00
34	Fail To Stop Before Crossing Highway From Private Driveway	Section 32	\$80.00
35	Fail To Stop Before Crossing Sidewalk From Private Road	Section 32	\$80.00
36	Fail To Stop Before Crossing Sidewalk From Private Driveway	Section 32	\$80.00
37	Obstruct Signalized Intersection	Section 34	\$80.00
38	Drive Motorized Snow Vehicle Along Serviced Roadway At Restricted Time	Section 35	\$80.00
39	Drive Motorized Snow Vehicle Across Serviced Roadway At Restricted Time	Section 35	\$80.00
40	Drive Motorized Snow Vehicle Upon Highway Or Part of Highway At Restricted Time	Section 35	\$80.00
41	Pedestrian Fail To Keep To Sidewalk	Section 38	\$80.00
42	Pedestrian Fail To Face Oncoming Traffic On Highway	Section 39	\$80.00
43	Pedestrian Fail To Keep To Left On Roadway	Section 39	\$80.00
43	Pedestrian Fail To Cross Roadway By Shortest Route	Section 40	\$80.00
44	Pedestrian Proceed Over Or Under Permanent Sidewalk Railing Or Barrier	Section 41	\$80.00
45	Pedestrian Cross Or Enter Highway Where Prohibited	Section 42	\$80.00
46	Pedestrian Impede Traffic	Section 43	\$80.00
47	Unauthorized Person On Restricted Highway	Section 45	\$80.00
48	Cyclist Fail To Keep To Bicycle Lane	Section 46(2)(a)	\$80.00
49	Cyclist Fail To Keep To Right	Section 46(2)(a)	\$80.00
50	Ride Bicycle Along Roadway Abreast Of Another Bicycle	Section 46(2)(b)	\$80.00
51	Push Bicycle Along Roadway Abreast Of Another Bicycle	Section 46(2)(b)	\$80.00
52	Fail To Maintain Control Of Bicycle	Section 46(3)	\$80.00
53	Obstruct Traffic With Parked Bicycle	Section 46(4)	\$80.00
54	E-Scooter Fail to Keep to bicycle Lane	Section 46.1 (1)	\$80.00
55	E-Scooter Fail to Keep to Right	Section 46.1 (1)	\$80.00
56	Ride E-Scooter Along Roadway Abreast of another E-Scooter or Bicycle	Section 46.1 (2)	\$80.00
57	Push E-Scooter Along Roadway Abreast of Another E-Scooter or Bicycle	Section 46.1 (2)	\$80.00
58	Fail to Maintain Control of E-Scooter	Section 46.1 (3)	\$150.00
59	Obstruct Traffic with Parked E-Scooter	Section 46.1 (4)	\$150.00
60	Person under the age of 16 years operating an E-Scooter	Section 46.1 (5)	\$80.00
61	Person under the age of 18 years old failing to wear a helmet that complies with the Highway Traffic Act	Section 46.1 (6)	\$80.00
62	Operating an E-Scooter carrying any other person thereon	Section 46.1 (7)	\$80.00
63	Operating an E-Scooter towing another person, vehicle or device	Section 46.1 (8)	\$80.00

Note: The general penalty section for the offences created above is Section 68 of The City of Hamilton Traffic By-Law 01-215, as amended and Section 61 of the Provincial Offences Act, R.S.O. 1990, c.P.33.

TEM	Short Form Wording	Provision creating or defining offence	Set Fine
64	Operating an E-Scooter and attaching himself or herself to another E-Scooter (vehicle or device) for the purpose of being drawn (or towed)	Section 46.1 (9)	\$150.00
65	Operating an E-Scooter in any position other than while standing at all times	Section 46.1 (10)	\$80.00
66	Operating an E-Scooter and carrying cargo	Section 46.1 (11)	\$80.00
Item	Short Form Wording	Provision creating or defining offence	Set Fine
67	Operator of an E-Scooter failing to keep a safe distance from pedestrians (and other users) at all times	Section 46.1 (12)	\$80.00
68	Operator of an E-Scooter failing to give way to a pedestrian (or bicycle) where there is insufficient space for the E-Scooter to pass	Section 46.1 (12)	\$80.00
69	Operator of an E-Scooter driving at a speed that is markedly greater than the speed of the pedestrians who are proximate to the E-Scooter	Section 46.1 (13)	\$80.00
70	Operator of an E-Scooter fail to ensure the E-Scooter is equipped with a bell (or horn) in good working order	Section 46.1 (14)	\$80.00
71	Operator of an E-Scooter fail to carry (or attach) a lighted lamp at the front and rear	Section 46.1 (15)	\$80.00
72	Operate (or cause to be operated, or use) an E-Scooter on a highway with a legal speed limit greater than 50 km per hour not in a bike lane	Section 46.1 (16)	\$150.00
73	Operate (or use) an E-Scooter in such a manner that may (harm, injure or damage) any person (or property)	Section 46.1 (17)	\$250.00
74	Drive Unauthorized Motor Vehicle Upon Bicycle Lane	Section 48(1)	\$80.00
75	Drive Unauthorized Motor Vehicle Upon Bicycle Path	Section 48(1)	\$80.00
76	Drive Unauthorized Motor Vehicle Upon Combined Foot And Bicycle Path	Section 48(1)	\$80.00
77	Fail To Keep To Right On Bicycle Path	Section 48(2)	\$80.00
78	Fail To Keep To Right On Combined Foot And Bicycle Path	Section 48(2)	\$80.00
79	Fail To Safely Pass On Bicycle Path	Section 48(3)(a)	\$80.00
80	Fail To Safely Pass On Combined Foot And Bicycle Path	Section 48(3)(a)	\$80.00
81	Fail To Pass On Left Side On Bicycle Path	Section 48(3)(b)	\$80.00
82	Fail To Pass On Left Side On Combined Foot And Bicycle Path	Section 48(3)(b)	\$80.00
83	Fail To Stay To Right Of Centre When Passing On Bicycle Path	Section 48(3)(c)	\$80.00
84	Fail To Stay To Right Of Centre When Passing On Combined Foot And Bicycle Path	Section 48(3)(c)	\$80.00
85	Cyclist Fail To Sound Audible Warning When Passing On Bicycle Path	Section 48(3)(d)	\$80.00
86	Cyclist Fail To Sound Audible Warning When Passing On Combined Foot And Bicycle Path	Section 48(3)(d)	\$80.00
87	Fail To Stop On Bicycle Path At Intersecting Roadway	Section 49(1)	\$80.00
88	Fail To Stop On Combined Foot And Bicycle Path At Intersecting Roadway	Section 49(1)	\$80.00
89	Fail To Stop On Bicycle Path At Intersecting Sidewalk	Section 49(1)	\$80.00
90	Fail To Stop On Combined Foot And Bicycle Path At Intersecting Sidewalk	Section 49(1)	\$80.00

Note: The general penalty section for the offences created above is Section 68 of The City of Hamilton Traffic By-Law 01-215, as amended and Section 61 of the Provincial Offences Act, R.S.O. 1990, c.P.33.

TEM	Short Form Wording	Provision creating or defining offence	Set Fine
91	Fail To Stop On Bicycle Path At Intersecting Route Not A Roadway Or Sidewalk	Section 50(1)	\$80.00
92	Fail To Stop On Combined Foot And Bicycle Path At Intersecting Route Not A Roadway Or Sidewalk	Section 50(1)	\$80.00
93	Fail To Yield On Bicycle Path At Intersecting Route Not A Roadway Or Sidewalk	Section 51(1)	\$80.00
94	Fail To Yield On Combined Foot And Bicycle Path At Intersecting Route Not A Roadway Or Sidewalk	Section 51(1)	\$80.00
95	Pedestrian Use Bicycle Path Where Adjacent Sidewalk Exists	Section 52	\$80.00
Item	Short Form Wording	Provision creating or defining offence	Set Fine
96	Pedestrian Use Bicycle Lane Where Adjacent Sidewalk Exists	Section 52	\$80.00
97	Permit Animal On Highway When Not Under Control	Section 54(1)	\$80.00
98	Permit Animal In Public Place When Not Under Control	Section 54(1)	\$80.00
99	Drive Animal Without Due Care And Attention Or Consideration	Section 54(3)	\$80.00
100	Fail To Produce Permit On Demand	Section 55(4)	\$250.00
101	Move Over-Sized Load Not In Compliance With Permit	Section 55(5)	\$105.00
102	Move Over-Weight Load Without Permit	Section 55(5.1)	\$105.00
103	Move Over-Sized Load Without Permit	Section 55(5.1)	\$105.00
104	Drive Heavy Traffic On Restricted Highway	Section 56(2)	\$105.00
105	Permit Heavy Traffic To Be Driven On Restricted Highway	Section 56(2)	\$105.00
106	Heavy Traffic Fail To Keep To Right-Hand Curb Lane	Section 56(5)(a)	\$105.00
107	Drive Over-Weight Vehicle On Restricted Bridge	Section 57(1)	\$250.00
108	Erect Unauthorized "No Parking" Or "No Stopping" sign	Section 60(2)	\$80.00
109	Install Unauthorized "No Parking" Or "No Stopping" sign	Section 60(2)	\$80.00
110	Place Or otherwise Use Unauthorized "No Parking" Or "No Stopping" sign	Section 60(2)	\$80.00
111	Display Sign Or Similar Device Above, On Or Under A City Bridge Over A Highway	Section 62.1(a)	\$105.00
112	Place Unauthorized Traffic Sign Or Device	Section 63(1)	\$80.00
113	Maintain Unauthorized Traffic Sign Or Device	Section 63(1)	\$80.00
114	Display Unauthorized Traffic Sign Or Device	Section 63(1)	\$80.00
115	Place Prohibited Sign Or Device	Section 63(2)	\$80.00
116	Maintain Prohibited Sign Or Device	Section 63(2)	\$80.00
117	Display Prohibited Sign Or Device	Section 63(2)	\$80.00
118	Fail To Remove Prohibited Sign Or Device	Section 63(3)	\$80.00
119	Move Traffic Sign Or Traffic Control Device	Section 63(5)	\$80.00
120	Interfere With Traffic Sign Or Traffic Control Device	Section 63(5)	\$80.00
121	Drive Vehicle Over Freshly Applied Painted Markings	Section 64	\$80.00
122	Drive Vehicle Over Or Through Or Around Painted Marking Warning Device	Section 64	\$80.00

Note: The general penalty section for the offences created above is Section 68 of The City of Hamilton Traffic By-Law 01-215, as amended and Section 61 of the Provincial Offences Act, R.S.O. 1990, c.P.33.

CITY OF HAMILTON

2021

ADVISORY COMMITTEES

BUDGET SUBMISSION FORM

Hamilton Cycling Committee (HCyC)
--

PART A: General Information

ADVISORY COMMITTEE MEMBERS:

Jeff Axisa	Kevin Vander Muelen
Kate Berry	Joachim Brouwer
Roman Caruk	Sharon Gibbons
Yaejin Kim	Cathy Sutherland
Ann McKay	Jane Jamnik
Jessica Merolli	Cora Muis
William Oates	Chris Ritsma
Christine Yachouh	Gary Rogerson
Councillor Esther Pauls	Councillor Terry Whitehead

MANDATE:

The purpose of the Hamilton Cycling Committee (HCyC) is to advise the City Government on all matters related to cycling, to monitor implementation of the Hamilton Cycling Master Plan, to encourage and participate in planning for bicycling facilities, to encourage citizens to cycle instead of drive, to educate the public on the benefits and necessities of cycling, and to integrate the work of neighbouring municipal bicycle committees.

PART B: Strategic Planning

STRATEGIC OBJECTIVES:

The Committee's goals are:

- Review progress in implementing the City of Hamilton Cycling Master Plan and to take action to influence progress if necessary;
- Ensure community input on specific details associated with implementing the Master Plan;
- Ensure that cycling needs are emphasized in all transportation related decisions;
- Encourage legislation and policy changes that are supportive of cycling;
- Promote cycling for transportation and recreation through relevant events;
- Educate the public on the benefits, necessities and safety aspects of cycling;
- Assist in establishing secure, adequate bicycle parking facilities;
- Represent the cycling community at City of Hamilton sponsored functions/events;
- Encourage the formation of, and liaise with other municipal cycling committees; and
- Foster a mutual respect between cyclists and other road users.

ALIGNMENT WITH CORPORATE GOALS:

Please check off which Council approved Strategic Commitments your Advisory Committee supports			
1) Community Engagement & Participation	<input checked="" type="checkbox"/>	2) Economic Prosperity & Growth	<input checked="" type="checkbox"/>
3) Healthy & Safe Communities	<input checked="" type="checkbox"/>	4) Clean & Green	<input checked="" type="checkbox"/>
5) Built Environment & Infrastructure	<input checked="" type="checkbox"/>	6) Culture & Diversity	<input checked="" type="checkbox"/>
7) Our People & Performance	<input checked="" type="checkbox"/>		

PART C: Budget Request

INCIDENTAL COSTS:

Meeting expenses	\$1000
SUB TOTAL	\$1,000.00

SPECIAL EVENT/PROJECT COSTS:

Social Media Campaign	\$500
Special Projects	\$5,000
Group Rides	\$1,000
Tourism Promotions- supporting Ontario By Bike	\$500
Supporting Community Events to Raise Awareness for Cycling	\$3,000
Special Cycling Events	\$2,000
Conferences	\$1,000
SUB TOTAL	\$13,000

TOTAL COSTS	\$14,000
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Funding from Advisory Committee Reserve (only available to Advisory Committees with reserve balances)	\$4,000
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TOTAL 2021 BUDGET REQUEST (net of reserve funding)	\$ 10,000.00
PREVIOUS YEAR (2020) APPROVED BUDGET (2020 Request \$ 13,000)	\$13,000.00

CERTIFICATION:

Please note that this document is a request for a Budget from the City of Hamilton Operating budget. The submission of this document does not guarantee the requested budget amount. Please have a representative sign and date the document below.

Representative's Name: **Chris Ritsma- Chair of the Hamilton Cycling Committee**

Signature:



Date:

November 5, 2020

Telephone # :



Title:	<i>WWQMS Operational Plan Summary Report</i>		
Document #	PW-WW-R-001-003	Document Level	3
Issue #:	1	Issue Date:	2020

TABLE OF CONTENTS

Preface.....	3
1 Quality Management System	4
1.1 Purpose	4
1.2 Scope.....	4
1.3 Definitions	4
2 Quality Management System Policy	9
2.1 Requirements	9
2.2 WWQMS Policy	10
3 Commitment and Endorsement	11
3.1 Requirements	11
3.2 Commitment and Endorsement	12
4 WWQMS System Representative	13
4.1 Requirements	13
4.2 WWQMS Representative	14
5 Documents and Records Control.....	14
5.1 Requirements	14
5.2 Hamilton Water Document and Record Management System	15
6 Wastewater Systems Descriptions.....	15
6.1 Requirements	15
6.2 Wastewater System Process Descriptions.....	16
7 Environmental Aspects & Impacts	16
7.1 Requirements	16
7.2 Hamilton Wastewater Systems' Aspects and Impacts Assessment	17
8 Objectives & Targets	17
8.1 Requirements	17
8.2 Hamilton Wastewater Systems' Objectives and Targets	18
9 Organizational Structure, Roles, Responsibilities & Authorities	18
9.1 Requirements	18
9.2 Hamilton Water Organizational Structure, Roles, Responsibilities, and Authorities.....	19
10 Competencies	20
10.1 Requirements	20
10.2 WWQMS Competencies	21
11 Personnel Coverage	22
11.1 Requirements	22
11.2 WWS Personnel Coverage	22
12 Communication.....	22
12.1 Requirements	22
12.2 Communications	22
13 Operational Planning and Controls	23
13.1 Requirements	23

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Page 1 of 32





Title:	WWQMS Operational Plan Summary Report		
Document #	PW-WW-R-001-003	Document Level	3
Issue #:	1	Issue Date:	2020

13.2	WWQMS Operational Planning Controls for WWS.....	23
14	Evaluation of Compliance	23
14.1	Requirements.....	23
14.2	Hamilton Wastewater Systems' Compliance	24
15	Review and Provision of Infrastructure	24
15.1	Requirements.....	24
15.2	Hamilton Water Infrastructure Review	24
16	Infrastructure Maintenance, Rehabilitation & Renewal	25
16.1	Requirements.....	25
16.2	Hamilton Water Infrastructure Maintenance, Rehabilitation and Renewal.....	25
17	Sampling, Testing & Monitoring.....	25
17.1	Requirements.....	25
17.2	Hamilton Water Sampling, Testing and Monitoring.....	26
18	Measurement & Recording Equipment, Calibration & Maintenance.....	26
18.1	Requirements.....	26
18.2	Hamilton Water Measurement and Recording Equipment, Calibration and Maintenance.....	26
19	Emergency Management.....	27
19.1	Requirements.....	27
19.2	Hamilton Water Emergency Management	27
20	Internal Audits.....	28
20.1	Requirements.....	28
20.2	WWQMS Internal Audit.....	28
21	Management Review	29
21.1	Requirements.....	29
21.2	Hamilton Water Management Review.....	30
22	Non-conformance, Corrective & Preventive Action	30
22.1	Requirements.....	30
22.2	Hamilton Water Non-Conformance, Corrective and Preventative Action Process	31
23	Continual Improvement	31
23.1	Requirements.....	31
23.2	Hamilton Water Continual Improvement Process	32



Title:	<i>WWQMS Operational Plan Summary Report</i>		
Document #	<i>PW-WW-R-001-003</i>	Document Level	<i>3</i>
Issue #:	<i>1</i>	Issue Date:	<i>2020</i>

PREFACE

Hamilton Water is committed to the protection of worker health, public health, property, and the environment. Beyond Compliance Operating System (BCOS) was developed to support this commitment. BCOS is an integrated management system that currently oversees the Drinking Water Quality Management System, Environmental Laboratory QMS and the Occupational Health and Safety Management System.

The Wastewater Quality Management System (WWQMS) falls within the BCOS umbrella. WWQMS is being implemented to effectively collect and treat wastewater and protect the environment. As no WWQMS Standard currently exists, the voluntary standard for the WWQMS was developed internally by Hamilton Water by merging the existing ISO14001:2015 and Drinking Water Quality Management Standard. The requirements of the WWQMS are stated throughout the Operational Plan Summary Report and have been developed by subject matter experts within Hamilton Water

BCOS Framework & WWQMS



Access to Reports

Following the endorsements of the WWQMS Operational Plan Summary Report, signed copies of the WWQMS Operational Plan Summary Report will be made available to the public on the City's website, Clerk's Office, City Hall and the Hamilton Water storefront at 330 Wentworth.

The WWQMS Operational Plan Summary Report is also accessible to staff through the BCOS Database and the Sectional Workspaces.



Title:	<i>WWQMS Operational Plan Summary Report</i>		
Document #	<i>PW-WW-R-001-003</i>	Document Level	<i>3</i>
Issue #:	<i>1</i>	Issue Date:	<i>2020</i>

1 QUALITY MANAGEMENT SYSTEM

1.1 Purpose

The purpose of the Wastewater Quality Management System (WWQMS) Operational Plan is to document the City of Hamilton's WWQMS as part of the City's efforts to:

- consistently process wastewater that meets applicable legislative, regulatory and other requirements, and
- enhance environmental performance through the effective application and continual improvement of the Quality Management System.

1.2 Scope

The WWQMS Operational Plan applies to Hamilton Water (HW), which is the Operating Authority for the City's wastewater collection and treatment system (WWS).

HW has developed a WWQMS Operational Plan Manual (PW-WW-M-001-007) outlining the procedures and documents appropriate to the wastewater systems located in the City of Hamilton. The purpose of the WWQMS Operational Plan Manual (PW-WW-M-001-007) is to ensure that the requirements of the WWQMS is efficiently and effectively communicated to HW staff and key stakeholders. The WWQMS Operational Plan Manual also includes a map entitled "[City of Hamilton Wastewater Collection System Map \(PW-WW-V-011-001\)](#)" which illustrates the geographic scope of the City's wastewater systems.

1.3 Definitions

BCOS	Beyond Compliance Operating System – Environmental, Health and Safety Management System for the Hamilton Water Division. BCOS is an umbrella system to the Environmental Laboratory QMS, DWQMS, and WWQMS sub-systems.
BCOS Database	Electronic management system software provided by Intellex. Scope of software is EQH&S and meets the requirements of the BCOS standards.
BLT	BCOS Lead Team - Includes SMR, Compliance Support Group, and Sectional QAs or designates from the Hamilton Water Division.
C&R	Compliance and Regulations Section



Title:	<i>WWQMS Operational Plan Summary Report</i>		
Document #	PW-WW-R-001-003	Document Level	3
Issue #:	1	Issue Date:	2020

CD	Capital Delivery Section
COH	City of Hamilton
Collection System	The entire network of equipment, processes, and service pipes that collect wastewater from customers
Combined Sewer Overflow Tank (CSO Tank)	Tanks designed for the storage of combined sewage during heavy rain events. Gates in the sewer system direct flow into the CSO tanks. The combined sewage is stored in the tanks until the rain event has ceased at which point the wastewater is directed back to the sewer system and onto the WWTP for treatment. These tanks help decrease the volume of water in the combined sewer system being transported to the WWTP and also decrease the number of CSOs to the natural environment.
Combined Sewer System	A wastewater collection system which conveys sanitary wastewaters (domestic, commercial and industrial wastewaters) and stormwater runoff through a single-pipe system to a Sewage Treatment Plant (STP) or treatment works. Combined sewer systems which have been partially separated and in which roof leaders or foundation drains contribute stormwater inflow to the sewer system conveying sanitary flows are still defined as combined sewer systems.
Continual Improvement	Recurring process of enhancing the management system in order to achieve improvements in overall performance consistent with the organization's policy. Continual improvement tools include identification of existing or potential non-conformances, root cause analysis, implementation of corrective / preventive action requests and verification of the effectiveness of corrective / preventive actions.



Title:	<i>WWQMS Operational Plan Summary Report</i>		
Document #	<i>PW-WW-R-001-003</i>	Document Level	<i>3</i>
Issue #:	<i>1</i>	Issue Date:	<i>2020</i>

Controlled documents	<p>Document deemed to be important to the functioning of Hamilton Water Division, as updated, reviewed, approved by the indicated staff, and authorized for release and distribution. The document is available to staff in a format that cannot be modified without appropriate approval. The document available to staff is always the most current version of the document. The document is subject to monitoring, auditing and update. Controlled documents have a unique BCOS issuance number.</p> <ul style="list-style-type: none"> Includes: procedures, manuals, checklists, forms, templates, lists, visual aids, guidelines and brochures.
Corrective Action	Action to eliminate the cause of a detected non-conformance or non-compliance.
CSG	Compliance Support Group
CS&CO	Customer Service and Community Outreach Section
DWQMS	Drinking Water Quality Management System
ECA	Environmental Compliance Approval



Title:	<i>WWQMS Operational Plan Summary Report</i>		
Document #	PW-WW-R-001-003	Document Level	3
Issue #:	1	Issue Date:	2020

E2	<p>The Environmental Emergency (E2) Regulations came into force under the authorities of the Canadian Environmental Protection Act, 1999 (CEPA 1999). The E2 Regulations were put in place to enhance the safety of the environment and human life and health of Canadians by preventing, preparing for, responding to and recovering from environmental emergencies. Under the E2 Regulations, any person who owns or has the charge, management or control of a listed substance on a fixed facility may be required to:</p> <ul style="list-style-type: none"> • identify substance and place; • prepare an environmental emergency plan (E2 plan); • implement, update and test the E2 plan annually; • provide notice of closure or decommissioning; and • report environmental emergencies involving regulated substances.
EQH&S	Environmental, quality, health and safety
Hamilton Water (HW)	Hamilton Water Division, which is the water, wastewater, and stormwater Operating Authority for the City of Hamilton.
HW - SMT	The Hamilton Water Senior Management Team includes the Directors & Section Managers of the Hamilton Water Division.
IPS	Infor Public Sector (formerly HANSEN). Departmental and cross-sectional modular software system, offering a variety of packages designed to handle different aspects of municipal operations such as infrastructure assets inventory, work management, stock inventory systems, service applications and call centers, licensing and enforcement.
Level III Document	A controlled document that applies to the Hamilton Water Division.
Level III Document (Scoped)	A controlled document that applies to two or more but not all the sections of the Hamilton Water Division.



Title:	<i>WWQMS Operational Plan Summary Report</i>		
Document #	PW-WW-R-001-003	Document Level	3
Issue #:	1	Issue Date:	2020

Level IV Document	A controlled document that applies to one Section of the Hamilton Water Division.
MOE	Ontario Ministry of Environment as amended (i.e. Ministry of Environment (MOE), Ministry of Environment and Energy (MOEE), Ministry of Environment and Climate Change (MOECC), Ministry of Environment, Conservation and Parks (MECP))
Operating Authority	Staff within the Hamilton Water Division responsible for the operation, maintenance and providing support services to the COH DWSs (including water treatment and distribution) and WWSs (including collection and water treatment).
Owner (DWS / WWS)	Every person who is a legal or beneficial owner of the City's DWSs and WWSs. Since the City's DWSs and WWSs are publicly owned and operated, the Mayor and Council of the City of Hamilton have been identified as Owners of the City's DWSs and WWSs.
PMATS	Plant Maintenance and Technical Services Section
PO	Plant Operations Section
Preventative Maintenance	Schedule of planned maintenance actions aimed at the prevention of breakdowns and failures.
QA	<p>Quality Assurance (process): Planned and systematic pattern of actions necessary to ensure that management and technical controls are being followed.</p> <p>Quality Assurance (staff): Staff who are responsible for maintaining quality within HW's Quality Management Systems. e.g. Sectional Quality Assurance Analyst, Quality Assurance Supervisor etc.</p>
RTC	Real Time Control



Title:	<i>WWQMS Operational Plan Summary Report</i>		
Document #	<i>PW-WW-R-001-003</i>	Document Level	<i>3</i>
Issue #:	<i>1</i>	Issue Date:	<i>2020</i>

SMR	Systems Management Representative (for the BCOS, DWQMS, and WWQMS Systems) - Manager of Compliance and Regulations Section. Equivalent to QMS Representative as described in the DWQMS Standard.
Top Management (DWQMS / WWQMS)	The DWQMS and WWQMS Top Management has been identified as: the General Manager of Public Works and the Director of Hamilton Water Division.
Wastewater	Water that has been used at home, in a business or as a part of an industrial process. Excludes surface runoff or stormwater unless it enters combined sewer systems.
Objective	Objective set by Hamilton Water consistent with its WWQMS Policy
Target	Means for providing verifiable evidence that wastewater objectives have been met
Wastewater System (WWS)	Any works for the collection, transmission, treatment and disposal of sewage or any part of such works, but does not include plumbing
WD&WWC	Water Distribution and Wastewater Collection Section
WWQMS	Wastewater Quality Management System
WWWPC	Water & Wastewater Planning & Capital
WWWSP	Water & Wastewater Systems Planning Section

2 QUALITY MANAGEMENT SYSTEM POLICY

2.1 Requirements

- 2.1.1 The Operational Plan shall document a Quality Management System Policy that provides the foundation for the Quality Management System, and:



Title:		<i>WWQMS Operational Plan Summary Report</i>	
Document #	<i>PW-WW-R-001-003</i>	Document Level	<i>3</i>
Issue #:	<i>1</i>	Issue Date:	<i>2020</i>

- c. includes a commitment to the maintenance and continual improvement of the Quality Management System,
- d. includes a commitment to comply with applicable legislation and regulations,
- e. includes a commitment to pollution prevention, and
- f. is in a form that can be communicated to all Operating Authority personnel and the Owner.

2.1.2 The Operating Authority shall establish and maintain a Quality Management System that is consistent with the Quality Management System Policy.

2.2 **WWQMS Policy**

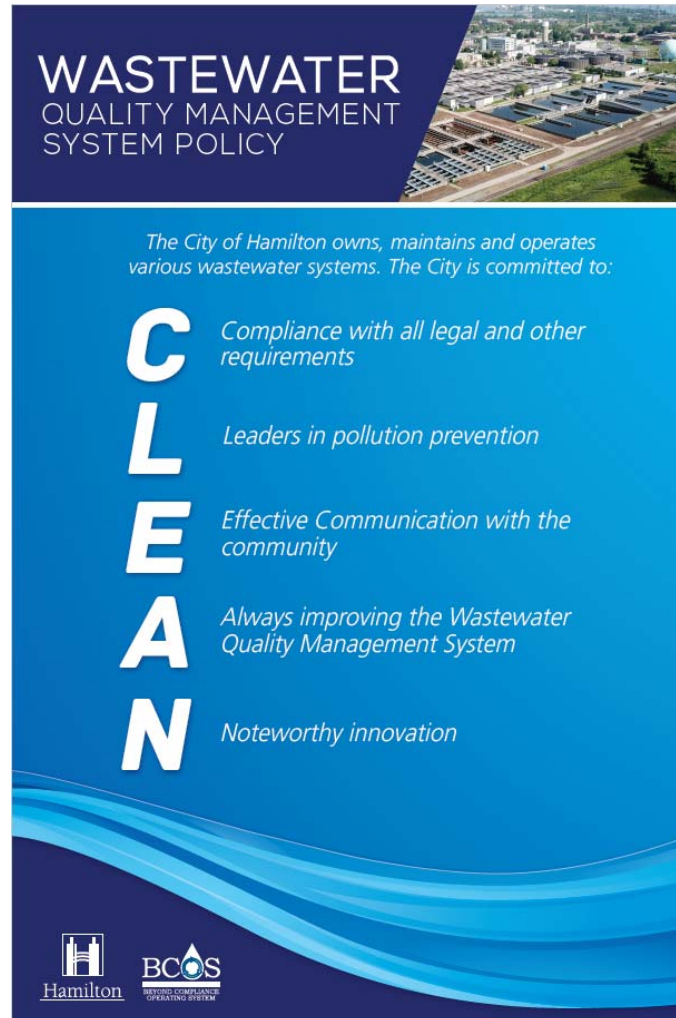
2.2.1 The WWQMS Policy was approved by Top Management on January 27, 2020. It has been communicated to HW staff as per the [Internal Communications \(PW-WW-P-008-001\)](#) procedure.

The WWQMS Policy is communicated to the public through posting on the City's website.



Title:	WWQMS Operational Plan Summary Report		
Document #	PW-WW-R-001-003	Document Level	3
Issue #:	1	Issue Date:	2020

WWQMS Policy



3 COMMITMENT AND ENDORSEMENT

3.1 Requirements

- 3.1.1 The Operational Plan shall contain a written endorsement of its contents by Top Management and the Owner.
- 3.1.2 Top Management shall provide evidence of its commitment to an effective Quality Management System by:



Title: <i>WWQMS Operational Plan Summary Report</i>			
Document #	<i>PW-WW-R-001-003</i>	Document Level	<i>3</i>
Issue #:	<i>1</i>	Issue Date:	<i>2020</i>

- a. ensuring that a Quality Management System is in place that meets the requirements of this Standard,
- b. ensuring that the Operating Authority is aware of all applicable legislative and regulatory requirements,
- c. communicating the Quality Management System according to the procedure for communications, and
- d. determining, obtaining or providing the resources needed to maintain and continually improve the Quality Management System.

3.2 **Commitment and Endorsement**

- 3.2.1 The Owner (Mayor and Council) and Top Management (General Manager of Public Works and the Director of HW) of the Operating Authority (HW) support the development, implementation, maintenance and continual improvement of the WWQMS, which supports the COH's WWS.
- 3.2.2 The Owner acknowledges their role through the receipt and review of WWQMS reports related to the adequacy of infrastructure, audits and management reviews, and by provision of resources to support the WWQMS.
- 3.2.3 Top Management supports the WWQMS through provision of resources, ensuring staff are aware of relevant legal requirements, and supporting WWQMS communications.
- 3.2.4 The WWQMS Operational Plan will be endorsed at minimum every four years, following the municipal election cycle. The signatures that follow serve as evidence of the endorsement of the WWQMS Operational Plan Manual (PW-WW-M-001-007).



Title: <i>WWQMS Operational Plan Summary Report</i>			
Document #	<i>PW-WW-R-001-003</i>	Document Level	<i>3</i>
Issue #:	<i>1</i>	Issue Date:	<i>2020</i>

Fred Eisenberger	Dan McKinnon
Mayor	General Manager, Public Works Department
WWS Owner Representative	WWQMS Top Management Representative

Andrea Holland	Andrew Grice
City Clerk	Director, Hamilton Water Division
(Signing Authority on Behalf of Council)	WWQMS Top Management Representative

4 WWQMS SYSTEM REPRESENTATIVE

4.1 Requirements

4.1.1 The Operational Plan shall identify a Quality Management System representative.

4.1.2 Top Management shall appoint and authorize a Quality Management System representative who, irrespective of other responsibilities, shall:

- a. administer the Quality Management System by ensuring that processes and procedures needed for the Quality Management System are established and maintained
- b. report to Top Management on the performance of the Quality Management System and any need for improvement,
- c. ensure that current versions of documents required by the Quality Management System are being used at all times,
- d. ensure that personnel are aware of all applicable legislative and regulatory requirements that pertain to their duties for the operation of the Subject System, and
- e. promote awareness of the Quality Management System throughout the Operating Authority.



Title: <i>WWQMS Operational Plan Summary Report</i>			
Document #	<i>PW-WW-R-001-003</i>	Document Level	<i>3</i>
Issue #:	<i>1</i>	Issue Date:	<i>2020</i>

4.2 WWQMS Representative

4.2.1 The Manager of Compliance & Regulations has been appointed as the Systems Management Representative (SMR) for WWQMS. The SMR is responsible for:

- ensuring that the WWQMS is established, implemented, and maintained,
- reporting to Top Management and HW - SMT regarding WWQMS performance including recommended continual improvement initiatives,
- promoting awareness of the WWQMS and of HW staff roles and responsibilities,
- overseeing the document control process including the development, review, approval and release of WWQMS System procedures and revoking obsolete documents,
- ensuring that HW and other staff are aware of all applicable legal requirements related to their duties and the WWQMS, and
- managing the WWQMS Internal Audit Program.

5 DOCUMENTS AND RECORDS CONTROL

5.1 Requirements

5.1.1 The Operational Plan shall document a procedure for Documents and Records Control that describes how:

Documents required by the Quality Management System are:

- a. kept current, legible and readily identifiable,
- b. retrievable,
- c. stored, protected, retained and disposed of, and

Records required by the Quality Management System are:

- a. kept legible, and readily identifiable,
- b. retrievable, and
- c. stored, protected, retained and disposed of.

5.1.2 The Operating Authority shall implement and conform to the procedure for Document and Records control and shall ensure that the Quality Management System documentation for the WWQMS includes:

- a. the Operational Plan and its associated policies and procedures,



Title: <i>WWQMS Operational Plan Summary Report</i>			
Document #	<i>PW-WW-R-001-003</i>	Document Level	<i>3</i>
Issue #:	<i>1</i>	Issue Date:	<i>2020</i>

- b. documents and records determined by the Operating Authority as being needed to ensure the effective planning, operation and control of its operations, and
- c. the results of internal and third-party Audits and management reviews.

5.2 **Hamilton Water Document and Record Management System**

- 5.2.1 Procedures have been developed that outline the document and record control processes for the Operating Authority.
- 5.2.2 The procedure entitled [Control of Documents \(PW-WW-P-010-001\)](#) is an integrated procedure that outlines document control processes for the Operating Authority. The purpose of this procedure is to control the issue, change, and approval of documents, ensuring that only up to date, approved documentation is used by Operating Authority staff. The Control of Documents procedure also ensures that staff can locate and access documents relevant to their work, in the format most suitable to their work, whether the documents are created internally or externally to the Operating Authority.
- 5.2.3 [Control of Records \(PW-WW-P-016-001\)](#) is an integrated procedure that applies to all HW sections. The purpose of this procedure is to ensure that both COH and externally generated non-COH records identified as critical are properly collected, identified, accessed, filed, stored, maintained, reviewed, and disposed of after their designated retention times.

6 **WASTEWATER SYSTEMS DESCRIPTIONS**

6.1 **Requirements**

- 6.1.1 The Operational Plan shall document for the Wastewater System:
 - a. the name of the Owner and Operating Authority,
 - b. a general description of the system including all components of Wastewater Collection and applicable Treatment System processes
 - c. a description including:
 - general characteristics of the receiving water body(ies),
 - common event-driven fluctuations, and
 - any resulting operational challenges and threats.
- 6.1.2 The Operating Authority shall ensure that the description of the Wastewater System is kept current.



Title:	<i>WWQMS Operational Plan Summary Report</i>		
Document #	<i>PW-WW-R-001-003</i>	Document Level	<i>3</i>
Issue #:	<i>1</i>	Issue Date:	<i>2020</i>

6.2 Wastewater System Process Descriptions

- 6.2.1 Process descriptions meeting the WWQMS requirements are found in WWQMS [Descriptions of Hamilton Wastewater Systems \(PW-WW-P-004-009\)](#). The map entitled [City of Hamilton Wastewater Collection System Map \(PW-WW-V-011-001\)](#) illustrates the geographic scope of the COH's wastewater collection and treatment systems.

7 ENVIROMENTAL ASPECTS & IMPACTS

7.1 Requirements

- 7.1.1 The Operational Plan shall develop an environmental aspects and impacts process to identify and assess environmental aspects and impacts associated with the collection and treatment of wastewater that:
- identifies the environmental aspects of its activities, and services (outputs) within the scope of the WWQMS that it can control or influence,
 - takes into account planned or unplanned changes or modified activities, products and services,
 - takes into account abnormal conditions and reasonably foreseeable emergency situations,
 - identifies the environmental aspects that can have a significant impact on the environment using established criteria,
 - identifies control measures to address the potential impacts,
 - ensures that the significant environmental aspects are taken into account in establishing, implementing and maintaining the wastewater management system,
 - describes how it shall communicate its significant environmental aspects among various levels and functions of the organization,
 - identifies a method to verify, at least once every calendar year, the currency of the information, and
 - conducts the assessment at least once every three years.
- 7.1.2 The Operational Plan shall document:
- the identified environmental aspects and associated impacts,
 - criteria used to determine its significant environmental aspects, and
 - the impacts rated significant.



Title:		<i>WWQMS Operational Plan Summary Report</i>	
Document #	<i>PW-WW-R-001-003</i>	Document Level	<i>3</i>
Issue #:	<i>1</i>	Issue Date:	<i>2020</i>

The Operating Authority shall ensure that the record of environmental aspects and impacts is kept current.

7.2 **Hamilton Wastewater Systems' Aspects and Impacts Assessment**

7.2.1 The procedure entitled [Environmental Aspects & Impacts Assessment \(PW-WW-P-003-001\)](#) has been developed to document the process followed by HW to identify and assess the environmental aspects and impacts associated with the activities, products and services related to the collection and treatment of wastewater. Once the Aspect and Impact pairs are identified and rated, their Significant Impact Rating can be calculated as the product of likelihood, severity and detectability. A summary of the significant aspects and associated control measures are identified and recorded in [Aspects and Impacts Register \(PW-WW-R-003-001\)](#).

7.2.2 The Aspects and Impacts Assessment is conducted every 3 years and the WWQMS Environmental Aspects and Impacts Register is assessed annually. The Aspects and Impacts Assessment is also conducted for a new wastewater facility or a major process modification within six months after the commissioning date. Communication about significant environmental aspects is carried out as per the [Internal Communications \(PW-WW-P-008-001\)](#) procedure.

8 **OBJECTIVES & TARGETS**

8.1 **Requirements**

8.1.1 The Operating Authority shall ensure that wastewater objectives and targets are established considering significant environmental aspects and associated compliance obligations. The environmental objectives shall be:

- a. consistent with the policy,
- b. measurable (if practicable),
- c. monitored,
- d. communicated, and
- e. updated as appropriate.

When setting objectives, the Operating Authority shall determine:

- a. what will be done,
- b. what resources will be required,
- c. who will be responsible,



Title: <i>WWQMS Operational Plan Summary Report</i>			
Document #	<i>PW-WW-R-001-003</i>	Document Level	<i>3</i>
Issue #:	<i>1</i>	Issue Date:	<i>2020</i>

- d. when it will be completed, and
- e. how the results will be evaluated, including applicable indicators for monitoring progress towards achievement.

The Operating Authority shall establish, implement and maintain a programme(s) for achieving its objectives and targets. Programme(s) shall include:

- a. designation of responsibility for achieving objectives and targets at relevant functions and levels of the organization, and
- b. the means and time frame by which they are to be achieved.

- 8.1.2 The Operating Authority shall maintain documented information about its environmental objectives, targets and management programmes.

The Operating Authority shall consider how actions to achieve its environmental objectives can be integrated into the organization's business processes.

8.2 **Hamilton Wastewater Systems' Objectives and Targets**

- 8.2.1 The procedure entitled [Wastewater Objectives and Targets \(PW-WW-P-005-001\)](#) documents the process by which Hamilton Water sets objectives and targets to avoid or minimize environmental impacts of WWS. Objectives are established after considering evaluation criteria outlined in the procedure. Targets established provide quantifiable milestones for measuring performance against set objectives. Management programmes established list the specific tasks or means by which to achieve the desired objective and target.

- 8.2.2 The list of objectives, targets and wastewater management programmes is recorded in [Objectives and Targets Summary \(PW-WW-R-005-001\)](#) and approved by Top Management annually.

9 **ORGANIZATIONAL STRUCTURE, ROLES, RESPONSIBILITIES & AUTHORITIES**

9.1 **Requirements**

- 9.1.1 The Operational Plan shall:
- a. describe the organizational structure of the Operating Authority including respective roles, responsibilities and authorities,
 - b. delineate corporate oversight roles, responsibilities and authorities where the Operating Authority operates multiple Wastewater Systems,



Title:		WWQMS Operational Plan Summary Report	
Document #	PW-WW-R-001-003	Document Level	3
Issue #:	1	Issue Date:	2020

- c. identify the person, persons or group of people within the management
- d. identify the structure of the organization responsible for undertaking the Management Review described in Section 21,
- e. identify the person, persons or group of people, having Top Management responsibilities required by this Standard, along with their responsibilities, and
- f. identify the Owner of the Wastewater System.

9.1.2 The Operating Authority shall keep current the description of the organizational structure including respective roles, responsibilities and authorities, and shall communicate this information to Operating Authority personnel and the Owner.

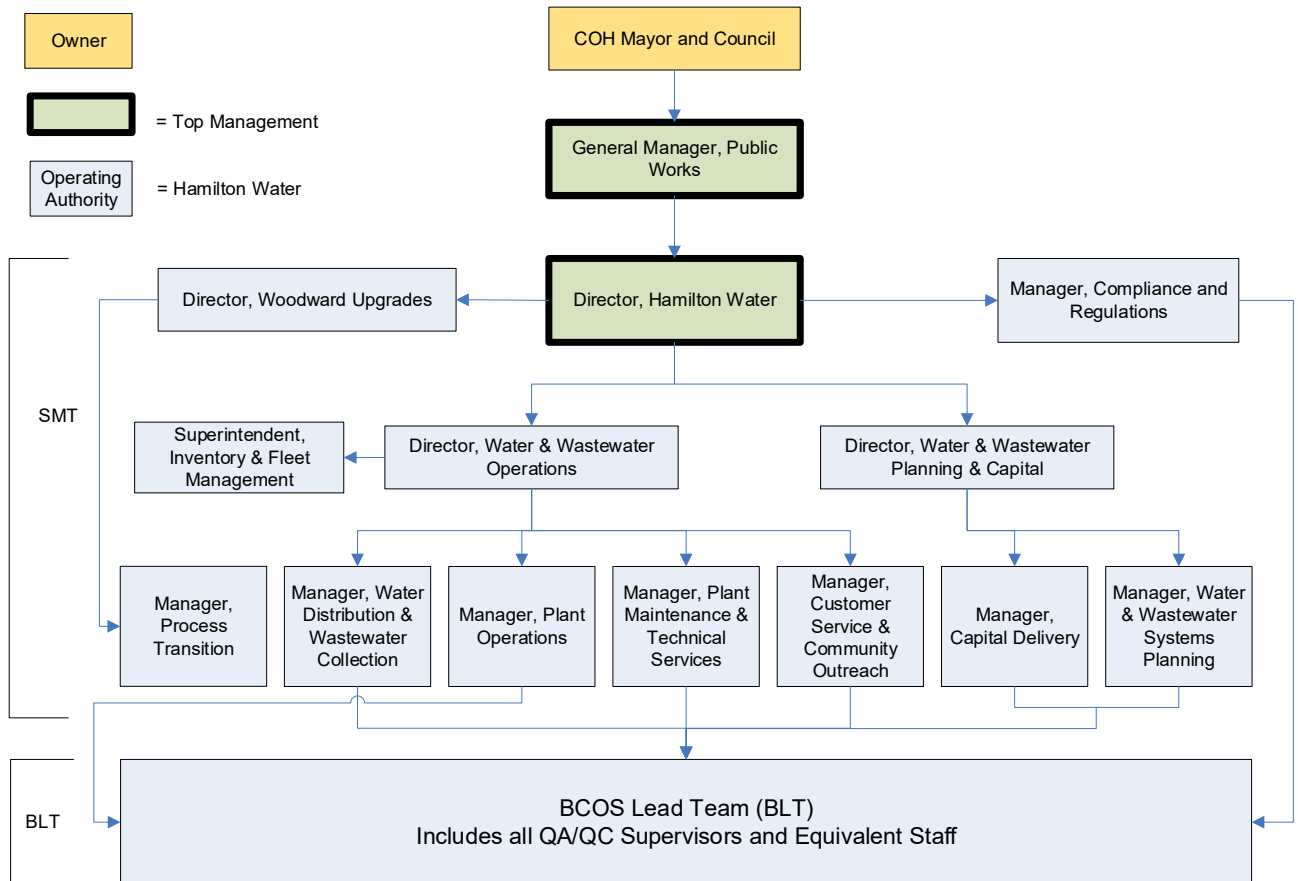
9.2 **Hamilton Water Organizational Structure, Roles, Responsibilities, and Authorities**

9.2.1 [Roles, Responsibilities & Authorities \(PW-WW-P-006-001\)](#) is an integrated procedure for BCOS including DWQMS and WWQMS that describes how roles, responsibilities, and authorities are defined, communicated, and maintained to ensure accountability in the implementation of these systems. The [Hamilton Water – Photo Organizational Chart \(PW-WW-R-006-002\)](#) identifies key roles and/or titles within HW. The [Roles, Responsibilities and Authorities Matrix \(PW-WW-G-006-001\)](#) outlines the roles, responsibilities and authorities relating to the BCOS systems.

9.2.2 The Roles, Responsibilities & Authorities Procedure applies to all sections of HW. CSG and BLT are responsible for ensuring that Operating Authority staff are kept aware of their respective roles, responsibilities and authorities as they relate to WWQMS. The organizational chart below delineates key wastewater positions.



Title:	<i>WWQMS Operational Plan Summary Report</i>		
Document #	PW-WW-R-001-003	Document Level	3
Issue #:	1	Issue Date:	2020



10 COMPETENCIES

10.1 Requirements

10.1.1 The Operational Plan shall document:

- competencies required for personnel performing duties directly affecting quality of wastewater collected and treated,
- activities to train, develop and/or maintain competencies for personnel performing duties directly affecting quality of treated wastewater, and
- activities to ensure that personnel are aware of the relevance of their duties and how they affect the quality of wastewater discharges into the environment.

10.1.2 The Operating Authority shall undertake activities to:

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Title:		<i>WWQMS Operational Plan Summary Report</i>	
Document #	<i>PW-WW-R-001-003</i>	Document Level	3
Issue #:	1	Issue Date:	2020

- a. meet and maintain competencies for personnel directly affecting quality of treated wastewater and shall maintain records of these activities, and
- b. ensure that personnel are aware of the relevance of their duties and how they affect the quality of wastewater discharges into the environment and shall maintain records of these activities.

10.2 WWQMS Competencies

- 10.2.1 The [Competency and Training Procedure \(PW-WW-P-033-001\)](#) provides the framework for the identification, delivery and tracking of training requirements related to the Hamilton Water Division. The procedure is also created to document how the Division ensures competencies of staff that could have a direct impact on wastewater collection and treatment.
- 10.2.2 The [Hamilton Water Division Core Training Guideline \(PW-WW-G-033-002\)](#) lists required core and developmental competencies for job positions that could impact wastewater quality. Positions potentially impacting quality of wastewater have been identified as:
 - Positions that require a Wastewater Operator's License (Treatment or Collection) Positions that supervise licensed Operators or Water Quality Analysts and
 - Other positions recommended by Section Manager
- 10.2.3 All Operating Authority staff are expected to be aware of their roles, responsibilities and authorities. WWQMS Awareness Training is a core training requirement for all staff of the Operating Authority. WWQMS Awareness Training is an on-going training provided to new staff at the Hamilton Water New Employee Orientation. In addition, refresher training may be provided as needed. Staff are also updated about WWQMS as per [Internal Communications \(PW-WW-P-008-001\)](#) procedure.
- 10.2.4 Further, this training may be provided to other City staff outside of the Operating Authority as required.
- 10.2.5 In order to better connect staff to available training, use training resources effectively and help manage training records, HW utilizes the IT Tool – the Learning Management Database.



Title: <i>WWQMS Operational Plan Summary Report</i>			
Document #	<i>PW-WW-R-001-003</i>	Document Level	<i>3</i>
Issue #:	<i>1</i>	Issue Date:	<i>2020</i>

11 PERSONNEL COVERAGE

11.1 Requirements

- 11.1.1 The Operational Plan shall document, implement and conform to a procedure to ensure that sufficient personnel meeting identified competencies are available for duties that directly affect wastewater collection and treatment.

11.2 WWS Personnel Coverage

- 11.2.1 The [Personnel Coverage \(PW-WW-P-034-003\)](#) procedure outlines the process by which the Hamilton Water Division ensures that adequate staffing and personnel coverage are maintained for its water and wastewater operations. The procedure details personnel coverage measures followed during regular business hours as well as evenings, weekends and holidays. Where applicable, Level 4 (Sectional) personnel coverage procedures should be referenced for Section-specific Personnel Coverage processes.

12 COMMUNICATION

12.1 Requirements

- 12.1.1 The Operational Plan shall implement, document and conform to a procedure for communications that describes how the relevant aspects of the WWQMS are communicated between Top Management and:
- a. the Owner,
 - b. Operating Authority personnel,
 - c. Suppliers that have been identified as essential, and
 - d. the Public.

12.2 Communications

- 12.2.1 The [Internal Communications \(PW-WW-P-008-001\)](#) procedure describes processes for internal communications on various elements of the organization 's management systems, policies and objectives. This procedure has been developed to ensure effective and timely communication with internal stakeholders.
- 12.2.2 [External Regulatory and Other Communications \(PW-WW-P-008-002\)](#) describes HW communication processes with regulatory agencies, general public and other external stakeholders.



<i>Title:</i>	<i>WWQMS Operational Plan Summary Report</i>		
<i>Document #</i>	<i>PW-WW-R-001-003</i>	<i>Document Level</i>	<i>3</i>
<i>Issue #:</i>	<i>1</i>	<i>Issue Date:</i>	<i>2020</i>

13 OPERATIONAL PLANNING AND CONTROLS

13.1 Requirements

- 13.1.1 The Operational Plan shall establish, implement, control and maintain processes needed to meet WWQMS requirements, and shall implement actions identified in the aspects and impacts assessment process and Objectives planning process by:

- a. establishing operating criteria for the process(es), and
- b. implementing control of the process(es), in accordance with the operating criteria.

The Operating Authority shall control planned changes and review the consequences of unintended changes, taking action to mitigate any adverse effects, as necessary.

The Operating Authority shall ensure that outsourced processes are controlled or influenced. The type and extent of control or influence to be applied to the process(es) shall be defined within the WWQMS.

- 13.1.2 The Operational Plan shall maintain documented information to the extent necessary to have confidence that the processes have been carried out as planned.

13.2 WWQMS Operational Planning Controls for WWS

- 13.2.1 The [Environmental Aspects & Impacts Assessment \(PW-WW-P-003-001\)](#) procedure documents the process followed by Hamilton Water to identify operational controls to address significant environmental impacts related to the collection and treatment of wastewater. The [Aspects and Impacts Register \(PW-WW-R-003-001\)](#) records the control measures associated with aspects and impacts including preventative maintenance, inspections and monitoring, standardized work instructions and/or improvement projects.

- 13.2.2 The [Essential Supplies and Services \(PW-WW-P-035-001\)](#) procedure documents the process followed by Hamilton Water to identify and review the quality of essential supplies and services provided from outside of the City of Hamilton Drinking Water and Wastewater Systems managed by the HW Division that can introduce quality, safety or environmental risks.

14 EVALUATION OF COMPLIANCE

14.1 Requirements

- 14.1.1 The Operational Plan shall:



<i>Title:</i>	<i>WWQMS Operational Plan Summary Report</i>		
<i>Document #</i>	<i>PW-WW-R-001-003</i>	<i>Document Level</i>	<i>3</i>
<i>Issue #:</i>	<i>1</i>	<i>Issue Date:</i>	<i>2020</i>

- a. document a procedure for periodically evaluating compliance with legal and other requirements and taking actions if needed,
- b. keep records of the results of the periodic evaluations and action taken,
- c. maintain knowledge and understanding of its compliance status, and
- d. establish implement and maintain processes to evaluate and fulfill its compliance obligations.

14.1.2 The Operating Authority shall implement and conform to the procedure and communicate the findings to Owner.

14.2 Hamilton Wastewater Systems' Compliance

14.2.1 The [Legal and Other Requirements \(PW-WW-P-004-004\)](#) procedure indicates how applicable legal and other requirements related to COH's WWS are identified, communicated and managed. The BCOS Database is used to list requirements, track and assign tasks associated with legal and other requirements. Wastewater approval related requirements are tracked in the [Approvals Register \(PW-WW-R-004-020\)](#) that is updated at least annually. In addition, external third-party compliance audits of WWS may be conducted as required.

15 REVIEW AND PROVISION OF INFRASTRUCTURE

15.1 Requirements

15.1.1 The Operational Plan shall document a procedure for reviewing the adequacy of the infrastructure necessary to operate and maintain the wastewater System that:

- a. considers the significant impacts described in Section 7, and
- b. ensures that the adequacy of the infrastructure necessary to operate and maintain the wastewater System is reviewed at least once every Calendar Year.

15.1.2 The Operating Authority shall implement and conform to the procedure and communicate the findings of the review to the Owner.

15.2 Hamilton Water Infrastructure Review

15.2.1 The [Review and Provision of Infrastructure procedure \(PW-WW-P-025-001\)](#) documents the process followed by Hamilton Water in reviewing the adequacy of its wastewater system infrastructure. The procedure applies to all City of Hamilton WWS infrastructure, including both vertical and horizontal infrastructure and other



Title: <i>WWQMS Operational Plan Summary Report</i>			
Document #	<i>PW-WW-R-001-003</i>	Document Level	<i>3</i>
Issue #:	<i>1</i>	Issue Date:	<i>2020</i>

infrastructure required for the operation of the WWS including offices, workspaces, buildings and critical software.

16 INFRASTRUCTURE MAINTENANCE, REHABILITATION & RENEWAL

16.1 Requirements

16.1.1 The Operational Plan shall document:

- a. a summary of the Operating Authority's infrastructure maintenance, rehabilitation and renewal programs for the wastewater System, and
- b. a long term forecast of major infrastructure maintenance, rehabilitation and renewal activities.

16.1.2 The Operating Authority shall:

- a. keep the summary of the infrastructure maintenance, rehabilitation and renewal programs current,
- b. ensure that the long-term forecast is reviewed at least once every Calendar Year,
- c. communicate the programs to the Owner, and
- d. monitor the effectiveness of the maintenance program.

16.2 Hamilton Water Infrastructure Maintenance, Rehabilitation and Renewal

16.2.1 The procedure [Infrastructure Maintenance, Rehabilitation and Renewal \(PW-WW-P-026-001\)](#) describes how Hamilton Water implements infrastructure maintenance, rehabilitation, and renewal programs depending on the condition of infrastructure, redundancy of equipment and the related operational risk. Infrastructure maintenance is addressed by both planned and unplanned maintenance activities carried out by PMATS, PO and WD&WWC.

17 SAMPLING, TESTING & MONITORING

17.1 Requirements

17.1.1 The Operational Plan shall document:

- a. a sampling, testing and monitoring procedure for process control and finished wastewater quality including requirements for sampling, testing and monitoring at the conditions most challenging to the wastewater System,



Title:		WWQMS Operational Plan Summary Report	
Document #	PW-WW-R-001-003	Document Level	3
Issue #:	1	Issue Date:	2020

- b. a description of relevant sampling, testing or monitoring activities, if any, that take place downstream of the wastewater System, and
- c. a procedure that describes how sampling, testing and monitoring results are recorded and shared between the Operating Authority and the Owner, where applicable.

17.1.2 The Operating Authority shall implement and conform to the procedures.

17.2 Hamilton Water Sampling, Testing and Monitoring

17.2.1 The [Sampling, Testing and Monitoring \(PW-WW-P-013-004\)](#) procedure describes how wastewater sampling, testing and monitoring activities are undertaken and how the results are communicated as per regulatory requirements.

17.2.2 The responsibilities for performing the required sampling in the City of Hamilton's wastewater collection system and wastewater treatment plants are outlined in the [City of Hamilton Wastewater Sampling Plan \(PW-WW-P-013-006\)](#). The [City of Hamilton Wastewater Sampling Schedule \(PW-WW-L-013-003\)](#) identifies the list of samples to be collected and tests to be performed by staff to meet City of Hamilton's compliance obligations.

18 MEASUREMENT & RECORDING EQUIPMENT, CALIBRATION & MAINTENANCE

18.1 Requirements

18.1.1 The Operational Plan shall document, implement and conform to a procedure for the calibration and maintenance of measurement and recording equipment.

18.2 Hamilton Water Measurement and Recording Equipment, Calibration and Maintenance

18.2.1 The procedure entitled [Calibration & Maintenance of Measurement and Recording Equipment \(PW-WW-P-036-001\)](#) describes the requirements for the calibration, verification and maintenance of measurement and recording equipment used in the operation of WWS. The procedure identifies responsible personnel, recording requirements, frequency and method for calibration, verification and maintenance of measurement and recording equipment.



Title:	WWQMS Operational Plan Summary Report		
Document #	PW-WW-R-001-003	Document Level	3
Issue #:	1	Issue Date:	2020

19 EMERGENCY MANAGEMENT

19.1 Requirements

19.1.1 The Operational Plan shall document a procedure to maintain a state of emergency preparedness that includes:

- a. a list of potential emergency situations or service interruptions,
- b. processes for emergency response and recovery,
- c. emergency response training and testing requirements,
- d. Owner and Operating Authority responsibilities during emergency situations,
- e. references to municipal emergency planning measures as appropriate, and
- f. an emergency communication protocol and an up-to-date list of emergency contacts.

19.1.2 The Operating Authority shall implement and conform to the procedure.

19.2 Hamilton Water Emergency Management

19.2.1 The [Hamilton Water Emergency Response Plan \(PW-WW-P-012-001\)](#) describes the City's Corporate, Departmental, Divisional, and Sectional Emergency Response structure. Emergency Response Plan (ERP) Manuals (binders) are available at various locations within Hamilton Water inclusive of the Hamilton Water Emergency Response Plan. A Risk Assessment approach is used to identify possible risks or emergencies that could potentially impact the City's WWS, Annual testing of the COH (Corporate) Emergency Response Plan, the HW Emergency Response Plan, and the Plant Operation's E2 Plan is required. Upon completion of testing, a debrief is held to determine possible improvement actions and document any procedural upgrades that may be required.

19.2.2 HW staff must receive training for all emergency response plans and/or procedures related to their job or responsibilities. Divisional training requirements are listed in the [Hamilton Water Division Core Training Guideline \(PW-WW-G-033-002\)](#). The City's Emergency Management Office determines training requirements for the COH's Emergency Response Plan.



Title:	WWQMS Operational Plan Summary Report		
Document #	PW-WW-R-001-003	Document Level	3
Issue #:	1	Issue Date:	2020

20 INTERNAL AUDITS

20.1 Requirements

- 20.1.1 The Operational Plan shall document a procedure for internal Audits that:
- evaluates conformity of the Quality Management System with the requirements of this Standard,
 - identifies internal Audit criteria, frequency, scope, methodology and record-keeping requirements,
 - considers previous internal and third-party Audit results, and
 - describes how Quality Management System Corrective Actions are identified and initiated.
- 20.1.2 The Operating Authority shall implement and conform to the procedure and shall ensure that internal Audits are conducted at least once every Calendar Year.

20.2 WWQMS Internal Audit

- 20.2.1 The [Internal Auditing procedure \(PW-WW-P-017-001\)](#) is an integrated procedure that describes how HW conducts objective and systematic internal audits as a means of measuring the performance of its BCOS, including WWQMS.
- 20.2.2 The SMR holds overall responsibility for ensuring that internal audits are planned and executed annually according to the requirements of this procedure. Internal auditors are appointed by HW - SMT and are identified in the [Internal Auditor List \(PW-WW-L-017-003\)](#).
- 20.2.3 Audit findings are recorded in the BCOS database and may indicate the need for corrective, preventive, or improvement actions (See Section 22.0 of this Operational Plan).
- 20.2.4 Once scheduled internal audits are completed, the SMR (or designate) reviews audit findings and compiles the information for presentation to SMT. In addition, the Internal Audit Program is reviewed on an annual basis as an input to Management Review (See Section 21.0 of this Operational Plan).



<i>Title:</i>	<i>WWQMS Operational Plan Summary Report</i>		
<i>Document #</i>	<i>PW-WW-R-001-003</i>	<i>Document Level</i>	<i>3</i>
<i>Issue #:</i>	<i>1</i>	<i>Issue Date:</i>	<i>2020</i>

21 MANAGEMENT REVIEW

21.1 Requirements

21.1.1 The Operational Plan shall document a procedure for management review that evaluates the continuing suitability, adequacy and effectiveness of the Quality Management System and that includes consideration of:

- a. incidents of regulatory non-compliance and response actions,
- b. the effectiveness of the wastewater aspects and impacts process (changes in significant wastewater aspects),
- c. objectives and targets, and status of wastewater Management Programmes,
- d. internal audit results,
- e. summary of WWQMS non-conformance reports, including Essential Supplies and Services' non-conformances,
- f. results of emergency response testing,
- g. operational performance,
- h. influent and effluent wastewater quality trends,
- i. follow-up on action items from previous management reviews,
- j. the status of management action items identified between reviews,
- k. changes that could affect the Quality Management System,
- l. internal & external communication,
- m. the resources needed to maintain the Quality Management System,
- n. the results of the infrastructure review,
- o. Operational Plan currency, content and updates, and
- p. staff suggestions.

21.1.2 Top Management shall implement and conform to the procedure and shall:

- a. ensure that a management review is conducted at least once every Calendar Year,
- b. consider the results of the management review and identify deficiencies and actions items to address the deficiencies,



Title: <i>WWQMS Operational Plan Summary Report</i>			
Document #	<i>PW-WW-R-001-003</i>	Document Level	<i>3</i>
Issue #:	<i>1</i>	Issue Date:	<i>2020</i>

- c. provide a record of any decisions and action items related to the management review including the personnel responsible for delivering the action items and the proposed timelines for their implementation, and
- d. report the results of the management review, the identified deficiencies, decisions and action items to the Owner.

21.2 **Hamilton Water Management Review**

- 21.2.1 The [Management Review procedure \(PW-WW-P-018-001\)](#) documents the process for planning, executing, and documenting Management Reviews, including provision of feedback to the Hamilton Water Division and reporting of review results to the Owner.
- 21.2.2 The SMR coordinates the annual Management Review meetings and compiles the required input data for presentation to Top Management. Top Management is responsible for reviewing the input materials presented and generating outputs as specified in the Management Review procedure. The SMR or delegate prepares minutes of Management Review meetings as proof of completion.
- 21.2.3 Top Management or their delegates are responsible for communicating Management Review results to the Owner. In addition, results of management reviews are summarized in the annual WWQMS Summary Report which is circulated to the WWS Owner.

22 **NON-CONFORMANCE, CORRECTIVE & PREVENTIVE ACTION**

22.1 **Requirements**

- 22.1.1 The Operating Authority shall develop a procedure for tracking and measuring effectiveness of its Quality Management System by:
 - a. documenting a process for identification and management of Quality Management System Corrective Actions that includes:
 - investigating the cause(s) of an identified non-conformity,
 - documenting the action(s) that will be taken to correct the nonconformity and prevent the non-conformity from re-occurring, and
 - reviewing the action(s) taken to correct the non-conformity, verifying that they are implemented and are effective in correcting and preventing the re-occurrence of the nonconformity.



Title:		WWQMS Operational Plan Summary Report	
Document #	PW-WW-R-001-003	Document Level	3
Issue #:	1	Issue Date:	2020

- b. documenting a process for identifying and implementing Preventive Actions to eliminate the occurrence of potential non-conformities in the Quality Management System that includes:
- reviewing potential non-conformities that are identified to determine if preventive actions may be necessary,
 - documenting the outcome of the review, including the action(s), if any, that will be taken to prevent a non-conformity from occurring, and
 - reviewing the action(s) taken to prevent a non-conformity, verifying that they are implemented and are effective in preventing the occurrence of the non-conformity.

22.1.2 The Operating Authority shall implement and conform to the procedure

22.2 Hamilton Water Non-Conformance, Corrective and Preventative Action Process

- 22.2.1 The integrated [Non-conformance, Corrective & Preventive Action Process procedure \(PW-WW-P-015-002\)](#) documents the non-conformance, corrective and preventative action process that ensures the effective resolution of system non-conformances and legal non-compliances related to the WWQMS.

Non-conformances are entered into the "Findings" Application of the BCOS Database. Once details of the nature of the non-conformance are entered into BCOS, a root cause analysis can be completed, and an action plan can be developed to correct or prevent the non-conformance. All action plans are verified as being complete. Verification for effectiveness may occur at the discretion of the SMR. All of the above information must be entered into the BCOS Database. Once the completion of the plan has been verified, the non-conformance report can be closed out.

23 CONTINUAL IMPROVEMENT

23.1 Requirements

- 23.1.1 The Operating Authority shall develop a procedure for tracking and measuring continual improvement of its Quality Management System.
- 23.1.2 The Operating Authority shall strive to continually improve the effectiveness of its Quality Management System by implementing and conforming to the procedure.



Title:	<i>WWQMS Operational Plan Summary Report</i>		
Document #	PW-WW-R-001-003	Document Level	3
Issue #:	1	Issue Date:	2020

23.2 Hamilton Water Continual Improvement Process

- 23.2.1 The COH is committed to continually improving its WWQMS. The Public Works departmental Continual Improvement procedure is currently under development. In addition, Hamilton Water follows the section on continual improvement found in [Non-conformance, Corrective & Preventive Action Process procedure \(PW-WW-P-015-002\)](#). Hamilton Water uses tools such as management reviews, internal audits, communications, BIMA scorecard and benchmarking initiatives to track and measure the continual improvement of WWQMS.

BCOS software tracks the revision history of document.

**Automated Speed Enforcement (ASE)
Revised Deployment Schedule October 2020-September 2021**

Location	Operation Date
Stone Church Road between Dartnall Road and Pritchard Road	October 2020
Glancaster Road between Rymal Road and Twenty Road	November 2020
Bellagio Drive between Fletcher Road and Keystoney Crescent	December 2020
Lawrence Road between Gage Avenue and Ottawa Street	January 2021
Lawrence Road between Cochrane Ave and Mt Albion Road	February 2021
Lewis Road between Barton Street and Highway 8	March 2021
Trinity Church Road between Guyatt Road and Dickenson Road	April 2021 (first 2 weeks of month)
Hunter Street between James Street and Wellington Street*	April 2021 (second 2 weeks of month)
Harvest Road between Tews Lane and Forest Avenue	May 2021 (first 2 weeks of month)
Lottridge Street between Cannon Street and Beechwood Avenue*	May 2021 (second 2 weeks of month)
Main Street between Parkside Drive and John Street	June 2021 (first 2 weeks of month)
Mountain Brow Boulevard between Broker Drive and Mohawk Road*	June 2021 (second 2 weeks of month)
Broker Drive between Kingslea Drive and Brentwood Drive	July 2021 (first 2 weeks of month)
Gage Avenue between Cannon St and Beechwood Avenue*	July 2021 (second 2 weeks of month)
Second Street between Charles Street and King Street	August 2021 (first 2 weeks of month)
Regional Road 56 between Golf Club Road and Guyatt Road*	August 2021 (second 2 weeks of month)
Greenhill Avenue between Quigley Road and Mt. Albion Road	September 2021 (first 2 weeks of month)
Highway 5 between Harrisburg Road and Troy Road*	September 2021 (second 2 weeks of month)

* - Denotes new location added to the ASE pilot project.

Locations Reviewed for Automated Speed Enforcement Consideration

Candidate Location	Ward	School Name (if present)	CSZ Ranking Score	Prohibitive Factor(s) & Comments
John Street North - John Street South to Barton Street East	2		67	ASE camera cannot be used due to roadway geometrics and on-street parking.
Hunter Street East - Hunter Street West to Wellington Street South	2		58	1 of 6 new locations added to the ASE pilot list.
Lottridge Street - Cannon Street East to Beechwood Avenue	3	Prince of Wales Elementary School	56	2 of 6 new locations added to the ASE pilot list.
Sanford Avenue North - Cannon Street East to Barton Street East	3	Cathy Weaver Elementary School	50	School zone flasher present.
Mohawk Road East - Mall Road to Bishopsgate Avenue	7	Our Lady of Lourdes Elementary School	48	ASE camera cannot be used due to five lane arterial configuration and recommended for the installation of a future school zone flasher.
Highway No. 8 - Green Road to Ellington Avenue	10	St. Francis Xavier Elementary School	47	ASE camera cannot be used due to five lane arterial configuration and school zone flasher present.
Mountain Brow Boulevard - Broker Drive to Mohawk Road East	6		43	3 of 6 new locations added to the ASE pilot list.
Regional Road 56 - Golf Club Road to Guyatt Road	11		41	4 of 6 new locations added to the ASE pilot list.
Highway No. 5 West - Harrisburg Road to Troy Road	12		41	5 of 6 new location added to the ASE pilot list.
Highway No. 5 East - Evans Road to Kerns Road	15		41	ASE camera cannot be used due to five lane arterial configuration.

Candidate Location	Ward	School Name (if present)	CSZ Ranking Score	Prohibitive Factor(s) & Comments
Dewitt Road - Highway No. 8 to Cresthaven Drive	10	Orchard Park Secondary School	38	School zone flasher present.
Dakota Boulevard - Rymal Road East to Pinehill Drive	9	Bishop Ryan Secondary School	38	On-street parking restricts ability to use ASE
Centre Road - Concession 6 East to Concession 5 East	15	Flamborough Centre School	37	Current speed limit reduction and school zone flasher present.
Whitedeer Road - Rymal Road East to Highbury Drive	9	St. Mark Elementary School	37	Current midblock all-way stop and parking restricts ability to use ASE cameras.
Upper James Street - English Church Road East to Airport Road East	11		37	ASE camera cannot be used due to roadway geometrics (width).
Regional Road 56 - Guyatt Road to Cemetery Road	11		37	6 of 6 new locations added to the ASE pilot list.
Regional Road 56 - Hall Road to Haldibrook Road	11		37	Below ranking threshold based upon total number of available additional ASE locations (6).
Highway No. 8 - Fifty Road to east boundary limits	10		37	Below ranking threshold based upon total number of available additional ASE locations (6).
Glancaster Road - Twenty Road West to Book Road East	11		37	Below ranking threshold based upon total number of available additional ASE locations (6).
Carlisle Road - Progreston Road to Milborough Line	15		37	Below ranking threshold based upon total number of available additional ASE locations (6).
Cranbrook Drive - Gretna Court to Gemini Drive	14	R.A. Riddell Elementary School	36	Below ranking threshold based upon total number of available additional ASE locations (6).

Candidate Location	Ward	School Name (if present)	CSZ Ranking Score	Prohibitive Factor(s) & Comments
Beach Boulevard - Eastport Drive to Van Wagner's Beach Road	5		36	Below ranking threshold based upon total number of available additional ASE locations (6).
Cannon Street East - Edgemont Street North to Robins Avenue	4	Queen Mary Elementary School	35	Below ranking threshold based upon total number of available additional ASE locations (6) and school zone flasher present.
Highland Road East - Highland Road West to Third Road East	9		35	Below ranking threshold based upon total number of available additional ASE locations (6).
Wilson Street - Mary Street to Ferguson Avenue North	2	Dr. Davey Elementary School	34	Below ranking threshold based upon total number of available additional ASE locations (6) and school zone flasher present.
Westbrook Road - Binbrook Road to Concession 5 Road	11		34	Below ranking threshold based upon total number of available additional ASE locations (6).
Millgrove Sideroad - Concession 5 West to Concession 6 East	15		34	Below ranking threshold based upon total number of available additional ASE locations (6).
Concession 5 West - Millgrove Sideroad to Carey Street	13	Millgrove Public School	33	Below ranking threshold based upon total number of available additional ASE locations (6).
Twenty Road East - Greti Drive to Twenty Road West	11		33	Below ranking threshold based upon total number of available additional ASE locations (6).
Upper James Street - Twenty Road East to Dickenson Road East	11		33	Below ranking threshold based upon total number of available additional ASE locations (6).

Candidate Location	Ward	School Name (if present)	CSZ Ranking Score	Prohibitive Factor(s) & Comments
Highway No. 8 - Jones Road to Glover Road	10		33	Below ranking threshold based upon total number of available additional ASE locations (6).
Highway No. 5 East - Spring Creek Drive to Evans Road	15		33	Below ranking threshold based upon total number of available additional ASE locations (6).
Mud Street East - First Road East to Third Road East	9		32	Below ranking threshold based upon total number of available additional ASE locations (6).
Barton Street - Napa Lane to Fifty Road	10	St Gabriel Elementary School	31	Below ranking threshold based upon total number of available additional ASE locations (6) and school zone flasher present.
Lawrence Road - Ottawa Street South to Kenilworth Avenue South	4		31	Below ranking threshold based upon total number of available additional ASE locations (6).
Mountain Brow Boulevard - Oakcrest Drive to Margate Avenue	6		31	Below ranking threshold based upon total number of available additional ASE locations (6).
Mud Street East - Third Road East to Tapleystown Road	9	Tapleystown Elementary School	31	Below ranking threshold based upon total number of available additional ASE locations (6) and school zone flasher present.
Highland Road West - Highbury Drive to First Road West	9	Saltfleet Secondary School	31	Below ranking threshold based upon total number of available additional ASE locations (6).
Mill Street South - Union Street to Mountain Brow Road	15		31	Below ranking threshold based upon total number of available additional ASE locations (6).

Candidate Location	Ward	School Name (if present)	CSZ Ranking Score	Prohibitive Factor(s) & Comments
Concession 5 East - Highway No. 6 to Centre Road	15		31	Below ranking threshold based upon total number of available additional ASE locations (6).
Gage Avenue North - Cannon Street East to Beechwood Avenue	4		30	Below ranking threshold based upon total number of available additional ASE locations (6).
Dewitt Road - Cresthaven Drive to Barton Street	10	Our Lady of Peace Elementary School	30	Below ranking threshold based upon total number of available additional ASE locations (6) and school zone flasher present.
Frances Avenue - Teal Avenue to Green Road	10		30	Below ranking threshold based upon total number of available additional ASE locations (6).
Mountain Brow Boulevard - Upper Ottawa Street to Mountain Brow Boulevard	6		30	Below ranking threshold based upon total number of available additional ASE locations (6).
Concession 5 East - Centre Road to Robson Road	15		30	Below ranking threshold based upon total number of available additional ASE locations (6).
Binbrook Road - Westbrook Road to Woodburn Road	11		30	Below ranking threshold based upon total number of available additional ASE locations (6).
Gatestone Drive - Shadyglen Drive to Highbury Drive	9	Gatestone Elementary School	29	Below ranking threshold based upon total number of available additional ASE locations (6).
Upper Ottawa Street - Mountain Brow Boulevard to Queensdale Avenue East	6		29	Below ranking threshold based upon total number of available additional ASE locations (6).

Candidate Location	Ward	School Name (if present)	CSZ Ranking Score	Prohibitive Factor(s) & Comments
Upper James Street - White Church Road East to Highway No. 6	11		29	Below ranking threshold based upon total number of available additional ASE locations (6).
Highway No. 5 East - Riley Street to Berry Hill Avenue	15		29	Below ranking threshold based upon total number of available additional ASE locations (6).
Concession 6 East - Centre Road to John Martin Crescent	15		29	Below ranking threshold based upon total number of available additional ASE locations (6).
Upper Ottawa Street - Queensdale Avenue East to Brucedale Avenue East	6		28	Below ranking threshold based upon total number of available additional ASE locations (6).
Hendershot Road - Golf Club Road to Guyatt Road	11		27	Below ranking threshold based upon total number of available additional ASE locations (6).
Fletcher Road - Rymal Road East to Pinehill Drive	9	Our Lady of the Assumption	27	Below ranking threshold based upon total number of available additional ASE locations (6) and school zone flasher present.
Concession 8 East - Centre Road to Green Spring Road	15		27	Below ranking threshold based upon total number of available additional ASE locations (6).
Highway No. 5 East - Mill Street South to Reynold Street	15		27	Below ranking threshold based upon total number of available additional ASE locations (6).
Centre Road - Concession 14 East to	15		26	Below ranking threshold based upon total number of available additional ASE locations (6).

Candidate Location	Ward	School Name (if present)	CSZ Ranking Score	Prohibitive Factor(s) & Comments
Mill Street North - Mill Street South to Church Street	15		25	Below ranking threshold based upon total number of available additional ASE locations (6).

Note: under Provincial regulations, ASE installation is not permitted in school zones where school zone flashers are present and that control speed limits.