




Hamilton

CITY OF HAMILTON
PUBLIC WORKS DEPARTMENT
Transit Division

TO:	Mayor and Members General Issues Committee
COMMITTEE DATE:	March 6, 2015
SUBJECT/REPORT NO:	Ten Year (2015 to 2024) Local Transit Strategy (PW14015a) - (City Wide) (Outstanding Business List Item)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	David Dixon (905) 546-2424, Extension 1860 Christine Lee-Morrison (905) 546-2424, Extension 6390 Jim Dahms (905) 546-2424, Extension 1858 Nancy Purser (905) 546-2424, Extension 1876 Craig Webb (905) 546-2424, Extension 1870
SUBMITTED BY:	Gerry Davis, CMA General Manager Public Works Department
SIGNATURE:	

RECOMMENDATION

- (a) That the Ten Year (2015 to 2024) Local Transit Strategy as outlined in Report PW14015a be approved, including the following approvals for 2015 and 2016 to address system deficiencies:
 - (i) \$6M dollars annualized to be phased in over two years;
 - (ii) an additional 50 FTEs with recruitment to be phased in over two years;
 - (iii) the addition of 25 buses to the fleet in 2015 at a capital cost of \$15.6M to be funded as follows:
 - (1) \$3M from development charges;
 - (2) \$5.7M from transit vehicle replacement reserve;
 - (3) \$6.9M unfunded capital to be requested from Metrolinx as part of recommendation (d) in Report PW14015a;

- (iv) delay the retirement of 10 buses at a capital cost of \$0.5M to be funded from the transit vehicle replacement reserve;
- (b) That the base fare increases as outlined in Report PW14015a be approved, including the following:
 - (i) 25 cents in September, 2015 and 10 cents in September, 2016 to align with the service improvements in recommendation (a) of Report PW14015a;
 - (ii) 10 cents in September, 2017 and 2018, also to align with service improvements;
 - (iii) annual fare increases of at least the consumer price index thereafter;
- (c) That new Service Standards as outlined in Report PW14015a be approved for the objective implementation of service;
- (d) That the City Manager be directed to develop an updated submission to Metrolinx further to what has already been submitted to the Province of Ontario in the Rapid Ready report for the unfunded capital requirements contained in the Ten Year Local Transit Strategy;
- (e) That the Outstanding Business List item related to Transit on the Hamilton Mountain be identified as complete and removed from the list;
- (f) That the Outstanding Business List item related to HSR Low Performing Routes be identified as complete and removed from the list.

EXECUTIVE SUMMARY

On February 27, 2013 Rapid Ready Expanding Mobility Choices in Hamilton (“Rapid Ready”, Report PW13014) was approved by Council (see Council resolution, Appendix A). Rapid Ready was submitted to Metrolinx as Hamilton’s funding requirements, seeking:

- (i) 100% capital and any upset net operating levy impact for Light Rail Transit;
- (ii) Growth funding for the overall public transportation program, as summarized on Pages 43 and 44 of Appendix A to Report PW03014 (refer to Investment Plan Tab), necessary to support a successful Light Rail Transit system.

The letters forwarding this request to Metrolinx are attached as Appendix B to this report.

Following the approval of Rapid Ready, on June 26, 2013 staff were directed to report back during the 2015 budget process on “a ten-year Hamilton local transit service level strategy, including specific route recommendations and a financial strategy, with reference to the role played by rapid transit, and with a goal of reaching 80 - 100 rides per capita by 2025.” See Appendix C for Motion.

The PowerPoint presentation “Ten Year Local Transit Strategy”, attached as Appendix D, was received by the General Issues Committee on February 6, 2015. The Ten Year Local Transit Strategy outlined in this report stabilizes the local system, while incrementally building service and increasing transit modal split. This builds on the Rapid Ready report which laid out, for City Council, action items for the short term to continue advancing toward rapid transit. This phased Strategy includes actions and resources to address: firstly, current deficiencies in the system; secondly, the alignment of services with updated Service Standards; thirdly, accommodating ongoing growth; and finally, promoting ridership (modal split) through the introduction of additional express bus service on the BLAST corridors which would create a differentiated level of service establishing the beginning of a rapid transit system. Rapid transit is required in order to reach the goal of 80 - 100 rides per capita. The Strategy also references typical industry thresholds that set out the progression to higher order modes, from a transit perspective (see Appendix D, pages 6 and 45, Transit Technologies & Capacities).

The Ten Year Local Transit Strategy Summary of Net Operating Impacts and Summary of Funded and Unfunded Capital are provided in Tables 1 and 2 on Pages 4 and 5, respectively. The operating costs to support the phased Strategy are reasonably within the City’s ability to fund through equitable increases in fares and the levy. However, in total, there is approximately \$302M in unfunded capital to support the BLAST express bus network. This is comprised of two significant pieces: BLAST network buses; and, a maintenance and storage facility required as a result of the transit expansion. Given the current financial challenges, it is unlikely the City can absorb these capital costs in the municipal tax base. Senior government support is required.

Alternatives for Consideration - See Page 12

FINANCIAL - STAFFING - LEGAL IMPLICATIONS

Financial:

Operating Budget Impact

Table 1 - Summary of Net Operating Impacts

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Service Expenditures (000's)	\$800	\$3,500	\$4,800	\$4,500	\$5,500	\$6,000	\$6,000	\$6,000	\$6,500	\$6,500
Fare Revenues (000's)	-\$1,908	-\$3,770	-\$3,120	-\$3,230	-\$1,825	-\$2,758	-\$2,857	-\$2,909	-\$3,069	-\$3,192
Transfer to Reserve (\$000's)	\$1,108	\$270	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Levy (000's)	\$0	\$0	\$1,682	\$1,269	\$3,675	\$3,242	\$3,143	\$3,091	\$3,431	\$3,308
Annual Change to City Levy	0.00%	0.00%	0.21%	0.15%	0.43%	0.38%	0.37%	0.36%	0.40%	0.39%
Revenue/ Cost Ratio	47.1%	48.9%	48.4%	48.4%	45.1%	44.1%	43.3%	42.6%	41.9%	41.4%

Service Expenditures

2015 and 2016 - \$6 million annualized to correct deficiencies:

- September 2015 \$0.8 million (\$2 million annualized);
- March 2016 \$1.5 million (\$2 million annualized), and,
- September 2016 \$0.8 million (\$2 million annualized).

2017 to 2024 - 2017 includes approximately \$1.1 million in additional operating expenses to implement Service Standards. In addition, starting in 2017, annual service plans will be brought forward to address emerging growth and implement an express bus service on the entire BLAST network. Annual increases in operating costs will be approximately \$4.5 million to \$6.5 million (inclusive of inflation).

Fare Revenues

To fund Operating expenses, a balanced approach is being proposed whereby transit users and property tax payers share in the burden since transit provides value to both through reduced congestion and delays, positive health, environment and community impacts (1 passenger-km reduces GHG by 65%), economic development, and social equity. The HSR is currently operating at about a 45% Revenue Cost (RC) ratio and moving closer to a 50% RC ratio is desirable. It should be noted that the RC ratio will fluctuate over the 10 year period. After the initial fare increase and as investment in transit increases, the RC ratio will go down. A 50% RC ratio should be considered a longer term goal.

Fare increases are being proposed in the early years of the ten year plan to:

- Help address current deficiencies in the system, the application of new service standards and to begin to address growth and modal split.
- Recognize the significant investments being made in transit.
- Recover ground lost as a result of no fare increases over the past four years.
- Provide a fare more in line with comparator transits while still at the low end.

Multi Year Fare Increase Summary:

- 25 cents in September, 2015;
- 10 cents in September, 2016, 2017 and 2018;
- Phased in seniors multiplier adjustment (13 times multiple of the adult ticket to a 22 times multiple over the four years);
- Annual fare increases of at least CPI thereafter.

Levy

2015 and 2016 - There will be no impact on the levy.

2017 to 2024 - In future years, the impact applied to the general tax levy is projected in the range of 0.15% to 0.43%, based on best estimates at this time.

Funded and Unfunded Capital

Table 2 - Summary of Funded and Unfunded Capital

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Totals
FUNDED CAPITAL (000's)											
Fleet (Local, 45 buses)	\$8,700		\$2,650	\$2,030	\$2,760	\$2,110	\$2,870	\$2,930	\$2,990	\$3,050	\$30,090
UNFUNDED CAPITAL (000's)											
Fleet (BLAST, 81 buses)	\$6,875		\$5,300	\$5,420	\$5,520	\$5,630	\$6,460	\$6,590	\$7,470	\$7,610	\$56,875
Maintenance Storage Facility	\$5,000	\$10,000	\$25,000	\$80,000	\$80,000						\$200,000
Customer Experience	\$4,000	\$4,000	\$4,000	\$4,000	\$3,833	\$3,833	\$3,833	\$3,833	\$3,833	\$3,833	\$39,000
Corridor Capacity	\$200	\$200	\$200	\$200	\$867	\$867	\$867	\$867	\$867	\$867	\$6,000
Totals	\$16,075	\$14,200	\$34,500	\$89,620	\$147,480	\$10,330	\$11,160	\$11,290	\$12,170	\$12,310	\$301,875

While most local governments are able to support operating costs through a combination of fares and levies, capital costs are far more challenging. Throughout most of North America, some form of support from higher levels of government is usually required to finance capital costs.

Hamilton has sufficient funds in the Bus Replacement Capital Account to fund buses required for local service, subject to the continuation of contributions from Federal Gas Tax and Development Charges. However, additional buses required to build the express bus BLAST network, along with a Maintenance and Storage Facility (MSF), branding and passenger amenities will require upper level government support.

2015 and 2016 Funded Capital

The addition of 25 buses to the fleet in 2015 at a capital cost of \$15.6M would be required to support the first two years of the Strategy, to be funded as follows:

- \$3M from development charges;
- \$5.7M from the transit vehicle replacement reserve; and,
- \$6.9M unfunded capital.

In addition, in 2015, it will be necessary to delay the retirement of 10 buses while the new buses are procured. This will be at a capital cost of \$0.5M, to be funded from the transit vehicle replacement reserve.

2015 to 2024 Unfunded Capital

In total, there is approximately \$302M in unfunded capital to support the BLAST express bus network. This includes \$6.9M in unfunded capital identified to purchase 11 of the additional 25 buses in 2015. A detailed table illustrating fleet requirements during the Ten Year Local Transit Strategy is attached as Appendix E. Recommendation (d) in this report identifies Metrolinx as a potential funding source.

It should also be noted that Rapid Ready, as submitted to Metrolinx, included an estimated \$132M in capital improvements. This Ten Year Local Transit Strategy includes estimates that are still approximate, but have been developed to a greater level of detail and refinement than Rapid Ready. The major difference is due to the updated estimate for a maintenance and storage facility from \$25M in Rapid Ready to \$200M in the Ten Year Local Transit Strategy. The original estimate recognized that additional storage capacity was needed and the \$25M estimate was included as a placeholder. This Strategy confirms that a new maintenance and storage facility is required at a substantially higher cost.

Staffing: A total of 50 FTEs over the first two years of this Strategy will be required and are included in the above noted operating costs. If approved, recruitment would begin in 2015.

Legal: N/A

HISTORICAL BACKGROUND

Rapid Ready Expanding Mobility Choices in Hamilton

On February 27, 2013 Rapid Ready Expanding Mobility Choices in Hamilton (“Rapid Ready”, report PW13014) was approved by Council (see Appendix A). The Rapid Ready report contains a strategy for all forms of public transportation in Hamilton over the next 5 years. Rapid Ready was submitted to Metrolinx for funding (see Appendix B), specifically requesting:

- 100% capital and any upset net operating levy impact for Light Rail Transit; and,
- Growth funding for the overall public transportation program.

Following the approval of Rapid Ready, on June 26, 2013 (see Appendix C) staff were further directed by Council to:

- Report back in time for the 2015 budget process to the new City Council on a ten-year Hamilton local transit service level strategy, including specific route recommendations and a financial strategy, with reference to the role played by rapid transit, and with a goal of reaching 80-100 rides per capita by 2025.

The following excerpt from Rapid Ready sets out the intent to significantly add service to the local network in advance of rapid transit:

“However, just building rapid transit alone will not get Hamilton where it needs to be. Cities that have or are moving towards rapid transit are also making significant increases in base transit service levels in advance of rapid transit. For example, London, Halifax, Winnipeg and Victoria have all significantly increased regular transit service levels over the past few years in advance of recent or pending investments in bus rapid transit or light rail transit. In the case of Winnipeg, a city which is similar in size as Hamilton, service hours per capita are about 40% greater than Hamilton. Winnipeg recently opened the first phase of its bus rapid transit system and continues to incrementally expand its transit system.

It would not be productive for Hamilton to build light rail while maintaining 30-minute headways on regular transit routes serving LRT. Perhaps more importantly, early and significant investments in base transit levels are required to build towards rapid transit.”

The presentation of the Ten Year Local Transit Strategy, attached as Appendix D to this report, was received by the General Issues Committee on February 6, 2015. A number of comments were received at the February 6th GIC meeting and are summarized in Appendix F of this report.

Outstanding Business List Items

Transit on the Hamilton Mountain - On September 10, 2014 staff were directed to report to Committee/Council on transit services on the Hamilton Mountain. The adequacy of transit services on the Mountain are addressed in this report, specifically on Pages 25

and 36 of Appendix D. Related service enhancements are proposed to be implemented in 2015 to 2017.

HSR Low Performing Routes - On April 9, 2014 staff were directed to report back to Committee/Council on underperforming transit routes. Potential underperforming routes have been identified in Appendix H Proposed Service Standard Gap Analysis - Productivity and are to be addressed by the adoption and ongoing application of new Service Standards.

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

The Strategy contained in this report aligns with Strategic Objective 1.4 of the Corporate Strategic Plan to “Improve the City’s transportation system to support multi-modal mobility and encourage inter-regional connections”. This Transit Strategy also aligns with a number of other key policy documents, including:

- HSR Transit Operational Review (2010);
- Hamilton Transportation Master Plan (2007)
- The Big Move Regional Transportation Plan (2008);
- Improving Health By Design in The Greater Toronto-Hamilton Area - A Report of Medical Officers of Health In The GTHA (2014); and,
- Urban Hamilton Official Plan (2009).

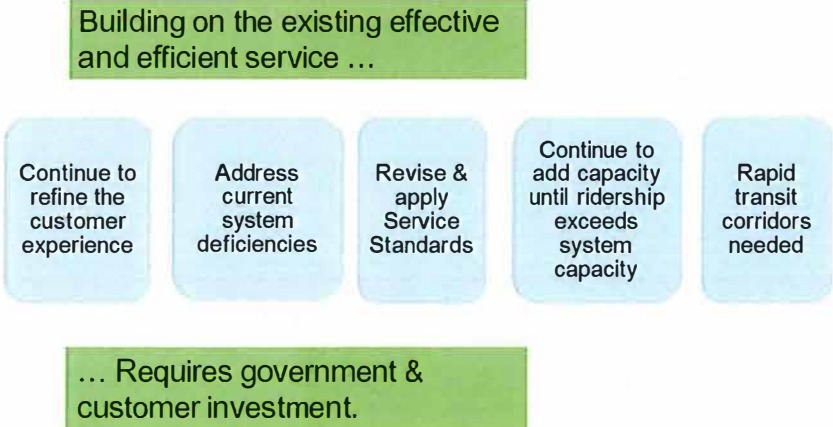
RELEVANT CONSULTATION

N/A

ANALYSIS AND RATIONAL FOR RECOMMENDATION

The following figure illustrates the Ten Year Local Transit Strategy as detailed in Appendix D and summarized in this report.

Figure 1 Ten Year Local Transit Strategy Conceptual Framework



Current System Deficiencies

HSR's ridership has been growing in recent years despite relatively modest investments by the City in public transit. In parts of the City, the supply of service has been outstripped by demand leaving numerous customers with extended wait times as they are by-passed by full buses. In addition, historical run times are now often inadequate given the loads being carried and lengthened dwell times to load mobility devices leading to sporadic service delivery. With the large headways HSR operates on many of the routes, this is particularly problematic in delivering a quality service and meeting customer expectations. Addressing current system deficiencies must be our immediate priority.

Using available data, such as passenger cordon counts, pass-by records and schedule adherence from AVL, a preliminary assessment has been undertaken to determine existing system deficiencies. The table on Page 25 of Appendix D illustrates the preliminary assessment of deficiencies based on "groups" of routes that work together. It should be noted that improvements to resolve these deficiencies may include a combination of measures, such as, increased frequency, addition of school extras (unscheduled buses added to relieve over-loading as a result of school related demand), added running time, added recovery time, route restructuring, etc. An on-going and more robust passenger count and analysis program will be required to design specific route improvements. To this end, automated passenger counters (APC) will be installed on buses.

HSR's ability to immediately correct deficiencies is restricted by the lack of resources: Operators, buses, and indoor bus storage space. Due to the long lead times to overcome these challenges, the earliest possible implementation date of new service is September 2015. To achieve this date, the deferred retirement of 10 buses for up to a year at a cost of \$500,000 will be required. In addition, buses will need to be parked outdoors at our Upper James facility until additional storage space can be built. A feasibility study will be undertaken in 2015 to investigate sites and a functional design (including reuse of 330 Wentworth Street) considering the longer term potential for rapid transit.

Current System Deficiencies Summary:

- First two years of Strategy (2015 - 2016);
- 50 FTEs & \$6M in operating costs;
- 25 buses & \$15.6M in capital costs;
- Delay the retirement of 10 buses as an interim measure at a cost of \$0.5M.

Service Standards

In order to objectively and transparently guide the process of service design going forward, Service Standards are required. Service Standards set the minimum (coverage, frequency and productivity) and maximum (span and loading) criteria for service design. Service Standards along with stakeholder input shape the system to meet customer expectations. A review of peers and best practices was undertaken to arrive at proposed Service Standards for Hamilton. Appendix G – Proposed Service Standards and Application contains additional detail on the Standards and how they will be applied. The following summarizes the standards and current gaps.

- Coverage (Minimum) - 90% of residents/workplaces within the Urban Transit Area are to be within 400 metres of weekday peak service. No deficiencies.
- Span (Maximum) - weekdays and Saturday 5:00 a.m. to 2:00 a.m. and Sunday 6:00 a.m. to midnight. No deficiencies.
- Frequency (Minimum): Generally, 60 minutes in the evening and 30 minutes during the day. Several routes do not meet minimum standards (see Page 36, Appendix D.)
- Productivity (Minimum) - 25 boardings per hour during weekday peak and 15 during all other times. Several routes have been identified as potentially underperforming (see Appendix H) and should be monitored.
- Loading (Maximum): 125% of seated capacity during weekday peak and 100% during all other times. Resolved in conjunction with Current System Deficiencies.

Application of Service Standards Summary:

- Third year of Strategy (2017);
- 12 FTEs & approx. \$1.1M in operating costs;
- 1 bus & \$0.6M in capital costs;
- Will be further detailed as part of a 2017 Annual Service Plan.

Keeping Pace with Growth

Once the current system deficiencies are addressed and Service Standards have been implemented (2017), HSR needs to keep pace with ridership growth by continually adding service on a regular basis sufficient to meet customer demands in accordance with the Service Standards achieved through Annual Service Plans. Capacity increases will progressively need to be augmented by operational improvements to improve the conventional transit system, such as the application of transit priority measures.

Residential and business growth is expected to occur at a rate of 1.3 and 2.8 percent annually, respectively. Therefore, natural system growth in the 2 percent range can be expected and has been planned for over the next 10 years. Growth trends and forecasts will be reviewed annually and adjustments can be made to the Strategy, if necessary, as Annual Service Plans are brought forward.

Modal Split

The form of growth desired for the City is one which will capture the benefits of public transit. The Transportation Master Plan (2007) includes targets to measure modal split changes and transit ridership as summarized on page 14 of Appendix D. Today, transit measures sit at approximately 45 rides per capita and 7% transit modal split. The City is lagging behind significantly in meeting its goals. Addressing current system deficiencies and continuing to keep pace with growth will only ensure the City doesn't fall further behind. To achieve an improvement in rides per capita and modal split, a service led strategy (rather than demand led) must be implemented to attract customers to transit.

Consistent with Rapid Ready, the full development of an express bus BLAST network, illustrated on page 40 of Appendix D, is the proposed strategy to begin this transition. While the express bus BLAST network has already begun to evolve based on demand and will continue to do so, completion of the network with at least a 10-minute headway on all lines will generate new customers for several reasons:

- Improved service levels throughout the urban area, resulting in more consistently reliable journeys; and,
- Connectivity - all major journey origins/destinations including inter-regional connections (i.e. GO) will be linked by the express bus network.

Even with a fully implemented express bus network, only approximately 50 rides per capita by 2024 will be achieved. In order to approach 80-100 rides per capita, higher order transit will be needed.

Network and Ridership Growth Summary:

- Year three to ten of Strategy (2017-2024);
- 274 FTEs & approx. \$5.8M in annual operating costs;
- 100 buses & \$71.4M in capital costs;
- Actions to increase corridor capacity such as transit priority measures at a cost of \$6M;
- New maintenance and storage facility is needed at a cost of \$200M;
- Detailed as part of future Annual Service Plans.

Rapid Transit

From a transit perspective, the move to higher order services usually occurs when volumes exceed system capacity or when congestion becomes a barrier to operating a reliable service. In accordance with the February 27, 2013 resolution (see Appendices A and B), the Council position was to grow the system and pursue LRT.

Customer Experience

Improvements to the customer experience will be an important component to growing transit and will center around three key elements:

- Improved customer communications;
- Improved density of shelters; and,
- Product differentiation of the BLAST network through branding.

ALTERNATIVES FOR CONSIDERATION

1. Do Not Adopt the Ten Year Local Transit Strategy & Reallocate Resources

The first alternative to this report is not to adopt this Strategy. This option would not provide a multi-year plan which is necessary to achieve City goals and objectives and to implement Rapid Ready. Furthermore, the status quo is not sustainable with the current level of resources so this would require the shrinking of the system to match the level of funding as well as the reallocation of resources to where they are most needed.

2. Adopt the Ten Year Local Transit Strategy Without the “Modal Split” Component

The second alternative is to adopt the Strategy, but to exclude the “Modal Split” component of Network and Ridership Growth, as described on page 11. While this would allow for transit network growth to keep pace with City growth, it would not enable a shift to transit from other modes of travel as envisioned in the Transportation Master Plan.

3. Adopt the Ten Year Local Transit Strategy with Alternative Fare Increases

The third alternative would be to adopt the Strategy with a revised fare increase, such as:

1. A base fare increase of \$0.15 in 2015 and in 2016 and \$0.10 in 2017 and 2018.
2. A base fare increase of \$0.15 in 2015 and \$0.10 in 2016 to 2018.

The table below illustrates the net levy impact of the above alternatives as compared to the proposed fare increase.

Table 3 - Net Levy Impact of Fare Increase Alternatives

Proposed Fare Increases	Net Levy Impact (\$000's)			
	2015	2016	2017	2018
25-10-10-10	-1108*	-270*	\$1,682	\$1,269
15-15-10-10	-498*	\$156	\$1,530	\$1,147
15-10-10-10	-498*	\$323	\$1,872	\$1,103
*Amount transferred to reserve. Net Levy Impact = \$0				

ALIGNMENT TO THE 2012 - 2015 STRATEGIC PLAN

Strategic Priority #1

A Prosperous & Healthy Community

WE enhance our image, economy and well-being by demonstrating that Hamilton is a great place to live, work, play and learn.

Strategic Objective

- 1.2 Continue to prioritize capital infrastructure projects to support managed growth and optimize community benefit.
- 1.4 Improve the City's transportation system to support multi-modal mobility and encourage inter-regional connections.
- 1.6 Enhance Overall Sustainability (financial, economic, social and environmental).

Strategic Priority #2

Valued & Sustainable Services

WE deliver high quality services that meet citizen needs and expectations, in a cost effective and responsible manner.

Strategic Objective

- 2.1 Implement processes to improve services, leverage technology and validate cost effectiveness and efficiencies across the Corporation.
- 2.3 Enhance customer service satisfaction.

Strategic Priority #3

Leadership & Governance

WE work together to ensure we are a government that is respectful towards each other and that the community has confidence and trust in.

Strategic Objective

- 3.2 Build organizational capacity to ensure the City has a skilled workforce that is capable and enabled to deliver its business objectives.

APPENDICES AND SCHEDULES ATTACHED

- Appendix A Special General Issues Committee Report 13-006
- Appendix B Letters from Andy Grozelle, Legislative Co-ordinator, Office of the City Clerk to Bruce McCuaig, President & CEO, Metrolinx and John Howe, Vice President, Investment Strategy & Project Evaluation, Metrolinx dated February 29, 2013
- Appendix C Council Motion June 26, 2013
- Appendix D PowerPoint Presentation Ten Year Local Transit Strategy February 6, 2015
- Appendix E Ten Year Local Transit Strategy Fleet Requirements
- Appendix F Additional Information from the General Issues Committee on February 6, 2015
- Appendix G Proposed Service Standards and Application
- Appendix H Proposed Service Standard Gap Analysis - Productivity