



Hamilton

# INFORMATION REPORT

<b>TO:</b>	Mayor and Members General Issues Committee
<b>COMMITTEE DATE:</b>	March 22, 2019
<b>SUBJECT/REPORT NO:</b>	Recalculation of 10 Year Local Transit Strategy (PW14015b) (City Wide)
<b>WARD(S) AFFECTED:</b>	City Wide
<b>PREPARED BY:</b>	Nancy Purser (905) 546-2424 Ext. 1876 Craig Webb (905) 546-2424 Ext. 1870
<b>SUBMITTED BY:</b>	Debbie Dalle Vedove Director, Transit Public Works Department
<b>SIGNATURE:</b>	

## COUNCIL DIRECTION

That the General Manager of Public Works be directed to recalculate the 10 Year Transit Strategy using actual ridership and population numbers rather than anticipated numbers, and report to the General Issues Committee of the impact during the 2019 Operating Budget process.

## INFORMATION

Following the approval of Rapid Ready on June 26, 2013, staff were directed by Council to report back in time for the 2015 budget process to the new City Council on a 10 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 (modal split) by 2025.

In March of 2015 Council approved the 10 Year (2015 -2024) Local Transit Strategy (PW 14015a). This strategy phased approach firstly addressed current deficiencies in the system (Years 1 and 2), application of service standards commencing in Year 3 of the plan with the remainder of the plan developed to accommodate ongoing growth and promoting ridership (modal split) through the introduction of additional express bus service on the BLAST corridors. The operating costs to support the phased strategy were funded through equitable increases in fares as well as the levy. The plan also included

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approximately \$302 million of unfunded capital which the majority was for buses for growth and modal split and an additional maintenance and storage facility.

Years 1 and 2 of the strategy were implemented as prescribed in 2015 and 2016 respectively. In the fall of 2016, the Federal government introduced the Public Transit Infrastructure Fund (PTIF) which provided a funding source for the buses required for Years 3 and 4 of the plan, however, the timing required to procure and receive the buses resulted in the plan being paused in 2017 with no increase in service hours and no fare increase. As a result, Year 3 of the original plan was implemented in September of 2018.

**Recalculation**

Table 1 below depicts the financial results of the 10 Year Local Transit Strategy from 2015 through to 2018 compared to actuals for service expenditures, fare revenue, net levy impact and ridership.

Table 1

2015-2018 10 Year Local Transit Strategy

	Service Expenditures(000's)	Fare Revenue (000's)	Net Levy (000's)	Ridership
Original Plan	\$14,045	(\$10,829)	\$3,216	23,403,024
Actual	\$8,260	(\$6,563)	\$1,697	21,522,471

The original plan was developed by first establishing the number of service hours required each year for the duration of the plan. Annual ridership projections were then calculated based on service elasticity from the additional service hours. Fare revenues were calculated next based on ridership and additional anticipated revenue from planned fare increases. The recalculation from 2019 to the end of the original plan (now 2025 based on the pause in 2017) has followed this same methodology however using actuals from 2015 to 2018 to inform assumptions moving forward. It is important to note that the assumptions for total service hours of 422,000, FTE's of 336, and fleet additions of 126 have not changed from the original plan.

The original plan identified an addition of 123,000 service hours by the end of 2018. However, due to the pause in 2017, only 84,000 service hours have been added, 39,000 service hours less than planned. Essentially, three years of the plan were executed and not the scheduled four years by the end of 2018.

Service elasticity informed the ridership calculations of the original 10 Year Local Transit Strategy. Transit industry standard prescribes that for every 1% increase in service hours, ridership will increase in the range of 0.5% to 0.7%. Upon reviewing the ridership calculations of the original plan, it was determined that the original plan used a very aggressive expectation of ridership growth at 0.8% service elasticity.

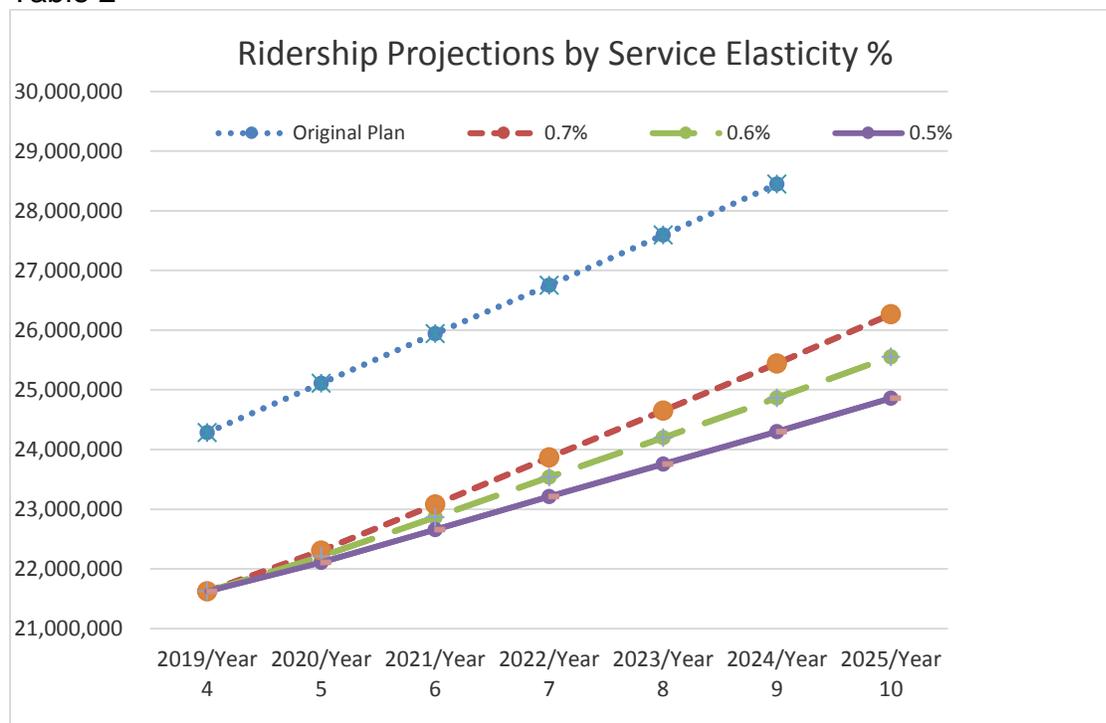
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The nationwide decline of transit ridership which occurred in 2015, the pause in 2017, the assumption that the first two years of the plan would generate ridership growth by addressing deficiencies, the 0.8% service elasticity forecast and the assumption that the increase in ridership in 2014 was the start of a trend to be the basis of all ridership calculations going forward all contributed to the ridership target not being met.

In order to assist in the recalculation of the remaining years of the plan, staff analysed the impact on ridership with the additional 34,000 hours that were added in September 2018 to determine the service elasticity. Based on the increase in ridership that we have experienced since the implementation of Year 3 in September 2018, initial analysis indicates service elasticity at the lower end of the service elasticity range closer to 0.5%.

Using the planned service hour increases starting in 2019 (Year 4) to the end of the 10 Year Local Transit Strategy (Year 10), staff have forecasted ridership projections using service elasticity based on three scenarios 0.5%, 0.6%, and 0.7%. This range is demonstrated in the graph in Table 2 below.

Table 2



Based on the graph above, Table 3 below provides the breakdown of service expenditures, fare revenue and net levy impact for the remainder of the 10 Year Local Transit Strategy and the associated ridership increases as well as the original plan projections.

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Table 3

2019 - End 10 Year Local Transit Strategy

	Service Expenditures(000's)	Fare Revenue (000's)	Net Levy (000's)	Ridership Increase
Original Plan*	\$37,400	(\$18,900)	\$18,500	5,042,575
Service Elasticity 0.7%	\$42,562	(\$23,285)	\$19,277	4,741,809
Service Elasticity 0.6%	\$42,562	(\$21,562)	\$21,000	4,031,581
Service Elasticity 0.5%	\$42,562	(\$19,879)	\$22,683	2,776,103

\* Original plan includes 39,000 less service hours due to pause in 2017

As a result of the pause in 2017, the recalculated service expenditure in Table 3 for 2019 and beyond is now higher as a result of the service hours being implemented a year later.

Reviewing the assumptions which informed the original plan and 5 months of ridership data since implementation of Year 3, staff believe that a more realistic achievable plan is based on using a 0.5% service elasticity as the reset forecast for the original plan. This results in an increase in ridership of 2,776,103 for the remainder of the plan.

Table 4 below demonstrates the anticipated impact of the full 10 Year Local Transit Strategy, recalculated using a service elasticity of 0.5%.

The recalculation provides for a decrease in service expenditures of \$623,000 which is due to a more refined FTE and operating cost calculations. Revenues are reduced due to reduction in projected ridership growth. In total the recalculation demonstrates an increase to the levy of \$2,664 million versus the original plan. Please see Appendix "A" for plan details by year.

It should also be noted that population information does not inform the calculations used to predict ridership.

Table 4

Original Plan Service Elasticity 0.8% versus Recalculated Service Elasticity 0.5% (000's)

	Elasticity 0.8%			Elasticity 0.5%			Impact B-A
	Plan (2015 - 2018)	Original Remaining Plan	Total A	Actuals (2015 - 2018)	Recalculated Remaining Plan	Total B	
Service Expenditures	\$14,045	\$37,400	\$51,445	\$8,260	\$42,562	\$50,822	-\$623
Fare Revenues	(10,829)	(18,900)	(29,729)	(6,563)	(19,879)	(26,442)	3,287
Net Levy	3,216	18,500	21,716	1,697	22,683	24,380	2,664

The service elasticity percentage will need to be revisited once we have a full year of ridership data to analyse further. As the original plan was developed based on decisions/assumptions at the time of its inception it was always contemplated that as we

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moved through implementation that adjustments to assumptions based on actuals would be made.

**APPENDICES AND SCHEDULES ATTACHED**

Appendix A – Recalculation of 10 Year Local Transit Strategy