

Request to Improve Transit along the Dufferin Street Corridor

Date: July 10, 2018To: TTC BoardFrom: Chief Customer Officer

Summary

The 29 Dufferin bus route is one of the top five busiest surface transit corridors in the TTC transit network carrying approximately 43,000 customers per weekday.

Recognizing the importance of providing high-quality transit service, especially along key corridors in the city of Toronto, and the future population and employment growth along the Dufferin Street corridor, City Council adopted a motion at their July 2016 meeting that directed TTC and City of Toronto staff to:

- a) Provide an overview of projected population growth and development activity along the corridor; and
- b) Identify possible transit improvements along the corridor including both service enhancements and transit priority measures.

This report provides a response to both of these directions.

In summary, residential and employment figures along the corridor have increased. From 2011 to 2016, the population along the corridor increased by approximately 10%, and employment increased by approximately 6%. The population and employment is expected to continue to grow by 17% and 13% respectively in the interim (up to 2031) based on developments currently in the pipeline.

Numerous service increases and reliability improvements have been made to the 29 Dufferin bus route in recent years to accommodate demand. Further improvements are planned for September and October 2018. The TTC will implement the following capacity improvements:

- Introduction of high-capacity articulated buses on Sundays;
- Routing change that provides full service from Wilson Station to the Exhibition Dufferin Gate loop and the elimination of the 29B short-turn branch; and
- Early implementation of the Board approved *Express Bus Network Study* recommendation of express bus service on the Dufferin Street corridor between Wilson Station and Dufferin Gate Loop.

The City and TTC are working on operational improvements along the corridor, including additional transit priority measures.

In the short-term, a very-frequent articulated bus route with a high-degree of transit priority will support the projected ridership based on developments currently in the pipeline.

In the longer-term, the TTC and City of Toronto must undertake a study to determine how transit demand can be met at full population and employment build-out. This study will be completed in the context of the *Official Plan Update Review*, and considering the future overall transit network improvements, including the impact of Regional Express Rail (RER), SmartTrack, Barrie Corridor improvements, including new stations and fare integration.

Recommendations

It is recommended that the TTC Board:

- 1. Approve full service on the 29 Dufferin between Wilson Station and Exhibition starting in October 2018. This includes the elimination of the limited 29B Dufferin peak-period service on Wingold Avenue, Lansdowne Avenue and Tycos Drive, in order to provide more service north of Tycos Drive over a busy part of the route.
- 2. Direct TTC staff to work with City staff to ensure that adequate transit priority measures and infrastructure is provided to facilitate the increase in the demand for transit resulting from new and planned developments for Dufferin Street and intersecting transit corridors.
- 3. Forward this report to the City of Toronto's City Planning and Transportation Services divisions.

Financial Summary

As seen in **Table 1**, the improvements along the Dufferin Street corridor will result in incremental costs of \$1,300,000 and are expected to generate \$529,000 in incremental annual revenue, resulting in a total annual net operating cost of \$771,000. Of the \$771,000 total annual net operating cost, \$200,000 can be attributed to the recommendation to provide full service on the 29 Dufferin between Wilson Station and Exhibition starting in October 2018.

Table 1:	Summary of Dufferin	Street corridor	improvements	estimated	costs and
revenue					

Annual Service Hours	Annual Service Kilometres	Annual Incremental Operating Cost	Annual Incremental Revenue	Net Annual Operating Cost
13,730	270,900	\$1,300,000	\$529,000	\$771,000

No additional funding is required for these improvements as funding for the capacity improvements on the Dufferin Street corridor was included in *Capacity Improvements* on Bus and Subway Services report that was approved by the Board on May 8, 2018.

The Chief Financial Officer has reviewed this report and agrees with the financial summary information.

Equity/Accessibility Matters

The TTC has made significant progress in moving towards providing barrier-free, accessible transit services to all customers. Presently, all TTC bus services are operated using accessible, low-floor buses. The TTC's *Easier Access Program* will make Wilson Station accessible in 2020, providing a new accessible connection to the 29 Dufferin route. All other remaining subway stations will be accessible by 2025, permitting all customers regardless of their level of mobility to use the TTC.

The service changes recommended in this report will support the Toronto Strong Neighbourhoods 2020 Strategy by increasing transit frequencies and reducing wait times along the northern portion of the corridor adjacent to the Downsview-Roding neighbourhood improvement area (NIA) by eliminating the 29B peak-period short-turn route. The changes also support the *City's Poverty Reduction Strategy and Seniors Strategy* objectives of making transit more accessible and attractive to everyone, as a means of improving access to employment, educational, and cultural opportunities.

Decision History

At its July 12-13, 2016 meeting, City Council passed motion MM20.17, by Chair Josh Colle, seconded by Deputy Mayor Ana Bailão. The motion requested City Planning and the TTC to report back on several items related to transit service and transit capacity along Dufferin Street, from Wilson Station to the Exhibition.

http://app.toronto.ca/tmmis/viewAgendaltemHistory.do?item=2016.MM20.17

At its June 15, 2017 meeting, the TTC Board approved the Express Bus Network Study.

http://www.ttc.ca/About_the_TTC/Commission_reports_and_information/Commission_ meetings/2017/June_15/Reports/6_Express_Bus_Network_Study_combined.pdf

At its May 8, 2018 meeting, the TTC Board approved the *Capacity Improvements on Bus and Subway Services* report which included approval and funding for express service on the Dufferin Street corridor.

http://www.ttc.ca/About_the_TTC/Commission_reports_and_information/Commission_ meetings/2018/May_8/Reports/7_Capacity_Improvements_on_Bus_and_Subway_Servi ces.pdf

Issue Background

The 29 Dufferin bus route, as shown in Figure 1, is one of the top five busiest surface transit corridors in the TTC network, with approximately 43,000 customer-trips every weekday.



Figure 1: Map of Existing 29 Dufferin Bus Route

The 29 Dufferin service is currently scheduled every three to seven minutes during the daytime, and every six to ten minutes in the evening. This route is part of the TTC's *Ten Minute Network* of high-frequency services, as such, the service is scheduled to operate every ten minutes or better at all times. Continuous 24-hour service is provided along the route, with the 329 Dufferin Blue Night route operating during the overnight hours, from about 2 a.m. to 5 a.m. The Dufferin Street corridor was also identified as a candidate for new express service in the *Express Bus Network Study* in 2017.

The Dufferin Street corridor is intersected by other major transit corridors including Wilson Avenue, Lawrence Avenue West, Eglinton Avenue West, St Clair Avenue West, Dupont Street, Bloor Street West, College Street, Queen Street West, and King Street West.

Recognizing the importance of providing high-quality transit service, especially along key corridors in the City of Toronto, and the future population and employment growth along the Dufferin Street corridor, City Council adopted a motion at their July 2016 meeting that directed TTC and City of Toronto staff to:

- a) provide an overview of projected population growth and development activity along the corridor; and
- b) identify possible transit improvements along the corridor including both service enhancements and transit priority measures.

Comments

1. Development Along the Dufferin Street Corridor

This section is in response to the City Council motion 1a., which asked for an overview of projected population growth, development activity, and resulting impacts on transit capacity along the Dufferin Street corridor.

In the City of Toronto Official Plan Map 2: Urban Structure Map, as shown in **Appendix A**, Dufferin Street is considered an *Avenue* from Eglinton Avenue West to Wilson Avenue and intersects many other *Avenues* such as Wilson Avenue, Lawrence Avenue West, Eglinton Avenue West, St Clair Avenue West, Bloor Street, College Street, Dundas Street West, and Queen Street West.

The City's Official Plan encourages growth to be directed towards *Avenues*, which are major arterial streets that often differ in terms of lot sizes and configuration, street width, existing uses, neighbouring uses, transit service and streetscape potential.

Dufferin Street from Wilson Avenue to Exhibition Place is also part of four Secondary Plans that detail local development policies to guide growth and change in a defined area of the city. The Secondary Plans are Downsview, Lawrence Allen, Dufferin Street, and Garrison Common North. Dufferin Street is considered a transit priority segment as part of the Official Plan's *Map 5 Surface Transit Priority Network*, as shown in **Appendix B**, and growth in transit capacity along the corridor can be supported with transit priority measures as noted later in this report. At this time, no higher-order transit is currently planned for the corridor but Dufferin Street intersects planned higher-order transit corridors such as Eglinton Avenue West and St. Clair Avenue West as noted in Map 4 *Higher Order Transit Corridor* of the Official Plan, as shown in **Appendix C**.

With the planned urban structure framework for Dufferin Street corridor noted above, residential and mixed-use developments are proposed and planned along the corridor. **Table 1** presents a breakdown of the potential population and employment of the corridor at full build-out.

Dufferin Corridor	2011	2016	Interim (up to 2031)	Potential at Full Build-Out (beyond 2031)
Population (residents)	149,300	165,700	194,100	237,700
Employment (employees)	67,900	72,000	81,300	92,500

Table 1: Population and Employment Growth

As shown in **Table 1**, from 2011 to 2016, the population along the corridor increased by approximately 10%, and employment increased by approximately 6%. Both are expected to continue to increase in the coming years. The residential and employment growth potential numbers are based on three data sets:

- 1. Projects currently in the pipeline, which will generally be completed by 2031 (i.e. the interim);
- 2. Soft site growth potential with no fix timelines beyond 2031 (i.e. additional growth at full build-out); and
- 3. Employment projections based on the background analysis for SmartTrack.

The population and employment is expected to continue to grow by 17% and 13% respectively in the interim (up to 2031). Please see **Appendix D** for a key map of active development projects.

The population and employment numbers are based on *Transportation Tomorrow Survey Traffic Zones*. These traffic zones are centred on Dufferin Street but extend as much as 1,400 metres to the east and west of the street, often including larger secondary plan areas, such as Downsview and Liberty Village. Therefore, the identified growth does not have direct frontage to Dufferin Street, and the potential transit ridership from planned and potential growth does not all directly impact Dufferin bus operation. As noted in **section 1.3**, a detailed transportation study and analysis of transit trip distribution is required to understand the long-term effect of population and employment growth at full build-out on Dufferin Street and other transit corridors shown in **Figure 1**.

2. Transit Service Improvements on Dufferin

This section is in response to City Council motion 1b, which asked for information on possible transit improvements along Dufferin Street, from Wilson Station to Dufferin Gate, including route changes. Since 2014, there have been numerous improvements to transit service along the Dufferin Street corridor. This includes:

- Introduction of high-capacity articulated buses from Monday to Saturday;
- Reliability improvements that include schedules improvements and routing improvements at the south end of the bus route; and
- Service improvements including adding 29 Dufferin to the 10-minute-or-better network and a northerly extension of the 329 Dufferin overnight route.

A full-account of recent service improvements can be found in **Appendix E**.

2.1. Short-Term Service and Operational Improvements

The following outlines short-term service and operational improvements on the Dufferin Street corridor including the introduction of high-capacity vehicles on Sundays, a new express service, a proposed change to the routing structure, and operational and infrastructure improvements.

There are other possible service changes that were investigated, but are not recommended. These can be found in **Appendix F**.

2.1.1. Introduction of High-Capacity Articulated Buses on Sundays

In September 2018, the TTC will begin to operate high-capacity articulated buses on the 29 Dufferin on Sundays and holidays to alleviate overcrowding throughout the daytime and early evening. With this improvement, articulated buses will operate seven days a week on the corridor. On Sundays and holidays, specifically, the route's capacity will increase up to 28 per cent throughout the day.

2.1.2. New Express Service

In October 2018, the TTC will implement a new express service on the Dufferin Street corridor to alleviate crowding and to improve travel times for customers.

The Dufferin express service was included in the *Express Bus Network Study* which was approved by the TTC Board at its June 15, 2017 meeting. The TTC Board approved funding to implement the Dufferin express service as part of the *Capacity Improvements on Bus and Subway Services* report at its May 8, 2018 meeting.

The new Dufferin express bus service will operate between Wilson Station and the Dufferin Gate Loop with limited stops only at major intersections and nodes. The Dufferin express bus service is ultimately planned to operate seven days a week. At full implementation, the express service will operate on weekdays between

approximately 6 a.m. and 10 p.m. and on weekends between approximately 8 a.m. and 7 p.m.

The Dufferin express service is expected to add 10% additional capacity on the corridor, save customers up to 15% in travel time, as compared to the local service, and is projected to be used by approximately 14,200 customer-trips each weekday. **Figure 2** shows a map of the new Dufferin express bus service.



Figure 2: Map of New Dufferin Express

2.1.3. Routing Change – Full Service Between Wilson Station and Exhibition

In October 2018, in conjunction with the new express service, the TTC proposes to provide full service between Wilson Station and Exhibition by removing the "29B" short-turn service to better serve demand on the northern section of the route.

During the peak periods from Monday to Friday, two services are operated on the 29 Dufferin bus route. Half of the service, the "29A", operates over the entire route, from the Exhibition to Wilson Station, while the other half of the service operates from Exhibition to Tycos Drive, just south of Lawrence Avenue. This "29B" peak-periods-only short-turn service to Tycos Drive turns around on three commercial streets, Wingold Avenue, Lansdowne Avenue, and Tycos Drive. This service is a remnant of past ridership patterns on the route. It was introduced several decades ago when ridership on the north part of the route was lower than on the south part. With the change in ridership and development patterns, it is appropriate to re-evaluate whether the short-turn service should continue to be provided, or whether all peak period service should operate to Wilson Station. The 29B service on Wingold, Lansdowne, and Tycos is shown on the map of the route, in **Figure 1**, above.

The 29B service on Wingold/Lansdowne/Tycos is used for approximately 220 customer-trips each weekday that begin or end at six bus stops that are only served by the 29B service. All of these stops are within 400 metres of alternate TTC service, either the main 29 Dufferin service on Dufferin Street, or the 14 Glencairn route, which connects with the 29B Dufferin service.

Removing the 29B service, and operating all the buses on the main service to Wilson Station, would make service less convenient for these 220 customer-trips each day, as they would have a longer walk to the nearest bus stop. Service would be improved for 5,150 customer-trips each day that are now made on the main part of the route north of Tycos Drive, as these trips would be made with a shorter wait of between two and three minutes.

Overall, the change in weighted travel time of the benefit of a shorter wait is greater than the inconvenience of a longer walk. The change would make service better for customers, and for this reason it is recommended.

Figure 3 shows the stops to be removed on Tycos Drive, Lansdowne Avenue, and Wingold Avenue.

It is recommended that the TTC Board approve full service to operate on the 29 Dufferin service.



Figure 3: Map of Stops to be Removed on the 29B Dufferin

Legend



400m catchment area

- stops to be removed
- other TTC stops

- Places of worship
- Community centres
- 2 Schools

- 0 Senior recreational centres
- Senior residences

2.1.4. Surface Transit Operational Improvement Study (STOIS)

The Surface Transit Operational Improvement Studies, or STOIS, form a joint study program being carried out by City of Toronto Transportation Services and TTC staff, supported by consultant's expertise. The studies began in 2016, and are looking at changes to traffic and transit operations on selected corridors to improve transit service. Dufferin Street corridor is included in the first phase of the study together with Wilson Avenue and Bathurst Street. Future phases will examine other corridors with high ridership, congestion, and reliability concerns.

As part of the studies, a wide-range of transit priority measures and other operational changes are being considered. These include:

- Transit Signal Priority (TSP): repairs, activation, expansion and refinement;
- Other signal timing changes to improve transit operations: both along the Dufferin Street corridor, and with intersecting routes. There is a parallel initiative by Transportation Services staff consisting of Signal Co-ordination Studies focused on overall traffic flow on major arterials;
- Transit Stop Consolidation/Relocation: accessibility improvements at bus stops are being undertaken through a separate TTC program;
- Queue-Jump-Lanes: to permit buses to bypass queues at congested intersections and serve bus stops with less delay while following the queue jump lane evaluation framework developed by City and TTC staff. Modelling and analysis are targeted at congestion hotspots where other interventions are not seen to be effective;
- Extended Peak-Hour Restrictions/Enforcement Strategy: possible changes to no stopping and no parking regulations to improve transit service, including better enforcement of existing restrictions. For example, the section of Dufferin Street south of Bloor Street is being considered for extended peak-period restrictions, but will undergo further analysis and consultation;
- Schedule/Headway Updates: ongoing monitoring of service levels on the bus route, recommendations for running-time changes, and increases to service where justified by ridership;
- Proof of Payment/All-Door Boarding: consideration of all-door boarding and proof-of-payment on this route, similar to the introduction of this practise on streetcar routes, subject to TTC board approval and funding for Transit Fare Inspectors;
- Modifying Shared-Turn Operations (Additional Turn Prohibitions/Lanes): detailed review of vehicle-turning movements at significant locations, and consideration of changes to reduce delay for transit customers; and
- Bus/HOV Lanes: a high-level evaluation of whether bus-only or high-occupancy vehicle lanes are physically possible and/or can be justified in sections where other operational interventions are inadequate for improving transit performance.

The work involves detailed traffic and transit operations modelling, and includes extensive field operations and data collection.

2.2. Other Short- to Medium-Term Initiatives

The following outlines other short- to medium-term on-going transit-related initiatives that may improve transit service for customers along the Dufferin Street corridor.

2.2.1. Protection for Bus Service Improvements at Dupont Development

A major redevelopment is proposed for the site of the Galleria Mall (1245 Dupont St.), at the southwest corner of the Dufferin Street/Dupont Street intersection. As part of the usual review of the development proposals, TTC and City staff have identified five modifications to existing and proposed streets within or adjacent to the development, to ensure that improved transit service can be provided.

- A new southbound far-side bus bay on Dufferin Street south of Dupont, which will improve bus operations and effectiveness of existing TSP;
- Supporting a new northbound left-turn lane already proposed by the developer at the Dufferin Street and Dupont Street intersection;
- Supporting the developer's suggestion to protect for bus service on internal site roadways;
- Installing TSP on all new signals associated with the development; and
- Requesting funds for TTC to install TSP at two other signals on Dupont Street near the development.

These proposed conditions for the development have been discussed and agreed between TTC staff and City of Toronto staff, and will be included in the City's condition of approval for the development.

2.2.2. Other Development Applications

The TTC reviews all development applications which may have an impact on TTC services, checking factors such as impacts to existing or planned transit stops, opportunities to enhance transit infrastructure and potential mitigations for traffic impacts. Two major developments along the Dufferin Street corridor that the TTC is reviewing are at 90 Croatia Street near Dufferin Street and Bloor Street, and at Yorkdale Mall.

2.2.3. Dufferin Street Secondary Plan

The *Dufferin Street Secondary Plan* has developed transit-supportive policies in Section 7.3 Transit and identified a portion of Dufferin Street as a transit priority segment in Map 36-6 Public Street Plan. TTC and City staff will continue to work with relevant agencies and stakeholders to ensure that improved transit service can be provided following the framework noted in the Secondary Plan.

2.2.4. Ability to Add Service as Warranted by Demand

In addition to the route changes and improvements noted above, TTC staff will continue to closely-monitor ridership and service levels on the 29 Dufferin bus route. This monitoring is carried out regularly on all TTC routes, and includes collecting detailed counts of customers several times per year, and the adjustment of service levels to match any significant changes in ridership. This process is flexible enough to deal with increasing ridership as a result of new developments, and also seasonal variations in ridership demand. The addition of service is subject to the availability of funding and

vehicles in the fleet, although some service increases may be possible by reallocating service from other, less-busy routes.

During the peak periods on weekdays, the combined service on the Dufferin Street corridor will be scheduled to operate every four to five minutes with the capacity improvements to be implemented in October 2018.

In theory, bus service may be increased to a bus every three minutes, if warranted by increasing ridership levels. This means there is a capability to add up to 30 per cent more capacity to the route by simply adding more buses to the existing service. However, transit priority, infrastructure and operational improvements are necessary to support a reliable transit service at this frequency.

2.3. Long-Term Improvements

In the short-term, a very-frequent articulated bus route with a high-degree of transit priority will support the projected ridership based on developments currently in the pipeline.

In the longer-term, the TTC and City of Toronto must undertake a study to determine how transit demand can be met at full-population and employment build-out. This study will be completed in the context of the *Official Plan Update Review*, and considering the future overall transit network improvements, including the impact of Regional Express Rail (RER), SmartTrack, Barrie Corridor improvements including new stations and fare integration.

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Attachments

- Appendix A: Urban Structure Map
- Appendix B: Higher Order Transit Corridors
- Appendix C: Surface Transit Priority Network
- Appendix D: Dufferin Bus Corridor Key Map
- Appendix E: Recent Service Improvements
- Appendix F: Other Service Improvements Studied But Not Recommended







Appendix B: Higher Order Transit Corridors



Appendix C: Surface Transit Priority Network



Appendix D: Dufferin Bus Corridor Key Map

Appendix E: Recent Service Improvements

The TTC has made numerous improvements over the last 3-5 years to improve the reliability and increase the capacity of bus service on the 29 Dufferin bus route.

High-Capacity Articulated Buses Introduced on Dufferin

In 2013-2014 the TTC purchased 153 high-capacity 18-metre long articulated buses. These buses have a planned peak-period capacity of 77 people, compared to 51 people for standard 12-metre buses. Articulated buses were assigned to the 29 Dufferin bus route starting in May 2014. The buses were used to increase the scheduled capacity of the route by between five and twenty per cent. The larger vehicles also help to reduce crowding at busy times, as they have a higher capacity to absorb short term increases or localised surges in ridership.

Service Reliability Improvements

Extensive studies of reliability and operations along the route were carried out by TTC staff in the fall of 2014. These were intended to identify the sources of delays, develop improved ways of managing and supervising the service, and determine a more-accurate scheduled running time for the route. This work resulted in revised schedules that were implemented in March 2015, with additional running time, additional buses, and a revised and simplified route structure. The new schedules resulted in improvements in reliability and on-time performance, improving from 50%-55% to 75-80%, and these improvements have been sustained since then. The service continues to be monitored closely, and further minor adjustments have been made since 2015.

Minor Route Changes at the South End

As part of the service reliability work, a change was made to the structure of the route at the south end. At busy times of the week, when warranted by ridership levels, buses on the 29 Dufferin bus route are extended south and east of the Dufferin Gate Loop to operate through Exhibition Place to the Princes' Gates. Previous to the service reliability work, only every other bus was extended over this routing to the Princes' Gates, with the other buses terminating at Dufferin Gate Loop. As a result of a service reliability study, the schedule has been changed, and all buses are now scheduled to operate over the extended routing to Princes' Gates. By having only one terminus location at any one time at the south end of the route, more-reliable and predictable service can be operated.

2015 Service Improvements on Dufferin

Several significant service improvements were made across the TTC system in late 2015, as part of a major-investment in additional transit service by the City of Toronto. These service improvements included the introduction of a network of routes with service every 10 minutes or better, all day. As part of this investment, the frequency of service on the 29 Dufferin bus route was improved in the evenings on Saturday, Sunday, and holidays so that service on the route at all times of the week operates every 10 minutes or better.

Also introduced as part of the major 2015 investment in transit service was a northerly extension of the 329 Dufferin overnight route from its previous terminal at Wilson Station to Sheppard West Station and to Steeles Avenue. This route extension provided new north-south overnight service to Dufferin Street corridor north of Wilson Avenue.

Additional Scheduled Time for Metrolinx Construction

In November 2016, temporary changes were made to the schedules of the 29 Dufferin bus route, to reduce delays caused by Metrolinx construction of Fairbank Station on Line 5 Eglinton. Construction of the station, located at the Dufferin/Eglinton intersection, requires temporary lane reductions and other road restrictions. Additional time has been added to the schedules of the 29 Dufferin bus route to mitigate against delays resulting from the station construction. These temporary service changes are funded by Metrolinx, and the additional time is planned to be removed in 2019 when the lane restrictions are expected to be eased. Ongoing monitoring is in place to ensure that the additional scheduled time is appropriate for the construction conditions.

Appendix F: Other Service Improvements Studied But Not Recommended

Connecting 29 Dufferin Bus Route to the Line 1 North-West Extension – Not Recommended

The northwest extension of Line 1 Yonge-University subway to Finch Avenue, York University, and York Region, will open in December 2017. As part of the changes to bus routes that could connect to the new subway extension, TTC staff considered changes to the north end of the 29 Dufferin bus route. These included an extension of the 29 Dufferin bus route to Sheppard West Station; and combining the 29 Dufferin bus route with the 105 Dufferin North route, which serves Dufferin Street north of Sheppard West Station. None of these service changes were recommended by staff, as they would not meet the TTC's service standards. The extension of the route between its present terminus at Wilson Station and Sheppard West Station would duplicate the existing subway and bus service on the 104 Faywood route, and would attract few new customers to the TTC. The 29 Dufferin and 105 Dufferin North routes have considerably different ridership demands, and so combining the two routes would lead to inefficient use of bus resources.

Splitting the 29 Dufferin Bus Route at Dufferin Station/Bloor Street – Not Recommended

The 29 Dufferin bus route is one of only a few major TTC routes that does not terminate at a Line 2 Bloor-Danforth station, but instead operates through, with service provided both north and south of Bloor Street. Unlike many stations on Line 2, Dufferin Station does not have an off-street bus terminal. When Line 2 was being designed, in the early 1960s, Dufferin Street was not the major-transit corridor that it is today, and the purchase of property for a bus terminal could not be justified. This decision was revisited in the late 2000's when planning was being done for the substantial-rebuilding of the station and its outfitting with elevators, and consideration was given to where an off-street bus terminal could be located, if property were to become available. This option was not pursued further at that time, because the cost of a bus terminal could not be justified.

The next two nearest north-south routes, 63 Ossington and 47 Lansdowne, also operate through their stations on Line 2, similar to the 29 Dufferin bus route. As shown in Table 1, below, the through ridership on 29 Dufferin – that is, the number of customers who stay on the bus at Dufferin Station – is higher both in total numbers and in proportion than on the parallel routes. Approximately 6,700 customer-trips each day travel through Dufferin Station without alighting from the bus, and these make up 42% of total ridership on the route at Dufferin Station. The percentage of through riders on 63 Ossington is 32% and, on 47 Lansdowne is 30%. This indicates that there is a relatively-high demand for through travel along Dufferin Street past Bloor Street, and that this demand is higher on Dufferin Street than on the nearby Ossington Avenue or Lansdowne Avenue.

Table 1: Riders Travelling Past Line 2 Station at Bloor Street – Typical Weekday					
	Riders Per Day	Percent Travelling Through			
29 Dufferin	6,700	42%			
63 Ossington	3,000	32%			
47 Lansdowne	1,900	30%			

A second important indicator of whether the route could be split into separate north and south sections at Bloor Street is the relative level of peak-direction ridership at busy times both north and south of Bloor Street. If there is a significant-difference in demand between the north and south portions of the route, then splitting the route would allow different service levels on each part of the route to be more closely tailored to ridership, compared to the present situation, where the same service level is operated both north and south of Bloor Street. Table 2, below, shows that peak-point, peak-direction, ridership at busy times is relatively similar both north and south of Bloor Street. There would be no ability to significantly-vary the service levels on a split service, as the demand is relatively equal over both the north and south parts of the route.

Table 2: Peak-Point, Peak-Direction Ridership, North and South of Bloor Street 29 Dufferin, Typical Weekday						
	Section of Route	Peak Point Location	Riders in Busiest Hour	Ridership by Section, as % of Total		
Morning Peak	North of Bloor	Shanly Street	930	53%		
	South of Bloor	Dufferin Park Ave	820	47%		
Midday	North of Bloor	Shanly Street	510	46%		
	South of Bloor	Dufferin Station	610	54%		
Afternoon Peak	North of Bloor	Dufferin Station	850	53%		
	South of Bloor	Dufferin Station	760	47%		

Because up to 6,700 customer-trips each day would be inconvenienced by a split service; because there is no substantial difference in ridership demand north and south of Bloor Street; and because there is no suitable location nor funding for a bus terminal near Bloor Street; it is recommended that service on the 29 Dufferin bus route not be split into separate north and south portions at Dufferin Station on Line 2.