

Metro All-Night Transit Service



**Toronto Transit
Commission**

SERVICE PLANNING
DEPARTMENT
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METRO ALL-NIGHT TRANSIT SERVICE

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Service Planning Department

Toronto Transit Commission

EXECUTIVE SUMMARY

INTRODUCTION

"All-Night" transit services refer to those services which operate between roughly 1:00 AM and 6:00 AM, the hours during which the majority of Metropolitan Toronto residents are asleep, and activity within the community is minimal. The TTC has provided all-night service on selected routes in Toronto since 1921, and this all-night service grid has changed very little since then.

In the Service Standards Applications between 1982 and the present, various municipal council submissions have requested expansion of the all-night service grid beyond its current boundaries. This paper summarizes research which has been done on this subject since 1982.

BACKGROUND

The existing all-night transit service grid is located primarily within the central area of the City of Toronto (See Exhibit E-1). In 1974, the Commission considered changes and expansion to the grid but, because of certain community concerns and budgetary constraints, only modest extensions were made to those services which replace the subways overnight.

In response to more recent municipal requests for expansions to the all-night service grid, research began in 1982 regarding the market for, and possible expansion of, such services. The research revealed six major facts:

1. Demand on all-night services operating exclusively within the City of Toronto's central area has generally been declining since 1973;
2. Demand on services operating within, or feeding, the municipalities of Etobicoke, North York, and Scarborough has generally been increasing;
3. Demand for all-night services is concentrated in the 1:00 AM to 2:00 AM and 5:00 AM to 6:00 AM time periods;

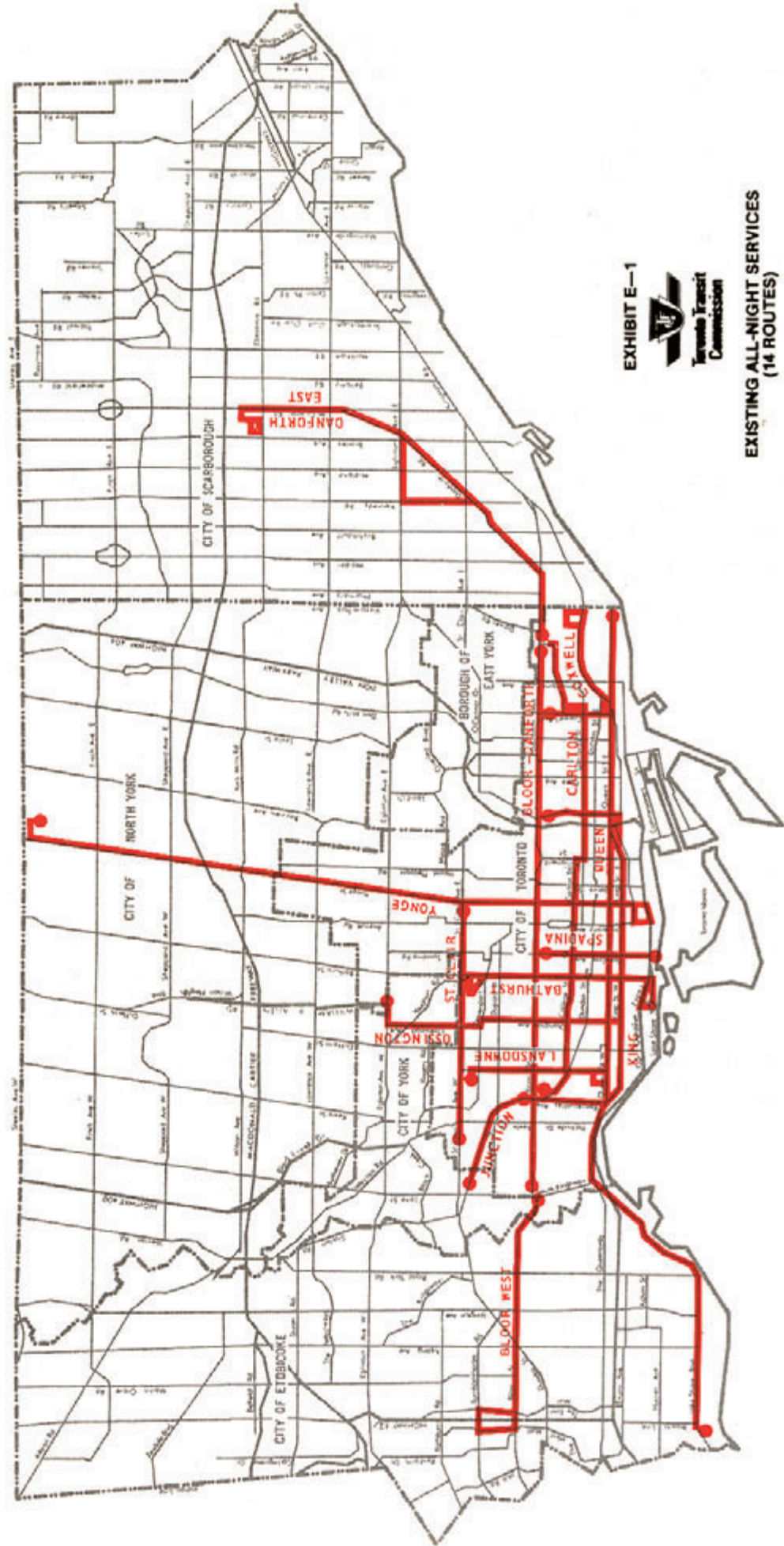


EXHIBIT E-1



**EXISTING ALL-NIGHT SERVICES
(14 ROUTES)**

● INDICATES OFF-STREET LOOP

4. Ridership volumes on late evening services (between approximately 10:00 PM and 2:00 AM) are low enough on certain routes that service frequencies could be reduced selectively in that time period in order to free up resources which could be used to provide a more comprehensive Metro-wide all-night service grid;
5. The existing all-night service grid is denser than is justified by current ridership, and some of these routes could be eliminated without causing significant inconvenience to current all-night riders; and
6. The majority of all-night transit riders are transit dependent; that is, transit is their primary means of travel.

A NEW APPROACH TO ALL-NIGHT TRANSIT SERVICES

The proposed new Metro-wide all-night transit services grid (see Exhibit E-2) was developed in accordance with the TTC's mandate to make transit services as accessible and convenient as possible to all Metro residents, subject to financial viability; in recognition of the trend of decentralization of population, development, and travel patterns throughout Metro; and in response to municipal requests for a more equitable and fair distribution of all-night transit services throughout Metro.

The all-night routings would be evenly spaced throughout Metro in order to bring such services within a maximum 15-minute walk of the majority of Metro residents. All routes would operate on a 30-minute service frequency, with the exception of the busy Yonge all-night bus, which would retain its current 15-minute service frequency. The all-night service grid would operate between approximately 1:00 AM and 6:00 AM. Easy-to-remember clockface schedules and timed-transfer connections would be used where possible in order to minimize waiting times at or between routes.

In order to achieve a more equitable and fair

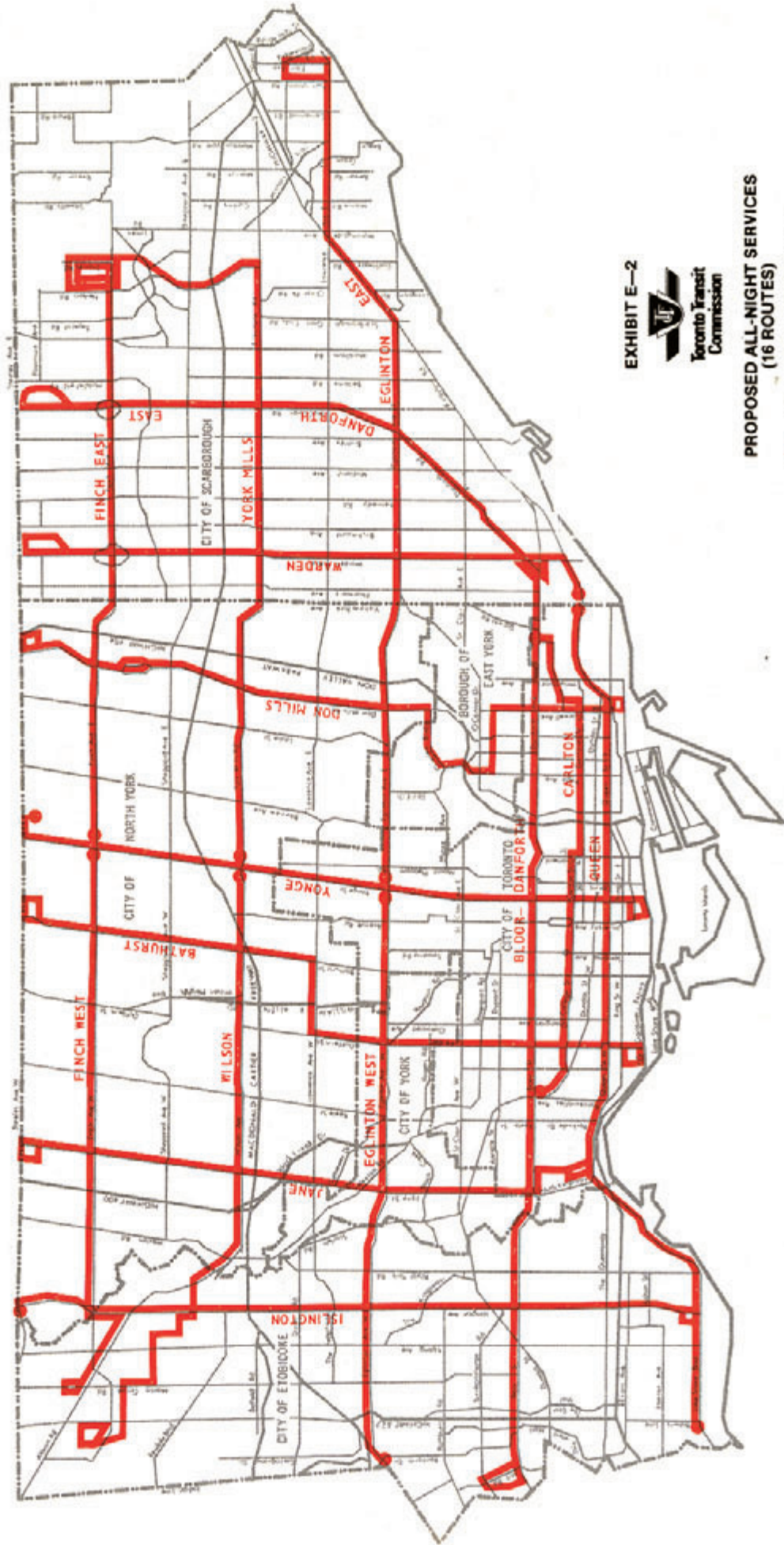


EXHIBIT E-2



**PROPOSED ALL-NIGHT SERVICES
(16 ROUTES)**

● INDICATES OFF-STREET LOOP

distribution of all-night transit services throughout Metro, and to implement the proposed new Metro all-night service grid at no additional cost, it would be necessary to re-allocate resources from existing under-utilized late evening or all-night services. Specifically, seven existing all-night transit routes, which serve primarily riders within the City of Toronto, and which are closely-spaced and under-utilized, would be eliminated. These services would still operate until about 2:00 AM and would resume service at about 5:00 AM, in order to continue to serve the majority of their current riders. Also, late evening service frequency reductions would have to be implemented on thirty routes throughout Metro which experience low passenger volumes after 10:00 PM.

The elimination of the specified all-night services would affect approximately 350 boardings on a typical weeknight. When the impact of the proposed service frequency reductions is added to this impact of the service eliminations, the overall impact is possible inconvenience to up to a maximum of 5300 boardings per weeknight. However, detailed analysis of ridership patterns on all of the subject routes indicates that about 2100 boardings per weeknight would typically experience some degree of inconvenience, of which, in the worst case, up to 1100 per weeknight might actually choose to no longer use the revised services still available to them.

In summary, between 350 and 1100 boardings might be lost from the TTC system per weeknight as a result of all of the proposed service changes. This may be contrasted with the projected possible 400 to 2300 new boardings which may be attracted per weeknight to the new all-night transit services which would be introduced in the proposed new grid. (This estimated range of new boardings was calculated by assuming that each new route would attract somewhere between the lowest single-route volume of riders currently observed on the all-night services and the average volume of riders currently observed on

all all-night services excluding the busy Yonge and Bloor-Danforth All-Night Bus routes). Additionally, the proposed new grid would bring all-night transit services within a maximum 15-minute walk of approximately 86 per cent of Metro Toronto's population, as opposed to 45 per cent under the current grid (an increase of approximately 91 per cent). Also, some of the "inconvenienced" existing boardings may actually benefit from the new all-night service routes because the new routes may be closer to these riders' origins and destinations.

The proposed new Metro all-night transit service grid would introduce eleven new all-night transit routes throughout Metro. A significantly larger number of commercial and institutional facilities (major office complexes, hospitals, police stations, bus terminals) would also be made accessible by all-night service. The expanse of the new grid's catchment area and the greater number of transfer opportunities between routes would make virtually all of Metropolitan Toronto accessible by all-night transit service.

The re-allocation of resources from existing under-utilized late evening and all-night services would introduce a more equitable and fair distribution of all-night services throughout Metro Toronto and would make it possible to implement the proposed new Metro all-night service grid at no additional operating cost. If a more dense all-night network or more frequent all-night services were desired, it would be necessary for Metropolitan Toronto Council to provide a special designated subsidy to cover any additional operating costs.

SUMMARY AND RECOMMENDATIONS

The proposed changes would result in a more equitable and fair distribution of all-night services throughout Metro by establishing a truly Metro-wide all-night transit service grid. This proposed grid would better serve Metro's dispersed residential and employment areas, at no additional operating cost

to the Commission. Therefore, it is recommended that:

- 1) The existing all-night service network be revised and expanded, at no net additional operating cost, as detailed herein;
- 2) Service levels be selectively reduced on existing regular routes which have surplus capacity during the late evening period (i.e. approximately 10:00 PM to 2:00 AM), as detailed herein;
- 3) The resources saved through the late-evening service reductions and the resources currently applied to all-night transit service be re-allocated to the proposed new Metro all-night transit grid;
- 4) The new Metro all-night grid be operated with a minimum 30-minute level of service between the hours of approximately 1:00 AM and 6:00 AM, seven nights per week; and
- 5) The implementation of the new Metro all-night transit grid be undertaken on an experimental basis, following which it would be subject to a post-implementation review and evaluation.

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METRO ALL-NIGHT TRANSIT SERVICE

1.0 INTRODUCTION

"All-night" transit services refer to those services which operate between roughly 1:00 AM and 6:00 AM, the hours during which the majority of Metropolitan Toronto residents are asleep and activity within the community is minimal. All-night transit services come into effect after late-evening services cease to operate. The "owl" services, as they are known, serve, to a great extent, those involved in the provision and enjoyment of Metro Toronto's leisure and entertainment facilities.

The Toronto Transit Commission has provided all-night service on selected routes in Toronto since 1921 when the Commission was established. With the exception of a brief period in 1974, very little analysis or discussion of the TTC's all-night service network occurred until 1982.

In the 1982 Service Standards Application, the Municipality of East York submitted a request for all-night service on the Don Mills route. Since then, several other requests for all-night transit service have been received. Upon review of these requests, it became apparent that the formal route evaluation procedures in the Service Standards Process were not applicable to all-night service. As a result, investigation of possible all-night service standards was initiated.

Research began in 1982 to determine how best to assess the viability of all-night service proposals. Among other things, this work revealed that, while all-night service provides a valuable community benefit, the current network is out-of-date

relative to changes which have occurred in Metro's demographic, land use, and travel behaviour patterns.

This paper presents the results of analyses which have been done over the last five years and recommends a completely revised all-night service network which is designed to provide benefits to the whole of the Metro community, while using existing transit resources in a more efficient manner than the current all-night network.

2.0 BACKGROUND

The TTC currently operates fourteen all-night services: four streetcar routes, three trolley coach routes and seven bus routes (see Exhibit 1). Most of these services coincide with their daytime routings. The Bloor/Danforth All-Night and Yonge All-Night Bus routes replace the subway, operating only when the subway is closed. Overall, the all-night services are concentrated in the central area of the City of Toronto. This network has remained essentially unchanged since the 1920's.

In June, 1974, ridership levels on the all-night services were reviewed, resulting in a recommendation to eliminate the Junction, Lansdowne, Spadina and Coxwell routes because of extremely light riding on these services. At the same time, various proposals for a comprehensive expansion of the network into suburban areas were made by TTC staff and area municipalities. These proposals included service on Finch Avenue, Eglinton Avenue and Kennedy Road. However, due to

budgetary constraints and objections from local interest groups regarding the removal of existing lightly-patronized services, most of the proposed changes were not implemented. Of the few changes that were made at that time, the most noteworthy were the extension of the Yonge All-Night Bus to Steeles Avenue from Glen Echo Loop (Yonge Street, north of Lawrence Avenue) in March, 1974, and the addition of the Danforth East and Bloor West All-Night Bus routes in September, 1974.

In response to requests for all-night service from the local municipalities, and as part of the ongoing revision of the 1977 Service Standards Base Document, draft all-night service policies were prepared during 1982. Nine service design guidelines and specific new service standards for all-night services were developed.

The proposed evaluation procedures would have assessed proposals for additional all-night service routes in terms of projected revenue/cost ratios and projected average trip ridership. Under the proposed standards, all-night service proposals would have been approved if the estimated values for both measures exceeded the then-current all-night system averages. However, because of the difficulty in assembling all-night ridership statistics and in projecting all-night ridership for proposed new routes, it was concluded that these guidelines and standards were impractical, and they were not recommended for incorporation into the TTC's Service Standards Program.

As a result of the lack of ridership and economic information regarding all-night services, as identified in the 1982 research, the TTC undertook limited data collection during the Summer and Fall of 1983. Specifically, staff observed first hand the ridership on all fourteen all-night service routes during the period August 15th to August 22nd. Also, drivers on the all-night routes were interviewed to obtain information on general ridership patterns, operations, problems, etc. Subsequently, during October and November, 1983, week-long boarding counts were undertaken by drivers on all fourteen all-night service routes, in order to collect comprehensive information on ridership.

The count data showed that the majority of all-night trip-making occurred in the first, or earliest, hour (1:00 AM to 2:00 AM) of the all-night service schedule and in the last hour (i.e. 5:00 AM to 6:00 AM) of the schedule. Overall, ridership levels on the all-night services were low, and it became apparent that the cost-recovery ability of these services was limited. These findings resulted in the development of two possible rationales and designs for operating all-night service:

1. As a ridership- or economically-justified service only, where very late evening and very early morning service would be provided by adding an hour or more of operation to the existing late evening and early morning service on existing regular routes. Coverage of even more hours in the all-night period would be accomplished through the introduction of individual additional trips, each to be evaluated based on observed ridership on the existing first or last trips, as specified in the appropriate Service Standards guidelines; or

2. As a community service, providing a limited-coverage grid of all-night routes, with a minimal level of service. This would be operated even if ridership levels could not justify operation of such services.

To determine which alternative would be best, another ridership survey was carried out on the all-night routes in December, 1984. The survey determined that 75 to 80 per cent of all-night service riders are transit dependent, thus supporting the view that all-night transit should be viewed as a community service, as described in Option 2. The survey also confirmed that more than 70 per cent of trips occurred in the beginning and end of the all-night period, indicating that Option 1, extending the hours of service of regular routes, might be more efficient in serving this demand than Option 2, operation of a basic grid of all-night services.

During the Spring and Fall of 1985, drivers were asked to take additional ridership counts during the late evening on selected existing routes. The counts showed relatively low volumes of late evening (10:00 PM to 2:00 AM) ridership, indicating that there was enough extra capacity on those late-evening regular route services to allow re-allocation of some of those existing resources to provide even later and earlier hours of operation on late-evening and early-morning regular services, respectively. That is, late-evening service levels could be reduced and still comfortably accommodate existing rider demand; and specific trips on a given route could be re-allocated to later times to extend the hours of service on that route, without incurring additional

costs. It was found that, using this re-allocation approach, the hours of operation of some routes could be extended to operate all night. On others, resource re-allocation would not provide all-night service. These findings, however, formed the basis of a solution to the earlier-submitted municipal requests for all-night services throughout Metropolitan Toronto.

Instead of re-allocating a route's resources to later/earlier times on the same route, the resources could be used effectively by pooling them and applying them to a basic all-night grid network as proposed in Option 2, the Community Service Concept. Recognizing the potential benefits of such an all-night service grid, and the efficiency of the resource re-allocation process, it was decided to pursue the concept and develop specific recommendations, as described below.

3.0 A NEW APPROACH

3.1 Identifying and Serving Today's Needs

All-night services were initially designed to serve demand generators such as railyards, shipyards, stockyards, factories, etc., which operated on a 24-hour basis. Most of these generators were concentrated in the south and central portions of the City of Toronto, which accounts for the present concentration of all-night service in that area of Metro.

With the exception of the Yonge and Bloor/Danforth All-Night Bus routes which replace the heavily-used subways when

the subways are closed, ridership has been decreasing on all of the all-night routes which existed prior to 1974 (see Exhibit 2). These trends indicate that the all-night services have not responded to the changing travel patterns which have occurred in Metro over the last several years. Based on current ridership statistics, and from a strict demand-justification perspective, most of the existing all-night routes should be eliminated, at least during the Monday AM through Friday AM period when ridership on all services is very light.¹

Complete elimination of such services would, however, conflict with the TTC's goals and objectives. One of the TTC's primary goals is to maximize mobility and accessibility to transit service, subject to the financial viability of all services operated. Bearing in mind the TTC's financial responsibility to Metro taxpayers, its objective to ensure accessibility to transit services (especially for transit dependent members of the Metro community), the municipal requests to expand the all-night service grid throughout Metro, and the possibility of implementing an expanded network at little or no cost through the process of resource allocation, it would be inappropriate to eliminate all under-utilized existing all-night services. It would be preferable to explore means of establishing an expanded grid within the given financial

¹ Ridership on the all-night network is concentrated on two nights with approximately 42 per cent of total weekly ridership carried on Saturday AM and Sunday AM. The Monday AM through Friday AM period accounts for the remaining 58 per cent.

constraints.

Major all-night ridership generators include offices which employ building maintenance and janitorial staff (service occupations) during non-business hours, and entertainment and cultural activities. Many of these types of generators are concentrated in the City of Toronto's central area, although there has been a trend, over the last few years, of decentralizing major office complexes to locations such as the North York City Centre, Scarborough City Centre, and the proposed Etobicoke City Centre. Additionally, it is reasonable to assume that the market or catchment areas for such traffic generators have spread out throughout Metropolitan Toronto in accordance with population and residential expansion within Metro's outer ring of municipalities. The increases in ridership observed on the Bloor-Danforth and Yonge All-Night Bus services (see Exhibit 2), the two main routes which either serve, or connect to other routes which serve, the Cities of Etobicoke, North York and Scarborough, lend support to this probable change in all-night origins and destinations. Also, the municipal service requests, which reflect the transit demands of local citizens, all indicate that the all-night service catchment areas have become dispersed throughout Metro.

The existing all-night service network is concentrated in the City of Toronto's central area, thereby serving trips which begin or end entirely within this area, but neglecting most other origins and destinations throughout Metro. A revision of

the current all-night network is required to better meet the changing travel needs within Metro's boundaries as well as to ensure a more equitable and fair distribution of resources among all-night riders throughout Metro.

3.2 A New All-Night Transit Service Grid Network

With the above in mind, a new all-night transit service grid network has been developed in order to meet the community service and transportation objectives outlined in the previous section. The new grid would, by necessity, have limited coverage or density within Metro, as a result of the limited financial resources available to implement this service. The all-night routings would be relatively evenly spaced on selected major Metro arterial roads, so that a large proportion of, though not all, Metro residents and workers would be within a maximum 15-minute walk of service. Specifically, under the proposed all-night service grid, approximately 86 per cent of the population of Metropolitan Toronto would be within a maximum 15-minute walk of all-night transit service, as opposed to approximately 45 per cent of the population which is within such a walk of the existing all-night transit service grid. The proposed grid would ensure reasonably convenient access to virtually all of Metro's developed areas. Exhibit 3 illustrates the proposed network. Descriptions of each individual route are contained in Exhibit 4. A summary of the proposed changes to the all-night service grid is presented in Exhibit 5.

The proposed new grid would not use any trolley coaches and it would operate only two streetcar routes. All new routes would use diesel buses.

The grid would operate only during those hours when daytime and evening TTC services are not in operation; that is, roughly between 1:00 AM and 6:00 AM. All routes would operate on a 30-minute frequency, with the exception of the busy Yonge All-Night Bus, which would retain its current 15'00" frequency. The 30-minute frequency was selected to minimize operating costs while ensuring adequate capacity for projected ridership; to allow use of easy-to-remember clockface schedules; and to ensure a degree of continuity in service in the event of a vehicle breakdown or other unforeseeable service interruption.

In order to maximize rider convenience, timed-transfer connections would be provided where possible, in an outbound direction from the central area, subject to operating and cost constraints. (A timed-transfer connection refers to buses on two or more routes being timed to meet each other at a designated location, on a regular interval, so that passengers can make immediate no-wait transfers between the routes).

In summary, the proposed new all-night transit service grid and its 30-minute service frequency would be adequate to accommodate current and probable all-night ridership levels, to achieve significantly greater service coverage throughout Metro, and to ensure that a large proportion of the Metro population is within a maximum 15-minute walk of transit service. The proposed

grid is limited in its density of coverage and in its service frequency because of the limited amount of existing resources available for re-allocation. However, a more dense network of all-night transit services and/or more frequent service on the proposed grid could be implemented if the Metropolitan Toronto Council were to provide special funding to cover any additional operating costs incurred in providing such higher quality service.

3.3 Pro's and Con's of the Proposed New All-Night Grid Network

3.3.1 Re-Allocation of Resources

The new Metro all-night service grid was based on the concept of re-allocating existing all-night and late-evening transit resources in order to provide significant improvements in all-night service throughout Metro while minimizing the amount of additional operating costs which would be generated by the new grid. In order to achieve the desired more equitable and fair distribution of resources throughout Metro, it is necessary to eliminate or reduce service levels on routes which are under-utilized. Given the current concentration of all-night services within the City of Toronto, it is riders who use all-night services within that municipality who would suffer the greatest service losses under the proposed re-allocation of resources. The following is a summary of the negative impacts of the proposed new grid on service and users.

Under the proposal, nine transit routes would operate

within the City of Toronto boundaries, as opposed to the current fourteen routes (see Exhibits 6 and 7). The current all-night routes proposed for elimination would still operate until approximately 2:00 AM each morning and would resume service at approximately 5:00 AM in order to continue to accommodate the approximately 70-75 per cent of current patrons whose riding occurs from 1:00 AM - 2:00 AM and from 5:00 AM - 6:00 AM . The service eliminations translate into a net loss of 37 kilometres of all-night transit routing within the City of Toronto (see Exhibit 8). Approximately 350 weeknight boardings which currently occur between 2:00 AM and 5:00 AM on the services proposed for elimination could be inconvenienced by the proposed re-organization of services, virtually all within the City of Toronto (see Exhibit 9). These 350 potentially inconvenienced boardings, any or all of which could choose to no longer use the revised services still available to them, may be contrasted with the approximately 400 to 2300 possible new boardings which may be attracted to the new all-night services which would be introduced in the proposed new grid. (This estimated range of new boardings was calculated by assuming that each new route would attract somewhere between the lowest single-route volume of riders currently observed on the all-night services and the average volume of riders currently observed on all all-night services excluding the busy Yonge and Bloor-Danforth All-Night Bus routes). Additionally, not all of the 350 boardings would necessarily be inconvenienced by the proposed changes. In the

absence of accurate information regarding origins and destinations of these all-night riders, it is reasonable to assume that the new service grid may prove more convenient for a number of the affected riders than is the currently-existing service grid.

The other means of re-allocating resources for the new grid is to reduce the frequency and duration of service on selected existing regular routes which exhibit relatively low levels of ridership in the late evening (part or all of the period 10:00 PM to 2:00 AM). All routes throughout Metro were reviewed for possible resource savings in this category. The service reductions identified as inconveniencing only a modest volume of riders and, therefore, being acceptable for this purpose, are listed in Exhibit 10. Again, because of the existing higher density of late evening services which operate in the City of Toronto, boardings which occur in that municipality would experience the largest number of late evening service frequency reductions (see Exhibit 11). Collectively, the number of boardings affected by late evening service frequency reductions in the Cities of Etobicoke, North York, and Scarborough exceeds the number of boardings in the City of Toronto which would be so affected (see Exhibit 12). Overall, on a typical weeknight, up to 4,900 boardings throughout Metro would experience lower-frequency service and approximately 1,700 of these boardings would be directly affected by the elimination of specific late-night trips on 30 existing routes. When one adds

to this the boardings affected by the elimination of the specified all-night services between 2:00 AM and 5:00 AM, the combined impact would be inconvenience for up to 5300 boardings per weeknight, of which up to 2100 would be directly affected by the proposed service changes. Exhibit 13 summarizes the number of weeknight late-evening and all-night boardings which would be affected, and the magnitude of the inconvenience which they would experience. In the worst case, up to 1100 boardings per weeknight could choose to no longer use the revised services still available to them. This figure, too, should be contrasted with the estimated 400 to 2300 new boardings per weeknight which could be attracted to the proposed new all-night transit services.

In summary, implementation of the new Metro all-night service grid would mean elimination of certain existing all-night services and the consequent inconvenience to some riders. In particular, riders within the City of Toronto would lose some of their closely-paralleled and lightly-patronized all-night service (e.g. operation of the Carlton and Queen All-Night Streetcar services instead of the existing concurrent operation of the Carlton, Queen, and King All-Night Streetcar services) and, hence, they would lose the current high-density all-night service coverage which they are used to. In fact, however, even after elimination of these parallel services, there would remain a comprehensive service grid in the City of Toronto, providing access to its major commercial and residential areas. Riders in other municipalities would experience service frequency

reductions on selected low patronage late-evening services. However, all ridership volumes were carefully checked to ensure that adequate capacity would remain after the proposed service reductions. In all cases, the standards relating to minimum service levels and allowable off-peak vehicle loads would be observed. Additionally, where possible, service reductions would be accompanied by higher operating speeds in order to minimize the frequency reduction which would actually be experienced by users.

3.3.2 Service Additions and User Benefits

The new Metro all-night service grid is expected to increase rider convenience and accessibility throughout all of Metropolitan Toronto, bringing such services closer to a significantly higher number of Metro residents at no additional operating cost. The projected benefits are described below.

Eleven new all-night routes would be introduced throughout Metropolitan Toronto (see Exhibit 6), representing 230 new route kilometres, or a net addition of 186 route kilometres (see Exhibits 8 and 14).

The proposed new grid would significantly improve accessibility to all-night transit services throughout Metropolitan Toronto because it covers a much larger service area (see Exhibits 15 and 16). Specifically, under the proposed all-night service grid, approximately 86 per cent of the population of Metropolitan Toronto would be within a 15-minute walk of all-night transit service, as opposed to approximately

45 per cent of the population which is within such a walk of the existing all-night transit service grid (see Exhibit 17). This represents a 91 per cent increase in the number of people who would have access to such services.

The new Metro all-night service grid would result in approximately 99 major commercial, social or institutional facilities (e.g. hospitals, police stations, major office/commercial complexes, colleges/universities, and train or bus stations) being within a 15-minute walk of all-night transit services, as opposed to approximately 65 facilities under the current all-night service grid (see Exhibit 18).

The new Metro all-night service grid would increase the possible choices of origins and destinations, making virtually all of the Metro Toronto municipalities accessible to the all-night traveller. Forty-five inter-route transfer connections would be distributed evenly throughout Metropolitan Toronto, as opposed to the current concentration of 35 transfer connections all within the City of Toronto (see Exhibit 19).

The widespread use of easy-to-remember clockface schedules and convenient timed-transfers would probably reduce waiting times for services for all-night riders.

In summary, the proposed new Metro all-night service grid would introduce a number of new all-night transit routings throughout Metro, increasing the number of kilometres of routing operated and, thereby, significantly increasing the all-night service coverage throughout Metro. The new grid would put a much

increased proportion of Metro Toronto's population and all-night facilities within a 15-minute walking access of such services and would make virtually all of Metro's municipalities accessible by all-night transit service.

3.3.3 Summary of Advantages and Disadvantages of the New All-Night Service Grid

In order to implement the all-night service grid, it is necessary to re-allocate resources from existing all-night and late-evening transit services and to establish a more equitable and fair distribution of such resources throughout Metro. Consequently, service eliminations and reductions, located primarily, but not exclusively, within the City of Toronto, would result in potential inconvenience to somewhere between 2,100 to 5,300 existing boardings. The latter number is an upper limit, based on observations and counts of all boardings currently occurring on all of the affected services. However, the actual inconvenience in many cases would be relatively minor; as Exhibit 13 indicates, about 74-82 per cent of frequency reductions would be increments of less than 10 minutes, and all would be increments of less than 15 minutes. In other cases, the revised service may be more convenient for the affected boardings than are the existing all-night services.

The new Metro all-night service grid would significantly increase the all-night service coverage area, thereby increasing the market potential for this service. An

additional 400 - 2300 new boardings could be attracted per weeknight to the new all-night services which would be introduced in the proposed new grid.

The proposed revisions would establish a truly Metro-wide all-night service grid, more commensurate with the demographic, developmental, and travel pattern changes which have occurred in Metropolitan Toronto over the last several years.

3.4 Costs

As described in the previous sections of this report, the new Metro all-night service grid was developed with the objective of introducing little or no additional operating costs to the system.

The projected total annual operating costs of the new all-night service grid is \$2,849,000 (see Exhibit 20). As explained in that exhibit, the resources currently applied to the all-night service grid, together with re-allocated resources from late-evening service frequency adjustments, would cover the costs of the entire proposed new grid.

If a more dense all-night network or more frequent all-night services were desired, it would be necessary for Metropolitan Toronto Council to provide a special designated subsidy to cover any additional operating costs.

It is impossible to accurately estimate the probable net impact of the proposed service changes on fare revenue collected on the affected late-evening and existing and proposed

all-night services because of the difficulty in projecting the probable changes in ridership. Exhibit 20 presents a range of possible fare revenue changes, including the worst case scenario (annual loss of \$96,000), the best case (annual gain of \$282,000), and the medium case (annual gain of \$110,000). The actual fare revenue impact of the proposed service changes would be reported as part of the six-month post-implementation evaluation of the new all-night grid, if this grid is actually implemented.

4.0 SUMMARY

The current all-night service grid, established in the 1920's to serve then-active all-night traffic generators, has not changed significantly in accordance with changes in Metro's demographics, development, and travel patterns.

In response to such changes and to municipal requests for expansion of the all-night service grid throughout the wider Metro community, a new service grid has been proposed which could be implemented at no net additional operating cost, through re-allocation of existing resources.

This re-allocation of existing resources would have the greatest impact on TTC riders in the City of Toronto, where a number of existing all-night transit services would be eliminated. Elsewhere in Metro, late-evening transit riders would experience varying degrees of reduced service frequency.

The proposed new grid would significantly increase the all-night service catchment area and would make such services

accessible to the majority of Metro residents. It would better reflect and serve current development trends within Metro Toronto. It would also ensure a more equitable and fair distribution of all-night resources throughout Metro.

The all-night grid, as currently proposed, could be implemented at no additional operating cost. If a more dense all-night network or more frequent all-night services were desired, it would be necessary for Metropolitan Toronto Council to provide a special designated subsidy to cover any additional operating costs.

5.0 RECOMMENDATIONS

It is recommended that:

- 1) The existing all-night service network be revised and expanded, at no net additional operating cost, as detailed herein;
- 2) Service levels be selectively reduced on existing regular routes which have surplus capacity during the late-evening period (i.e. approximately 10:00 PM to 2:00 AM), as detailed herein;
- 3) The resources saved through the late-evening service reductions and the resources currently applied to all-night transit service be re-allocated to the proposed new Metro all-night transit grid;
- 4) The new Metro all-night grid be operated with a minimum 30-minute level of service between the hours of approximately 1:00 AM and 6:00 AM, seven nights per week; and
- 5) The implementation of the new Metro all-night transit grid be undertaken on an experimental basis, following which it would be subject to a post-implementation review and evaluation.

E X H I B I T S

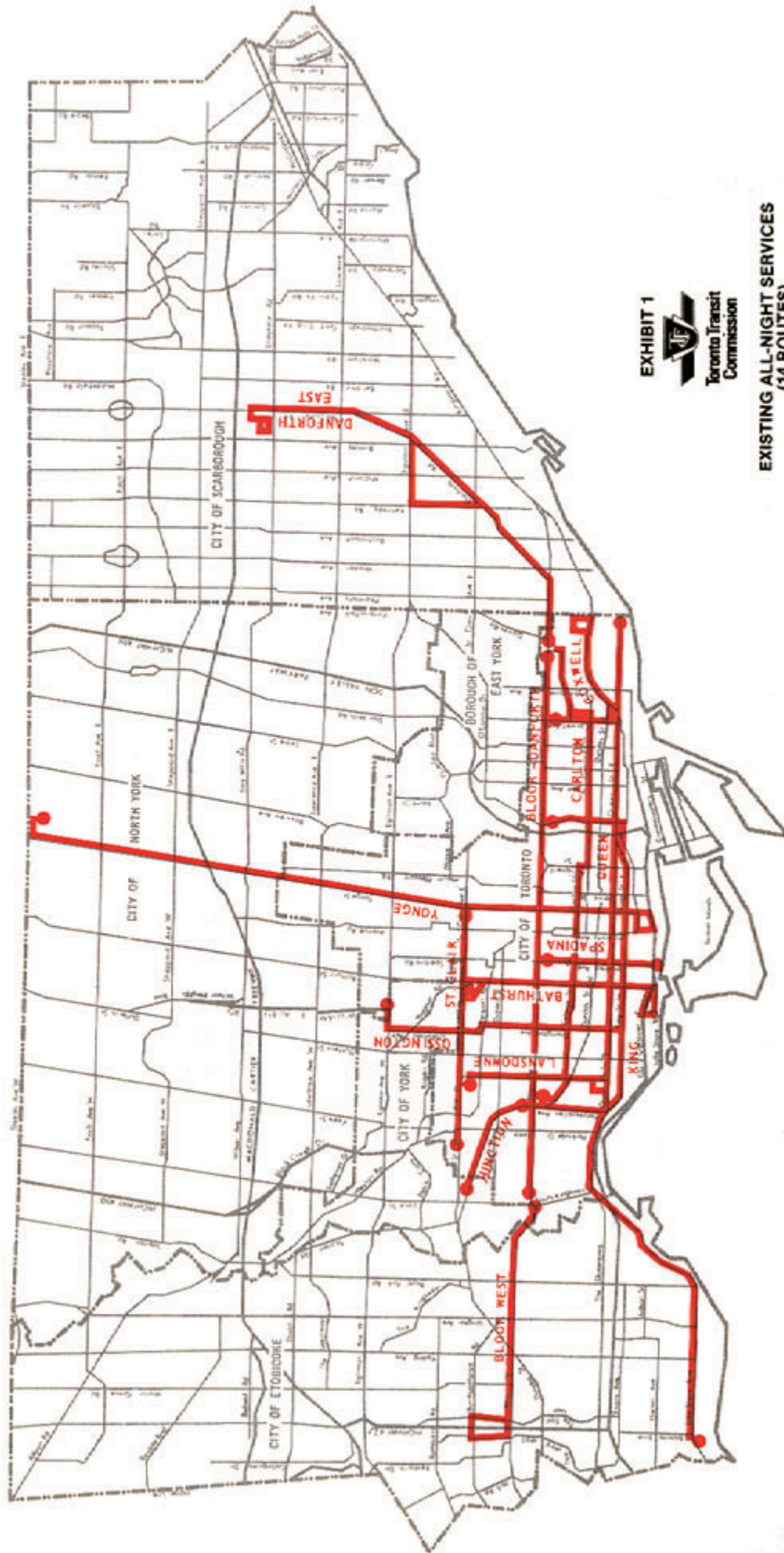


EXHIBIT 1



**EXISTING ALL-NIGHT SERVICES
(14 ROUTES)**

● INDICATES OFF-STREET LOOP

EXHIBIT 2

BOARDINGS ON ALL-NIGHT SERVICE ROUTES, 1974-1983

<u>ROUTE NAME</u>	<u>TOTAL BOARDINGS</u> <u>(ONE WEEK'S OBSERVATION)</u>		<u>PERCENTAGE</u> <u>INCREASE</u> <u>OR (DECREASE)</u> <u>IN BOARDINGS</u>
	<u>FEB. 1974</u>	<u>FALL 1983</u>	
Bathurst N.B.	1,565	635	(59.4)
Bloor N.B.	4,504	5,416	20.2
Bloor West N.B.	NA	738	NA
Coxwell N.B.	415	257	(38.1)
Carlton S.C.	3,531	2,303	(34.8)
Danforth East N.B.	NA	1,361	NA
Junction T.C.	685	321	(53.1)
King S.C.	2,269	1,670	(26.4)
Lansdowne T.C.	850	683	(19.7)
Ossington T.C.	1,791	1,435	(19.9)
Queen S.C.	3,871	2,938	(24.1)
Spadina N.B.	806	420	(47.9)
St. Clair S.C.	1,263	1,003	(20.6)
Yonge N.B.	<u>5,399</u>	<u>8,200</u>	51.9
TOTAL WEEKLY BOARDINGS	26,949	27,380	

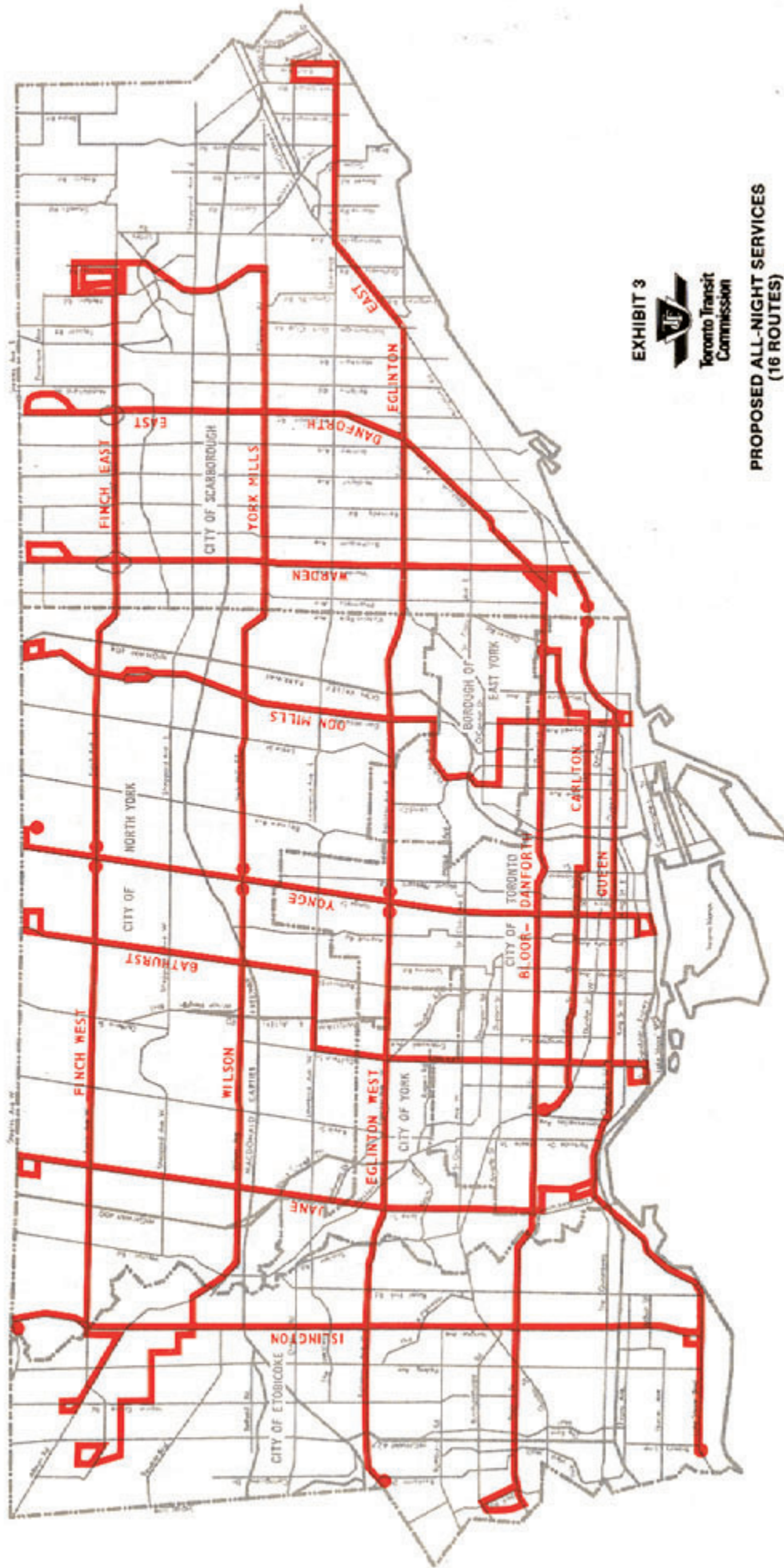


EXHIBIT 3



PROPOSED ALL-NIGHT SERVICES (16 ROUTES)

● INDICATES OFF-STREET LOOP

EXHIBIT 4

DESCRIPTIONS OF INDIVIDUAL ALL-NIGHT ROUTINGS

1. FINCH EAST BUS

From Finch Station, eastbound on Finch Avenue East, looping clockwise via Tapscott Road, Newgale Gate and Finchdene Square, and return via routing.

2. FINCH WEST BUS

From Finch Station, westbound on Finch Avenue West, south on Islington Avenue, west on Albion Road, looping clockwise via Silverstone Drive, Lexington Avenue and Martin Grove Road, and return via routing.

3. WILSON BUS

From York Mills Station, westbound on Wilson Avenue, Walsh Avenue, Albion Road, Elmhurst Drive, Hinton Road, Harefield Drive, Elmhurst Drive, Brookmere Road and West Humber Boulevard, north on Martin Grove Road, west and north on John Garland Boulevard, west and north on Humber College Boulevard, looping clockwise via Carrier Drive, Woodbine Downs Boulevard and Finch Avenue, and return via routing.

4. YORK MILLS BUS

From York Mills Station, eastbound on York Mills Road, Parkwoods Village Drive and Ellesmere Road, north on Neilson Road, looping clockwise via Tapscott Road, Newgale Gate and Finchdene Square, and return via routing.

5. EGLINTON EAST BUS

From Eglinton Station, eastbound on Eglinton Avenue East, north on Kingston Road, east on Lawrence Avenue, looping clockwise via Centennial Road, Lawson Road and Port Union Road, and return via routing.

6. EGLINTON WEST BUS

From Eglinton Station, westbound on Eglinton Avenue West to off-street loop at Renforth Drive, and return via routing.

7. BLOOR-DANFORTH BUS

From counter-clockwise looping via Warden Avenue and Danforth Road, westbound on Danforth Avenue and Bloor Street West, past Jane Station, looping clockwise via Markland Drive and Mill Road, and return via routing (note: no detour into Kipling Station).

8. CARLTON STREETCAR

From Dundas West Station loop, south and eastbound on Dundas Street West, eastbound on College and Carlton Streets, southbound on Parliament Street, eastbound on Gerrard Street East, northbound on Coxwell Avenue, eastbound on Gerrard Street East and northbound on Main Street to off-street loop at Main Station, and return via routing.

9. QUEEN STREETCAR

From Long Branch Loop, eastbound on Lake Shore Boulevard West, The Queensway, Queen Street West, Queen Street East and Kingston Road to Bingham Loop, and return via routing.

10. ISLINGTON BUS

From clockwise looping via Lake Shore Boulevard West, Eighth Street and Birmingham Street, northbound on Islington Avenue to off-street loop at Steeles Avenue, and return via routing (note: no detour into Islington Station).

11. JANE BUS

From clockwise looping via Coe Hill Drive, The Queensway, Southport Street and Windermere Place, north on Windermere Avenue, west on Bloor Street West and north on Jane Street, looping clockwise via Hullmar Drive, Peter Kaiser Gate, Steeles Avenue West and Jane Street, and return via routing.

12. BATHURST NORTH BUS/DUFFERIN BUS

From counter-clockwise looping via Springhurst Avenue and Fort Rouille Street (Exhibition), northbound on Dufferin Street, east on Queen Street West, north on Gladstone Avenue, west on Peel Avenue, north on Dufferin Street, east on Lawrence Avenue West, north on Bathurst Street, looping clockwise via Fisherville Road, Carpenter Road, Steeles Avenue West, Village Gate and Greenwin Village Road, and return via routing.

13. YONGE BUS (existing all-night route unchanged)

From clockwise looping via Lake Shore Boulevard West, Bay Street and Front Street, northbound on Yonge Street to off-street loop at Steeles Avenue East, and return via routing.

14. DON MILLS BUS

From Coxwell and Queen (Coxwell Loop), north on Coxwell Avenue, west on Cosburn Avenue, north on Pape Avenue and Millwood Road, east on Overlea Boulevard, north on Don Mills Road, looping clockwise via Steeles Avenue East, Townsend Road and Freshmeadow Drive, and return via routing.

15. WARDEN BUS

From Bingham Loop, eastbound on Kingston Road, north on Warden Avenue, looping counter-clockwise via Bamburgh Circle and Warden Avenue, and return via routing.

16. DANFORTH EAST BUS

From clockwise looping via Warden Avenue and Danforth Avenue, north and east on Danforth Road, north on McCowan Road, looping counter-clockwise via Alton Towers Circle, and return via routing.

EXHIBIT 5

PROPOSED CHANGES TO ALL-NIGHT NETWORK

All-night service eliminated on following existing routes:

- Bathurst All-Night Bus
- Junction All-Night Trolley Coach
- King All-Night Car
- Lansdowne All-Night Trolley Coach
- Ossington All-Night Trolley Coach
- Spadina All-Night Bus
- St. Clair All-Night Car

All-night service added on following routes:

- | | |
|-----------------|---------------------|
| ● Finch West | ● Eglinton West |
| ● Finch East | ● Don Mills |
| ● York Mills | ● Dufferin-Bathurst |
| ● Wilson | ● Jane |
| ● Warden | ● Islington |
| ● Eglinton East | |

Existing all-night routes extended:

- Danforth East Night Bus (to Steeles Avenue)
- Bloor-Danforth Night Bus (over former Bloor West Night Bus routing to Etobicoke west boundary)

EXHIBIT 6

NUMBER OF ALL-NIGHT ROUTES OPERATING
WITHIN METRO MUNICIPALITIES

<u>MUNICIPALITY</u>	<u>NUMBER OF ROUTES - EXISTING NETWORK *</u>	<u>NUMBER OF ROUTES - PROPOSED NETWORK *</u>
City of Toronto	14	9
City of York	2	3
City of Etobicoke	2	6
City of North York	1	10
City of Scarborough	1	6
Borough of East York	1	3

* Routes which operate in more than one municipality were counted for each municipality in which they operate.

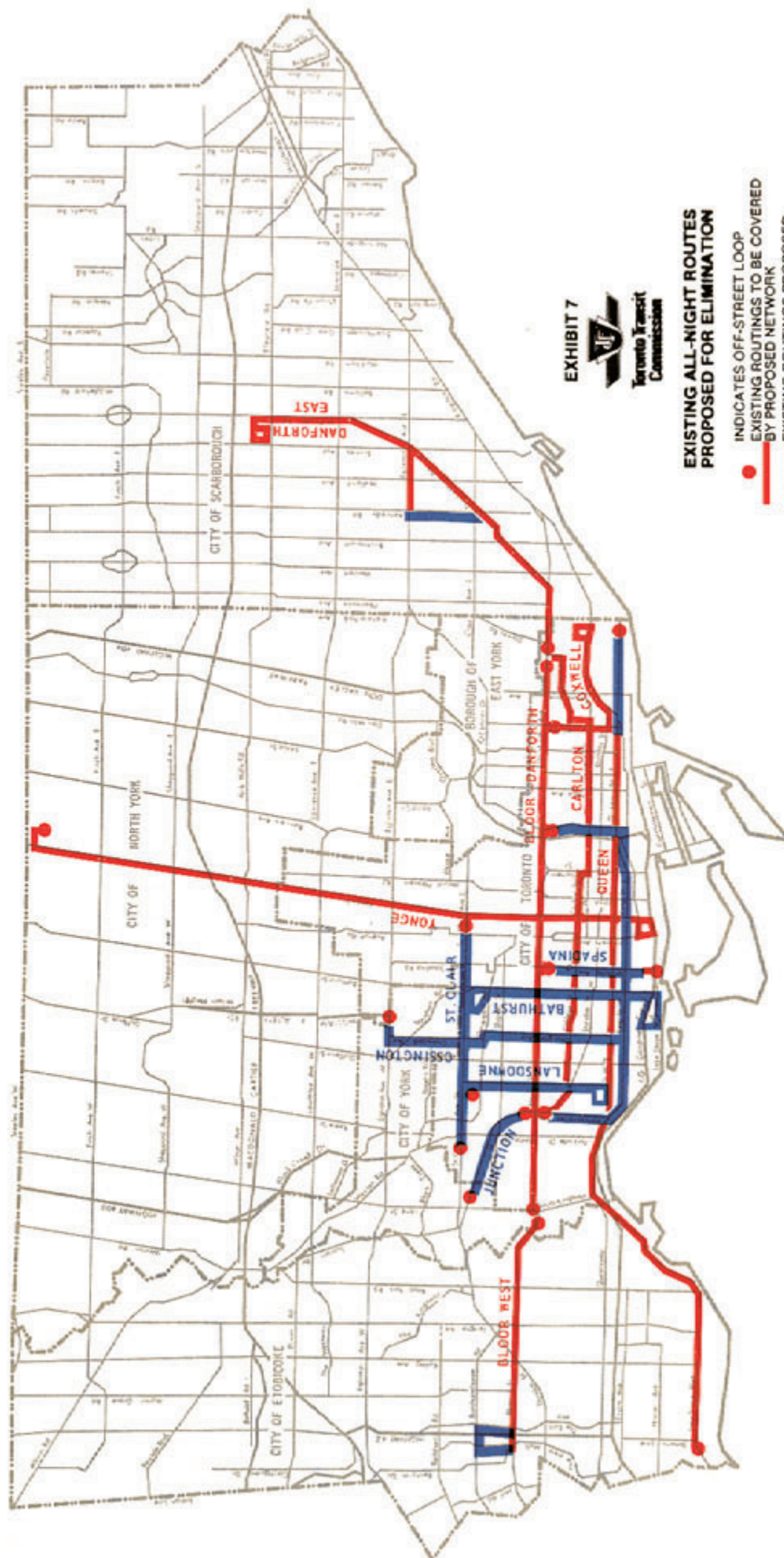


EXHIBIT 7



**EXISTING ALL-NIGHT ROUTES
PROPOSED FOR ELIMINATION**

- INDICATES OFF-STREET LOOP
- EXISTING ROUTINGS TO BE COVERED BY PROPOSED NETWORK
- EXISTING ROUTINGS PROPOSED FOR ELIMINATION

EXHIBIT 8

KILOMETRES OF ALL-NIGHT ROUTING
WITHIN METRO MUNICIPALITIES

<u>MUNICIPALITY</u>	<u>KM. OF ROUTING - EXISTING NETWORK</u>	<u>KM. OF ROUTING - PROPOSED NETWORK</u>	<u>NET KILOMETRES GAINED/LOST</u>
City of Toronto	113.2	75.8	-37.4
City of York	2.9	15.6	+12.7
City of Etobicoke	9.2	55.3	+46.1
City of North York	7.6	92.5	+84.9
City of Scarborough	11.9	83.4	+71.5
Borough of East York	<u>0.5</u>	<u>8.8</u>	<u>+ 8.3</u>
TOTAL	145.3	331.4	+186.1

11-113-66
April 23, 1986

Service Planning Department

EXHIBIT 9

NUMBER OF ALL-NIGHT BOARDINGS IN METRO
MUNICIPALITIES AFFECTED BY PROPOSED ELIMINATION
OF ALL-NIGHT SERVICE ON EXISTING ROUTES

ALL-NIGHT ROUTES TO BE ELIMINATED	TOTAL BOARDINGS/NIGHT AFFECTED	CITY OF TORONTO	CITY OF YORK	CITY OF ETOBICOKE	CITY OF NORTH YORK	CITY OF SCARBOROUGH	BOROUGH OF EAST YORK
Bathurst Bus	91	91	-	-	-	-	-
Junction Trolley	46	41	5	-	-	-	-
King Car	239	239	-	-	-	-	-
Lansdowne Trolley	98	98	-	-	-	-	-
Ossington Trolley	205	123	82	-	-	-	-
Spadina Bus	60	60	-	-	-	-	-
St. Clair Car	143	143	-	-	-	-	-
TOTAL	882	795	87	-	-	-	-
ESTIMATED BOARDINGS 2:00 AM - 5:00 AM	350	315	35	-	-	-	-

NOTE: Total boardings affected are apportioned to each municipality based on the proportion of route-kilometres operated in each municipality.

11-1113-66
April 23, 1986

Service Planning Department

EXHIBIT 10

LATE EVENING SERVICE FREQUENCY REDUCTIONS

ROUTE NAME	RTD	+++++EXISTING+++++			+++++PROPOSED+++++			TIME FROM WHICH PROPOSED HDNY PROVIDED	NO. OF ROUND TRIPS SAVED	MUNICIPALITY	NIGHTLY BOARDINGS AFFECTED (eliminated trips only)	NIGHTLY BOARDINGS AFFECTED (all trips in affected time period)
		RTT	HEADWAY	SPEED	RTT	HEADWAY	SPEED					
Spadina Bus (Bay)	7.2	50	20'00"	8.6	50	20'00"	8.6	11:55 pm	1.0	Tor.	14	86
Junction Trolley Coach	3.8	24	8'00"	9.5	20	10'00"	11.4	11:00 pm	10.0	Tor./York	123	445
Don Mills Bus (a)	20.3	80	8'00"	15.2	80	10'00"	15.2	10:10 pm	4.0	Tor./NY/EY	283	1,205
Wilson Bus	24.9	104	10'00"	14.4	105	15'00"	14.2	1:00 am	1.0	NY/Etob.	23	23
Steeles West Bus	20.5	68	17'00"	12.1	66	22'00"	16.6	12:30 am	1.0	NY/Etob.	21	50
Pape Bus (Queen)	3.5	20	15'00"	10.5	20	20'00"	10.5	11:00 pm	5.0	Tor.	132	184
Kingston Road East Bus	8.9	40	20'00"	13.4	eliminate service(1)			7:10 pm	20.0	Scar.	192	192
Coxwell Bus (a)	6.9	40	10'00"	10.4	30	15'00"	13.8	11:30 pm	1.5	Tor.	25	219
Carlton Streetcar (a)	18.5	102	6'48"	10.9	100	10'00"	11.1	11:40 pm	2.0	Tor.	52	424
McCowan Bus	11.5	48	16'00"	14.4	48	24'00"	14.4	12:36 am	1.0	Scar.	10	69
York Mills Bus	23.3	80	13'20"	17.5	80	20'00"	17.5	12:30 am	1.0	NY/Scar.	27	106
Davisville Bus	9.3	48	16'00"	11.6	48	24'00"	11.6	11:14 pm	4.0	Tor./NY/EY	50	109
Don Mills (b)	20.3	80	8'00"	15.2	80	16'00"	15.2	12:40 am	1.0	Tor./NY/EY	90	128
Steeles East Bus	11.9	48	16'00"	14.9	50	25'00"	14.3	11:20 pm	1.0	NY/Scar.	24	168
Vaughan Bus	3.6	24	12'00"	9.0	20	20'00"	10.8	11:30 pm	3.0	Tor./York	71	187
Martin Grove Bus	19.4	72	18'00"	16.2	72	24'00"	16.2	11:12 pm	1.0	Etob.	41	188
Finch West Bus	24.0	93	8'27"	15.5	94	15'40"	15.3	12:40 am	5.0	NY/Etob.	108	202
Coxwell Bus (b)	6.9	40	20'00"	10.4	30	30'00"	13.8	1:30 am	1.0	Tor.	8	17
Carlton Streetcar (b)	18.5	100	10'00"	11.1	100	20'00"	11.1	12:40 am	3.0	Tor.	439	439
Islington South	6.7	36	18'00"	11.2	30	30'00"	13.4	12:00 MN	2.0	Etob.	22	42
Birchmount Bus	20.0	75	18'45"	16.0	90	30'00"	13.3	12:23 am	1.0	Scar.	13	53
Kingston Road Bus	10.3	51	17'00"	12.1	60	30'00"	10.6	12:00 MN	2.0	Scar.	28	57
Victoria Park Bus	18.2	77	11'00"	14.2	75	25'00"	14.6	12:30 am	1.0	NY/EY/Scar.	43	70
Islington Bus	17.8	68	11'20"	15.7	68	22'40"	15.7	12:55 am	1.0	NY/Etob	15	72
Spadina Bus (Clarence Sq.)	3.7	30	20'00"	7.4	30	30'00"	7.4	12:25 am	2.0	Tor.	42	72

EXHIBIT 11

NUMBER OF PROPOSED LATE EVENING
SERVICE FREQUENCY REDUCTIONS
IN METRO MUNICIPALITIES

<u>MUNICIPALITY</u>	<u>NUMBER OF ROUTES PROPOSED FOR SERVICE REDUCTIONS*</u>
City of Toronto	15
City of York	3
City of Etobicoke	6
City of North York	12
City of Scarborough	8
Borough of East York	<u>4</u>
TOTAL	48

* Routes which operate in more than one municipality were counted for each municipality in which they operate. Therefore, the total of 48 includes routes which have been counted more than once. The actual total number of routes proposed for service reductions is 30.

11-113-66
May 20, 1986

Service Planning Department

EXHIBIT 12

NUMBER OF LATE EVENING BOARDINGS IN
METRO MUNICIPALITIES AFFECTED BY PROPOSED
LATE EVENING SERVICE REDUCTIONS

	<u>TOTAL BOARDINGS</u>	<u>CITY OF TORONTO</u>	<u>CITY OF YORK</u>	<u>CITY OF ETOBICOKE</u>	<u>CITY OF NORTH YORK</u>	<u>CITY OF SCARBOROUGH</u>	<u>BOROUGH OF EAST YORK</u>
Boardings per night (eliminated trips only)	1,731	575	52	114	566	344	80
Boardings per night (all trips in affected time period)	4,887	1,845	148	358	1,674	627	235

11-1113-66
May 14, 1986

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EXHIBIT 13

AFFECTED LATE EVENING AND ALL-NIGHT BOARDINGS
GROUPED BY CATEGORY OF IMPACT (TYPICAL WEEKNIGHT)

<u>Reduction in Service Frequency (Minutes)</u>	<u>MAXIMUM ¹ POTENTIAL IMPACT (NUMBER OF BOARDINGS) (%)</u>	<u>PROBABLE ² ACTUAL IMPACT (NUMBER OF BOARDINGS) (%)</u>
0-2	1,736 (36%)	420 (24%)
3-5	1,092 (22%)	445 (26%)
6-9	1,157 (24%)	421 (24%)
10-14	902 (18%)	445 (26%)
15 or more	<u>0 (0%)</u>	<u>0 (0%)</u>
Subtotal	4,887 (100%)	1,731 (100%)
Elimination of All-Night Services (2:00 AM-5:00 AM)	<u>350</u>	<u>350</u>
TOTAL	5,237	2,081

¹ Based on observed actual boardings occurring during entire affected time period.

² Based on observed actual boardings occurring on specific trips recommended for elimination.

11-111-68
May 14, 1986

Service Planning Department

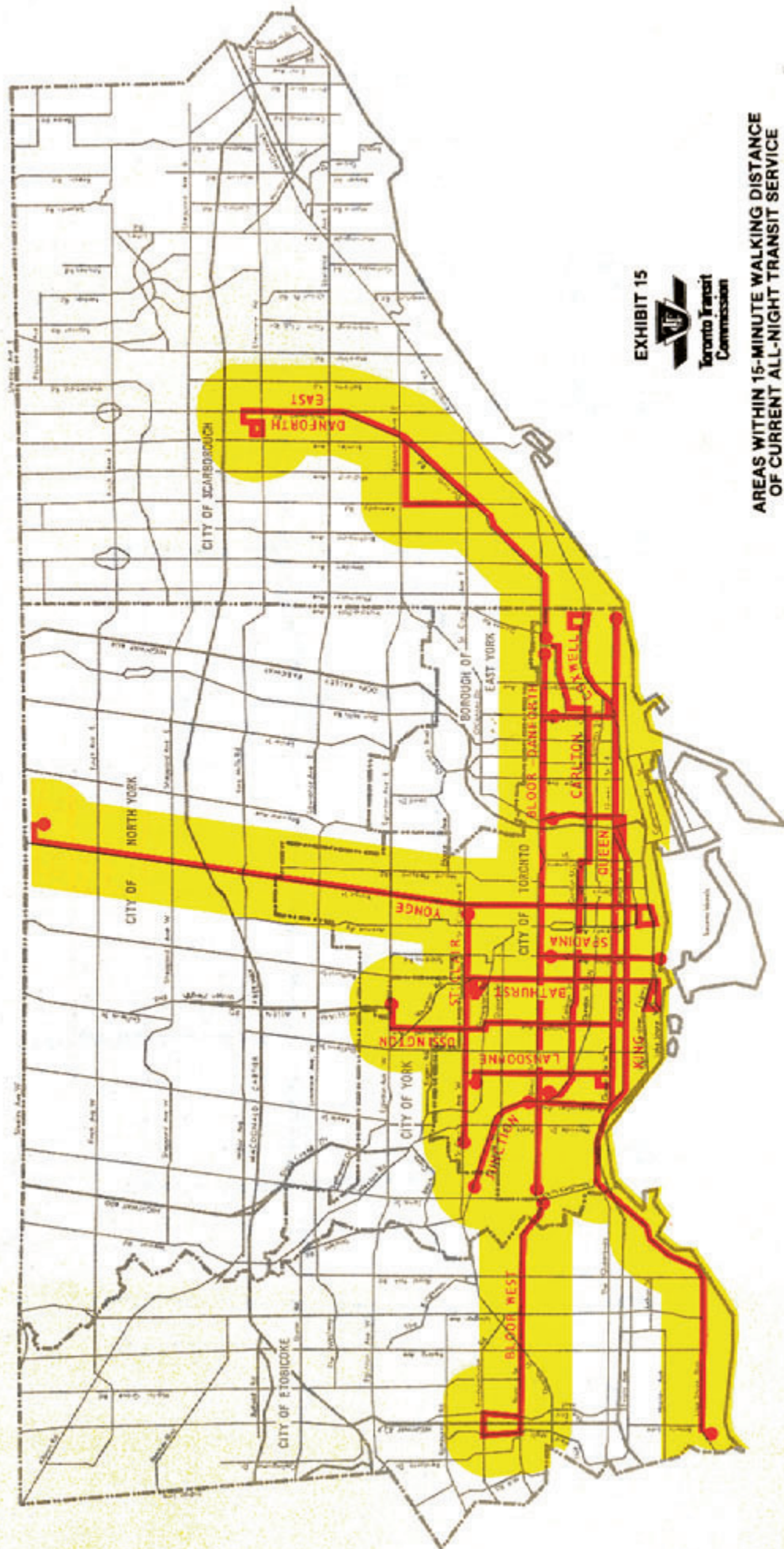


EXHIBIT 15



**AREAS WITHIN 15-MINUTE WALKING DISTANCE
OF CURRENT ALL-NIGHT TRANSIT SERVICE**

INDICATES OFF-STREET LOOP
INDICATES CATCHMENT AREAS

TTC OP 88-04.23 DRG. NO. 9133A

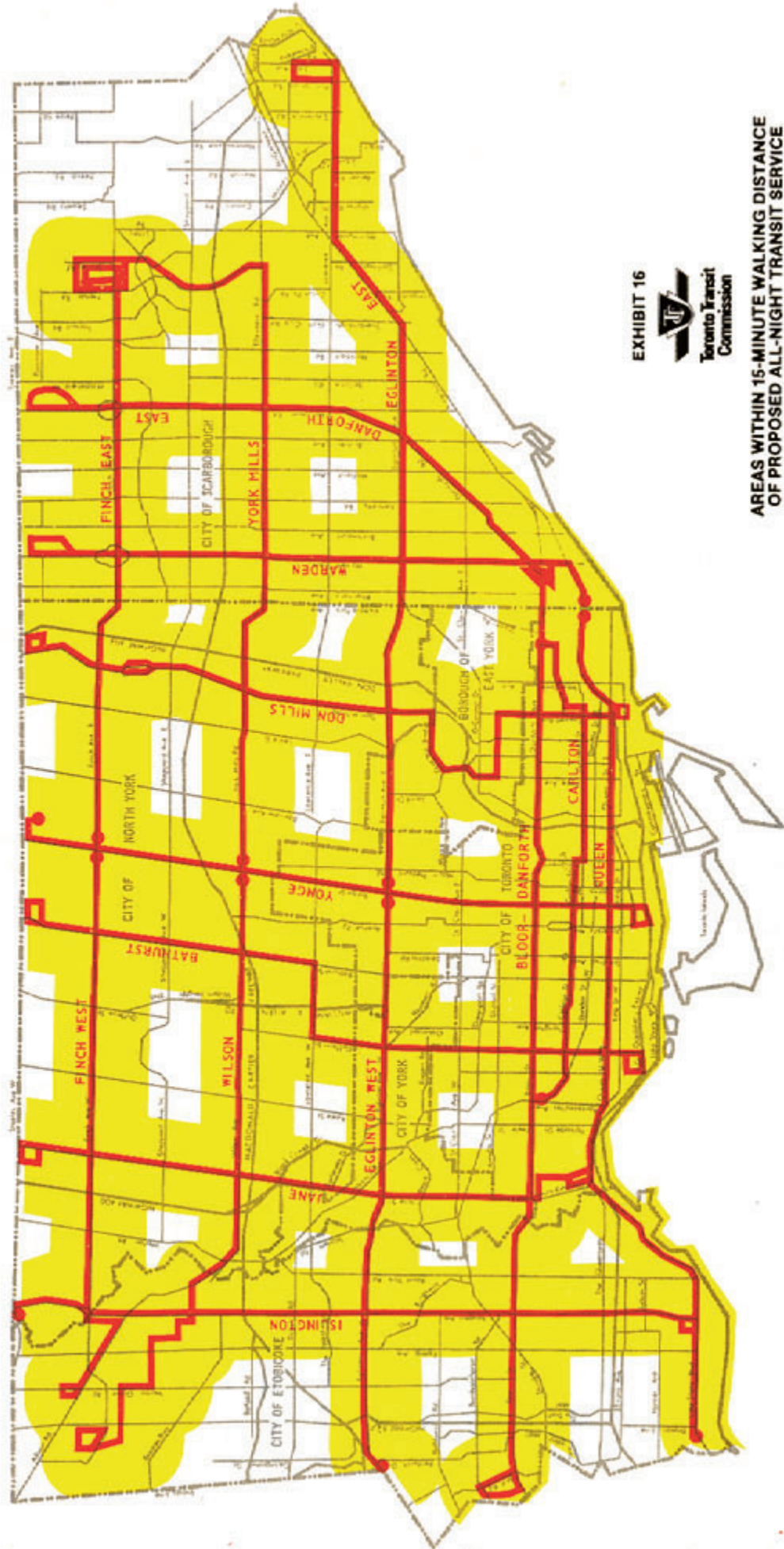


EXHIBIT 16



**AREAS WITHIN 15-MINUTE WALKING DISTANCE
OF PROPOSED ALL-NIGHT TRANSIT SERVICE**

- INDICATES OFF-STREET LOOP
- INDICATES CATCHMENT AREAS

EXHIBIT 17

NUMBER OF METRO RESIDENTS WITHIN
15-MINUTE WALK OF ALL-NIGHT SERVICE

<u>MUNICIPALITY</u>	<u>RESIDENTS WITHIN 15-MINUTE WALK OF EXISTING SERVICE</u>	<u>RESIDENTS WITHIN 15-MINUTE WALK OF PROPOSED SERVICE</u>	<u>INCREASE/DECREASE IN RESIDENTS WITHIN 15-MINUTE WALK OF SERVICE (%)</u>
City of Toronto	580,000	570,000	- 10,000 (1.7)
City of York	78,000	120,000	+ 42,000 (53.9)
City of Etobicoke	101,000	240,000	+139,000 (137.6)
City of North York	54,000	444,000	+390,000 (722.2)
City of Scarborough	110,000	378,000	+268,000 (243.6)
Borough of East York	<u>36,000</u>	<u>75,000</u>	<u>+ 39,000 (108.3)</u>
TOTAL	959,000	1,827,000	+868,000 (90.5)

11-113-66
April 23, 1986

Service Planning Department

EXHIBIT 18

NUMBER OF OFFICE/INSTITUTIONAL FACILITIES
WITHIN 15-MINUTE WALK OF EXISTING AND
PROPOSED ALL-NIGHT NETWORKS

<u>MUNICIPALITY</u>	<u>HOSPITALS</u>		<u>POLICE STATIONS</u>		<u>COLLEGES/ UNIVERSITIES</u>		<u>OFFICE/ TRANSPORTATION NODES*</u>	
	<u>EXISTING</u>	<u>PROPOSED</u>	<u>EXISTING</u>	<u>PROPOSED</u>	<u>EXISTING</u>	<u>PROPOSED</u>	<u>EXISTING</u>	<u>PROPOSED</u>
City of Toronto	20	20	7	7	10	10	8	8
City of York	1	2	1	4	0	2	0	0
City of Etobicoke	2	3	1	3	2	3	2	2
City of North York	1	9	1	3	0	6	2	4
City of Scarborough	1	4	1	3	1	2	1	1
Borough of East York	1	1	1	1	1	1	0	0

* Only the most major office nodes were considered such as Islington/Bloor, Yonge/Eglinton, Yonge/Sheppard and Scarborough City Centre, etc. Transportation nodes include bus and train stations.

11-1113-66
May 15, 1986

Service Planning Department

EXHIBIT 19

NUMBER OF TRANSFER OPPORTUNITIES*
WITHIN METRO MUNICIPALITIES PROVIDED BY
THE EXISTING AND PROPOSED ALL-NIGHT NETWORKS

	TOTAL TRANSFER OPPORTUNITIES	CITY OF TORONTO	CITY OF YORK	CITY OF ETOBICOKE	CITY OF NORTH YORK	CITY OF SCARBOROUGH	BOROUGH OF EAST YORK
Existing All-Night Grid	35	35	0	0	0	0	0
Proposed All-Night Grid	45	16	3	5	11	10	0

* Transfer opportunities are defined as locations where two or more routes intersect or meet. The connections may or may not be timed transfers.

11-113-66
May 15, 1986

Service Planning Department

EXHIBIT 20

FINANCIAL IMPACT OF
PROPOSED ALL-NIGHT SERVICE GRID

A) OPERATING COSTS OF EXISTING
AND PROPOSED ALL-NIGHT NETWORKS

Total Annual Operating Costs of Existing Network	\$2,033,643
Total Annual Operating Costs of Proposed Network	<u>\$2,849,058</u>
Total Additional Annual Operating Costs of Proposed Network	\$ 815,415
Total Annual Operating Costs (Savings) Through Late Evening Service Reductions	<u>(\$ 821,139)</u>
Net Additional Annual Operating Costs (Savings) of Proposed Network	<u><u>(\$ 5,724)</u></u>

B) POSSIBLE FARE REVENUE CHANGES RESULTING FROM PROPOSED CHANGES
TO LATE-EVENING AND ALL-NIGHT SERVICES (BASED ON WEEKNIGHTS)

	<u>ANNUAL CHANGE IN FARE REVENUE *</u>
1) Worst Case (Weeknight):	- \$ 96,000
- Gain 400 New Boardings	
- Lose 1,100 Existing Boardings	
2) Best Case (Weeknight):	+ \$282,000
- Gain 2,400 New Boardings	
- Lose 350 Existing Boardings	
3) Medium Case (Weeknight):	+ \$110,000
- Gain 1,500 New Boardings	
- Lose 700 Existing Boardings	

* Based on 1985 system-wide average fare/boarding of 37.76¢.

11-113-66
May 15, 1986

Service Planning Department

