



STRATEGIC OUTLOOK:

Enabling Mobility for the Next 21 Years

September 2011



TABLE OF CONTENTS

1.0	PURPOSE	
1.1	The Toronto Parking Authority Today	
2.0	STRATEGIC FRAMEWORK	
2.1	On-Street Versus Off-Street Parking	
2.1.1	On-Street	
2.1.2	Off-Street Parking	
2.2	Rates, Revenue, Costs – Off-Street Parking	
2.3	Competitive Environment	
2.4	Previous Strategic Reviews	
2.5	Moving Forward – Again	
3.0	THE NEXT 21 YEARS	
3.1	Population and Employment	
3.1.1	Population	
3.1.2	Employment	
3.1.3	Summary	
3.2	Trip Choices	
3.3	Trip Substitution or Technological Replacement	
4.0	THE NEXT 21 YEARS IN TECHNOLOGY	
4.1.1	Motive Power	
4.1.2	Guidance Technology	
4.1.3	Fuel Price	
4.1.4	Payment Systems	
4.1.5	Construction Costs and Techniques	
4.2	Conclusion	
5.0	POLICY INITIATIVES	
5.1.1	Parking Taxes	
5.1.2	Congestion Charges, Road Tolls, etc	
5.1.3	Lane Reductions	

5.1.4	Vehicle Priority Schemes
5.1.5	Car Sharing
5.1.6	Land Use Regulations
5.1.7	Deregulation of Common Carriers.....
5.1.8	Bicycles
5.1.9	Privatization Initiatives
5.2	Conclusion
6.0	SITE SPECIFIC ANALYSIS
6.1	The Large Facilities
6.1.1	Nathan Phillips Square Garage.....
6.1.2	Yorkville Garage
6.1.3	St. Lawrence Garage.....
6.1.4	Queen Victoria Garage.....
6.1.5	Dundas Square Garage.....
6.1.6	University Avenue Garage
6.1.7	Air Canada Centre – Bay Street east side
6.1.8	Intercontinental Hotel.....
6.1.9	Charles/Hayden Garage.....
6.1.10	Rosehill Garage.....
6.2	Other Site Specific Considerations.....
6.3	Conclusion
7.0	CONCLUSION
7.1	Strengths, Weaknesses, Opportunities and Threats.....
7.2	Concluding Comments

1.0 **PURPOSE**

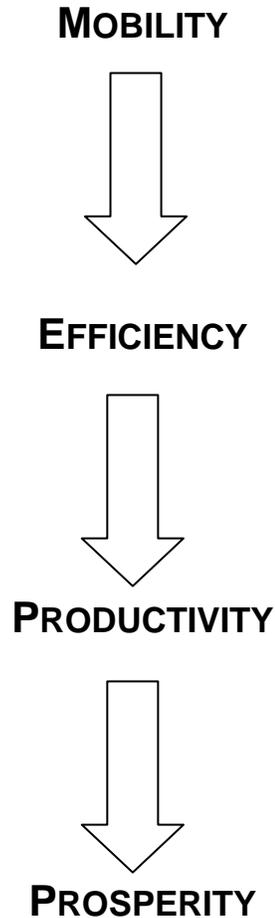
This document undertakes a strategic assessment of the Toronto Parking Authority. The assessment covers a timeframe of the next 21 years to 2031. The 21 year review timeframe was chosen to coincide with the strategic planning timeframe already in use by the Province and the GTA municipalities. The review is intended to:

1. ensure that the current activities of the TPA are consistent with our policy objectives and in line with the previous strategic assessments undertaken by the Authority; and,
2. assess whether the existing policy objectives and strategic framework need to be modified in response to internal or external factors.

In executing its strategy, the Toronto Parking Authority is both constrained and guided by internal and external factors. These factors can be either technical constraints such as land and construction prices or changes to personal mobility technologies or policy/administrative constraints such as parking taxes and restrictions on personal mobility. Moreover, the Authority operates in an unfolding urban environment that will experience changes in the two variables largely dictating parking demand; changes to employment and changes to populations and more specifically, where geographically these changes occur.

This document will review this external environment and try to identify and assess the impact of some key variables. While the scan of the next 21 years tries to imagine changes in the external environment, it also assumes that society and behaviors will not change fundamentally. That is, people will continue to behave essentially as they do now and in accordance with the recent past and that their lifecycle behavior will remain similar. It is possible that something unforeseen or revolutionary may occur, at which time the TPA may need to respond. By definition, one cannot plan for the unknown and the best guide to the future remains the experience of the recent past. Remember, the singularity is near.

The philosophy behind the TPA can be summarized in a simple graphic.



The tradition of the TPA has been to have a highly trained, highly informed senior management and a professional operations staff so that challenges can be met quickly and effectively. This will not change.

1.1 The Toronto Parking Authority Today

The modern Toronto Parking Authority (TPA) was formed in 1998 by the Province of Ontario when it amalgamated the 7 former municipalities of Toronto, North York, Scarborough, Etobicoke, East York, York and Metropolitan Toronto into the (new) City of Toronto with the boundaries of the former Metropolitan Toronto. The Toronto Parking Authority is effectively the successor agency to the former Parking Authority of Toronto with the same structure and powers of the former agency which had been in existence since 1952. The history and practice of this predecessor agency has been used as a guide to behaviour. At the same time as amalgamation, the City transferred responsibility for the operation and management of the on-street paid parking (meters) from the City's

Transportation Department to the new agency. The TPA is a wholly owned agency of the City of Toronto, however, it operates with its own Board of Directors. With respect to operations, management and administration the Authority operates autonomously from the City of Toronto, however, the City retains approval authority over the TPA's budgets and property acquisitions and disposals. In addition to establishing and operating the City's paid parking, the TPA has a parking advocacy role in the City and provides professional and technical input to the City through participation in departmental technical committees and task forces.

Today, the TPA operates 189 municipal parking lots and garages as municipal public parking spaces with 21,207 off-street spaces, as well as 2,400 Pay & Display machines covering about 18,000 on-street spaces. Another 307 Pay and Display machines are used at unattended lots. Net revenue for 2008 was \$76M on \$113M in revenue. Distributions to the city from net revenue totaled \$73M (\$55 million in revenue sharing from parking operations and an additional \$18 million from special payments), The TPA also paid \$14.8M in municipal realty taxes. The remainder of the net revenue is retained to fund the capital program for both parking supply expansion and state of good repair maintenance.

In 2009, 14.1 million parking transactions were undertaken in TPA parking lots. The Green P parking signs provide parkers with the confidence that they will find convenient, clean, (safe) parking at reasonable rates. Average rates on-street in Toronto were \$3.50 per hour in the commercial core and \$1.96 per hour for the city as a whole while off-street rates were \$1.25-\$2.75, with a mean of \$1.94 per ½ hour in the central core and \$0.50-\$2.00 per ½ hour with a mean of \$0.94 per ½ hour for the rest of the city.

In addition to the Green P municipal lots, the TPA also operates the 30 Park and Ride lots with 13,718 parking spaces under contract for the TTC. The TTC sets rates and policies at the Park and Ride lots and their intention is to mainly provide the spaces for use by riders on the system.

The TPA's capital budget currently identifies over \$300M in capital projects for the 2010-2019 timeframe in various stages of development. The projects are funded by the TPA through its parking revenues. These projects aim to fulfill the TPA's multiple objectives of:

- providing short term parking at reasonable cost
- supporting economic activity and growth through strategic distribution of facilities
- facilitating the City's transportation management and transit initiatives

2.0 **STRATEGIC FRAMEWORK**

This section discusses the strategic framework. That is, the structural components of the organization and the structural components of the operational environment which determine possible and desirable initiatives and identify areas of potential weakness.

2.1 **On-Street Versus Off-Street Parking**

The TPA operates two very different parking systems. The on-street system is characterized by:

- ◆ Low cost of capital
- ◆ Low operating cost
- ◆ Extremely high marginal rates of return
- ◆ Locationally dynamic
- ◆ Monopoly operations
- ◆ Low jurisdictional control

While the off-street parking system is characterized by:

- ◆ High risk associated with high initial capital costs
- ◆ High and somewhat uncontrollable operating costs
- ◆ Low rates of return
- ◆ High asset value
- ◆ Low barriers to entry for competitors
- ◆ Locationally static
- ◆ High jurisdictional control

2.1.1. **On-Street**

The Authority has operated the city's on-street paid parking since 1998. The provision of on-street parking is a low risk activity with respect to cost due to the fact that there are no land and development costs associated with it. The cost risk is largely related to the initial acquisition cost of the pay and display machines and the associated fees resulting from the asset renewal program (which although booked as operating costs, really represent pre-paid capital costs for equipment purchases which are now foregone). The TPA is in a

monopoly position on-street. However, the TPA has low jurisdictional control over the program as the location of parking is subject to input and approval from other City Departments and City Council, and the parking rates and regulations are under the jurisdiction of Toronto City Council. This is a necessary condition as the streets exist to move vehicles primarily and to store vehicles when and where moving vehicle is not required. On the other hand, the equipment is foot loose so where regulations change, it can be relocated inexpensively. The on-street operation is very low risk to the Authority from a cost perspective, but of a higher risk to the Authority from a gross revenue perspective (nominally) as it generates the bulk of the TPA's net income. There is no foreseeable risk that net revenues could become negative but they could theoretically decline to a level that could impair the TPA's ability to fund its capital program. This would be due to either low demand; in which case the need for the off-street facilities (the prime component of the capital program) would likely disappear, or regulatory initiatives. While regulatory initiatives are already negatively impacting the operation of our on-street program (refer to section 5.3) there would seem to be a very low likelihood that this will expand to the extent that it forms an existential threat to the profitability of the on-street program. Due to this, other than the overall environmental factors which will impact both on and off-street parking, this document will mainly address the off-street parking system.

2.1.2 Off-Street Parking

Due to the high upfront capital cost associated with off-street parking, and the fact that it consists mainly of potentially stranded assets, it presents a substantial financial risk. Further, the risk profile is different for the two general types of facilities:

- ◆ Surface lots; and,
- ◆ Garages

Garages are a more risky venture because should they underperform expectations, they have a low disposal value whereas with surface lots a large component of their value is recoverable through the raw land value which is a highly liquid commodity (although perhaps not at a full recovery price) and usually a high proportion of the initial establishment cost can be recuperated at

disposal. On the other hand, well designed and located parking garages can be extremely helpful in achieving the TPA's strategic and financial objectives. For example, the Dundas Square garage replaced and expanded an existing surface lot. The change resulted in a large increase in parking transactions and an increase in net annual revenue after amortizing the development cost of about \$600,000 annually.

Basic parking economics are discussed in the next section.

2.2 Rates, Revenues and Costs – Off-Street Parking

This is a brief introduction to the relationship of rates / revenues and a short overview of operating costs. It is by necessity extremely generic and intended as a guideline. More accurate calculations are undertaken on a location specific basis as part of the pro-forma review.

The parking market from a functional perspective consists of three types of parkers:

- Short stay (less than 3 to 4 hours);
- Longer stay non-discretionary (stay longer than 3 to 4 hours, but not readily transferable to public transit, bicycle or walking sometimes referred to as medium stay); and,
- Longer stay discretionary where the private automobile is chosen where other modes would seem to provide an acceptable alternative.

The characteristics of the three groups tend to result in parking space usage profiles approximately as indicated in the following table:

	Short	Non-Discretionary Long (medium)	Long
Total daily transactions per peak occupied space	5	1.8	1.2
Long-stay rate in half hours ¹	-	7.0	6.0
Half-hours of revenue per peak occupied short stay space per day	17	13	7
Revenue per stall per \$1.00 per half hour	\$17.00	\$13.00	\$7.00
As percent of short stay	100	77 (75)	41 (40)
Annual revenue half hour equivalents	4,000	3,000	1,600

Note 1: where capacity exceeds total of short and non-discretionary long parkers, long rates set at 6.0 times half-hour rate would also apply to non-discretionary long parkers.

The above analysis excludes monthly permits which would have an even lower revenue profile than traditional long stay parkers.

The above table provides a first cut tool for analyzing revenue at a proposed facility, but it requires as input, a critical number which is the peak short stay accumulation. The estimate of this number is a difficult and complicated process which cannot be easily summarized. One other consideration is that there seems to be an irreducible minimum number of traditional long stay and non-discretionary long stay parkers in any lot amounting to between 5-10% of spaces, and 20 to 30% of spaces respectively irrespective of the rates.

Operating costs consist of variable costs which generally relate linearly to space count and lumpy costs which are largely a fixed sum irrespective of the facility size (within size ranges – small <200, medium 200-600, or large >600).

The best example of a pure variable cost is realty taxes. There are not any pure 'lumpy' costs, but items such as attendant's wages would be examples where high degrees of lumpiness are present. Excluding realty taxes, operating costs for a typical underground or above-grade garage would range from about \$3,000 per space annually to a low of about \$1,500 annually for a small to large garage respectively. Surface carparks would range between \$1,000 to \$2,000.

The annual payment to service a 25 year loan at 5% interest to construct a \$50,000 parking stall is \$3,548.

2.3 Competitive Environment

Given the nature of parking activity, it is subject to two types of competition;

- ◆ Substitution, and;
- ◆ Market competition. Market competition can take the form of either price competition or non-price competition.

On-Street Parking

On-street metered parking is a monopoly operation with the TPA as the sole provider. However, it can be considered to have three competitors:

- ◆ Substitution of mode or deferral of trip;
- ◆ Displacement of parking operation to less convenient on-street free parking location; and,
- ◆ Displacement of trip to off-street parking location.

For TPA purposes, the substitution or deferral effect is only considered in comparison to the existing base of practice. That is, there is already an established distribution of trips by mode, and an existing deferral percentage. The question to consider is whether this is likely to change over the strategic timeframe.

Substitution/Deferral

A person currently traveling by car and parking could in future travel by taxi, public transit, car sharing, bicycle or walking or could decide to forgo the trip. Assuming that no preferential road allocation schemes are introduced (refer to Section 5.1.1, 5.1.2, 5.1.3, 5.1.4, 5.1.5 for a discussion of these), there is little likelihood of a shift to taxis or public transit, and in fact, this will likely be a cost push away from these modes towards other modes. There may be some push to bicycles, car sharing and pedestrian travel, but it is likely to be small. Shared vehicles will still need parking. The impact of forgone trips is discussed in Section 3.3, but is thought to be small.

Assuming that the pricing framework currently in place on-street remains similar to its current level, there is no reason to expect any noticeable shift to unpaid on-street locations. With respect to a shift to off-street parking, there is no expectation of a price advantage where a shift to privately operated parking and any shift to off-street TPA parking would be a TPA initiative.

Overall, changes in the competitive environment are unlikely to noticeably impact on-street parking.

Off-Street Parking

Many of the same considerations with the on-street parking environment would apply to the off-street system. In general, the commercial parking environment in Toronto is a very mature industry and not a great deal of change is expected to affect it on an overall basis. That is, no great changes in supply are expected. However, given the extreme localness of parking demand, individual facilities could experience competition, or supply related demand increases or decreases. Across the system, the supply impacts should (and generally always have historically) balance out.

As discussed in Sections 5.1.1. to 5.1.5, there is some risk to demand pressure on the parking market as a whole. This is expected to be low. There is no realistic expectation of any private competition entering into price competition with the TPA in the market for short and medium stay parkers. Other than locational aspects, no mechanism for non-price competition which will have a significant impact on the short and medium stay market has been identified. The effect of competitors on the TPA's 10 large garages is considered in Section 6.0. The types of non-price competition utilized by our competitors such as reserved spaces, valet parking and assumed parking are tools that the TPA does not utilize.

Overall, competition is seen to be a low risk factor.

2.4 Previous Strategic Reviews

Practically, there is an ongoing strategic review of parking by the Authority in the form of its annual strategic planning documents. These are:

1. The Capital Budget which allocates funds for acquisitions and/or expansion of projects in priority areas. While it sets out a 10 year plan, the plan is reviewed annually. The current 10-year off-street expansion priorities are indicated on Map 1. In addition to the acquisition and expansion projects, the capital program identifies the major state of good repair activities which need to be undertaken;
2. The TPA Policy Manual and the annual review process of this document; and,
3. The annual or more frequent rate reviews.

In addition to these continuing reviews, over the nearly sixty-year history of the Authority, there have been three comprehensive strategic reviews which have tried to:

1. Itemize in a single document the strategic direction of the organization, and;
2. Consider in more detail the underlying environmental factors which affect the activities of the Authority.

The first strategic direction document prepared by the Authority was published in December of 1953 immediately following the creation of the Authority. It was entitled “**Statement of Basic Principles, Policy, and Initial Program**”. (It should be noted that at the time of creation, the expectation was that all on-street parking in Toronto was to be phased out so there was no consideration of this service in the initial document. This obviously did not happen.) The document contained the following policy objectives:

“The major concern of the Authority will be the provision of short-term parking facilities, with rate structures and accommodation designed for this type of parker – the shopper, client, patron or business man who needs less than three hours”;

“The Parking Authority will discourage all-day parking within the central downtown area”, and;

“The Parking Authority will attempt to provide short-term, reasonably priced facilities at strategic locations throughout the downtown area”.

These policy objectives reflected the ‘**Basic Principle**’ for the creation of the Authority to, in the words of the principle section, support “**the free circulation of traffic of all kinds through the highways of Toronto**”.

At that time, the focus of the Authority’s facilities plan was the downtown areas and the document indicated that they would support the establishment of public parking in neighbourhood retail areas, but did not have the resources to get directly involved. This later changed largely as a result of the construction of the Bloor / Danforth subway line which provided ideal parking locations in many retail areas. In addition, the Authority

then, as now, was extremely diligent and opportunistic in identifying and acting on strategic acquisition opportunities throughout the city. This ability largely resulted from two factors; organizational design leading to nimbleness of response, and a limited mission of being a parking operator and not part of a wider transportation department.

In the late 1960's and early 1970's, various factors created an environment where the nature and purpose of the use of private automobiles was coming into question and measures to restrict uses of automobiles were being considered by many. The Spadina Expressway OMB hearing occurred at this time. While not a strategic document per se, the 1971 Annual Report of the Toronto Parking Authority, contained a remarkable section entitled "**The Serious Problem Looming Ahead**", which was the organizations response to the perceived strategic threat of the "war on the car" by Toronto City Council among others. The Authority was of the opinion that the promoters of the anti-automobile policies acted as though they felt that:

"... parking in Toronto is a very evil ogre causing traffic congestion and air pollution..."

The Authority clearly did not share this sentiment. The policy clash was defused by events which swiftly followed the publication of the 1971 Annual Report. A number of factors reduced the intensity of the "war on the automobile" including:

- ◆ The final demise of the Spadina Expressway (and the urban expressway movement in general),
- ◆ the first oil crisis, *resulting in*
- ◆ a severe recession and economic crisis which persisted for the next 10 years, and
- ◆ high fuel prices and self-imposed restraints on automobile use. People were more worried about having a job than how they were going to get to their jobs

In addition, this was the period in which government regulations began reducing tail pipe emissions and effectively eliminating the pollution issue with respect to private automobiles from all but the fringes of political debate. The issues leading to the 'war on the car' largely disappeared for the general public until the late 1980's when the City of Toronto began to update its Official Plan wherein the 'war on the automobile' perception

began to surface again. The late 1980's update to the Official Plan occurred during the unprecedented commercial development construction spree in the downtown core. This spree came to an abrupt end in the early 1990's punctuated by the abandonment of the Bay/Adelaide Centre construction and the bankruptcy of a number of the largest development companies in the world. Commercial construction was non-existent for the next 15 years and has only recently re-appeared in subdued form.

Largely as a result of this property boom and city policy response, in 1990, the Parking Authority commissioned a study which was published in January 1991 entitled "**Solutions for the 90's: Strategic Direction**". The '**Goals for the 90's**' section of the report is provided as Appendix 'A' to this report. The goals stand up well. The basic philosophy of the report is contained in the introductory section:

"At the heart of the strategic and policy issues facing PAT for the 90's is the fundamental reassessment of private automobile use; the City's transportation policy and planning have an ultimate objective of reducing automobile use in the City – specifically, in the City core. In its simplest form, the underlying logic of the emerging thinking appears to be that reducing and/or limiting the amount of municipal parking will reduce automobile use and traffic congestion. In this context, decision makers may fail to understand the role of the PAT and how a balanced parking strategy can contribute to solving traffic, congestion and related environmental problems. For example, change-of-mode parking facilities can be a key element in a traffic intercept system that encourages inter-regional auto users to switch to public transit to get into the City core."

The philosophy underlying the strategic objectives of the Authority since its inception is based on the perceived role of the Authority as part of the transportation system and its strategy reports tried to illustrate how to deliver in this capacity. Consequentially, the document proposed that the PAT would be the "animateur" for a parking and transportation forum to crystallize the role of parking in facilitating transportation (mobility). The forum, for various reasons, mostly the severe local commercial real estate recession which, by itself took a lot of pressure off of the local transportation network, never happened.

The Authority's next strategic planning exercise pre-empted the 20-year cycle (1953, 1971, 1991), but was not initiated by the Authority. This was the preparation of the "Moving Forward" report of 1997 prompted by the amalgamation of the seven municipalities into the new City of Toronto. *Moving Forward* proposed the consolidation of on-street and off-street parking operations for the new City under an Authority. The 'Mandate and Objectives' chapter of that report is provided as Appendix 2 to this report.

What the Moving Forward report reflects was that the Authority started to consider its role not only in facilitating mobility but also as an instrument of economic development as well as a component of the transportation system. By providing mobility in a convenient and efficient manner through low cost short-term parking, the Authority is delivering customers to the city's businesses and enabling citizens to undertake essential personal business in an easy way. While this has changed the Authority's perspective somewhat, it has not fundamentally changed the practices.

As on-street parking was not an Authority responsibility up until 1998, there is little consideration of the program in the strategy documents prior to that time. The 1999 TPA document "Rate Setting at on-street Meters" sets out the guidelines to be used in developing policies and practices for on-street parking. The rates in the different areas should be set such that:

- Duration limits that allow sufficient time for patrons to undertake activity while ensuring parking spaces are primarily utilized by short term parkers. This was originally set at 2 hours in 1999 and increased to 3 hours in 2007;
- Rates reflect the ability of the typical area patron to pay, as well as reflecting the underlying price structure for other goods and services within that area. Prices should relate where possible to the prices in effect in the Authorities off-street facilities;
- Similar areas should receive similar treatment;
- Easy to communicate and simple to understand. Persons traveling to an area should be able to predict the rates and other operating practices that they can expect with a reasonable level of certainty;
- Maximize revenue in so far as this is consistent with the remaining governing principles;
- Rates are such that in most locations at most times a motorist will be able to locate a space in reasonable proximity to their desired location.

One additional principle which was not enumerated at the time, but has been the practice of the TPA, is to make it easy and convenient to pay.

2.5 Moving Forward – Again

A review of the previous strategic planning exercises indicate that the policy objectives have remained substantially unchanged for 60 years. In the absence of any new factors, there does not seem to be a need to substantially change them at this time. The Authority should continue its commitment to a practice of:

- ◆ providing off-street parking to accommodate short-stay and non-discretionary long-stay parkers in areas of need;
- ◆ ensuring that all facilities are operating at a breakeven or better level financially or are priced such that they would function at a break even level under normal demand conditions;
- ◆ providing all spaces on a first come, first served basis;
- ◆ maintaining the lowest possible price for short stay parking consistent with the requirement to break-even financially and ensuring turnover;
- ◆ pricing on-street parking at a level where a person wishing to utilize on-street parking has a reasonable chance of locating a parking space close to their desired destination at most times;
- ◆ supporting other City initiatives and objectives in so far as they are consistent with the other Authority principles. Facilitate the City's transportation management and transit initiatives; and.
- ◆ Remaining at the forefront of parking technology to improve efficiency and to ensure unmatched customer service.

The remainder of this document considers the challenges and opportunities which the Authority can expect to encounter over the next 21 years in delivering on this strategic objective.

3.0 THE NEXT 21 YEARS

A number of estimates of population and employment were prepared in the late 1990's and have been utilized by the City of Toronto as the basis for their Official Plan. The Plan covers the period up to 2031, hence the title of this section. By utilizing the same time period the TPA can align its planning with the city timeframe of the City of Toronto, the GTA region in general and the Province of Ontario.

3.1 Population and Employment

Population and employment matter for understanding parking as they are two of the variables which most impact parking demand. (The other key variable is mode choice which will be discussed below). It is almost too obvious to indicate that population is a determining factor because people make the trips which have trip ends in parking activity. In general, the greater the population, the greater the number of parking operations although this relationship can be endlessly referred by segmenting population into demographic and socio-economic categories. Trips generated have a number of purposes:

- ◆ journeys to and from work, school
- ◆ journeys made for work related purposes
- ◆ personal business journeys
- ◆ shopping
- ◆ dining/entertainment
- ◆ other

A rough guide to trip distributions is as follows:

- ◆ home to work or school – 30%
- ◆ work or school to home – 20%
- ◆ work/school to non-home – 10%
- ◆ home to non-work – 12%
- ◆ non-work to home – 18%
- ◆ non-home or work-based – 10%

Every day every resident of the City of Toronto makes about two trips, about 55% of which are made as the driver of an automobile and about 85% stay within the City of

Toronto. There are roughly an equal number of trips to Toronto made by non-residents each day of which again about 55% are made as car drivers.

Employment levels are an important consideration for parking demand for two reasons; they create parking demand by employees and they generate trips by visitors. The characteristics of these two generating factors in Toronto and the GTA is examined in the following two sections.

3.1.1 Population

The GTA is growing by about 90,000 persons per year and this is expected to continue over the planning horizon. Growth is entirely through immigration. Only a small portion of the GTA population growth is occurring in Toronto – the exact number has been a controversial issue, but ranges between 0 and 10,000 persons per year. The City's Official Plan expresses a policy objective of increasing the city population by 400,000 to 500,000 by 2031 which implies a growth rate of about 20,000 to 25,000 annually. The results of the 2011 census will be instructive as to whether the city is achieving its policy target. The City has adopted a growth plan to identify where to accommodate the new (expected) residents. These areas of growth are the downtown and central waterfront, the centres (Scarborough, Etobicoke and North York and Yonge-Eglinton) and the Avenues. With respect to parking demand, the impact of population change in the city is expected to be minor as it seems that given the trends, the current population is likely to increase by less (and perhaps considerably less) than 10% over the next 21 years. About 70% of the increase is expected to occur in the growth areas. However, the GTA is expected to grow more quickly over the same 21 year period adding about 1.5 million persons. This will increase the overall number of auto trips to the city generating some additional parking demands. As the City intends to direct growth to the areas indicated above, the TPA should concentrate its expansion efforts in these areas. These are the areas where the TPA has traditionally been active.

3.1.2 Employment

Employment levels for Toronto (as measured by the City's annual employment survey) since 1986 are indicated in Figure 1. The figures from Statistics Canada are provided as Figure 2 and are slightly different in quantity but track the same trend. As may be seen, employment levels have fluctuated but there has not been a great deal of growth in employment over the past 25 years. The City has a policy objective of adding

approximately 400,000 jobs over the next 21 years. Given that employment levels have increased by less than 200,000 over the last 27 years and have actually declined over the past 21 years, this seems unlikely based on current trends. A reasonable high estimate may be about 5,000 jobs per year or about 100,000 jobs over the next 21 years. Between 2003 and 2008 the City added 58,000 jobs of which 45,000 were in the downtown and 6,000 in NY Centre. It is expected that employment will increase by less than 7% over the next 21 years. The late 1980's commercial development boom can be seen in the graph. Generally, employment levels fluctuate with the business cycle.

Figure 1 : source – City of Toronto

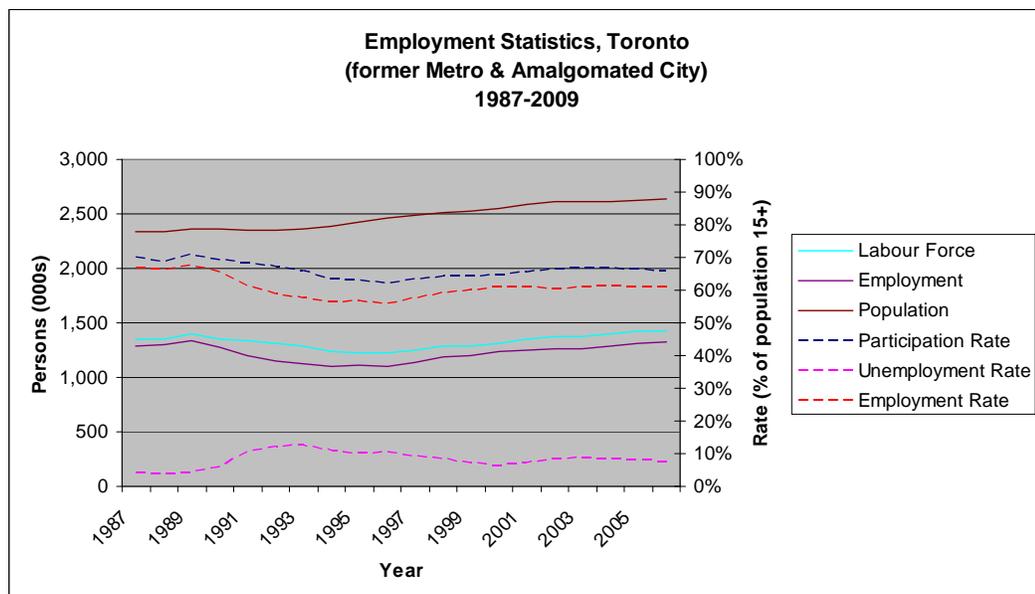


Figure 2 : Source – Statistics Canada

3.1.3 **Summary**

Based on the gross changes in population and employment, parking demand overall may be expected to increase slightly over the planning horizon. The current 10 year capital budget and funding formula are sufficient to deal with this expected increase in parking demand.

3.2 **Trip Choices**

The previous section examined the two variables which determine overall trip making, population and employment levels. It was concluded that there will be a slight overall increase in trip making over the next 21 years due to slight population increases in the city, large population increases in the GTA, and slight employment increases in the city. The other major variable which can affect parking demand is the mode chosen by those making trips. Generally, trip making is considered to occur by one of the following modes:

- ◆ car driver
- ◆ car passenger
- ◆ transit
- ◆ bicycle
- ◆ walk

Obviously, some trips are more likely by one mode than the other. For example, work trips are much more likely to be made by transit than non-work trips. For the purposes of this analysis, the overall level of trips by mode is not crucial. What is crucial is the extent to which trips previously undertaken as a car driver are replaced by trips on other modes or, on the other hand, trips previously not made or made by other modes are attracted to automobiles.

Certain trips are more subject to mode shifting than others. The largest trip block is home based journey to/from work and this trip block generally has a large component of transferable trips depending on outside variables such as availability of a vehicle and the provision or not of free employer provided parking. As this group is not part of our target market, and their use of our lots can be controlled by pricing to ensure they do not crowd out short stay parkers, this cohort is of minor concern strategically.

Our target market is short stay trips. Short stay trips are composed of the following groups:

- ◆ persons on employer business (meetings, etc.)
- ◆ persons conducting personal business visits (i.e. medical)
- ◆ shoppers
- ◆ hospitality and entertainment visits
- ◆ others (e.g. residential visitors, sightseeing, social, etc.)

For most of these types of trips there is expected to be a limited amount of substitution of modes that will occur. For this reason, there is little reason to expect large changes in the presently established trip choice patterns. A large shift in modes away from public transit to private automobile occurred between about 1950 and 1990 due to the falling relative cost of commuting by automobile versus public transit. This is over and may be reversing slightly. Recent research out of both Australia and the United States indicates that the younger demographics, 16-19 and 20-29, are becoming licenced drivers at a lower rate than was the recent norm. The research is still controversial. Some factors thought to be influencing the rate of obtaining licenses are the more stringent requirements associated with obtaining licences and higher costs to automobile ownership and operation for younger demographics (mainly insurance). The effect seems to disappear in older demographics. Notwithstanding this, people generally have good reasons for which they are choosing the mode they choose and unless changes in the underlying circumstances occur, there will be little impetus to change modes. In choosing a mode, people generally consider the following

- Availability of a vehicle
- Parking cost versus fare cost
- Convenience
- Traffic congestion
- Travel Time

Take, for example, a trip to consume live theatre by a couple from the outer Toronto suburbs who do not have transit passes. Four transit tickets (two each way) would cost \$12.00. Evening parking in the downtown can easily be found for \$7.00 or less and it is usually quicker and more convenient by private automobile. Unless some factor such as fare cost, parking costs or travel time was to change dramatically, the mechanism for

which cannot be envisioned, there is little chance of a mode change. Similar comparisons of price and other factors for other types of trips can be made. This price relationship between parking and transit is unlikely to change for cash trips. Notwithstanding this, the transferrable Metro-pass has changed mode considerations somewhat and has made some trips previously taken by automobile or other modes more attractive by transit. This is likely a small effect and in any event, over time will be offset by this change causing

transit fares to increase faster than the rates of inflation. Car sharing is discussed in section 5.5.

3.3 Trip Substitution or Technological Replacement

The continued evolution of communication technology is improving the ability for persons to substitute virtual trips in place of actual trips. This is expected to continue. To date, the rate of substitution has been low with respect to trips made by traditional short stay parkers. The types of trips most subject to substitution are some business meetings and personal business trips such as to government offices. Scenarios can be imagined wherein the rate of substitution could increase dramatically. As virtual meeting applications improve, this could reduce work-related trips for example which would severely affect a large component of the TPA's core market. This is the most significant risk factor to the traditional demand component of the TPA service model.

4.0 THE NEXT 21 YEARS IN TECHNOLOGY

The Toronto Parking Authority has long been at the forefront of technology innovation. While the next 21 years is destined to provide a spectacular array of technological changes, aside from the potential for trip substitution described in the previous section, these changes are not likely to change the basic mobility structure and pattern as they relate to municipal parking. However new and evolving technologies do have the potential to change how parking services are provided. A few technologies are reviewed below:

4.1.1 Motive Power

Presently, the vast majority of private vehicles are powered by internal combustion engines. There is some expectation that electric-powered vehicles and hybrids (either by way of fuel cells or batteries) will begin to displace IC vehicles. Clearly, this represents a dramatic change in the automobile industry, but other than possibly creating a requirement to provide charging services, has little impact on parking infrastructure. The vehicle designs and capabilities are expected to remain roughly the same as at present. At the present time the industry has not standardized on a vehicle charging technology but, once it does, the TPA will need to respond as appropriate.

4.1.2 Guidance Technology

Guidance Systems in parking can take several forms. They can consist of:

- Electronic information signs throughout the city indicating the availability of parking at different lots and how to get there (Area Parking Control);
- Mobile applications for GPS or smart phones that provide rates availability and locations of parking to a terminal in your car;
- Electronic signs and lights inside a parking garage directing cars to available spaces;
- Self-parking systems in cars.

Area Parking Control using electronic signs for deployment throughout the city was considered previously for Toronto in the early 90s specifically for use in the Chinatown area (Spadina/Dundas). However, there was significant opposition by both government and the public to adding more signs to Toronto's already cluttered streets. In addition,

there does not appear to be the a need to direct traffic to alternative parking locations within the TPA system due to the TPA's use of rates to ration use and encourage turnover and insure availability of parking. A more appropriate system, and one that is currently under development by the TPA, is the use of mobile applications to deliver information on rate and locations of parking facilities to personal devices. This technology could be further expanded to include information on real-time availability of parking.

Many newer parking garages, such as the GTAA garages at Pearson International Airport use parking guidance systems combining signs indicating the number of available spaces in a row and lights above the spaces indicating availability to assist drivers in finding free spaces. From a business perspective, such systems do little to increase business to the parking lots, but may increase customer satisfaction by reducing search times and traffic circulation within the parking lots. However, most TPA garages are designed using the drive aisles as ramps and with circulation systems such that a driver must pass most parking spaces and thus will find the next available empty space as it is driven by. Therefore, guidance systems of this sort may only be appropriate in a couple of the larger and more complex garages such as the Nathan Phillips Square garage or the Yorkville-Cumberland garage.

There are likely to be vast improvements in automated vehicle guidance technology over the next two decades. This could lead to more efficient parking layouts and automated valet parking systems. Again this will not fundamentally alter basic vehicular requirements rapidly but could start to modify parking design procedures and lead to more efficient construction. In addition, automated (robotics) garages will likely become more common in future. However, these facilities are generally more appropriate for longer stay parking activities and are less likely to be deployed widely in high-turnover, short-stay parking.

4.1.3 Fuel Prices

The price elasticity of fuel is negative. That is, a 1% increase in fuel prices will result in a less than 1% reduction in quantity purchased. The range of studies undertaken generally concludes price elasticity of about negative 0.25%. Were a large increase in fuel prices to become permanent, there would be a substitution to more fuel efficient vehicles but no large scale reduction in personal vehicle use as it relates to short-stay trips. Fuel prices on their own are not seen as a risk to parking demand.

4.1.4 Payment Systems

Payment system will continue to evolve. The TPA is planning to implement payments by way of mobile devices on a test basis. Should this prove successful, it will be expanded. The TPA will continue to be the industry leader in innovating with effective and efficient payment techniques.

4.1.5 Construction Costs and Techniques

The most significant challenge currently facing the TPA is the rapid escalation that has been occurring in construction costs. The cost of constructing underground parking spaces has roughly tripled in the past 15 years. The exact causes of this rapid cost increase are not easy to determine and therefore it is difficult to determine whether the escalation will continue or begin to moderate or reverse. There is some speculation that it is a demand driven phenomenon related to the unprecedented building program in the GTA associated with condominium development and the various government sponsored infrastructure projects including the extension of the Spadina subway, other Big Move transit construction and the Pan Am games buildout. If it is likely that the current construction costs are indicative of what can be expected, the TPA will need to reconsider its base pricing model and revise the short stay rate structure upward. Changes to construction techniques may help moderate the price escalation.

4.2 Conclusion

The future of mobility is likely to mimic the present in terms of fundamental requirements for parking over this planning timeframe. However, technology changes may change how parking services are delivered; increasing efficiency and easy of use. The Toronto Parking Authority should continue to monitor the continuously advancing technology landscape to ensure the TPA remains a leader in parking technology and modernization. Steps may need to be taken to address construction cost issues.

5.0 POLICY INITIATIVES

The City, the Province, the Federal governmental and several non-governmental agencies have been emphasizing that for various reasons, they are likely to pursue a policy framework over the next 21 years which intends to enhance the use of public transportation and other modes and constrain the use of conventional personal vehicle transportation. While this framework has been in place since the early 1970's it appears to be being pursued more aggressively now. Enhancing public transit on its own will have little impact on our operations as it is unlikely to change the relative attractiveness of modes with respect to our customer base. For the vast majority of persons currently making short trips by private automobiles even an improved transit system would not prove a desirable alternative as it can not be made to compete with the speed and convenience of private automobile use. Constraining auto use could be effective. This section surveys what policy initiatives to control auto use may be implemented and what impact they may have.

5.1.1 Parking Taxes

This issue of parking taxes was the subject of the Authority's 2007 **Parking Tax Discussion Paper** which is available on the GreenP website. The summary is excerpted below:

Traditional approaches to taxing parking were reviewed. These include sales taxes, transaction taxes and space taxes. Two additional variations were considered; expanding the scope of the on-street charging program to areas without turnover requirements, and special treatments for low emission vehicles.

The measures were assessed in relation to their ability to achieve 5 policy objectives:

- *Revenue generation;*
- *Congestion reduction;*
- *Reduction in greenhouse gas emissions;*
- *Ease of implementation and transparency of application; and*
- *Tax fairness.*

*With the exception of special treatments for hybrid vehicles, all of the tax measures were assessed to have high revenue generating potential. None of the measures considered had an appreciable impact on congestion or emissions. **The per space tax on a city-wide basis was the fairest and easiest to implement and would be the preferred approach should taxes be pursued.** All of the other parking tax options would have significant negative effects. Taxes limited to specific areas, either sales taxes or space taxes, would tend to encourage rather than curb de-concentration of economic activity.*

*Some other non-parking tax measures were assessed. These included vehicle registration fees, tolling and congestion charging. These measures were also judged to have high revenue generating potential but little impact on congestion (other than some local impacts) or greenhouse gas emissions. **Due to the ease of implementation, a vehicle registration fee was judged to be the best of these non-parking tax options.***

The discussion paper did not address in any detail the specific effect of parking taxes on the TPA. The precise impact would depend on the specific tax regime applied, but all would have the general impact of reducing the net revenue achievable from a parking space thereby reducing the TPA's opportunity to establish new parking facilities or undertake joint redevelopment ventures on existing lots. Parking taxes are likely in some form during the next 5 years. An ad valorem tax will likely be strongly promoted. The TPA should pursue the alternative of a space-based tax.

5.1.2 Congestion Charges, Road Tolls, etc.

The above-noted discussion paper contained a brief section on congestion charges and road tolls, but didn't specifically assess their impact on TPA facilities. Again the impact would vary with any implementation specifics, but it can generally be stated that any road tolls would reduce to some extent the TPA customer base resulting in lower revenues and less expansion opportunities than without tolls. The implementation of the congestion zone would likely have devastating impacts for any facilities within the zone, and some slight boost for facilities outside of, but in proximity to the zone boundary. Metrolinks is due to report out on financing methods in 2013, or now it seems earlier, so the best guess is that any program is at minimum three years away and probably longer. It should be noted that the tolling of existing roads has not been widely adopted around the world

and has largely been considered a political 'third rail'. The implementation of a congestion zone or widespread road tolling is considered unlikely in the medium (less than 10 years timeframe).

5.1.3 Lane Reductions

A number of city initiatives over the years have had the effect of reducing the amount of road lanes available to accommodate vehicles either permanently or at various times of day. The lanes are taken out either to accommodate bicycle lanes (Sherbourne) or to widen sidewalks for pedestrians and merchants (Bloor Street) or to give priority to Transit (Bay Street, Don Mills, St. Clair). The reduction in lanes in some cases displaces on-street parking and in all cases displaces vehicles. Generally, the overall effect is to increase congestion for private vehicles. The likelihood of additional lane reduction on a scale which would seriously impact TPA operations will depend strongly on the composition of Toronto City Council and is unpredictable at present.

5.1.4 Vehicle Priority Schemes

A number of vehicle priority schemes have either been implemented or are under consideration. These types of schemes would give preference to some vehicles over others in order to reward practices which benefit the environment or traffic. The Province of Ontario is implementing an eco-plate program which will allow for eco-friendly vehicles to be identified. There has been, and will continue to be, encouragement for the Toronto Parking Authority to support these programs (car sharing is discussed separately below). Support generally would take the form of:

- ◆ reduced parking fees, and/or
- ◆ reserved spaces in TPA facilities

Reducing fees encourages auto use and therefore would seem to be contrary to the general policy goal of reducing the use of private vehicles. Reserved spaces are difficult to implement and reduce the efficiency and therefore increase the cost of building and operating the parking facilities. For these reasons, the TPA has not been disposed towards implementing either policy.

Many municipalities have programs in place to favour various classes of low emission vehicles. For Example, the City of York, UK, has introduced discounts on various city parking permits of 50% for qualified vehicles. Los Angeles had a program giving hybrid vehicles free parking at meters, but the program was cancelled because it did not appear to be encouraging new hybrid sales. Seattle offers registered carpools parking permits for designated on-street and off-street parking areas that reduce parking cost by 50% per vehicle, and at least 75% per person depending on the number of persons carpooling together.

The Province of Ontario considered but did not pursue mandatory special parking preferences in conjunction with its ECO plate program. As with lane reduction, the likelihood of these programs will depend strongly on the composition of Toronto City Council and is unpredictable.

5.1.5 Car Sharing

Car sharing refers to the practice of a membership-based car rental company. In Toronto the car sharing initiatives are for profit enterprises. The proponents of car sharing promote it as having the following public benefits:

- ◆ reduction in car use overall due to persons not owning cars (“once you own a car you will use it”). By metering use and bundling all capital and operating costs into a user fee, it encourages users to pick the appropriate transport mode for individual trips which means less automobile trips by members who would not then own a vehicle.
- ◆ assuming that the above assumption is correct, the argument is made for environmental benefits due to less overall vehicle kilometers traveled by private automobiles and more use of other more environmentally friendly modes.
- ◆ again assuming the first assumption is correct, there is an argument that it generates less overall traffic congestion and less overall space required for parking.

It has not been possible to verify the central claim (first bullet above). If the central claim is not true then the case for car sharing reduces down to a reduction in the amount of space required for parking. It seems that the central claim is less likely to be true in

Toronto, especially in the denser older parts of the city, than it would be in newer cities. This is due to the fact that Toronto already has an extremely high level of transit use and a large proportion of the users are not choice users (i.e. do not have access to a car). To the extent these persons are substituting trips they were making on the TTC to car sharing they would worsen rather than help the problem.

Even assuming that there are some public benefits created by car sharing, it is not clear that these benefits outweigh the difficult situation of a public agency subsidizing, or otherwise favourably discriminating in favour of a private, for profit, enterprise.

There is likely to be continued accommodation of car sharing at on-street locations, including street meters. There is likely to be pressure on the TPA to accommodate car sharing in reserved spaces at its off-street facilities.

5.1.6 Land Use Regulations

The city regulates land use by way of various regulatory documents. The city is currently attempting to consolidate the zoning by-laws which were in place in the six former municipalities into a single document. The current draft of the document has been posted for public consultation and comment. In addition, the city has adopted “**Green Guidelines for the Development of Surface Carparks**” and the “**Green Development Standards**” which are raising the cost of supplying parking. There is no expectation that they will be relaxed and are more likely to be made more stringent over time.

5.1.7 Deregulation of Common Carriers

The establishment of pooled taxi services, or a jitney system would have the potential of attracting some current private automobile users to the system. The likelihood of such a system being established in Toronto is considered to be very low given that the Toronto Transit Commission strongly opposes the initiative. However, New York City is implementing the program and may demonstrate its usefulness leading to implementation pressures on other North American cities.

5.1.8 Bicycles

The city has been strongly promoting the increased use of cycling as a transportation mode. This has resulted in the conversion of some road lanes that were previously available for automobile. It is not clear whether this policy will continue.

The Toronto Parking Authority has a history of providing bicycle parking. When the TPA began replacing parking meters with Pay and Display machines, it converted approximately 2000 meters to post and ring stands. In addition, TPA Policy Resolution 3-9 states: **“the Authority provides suitable bicycle racks at carparks where there is likely to be sufficient usage of the racks to warrant this arrangement”**. Many racks have been installed in TPA lots where space cannot be used for car parking. However, some/much of these infrastructures may be underutilised due to a lack of public knowledge about its existence.

The Toronto Bike Plan identifies the TPA as a potential partner in implementing the Bike Plan, in particular, feasibility study and installation of full service bike stations. Such a station venture is currently in development in P1 of the Nathan Phillips Square garage. Any benefits arising from the TPA bicycle strategy are necessarily indirect. That is, by facilitating overall mobility, the TPA assists the City in remaining vibrant which underpins all businesses.

TPA participation in providing bicycle facilities and infrastructure such as lockers, stations, racks and rental programs should be evaluated on a case by case basis and implemented where possible to the extent that such ventures do not significantly reduce the ability of the TPA to fulfill its primary mandate of providing short-term parking to automobiles. In addition, the TPA should continue its practice installing (funding) of post and ring stands when replacing parking meters throughout the city.

5.1.9 Privatization Initiatives

The issue of monetization or privatization of all or part of the City's parking system continues to be a topic of discussion. The TPA is committed to the position that the parking system in its current configuration best serves the needs of the citizens and businesses in Toronto. The impact of a straight monetization, that is, the sale of the future profit stream would have little impact on the TPA. An examination of possible options would need to be undertaken. The objective would be to restructure the Authority

such that it could access the Capital Markets on its own initiative. The sale or long term lease of TPA assets to private operators would be run under private sector operating practices have the effect of largely eliminating the TPA service model in favour of the private operation model.

5.2 Conclusion

The next 21 years are likely to be seen the introduction of a series of policy initiatives which are designed to raise revenues from automobile users and encourage mode shifts away from private internal combustion powered vehicles or both. The most probable outcome from the introduction of these initiatives are very small reductions in demand for public parking or reductions in net revenue generated for public parking. However, some specific measures could have serious consequences on a local basis. Any initiatives need to be reviewed and, if necessary, responded to on a case by case basis.

6.0 SITE SPECIFIC ANALYSIS

With respect to the off-street parking program, there are some site specific considerations which are worth reviewing for either of two reasons.

1. If changes in the demand environment occur at the large lots, this can have ripple effects through the funding model as they account for a large proportion of free cash flow; and
2. Some lots are facing specific redevelopment challenges either initiated by the TPA or by outside agencies.

6.1 The Large Facilities

The Table below indicates net and gross revenue for the ten largest facilities.

Carpark	Gross Revenue 2009 (\$000,000)	Net Revenue 2009 (\$000,000)
Nathan Phillips Square	8.3	4.2
Yorkville Garage	5.3	2.8
St. Lawrence Garage	5.3	2.5
Queen/Victoria Garage	3.9	2.2
Dundas Square Garage	2.6	1.4
University Avenue Garage	2.4	1.3
Air Canada Centre	2.3	0.1
Hotel Intercontinental	2.5	1.3
Charles / Hayden Garage	2.0	1.0
Rosehill Garage	1.7	0.7
Total	36.3	17.5
%	53.4	76.1
Rest of Carparks	31.7	6.5
%	46.6	23.9

The 10 largest car parks are responsible for three quarters of the net cash flow of the TPA's off-street operation, and as such, largely fund the capital expansion program. The relative importance of the large facilities is not expected to change over 21 year planning horizon. At the present time there are two large new garage facilities identified in the capital budget. Both of these will create large net contributions to the TPA balance sheet when they come on line. The continued operation and profitability of these facilities is essential to the TPA operating model. A brief discussion of these facilities is provided below:

6.1.1 Nathan Phillips Square Garage

This facility provides 2000 spaces to serve the north/west downtown core. The main sources of parking demand are City Hall, the commercial properties on the south side of Queen Street built without parking, and the three Courthouses adjacent to the site. Evening demand is generated from the Four Seasons Centre. The City is currently intending to relocate its Provincial Offences Courts from Old City Hall in 2016 which, depending on what replacement use the Province implements could impair future demand. Phase II and III of the Bay/Adelaide project will generate additional parking demand when they proceed. The only large redevelopment site remaining in the vicinity is the 200-space surface parking lot located at the north/west corner of Chestnut Street and Armoury Street. This property is owned by the Province.

6.1.2 Yorkville Garage

The Yorkville garage (constructed in 1973) has seven above-grade and two below-grade levels, as well as containing a Mall and three partial floors of offices. The building has not aged well and requires extensive maintenance and rehabilitation. A major structural refit was undertaken in the mid 1990s due to possible failure of the structure. A major very expensive rehabilitation is required if the existing facility is to be retained. In a similar situation, the garage at 33 Queen Street East was demolished and reconstructed as mixed-use redevelopment. A similar idea is being investigated for the Yorkville garage whereby redevelopment will be undertaken with a joint venture partner wherein the air rights will be sold and the underground portion of the garage will be expanded with possibly some additional parking in a podium. This will likely result

in a reduction of the size of the garage from its current 1036 capacity to between 700 and 800, but should not affect the net profitability of the facility in future. As a result, the Charles/Hayden garage may be expanded by 200 spaces to replace the area capacity (refer to 6.1.9).

6.1.3 **St. Lawrence Garage**

The St. Lawrence Garage serves the following customers:

- All-day parkers primarily associated with the financial district to the west;
- visitors to local area business and the St. Lawrence market; and
- Patrons of the live entertainment facilities nearby.

The usage at the St. Lawrence garage is overwhelmingly composed of long stay, mainly commuter parkers, The short stay parking demand for the area is expected to remain constant or slightly increase over the medium term. Significant changes are expected in the competitor environment over the near/medium term. The large surface lot to the east (230 spaces) is partially closed and will be completely closed shortly to be replaced by a mixed commercial residential building with a small component of commercial parking. The surface lot at the south/west corner of Church Street and The Esplanade (about 120 spaces) will be redeveloped at some point, likely in the timeframe of this planning exercise. The previous surface lot at the northeast corner of Scott Street and the Esplanade is under construction as a residential building which will also provide for public parking (180 spaces). The TPA is planning to construct a 250-space (or less) underground garage to serve a new market and courthouse building at the northwest corner of Jarvis and Front Street. All of this should have a net positive impact on generating short stay parking demand for this St. Lawrence Garage. This will cause the revenue at the carpark to grow at a faster rate than growth in the system as a whole. The following are estimates of the gross revenue in year 2031 based on average growth rates of 3%, 4% and 5% annually and the adjusted revenue expected arising from substituting in a greater portion of short-stay parkers.

	3%	4%	5%
2009 Gross (\$000)	5,300	5,300	5,300
2031 Gross (\$000)	9,900	12,100	14,800
2031 Gross Adj (\$000)	11,300	14,000	18,200

6.1.4 Queen / Victoria Garage

The Queen/Victoria garage serves the businesses along Queen Street East, downtown shoppers, the live theatre precinct, and St. Michael's Hospital. St. Michael Hospital is in the process of expanding which should generate additional parking demand. There is an approved development on the lands to the east of the Hospital which includes a 400-space public parking garage under the Church yard. Given recent increases in parking construction costs, this may never be developed, however, if built, it would have some depressive effect on income. The large 600-space surface carpark on the north side of Queen Street between Church Street and Jarvis Street has also received approval for redevelopment. The future status of the two surface lots on the south side of Richmond Street is unknown. The demand for short stay parking should increase over the next 21 years resulting in gross revenues increasing at a faster rate than inflation.

6.1.5 Dundas Square Garage

This facility already operates as virtually a short-stay only facility. Net revenue at this facility should continue to increase faster than the rate of inflation over the planning timeframe. There is a city owned building to the northeast of this garage. Should the city redevelop this property the TPA should construct additional public parking as part of the redevelopment.

6.1.6 University Avenue Garage

There should be an opportunity to increase short-stay parking activity at this garage by improving the street level signage and generally revitalizing its appearance. This garage underperforms expectations.

6.1.7 Air Canada Centre – Bay Street east side

This surface lot is owned by the Caisse de Depot de Quebec and is anticipated to be a development site at some future date. The TPA leases this property for a nominal annual rent of \$10.00 but due to very high payments in lieu of taxes, the carpark has a very low net revenue result. Short-stay parking demand has

increased in the area and increases in short-stay use should be possible by displacing some of the long-stay parkers. In the medium to long term, the TPA should try to secure public parking in any redevelopment that occurs on this site.

6.1.8 *Intercontinental Hotel*

The TPA owns the lands at 220 Bloor Street West where the Hotel Intercontinental is located. The Hotel has a lease running until 2086 at which time the Hotel will revert to the TPA. This carpark provides parking for the Hotel, area business and restaurants, the ROM, the RCM and Varsity Stadium. Parking demand is expected to remain steady or intensify over the medium term. Other than the unlikely redevelopment of the Varsity Stadium lands, there are no realistic opportunities for competing facilities to be provided in the area. The City has initiated a study to reconfigure the carpark to allow the properties fronting Bloor Street to be serviced by way of the lane which services the Hotel. This lane is part of the TPA property and is subject to an exclusive easement on behalf of the Hotel. The Hotel would need to consent to change to this arrangement. The concept of employing a deck on the surface portion of this carpark has been investigated. A redevelopment of the entire site prior to the 2086 lease termination is possible, but not likely.

6.1.9 *Charles / Hayden Garage*

The Charles / Hayden garage was discussed briefly in Section 6.2. Planning approvals have been obtained to add two additional floors to this garage increasing the capacity by 200 spaces. This would likely only be done if a redevelopment and size reduction is undertaken at the Yorkville/Cumberland garage.

6.1.10 *Rosehill Garage*

The Rosehill garage is established on lands under lease from the Toronto Transit Commission. The lease extends to 2018 with renewals for an additional 26 year term. The Yonge / St. Clair area has been transforming away from being a commercial node and there is little prospect of parking demand intensifying in this area.

6.2 Other Site Specific Considerations

In addition to the 10 sites identified in Section 6.1, the TPA has a number of other sites which are of interest due to their potential as redevelopment sites. Any redevelopment is done on a case by case basis in accordance with the TPA's Policy 6-2 - Joint Venture Development, which ensures that any redevelopment is only undertaken where the provision of municipal parking remains the fundamental objectives of the project.

6.3 Conclusion

Due to their large contribution to net off-street revenue, and hence their essential contribution to funding the capital program (both expansion and state of good repair), special attention is given to the large off-street facilities. In addition, where redevelopment of any off-street facility is considered, the delivery of municipal parking services remains the core objective.

7.0 CONCLUSION

7.1 Strengths, Weaknesses, Opportunities and Threats

The strengths, weaknesses, opportunities and threats associated with the next 21 years have been discussed throughout this report. They are summarized in the table below.

Strengths	Weaknesses
<ul style="list-style-type: none"> • TPA is highly profitable and self-financing. For 2008, net revenue was \$76M M on \$113M of gross revenue. There is little prospect of net revenue decline substantially. • Large loyal customer base which indicates its loyalty due to high quality parking services at affordable prices. In 2009, there were over 14.1 million customers. • Well trained, effective work force. • Modern, state-of-the-art equipment and facilities. 	<ul style="list-style-type: none"> • Competition for traffic lanes. • Pressure for taxes and other measure on private auto use. • Limited control over external parking environment. • Somewhat negative public perception of automobile culture.
Opportunities	Threats
<ul style="list-style-type: none"> • Forecasted Population increases in the City of Toronto will create a greater demand for the number of parking operations. • New innovations in technology such as payment systems have the potential to better the TPA's parking services. • Potential of TPA to assume ownership and operation of the Public Bike Program • Acquire or manage additional facilities to increase total parking spaces. 	<ul style="list-style-type: none"> • Congestion charges, parking taxes, road pricing • The TPA is vulnerable to rises in land and construction prices • Unpredictable changes to employment that can affect the demand for parking in the City • Initiatives to remove On-street Parking for other modal purposes will present a loss in revenue and create a shortage of spaces for TPA users. • The TPA is subject to property taxes, but has no appeal rights.

7.2 Concluding Comments

The underlying forces guiding the TPA service model at the 10 largest facilities and for the overall system are likely to continue and slightly intensify over the next 21 years timeframe. This ensures a stable funding environment.

These underlying forces are:

- Moderate population growth over the period with a majority of the growth in the growth areas as defined in the Official Plan
- Very low levels of employment growths
- No major shift in mode choice away from private automobiles
- People will continue to make trips at a rate similar to now.

However, there is likely to be continued pressure on the parking service through restrictions on road use which will put pressure on the parking environment. In addition, there is a strong possibility of additional monetary restrictions being placed on private automobile use. The total impact of this is difficult to gauge.

The TPA should continue to pursue its capital expansion program and monitor the impacts of any new policies on mobility. The objective of the Authority should continue to be to price parking to achieve the two objectives of:

1. Creating high levels of turnover; and;
2. Ensuring that the off-street program is self-financing.

APPENDIX A

SECTION 5

GOALS FOR THE 90s

Introduction

In order to fulfil the PAT's Mission, achieve its Vision and respond to the full range of issues identified in preceding sections, the PAT has identified specific Goals. The Goals are statements of long-range aspiration: directions that will be pursued but will never be fully completed. For example, it will always be possible to strive for a more balanced parking strategy.

The PAT will continue to develop its Operating Budget and five- and ten-year capital plans to reflect the goals outlined below. Examples of goal-related initiatives within the Operating Budget would include pricing strategies and reviews, new technology and equipment, additional research and planning studies, and staff development. The Capital Plan will continue to include specific elements related to land banking, commuter parking facilities, integrating new and expanded facilities with retail/Main Streets Programs, and joint venture developments and acquisitions.

Core Business Goals - Off-Street Public Parking

- To provide safe, well-managed public parking.
- To have aesthetically attractive parking facilities that enhance the neighbourhoods in which they are located.
- To provide conveniently located parking .
- To strive for a balanced parking strategy that includes
 1. change-of-mode commuter parking along subway and commuter rail lines;
 2. short-term parking in both the core and the local commercial/retail strip areas of the City;
 3. long-term parking on the fringes of the core area of the City; and
 4. variable pricing strategies at single locations.
- To set prices that support a balanced parking strategy.

Policy Goals

- To be an integral component of the City's Official Plan, transportation policies and infrastructure.
- To be politically sensitive and cognizant of community priorities, particularly environmental concerns.
- To use pricing strategies to help achieve the transportation objectives of the City.
- To provide parking in response to community demand in residential/retail areas.

Financial Goals

- To meet the legislative requirement to be self-sustaining.
- To fund the development of the City of Toronto off-street parking program.
- To remain committed to providing a satisfactory return to the City of Toronto.
- To continue to seek innovative funding mechanisms.

Development and Planning Goals

- To monitor parking demands, expanding facilities to meet demand in existing areas and providing new facilities in unserved areas.
- To continue to take an entrepreneurial approach to joint ventures, developments and land acquisition.
- To leverage assets through portfolio management for the purpose of pursuing an integrated, balanced parking strategy.

Operational Goals

- To provide exemplary customer service.
- To maintain a well-trained, highly motivated and public-minded staff.

Management Goals

- To maintain a lean organization and continuously improve the PAT's effectiveness and efficiency.
- To be a fair and equitable employer.
- To value and encourage the input of staff to the continuous improvement of the PAT.
- To maintain integrity in PAT's dealings with its stakeholders, employees and suppliers.
- To stay at the "cutting edge" in the use and application of technology.

External Goals

- To be responsive to requests from Council for it to be involved in special events and projects on behalf of the City.
- To provide operating services as requested by other jurisdictions.
- To develop consulting services in parking planning, development and operations.
- To offer initiatives in resolving transportation problems.
- To act as an advocate for itself and the City on issues affecting parking matters.

APPENDIX B

5.0 MANDATE AND OBJECTIVES

The provision and operation of municipal parking is integral to the proper functioning of the New City's transportation system, and is an essential element of ensuring a healthy economy. The following overall goal of the TPA is therefore:

"To administer an innovative and co-ordinated parking management program that delivers affordable, convenient, well designed and secure parking in quantities and locations necessary to ensure the continued success of the City's commercial and residential areas while self-financing its activities and supporting the overall transportation objectives of the City."

This mandate is fulfilled by pursuing the supply, service and price objectives outlined below.

5.1 PARKING SUPPLY OBJECTIVES: *REFLECT CITY POLICY AND MARKET NEEDS*

The supply of parking provided by the TPA will consist of the following:

- affordable short-stay parking in the core commercial areas and the outlying retail strips;
- parking for essential long-stay parkers and commuters on the fringes of the core commercial areas, and in locations where automobiles may be intercepted prior to impacting the local road network;
- collective and joint use parking facilities;
- parking in the vicinity of regional entertainment attractions which is priced reasonably and consistently;
- change of mode parking along subway and commuter rail lines;
- respond to the needs for on-street residential permit parking where requested;
- commercial boulevard parking where appropriate to support economic activity.

5.2 SERVICE STANDARDS: *CUSTOMER DRIVEN*

The TPA will adopt the following service objectives for the supply of both off-street and on-street parking.

- to ensure that **high quality** parking is **conveniently located, well identified and accessible**;
- to provide exemplary **customer service** with well trained, professional staff;

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- to ensure that the facilities are **safe** through the use of superior design materials, adequate maintenance and high operating standards;
 - to ensure that the parking facilities are well designed and integrated into the neighborhoods in which they are located through high levels of **public participation** in the projects;
 - to ensure that parking is delivered in the most flexible, effective manner possible with the most **up-to-date equipment and practices** available.

5.3 PRICING PRINCIPLES: *FAIR AND CONSISTENT*

The TPA will follow these principles in establishing its parking rates:

- to set short term rates as low as possible consistent with its parking supply objectives;
- to set long stay rates at a level competitive with the private sector operators;
- to ensure that rates are consistent and predictable, and that customers are provided with adequate notice of rate changes;
- to ensure that the pricing strategies adopted are consistent with the City's transportation objectives;
- to ensure that the overall pricing and marketing strategy is consistent with the TPA's need to be self-financing.