



REPORT FOR ACTION

Parking Market Analysis for 2020 Toronto Parking Authority Budget Submission

Date: September 18, 2019
To: Board of Directors, Toronto Parking Authority
From: Acting President, Toronto Parking Authority
Wards: All

SUMMARY

This report responds to the request from Toronto City Council to the President of Toronto Parking Authority (TPA) to include a Parking Market Analysis, annually, as part of its Budget Submission.

The parking market served by TPA consists of two main service streams: the on-street program and off-street program. The on-street parking stream includes all of the approximately 19,000 paid on-street parking spaces, which accept payment by way of parking machines, or through the Green P App, and a few legacy single-space parking meters. The comprehensive parking market analysis of this on-street program is undertaken for all locations once every three years when the rates and rules of operation are reviewed and aligned with utilization levels and to ensure equitable treatment of all areas of the city. The last comprehensive review was undertaken in October 2017. Implementation was completed in late 2018. The next comprehensive review is scheduled for the middle of 2020. In addition to the comprehensive review, in-year adjustments are undertaken as circumstances warrant. On-street parking is competitively priced with TPA off-street pricing where applicable and to below prices set by private parking operators. On Street parking is almost always the first choice of short-stay (under three hours) parker.

TPA also operates an extensive inventory of approximately 300 off-street parking facilities containing over 40,000 spaces, however over one third of these spaces are managed and operated by TPA on behalf of other City departments or agencies including City Real Estate Services, Parks, Recreation and Forestry, Toronto Transit Commission (TTC), Exhibition Place, and Toronto Community Housing Corporation. While consultation usually occurs, in most of these facilities the parking fees are set by the department or agency and reflect their policy objectives. In addition, there are 26 locations where garages or surface locations are leased from public or private

landowners. The facilities where rates are set by the TPA Board of Directors, are subject to a comprehensive annual rate review. The next comprehensive review is scheduled for November 2019 for implementation in January 2020. Each year the comprehensive review includes surveys of rates being charged by private parking competitors located in the vicinity of TPA parking facilities. All of the TPA's large garages, had competitors identified as part of the 2019 Rate Review.

The primary objective of TPA's rate setting process is to achieve high usage levels in its facilities. TPA would not normally change rates where usage levels are low or declining. TPA's service mandate is to serve short-stay high turnover parkers. These are the customers to the City's businesses. The TPA only accommodates longer stay parkers where all short-stay parkers have been served and additional space is available in the facility. TPA's rate setting practices reflect this service mandate by having short-stay rates lower than most competitor rates. There are many other factors which influence parking behaviour and choice of parking location. These include selecting other travel modes, road congestion and general traffic issues in the vicinity of a given facility, and general economic conditions either local to an area or on a more widespread basis.

There was an extensive series of rate adjustments implemented in early 2019 which impacted 93 of TPA's approximately 230 off-street locations. This report analyzes the effect that these price changes had in terms of usage levels and parking revenue as well as calculating the price elasticity associated with the changes. In general, with the exception of eight TPA garages in the core commercial areas, the price adjustments resulted in no change in overall parking transactions in the 93 locations where they were implemented and generated 5.52% in additional revenue at these locations. Additional rate change recommendations will be considered by the TPA Board of Directors at their November 25, 2019 meeting. TPA is projecting a total increase in 2019 revenues across all revenue streams of 2.4% for 2019 over 2018. This represents the results of the revenue increases at the carparks referenced in this report as well as car parks where rates were not increased and performance of the on street metered parking program. There is also a brief description of the 2019 competitor rate analysis which is currently underway. Overall private sector competitors were identified for the car parks in the core commercial areas including the downtown, the midtown centers and North York Center. Results indicate that as per TPA policy, half-hour rates at TPA locations are in most cases lower than the private sector while daily rates tend to be at, or near, the level of competitors.

RECOMMENDATIONS

The Acting President, Toronto Parking Authority recommends that:

1. The Board of Directors of Toronto Parking Authority refer this report to the Budget Committee for consideration during the 2020 budget process.

FINANCIAL IMPACT

There is no financial impact resulting from the adoption of the recommendation in this report.

DECISION HISTORY

City Council, at its meeting of March 7, 2019, in considering the matter "2019 Rate Supported Budgets - Toronto Parking Authority", requested that the President, Toronto Parking Authority, include a parking market analysis annually as part of its budget submission.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2019.EX2.4>

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COMMENTS

At its meeting of March 7, 2019, Toronto City Council adopted the following:

"City Council request the Toronto Parking Authority Board to request the President, Toronto Parking Authority, to provide a parking market analysis annually with its budget submission."

Comments

The TPA manages parking in two distinct service delivery channels: on-street paid (single-space meters, machines and mobile pay) parking, and off-street (garage and surface car parks) parking.

The most recent comprehensive analysis of the on-street parking program was undertaken in 2017 and the results of that analysis can be found at this link

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2017.GM22.27>

Following approval of the rate changes, these adjustments were implemented through the remainder of 2017 and the first half of 2018.

The on-street program operates largely independently of the off-street program and consists of all paid on-street parking (single-space meters, machines, and mobile pay). On-street parking is generally limited to a maximum duration of stay of three hours. It is the preferred alternative for short stay parkers due to the convenience and ease of use. The majority of on-street inventory is located outside of the city's core in neighbourhood retail areas such as Danforth Avenue or Queen Street East and West. These are

locations where there are few, or no private paid parking alternatives. In many locations there are TPA off-street lots or free parking on residential streets. Due to the convenience of parking on-street these locations are generally selected by parkers over off-street lots and garages. The rates and rules for the on-street parking program are set mainly based on usage levels and in line with prices at off-street TPA car parks where applicable. There is some consideration for equity and predictability. Generally the objective is to have high usage levels at busy times, but to ensure that in most cases the market clears. That is, at most times, in most locations, a potential parker is able to find a parking space reasonably close to their destination. The market is becoming harder to manage especially in the downtown core due to the number of non-revenue parkers which are not subject to market forces. The next comprehensive review of rates and rules in the on-street parking system is scheduled for the middle of 2020.

The 2017 changes approved by the Board of Directors of the Toronto Parking Authority and Toronto City Council impacted approximately 80% of all on-street paid parking spaces with increases generally ranging from twenty-five percent to thirty-three percent. The purpose of the Rate Review and subsequent rate changes was to create parking availability in areas of the city that were oversubscribed and to ensure Toronto's parking rates were aligned with rates in other cities. As a result of the changes implemented total revenue from on-street parking increased by 7.0% for the first half of June 2019 compared to the first half of June 2018, while total transactions declined by about 1.3%.

This report provides a market commentary mainly with respect to the off-street parking program operated by TPA.

Off-Street Parking Program

TPA owns or manages approximately 300 off-street parking locations including TTC Park-and-Ride facilities; waterfront parks on behalf of Parks, Forestry and Recreation division of the City; Exhibition Place; Toronto Community Housing Corporation and approximately 26 private landowners, through leases or management agreements. Every year TPA conducts a comprehensive review of the rates at all of the facilities under its direct control and makes changes based on performance and/or other objectives. This excludes the inventory managed on behalf of other City divisions and agencies as they determine the prices they charge. The most recent comprehensive Rate Review was considered by the Board of Directors on October 24, 2018. The rate changes adopted are available at this link:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2018.PA15.5>

The Rate Review includes a detailed comparison of TPA rates to competing private parking operators where such competitors exist (discussed below). In general, the facilities in the core commercial areas have private competitors while the car parks located in neighbourhood retail areas do not. The TPA prices its short stay parking below the prices charged by private parking operators to encourage short stay parkers and deter, where necessary, daily parkers in order to maximize the number of customers that can access local businesses. Therefore price conscious informed

parkers will select Green P locations. However, price is just one of the factors which determines parking choice by customers who, for example, may choose a location more convenient to the location they are intending to visit. In addition, as parking is a derived demand, due to economic or other factors, local or more widespread, the total demand for parking can fluctuate, impacting local or wider parking usage. Outside factors can also include road construction. Lately, the City has been focusing on active transportation and encouraging the use of modes other than private automobile for trips that may be impacting overall parking demand.

The performance of TPA car parks in response to the rate changes implemented in late 2018 is discussed in detail under section heading titled *Price Sensitivity and Elasticity Analysis*.

Price Sensitivity and Price Elasticity Analysis

An analysis of parking usage and revenue in response to the rate changes approved in October 2018 was undertaken using transaction data prior to and after the rate changes were implemented. Data from the first half of 2018 was compared to data from the first half of 2019.

During the annual comprehensive Off-Street Rate Review, each parking facility is considered individually. The main consideration in changing prices is to regulate usage in order to accommodate short stay users. Generally this may include raising or removing the daily maximum rate. Price response is strongly influenced by factors such as location, time of day, time of journey, quality of the city area and motive for visiting. Accordingly, price changes are assessed by TPA on a location by location basis, as each product is unique. However, certain car parks exhibit similar behaviours and similar rate changes are enacted. For the purpose of analysis and to calculate price elasticity to certain kinds of price changes, car parks where similar rate changes were implemented, were categorized in the following four groups based on the type of price change that was implemented.

- Car parks where only the half-hour rate was increased (11 car parks);
- Car parks where only the daily maximum rate was increased (45 car parks);
- Car parks where the half-hour rate and the daily maximum were increased (16 car parks); and,
- Car parks where the daily maximum rate was removed and parkers pay in increments of half-hours (21 car parks). Many of these car parks had their half-hour rates reduced.

The analysis compared the change in usage levels and the change in revenue. The results are summarized in Attachment A - Analysis of Market Response to Price Changes Arising from the October 24, 2018 Meeting of the Board of Directors of Toronto Parking Authority.

1. Car parks where only half hour-rates were increased.

There are 11 locations in this group. On average the half-hour rate at these car parks changed from \$2.54 to \$3.00 which translates to a percentage change of 17.86. Across all transactions in this group, revenue increased by 1.24% and the number of transactions declined by 3.20%. For all transactions this translates to a price elasticity of -0.196 which indicates that these car parks were relatively insensitive to a change in half-hour rates. The data was further refined to consider only transactions with durations of three hours or less, as these are considered short stay transactions, which are affected by half-hour rate changes. Transactions by these short stay parkers at these locations declined at a greater rate than the overall decline in total parkers as was to be expected. The decline in transactions was 3.98%. However, the revenue associated with these transactions increased by 6.62%. The price increase was more than offset by the decline in parking transactions. This translates to a price elasticity for these short stay parkers of -0.244 which indicates they are relatively price inelastic at these price levels.

2. Car parks where only the maximum daily rate was increased.

There are 45 locations where the daily maximum rate was increased but the half-hour rate was not adjusted. The average daily rate at these car parks increased from \$9.03 to \$10.74, or 18.94%. When including all transactions at these locations the total number of transactions declined by 0.09% and the total revenue increased by 4.36% and the price elasticity was -0.051, which indicates very limited impact. A further analysis was undertaken selecting only transactions of three hours or more in length which represent long stay or daily parkers as this rate change would affect these parkers. Analysing only this cohort, the number of transactions declined by -1.02% and revenue increased by 3.38%. This translates to a price elasticity of -0.327, which is relatively inelastic to these changes.

3. Car parks where both the maximum daily rate and the half-hour rates were increased.

There are 16 locations in this group. The analysis selected all transactions to be analysed as a group as the average change in price for daily parkers (16.37%) and the half-hourly parkers (16.46%) was virtually the same. Usage by these parkers at these locations decreased by 0.20% and revenue increased by 11.06%. While there are 16 car parks in this group one was excluded from the analysis as it had large usage and revenue increases not related to the rate change but due to a large decrease in local parking inventory. This group of car parks was highly insensitive to the price increases with an elasticity of -0.098.

4. Car parks where the maximum daily rate was removed and all transactions during the day are increments of the half-hour rate.

There are 21 locations in this group. These are locations which prior to this change were filling to capacity on a regular basis with a large proportion of the spaces being occupied by daily parkers. Daily parkers tend to arrive early in the morning while

shorter stay parkers arrive later in the day. Consequently, on a regular basis, the TPA core customer base of short stay high turnover parkers were unable to park as all of the spaces were already occupied. The purpose and effect of removing the daily maximum is to displace some of the daily parkers. They are able to park for the day by paying in half-hour increments. This would result in a total daily fee substantially higher than prior to the removal of the daily maximum rate. The table in Attachment A indicates the daily fees that would result for customers parking for eight hours. On average their fees would increase from \$9.00 to \$21.40. Following the implementation of these changes the total transaction volumes at these car parks increased 7.57% (one car park was excluded from the analysis due to a 50% reduction in spaces for the TTC second exit program between 2018 and 2019. This car park is located at 14 Arundel Avenue) and revenue grew by 2.49%. The overall price elasticity resulting from this change in price structure was 0.089 which indicates a rise in use despite a rise in price. A further analysis was undertaken for these car parks which only included transactions of three hours or more, which is the traditional definition of long stay parkers. As a result of the removal of the day maximum rate transaction volumes for these parkers declined by 23.10% and revenue declined by 6.42%. This represented a price elasticity of -0.32.

Following the comprehensive Rate Review of October 2018, an additional set of half-hour rate increases were identified as part of the annual operating budget for 2019. All eight of these car parks are included in one of the above identified groups, however they were analysed separately. An analysis of the eight car parks indicated a revenue increase of 2.61% and a decrease in the number of parking transactions of 2.70% with a price elasticity of -0.161. The impact on short stay parkers affected by the change was analysed separately. With respect to the half-hour rate, the average half-hour rate in 2018 was \$2.69, which increased to \$3.19 following the change. Isolating only parkers staying for three hours or less it was found that they had a 4.39% decline in transactions and a 6.76% increase in revenue. The price elasticity with respect to this change was calculated to be -0.258. Attachment B presents the expected and actual revenue results arising from the half hour rate changes added during the 2019 budget cycle. The projected revenue levels are not expected to be achieved at any of the car parks. Five of the eight car parks have a projected revenue above 2018 levels while three are expected to experience a year over year revenue decline.

Overall, at the car parks where rates were changed due to usage considerations, the total number of parking transactions was unchanged and the revenue increased by 5.52%. Generally the price elasticity experienced as a result of the changes implemented in 2019 at these high usage car parks indicated the parking activity at these specific properties was relatively insensitive to the price changes, which is consistent with TPA's service mandate. The remaining approximately 130 car parks were not subject to a rate increase as usage levels did not warrant changing rates at this time. A total revenue increase of 2.4% across all parking activity is being projected for 2019. This is a result of the off-street rate changes described in this report blended with the results of the car parks where no rate changes were implemented, and the on- street parking program.

Competitor Analysis

Each year as part of the Off-Street Rate Review a survey of the prices being charged by private parking operators in the vicinity of the TPA's off-street facilities is undertaken. There are few competitors to TPA parking operations in neighbourhood retail areas such as the Beaches; Danforth; or the Kingsway, as private parking operators generally only operate in high intensity commercial areas, where higher value parking activity is concentrated. These higher value areas would include the downtown core, downtown fringe, and suburban north areas around the North York City Centre. The TPA rate policy provides guidelines for rate setting by TPA. The two most significant are that:

1. Half-hour rates at TPA facilities are no more than 75% of the half-hour rates charged by private competitors; and
2. Longer stay rates are set at or above nearby competitors.

These rules reflect both the City of Toronto policy framework to encourage mobility options other than private automobiles for longer duration trips, mainly representing persons commuting for work, and the City's objective of supporting the City's businesses and business areas by high turnover, convenient parking options for their short stay customers. TPA's long term business strategy is to create brand loyalty in its customers. Therefore TPA offers its customers a predictable value in its short stay parking to ensure that whenever possible, the customer chooses a Green P option. This maximizes revenue over the mid to longer term.

The competitor rate analysis that was prepared for the 2018 comprehensive rate review can be found at:

<https://www.toronto.ca/legdocs/mmis/2018/pa/bgrd/backgroundfile-120868.pdf>

The competitor rate analysis is undertaken to compare the rate changes being proposed by TPA to those of its' competitors. A similar comparison of 2019 competitor rates is not yet available, as the rate proposals will be considered by the Board of Directors of the Toronto Parking Authority at their November 25, 2019 meeting. However, an updated survey of competitor rates has been undertaken. Qualified competitors were identified for 34 TPA car parks. These competitors generally exist only in the core commercial areas and at centers such as Yonge and Eglinton or North York City Center, or in areas of concentrated economic activity outside the core such as Liberty Village. The results of this survey will form the basis of the competitor rate analysis that will be presented to the Board of Directors of the Toronto Parking Authority in November 2019.

The 2019 competitor rate survey included the same car parks as the 2018 survey. Most of TPA's car park inventory are located in neighbourhood retail areas, where the private sector does not operate, with a few exceptions such as parking for a specific retail outlet, as it is not consistent with their business model. The general results of 2019 competitor rate survey are consistent with previous years, whereas per TPA policy, TPA has lower half-hour rates than the private sector, while the longer stay rates tend to be set at competitive levels. Competitor rates are just one factor that is considered when setting rates at TPA car parks. The main consideration is the usage level at the facility,

which is further disaggregated into short and long stay parkers. Where usage levels measured by both year-over-year changes in transactions, and the average peak occupancy of the facility are low or declining, rate changes are generally not implemented. Facilities experiencing high or increasing usage levels are generally candidates for rate increases. Some initial results from the 2019 survey are described below.

Half Hour Rates

In 2018, TPA increased the half-hour rate at 17 locations where competitors were identified. With regards to the half hour rates in 2019, 93% of competitors were found to have a higher half-hour rate than the 34 facilities operated by TPA, while 4% had lower rates. Where TPA increased its half-hour rates in 2018, 53% of competitors also increased their rates year-over-year, while 24% of competitor rates stayed the same, and 6% of rates were decreased or eliminated.

Daily Parking Rates

In 2019 TPA changed the daily parking rate at 17 of its facilities where competing private operators were identified. On average, in 2019, 56% of the competitors identified for the 2018 Rate Review currently have lower day maximums compared to the TPA facilities, while 35% of competitors have a higher day maximum, and 9% had the same rate. From 2018 to 2019, 33% of competitors increased their day maximum, while 17% of competitor rates stayed the same, and 17% of competitor rates decreased. Where appropriate TPA daily rates will be adjusted upwards to be consistent with TPA rate guidelines as part of the 2019 comprehensive Off-Street Rate Review.

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SIGNATURE

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ATTACHMENTS

Attachment A - Analysis of Market Response to Price Changes Arising out of the October 24, 2018 Meeting of the Board of Directors of the Toronto Parking Authority

Attachment B - Half-Hour Rate Increases Arising from 2019 Budget Submission

Attachment A - Analysis of Market Response to Price Changes Arising out of the October 24, 2018 Meeting of the Board of Directors of the Toronto Parking Authority

Rate Change Category	Number of Car Parks Impacted	Average Applicable Rate		Percent Change 2019 vs. 2018	Revenue YTD		Revenue 2019 vs. 2018	Cars Parked YTD		Percent Change in Cars Parked 2019 vs. 2018	Price Elasticity
		2018	2019		2018	2019		2018	2019		
Changes to only half-hour rates (showing half-hour rates)	11	\$2.54	\$3.00	17.86%	\$12,471,954	\$12,627,171	1.24%	1,015,813	983,346	-3.20%	-0.196
Changes to only half-hour rates including only transactions of less than three hours	11	\$2.54	\$3.00	17.86%	\$4,172,736	\$4,448,879	6.62%	538,688	517,262	-3.98%	-0.244
Changes to only daily maximum rates (showing day rates) includes all transactions	45	\$9.03	\$10.74	18.94%	\$10,371,258	\$10,823,764	4.36%	1,282,077	1,270,885	-0.09%	-0.051
Changes to only daily maximum rates (showing day rates) includes transactions over 3 hours	45	\$9.03	\$10.74	18.94%	\$7,464,598	\$7,713,783	3.38%	646,255	610,664	-1.02%	-0.327
Changes to both daily maximum and half-hour rates (showing half-hour rates)	16	\$1.58	\$1.84	16.46%	\$3,131,328	\$3,497,973	11.06%	453,948	447,266	-0.20%	-0.098
Changes to both daily maximum and half-hour rates (showing daily rates)	16	\$8.43	\$9.81	16.37%	\$3,131,328	\$3,497,973	11.06%	453,948	447,266	-0.20%	-0.098
Car parks where daily rates were removed (showing daily rate for 2018 and the cost of 8 hours at half-hour rate for 2019)	21	\$9.00	\$21.40	137.78%	\$2,155,611	\$2,209,360	2.49%	368,029	395,883	7.57%	0.089
Car parks where daily rates were removed and including only transactions over 3 hours (showing daily rate for 2018 and the cost of 8 hours at half-hour rate for 2019)	21	\$9.00	\$21.40	137.78%	\$1,294,129	\$1,211,124	-6.42%	139,385	107,188	-23.10%	-0.320
Eight car parks arising out of operating budget (half-hour rates were changed)	8	\$2.69	\$3.19	18.59%	\$13,515,251	\$13,868,040	2.61%	1,112,014	1,082,008	-2.70%	-0.161
Eight car parks arising out of operating budget (half-hour rates were changed) transactions of 3 hours or less	8	\$2.69	\$3.19	18.59%	\$4,648,934	\$4,963,384	6.76%	595,824	570,264	-4.39%	-0.258
Total (excludes car parks in more than one group)	93				28,130,151	29,158,268	5.52%	3,119,867	3,097,380	0.00%	

Note: One car park was excluded in both the changes to both daily rate and half-hour rate and in the daily rates removed group for the calculation of price elasticity due to unusual circumstances

Attachment B - Half-Hour Rate Increases Arising from 2019 Budget Submission

Car Park # and Location		Previous 1/2 Hour Rate	Rate Increase (%)	Current 1/2 Hour Rate	Projected Incremental Annual Revenue Impact	2018 Revenue	YTD Revenue as of June 2019	Projected 2019 Revenue	2019 Projected vs. 2018	Difference 2019 vs. 2019 Budget Projection
11	21 Pleasant Boulevard	\$2.50	\$0.50	\$3.00	278,638	1,954,001	1,076,625	2,153,250	199,249	-79,389
12	30 Alvin Avenue	\$3.00	\$0.50	\$3.50	162,844	1,378,084	742,722	1,485,444	107,360	-55,484
26	37 Queen Street East.	\$3.00	\$0.50	\$3.50	605,173	5,137,679	2,680,133	5,360,266	222,587	-382,586
36	110 Queen Street West (Nathan Philips Square)	\$3.00	\$0.50	\$3.50	1,192,844	10,384,580	5,078,409	10,156,818	-227,762	-1,420,606
39	20 Castlefield Avenue	\$2.50	\$0.50	\$3.00	126,134	900,783	470,542	941,084	40,301	-85,833
49	30 Roehampton Avenue	\$2.00	\$0.50	\$2.50	138,934	786,320	369,439	738,878	-47,442	-186,376
52	40 York Street	\$3.50	\$0.50	\$4.00	246,832	2,451,587	1,254,147	2,508,294	56,707	-190,125
68	20 St. Andrew Street (Kensington)	\$2.00	\$0.50	\$2.50	287,137	1,613,791	795,933	1,591,866	-21,925	-309,062
Total					3,038,536	24,606,825	12,467,950	24,935,900	329,075	-2,709,461