# EXECUTIVE SUMMARY

The following provides a summary of the study process, methodology and recommended strategy for addressing parking and parking-related issues on the grounds of Exhibition Place. In particular, this summary addresses the study's two objectives as describe in the RFP.

### 1.1 STUDY OBJECTIVES AND METHODOLGY

# 1.1.1 STUDY OBJECTIVES

The objectives of the Parking study are:

- → To produce a comprehensive parking study, to include and consider the location and costing of a new parking facility; and
- → To produce a parking strategy which recommends how best to plan for the future and alleviate the current parking stresses and, using a 10-year horizon, looks proactively at the increased use of the grounds and assesses unidentified parking demand.

# 1.1.2 APPROACH AND METHODOLOGY

### STUDY APPROACH

The WSP team recognizes this is a parking study and not a transportation master plan or a transit study. However, other modes of transportation are critical to the success of an effective parking strategy. Just as shopping malls do not design their already massive parking lots to meet parking demands on December 23rd or Boxing Day each year, it is not practical, cost effective or environmentally sound to accommodate 100 percent of maximum peak parking demand for every single event with on-site parking at Exhibition Place. Transit and active transportation must play important roles in addressing the site parking demand and issues. It is with this approach that the WSP team developed a comprehensive methodology to conduct the parking study and it is with this perspective that a parking strategy was developed for the site.

#### **METHODOLOGY**

# **Best Practice Review**

A number of major mixed use (entertainment, recreational and retail) complexes, stadiums and convention centres, both nationally and internationally, were reviewed to identify best practices and their possible applicability to Exhibition Place.

### Consultation

An important component of the work for developing an effective parking strategy was to obtain both data and the perspectives of the local stakeholders – these are the organizations and people working and/or living at, or near Exhibition Place, or serving Exhibition Place with planning, traffic and transportation services.

WSP reached out to each stakeholder through surveys to obtain background information on operations, transportation (parking, traffic, transit) needs and issues. WSP followed up the surveys with focus group

sessions, individual in-person meetings, and/or conference calls. The consultation process culminated into a Solutions Workshop held on October 15, 2015 with representation from all groups of stakeholders (tenants, operators, exhibitors, transit authorities, political representatives, community associations and Exhibition Place). The results of the workshop assisted in the formation of the parking strategy.

### PARKING ALLOCATION MODEL

The WSP team developed an allocation model to determine the future parking demand at Exhibition Place with additional developments in place. The allocation model consists of an electronic description of Exhibition Place and its environs.

The demand for parking is comprised as a list of every car that travels onto the site over a full day from 7:00am to midnight. For each record, the time of arrival on-site is defined, the occupants' destination on-site, the duration of stay, and purpose. The origin of trips, based on nine zones covering the Greater Toronto Area and beyond, are also included.

### PARKING SUPPLY OPTIONS

The WSP team investigated opportunities to increase on-site parking supply through optimization of existing parking supply and the addition of a parking structure. All existing parking lots were reviewed and four locations were examined for a new parking structure, including both above ground and below ground.

### FINANCIAL ASSESSMENT FOR A PARKING STRUCTURE

The parking structure options were assessed on:

- proposed supply
- capital cost
- operating cost
- cash flow margin
- → Net Present Value (NPV)

# 1.2 CURRENT AND HISTORIC PARKING SUPPLY AND DEMAND

Exhibition Place is a 192-acre site owned by the City of Toronto and managed by the Board of Governors of Exhibition Place, an agency of the City. Exhibition Place boasts several historically and architecturally significant heritage buildings, open parks and gardens, restaurants, BMO Field, Ricoh Coliseum, Enercare Centre and Allstream Centre. Each year, over 5.3 million visitors come to Exhibition Place to attend trade and consumer shows and meetings such as the National Boat Show, One-of-a-Kind Craft Shows, Print World and Royal Agricultural Winter Fair, and participate in events such as the annual CNE, Honda Indy, and Scotiabank Toronto Caribbean Carnival.

# PARKING SUPPLY

Exhibition Place is a very unique site when comparing parking demand and supply. As noted earlier, Exhibition Place is comprised of a number of buildings, however, it is not simply a collection of buildings that events and shows are performed in but, depending on the event, the entire grounds, including parking lots, are used to exhibit products, merchandise, livestock, operate amusement rides, and a race track. The

result is an unstable and fluctuating supply of parking per event. This is illustrated in recent parking demand and supply values observed during major events from May 2015 to November 2015, see Exhibit – ES-1. The parking supply fluctuated between approximately 1,500 and 5,300 spaces; averaging approximately 3,600 spaces, far less than the almost 6,000 spaces the site reported as their supply.

It is important to note that in the summer of 2015, Exhibition Place was a very important venue for the Toronto 2015 Pan Am Games. Exhibition Place was transformed to host five sporting competitions, as well as the Main Media Centre and the Cisco International Broadcast Centre for athletes from the Americas as they competed. Therefore, the low on-site parking supply during the months of June to July is not a fair representation of typical summer months' parking supply. However, the remaining months provide an accurate profile of the fluctuation in on-site parking supply, depending on the event. As shown, during the CNE and Honda Indy, on-site parking supply can reduce to 50 percent. This includes informal parking areas such as grass areas (see ES-2). Without these areas, the parking supply would be significantly less.

Exhibit ES-1 - Variation in Parking Supply

MONTH	PARKING SUPPLY	PARKING SUPPLY RATIO	COMMENTS
February - 2015	5,930	100%	Base Formal Parking Supply
May	5,128	86%	During apparatuation of RMO Field
October	5,336	90%	During construction of BMO Field
November	4,748	80%	expansion and roof addition
August	3,861	65%	CNE
June	2,967	50%	Pre Pan AM + Honda Indy
July	1,755	29%	Pan AM

Notes: 1 - Per RFP documents

2 - 2012 data indicates parking supply was 6,275

This type of variation in the available supply does provide a challenge for parking staff and can impact the experience of visitors.

### **CURRENT PARKING DEMAND**

As shown in Exhibit ES-3, the largest demand for on-site parking demand was Saturday, November 14, 2015, at 3:00pm during the Royal Winter Fair when 4,353 parked vehicles were observed on Exhibition Place grounds. This represented approximately 90 percent of the site's available supply of 4,750 spaces.

Exhibit ES-2 illustrates an important issue and that is the importance of the informal parking areas (the grass area in front of Liberty Grand and area adjacent Parking Lot 5A). During the CNE, more than 50 percent of the available parking was on the grass area (ES-2) and during the Royal Winter Fair, a similar situation occurred. This was especially true during the Pan Am games. It is an effective tool used by parking staff to address parking demand when the surface lots are full or not available.

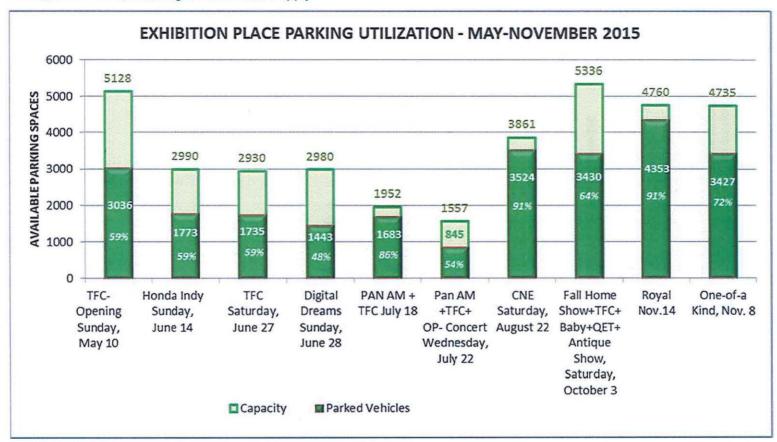
Without the use of these areas, the site could not accommodate peak parking demand when the surface parking lots are not available. The WSP team was unable to observe the site during winter conditions when snow on the ground could limit the use of the overflow parking areas. Therefore, Exhibition Place staff should be mindful of booking events with large parking demand during the winter months if the surface parking lots are not available. This can also be addressed by making arrangements for off-site parking and offering extra incentives (transit subsidy – bundle event ticket and transit pass) to reduce parking demand.

Exhibit ES-2 - Informal Parking Areas





# Exhibit ES-3 - Peak Parking Demand and Supply



### HISTORIC PARKING DEMAND

The WSP team reviewed the Daily Parking Report from 2012 to 2014, as provided by Exhibition Place. The pattern and general volumes for 2012 to 2014 are similar but 2012 had the highest volume of parked vehicles on the site. Exhibit ES-4 provides the daily parking demand at Exhibition Place during 2012. It illustrates the following:

- → significant daily fluctuation in parking demand
- → daily average parking demand of 1,350 vehicles
- → almost 70 percent of days had parking demand of less than 1,500 vehicles
- → on only 21 (6 percent) of the 366 days did the parking demand exceed 5,000 vehicles

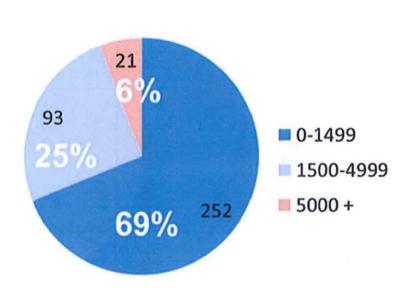


Exhibit ES-4 – Frequency of Days with Significant Parking Volumes on the Site – 2012

### **PEAK DAY**

Exhibit ES-5 provides the peak day profiles. It shows the modelled representation of demand over the day as the blue area. The red level is 1,300 spots (availability in Enercare Centre underground); orange represents the effective capacity at 5,500 spots (total capacity of Exhibition Place) as reported in 2012 and 8,000 spots (total crush capacity of area, including Ontario Place, Liberty Village and TPA Lots). The Exhibit indicates the site peaked at approximately 5,000 vehicles between 1:00pm and 3:00pm, on Saturday, March 17, 2012 during the Home Show and a Marlies games.

Exhibit ES-5 - Peak Day Parking Demand Profile - March 2012

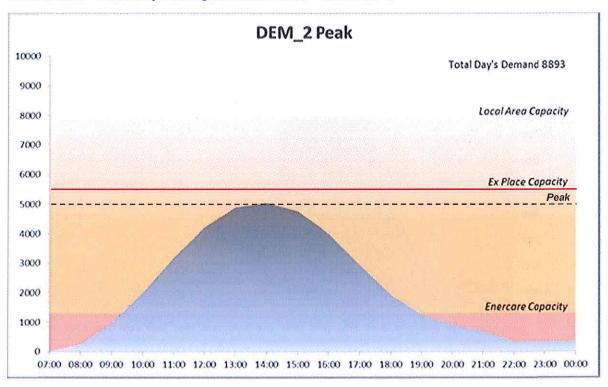


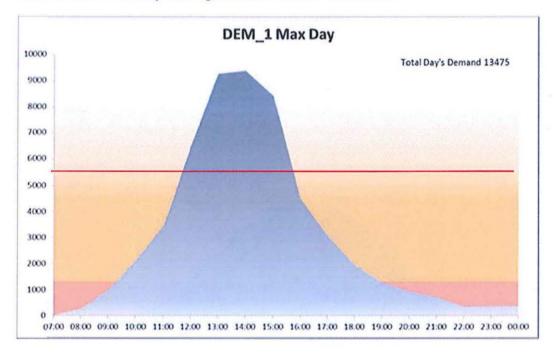
Exhibit ES-5 also illustrates that on this day, the capacity at the Enercare Centre was fully utilized from approximately 10:00am to 7:00pm making parking spaces in this area very difficult to find.

# MAXIMUM SITE PEAK

The historic data shows that the site reached maximum peak on Saturday, March 24, 2012 when the Home Show/Canada Blooms event coincided with a 1:00pm TFC game and considerable activity at Liberty Village and Medieval Times, as well as the Theatre and Muzik. The levels of demand were significant and unusual, exacerbated by the soccer game being at the same time as the peak attendance at the Home Show.

This occurred once and the site parking supply should not be designed based on this single occurrence.

Exhibit ES-6 - Max Day Parking Demand Profile - March 2012



# Exhibit ES-7 - Max Day Parking Demand Profile - March 2012

# **Projects**

### 1. Festival Plaza

- 6.7 hectare area
- Located in Parking Lots 1 & 2
- · Surface lots remain with 1,420 spaces
- · Accommodate up 100,000 people
- Loss of Parking spaces 379 spaces

# 2. Enercare Centre Expansion

- · Westerly into Parking Lot 3
- New Hall = 108,000 SF
- New Meeting Rooms = 130,000 SF
- Replace surface parking underground

# 3. Raptors Facility

- Anticipated opening February 2016
- Basketball training Centre = 68,000 SF
- Western section of Parking Lot 6
- Parking provided behind Medieval Times

# 4. Hotel X

- Phase 1: Opening Spring 2016
  - 404 rooms
  - Access from Newfoundland Drive
  - 411 parking spaces underground
- Phase 2
  - 5-7 years after opening of Phase 1









# 1.5 FUTURE PARKING DEMAND

Based on the current parking supply and adjustment for the future development, there will be two base parking supplies:

- → Base Supply with Lots 1 and 2 available during non-Festival Plaza event days: 5,408 spaces without Hotel X and 5,839 spaces with Hotel X
- → Base Supply with Festival Plaza in operation: 3,985 spaces without Hotel X and 5,460 spaces with Hotel X

As shown in Exhibit ES-8, the forecasted site parking demand for seven of the nine Day Types modelled, representing 90 percent of the sites activities, can be accommodated on the site.

Exhibit ES-8 – Future Parking Demand by Day Type-Base Supply

Future Day Type	Base Frequency	Total Daily Demand	EP Demand	3 <sup>rd</sup> Party	Parking Deficiencies	Comments
1 Max Fut	1	14,676	8,498	2,446	(3,730)	Exceeds EP and local area supply
2 Peak Fut	6	10,093	8,134	1,959		Exceeds EP supply but demand accommodated in area supply
3 Major Event	16	4,993	4,800	193		Sufficient supply on EP
4 TFC Fut	17	6,417	4,588	1,829		Exceeds EP supply but demand accommodated in area supply
5 Events	59	2,578	2,496	82		Sufficient supply on EP
6 Events + OP	12	5,787	4,937	850		Sufficient supply on EP
7 Minor	215	400	400	0		Sufficient supply on EP
8 Minor + OP	6	3,737	3,031	706		Sufficient supply on EP
9 Minor + FP Fut	12	6,897	3,126	2,018	(1,750)	Exceeds EP and local area supply

There will be 36 days (10 percent) when the Exhibition Place site supply cannot meet the required parking demand; however, the area supply will be able to meet all except 13 days or 2 Day Types – Max Fut and Minor + FP Fut.

# THE MAXIMUM FUTURE DAY (MAX FUT)

- → The Max Future Day is unable to accommodate all the day's demand within the area capacity. Over the daytime, the model has assigned 14,675 cars. Given the times of arrival and durations of stay in the Max Fut demand list, the parking included within Exhibition Place, Liberty Village and Ontario Place is insufficient at some periods of the day.
- → An important element to note is that this day type represents only one day per year. However, as a lesson learned from a similar event in 2012, the Exhibition Place staff and its tenants, exhibitors and Ontario Place have worked diligently to avoid such scheduling of major events, primarily a large sporting event occurring concurrently with a major show.
- → Therefore, the site parking supply should not be designed to accommodate this type of possible one day, once per year event. Similar to how shopping malls do not provide parking supply to accommodate the maximum December peak days.

# MINOR EVENT PLUS FESTIVAL PLAZA (MINOR + FP FUT)

- On days that Festival Plaza is operational, there is also a potential insufficiency of parking. The combination of long durations of stay with the likelihood of start and end times being close creates high demand at key times. The Festival itself occupies Lots 1 and 2, reducing the site's capacity considerably and bringing the total capacity down by more than 1,400 spaces.
- → Exhibition Place staff will have to adopt measures to address parking demands on days when the Festival Plaza site is in use. As discussed earlier, such measures should include heavy transit promotion and possible off-site parking, coupled with the use of informal parking areas on the site (bike and grass areas).

# PERCEPTION OF A SHORTAGE OF PARKING ON-SITE

In the future, the Enercare Centre Lots 1 and 2 will provide capacity for 3,373 cars as shown in Exhibit ES-9 as a horizontal dotted black line.

The volume of visiting cars to the Enercare Centre on busy weekend days (Peak Day Type) is shown by the blue area. What the diagram illustrates is that while the site capacity is adequate for the peak volume of cars, by mid-morning all the capacity in the Enercare Centre Lots 1 and 2 is taken and remains at capacity until approximately 4:30pm. This is a critical concern for users of the site that expect available parking in close proximity to the Enercare Centre. Thus, while the site and environs have available capacity, the complaint that there is insufficient capacity applies for those that expect to be able to park close to their destination (Enercare Centre).

Exhibition Place staff will have to work on managing expectations in this regard, and provide other measures to offset these expectations. As identified earlier, these could include promoting transit use and providing additional incentives for guests to do so. Other parking management measures could include pricing; by increasing the parking fee for the Enercare Centre Lot 1 and Lot 2, to make them less attractive for some guests. Alternatively, reduce the parking fees on the outer parking lots (Lot 5 and Lot 6) to make them more attractive to those who do not mind walking a bit further and saving on parking fees.

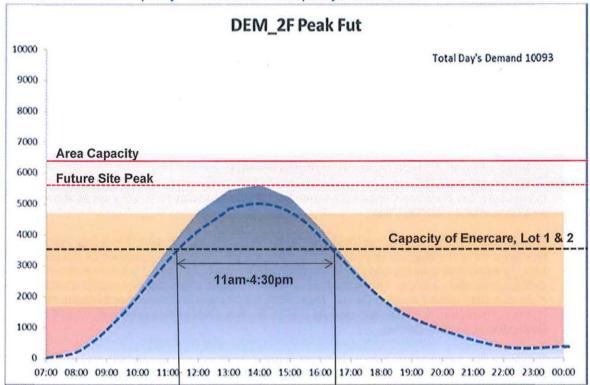


Exhibit ES-9 - Site Capacity versus Enercare Capacity and Demand

### 1.6 FUTURE PARKING SUPPLY OPTIONS

To better address the site future parking demand, a series of parking supply options were examined. They include:

- → examining off-site parking opportunities
- → optimizing the existing on-site parking supply
- → adding a new parking structure on the site

# **EXAMINING OFF-SITE PARKING OPPORTUNITIES**

There are approximately 2,500 parking spaces along Lake Shore Boulevard and within Liberty Village for public use that could be considered for off-site parking in situations when the site parking supply cannot support the anticipated demand. Exhibition Place can investigate partnering with off-site suppliers such as TPA or possible private operators in Liberty Village or elsewhere, particularly to store vehicles such as those of exhibitors, and provide a convenient shuttle to service and transport them. There is an existing working relationship with Ontario Place in this regard and this should continue.

### OPTIMIZING THE EXISTING ON-SITE PARKING SUPPLY

The WSP team reviewed all the parking lots and determined that a total of 450 parking spaces can be achieved through optimization of existing parking lots. The optimization also incorporated extensive redesign to improve safety, supply, operations and reduce delay at entry and exit points.

### ADDING A NEW PARKING STRUCTURE ON SITE

The WSP team examined opportunities to increase the available parking supply by adding a new parking structure in the form of an above ground or below ground garage, ranging from 150 spaces to 1,000 spaces. The preliminary analysis indicated that a parking structure could be located in the following locations:

- → Lot a (Gore): A multi-level above grade structure or below grade 1 level structure
- → Lot 1 and 2: Below grade 1 level garage and/or partial multi-level above grade structure in Lot 2
- → Lot 3 Enercare Expansion: Below grade addition to existing garage
- → Lot 4: Above ground multi-level structure

# 1.7 FINANCIAL ASSESSMENT OF A PARKING STRUCTURE

The financial viability of a new parking structure was assessed using the options of increasing the on-site parking supply by an additional 150 to 1,000 spaces; the current parking fees; and the forecasted future parking demand. The results indicate:

- → A new underground parking garage of 1,000 spaces, located in Lots A, 1 or 2, would have a present value cost of \$72.5 million and not generate sufficient revenue to make the investment viable as it results in a negative (loss) present value of almost \$57 million, see Exhibit ES-10.
- → A prefabricated galvanized steel beam garage has a significantly lower capital cost (\$20,000 per space vs. \$63,000 per space for underground structure) for Lot 4 with 150 parking spaces (column 4 of ES-10), but still has a negative present value of approximately \$400,000. The latter is compounded if 1,000 parking spaces were provided in a new Lot 4 structure resulting in a negative present value of approximately \$5.2 million, but significantly less than a traditional concrete structure in Lots A, 1 or 2.

Exhibit ES-10 - Financial Review of Three Possible Parking Structures - Base Condition

		2	-	3		4		5
30 Year Assessment @ 5% Discount Rate	Future Base: Enercare Expansion		Lot A, 1 or 2 - New Undergrd		Lot 4 - Prefab Garage		Lot A or 4 - Prefab Garage	
Total Site No. of Spaces On Site		5,408		5,408		5,408		5,408
No. of Spaces Added				1,000		150		1,000
Option No. Of Space on Site Annual No. of Vehicles that will Park On Site		559,350		6,408 590,107		5,558 563,714		6,408 590,107
Annual Revenue Ex Place	S	9,300,000	S	10,700,000	S	9,535,000	S	10,700,000
Capital Cost per Space for Option			S	63,000	s	20,000	s	20,000
Total Capital Cost of Option	1	The state of	\$	63,000,000	S	3,000,000	\$	20,000,000
Annual Maintenance Costs			s	350,000	S	30,000	\$	200,000
Refurb Costs (after 25 years)			\$	15,750,000	\$	750,000	S	5,000,000
PV Cost	A colo	No.	\$	72,516,000	\$	3,429,000		\$22,858,000
Annual Net Revenue Difference			s	1,050,000	S	205,000	S	1,200,000
PV Benefits			\$	15,443,000	\$	3,015,000	\$	17,649,000
Net PV			\$	(57,073,000)	\$	(414,000)	\$	(5,209,000

The WSP team tested a number of scenarios to determine the conditions under which a new parking structure on the site would be financially viable. However, the \$30 special event parking fee would have to be charged 40 days in the year and with the new parking structures fully occupied, which means that this premium parking fee would apply to the major shows, Festival Plaza events, Argo football and Toronto TFC soccer games. The results indicated:

→ Both prefabricated garages slightly exceed or are below the breakeven point. For example, a negative net present value for a 150-space prefabricated garage of -\$47,000 and a positive net present value of \$66,000 for a 1,000-space prefabricated garage structure, see Exhibit ES-11. The 150-space prefabricated garage would achieve a positive net present value of \$19,000 if the garage was full for 41 days at a \$30 flat fee.

Based on the current operating model, the WSP team believes it will be difficult to achieve such objectives and is concerned it will be challenging for Exhibition Place to gain acceptance by the major tenants and exhibitors of charging their customers a \$30 parking fee. This could be viewed as excessive and discouraging attendance to their events.

Therefore, based on the projected annual parking demand and current parking fee protocol (\$30 parking fee applied to only 30 days per year), a new parking structure would not be financially viable at Exhibition Place.

However, this should be reviewed in the future should additional developments be proposed at Exhibition Place and also when Ontario Place development plans are known.

Exhibit ES-11 – Financial Review of Three Possible Parking Structures – Increased Demand and Increased Parking Fee

	Future Base: Enercare Expansion		3 Lot A, 1 or 2 - New Undergrd		4 Lot 4 - Prefab Garage		5 Lot A er 4 - Prefab Garage	
30 Year Assessment @ 5% Discount Rate								
Total Site No. of Spaces On Site		5,408		5,408		5,408		5,408
No. of Spaces Added				1,000		150		1,000
Option No. Of Space on Site				6,408		5,558		6,408
Annual No. of Vehicles that will Park On Site		559,350		590,107		563,714		590,107
Annual Revenue Ex Place	\$	10,697,649	\$	12,556,279	S	10,972,569	\$	12,556,279
Capital Cost per Space for Option			s	63,000	s	20,000	s	20,000
Total Capital Cost of Option			\$	63,000,000	\$	3,000,000	5	20,000,000
Annual Maintenance Costs			\$	350,000	5	30,000	S	200,000
Refurb Costs (after 25 years)			S	15,750,000	\$	750,000	\$	5,000,000
PV Cost				672,516,000		3,649,000		\$24,328,000
Annual Net Revenue Difference			S	1,508,630	s	244,920	S	1,658,630
PV Benefits			\$	22,188,000	\$	3,602,000	\$	24,394,000
Net PV			\$	(50,328,000)	\$	(47,000)	\$	66,000

### 1.7.1 REVISED FINANCIAL ASSESSMENT

WSP reassessed the financial viability of the 150-space prefab parking structure in Lot 4, based on the Letter of Intent with Maple Leaf Sports and Entertainment Ltd. (MLSE), where MLSE would contribute toward the provision of parking and green space on the Exhibition Place grounds. In a City Staff Report dated August 25, 2014, the following was outlined:

- → MLSE to contribute \$2 million towards the cost of a new permanent parking on the Exhibition Grounds, with up to \$200,000 being applied towards the cost of a parking needs study and the balance applied towards the capital cost of the new parking facility identified in the study.
- → The City to provide a matching contribution of \$2 million towards the capital cost of the new permanent parking facility.
- → The net revenue from the new permanent parking facility will be shared among MLSE, the City/Board, and any other funders in proportion to their respective capital contributions until these contributions have been fully recovered. Once these contributions have been recovered, all of the net revenues will be accrued to the Board of Governors of Exhibition Place.

As a result of the Letter of Intent, the contribution of the funds for the entire capital cost does require a different calculation which is based on a **Payback Period** rather than the Net Present Value addressed above.

Based on a contribution amount of \$4,000,000, it is clear that a 1,000-space garage is not financially viable, however, with capital cost of \$3,000,000, a Payback Period assessment was conducted for the 150-space prefab facility, as shown in Exhibit ES-12.

Exhibit ES-12 - Financial Assessment and Payback Period of a 150-Space Prefabricated Garage

30 Year Assessment @ 0% Discount Rate	Future Base: Enercare Expansion	Lot 4 - Prefab Garage		
Total Site No. of Spaces On Site	5,408		5,408	
No. of Spaces Added			150	
Option No. Of Space on Site		a. Seminar	5,558	
Annual No. of Vehicles that will Park On Site	559,350		563,714	
Annual Revenue Ex Place	\$ 9,300,000	\$	9,535,000	
Parking Structure Cost per Space	Management and the state of the state of	\$	20,000	
Total Parking Structure Cost		\$	3,000,000	
Capitalized development, engineering, design, consulting, permits, parking study, contingency & other related expenses		\$	1,000,000	
Total Capital Cost	\$ -	\$	4,000,000	
Annual Maintenance Costs	ente para esta de contro de terra esta el 17 de la 27 de para esta de 190	\$	30,000	
Refurb Costs (after 25 years)	AND	\$	750,000	
Annual Net Revenue Difference	North Control of the Control of the	\$	205,000	
Payback Period on Structure			19.5 Years	

The results indicate the garage could be financially viable and would have a payback period of approximately 19.5 years based on the following assumptions:

- a) Interest-free capital cost \$4 million inclusive of planning studies and engineering fees
- b) Prefabrication Structure for 150 spaces
- c) Cost per space approximately \$20,000
- d) Annual parking demand 30 days fully utilized
- e) The parking fee of \$30 for a minimum of 30 annual events
- f) Annual Maintenance/Operating Cost of \$30,000
- g) Refurbish after 25 years at \$750,000
- h) Annual Net Revenue of \$205,000