151-04562

# EXHIBITION PLACE PARKING STUDY – EXECUTIVE SUMMARY



JANUARY 2016



COMMUNICATIONS

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151-045620-00

January 25, 2016

Ms. A. Campbell General Manager Sales & Event Management 100 Princes' Boulevard Suite 1 Toronto, ON M6K 3C3

# Subject: Exhibition Place Parking Study – Executive Summary

Dear Ms. Campbell,

Attached is the Revised Executive Summary for the Exhibition Place Parking Study. Should you have any questions, please feel free to contact me.

Yours truly,

WSP Canada Inc.

Sharon Sterling, MCIP, RPP Director, Transportation Planning

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# 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

ES-2

(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 onsite, 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 ASSESSMEMT FOR A PARKING STRUCTURE

The parking structure options were assessed on:

- $\rightarrow$  proposed supply
- → capital cost
- → operating cost
- $\rightarrow$  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<br>SUPPLY | PARKING<br>SUPPLY<br>RATIO | COMMENTS                         |
|-----------------|-------------------|----------------------------|----------------------------------|
| February - 2015 | 5,930             | 100%                       | Base Formal Parking Supply       |
| May             | 5,128             | 86%                        | During construction of PMO 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                           |

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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.

Exhibition Place Parking Study Exhibition Place

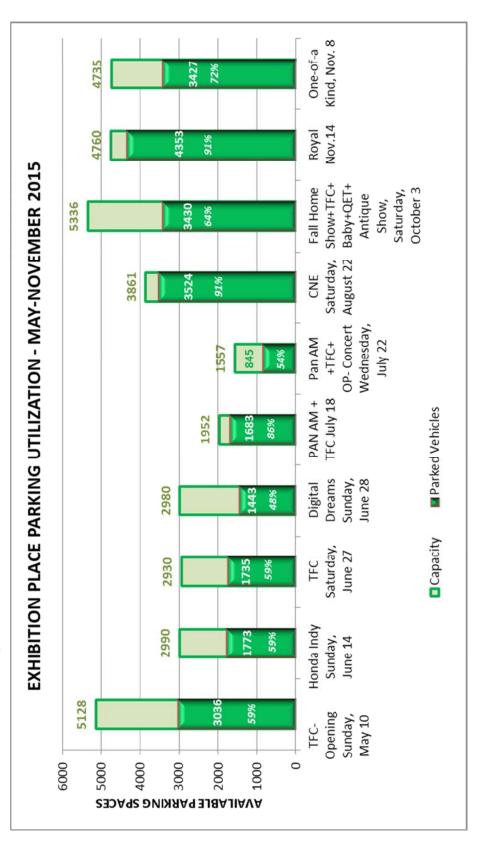






Exhibit ES-2 – Informal Parking Areas

Exhibit ES-3 – Peak Parking Demand and Supply



ES-5

WSP No 151-04562-00 January 2016

Exhibition Place Parking Study Exhibition Place

# 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
- $\rightarrow$  daily average parking demand of 1,350 vehicles
- $\rightarrow$  almost 70 percent of days had parking demand of less than 1,500 vehicles
- $\rightarrow$  on only 21 (6 percent) of the 366 days did the parking demand exceed 5,000 vehicles

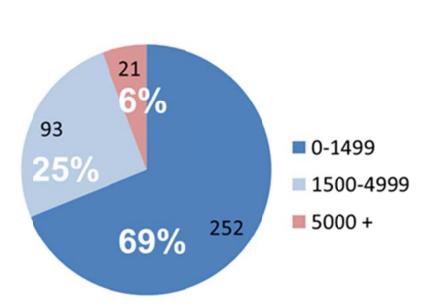
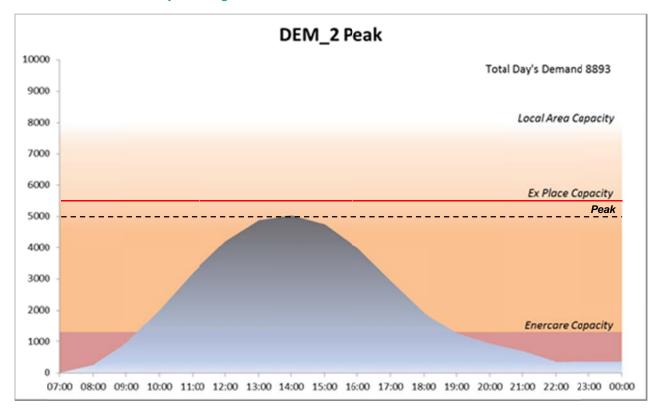


Exhibit ES-4 – Frequency of Days with Significant Parking Volumes on the Site – 2012

# 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.

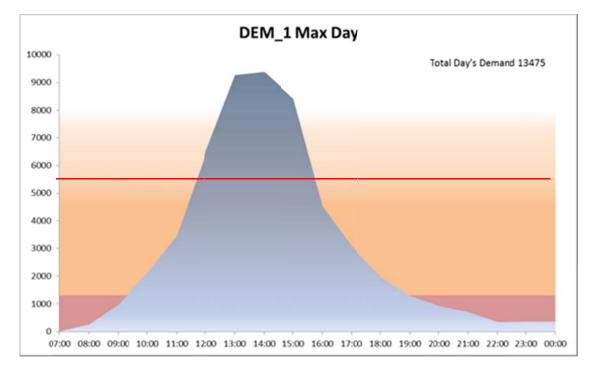


Exhibit ES-6 – Max Day Parking Demand Profile – March 2012

# 1.3 CONSULTATION WITH STAKEHOLDERS

Using emailed surveys, focus group sessions, individual in-person meetings, and/or conference calls and a Workshop, the WSP team obtained both data and the perspectives of local stakeholders. Stakeholder refers to organizations and people working and/or living at, or near Exhibition Place, or serving Exhibition Place with planning, traffic and transportation services on parking and parking-related issues.

The consultation process resulted in common themes around the following areas:

- → erosion of parking spaces, on-site and off-site
- → parking and traffic management, on-site
- → traffic management during events, off-site
- $\rightarrow$  inconsistent parking space condition, allocation, security
- → utilization of public transit and alternate modes of transport
- → challenges in communications and support

The participants provided the following solutions:

- $\rightarrow$  add more parking inventory on-site or off-site
- $\rightarrow$  discount the parking for farther lots and educate customers about them
- → add well managed shuttles for further lots
- → Liberty Village BIA could offer Exhibition Place customers parking for a fee, once new lots are built
- → revisit the loss of Marilyn Bell Park for parking space with the City
- → produce a proactive master parking/traffic plan, with templates for the individual events, so that parking and shuttle services are consistent from year to year
- $\rightarrow$  charge fees as they relate to peak event hours
- → add more bike lanes/trails, especially near Princes' Gates
- $\rightarrow$  add a stop sign on Manitoba Road
- $\rightarrow$  hire traffic and parking management staff; inform and train them well
- $\rightarrow$  inform and train paid duty staff to a higher level
- → work with the City to improve traffic light management, especially on streets like Jameson Avenue
- → provide consistent designated parking for tenants, with fenced parking for police and fire

- $\rightarrow$  work as a consortium with others to promote transit and ride sharing
- $\rightarrow$  brand the shows with travel and parking options
- → bundle events tickets with transit tickets/passes
- $\rightarrow$  work with TTC and GO to encourage new Family Passes
- $\rightarrow$  motivate employees to take transit or ride-share during busy events

# 1.4 FUTURE DEVELOPMENT AT EXHIBITION PLACE

Exhibition Place Strategic Plan 2014-2016, identifies several planned developments within the grounds. These developments include:

- → creation of Festival Plaza
- $\rightarrow$  expansion of the Enercare Centre
- → completion of the Raptors Practice Facility
- $\rightarrow$  completion of Hotel X

Exhibit ES-7 describes the key features of the pending and future planned developments at Exhibition Place. These developments were incorporated into the parking model to forecast the future parking demand on the site.

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

| Projects   |               |
|--|---------------|
| <ol> <li>Festival Plaza         <ul> <li>6.7 hectare area</li> <li>Located in Parking Lots 1 &amp; 2</li> <li>Surface lots remain with 1,420 spaces</li> <li>Accommodate up 100,000 people</li> <li>Loss of Parking spaces 379 spaces</li> </ul> </li> </ol> |               |
| <ul> <li>2. Enercare Centre Expansion <ul> <li>Westerly into Parking Lot 3</li> <li>New Hall = 108,000 SF</li> <li>New Meeting Rooms = 130,000 SF</li> <li>Replace surface parking underground</li> </ul> </li> </ul>  | E Contraction |
| <ul> <li><b>3. Raptors Facility</b> <ul> <li>Anticipated opening February 2016</li> <li>Basketball training Centre = 68,000 SF</li> <li>Western section of Parking Lot 6</li> <li>Parking provided behind Medieval Times</li> </ul> </li> </ul>              |               |
| <ul> <li>4. Hotel X <ul> <li>Phase 1: Opening Spring 2016</li> <li>404 rooms</li> <li>Access from Newfoundland Drive</li> <li>411 parking spaces underground</li> </ul> </li> <li>Phase 2</li> </ul>   |               |

1.5 FUTURE PARKING DEMAND

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

5-7 years after opening of Phase 1

- → 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.

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

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

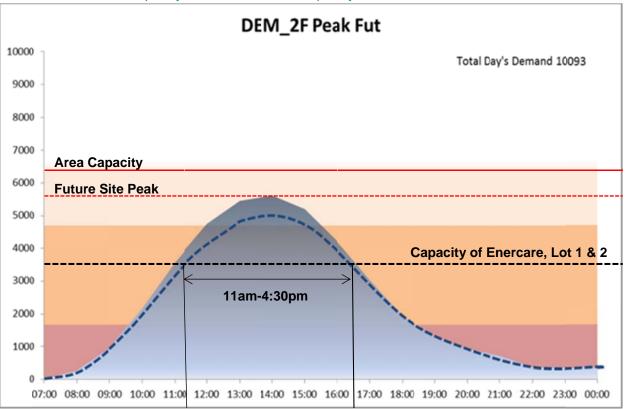


Exhibit ES-9 - Site Capacity versus Enercare Capacity and Demand

# 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
- $\rightarrow$  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.

|   | 2                           |     | 3                           |    | 4                       |    | 5                            |
|---|-----------------------------|-----|-----------------------------|----|-------------------------|----|------------------------------|
| 30 Year Assessment @ 5% Discount Rate         | Base: Enercare<br>Expansion | Lot | A, 1 or 2 - New<br>Undergrd | L  | ot 4 - Prefab<br>Garage | L  | ot A or 4 - Prefab<br>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                   |                             |     | 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                       | \$<br>9,300,000             | \$  | 10,700,000                  | \$ | 9,535,000               | S  | 10,700,000                   |
| Capital Cost per Space for Option             |                             | s   | 63,000                      | \$ | 20,000                  | \$ | 20,000                       |
| Total Capital Cost of Option                  |                             | s   | 63,000,000                  | \$ | 3,000,000               | \$ | 20,000,000                   |
| Annual Maintenance Costs                      |                             | \$  | 350,000                     | \$ | 30,000                  | \$ | 200,000                      |
| Refurb Costs (after 25 years)                 |                             | \$  | 15,750,000                  | \$ | 750,000                 | \$ | 5,000,000                    |
| PV Cost                                       |                             | s   | 72,516,000                  | \$ | 3,429,000               |    | \$22,858,000                 |
| Annual Net Revenue Difference                 |                             | \$  | 1,050,000                   | \$ | 205,000                 | \$ | 1,200,000                    |
| PV Benefits                                   |                             | \$  | 15,443,000                  | \$ | 3,015,000               | \$ | 17,649,000                   |
| Net PV  |                             | s   | (57,073,000)                | \$ | (414,000)               | \$ | (5,209,000)                  |

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

→ 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.

|   |       | 2                             |     | 3                           |    | 4                       |    | 5                            |
|---|-------|-------------------------------|-----|-----------------------------|----|-------------------------|----|------------------------------|
| 30 Year Assessment @ 5% Discount Rate         | Futur | e Base: Enercare<br>Expansion | Lot | A, 1 or 2 - New<br>Undergrd | L  | ot 4 - Prefab<br>Garage | ι  | ot A or 4 - Prefab<br>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                   |       |                               |     | 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                    | S   | 12,556,279                  | S  | 10,972,569              | S  | 12,556,279                   |
| Capital Cost per Space for Option             |       |                               | s   | 63,000                      | s  | 20,000                  | s  | 20,000                       |
| Total Capital Cost of Option                  |       |                               | S   | 63,000,000                  | S  | 3,000,000               | S  | 20,000,000                   |
| Annual Maintenance Costs                      |       |                               | S   | 350,000                     | s  | 30,000                  | s  | 200,000                      |
| Refurb Costs (after 25 years)                 |       |                               | s   | 15,750,000                  | s  | 750,000                 | \$ | 5,000,000                    |
| PV Cost                                       |       |                               | 5   | 72,516,000                  | 5  | 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                       |

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

# 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.

| 20 Veer Accessment @ 0% Discount Date             | Future | Base: Enercare | L  | ot 4 - Prefab |
|---|--------|----------------|----|---------------|
| 30 Year Assessment @ 0% Discount Rate             |        | Expansion      |    | Garage        |
| Total Site No. of Spaces On Site                  |        | 5,408          |    | 5,408         |
| No. of Spaces Added                               |        |                |    | 150           |
| Option No. Of Space on Site                       |        |                |    | 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                  |        |                | \$ | 20,000        |
| Total Parking Structure Cost                      |        |                | \$ | 3,000,000     |
| Capitalized development, engineering, design,     |        |                | \$ | 1,000,000     |
| consulting, permits, parking study, contingency & |        |                |    |               |
| other related expenses                            |        |                |    |               |
| Total Capital Cost                                | \$     | -              | \$ | 4,000,000     |
|   |        |                |    |               |
| Annual Maintenance Costs                          |        |                | \$ | 30,000        |
| Refurb Costs (after 25 years)                     |        |                | \$ | 750,000       |
|   |        |                |    |               |
| Annual Net Revenue Difference                     |        |                | \$ | 205,000       |
| Payback Period on Structure                       |        |                |    | 19.5 Years    |

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

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

# 1.8 RECOMMENDED PARKING STRATEGY

The following outlines the Strategic Parking Plan developed for Exhibition Place:

# 1. Parking Structure

- → Based on Net Present Value (NPV) assessment, there isn't a business case to support a large traditional parking structure at Exhibition Place due to the current financial model and the lack of consistent parking demand to achieve a reliable ongoing parking revenue stream.
- → When more development and/or a significant increase in the number of large events occur throughout the year, the business case for a new parking structure or new underground parking garage should be re-examined. There may also be possible future partnership opportunities with Ontario Place to share in the development of a parking structure/underground garage once their future development plans are known and when parking demand warrants such a large capital investment, or the current financial model changes.
- → Under the condition that MLSE and the City intend to contribute a total of \$4,000,000 to the construction of a new parking facility, a 150-space prefab facility could be financially viable with a payback period of 19.5 years.
- → Based on the typical parking demand, the limited number of "peak events" on the site over 365 days, it is recommended that the \$4,000,000 (less \$200,000 for studies) or remaining \$3,800,000, be used to improve conditions on the site that will result in INCREASED available parking supply, improved parking, bicycle and transit facilities on the site. These measures will help reduce parking demand, are more environmentally friendly, and will be more beneficial to a large component of the visitors, guests and exhibitors to the Exhibition Place grounds.

# 2. Parking Supply

# Short-Term

- → Within the short-term period (prior to any further redevelopment on the site), an on-site parking supply of approximately 5,800 spaces is sufficient to adequately accommodate peak parking events. This can be addressed with the future supply 5,408 + 454 (optimized) = 5,862 and 6,293 with Hotel X.
- → Continue to supplement the formal on-site parking supply with use of the informal parking areas on-site (grass area/BLC) and/or when required).
- → Optimize the current parking lots, especially Lots 4, 5 and 6, to increase parking supply and improve operations.

### Medium-Term

- → Within the medium-term period (after the development of Festival Plaza and prior to the expansion of Enercare Centre), the on-site parking supply should be maintained to be approximately 5,800 spaces.
- → Any measureable loss in parking supply due to the development of Festival Plaza should be replaced with an equivalent transit incentive program to be implemented with specific funds dedicated to increasing transit usage to Exhibition Place.

→ Develop a contingency plan to address rare events (one to two times per year – Papal visit/Winter Classic) that will result in maximum peaking load, where off-site parking arrangements may be required and/or additional transit and shuttle service is required to accommodate the peak demand.

# Long-Term (10 Years)

- → It is recommended that any expansion of Enercare Centre or development within the vicinity of Enercare Centre or Festival Plaza should include some level of additional parking supply subject to further study on the parking demand and frequency of event.
- → A contingency plan must be developed to address maximum peaking of simultaneous events. The plan must include:
  - i. expanded transit service
  - ii. off-site parking arrangements
  - iii. shuttle service
- → Should the redevelopment of Ontario Place occur within a 10-year period, then a significant increase in parking supply may be required to service both Ontario Place and Exhibition Place, particularly during simultaneous events. In this case, a new parking structure or new underground parking garage should be re-examined.

# 3. Transit Infrastructure

- A. Exhibition Place should continue to work with Ontario Place and form new relationship with Liberty Village BIA, Ratepayers Association, Neighbourhood Associations and local political representatives to have ongoing meetings with Toronto Transit Commission and Metrolinx regarding improved service to Exhibition Place.
- B. Exhibition Place, Ontario Place, TTC and Metrolinx develop a service protocol that identifies the various types of service that can be provided, when, how, and how the cost will be recovered if not at the fare box.
  - i. Provide extra service during major events and special events.
  - ii. Provide coordinated service to Exhibition Place during major events, which must include having connecting service to bring people in and return them to point of origin. This service should continue until the end of the event.
  - iii. The protocol should include all major events and special events at Exhibition Place and be managed by Exhibition Place and not individually by each show operator or tenant.
  - iv. Exhibition Place and Ontario Place meet with Metrolinx Strategic Business Development Group to develop a partnership opportunity. The following should be considered as part of the agreement:
    - major event transit fee Day/Event/Family Pass
    - bundle major event tickets and transit tickets

- marketing campaign of transit service to guest and employees
- increase regular/off-peak/special event service to Exhibition Place and Ontario Place
- C. Improve existing transit facilities on Exhibition Place grounds:
  - i. Improve the visibility of all the bus stops on the grounds and provide information on service hours.
  - ii. Provide bus shelters and schedules at the stops on Manitoba Drive at Nova Scotia Avenue and at Saskatchewan Road, and the bus Loop on Canada Drive, including links to websites and social media.
  - iii. Improvement to the existing Metrolinx and TTC Station and the walkway between Liberty Village and Exhibition Place. Make it more attractive, provide information and signage, enclosed shelters/waiting area, lighting, seats, washroom facilities and more accessible features. Liberty Village BIA could be approached as a potential partner for these improvements.

### 4. Parking Demand Management

The following are measures that Exhibition Place should adopt to improve the efficient use of parking resources and reduce on-site parking demand, particularly during peak events.

### Event Scheduling

- A. The Exhibition Place team (marketing, sales and parking), show operators, tenants and Ontario Place should continue to improve their ongoing communications to better manage and schedule events to minimize overlap of large events on and off-site, multiple events on-site and timing of events. This group should also meet, at least quarterly, with the event planning consortium being proposed by the Mayor, John Tory. The following specific measures should be considered:
  - i. have monthly planning meeting with core team that should include:
    - a) "Parking and Traffic" Coordinator (who would also work closely with Toronto Police)
    - b) Managers: Parking, Security, IT
    - c) Marketing and Sales
    - d) Event Management Services
    - e) Ontario Place
  - ii. Minimize overlapping of multiple large events on same day
  - iii. Avoid scheduling a sporting event (BMO Field/Ricoh Coliseum) and major events simultaneously. Where it cannot be avoided, develop contingency plan for parking and traffic.
  - iv. Avoid scheduling of major events during off-site major events/festivals/sporting events occurring, particularity at Ontario Place, Liberty Village, Harbourfront and the Downtown core and/or major closures or construction on critical roadways (Lake Shore Boulevard and Gardiner Expressway).

# Pricing Structure

- A. Develop parking rates that reflect location of event, current market and off-site events and competitors (Toronto Parking Authority, Ontario Place, Fort York, private vendors in Liberty Village).
- B. Develop/adopt parking rates that help to manage parking and traffic on-site:
  - i. highest rates near the centre of the site or destination point (Enercare/Allstream/Better Living/BMO Field)
  - ii. lowest rates on the periphery to deter motorists from entering the centre
  - iii. for major events when on-site supply is low, adopt highest parking rates but vary by location
  - iv. special event rates ranging from \$20 to \$30 is consistent with special event rates in the City of Toronto and is acceptable for the site.

# Car Pooling

- A. Provide incentives for guests who car/vanpool (three or more) to the site such as:
  - i. group discounts on tickets
  - ii. preferred parking spaces
  - iii. designated parking spaces
  - iv. preferred entrance

# Non-Auto Travel

- A. Provide safe, convenient opportunities and facilities for guests to travel to Exhibition Place without private automobiles. The following measures can be implemented:
  - i. Improve and increase the on-site and off-site cycling facilities, including additional Toronto Bike Share inventory operated by the Toronto Parking Authority.
  - ii. Increase the number of on-site and safe bicycle lockers and bicycle parking racks
    - in the short-term, increase the number of bike racks from 550 to 1,000 representing the three percent of guests that arrive by bike
    - approximately 400 of the bike racks should be in very close proximity to BMO Field
    - increase the current supply of 250 bike racks inside the garage and adjacent to the Enercare Centre to approximately 400 and include bike lockers in this location
    - over time, increase the number of bike lockers and bike racks to 1,500
  - iii. Provide appropriate signage for bike storage and communicate it to guests.

- iv. During special shows and events (CNE, Home Show), where the number of cyclists on the site increases, continue to provide increased bike storage through temporary measures.
- v. In the long-term, provide a secure and sheltered bike storage area with any future parking structure or parking expansion.
- vi. Increase the number and width of sidewalks and pathways leading to the buildings, especially from parking lots and bus stations/stops, and along Princes' Boulevard in front of BMO Field.

# 5. Parking Equipment and Technology

# Pay and Display

- $\rightarrow$  It is recommended that existing pay-and-display machines be utilized more.
- → Wireless network 2G communications be upgraded to the 3G communications resulting in faster transaction times.
- → Review the possible deployment of the "tap & go" feature using the Interac Flash debit card with the current Pay-and-Display vendor.
- → Acquire Parking Management Software tied to financial statements for monthly measuring and monitoring of Key Performance Indicators.

# Pay-on-Foot and Parking Guidance for Enercare Garage

→ For the Enercare Centre parking garage, examine the feasibility of replacing the manual attendant cashier booths with a fully automated pay-on-foot system.

# Pre-Purchase of Parking Fees Online

→ Adopt an online application that allows customers to pre-buy a barcoded parking permit prior to arriving, displaying it on the dash and having a mobile attendant scan (using handheld scanners to reduce processing times and line-ups).

### Mobile Payment of Parking Fees

→ Work with the Toronto Parking Authority or Ontario Place in the deployment of a mobile pay application (customers using their smartphones) as just another form of payment in addition to coin, bill notes, debit card and credit card payment methods.

# 6. Digital Parking Information

- → In the short to medium-term, install a basic parking "lot full" display board at the two entrances (east and west sides of garage) and digital "number of spaces available" with a green and red light system, for directing people to the express "pay by credit card" lanes on entry, to improve customer service and reduce delays and queues.
- → In the medium to long-term, install digital information at selected entry points to the grounds and entry to all major parking lots and garages, (more than 200 spaces) indicating space availability. This system should be tied to a main network that allows guests to remotely obtain parking information and update parking personnel with live information.

→ Make user-friendly improvements to the Exhibition Place website, providing dynamic information on all modes of transportation and links to other service providers' websites (i.e., TTC, GO Transit, cycling, taxi, etc.) and Google maps.

# 7. Site Operations and Management

# Communication and Signage

- → Designate a "Parking and Traffic" Coordinator to liaise with others and disseminate information on traffic and parking issues, regarding events on the grounds and surrounding area, that may impact guests access and operations on the ground.
- → Build on the pending signage program by implementing directional signage and way-finding measures throughout Exhibition Place, including:
  - every site entry, parking lot entry and exit point
  - name or number each parking lot (highly visible: large fonts, contrasting colour and reflective)
  - improve signage and way-finding measures between Exhibition Place and Ontario Place
  - provide digital signs of parking availability at each parking lot and garage

# Personnel Training

- $\rightarrow$  Parking operations staff to receive basic training on:
  - how to operate the various parking equipment on-site
  - customer service
  - parking and traffic management measures

# Customer Service Ambassadors

→ During major events/shows, provide on-site and at major entry points, highly visible customer service ambassadors to assist guests in navigating the site.

# Accessibility

- → Improvements are required on-site to make the site more accessible to guests with mobility issues and seniors. These could include:
  - clear and accessible pathways between the parking lots, transit stations and major buildings
  - increase the number of sidewalks and walkways and their width, to accommodate wheelchairs, walkers, scooters and strollers
  - more visible way-finding signage, especially showing elevators, ramps
  - the accessible entry point for BMO Field should be more visible and better marked for the public

# Pick-up/Drop-off Facility

- → Incorporate designated pick-up/drop-off areas throughout the site to improve traffic flow and convenience to guests.
- → Incorporate pick-up/drop-off facility into the redesign and re-line marking of surface Lots 1, 2 and 3, when Festival Plaza is introduced.
- $\rightarrow$  Have a designated pick-up/drop-off area and layover area for tour buses and motor coaches.

# Safety and Security

- → Improve on-site safety and security measures:
  - reduce cash transactions other than by pay-and-display meters
  - significantly improve lighting (volume and wattage) throughout the site, especially at each surface parking lot
  - increase the number of security surveillance cameras on the site, particularly within surface parking lots

# Parking Maintenance

- → Budget 10 percent of the parking operating budget for annual maintenance, covering sweeping and power washing facilities, pavement line markings, pavement patching and repair, equipment repair, and lighting and signage upgrades for both surface lots and parking structures. Snow clearing would add an additional 4 to 5 percent of the parking operating budget.
- → Allocate annually 1 percent of the total value (cost) of parking capital assets for major upgrades to elevators, parking lot repaving, lighting system replacement and technology (software and hardware) improvements for both surface lots and parking structures. This annual allocation should be used for refurbishment of surface parking lots at Year 15 and parking structures (above ground and underground) at Year 25 from the date of initial opening of the facilities. Surface parking lots typically have a 15-year life, while underground parking structures and prefabricated above ground structures have a life cycle of 50 years or more, if maintained properly.
- → Undertake a physical "state of good repair" inventory and evaluation program to establish five and 10year budget priorities.

# 8. Traffic Management Plan

# Short-Term Plan

- $\rightarrow$  Reduce or eliminate through traffic on Exhibition Place grounds particularly during events:
  - provide signage advising motorist that access points east of Dufferin Street on Saskatchewan Road, west of Strachan Avenue, and Princes' Boulevard are for event traffic only
  - in the short-term during major events and BMO Field activity, restrict vehicular traffic on:
    - → Princes' Boulevard between Newfoundland and Ontario unless destined to Parking lots
    - $\rightarrow$  Nova Scotia Avenue between Manitoba Drive and Princes' Boulevard
    - $\rightarrow$  Ontario Drive from Princes' Boulevard to Manitoba Drive
    - → Quebec Street
- → Permanently close the roadway through Princes' Gate to vehicular traffic to improve on-site circulation, reduce delay, traffic congestion and safety concerns at Strachan Avenue/Princes' Gate and Lake Shore Boulevard.
- → Restripe British Columbia Road between Lake Shore Boulevard and Saskatchewan Road to accommodate three travel lanes. The centre lane to be used as a reverse traffic lane to match the peak direction of traffic. One of the two required signs is currently present on British Columbia Drive near Lake Shore Boulevard. A second will be required on British Columbia near Saskatchewan Road.
- → Establish a protocol arrangement with the Toronto Traffic Management Centre, to provide adjustments to all traffic signals at the entry points to the Exhibition Place grounds, in coordination with boundary road conditions.
- → Provide paid duty officers (until coordination and control from Toronto Traffic Management Centre is established) at the signalized access points around the site during major events:
  - British Columbia Road and Lake Shore Boulevard
  - Lake Shore Boulevard and Ontario Drive
  - Lake Shore Boulevard and Newfoundland Drive
  - Strachan Avenue and Fleet Street
- $\rightarrow$  Install permanent all-way stops at the following locations to help manage traffic and pedestrian conflict:
  - Nova Scotia Avenue and Manitoba Drive
  - Quebec Street/Parking Lot 4 exit and Manitoba Drive
- → Provide a paid duty officer at Nova Scotia Avenue and Manitoba Drive to control pedestrian flow and improve pedestrian safety during all TFC games or other major events on-site.

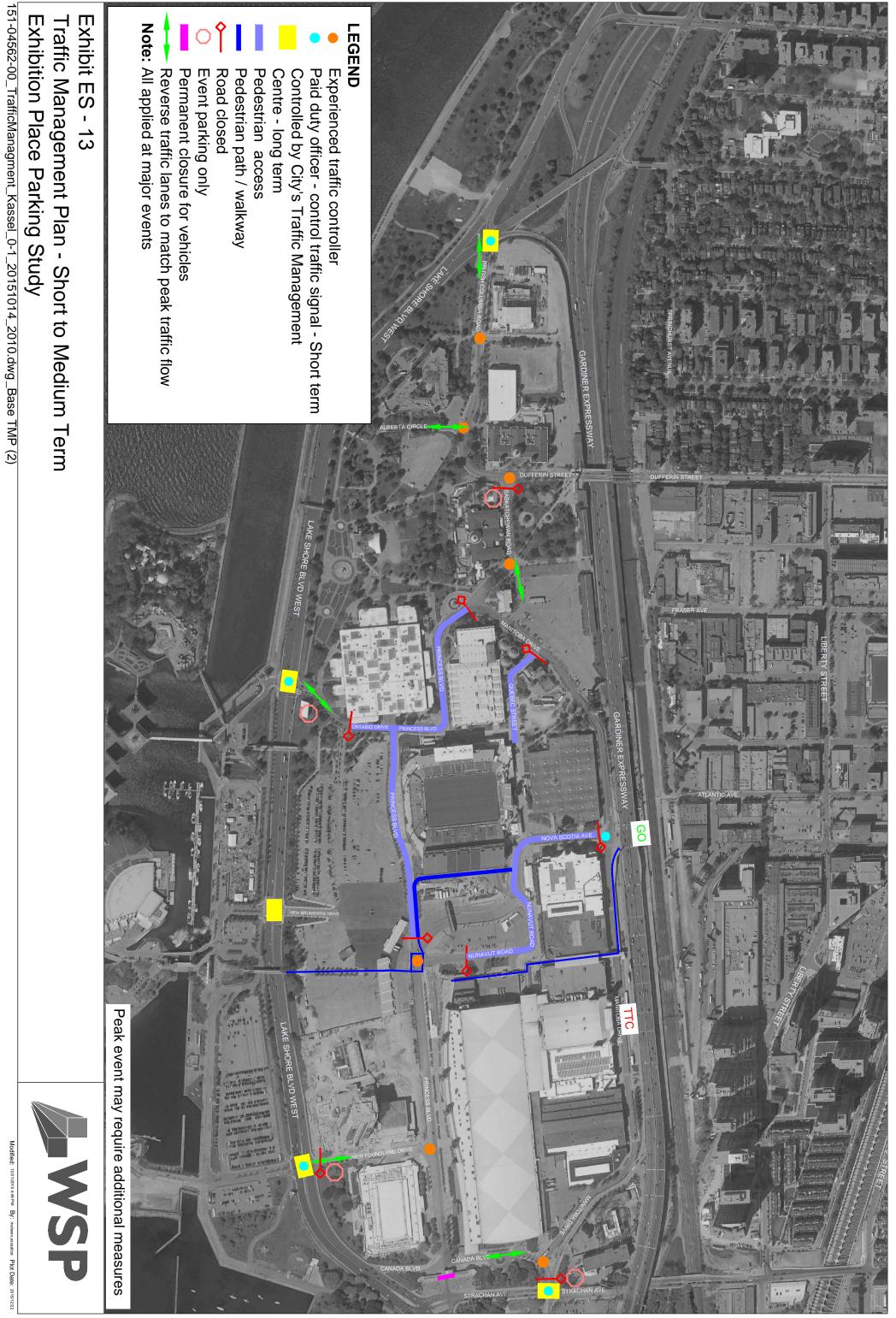
- → Provide interlocking bricks or other roadway treatment to alert motorists of high pedestrian areas at:
  - GO Transit Station/Nova Scotia Avenue and Manitoba Drive
  - TTC Station Exist/entrance and Manitoba Drive
- → At the discretion of the Parking Manager, provide traffic control personnel at key locations during major events on-site, to improve traffic flow and to direct guests.
- → At the discretion of the Parking Manager, operate sections of the following roadways as one-way or two-way to disperse traffic in a timely and efficient manner:
  - British Columbia Road
  - Alberta Circle
  - Saskatchewan Road
  - Ontario Drive

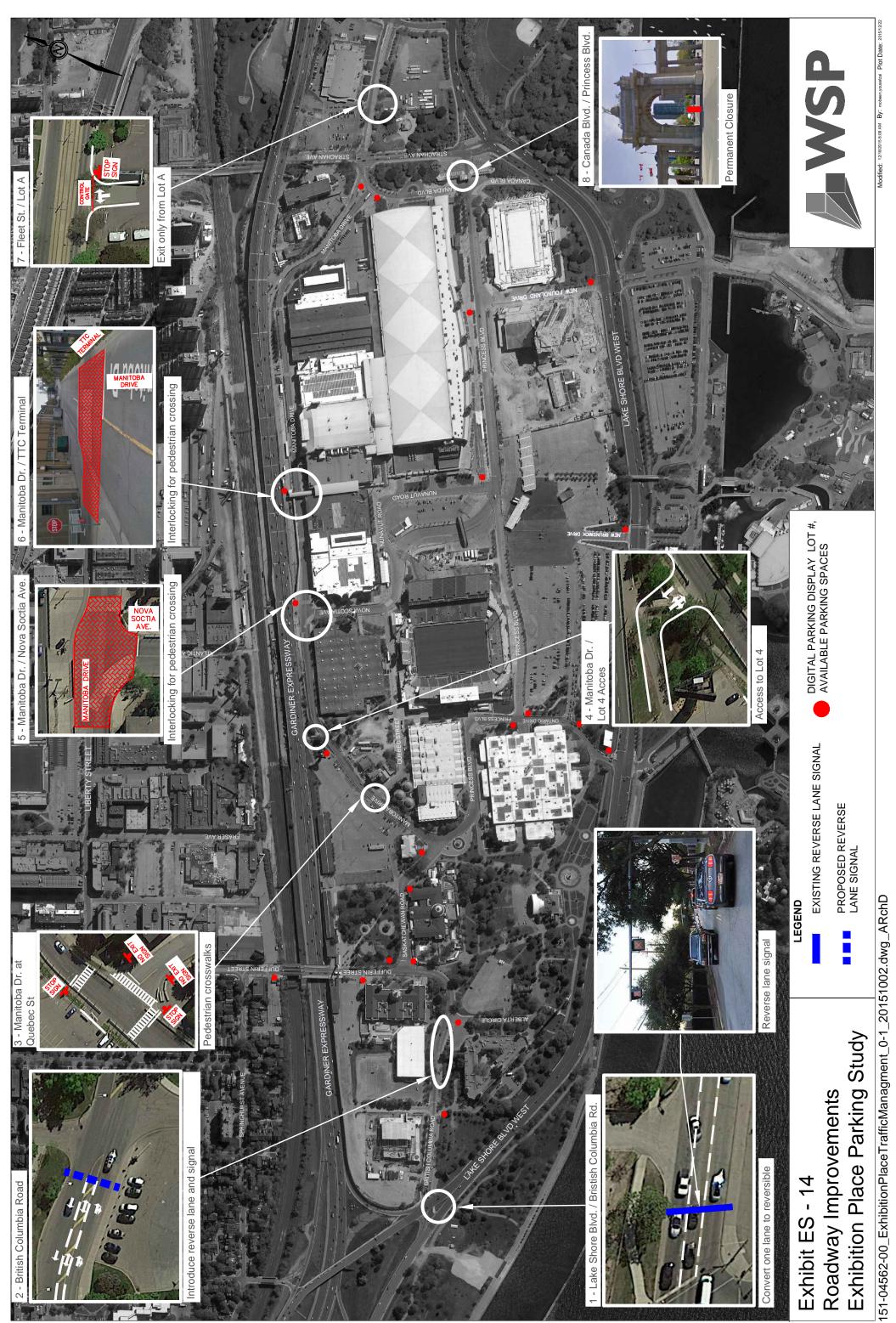
### Long-Term Plan

- → When Festival Plaza is implemented or Lots 1, 2 and 3 are redesigned, the following measures should be included:
  - realign Nova Scotia Avenue to align with New Brunswick Way
  - realign Princes' Boulevard to terminate at Nova Scotia Avenue
  - close Princes' Boulevard between Nova Scotia and Ontario to vehicular traffic, and make it a
    pedestrian walkway, creating safe refuge for pedestrians
- → All signalized access points be coordinated and controlled from Toronto Traffic Management Centre to improve inbound and outbound flow with boundary road conditions, especially during major events at the site (the number, events and duration predetermined based on agreed-upon protocol).

The Traffic Management Plan is provided in Exhibit ES-13 and the recommended roadway improvements are provided in Exhibits ES-14, ES-15 and ES-16.

A high level cost estimate of the recommend improvements are provided in Exhibit ES-17





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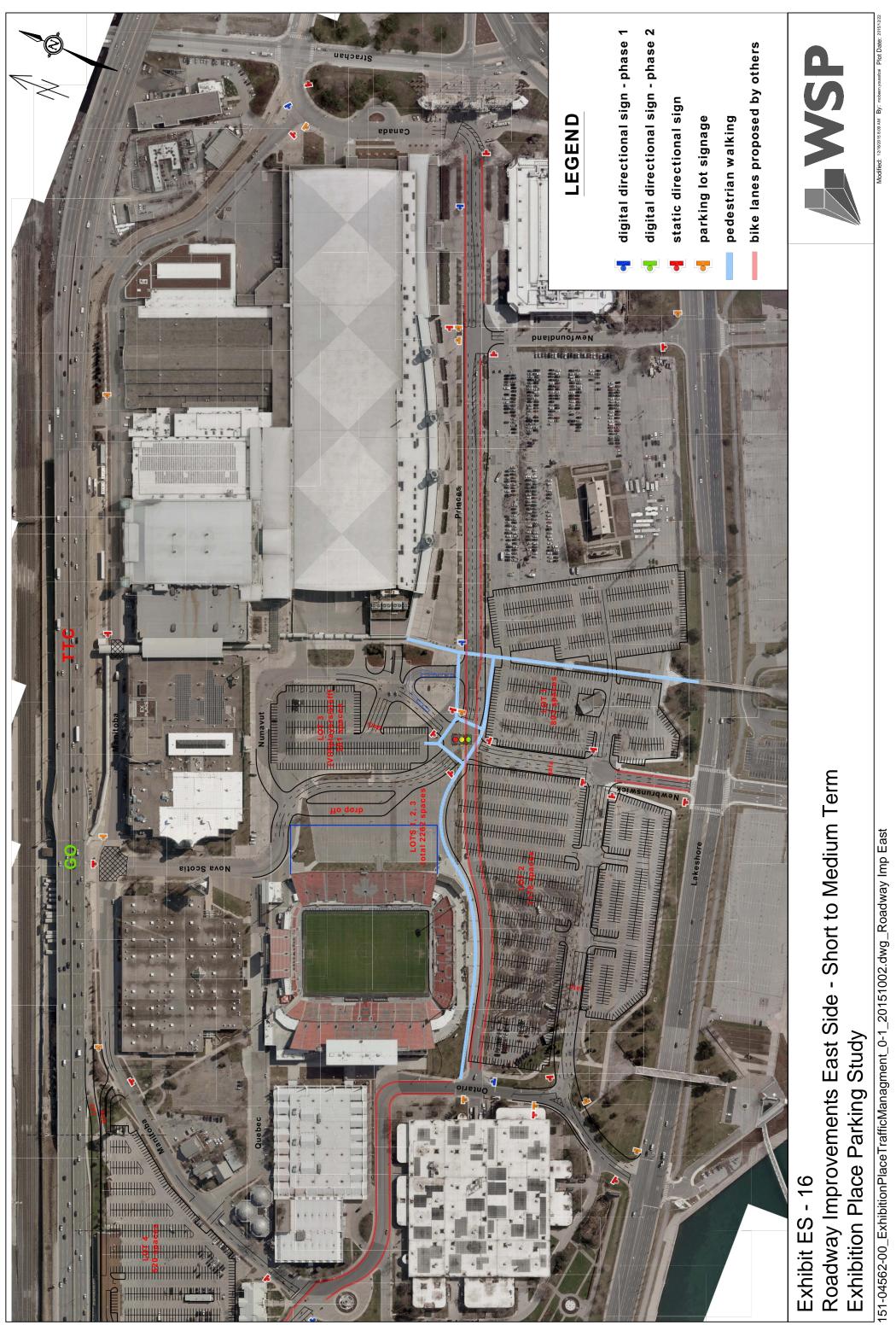
|   | 2-00 ExhibitionPlacePar  | kingStudy\3.0 Technical\3.7 CAD   | & Figures or 3D (Optional out-dent | ;)\Final |                 |
|---|--|---|------------------------------------|----------|-----------------|
| Exhibit ES - 15<br>Roadway Improvements<br>Exhibition Place Parking | <ul> <li>parking lot signage</li> <li>pedestrian walking</li> <li>bike lanes proposed by others</li> </ul> | LEGEND<br>digital directional sign - phase 1<br>static directional sign - phase 2 |                                    |          |                 |
| West Side- Short to Medium Term<br>Study                            |  |   |                                    |          | a part of lot 6 |
|   |  |   |                                    |          |                 |

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BY:

Plot Date





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|                              | January-16   |                  |                               |                      | Priority                   |                          |   |
|------------------------------|--|------------------|-------------------------------|----------------------|----------------------------|--------------------------|---|
|                              |  |                  | -                             | 2                    | ω                          | 4                        | 5   |
| Final<br>Report<br>Reference | Parking Strategy Initiative  | High Lev<br>Esti | High Level Budget<br>Estimate | Short-term<br>(2017) | Medium-term<br>(2018-2023) | Long-term<br>(2024-2029) | Comments  |
|                              | Optimize on-site parking supply - Lots 4, 5, 5A and 6, does not include electrical, draining and relocating servicing if required.                               | ÷                | 2,300,000                     | -                    |                            |                          | Does not include Lots 1, 2 and 3  |
| 11.3 B (iv)                  | Extra GO Train services for special events (GO Transit to advise on protocol & contributions.)   | -                | TBD                           |                      | -                          |                          | GO advised during study, 12 coach train carries 1,944 customers,<br>75% recovered from farebox & \$6 average fare, therefore = Total<br>\$11,664 revenue per train X 4 trains per event= \$46,656 in gross<br>revenue per special event. Need cost per train from GO and how<br>many trains per event are required. |
| 11.2 B, (iv)                 | Partnership with Ontario Place, Metrolinx and TTC on transit services, promotions, family pass (TTC has this already), etc.                                      | \$               | 150,000                       | -                    |                            |                          | Budget 2% of total special event revenues for marketing   |
| 11.3 C, (ii)                 | Provide 2 large on-site transit shelters   | \$               | 40,000                        | 1                    |                            |                          | Should work with GO and TTC to look at cost sharing, or negotiate directly with City's transit shelter advertising company.   |
| 11.5.1, B                    | Upgrade existing 30 Pay & Display machines from 2G to 3G network communications.   | Ф                | 75,000                        |                      |                            |                          | Includes new modems and card readers.   |
| 11.5.1, C                    | Upgrade to accept contactless Interac Flash debit card for 30 P&D machines   | \$               | 20,000                        |                      | -                          |                          | Includes hardware and software.   |
| 11.5.1, D                    | Acquire Parking Management Software (if pay-on-foot system acquired, this is included)*  | ÷                | 75,000                        |                      | 4                          |                          | In interim a low cost Key Performance Indicators (KPIs) application could be developed for \$35,000 using Microsoft Access and Excel by extracting data from P&Ds and other financial & operational data sources.   |
| 11.5.2, A                    | Acquire Pay-on-Foot parking access revenue control system to replace Enercare garage cashiers*   | ↔                | 500,000                       |                      | -                          |                          | Includes complete system: entry/exit terminals, 3 pay stations, software, gates and installation (subject to detailed review of communication, networking, trenching and power requirements).   |
| 11.5.3, A                    | Acquire Pre-Purchase Parking Fee Barcode Online Software Application & handheld barcode scanners for Ex. Place on-site special events parking staff*             | \$               | 75,000                        | -                    |                            |                          | Another alternative is to work with parking vendor, ecommerce provider or online ticket seller, where a transaction fee may apply, but no capital investment required.  |
| 11.5.4, A                    | Acquire mobility payment parking application by working with TPA and/or Ontario Place*   | ÷                | 10,000                        | -                    |                            |                          | In addition, a user convenience fee is typically charged to the parking customer ranging from \$.25 to \$.35 per transaction.   |
| 11.6, A                      | Obtain "Lot Full" display board and real-time digital parking spaces availabilty for Enercare garage 2 entrances*  | \$               | 50,000                        |                      | 1                          |                          | Digital signs are \$10,000 each, the balance is installation, software and communications. Individual parking spaces are not monitored, which is a longer-term and more expensive parking guidance solution.  |
| 11.6, B                      | Acquire digital campus-wide type of parking guidance system and phase-in at major entry points $^{st}$   | \$               | 3,000,000                     |                      |                            | 1                        | Budget \$500 per space. As the technology matures and becomes more widely deployed, price per space should drop.  |
| 11.6, C                      | Develop a user-friendly multi-modal transportation (including parking & other transportation modes) dynamic real-time website to replace current static website. | ÷                | 40,000                        |                      | -                          |                          | The trend now is away from specially designed smartphone/tablet apps and towards well designed websites that may be accessed by any type of computing device.   |
|                              |  | 69               | 6,335,000                     | Q                    | 7                          | 1                        | *Note: Vendors offer 5 and 10 year lease agreements on<br>parking equipment & software as well as revenue sharing<br>programs to assist clients in amortizing the costs.  |

# Exhibit ES-17 – Preliminary Cost Estimate of Improvements

**Exhibition Place Parking Study** 

Exhibition Place Parking Study Exhibition Place

ES-33