



LANSLOWNE 2.0

Transportation Demand Management Strategy Report

June 30, 2023 **DRAFT**





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Transportation Demand Management Strategy
Report **(DRAFT)**

June 30, 2023

Prepared for:

Ottawa Sports and Entertainment Group (OSEG)
on behalf of the City of Ottawa

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Stantec Consulting Ltd.

June 30, 2023

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1.0 INTRODUCTION

In October 2012, City Council approved a 40-year partnership between the City of Ottawa and the Ottawa Sports and Entertainment Group (OSEG), governed by the Lansdowne Partnership Plan (LPP), for the redevelopment of Lansdowne Park. TD Place at Lansdowne opened in 2014 as a mixed-use sports and entertainment district with residential, retail, restaurant, office, and public land uses, among others, making it a major Ottawa destination.

Integrating sustainable transportation modes at Lansdowne has been a priority since the early stages of planning. Prior to final site plan approval, City Council required the development of a Transportation Demand Management (TDM) Plan as part of the planning process. TDM is a wide range of policies, programs, services and products that influence how, why, when and where people travel with the goal of making travel behavior more sustainable, and to reduce reliance on the single occupancy vehicle (SOV).

The *Lansdowne Revitalization Transportation Demand Management Plan (October 2011)* outlined the strategies and programs for encouraging walking, cycling, carpooling, carsharing, and transit use among residents, employees, and visitors alike. Many of the strategies were successfully implemented since the opening of Lansdowne in 2014. Moreover, a monitoring program was established to measure the effectiveness of TDM strategies in promoting alternatives to the private automobile for special events. A hallmark of the TDM program for events at Lansdowne is the inclusion of free transit for all ticketed events, irrespective of the size of the event. Free transit and shuttle services are provided to all ticketholders, with the cost of enhancements to transit services funded by OSEG.

To ensure the long-term success of Lansdowne, City Council approved the *Lansdowne Park Partnership: Path to Sustainability and Next Steps* report (ACS2021-PIE-GEN-0004) in July 2021. The report laid the foundation for further improving Lansdowne with a goal to ensure that the LPP is financially sustainable through a program of facility replacement, additional residential density and additional retail offerings.

Discussions between City staff and OSEG led to a proposed mixed-use redevelopment project, referred to as Lansdowne 2.0, that involves replacement of the functionally obsolete Arena at TD Place and north side stands with a new Event Centre and new north side stands at TD Place, as well as increasing residential dwelling units and commercial retail space that are experiential and destination-based.

With the proposed increase in residential dwelling units and commercial retail space through the Lansdowne 2.0 initiative, Council has directed that an update to the 2011 TDM Plan be prepared to ensure the continued promotion of sustainable transportation modes to Lansdowne.

The *Lansdowne 2.0 Transportation Demand Management Strategy* outlines the TDM program elements that are necessary to ensure that the Lansdowne 2.0 redevelopment project continues to achieve the maximum benefit from a variety of transportation modes with a focus on promoting walking, cycling, and transit as viable and competitive options.

This document provides an overview of the recommendations set forth in the 2011 TDM Plan, discusses their implementation status, and outlines additional recommendations to address existing gaps to accommodate the proposed increases in residential and retail commercial density, as well as the new north side stands at TD Place Stadium, and the new Event Centre.

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2.0 PROJECT BACKGROUND

The Lansdowne site re-opened in 2014 through the Lansdowne Revitalization Project and is located within the Glebe neighborhood of Ottawa, Ontario. The site currently consists of the Stadium at TD Place, the Arena at TD Place, two condominium towers and townhomes, varied commercial retail and office space, and an 18-acre urban park that includes the historic Aberdeen Pavilion and Horticulture buildings. As part of the Lansdowne Revitalization project, the previous ground-level surface parking, which previously supported activities at Lansdowne, was replaced with an underground parking garage for public and residential use.

The Lansdowne 2.0 plan seeks to replace existing infrastructure while adding additional density to the site. The proposed plan includes the following elements:

- Replacing the existing functionally obsolete north side stands and arena complex with a new 11,200 seat (12,100 spectator) north stand structure for the Stadium at TD Place. This new facility replaces the existing north stadium stands, which currently has a capacity of 14,028 spectators, and would result in a reduction of approximately 2,000 spectator capacity at the Stadium at TD Place. This venue will continue to be the home of the CFL's Ottawa REDBLACKS and the CPL's Ottawa Atlético.
- Replace the existing 9,800 seat indoor arena and event space attached to the north stadium stands with a new standalone 5,500 seat (6,500 spectator) multi-purpose event center that will be home to the OHL's Ottawa 67's, the CEBL's Ottawa BlackJacks, and other indoor ticketed sporting events and concerts.
- Construction of three new residential towers with a total of 1,199 dwelling units that include rental, owned and affordable housing.
- Replacing the existing 41,000 ft² of commercial retail and box office annex to the Stadium on Exhibition Way with 79,176 ft² of new podium-level commercial retail space. This represents a net increase of 38,176 ft² of commercial retail space from what is currently provided today, and the addition of a new indoor 27,845 ft² music hall with a seating capacity of 1,500 people.

The Lansdowne 2.0 plan is anticipated to be built-out in three phases with full build-out and occupancy anticipated to occur by 2029:

- *Phase 1* consists of building the new 5,500 seat multipurpose event center which is planned to be completed in mid-2026. This phase of development replaces existing land uses and activities currently provided at Lansdowne. This phase of development is not expected to generate any additional transportation demands.
- *Phase 2* consists of building the new 11,200 seat north side stands stadium structure and a portion of the podium level retail space. This phase is anticipated to be completed in late-2028 or early 2029 and replaces existing land uses and activities currently provided at Lansdowne. This phase of development is not expected to generate any additional transportation demands.

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- *Phase 3* consists of building the three new residential towers with a total of 1,199 new residential units. This phase is anticipated to be completed in phases between 2032 and 2036 and is representative of additional land use density to the site. This phase of development is anticipated to generate additional transportation demands.

The proposed improvements to the north stadium stands and the replacement of the indoor arena with a new multi-purpose event center will not increase the spectator capacity of venues at Lansdowne. However, the new facilities provides the opportunity, while unlikely to occur, of concurrent events hosted at the stadium and new multi-purpose event centre. This potential scenario requires a re-examination of the TDM Strategy for events held at Lansdowne.

Also, the addition of new commercial retail, office, and residential uses requires a reexamination of the existing TDM strategies to ensure adequate transportation alternatives are available and accessible to these new residents, employees, and visitors to Lansdowne 2.0.

Figure 1 illustrates a rendering of the Lansdowne 2.0 redevelopment concept.

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Figure 1 – Lansdowne 2.0 Development Concept



Source: OSEG

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3.0 PREVIOUS STUDIES

3.1 LANSDOWNE REVITALIZATION PROJECT

As part of the Lansdowne Redevelopment project, a number of transportation and sustainability studies were completed in support of planning and development approvals.

The *Lansdowne Revitalization Transportation Impact and Assessment Study* (June 2010) assessed the potential impacts of the redevelopment and revitalization proposal for Lansdowne Park. A number of other supporting transportation studies were developed focusing on the TDM measures needed to support day-to-day activities as well as special events.

Transit and Shuttle Service Plan (October 2011)

The Transit and Shuttle Service Plan outlined the requirements for transit services, satellite parking lots, and shuttle services for planned special events using the attendance thresholds of 7,000 to 14,000 patrons (arena events, smaller stadium and urban park events), 15,000 to 24,000 patrons (full stadium events and larger urban park events), and large events with 40,000 plus patrons (expanded stadium events).

Traffic and Parking Management Plan (October 2011)

The Traffic and Parking Management Plan outlined the requirements for off-site traffic and parking operations related to special events with attendance thresholds of 10,000 patrons (arena events, smaller stadium and urban park events), to 25,000 patrons (full stadium events and larger urban park events) and 40,000 plus (expanded stadium events).

Transportation Demand Management Plan (October 2011)

The Transportation Demand Management Plan outlined strategies for encouraging residents, employees, and visitors to Lansdowne to utilize transit and active transportation modes to reduce reliance on single occupant vehicles (SOV) and automobile use. The plan included recommendations for both day-to-day operations (residents, employees and retail patrons), as well as for special events with attendance levels of 10,000 patrons (arena event), 25,000 patrons (stadium event), and 40,000 plus patrons (expanded stadium events).

3.2 LANSDOWNE 2.0

In April 2022, City of Ottawa staff submitted the *Lansdowne Partnership Sustainability Plan and Implementation Report*. In addition to outlining funding strategies for the replacement of the Arena at TD Place and north side stadium stands, a process for securing air rights for the proposed residential development, and commitments for affordable housing, the report also included recommendations for improving the active transportation network. Recommendations by City of Ottawa staff for the active transportation network were incorporated into this TDM Plan and include signalization improvements, roadway modifications, infrastructure upgrades, and signage.

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4.0 LANSDOWNE REDEVELOPMENT TDM IMPLEMENTATION

4.1 OVERVIEW

Since the opening of the redeveloped Lansdowne in 2014, several recommendations from the original 2011 TDM Plan have been implemented. Additionally, the performance of the transportation program was monitored through the Lansdowne Transportation Monitoring Operations Committee (LTMOC).

The LTMOC was established as part of the Lansdowne Revitalization project to review and assess neighborhood traffic impacts associated with the redevelopment of Lansdowne through on-going consultations and a comprehensive Traffic Data Collection Program. The LTMOC committee was comprised of representatives from:

- City of Ottawa's Transportation Services Department;
- The Glebe Community Association (GCA);
- Old Ottawa South (OOS);
- Old Ottawa East (OOE);
- Glebe Business Improvement Area (BIA);
- National Capital Commission (NCC);
- City of Ottawa Ward 17 Councillor; and
- Ottawa Sports and Entertainment Group (OSEG).

The LTMOC was established by a directive from the City of Ottawa's Transportation Committee to report on the transportation performance of Lansdowne for a three-year period (2014, 2015 and 2016). The reports, which were submitted to Transportation Committee annually, included Community Association Report Cards provided by the Glebe Community Association (GCA), Old Ottawa South (OOS), and Old Ottawa East (OOE).

In addition, OSEG produced and submitted annual Transportation Demand Management (TDM) reports to document the performance of the transportation program to support events at Lansdowne.

4.2 MODAL SHARE TARGETS

The *Lansdowne Revitalization Transportation Impact and Assessment Study* (June 2010) established modal share targets for day-to-day activity, as well as for special events held at Lansdowne with various attendance levels.

Day-to-day modal shares were developed for various peak periods ranging from the Weekday AM and PM, Friday Evening, and Saturday and Sunday peak hours.

Special Event modal shares were developed based on anticipated attendance levels and the transportation network and parking availability constraints.

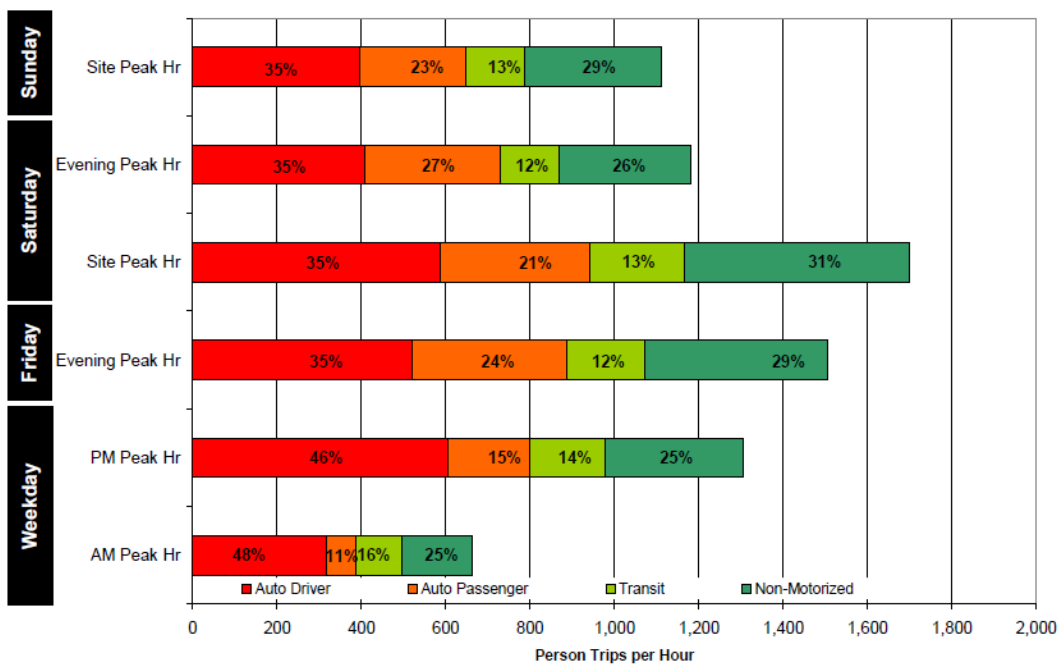
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4.2.1 Day-to-Day Activity

Day-to-day activity modal shares were established for a variety of land-uses ranging from residential, general office, cinema, and commercial retail.

Figure 2 illustrates the 2011 modal share assumptions and corresponding site-generated person trips for the redevelopment of Lansdowne.

Figure 2 – Lansdowne Redevelopment Modal Share Assumptions



Source: Lansdowne Revitalization Transportation Impact and Assessment Study (June 2010, MRC)

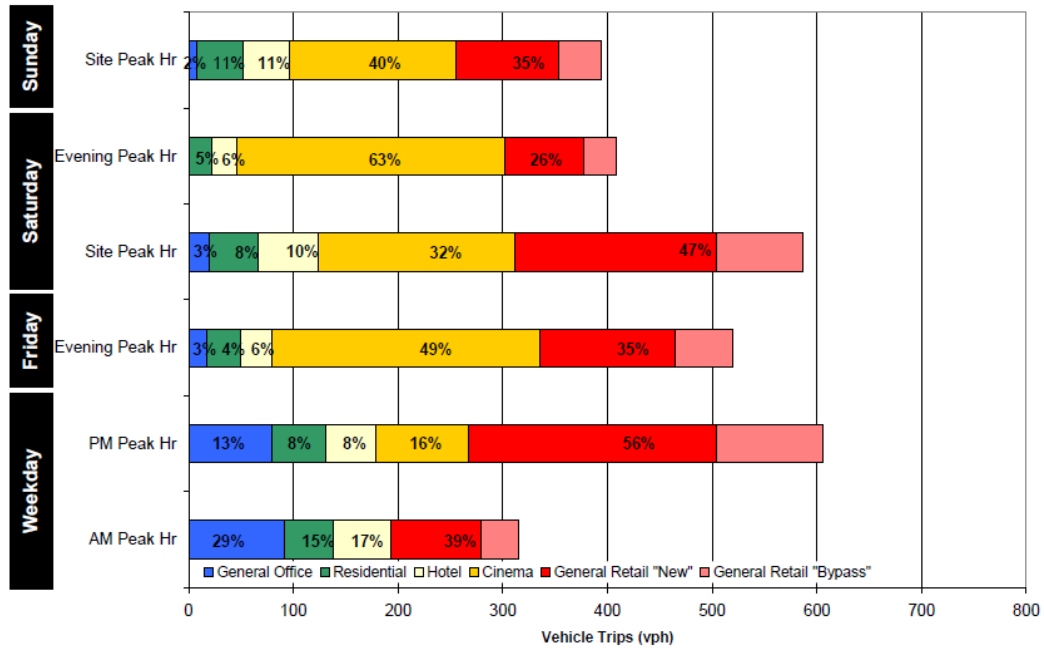
The Lansdowne 1.0 modal share assumptions for Auto Driver (i.e. vehicle trips) ranged between 35% to 48% depending on the time of day and day of the week. The Transit modal share ranged between 12% and 16%, and the Non-Motorized mode (i.e. walking and cycling) ranged between 25% to 31%.

The fluctuation of modal shares by time of day is due to the mixed-use nature of the Lansdowne redevelopment with land uses that include General Office, Retail, Residential, and Cinema.

Figure 3 illustrates the assumed breakdown of trip activity by land-use for the redevelopment of Lansdowne.

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Figure 3 – Lansdowne Redevelopment Modal Share Assumptions



Source: Lansdowne Revitalization Transportation Impact and Assessment Study (June 2010, MRC)

A significant portion of the assumed trips for the redeveloped Lansdowne are attributed to the General Retail, Cinema, and Office land uses, which currently represent a significant portion of the build-density of Lansdowne and are currently reflected in the day-to-day operations of the site today.

4.2.2 Special Events

Original Planning Assumptions (2010 – 2011 Studies)

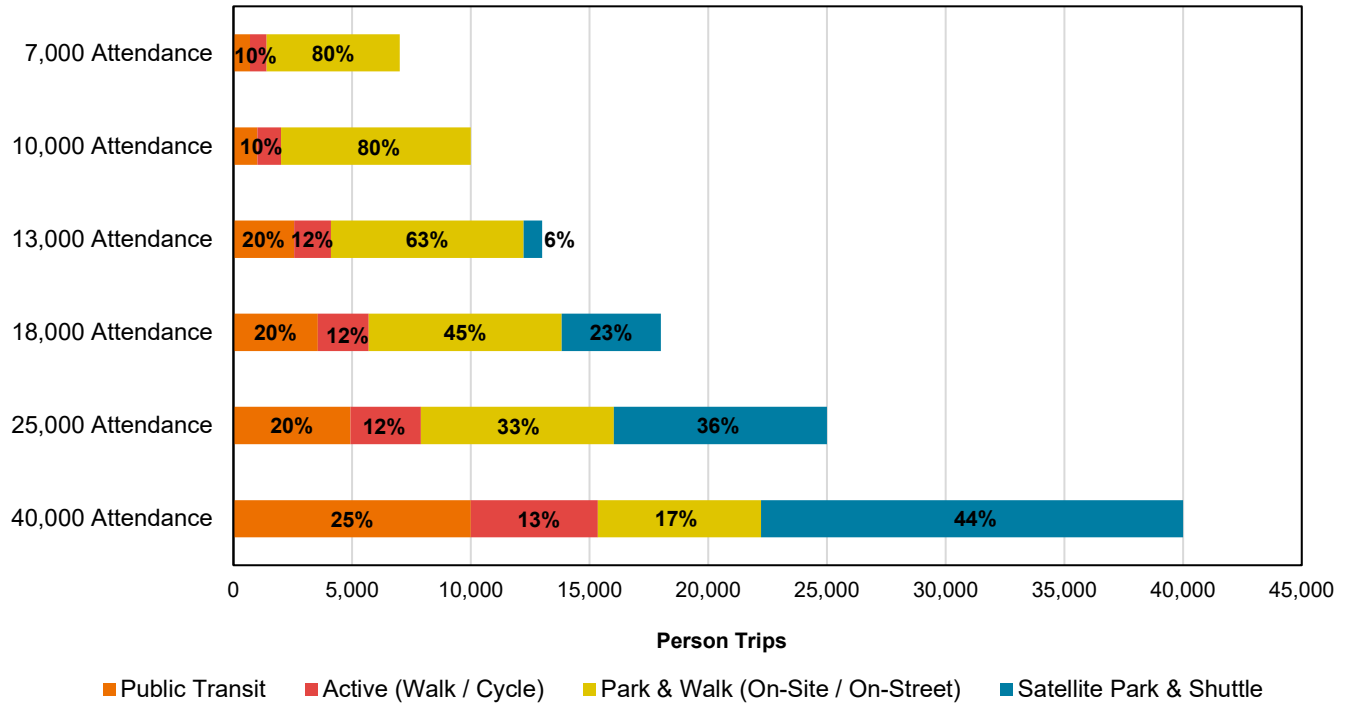
Transportation modal share targets for special events were developed as part of the 2011 Transportation Studies. Modal share projections were developed based on a review of existing travel through the Origin-Destination survey data, pedestrian and cycling data. Modal share targets and special event demands were developed for the following event sizes:

- 7,000 to 10,000 representing average and sold-out Arena events;
- 13,000 representing events between 10,000 and 15,000 (i.e., smaller Stadium event);
- 18,000 to 25,000 representing average and sold-out Stadium events; and
- 40,000 representing a large 'Mega Event' with expanded Stadium seating capacity, or concurrent large events.

Figure 4 illustrates the special events modal share targets for various event sizes held at Lansdowne.

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Figure 4 – Original Modal Share Targets for Lansdowne Special Events



Source: Data re-purposed from Lansdowne Revitalization Transportation Impact and Assessment Study (June 2010, MRC)

The active modes (walking and cycling) accounted for 10% to 13% of event attendees depending on the event size.

The percentage of attendees assumed to use Public Transit provided by OC Transpo and the Société de transport de l'Outaouais (STO) ranged from 10% for Minor Events (10,000-person events or less), to 20% for Major Events (25,000-person events), and 25% for Mega Events (40,000-person events).

The Park & Shuttle Bus mode, which is activated for Major Events, was earmarked at 36% for 25,000-person events, and 44% for 40,000-person Mega events.

The Park & Walk mode, which represents driving and parking at or near Lansdowne (combination of on-site parking and nearby on-street parking) ranged from 80% for 10,000-person events, to 30% for 25,000-person events, to 17% for 40,000-person events.

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Revised Special Events Modal Shares (2014 – Current)

Since the opening of the redeveloped Lansdowne and TD Place in 2014, modal shares were closely observed through the 2014 – 2016 period through the LTMOC committee. The base special event modal share targets developed in the original planning studies did not reflect and account for alternative modes of transportation such as passenger drop-offs, the use of taxis, privately organized group buses, and ridesharing services through Transportation Network Companies (TNCs) such as Uber and Lyft.

The modal share targets for special events held at Lansdowne were revised through the LTMOC to better reflect the split between transit and shuttle modes, as well as alternative modes of transportation.

The revised modal share targets developed for Major Events and Minor Events are outlined in **Table 1** and **Table 2**, respectively.

Table 1 – Revised Modal Share Targets (Major Events)

Travel Mode	Major Events Modal Share Targets
Transit & Shuttle	50 – 55%
On-Street Parking	3 – 6%
Cycling	1 – 3%
Walking	8 – 10%
On-Street Parking	26%
Other Modes *	5 – 10%
Total	100%

Table 2 – Revised Modal Share Targets (Minor Events)

Travel Mode	Minor Events Modal Share Targets
Transit	50 – 55%
Active Modes (Walking / Cycling)	3 – 6%
Auto Modes (On-site / On-Street Parking)	1 – 3%
Other Modes*	8 – 10%
Total	26%

* Other represents modes such as drop-offs, taxis, and ridesharing services, and alternative shuttle services.

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4.3 TDM INITIATIVES FOR DAY-TO-DAY ACTIVITY

The *Transportation Demand Management Plan* for the Lansdowne Revitalization (October 2011, MRC) outlined the policies, programs, services and products required to accommodate transportation demands for the redeveloped Lansdowne for day-to-day activity, as well as during special events.

TDM requirements to support the Lansdowne redevelopment were categorized under the following items:

- **On-Site TDM Coordinator:** outlines the role and responsibilities of a TDM Coordinator to help establish and support the various TDM programs for the redevelopment of Lansdowne.
- **TDM Programs for Households:** initiatives aimed at supporting alternative transportation options for residents living at Lansdowne.
- **Workplace Programs:** initiatives aimed at supporting alternative transportation options for the general office and commercial retail employees working at Lansdowne.
- **TDM for Special Events:** programs and services to be provided during special events at Lansdowne, this includes promoting enhanced transit and shuttle services, expanded bicycle parking, and promoting active modes.
- **Bicycle Infrastructure and Pedestrian Facilities:** provisions for on-site bicycle parking and change room facilities to support active modes of transportation.

4.3.1 On-Site TDM Coordinator

2011 TDM Plan:

The 2011 Transportation Demand Management Plan identified the role of a dedicated, on-site TDM Coordinator as key to achieving target modal shares, particularly related to special events. According to the recommendations, the ongoing role would be focused on developing and sustaining TDM Programs. Key roles and responsibilities included:

- Promoting TDM programs (online ride-matching, transit and bicycle use, car and bicycle sharing, and trip planning as well as TDM measures for special events).
- Providing information to residents and visitors and working actively with businesses to provide information specific to their needs.
- Working with outside agencies and government departments to make available necessary materials and information to residents and employees.
- Developing marketing materials, a user-friendly online website, and a newsletter.
- Setting up a monitoring plan to identify percentage of travelers choosing sustainable modes, and monitoring carpooling and parking permit data.

Implementation Status:

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A dedicated TDM Manager was hired by OSEG in early 2014 to lead the implementation of the TDM program at Lansdowne. The TDM Manager was located on-site and focused on coordinating all aspects of the TDM program to support day-to-day and special events transportation demands. Other duties included participating in the LTMOC committee, stakeholder engagement and coordination, as well as monitoring transportation activities and reporting on the performance of the programs annually through the submission of Annual TDM Reports. After the establishment of the TDM program at Lansdowne, the roles and responsibilities of the TDM Manager were transitioned to the dedicated on-site OSEG Transportation Manager who is supported by other staff within the Guest Relations and Marketing teams.

4.3.2 TDM Programs for Households

The 2011 Transportation Demand Management Plan outlined several incentives to encourage residents of Lansdowne to utilize sustainable modes of transportation. These recommendations focused on promoting transit, car sharing, and individualized travel planning as the primary strategies for reducing reliance on single-occupancy vehicles for travel among Lansdowne residents.

4.3.2.1 Transit

2011 TDM Plan:

To encourage the use of transit among residents of Lansdowne, the 2011 TDM Plan recommended requiring the Lansdowne Park residential developers to provide all purchasers of residential units with a single, one-year transit pass. The plan further recommended encouraging other members of residential households to also purchase transit passes using the ECOPASS program, which allows users to purchase transit passes through a direct monthly debit or credit deduction. A discount program was recommended based on the number of months purchased (renewed) during the year.

Implementation Status:

Upon the completion of Lansdowne, single, one-year transit passes were issued to all purchasers of residential units. The ECOPASS program was phased out prior to the build-out and occupancy of the residential units at Lansdowne. The ECOPASS program has been replaced with PRESTO, a smartcard fare system implemented in May 2013. There are currently no discounts available for residents who participate in the PRESTO card program, as recommended by the 2011 TDM Plan.

4.3.2.2 Car Sharing

2011 TDM Plan:

Car sharing is a car rental service that allows people to use vehicles for short periods of time, often by the hour. It provides mobility options for those who only need occasional access to a vehicle. To be successful, shared cars should have dedicated parking spaces in conveniently located areas. The 2011 TDM Plan recommended that as part of the Lansdowne redevelopment, a car sharing company locate cars at the Lansdowne site in highly visible and accessible locations. VRTUCar was referenced in the original document as it was the only service provided in Ottawa.

Implementation Status:

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In October 2016, two car sharing vehicles were deployed to Lansdowne through ZipCar. The two cars were placed in a highly visible and accessible location on Marche Way as shown in **Figure 5**.

Figure 5 – ZipCar Car Sharing Location at Lansdowne (2016)



The car sharing service operated with moderate success, service was used by both residents living in or near Lansdowne, as well as employees.

Zipcar ceased to operate in Ottawa in 2020 and there is currently no car share service provider with service fixed at Lansdowne. Discussions have taken place with Communauto (previously known in the Ottawa market as Vrtucar) on the placement of future cars.

4.3.2.3 Individualized Travel Planning

2011 TDM Plan:

The 2011 TDM Plan recommended the TDM Coordinator provide personalized travel information for residents and visitors to the site. The recommendation further encouraged information be provided early to residents (or even potential residents) to increase the likelihood that residents consider and utilize more sustainable options.

Implementation Status:

Individualized travel planning was implemented through early communications with residents. Presently, OSEG provides up-to-date travel information to stakeholders through newsletters distributed weekly to retail stakeholders and bi-weekly to residents and community associations. The purpose of these newsletters is to keep stakeholders informed regarding upcoming events at Lansdowne, anticipated attendance levels, traffic, parking, and transit availability.

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4.3.3 Workplace Programs

The 2011 TDM Plan outlined several incentives to encourage those working at Lansdowne to utilize sustainable modes of transportation. These recommendations focused on the creation of a Transportation Management Association (TMA) to distribute information, and the promotion of carpooling, transit, and bike sharing as the primary strategies for reducing reliance on single-occupancy vehicles for travel among Lansdowne employees.

4.3.3.1 Transportation Management Association (TMA)

2011 TDM Plan:

The 2011 TDM Plan recommended that the TDM Coordinator lead the creation of a Transportation Management Association (TMA) at Lansdowne. A TMA is defined as a group of workplaces that come together to encourage the use of sustainable transportation options and lobby for appropriate infrastructure. The plan further recommended that the TDM Coordinator act as chairman of and establish a committee of interested employers.

The TMA would be used to distribute information to all workers at Lansdowne, and the TDM Coordinator would manage requests for information, suggestions for improvements to infrastructure, and requests for services, and develop an incentive program that individual workplaces may not be able to do. The plan advised that as the TMA evolves, it could be expanded to include the executive of the Glebe Business Improvement Area (BIA).

Implementation Status:

The Lansdowne TMA was created in 2017. The TMA primarily conducted workshops with businesses at Lansdowne to share commuter information with their employees. Presently, there is a weekly transportation meeting between the City of Ottawa and OSEG, as well as quarterly board meetings to which retail and residential property managers are also invited. The weekly newsletter distributed by OSEG also provides current information regarding upcoming events at Lansdowne, anticipated attendance levels, traffic, parking, and transit availability.

4.3.3.2 Carpooling

2011 TDM Plan:

Carpooling can be a means of reducing private automobile trips for employees that are unable to utilize transit services or active transportation modes. The 2011 TDM Plan recommended the promotion of the City of Ottawa's on-line ridematching program *OttawaRideMatch.com* by linking parking cards to the *OttawaRideMatch.com* website. The Plan also recommended providing preferential parking to carpools, as well as reduced monthly parking rates. Other incentives outlined in the 2011 TDM Plan included guaranteed ride home programs, bicycle sharing memberships, and secure bicycle parking.

Implementation Status:

Several workshops were held with the employees of businesses at Lansdowne to demonstrate and encourage carpooling through *OttawaRideMatch.com*. Additionally, OSEG worked with the City of Ottawa to develop a Lansdowne-specific *OttawaRideMatch* portal in 2016. The Lansdowne-specific portal has become inactive due to underutilization; however, the *OttawaRideMatch* website is still active and available for use by Lansdowne employees

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and members of the community at-large, including residents and employees within the Glebe. Secure bicycle parking is currently provided for employees, as well as access to showers.

The other recommendations and incentives included in the 2011 TDM Plan, such as linking parking cards to OttawaRideMatch.com, reducing monthly parking rates for carpools, and providing preferential parking, have not been implemented. The significant administrative burden, coupled with the limited supply of on-site parking, particularly during special events, made implementation of these strategies unfeasible.

4.3.3.3 Transit Pass Program (ECOPASS)

2011 TDM Plan:

The 2011 TDM Plan recommended the promotion of OC Transpo's ECOPASS program through the TMA. During the development of the original TDM Plan in 2011, the OC Transpo-led Ecopass commuter program was in place allowing employers and employees to get discounted monthly transit pass rates through payroll deductions. The program was very successful increasing transit ridership, particularly for employees working for the Federal government.

Implementation Status:

In May 2013, OC Transpo introduced the PRESTO smart card system which allows all residents of Ottawa to obtain a transit pass through for various fare types, including single ride fares, as well as passes for daily, weekly, and monthly passes. The rollout of the PRESTO smart card program did not include discounted transit passes. While discounted transit passes were no longer available, monthly transit passes were accommodated through the new PRESTO smart card system through automatic monthly enrollment.

OC Transpo continues to provide reduced transit fares for seniors (65+), youth and children. Also, reduced single-ride and monthly passes are currently provided through the *Equipass* for low-income individuals, the *U-Pass* for full-time students at post-secondary institutions, the *Community* and *Access* passes to Ontario Disability Support (ODSP) recipients and Para Transpo customers.

4.3.3.4 Bike Share

2011 TDM Plan:

Bike sharing programs are a service that provides bicycles for shared use by individuals at a low cost to encourage cycling as a transportation option at employment centers, as well as for visitors. At the time of the 2011 TDM Plan, the Capital Bixi bike program was in operation with 100 bicycles at 10 stations throughout Ottawa. The 2011 TDM Plan identified Lansdowne as a potential location for expansion of the service, particularly adjacent to the Rideau Canal with access to the bike paths. The TDM Plan further recommended reducing rates or providing complementary one-month memberships to employees to encourage their use and eventual long-term adoption.

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Implementation Status:

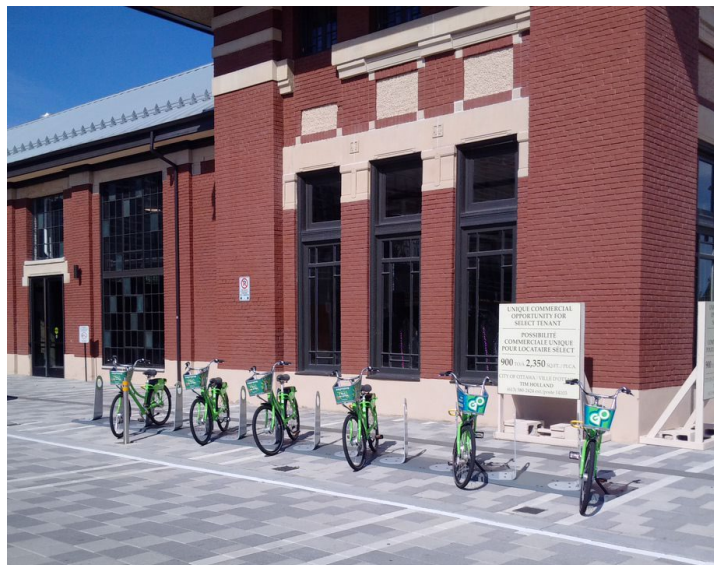
In January 2014, the parent company for Capital Bixi, filed for bankruptcy protection and ceased operations that year. Later in 2014, the National Capital Commission announced that CycleHop, a bike sharing company assumed the Capital Bixi program and re-launched in Ottawa in October 2014 under the VeloGo brand.

In 2015, a VeloGo hub was installed at Lansdowne by the Horticulture Building, as shown in **Figure 6**. The service ran successfully at Lansdowne and the hub proved to be popular within the VeloGo network and was ranked as one of the top 5 origin-destination hub locations. The VeloGo service ran successfully until 2019, when the services were discontinued within Ottawa. Other incentives recommended in the 2011 TDM Plan, including reduced rates and/or complementary memberships, were not implemented as the mechanism to implement them was not readily available at the time.

Organizations have expressed interest in introducing a bikeshare program in Ottawa, OSEG is supportive of initiatives aimed at reintroducing a bikeshare program with a hub provided at Lansdowne. OSEG is currently looking at other comparable bikeshare systems in Canada and are actively following Montreal’s Bixi bikeshare pilot project of running year-round service through the winter season to learn best practices that may be applicable to Ottawa.

In 2022, the City of Ottawa approved the deployment of e-scooters as part of a micro mobility pilot program in Ottawa. Two service providers were selected, Bird Canada and Neuron Mobility, to provide e-scooter service as part of the pilot program in Ottawa. In 2022, OSEG has worked to promote their use among residents, employees and visitors as another transportation mode to Lansdowne. E-scooters are currently limited in the mobility they provide since they are only available from May through September and are not operational after 11:00 pm.

Figure 6 – VeloGo Bike Sharing at Lansdowne (2015)



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4.4 TDM INITIATIVES FOR SPECIAL EVENTS

The *Transportation Demand Management Plan* for the Lansdowne Revitalization (October 2011, MRC) focused on promoting transit use for Special Events held at Lansdowne, implementing a shuttle bus service for satellite parking, and encouraging walking and cycling as the primary strategies for promoting sustainable transportation modes and reducing the impact of traffic on the surrounding neighborhoods.

A hallmark of the TDM program for special events at Lansdowne is the inclusion of free transit and shuttle service to all ticketed events at Lansdowne, irrespective of the event size. Free transit and shuttle services are provided to all ticketholders, with the cost of enhancements to transit services funded by OSEG. The 2011 TDM Plan focused on special events with an entrance fee and identified the amounts to be added to ticket prices to cover the costs of enhanced transit, satellite parking and shuttles, and temporary bicycle parking facilities.

The TDM initiatives to support special events at Lansdowne were categorized under the following items:

- ***Encouraging Transit Use to Lansdowne Park Special Events:*** provisions to promote and market transit service for events at Lansdowne.
- ***Shuttle Bus Service for Satellite Parking:*** provisions for free, conveniently located satellite parking connected to Lansdowne by frequent shuttle service for major events.
- ***Encouraging Walking and Cycling:*** initiatives aimed at promoting and supporting walking and cycling as travel options for events at Lansdowne, particularly for those within a 3 to 5 kilometre radius (for walking), and a 5 to 10 kilometre radius (for cycling).
- ***Provision of Bicycle Parking Corrals:*** provisions for free, conveniently located secure bicycle parking during major events.
- ***On-Site Parking for Special Events:*** provisions to pre-sell parking for events at Lansdowne to limit driving and parking during events.

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4.4.1 Transit & Shuttle Bus Use to Lansdowne Park Special Events

2011 TDM Plan:

The plan identified the need to encourage transit by including the transit fare as part of ticketed events. The plan recommended that tickets be valid for transit fare for two to three hours prior the event start time.

The plan also outlined the provision of free, conveniently located satellite parking connected to Lansdowne by frequent shuttle service to reduce the number of private vehicles accessing the site and the surrounding community. Off-site Park & Shuttle locations would be advertised through variable message signs and local radio stations to inform event-goers of the locations and availability of parking spaces.

The plan identified a marketing campaign to promote this option as a viable way to get to Lansdowne for events, particularly for major events. It is worth noting that at the time of development, the plan distinguished between enhanced transit services operated by OC Transpo and the STO with service to Bank Street, from nearby satellite parking and shuttle services to the purpose-built shuttle loop on QED. The preliminary planning placed a larger emphasis on the satellite park & shuttle service as the assumed modal shares accounted for a higher proportion of major event attendees driving to or near Lansdowne and parking at satellite parking & shuttle facilities made available during major events.

Implementation Status:

As part of the preparations for the 2014 inaugural season of the Ottawa RedBlacks, three TDM brands were developed to promote transit and park & shuttle service for events at Lansdowne. A brief overview of the three brands is provided below:

TD Place Park & Shuttle: The TD Place Park & Shuttle brand focused on promoting park-and-ride shuttle services operated by OC Transpo and STO from Park & Ride locations, as well as shuttles operated by TD Place (initially included Canada Post, Carleton University, the RA Center, and Vincent Massey Park before transitioning to Canada Post and City Hall to better match demand).

TD Place Take Transit: The TD Place Take Transit brand promoted door-to-door transit service to TD Place. Similar to the Park & Shuttle brand, promoting this service is as free with an event ticket is a key component of the brand and promotion.

TD Place Bike & Park: The TD Place Bike & Park brand promoted cycling and using secure bike parking (i.e. corrals) when attending major events at TD Place and Lansdowne. In 2021, the bike parking area was moved from the sport court east of the Aberdeen Pavilion to a more visible location close to stadium gate 4 to better promote cycling as a transportation option.

The TDM brands developed to promote sustainable modes of transportation for major events at TD Place are illustrated below in **Figure 7**.

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Figure 7 – TD Place Special Events TDM Brands



TDM Outreach:

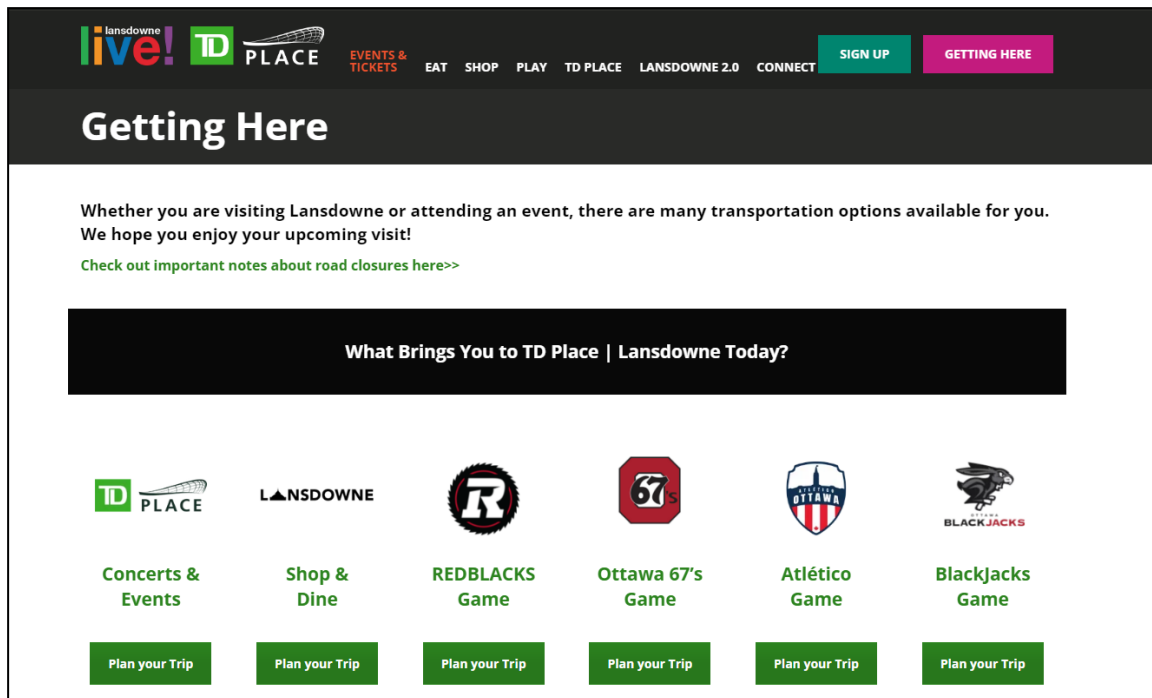
A key aspect of the branding strategy in 2014 was to promote both the Park & Shuttle and Take Transit brands equally as viable and convenient options to travel to Lansdowne for special events. This included promoting OC Transpo’s enhanced 450-series service from transit Park & Ride lots and OSEG’s special event operated satellite park & shuttle service under the same TD Place Park & Shuttle brand.

As part of the TDM marketing campaign, a direct communication outreach program has been undertaken to inform event attendees on available transportation options, and to provide information on available trip planning tools.

Website Promotion

Transportation planning information is provided on all OSEG operated websites, this includes providing event specific travel information to the park, shops and restaurants at Lansdowne, as well ticketed events, concerts and sporting events. Figure 8 shows an example of website promotion.

Figure 8 – Website Promotion of Travel Options to Lansdowne



Source: www.tdplace.ca/directions

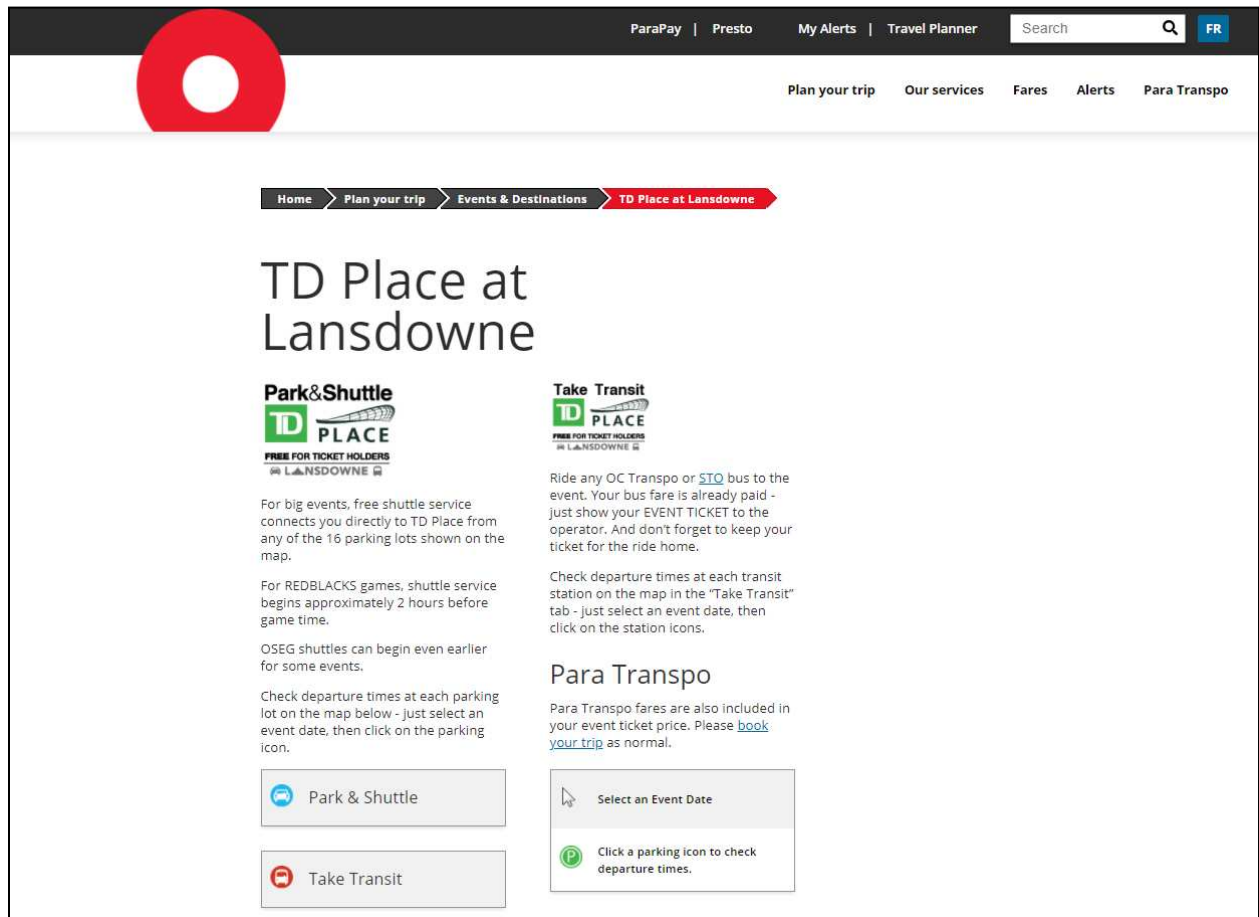
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Integrated Trip Planning Tools

Since the opening of the site in 2014, OSEG continues to work closely with OC Transpo and STO to provide an integrated trip planning tool on the OC Transpo website. A dedicated TD Place event portal is maintained on the OC Transpo website for events at TD Place and Lansdowne. Starting in 2021, the location of public and private parking lots within walking distance of Lansdowne is posted. The 11 identified lots are within walking distances of 20, 30 and 40 minutes.

Figure 9 illustrates the integrated OC Transpo trip planning website.

Figure 9 – Integrated Trip Planning Tool



Source: www.octranspo.com

In addition, event-specific transportation information and reminders are communicated through all social media platforms leading up to events. These communications feature direct links to online trip planning tools.

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4.4.2 Encouraging Walking and Cycling

2011 TDM Plan:

The plan identified the need to encourage walking and cycling for special events as an alternative to driving, particularly for event attendees within a 3 to 5 kilometre radius for walking, and 5 to 10 kilometre radius for cycling. The plan identifies the opportunities to connect to existing active modes infrastructure including the multi-use pathway system along the Rideau Canal. The plan also highlights future improvements such as the pedestrian crossing of the Rideau Canal at Fifth Avenue and Clegg Street, as well as proposed cycling improvements outlined in the City's Cycling Master Plan, as opportunities to support non-motorized modes of transportation for events.

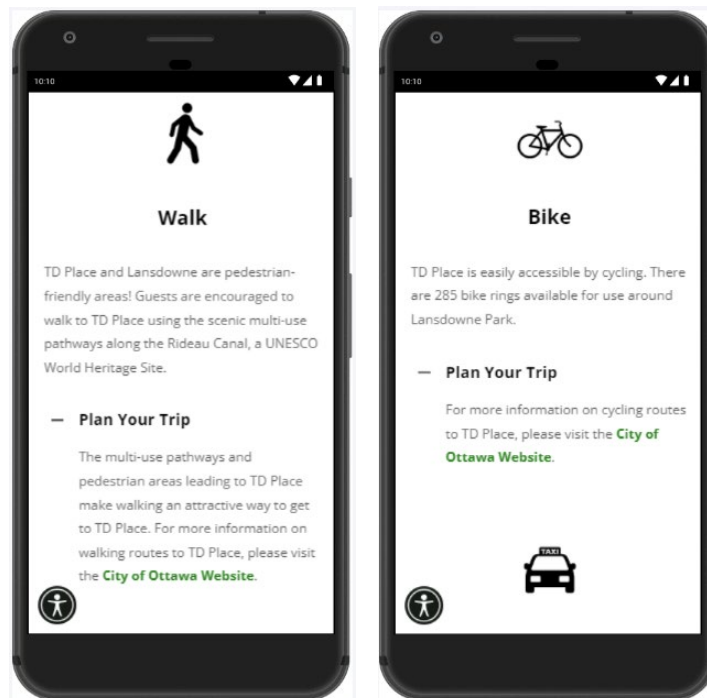
Implementation Status:

Encouraging walking and cycling as viable modes of transportation to special events at Lansdowne was a key component of the TDM marketing campaign which included promoting walking and cycling as part of the communications campaign leading up to the opening of the site.

Consistent with the 2011 TDM Plan, context-sensitive messaging related to travel options was provided to event attendees leading up to the Ottawa RedBlacks home opener in July 2014. In addition to general messaging related to all of the travel options made available for special events at Lansdowne, targeted messaging that promoted walking and cycling were provided for ticket holders with postal codes that fall within a three kilometer radius of Lansdowne.

In addition, a marketing campaign was held to promote walking and cycling routes to Lansdowne, including promoting the multi-use pathway system along the Rideau Canal on Queen Elizabeth Driveway (QED) and Colonel By Drive. OSEG and the City of Ottawa continue to promote walking and cycling for visitors to Lansdowne through online communications including the TD Place website, an example of which is shown in **Figure 10**.

Figure 10 – Promotion of Active Modes to TD Place



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4.4.3 Provision of Bicycle Parking Corrals

2011 Plan:

The 2011 TDM Plan noted that more than promotion of walking and cycling is required if active modes are to be encouraged. In particular, the Plan recommended considering the location of bicycle parking corrals for special events to eliminate interference with pedestrian movements, especially near gates. As an example, the Plan recommended locating a supervised bicycle parking corral near the southwest end stadium and adjacent to the multi-use trail located alongside QED. A secondary supervised bicycle parking corral was recommended in the vicinity of the entrances on the northeastern edge of the site. Ultimately, the plan recommended that the locations chosen should be accessible by cyclists and not impede the flow of pedestrian traffic on the site. The 2011 TDM Plan also recommended that for very large events (40,000 attendees), off-site supplementary supervised bicycle parking corrals should be set up to accommodate cyclists coming from the south or west to the site to limit the number of bicycles reaching the site and to reduce conflicts with pedestrians.

Similar to transit service, the 2011 TDM Plan recommended the cost of the supervised bicycle parking program, available for events with projected attendance of more than 10,000, be covered in the price of the event ticket. The plan also identified the following operational matters as key to successful implementation of temporary bike corrals for events:

- Providing an administrative area,
- Room for storage of forms and tags as well as a table on which forms can be filled out, and
- A monitoring program to determine the usage levels of the corrals.

The plan further highlighted the importance of direction signs indicating the location of the supervised bicycle parking, and recommended information on parking locations be available at the Transportation Office and promoted prior to each event through public service announcements, event advertising, and on the transportation website for the park.

Implementation Status:

The bicycle parking corral program was implemented in 2014. The free, supervised bicycle parking program was promoted through the *TD Place Bike & Park* brand as part of the TDM communications. The corral was initially setup on the East Court (sports court east of the Aberdeen Pavilion) side of the site on the Lansdowne Park basketball court / skating ring facility east of the Aberdeen Pavilion.

Figure 11 shows the Bike & Park Corral set-up at TD Place in 2015.

For several years, the program was administered in partnership with WheelUp Inc., a local bicycle parking service provider for special events. WheelUp Inc. went out of business several years ago, and as a result OSEG purchased the bike racks from the organization.

Since the purchase of the bike racks from WheelUp Inc., OSEG has been operating the Bike & Park program for major events at TD Place. With the bike racks stored onsite and readily available for use, valet bike parking has been offered for more events held at Lansdowne include events held in the park. The use of bike racks was also used by the Tamarack Race Weekend during kit pickups by participants.

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In 2021, the bicycle parking area was moved from the East Court to a more visible location close to TD Place Stadium Gate 4.

In 2022, the location of the valet Bike & Park service has been moved to the Event Square in front of the Aberdeen Pavilion for better visibility and easy access to Gate 3.

Figure 11 – Bike & Park Corral Setup During a Major Event at TD Place (2015)



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4.4.4 On-Site Parking for Special Events

2011 Plan:

As on-site parking is limited at Lansdowne, the 2011 TDM Plan identified the need for event attendees to pre-purchase parking passes to ensure that only event attendees with pre-purchased parking passes arrive on-site during events. The plan also notes that for special events that are free, including those that occur at Lansdowne Park, parking operations plans are needed to manage the use of on-site parking.

Implementation Status:

Leading up to the opening of TD Place Stadium in July 2014, the commercial, residential and office land uses at Lansdowne were still under construction and not in use. As a result, the staggered phasing of the redevelopment of Lansdowne provided the opportunity to restrict access to the underground parking facilities to only event attendees with parking passes. This approach was instrumental in the success of the TDM program from the beginning as it effectively managed the limited number of parking spaces available on-site and allowed for positive travel behaviors to develop for major events using transit, the park & shuttle facilities and active modes.

Since the opening of TD Place Stadium, the other aspects of mixed-use site were built-out and occupied including the residential condominium and townhomes, commercial retail spaces, office buildings, and the public park. This introduced new site users with varying levels of parking demands. While parking continued to be pre-sold, general public parking was permitted to accommodate access to residents and retail customers.

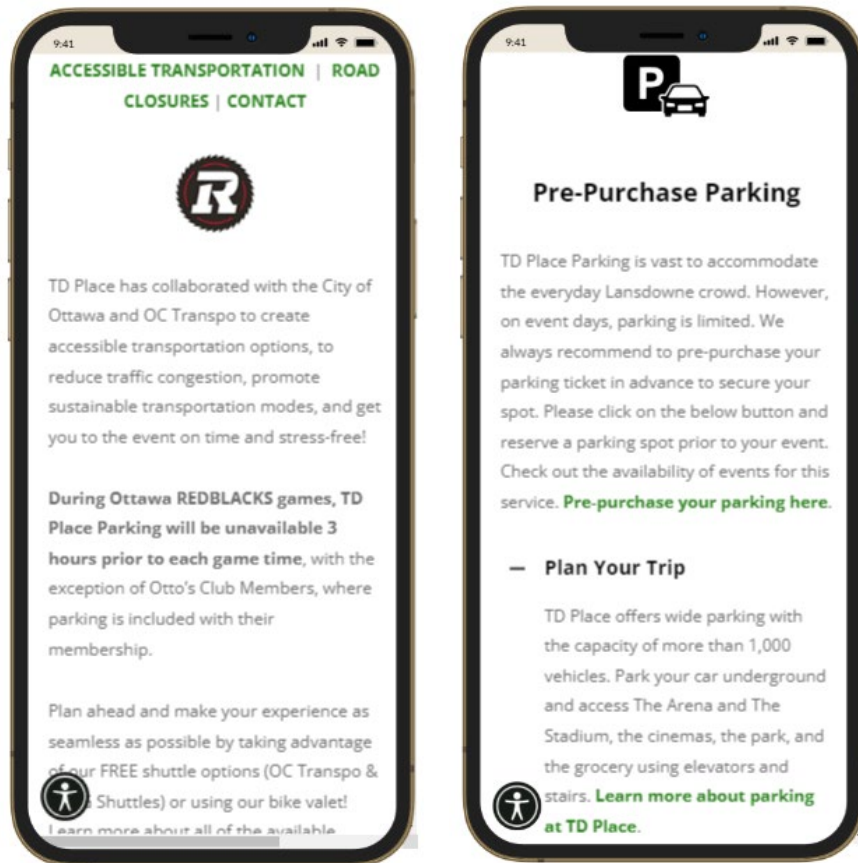
Currently, the messaging program for events at TD Place indicates that no parking is available during major events at TD Place, with the exception of some Otto's Club Members (i.e. club and suite ticket holders) who have parking included in their membership.

For minor events, pre-purchasing parking is strongly encouraged as it is the only way for event attendees to reserve a parking space on-site.

Figure 12 illustrates current messaging around parking on the TD Place website.

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Figure 12 – TD Place Event Parking Messaging



Source: www.tdplace.ca/directions

In addition to promoting pre-purchasing parking for events at Lansdowne, alternative parking facilities that are near Lansdowne are promoted online as alternatives to on-site and on-street parking. Alternative parking facilities are identified within a 20-minute, 30-minute, and 40-minute walk from Lansdowne. As part of the messaging, transit service on OC Transpo Routes 6 and 7 are promoted as ways to connect between alternative parking facilities and Lansdowne.

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4.4.5 Special Events TDM Initiatives

2011 Plan:

The 2011 Transit & Shuttle Service Plan identified the operational requirements of enhanced transit and satellite parking and shuttle bus services to support major events at TD Place. In order to meet the required satellite Park & Shuttle service, significant resources were identified to meet the modal share target of 36% for a sold-out Stadium event.

The initial plan assumed that the majority of Major Event attendees will utilize satellite Park & Shuttle facilities in the periphery of Lansdowne that are operated by OSEG during major events. The plan identified the need to provide off-site parking and shuttle service for events ranging between 10,000 and 15,000 (small Stadium events), between 15,000 and 25,000 (average and sold-out Stadium events), and Major Events with +25,000 attendance levels.

Significant satellite parking resources were identified as required and are shown in **Table 3**.

Table 3 – Satellite Parking Requirements (2011 Transit & Shuttle Plan)

Event Size	Satellite Parking Spaces Required
7,000	0
10,000	0
13,000	310
18,000	1,675
25,000	3,590
40,000	7,110

Source: Data re-purposed from Lansdowne Transit and Shuttle Service Plan (October 2011, MRC)

In order to meet the satellite parking requirements, the following satellite parking facilities were identified:

- Carleton University (1,500 spaces)
- Canada Post (1,500 spaces)
- Vincent Massey (600 spaces)
- Brookfield High School (180 spaces)
- RA Center (300 spaces)
- City of Ottawa City Hall (750 spaces)

Carleton University, Canada Post, and Vincent Massey were identified as the three main lots identified for major events.

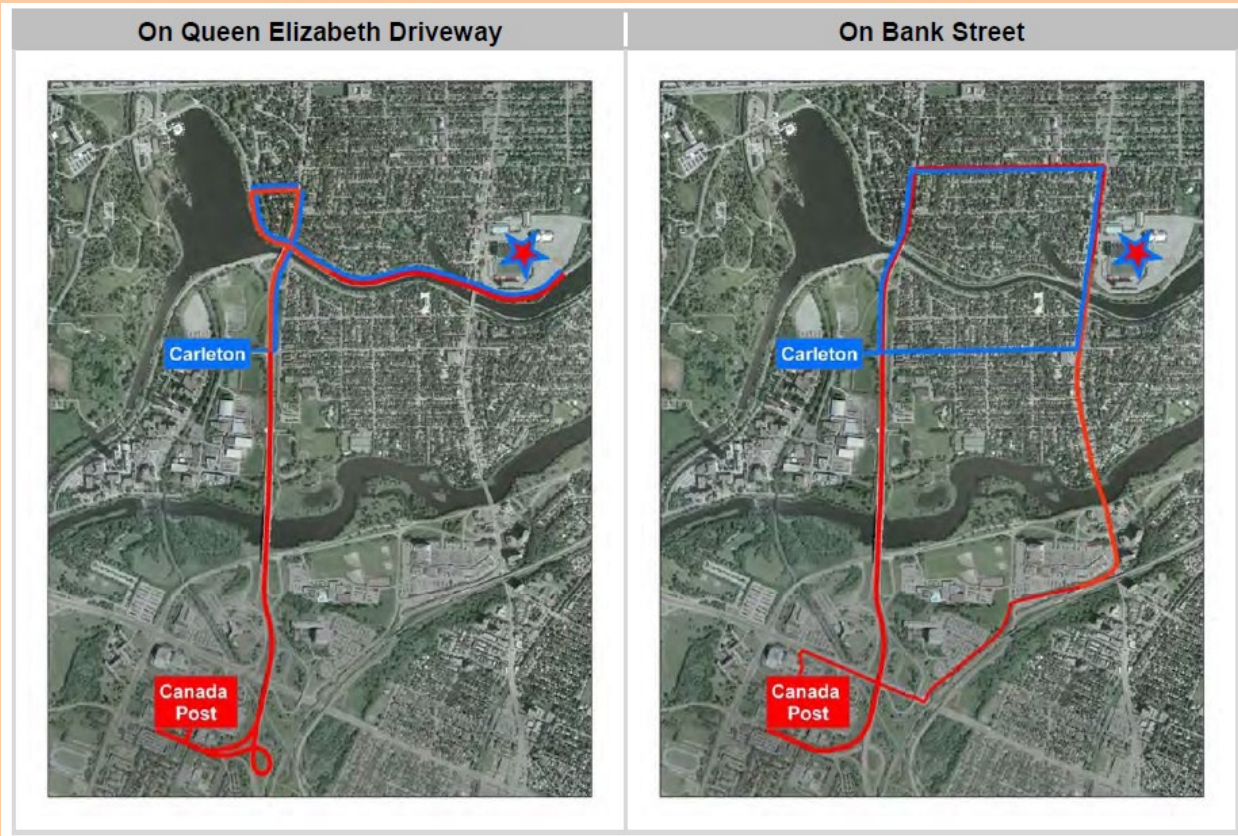
The 2011 Plan identified the number of buses required to accommodate satellite shuttle service. The number of buses required ranged from 5 buses for a 13,000-person event to 42 buses for a 25,000 sold-out stadium event. In order to meet the satellite parking and shuttle bus modal share of 36% for a major event, service frequencies of 100 bus trips per hour (50 trips/hr from Carleton University and 50 trips/hr from Canada Post) were identified.

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The 2011 Plan identified two different shuttle route options for Major Events at Lansdowne: a route that would utilize QED to provide service at the purpose-built Shuttle Loop and Platform on the east side of the Lansdowne, and an alternative shuttle route that utilizes Bank Street.

The original Park & Shuttle routes as identified in the 2011 Plan are illustrated in **Figure 13**.

Figure 13 – Satellite Parking Shuttle Service Routes (2011 Plan)



Source: *Lansdowne Transit and Shuttle Service Plan (October 2011, MRC)*

The proposed shuttle route using QED utilized Bronson Avenue, Lakeside Avenue, and Queen Elizabeth Driveway to access the shuttle loop at Lansdowne.

The proposed shuttle route on Bank Street utilized Riverside Drive, Bank Street, Fifth Avenue and Bronson Avenue for service to/from Canada Post. Service to/from Carleton University utilized Sunnyside Avenue, Bank Street, Fifth Avenue and Bronson Avenue.

The 2011 Plan identified potential challenges of accommodating all transit and shuttle services on Bank Street, particularly after events during egress operations. The 2011 Plan notes that for sold-out Major Events, the closure of Bank Street to general traffic, between Fifth Avenue and Sunnyside Avenue.

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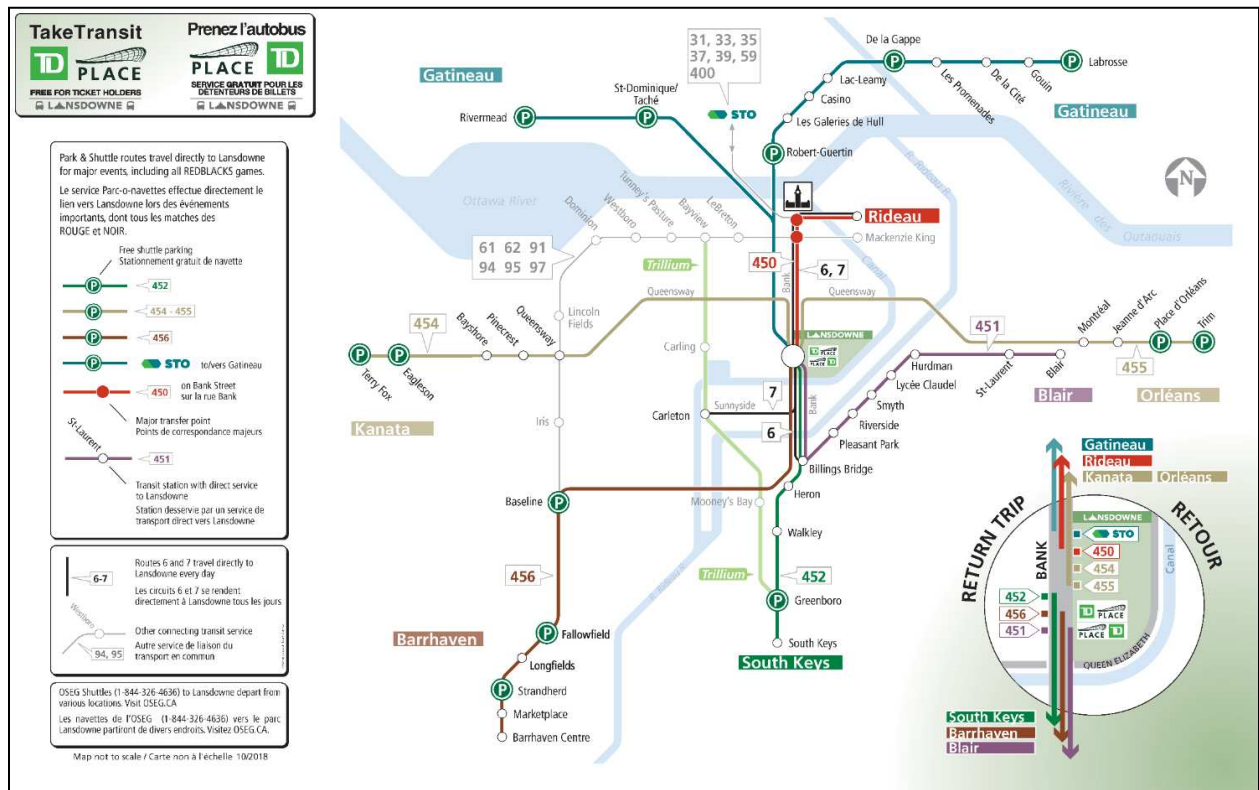
Implementation Status:

The enhanced transit and satellite parking and shuttle bus services were successfully implemented in advance of the July 2014 debut of the Ottawa RedBlacks. Under the *TD Place Park & Shuttle* brand, all enhanced transit services from OC Transpo and STO Park & Ride lots, as well as OSEG operated Park & Shuttle service from nearby lots, were marketed as attractive and convenient options to get to TD Place for events.

Figure 14 is a map of the TD Place Park & Shuttle network.

As part of the TDM marketing campaign, a direct communication outreach program was undertaken to inform event attendees on available transportation options, and to provide information on available trip planning tools.

Figure 14 – TD Place Park & Shuttle System Map



The TDM marketing strategy proved to be very successful and the combined transit and park & shuttle modal share of 55% was effectively met in 2014, and continues to be met as of the 2022 season. Since 2014, the modal share for enhanced transit and 450-series service continued to grow, while ridership at OSEG operated Park & Shuttle lots were being reduced.

This resulted in the need for less nearby off-site parking needs, as well as a significant number of shuttle bus trips required at the QED shuttle loop. As of 2022, the average number of shuttle buses operating on QED during a Ottawa RedBlacks football game was between 30 – 60 trips for all OSEG operated park & shuttle facilities, significantly lower than the +200 trips originally planned for as part of the 2011 TDM Plan.

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The LTMOc committee took a collaborative approach in evaluating transportation conditions associated with Lansdowne and identifying potential improvements to addressing community and stakeholder concerns. As part of this process, the Community Association Report Cards played a critical role in providing a summary of the community's impression and observations of the transportation program, as well as in identifying opportunities for improvement.

Some of the adjustments and improvements identified and implemented through LTMOc include:

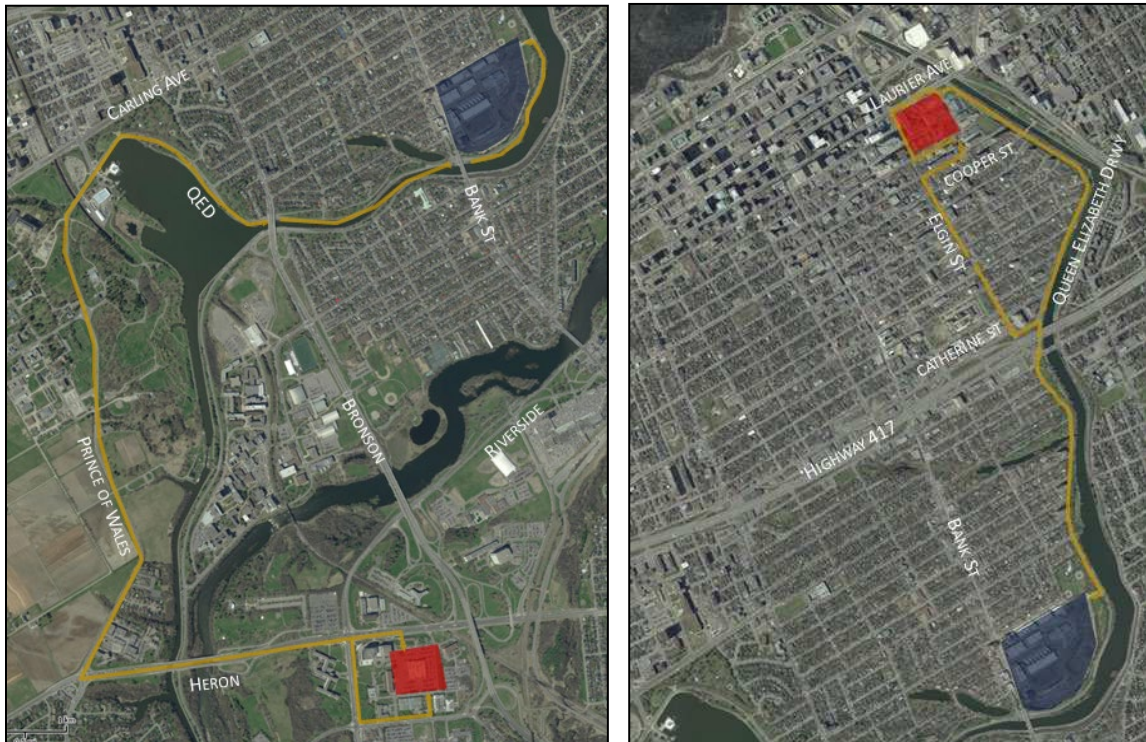
- a. In coordination and agreement with the NCC, adjustments were made to the TD Place Park & Shuttle to use QED as a consistent route for service to/from nearby satellite parking lots during Major Events. The original transit and shuttle service plan called for alternating the shuttle service between Bank Street and the QED for every other major event, raising concerns with the perceived quality and consistency of the service by attendees.
- b. Relocating all shuttle bus service to Arterial roadways: Adjustments to the original TD Place Park & Shuttle route were made to avoid Lakeside Avenue, a residential street, in the shuttle routes to/from Carleton University and Canada Post during Major Events.
- c. Reducing the Park & Shuttle facilities to two locations: Canada Post and City Hall:
 - i. Canada Post (up to 1,500 spaces) with direct Park & Shuttle service to TD Place
 - ii. City Hall (up to 800 spaces) with direct Park & Shuttle service to TD Place

The Canada Post Park & Shuttle utilizes Heron Road, Prince of Wales Drive, and QED to provide direct shuttle service to the designated platform areas located on the east side of Lansdowne.

The City Hall Post Park & Shuttle utilizes Elgin Street, Cooper Street, Cartier Street, Lisgar Street, Laurier Avenue, and QED to provide direct shuttle service to the designated platform areas located on the east side of Lansdowne.

Figure 15 illustrates the Park & Shuttle route from the OSEG managed shuttle service at Canada Post and City Hall.

Figure 15 – TD Place Satellite Park & Shuttle Facilities (OSEG)



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Enhanced OC Transpo and STO service (local routes and special routes from Park & Ride stations) are accommodated at a number of designated transit bus stop locations on Bank Street. This service setup better distributes transit and shuttle passenger demands at two different locations.

Figure 16 illustrates the location of passenger pick-up and drop-off platforms.

Figure 16 – Lansdowne Major Events Transit & Shuttle Service Platforms

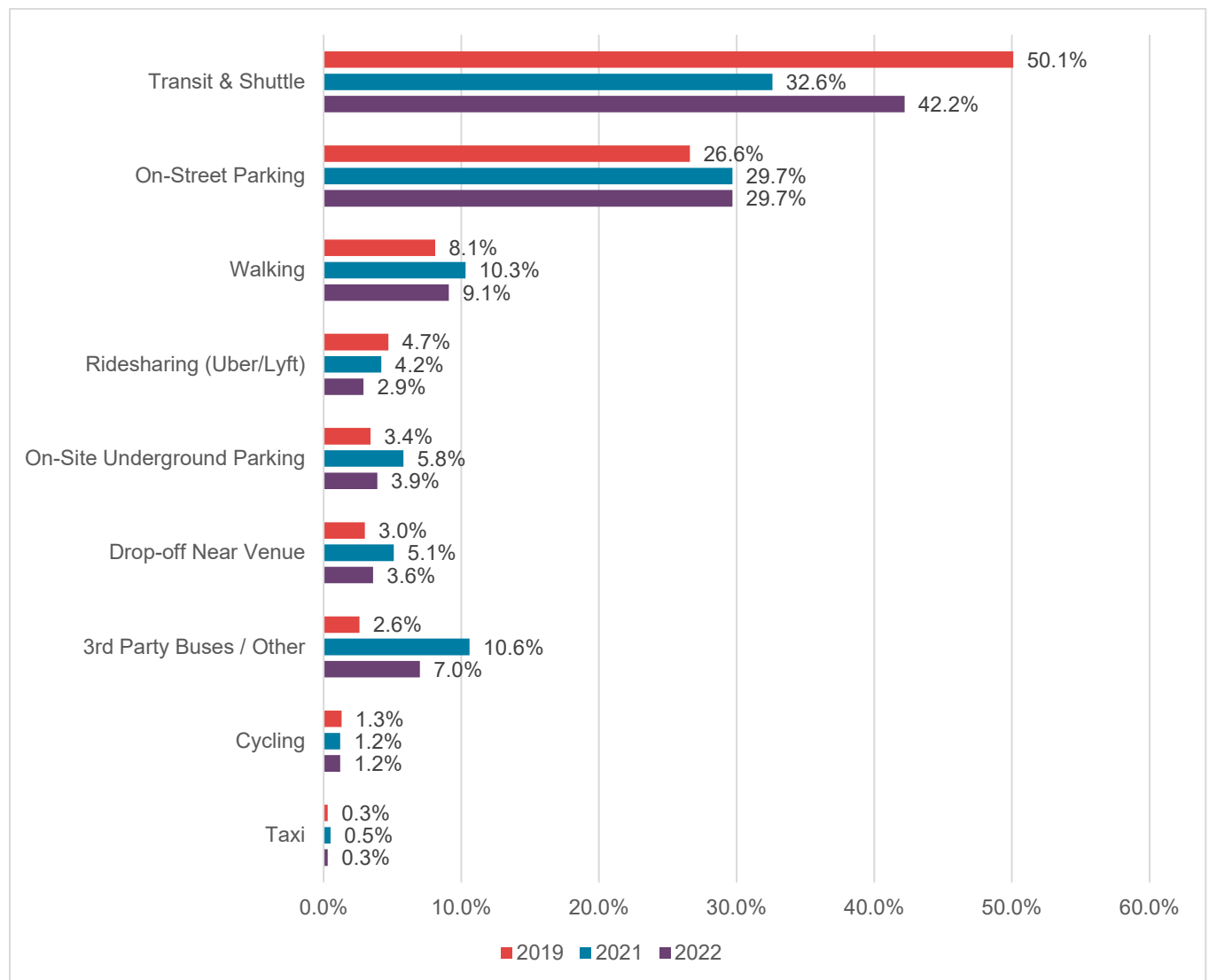


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4.4.6 Major Events TDM Performance

As part of the TDM monitoring plan, post-event transportation surveys are completed for all RedBlacks games at TD Place. These online surveys are sent shortly after each game to obtain feedback on transportation services and travel modes utilized for each game. The online surveys also provide a better understanding of travel behavior for modes that are not easily quantified through passive on-site counts, these include drop-offs near the venue, the use of taxis or ridesharing services, as well as group buses organized by third-party organizers. Modal shares from these survey data for Ottawa RedBlacks games in 2019 (which represents a “normal”, pre-pandemic year), 2021 (which included capacity restrictions as part of the Province of Ontario’s COVID-19 mitigation strategy), and 2022 (which represents a return to normal capacity levels, but with residents and visitors still reluctant to take public transit post-COVID), are summarized below in **Figure 17**.

Figure 17 – Major Events Average Modal Shares



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2019 Major Event Modal Shares

As illustrated in **Figure 17**, average modal share targets were achieved in 2019. Over 50 percent of attendees utilized transit or Park & Shuttle services. Nearly 30 percent of event-goers parked an automobile in an adjacent neighborhood and walked to the site, while just over 3 percent parked on-site. Over 9 percent of attendees used active modes of transportation (cycling or walking) to access the event, with the remaining 11 percent utilizing drop-off, ridesharing, 3rd party group bus, or taxi services.

2021 Major Event Modal Shares

In 2021, there was a decrease in the number of event attendees using transit or Park & Shuttle, likely in response to the ongoing pandemic and social distancing norms, dropping from over 50 percent in 2019 to just over 30 percent in 2021, which is below the target for these two modes. Both the share of event goers parking an automobile in an adjacent neighborhood and walking to the site, and those parking on-site, increased above the targets for these modes. Active forms of transportation increased slightly to nearly 12 percent, keeping them on target, and there was a significant increase in the share of attendees choosing other modes, particularly drop-offs and 3rd party group buses, placing other modes well above the target range. These changes in travel behaviors can largely be attributed to on-going regulations and personal preferences related to the risks posed by the COVID-19 pandemic. The 2021 modal shares are shown in **Figure 17**.

2022 Major Event Modal Shares

2022 modal shares for transit and Park & Shuttle have increased since 2021, indicating a return to pre-pandemic travel behaviors. However, at 42 percent, their modal share was still below the target range. On-street parking in adjacent neighborhoods and walking to the site remained stable from 2021 to 2022, but the share of attendees parking on-site dropped from 6 percent to 4 percent, bringing it within range of established targets. Walking and cycling remained stable compared to 2021 and were within their target modal range, and the share of event goers using other modes, such as drop-offs, ridesharing, 3rd party group buses, and taxis dropped from more than 20 percent to under 14 percent in 2022. While not all modal share targets were met in 2022, the trends suggest travel behaviors may be slowly returning to pre-pandemic levels.

5 LANSDOWNE 2.0 TDM STRATEGY

The TDM Strategy for Lansdowne 2.0 takes into account the evolving nature of Lansdowne. This includes developing strategies to accommodate the increase in transportation demands associated with the additional residential and retail density.

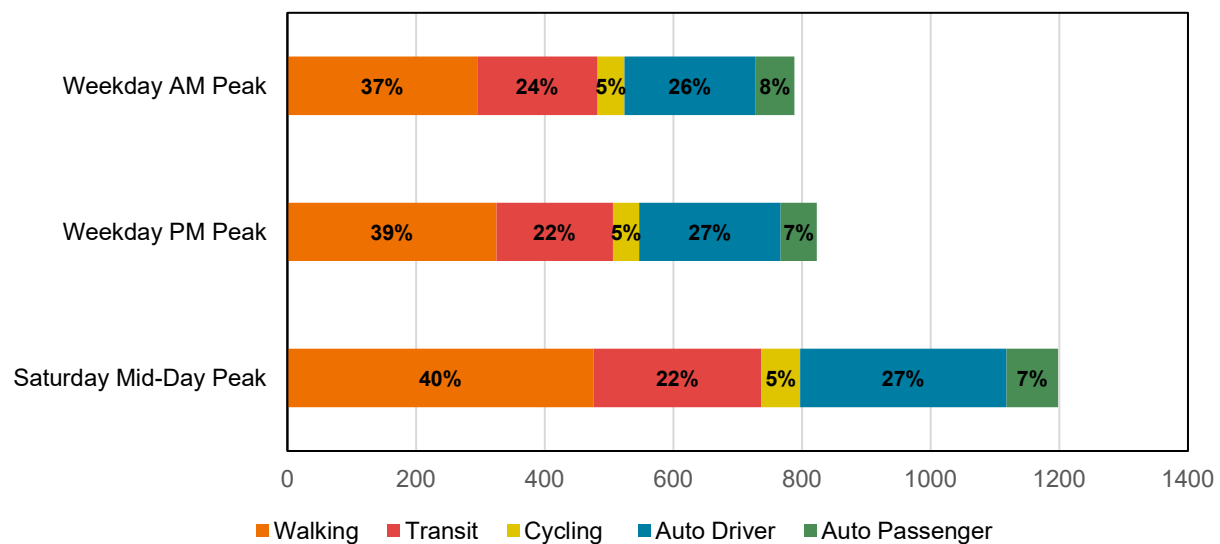
Revising the TDM Strategy for Special Events was also completed to account the revised nature of the site, including the potential for two separate venues to accommodate events concurrently.

5.1 TDM FOR DAY-TO-DAY ACTIVITY

The Lansdowne 2.0 redevelopment seeks to increase the residential and commercial retail density on the site and will generate additional person trips related to the day-to-day activities. Based on the Ottawa TRANS Trip Generation Manual, it is estimated that the proposed additional density will result in approximately 800 to 1,200 new person trips during the peak travel periods.

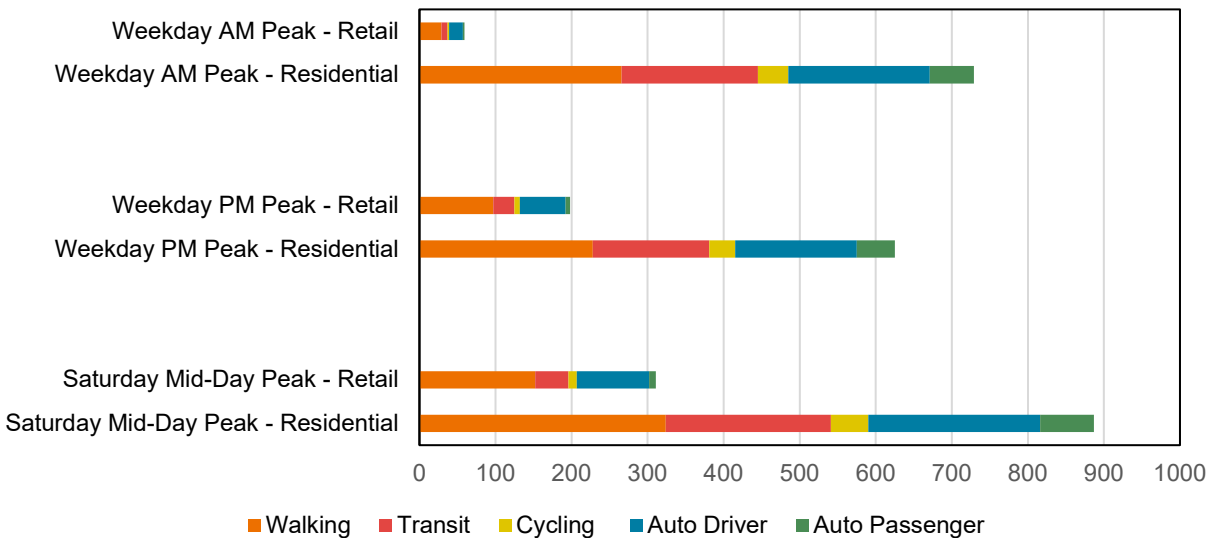
The modal share targets for these additional trips are shown below in **Figure 18**.

Figure 18 – Lansdowne 2.0 Person Trips and Modal Share Targets



As shown in **Figure 19**, the majority of additional trips forecasted for the proposed Lansdowne 2.0 are residential trips; over 90% of the trips generated during the weekday morning peak period (AM peak) are estimated to be generated by the proposed residential development. The weekday afternoon peak period (PM peak) and weekend Saturday afternoon peak are projected to be approximately 75% residential trips, with the remaining trips attributed to the additional commercial retail development.

Figure 19 – Lansdowne 2.0 Total Person Trips By Time Period



The largest modal share for new forecasted trips is walking, with an average of 39% of new peak period trips allocated to this mode. A cycling mode share of 5% is assumed. A transit modal share of 23% is forecasted for new trips. Auto trip share is forecasted at 26%, with an additional 7% estimated for auto passengers.

Lansdowne 2.0 has a distinct opportunity to learn from the previous development interventions and deliver targeted solutions which will create the greatest impact for the audience of transportation user groups. As with all TDM initiatives, there is a balance between the programming to deliver meaningful opportunities to support transportation alternatives and the connection with hard infrastructure which can support alternative movement.

Condominiums enable high density property ownership with limited allocated space for surface or underground parking. With the limitations of residential parking, it is anticipated that those who choose to live in Lansdowne 2.0 will be living there to maximize the opportunities of a lifestyle unconstrained by high car ownership.

Consistent with the City of Ottawa’s TDM Measures Checklist for new developments, the following TDM measures were identified in support of promoting sustainable modes of transportation and reducing the reliance on the single automobile travel for day-to-day activities at Lansdowne:

- TDM Program Management
- Supporting Walking and Cycling
- Supporting Transit
- Carsharing
- Bikesharing & Micromobility
- Parking
- TDM Marketing & Communications
- Ridesharing

5.1.1 TDM Program Management

5.1.1.1 TDM Committee

Delivery of TDM programs relies on the ability to balance the options between different user groups and requires a concerted point of contact tracking the programs and events and advocating for infrastructure. Administration of cycling, transit and car share programs requires ongoing coordination with various stakeholders and service providers. Administering the TDM program on-site remains a key component to the success of the TDM program at Lansdowne through the planning and delivery of the various event services and supplementary programming, and support for workplaces and residents at Lansdowne. Currently, the coordination of the TDM program at Lansdowne is administered through a full team that is comprised of individuals within OSEG including the Transportation Manager, and members of the Guest Relations, Operations and Marketing teams.

The current provisions of administering the TDM programs through a TDM Committee, which includes OSEG's Transportation Manager, and a wide-ranging team comprised of senior management, Guest Relations, Operations, and Marketing, should be continued into the future as part of the Lansdowne 2.0 initiative.

5.1.1.2 Travel Surveys

In order to track the effectiveness of the TDM program for day-to-day activity, it is recommended that the on-site Transportation Manager work with property managers and the TMA to develop a monitoring program to track modal shares among residents, employees, and retail patrons alike. A monitoring program for day-to-day activities could include quarterly surveys sent to all residents and employees, and should consider incentives for participation, such as entry into a raffle for event tickets or gift cards to local vendors. To capture the travel behaviors of retail patrons, the TDM Committee could organize an annual on-site survey through Guest Services representatives to conduct short interviews. A monitoring program for day-to-day activities would allow for a better level of travel behavior understanding and tailored programming to maximize resources aimed at encouraging sustainable modes of transportation among residents, employees, and retail patrons.

5.1.1.3 Transportation Management Association (TMA)

The Transportation Manager should encourage and facilitate continued employer participation in the TMA, which should meet bi-annually to discuss upcoming events and transportation management. The TMA should be encouraged to actively participate in the activities managed by the TDM Coordinator. Further options may be available by the TMA partners that will support the transportation management environment.

TMA participants can administer regular (i.e. annual) transportation surveys of employees asking how they access the site. The TMA also provides a key format for messaging employees on events (e.g., bike-to-work day) or administering secure bike parking access for employees.

5.1.2 Walking and Cycling

5.1.2.1 Provide Information of Walking and Cycling Routes

Lansdowne benefits from access to high-quality walking and cycling facilities on QED, Bank Street, and the O'Connor Street bike lanes. These facilities offer opportunities for recreational activity and travel through active modes to key destinations including downtown Ottawa, Dow's Lake and other areas throughout the City.

Lansdowne currently benefits from a wayfinding and branding system to make it easier for all site users to access on-site amenities. As part of the TDM program for Lansdowne 2.0, it is recommended that the current wayfinding system be upgraded to clearly identify access points to walking and cycling facilities, including the multi-use pathway system on QED and the O'Connor Street bike lanes. These updates should be coordinated in conjunction with key stakeholders such as the City of Ottawa and the National Capital Commission.

Local maps should be updated as part of the wayfinding upgrades to include this information, with updated maps with walking and cycling access routes and key destinations clearly marked. Updated maps should be displayed at key entrances including the entrances and lobby areas of existing and future residential buildings, as well as the unified wayfinding system provided throughout the public realm at Lansdowne.

5.1.2.2 Bicycle Workshops

Opportunities to promote cycling for residents, employees can be facilitated through bicycle workshops and cycling courses offered on-site at Lansdowne. These can be made available to the public to include Lansdowne visitors, or be tailored specifically to residents and employees.

Workshops can offer tips on safe cycling, provide basic maintenance clinics, and share information on on-site bicycle parking amenities to residents and employees, including existing secure bicycle parking and shower and change room facilities. Bicycle workshops are offered by the City of Ottawa annually at Lansdowne.

Workshops should continue to be facilitated in partnership with local organizations such as *Bike Ottawa*, and the *EnviroCentre* through their *Let's Bike Ottawa* program.

It is recommended that as part of the revised TDM Strategy in support of the Lansdowne 2.0 project, bicycle workshops should continue to be provided once a year for residents and employees. As part of this, a bike clinic can be offered to help provide basic maintenance and tune-up and information on on-site amenities and services can be made available. It is recommended that the workshop be scheduled in the Spring to allow for the maximum benefit for a wider group of people, including occasional or interested bicycle users. Providing bicycle workshops annually at Lansdowne allows for the information to be shared to employees and residents that are new to Lansdowne.

5.1.3 Transit

5.1.3.1 Transit Information

Lansdowne residents benefit from high frequency bus service on Bank Street on OC Transpo Routes 6 and 7 with direct access to both downtown Ottawa and south Ottawa, and the larger network through one transfer.

It is anticipated that limited TDM office interventions will be necessary to support transit users. Some hard infrastructure improvements directly associated with the development of additional residential units include the provision of enhanced bus schedule timing signage and the protection of the necessary spaces for high quality stops and waiting areas on Bank Street.

The City of Ottawa is planning on increasing the size of the current bus stop shelter on Bank Street in 2024. To be effective, and avoid conflicts with events, the proposed bus stop upgrade should consider a non-standard design, protecting the pedestrian spaces necessary for event functions.

Opportunities to provide residents with real-time transit information should be explored and provided in high traffic areas such as building lobbies. These digital dashboards provide real-time information on next bus arrival for local routes serving the area. In recent years, these dashboards have expanded to include information on other modes of transportation available within a site including the real-time availability of bikeshare, scooter, and carshare vehicles within a district, and the proximity and time of arrival of rideshare services such as Uber and Lyft.

5.1.3.2 Transit Fare Incentives

As a way to support transit use, opportunities to offer residents with PRESTO cards preloaded with one monthly transit pass on resident purchase / move-in should be explored to encourage residents to use transit. Moreover, information regarding the PRESTO card system should be available on-site and provided to all households to encourage other members to sign up for monthly-debited transit passes.

5.1.4 Carsharing

Carsharing services provide residents with access to the flexibility and convenience of a vehicle without necessitating car ownership. There are currently no carsharing service providers available at Lansdowne; the previous car sharing model demonstrated several challenges in administering a system for multiple buildings and parking environments. While there have been conversations between OSEG and Commuauto about providing service, there are currently challenges with implementation. Commuauto requires three above-ground, dedicated parking spots with e-charging stations, and the cost of construction will not be covered by Commuauto.

Transportation Network Company (TNC) services such as Uber and Lyft, which were not available in the service area during the first phase of redevelopment, continue to provide transportation options for some of the same users and trip purposes as originally planned for car sharing services. The presence of TNCs in the service area, and the wide adoption of their use for many activities for both car owners and those without access to a private vehicle, reduces the need for as large of a car sharing presence as originally forecasted.

Assuming a meaningful partner can be identified, it is recommended that space be allocated during the design phase of the residential towers to accommodate three (3) curbside car share parking spaces on Exhibition Way near both the old and new residential units and office buildings. Convenient, surface-level access and increased visibility will help to ensure the success of the program.

If on-site car sharing is not feasible, opportunities to coordinate with local community groups to have carsharing spots designated in adjacent neighborhoods, such as on-street parking on Holmwood Avenue or O'Conner Street, which eliminates challenges such as parking garage access for users and makes the service readily available to the public. There are locations in these areas that can support several vehicles without negatively impacting the operation of local parking. Support for car share can be achieved through a financial partnership based on suitable operators, including providing a relationship which benefits the residents, and ideally the site employees.

5.1.5 Bikesharing & Micro-mobility

Bikeshare programs have operated in Ottawa in the past. Under the supervision of the NCC, the Capital Bixi Bike program operated from 2009 to 2013. Since then, various bikesharing operations have existed such as Right Bike, VeloGo and CycleHop. The last iteration of Ottawa's Bikeshare program, CycleHop, ceased operations in Ottawa in 2018. No bikeshare service provider has been in Ottawa since, which has resulted in a gap in the system offerings over the last few years. A notable characteristic of all previous bikeshare programs is the positioning of the service to serve primarily tourists and visitors to Ottawa.

In June 2023, the City of Ottawa Transportation Commission passed a motion to initiate a study on implementing a city-led bikeshare program in Ottawa. This motion includes undertaking a study to assess and explore potential bikeshare operation scenarios. A focus of this initiative is to position any potential bikeshare offering in the future as a shared mobility service that complements public transit and first/last mile connectivity for residents. It is recommended that the TDM Committee work closely with the City of Ottawa and other advocacy groups, such as the EnviroCentre and Bike Ottawa, to identify Lansdowne for consideration as a key hub within any future bikeshare network.

The introduction of e-scooters in the City of Ottawa has created a dynamic transportation option. The 2022 Bird Pilot program prohibited Lansdowne and QED as an operating area. Going forward, if the prohibition remains, additional parking zones will need to be provided on the boundary of the development area, notably at pedestrian and cycling access points to Lansdowne. Opportunities exist to leverage the spaces in the development to host rider comfort events and other outreach for new users depending on the relationship with the operator. The TDM Committee will be in a position to evaluate and incorporate opportunities that serve the businesses and residents, such as cargo bikes for the grocery stores and micro-mobility food delivery for the restaurants and put in place those environments that better support that service. Finally, there are opportunities to work with the operator to purchase credits, similar to the transit passes for users of the micro-mobility service, to promote their use, either to familiarize or to link with events and functions (e.g. staff get a free ride on major event days).

The conflicts between micro-mobility services and pedestrians in the complex environment are notable and may be best addressed through specific designated corridors and routes with additional access or benefit to the user. Other measures to limit pedestrian / scooter conflicts within the Lansdowne public realm include working with service providers to limit motorized use of the devices within Lansdowne through geofencing (i.e. users who wish to traverse the site have to do so walking the devices). These programs can be tested depending on the relationship with the operator and the potential to create an adaptive dynamic approach to service delivery.

5.1.6 Parking

5.1.6.1 Unbundled Parking (Residential)

Unbundling parking, separating the cost of parking from other goods can significantly impact mode choice and make walking, cycling, and transit as viable and attractive options than owning and operating a private vehicle. Unbundling the cost of parking provides an opportunity to be explicit about the cost of parking and provides people with the opportunity to avoid the cost.

Unbundling the cost of parking from the residential units was adopted as part of the Lansdowne Redevelopment project in 2014. As part of the Lansdowne 2.0 project, the additional parking spaces added as part of an expanded underground parking garage should be unbundled.

5.1.7 TDM Marketing & Communications

5.1.7.1 Multimodal Travel Options Information

Multimodal travel option information should continue to be provided through a variety of sources including the Lansdowne website. For the Lansdowne 2.0 redevelopment project, multimodal travel information could be made available to new residents through a print media brochure that is included with a purchase and/or within a move-in welcome package.

Opportunities to provide residents with real-time transit information should be explored and provided in high traffic areas such as building lobbies. This can be provided through digital screen dashboards that provide real-time information on next bus arrival for local routes serving the area, real-time availability of bikeshare, scooter, and carshare vehicles within a district, and the proximity and time of arrival of rideshare services such as Uber and Lyft. **Figure 20** shows an example of an interactive multimodal dashboard.

Figure 20 – Interactive Multimodal Information Dashboard



Source: Actionfigure

5.1.7.2 Personalized Travel Planning

Travel planning is frequently a major barrier to supporting travel through modes other than car, as the base perspective is that the car is more flexible and can address user concerns.

Local travel planning, especially for regular trips is best achieved through existing travel planning app systems (e.g., Google Maps, Waze), with consideration for community disruption and event detours. Updating platform operators with up-to-date construction detour information, access restrictions for special events, and other changes in the transportation network would allow travelers to better evaluate their travel options and make informed decisions.

Updating these communications platform can be facilitated through the TDM Committee by updating platform operators with accurate and updated information.

Opportunities to work with travel planning app providers, and/or mobility-as-a-service information integrators, to develop a Lansdowne specific travel planning app can be explored. In addition to providing traditional travel planning functionality (as provided by Google Maps and/or Waze), a site-specific travel planning app can also include additional information related to next-trip transit information, proximity of TNC vehicles, and real-time availability of shared mobility options such as carsharing vehicles, bikeshares, and other micro-mobility fleets.

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5.2 SPECIAL EVENTS TDM PROGRAM

The TDM program to support special events transportation demands at Lansdowne has been largely effective in diverting automobile trips from the direct neighborhood. The continued provision of the program, including the inclusion of free transit service to all ticketed events, will be critical in maintaining the success of the program.

in 2014. As part of the Lansdowne 2.0 project, the additional parking spaces added as part of an expanded underground parking garage should be unbundled.

5.2.1 Overview

The original TDM plan developed for the Lansdowne Revitalization identified the transportation services needed for the following event sizes:

- 7,000 to 10,000 representing average and sold-out Arena events;
- 13,000 representing events between 10,000 and 15,000 (i.e. smaller Stadium event);
- 18,000 to 25,000 representing average and sold-out Stadium events; and
- 40,000 representing a large 'Mega Event' with expanded Stadium seating capacity, or concurrent large events.

The TDM plan for special events under Lansdowne 2.0 will be largely the same as the current TDM program for events at TD Place and Lansdowne. The Lansdowne 2.0 Transportation Demand Management Strategy provides an opportunity to refine the TDM program for Lansdowne, and to take into account anticipated changes in programming. These are summarized below:

- The existing 9,800 seat indoor arena and event space, known as TD Place Arena, will be replaced with a new standalone 5,500 seat (6,500 spectator) multi-purpose event centre that will be the new home to the OHL's Ottawa 67's, the CEBL's Ottawa BlackJacks, and other indoor ticketed events. This change will effectively cap indoor arena events to 6,500 attendees, down from the previous 10,000 level that was previously identified for a sold-out arena event.
- The current spectator capacity for the Stadium at TD Place is 24,000. Under Lansdowne 2.0, the existing north stadium stands will be reconstructed with capacity for 11,200 seats (12,100 total spectators), down from the current capacity of 14,028 spectators. This will result in a reduction in capacity of approximately 2,000 spectators at the north stadium stands, and will result in a total capacity of 22,000 spectators for the Stadium at TD Place.
- As part of the proposed podium level retail space, a new indoor 27,845 ft² music hall with a capacity of 1,500 is being proposed. It is anticipated that events held at the music hall will be ticketed, similar to all other ticketed events at Lansdowne. This venue introduces a new Minor Event activity at Lansdowne that should be considered as part of the TDM strategy for special events at Lansdowne.

Other considerations that need to be taken into account as part of the revised TDM strategy for Lansdowne 2.0 are the concurrent events happening at Lansdowne on a regular basis, particularly on weekends. These public events, such

as the Ottawa Farmer's Market and 613Flea, occur regularly and occasionally overlap with other events held at Lansdowne.

Based on the changes highlighted above, the event level sizes have been refined as part of the Lansdowne 2.0 TDM Strategy. Consistent with the original TDM Plan, events at Lansdowne are categorized as either Minor Events or Major Events. Minor Events constitute events and programming at Lansdowne with total attendance levels of 10,000 or less, typically representative of indoor events. Major Events are those with attendance levels of 10,000 or more and are typically outdoor stadium events.

The revised event size thresholds are outlined below:

Minor Events

- Events with less than 3,000 representing smaller indoor events at the new Event Centre, proposed Music Hall, and other public events held at Lansdowne.
- 3,000 to 6,500 representing average and sold-out indoor events at the new Event Centre.
- 10,000 representing concurrent sold-out indoor events at the new Event Centre with other events occurring at Lansdowne such as the Ottawa's Farmer Market.

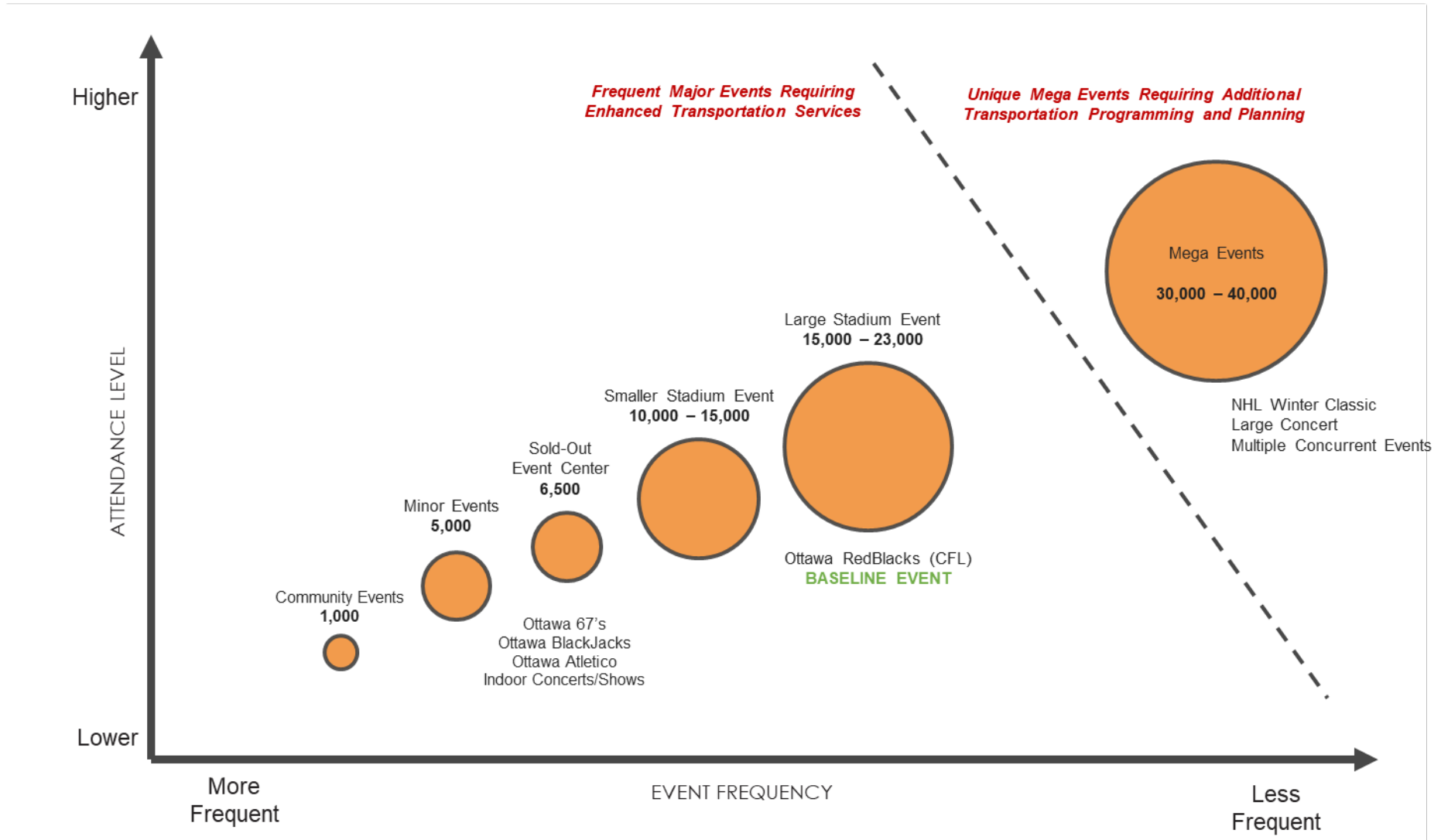
Major Events

- 13,000 representing events between 10,000 and 15,000 (i.e. smaller Stadium event).
- 18,000 to 23,000 representing average and sold-out Stadium events.
- 30,000 representing concurrent sold-out indoor events at the new Event Centre, and a sold-out event at the Stadium at TD Place. It is noted that while the overlapping of two sold-out events is unlikely, the Lansdowne 2.0 Strategy needs to account for it.
- 40,000 representing a large 'Mega Event' with expanded Stadium seating capacity, or concurrent large events.

The smaller events with attendance levels of 5,000 or less occur more frequently at Lansdowne. For example, of the 161 events expected in 2024 at Lansdowne, approximately 128 (79%) will be under 5,000. Generally, the frequency of large events decreases as attendance levels increases. For example, the Ottawa RedBlacks CFL football games represent the typical major event category at Lansdowne with approximately 10 to 12 home games occurring every season. In contrast, the Ottawa 67's have more than 30 home games a season.

The Lansdowne event mix by frequency and attendance levels is visualized in **Figure 21**.

Figure 21 – Lansdowne 2.0 Event Mix Frequency and Attendance Levels



5.2.2 Modal Share Targets

Under Lansdowne 2.0, the current modal share targets for Major Events and Minor Events, as outlined in Table 1 and Table 2, will be maintained.

Table 4 documents the revised modal share targets and Table 5 documents the person trips forecasted for events at Lansdowne 2.0. Similar to the initial TDM planning, the Auto mode which accounts for both on-site and on-street parking, is capped at 8,225 person trips based on the limited on-street parking supply of 2,175 on-street parking spaces within the vicinity of Lansdowne, and 600 on-site parking spaces.

Table 4 – Lansdowne 2.0 Modal Shares for Various Event Sizes

Attendance	Minor Events				Major Events			Mega Events	
	1,500	3,000	6,500	10,000	13,000	18,000	23,000	30,000	40,000
Transit / Park & Shuttle	10%	10%	10%	10%	52%	52%	52%	57%	63%
Active Modes (Walking/Cycling)	10%	10%	10%	10%	11%	11%	11%	11%	11%
Auto (On-Site / On-Street)	75%	75%	75%	75%	32%	32%	32%	27%	21%
Other Modes	5%	5%	5%	5%	5%	5%	5%	5%	5%

Table 5 – Lansdowne 2.0 Person Trip Demands for Various Event Sizes

Attendance	Minor Events				Major Events			Mega Events	
	1,500	3,000	6,500	10,000	13,000	18,000	23,000	30,000	40,000
Transit / Park & Shuttle	150	300	650	1,000	6,720	9,320	11,920	16,975	25,375
Active Modes (Walking/Cycling)	150	300	650	1,000	1,430	1,980	2,530	3,300	4,400
Auto (On-Site / On-Street)	1,125	2,250	4,875	7,500	4,200	5,800	7,400	8,225	8,225
Other Modes	75	150	325	500	650	900	1,150	1,500	2,000

5.2.3 Special Events Transportation Services

Minor Events:

The basic elements of the TDM Plan to accommodate Minor Events at Lansdowne does not change as part of the Lansdowne 2.0 project. A key hallmark of the service delivery is the continued provision of free transit to all ticketed events at Lansdowne beginning two hours prior to the start of events, and up to two hours after the end of events.

Depending on the anticipated attendance levels, enhancements on OC Transpo Routes 6 and 7 should be added as needed to ensure adequate transit capacity is provided. Further enhancements, such as satellite Park & Shuttle facilities or dedicated 450-series service are not identified as required due to the costs associated with implementing those services and the lack of economies of scale to support the financial costs for minor events.

In light of this, the TDM Strategy report for Lansdowne 2.0 does recognize the challenges associated with Minor Events at Lansdowne, particularly on busy weekend periods with overlapping programming, and the challenges associated with traffic delays experienced by all road users on Bank Street. These challenges are especially pronounced when there are programming closures on QED to support community programming such as Winterlude, the Ottawa Race Weekend events, and the most recent closures of QED on weekends as part of a pilot project to support active modes on the scenic parkway. These closures result in a significant diversion of traffic onto Bank Street which increases delays and cut through traffic on local neighborhood streets.

Any long-term, frequent closures of QED will impact the viability of events at Lansdowne, irrespective of the Lansdowne 2.0 initiative. The current programming on-site cannot be supported with severe restrictions on Bank Street. Opportunities to reduce auto travel to Lansdowne, and by extension, traffic demands utilizing QED are explored below.

Transit Priority Improvements:

Opportunities to improve transit service along Bank Street for Routes 6 and 7 will be evaluated through the City of Ottawa's Active and Transit Operations study for Bank Street. Potential improvements, which may include transit signal priority measures and enhanced bus shelters, can improve transit service reliability and passenger comfort. These improvements to service reliability and passenger comfort on Bank Street will help to promote transit service to Lansdowne as a viable and attractive option for day-to-day travel, as well as for Minor Events.

Park & Shuttle 'Lite':

Opportunities to intercept and divert traffic on Bank Street can be achieved by exploring alternative off-street parking facilities within the periphery of Lansdowne. OSEG is currently identifying nearby off-street parking near Lansdowne as an alternative to on-site parking, particularly for use during events.

Intercepting inbound auto travelers for Minor Events at alternative parking facilities that are typically underutilized on weekday evenings and weekends has the potential to reduce direct auto travel to Lansdowne. Alternative parking information is currently provided on the TD Place website and provides information on nearby lots that are within a 20, 30, and 40-minute walk to Lansdowne. In addition, parking facilities with access to Routes 6 and 7 are identified for convenience as a way to address First / Last Mile connectivity through free transit service on Bank Street for ticket holders.

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OSEG is currently exploring options to aggregate the availability of off-site alternative parking, and the ability to pre-purchase or reserve alternative nearby off-street parking, through service providers such as ParkWhiz.

This new option, which can be made available during Minor Events, can be promoted through a unique TDM branding strategy to support Minor Events at Lansdowne, and reduce the number of auto trips to Lansdowne.

Fare Free Zone Pilot:

Other opportunities to promote transit use, particularly on busy weekends, is to explore the potential of introducing a “Fare Free” zone on Bank Street to support local businesses, including Lansdowne, and reduce the reliance on auto travel.

This initiative can support programming at Lansdowne during busy weekend periods that include the Ottawa Farmer’s Market or 613Flea, as well as merchants along Bank Street between downtown Ottawa and the Glebe. The “Fare Free” zone can be provided on Route 6 and/or 7 during certain hours and specific days of the week. For example, service delivery could potentially include providing “Fare Free” service on Route 7, between Carleton University and downtown Ottawa (Rideau Station), on Saturdays and Sundays between the hours of 9:00 AM and 3:00 PM.

The feasibility and challenges of providing “Fare Free” service on Bank Street will need to be studied and evaluated. This type of service should be considered as part of the traffic management strategy to support alternative modes of transportation and to reduce traffic impacts associated with events such as Winterlude, Ottawa Race Weekend, etc.

Major Events:

Under Major Events, no significant changes are anticipated for a sold-out football game. Transportation services provided for outdoor Stadium events should continue to be provided in its current format.

Opportunities to streamline and adjust Park & Shuttle services from Canada Post and City Hall should be explored and changes to services provided should be informed through consultations with key stakeholders including OC Transpo, City of Ottawa, and the National Capital Commission (NCC). This includes a re-evaluation of the number of satellite parking facilities needed, and the potential to reduce TD Place Park & Shuttle service to only the Canada Post facility for sold-out stadium events with attendance levels of 23,000.

Enhanced transit service and 450-series shuttles provided by OC Transpo and the STO will continue to provide service on Bank Street. TD Place Park & Shuttle service from Canada Post and City Hall provide service to the Shuttle Loop on the east side of Lansdowne and require access on QED.

Continued cooperation and coordination with key stakeholders including the City of Ottawa and the NCC will be required to successfully deliver Major Events at Lansdowne. QED will continue to play a significant role in supporting multimodal access to Lansdowne. In addition to supporting active mode trip access through the multi-use pathway system, QED plays a critical role in supporting vehicular access to the site during Major Events for both residents and retail patrons. The access is also used as the primary drop-off area for TNC service providers such as Uber and Lyft, as well as Park & Shuttle services from Canada Post and City Hall.

The timing of closures on QED should be coordinated closely by the NCC, the City of Ottawa, and OSEG for Major Events. While the majority of access to Lansdowne is facilitated on the 450-series service on Bank Street, the QED

will primarily accommodate parking garage access during event Ingress and Egress time periods when access on Bank Street is fully restricted to vehicular traffic due to pedestrian demands.

At the moment, the full closure of QED during Major Events cannot be supported without a significant change in the overall traffic management plan. A full closure of QED is expected to have significant impacts to the surrounding community and the ability to access Lansdowne during Major Events for all user groups, including residents. Due to the number of pedestrians and shuttle users on Bank Street, vehicular access on Bank Street should remain restricted prior to the start of events, and shortly after the end of events to safely accommodate large pedestrian and transit user demands.

Should QED be closed during major events with no means of vehicular access to Lansdowne, access to the underground parking garage will need to be facilitated either through a routing of vehicular traffic through the Lansdowne site at Marche Way (north access), and/or the currently restricted residents-only parking garage access on Holmwood Avenue. Both options are expected to generate significant traffic impacts on the local community including vehicle queuing and backups onto Bank Street and residential streets.

Mega Events:

For the Mega Events scenario additional transportation services will be required to support large events or concurrent sold-out Event Centre and Stadium Events. Further enhancements to 450-series service will be required to support demand at 30,000 events, which are representative of -concurrently occurring events at the new Event Center and the Stadium. It is anticipated that a total of 30 to 35 additional transit trips are required across the 450-series service to meet transit demands.

30,000 attendance level Mega Events should include TD Place Park & Shuttle services from both Canada Post and City Hall to ensure an adequate level of off-site parking capacity is provided.

For a 40,000 attendance Mega Event, additional TD Place Park & Shuttle facilities should be secured in addition to Canada Post and City Hall. Arrangements for supplemental the parking facilities should be explored at Vincent Massey Park and/or the EY Centre depending on the attendance level.

For 40,000 attendance Mega Events, restricted access on QED may be required to support enhanced Park & Shuttle operations from satellite parking locations.

Table 6 summarized the required transportation service by event size.

Table 6 – Required Transportation Services Based on Event Size

Transportation Service	Attendance Level			
	Arena at TD Place / Lansdowne Park Events		Stadium at TD Place Events	'Mega' Events
	Events with	Events Between	Events Between	Events Between
	Less than 5,000	5,000 - 15,000	15,000 - 25,000	25,000 - 40,000
Transit Service	Increase Service on Bank Street OC Transpo Routes 6 and 7 (as required)			
Park & Shuttle	No Requirement	As Required (+10,000)	OC Transpo / STO 450 series service from Park & Ride locations	
			Park & Shuttle Service from Canada Post and City Hall	
Additional Park & Shuttle Capacity	No Requirement			Additional Park & Shuttle Service Capacity from Vincent Massey, EY Centre (as required)

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6 ACTIVE AND TRANSIT INFRASTRUCTURE IMPROVEMENTS

In April 2022, City of Ottawa staff submitted the Lansdowne Partnership Sustainability Plan and Implementation Report. In addition to outlining funding strategies for the replacement of the Arena at TD Place and north side stadium stands, a process for securing air rights for the proposed residential development, and commitments for affordable housing, the report also includes recommendations for improving the active transportation network. Recommendations by City of Ottawa staff for the active transportation network have been incorporated into this TDM Plan and include signalization improvements, roadway modifications, infrastructure upgrades and signage as discussed below. The implementation of these measures will improve safety, enhance the user experience, and further promote the use of active transportation modes to the Lansdowne site.

The infrastructure improvements are listed below:

1. Add advanced bike phase at Bank Street and Holmwood to the existing advanced pedestrian phase in the west bound direction.
2. In conjunction with the NCC, explore opportunities to add a signalized crossing at QED and Princess Patricia Way.
3. Narrow throat entrance and extend sidewalk on Echo Drive to the gate.
4. Create a two-way accessible link from Colonel By Drive to the Canal
5. Curb modification on Bank Street to create a right-in / right-out detail
6. Adjust curbing to facilitate right turn movements on Bank Street at Exhibition Way
7. Install a new signalized pedestrian crossing at Holmwood Avenue, 85 metres east of Bank Street
8. In conjunction with the NCC, add sidewalk along north side of entrance to the Park at QED
9. Re-refresh intersection design by adding protected cycling facility on Fifth Ave eastbound and widening the west approach.
10. Provide northbound bike and pedestrian multi-use pathway (MUP) facility
11. Improve entrance into Lansdowne Park by reducing curb barriers at the end of Holmwood Avenue
12. Add a southbound bike lane or cycle track from Bank Street to Aylmer Street
13. Upgrade asphalt sidewalk on the QED access to a MUP
14. Consideration of cycling lanes through the site connecting cyclists from Bank Street to QED
15. Covered bike parking (across the Lansdowne site)
16. New lighting to increase visibility along existing MUP at north end of the site
17. Improved lighting at three-way MUP junction along QED
18. Install physical barriers in Aberdeen Square to help delineate road from pedestrian plaza
19. Provide a Bike repair stand on-site
20. Install Pedestrian Crossover along MUP across from Pig Island for better connectivity
21. Sign speed limit along QED to be 40km/hr
22. Implement improved wayfinding

The locations of these recommended improvements are shown in **Figure 22**.

Figure 22 – Sustainability Plan Report Active Transportation Recommendations



7 CONCLUSIONS AND RECOMMENDATION

The 2011 TDM Plan laid the groundwork for ensuring sustainable transportation modes such as transit, walking, cycling, carsharing, and carpooling are available to residents, employees, and visitors to Lansdowne. Many of the recommended strategies from the 2011 TDM plan have since been implemented, some of which have had great success in encouraging alternatives to the private automobile, and others which have faced some hurdles due to third-party operator issues or the administrative burden of implementation. This update to the 2011 TDM Plan is not intended to replace or supersede the previous recommendations. Instead, the strategies laid out in the 2011 TDM Plan, their implementation status, and overall success should be regularly reviewed and assessed in light of changing services, environments, and travel behaviors.

This plan builds on previous recommendations to address, in particular, the increase in residential units and commercial retail space under the Lansdowne 2.0 redevelopment plan. As has been the case since the redevelopment of Lansdowne, the TDM Committee currently in place will continue to play a key role in the implementation of TDM strategies. This plan further recommends the creation of a monitoring program for modal targets and shares for residents, employees, and retail patrons to evaluate and prioritize investments in TDM strategies best supporting day-to-day activities.

Many of the same strategies from the 2011 TDM Plan aimed at encouraging transit usage should be implemented with the new residents and employees under Lansdowne 2.0, including the provision of one-month transit passes to the purchasers of the new condominiums and promotion of the PRESTO program to residents and employees alike. Some hard infrastructure improvements may include bus timing signage in the residential buildings and protecting the necessary spaces for high quality stops and waiting areas on Bank Street.

This plan also recommends that the design phase for the new residential towers consider the provision of three curbside parking spaces for a carshare service. While the need for carsharing services has been significantly reduced by the presence of TNCs such as Uber and Lyft, they still play a role in providing transportation options for journeys that require trip-chaining or the need to transport goods.

To support special event transportation demands under Lansdowne 2.0, event size categories have been revised to reflect changes in venue sizes and programming opportunities. These changes are not expected to result in any significant changes in how the TDM program and services are delivered for special events at Lansdowne.

The following recommendations are made to further support special events at Lansdowne:

- Opportunities to improve transit service on Bank Street for Routes 6 and 7 should be explored to better support the adoption of transit for all events at Lansdowne, particularly minor events with attendance levels of 10,000 or less. The City of Ottawa's forthcoming Active and Transit Operations Study for Bank Street, which will explore potential active and transit improvements, should consider the needs of enhanced transit service for Lansdowne.

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- Opportunities to implement an off-site parking and transit service to Lansdowne (i.e. Park & Shuttle 'Lite') should be explored, particularly for minor events with attendance levels of 10,000 or less. This consists of promoting off-street parking facilities near Lansdowne in close proximity to Bank Street with access to OC Transpo Routes 6 and 7. OSEG is currently identifying nearby off-street parking near Lansdowne as an alternative to on-site parking, particularly for use during events. Intercepting inbound auto travelers for minor events at alternative parking facilities that are typically underutilized on weekday evenings and weekends has the potential to reduce direct auto travel to Lansdowne. This new travel option can be promoted through a unique TDM branding strategy and enhanced parking booking and trip planning tools to further enhanced transit adoption for minor events.
- Opportunities to implement a "Fare Free" Zone on Bank Street should be explored to promote transit use and reduce the reliance on auto travel during busy periods in the area, particularly on weekends. This initiative can support busy weekend periods. The "Fare Free" zone can be provided on Routes 6 and/or 7 during certain hours and specific days of the week such (e.g. "Fare Free" service on Saturdays and Sundays between 9:00 am and 3:00 pm.).
- For Mega Events with attendance levels of 30,000 attendees (concurrent Event Centre and Stadium Events), further enhancements to 450-series service will be required to support additional shuttle users. It is anticipated that that a total of 30 to 35 additional transit trips are required across the 450-series network to meet the incremental transit demands. TD Place Park & Shuttle service will continue to be provided from both Canada Post and City Hall to ensure an adequate level of off-site parking capacity is provided.

The TDM program for events relies on a balanced approach in accommodating transportation demands and access requirements, Bank Street is expected to continue to accommodate a significant portion of trips made to Lansdowne during major events on dedicated 450-series transit service.

During major events, vehicular access to Lansdowne will continue to be temporarily restricted on Bank Street to safely accommodate the large number of transit passengers, pedestrians and cyclists accessing Lansdowne from Bank Street. During these temporary closures, vehicular access to the underground garage, TNC drop-offs (i.e. Uber and Lyft), and some Park & Shuttle services would continue to be accommodated at the QED access. Under a full QED closure scenario during major events, the expected traffic impacts would be extremely severe and the viability of running events safely with minimal impact to the community would be compromised.

Irrespective of the Lansdowne 2.0 plan, QED is an integral part of the city's transportation network and plays a crucial role in supporting a balanced, safe and efficient access program to Lansdowne, particularly during major events. It is acknowledged that QED is a federal parkway under the jurisdiction of the NCC, the TDM Strategy recommends continued coordination and collaboration between the NCC, City of Ottawa, and OSEG regarding the future use of QED.