# Downtown Transportation & Streetscape Study

March 2015

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downtown.

# Study Team

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*Lakeshore Road East, 2014*

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*George Street can become a flexible street that is pedestrian-only for special events.*

# 1.0/ Executive Summary

The Downtown Transportation and Streetscape Study (DTS) is a key part of a broader visionary process: The Downtown Oakville Strategic Action Plan. The Strategic Action Plan, completed in 2010, provides guidance for the future of downtown Oakville over the next 20 years and reinforce the vision for downtown Oakville established in the town's Official Plan, Livable Oakville.

To further advance many of the projects and initiatives identified in the Downtown Oakville Strategic Action Plan, the town has launched the Downtown Plan, one of the most creative, inclusive, and compelling projects in Oakville. The objective of the Downtown Plan is to successfully engage the public and integrate the efforts of two studies – The Downtown Cultural Hub Study (DCH) and the Downtown Transportation and Streetscape Study (DTS) — both looking at ways to improve downtown by maximizing facility space, enhancing accessibility, leveraging existing roadways and increasing the cultural character.

The DTS and its Streetscape Master Plan is founded on technical findings of a Transportation Study conducted during this study for all downtown streets. The Transportation Study also informs the three options for the reconstruction of Lakeshore Road East, from Allen Street to Navy Street. Recommendations to revitalize Towne Square will be advanced later with the input of the Downtown Cultural Hub to ensure its programming is well-balanced with the future of Centennial Square and the cultural programme of its surrounding buildings.

The DTS study area is focused on Lakeshore Road in the downtown core area bounded on the west by Sixteen Mile Creek, on the east by Allan Street, on the south by Robinson Street and to the north by Randall Street. The year and half study involved extensive community and stakeholder consultation program, including local residents, business owners and the Downtown BIA to achieve the best possible consensus for the recommended plan directions. The consultation program included two series of stakeholder consultations, six community meetings and three presentations/workshops with members of the BIA. The consultation program advanced key design considerations including the objectives of enhanced access for all, economic vitality, cultural dynamism and a vibrant public realm. Ongoing dialogue with the public and key stakeholders informed the recommendations of the Downtown Streetscape Master Plan and Lakeshore Road reconstruction options.

All street design options are intended to compliment and reinforce buildings, provide a continuous two-way cycling route through the downtown, promote wider tree-lined boulevards, and provide complementary streetscape materials and furnishings within the Downtown Oakville Heritage Conservation District. The DTS and the DCH were initiated at the same time so that their directions could inform one another. The DCH is an ongoing study that will recommend the best locations and make-up of new cultural facilities that will best serve Oakville for the next fifty years.

The Transportation Study assessed current conditions and made key recommendations for improvement in two key areas including one-way street to two-way street conversion and the design of Navy Street and George Street as curbless, flexible streets that promote pedestrian use and controlled vehicular access. Navy Street is intended to extend the planned Cultural Hub facilities at the Library and Performing Arts Centre and a revitalized Centennial Square, while George Street will promote a key open space connection and active public space between Towne Square and the redeveloped Post Office.

Lakeshore Road East is at the end of its lifecycle and must be reconstructed. All three options developed for Lakeshore Road include recommendations for high quality, contemporary street and boulevard design and relocating centre lane loading to the side streets or on limited locations on Lakeshore Road. Option 1 (Status Quo) retains a similar profile to the existing road configuration with a 4.6 metre boulevard, removing the centre loading lane and replacing it with a centre lane for turning. Option 2 is broken down into two sub-options. Option 2A (Wide Boulevard) removes the centre lane except at signalized intersections, providing a wider 6.0 metre boulevard; Option 2B is similar but also provides bike sharrows and reduces the boulevard width to 5.85m. Dedicated cycling lanes are provided for both Options 1 and 2 on Church Street and Robinson Street. Option 3 (Cycling Lanes) incorporates dedicated cycling lanes between street parking and the drive lane resulting in a 5.2 metre wide boulevard.

An accountable Evaluation Criteria has been developed to test and evaluate each street option as its design responds to universal access, economic vibrancy, cultural focus and multi-use streets, facilities and infrastructure that meet existing and future needs and is financially sustainable.

# 2.0/ Introduction

# 2.1/ Background

## The Downtown Transportation and Streetscape Study complements the Downtown Cultural Hub Study to produce a comprehensive plan for revitalization in the downtown core

The Downtown Transportation and Streetscape Study (DTS) is a key part of a broader visionary process: The Downtown Oakville Strategic Action Plan. The Strategic Action Plan, completed in 2010, provides guidance for the future of downtown Oakville over the next 20 years and reinforce the vision for downtown Oakville established in the town's Official Plan, Livable Oakville.

The Strategic Action Plan features 12 prioritized strategic initiatives including: planning to revitalize Centennial Square, pursuing a cultural heritage designation for downtown Oakville, evaluating transportation, mobility and accessibility elements and recommending improvements, reviewing the role and function of municipal cultural and recreational facilities and activities. The Action  Plan outlines initiatives and other studies that will shape development and further enhance Oakville's downtown as a sustainable, well-designed and accessible area while protecting its unique historic character. The Strategic Action Plan outlines initiatives that have shaped the Downtown Plan.

To further advance many of the projects and initiatives identified in the Downtown Oakville Strategic Action Plan, the town launched the Downtown Plan, one of the most creative, inclusive, and compelling projects in Oakville. The objective of the Downtown Plan is to successfully engage the public and integrate the efforts of two studies – the Downtown Transportation and Streetscape Study (DTS) and the Downtown Cultural Hub Study (DCH) - both looking at ways to improve the downtown core by maximizing facility space, enhancing accessibility, leveraging existing roadways and increasing the cultural character.

### The Downtown Transportation and Streetscape Study

The Downtown Transportation and Streetscape Study has developed options that consider economic vibrancy; create cultural focus, develop infrastructure that meet existing and future needs; enhances the natural environment; and finds financially sustainable solutions. The DTS includes three key components: a Streetscape Master Plan including a Transportation Study for all downtown streets; three options for reconstructing Lakeshore Road from Allan Street to Navy Street and three options to revitalize Towne Square. The preferred concept for Towne Square will be advanced later in the process and with the input of the DCH key directions to ensure the programming of Towne Square is well balanced with future plans for Centennial Square and adjacent flexible streets such as George Street and Navy Street.

### Transportation Study

The Transportation Study assessed traffic and operational characteristics in the downtown and produced recommendations for enhancements. It provided background data and analysis on traffic flows, parking demand, intersections, cycle routes, pedestrian movement, loading and transit movement. This study also assessed two alternative scenarios for modifications to the existing road network, including conversion of one-way roads to two-way and conversion of an existing street to a pedestrian-only mall. The Transportation Study, including the recommended scenarios, is appended to this report (Appendix 6.2).

### Streetscape Master Plan

The Streetscape Master Plan provides clear direction for future development and enhancements to the public realm and streetscape in the downtown. It includes recommendations for revitalization that will reinforce the character of the downtown and its vibrant commercial environment. Key recommendations include cross-sections for streets in the downtown, as well as guidance on streetscape design.

Key objectives are to increase connectivity, mobility and accessibility, create a balance between transportation modes, promote a pedestrian-oriented environment and integrate heritage conservation objectives. This work will guide the redesign and renewal of streets in the downtown into the future.

### Towne Square

The Downtown Transportation and Streetscape Study (DTS) team was tasked with defining a new future for Towne Square. Built in the late 1980s, the space quickly became an important venue for events and festivals and continues to host events today. The square also attracts families, residents and downtown patrons as a comfortable place to gather and rest.

Since its inception, the Square has not been significantly altered or upgraded so is beginning to show its age. Materials are worn; trees struggle in small planters; the lawn area is in constant need of repair and maintenance. It is in this context that the town is beginning to consider a new future for this important public space. The contemplation of a new future for the Centennial Square site - another prominent public realm feature of downtown - also drives the need for Towne Square to be redesigned and potentially re-purposed.

### The Downtown Cultural Hub Study

The Downtown Cultural Hub (DCH) Study will recommend the best locations and composition of new cultural facilities that will serve Oakville for the next fifty years. The study responds to the need for a revitalized cultural presence in downtown Oakville that can be met within a sustainable financial framework for the town and its performing and funding partners.

The principle findings of the DCH study to date include:

- the establishment of a downtown cultural hub is a viable concept that will make a valuable contribution to the cultural life of Oakville and greatly contribute to the economic health and attractiveness of the downtown
- the existing cultural facilities on Centennial Square are in need of major and expensive modification
- a re-invigorated downtown cultural hub would consist not only of buildings but of a range of programmes, places and spaces to complement the primary cultural facilities
- a range of new active and passive open spaces to accommodate cultural programming and recreational activities should form an important part of the cultural hub
- the visitation generated by cultural hub activities is a critical contribution to the economic health of the downtown, generating significant retail and restaurant activity
- the attractiveness of the cultural activities to patrons is greatly enhanced by their presence in an interesting downtown with excellent shopping and dining opportunities and a very attractive natural setting
- associated residential and office development will help facilitate the establishment of the cultural hub and increase the vitality of the downtown

### DTS and The Downtown Oakville Heritage Conservation District

The Downtown Oakville Heritage Conservation District (HCD) is within roughly the area from just west of Navy Street to Dunn Street, and just north of Randall Street to Robinson Street. The Downtown Oakville Heritage Conservation District Study is an implementation initiative of the Downtown Oakville Strategic Action Plan. The HCD Study identifies heritage resources of downtown Oakville, and provides guidelines that will preserve heritage resources, manage change and guide future development in the area. The DTS design development responds to the importance of built heritage in the downtown from the quality and scale of buildings that line streets to the character of existing streets and open spaces including Towne Square and Centennial Square.

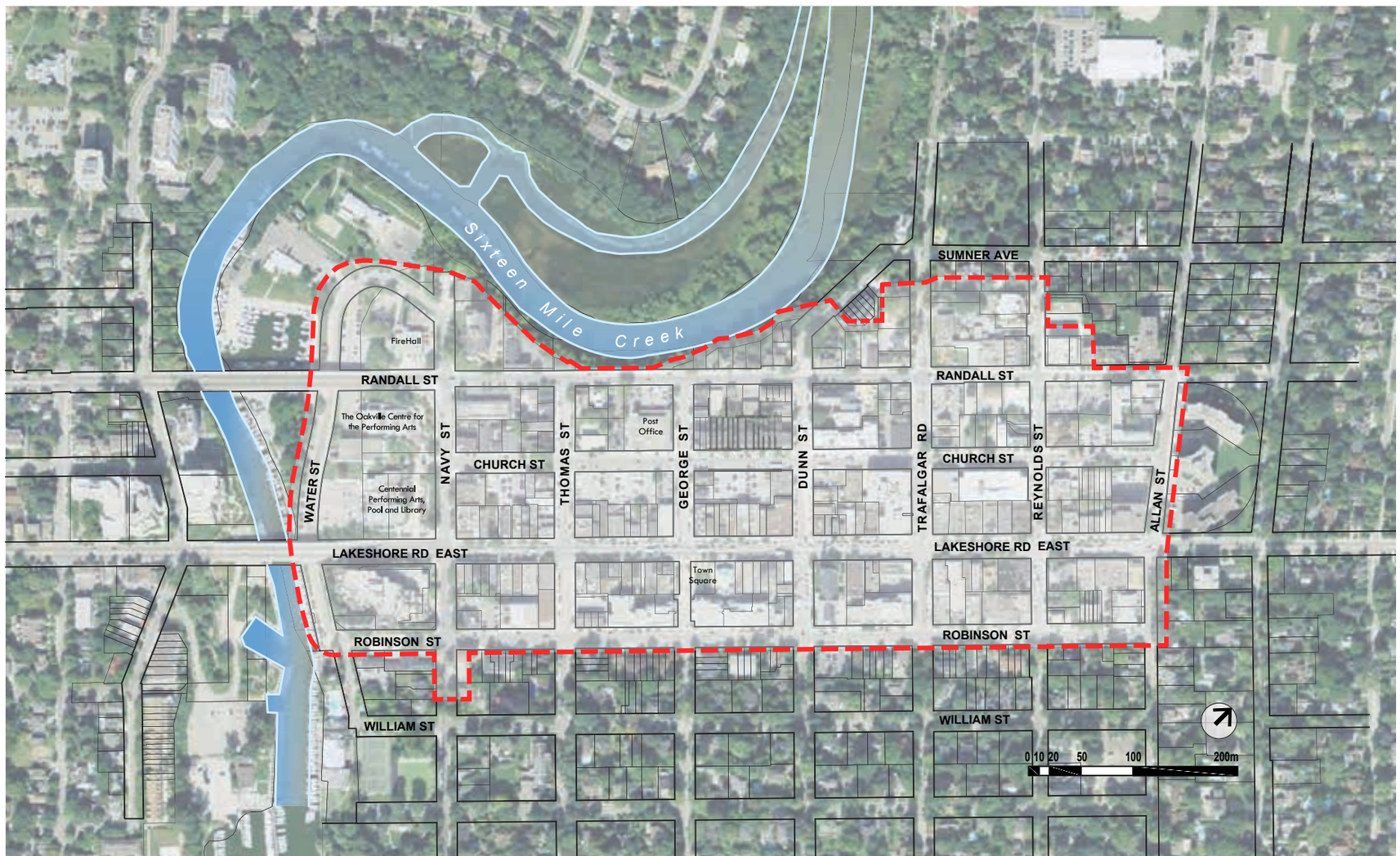
The DTS directs the design of streets to complement and reinforce heritage buildings, structures, views and other elements in the heritage conservation district. As a fundamental principle, street design must preserve and protect the existing inventory of buildings and elements, and further support this principle in the balanced selection of high quality and durable materials, complementary forms and patterns. Street design should still allow for a contemporary design language and material selection that integrates sustainable energy measures, long-term street tree growth and enhanced cycling and pedestrian infrastructure.


*Lakeshore Road has an eclectic mix of retailers. The street is scaled well and is a comfortable place to walk.*

# 2.2/ Study Area

## Oakville is proud of its vibrant downtown, surrounded by Sixteen Mile Creek and thriving, tree-lined residential neighbourhoods

The study area is bounded by Sixteen Mile Creek to the north; Allan Street, Robinson Street, and Water Street. This reflects the boundary of the downtown Oakville growth area as established in the Livable Oakville Plan.



# 2.3/ Public & Stakeholder Consultation

## Public and stakeholder consultation informed design decisions throughout the study, resulting in a Streetscape Master Plan that reflects the community's vision

The public and stakeholder consultation program for the study spanned five public meetings and numerous stakeholder sessions, as follows:

**Public Consultation**

### Downtown Plan Launch - December 5, 2013

The Downtown Plan launch event kicked-off the three studies that make up the Downtown Plan initiative. The three studies include the DTS, DCH and the Downtown Cultural Studay. The well attended event was held at the Oakville Centre for the Performing Arts and included a series of guest speakers and a panel discussion.

### Community Workshop #1 - January 30, 2014

The goal of the first workshop was to provide a project overview and generate discussion and feedback on what is working well, what is not working and priorities for renewal for downtown streets and the Towne Square. This workshop was held in conjunction with the Cultural Hub Study team.

### Community Workshop #2 - April 12, 2014

The second public workshop was designed as a fun and interactive model building exercise focusing on Lakeshore Road. Participants were given a scaled base plan and model pieces and were asked to design the street section. Sixteen workshop groups of 8-10 people each designed their ideal street and intersection approach for Lakeshore Road. This workshop was held in conjunction with the Cultural Hub study team.

### Community Meeting #3 - June 10, 2014

The third public workshop presented a series of emerging directions for feedback. The study team discussed the evolving role of downtown streets. A series of design precedents were presented to frame the discussion and three options for Lakeshore Road were presented and discussed. This meeting was held in conjunction with the Cultural Hub Study team.

### Community Workshop #4 - October 9, 2014

The fourth public workshop focused on Streetscape Master Plan options and Towne Square concept options. Following board viewing and a presentation, participants were divided into two rooms to consider the Streetscape Master Plan and Towne Square concepts. Small groups were asked for their feedback and each group presented a summary of their discussion back to the room to compare and contrast ideas.

### Community Meeting #5 - December 2, 2014

The fifth workshop summarized all work to date and presented the preferred direction for the Streetscape Master Plan, Lakeshore Road and Towne Square. A panel viewing session and detailed presentation allowed participants to understand the entire study process, the evaluation of options and the next steps. Following the presentation, study team members asked for feedback and answered questions.

**Stakeholder Consultation**

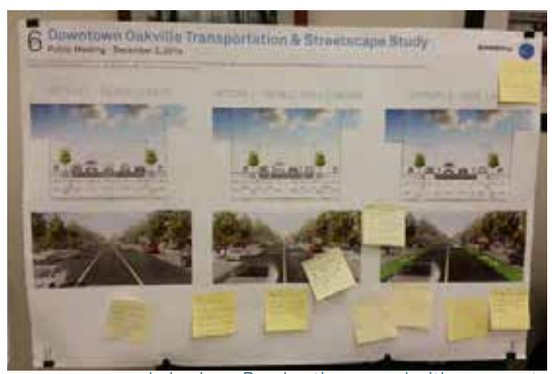
The study team conducted several rounds of interviews with key stakeholders, including the BIA, Chamber of Commerce, Oakville Transit staff, Culture and Recreation staff, resident groups, Emergency Services, the Region, utility providers, Heritage Advisory Committee, Accessibility Committee, the Mayor and Councillors and Water Street stakeholders. In addition, on-going consultation has taken place with the BIA as well as the Downtown Focus Group - made up of a series of key stakeholder representatives. This consultation was critical to identifying opportunities and constraints, as well as prioritizing design options for Lakeshore Road.

Three dedicated BIA workshops were held on April 9, June 10 and September 30, 2014. Each BIA workshop preceded a public event and was held to give the BIA exclusive access to study material.

**Online Consultation**

In addition to in-person consultation, residents and business owners could also submit their ideas and comments online through the town's website. All public meeting material including panels, presentations, worksheets and drawings were posted on the town's website. Lakeshore Road options, Towne Square options, site furnishing options and Streetscape Master Plan options were posted with areas to comment specifically on each option. Additionally, the *Town of Oakville Idea Forum* hosted several lively discussions about the DTS project.

*Residents working on their model for Lakeshore Road*




*Lakeshore Road options panel with comments*

# 2.4/ Transportation Study

## A comprehensive transportation engineering assessment of existing and proposed conditions ensures that the preferred recommendation is functional and effective

The Transportation Study was conducted in conjunction with the preparation of streetscape/ landscape plans for the downtown Oakville commercial district. Its main objective was to provide an assessment of existing traffic and transportation conditions in the downtown and assess two key options for improvement; one to two-way street conversion and pedestrian mall conversion of Navy and George streets. The study's findings were critical in the identification and analysis of options and the preferred recommendation. The following are the key findings and recommendations:

Item 1: Existing Conditions Assessment

The operational assessment of traffic on downtown streets indicated that acceptable levels of service are being provided at both signalized and unsignalized intersections. Recommendations to address a number of operational and safety issues include:

- relocating the current unofficial commercial vehicle loading/unloading spaces from the centre lane on Lakeshore Road to side street areas
- retaining the centre turn lane on Lakeshore for left turn movement. If the lane is to be removed in some areas for streetscaping, at a minimum, it should be retained at signalized intersections and should provide slip-around areas to bypass left turning vehicles at unsignalized intersections.
- investigating synchronizing the Lakeshore Road traffic signals to improve gaps in traffic and enhance pedestrian crossing opportunities
- providing cyclists with an alternate cycle route through the downtown via Allan Street, Robinson Street and Navy Street

It also identified a number of improvements to improve roadway operations and safety, including:

- removal of the channelized eastbound right turn from Randall Street to Navy Street
- removal of the uncontrolled pedestrian crossing on Navy Street at Church Street, located on the south side of Church Street, and replacement with a controlled pedestrian crossing
- replacing the existing pedestrian cross over on Robinson Street with a pedestrian signal
- providing curb side commercial loading spaces either on Lakeshore Road or cross streets to enable the prohibition of commercial loading/unloading activities from the centre lane on Lakeshore Road
- maintaining the current metered maximum time for on-street spaces on Lakeshore Road, at least until the improvements to Lakeshore Road have been implemented

Item 2a: One-Way Street Conversion

This analysis showed that converting the one-way streets to two-way operation could provide for simpler travel through the downtown and would tend to even out the turning movements at some intersections. The conversion also simplifies the provision of curb side commercial loading zones and transit service in the downtown but does require some additional geometric changes to some streets.

Item 2b: Pedestrian Mall Conversion

Closure of Navy Street was found to result in relatively small changes in traffic flow but would require the following additional improvements:

- Separate eastbound right turn lane at the Randall Street and Thomas Street intersection
- Separate southbound left turn lane at the Lakeshore Road and Thomas Street intersection
- Signal controls may be warranted at these two intersections

The closure of George Street will not result in significant changes to the traffic flows at adjacent intersections and no further improvements would be required.

The permanent closure of Navy Street or George Street was not contemplated further as a part of the streetscape master plan.

*Delivery vehicles stopping in the centre lane on Lakeshore is not safe for pedestrians, motorists or the delivery workers*

# 2.5/ Vision & Guiding Principles

The Downtown Plan Vision & Guiding Principles served as the lens through which the DTS developed and evaluated options

## Vision

The Downtown Plan vision is to create an attractive, active, animated and vibrant downtown where people come together to live, work, shop, stay, meet and engage.

It will be the cultural, social and economic heart of our community where citizens and visitors can celebrate and experience the natural setting, heritage, culture and the arts.

## Guiding Principles

- To contribute to a successful economically vibrant downtown
- To create a cultural focus for the town in the downtown area
- To provide facilities and infrastructure that meet existing and future needs
- To protect and enhance the natural environmental and cultural heritage of downtown
- To develop solutions that are financially sustainable

# 3.0/ Streetscape Master Plan

# 3.1/ The Streetscape Master Plan

## The network of revitalized streets and blocks defined in the Streetscape Master Plan strengthen downtown Oakville as a people place and as a centre for commerce and culture

Downtown Oakville is a destination within the Town of Oakville and the larger Greater Toronto Area, serving as a thriving centre for retail, events and entertainment, tourism, commercial and social services, office employment, cultural facilities, civic and religious institutions.

The Streetscape Master Plan defines Oakville's major downtown streets, including the hierarchy of primary east-west streets: Lakeshore Road East, Church Street, Randall Street and Robinson Street. Trafalgar Road and the six north-south streets between Navy Street and Allan Street establish a compact and tightly knit urban fabric with buildings that reflect a human scale and a desirable mix of shops, restaurants, offices, civic and community services, and residences. The downtown's intimate public spaces, which include Towne Square as a central focal point, reinforce a sense of civic identity. Its natural amenities, including the Sixteen Mile Creek, abut established tree-lined residential neighbourhoods with views and a short walking distance to Lake Ontario. Downtown cultural attractions, including the Oakville Centre for the Performing Arts, play an important role in community life, with the town hosting a variety of established and popular events and festivities throughout the year.

The Streetscape Master Plan for downtown streets builds on the significant inventory of heritage buildings, other cultural heritage features, and a unique collection of significant landmarks that demonstrate Oakville's unique character, quality of life, and enviable cultural and civic identity.

The network of revitalized streets and blocks defined in the Streetscape Master Plan strengthen downtown Oakville as a people place and as a centre for commerce and culture by incorporating progressive public realm improvements. To accomplish this, equitable mobility is woven into the Streetscape Master Plan to balance the needs of all modes of transportation. New and enhanced street boulevards, with the potential for curbless streets designed to be both vehicular and pedestrian only, will be lined with street trees, spaces for cafes, seating and bicycle parking will improve quality of life in the downtown. Active modes of transportation will be encouraged through streetscape enhancements and the introduction of other functional and aesthetic improvements.

The Streetscape Master Plan defines a clear design direction for the downtown public realm to guide its future. The plan must consider strategies to ensure that recommendations can clearly guide redevelopment in the near-term but also remain flexible enough to adapt to future priorities. Special attention will be given to interfaces with Towne Square and cultural hub destinations. The plan will also address standards for street furniture, finishes, and street tree selection. The technical requirements of incorporating servicing and loading, a looped network of dedicated bicycle lanes and the conversion of one way streets have been studied and recommended through the Transportation Study as a key component of the Downtown Transportation and Streetscape Study.


TRAFFIC SIGNAL
TRANSIT STOP
STREET TREE - CONCEPTUAL LOCATION
SIGNALIZED PEDESTRIAN CROSSING
BUFFERED BIKE LANE
Sixteen Mile Creek
SUMNER AVE
DUNN ST
RANDALL ST
CHURCH ST
LAKESHORE RD EAST
ROBINSON ST
WATER ST
NAVY ST
THOMAS ST
GEORGE ST
DUNN ST
TRAFALGAR RD
REYNOLDS ST
ALLAN ST
Downtown Cultural Hub - Centennial Square Site
Downtown Cultural Hub - Post Office Site
Towne Square
0 5 10 20 50 100m
N

# 3.2/ Cross-Sections for Key Streets

## 3.2.1/ Lakeshore Road (24.4m right-of-way)

Lakeshore Road is downtown's high street and it is the primary mixed use connecting street for the whole of downtown. Its importance goes beyond its arterial function as a former provincial highway as it forms the heart of downtown's cultural and business district.

Lakeshore Road is in a poor state of repair and must be reconstructed to ensure continuity of traffic and retail operations. As the street and its boulevards will need to be entirely reconstructed, the opportunity exists to promote safer and more efficient vehicular, pedestrian and cyclist movement, as well as improved servicing and loading functions. This opportunity can also be used to create a more comfortable, animated, sustainable and attractive public realm. In addition to renewing surface materials, many below grade utilities are also in need of renewal.

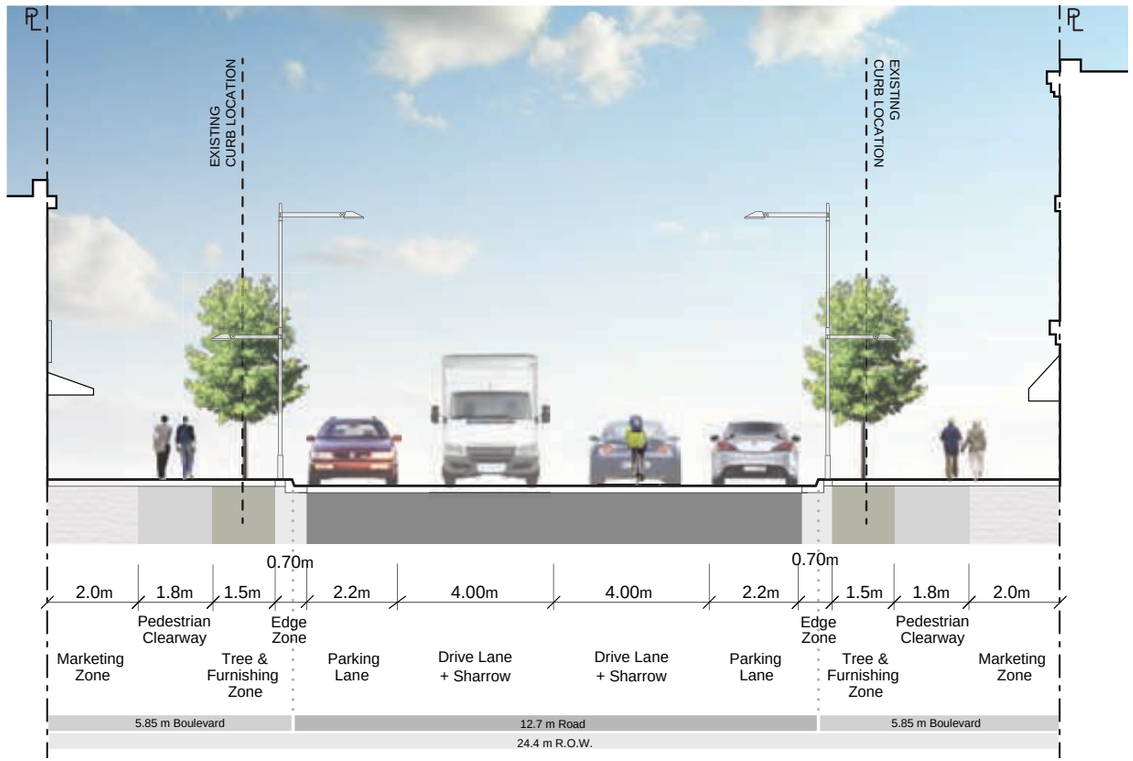
Three distinct renewal options for Lakeshore Road were developed and tested during the study. The first option retained the centre multi-purpose lane but renewed all surface materials. The second option eliminated the centre multi-purpose lane in favour of widening the boulevards and included a sharrows to accommodate cycling. The third option also eliminated the centre lane to accommodate a dedicated on-street bike lane (concept drawings can be found in Appendix 6.4).

The options were presented to internal and external stakeholders and the public to garner feedback with the aim of resolving upon a preferred alternative. Following this input phase, the study team conducted an extensive evaluation of the three concepts to determine a preferred option (refer to Appendix 6.5 for the complete evaluation).

The preferred option for Lakeshore Road, illustrated here, removes the centre lane and allocates more space to the boulevard, expanding their width by approximately 30 per cent. Wider boulevards allow for the creation of a 2.0m wide dedicated 'marketing zone' for the use of retailers.

During the latter stages of the public consultation process, the project team developed a hybrid version Option 2A (illustrated here) to include "in-line" bike sharrows within the cross section in order to address equity for all travel groups along Lakeshore Road. This revision required the need to provide a slightly wider traffic lane and this was accomplished by reducing the boulevard width from 6.0 m to 5.85m. While the Highway Traffic Act permits cyclists to share street lanes with traffic, the hybrid option provided an opportunity to formally recognize cyclists using Lakeshore Road in the downtown without striping a dedicated lane (which requires more space to be taken away from the boulevard area – see Option 3).

The 2.0m marketing zone is a key component of the preferred option and may be used for restaurant/café patios or as a place for shop owners to display their goods. Additionally, with renewal and enhancement of cultural hub facilities, revitalized street design will augment the experience of going to the theatre, visiting the art gallery, or attending cultural events. The marketing zone encourages restaurants and




retailers to use the street as part of a downtown experience.

The boulevard also accommodates a dedicated area for street trees and furnishings and a generous pedestrian clearway to meet accessibility requirements.

Maintaining on-street parking on Lakeshore Road is a primary goal as it plays a key role in supporting access to shops, businesses and cultural destinations in downtown. The BIA expressed a desire to retain as much on street parking as possible. The preferred option for Lakeshore Road retains 96 percent of existing on street parking (refer to Section 3.7 for parking counts).

Initially, this concept did not include sharrows in the drive lane but during the public input phase of work, the community expressed a desire that

cycling should be accommodated in some form on Lakeshore Road. Sharrows were added to the preferred option by widening the drive lanes to accommodate both modes of transportation. In addition to sharrows on Lakeshore Road, cyclists traveling east-west have the option of diverting to Church or Robinson streets, which both provide dedicated cycling facilities.

Vehicle left-turn lanes will be provided at current signalized intersections (Navy, Trafalgar, Allan) to minimize the effect of the removal of the centre lane. Additionally, lanes will widen at non-signalized intersections as the on-street parking lane ends before reaching the intersection. This will allow through-vehicles to informally by-pass a queued left-turning vehicle. Parallel on-street parking is retained on both sides of the street.

Where applicable, bump-outs can be provided at intersections to create additional space for street furnishings and bike racks. The bump outs also decrease the crossing distances for pedestrians.

Transit stops are accommodated and remain in their current location (see Streetscape Master Plan drawing Appendix 6.1). Transit vehicles will generally stop in the live lane of traffic at a bump-out on Lakeshore Road.

With the removal of the centre lane, commercial loading zones (CLZs) will be located on side streets and in limited locations on Lakeshore Road (see Section 3.8).

Lakeshore should be constructed using a palette of high quality materials including granite curbs, granite unit pavers and concrete parking stalls .

*Lakeshore Road is designed to foster economic prosperity and encourage all modes of transportation, including as walking, cycling and transit*

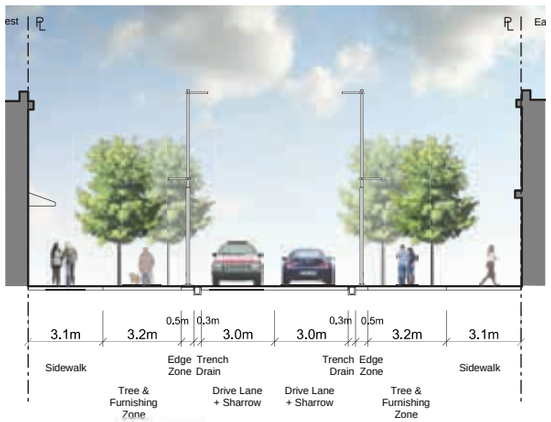
# 3.2.2/ George Street (20.1m right-of-way)

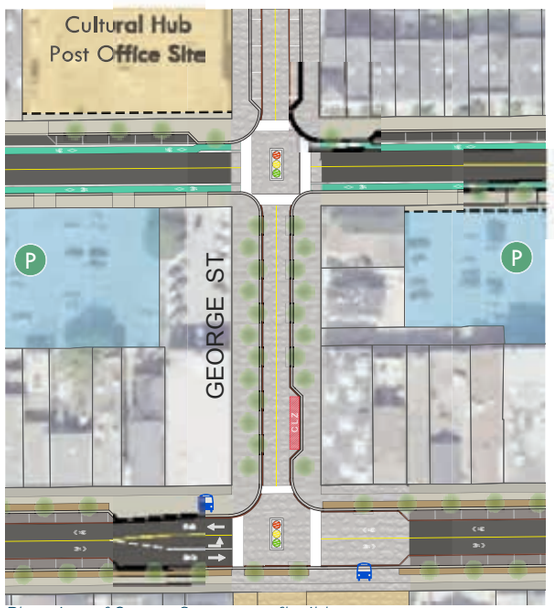
George Street is envisioned to transform into a high quality flexible street to draw pedestrians and activity between Towne Square and Lakeshore Road towards Church Street, and the former Canada Post site, which is a key cultural hub destination. The street is a natural extension of Towne Square and, when closed during events, it will act as vital public open space for a variety of events including markets, festivals and concerts.

Between Church and Lakeshore, a double row of street trees and extra wide boulevard strengthens the public realm connection between Towne Square and the Post Office site. North of Church Street, on street parking lines both sides of the street.

To signify George Street's importance in the downtown, the highest quality fixtures and finishes should be used, including:

- unit pavers in both the roadway and boulevard
- a trench drain system for stormwater
- bollards and tree pits used as the separators between roadway and boulevard
- power and water hookups for events
- pedestrian and road lighting
- site furnishings including benches, waste receptacles and bike rings




*Plan view of George Street as a flexible street*

*George Street, when not hosting an event, functions as a day-to-day street*

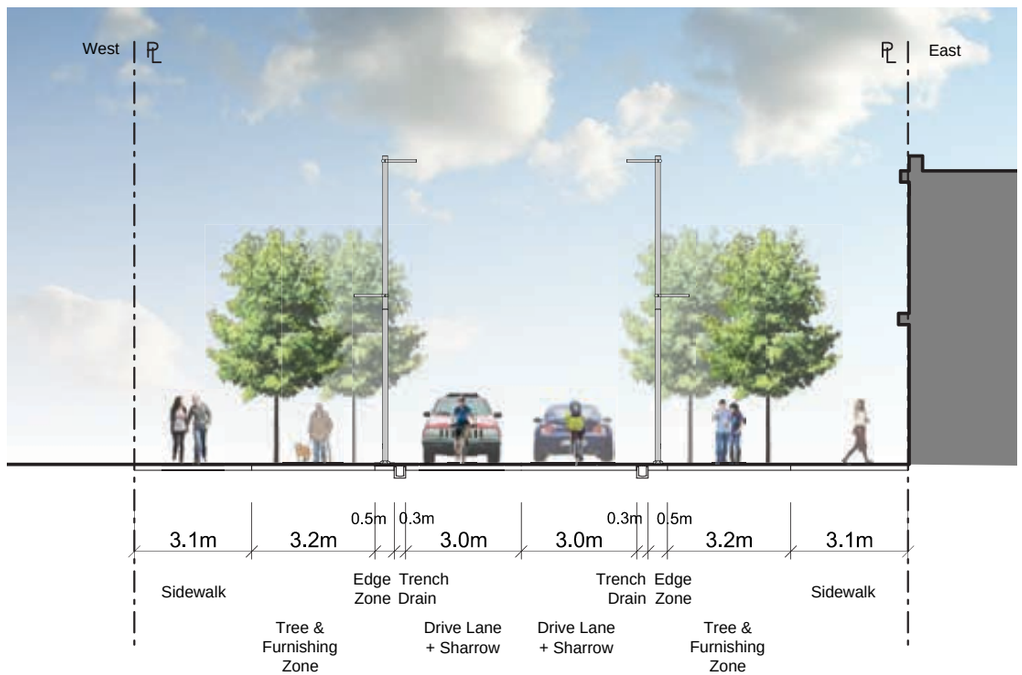
*Events held on George Street will seamlessly accommodate a mix of vendors, activities and many pedestrians*

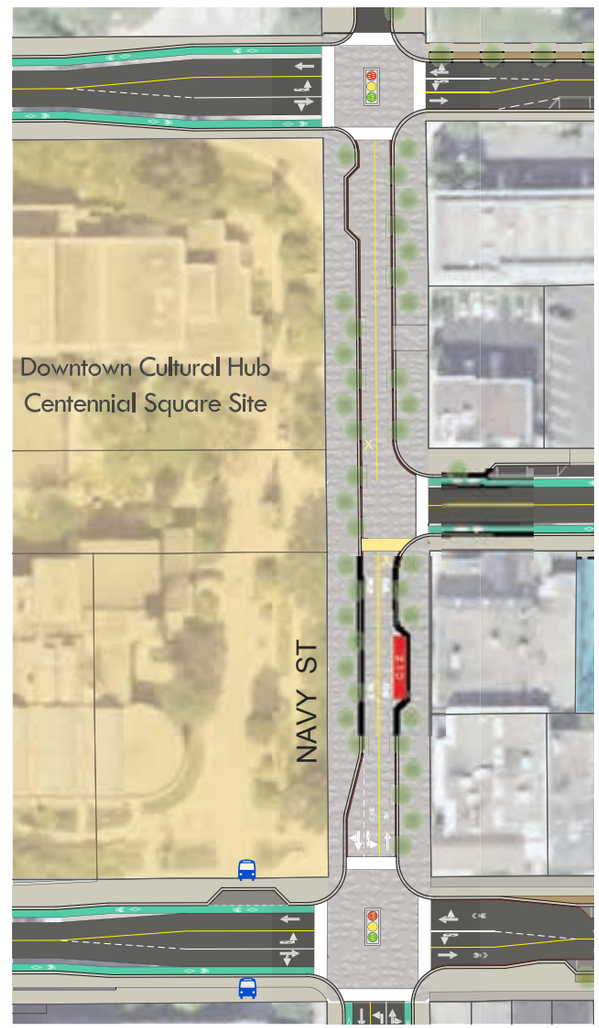
# 3.2.3/ Navy Street (20.1m right-of-way)

With the redevelopment of the Centennial Square site, Navy Street will transform into a prominent street in the downtown. The redevelopment scenarios under consideration by the Downtown Cultural Hub Study incorporate a public open space fronting Navy and envision the street as an extension of Centennial Square. Navy Street is designed to be a physical extension of the Centennial Square site both on a day-to-day basis and during special events.

Parking is eliminated in favour of wide boulevards with potential for a double, staggered row of street trees. This allows for events and programming to occur on the street without having to close it down. When the street is closed for an event, however, it should be experienced as a natural extension of the adjacent square. It should be paved in a similar material and include similar fixtures and finishes to read as one place.

As recommended in the Transportation Study, a signalized pedestrian crossing on Navy Street at Church Street creates a safe pedestrian crossing that links the Centennial Square site to downtown.




*Plan view of Navy Street as a flexible street*

# 3.2.4/ Church Street (20.1m right-of-way)

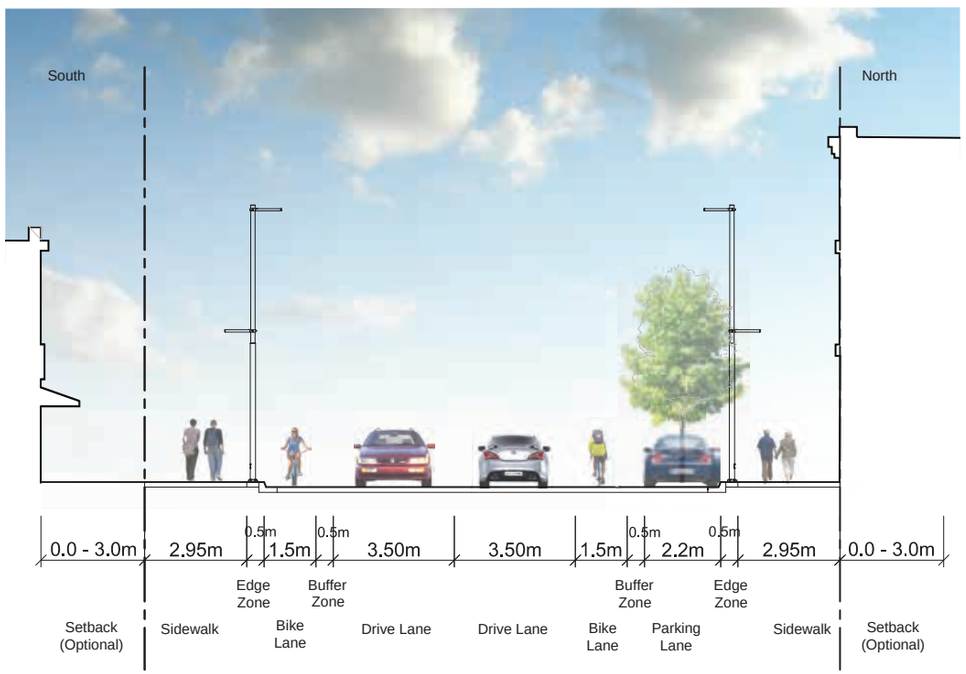
With redevelopment of the Centennial Square and the former Canada Post site, conversion to a two-way street, and with the addition of a dedicated bike lane, Church Street will gain new prominence as an important avenue in the downtown. To recognize its evolving role, the street will incorporate wider boulevards, improved growing conditions for street trees, rationalized on-street parking and a buffered bike lane to support intensification.

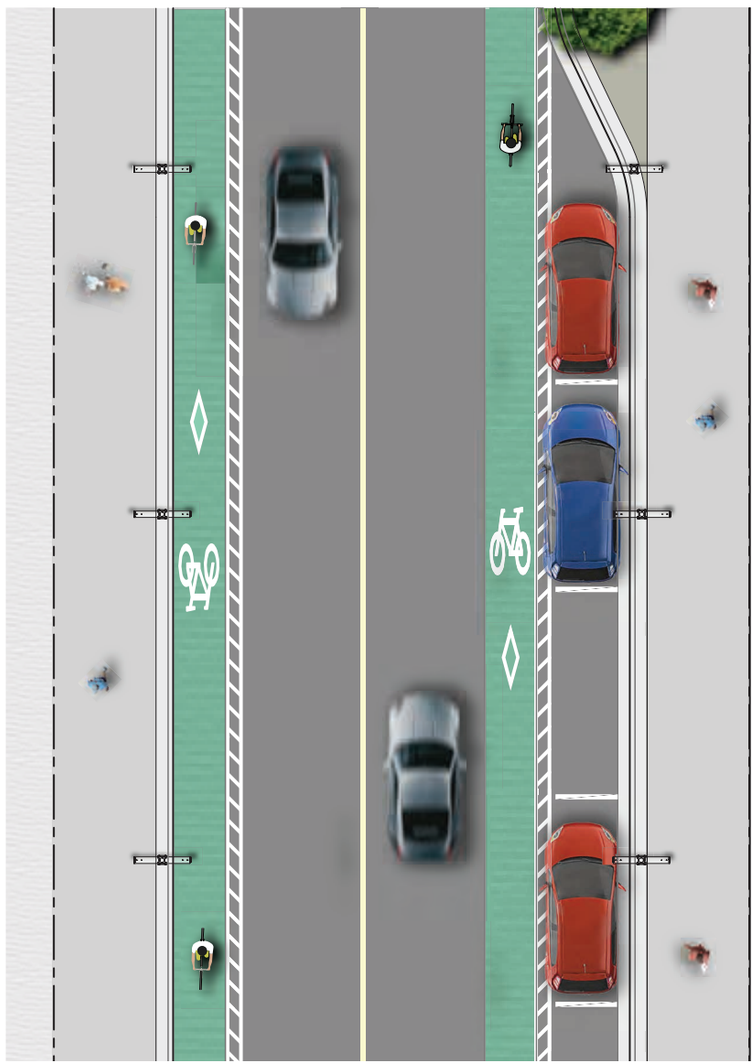
The buffered bike lane on Church, running the full length of downtown from Navy to Allan, will position the street as an important multi-modal corridor that links key institutional, commercial and residential nodes in downtown. The bike facility does require the that one side of on-street parking be eliminated but because of the abundance of surface parking lots and the parking structure on Church, this is an acceptable compromise.

As Church Street aligns to the centre of the Centennial Square site, there is an opportunity both from the DCH and DTS projects to create an iconic visual terminus looking west down the street.

Where ever possible, and because Church Street is relatively narrow at 20.1m, setbacks should be incorporated with development to allow for a wider boulevard and street trees.

Church Street is also an important transit corridor and the existing hub at Dunn has been retaining with the inclusion bus lay-bys.



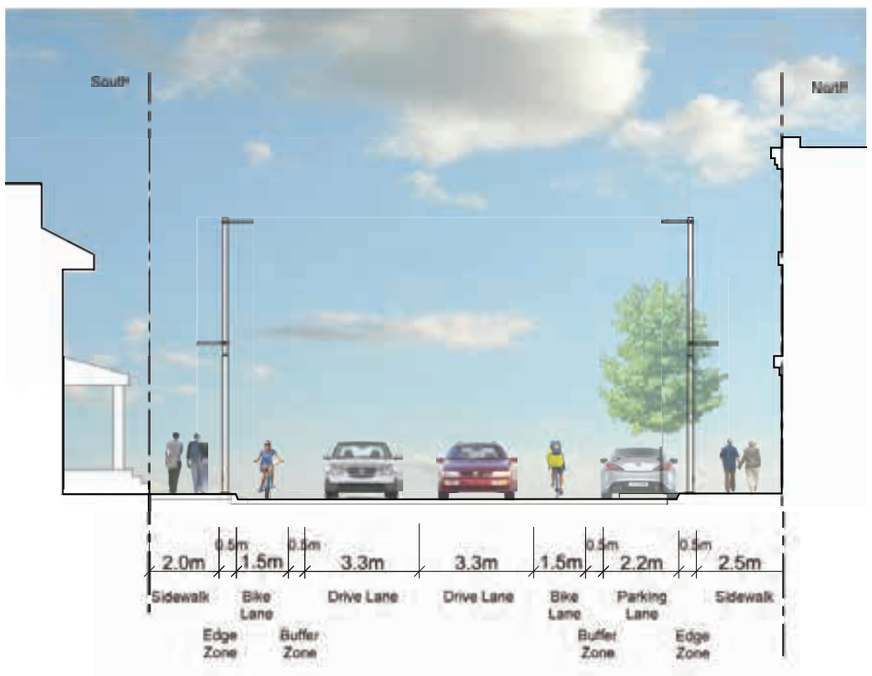



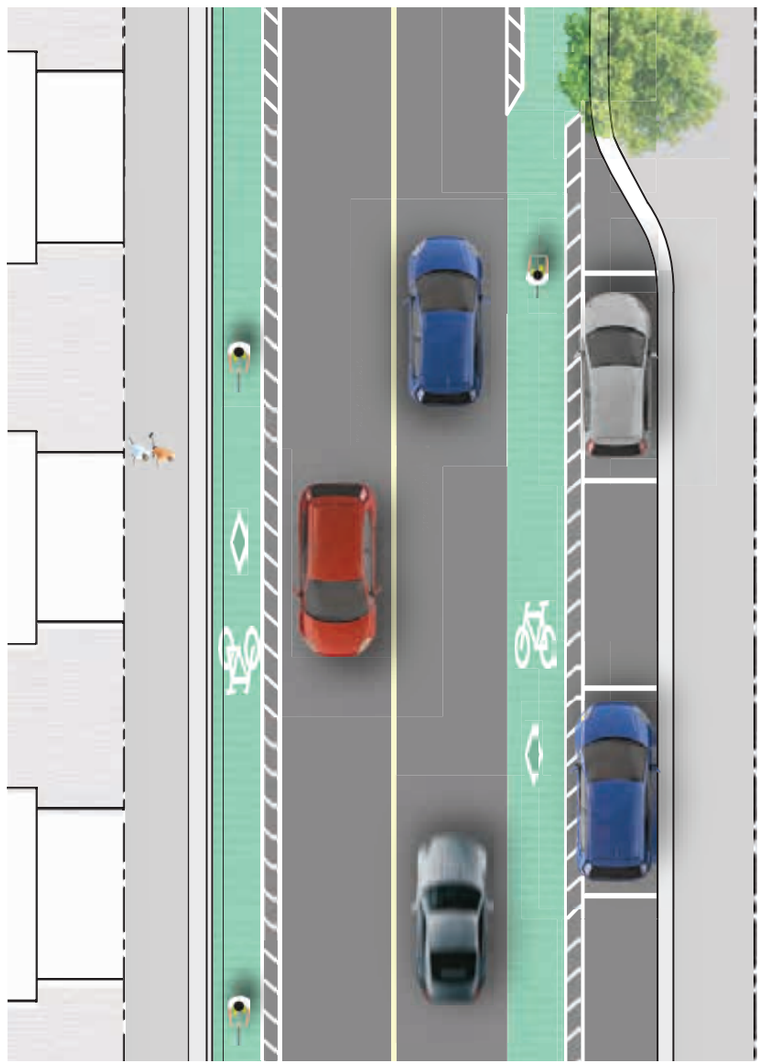
# 3.2.5/ Robinson Street (18.3m right-of-way)

Robinson Street has a quieter, more residential character than other streets in the downtown. Traffic tends to move slower and it acts as less of a through-way than other east-west streets. Predominantly single family residential on the south side of the street and mixed commercial and multi-unit residential on the north side, it acts simultaneously as both a local street and a retail street. At 18.3m in width, it is also relatively narrow when compared to other streets in the downtown.

Robinson Street's existing residential character creates a comfortable street for pedestrians and cyclists as traffic generally moves slowly. To support this existing function and to provide a series of high quality east-west cycling options, Robinson Street will include a buffered bike lane on each side of the street as a part of a larger, continous downtown cycling network (see Section 3.9). To accommodate the dedicated bike facility, on-street parking on the south side of the street is removed.

In addition to bike lanes, Robinson Street will also have wider sidewalks, street trees in bump-outs and narrower drive lanes.

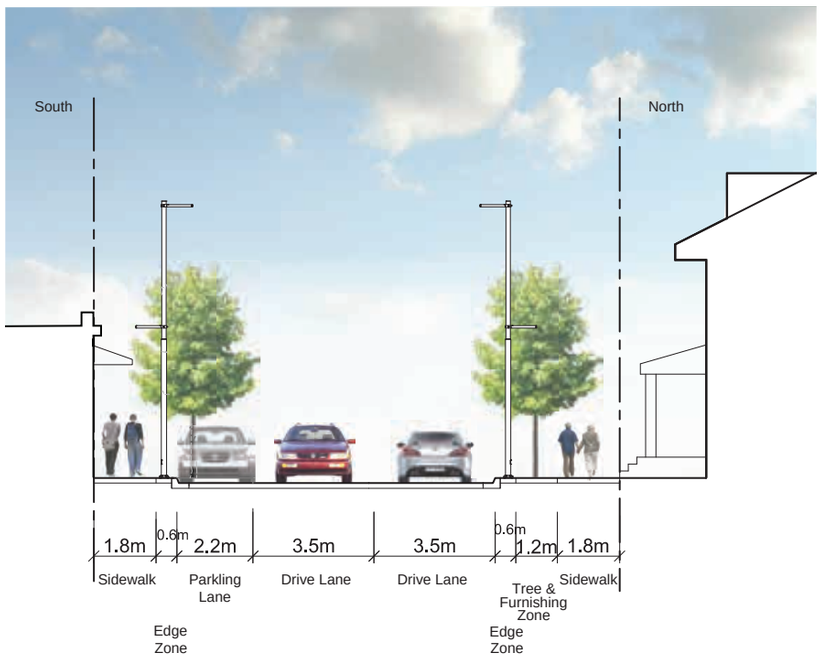


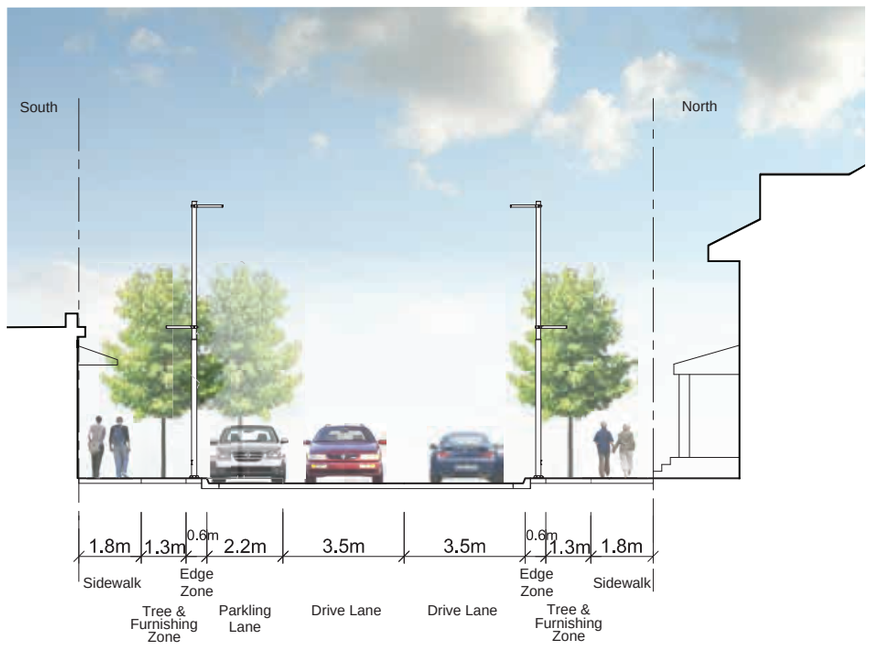



# 3.2.6/ Randall Street (varies: 15.2m & 16.6m right-of-way)

With the current one-way system in place in the downtown, Randall Street is a vehicle oriented street. Conversion to a two-way street network will drastically alter the character of Randall Street. The width of the roadway will narrow, slowing vehicles and creating a safer and more comfortable pedestrian environment. This change may encourage more commercial and residential development over time.

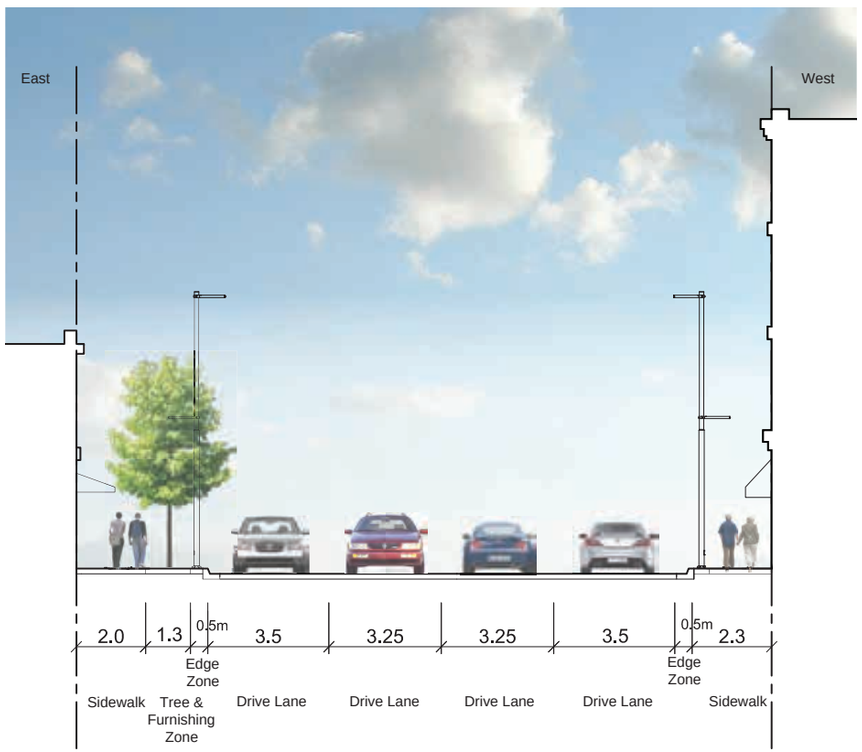
To support this evolution, Randall Street will incorporate narrower lanes, wider boulevards, improved street tree zones, and renewed materials.

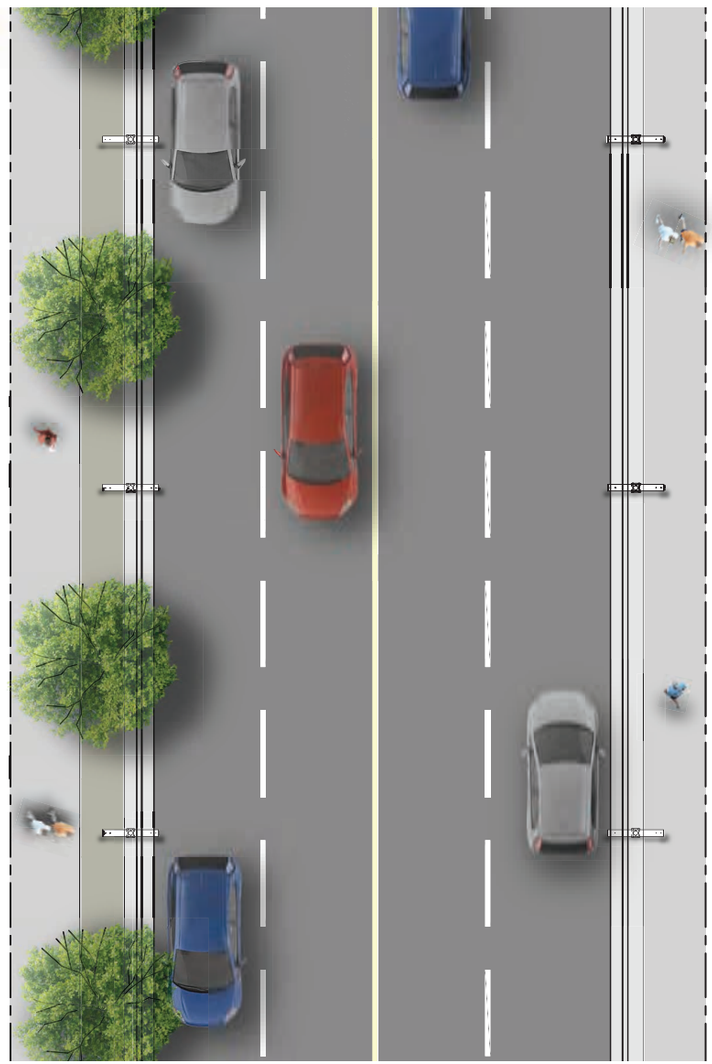


# 3.2.7/ Trafalgar Road (20.1m right-of-way)

Trafalgar Road acts as a major arterial road in and out of the downtown, predominantly from the north. It will continue to serve this role in the downtown, and remains a four lane street north of Lakeshore Road to facilitate turning movements onto east-west streets. South of Lakeshore Road, where the traffic volume is reduced, the street is narrowed to two lanes with turning lanes in order to widen boulevards and provide on-street parking.



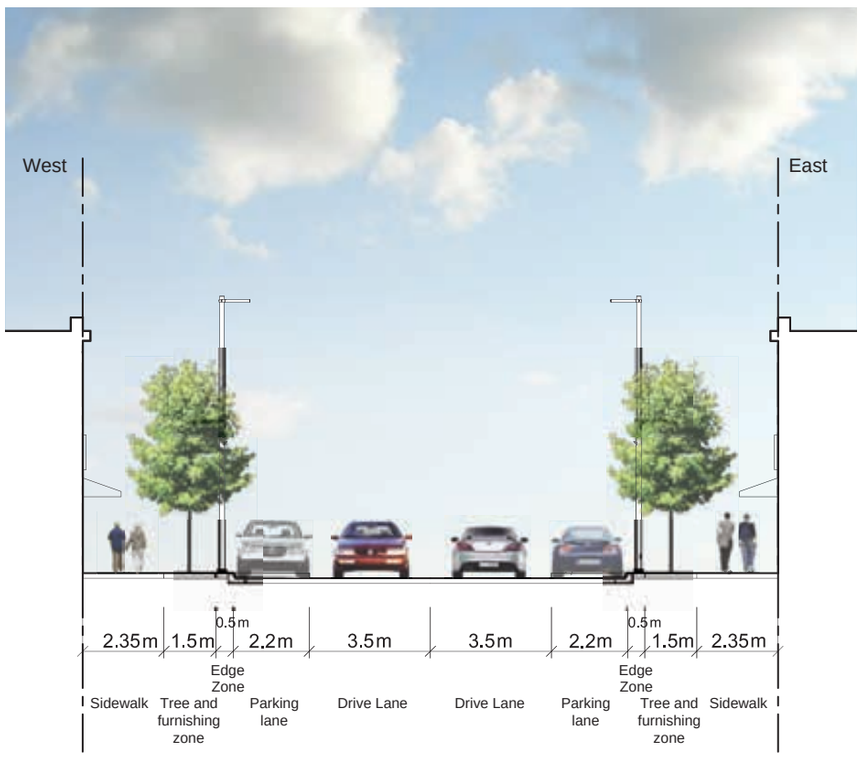
# 3.2.8/ Thomas, Dunn and Reynolds Streets (20.1m right-of-way)

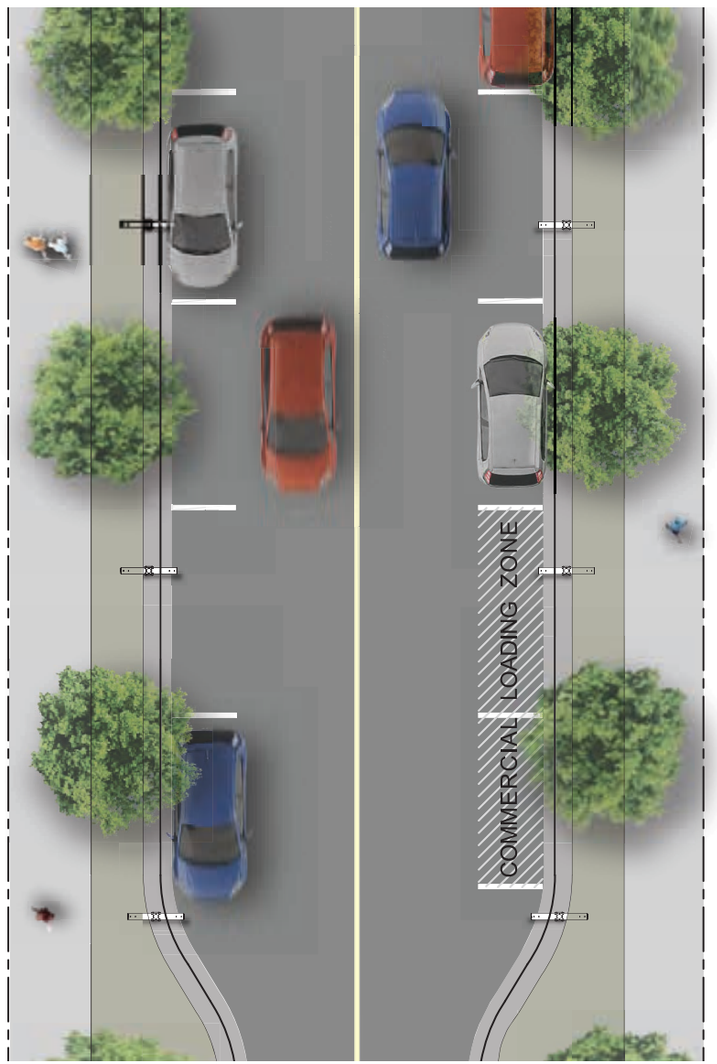
The ‘up/down’ streets, as they are colloquially known, serve an important function in the downtown. With the evolving role of Church Street and conversion to a two-way street network, these streets will become important connectors for pedestrians, cyclists and vehicles. They will also continue to support a healthy mix of street-oriented retail.

The current two lane and on-street parking configuration of these streets is ideal as it provides convenient parking for ‘up/down’ shops as well as for shops on Lakeshore Road. With the provision of dedicated bike lanes on both Church and Robinson Streets, these streets must also serve an increasing number of cyclists.

To support their evolving role in the downtown, lanes widths are narrowed slightly and that space is given over to the boulevard for wider sidewalks and larger street tree zones.

Several Commercial Loading Zones have been located on the ‘up/down’ streets providing a convenient location to serve Lakeshore Road and these streets themselves.



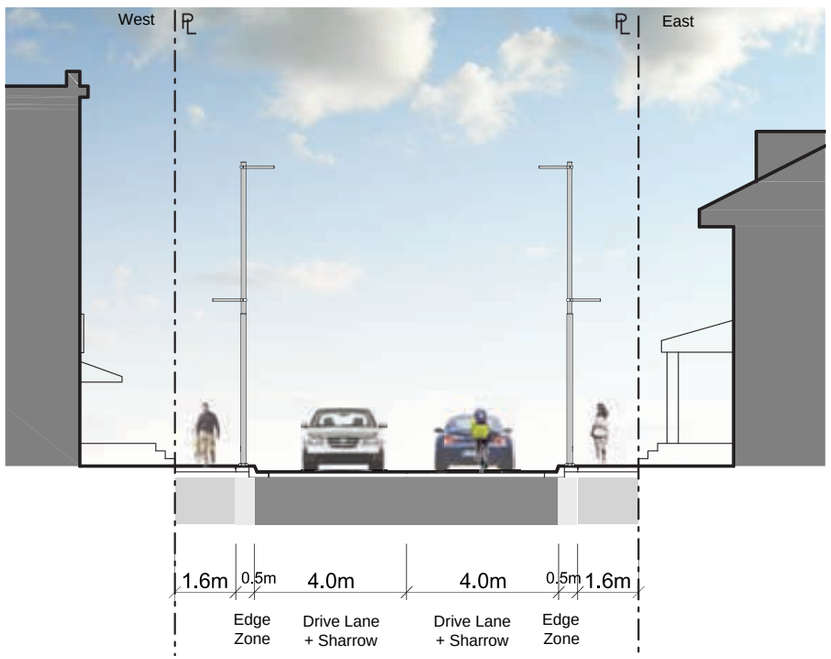



## 3.2.9/ Allan Street (12.2m right-of-way)

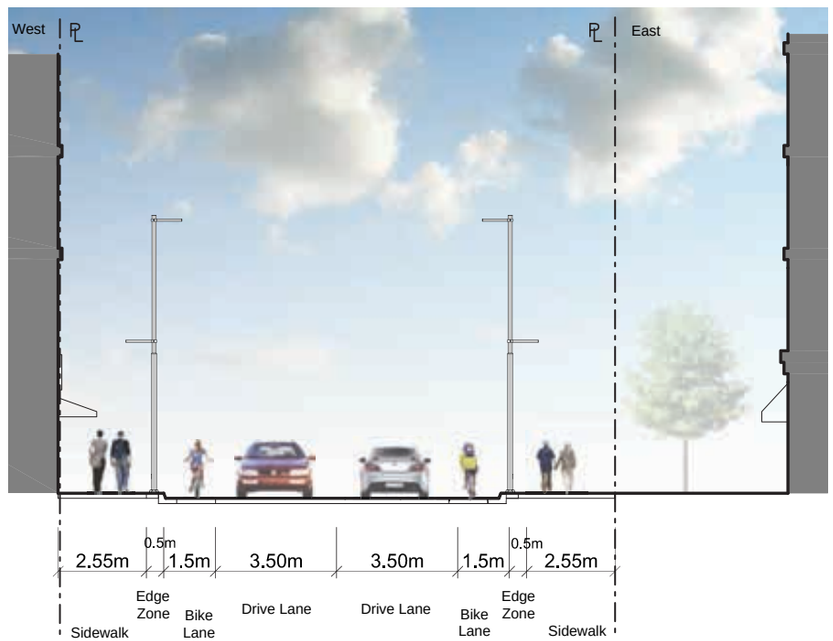
Allan Street is very narrow and limited in how it can change. Its primary function will be to provide the western cycling link up to Church Street and down to Robinson Street.

North of Lakeshore Road, a 1.5m cycling lane can be accommodated if additional right-of-way is acquired from the eastern properties. South of Lakeshore Road, there is not enough room for a dedicated bike lane so the road must be shared between cyclists and vehicles.

In addition to the cycling facilities, lanes are narrowed and boulevards are widened. Allan Street is generally too narrow for a continuous row of street trees so they are accommodated at select bump-outs only.




*Allan Street narrows to 12.6m R.O.W. south of Lakeshore Road so incorporates a sharrow to link cyclists down to bike lanes on Robinson Street*




*Allan Street is wider north of Lakeshore Road at 16.1m R.O.W. so incorporates a 1.5m bike lane to link cyclists up to bike lanes on Church Street*

## 3.2.10/ Water Street

The role of Water Street in downtown changes as a direct result of the DCH's vision for a public realm connection from the Centennial Square site to Sixteen Mile Creek. To accommodate this connection, Water Street is bisected, terminating in a cul-de-sac under the Lakeshore Road and Rebecca Street bridges. This allows for a park like connection between Sixteen Mile Creek and the slope adjacent to the Centennial Square site. Vehicular service access to the removed portion of Water Street should be provided.

# 3.3/ Flexible Streets

## Flexible streets intentionally blur the boundary between road and boulevard space

Curbless streets prioritize pedestrian and cyclist movement by removing the grade-separation between the sidewalk and the roadway to create a shared space for all modes of transportation. This technique, along with traffic calming measures, results in reduced traffic speeds and a more lively and pedestrian-oriented environment. These streets are often finished with pavers, which further helps to reinforce the character of main streets, and signal pedestrian priority.

Curbless streets also facilitate ease of closure and access for town events and festivals. Navy Street will gain importance as a gathering place in the downtown as the Cultural Hub site redevelops. It should act as a seamless extension to the Centennial Square envisioned by the Downtown Cultural Hub Study.

George Street, as the northern extension of Towne Square, is appropriate for a flexible street. The street will allow for events centred in the square, such as the Jazz Festival, to easily extend up the street. Extending the materials used in the square through the street will signal the importance of this corridor by treating the two components as one larger public space.

*Carden Street in Guelph*

*Rue St. Catherine in Montreal*

*King Street in Kitchener/Waterloo*

*A visualization of George Street as a flexible street during a normal day when it is open to vehicles*

*When George Street is closed to vehicles, the curbless configuration comfortably hosts festivals and events*

# 3.4/ Materials

## A palette of high-quality materials for downtown streets will redefine the public realm

High-quality materials are both aesthetically pleasing and cost effective over the long term. They will be more robust, better withstand the impacts of decades of heavy urban use, will require less maintenance and will last longer before requiring replacement. Furthermore, materials like granite curbs and granite unit pavers can be removed and replaced an infinite number of times, if access to below grade utilities is required, unlike concrete which must be removed and replaced, often leaving scars and mismatched textures/colours.

The following materials are recommended to be used in downtown Oakville:

For Lakeshore Road, George Street and Navy Street:

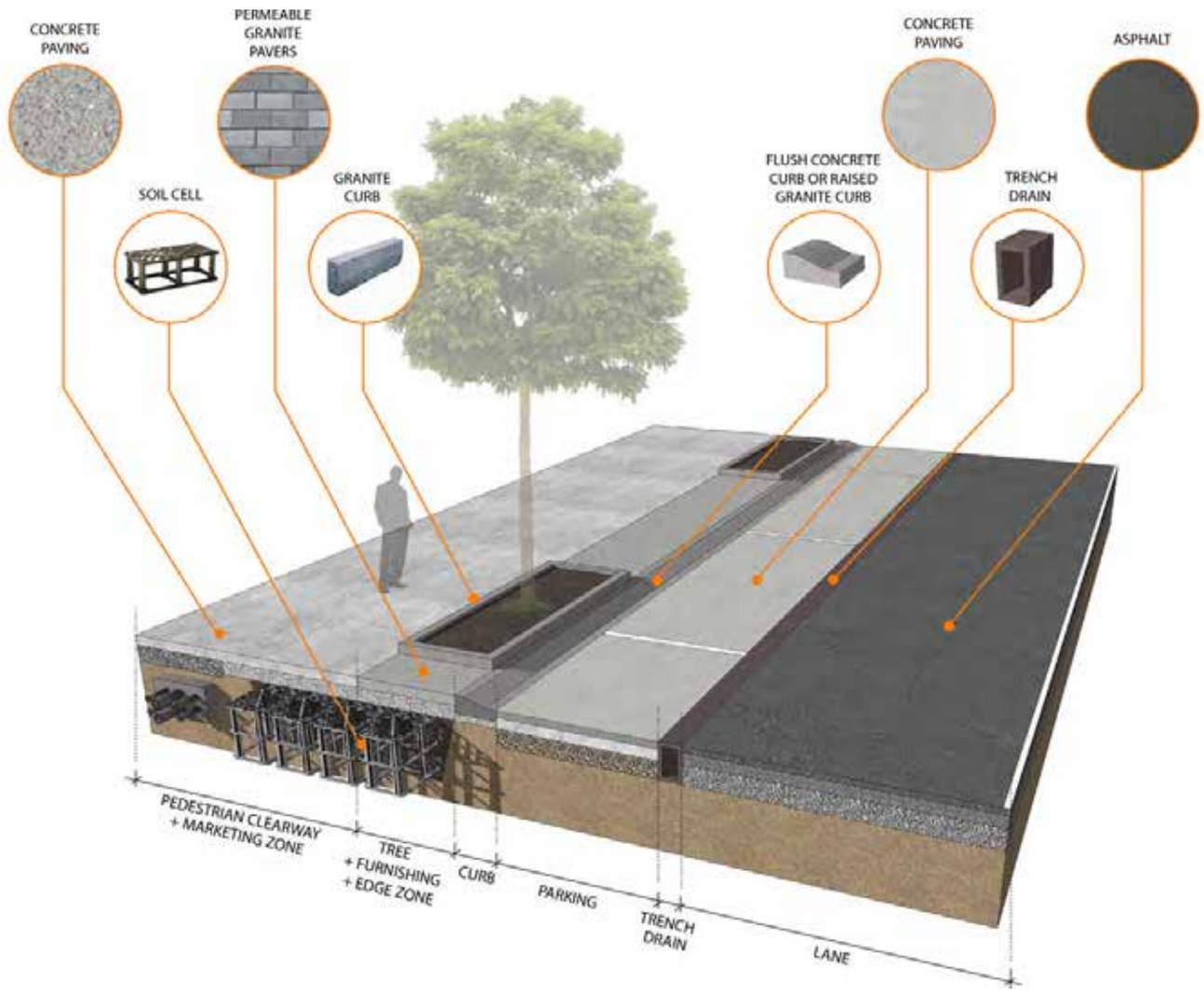
- granite unit pavers (permeable and non-permeable)
- granite curbs (traditional or low-profile)
- raised granite curbs for tree pits
- cast iron trench drains
- cast iron detectable warning plates
- concrete pedestrian clearway & marketing zone
- concrete parking lane (Lakeshore)
- asphalt roadway (Lakeshore)

For all other streets in the downtown:

- granite unit pavers (permeable and non-permeable)
- concrete gutter curbs
- raised granite curbs for tree pits
- cast iron detectable warning plates
- concrete pedestrian clearway & marketing zone
- asphalt roadway & parking lane

**ACTION ITEMS:**

- select materials for Lakeshore Road detailed design
- establish a furnishings and finishes manual for downtown, based on Lakeshore Road detailed design decisions
- apply the selected products throughout the downtown on future reconstruction projects
- establish a monitoring and state of good repair maintenance regime specifically for materials in the downtown



# 3.5/ Site Furnishings

## A contemporary suite of site furnishings throughout the downtown will define the public realm as uniquely Oakville

A consistent suite of site furnishings throughout the downtown will help create a unified and recognizable public realm, and reinforce the identity of the downtown. A simple, contemporary palette will provide balance to the nearby heritage districts, where traditional elements speak to the cultural and built heritage of this area. Furnishings will promote vibrancy and activity by providing amenities for pedestrians, cyclists, and those who live, shop, dine or work in the downtown.

Site furnishings include benches, lighting, bollards, bicycle infrastructure and litter receptacles. Each element should be made of durable and natural materials that are long-lasting, and easily maintained.

Furnishings should be located to guide movement through the downtown without cluttering streets and sidewalks. Though a consistent palette is recommended, variety in how it is deployed will create interest on the street and respond to site conditions.

**ACTION ITEMS:**

- select a product for each type of site furnishing during Lakeshore Road detailed design
- establish a furnishings and finishes manual for downtown, based on Lakeshore Road detailed design decisions
- establish a monitoring and state of good repair maintenance regime specifically for site furnishings in the downtown

*Contemporary site furnishings offer an interesting counterpoint to heritage districts*

*Contemporary light standards and bold architectural lighting harmonize a the night scene in Cannes, France*

## Bench

*Santa & Cole 'Neoromantico'*

*landscapeforms 'MultipliCITY'*

*landscapeforms 'Rest'*

## Light

*Technilum 'Semillon'*

*Santa & Cole 'Rama'*

## Bollard

*mmcite 'Isac'*

*Maglin 'SCTB1600-AL'*

*Iguana Creative 'Slim'*

## Bike

*Forms + Surfaces 'Apex'*

*Forms + Surfaces 'Capitol'*

*Forms + Surfaces 'Summit'*

## Litter

*Forms + Surfaces 'Apex'*

*landscapeforms 'Select'*

*Big Belly*

# 3.6/ Street Trees & Stormwater

## Trees in our urban environment represent an important investment in community health, environmental condition and overall quality of life

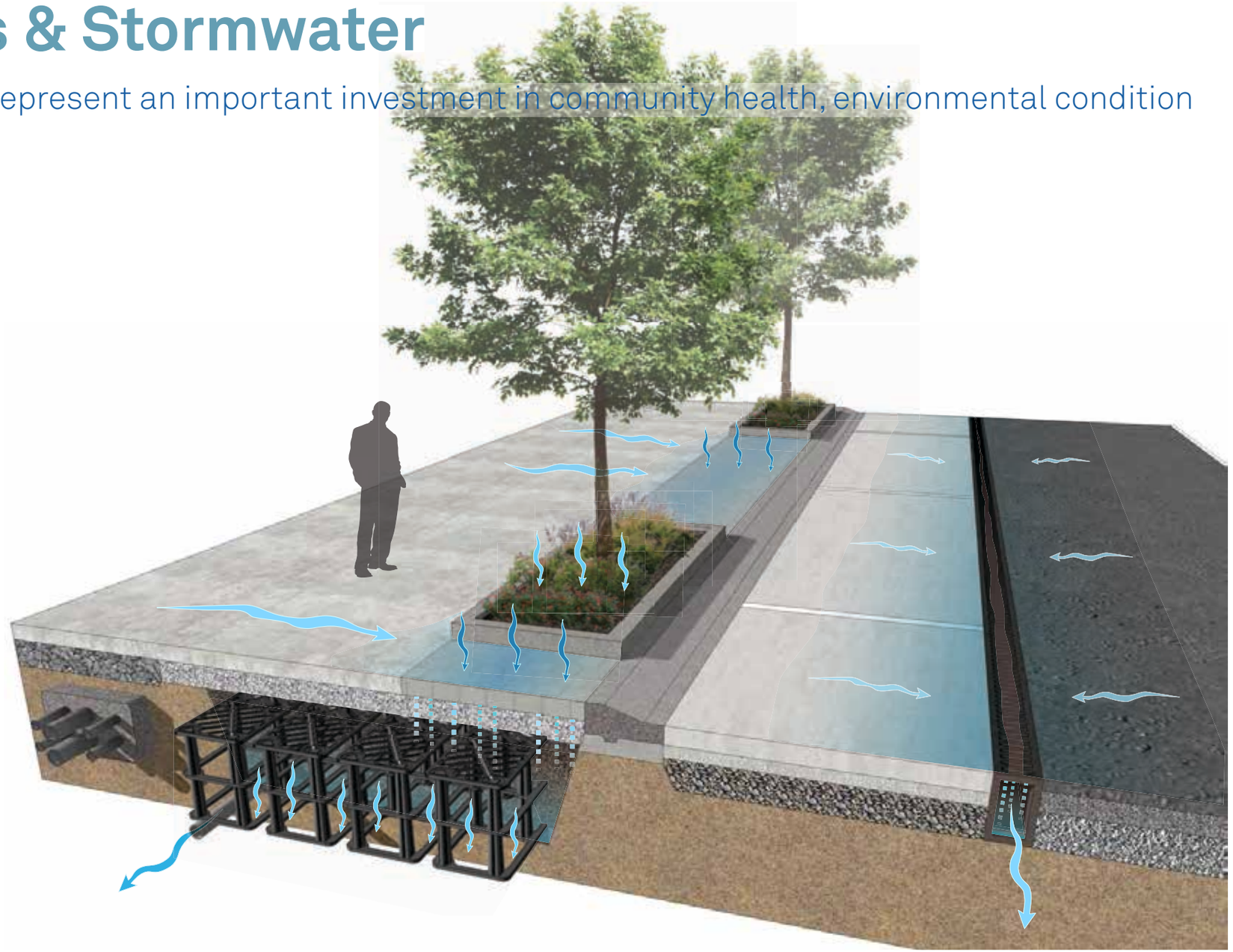
When renewing downtown Oakville's streets, street tree pits should be constructed in accordance with best practices to ensure health and longevity. All tree pits in the study area should utilize:

### Soil Cells

Soil cells promote mature and healthy street tree growth by providing a space for soil that is protected from compaction. The space can be underneath any pavement structure in the right-of-way including sidewalks, curbs and parking lanes. If detailed correctly, tree canopies will grow taller and more full. This technology can also accommodate underground utilities, making it ideal for enhanced streetscapes in constrained corridors.

Per tree soil volume targets is established in the Urban Forest Strategic Management Plan (2008). These standards may require additional review to inform the detailed design of tree pits. The North Oakville Urban Forest Strategic Management Plan (2011), for example, targets a minimum volume of 30$m^3$ of high quality soil per tree if in a single planter or 15$m^3$ per tree if in a shared planter.

Soil cells are more expensive to install than traditional tree pits but offer numerous advantages as a healthy urban forest improves air quality, reduces wet-weather flows, moderates climate, stores and sequesters carbon, and can increase property values.



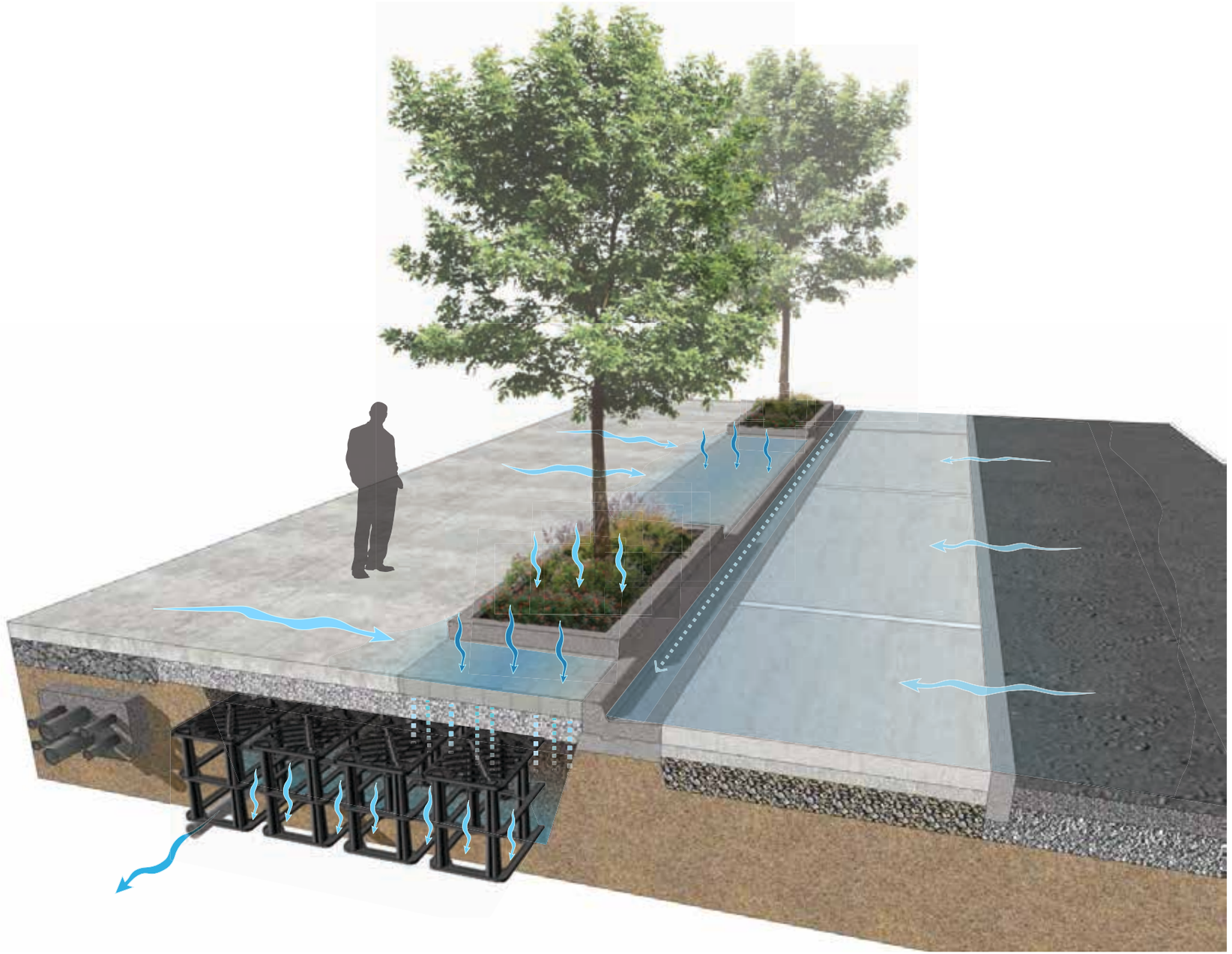
*A flexible (or curbless) street with tree pits utilizing soil cells, open planters and stormwater to provide passive irrigation.*

In addition to soil cells below grade, tree pits should be open at grade (i.e. - no tree grates) to provide the best possible growing conditions for trees. These open pits should be raised, as shown, and can be mulched or planted.

### Stormwater

Using stormwater to passively irrigate street trees is a sound use of a readily available resource. Stormwater should be directed into tree pits in lieu of a mechanical irrigation system. Stormwater that enters tree pits can then infiltrate into surrounding soil. A weeper system should be integrated into the tree pit to intercept water during larger rain events and to prevent water from ponding in the pit.

Water can enter the tree pits via an area drain system, a rill drain system or via permeable pavement in the street tree and furnishing zone. Additionally, water will enter the system through the open tree pit areas. Monitoring wells should be installed periodically to allow for performance monitoring.



*A traditional curb & gutter street with tree pits utilizing soil cells, open planters and stormwater to provide passive irrigation.*

# 3.7/ Parking

## On-street parallel parking is important in a mixed-use, pedestrian-oriented downtown

On-street parking supports local commercial activity, and promotes more efficient use of land by reducing the need for off-street parking. It also increases safety by reducing vehicle speeds through 'side-friction,' which is important in an environment where there are higher numbers of pedestrians and cyclists.

Throughout this study process, the local BIA has been clear that a significant reduction in on-street parking is not desirable. During public meetings, opinions were mixed on the need for parking in the downtown but most community members supported the retention of on-street parking on key retail streets. In response to this feedback, the design for downtown streets sought to minimize the loss of on-street parking.

The table here illustrates the total existing and proposed number of parking stalls. The proposed stalls are taken from the master plan drawing (Appendix 6.1), which illustrates the full build-out scenario and six metre stalls. During detailed design, the on-street parking layout should be revisited to tailor it to the current context.

On Lakeshore Road, between Navy and Allan streets, there are currently 120 parking stalls. For the proposed Lakeshore Road design, the total number of stalls is reduced by four per cent to 116 stalls.

In order to accommodate dedicated cycling facilities, both Church and Robinson streets lose one side of on-street parking.

The table on this page shows the parking changes, existing vs. proposed.

| STREET | EXISTING NUMBER OF PARKING STALLS * | PROPOSED NUMBER OF PARKING STALLS * |
|---|---|---|
| Lakeshore Road East | 120 | 116 |
| George Street | 26 | 20 |
| Navy Street | 8 | 2 |
| Church Street | 64 | 51 |
| Robinson Street | 71 | 57 |
| Randall Street | 39 | 40 |
| Trafalgar Road | 6 | 7 |
| Thomas Street | 36 | 35 |
| Dunn Street | 34 | 33 |
| Reynolds Street | 10 | 14 |
| Allan Street | 0 | 0 |
| **TOTAL** | **414** | **375** |

* Commercial Loading Zones have been included in the parking counts.

# 3.8/ Commercial Loading Zones

## No business on the Lakeshore Road retail corridor will be further than one half block away from a designated Commercial Loading Zone

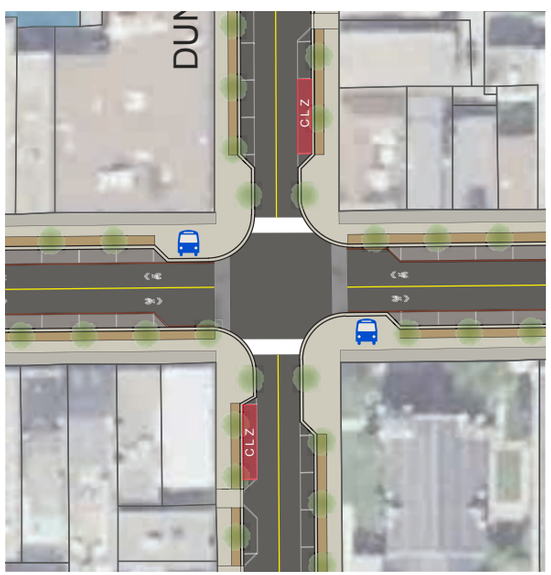
The Transportation Study has concluded that the current practice of delivery vehicles using the centre lane is unsafe and should be discontinued. The town has tolerated this practice for many years but with renewal of the streetscape comes opportunity to implement a new approach to deliveries in the downtown. Most cities in Southern Ontario with a similar main street retail condition operate efficiently and effectively using a system of commercial loading zones (CLZs). This system is particularly well suited to downtown Oakville as blocks are small, providing the opportunity for CLZs at each up/down street (and two on Lakeshore Road). This will ensure the majority of businesses on Lakeshore Road will be within a block of one or more zones. CLZs will be reserved for the exclusive use of delivery vehicles for a portion of the day (from 7am to 3pm, for example) and then revert back to parking spots during evenings and weekends. CLZs typically occupy two on-street parking stalls. Conversion to a two-way street network will further aid in the transition to a CLZ system as delivery vehicles are able to drive directly to a desired spot.

To service Lakeshore Road and adjacent businesses, approximately 16 parking spots on up/down streets and two spots on Lakeshore Road will convert to CLZs to provide adequate coverage for the Lakeshore retail corridor.

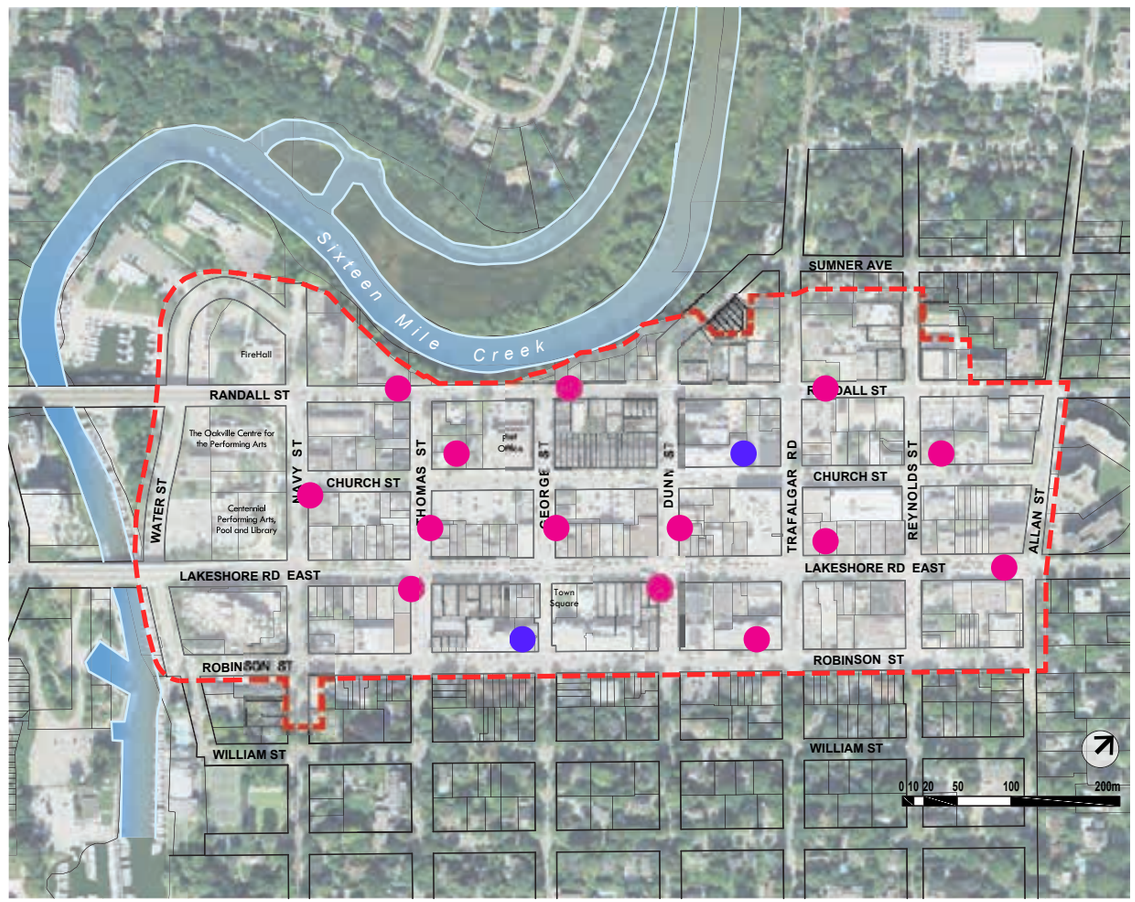
To service other areas in the downtown, a series of additional CLZs have been located around the study area. The number of loading zones can and should be adjusted on an on-going basis to best suit changing business needs in the downtown.

**ACTION ITEMS:**

- transition downtown to a Commercial Loading Zone system to accommodate delivery and loading
- develop supporting by-laws
- develop a public awareness campaign to ease transition
- work closely with the BIA to inform their members of forthcoming change




*Two Commercial Loading Zones on Dunn Street at Lakeshore Road. The CLZs take up two parking stalls but revert back to parking during evenings and weekends.*




*LEGEND*

- *Proposed CLZ*
- *Existing CLZ*

# 3.9/ Cycling

## Dedicated bicycle infrastructure that is well-marked provides safety and predictability for all users of the road

Dedicated bicycle infrastructure that is well-marked provides safety and predictability for all road users. A series of dedicated and shared bike facilities are recommended for downtown Oakville to provide options for active transportation users.

Buffered bike lanes on Church Street and Robinson Street, connected to Lakeshore via Navy Street and Allan Street, will provide two high-quality east-west cycling route options through the downtown. Buffered bike lanes reduce the risk of 'dooring' as they provide a dedicated buffer between cyclists and parked cars. These lanes should be marked with brightly coloured paint, signage, and be buffered from the live lane of traffic or parking with a painted buffer. Flexible bollards can be installed in the buffer to provide physical separation where it is adjacent to traffic.

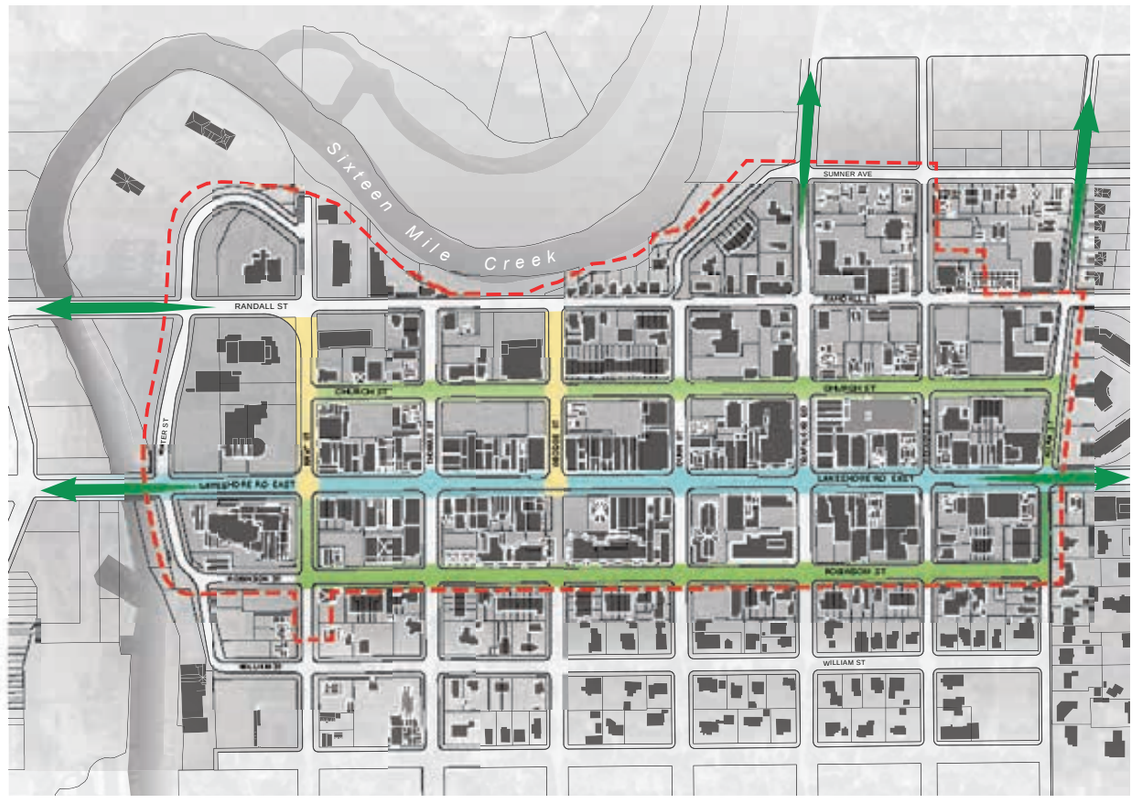
Sharrows on Lakeshore Road will provide convenient access to shops and restaurants as a direct route through downtown.

In addition to bike lanes, bicycle parking should be considered in all areas of the downtown. Bike rings should be installed on all streets in the tree and furnishing zone. Large bike corrals should be installed in summertime in on-street parking spots on Lakeshore Road. One corral per block would be ideal. Approximately 12-16 bicycles can fit in one parking spot, depending on the corral design.

As a first phase, Robinson Street can accommodate a bike lane, two travel lanes and on-street parking inside of existing curblines. This change should be implemented immediately to provide a dedicated east-west cycling route across downtown. Efforts should be made to connect the Robinson cycling facility on both ends to provide active transportation continuity. Refer to the Transportation Study for additional detail.

**ACTION ITEMS:**

- implement bike lanes on Robinson Street within existing curblines immediately
- create sharrows on Lakeshore Road
- create buffered bike lanes on Church and Robinson streets, and north-south connections on Navy and Allan streets
- connect downtown bike facilities to broader town and regional active transportation networks to encourage cyclists
- update Active Transportation Master Plan to reflect findings of this study




*Dedicated buffered bike lanes on Church & Robinson Streets and sharrows on Lakeshore Road provide options for cyclists in the downtown. The ATMP will like downtown's cycling network to the broader town network via Randall, Lakeshore, Trafalgar and Allan, as shown.*

# 3.10/ Intersections

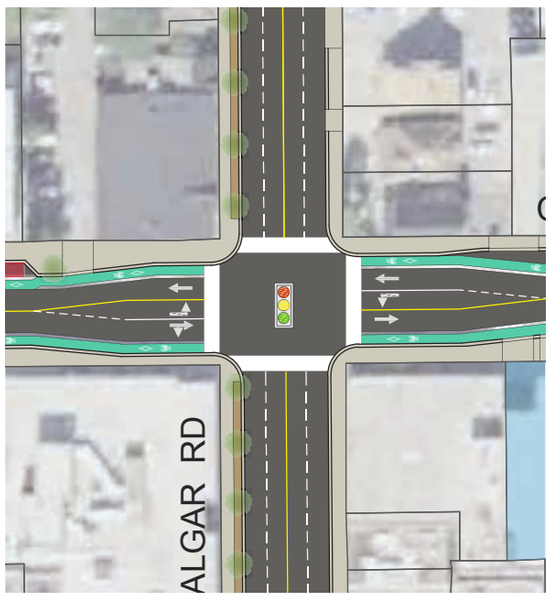
## Intersection design to improve safety for pedestrians

Intersections throughout the downtown are designed to promote pedestrian movement by reducing crossing distances for pedestrians and improving visibility, while also ensuring efficient traffic movement. Key design elements to achieve this objective include:

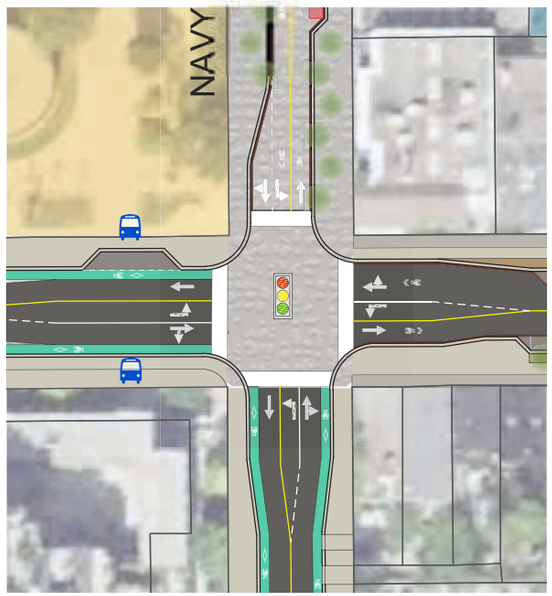
- narrowing of lanes, reduction of corner radii and provision of bump-outs at intersections to reduce the distance required to cross the intersection
- improvement of lighting at intersections and ensuring that site furnishings on bump-outs do not obstruct views of the street or sidewalk
- use of materials that signal pedestrian priority, such as unit pavers, particularly along Navy Street and George Street, where flexible use of the street is encouraged

In addition, dedicated left turning lanes will be retained as they are today at all signalized intersections on east-west streets, including Lakeshore Road. This will facilitate frequent turning movements and will ensure that left-turning vehicles do not block through-traffic movement.

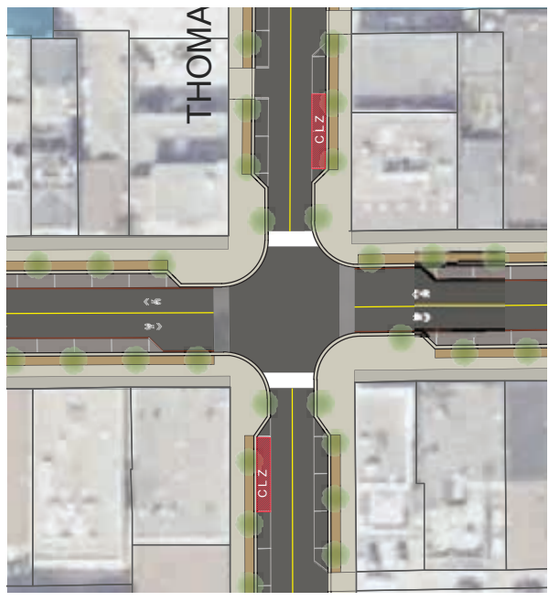
At intersections without dedicated turn-lanes, there will be no bump-out on the nearside of the intersection. This will provide room for a vehicle to squeeze by on the right-hand side of a queuing vehicle (as is the case today).




*At Church Street and Trafalgar Road bike lanes carry through to the intersection on Church and left-turn lanes are provided to minimize delays at this signalized intersection*




*At Lakeshore Road and Navy Street a number of street typologies converge. Navy Street's high-quality treatment extends on to Lakeshore to slow traffic and signify this corridor's importance in downtown. Bike lanes on Navy Street and on the Lakeshore Road bridge transition to sharrows on Navy and Lakeshore through downtown. Left turn lanes are provided to minimize delays as the intersection is signalized.*




*At Lakeshore Road and Thomas Street, a non-signalized intersection, no left turn lane is provided but the on-street parking lane drops off before the intersection to allow vehicles to squeeze by. Bump-outs are provided on Thomas and on the farside of the intersection on Lakeshore to minimize pedestrian crossing distances and create a wider boulevard area.*

# 3.11/ Public Art & Embedded Culture

## Public art and subtle interpretive interventions tell the story of past, present and future

Integration of public art in the downtown should be considered in all future stages of redevelopment. Art pieces can be both temporary and permanent, depending on the location, availability and intent. They can also be as widely varied as stand-alone pieces or integrated into site furnishings.

Aside from creating visual interest and beautifying the street, this strategy can promote local artists, providing a free and accessible outdoor art gallery. Temporary installations can be curated by or with the support of the BIA, and can change with the seasons or for special events.

Cultural or historical pieces can be integrated into sidewalks, buildings or public spaces, and can speak to historical events, figures or local identity, and promote a sense of place.

**ACTION ITEMS:**

- amend Public Art Procedure to enshrine public art locations in the downtown area
- ensure embedded public art pieces and/ or interpretive elements are part of every streetscape design process
- consider Section 37 benefit for Public Art in Official Plan Review


*Historical facts imbedded into paving allow the curious visitor to learn*

*Seasonal lighting can be a part of a public art program*


*Poetry or prose by local artists adds to the understanding of a place*

*Documenting the past allows for a greater understanding of the future*

# 3.12/ Special Events

## A variety of squares, plazas and flexible streets to accommodate special events

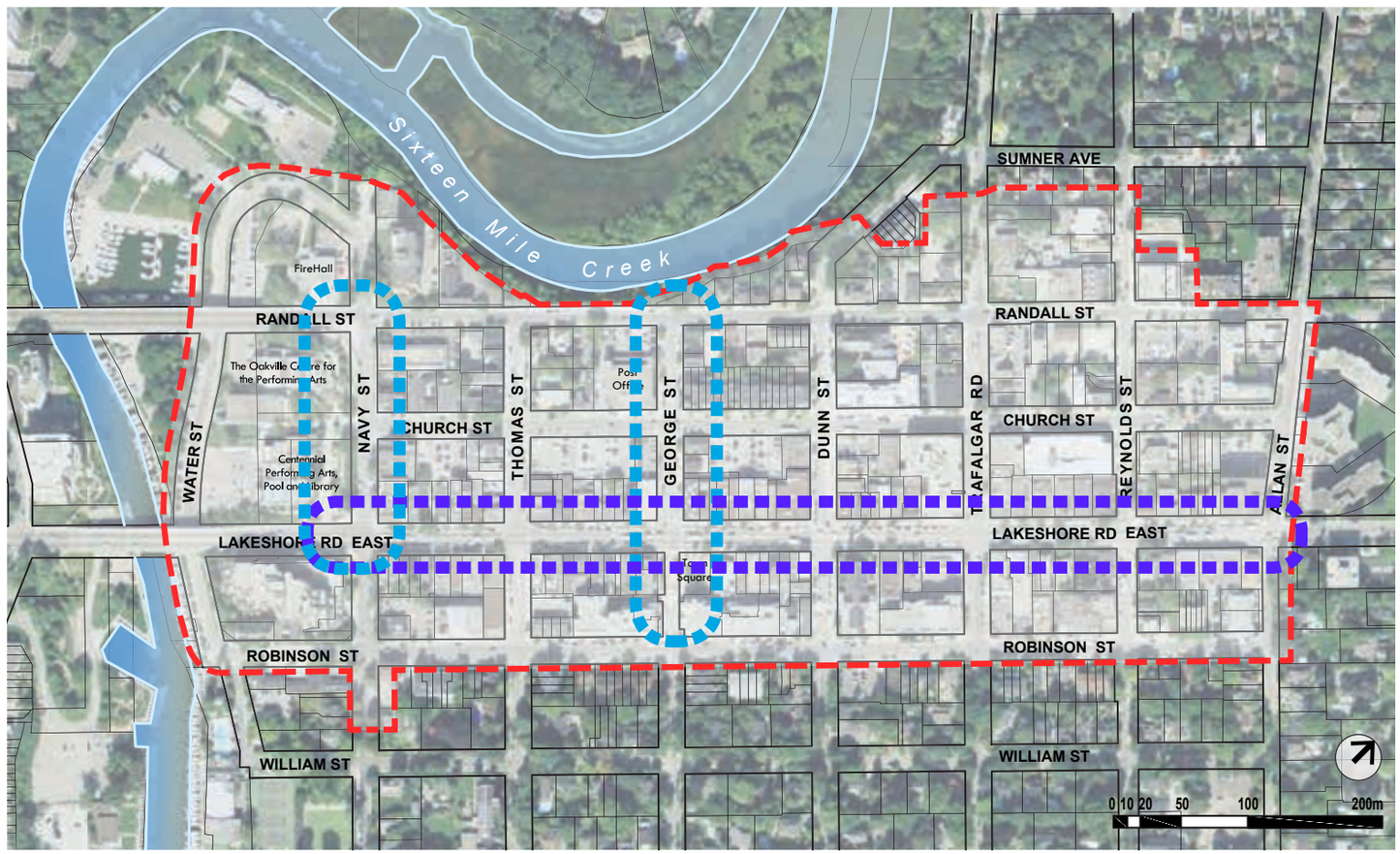
In addition to important civic squares in downtown - Centennial Square and Towne Square - streets also host a variety of events throughout the year. To support current and future events, several streets have been identified within the downtown as key sites for special events, and the design of these places will reflect and facilitate this use.

Navy Street and George Street are identified as flexible streets. The design of Navy Street extends Centennial Square onto the street, opening this space up for gathering and special events by removing the curb and other barriers.

George Street, at Towne Square, can also have a curbless design, creating a new space for events that can be used in conjunction with the square or independently.

Lakeshore Road, in contrast, is designed as a space for linear events. As the downtown high street, Lakeshore Road can be the ceremonial street for parades, street festivals and other special events.

All streets designated for events should incorporate the necessary support, such as power supply and the use of sound equipment where appropriate.




*LEGEND*

*Flexible Streets & Squares*

*Linear Events*

# 4.0/ Towne Square

*Towne Square in 2014. The fixtures, finishes and furnishings are dated and in a poor state of repair*

# 4.1/ The Process

## Towne Square is an important public space that is the ceremonial heart of downtown Oakville

The Downtown Transportation and Streetscape Study (DTS) team was tasked with defining a new future for Towne Square. Built in the late 1980s, the space quickly became an important venue for events and festivals and continues to host events today. The square also attracts families, residents and downtown patrons as a comfortable place to gather and rest.

Since its inception, the square has not been significantly altered or upgraded and is beginning to show its age. Materials are worn; trees struggle in small planters; the lawn area is in constant need of repair and maintenance. It is in this context that the town is beginning to consider a new future for this important public space. The contemplation of a new future for the Centennial Square site - another prominent public realm feature of downtown - also drives the need for Towne Square to be redesigned and potentially re-purposed.

The DTS Study has conducted stakeholder interviews with local businesses and a public workshop to evaluate future opportunities for revitalizing the square. Key outcomes of this outreach include:

- balance the square with other outdoor spaces: Towne Square and its future role and activities must be balanced with the future role of Centennial Square. The square should be a destination open space that serves the needs of the surrounding businesses and be a primary downtown open space.
- unify the downtown: The square should promote connectivity and place making through ease of access, preservation of views to Lake Ontario and Lakeshore Road/ George Street. Towne Square should be recognized as a distinct place with specific purpose and character.
- support local business: Other activities appropriate for the square such as outdoor exhibits, concerts or performances should not be detrimental to commercial or residential uses adjacent to the square.
- make the square comfortable and beautiful: Elements that should be incorporated into the square include a canopy to support events and performance, flexible seating, planted areas with trees, a lit beacon enclosure for the garage exhaust, and feature paving. A contained water feature for children's play and all ages should be accessible, interactive and designed for a sensory experience.

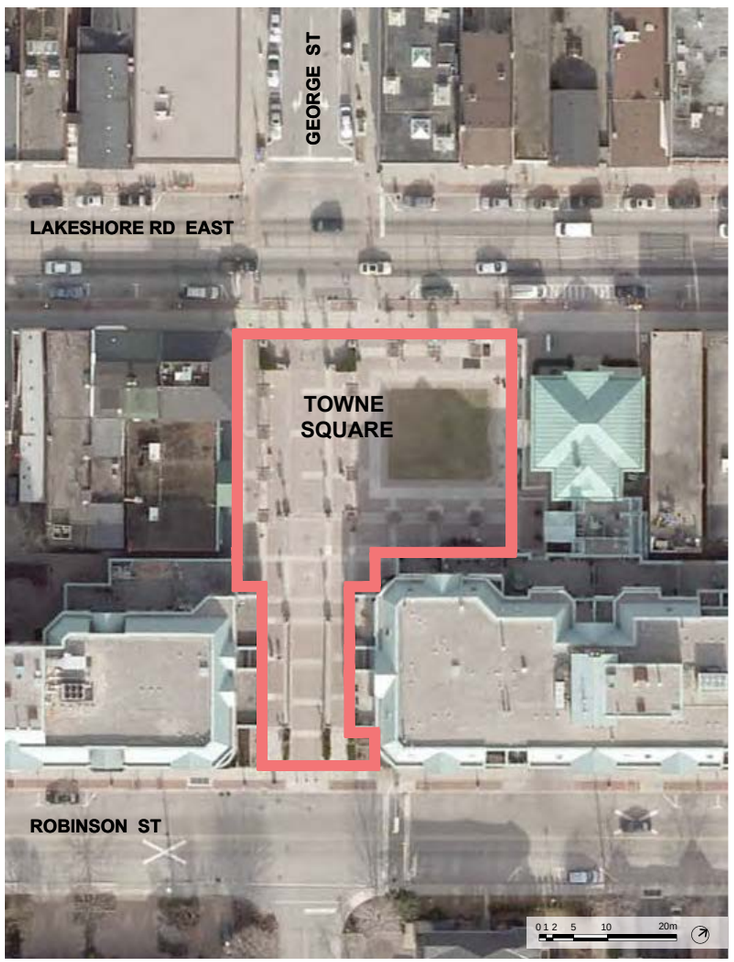
The DTS Study team and town's Steering Committee collaboratively developed the three concept options illustrated here. These options were tested with internal and external stakeholders and brought to the public for feedback. The intention of the DTS Study was to develop a preferred concept. During the concept development process, however, it became apparent that the Downtown Cultural Hub Study (DCH) and its on-going directions would make it difficult to commit to a preferred concept for Towne Square without a clear understanding of the future uses and activities on Centennial Square.

Towne Square work will resume when the Centennial Square uses and activities are better defined, allowing these two public spaces to be mutually supportive and well-balanced.

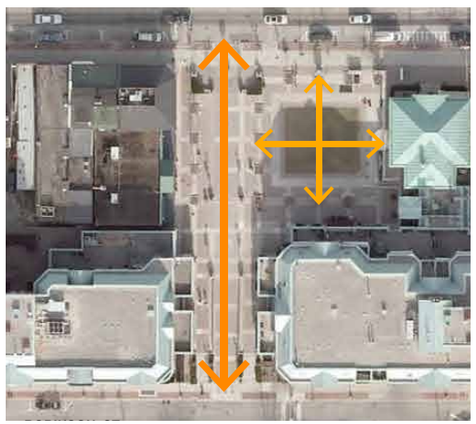
The following three concepts illustrate the initial ideas developed and presented to the public.

# 4.2/ Analysis

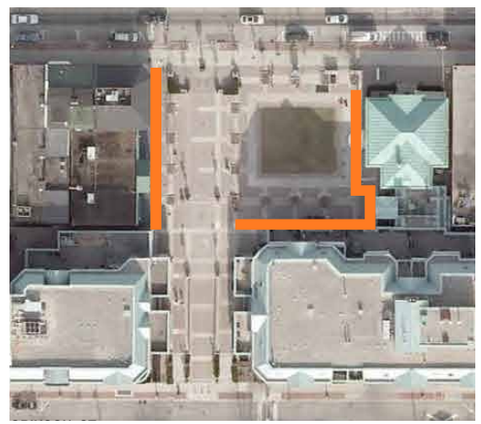
## Understanding how Towne Square is used today is an important first step to reimagining how it can be used tomorrow




*Towne Square is an approximately 1,735m² (18,675ft² or 0.43 acres) public Square in the heart of downtown Oakville*



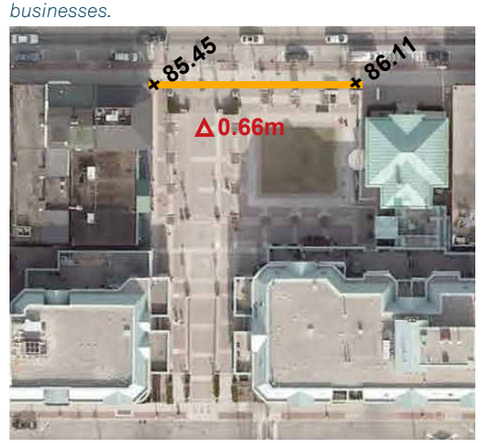
*The predominant pedestrian circulation routes in through the Square are north-south and inside the lower bowl area. A significant amount of space in the Square is given to the north-south circulation route.*



*Active retail frontages line three sides of the Square. Today there are restaurants and cafes that actively use the Square. Additional retail space that fronts the Square exists but is used by inward focused businesses.*


*As businesses front the perimeter of the Square, the edges are fixed and cannot be altered with redevelopment.*


*There is a significant grade change from north to south. From Lakeshore down to Robinson, the grade change is 2.80m. From Lakeshore down to the lower bowl area, the grade change is 1.40m.*




*There is also a grade change to be considered along Lakeshore Road. From the east end of the Square's frontage to the west end, the grade drops 0.66m.*


*The entire Square lies above a parking structure. This is why existing tree pits are in raised planters. The approximate depth of cover in the lower bowl area is 0.50m.*

# 4.3/ Inspiration

## Ideas from public places around the world

*Functional elements such as steps create natural places for people to gather, rest and watch*

*Integrated lighting can add ambiance. It can also be used to tell a story*

*Water elements attract families and children to public spaces*

*Places for performance - formal or informal - animate public space*

*Enhanced seating can be integrated into functional elements*

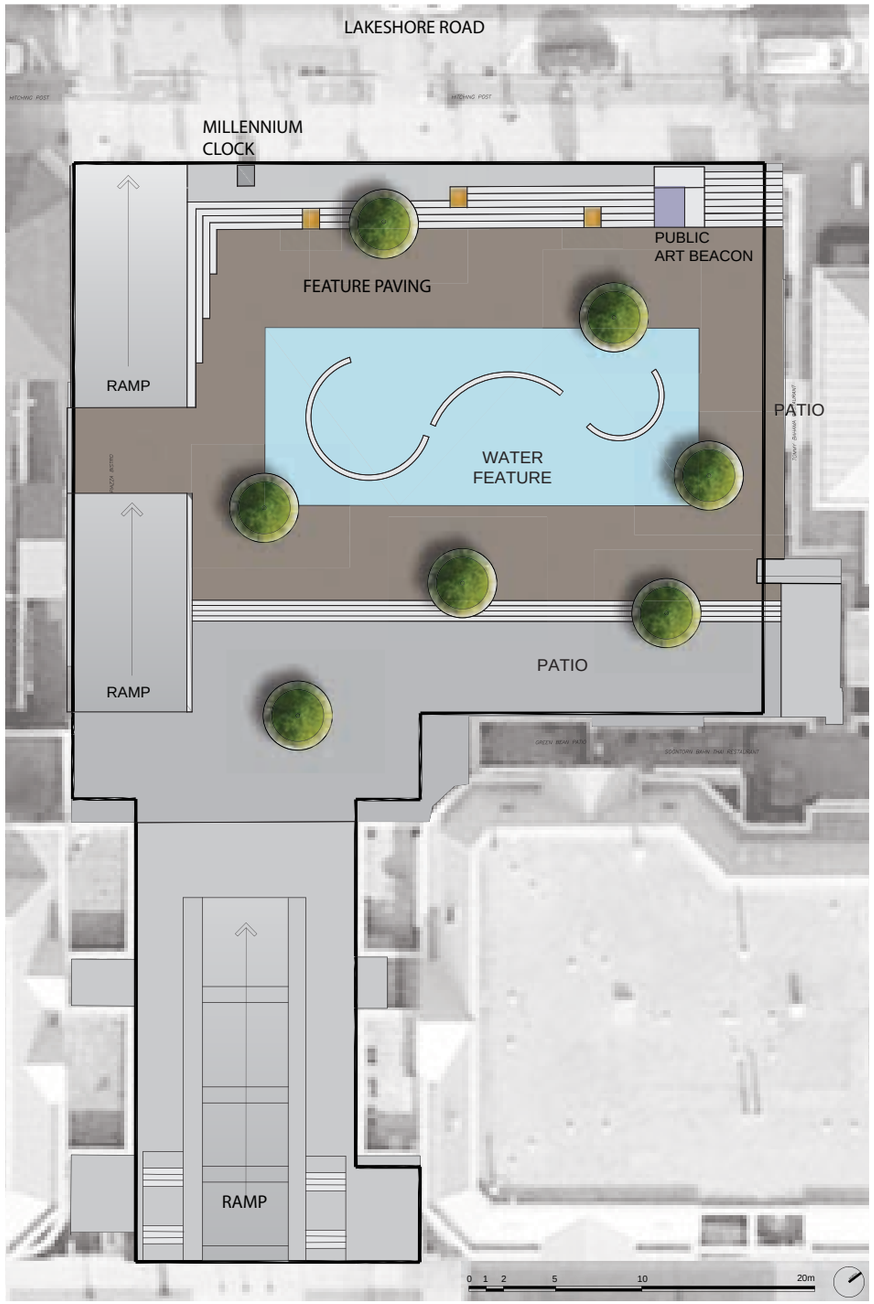
# 4.4/ Concept Design Options

## Option 1

This concept for Towne Square aims to maximize connectivity between the square and Lakeshore Road. The ramp on the west side of the site that connects the upper and lower levels is narrowed and pushed to the edge of square. This maximizes open plaza space, allowing for greater flexibility during events and more seating options during day-to-day use. The generous bank of stairs leading down from Lakeshore Road incorporate wood seating elements to encourage lingering.

The enlarged plaza space is punctuated by raised tree planters to encourage healthy tree growth. A water feature in the centre of the plaza will animate the space and also provide a pleasant auditory experience. During public consultation, many community members liked the idea of water in the square but felt that the water feature shown in these drawings was too dominant in the space. It should be scaled back during the next phase of concept development work.

A public art beacon above the existing garage vent shaft has both a practical and aesthetic purpose. Practically, it sends unpleasant exhaust fumes and noise up above the square. Aesthetically, it serves as a beacon that will draw one to this important public plaza from afar. The beacon is intended to incorporate public art, lighting and audio equipment.



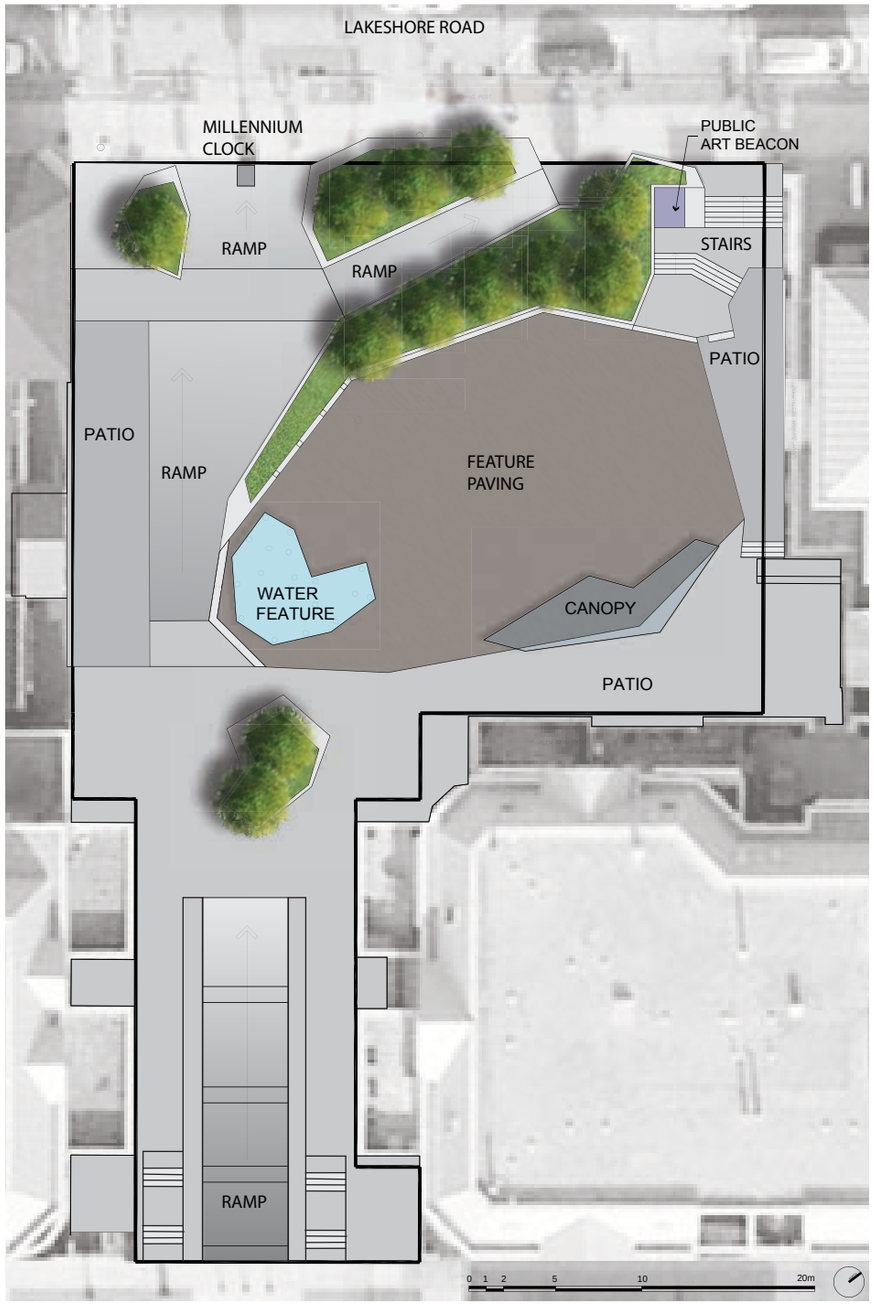
# Option 2

This concept for Towne Square aims to provide a more intimate square experience that is sheltered from activity on Lakeshore Road: an oasis in the city.

Instead of a broad bank of stairs, several ramps bring the user in and out of the space. The ramps are pushed west to maximize plaza space but in this iteration, a dedicated patio space is created on the west frontage.

The fractured geometry adds a dynamic quality to a rectilinear space and allows for the created of two larger planters. The large planters will accommodate several trees each and a mix of naturalized planting that will soften the square.

A water feature animates the square and is nestled at the end of the plaza. A canopy on the southern edge of the space will provide shade during hot summer days in addition to informally extending the adjacent patio.



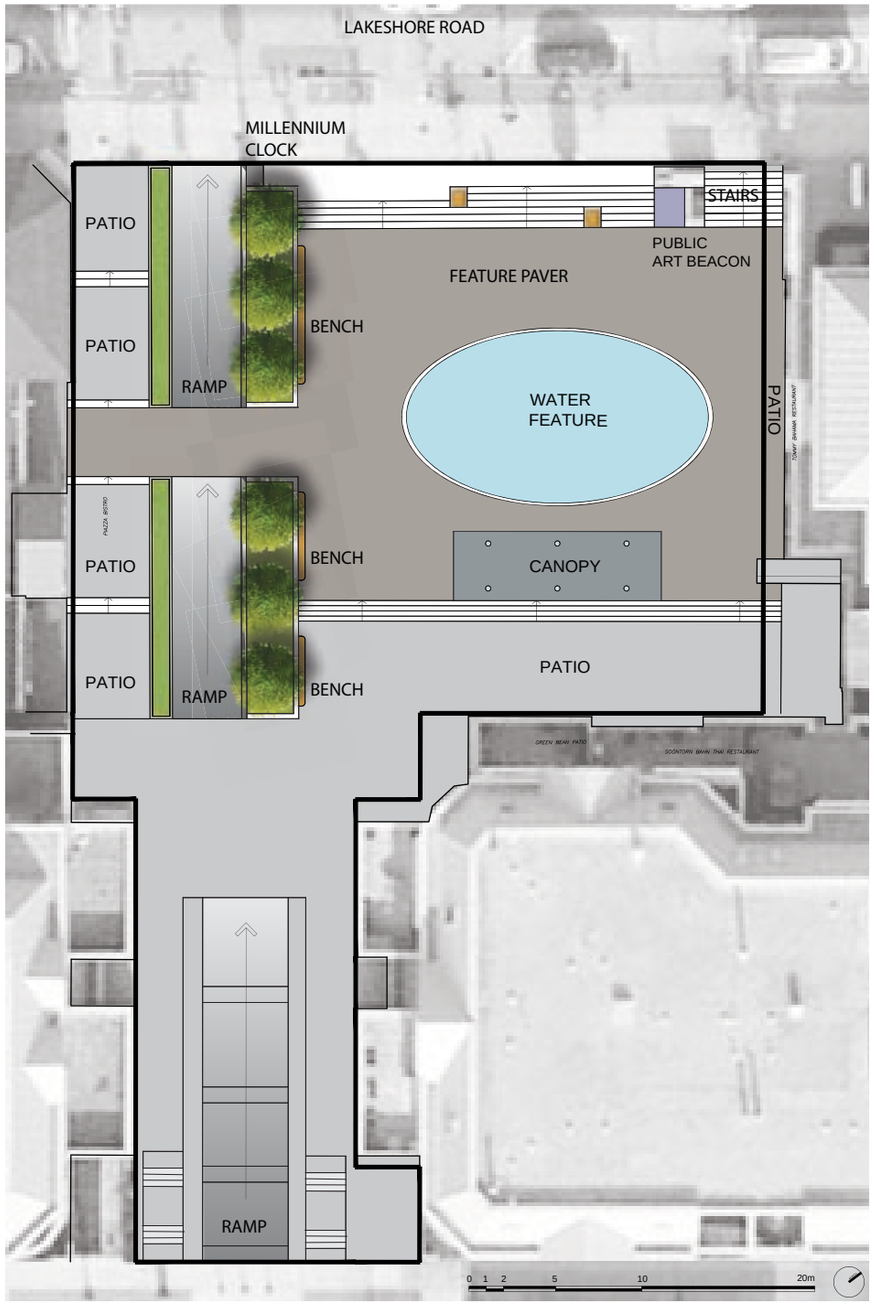
# Option 3

This option for Towne Square incorporates elements from the first two options. The rectilinear layout compliments the surrounding building fabric but a round water feature offers a counterpoint to the edges elsewhere. Similar to option 1, the community felt that the water feature shown was too large, so it should be scaled down in subsequent concept iterations.

The broad bank of steps along Lakeshore return to maximize connectivity between the lower plaza and the street. The stairs also create an ideal vantage point down to the canopy/stage area.

A larger canopy at the south edge of the plaza provides an ideal backdrop for concerts and events in addition to providing shade for day-to-day use.

Dedicated, tiered patios occupy the western edge of the square with a narrowed ramp and consolidated planters adjacent.



# 4.5/ What We Heard

## Oakville residents are keenly interested in the identity and function of Towne Square and were clear about what they liked and disliked like about the redevelopment concepts

Two public events were held to discuss the Towne Square concept designs. All meetings were held as interactive workshop style events that included an introductory presentation followed by small group working sessions.

The first event, held on October 1, 2014, was a target event for BIA members and residents who abut the square.

The second event, held on October 9, 2014, was open to the general public and was coupled with streetscape content. The workshop portion of this meeting was divided up into two halves, one for Towne Square and one for streetscape work.

Many residents, business owners and landlords voiced their opinions at these events. The themes that emerged from these meetings can be summarized as follows:

- mixed opinions on Concept 2 – limits access but creates a 'room'
- access to and from square is important
- importance of patio space connected to square, especially on west side of square
- size of water feature - too large as currently shown
- importance of program and activity flexibility
- consider winter use (i.e. fireplace, skating)
- like beacon and should incorporate lighting and art
- consider seamless lighting in the ground
- some participants felt that square was fine as it is and that no change was necessary
- mixed opinions on existing grass. Some like and some do not.

# 5.0/ Implementation

# 5.1/ Implementation Considerations & Financing

## Reconstructing Oakville's downtown streets will be a complex task that will require careful coordination between internal departments and external stakeholders

### 5.1.1 Implementation Considerations

#### Phasing & Integration

Capital planning will determine the order in which streets are reconstructed. Prior to allocating capital funds, an integrated strategy for renewal should prioritize projects based on need and benefit within the context of an evolving downtown. It is important to continually modify the prioritization strategy to respond to evolving development, especially relative to the findings of the Downtown Cultural Hub Study.

#### Detailed Design

This report presents a preferred concept for each street, as well as a series of additional design considerations and action items. The street concepts are general in nature and will require professional expertise to translate into functional layouts prior to implementation. A detailed design exercise for each street must therefore be undertaken to translate concepts and guidelines to fit the unique conditions of each street in downtown.

#### Environmental Assessments

The Municipal Class Environmental Assessment (MCEA) process requires that, for large infrastructure projects, a municipality identify and mitigate impacts to all aspects of the environment. Through the Municipal Engineers Association of Ontario (MEA), environmental assessments in Ontario must adhere to the standards of the Municipal Class Environmental Assessment (MCEA, as amended in 2011). At project initiation and in conjunction with the initial stages of detailed design, municipal staff must determine, firstly, if the project will require a Class EA and, secondly, in what class the assessment should be undertaken.

Town staff have reviewed the Downtown Transportation and Streetscape Study and its applicability to the MCEA process. The streetscape and transportation related recommendations of this study fall under a Schedule A or A+ category under the MCEA which are considered pre-approved projects with no upward cost limits. Schedule A projects may proceed without following prescribed procedures as outlined in the MCEA; Schedule A+ projects, while considered pre-approved, also require that the public be advised prior to implementation of the project. For example, the conversion of one-way streets to two-way operation is considered an A+ initiative and would require public notice prior to implementation. Appropriate forms of notification could take the form of a notice provided to adjacent property owners or a report to the municipal Council.

#### Mitigating Construction Impacts

The town recognizes that reconstruction of downtown streets will have a considerable impact on businesses. During extensive consultation with the BIA throughout this study process, members stressed the importance of a coordinated strategy to mitigate construction impacts, especially during the reconstruction of Lakeshore Road. Town staff and the consultant team thus decided to prepare a comprehensive report on construction mitigation best practices. Please refer to the appendix for the full report.

#### Coordination with Utility Providers

It is critical to coordinate road reconstruction with utility providers. Wherever possible, infrastructure in the right-of-way must be renewed concurrent with street reconstruction to minimize disruption to businesses and residents. It is highly undesirable for a utility provider to renew their infrastructure after road reconstruction as this will damage newly installed streetscape elements and frustrate business owners and residents. Planning must occur early and often with utility providers to ensure that construction efforts are coordinated and efficient.

#### Foundation Assessments

As many buildings in the downtown were constructed in the late 19th or early 20th century, the state of repair of their foundation walls are questionable or unknown. In order minimize construction time when renewing a street, a comprehensive foundation assessment should be undertaken prior to street reconstruction to understand each structure.

#### Accessibility

All streets must comply with the Accessibility for Ontarians with Disabilities Act (AODA) to ensure universal accessibility. During detailed design, special attention should be given to compliance with AODA. Public spaces will also comply with the Accessibility Standard for the Design of Public Spaces (DOPS).

#### Transit

With conversion to a two-way street network, transit routes have the opportunity to evolve to better suit transit users. Transit staff should take the opportunity to reassess all routes in the downtown to optimize their routing.

## Maintenance & Operations

The street designs recommended in this study will require increased maintenance and operations commitments. Enhanced maintenance practices must be implemented in concert with the decision to proceed with street reconstruction. New regimes must be established to maintain street elements to protect the town's investment in an improved public realm, all of which should be kept in a good state of repair. Lakeshore Road and the flexible streets, in particular, use a variety of high-quality materials and will require a higher-order of maintenance activities over and above traditional urban streets. Additionally, dedicated cycling facilities must be maintained with the same priority as the roadway to encourage year round cycling.

When streets are renewed, it is recommended that town staff prepare an operating and maintenance manual that itemizes the project's materials and design details so that they can be replaced or repaired easily.

In addition to enhanced maintenance and operations activities, town staff should also develop a systematic monitoring system to track life cycles, state of repair and seasonal activities for downtown streets.

## Training & Outreach

It is important to educate the public on the benefits and operational considerations for renewed and reconfigured streets in the downtown. Town staff should develop programs on:

- how to use flexible streets (as a pedestrian, as a cyclist and as a motorist)
- the sustainable features of downtown streets and their benefits (permeable paving, storm water collection, durable materials, healthy street trees & passive irrigation)
- how to use new cycling infrastructure (bike lanes, sharrows, bike corrals, etc.)

## Financing

An important consideration throughout this study has been the condition of Lakeshore Road East through the downtown core. The roadway is near the end of its life cycle and needs to be reconstructed in the near future. The preliminary estimate to undertake the Lakeshore Road East Reconstruction and Streetscape Project is $9.25 million, including engineering design fees. The town's 2015 capital budget request included funding for the engineering design phase of the Lakeshore Road East project.

Later in 2015, the ten (10) year capital forecast will be presented to Town Council for approval. The Lakeshore Road East Reconstruction and Streetscape Project will be included in this forecast. The balance of the street network in the downtown will be programmed into future years of the town's long range financial forecast.

The DTS projects are not attributed to growth and are not Development Charge eligible. Financing for these projects would be derived from tax levy funding

Opportunities for federal and/or provincial funding for these projects will also be reviewed.

Preliminary cost estimates for the DTS projects are included in Appendix 6.7 of this report.


*Priority winter maintenance of cycling facilities should be implemented with the introductions of bike lanes in downtown*

BrookMcIlroy/