TO:	CHAIR AND MEMBERS STRATEGIC PRIORITIES AND POLICY COMMITTEE MEETING ON JANUARY 28, 2016
FROM:	JOHN BRAAM, P.ENG. MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT:	DOWNTOWN INFRASTRUCTURE PLANNING AND COORDINATION

RECOMMENDATION

That on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, with the concurrence of the Managing Director of Planning and City Planner, the following actions **BE TAKEN** with respect to the planning and coordination of infrastructure projects in Downtown London:

- (a) the key project planning directions identified in this report **BE ENDORSED** to provide guidance in the development of project solutions, and
- (b) the preliminary construction timelines identified in this report **BE**INCORPORATED into the various projects as the basis for community consultation.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

- Council Resolution July 28, 2015 Coordination of Environmental Assessments with Shift Rapid Transit Initiative (Item 47 on the Civic Works Committee Deferred Matters List)
- Planning and Environment Committee December 14, 2015 Back to the River Design Competition

2015-19 STRATEGIC PLAN

The 2015 – 2019 Strategic Plan identifies the Rapid Transit Implementation Strategy as a means to deliver convenient and connected mobility choices. The initiative will be the single largest infrastructure project in the history of the City of London.

In addition to rapid transit, there are numerous infrastructure projects planned over the course of the next decade for Downtown London and parallel transportation corridors that contribute to the Strategic Plan Areas of Focus of Growing Our Economy and Building a Sustainable City by facilitating urban regeneration through investment in London's downtown as the heart of our City and provide convenient and connected mobility choices for all users.

Council recently adopted "Our Move Forward: London's Downtown Plan" which plans for a number of transformational projects aimed at improving our Downtown, elevating our city image, stimulating small business development, attracting a high quality labour force and supporting economic development. London's Downtown Plan dovetails with Council's 2015-2019 Strategic Plan, which includes several of these transformational projects as strategic initiatives.

These infrastructure projects are consistent with the draft London Plan that focuses on goals such as growing inward and upward, regenerating Downtown London, offering quality mobility choices, and protecting and improving our Thames River and its natural heritage corridors.

BACKGROUND

The City has embarked on a number of plans and projects (initiatives), some Downtown focused, others City-wide, and others that are linked to the Thames River. These are exciting opportunities that will transform our city, affect our mobility, and enhance the City's image through a re-imagined Downtown, transportation system and public linkage to the river.

Project planning, including several environmental assessments are currently underway. As such, it is timely to provide a holistic update of all projects to examine the interrelationships and cumulative benefits of the projects.

The inter-relationship of these initiatives have been considered relative to time, space, purpose, priority and budget at a convergence point, Downtown and the Forks in particular. This complex process has been guided by the following principles.

Principles for Project Coordination

- Council maintains a vision for the Downtown that promotes economic development and city building, enhances our transportation mobility options, recognizes intensification opportunities, embraces the river and respects the environment.
- 2. Agencies continue to play a pivotal role through their decision making under their regulatory authority.
- 3. Funding is prioritized; the City will continue to consider best value in their investment decisions.
- 4. The City will continue to respect past, current and future public processes that have brought the numerous initiatives to where they are now.
- 5. Deliver Council's priority projects in a time-effective and well-coordinated fashion.

The above principles were utilized to develop a coordinated implementation timeframe that is socially, economically and environmentally integrated. Applying these principles have guided the recommendations of this report. A course of action for each initiative,

and an integrated strategy for coordinating these actions, becomes evident when these principles are applied.

Purpose

Municipal Council has passed the following resolutions:

That the Civic Administration BE REQUESTED to report back on a proposed decision-making process which would close the gap between various Environmental Assessments and the Shift Rapid Transit Initiative. (July 28, 2015)

That the Civic Administration BE DIRECTED to report back on the scope of the Inaugural Project at the Forks of the Thames, its potential implications for other City Projects in the area and the implementation process for the Inaugural Project. (January 4, 2016)

The purpose of this report is to provide Council with a holistic overarching report that addresses these two resolutions by briefly summarizing each initiative and how they interact with each other, and recommending a direction for each project to take in a principled way. Each project will be the subject of individual detailed reports; a number of them are scheduled for the February 2, 2016 Civic Works Committee.

CONTEXT

The City has embarked on a number of initiatives that have been identified through Our, Smart Moves Transportation Master Plan and Our Move Forward – London Downtown Plan and various water/wastewater plans. These initiatives include the following:

- Shift Rapid Transit EA
- Blackfriars Bridge EA
- Dundas Place EA
- Wharncliffe Road CP Underpass EA (north of Oxford)
- Wharncliffe Road CN Underpass EA (north of Horton)
- London ON Bikes Cycling Master Plan EA
- Pollution Prevention and Control Plan York Street Combined Sewer Separation Replacement Program
- UTRCA Remediating Flood Control Works (Dykes remediation/replacement program) EA
- Back to the River "Ribbon of the Thames" concept plan
- Springbank Dam Replacement Gates

Some of these initiatives are Downtown focused, other city-wide while others are linked to the Thames River. The underlying factor is that they are all linked together from an implementation perspective. These projects and initiatives are intended to be undertaken over several years and the successful implementation of these projects recognizes that transformative work this wide in scope means that everything cannot be done all at once.

The implementation has implications from not only a financial perspective, but there are social, traffic, environmental and construction impacts that require a holistic approach and management.

Current Projects

London's vitality provides many opportunities to shape growth and create the City envisioned by the draft London Plan. The projects currently under consideration include:

Shift Rapid Transit

The Shift Rapid Transit Environmental Assessment (EA) is underway. Council recently approved the hybrid alternative as the preliminary preferred alternative to carry forward for further public engagement.

Rapid Transit (RT) will be beneficial for the downtown given all routes converge and link in the downtown. Providing a higher order rapid transit system will attract more riders to the transit choice and make a significant contribution to the modal shift goals in the Smart Moves Transportation Master Plan (TMP). In addition to improving connectivity, RT will help manage downtown parking needs.

Rapid Transit is an important tool to incent and stimulate intensification – future growth that is "inwards and upwards". The draft London Plan recognizes this, and shapes future growth around rapid transit corridors, stations, transit villages and the Downtown. This residential, institutional, office and commercial growth will serve to boost ridership and support a sustainable and convenient rapid transit system.

To achieve an efficient rapid transit system with benefits that can attract discretionary riders, dedicated rapid transit corridors are required. Implementation of dedicated rapid transit corridors through the downtown will require some restrictions to existing corridors. The conversion of some general purpose and on-street parking areas to RT corridors will be required. These concepts will be further refined in the next phase of the Shift EA project.

At the present time, there are two concepts being considered for transit routing in the downtown. These concepts are coordinated with the potential removal of transit off of Dundas Place and with the Back to the River concept in order to ensure the rapid transit solution maintains its functionality and operational requirements. In particular, the Kensington Bridge and portion of Dundas Place (west of Ridout) will be designed with the greater place making concepts in mind while maintaining the transportation function of the corridor for rapid transit and local transit use only. While a key goal for the future use of Kensington Bridge will be to create a high quality pedestrian environment that crosses the Thames River from east to west and links seamlessly to the Dundas Place flex street, it is recognized that rapid transit and local transit service will be given priority to ensure a functional transit system.

Dundas Place

Our Move Forward, London's Downtown Plan, identifies Dundas Place as the first of ten transformational projects designed to "change the face" of Downtown London. The My Dundas EA began in the Summer of 2015 and is currently in the phase of generating and evaluating alternative designs.

The project considers converting Dundas Street between Wellington Street and the Thames River into a multi-functional facility that can serve both as a transportation corridor as well as a gathering place. Toggling between these functions is intended to be seamless so that Dundas Street can retain its transportation functionality when not closed to automobile through-traffic, but can also be the centre of a vibrant people-oriented downtown. The project EA is considering the relocation of transit bus routes off the corridor and onto parallel routes.

Dundas Place will be managed and programmed to host regular events and activities. The space will be designed to support collaboration with business owners that can deliver arts, culture, entertainment, food, sport and unique experiences. The flexibility of the street will accommodate regular business activities during certain hours, while allowing for a transformation to a gathering place and destination where people want to stay.

The construction of Dundas Place is anticipated in 2018 and 2019. The construction will be disruptive and require the closure of Dundas Street in phases. The staging plan development will have regard for the needs of Dundas Street business owners. The staging will also be a function of the private utility companies that will also be using the opportunity to upgrade their underground plant. At this time, it seems likely that the construction will begin at the west end and proceed easterly toward Wellington Street. The estimated cost of the project is in the order of \$16 M. A significant portion of this cost relates to the underground and above ground infrastructure which is in need of updating and improvements.

Downtown East-West Cycling Facility

London ON Bikes, the process to create a new cycling master plan has been underway since the spring of 2015. The master plan will contribute to the draft London Plan objectives of creating livable vibrant public spaces.

Extensive consultation has occurred in 2015 and it is planned to present the master plan recommendations to Civic Works Committee in the spring of 2016. Recurring requests from Londoners are for more separated cycling facilities and for routes serving the downtown. A key recommendation in development for Council consideration at the end of the master plan is the creation of a two-way east/west cycling route through the downtown. The routing of this facility is dependent on the outcome of the Shift EA and will likely be proposed on either Queens Avenue or King Street. The creation of the dedicated cycling facility will likely require reallocation of a general purpose/on-street parking lane to a cycling transportation purpose.

Wharncliffe Road CP Underpass EA (north of Oxford)

The Wharncliffe Road corridor north of Oxford Street is a major north/south corridor that provides a key transportation linkage between Western University and Downtown. The existing reduction to two lanes at the CP Underpass creates a bottleneck that also impacts the Wharncliffe Road / Oxford Street intersection. The recently approved EA has identified the need for a widening to four lanes, cycling facilitates and improvement to intersections. The widening will require a local temporary detour of the CP railway line, the removal of the existing structure and the construction of a new railway

structure. Addressing this major constraint on the transportation system prior to Shift rapid transit implementation is important for construction-related network traffic management.

This is a large multiphase, three year construction project involving numerous property acquisitions, utility relocations and approvals. The cost for the first phase of works north of Oxford Street is estimated at \$23 Million. The second phase works including the Oxford Street west intersection is anticipated to be implemented through the rapid transit initiative.

Construction of this project is predominantly planned to take place in 2018, with the construction of the rail diversion in 2017. Intermittent Wharncliffe Road closures totaling around two to three months will be necessary and this will be refined and communicated during the design.

Wharncliffe Road CN Underpass EA (north of Horton)

The Wharncliffe Road corridor south of Stanley Street is a major north-south corridor that provides access to the downtown. The existing reduction to three lanes under the CN railway line creates a bottleneck at the Horton Street intersection. The EA process currently underway is reviewing options for the widening of the roadway under the CN structure, improvements to the intersection and corridor. The completion of this major improvement to the transportation system prior to Shift rapid transit implementation is important for construction-related network traffic management.

The grade separation reconstruction is a large multiphase, three year construction project involving numerous property acquisitions, utility relocations and approvals. The cost for works is currently still being developed but it is anticipated to be in the range of \$24 M.

Construction of this multi-year project is planned to begin in 2019. Wharncliffe Road and the intersection of Horton Street intersection must be lowered to achieve proper clearance beneath the new structure. Considerable road closures will be necessary, including a total closure of Wharncliffe Road of considerable length (12 months minimum). Lane reductions and intermittent closures of Horton Street over a period of about five months will also be necessary. Traffic will be rerouted onto alternative routes.

Blackfriars Bridge

Blackfriars Bridge is another unique component of the transportation network. It serves a transportation function in addition to being a city cultural landmark and a source of inspiration to many of London's local artists, writers, photographers, and historians. Advanced structural deterioration recently required the closure of the bridge to vehicles. The bridge is currently open to only pedestrian and cycling use.

The Blackfriars Bridge EA was initiated to determine the future purpose and use of the structure. An upcoming report to the Civic Works Committee on February 2nd will present the EA Environmental Study Report for approval and is to be considered in conjunction with this report.

Briefly, the transportation recommendations of the EA are:

- rehabilitate the bridge for all road users including vehicles;
- provide two-way operations for pedestrians and cyclists; and,
- provide one-way eastbound operations for vehicles into the Downtown.

A key consideration for the Blackfriars Bridge is the role of the river crossing as part of the overall transportation system. As this report identifies, there will be considerable infrastructure works over the next decade that will reduce traffic capacity as bridges and roadways are under construction. Alternative capacity is required to reduce social impacts and mitigate traffic disruptions. This EA recommendation also balances the heritage value, the transportation needs as influenced by the public input received and risk management as it relates to the longevity of the heritage structure.

Opening Blackfriars Bridge to eastbound traffic provides additional network capacity into the downtown, particularly during the morning rush and as part of a network management plan during major construction projects elsewhere. The elimination of westbound automobile traffic eliminates the identified risk of the exposure of the primary bridge support to errant vehicles on the steep westbound approach.

Queens Avenue, Kensington and Wharncliffe Road South Bridges over the Thames River

The bridges over the Thames are critical links for both vehicular and active transportation purposes. The Thames River presents a transportation constraint to those travelling to and from the downtown from the south and west parts of the City. Therefore, the existing bridges need to be considered carefully. Work is proposed on all three of these bridges in the near term.

Kensington Bridge

Transformational Project #2 within London's Downtown Plan identified a desire to convert Kensington Bridge (Riverside Drive eastbound over the Thames River) into a non-automobile connection across the Thames River. This would require the conversion of the Queens Avenue Bridge located to the north to two-directional traffic.

Considering the desire to provide enhanced pedestrian linkages in the area and to mesh with the Dundas Place and Back to the River projects, but recognizing overall mobility link challenges between Downtown and the west, the Shift Rapid Transit EA currently envisions the preliminary preferred rapid transit corridor across Kensington Bridge, likely as a transit-only facility. Transit only operations on the bridge would greatly reduce the frequency of traffic from constant flow to a vehicle every few minutes which would contribute to the Downtown Plan vision. It may also be possible to broaden the space devoted to pedestrians on the bridge by limiting the area dedicated to transit service.

The consideration of various options continues. However, recognizing the intent of the Downtown Plan, a key goal for any improvements to Kensington Bridge will be to create a high quality and welcoming pedestrian environment that crosses the Thames River from east to west and links seamlessly to the Dundas Place flex street. This is

important to connect Labatt Park and the other important Downtown amenities that exist, or are planned, on the west side of the Forks.

The Kensington Bridge has life cycle renewal requirements that will need to be addressed in the near term prior to any change of use. Rehabilitation of the bridge will require a temporary closure and routing of traffic onto the Queens Avenue structure. This work will be coordinated with the Rapid Transit initiative.

Queens Avenue Bridge

The Queens Avenue Bridge has life cycle renewal requirements that will need to be addressed in the near term prior to any change of use. This work will be coordinated with the Rapid Transit initiative. The bridge may be wide enough to accommodate four lanes of traffic as currently envisioned by the preliminary Shift routing. This bridge is also adaptable to widening if it is desired to modify RT routes and add a dedicated transit lane for westbound transit operations across the bridge. The bridge rehabilitation would be disruptive but could generally remain open to traffic due to the width of the existing platform. Any widening would likely require in-water work and approvals to widen the existing piers.

The conversion of the Queens Avenue Bridge to four-lane two-way operations would create a high turn demand at the convergence with the existing one-way operations on the downtown side of the river. Therefore, the conversion of Queens Avenue to two-way operations may extend one additional block east to Talbot Street in order to disseminate the required turning movements across two intersections.

Wharncliffe Road South Bridge

The Wharncliffe Road South Bridge is in need of life cycle rehabilitation works in the near term. The rehabilitation of the structure will require the road to be reduced from four to at least two lanes with the potential for short-term closures. It is currently envisioned to undertake this rehabilitation at the same time as the Wharncliffe Road / CNR Grade Separation construction to the south to maximize the amount of infrastructure work during the imposed traffic restrictions required for the grade separation. The design of this bridge rehabilitation will consider options to make the bridge more comfortable for pedestrians and cyclists.

Victoria Bridge (Ridout Street over the Thames River)

Victoria Bridge, which carries Ridout Street across the South Branch of the Thames River also has near-term life cycle renewal needs. The structure is a two-lane steel pony truss structure constructed in 1926. Given that Ridout Street is a priority cycling route between Downtown and the south, options to incorporate cycling facilities across the bridge will be assessed. This will include consideration of rehabilitation with widening and bridge replacement. Replacement will require an EA. This project will require closure of the river crossing to traffic for a complete construction season. The scheduling of this project can accommodate other projects and is currently envisioned in 2018.

Pollution Prevention and Control Plan

The Pollution Prevention and Control Plan now under development will provide the City of London with a "road map" for implementation of infrastructure improvement projects that will mitigate the impacts of wet weather sewer system overflows on the Thames River, in alignment with the City's commitment to environmental stewardship and the protection of water resources. The implementation plan must achieve this objective while not negatively impacting the existing system performance with respect to sanitary sewer service, and provide increased protection against localized basement flooding.

While the plan is being developed, significant investments to reduce overflows continue to be made. The Wastewater Capital Budget includes a funded program for replacing remaining combined sewers with a separated sewer system. The program has identified the combined sewers in the downtown core as a high priority, with the first phase being York Street from the Thames River to Talbot Street at an estimated cost of \$4 million. The existing system contributes to overflows near the Forks and local water quality degradation.

A staged program is needed because of the length of the project. It must also be coordinated with other traffic disrupting projects: Rapid Transit, Dundas Place, area bridge improvements and the Wharncliffe / CN underpass.

Back to the River

The Back to the River project is a third transformational project stemming from Council's Downtown Plan. The London Community Foundation has partnered with the City to undertake an international design competition and comprehensive public participation process to establish a plan for the Forks of the Thames River. The area of the Thames River that is covered by the twenty-year Plan emanates from the Forks in three directions – to Wharncliffe Road, to Adelaide Street and to Oxford Street.

On January 4, 2016, direction was provided by Council to report back on the scope of the Inaugural Project at the Forks of the Thames, its potential implications for other City Projects in the area and the implementation process for the Inaugural Project. A business plan (Additional Investments Business Case #18) was previously prepared for consideration during the multi-year budget process. The investment request totals \$5.35M in funding to support the inaugural Forks of the Thames project within the 2016-19 period.

The first step in implementing the winning "The Ribbon of the Thames" concept plan will be to undertake a Municipal Class Environmental Assessment (EA) study as required by the provincial Environmental Assessment Act. This legislatively mandated study would have to consider how the social, economic and natural environment goals of the concept plan could be met. One of the fundamental principles of the concept plan is to create access to the waterfront for leisure and recreational purposes.

The scope of an Environmental Assessment should not be limited to the inaugural project area because it would not sufficiently address broader social and natural environment issues, would not position the city to take advantage of future senior government funding that may become available for other phases of a Back to the River Plan and would not consider the impact that the Springbank Dam may have on water

levels. These matters could be managed and addressed through an environmental assessment covering a broader area, and incorporating the consideration of Springbank Dam and West London Dyke project objectives.

Springbank Dam

The Springbank Dam has been a historical cultural asset that provided multiple social benefits balanced with the local environment. When the Springbank Dam improvement project was initiated, after a dam breach in 2000, the key issue was to address safety concerns related to the structure. The conclusion of the approved EA was to replace the stop logs with hydraulically operated steel gates to allow for more effective gate operations. After a gate failed in June 2008, the City litigated the matter, arriving at a \$3.775 M settlement.

The Springbank Dam and the part-time reservoir that it has historically created allowed for dependable, reliable water levels that extended from the dam upstream to the Forks of the Thames. An upcoming information report to the Civic Works Committee on February 2nd will provide the status of the physical condition of the structure, and the prevailing regulatory framework and environmental conditions that will influence future directions. The shared social and environmental issues with the Back to the River design concepts and the West London Dyke EA should be managed together to provide clarity for the public and regulatory authorities.

West London Dyke

The West London Dyke is approximately 2.4 km long and runs along the westerly bank of the North Branch of the Thames River from Oxford Street to the forks of the Thames River and then along the northerly bank of the Main Branch to the west side of the Wharncliffe Road Bridge. The City of London owns the dyke. It is maintained through agreement by the Upper Thames River Conservation Authority (UTRCA). The dyke is a major component of the City of London's flood control system and is the primary source of flood protection for the West London/Blackfriars area. The West London Dyke improvement program has a budget of over \$26M that anticipates matching funding from the provincial Water and Erosion Control Infrastructure (WECI) program. Following the completion of the current EA, the City and UTRCA will be in a position to apply to the province for the funding to complete the design and construction of the next phase of the dyke.

As a portion of the dyke is within the Forks area, the West London Dyke will be an important consideration during works related to the Back to the River initiative. If any significant changes are suggested after its completion, then a minor addendum to the West London Dyke EA may be necessary. With this in mind it is still recommended to finalize the West London Dyke EA in order to move ahead with the next phase of critical infrastructure improvements and to maximize provincial funding. The next phase of the dyke to be reconstructed is the portion between Rogers Ave. and Cummings Ave. at an estimated cost of \$7.3 M and scheduled to proceed 2016-2017. A report requesting that the EA be placed on public record will be submitted to the February 2nd meeting of the Civic Works Committee.

<u>Other</u>

LTC Route Structure and Service Review

London Transit Commission has produced a draft 2015 London Transit Route and Service Review. Route modifications and headways are recommended to improve functionality with the proposed rapid transit system. While the proposed route network provides a good indication of future route structure and headways, the plan has not yet been approved by the London Transit Commission and is subject to change.

Part One of the study involved the development of a five year service plan which assumed no RT network would be in place over the next five years. The focus of the five-year service plan was to address immediate concerns identified by customers, transit staff and community stakeholders and identify opportunities to enhance service today and continue to grow ridership.

Part Two of this study involved the development of a service strategy that includes RT. This network builds on the network recommended in Part One as a base (route structure/headway, ridership and service hours). The objective was to ensure that the 2019 transit route structure takes into account a future which includes Rapid Transit in London. Strategic modifications are recommended to the 2019 network to better connect local transit services to the preliminary preferred RT network and avoid duplication of services where existing London Transit routes operate on the same corridor.

Downtown Parking Strategy

In addition to the identified projects, the development of a Downtown Parking Strategy is underway. The strategy will assess the optimal amount and type of parking that is beneficial to the downtown and how it can be delivered. The strategy will consider the impacts and benefits of the individual projects and develop strategies in coordination with these initiatives.

CONSTRUCTION COORDINATION

Utilizing the Principles for Project Coordination noted above, an assessment of each project's requirements was undertaken to develop a multi-year, coordinated plan with the goal of minimizing impacts to road users and maximizing the use of capital funds. The influences on project timing are numerous and program schedules are often in flux. Influences include the coordination of unlike asset renewal work, growth work, private utility needs, available funding, and traffic management considerations. Project schedules are often adjusted to implement all city infrastructure and private utility work in unison to avoid multiple disruptions on a given street.

The downtown projects currently under consideration are multi-faceted and are driven by development needs, infrastructure renewal, mobility improvements and urban regeneration. The amount of infrastructure work planned for the downtown requires a focused look at the area and an integrated approach. Coordination activities and discussions have been initiated with major players such as London Hydro.

The construction impacts will be disruptive. A scheduling plan to mitigate the impacts as much as possible is under development. A current snapshot of the envisioned timing of major downtown projects currently in the planning stages is illustrated on **Figure 1**. The timing of projects includes assumptions regarding RT funding commitments and individual project approvals.

e, IGN, Kadaster NL, Ordnance Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBas Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MaprimyInda, © OpenStreefMap contributors. NORTH-EAST RT ROUTE 2023-2026 MAJOR DOWNTOWN PROJECTS CONSTRUCTION COORDINATION TALBOT STILRP 2018 T N RESURFACING 2016 ham es Park MEST LONDON DYKES 2016-2017 SOUTH-WEST RT ROUTE (DOWNTOWN SECTIONS) 2022-2023

Figure 1 - Proposed Downtown Project Construction Scheduling

The construction impacts to east-west routes across the river and through downtown will need to be managed carefully in a coordinated manner. The construction coordination of the York Street Sewer Separation projects, Dundas Place and the Thames River bridge rehabilitations presents a challenge to east-west traffic flow.

The York Street Sewer Separation project is required to support development in the downtown and is scheduled under the Infrastructure Lifecycle Renewal Program. Dundas Place is being considered as a strategic investment (Strategic Investment Case # 22) during Multi Year Budget deliberations. As more information becomes available, the scheduling of one or both of these projects may need to be adjusted to minimize impacts on traffic in the downtown during the construction season.

PROJECT PLANNING DIRECTIONS

London is experiencing a renewed vitality in its downtown as the city grows. Council's Strategic Plan, the draft London Plan, the Shift Rapid Transit program, and London's Downtown Plan all strive for Downtown regeneration with the goals of strengthening our community, city-building and growing our economy. Many public infrastructure projects are proposed that will further contribute to London's downtown regeneration. These opportunities will transform our city, affect our mobility, and enhance the City's image through a re-imagined downtown, transportation system and public linkage to the river.

Key Project Planning Directions

There are a number of key interlinked project planning directions that need to be rationalized so that each project can be advanced in an integrated and coordinated manner.

Removal of Transit Routes from Dundas

The planning approach as guided by the Smart Moves TMP and draft London Plan represent a fundamental shift in transportation policy. From a transportation perspective, the implementation of RT and the Downtown Cycle Track represent a shift away from an unsustainable automobile priority approach as London grows.

The integration of transit routing from the Shift Rapid Transit EA and the rerouting of bus routes off Dundas Place under consideration in the My Dundas EA is critical.

Retention of River Crossing Capacity

The restricted west side access into the downtown created by the Thames River creates a constraint to the transportation network. Increased congestion is expected in the downtown and in particular routes on the west side on both sides of the river. However, predicted 2025 operations are acceptable with the implementation of RT and one-way eastbound vehicular operations on Blackfriars Bridge. Reopening the Blackfriars Bridge to one-way eastbound vehicular traffic will slightly improve operations on Oxford Street,

particularly in the morning peak when predominant movements are toward the downtown.

The Kensington Bridge represents one of few Thames River crossings on the west side of downtown. As the City grows and RT is implemented, increased congestion will stress vehicular and regular transit operations around the river crossings. For this reason, the analysis suggests that restricted operations on Kensington Bridge to transit only is the optimal balanced approach to improving the multi modal environment on this connection across the river while meeting network operation targets. The Back to the River concepts to be furthered in the upcoming EA should explore various ways to achieve its goals at the Forks under these future network transportation infrastructure conditions, with the aim of improving the quality of the pedestrian experience crossing the bridge, linking seamlessly to Dundas Place.

Reduction in Downtown On Street Parking

The addition of RT provides an opportunity for more people to move both across the city and to downtown more efficiently. The implementation of Rapid Transit and changes to Dundas Place will require the displacement of on-street parking in the downtown. The Downtown Parking Strategy that is commencing will consider the amount and type of parking needed to serve Downtown London and will take into account the reduction of on street parking.

Back to the River / Springbank Dam / West London Dyke Integration

Coordination between the three Thames River focused initiatives is critical to meeting a number of corporate strategic goals related to the river and the waterfront: Building a Sustainable City, 1B – managing our infrastructure; 1E – climate change adaptation; 3E – protecting our environment; and, 4E – investing in the riverfront to make it beautiful and accessible for all Londoners. The Principles for Project Coordination suggest that these projects must collectively balance the need for public recreational opportunities while protecting the natural environment in accordance with provincial policy and our Official Plan within this highly urbanized downtown core.

These issues are not isolated to the Forks of the Thames or Springbank Park. In order to meet the multiple objectives involving the river, a holistic, sustainable plan is required under a 'One River' approach. The multiple objectives cannot be achieved in isolation either by project or by location. A piecemeal approach will only lead to duplication of effort and a reduced solution set. A comprehensive approach will provide flexibility in addressing the key issues, drive greater public approval, and provide clarity to the approval agencies. Better outcomes will be derived from a comprehensive knowledge and opinion base created through this 'One River' approach. Furthermore, the City will be well-positioned to seize on senior government funding programs that may emerge in the future, with a completed environmental assessment in hand relating to a broader range of projects within the Back to the River and West London Dykes plans.

To implement this direction, an Environmental Assessment Study should be undertaken to best manage the 'One River' key issues together. Various options can be considered, including the role of Springbank Dam. Subject to the approval of this key project planning direction, a future Civic Works Committee report would recommend a study

scope, budget and multiple sources of financing for "One River – Managing Objectives for the Thames River within our Urban Environment".

Acknowledgements

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