

3. COMPLETE STREETS IMPLEMENTATION FRAMEWORK

CADRE DE MISE EN ŒUVRE DES RUES COMPLÈTES

COMMITTEE RECOMMENDATION AS AMENDED

That Council approve:

1. The Complete Streets Implementation Framework and;
2. That staff report back to the Transportation Committee in Q4 2016 to identify the projects that have been examined and implemented through the Complete Street lens for 2016, and those planned for 2017.

RECOMMANDATION DU COMITÉ TELLES QUE MODIFIÉES

Que le Conseil approuve :

1. Le Cadre de mise en œuvre des rues complètes et;
2. Que le personnel soumettra au Comité des transports, au quatrième trimestre de 2016, un rapport qui indiquera les projets ayant été examinés et mis en œuvre dans l'optique des rues complètes pour 2016 et ceux qui le seront en 2017.

DOCUMENTATION / DOCUMENTATION

1. Acting Deputy City Manager's Report, City Operations, dated 30 September 2015 (ACS2015-PAI-PGM-0159)
Rapport de la Directrice municipale adjointe par intérim, Opérations municipales, daté le 30 septembre 2015 (ACS2015-PAI-PGM-0159)
2. Extract of Draft Minute, Transportation Committee, 07 October 2015.
Extrait de l'ébauche du procès-verbal, Comité des transports, le 07 octobre 2015.

**Report to
Rapport au:**

**Transportation Committee / Comité des transports
October 7, 2015 / 7 octobre 2015**

**and Council / et au Conseil
October 14, 2015 / 14 octobre 2015**

**Submitted on September 30, 2015
Soumis le 30 septembre 2015**

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Ward: CITY WIDE / À L'ÉCHELLE DE LA VILLE File Number: ACS2015-PAI-PGM-0159

SUBJECT: Complete Streets Implementation Framework

OBJET: Cadre de mise en œuvre des rues complètes

REPORT RECOMMENDATION

That Transportation Committee recommend Council approve the Complete Streets Implementation Framework.

RECOMMANDATION DU RAPPORT

Que le Comité des transports recommande au Conseil d'approuver le Cadre de mise en œuvre des rues complètes.

EXECUTIVE SUMMARY

Complete streets are roadways planned, designed, constructed, operated and maintained for everyone's safety and comfort regardless of people's age, ability, or mode of transportation. There is no one design for a complete street but they often include such things as sidewalks, crosswalks, public lighting and bike lanes.

The Complete Streets policies were approved by Council as part of the Transportation Master Plan Update in November 2013. The process to develop the implementation framework for the policy began with the formation of a Complete Streets Advisory Committee, with representation from several City departments, including Planning and Growth Management, Public Works, Infrastructure Services, Transit Services, and Public Health.

In addition, there has been public participation through open houses, presentations to BIAs and community associations, and updates to the Accessibility Advisory Committee. The proposed framework has been well received by the majority of the key stakeholders and general public.

The focus of the Complete Streets Advisory Committee was to review and assess how well existing City of Ottawa policies and processes support the implementation of complete streets and how best to proceed with the directions approved by Council in November 2013.

The framework outlined in this report identifies how the policies will be implemented, which includes alignment with the Comprehensive Asset Management (CAM) Program and Municipal Class Environmental Assessment (MCEA) processes, as well as new Multi-Modal Level of Service guidelines to assist with right-of-way planning and design.

The proposed framework recommends early project scoping for transportation-related projects, which is beneficial for long-term financial forecasting and planning.

RÉSUMÉ

Les rues complètes sont des voies planifiées, conçues, construites, exploitées et entretenues pour la sécurité et l'aisance de déplacement de tous les usagers, quels que soient leur âge, leurs capacités ou leur mode de transport. Il n'existe pas de modèle type de rue complète, mais on y retrouve souvent des trottoirs, des passages pour piétons, des lampadaires et des voies cyclables de qualité.

Les politiques relatives aux rues complètes ont été approuvées par le Conseil dans le cadre de la mise à jour du Plan directeur des transports, en novembre 2013. Le processus d'élaboration du cadre de mise en œuvre de la politique a démarré avec la création d'un Comité consultatif sur les rues complètes, formé de représentants de plusieurs services de la Ville, notamment Urbanisme et Gestion de la croissance, Travaux publics, les Services d'infrastructure, le Service de transport en commun et Santé publique.

Les résidents ont eu l'occasion de participer au processus par le biais de réunions portes ouvertes, de présentations faites aux ZAC et aux associations communautaires, et de comptes rendus au Comité consultatif sur l'accessibilité. Le cadre proposé a été bien accueilli par la majorité des parties intéressées et des membres du public.

Le Comité consultatif sur les rues complètes avait pour principale tâche d'examiner et d'évaluer dans quelle mesure les politiques et les méthodes actuelles de la Ville d'Ottawa soutiennent la création de rues complètes, et de déterminer comment appliquer au mieux les orientations approuvées par le Conseil en novembre 2013.

Le cadre décrit dans le présent rapport définit comment les politiques seront mises en œuvre, notamment en ce qui concerne leur harmonisation avec les processus du Programme de gestion intégrale des actifs et ceux des évaluations environnementales (ÉE) municipales de portée générale, ainsi qu'avec les nouvelles lignes directrices sur le niveau de service multimodal, afin de contribuer à la planification et à la conception des emprises.

Le cadre proposé recommande une définition précoce du cadre des projets de transport, une mesure qui sera favorable à la prévision et à la planification financière à long terme.

BACKGROUND

Complete streets are roadways planned, designed, constructed, operated and maintained for everyone's safety and comfort regardless of people's age, ability, or mode of transportation. There is no single design for a complete street but they often include such things as sidewalks, crosswalks, public lighting and bike lanes.

The complete streets concept was first launched in 2004 by the National Complete Streets Coalition in the United States. In 2009, the City of Toronto began implementing Complete Street policies and in 2011 the Complete Streets for Canada initiative was launched through an Ontario Trillium Foundation grant that was awarded to the Toronto Centre for Active Transportation (TCAT).

Today, approximately 730 cities and regional municipalities across North America have officially adopted Complete Street policies, including Toronto, Vancouver, Calgary, and Edmonton.

In November 2013, Council unanimously approved an update to the City's Transportation Master Plan as part of the Building a Liveable Ottawa Initiative which included the following actions related to complete streets:

- Adopt a Complete Streets Policy for road design, operation and maintenance;
- Update road design guidelines, standards, and processes to reflect complete streets principles; and
- Use Multi-Modal Levels of Service (MMLOS) to assess road designs and allocate right-of-way.

DISCUSSION

Following Council's approval in November 2013 of the high-level Complete Street policies and actions within the updated Transportation Master Plan, staff began to develop a framework for successfully implementing the policies. The process to develop the implementation framework included the formation of a Complete Streets

Advisory Committee, which has representation and participation of staff members across several city departments, including Planning and Growth Management, Public Works, Infrastructure Services, Transit Services, and Public Health. This process also included extensive public participation.

The focus of the Complete Streets Advisory Committee was to review and assess how well existing City of Ottawa policies and processes support the implementation of complete streets and how best to proceed with the directions approved by Council.

Collectively, the Complete Streets Advisory Committee concluded that the next steps to realizing more complete streets in the City should include the following:

- A coordinated inter-departmental complete streets process for scoping transportation projects and defining the expectations for different project types;
- Effective internal and external communication, as well as staff training, about complete street policies and implementation, including a definition for the City of Ottawa context;
- Updates to existing policy, standards and guideline documents, such as the City of Ottawa Transportation Impact Assessment Guidelines and the City of Ottawa Road Design Guidelines; and
- New Multi-Modal Level of Service (MMLOS) guidelines to better assist with right-of-way planning and design with respect to pedestrians, cyclists, transit, and motor vehicles.

City of Ottawa Complete Streets Definition

The starting point for the review of implementing Complete Streets policies included the need for a concise definition. The Complete Street Advisory Committee, in collaboration with external stakeholders and members of the general public, formed the following definition for the City of Ottawa:

“Complete Streets incorporate the physical elements that allow a street to offer safety, comfort and mobility for all users of the street regardless of their age, ability, or mode of transportation. A Complete Streets approach uses every transportation project as a catalyst for improvements within the

scope of that project to enable safe, comfortable and barrier-free access for all users.”

Key to the definition is the intent that Complete Streets is a process rather than a prescribed design and that they will look different depending upon the location and context of the street.

For example, a local street will provide for the safety, comfort and mobility of users differently than a major arterial road but both can be referred to as a complete street given their context and function. The objective of the definition is to ensure that basic needs of all users are provided as a minimum, and then further improvements should be considered within the scope of the transportation project.

The scope of the transportation project is determined in the early planning phases of the project for long-term budgeting, timelines and resource planning purposes. Early scoping during the project initiation phase of all transportation projects is the ideal point to apply the complete streets approach. At this early phase in transportation project delivery, projects can anticipate opportunities to incrementally achieve municipal goals, including safe and efficient, multi-modal complete streets. By integrating the approach early, and through all branches responsible for this task, cost-effective project delivery and implementation is expected over the long-term.

Coordinated Inter-Departmental Complete Streets Process

The intent of the proposed framework is for staff to integrate the complete streets approach into routine processes, guidelines and standards for the planning, design, operation and maintenance of streets using the following guiding principles:

- Goals are identified at project initiation to foster multi-modal and context-sensitive solutions;
- Complete street elements will align with the scope of transportation projects and Municipal Class Environmental Assessment (MCEA) requirements. This requires that designs be developed with a focus on matching available resources with expected outcomes;
- Key constraints are recognized early in the process, including right-of-way ownership, major utility conflicts, and long-term maintainability;

- Projects will anticipate opportunities to incrementally achieve complete streets and networks over time, and in future phases of projects; and
- Each project must be budgeted appropriately for implementation of the complete street approach.

Critical to this process is the initial scoping of each transportation project and determination of the physical elements of the street that can be affected within that scope. The context of the street will first be considered with the intent to meet the basic needs of all users and then the consideration of further improvements.

The basic needs will differ based on context and location. For example, pedestrians generally need safe, accessible space and short street crossings in urban areas, or paved shoulders to walk on in rural areas. Cyclists can share travel ways with motorists if traffic speeds or volumes are low; separate or protected space need to be considered as traffic speeds and volumes increase. Accommodating the basic needs of transit users will depend upon the type of service provided along that street. Truck route performance will be recognized; local streets may permit trucks for deliveries but will not be designed for their unimpeded movement.

Every street will be subject to the complete streets approach, but not every street can be ideal for every user. Local constraints, such as limited right-of-way for winter maintenance and snow storage or potential impacts to heritage, cultural or natural assets will require trade-offs to be made about how each user will be accommodated.

Existing Complete Streets Planning and Design Tools

There are a number of existing internal and external documents that staff use to guide the planning, design, operation and maintenance of streets. Those with a high relevance to complete streets are listed in Document 1. Staff will have regard to the complete streets approach when referencing, updating and creating new relevant materials, such as the City of Ottawa Transportation Impact Assessment Guidelines, the City of Ottawa Road Design Guideline Update, and the Pedestrian and Cycling Design Toolbox, all of which are currently underway. However, it is important to note that the proposed Complete Streets Implementation Framework addresses how the internal transportation project delivery process should change to incorporate the complete streets approach rather than providing a prescribed design. This is consistent with the

approach that a complete street will include different elements and will look different depending upon the location and context of the street. Rather than providing a prescribed design, the approach provides guidance for assessing the various Levels of Service (LOS) for the different modes of transportation and recommends target service levels for each modes contingent upon the location and context of the transportation project. This is outlined further in this report as part the proposed Mutli-Modal Level of Service (MMLOS) guideline which is an important component to the Complete Streets Implementation Framework.

Comprehensive Asset Management (CAM) Program

Comprehensive Asset Management (CAM) is an integrated business approach involving planning, finance, engineering, maintenance and operations geared towards effectively managing existing and new infrastructure to maximize benefits, reduce risk and provide safe and reliable levels of service to community users. This is accomplished in a socially, culturally, environmentally and economically conscious manner. Aligning the complete street approach with CAM is essential.

Interdepartmental collaboration, especially during the early scoping process of a project, is central to the complete street process.

Developer Delivered Transportation Projects

Not all transportation projects are delivered by the City. Some projects are initiated and constructed by private developers to support their development projects. During the planning and design phases, the City provides reviews, approvals and agreements for the proponent of developer-managed transportation projects.

The same tools available for City-managed projects are available for the development review process. Emphasis is placed on policies, by-laws, standards and guidelines, including the proposed new Multi-Modal Level of Service tool which will be important for making progress on developer-managed projects within a complete streets framework.

Key documents include:

- City of Ottawa Official Plan (Consolidated, 2003);
- Zoning By-laws;

- Secondary Plans;
- Community Design Plans;
- Urban Design Guidelines for Development;
- Transportation Impact Assessment Guidelines (2007); and
- Multi-Modal Level of Service Guidelines (draft).

Municipal Class Environmental Assessment (MCEA) processes

The complete streets approach to transportation project delivery must align with the MCEA requirements. In this way, scoping of the project through a complete streets approach must be done early, during the project initiation stage, so that the project's MCEA schedule requirements are determined before project planning and design commences.

It is important to note that there are currently proposed amendments to the MCEA process that will provide more clarity and will expedite the construction of bicycle paths and bike lanes within existing right-of-ways.

Multi-Modal Level of Service (MMLOS) Guidelines

The concept of Level of Service (LOS) was first introduced by the U.S. Highway Capacity Manual in 1965 as a means of evaluating the driver's perspective of a transportation system's performance. A similar approach was also later enshrined in Canadian guidelines through the Institute of Transportation Engineers Canadian Capacity Guide, focusing on LOS at signalized intersections. Traditionally, this motor vehicle LOS is based on peak hour vehicle delays, with delay typically expressed as a ratio between normal free flow vehicles speeds and actual travel speeds. After delays have been determined, the LOS is simply the conversion of these delays to discrete categories that represent an attempt to broadly characterize the ability of motorists to travel quickly, free of delays, and free to manoeuvre in the roadway. Thus, the concept is simple in that it involves assigning delay thresholds to a rating system familiar to most North Americans (i.e. A, B, C, D, E, and F).

Although simple, this LOS scoring system has had a powerful effect on transportation engineering since it is easy to convey to decision makers and has traditionally been one

of the few consistently-used measures for evaluating transportation planning decisions. The LOS scores can be easily mapped, highlighting intersections and/or network links forecasted or considered to have poor levels of service. Thus, LOS has tended to raise the issue of vehicle delay to the forefront of transportation decision-making.

Since no comparable LOS measures have been commonly institutionalized for other modes of travel, the tradeoffs between vehicle delay and its impacts on the quality and LOS of travel by other modes are often overlooked. That is, the typical outcome of improving automobile LOS is wider roads with more travel lanes, higher vehicle volumes, and faster vehicle speeds. These impacts generally tend to degrade conditions for walking and cycling directly and for transit indirectly because unfriendly pedestrian conditions negatively impact transit ridership. These tradeoffs are not incorporated into the traditional motor vehicle LOS indicator. In moving forward with the Complete Streets Implementation Framework, it is critical to recognize that tradeoffs among the different roadway users are inevitable, and that such tradeoffs can be facilitated effectively only when level of service standards are developed, measured and adopted for all modes of transportation.

The proposed MMLOS guidelines will provide guidance to practitioners (City staff, consultants, etc.) for how to assess the various LOS for the different modes of transportation and what the specific target service levels for each mode should be given the location and context the transportation project. Figure 1 shows the proposed LOS range and general description for each mode.

Figure 1 – Proposed Level of Service by Transportation Mode

MODE	ELEMENT	LEVEL OF SERVICE					
							
Pedestrians (PLOS)	Segments	High level of comfort				Low level of comfort	
	Intersections	Short delay, high level of comfort, low risk			Long delay, low level of comfort, high risk		
Bicycles (BLOS)	Segments	High level of comfort				Low level of comfort	
	Intersections	Low level of risk / stress				High level of risk / stress	
Trucks (TkLOS)	Segments	Unimpeded movement				Impeded movement	
	Intersections	Unimpeded movement / short delay			Impeded movement / long delay		
Transit (TLOS)	Segments	High level of reliability				Low level of reliability	
	Intersections	Short delay				Long delay	
Vehicles (LOS)	Intersections	Low lane utilization				High lane utilization	

Proposed Pedestrian Level of Service (PLOS) Methodology

The intent of the Pedestrian Level of Service (PLOS) method is to evaluate pedestrian comfort, safety and convenience. The PLOS includes LOS analysis for both mid-block segments and at signalized intersections. The segment analysis is based on the quality of pedestrian facilities and the impact of adjacent traffic. The signalized intersection methodology considers two factors – delay experienced by pedestrians based on the Highway Capacity Manual (HCM) method and the Pedestrian Exposure to Traffic at Signalized Intersections (PETSI) based on the Charlotte NC Pedestrian LOS at Signalized Intersections methodology.

The following criteria is proposed for evaluating PLOS, as described further in Document 2 attached to this report.

Segment PLOS criteria:

- Motor vehicle operating speed;
- Sidewalk width;
- Boulevard width;
- Motor vehicle volume; and
- Presence of on-street parking.

Intersection PLOS criteria:

- Street width and presence of refuge island for crossing pedestrians;
- Right and left turn conflicts based on phasing (permitted, protected/permitted, protected, prohibited) and pedestrian-only phases (leading pedestrian interval);
- Right turn on red (RTOR) restrictions;
- Corner radius and type (smart right turn channel, right turn channel with receiving lane);

- Crosswalk treatment (transverse marking, zebra stripe markings, textured/coloured crosswalks, raised crosswalks) Cycling facilities at intersection (pocket bike lane vs. mixed traffic);
- Cycle length; and
- Pedestrian green time (walk time).

Proposed Bicycle Level of Service (BLOS) Methodology

The intent of the Bicycle Level of Service (BLOS) tool is to evaluate both roadway segments and signalized intersections for the Level of Traffic Stress (LTS) experienced by cyclists using the corridor. The methodology, based on a recent Mineta Transportation Institute report (no. 11-19), relates the LTS on a facility to the degree of comfort experienced by a cyclist and targeted users. The City of Ottawa has adapted the tool to allow for comparison with other modes by mapping LTS to LOS A-F.

The following criteria is proposed for evaluating BLOS, as described further in Document 2 attached to this report.

Segment BLOS criteria:

- Street width (total number of lanes in both directions);
- Operating speed;
- Street width (number of through lanes per direction);
- Bike lane width (including marked buffer and paved gutter width);
- Parking lane width (where bike lane is adjacent to parking lane);
- Operating speed;
- Qualitative assessment of commercial deliveries for commercial areas;
- Presence of median refuge suitable for bicycle storage (≥ 1.8 metres wide);
- Width of street being crossed (number of lanes in both directions); and

- Speed limit of street being crossed.

Intersection BLOS criteria:

- Right turn lane characteristics (number of right turn lanes, length of turn lane, turning speed);
- Operating speed;
- Left turn accommodation (presence of bike box, number of left turn lanes, number of lanes crossed);
- Right turn lane characteristics (number of right turn lanes, length of turn lane, turning speed);
- Operating speed; and
- Left turn accommodation (presence of bike box, number of left turn lanes, number of lanes crossed).

Proposed Transit Level of Service (TLOS) Methodology

The intent of the transit level of service (TLOS) is to evaluate the relative attractiveness of transit in support of the City's aim to increase transit mode share. The relative attractiveness, for the purposes of TLOS, is evaluated based on transit travel time and the transit priority afforded to transit vehicles based on varying facility types and conditions.

The TLOS methodology is intended to be applied only along corridors with existing or planned rapid transit or transit priority measures. The extent of analysis required should be determined at the time of the project or development application.

The following criteria is proposed for evaluating TLOS, as described further in Document 2 attached to this report.

Segment TLOS criteria:

- Level/exposure to congestion delay, friction, and incidents;
- Average transit travel speed;

- Posted speed limit; and
- Number of driveways along corridor and approximate crossing volume.

Intersection TLOS criteria:

- Average signal delay.

Proposed Truck Level of Service (TkLOS) Methodology

The traditional motor vehicle LOS methodology accounts for trucks by considering the percent of trucks and buses in the traffic volume. However, some elements of roadway segments and intersections clearly affect the ability of trucks to operate with ease. The intent of the truck level of service (TkLOS) is to complement motor vehicle LOS by considering the physical space available for trucks to negotiate corners quickly and easily, and to operate safely within travelled lanes.

The objective of evaluating TkLOS is to facilitate goods movement within the City of Ottawa – however, unlike other modes; the TkLOS need only be applied along truck routes, arterial roads and key delivery access routes, since trucks are not intended to operate on every street.

Segment TkLOS criteria:

- Street width (number of through lanes per direction) ; and
- Curb lane width (m).

Intersection TkLOS criteria:

- Effective radius; and
- Number of receiving lanes on departing leg.

Motor Vehicle Level of Service (MVLOS) Methodology

The Motor Vehicle Level of Service (MVLOS) is based on motor vehicle volume to capacity ratios (V/C) and continues to be consistent with the motor vehicle LOS methodology approved by Council in 2009 as part of the Transportation Impact Assessment Guidelines.

Proposed Multi-Modal Level of Service (MMLOS) Targets

The ultimate objective of developing a MMLOS program is to enable designers, City staff and the public to evaluate and understand transportation choices. The MMLOS framework is not complete until the MMLOS tools are used and presented in relation to each other. Different streets and roads with associated land-use contexts will have varying levels of service for each mode – it is neither possible nor desirable to achieve LOS A for all modes on every street due to finite land resources and limited funding. LOS targets exist as a way to quantify on-the-ground conditions and to identify where higher or lower levels of services are appropriate.

Towards this end, multi-modal level of service targets have been developed. In order to introduce a measure of local context, these targets are presented based on various OP land use designations and road classifications. The OP designations provide a sense of the surrounding land use, density, commercial activity and in certain cases the function of the roadway (i.e. arterial mainstreet), while road classifications provide a proxy for the vehicular volume and speed of the roadways.

Figure 2 shows the proposed minimum level of service by mode, as described further in Document 2 attached to this report.

It is important to reiterate that these targets must cover a wide range of conditions (i.e. varying built form and context) and therefore should be considered to provide broad guidance rather than absolute cut-offs. At the same time, these targets represent City policies and plans, and provide a more realized vision for future street planning and design. Over time these targets are likely to shift as they are better calibrated to reflect ongoing outcomes and initiatives.

Figure 2 – Proposed MMLOS Targets by Official Plan Designation / Land Use^{1, 2}

Official Plan Designation / Land Use	Pedestrian	Bicycle	Transit	Truck	Automobile
	PLOS	BLOS	TLOS	TkLOS	MVLOS
Central Area / Mixed Use Centres	High	High	High	Low	Low

Transit Station Areas	High	High	High	Low	Low
School Areas	High	High	Medium	Low	Low
Traditional Main Streets	High	Medium	Medium	Low	Low
Arterial Main Streets	Medium	Medium	Medium	Medium	Medium
General Urban / Village Areas	Medium	Medium	Medium	Low	Low
Rapid Transit Corridors	Medium	Medium	High	Low	Low
Transit Priority Corridors	Medium	Medium	Medium	Low	Low
Crosstown Bike Routes	N.A.	High	N.A.	N.A.	N.A.
Bike Spine Routes	N.A.	Medium	N.A.	N.A.	N.A.
Truck Routes	N.A.	N.A.	N.A.	High	N.A.
General Rural Areas	Low	Low	N.A.	Medium	Medium

¹ Values represent minimum targets to be exceeded wherever possible without negatively impacting other modes.

² Not Applicable (N.A.).

Provincial Policy Statement

Staff have reviewed this proposal and have determined that it is consistent with the Provincial Policy Statement, 2014.

RURAL IMPLICATIONS

Feedback from rural residents are included in the overall summary of all feedback received through the consultation processes. The Complete Streets Implementation Framework respects the rural context of roads in the general rural area, including the need for paved shoulders, where appropriate, to help facilitate alternative modes of transportation. Within rural villages, the framework is similar to the general urban area with a focus to accommodate the basic needs for all transportation modes

CONSULTATION

Extensive consultation for the Complete Streets Implementation Framework included an internal advisory committee, an external advisory committee, consultation with the Accessibility Advisory Committee (AAC), and a public information session. Additional consultation included presentations and discussions with Ecology Ottawa and the Community Associations for Environmental Sustainability (CAFES).

Internal Advisory Committee

Staff members from various City departments, including Planning and Growth Management, Infrastructure Services, Public Works, Transit Services, Public Health, and Emergency and Protective Services participated in an internal advisory committee which met several times through the course of study. Collectively, the Internal Advisory Committee reviewed and recommended the process and tools to implement the Complete Streets Implementation Framework.

External Advisory Committee

An external advisory committee was established representing a diverse group of road users, including Greater Ottawa Truckers Association, Ottawa Student Transportation Association, Ecology Ottawa, Citizens for Safe Cycling, Green Communities Canada, Public Works and Government Services Canada, and several Business Improvement Area (BIA) associations and community associations.

The committee was circulated draft documents for comment and a meeting was held on April 9, 2015 at City Hall. In general, committee members appreciated the briefing and the proposed complete streets approach, especially the context-driven design elements that will make complete streets look different depending upon their location.

Accessibility Advisory Committee

Staff consulted with the City's Accessibility Advisory Committee (AAC) on June 16, 2015 and September 15, 2015. Consultation with the AAC resulted in the complete streets definition to include the words "barrier-free".

Public Information Session

A public information session was held on May 5, 2015 in Jean Pigott Place at City Hall, which included display boards, a slide presentation, and a question and answer session.

Approximately 70 people attended the public meeting. The meeting was advertised in the EMC and LeDroit newspapers, City's website, and through the Building a Liveable Ottawa electronic newsletter. Feedback was received via paper comment sheets and through emails to the City's project manager. Approximately 25 written submissions were received, all of which were in support of the initiative with various additional site-specific concerns and issues.

COMMENTS BY THE WARD COUNCILLORS

This is a city-wide report – not applicable.

ADVISORY COMMITTEE COMMENTS

Staff consulted with the City's Accessibility Advisory Committee (AAC) on June 16, 2015 and September 15, 2015.

LEGAL IMPLICATIONS

There are no legal impediments to implementing the recommendation as outlined in this report.

RISK MANAGEMENT IMPLICATIONS

The Complete Streets Policy has been approved by Council as part of the 2013 TMP update. There are no risks associated with the Complete Streets Implementation Framework.

ASSET MANAGEMENT IMPLICATIONS

The recommendations documented in this report are consistent with the City's Comprehensive Asset Management (CAM) Program ([City of Ottawa Comprehensive Asset Management Program](#)) objectives. The implementation of the CAM program results in timely decisions that minimize lifecycle costs and ensure the long-term affordability of assets. To fulfill its obligation to deliver quality services to the community,

the City must ensure that assets supporting City services are managed in a way that balances service levels, risk and affordability.

The Complete Street Implementation Framework, as described in this report, is a process rather than a prescribed design through which the scope of the project is determined in the early planning phases for long-term financial forecasting, timelines and resource planning. The process supports CAM's integrated planning frameworks and provides a vehicle for balancing scope expectations with affordability and long-term sustainability of assets. By establishing target levels of service, staff will have clearer direction on investment priorities and decision makers will be better informed on the rationale for project selection and project scope.

The framework is a common best practice among other municipalities and is aligned to the Transportation Master Plan, which supports a forward looking approach to meet future challenges, including changing demographics and populations, legislative and environmental factors.

FINANCIAL IMPLICATIONS

Funding to implement the complete street approach will be included within the respective project budget, for Council consideration through the budget process.

ACCESSIBILITY IMPACTS

The intent of the proposed Complete Street Implementation Framework is to plan, design, construct, operate and maintain roads with a more enhanced focus on the most vulnerable users. The implementation of transportation projects will continue to meet the *Accessibility for Ontarians with Disabilities Act* (AODA) and the City of Ottawa Accessibility Guidelines.

ENVIRONMENTAL IMPLICATIONS

Complete streets is a process to ensure people have more transportation mode choices by providing more certainty that the basic needs of each mode are accommodated through the planning, design, construction, operation and maintenance of roads. Providing more alternative and sustainable transportation infrastructure; such as sidewalks, crosswalks, public lighting and bike lanes, helps to grow the city's

sustainable transportation mode share, which in turn improves the environment and public health over the long-term.

TERM OF COUNCIL PRIORITIES

This project addresses the following Term of Council Priorities:

Transportation and Mobility

TM2 – Provide and promote infrastructure to support safe mobility choices.

TM4 – Improve safety for all road users.

SUPPORTING DOCUMENTATION

Document 1 Complete Streets Related Policies, Standards and Guidelines

Document 2 Proposed Multi-Modal Level of Service (MMLOS) Guidelines (*Previously distributed and held on file with the City Clerk and Solicitor*).

DISPOSITION

Upon Council approval of this report, the Planning and Growth Management Department will finalize the documentation for the Complete Streets Implementation Framework, including the Multi-Modal Level of Service Guidelines. Staff from the applicable departments will apply the Complete Streets Implementation Framework through updating their relevant processes, guidelines, standards and procedures

Document 1 – Complete Streets Related Policies, Standards and Guidelines

Master plans:

- City of Ottawa Official Plan (Consolidated, 2003).
- Comprehensive Asset Management Policy (City of Ottawa, 2012).
- Infrastructure Master Plan (2009).
- Transportation Master Plan (2013).
- City of Ottawa Cycling Plan (2013).
- City of Ottawa Pedestrian Plan (2013).
- Downtown Moves: Transforming Ottawa's Streets, 2013.
- Secondary Plans (various).

Planning and design guidelines:

- Transportation Impact Assessment Guidelines (2007).
- Community Design Plans (various).
- Guidelines for the Replacement of Utilities within the Right-of-Way.
- Sidewalk Technical Design Guidelines (2002).
- Road and Sidewalk Design Manual (1999).
- Cross-section Guidelines for New Residential Roads (2007).
- Transitway and Station Design Guidelines (OC Transpo, 2013).
- Street Tree Manual for Greenfield Neighbourhoods (2014, draft).
- Right-of-Way Lighting Policy (2009).
- Road Corridor Planning and Design Guidelines (2008).
- Design Guidelines for the Development of Rural Villages (2009).

- Transit-Oriented Development Guidelines (2007).
- Urban Design Guidelines for Development along Arterial Mainstreets (2006).
- Urban Design Guidelines for Development on Traditional Mainstreets (2006).
- Urban Design Guidelines for Greenfield Neighbourhoods (2007).
- Street Design Policy Special Streets (2012, draft).
- Building Better Suburbs (2013).
- Accessibility Design Standards (City of Ottawa, 2012).
- Bikeway Planning/Design Guidelines – Technical Appendix to OCP (2008).
- Pedestrian and Cycling Design Toolbox (in progress).

Construction, maintenance and operations manuals:

- Guidelines for Accommodating Cyclists in Construction Zones (2009)
- Maintenance Quality Standards for Roads, Sidewalks and Pathways.

External standards and guidelines:

- Ontario Traffic Manual (OTM) – Book 15: Pedestrian Crossing Facilities (2010).
- OTM – Book 18: Cycling Facilities (2013).
- OTM – Bicycle Traffic Signals Guide (2015).
- AODA Regulation 413/12 Integrated Accessibility Standards Part IV.1 Design of Public Spaces Standards (Accessibility for the Built Environment).
- Municipal Engineers Association's Municipal Class Environmental Assessment with proposed amendments to the Municipal Roads Schedules.
- *Ontario Municipal Act* Regulation 239/02, Minimum Maintenance Standards for Municipal Highway.

- North American Cities Transportation Officials (NACTO) Urban Bikeway Design Guide (2013, 2nd edition).
- NACTO Urban Street Design Guide (2013).
- Velo Quebec Association Planning and Design for Pedestrians and Cyclists.
- Institute of Transportation Engineers (ITE) Designing Walkable Urban Thoroughfares: A Context Sensitive Approach.
- Transportation Association of Canada (TAC) / ITE Canadian Guide to Neighbourhood Traffic Calming (1998).
- ITE Promoting Sustainable Transportation Through Site Design: An ITE Recommended Practice, Institute of Transportation Engineers (2010).
- AASHTO Guide for the Planning, Design and Operation of Pedestrian Facilities, American Association of State Highway and Transportation Officials (2004).