

# Report to Council



**Date:** January 13, 2016  
**File:** 1850-30  
**To:** City Manager  
**From:** Moudud Hasan, Transportation & Mobility Manager  
**Subject:** Pedestrian and Bicycle Master Plan draft report

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**Recommendation:**

THAT Council receives for information this report dated January 13, 2016, from the Transportation & Mobility Manager regarding the Pedestrian and Bicycle Master Plan;

AND THAT Council endorses the next steps related to the master planning process prior to staff reporting back to Council with the Pedestrian and Bicycle Master Plan final report for Council endorsement, as outlined in the report from the Transportation & Mobility Manager, dated January 13, 2016.

**Purpose:**

To receive Council feedback on the Draft Pedestrian and Bicycle master Plan and the next steps towards the completion of the Master Plan adoption.

**Background:**

The City of Kelowna's Pedestrian and Bicycle Master Plan development project started in August 2014 with the objective of identifying and establishing a walking and cycling network within the City and to prioritize projects and policies over the short and long-term horizons to deliver on achieving that network vision. The ultimate goal is to create a complete community where walking and cycling conditions are incrementally improved to achieve a multitude of the 2030 Official Community Plan (OCP) growth objectives. The planning process, branded as *Kelowna On the Move*, was undertaken in two phases where data collection, mapping, public consultation and analysis were completed in Phase I followed by further technical work, best practice review, as well as program, policy and Bylaw review in Phase II.

This project is an important infrastructure Master Plan, which is needed to be the building block for other large-scale community plan work. Notably, when complete, this master plan will inform the next OCP update regarding the active transportation needs and priorities in the community. Notably, it will further inform the upcoming Transportation Master Plan that is also a critical input when comprehensively examining the future growth of our City and prioritizing infrastructure and capital investment to accomplish the long-term growth strategy for decades to come. A team of consulting firms led by ALTA Planning has assisted staff in developing this master plan. This team has considerable experience in active transportation facility planning, design and policy development across North America.

### **Vision, Goals and Principles**

This master plan establishes a vision with corresponding goals, principles, and objectives to be aligned with the City's current 2030 OCP and be forward thinking to apply to the next OCP update. The vision of this Master Plan is:

*To make walking and cycling safer, convenient, and practical modes of travel, to reduce motor vehicle use and resulting greenhouse gas emissions, and to increase opportunities for active living to improve community health and happiness.*

### **Principles:**

- To increase walking and cycling as practical modes of travel; and
- To improve safety and convenience for pedestrians and cyclists.

### **Goals:**

- Increase year-round walking and cycling so that within 20 years, 25% of all trips less than 5.0 km in length are made by walking and cycling; and
- Improve pedestrian and cyclist safety so that the rate of collisions with motor vehicles is reduced by 50% within 20 years.

### **Objectives:**

- Network Design:
  - Facilitate and enhance walking and cycling in all roadway design;
  - Apply higher design standards for high demand or "strategic" active transportation routes;
  - Develop a comprehensive pedestrian and bicycle network for phased implementation.
- Planning, Monitoring and Maintenance:
  - Establish proactive and ongoing planning for both new and existing infrastructure;
  - Establish monitoring and evaluation mechanisms;
  - Ensure ongoing maintenance programs for walking and cycling facilities.
- End-of-Trip and Transit Integration:
  - Encourage transit-bicycle integration;
  - Incorporate end-of-trip facilities for pedestrians and cyclists in new and existing developments.
- Education and Promotion:
  - Develop and implement an ongoing education and awareness program.
- Bylaws, Policies and Enforcement:
  - Establish bylaw, policy, and enforcement measures to improve pedestrian and cyclist safety.
- Funding:
  - Support walking and cycling programs and infrastructure with effective and equitable investment.

### **State of Walking and Cycling in Kelowna**

The City of Kelowna's existing walking and cycling network consists of 400 kilometres of sidewalks, 297 km of bike lanes and 40 km of shared-use pathways. These are remarkable compared to many other municipalities. However, opportunities for improvement exist in terms of completing gaps in the sidewalk network and providing better width and physical separation to enhance the safety of our bike lanes. Such measures will enable users of all ages and abilities to walk or bike to their destinations. Enhanced walking and cycling also

promote transit use and provide alternative travel options to driving, leading to a cleaner environment and a more active lifestyle.

### Mode Share

The percentage of walking and cycling trips is gradually increasing in Kelowna. The combined pedestrian and cycling mode share for all daily trips increased from 8% in 2007 to 11.1% in 2013. For the urban core area, the growth was more pronounced, as mode share increased from 8.9% in 2007 to 13% in 2013. While these mode shifts are trending in a positive direction, there are opportunities for improvement to establish walking and cycling as alternative modes of travel in the City. Due to density, higher demand and shorter travel distances in the urban centres, it is more cost-effective to increase walking and cycling by providing infrastructure.

### Safety

Based on the Insurance Corporation of British Columbia (ICBC) collision data, each year 60 to 70 pedestrian collisions and 60 to 80 cyclist collisions are reported in Kelowna. Despite slight increases in the total number, the average collision rates per capita have remained relatively steady over the recent years. Measures should be taken to reduce the number of these collisions.

### Barriers

An online survey was conducted as part of this master plan, which cited a lack of safe infrastructure as the number one reason to be a barrier to cycling as a viable mode choice. For walking trips, time and distance are noted as the most significant barriers; however, a lack of sidewalks was the second most-cited obstacle. The completion of the critical gaps through infrastructure delivery would mitigate this barrier.

### Status and Outcomes

The Draft Pedestrian and Bicycle Master Plan development is now at the last stage of this extensive 15 month process, and the final public engagement sessions to inform the community of the proposed network is left remaining. The attached draft Plan identifies a comprehensive network that links the City and completes many areas of gaps. The public involvement at key milestones of the process resulted in a network that ultimately increases mobility throughout the City and serves both pedestrians and cyclists of all ages, abilities and trip purposes. The network connects major destinations, linking growth and the village centres, transit exchanges, parks, and schools throughout our community. The Plan identifies a range of projects, programs and policy measures to meet the goals and visions established by the community through this process and was influenced by the goals and objectives of the 2030 OCP. The key outcomes of this planning process are as follows.

#### Key Outcome 1

1. The identification of gaps in the existing pedestrian and bicycle networks. This includes:
  - A Geographic Information System (GIS) based inventory of existing assets;
  - Identification of existing gaps in the pedestrian and bicycle networks; and

#### Key Outcome 2

2. A list of priority pedestrian and bicycle infrastructure projects. Table 1 summarizes existing and proposed walking and cycling facilities in the City. The proposed infrastructure will be implemented gradually as part of annual capital program delivery and utilizing any external grant(s) that become available. A set of

prioritization criteria, developed with public and stakeholder input, was applied to rank the sidewalk and cycling projects. This takes into account:

- Utility prioritization criteria consisting of factors such as geographic area, land use context, network gap closure, connectivity to transit, primary network, and connectivity to schools;
- Implementation prioritization criteria consisting of project readiness, cost, site constraints, and development opportunities.

Table 1: Summary of Existing and Future Priority Walking and Cycling Facilities in Kelowna

Infrastructure Type	Existing (km)	Proposed Priority (km)*	Description
Sidewalks	399.8	87.4	One or both sides of the road, excludes beautification or storm drainage works
Cycle Tracks	4.2	40.6	Two direction separated roadside cycling facility
Shared-Use Pathway	40.2	44.5	Paved pathway for walking and cycling within road right-of-way
Bike Lanes	297	210	On-road marked bike lanes measured on both sides

\*These are proposed new infrastructure in addition to existing facilities

### Key Outcome 3

3. A summary of supporting programs and activities to strengthen the implementation feasibility of the Master Plan. The planning process has brought together planners, engineers, community partners and residents to inform these tools, including the education, encouragement and advocacy programs to put this Plan into action. These activities include:
  - Awareness, encouragement programs;
  - Evaluation and monitoring tools;
  - Recommended Bylaw and policy amendments;
  - Facility design recommendations; and
  - Funding options.

### Funding

The priority walking and cycling networks are illustrated in Attachment A. Based on preliminary cost estimates, the delivery of these priority projects alone will cost approximately \$267 million. As shown in Table 2, the City currently invests \$500,000 in its new sidewalk and \$300,000 in bike lane construction each year. This current allocation results in less than \$90 million invested in the network by 2030, which is inadequate to complete the delivery of the facilities. To minimize financial burden on residents, these networks will need to be completed gradually in phases extending beyond 2030. This also applies to various encouragement and promotional programs that will need to gradually expanded to increase awareness and participation in the community.

Table 2: 2030 Infrastructure Plan (Draft) Anticipated Investments

Facility Types	2016	2017	2018	2019	2020
Sidewalks	\$417,620	\$500,000	\$500,000	\$500,000	\$500,000
Bike Lanes	\$340,000	\$300,000	\$300,000	\$300,000	\$300,000
Active Transportation Corridors	\$3,230,000	\$4,928,400	\$8,307,799	\$8,407,601	\$3,400,000
<b>Total</b>	<b>\$3,987,620</b>	<b>\$5,728,400</b>	<b>\$9,107,799</b>	<b>\$9,207,601</b>	<b>\$4,200,000</b>

Potential funding sources were explored further as options to increase the investment in active transportation programs and projects. This includes:

- Community contribution and Local Area Service taxes;
- Cash-in-Lieu and parking revenues;
- External grants; and
- Private sector partnership.

### Next Steps

Staff is seeking Council feedback of the draft Pedestrian and Bicycle Master Plan and endorsement of the final project phase. Following this, the Master Plan information will be made available to public and the feedback received from open houses and through online engagement will be incorporated in the final version of the report and published online.

The next steps to finalize the master plan are as follows:

- Open House and online public engagement to inform the community of the Master Plan content and to receive feedback (January- February);
- Final inclusion of community comments and technical review for the Master Plan (February 2016);
- Council presentation and adoption of the final PBMP Master Plan report (March 2016).

### Summary

The Pedestrian and Bicycle Master Plan describes a strategic approach for achieving a significant shift in transportation throughout our City, and sets out a vision that underscores the goal of the City of Kelowna to be a truly livable community, where walking and cycling infrastructure are key components to our community fabric. It is ambitious in its goals of providing pedestrian facilities and a cycling network that are safe, accessible, and complete for all users of all abilities. The implementation of this plan will establish active transportation as a suitable alternative to driving. Active transportation can reduce environmental impacts of single occupancy vehicles, reduce congestion and help us manage the ever growing demand for capacity, new roads and road widening. A balanced transportation network is essential to enhance community health and make Kelowna an attractive place to live, work and visit. This Plan will set in motion a vision to be realized for decades to come, and takes inspiration from other real-life City examples such as Vancouver, Seattle and Montreal that are actively investing in active transportation and realizing the benefits to health, safety, the environment, neighborhood livability, and sound fiscal spending. The unique character of our City can be enjoyed and enhanced through the creation of a connected set of pedestrian and cycling facilities.

**Internal Circulation:**

Divisional Director, Infrastructure  
Divisional Director, Community Planning & Real Estate  
Divisional Director, Civic Operations  
Divisional Director, Active Living & Culture  
Divisional Director, Communications & Information Services  
Divisional Director, Corporate & Protective Services  
Infrastructure Planning Dept Manager  
Policy & Planning Department Manager

**Existing Policy:**

OCP Policy 7.6.1 - Transportation Infrastructure Priority. Transportation infrastructure will be funded, designed, constructed and maintained to meet the needs of users and according to the following priority:

- i. Active Transportation (Walking and Cycling)
- ii. Transit
- iii. Movement of Goods & Services
- iv. High Occupancy Vehicles (HOVs)
- v. Single Occupant Vehicles (SOVs)

Priority will be assigned to active transportation and transit infrastructure that serves and connects Urban Centres, major employers, health care and educational facilities.

OCP Policy 7.7.1 - Motorized Trips. Provide infrastructure to the Urban Centres based on the expectation that not more than 45% of total trips in the City Centre and other Town Centres will be by motor vehicle.

OCP Policy 7.7.2 Ease of Movement. Ensure that pedestrians, bicyclists and transit users can move about pleasantly and conveniently and that they are not unduly impeded in their movements by provisions for enhanced automobile mobility.

OCP Policy 7.8.2 Active Transportation. Ensure corridors identified on Map 7.1 - Active Transportation Corridors, are designed for bicyclists, pedestrians of all ages and abilities, and people getting on and off transit vehicles.

OCP Policy 7.8 .5 Walkability. Increase walkability within the City's Urban Centres.

Climate Action Plan - Reduce vehicle kilometers travelled by 20% per capita.

Council Policy No. 352 - Sustainable Municipal Infrastructure.

The City's municipal infrastructure provides the essential foundation for local economic prosperity and the quality of life for its residents, as well as making a fair and appropriate contribution to global sustainability.

**Financial/Budgetary Considerations:**

The master plan is developed to align with the anticipated investment in active transportation in the proposed 2030 Infrastructure Plan that will be presented for Council adoption in February 2016.

**External Agency/Public Comments:**

The following consultation with the public occurred in the fall, 2014:

- Get Involved Kelowna Map - 1,500 individuals viewed the maps, 489 people had some interaction with the maps and/or left comments during the fall, 2014
- Public survey - 243 people completed the survey during fall 2014
- Stakeholder event - 16 stakeholders attended a 2 hour session on September 23.
- Open house - 200 individuals spoke with project representatives at an Open House at Orchard Park Mall on October 18.
- School District Survey - 14 responses were received from school administrators regarding student's mode of transportation and desire for infrastructure improvement, education or enhancements.

Further inputs to the Pedestrian Bicycle Master Plan will include an Open House and online public engagement to inform the community of the Master Plan content and to receive feedback (January-February).

**Communications Comments:**

Communications has been working together with Transportation & Mobility on the Pedestrian and Bicycle Master Plan. A dedicated website, [kelowna.ca/onthemove](http://kelowna.ca/onthemove) has been created for this project where the public can be informed and kept up to date on its status.

**Considerations not applicable to this report:**

Legal/Statutory Authority:

Legal/Statutory Procedural Requirements:

Alternate Recommendation:

Personnel Implications:

Submitted by:

M. Hasan, Transportation and Mobility Manager

Approved for inclusion:



Alan Newcombe, Infrastructure Divisional Director

Attachment A: Proposed Pedestrian and Bicycle Network Maps

Attachment B: Lists of Priority Pedestrian and Bicycle Projects

Attachment C: Executive Summary on Pedestrian and Bicycle Master Plan

Attachment D: Draft Pedestrian and Bicycle Master Plan

Attachment E: Presentation - PBMP draft

cc: Divisional Director, Infrastructure

Divisional Director, Community Planning & Real Estate

Divisional Director, Civic Operations

Divisional Director, Active Living & Culture

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