Transportation Advisory Committee Report

The 2nd Meeting of the Transportation Advisory Committee February 25, 2020 Committee Room #4

Attendance

PRESENT: D. Foster (Chair), G. Bikas, D. Doroshenko, B. Gibson, T. Kerr, T. Khan, M. Rice and S. Wraight and J. Bunn (Committee Clerk)

ABSENT: P. Moore and M.D. Ross

ALSO PRESENT: J. Bos, G. Dales, T. MacDaniel, A. Miller, M.

Morris and M. Stone

The meeting was called to order at 12:15 PM.

1. Call to Order

1.1 Disclosures of Pecuniary Interest

That it BE NOTED that no pecuniary interests were disclosed.

2. Scheduled Items

2.1 Transportation Master Plan Implications of the Cycling Master Plan Review Document

That it BE NOTED that the City of London Cycling Master Plan Review document, dated October 16, 2019, from the Cycling Advisory Committee (CAC) Master Plan Review Working Group, as appended to the agenda, and the <u>attached</u> presentation from B. Cowie and C. DeGroot of the CAC, with respect to this matter, were received.

2.2 Accessibility for Ontarians with Disabilities Act Training

That it BE NOTED that the presentation, as appended to the agenda, from M. Stone, Accessibility Specialist, with respect to Accessibility for Ontarians with Disabilities Act training, was received.

2.3 2020 and 2021 Annual New Sidewalk Program

That it BE NOTED that the <u>attached</u> presentation from J. Bos, Technologist II, with respect to the 2020 and 2021 Annual New Sidewalk Program, was received.

3. Consent

3.1 1st Report of the Transportation Advisory Committee

That it BE NOTED that the 1st Report of the Transportation Advisory Committee, from its meeting held on January 28, 2020, was received.

3.2 Municipal Council Resolution - 11th Report of the Transportation Advisory Committee

That it BE NOTED that the Municipal Council resolution, from its meeting held on January 14, 2020, with respect to the 11th Report of the Transportation Advisory Committee, was received.

3.3 Municipal Council Resolution - 1st Report of the Transportation Advisory Committee

That it BE NOTED that the Municipal Council resolution, from its meeting held on February 11, 2020, with respect to the 1st Report of the Transportation Advisory Committee, was received.

3.4 (ADDED) Notice of Planning Application - Official Plan Amendment - London Plan Housekeeping Amendment

That it BE NOTED that the Notice of Planning Application, dated February 19, 2020, from J. Lee, Planner I, with respect to an Official Plan Amendment related to a London Plan Housekeeping Amendment, was received.

4. Sub-Committees and Working Groups

4.1 Sub-Committee Update

That it BE NOTED that the Transportation Advisory Committee (TAC) held a general discussion with respect to sub-committee items on the 2020 TAC Work Plan.

5. Items for Discussion

None.

6. Adjournment

The meeting adjourned at 1:59 PM.

City of London Cycling Master Plan Review

Master Plan Review Working Group

Timeline of Key Events September 2016 Cycling Master Plan (CMP) approved by London Council 2016 2017 2018 May 16, 2017 London adopts Vision Zero Principes October 8, 2018 UN releases Special Report on Global Warming of 1.5 °C

The Need to Review the CMP

Based on the timeline of events since the CMP was adopted, the CMP requires a detailed review based on:

→ Climate Emergency

Are the mode share targets upon which the CMP is based consistent with the need for 45% reduction in CO2 emissions? If not, what mode split targets are required? Is the CMP consistent with achieving these targets?

→ Vision Zero

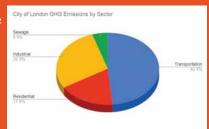
Is the CMP consistent with the Vision Zero principles that no loss of life is acceptable, that we all make mistakes, and that traffic fatalities and serious injuries are preventable and that eliminating them is a shared responsibility between road users and those that design/maintain them?

2017 Community Energy and Greenhouse Gas Report

London's total carbon emissions in 2017 were 2870 kilotonnes (kt) CO2 equivalent (CO2e)

Largest source of emissions is transportation sector

Around 70% of transportation sector emissions is from personal vehicles



(SR15) declaring a 45% reduction in CO₂ is required by

London's Climate Emergency declaration acknowledges carbon reduction targets required by science (i.e. SR15); therefore London's carbon budget for 2030 is 1925 kt CO2e (45% reduction from 2010 levels).

Scenario Analysis of Carbon Emissions Methodology

Different scenarios are analyzed, considering:

- Variable electrification of the automotive sector
- Complete electrification of the transit sector Variable mode split scenarios
- due to longer lifecycles of equipment, which is unlikely to be significantly changed by 2030 (also outside our scope as a committee)

Scenario Analysis of Carbon Emissions TMP-Based Mode Split

TMP considers scenarios with two different growth patterns:

- **Scenario A:** population growth of 73,800 to a total population of ~430,000 by
- Scenario B: population growth of 140,000 to a total population of ~493,000
- No change in vehicle electrification assumed

Transportation Master Plan (TMP) Mode Split Targets

Mode	2009 Mode Split	2030 Target
Automobile	76%	60%
Transit	11%	20%
Active Transportation - Cycling - Walking	9% ~1% ~8%	15% 5% 10%
Other	5%	5%

TMP-Based Mode Split Analysis

	Scenario A (pop 430,000)	Scenario B (pop 493,000)
Change in transportation emissions (kt CO2e)	-61	+133
% Change in transportation emissions relative to 2010	-4%	+10%
Total 2030 Carbon Budget kt CO2e	1925	1925
Residential kt CO2e	510	510
Industrial kt CO2e	830	830
Sewage kt CO2e	140	140
Transportation as % of allowable GHG in 2030	68%	78%
Total Emissions (% of 2030 Target)	145%	155%

Scenario Analysis of Carbon Emissions

TMP-Based Mode Split with Electrification

The effects of electrification are examined:

- Full electrification of transit fleet assumed
- Variable electrification of vehicles considered
- International Energy Agency estimates ~30% electrification of personal vehicles by 2030
- Lifecycle emissions of EVs are on average 50% of conventional vehicles (potentially as low as 30% for carbon-free energy supply)

TMP-Based Analysis with Electrification

	100% EVs (pop 430,000)	50% EVs (pop 430,000)	25% EVs (pop 430,000)
Change in transport emissions (kt CO2e)	-716	-388	-225
% Change in transport emissions relative to 2010	-52%	-28%	-16%
Total 2030 Carbon Budget kt CO2e	1925	1925	1925
Residential kt CO2e	510	510	510
Industrial kt CO2e	830	830	830
Sewage kt CO2e	140	140	140
Transportation as % of allowable GHG in 2030	34%	51%	59%
Total Emissions (% of 2030 Target)	111%	128%	136%

Scenario Analysis of Carbon Emissions

Variable Mode Split without Electrification

The effects of mode split are examined:

- Reduce vehicle mode split
- Assume 5% "other" mode split
- Assume remaining share is equally split between active transportation and transit
- Assume Scenario A for population growth
- No change in vehicle electrification assumed

Variable Mode Split Analysis without Electrification Mode Split 5 Mode Split 15 Mode Split 30 Mode Split 45 Mode Split 60 Transit Mode Share (%) 40 30 25 20 Active Transport Mode Share (% Other Transport Mode Share (%) 5 5 10 5 5 Transportation GHG (kt CO2e) GHG Non-Transport (kt CO2e) 1480 1480 1480 1480 1480 GHG-All (kt CO26 1807 2134 2462 Change in GHG from 2009 -92% -76% -52% -28% -4% 2030 Emissions Budget (kt CO 1925 1925 1925 Transport Fraction of 2030 C Target 68% 6% 17% 34% 51% Total GHG Relative to Target (kt CO2e) 864 -118 209 537 Total Emissions (% of 2030 Target) 128% 111% 145%

Scenario Analysis of Carbon Emissions

Variable Mode Split with Electrification

The effects of mode split are examined:

- This analysis represents "best of both worlds"; significant mode split changes with variable electrification
 Considers Scenario A for population growth

Parameter	TMP (Mode Split 60)	Mode Split 30 0% EV	Mode Split 30 25% EV	Mode Split 30 100% EV	Mode Split 45 25% EV
Automobile Mode Share (%)	60	30	30	30	45
Transit Mode Share (%)	20	35	35	35	25
Active Transport Mode Share (%)	15	30	30	30	25
Other Transport Mode Share (%)	5	5	5	5	5
Transportation GHG (kt CO2e)	1309	654	573	327	859
GHG Non-Transport (kt CO2e)	1480	1480	1480	1480	1480
GHG-All (kt CO2e)	2462	2134	2053	1807	2339
Change in GHG from 2009	-4%	-52%	-58%	-76%	-37%
2030 Emissions Budget (kt CO2e)	1925	1925	1925	1925	1925
Transport Fraction of 2030 C Target	68%	34%	30%	17%	45%
Total GHG Relative to Target (kt CO2e)	864	209	128	-118	414
Total Emissions (% of 2030 Target)	145%	111%	107%	94%	121%

Even if TMP mode split targets are achieved and vehicles are 100% electric, it is impossible to stay within London's climate-informed carbon budget for 2030; therefore mode split targets need to be revised.

Climate-Informed Mode Split Target

- 25% Electrification of Private Cars and City Vehicles
- Mode Split:

 - 35% Transit
 35% Active Transportation (walking 10%, cycling 25%)
 5% Other
- Net GHG Emissions for this outcome: 1957 kt CO2e, ~102% of permitted

The Four Types of Bicyclists

Strong and Fearless

Enthused Confident

People willing to bicycle if some bicycle-specific infrastructure is in place

Interested but Concerned

People willing to bicycle if high-quality bicycle infrastructure is in place

No Way, No How

People unwilling to bicycle even if high-quality bicycle infrastructure is in place

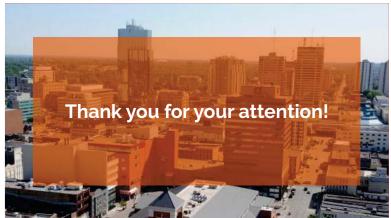
Distribution of the Four Types of Bicyclists

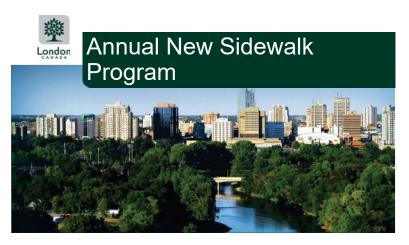


Infrastructure Requirements for AAA



To achieve high mode split of cycling, engaging "Interested But Concerned" riders, high-quality, connected, maintained infrastructure must be in place throughout the city.





Transportation Advisory Committee Presentation February 25, 2020



Annual New Sidewalk Program

- Annual program that responds to resident requests for sidewalks to be installed in neighbourhoods with no sidewalk or sidewalks on one side of the road.
- The goal of the program is to support and promote the City of London's road safety strategy <u>'Vision Zero'</u> by offering safe mobility options for all individuals.





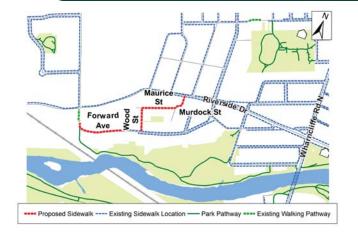
2020 Program

The 2020 Annual New Sidewalk Program will install sidewalks on the following streets:

- Kensington Village
 - This area is consists of Forward Avenue, Wood Street, Maurice Street, and Murdock Street
- Windermere Road
- Joliet Street
- Wavell Street at Merlin Crescent

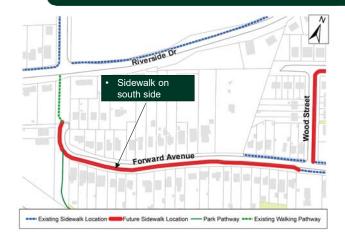


Kensington Village



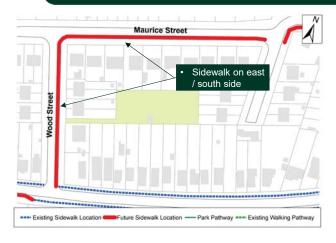


Forward Avenue





Wood Street & Maurice Street





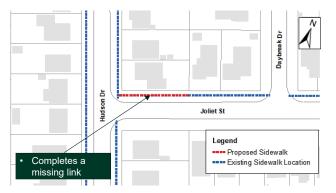
Murdock Street

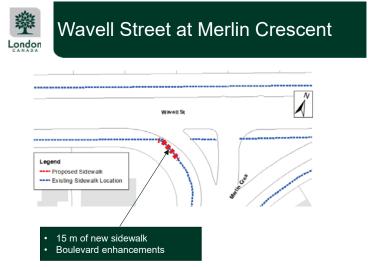


















Chosen Locations Rationale

- Most of these locations are taken from the New Sidewalk List.
- A few locations are small sections (less then 100 m) that complete a missing link in the sidewalk network.
- Locations are coordinated with other reconstruction programs

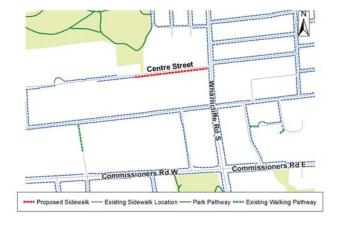


Buchan Road

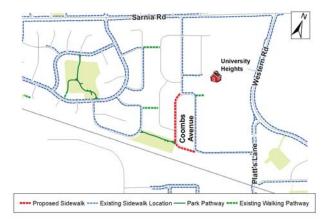




Centre Street











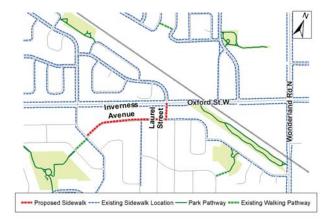


Hillsborough Road





Laurel Street & Inverness Avenue









Next Steps

Next steps include

- · Receiving topographic surveys
- · Reviewing location options and designing
- Public liaising through letters and conversation

In late 2020 / early 2021, there will be a follow up presentation to the Transportation Advisory Committee prior to tendering.



Questions?

If you think of any questions afterwards:

- Email jbos@london.ca
- Website <u>www.London.ca/sidewalks</u>
- Phone 519-661-2489 x 7348

John Bos Technologist II Transportation Planning & Design