

Cycling Advisory Committee

Report

The 10th Meeting of the Cycling Advisory Committee
October 16, 2019
Committee Room #4

Attendance PRESENT: C. Linton (Chair), B. Cowie, C. DeGroot, R. Henderson, J. Jordan, C. Pollett, E. Raftis and J. Roberts and D. Turner (Secretary)

ABSENT: K. Brawn, B. Hill and O. Toth

ALSO PRESENT: A. Giesen, Sgt. S. Harding, T. MacDaniel, D. MacRae, L. Maitland, A. Miller, C. Saunders, J. Stanford and S. Wilson

The meeting was called to order at 4:00 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 Demand Management Cycling Activities – Introduction and Update

That it BE NOTED that the attached presentation from A. Miller, Transportation Demand Management Coordinator and J. Stanford, Director, Environment, Fleet and Solid Waste, with respect to an introduction and update on Transportation Demand Management Cycling Activities, was received.

2.2 Bicycle Parking By-laws and Regulations

That the Civic Administration BE REQUESTED to attend a future meeting of the Cycling Advisory Committee to bring forward information related to the quality of bicycle parking in the City of London as it relates to the planning process; it being noted that the attached presentation, from L. Maitland, Site Development Planner, with respect to this matter, was received.

2.3 Cycling Counts Webpage

That it BE NOTED that the attached presentation from A. Giesen, Senior Transportation Technologist, with respect to the Cycling Counts Webpage, was received.

3. Consent

3.1 9th Report of the Cycling Advisory Committee

That it BE NOTED that the 9th Report of the Cycling Advisory Committee, from its meeting held on September 18, 2019, was received.

3.2 Municipal Council Resolution - Area Speed Limit Program

That the following actions be taken with respect to the Municipal Council Resolution from its meeting held on October 1, 2019, with respect to the Area Speed Limit Program:

- a) the Civic Administration BE REQUESTED to investigate methods and practices that could be undertaken to promote compliance with speed limits; and,
- b) the Civic Administration BE REQUESTED to further review the potential implementation of 30 km/h speed limits on local and connecting streets and a suggested time frame for implementation;

it being noted that the above-noted Municipal Council resolution letter was received.

3.3 Notice of Planning Application - Zoning By-law Amendment - 21 Norlan Avenue

That it BE NOTED that the Notice of Planning Application, dated September 18, 2019, from C. Parker, Senior Planner, with respect to a Zoning By-law Amendment for the property located at 21 Norlan Avenue, was received.

3.4 Notice of Planning Application - Official Plan and Zoning By-law Amendments - 84-86 St. George Street and 175-197 Ann Street

That the following actions be taken with respect to the Notice of Planning Application, with respect to Official Plan and Zoning By-law Amendments for the properties located at 84-86 St. George Street and 175-197 Ann Street:

- a) the Civic Administration BE REQUESTED to consider adding additional bicycle parking spots based on a .75 ratio per bedroom rather than per unit, and that these proposed additional bicycle parking spots be secure, indoor and located at ground-level; and,
- b) the above-noted Notice of Application BE RECEIVED.

3.5 Notice of Planning Application - Official Plan and Zoning By-law Amendments - 332 Central Avenue and 601 Waterloo Street

That it BE NOTED that the Notice of Planning Application, dated October 2, 2019, from M. Vivian, Planner I, with respect to Official Plan and Zoning By-law Amendments for the properties located at 332 Central Avenue and 601 Waterloo Street, was received.

4. Sub-Committees and Working Groups

4.1 Sport and Leisure Cycling Sub-Committee Report

That it BE NOTED that the Sport/Leisure Cycling Working Group Report, as appended to the agenda, was received.

4.2 Cycling Master Plan Review Working Group Report

That the revised attached '8.0 - Recommendations' section of the Cycling Master Plan Review Working Group Report BE FORWARDED to the Municipal Council for their consideration; it being noted that the remainder

of the above-noted working group report was received; it being noted that the attached presentation from C. DeGroot with respect to this matter was received.

5. Items for Discussion

5.1 London Road Safety Strategy Review

That the City of London Road Safety Strategy 2014-2019 BE DEFERRED to the next meeting of the Cycling Advisory Committee.

5.2 2019 Work Plan

That the following actions be taken with respect to the 2019 Cycling Advisory Committee (CAC) Work Plan:

- a) the following expenditure from the 2019 CAC budget BE APPROVED to promote community cycling engagement:
 - i) \$500.00 for bicycle safety light kits; and,
 - ii) \$300.00 for bicycle safety bells;
- b) the 2019 CAC Work Plan BE DEFERRED to the next meeting of the CAC.

6. Adjournment

The meeting adjourned at 7:02 PM.



TDM CYCLING ACTIVITIES: INTRODUCTION & UPDATE



**Cycling Advisory
Committee
October 16, 2019**

**Jay Stanford, Director,
Environment, Fleet & Solid Waste**

**Allison Miller
TDM Coordinator**



WHAT IS TRANSPORTATION DEMAND MANAGEMENT?

- Strategies that result in more efficient use of a transportation system
- Encouraging Londoners to use options other than driving alone or *driving at all!*
- More than just weekday peak trips
- Part of an active lifestyle

Cycling is just one part of this. Over the last few years it has taken up a lot of time.



GOALS OF TDM

✓ Reduce

- Reliance on single occupancy vehicles (SOV)
- Vehicle kilometres travelled (VKT)
- Capital expenditures
- Maintenance costs
- Traffic congestion
- GHG emissions



✓ Improve

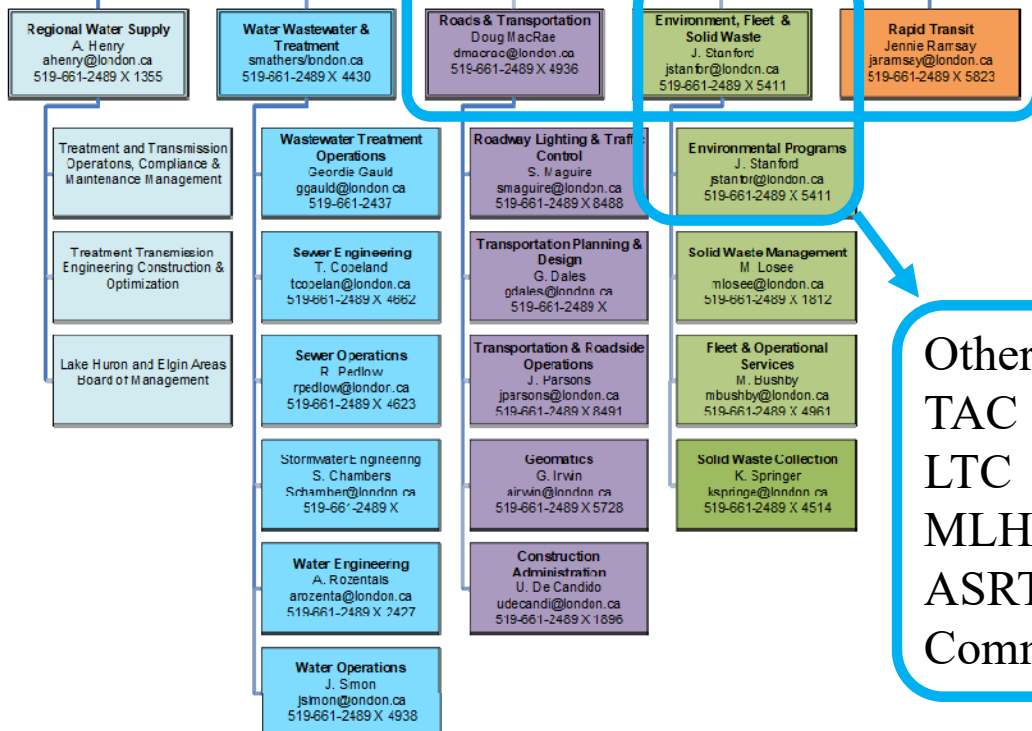
- Traffic safety
- Air quality
- Health



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WHERE DOES TDM FIT INTO THE CITY?





WHERE DOES TDM FIT INTO CAC?

Mandate: The CAC will advise and support City Council in the implementation of the cycling component of Active Transportation and Transportation Demand Management by:

- publicizing the benefits and importance of the initiatives designed to achieve the objectives of the BMP, TMP and LRSS;
- assisting in the development of new cycling policies, strategies and programs;
- encouraging public participation in the initiatives. ;
- advising on measures required to implement the City's commitment to cycling;
- recommending and advising on new cycling initiatives in the context of available approved budgets and under future potential budget allocations; and
- assisting in monitoring the effectiveness of cycling facilities and support programs.



TDM PROJECTS – CYCLING FOCUS

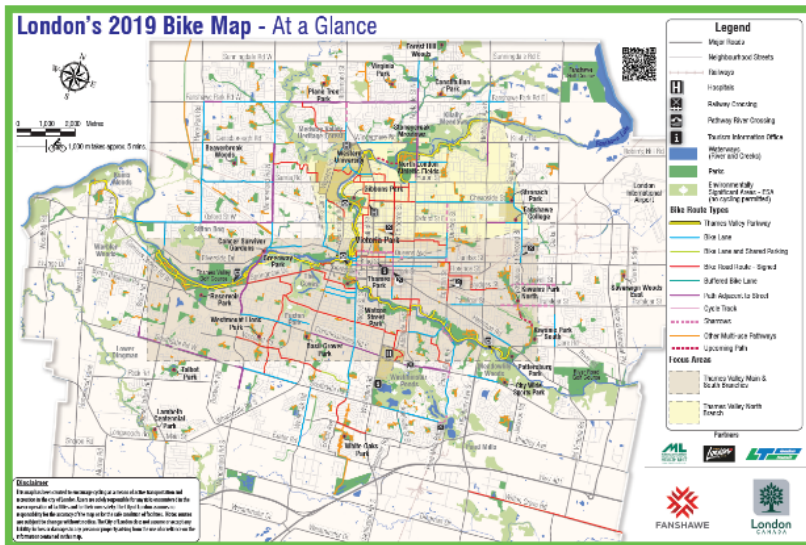
- Updates on 7 of 14 Actions from 2016 Cycling Master Plan
- Feasibility Study for a Transportation Management Association & Commute Ontario
- Greenhouse gas emissions from burning fossil fuel





UPDATED BIKE MAP

CMP Action #3 - Identifying Touring Loop Routes



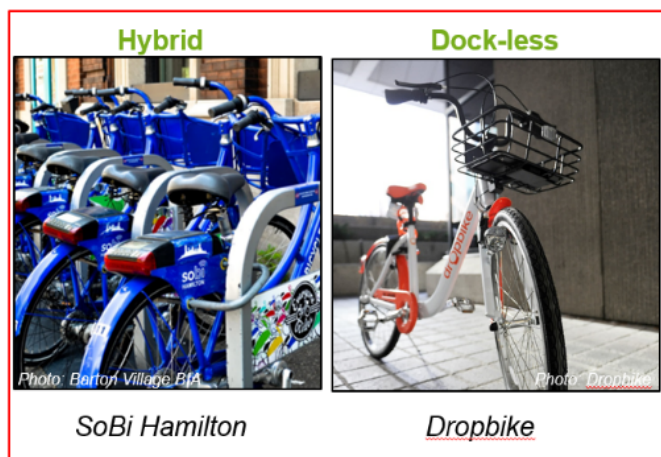
- In progress
- Focus has been TVP routes
- More routes identified for spring 2020



BIKE SHARE BUSINESS CASE

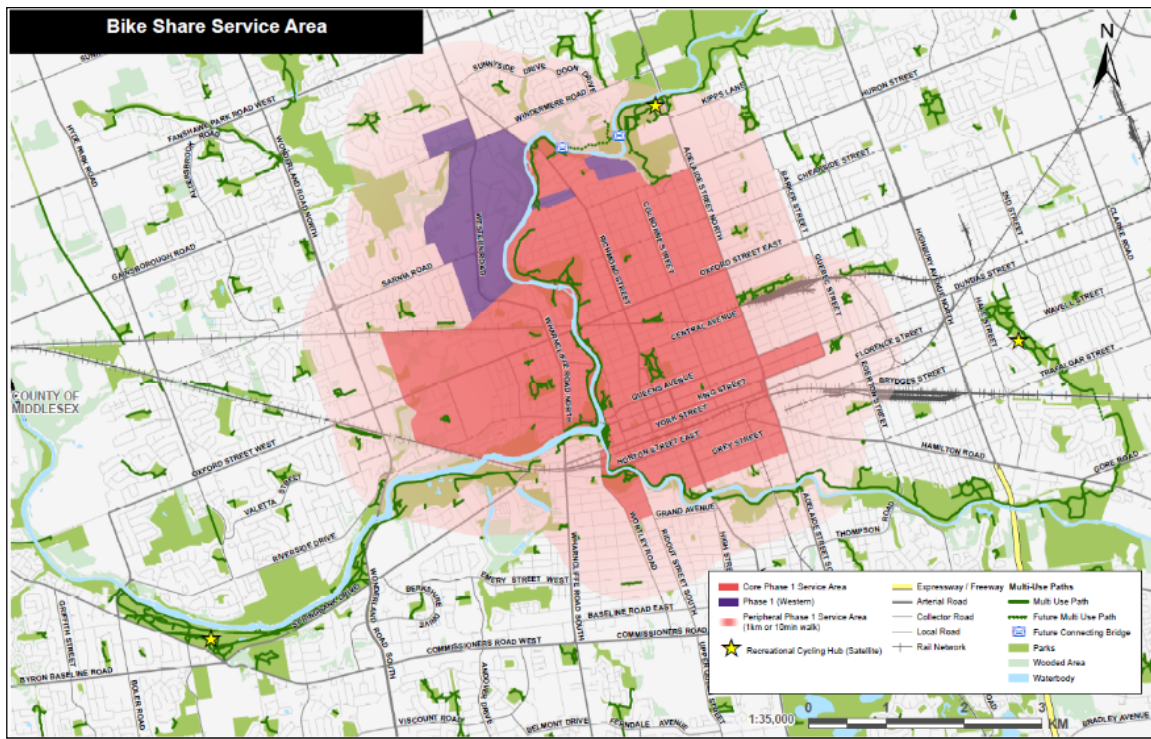
CMP Action #4 - Exploring a Bike Share System

- Background details and preliminary analysis completed
- Implementing a RFP to obtain pricing and a vendor
- Proposed launch Spring/Summer 2020





BIKE SHARE – SERVICE AREA



AWARENESS AND EDUCATION

CMP Action #6 - Creating a Cycling Specific Web Presence

- In progress
- Updated cycling information on City website
- Produced how-to/safety videos



<https://www.youtube.com/watch?v=qA0J3lZ-iC8&feature=youtu.be>



BICYCLE PARKING

CMP Action #8 - Enhancing Bicycle Parking

- Adding short-term bike racks in spring 2020
- Doubling number of bike corrals
- Festival bike parking system for events
- Developing Business Bike Rack Program



BICYCLE PARKING

- Secure Public Bike Parking Downtown Pilot
- Neighbourhood Bike Parking Concepts
- Listed in Strat Plan - Undertake background details and community engagement on bike parking challenges, opportunities, priorities and implementation plans.



City of Portland



City of Toronto



MEASURING

CMP Action #9 – Establishing Performance Measures

- **In progress.** Measures include:
 - Counts
 - Facility length
 - New measures (connectivity, safety, travel time, etc.)
- Listed in the Strategic Plan - Prepare background methodology, an approach to monitoring and implement



AWARENESS AND EDUCATION

CMP Action #11 Enhancing Enforcement

- In progress
- Working with LPS, Fanshawe, Western Police on promotions (**upcoming**)





SPECIAL EVENTS AND PARTNERS

CMP Action #12 - Establishing High Profile Events

1. London Celebrates Cycling:

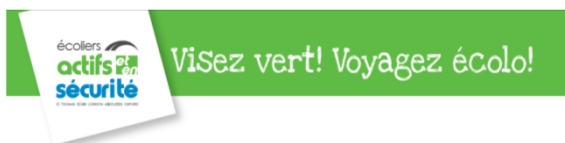
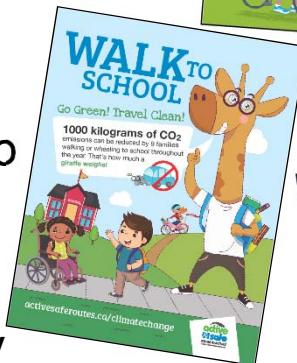
- Every June (last 3 years)
- Partnership event
- Goal to celebrate those who ride and reach new cycling audiences (to encourage to ride)
- Event is evolving and growing



SPECIAL EVENTS AND PARTNERS

2. Partner Event Support

- CAN Bike
- ELMO ASRTS: Climate Change campaign & Bike to School Week support
- Big Bike Giveaway





CYCLING IN LONDON SURVEY

Tied to all CMP actions and Promoting Sustainable Travel for All Time Periods

- Part of Western University Doctoral research
- First dedicated, comprehensive cycling survey in London
- Supported by EES
- Results on the facilitators and barriers to further uptake of cycling will be used when considering future infrastructure and programs



TRANSPORTATION MANAGEMENT ASSOCIATION

- TMA is usually a non-profit, member-controlled organization that provides transportation services in a particular area or areas
- Feasibility Study just started; based in part on past work in the Oxford East business area
- Define location(s), governance models, and current context and programming



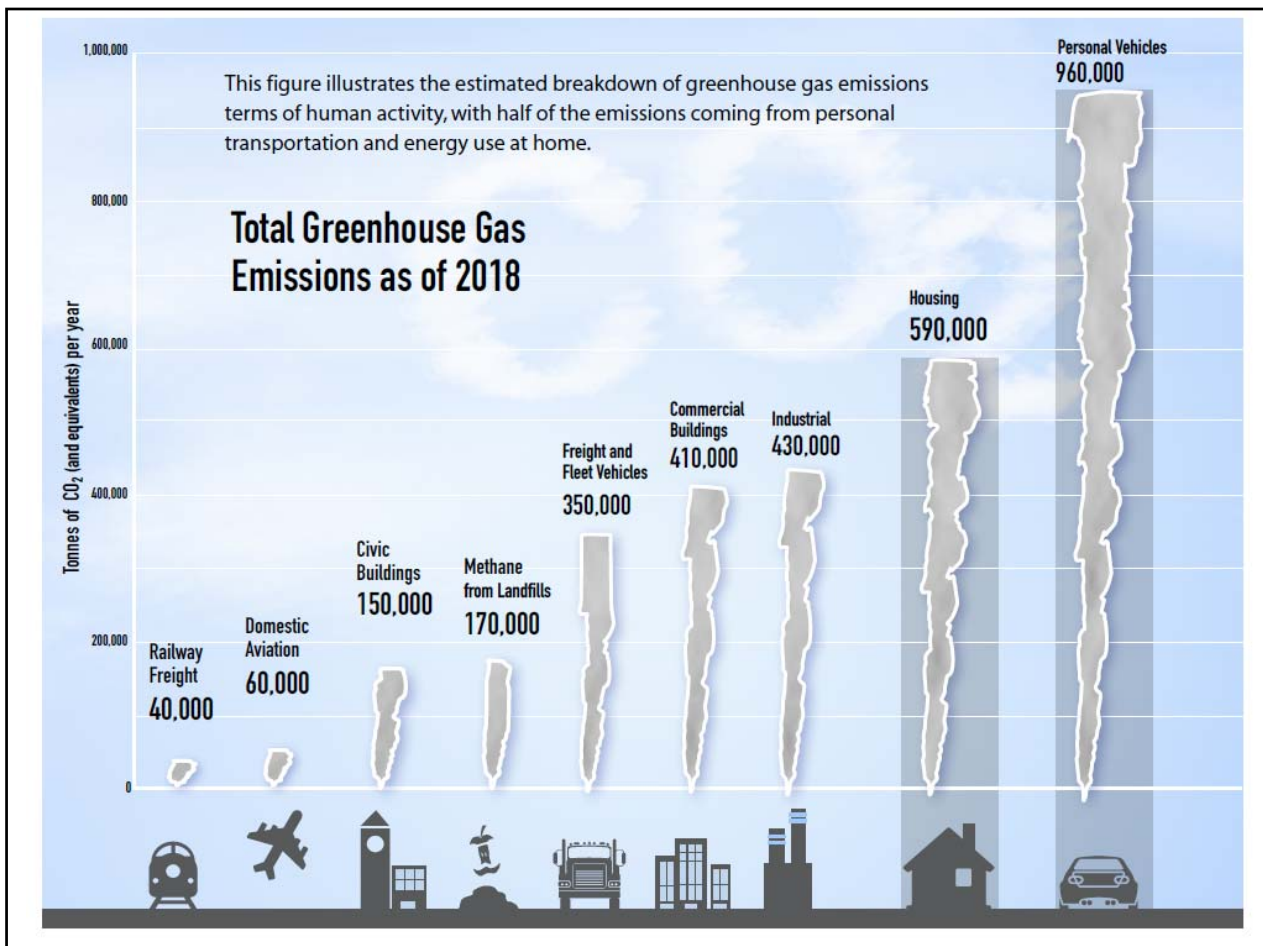


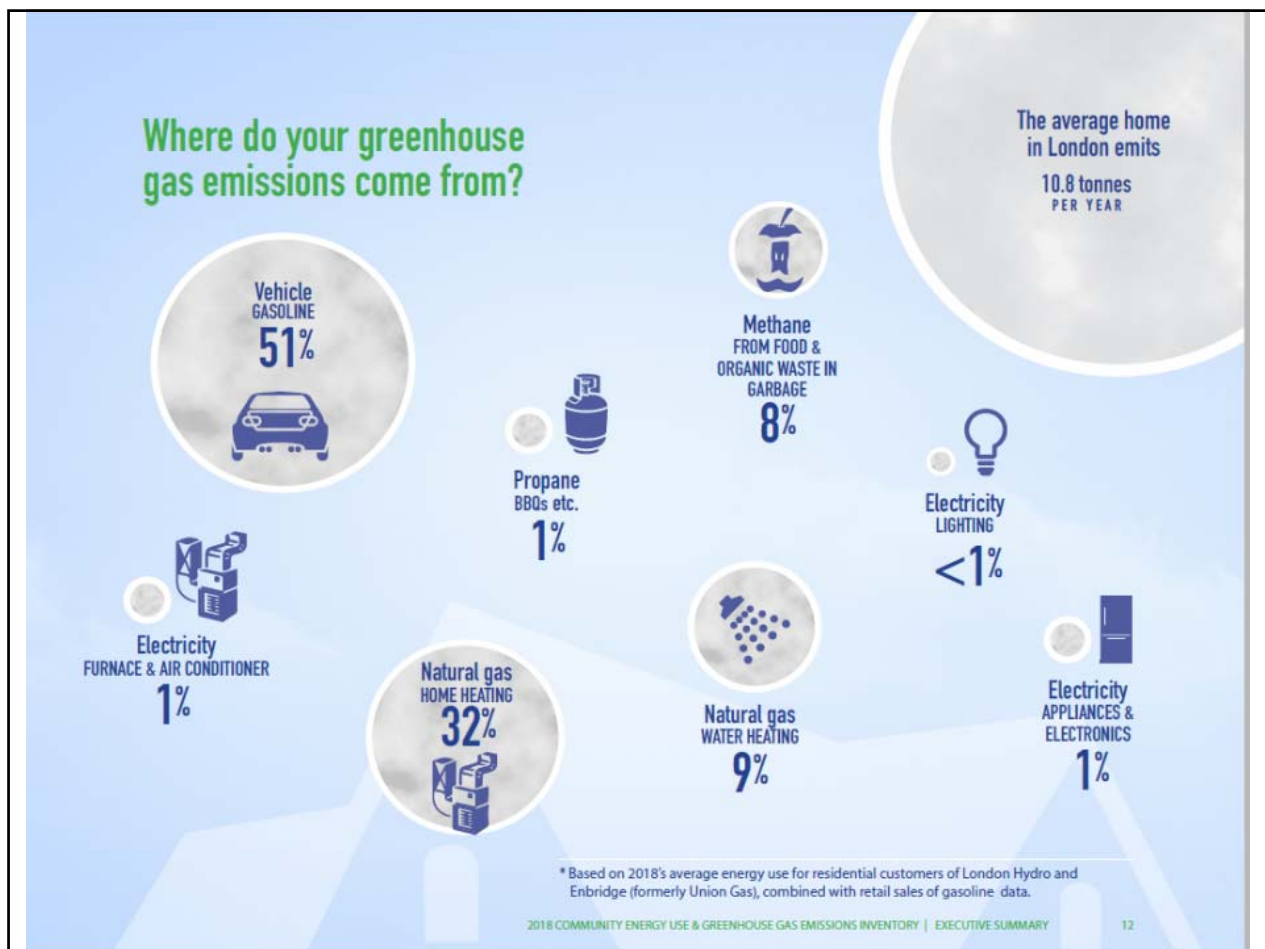
- Ontario Trillium Foundation-funded project
- Lead is SustainMobility – delivers TMA programs in GTA
- 6 other municipalities
- Commuter programs and supports to be Londonized
- Includes a Guaranteed Ride Home Program (stumbling block to more commuter cycling)



BE PART OF THE SOLUTION

ONTARIO'S COMMUNITIES ARE COMING TOGETHER TO REDUCE 20,000,000 KM OF VEHICLE TRAVEL!





GHG REDUCTION ACTIONS - CLIMATE EMERGENCY

From 2018 Community Energy Use & GHG Inventory Report to CWC, October 22/19

What can Londoners do immediately?

- **Drive less (or not at all)** – make more trips by walking, **cycling**, transit, carpooling
- If you must own a vehicle, own an electric or hybrid vehicle, or a very fuel efficient one
- Make your home more energy efficient – and work towards net-zero energy
- Reduce food waste, especially for high-impact foods such as red meat and dairy
- Go local – for food, for products, for vacations



GHG REDUCTION ACTIONS - CLIMATE EMERGENCY

What can London's Businesses & Employers do immediately?

- Invest in energy efficiency measures for buildings and processes
- Apply green procurement strategies to the supply chain
- Invest in **green fleet measures**
- Reduce business travel, especially by air, through webinars and video conferences. If business travel is required, consider carbon offsetting
- Reduce employee commuting – **promote cycling**, transit, carpooling, telework



QUESTIONS

- Now
- Next CAC
- At a Sub-committee or Working Group meeting





Bicycle Parking Regulations (and Policies)

City of London

Cycling Advisory Committee – October 16, 2019

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Policy Framework

- Official Plan – *The London Plan*
 - Zoning By-law – Z.-1 Zoning By-law
 - Site Plan Control By-law
- Complete Streets Design Manual
- Parks and Recreation Design Standards

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London Plan Policies

- (City Design) 280_ Secure, covered and non-covered bicycle parking should be incorporated into multiple-unit residential, commercial, retail, institutional, and recreational developments.
- (Mobility) 353_ *The Cycling Master Plan* should identify cycling infrastructure such as secure bicycle parking, bike racks on buses and change rooms and shower facilities to support cycling and multi-modal forms of mobility.
- (Public Facilities) 434_ To support active forms of mobility, public facilities should provide for secure bicycle parking and adequate shower and locker facilities for employees.

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London Plan Policies

- **Downtown specific policies**
 - 799_5 Prepare a parking strategy to coordinate municipal parking supply and provide for public parking at strategically advantageous locations. Plan for, and integrate, bicycle parking, bikesharing, and carsharing through this strategy.
 - 803_10 Shared car and bicycle parking facilities and carshare/bikeshare programs will be encouraged within the Downtown.
- **Transit Village specific policies**
 - 814_12 Shared car and bicycle parking facilities and carshare/bikeshare programs will be encouraged within Transit Villages. Public change rooms and bicycle facilities will be encouraged.

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London Plan Policies

- **Methadone Clinics**

1097_ The Zoning By-law will identify standards for new and expanded methadone clinics and methadone pharmacies to ensure all of the following:

1. Adequate automobile parking.
2. Adequate bicycle parking facilities.
3. Adequate waiting room floor areas.

- **Bonus Zoning**

1652_10. Large quantities of secure bicycle parking, and cycling infrastructure such as lockers and change rooms accessible to the general public.

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London Plan Policies

- **Site Plan policies requiring items to be shown and addressed.**

- 1678_e. The sustainable design elements on any adjoining street, including without limitation trees, shrubs, hedges, plantings or other ground cover, permeable paving materials, street furniture, curb ramps, waste and recycling containers and bicycle parking facilities.
- 1681_15. The sustainable design elements on any adjoining street under the City's jurisdiction, including trees, shrubs, hedges, plantings or other ground cover, permeable paving materials, street furniture, curb ramps, waste and recycling containers, and bicycle parking facilities.

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Zoning By-law Regulations

4.19 PARKING

16) NUMBER OF BICYCLE PARKING SPACES

1) Residential Development:

Apartment buildings and lodging houses (with five or more residential units) shall be required to provide 0.75 longterm bicycle parking space per residential unit.

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Zoning By-law Regulations

2) Residential Care Facilities:

Short-term bicycle parking spaces shall be provided at a rate of 7% of the required number of automobile parking spaces, as specified in the Zoning By-law, for the following residential care facilities:

- | | |
|---|---------------------------------------|
| a) senior citizen apartment buildings; | h) chronic care facility; |
| b) nursing homes; | i) foster homes; |
| c) rest homes; | j) group home type 1 and type 2; |
| d) retirement lodges; | k) supervised residence; |
| e) retirement homes; | l) correctional and detention centre; |
| f) handicapped persons apartment buildings; | m) emergency care establishment. |
| g) continuum-of-care facility; | |

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Zoning By-law Regulations

3) Residential Development Exemptions: bicycle parking shall not be required for:

- a) Conversions of existing space to residential units;
- b) Single detached dwellings;
- c) semi-detached dwellings;
- d) duplex dwellings;
- e) triplex dwellings;
- f) fourplex dwellings;
- g) townhouse dwellings;
- h) stacked townhouse dwellings;
- i) street townhouses;
- j) cluster townhouses;
- k) farm dwellings.

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Zoning By-law Regulations

4) Non-Residential Development:

Short-term bicycle parking spaces shall be provided at a rate of 7% of the required number of automobile parking spaces, as specified in the Zoning By-law, for all non-residential development except as specified below:

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Zoning By-law Regulations

5) Non-Residential Development Exemptions:

- a) where the required number of automobile parking spaces specified in the Zoning By-law is 9 or fewer spaces, no bicycle parking is required;
- b) No bicycle parking requirement applies for the following uses specified in the Zoning By-law: Abattoir; aggregate reprocessing; aggregate storage area; agricultural service establishment; agricultural supply establishment; agricultural use; agricultural use, intensive; agricultural use, non-intensive; agriculturally related commercial use; agriculturally related industrial use; batching plant, asphalt; batching plant, concrete; channel composting facility; construction and demolition recycling facility; crushing plant; driving range; drive-through facility; farm; farm cluster; farm equipment sales and service; farm foods and products market; farm market; feedlot; forestry use; grain elevator; greenhouse, commercial; in-vessel composting facility; kennel; landing strip; livestock; livestock facilities; managed woodlot; manure storage facilities; pit; propane transfer facility; quarry; resource excavation; residential and other source recycling facility; resource extraction operation; salvage yard; specialized recycling facility; stockpiling; travel plaza/truck stop; truck stop; theatre, drive-in; wayside pit or wayside quarry; windrow composting facility.
- c) No bicycle parking requirement will apply to the conversion of existing buildings for residential or non-residential uses in all Downtown Area 1 and 2 Zones. Major redevelopment involving property consolidation and new construction is required to provide for bicycle parking facilities at the mandated standard.
- d) No bicycle parking requirement will apply to the conversion of existing buildings for residential or non-residential uses in all Business District Commercial 1 and 2 Zones. Major redevelopment involving property consolidation and new construction is required to provide for bicycle parking facilities at the mandated standard.
- e) For CLINIC, METHADONE or PHARMACY, METHADONE uses, notwithstanding any provisions of this by-law, the number of bicycle parking spaces provided shall be no less than 5 spaces.

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Zoning By-law Regulations

6) Municipally-owned Parking lots and structures:

Municipally-owned parking lots in the Downtown Area zones and defined Business District Commercial Area zones shall provide for short-term bicycle parking facilities equal to 7% of the total vehicular parking spaces provide.

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Zoning By-law Regulations

7) Bicycle Parking Incentives:

Notwithstanding Section 4.19 of this By-law to the contrary, the required number of motor vehicle parking spaces for non-residential uses may be reduced to provide for additional short or long-term bicycle parking spaces beyond those mandated by this by-law provided, however, the reduction in motor vehicle parking spaces shall not exceed 10% of the required motor vehicle parking spaces. Individual vehicular parking stalls shall be required to provide for a minimum of five bicycle parking spaces. This incentive shall not apply to CLNIC, METHADONE or PHARMACY, METHADONE uses.

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Site Plan Control By-law

14. BICYCLE PARKING FACILITIES

(a) Objectives:

- To encourage the use of bicycles as an alternative means of transportation, bicycle parking facilities shall be provided at the residential base and at destination locations such as the workplace, convenience and destination and commercial and institutional facilities. Bicycle parking shall be provided in facilities that are convenient, safe, secure and functional for the intended use.

(b) Number of Bicycle Parking Spaces:

- To be provided in accordance with the regulations set out in the current Zoning By-law.

(c) Design Characteristics

- When required in association with a development, bicycle parking spaces shall be provided in accordance with the design characteristics as set out in Table 6.10.

(d) Long and Short-term Bicycle Parking Facilities:

- Long-term bicycle parking is required for apartment buildings and lodging houses with five or more residential units to store bicycles for several hours or days at a time. The facility must be protected from the weather and should be enclosed within a secure space.
- Subject to the provisions of the Z.-1 Zoning By-law, short-term bicycle parking is required for all non-residential development requiring 10 or more vehicular parking spaces. Short-term bicycle parking spaces should be as accessible as possible and should be visible to discourage theft. Short-term bicycle parking facilities typically consist of a rack or a post where the frame and wheels of the bicycle can be secured by a user supplied lock.

(e) Change Room and Shower Facilities:

- Change room and shower facilities for cyclists are encouraged to enhance the use of bicycles for work based travel.

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Site Plan Control By-law

1. Location

Long-Term Bicycle Parking:

Apartment buildings and lodging houses (with five or more residential units) shall be required to provide for long-term bicycle parking opportunities in an accessible, secure and weather protected area. Subject to the design characteristics set out below, long-term bicycle parking spaces may be provided in the following locations;

- (a) in a bicycle room or bicycle compound located within a building or motor vehicle parking structure
- (b) within an individual bicycle locker
- (c) within an accessory building

For the purpose of this By-law, long-term bicycle parking shall not be provided within a dwelling unit or a balcony thereof.

Short-Term Bicycle Parking:

Short-term bicycle parking spaces may be provided within an exterior space (covered or uncovered) designated for the parking of bicycles.

Large scale developments may spatially disperse the required number of short-term bicycle parking spaces throughout the site in accordance with the locational considerations detailed under 4, 5, 6, and 7 noted below.

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Site Plan Control By-law

2. Size of a Bicycle Parking Space

Minimum horizontal dimensions of 0.6 metres by 1.5 metres and a height of at least 1.9 metres

3. Aisle Width

Where more than one row of bicycle parking spaces is provided, a minimum aisle width of 1.5 metres shall be provided

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Site Plan Control By-law

4. Location for Accessibility

Less than 15 metres from the entrance used by cyclists or if located within a building in a location easily accessible to bicycles

Should not be farther from the entrance than the closest motor vehicle parking space (excluding parking spaces for persons with disabilities)

In a separately designated area that does not impede the movement of pedestrians

In an easy to find location directly visible from the street and if not directly visible from the street directional information signs shall be installed to direct cyclists to the bicycle parking facility

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Site Plan Control By-law

5. Location for Natural Surveillance

Located within constant visual range of persons within the adjacent building or within well traveled pedestrian areas

Within unobstructed view from the adjacent municipal roadway

6. Security Lighting

Night lighting shall be provided in a manner to ensure that the entire bicycle parking area is well lit

7. Covered Bicycle Parking

If covered motor vehicle parking is provided, the required bicycle parking shall also be covered.

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Links

- [*The London Plan*](#)
- [Zoning By-law](#)
- [Site Plan Control By-law](#)

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Cycling Counts Webpage “Bike Data”



Cycling Advisory Committee – October 16, 2019



Meeting Topics

- Implementing the Cycling Master Plan
- Existing permanent cycling count infrastructure
- Future permanent cycling count infrastructure
- Cycling counts web page





Implementing the Cycling Master Plan

- Action item #6
 - “Creating a Cycling Specific Web Presence”
- Action item #9
 - “Establishing Performance Measures”




Existing Permanent Cycling Count Infrastructure

- 14 located within the parks pathway system
- 6 permanent counters located on roadways



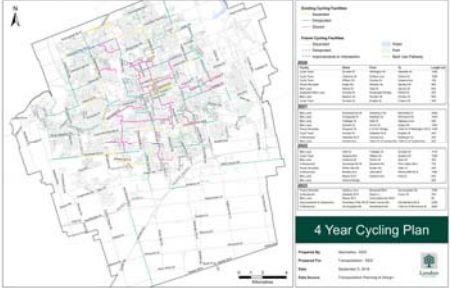
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Future Cycling Count Infrastructure

- Egerton Street -2020
- Dundas Street – 2020
- Southdale -2021
- Cheapside -2021
- Queens Ave -2022
- Bradley Ave- 2022
- Sunningdale Road -2023
- Adelaide Street North -2023



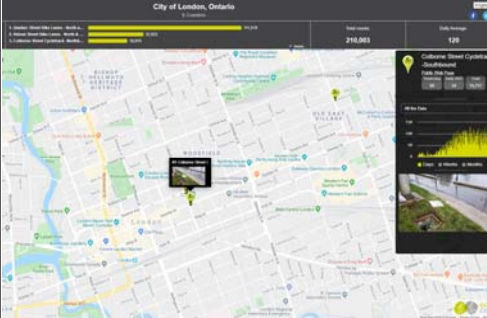



5



City Web Page

- Dedicated web page, with access to count data in real time
- <https://www.london.ca/residents/Roads-Transportation/cycling/Pages/Bike-Data.aspx>





6



Questions?



8.0 - Recommendations

Based on our assessment of new policies London ON Bikes **does not** meet City of London policy goals of:

1. Declaration of Climate Emergency
2. Vision Zero

Additionally, the Cycling Master Plan falls short in many areas compared to other cities in terms of its infrastructure design, and evaluation metrics. We therefore make the following recommendations:

1. We recommend that council request that staff conduct a detailed assessment of climate emergency implications of the Transportation Master Plan, and The London Plan. Transportation and Land Use are the two largest contributing factors to climate emergency within the city, and examining these through the lens of Climate Emergency may reveal essential changes in outcome. We believe this report is the first assessment of ANY City of London policy through this lens, and given our findings, believe it prudent to examine all relevant documents from a climate perspective.
2. We recommend that council direct staff to overhaul the existing London ON Bikes plan, with major revisions to meet climate informed modal splits by 2030. The new plan should aim for transportation equity by only using modern Vision-Zero compliant design approaches and by building exclusively All Ages and Abilities infrastructure.
3. We recommend funding the creation of an Active Transportation Strategy at a funding rate of \$50/person/year, or ~\$20M annually. This is consistent with funding in high mode-share cities throughout the world.
4. We recommend that council direct construction of a temporary city-wide bike grid to be constructed by July 1, 2021. This emergency network should rapidly deploy inexpensive materials, while retaining All Ages and Abilities design principles. Full implementation of permanent AAA infrastructure should be completed during regular life cycle renewal of these streets to minimize ongoing costs.
5. We request that staff initiate consultation with Vision Zero Canada for a frank assessment of our Vision Zero progress. We request Vision Zero Canada's continued

involvement in our trajectory toward zero deaths or serious injuries on our road system for cyclists, pedestrians, and motorists alike.

6. We recommend a moratorium on all planned and future road widening, unless required for transit and/or cycling infrastructure improvements, due to there being no climate informed transportation mode split scenario that permits for anything less than 50% decrease in total driving. Funding currently allocated to road widening (\$75M per year) should be used to fund transit and cycling infrastructure for maximum climate emergency mitigation effect.
7. We recommend that the City of London decrease all residential speed limits to 30 km/h commensurate with safe practices as defined by NACTO. This will immediately facilitate safe cycling in all neighbourhoods, including school routes, city-wide. While we acknowledge that design, not speed limit, is the essential factor in decreasing speeds on roads, neighbourhood streets should be re-designed for 30 km/h design speeds during life cycle renewal.

"We have presented governments with pretty hard choices. We have pointed out the enormous benefits of keeping to 1.5C, and also the unprecedented shift in energy systems and transport that would be needed to achieve that. We show it can be done within laws of physics and chemistry. Then the final tick box is political will. We cannot answer that. Only our audience can – and that is the governments that receive it."

- Jim Skea, Professor of Sustainable Energy at Imperial College London, co-chair of the United Nations Intergovernmental Panel on Climate Change working group on mitigation.



City of London Cycling Master Plan Review

Master Plan Review Working Group



Timeline of Key Events



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?

Climate Emergency

UN Special Report on Global Warming of 1.5°C (SR15)

- *Global net human-caused emissions of carbon dioxide (CO₂) would need to fall by about 45 percent from 2010 levels by 2030, reaching 'net zero' around 2050*

Canada's Changing Climate Report 2019

- *Both past and future warming in Canada is, on average, about double the magnitude of global warming*
- *Canada and the rest of the world reduce carbon emissions to near zero early in the second half of the century and reduce emissions of other greenhouse gases substantially*



City of London Statement on Climate Emergency

1. Acknowledgement of the Situation

Whereas climate change is currently contributing to billions of dollars in **property and infrastructure damage** worldwide, **stressing local and international economies**; Whereas climate change is currently **jeopardizing the health and survival** of many species and other natural environments worldwide, **stressing local and international eco systems**; Whereas climate change is currently harming human populations through **rising sea levels** and other extraordinary phenomena like **intense wildfires** worldwide, stressing local and international communities;

City of London Statement on Climate Emergency


2. The Need for Action

Whereas recent **international research** has indicated a need for **massive reduction in carbon emissions in the next 11 years** to avoid further and **devastating economic, ecological, and societal loss**; Whereas the climate in **Canada is warming at twice the rate of the rest of the world**, as per Canada's Changing Climate report; **Whereas current initiatives such as the green of the city's fleet and energy reduction initiatives are not sufficient to meet the targets as defined by the IPCC scientists**

City of London Statement on Climate Emergency

3. The Declaration of Climate Emergency

Whereas an emergency can be defined as "an often dangerous situation requiring immediate action"; Whereas municipalities such as Kingston, Vancouver and Hamilton have already declared climate emergencies; Therefore, **a climate emergency BE DECLARED by the City of London for the purposes of naming, framing, and deepening our commitment to protecting our economy, our eco systems, and our community from climate change.**



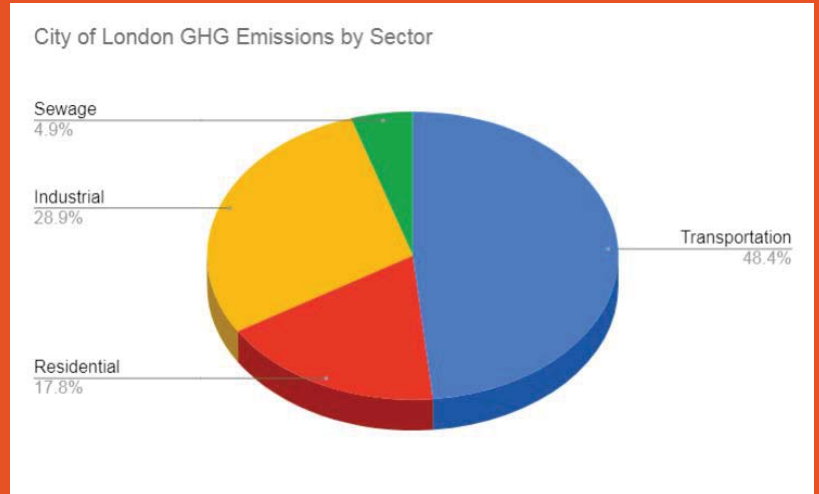
The City of London recognizes that there exists a Climate Emergency and that current initiatives are insufficient to reach scientifically-based emissions targets.

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



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
 - No changes in residential, industrial, and sewage emissions are assumed 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 2030 (21% increase from 2007)
 - **Scenario B:** population growth of 140,000 to a total population of ~493,000 by 2030 (39% increase from 2007)
 - 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	9%	15%
- Cycling	~1%	5%
- Walking	~8%	10%
Other	5%	5%

TMP-Based Mode Split Analysis

	Scenario A (pop 430,000)	Scenario B (pop 493,000)
Change in transportation emissions (kt CO ₂ e)	-61	+133
% Change in transportation emissions relative to 2010	-4%	+10%
Total 2030 Carbon Budget kt CO ₂ e	1925	1925
Residential kt CO ₂ e	510	510
Industrial kt CO ₂ e	830	830
Sewage kt CO ₂ e	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

Parameter	Mode Split 5	Mode Split 15	Mode Split 30	Mode Split 45	Mode Split 60
Automobile Mode Share (%)	5	15	30	45	60
Transit Mode Share (%)	45	40	30	25	20
Active Transport Mode Share (%)	45	40	30	25	15
Other Transport Mode Share (%)	5	5	10	5	5
Transportation GHG (kt CO ₂ e)	109	327	654	982	1309
GHG Non-Transport (kt CO ₂ e)	1480	1480	1480	1480	1480
GHG-All (kt CO ₂ e)	1589	1807	2134	2462	2462
Change in GHG from 2009	-92%	-76%	-52%	-28%	-4%
2030 Emissions Budget (kt CO ₂ e)	1925	1925	1925	1925	1925
Transport Fraction of 2030 C Target	6%	17%	34%	51%	68%
Total GHG Relative to Target (kt CO₂e)	-336	-118	209	537	864
Total Emissions (% of 2030 Target)	83%	94%	111%	128%	145%

Scenario Analysis of Carbon Emissions

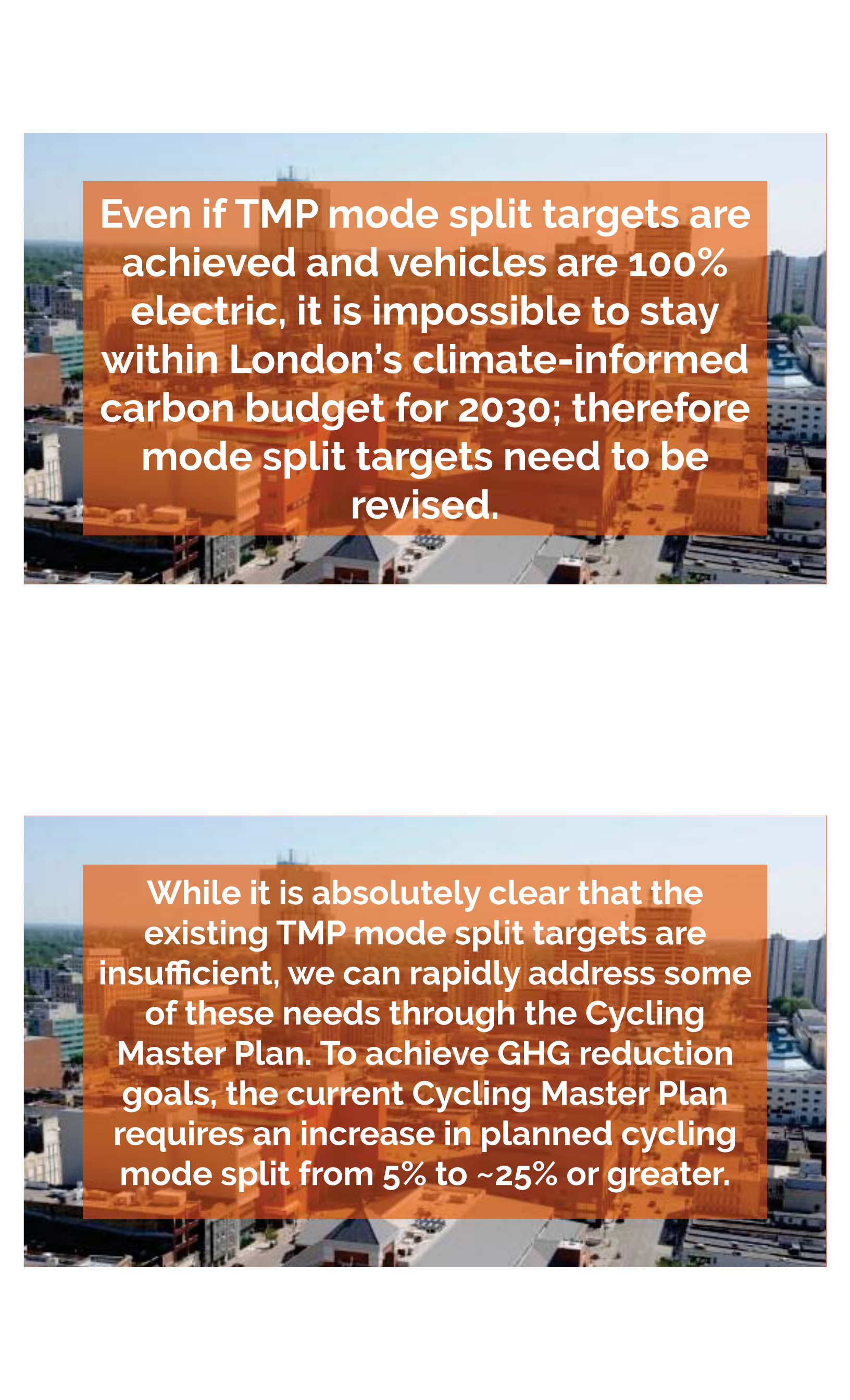
Variable Mode Split with Electrification

The effects of mode split are examined:

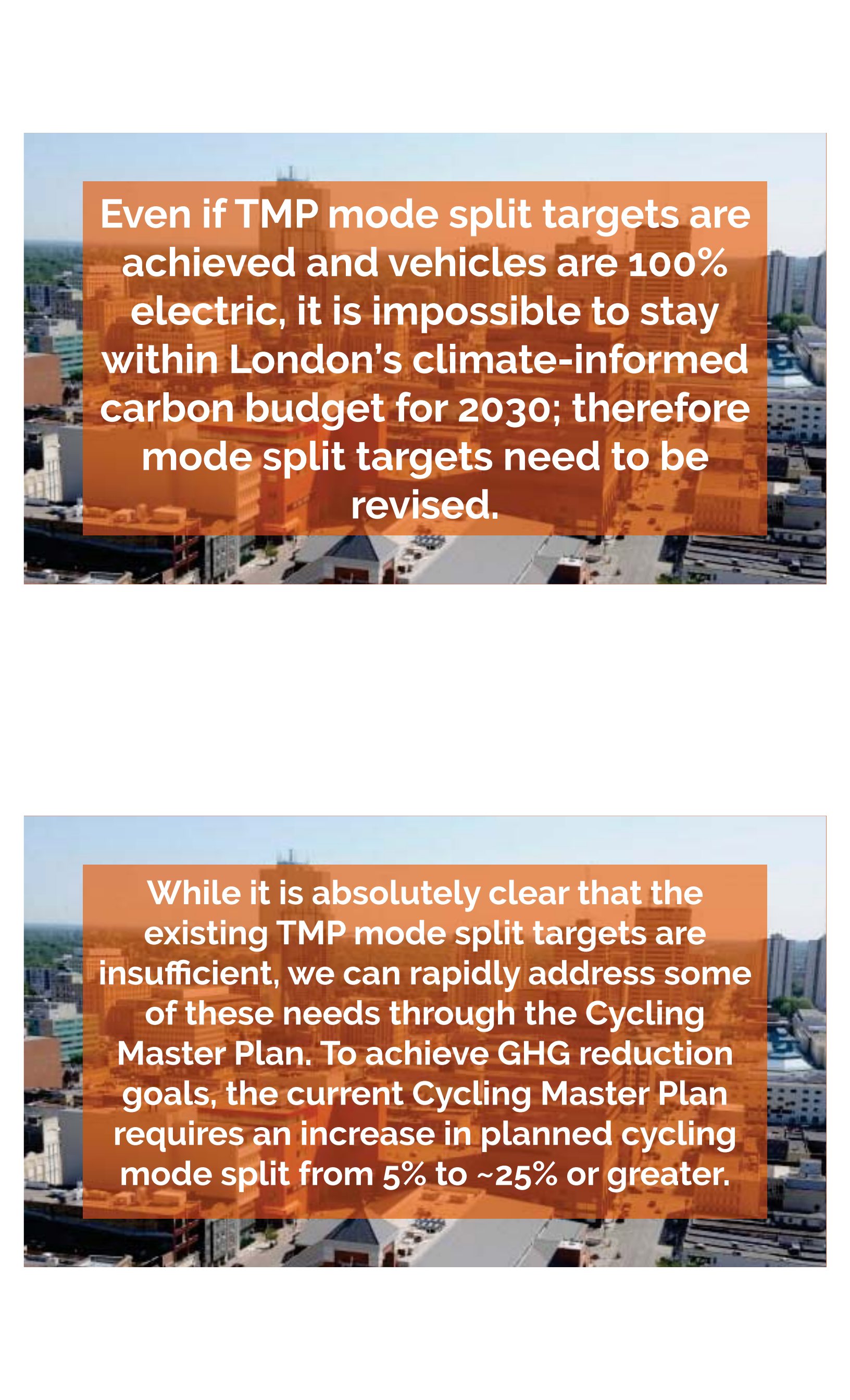
- This analysis represents “best of both worlds”; significant mode split changes with variable electrification
- Considers Scenario A for population growth

Variable Mode Split Analysis with Electrification

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 CO ₂ e)	1309	654	573	327	859
GHG Non-Transport (kt CO ₂ e)	1480	1480	1480	1480	1480
GHG-All (kt CO ₂ e)	2462	2134	2053	1807	2339
Change in GHG from 2009	-4%	-52%	-58%	-76%	-37%
2030 Emissions Budget (kt CO ₂ e)	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%

An aerial photograph of a city skyline, likely London, showing various buildings and streets. A semi-transparent orange rectangular box is overlaid on the center of the image, containing white text.

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.

An aerial photograph of a city skyline, likely London, showing various buildings and streets. A semi-transparent orange rectangular box is overlaid on the center of the image, containing white text.

While it is absolutely clear that the existing TMP mode split targets are insufficient, we can rapidly address some of these needs through the Cycling Master Plan. To achieve GHG reduction goals, the current Cycling Master Plan requires an increase in planned cycling mode split from 5% to ~25% or greater.

Climate-Informed Mode Split Target


- 100% Electrification of London Transit Vehicles
 - 25% Electrification of Private Cars and City Vehicles
 - Mode Split:
 - 25% Automobile
 - 35% Transit
 - 35% Active Transportation (walking 10%, cycling 25%)
 - 5% Other
 - Net GHG Emissions for this outcome: 1957 kt CO₂e, ~102% of permitted emissions
-

Financial Benefit of Acting Now

- With a rising price on emitting carbon in Canada, London will benefit economically from acting sooner rather than later on climate emergency
 - Canada's price on carbon is not a tax, but a fee and dividend system, which charges excessive polluters and reward those who cut emissions faster and deeper
 - As individuals and as a city we can collect dividend payments by lowering our overall carbon footprint
 - If London acts earlier than other cities on decreasing emissions, it will represent a significant wealth injection into the city on the order of tens of millions of dollars per year
-

TMP-Based Analysis with Electrification

Price of 1t CO ₂ e emitted in 2022:	\$50
Price of 1t CO ₂ e emitted in 2030 (PBO estimate):	\$102
Current emissions (tonnes CO ₂ e):	2,870,000
TMP emissions (tonnes CO ₂ e):	2,789,000
Mode Split 30 emissions + 25% EV (tonnes CO ₂ e):	2,053,000
Difference [MS30-ev25 - TMP] (tonnes CO ₂ e):	736,000
2022 [MS30-ev25 - TMP] Difference x Carbon Dividend (annual):	\$36,800,000
2030 [MS30-ev25 - TMP] Difference x Carbon Dividend (annual):	\$75,072,000



It is clear that major changes in cycling mode split targets are required to meet carbon reduction targets. We must then determine how we can achieve a much more aggressive shift in mode split.

Vision Zero

On May 16, 2017, Municipal Council adopted the following principles as its Vision Zero declaration:

- No loss of life is acceptable
- Traffic fatalities and serious injuries are preventable
- We all make mistakes
- We are all physically vulnerable when involved in motor vehicle collisions
- Eliminating fatalities and serious injuries is a shared responsibility between road users and those who design and maintain our roadways



Vision Zero vs. London Road Safety Strategy

Vision Zero

Traffic deaths are preventable, and the loss of life is not negotiable

London Road Safety Strategy

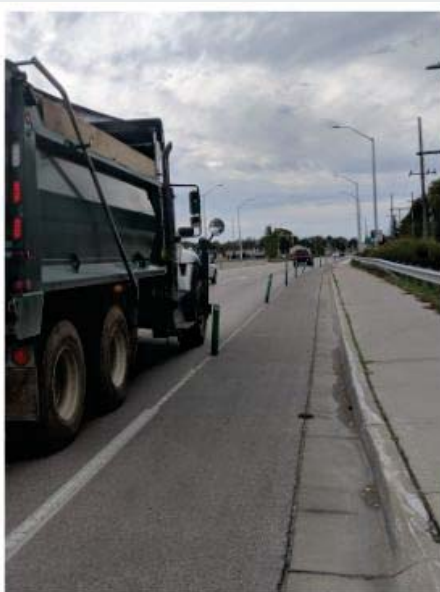
Reduce injury and death on roads by 10% within five years

Vision Zero holds transportation systems designers and policy-makers accountable and responsible for road safety, rather than individual road users

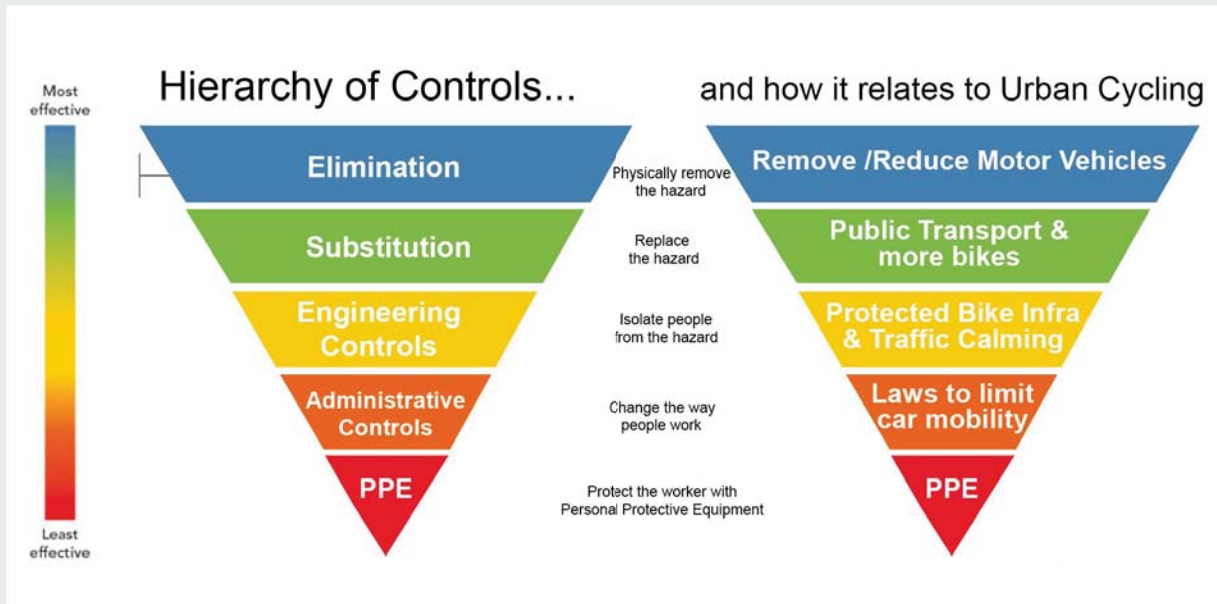
London's Interpretation of Vision Zero

- London's goal accepts:
 - More than 1000 injuries and deaths on our roads are inevitable
 - Programs (i.e. not safe systems) will reduce injury and death
 - Vision Zero requires focus on **system failure**
 - Safe system design focuses on building better roads, improving vehicle safety technologies, and managing kinetic energy (speed reduction) to reduce risk of injury
 - Strives to create road system designs that anticipate human error, and that are forgiving when errors are made
-

Representative Non-Safe Systems



Hierarchy of Controls



Of the major initiatives in the CMP, the majority of planned initiatives are considered to be Administrative or Behavioural Controls. Less than 1% of planned interventions (protected bike lanes, 7.5 km out of 799 km of "facilities") could be considered Engineering controls, and 0% of the CMP could be considered Substitution or Elimination.

Cycling Infrastructure Assessment

Achieving the required GHG reductions is possible, and other cities of similar size have already done this

- It is important to note the role of great transit and land use policy in achieving these goals
- Here, we focus on how cycling infrastructure plays a role in achieving GHG reduction goals



Mode Split in Winter Cities

City	Population	Area (km ²)	Bike Share (%)	Transit Share (%)
London, CAN	355,000	232 sub/urban 402 incl. south rural	~1%	11%
Montreal, CAN	1,780,000	431	3%	19%
Toronto, CAN	2,930,000	630	1%	24%
Vancouver, CAN	675,000	115	12%	17%
Copenhagen, DEN	602,000	88	62%	27%
Utrecht, NL	1,285,000	99	33%	28%
Uppsala, SWE	168,000	49	28%	20%
Munster, GER	310,000	302	39%	11%
Freiburg, GER	227,000	153	13%	12%
Bremen, GER	557,000	326	25%	24%

Achieving High Cycling Mode Split

- Attaining high modal splits for cycling and transit is possible in winter cities
 - Attaining high modal split in relatively lower density cities is also possible (e.g. Bremen, Munster)
 - High transit usage and high cycling mode split are not necessarily coincident (e.g. Munster); both require different infrastructure investments that are complementary when done well (e.g. Utrecht)
-

The Four Types of Bicyclists

Strong and Fearless

People willing to bicycle with limited or no bicycle-specific infrastructure

Enthused and Confident

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

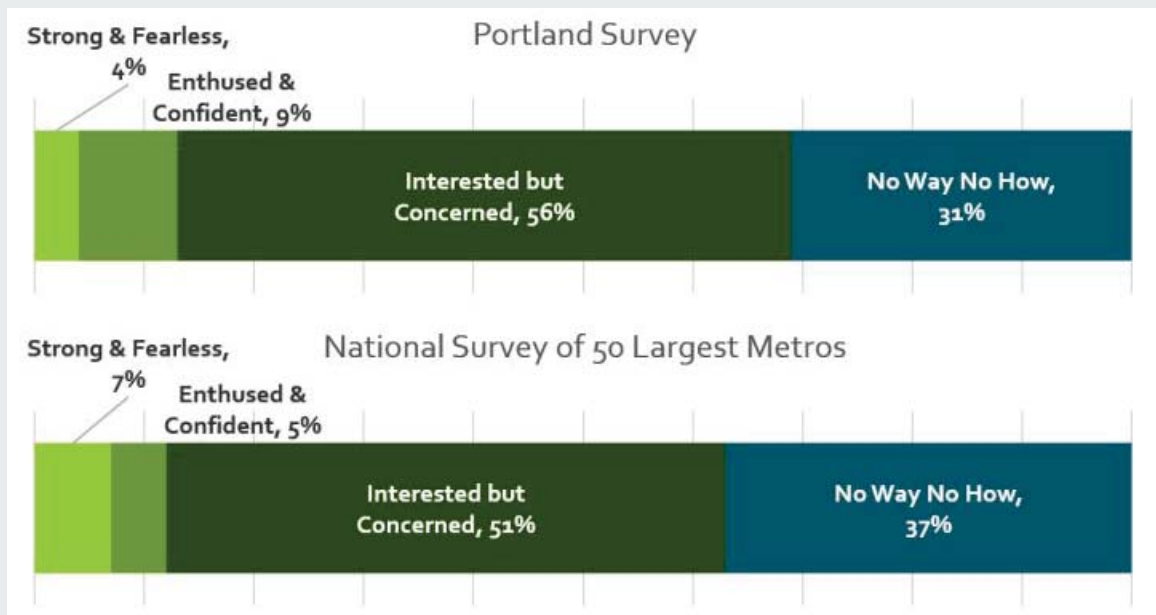
Interested but Concerned

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



London, ON: A Major Outlier?

- "The market for commuter based cycling infrastructure is approximately 9% of the overall population" - City of London Transportation Master Plan
- London's CMP is based on the premise that only 9% of the general population has a willingness to cycle; this is suspiciously similar to the "Strong and Fearless" and "Enthused and Confident" groups
- It is with virtually certainty that we conclude that London's potential cycling market share is not a measly 9%, but given proper infrastructure, greater than 60% of the total population would choose cycling for many trips

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.

AAA Infrastructure in the CMP

	Existing in 2016 (km)	Proposed in CMP (km)	Total (km)
Cycle Track (Protected Bike Lane)	0	7.5	7.5
In-Boulevard Multi-use Pathway	42	28.2	70.2
Multi-use Pathway	166	78.7	244.7
Total	208	114.4	322.4


- Of the 799 km of facilities proposed in the CMP, only 7.5 km (less than 1%) are cycle tracks
- This represents <1% of arterial road network
- The value of multi-use pathways is acknowledged for recreational cycling; however these are less effective for shifting mode share since they do not directly access many key destinations

An aerial photograph of a city street scene, showing buildings, roads, and a clear sky. A semi-transparent orange text box is overlaid on the center of the image.


Only 4% of London's planned bike routes over the next four years meet AAA quality standards. Stated differently, London's approach builds 96% of its cycling infrastructure to serve existing cyclists (Strong and Fearless, Enthused and Confident) marginally better, rather than planning streets for a wider ridership demographic, which represents more than 90% of the population.

Who Are We Building Bike Lanes For?

- Building for the “Fearless” and “Enthusied and Confident” groups may allow London to meet the TMP-based 5% mode share goal
 - However, it will never be able to grow beyond 5-10% mode share without accessing the “Interested but Concerned” group of riders
 - Most people don't consider cycling as an option for because they have never seen, let alone used, quality AAA bike infrastructure
 - Once people see and try AAA infrastructure, they will choose a bike for many trips; until that point, citizens will never ask for it, because they don't know that it is even possible
-



Building a City-Wide Network of All Ages and Abilities bike facilities is a necessary part of achieving our GHG reduction targets. We cannot achieve our GHG targets without this investment, and stand to greatly benefit as a city by building the network as soon as possible.



Focusing on increasing cycling mode split is a cost effective and quick way of achieving GHG reduction targets as compared to transit, which requires much larger infrastructure investments and longer timelines for completion.

Comparison with Other Cities

London's Cycling Master Plan was compared with the plans from similar cities around Canada: Halifax (2014), Waterloo Region (2014), Ottawa (2013), Waterloo (2011), Victoria Capital Regional District (2011), and K (2010)



How Does London Differ?

- Addressing “Interested but Concerned” Cyclists
 - Each of the other cities recognizes this as an important group to target
- Identifying Goals and Expected Outcomes
 - Every other city identifies significantly increasing the cycling mode share and reducing cycling collisions as a metric for evaluating the cycling policies and actions
- Criteria for Evaluating the Success of Projects
 - The best plans consider methods for evaluating the success and gauging the potential for projects to increase mode share
- Data and Demographics Collection
 - Other cities address the need for and the means for collecting the data that their planning and evaluative processes require in order to facilitate data-driven decision-making

Conclusions

London's CMP states its vision of “providing infrastructure which is considered comfortable, safe, and convenient...for all Londoners.”

→ **Climate Emergency**

The target mode share of the CMP does not allow for sufficient reductions in GHG emissions

→ **Vision Zero**

The current CMP is inconsistent with the Vision Zero safe systems design principles

→ **Metrics of Success**

Kilometres of lanes is the metric of success in the current CMP; the degree to which it provides infrastructure that is “comfortable, safe, and convenient” is not evaluated

Recommendations

We RECOMMEND that council:

- request a detailed evaluation of the greenhouse gas emissions implications of the City of London Transportation Master Plan in accordance with the City of London's Declaration of Climate Emergency.
- request a detailed evaluation of the greenhouse gas emissions implications of the City of London Transit Master Plan in accordance with the City of London's Declaration of Climate Emergency.
- request a detailed evaluation of the greenhouse gas emissions implications of the City of London Official Plan or The London Plan in accordance with the City of London's Declaration of Climate Emergency.
- request a detailed evaluation of the greenhouse gas emissions implications of the City of London Parking Strategy in accordance with the City of London's Declaration of Climate Emergency.

Recommendations

We RECOMMEND that council:

- request a detailed evaluation of the greenhouse gas emissions implications of the City of London Accessibility Strategy in accordance with the City of London's Declaration of Climate Emergency.
- request a detailed evaluation of the City of London Road Safety Strategy in accordance with the City of London's Adoption of Vision Zero
- direct staff to undertake major revisions to the City of London's Cycling Master Plan infrastructure implementation in accordance with the Declaration of Climate Emergency. The revised plan should be singularly focused on building All-Ages-and-Abilities infrastructure to achieve climate-informed modal split targets, while achieving cost allocation and social equity for basic affordable transportation by 2030.

Recommendations

We RECOMMEND that council:

- direct staff to design and construct an emergency city-wide minimum grid of protected bike lanes designed for All-Ages-and-Abilities to be completed by July 1, 2021.
- enact a moratorium on all currently planned and future road widening. Presently budgeted funds for road widening (\$75M/year) should be reallocated to transit and cycling for maximum mitigation of climate disruption.
- fund continued investment in active transportation (including walking, accessibility, and micro mobility) at a rate of \$50/person/year, or ~\$20M/year, comparable to the scale of investments in major cycling cities.
- decrease speed limits on all residential streets to 30 km/h.



Thank you for your attention!

**We now invite personal
statements from the Working
Group members**