

Area of Focus 4 - Transforming Transportation and Mobility

Area of Focus 4	Transforming Transportation and Mobility Workplan
Purpose of this Workplan	The Transforming Transportation and Mobility Workplan has been developed based on: • feedback obtained through the community engagement; • compiled or recommended from other municipalities, organizations; committees and others specializing in climate change actions; • direction from Council; and/or • input from various City staff. The purpose of this workplan is to set an initial direction for collaborative discussion, action and measuring progress. How the workplan is operationalized will be determined in early 2022.
Climate Change Expected Results	This workplan has been designed to make progress toward the following expected results: Walkable, Complete Neighbourhoods Increased Active Transportation and Transit More Zero emission Vehicles More Resilient Buildings and Infrastructure More Carbon Capture
Why Does this Matter?	Over the 2015-2019 period, before the COVID-19 pandemic, transportation represented about 1.4 million tonnes of GHG emissions per year or about 47% of local GHG emissions. This included in-town trips, trips to/from London, and goods movement. Personal vehicles account for most of London's transportation emissions, at almost 1 million tonnes of GHG emissions per year. Up to one half of these emissions are for in-town trips, many of which could be replaced by walking, cycling, and transit. In 2016, trips taken as the driver of an automobile represented 64 per cent of all daily trips made within the greater London area during the weekday rush hour. The extraction, refining, and transportation of petroleum-based fuels for use in London is a large source of upstream GHG emissions from sources such as Alberta's oil sands and Sarnia's oil refineries. London's share of these emissions is roughly in the 500,000 tonnes per year range.

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	Vehicle manufacturing, from raw material extraction through to vehicle assembly, is another large source of upstream GHG emissions. London's share of these emissions is roughly in the 400,000 tonnes per year range. Many of the construction materials used in transportation infrastructure, such as asphalt, concrete, and steel, also have large GHG upstream emissions. Providing more accessible mobility options is critical for ensuring equity for Londoners of all ages, abilities, gender, and income levels.
Background – How did we get here?	The convenience provided by automobiles has been so great that households are willing to spend over \$10,000 per year per vehicle to operate and maintain them. On average, there are 1.6 vehicles owned per household in London. As a result, over six decades of automobile-oriented land use planning and transportation planning has led to dependency on automobiles for in-town trips (78% of in-town trips) and trips to/from London (99% of trips). (Source: Google's Environmental Insights Explorer) As noted in the 2016 Household Travel Survey Summary Report, trips taken as the driver of an automobile represented 64 per cent of all daily trips made within the London Census Metropolitan Area during the weekday morning peak period. This is better than it was in 2002, when surveys indicated that drivers represented 73 per cent of all daily trips. This dependency on automobile use adds a financial burden to many households in London. Those households that cannot afford to own a vehicle often cannot access employment opportunities, while many employers have difficulty finding employees if they are in a part of London without transit service or safe cycling infrastructure.
What are some recent actions?	• The London Plan (Official Plan) has established a plan for London to grow inwards and upwards, supported by several mobility-related Key Directions: ○ Direction #1 - Plan strategically for a prosperous city ○ Direction #2 - Connect London to the Surrounding Region ○ Direction #4 - Become one of the greenest cities in Canada ○ Direction #5 - Build a mixed-use compact city ○ Direction #6 - Place a new emphasis on creating attractive mobility choices

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	○ Direction #7 - Build Strong, healthy, and attractive neighbourhoods for everyone ○ Direction #8 - Make wise planning decisions ● London's 2018 Complete Streets Design Manual is being implemented to provide streets which are design to be safe for everyone including pedestrians, cyclists, transit users and automobile users, and to include green infrastructure and low impact design features. ● The new Masonville Secondary Plan sets policies to create a "Transit Village" with improved cycling, pedestrian, and transit connections and infrastructure. ● Three bridges built on the Thames Valley Parkway to improve the connectivity of mobility infrastructure. ● Higher-order cycling infrastructure (protected bike lanes) has been installed on sections of Dundas Street, Colborne Street and on Riverside Drive connected to the Thames Valley Parkway. ● Implement Vision Zero road safety actions that make active transportation more appealing such as an annual implementation of pedestrian crossovers, pedestrian and bicycle signals, lower area speed limits and automated speed enforcement. ● Added a staff position dedicated to the implementation of active transportation infrastructure ● Secure bike parking (bike lockers) has been provided in three locations in downtown London as part of a pilot project. ● Electrically assisted bicycles (e-bikes) have been introduced to support the delivery of municipal services such as parking enforcement. ● Electric vehicle (EV) charging stations have been installed at most major City of London community centres in 2021 through an innovative land lease agreement with an EV charging service provider. Three curbside EV charging stations were installed by London Hydro in 2019 as part of a national pilot project with Natural Resources Canada.

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	- Continued support for the growth of both conventional and specialized transit services across the city, making public transit a more viable option for more Londoners - At the April 28, 2021 meeting of the London Transit Commission, the Commission approved the award of a contract to the Canadian Urban Transit Research and Innovation Consortium (CUTRIC) for the completion of a Zero emission Bus (ZEB) Implementation Strategy. The initial implementation step calls for LTC to procure 10 battery electric buses and 7 chargers (3 overhead and 4 plug-in). This project will also require facilities work to upgrade the grid connection, install the required charging equipment, and retrofit facilities to accommodate the zero emission buses. - Council refers a report from the Cycling Advisory Committee called Cycling Master Plan Review to Civic Administration (focus on greenhouse gas reduction from cycling) - Sections of Waterloo Street have been reconstructed with bioswales to improve stormwater management and minimize impacts on the environment.
Responsible City Service Area(s)	- Led by Environment and Infrastructure, Enterprise Supports, and City Manager's Office - Supported by Planning and Economic Development, Neighbourhood and Community-Wide Services, Finance Supports, London Transit Commission
Key Community Partners and Stakeholders	- Provincial and Federal Governments - City of London Advisory Committees - London Economic Development Corporation - London Transit Commission - Energy Utilities (London Hydro, Enbridge Gas) - Middlesex London Health Unit - Business Associations (e.g., London Chamber of Commerce, Green Economy London) - Community Groups (e.g., London Environmental Network, London Cycle Link, London Electric Vehicle Association, Urban League of London)

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Key Actions (and Milestones)	1. Mobility Master Plan (Timeline: 2021 - 2024) a. Update Committee and Council on direction for the Mobility Master Plan (MMP) (November/December 2021) b. Launch MMP including community engagement, internal City teams and technical consulting team including comprehensive workplan for activities, analysis, feedback and reporting to Committee and Council. 2. Additional Active Transportation Actions (Timeline: 2022 - 2024) a. Continue to implement active transportation infrastructure including sidewalks and cycling infrastructure in renewal, growth and standalone projects. b. Continue to seek funding from senior levels of government for new bike infrastructure c. Continue to support the Active and Safe Routes to School Program. d. Review and provide options for alternative municipal funding sources to support new active transportation infrastructure and programming such as the introduction of a new fee for overnight on-street parking permits, increasing parking rates at municipally controlled parking stalls, and/or a new parking levy on owners of commercially owned parking stalls e. Review and provide options for winter maintenance practices to place a higher service level for snow and ice clearing on sidewalks, transit stops, and cycling infrastructure, including the relationship between winter maintenance standards and mode choice and life cycle cost implications. f. Review and determine types and appropriate level of support for micro-mobility (e.g., bike share) services g. Explore and test the use of time-specified car-free periods in high-volume pedestrian areas such as Dundas Place

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	h. Finalize and implement a city-wide bike parking plan, including neighbourhood bike parking and secure bike parking services i. Use Cycling Performance Measures to track the progress and use of cycling infrastructure, supports and programs j. Assess options for “quick build” cycling infrastructure safety improvements to existing on-road cycling infrastructure (e.g., curb stops along bike lanes) 3. Additional Transit Actions (Timeline: 2022 - 2024) a. Continue to implement priority rapid transit projects as per Council direction and Investing in Canada Infrastructure Program funding b. Continue to support the annual service improvements to the conventional and specialized transit services c. Review and provide options for integrating micro-mobility (e.g., bike share) services for first/last mile travel on public and/or private property d. Develop and promote programs to retain existing riders and attract new riders to public transit e. Support development of gateway parking and transit connection(s) (e.g., Park and Ride) f. Advocate for a regional transportation system that supports London as a regional transit hub and provides frequent and reliable connections to the Greater Toronto Area, Waterloo Region and Windsor-Detroit 4. Transportation Management Association (Timeline: 2022) a. Establish a Transportation Management Association (TMA) for London employers to support and encourage employees to commute by walk/bike, transit, carpool, and support remote work options.

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	5. Encourage Zero Emission Vehicles (Timeline: 2022 - 2025) a. Develop a plan to convert 100% of LTC's bus fleet to zero emission vehicles, based on CUTRIC study results, LTC approval and City approval b. Assist London Hydro as they actively work with London Transit and their consultant on the electrification of transit and the development of rapid transit routes c. Develop an electric mobility plan for London including: i. Increase public charging stations, parking arrangements, options for local incentives and other ideas to increase the use of EVs, e-bikes and similar options ii. Encourage and support the use of zero emission delivery services iii. Encourage and support the use of zero emission car-share services iv. Review and provide options for the Vehicle-for-Hire By-Law to mandate the use of electric vehicles or other zero emission vehicles including municipal scan, applicable jurisdiction, implementation benefit, and complexity analysis v. Review and provide options for encouraging the adoption and use electrically assisted bicycles vi. Grow the network of public electric vehicle and e-bike charging stations at major community facilities vii. Assist London Hydro with their regular review of trends in the EV market to ensure the local electricity distribution system can meet emerging demands due to the electrification of vehicles and fleets d. Complete the strategy for connected and automated vehicles that discourages zero-occupancy use, encourages shared ownership/service models, complements London's public transportation system, prioritizes active transportation road users' safety, and uses zero emission vehicles e. Work with London Hydro to test smart grid strategies such as EV-to-grid (power storage) and EV-to-home (emergency power) f. Work with Enbridge Gas to promote solutions for 'hard to electrify' diesel vehicles in the community such as heavy-duty construction equipment and vehicles, such as compressed natural gas, renewable natural gas, or hydrogen to power these

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	vehicles. 6. Expand By-law Enforcement Opportunities (Timeline: 2022 - 2023) a. Review and provide options for using the Administrative Monetary Penalty System to allow the use of private video evidence to report by-law infractions such as idling vehicles, parking in bike lanes, parking in accessible parking spots, and blocking access to electric vehicle charging stations. 7. Low Impact Design (Timeline: 2022 - 2023) a. Continue to review and provide options for alternative road designs that preserve existing mature street trees when roadway reconstruction projects are initiated b. Prioritize the importance of street trees in providing shade for pedestrians. c. Continue to review projects for climate change adaptation and low impact development opportunities. 8. Review Existing City Plans (Timeline: 2022 - 2023) a. Review existing City plans to reconcile previously established policy areas that may now conflict with the Climate Emergency Action Plan.
Examples of Measuring Progress	Walkable, Complete Neighbourhoods • % of Urban Growth Area streets without sidewalks • Number of street trees planted per kilometre of sidewalk Increased Active Transportation and Transit • % of in-town trips in London taken by active transportation and transit • % of trips to/from London taken by bus or rail • % of Londoners within 800 metres of a multi-use path or protected bike lane • Number of households within 400 metres of a regular service public transit stop • Number of households within 800 metres of a rapid transit or express bus transit stop

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	• Number of transit riders • Number of registered vehicles per person More Zero Emission Vehicles • % of LTC bus fleet that are ZEV • % of City of London fleet that are ZEV • % of vehicle-for-hire fleet that are ZEV • % of new model year light-duty vehicles registered that are ZEV • % of all light-duty vehicles registered that are ZEV • % of medium-duty and heavy-duty vehicles that are ZEV or use zero emission fuels (hydrogen, renewable natural gas) • Number of EV charge ports per thousand people for public use • Retail sales of fossil fuel (litres) per person per year • Retail sales of fossil fuel (litres) per registered vehicle per year More Resilient Buildings and Infrastructure • Area of low-impact development (LID) drainage installations incorporated into road projects (square metres) More Carbon Capture • % of length of sidewalk with shade and/or tree leaf cover • % of road projects' landscaped areas planted with native plant species (square metres) These measures are intended to evolve through the consultation and implementation process to ensure they are adding value to the progress of the CEAP.
Resources	CEAP Supporting Documents Complete Streets Design Manual Neighbourhood Bike Parking Guidelines 2030 Smart Moves Transportation Master Plan London ON Bikes Cycling Master Plan Framework for Municipal Zero Emission Vehicle Deployment (Pollution Probe) Zero Emission Vehicle Charging in Multi-Unit Residential Buildings and for Garage Orphans (Pollution Probe)