

City of London MOBILITY MASTER PLAN



LAND AND WATER ACKNOWLEDGMENT

We acknowledge that the City of London is on the traditional lands of the Anishinaabek (AUh-nish-in-ah-bek), Haudenosaunee (Ho-den-no-show-nee), Lūnaapéewak (Len-ah-pay-wuk) and Attawandaron (Add-a-won-da-run) peoples. We honour and respect the history, languages and culture of the diverse Indigenous people who call this territory home.

We acknowledge all the treaties that are specific to this area: the Two Row Wampum Belt Treaty of the Haudenosaunee Confederacy/Silver Covenant Chain; the Beaver Hunting Grounds of the Haudenosaunee NANFAN Treaty of 1701; the McKee Treaty of 1790, the London Township Treaty of 1796, the Huron Tract Treaty of 1827, with the Anishinaabeg, and the Dish with One Spoon Covenant Wampum of the Anishnaabek and Haudenosaunnee.

The three Indigenous Nations that are neighbours to London are the Chippewas of the Thames First Nation; Oneida Nation of the Thames; and the Munsee-Delaware Nation who all continue to live as sovereign Nations with individual and unique languages, cultures, and customs.

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GLOSSARY

ACAC Accessibility Community Advisory Committee ASL..... Area Speed Limits CAV Connected and Automated Vehicle CCBF......Canada Community-Building Fund CEAP..... London's Climate Emergency Action Plan City The City of London DC Development Charges DSRM...... Design Specifications & Requirements Manual EIE..... Environmental Insights Explorer (Google) EV Electric Vehicle GHG..... Greenhouse Gas HOV..... High Occupancy Vehicle ICSC Infrastructure and Corporate Services Committee IRP Infrastructure Renewal Program KPI Key Performance Indicator LCV..... Long Combination Vehicle LED Light-emitting Diode LGTBQ2+...... Lesbian, Gay, Bisexual, Transgender, Questioning, Intersex, Asexual and Two-Spirit LMRSC..... London-Middlesex Road Safety Committee LOS..... Level of Service LRRP.....Local Road Reconstruction Program LTC London Transit Commission MMLOS..... Multi-Modal Level of Service MMP..... Mobility Master Plan OTC Ontario Traffic Council PXO..... Pedestrian Crossover TDM Transportation Demand Management TMC......Transportation Management Centre TTI Travel Time Index







EXECUTIVE SUMMARY

The Mobility Master Plan is a comprehensive document that outlines the long-term vision and strategy for mobility in London

The Mobility Master Plan (or "Plan") is a long-term strategic planning document that will inform how London plans for and invests in its multimodal mobility system from now through to 2050. The Plan recognizes that re-imagining London's streets involves improving all modes of mobility including walking, cycling, taking transit, and travel by vehicle. The Plan includes mobility infrastructure recommendations and actions that will encourage more walking, cycling, and transit use, manage road congestion, foster economic growth, enable community development, and shape a thriving city for all.



The Mobility Master Plan was developed through a comprehensive multi-phase process

The Mobility Master Plan was developed through a comprehensive multi-phase process that involved wide-spread consultation and thorough research and analysis during every phase. Each phase is outlined in **Exhibit ES.1.**

EXHIBIT ES.1: MOBILITY MASTER PLAN STUDY PHASES



Feedback from the community was integral in the development of the Plan

The valuable insights gained from extensive community engagement was an integral part of the development of the Plan. Wide ranging perspectives from the public, Indigenous communities, community organizations, and other interested parties in London influenced the recommendations.

Outreach and engagement occurred throughout the study and included:

- A project website with information on the development of the plan and opportunities to subscribe for project updates and provide feedback;
- · Email updates to subscribers, key contacts and under-represented groups;
- · Community pop-up events at locations throughout the city;
- · Meeting presentations to community groups, organizations and other interested parties;
- · Presentations at ward meetings;
- · Presentations to Community Advisory Committees; and
- Community conversations including in-person public meetings, a live webinar, pre-recorded videos and online interactive maps.

Common feedback themes heard throughout the engagement include:

- · The need to improve road safety for all road users;
- · The need to manage road congestion;
- · The need for a complete and connected network of comfortable cycling facilities;
- · The need for more frequent, reliable and extended transit service areas and hours; and
- The need for improved personal safety.

More information on the feedback heard throughout the engagement, and how it influenced the development of the Mobility Master Plan, is referenced throughout this report. Engagement statistics are summarized below in **Exhibit ES.2.**

EXHIBIT ES.2: MOBILITY MASTER PLAN BREADTH OF ENGAGEMENT



community events and meetings attended, including pop-up events, ward meetings, and meetings with community groups, organizations and other interested parties.



community conversations which included a live webinar, eight prerecorded videos, four in-person public meetings, and four online interactive maps.



project website visits and video views on getinvolved.london.ca/mobilitymaster-plan and london.ca/mobility

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presentations to Community Advisory Committees



email updates to subscribers, key contacts and under-represented groups.



feedback submissions from online and printed surveys.

London is currently one of the fastest growing cities in Canada

More than a decade has passed since London's last transportation master plan. London is experiencing rapid and diverse population growth, an aging population, increasing density and urbanization, and an expanding economy among other trends. This changing context has clear implications on London's mobility system:

- London's growth includes a densifying downtown and expanding suburban areas. Land use and mobility are inextricably linked, and designing new communities with walking, cycling, and transit options at the forefront can help the city better accommodate future growth.
- Most London trips are made by personal vehicles as many areas have limited access to transit
 and active transportation options that are convenient, efficient, and dependable. Further, many people
 in London do not have personal vehicles. There is a need to improve access to a range of affordable
 mobility options that connect people to employment, education and other everyday
 needs and destinations.
- London's travel patterns are shifting. While London's downtown has many destinations, there are also key institutions, employment centres and entertainment attractions outside of the downtown which are generating more trips from across the city. Today people also make many shorter trips which often start and end in the same neighbourhood, yet many of those trips are made by personal vehicle. There is also a growing number of longer trips to/from London and the surrounding area and an increasing demand for more travel options. For all types of trips there is a need to provide more convenient and affordable mobility options.
- London's Climate Emergency Action Plan sets a goal to achieve net-zero greenhouse gas (GHG)
 emissions by 2050. Transportation is one of the largest GHG emitters, and significant infrastructure
 and behavioural changes are needed to move more people more often by walking, cycling, and transit.
- London is a diverse city with residents and visitors that vary in age, ethnicity, language, abilities, preferences, and needs. Supporting all people getting around means removing barriers and addressing gaps that limit access to mobility options. The Mobility Master Plan is an opportunity to improve the safety, accessibility, equity and ease at which people move around London.

The Mobility Master Plan has been developed to respond to challenges and capitalize on emerging trends to create a mobility system that will help London achieve its desired mobility vision for the future.



London's desired future is set out in a vision statement

"By 2050, Londoners of all identities, abilities, and means will have viable mobility options to allow them to move throughout the city safely and efficiently, as well as providing connectivity to the region. The movement of people and goods will be environmentally sustainable, affordable, and supportive of economic growth and development."

Guiding principles informed the decision-making process

Five interconnected guiding principles were developed based on the priorities outlined in the mobility vision. The guiding principles establish the framework for the decision-making process for the development of the Mobility Master Plan, to ensure that all aspects of the Plan support achieving the vision. The guiding principles are:



Environmentally sustainable: This includes taking bold action to address climate change by designing a mobility system that allows people to move in ways that produce fewer GHGs and protects the natural environment. This means increasing walking, cycling, and transit trips, managing travel demand, and adopting new technologies (such as zero-emission vehicles). An environmentally sustainable mobility system is one that makes walking, cycling and transit viable and attractive travel options.



Financially sustainable: This means ensuring that mobility infrastructure and programs provide good value for the investment for current and future generations. This includes a mobility system whose lifecycle costs are cost-efficient for the City and taxpayers to build, operate, and maintain in the short- and long-term, but also mobility options that are affordable for individuals to use. A financially sustainable mobility system is one where the need for costly new infrastructure is minimized and where mobility options are available to Londoners of all income levels.



Equitable: This includes identifying and removing barriers and systemic practices within the mobility system that impact people's ability to participate in city life. For the MMP, this means recognizing diverse mobility needs, particularly for equity-denied groups and embedding equity into decision making to enable everyone to move around the city. An equitable mobility system is one that provides access to the city for all Londoners.



Healthy and safe: This means promoting and protecting the physical, mental, and social wellbeing of all and encouraging active living. This includes but is not limited to enabling physical activity through walking and cycling and improving road safety and personal security. A healthy and safe mobility system is one where Londoners safely move through the streets using all mobility options.



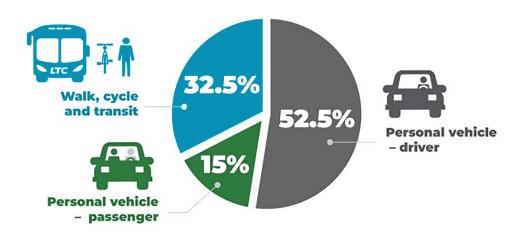
Integrated, connected, and efficient: This means enabling better access to people and places, and the efficient movement of goods. Mobility contributes to improving access to the city through strategies such as making improvements to the transportation network and expanding the coverage of high-quality transit throughout the city. A mobility network with multiple mode options also supports a more compact city which brings more people closer to more destinations.

A strategic approach was used to develop the Plan to achieve the vision

In addition to the guiding principles, a strategic approach was used to help achieve the vision. This strategic approach included four essential elements:

- **Vision-driven** Identifying the desired mobility future and working backwards to figure out the mobility infrastructure recommendations and actions needed to achieve this future.
- Mode share targets A future London where 32.5% of trips or more are made by walking, cycling, and transit (Exhibit ES.3).

EXHIBIT ES.3: 2050 MODE SHARE TARGET



2050 Mode Share Target

- Walking, cycling, and transit at the forefront Working towards a London where more people choose walking, cycling, and transit more often.
- Connections to other city plans/initiatives Building on progress to date and using mobility to
 work towards desired outcomes in other plans like The London Plan and the Climate Emergency
 Action Plan.

Together, the vision statement, guiding principles, and strategic approach steered decision-making throughout the study process. This included shaping the evaluation process and developing mobility infrastructure recommendations and actions that respond to London's current and changing context and help realize London's desired 2050 mobility future.

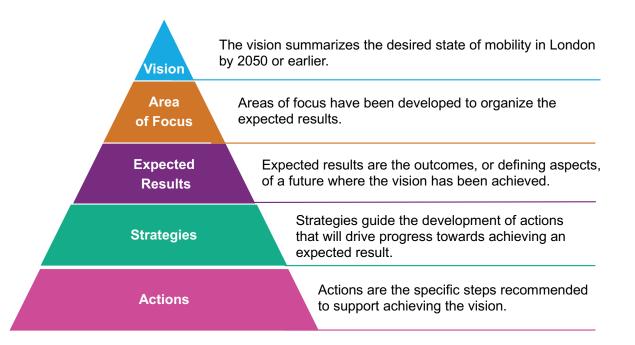
Implementing the Plan will create more choices for people in London

London's future mobility system will provide residents and visitors with more options to get to where they need to go, when they need to get there. The Mobility Master Plan includes a range of mobility infrastructure recommendations and actions that will improve how people move around within the city from now through to 2050. The Mobility Master Plan infrastructure recommendations and actions are further summarized below.

Comprehensive strategies and actions to achieve the vision

The Mobility Master Plan sets the direction and outlines the steps for London to take to achieve its desired mobility future. The Plan includes a comprehensive list of interconnected strategies and actions which have been developed to achieve a series of expected results. The expected results describe various aspects of a future where the vision has been achieved. The full structure of the Plan is illustrated below in **Exhibit ES.4.**

EXHIBIT ES.4: MULTI-TIERED APPROACH TO ACHIEVE THE VISION FOR MOBILITY





Eight areas of focus (Exhibit ES.5) provide the framework for organization of the expected results, strategies and actions. The areas of focus were developed based on the needs and opportunities identified in Phase 1 of Mobility Master Plan development and are as follows:

EXHIBIT ES.5: AREAS OF FOCUS



The strategies and actions are comprehensive and interconnected and in some cases support achieving the expected results of more than one area of focus.

Mobility infrastructure improvements to improve capacity, connectivity, operations and safety for all modes

The Mobility Master Plan also identifies mobility infrastructure recommendations which reflect multiple areas of focus. The mobility infrastructure recommendations include currently planned projects as well as newly identified infrastructure improvements based on the needs and opportunities identified in Phase 1 of the Mobility Master Plan. The future mobility infrastructure recommendations for walking, cycling, transit, and roads are described below. Together these mapped infrastructure improvement recommendations form an integrated and connected multimodal network. The details of individual projects will be determined through individual project scoping, consultation, design and approval processes.



Enhance the road network with strategic expansions, connections and road improvements

The recommended road projects were selected to make the most efficient use of London's existing road infrastructure to accommodate growing travel demand in a cost-efficient and environmentally sustainable manner. The recommended road projects include intersection and road improvements, new road alignments and extensions, and road expansions that together represent necessary targeted improvements as part of a strategic approach to manage congestion and improve road capacity.

EXHIBIT ES.6: ROAD PROJECTS PLAN



Build on the existing rapid transit corridors to provide a transit priority network which strengthens connections and provides access to more destinations

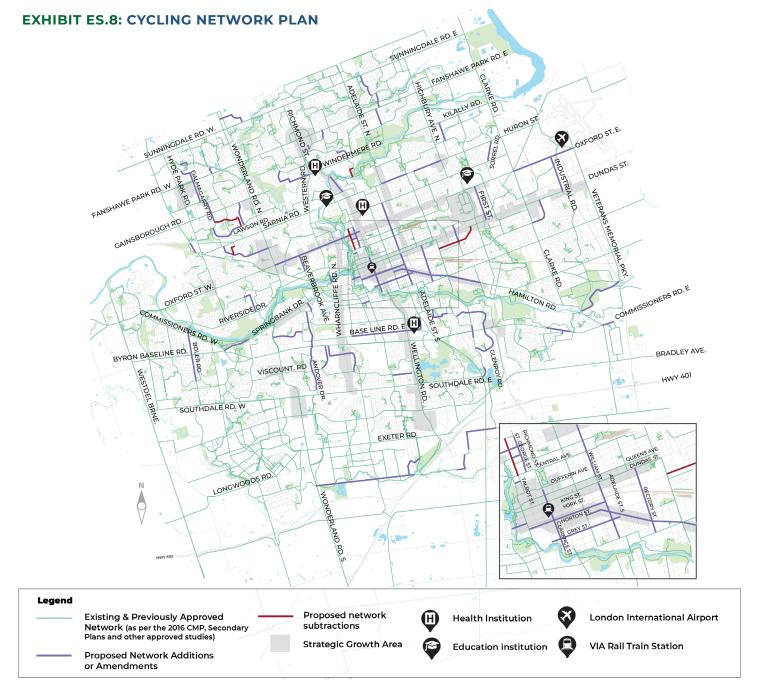
The recommended transit priority network builds on the existing rapid transit corridors to provide a more complete and extensive transit priority network. The recommended transit priority network includes rapid transit corridors, transit priority corridors, and transit friendly corridors, that together will help make transit the option of choice for more trips. The network has been planned to provide more efficient, convenient, accessible, safe, and connected transit services for residents and visitors as the city grows.

EXHIBIT ES.7: TRANSIT PRIORITY NETWORK PLAN



Provide a comfortable and connected network of on- and off-road cycling facilities suitable for all ages and abilities

The recommended cycling network includes cycling facilities along streets and multi-use paths in parks and other connections in the pathway network. It is recognized that multi-use paths also support walking. These projects create the ability for people to complete more short trips in a low-cost, healthy and environmentally friendly way. Cycling improvements were previously well detailed in the comprehensive *Cycling Master Plan* (2016). Recognizing this, the Mobility Master Plan builds on the *Cycling Master Plan* and includes additions and subtractions from the previous plan. The recommended cycling projects include stand alone cycling projects to address critical gaps in the cycling network. There are also cycling improvements proposed to be completed in conjunction with other major infrastructure improvement projects such as the recommended road and transit projects.



Address gaps in the sidewalk network in support of walkable communities and sidewalks

The planning of sidewalks focused on major streets recognizing that existing programs are in place to determine pedestrian infrastructure within neighbourhoods. All major roads within the urban growth boundary without sidewalks were identified and many are recommended to be addressed in conjunction with other major infrastructure improvement projects. Opportunities to address other sidewalk gaps will also be pursued, such as in conjunction with developments or through the new sidewalk program. Implementation of sidewalks throughout the city will improve accessibility for all ages and abilities and will support healthier lifestyles and environments.

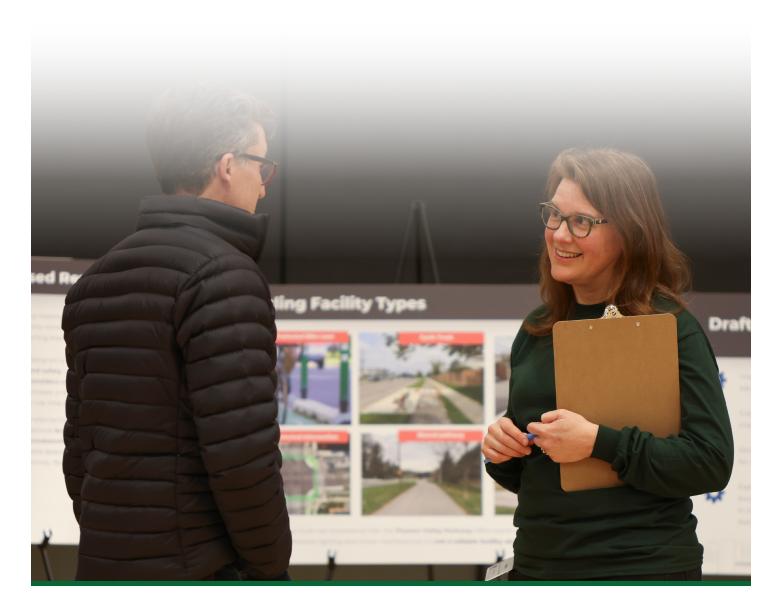
EXHIBIT ES.9: SIDEWALK PROJECTS PLAN



The Mobility Master Plan is an ambitious but achievable plan and success will be monitored and measured

The Mobility Master Plan is an ambitious but achievable plan that outlines the steps to achieve a fully integrated and efficient mobility system. While the Mobility Master Plan is intended to address current and forecasted mobility needs, it is acknowledged that London will continue to evolve. Accordingly, the monitoring and measuring of success of the plan is critical to ensure progress in achieving the vision and to help identify areas where further improvements or adjustments may be needed in response to evolving challenges or opportunities. Monitoring the implementation and success of the plan also builds trust in the community by providing transparency and accountability.

The Mobility Master Plan monitoring framework includes a series of key performance indicators that each relate to one or more of the areas of focus. Each key performance indicator is accompanied by a data source and frequency for reporting. The application of this monitoring framework will enable the City to evaluate the success of Mobility Master Plan infrastructure recommendations and actions and identify areas for future improvement.





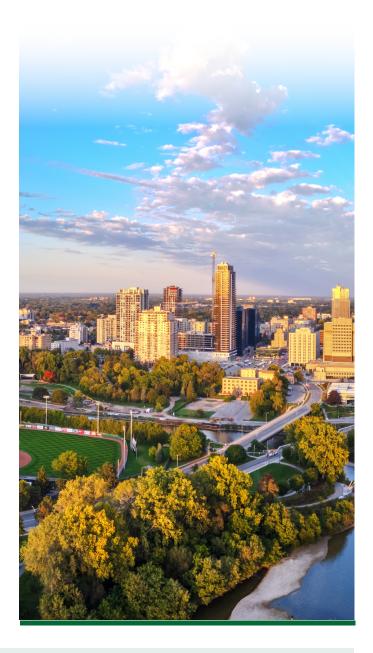
1. INTRODUCTION

London is currently one of the fastest growing cities in Canada. Significant population growth is expected to continue, meaning more people will make more trips within the city and to the city to access services and amenities.

The City of London (City) is also wrestling with the climate emergency – a generational challenge closely related to the emissions impacts of mobility. London's population and economy are growing, and making walking, cycling, and transit more practical, efficient, safe, and comfortable will help manage this growth sustainably.

The mobility network will need to support an increasingly more compact city. The economy is also changing, and new technologies and business models are emerging that will both change mobility needs and be influenced by mobility decisions. Finally, the COVID-19 pandemic brought about changes in travel behaviour, some of which will likely last well into the future and influence many mobility decisions.

The future London will look far different than today's London. This Mobility Master Plan, which serves as an update to London's 2030 Transportation Master Plan: SmartMoves (2013), sets the stage for working towards a mobility system that supports walking, cycling and transit, equitable access to city life, and works towards broader city building goals in The London Plan.



Mobility is the movement of people and goods through, and beyond, the city from one location to another in a safe, accessible, convenient, and affordable manner. Mobility, typically referred to as transportation, can be classified into five main types: walking, cycling, transit, movement with mobility devices, and motorized vehicle movement. Our fixed mobility infrastructure includes such things as streets, sidewalks, cycling lanes, rapid transit lanes and/or rails, stations, pathways, parking facilities, and the many physical features that are supplementary to, and supportive of, this infrastructure.

(The London Plan, 307).

1.1 WHAT IS THE MOBILITY MASTER PLAN?

The Mobility Master Plan ("MMP" or the "Plan") is a long-term strategic planning document that will inform how the City plans for and invests in its multimodal mobility system from now through to 2050. The MMP includes extensive mobility infrastructure recommendations which are supported by a comprehensive and interconnected list of strategies and actions that when implemented over time will work towards achieving London's mobility vision. The MMP also sets the stage for future work, in subsequent plans and/or studies, towards achieving the mobility vision.

A plan that recognizes multimodal mobility and city building

The MMP recognizes that all modes of mobility have a role to play in working towards the mobility vision. There is a need to re-imagine many of London's streets to make them better places to walk, cycle, and take transit while accounting for the needs of personal vehicles. The MMP acknowledges that London's street network has an essential role in supporting London's economy by providing safe, efficient, and reliable routes for the movement of goods.

The MMP also recognizes the importance of holistically integrating city building and mobility planning. It is essential to manage both intensification within the built area and new communities in greenfield areas in a way that provides more mobility choices.

A plan to accommodate evolving mobility needs and technologies

The MMP was developed in the context of a city made up of all ages, abilities, and socio-economic backgrounds, each of which will continue to influence mobility patterns in London. The COVID-19 pandemic resulted in permanent and evolving impacts on mobility, and post-pandemic impacts on mobility systems may continue to change. Emerging technologies and new business models will also continue to influence mobility in London in the coming decades. In addition, new sources of data will further enhance the understanding of travel patterns and trends, including enhancing London's understanding of travel outside of typical peak periods.

The City will continue to monitor trends and conditions which influence mobility needs, including population and employment growth, and the MMP may be adjusted as appropriate based on this information. Progress on implementation of the MMP and the success of its implementation will also be monitored and the Plan will be reviewed and updated regularly through subsequent MMP updates.

A long-range strategic look to the future

Planning with an outlook to 2050 is an opportunity to set in motion mobility investments that will guide how people in London get around for generations to come. The MMP is a set of cohesive mobility infrastructure recommendations and actions guided by a mobility vision which is aligned with the broader goals for the city. A mobility network functions best when planned holistically, with all components and their interactions included. The MMP provides a high-level plan that will play an important role for decisions throughout London for the future.

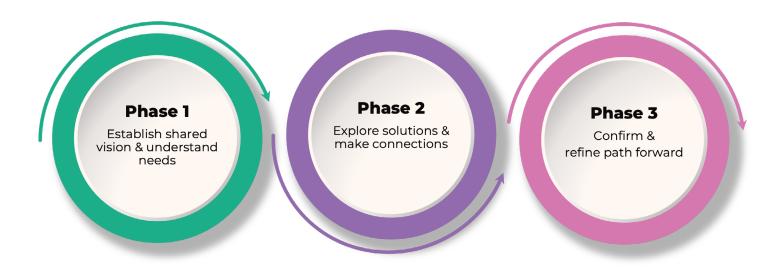
1.2 HOW WAS THE MOBILITY MASTER PLAN PREPARED?

The MMP was developed in multiple phases, with significant community engagement throughout the study process. The three MMP phases, and how community engagement was used to shape the Plan, are described below.

1.2.1 STUDY PROCESS

The MMP was developed through a comprehensive multi-phase process that involved wide-spread consultation and thorough research and analysis during every phase. Each phase is outlined in **Exhibit 1.1**

EXHIBIT 1.1: MOBILITY MASTER PLAN STUDY PHASES



The MMP adheres to the Municipal Class Environmental Assessment (MCEA) planning process for Master Plans under the Province of *Ontario's Environmental Assessment Act (1990)*. The MCEA planning process provides a transparent approach to planning and building municipal infrastructure and is designed to predict the environmental effects of proposed initiatives before they are developed to protect the natural, cultural, social, and economic environment. The MMP follows the Master Plan approach, which requires the first two phases of the MCEA planning process.

- MCEA phase 1: Identify the problem or opportunity statement (corresponding to phase 1 of the MMP).
- MCEA phase 2: Identify and evaluate alternative solutions to address the problem and establish a preferred solution (corresponding to phases two and three of the MMP).

1.2.2 COMMUNITY ENGAGEMENT ACTIVITIES

The MMP is a plan that is shaped with and by people in London, for people in London. The people that live, work, and play in London on a daily basis have diverse first-hand knowledge of the city's mobility system, including what works well and what can be improved. It's important to involve members of the public who offer a diversity of perspectives from their travels on different modes, at different times of day, to different areas of the city, with or without children, with a disability, or other thoughts or experiences that impact travel and ability to access opportunities.

Continuous engagement with the community including the public, Indigenous communities, community organizations, and other interested parties was a foundational component of MMP development. Engagement and lived experience informed every component of the MMP including the identification of needs and opportunities, the identification of mode share targets, the development of the project evaluation framework, and walking, cycling, transit, and road infrastructure recommendations and actions. Engagement included the following:

- Project website: The project website provided ongoing updates on the development of the plan and opportunities to provide feedback.
- **Email updates:** The project team sent out email updates to subscribers and completed tarted outreach to groups.
- Meeting presentations with interested parties:
 The project team regularly met with communities,
 organizations and other interested parties to seek input on the development of the Plan.
- Presentations at ward meetings: The project team attended and provided presentations at various ward meetings across the city.
- Presentations to Community Advisory Committees:
 The project team provided presentations to Community Advisory Committees at various points throughout the development of the Plan.
- **Community pop-up events:** The project team hosted popup events throughout London at each phase of the study.

LONDON COMMUNITY CONNECTORS

The Community Connectors are dedicated City of London employees, committed to fostering public engagement across a variety of city programs and projects.

They play a vital role
in connecting with
underrepresented, marginalized,
and diverse groups across
London. The team includes
specialized roles such as a
Black Community Connector
and an Indigenous Community
Connector, ensuring meaningful
representation and outreach.

Fluent in multiple languages and reflective of diverse backgrounds, the Community Connectors work to **empower people in London** by encouraging civic participation, strengthening community ties, and making public engagement more accessible for everyone.

To support MMP engagement, the Community Connectors participated in numerous pop-up events and in-person community conversations throughout the development of the MMP, facilitating discussions with people about their daily travel experiences and the barriers they face.



• **Community conversations:** There were community conversations consisting of in-person public meetings and online content including a live webinar and pre-recorded videos. The community conversations served as formal engagement points at each phase of the study.

The following community conversations occurred as part of the study:

- Community conversation one (vision, guiding principles, and mobility experiences) Focused on building awareness of the study, inviting people to share their experiences with mobility in London, and collecting input on the mobility vision and guiding principles. This initial conversation occurred in phase one of the study and included a live webinar (Fall 2022).
- Community conversation two (actions) Focused on sharing what was heard in the first conversation, how it shaped the study, and presenting proposed expected results by area of focus and examples of potential strategies and actions. This second conversation occurred in phase two of the study and included posting eight pre-recorded online videos (Summer 2024).
- Community conversation three (mobility infrastructure recommendations) Focused on presenting and gathering feedback on draft mobility infrastructure recommendations. This third conversation occurred in phase two of the study and included four in-person public meetings and online content including interactive maps (Winter 2024/2025).

In addition, engagement on the mode share targets and evaluation framework occurred in Summer/Fall 2023.

Exhibit 1.2 shows the full breadth of engagement for the study.

EXHIBIT 1.2: MMP BREADTH OF ENGAGEMENT.



community events and meetings attended, including pop-up events, ward meetings, and meetings with community groups, organizations and other interested parties.



community conversations which included a live webinar, eight prerecorded videos, four in-person public meetings, and four online interactive maps.



project website visits and video views on getinvolved.london.ca/mobility-master-plan and london.ca/mobility



presentations to Community Advisory Committees



email updates to subscribers, key contacts and under-represented groups.



feedback submissions from online and printed surveys.

1.2.3 COMMUNITY ENGAGEMENT FEEDBACK

The community conversations offered a rich overview of the experience of mobility in London and identified areas for improvement. Key feedback included:

- Desires for continuous walking and cycling routes: While many people were pleased with the cycling network plan and current sidewalk infrastructure, some suggested filling specific gaps and addressing missing sidewalks, crossings, and disconnected cycling routes.
- The need to create safer streets for people: Both drivers and cyclists wanted more physical separation between traffic and cyclists. Many people reflected on the discomfort of walking on a narrow sidewalk close to fast-moving traffic. People wanted to make the roads an efficient yet safe space for all residents travelling throughout the city.
- Support for increased connectivity: Many people requested extended transit service hours, frequency and service areas to provide or improve connectivity to important destinations throughout the city. New or enhanced connections to major transportation hubs (i.e., VIA Rail station, London International Airport) as well as major commercial centres, industrial areas, and new developments were frequently mentioned during community engagement.
- Support for rapid transit development: Londoners are interested in rapid transit and many are supportive. Many comments called for dedicated bus lanes to make transit service more reliable and additional rapid transit connections to major destinations, like Western University and downtown London.
- The need to manage the pedestrian environment and road congestion: Many people requested
 a more complete and connected pedestrian network with a safe and comfortable pedestrian
 environment. Many people also expressed a desire to address traffic congestion, particularly in the
 north and west parts of the city.

More feedback that we heard during engagement, and how it influenced this MMP, is referenced throughout this report.



1.3 WHAT'S INSIDE?

Following this introductory chapter, this report is structured as follows:

- Chapter 2: Mobility in 2050 the London way presents the vision and guiding principles, mode share targets, and the overall strategic approach to developing the MMP.
- Chapter 3: London's current and changing context summarizes the policy context and trends that informed the MMP recommendations.
- Chapter 4: Moving forward presents the recommendations for London's future mobility system, including mobility infrastructure recommendations and actions, organized by area of focus.
- Chapter 5: Delivering the Plan details how the Plan will be implemented and how success will be measured.

Mobility infrastructure recommendation maps are included as an appendix and in the following sections of Chapter 4:

- · Road Projects Plan: Section 4.3 Manage road capacity strategically
- · Transit Priority Network Plan: Section 4.4 Make transit the option of choice for more trips
- Cycling Network Plan: Section 4.5 Make walking, rolling and cycling preferred mobility options to meet daily travel needs
- Sidewalk Projects Plan: Section 4.5 Make walking, rolling and cycling preferred mobility options to meet daily travel needs

Other mobility maps including with this report are as follows:

- Enhanced Pedestrian Areas Map: Section 4.2 Put people first in London's mobility system
- · Priority Goods Movement Network: Section 4.6 Support London's role as a regional hub

The report appendices include:

- · Appendix A: Summary of project evaluation framework
- **Appendix B:** Mobility infrastructure recommendation maps (also included in main report) and recommended project phasing maps
- Appendix C: Full list of strategies and actions

The MMP is:



Vision-driven

The MMP was developed using an approach that identified the desired future and worked backwards to identify the mobility infrastructure recommendations and actions needed to take **London's mobility system from where it is today to where the community wants to be in 2050.**

Developed with people in London

The MMP was developed through **extensive engagement** with the public, community organizations, Indigenous communities, and other interested parties. The MMP is a plan that is shaped **by people in London, for people in London.**





About more choice for people in London

The MMP envisions a future London with more **mobility freedom.** This means people in London have accessible and attractive choices to get to **where they need to go, when they need to get there.**





SECTION 2 MOBILITY IN 2050: THE LONDON WAY



2. MOBILITY IN 2050: THE LONDON WAY

The MMP aspires to shift London away from its mobility status quo. This means a future London where 32.5% or more of all trips are made by walking, cycling, or transit, representing a significant increase from 2019 where only 23% of all trips were made by these modes. The future London is also one where walking, cycling, and transit options are plentiful, access to city life is more equitable, and there is an efficient road network that supports movement of people and goods.



2.1 LONDON'S VISION FOR THE FUTURE OF MOBILITY

To set London on a path towards achieving a fully integrated and efficient mobility system, it is critical to determine what the London of 2050 should look like. The mobility infrastructure recommendations and actions in this Plan will work together to build this desired future London, guided by an aspirational look at London in 2050.

MMP development was guided by the following vision statement:

"By 2050, Londoners of all identities, abilities, and means will have viable mobility options to allow them to move throughout the city safely and efficiently, as well as providing connectivity to the region. The movement of people and goods will be environmentally sustainable, affordable, and supportive of economic growth and development."

This vision was developed and confirmed with community input.

WHAT WE HEARD

Feedback from Phase 1 of the MMP Study confirmed the vision aligns with the people in London's aspirations for the future, including:

- Strong support for mobility options that are **environmentally sustainable, reliable,** and provide more **convenient** access to people, places, and services.
- The importance of transportation being **affordable** and furthering **safety and comfort** for all users of the mobility system.

2.2 GUIDING PRINCIPLES

Five interconnected guiding principles were developed based on the priorities outlined in the mobility vision. The guiding principles establish the framework for the decision-making process for the development of the Mobility Master Plan. They ensure that the strategies and actions developed through the Mobility Master Plan work towards achieving the vision. The guiding principles were developed based on the existing policies and plans including *The London Plan*, Council's 2023-2027 Strategic Plan and the Climate Emergency Action Plan.

The guiding principles are:



Environmentally sustainable: This includes taking bold action to address climate change by designing a mobility system that allows people to move in ways that produce fewer greenhouse gases (GHGs) and protects the natural environment. This means increasing walking, cycling, and transit trips, managing travel demand, and adopting new technologies (such as zero-emission vehicles). An environmentally sustainable mobility system is one that makes walking, cycling and transit viable and attractive travel options.



Financially sustainable: This means ensuring that mobility infrastructure and programs provide good value for the investment for current and future generations. This includes a mobility system whose lifecycle costs are cost-efficient for the City and taxpayers to build, operate, and maintain in the short- and long-term, but also mobility options that are affordable for individuals to use. A financially sustainable mobility system is one where the need for costly new infrastructure is minimized and where mobility options are available to Londoners of all income levels.



Equitable: This includes identifying and removing barriers and systemic practices within the mobility system that impact people's ability to participate in city life. For the MMP, this means recognizing diverse mobility needs, particularly for equity-denied groups and embedding equity into decision making to enable everyone to move around the city. An equitable mobility system is one that provides access to the city for all Londoners.



Healthy and safe: This means promoting and protecting the physical, mental, and social wellbeing of all and encouraging active living. This includes but is not limited to enabling physical activity through walking and cycling and improving road safety and personal security. A healthy and safe mobility system is one where Londoners safely move through the streets using all mobility options.



Integrated, connected, and efficient: This means enabling better access to people and places, and the efficient movement of goods. Mobility contributes to improving access to the city through strategies such as expanding the coverage of high-quality transit throughout the city as well as completing gaps in the sidewalk and cycling networks. A mobility network with multiple mode options also supports a more compact city which brings more people closer to more destinations and supports reduced reliance on personal vehicles.

WHAT WE HEARD

Feedback from phase 1 confirmed these guiding principles align with people in London's aspirations for the future, including:

- **Environmentally sustainable** Strong support for walking, cycling, and riding transit and a desire to start or continue to use them.
- Financially sustainable The need for affordable mobility options.
- **Equitable** There are significant differences in mobility experiences and ability to meet daily needs based on age, ability, income level, etc.
- **Healthy and safe** Everyone needs to feel safe and protected, using all modes, year-round, supported by infrastructure and amenities that help encourage active lifestyles.
- Integrated, connected, and efficient Strong support for efficient cross-town trips, improved transit reliability, and greater access to the entire city among all modes.

2.3 STRATEGIC APPROACH

There are four strategic elements that directed the development of the MMP towards the mobility vision in line with the guiding principles. These elements include:

- **Vision-driven** Putting the vision at the forefront of the planning process by working backwards from the desired future to identify the steps required to get there.
- Mode share targets Identifying the desired proportion of people who will travel by each mode of mobility including walking, cycling, transit, and by personal vehicle either as a driver or passenger.
- Sustainability first Developing a plan that makes walking, cycling, and transit more viable for more trips so that more people choose them.
- Connections to other City plans/initiatives Ensuring the MMP aligns with and works towards the goals of other city plans and initiatives.

2.3.1 VISION-DRIVEN

The MMP planning process started with London's desired future as articulated by the mobility vision and *The London Plan*. The MMP then worked backwards to identify the mobility infrastructure recommendations and actions that are required to achieve the desired future. This is an approach called "backcasting." Backcasting helps answer the question: what mobility infrastructure recommendations and actions do we need in the near, medium, and long-term to build the future London that we want?

The network development process applied the backcasting approach by assuming the Council approved MMP mode share targets were achieved in 2050. This means that the MMP mobility infrastructure recommendations and actions are designed to accommodate and encourage walking, cycling, and transit use in line with the targets. This is the right approach for London because it considers future travel demand within the context of achieving transformational change.

2.3.2 MODE SHARE TARGETS

Ambitious but achievable mode share targets were developed to work towards London's vision. Mode share is the percentage of people who travel by different modes throughout the day (i.e. walking, cycling, taking transit, personal vehicle as a driver and personal vehicle as a passenger). Increasing trips by walking, cycling, and transit is a core component of achieving the vision of more environmentally sustainable and equitable mobility in London, as mode share determines the demand for and use of the mobility network across various modes. More people walking, cycling, and taking transit means reduced congestion, reduced GHG emissions, less space needed for road widenings and parking, and the ability to provide more people-focused public spaces.

The 2019 mode share and MMP 2050 mode share targets for trips within London, approved by Council in April 2024, are shown in **Exhibit 2.1.** The MMP 2050 walk, cycle and transit mode share target represents a 9.5 percentage point increase compared to 2019. These are daily targets, which means that the targets would apply to all trips throughout the entire day. This approach is appropriate for the MMP because people travel at all times of the day and a daily target provides guidance for mobility decisions that will benefit everyone, not just those that travel during peak periods.

EXHIBIT 2.1: 2019 MODE SHARE AND 2050 MODE SHARE TARGETS



2019 Mode Share

2050 Mode Share Target

These mode share targets were developed by analysing London's projected population, employment distribution, travel patterns, and service levels necessary to achieve the targets. The analysis showed that the 32.5% or more walking, cycling, and transit mode share target, (13% transit and 19.5% ¹ walking, rolling ² and cycling), is ambitious but can be achieved with significant mobility infrastructure recommendations and actions over the horizon of the MMP.

¹ Represents approximately 15% walking and rolling and 4.5% cycing.

² Rolling refers to the use of mobility devices with wheels, including but not limited to wheelchairs and walkers.

WHAT WE HEARD

In response to a 2023 survey on proposed mode share targets, respondents expressed a strong preference for planning towards an increase in the share of trips made by walking, cycling, and transit.

On April 2, 2024, London City Council approved an ambitious but achievable target of 32.5% or more walk, cycle, and transit, to be reviewed and updated at least every four years.

2.3.3 WALKING, CYCLING, AND TRANSIT AT THE FOREFRONT

The MMP supports a future London where there are more options for moving around, and where more people choose to walk, cycle or take transit for more trips in line with *The London Plan*.

Encouraging more people to walk, cycle, or take transit in London requires strategic mobility planning that balances trade-offs. This means deliberately considering how road space is allocated between modes, where investments are being made in the city, who is benefiting from planning decisions, and above all, considering the role of walking, cycling, and transit options in planning decisions and applying context-sensitive solutions. Part of this is always considering that streets function as mobility corridors and public spaces. This dual role means that streets and the network must provide safe spaces for walking, cycling, taking transit, or driving, as well as for the safe movement of goods. This also means planning a mobility system that works towards London's *Climate Emergency Action Plan* targets and actions to reach net zero emissions by 2050. A walking, cycling, and transit first mindset was used to develop MMP recommendations, and this mindset should continue through the horizon of the plan as recommendations are updated.

2.3.4 CONNECTIONS TO OTHER CITY PLANS/INITIATIVES

The London Plan, Climate Emergency Action Plan, Safe Cities London Action Plan, Complete Streets Design Manual, and Council's 2023-2027 Strategic Plan, among others were reviewed to identify opportunities to develop MMP recommendations that will advance London's city building objectives. Since mobility influences so many aspects of daily life, the MMP has an important role to play in working towards the desired outcomes in these plans by identifying actions that provide more specific direction on key mobility planning needs. Ultimately, the MMP is working towards a city where more people can access daily needs by walking, cycling or taking transit more often – an outcome that contributes to many objectives related to social equity, safety, health, quality of life, economic development, and climate change mitigation.

2.4 DEVELOPMENT OF THE MMP INFRASTRUCTURE RECOMMENDATIONS

Together, the vision statement, guiding principles, and strategic approach steered decision-making throughout the study process. This included shaping the evaluation process and developing mobility infrastructure recommendations and actions that respond to London's current and changing context and help realize London's desired 2050 mobility future. Further, the areas of focus, expected results, strategies and actions described in **Section 4** stem directly from the vision, guiding principles, and strategic approach.

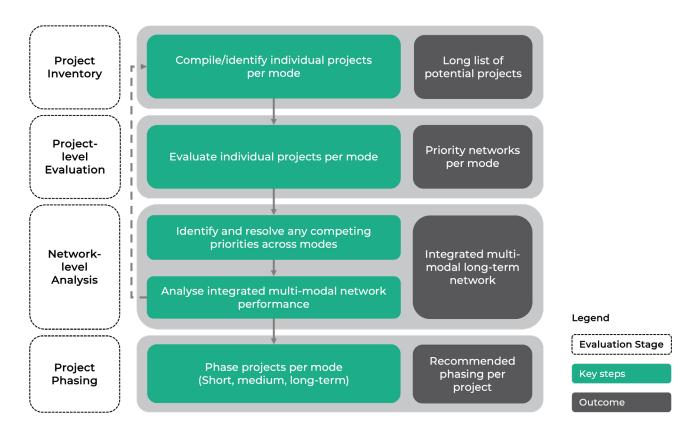
MMP infrastructure recommendations were developed in line with London's desired future – a desired future that is well defined in policy and represents a departure from the status quo. The process to develop the infrastructure recommendations reflects this. This process is summarized below and is illustrated in **Exhibit 2.2.**

- Compiling and identifying potential infrastructure improvement projects per mode: this step
 involved compiling already documented capacity-related infrastructure projects. These projects were
 compiled from the 2013 TMP, London's Development Charge Study, Environmental Assessments and
 other studies and plans. This step also included identifying additional infrastructure improvement
 projects to address capacity, connectivity, operational and safety concerns identified in the needs and
 opportunities analysis.
- Initial screening of projects: any projects that clearly did not align with the MMP vision and guiding
 principle or City policy, or are technically infeasible were screened out. The outcome of this process
 was a long list of potential projects that were subject to further evaluation.
- Evaluating individual projects per mode: projects were evaluated per mode (i.e., road, transit, and cycling projects are each evaluated separately) using key indicators developed based on the guiding principles. Key indicators are outcome-based metrics intended to measure the general contribution of a project to a guiding principle. Projects received a score based on their contribution to the guiding principles. As referenced in Section 2.3.1, this evaluation was completed assuming that the 2050 Council approved mode share targets are achieved. This means that there is far more waking, cycling, and transit use; to work towards this, transit infrastructure projects are planned within the context of the desired level of transit use and road improvements are focused on locations that still experience congestion despite significant uptake of walking, cycling, and transit. Evaluating projects separately per mode provided an understanding of priority improvements for each mode, before determining trade-offs between modes or prioritization across modes. Evaluation frameworks for roads, transit and cycling projects are available in Appendix C.
- Identifying and resolving any competing priorities across modes: infrastructure improvement projects and resulting networks developed in the previous step were combined into one multi-modal network, which identified streets with multiple recommended projects across different modes (e.g. a road widening and transit priority project). In some cases, multiple projects in one corridor can be implemented together and do not complete for space. For example, a corridor may be identified for transit priority measures and the addition of protected bikes lanes—if the geometry of the space allows for this, no trade-offs are needed. In other cases, there may be multiple recommended projects across modes for a street where the projects cannot be implemented together (e.g. transit priority measures and a protected bike lane on the same corridor where there are physical constraints to

fitting them both). In these cases trade-offs between recommended projects were determined based on factors including the street's contribution to the overall vehicle, cycling, transit, and sidewalk networks; overall travel and people-moving capacity of projects; the availability of alternative routes for each mode; and the surrounding land use context.

- Analyze integrated multi-modal network performance: the full multimodal network was evaluated
 to capture important factors that are best analysed at the network-wide scale using metrics that
 capture the combined impact and relationships between the projects. This included analysing GHG
 emissions with the recommended projects, among several other indicators.
- Phasing projects: all infrastructure recommendations were grouped into three time phases: short-term (present to 2035), medium-term (2035 to 2045), and long-term (2045 to 2050). Phasing was determined based on the scores of each project determined at the project evaluation stage with higher scores typically recommended for earlier implementation, with consideration of additional factors impacting the timeline of a project (for example, the timing of nearby land development, social equity considerations, network dependencies, the opportunity to implement projects on the same corridor at the same time, and general implementation readiness of a project). Actual timing for implementation of the recommended improvements is subject to further studies, funding and approvals. Project phasing maps can be found in **Appendix B.**

EXHIBIT 2.2: INFRASTRUCTURE IMPROVEMENT PROJECT EVALUATION PROCESS



Greenhouse Gas Emissions and the MMP

The City has made important commitments through its *Climate Emergency Action Plan* to achieve net-zero emissions by 2050. Reducing transportation-related greenhouse gas emissions (GHGs) is an important part of moving towards net-zero: transportation is responsible for nearly half of London's total annual GHG emissions and personal vehicles represent the largest portion. This includes trips to and from London as well as in-town trips.

There are three major factors that influence transportation related emissions, particularly from personal vehicles:

- Total vehicle kilometres travelled (i.e. the number of trips by personal vehicle and how far those trips are)
- How vehicles are fueled (e.g. gasoline and other fossil fuels, ethanol and other green fuels, electricity, hydrogen)
- · How efficient vehicles use fuel (influencing factors include vehicle size and vehicle technology)

By 2050, the majority of vehicles in London are expected to be zero-emission primarily full battery electric vehicles (BEVs) as well as plug-in hybrid electric vehicles (PHEVs). This is largely driven by Federal government commitments to have 100% of new cars and light duty trucks sold in Canada be zero-emission from 2035 onwards, which includes PHEVs. This means that the only cars and light duty trucks powered just by internal combustion engines on the road in 2050 will be those in the fleet in 2035 that have aged over the 15-year period. It is also important to note that PHEVs also have gasoline-burning internal combustion engines, although these would likely be used primarily for longer-distance trips to and from London while the battery is used for most in-town trips. London transit vehicles will follow: London Transit Commission (LTC) is proceeding with an electric bus pilot program with ambitions to transition to a zero-emissions bus fleet. The assumed widespread adoption of zero emission vehicles by 2050 is the most significant factor in working towards net-zero emissions.

With the full list of MMP network recommendations, policies to encourage mode shift, and a city that is getting more compact in key locations, in 2050 Londoners are expected to make about the same number of trips per person that they do today, but for each trip to be on average a little shorter. This translates to an approximately 10% reduction in vehicle kilometres travelled per capita in the afternoon rush hour compared to 2019. While the total number of vehicle kilometres travelled in London will increase with significant population growth, the high number of zero emission vehicles on the road will result in a reduction of GHG emissions compared to today.

Increasing the number of trips taken by transit, walking, and cycling is also a contributing factor to reducing GHG emissions. The MMP assumed the Council approved 2050 mode share target of 32.5% or more of all trips being made by walking, cycling, and transit with 52.5% being made by personal vehicle as a driver. This compares to 23% of trips today being made by walking, cycling, and transit with 61% being made by personal vehicle as a driver.

While London's population growth still means more personal vehicle trips compared to today, planning for a London where more trips are made by walking, cycling and transit, supported by MMP infrastructure recommendations and the implementation and uptake of the MMP recommended strategies and actions, results in an estimated 17% reduction in GHG emissions by 2050 compared

to a 2050 business-as-usual scenario for London's mobility network. When the federal government's plans for zero emission vehicles are included and achieved, London could see a 92% reduction in GHG emissions from in-town travel by passenger vehicles compared to today. The success of the MMP infrastructure, strategies and actions in meeting climate action goals hinges not just on their design and implementation, but on how residents, employees, employers and visitors perceive, engage with, and use the services provided.

Achieving 100% reduction (no GHG emissions) from transportation by 2050 may not be possible as there will still be some fossil fuel burning vehicles on London roads in 2050 unless further actions at the provincial and/or federal government level occur.

INFRASTRUCTURE IS NOT THE ONLY SOLUTION

Infrastructure investment alone is not enough to achieve the vision of the MMP. The desired London of the future will be the result of many people making different mobility choices than they make today. **TDM** actions and programs will play an essential role in increasing walking, cycling and transit.

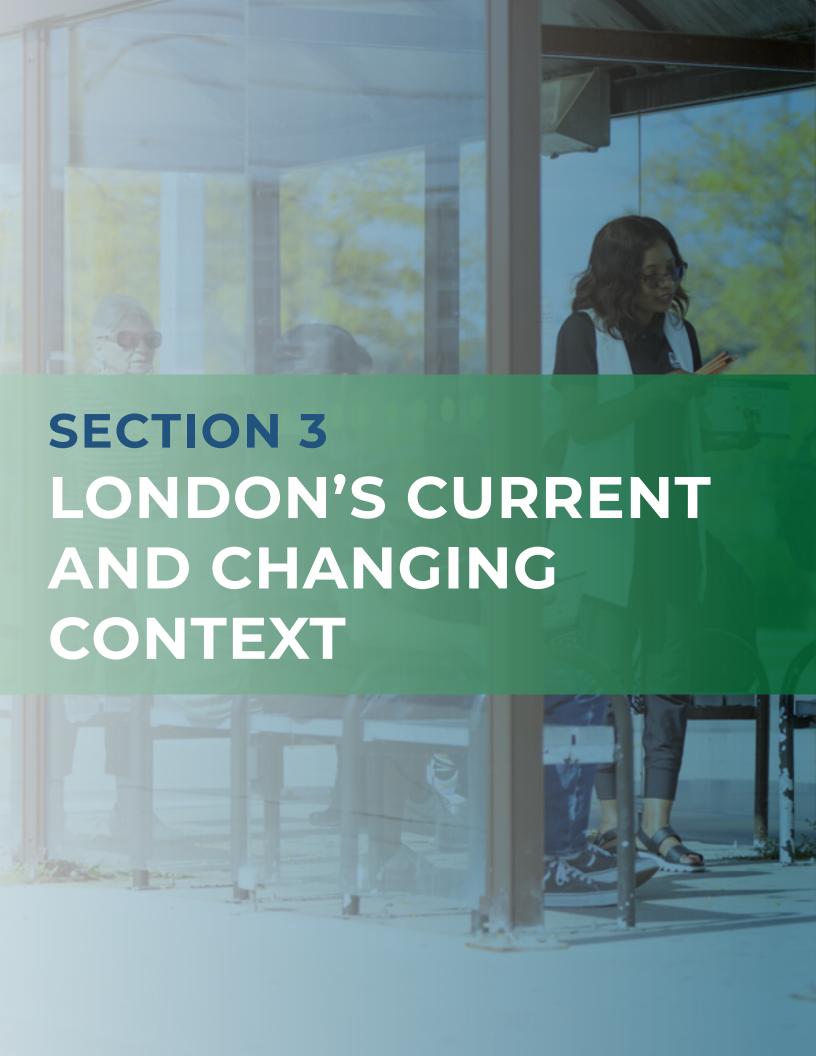
Broadly, TDM is about the use of actions, programs, services, and products to influence whether, why, when, where, and how people travel. TDM actions and programs ensure optimal use of the current transportation system. TDM can maximize the benefits of existing infrastructure by managing demand and mitigating the need for expensive new infrastructure. TDM solutions are often the most cost-effective solutions for addressing traffic congestion and improving mobility which can reduce infrastructure costs.

TDM was a central component of the MMP process to develop mobility infrastructure recommendations and identify actions. As described further in **Section 2.2.1**, the mobility infrastructure recommendations were developed based on a future scenario where the 2050 mode share targets have been achieved. This means that the infrastructure recommendations were developed and evaluated based on a future scenario where more people are choosing to walk, cycle, and take transit for more trips, and people are relying on personal vehicle for less trips.

Underpinning the technical process is the assumption that a robust set of actions and programs are in place – without them significant mode shift is not possible. The recommended MMP actions and programs will make sure that the sustainable infrastructure investments achieve their full city building potential.

As a result, network recommendations include strategic road projects to manage congestion and accommodate the movement of goods. Network recommendations also include a city-wide transit priority network, cycling network and sidewalk projects to accommodate planned increases in transit, cycling and walking throughout the city.

More details on the MMP's TDM recommendations can be found in Section 4.3.

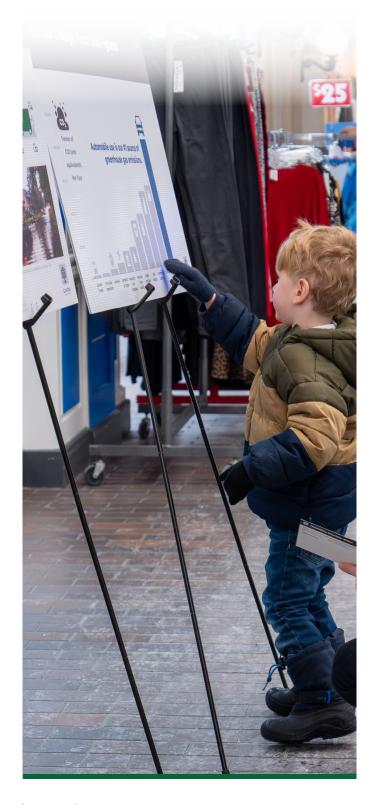


3. LONDON'S CURRENT AND CHANGING CONTEXT

The City of London has an important role as the major regional centre in Southwestern Ontario, drawing new residents, businesses, and visitors from across Canada and abroad. London is in a state of change: rapid and diverse population growth, an aging population, increasing density and urbanization, an expanding economy, and broader global trends will alter the way people in London move, live, and work into the future. The MMP is an opportunity to identify how the mobility network can support London's rapid growth while meeting the City's goals. This chapter summarizes the city's context, from what we know today to trends that provide an idea of how 2050 may look. Understanding existing conditions and anticipated changes helps us to better plan for a future mobility network that is responsive to the needs and priorities of London and its residents.

There are nine key components of London's current and changing context:

- · London is growing and travel demand is increasing
- London is simultaneously densifying and continuing to suburbanize
- Parts of London have high personal vehicle use and low levels of transit access
- Many people in London travel short distances for their trips
- People in London are increasingly travelling between neighbourhoods more so than downtown
- London's Climate Emergency Action Plan calls for bold change
- · People in London are all ages and abilities
- London's economy is diverse and requires more transportation access to jobs
- London's mobility and economic landscapes are shifting



Each of these key components are described in the following sections.

3.1 LONDON IS GROWING AND TRAVEL DEMAND IS INCREASING

The city is growing at an exceptional rate. The 2021 Canadian census identified that London was the fourth fastest-growing municipality in Canada and London's population is projected to increase by 48% between 2021 and 2051 to approximately 647,500 people. ² More people means significantly more travel demand. Some of these new residents will be accommodated in established neighbourhoods, adding more travel demand to existing networks. Other new residents will live in new neighbourhoods, requiring careful planning and consideration of future growth and integration with the London mobility network. London in 2050 will have more people living, working, visiting, and travelling in the city than ever before. The MMP aims to accommodate these new pressures while providing efficient, and comfortable options for mobility for both existing and new residents, workers, and visitors.



² City of London. (2022). Population, Housing and Employment Growth Projection Study, 2021-2051. Accessed January 2025.

< https://getinvolved.london.ca/35407/widgets/147493/documents/128020>

3.2 LONDON IS SIMULTANEOUSLY DENSIFYING AND CONTINUING TO SUBURBANIZE

Like most North American cities, London's development patterns have changed since the City was founded in 1826. Much of Central London³ was built prior to 1945, with more compact development and a grid-like street network that is easier to serve by walking, cycling, and transit. Outside of Central London, building patterns begin to reflect more traditional car-centric suburban development styles, with wide arterial roadways, lower-density neighbourhoods, large surface parking lots, and curvilinear streets.

Land use and mobility are inextricably linked; development styles heavily influence opportunities for transportation. Lower-density suburban development is more challenging to serve by walking, cycling, and transit: fewer homes, people, and businesses in a block means fewer potential transit users and longer distances between destinations; car-oriented design including curvilinear streets, disconnected cul-de-sacs, and fast-moving arterials makes it challenging to comfortably and efficiently walk or cycle and less practical to meet daily needs.

EXHIBIT 3.1: FIVE MINUTE WALKSHED ACROSS DIFFERENT TYPES OF STREET LAYOUTS



Source: Based on graphic from Congress for the New Urbanism (2017) **4**

Street networks that are designed with active users in mind support their safety, connectivity, and convenience. **Exhibit 3.1** provides an illustrative example of how different development styles impact walkability. The large pink circle represents a 400 meter radius from the small pink circle in the centre, while the lighter shade of green represents the area that is reachable in a five minute walk from the small pink circle. The top two quadrants show that a traditional street grid enables pedestrians to travel further in five minutes compared to the bottom two quadrants that show a curvilinear street network (bottom left) and modified grid layout (bottom right).

In London, between 2006 and 2016, approximately 75% of development occurred outside of lands that were already built-up. To limit the expansion of London's urban boundary and encourage more compact development, *The London Plan* set an intensification target of at least 45% of new residential development within the Built Area Boundary through to 2035. This means that London will continue to suburbanize while also densifying. While *The London Plan* calls for context-sensitive intensification throughout the Built Area Boundary, there is an emphasis on intensification in the Downtown, in Transit Villages, and at station locations along the Rapid Transit Corridors.

3 The London Plan, Our City, Figure 4

⁴ Congress for the New Urbanism (2017). Great idea: Interconnected street networks. Accessed March 2025. https://www.cnu.org/publicsquare/2017/03/06/great-idea-street-networks

⁵ Arcadis analysis of City of London data.

⁶ City of London. (2016) The London Plan, Section 4: Our City p.36-38. The Built-Area Boundary is defined generally as the line circumscribing all lands that were substantively built out as of 2016.

3.3 PARTS OF LONDON HAVE HIGH PERSONAL VEHICLE USE AND LOW LEVELS OF TRANSIT ACCESS

London's neighbourhoods are diverse in land use and transportation. Many areas have limited access to walking, cycling, and transit options that are convenient, efficient, and dependable. Travelling by transit can take more than double the time of an equivalent trip by personal vehicle; for example, travel between Western University and White Oaks Mall takes about 25 minutes by personal vehicle, but over 50 minutes by transit. Further, access to transit service is limited in certain parts of the city, particularly on the periphery where locations like Fox Hollow and Cedarhollow have significantly below average transit mode share. Accordingly, residents often rely on their vehicles. As of 2019, 77% of trips are made by personal vehicle, either as a driver (61%) or passenger (16%). In 2019, the share of trips made by transit was 8%; however, outer areas in the city had an average transit share of approximately 5% with a corresponding higher share of trips made by personal vehicle. This is noteworthy because some areas with current low transit use are forecasted to significantly increase in population, meaning that transit use needs to increase substantially in these neighbourhoods to make progress towards London's mode share targets.

Although most trips in London today are taken by personal vehicle, 13% of households do not have access to a vehicle ¹⁰ – these residents may live centrally and rely on a mixture of walking, cycling, transit, and ride hail. For residents that do not have access to a vehicle and live in more suburban areas or have lower incomes, their access to daily needs is limited by a lack of affordable and convenient travel options. With London's changing population that includes an aging contingent, residents may increasingly be unable to drive or choose not to. The MMP aims to provide London's residents and visitors with convenient and efficient mobility choices across a range of modes as part of a more accessible and equitable future.



7 The London Plan, Appendix 1 – Maps, Map 1 – Place Types

8 As per The London Plan policy number 86.

9 Arcadis analysis of City of London data.

10 2016 Household Travel Survey.

3.4 MANY PEOPLE IN LONDON TRAVEL SHORT DISTANCES FOR THEIR TRIPS

About one-third of all trips people in London make begin and end in the same neighbourhood. As shown in **Exhibit 3.2** thirty eight percent (38%) of all trips are under three kilometres, and many of these are school-based or leisure (such as shopping or visiting friends). Although shorter trips are more likely to be taken by walking, cycling, and transit, driving is the most common mode for all trip distances over one kilometre. ¹⁷

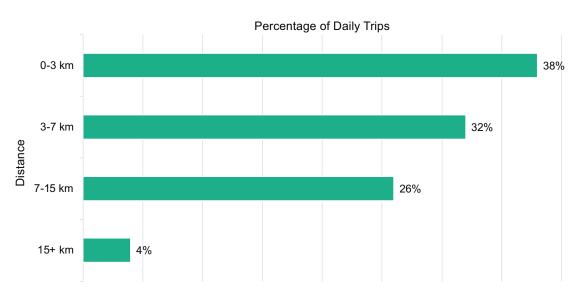


EXHIBIT 3.2: TRIP LENGTH DISTRIBUTION FOR DAILY TRIPS WITHIN LONDON (2019)

London's high proportion of short distance trips reflect that there are many neighbourhood-based destinations throughout the city. However, a lack of access to bus stops in periphery areas and gaps in sidewalks and cycling lanes pose significant barriers and discourage people in London from making short trips by walking, cycling, and transit. The MMP aims to improve transit access and active transportation infrastructure to make these short distance trips more amenable to walking, cycling, and transit.



¹¹ Arcadis analysis of City of London data.

3.5 PEOPLE IN LONDON ARE INCREASINGLY TRAVELLING BETWEEN NEIGHBOURHOODS INSTEAD OF DOWNTOWN

London has an active downtown full of major regional and local destinations, as well as major destinations located outside of the downtown which are increasingly attracting more trips. Major institutions like University Hospital, Western University, Fanshawe College, and London International Airport contribute to growing travel demand outside the downtown. Further, employees must travel to jobs in industrial parks in the outer areas of the city, however many of these areas lack transit and active transportation connections.

In the morning peak period, 45% of trips start and end outside Central London (which includes the Downtown Place Type and other Place Types bounded by Oxford Street, Adelaide Street and the Thames River). Central London is also a key hub, as 16% of all morning peak period trips end in Central London. Travellers going to and from London across municipal boundaries are also important to consider – 6% of morning peak period trips leave London while 9% enter London. Further, the share of people crossing to and from external municipalities may change with significant employment expected in St. Thomas in the near future.

Travel outside of peak hours and on the weekend is also important, as people travel to access many important destinations seven days per week throughout the day.

The MMP aims to respond to these patterns to make travel easier and more reliable throughout London at all times of day. This includes more transit and active transportation connectivity between areas in outer areas of London, as well as coordinating with external municipalities for cross-boundary multi-modal planning.



3.6 THE CLIMATE EMERGENCY ACTION PLAN CALLS FOR BOLD CHANGE

One of the main goals of *Climate Emergency Action Plan* (CEAP) is for the city to achieve net-zero GHG emissions by 2050. CEAP calls for big shifts in development, infrastructure and behaviour to drastically reduce GHG emissions, including adding new walking and cycling infrastructure, making changes to transit to make it more reliable and convenient, introducing programs to support an overall reduction in reliance on personal vehicles, and reducing or eliminating fossil fuel use.

Transportation creates about 45% of London's GHG emissions, with personal vehicles making up 31% of all city-wide GHG emissions. The MMP aims to enable a 2050 mobility network that is part of a net zero future. This includes improving walking, cycling, and transit to make efficient use of street space and foster healthy active lifestyles, as well as leveraging emerging technologies like zero-emission vehicles.

12 Arcadis analysis of City of London data.

3.7 PEOPLE IN LONDON ARE MADE UP OF ALL AGES AND ABILITIES AND HAVE DIVERSE TRAVEL NEEDS

People in London are diverse in age, ethnicity, language, and abilities and have diverse preferences and needs for their trips. Transportation is strongly connected to quality of life and access to opportunity. Supporting all people in London getting around means addressing the gaps that limit access for some people, particularly equity-denied groups including women, visible minorities, Indigenous communities, people with disabilities, and more. This could mean benches at a bus stop for a place to rest, high visibility crosswalks near elementary schools, ample lighting at transit stops for safety, curb cuts to allow people with mobility devices and strollers to navigate easily, multi-lingual information, or transportation demand management (TDM) programs for students and families to foster walking, cycling, and transit lifestyles. The MMP seeks to enhance equity, safety, and comfort across the mobility network for a more inclusive London.

3.8 LONDON'S ECONOMY IS DIVERSE AND REQUIRES MORE TRANSPORTATION ACCESS TO JOBS

Commuting patterns in cities typically reflect the landscape of major economic industries and jobs. In London, jobs are spread across a highly diverse economy: agriculture and food production, manufacturing, digital media and technology, health and life sciences, and professional services.

Each of these industries' jobs have unique characteristics that influence travel behaviour, such as location and proximity to transit, shift timing and duration, seasonality, and ability to work from home. Knowledge-based jobs, such as those in science and technology, professional services, and post-secondary education, are commonly located in more compact areas served by transit with work times aligning with the general transit schedule. Industrial and agricultural jobs, in contrast, are often not located in transit-accessible areas and often don't have shift times that align with current transit operating hours.

The economy continues to grow, primarily through commercial and institutional sectors like wholesale trade, retail, accommodation and food, professional services, and technology. These sectors require environmentally sustainable and cost-effective employee transportation options and efficient goods movement to attract workers and maintain competitiveness. While commercial and institutional growth is prominent, there are also planned industrial facilities located outside of the current transit network and in nearby municipalities like St. Thomas. People will likely need to travel to and from these future industrial facilities during off-peak hours to meet shift start and end times, including outside of existing transit service hours.

The MMP aspires to support economic growth and enhance access to employment opportunities. This includes jobs located in established more compact areas and jobs in areas with fewer environmentally sustainable and affordable transportation options outside the downtown.

3.9 LONDON'S MOBILITY AND ECONOMIC LANDSCAPES ARE SHIFTING

Like many large urban centres, there are numerous emerging trends that will impact mobility in London to the year 2050 and beyond. While many workers have returned to office post-pandemic, hybrid and remote work are still present and anticipated to continue in the future. Further, it is expected that over three quarters of Canada's population will be e-commerce users in 2025. ¹³

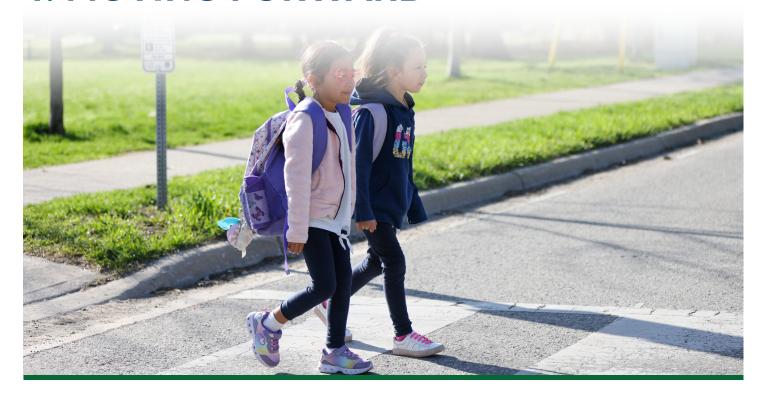
E-commerce requires long-range goods movement between cities and short-range goods movement for last-mile delivery, off-site loading, truck movements with cities, and management of curb space. Emerging technologies and New Mobility have also introduced new ways to travel, like electric vehicles (cars, e-bikes and e-scooters), shared mobility (carpooling, car sharing, bike sharing, ride hailing), and connected and automated vehicles among others. The MMP aims to leverage emerging trends and position London's mobility system to strategically manage future change.



13 International Trade Administration (2022). Canada – Country Commercial Guide. Accessed November 2022.

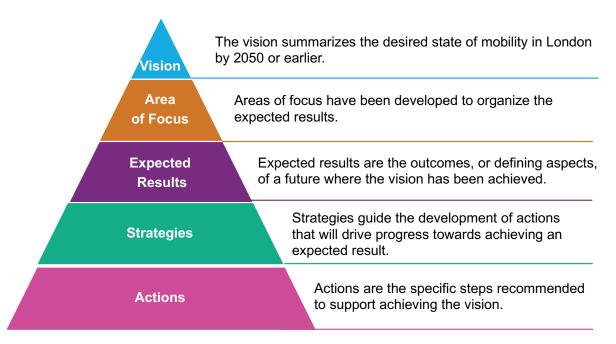


4. MOVING FORWARD



The MMP sets the direction and outlines the steps for London to take to achieve its desired mobility future. The Plan includes a comprehensive list of interconnected strategies and actions which have been developed to achieve a series of expected results. The expected results describe various aspects of a future where the vision has been achieved. The full structure of the Plan is illustrated in **Exhibit 4.1.**

EXHIBIT 4.1: MULTI-TIERED APPROACH TO ACHIEVE THE VISION FOR MOBILITY



Eight areas of focus (Exhibit 4.2) provide the framework for organization of the expected results, strategies and actions. The areas of focus were developed based on the needs and opportunities analysis in Phase 1 of MMP development and are as follows:

EXHIBIT 4.2: AREAS OF FOCUS



The following sections explain each **area of focus** in further detail, including their corresponding expected results, strategies, actions and mobility infrastructure recommendations. ¹⁴

Each area of focus includes:

- · An introduction to the area of focus
- · A description of London's current state, and where London wants to be in the future.
- · Expected results that describe the anticipated outcomes of the area of focus.
- · The strategies and actions that will support achieving an expected result.

WHAT WE HEARD

Input from people in London helped to shape the outcomes of the MMP, having a direct hand in the recommendations outlined in this section. Where relevant, summaries of what we heard as it relates to the strategies and actions listed are provided throughout this section.

¹² International Trade Administration (2022). Canada – Country Commercial Guide. Accessed November 2022.

4.1 USE THE MOBILITY SYSTEM TO SUPPORT LONDON'S DESIRED FUTURE LAND USE

The City is refining its planning approach to create more vibrant, healthy and safe neighbourhoods. *The London Plan*, adopted by Council in 2016, emphasizes growing inward and upward and creating walkable communities. There is also an opportunity to improve cycling connections and transit infrastructure in existing neighbourhoods to provide more mobility choices for residents. Improving mobility connections and adding new places to live, play, and work within the existing built area helps to manage urban growth, which protects environmental areas, farmland, and natural resources. London's land use policies will result in a future development pattern that increases the overall density of the city, meaning there will be more people and businesses in the same area, compared to today. The benefits of increased density are significant:

- · Amenities and services are close by and easier to access by walking or cycling;
- · GHG emissions are reduced;
- · Municipal services like water and wastewater are more efficient to provide; and
- · More frequent transit service can efficiently move large numbers of people.

Municipalities can more easily and efficiently support the transportation and mobility networks on grid-based street layouts. This is generally because there are more connections and therefore more direct routes between destinations in grid-based street systems. In contrast, curvilinear street layouts are more difficult to serve as transit and pedestrians must cover greater distances between destinations as the routes are not as direct. This makes it more challenging to provide transit to service to the same number of people in a curvilinear street layout versus a grid-based street layout.

Exhibit 4.3 shows different residential street layouts in London.

EXHIBIT 4.3: RESIDENTIAL STREET LAYOUTS IN LONDON

Traditional Street Grid



Modified Grid Layout



Curvilinear Street Layout



London's mobility network needs to be developed to support a future land use approach and development pattern that is different from today.

Land use planning is an overarching term to describe how a City manages its land and resources through plans and policies. This includes decisions about where things like houses, factories, stores, schools, and parks can be located, the size and height of buildings, and where buildings can be situated on lots. Land use policies are the driving force behind why one neighbourhood may have larger lots with houses further apart, and another neighbourhood may be a combination of mid-rise apartments and townhouses.

4.1.1 WHERE LONDON IS TODAY

London's development patterns over the last several decades have primarily consisted of low-density, single-detached houses developed as part of urban expansion. This style of development is difficult to serve with walking, cycling, and transit and encourages more trips by personal vehicle.

In contrast to the outer urban areas, London's downtown has a more traditional street network grid and greater density of homes and destinations that support greater travel by walking, cycling, and transit. While London has a target of having 45% of new developments within the 2016 Built Area Boundary, many developments will continue to be built outside of the boundary.

4.1.2 WHERE LONDON WANTS TO BE

In London's mobility vision for the future, London will have higher-density neighbourhoods throughout the city, created through infill (building on open or re-purposed lots in existing built-up areas) and by new approaches to developing on greenfields (previously undeveloped land). Development will both support walking, cycling, and transit and require walking, cycling, and transit to meet needs of residents, workers, and visitors so they will not need to rely on a personal vehicle for all their trips. People living in neighbourhoods will have the option of choosing a mode that best suits their trip and meets their accessibility needs; for some it will be by walking, cycling, or transit, while for others it will be by personal vehicle. Parking will be provided in a way that is appropriate to community needs and a people-focused city. New developments in London in 2050 will be built to promote and enable walking, cycling, and transit.

WHAT WE HEARD

Residents want the option to get around by walking, cycling, and transit – but feel as though their neighbourhoods discourage it with fast-moving traffic and poor sidewalks and infrastructure.

4.1.3 EXPECTED RESULT: COMMUNITY PLANNING AND DEVELOPMENT PRACTICES BUILD COMMUNITIES THAT PROMOTE MORE WALKING, CYCLING, AND TRANSIT

Environmentally sustainable

Financially sustainable

Equitable

Healthy and safe

Integrated, connected, and efficient











Walking, cycling, and transit is directly connected to London's community-building goals. Homes, jobs, services and other every day needs can be more easily accessed when they are close together and along transit and cycling networks. Locating destinations in this manner will provide people in London with more choices to access destinations, people will be able to access more within a walkable and cyclable distance and transit will provide more convenient connections to destinations across the city. Together the policies of *The London Plan* and the MMP support making walking, cycling, and transit options more appealing for people in London. This will not only help reduce GHG emissions per capita, but also promote physical activity and healthy lifestyles as part of developing complete and attractive communities.

4.1.3.1 STRATEGIES AND ACTIONS

Strategy LU1: Support *The London Plan* policies to design neighbourhood street networks and block sizes to ensure connectivity and support transit and active mobility.

Actions:

 Develop New Neighbourhood Guidelines which include guidance on street network layout and design

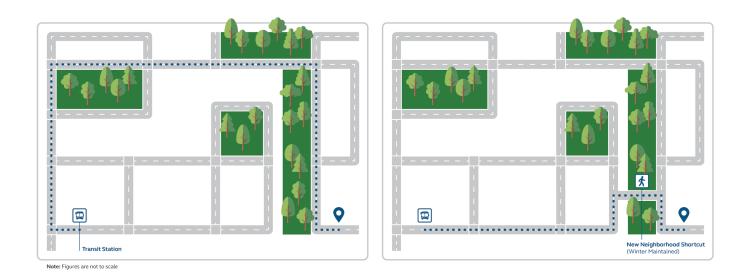
Strategy LU2: Where street/block pattern is not supportive of active mobility and access to transit, work with landowners to provide active mobility connections through large sites and/or acquire land to provide municipal walkways and cycling shortcuts to improve neighbourhood connectivity.

Actions:

- Identify needs and opportunities to improve connectivity in existing neighbourhoods based on community feedback as well as through the development of Neighbourhood Connectivity Plans
- Budget planning to acquire property for active mobility connections

Exhibit 4.4 shows an example of how a small change in an existing street layout can improve connectivity for pedestrians and cyclists.

EXHIBIT 4.4: CONCEPTUAL NEIGHBOURHOOD SHORTCUT FOR PEDESTRIANS AND CYCLISTS



Strategy LU3: Support *The London Plan* policies to incorporate active mobility facilities and transit planning considerations into the design of new neighbourhoods.

Actions:

- Amendment(s) to The London Plan including Table 6 and specific policy direction on implementation of dedicated cycling facilities on neighbourhood connectors (Related to WCI)
- Develop New Neighbourhood Guidelines which include planning consideration for future transit routes and transit stop needs
- Design Specification & Requirements Manual (DSRM) updates including design standards for neighbourhood connectors with boulevard cycle tracks

London's **Design Specification & Requirements Manual (DSRM)** is the basis for design of the transportation system. It includes specifics of every component: from the length of turning lanes to the types of traffic calming (such as raised crosswalks) that can be used. Policies that are intended to change how transportation components are designed need to be reflected in the DSRM to be implemented.

Strategy LU4: Support *The London Plan* policies to create walkable communities that incorporate a mix of land uses in appropriate locations so that people can access their daily needs.

Actions:

- Amendment(s) to The London Plan including Table 10 Range of Permitted Uses in Neighbourhoods Place Type
- · Amendment(s) to The London Plan including Strategic Growth Areas
- Amendment(s) to the **Zoning By-law** including as-of-right zones to facilitate mixed-use developments, higher-density, and greater heights
- Develop New Neighbourhood Guidelines in support of creating mixed-use complete communities

4.1.4 EXPECTED RESULT: PARKING IS PROVIDED AND MANAGED IN A WAY THAT SUPPORTS WALKING, CYCLING, AND TRANSIT AND A PEOPLE-ORIENTED CITY

Environmentally sustainable

Financially sustainable

Equitable

Healthy and safe

Integrated, connected, and efficient











Historically, North American cities often used minimum vehicle parking standards to determine the supply of parking spaces for new developments. However, more and more people in London are choosing to travel by non-vehicle means, and applying uniform parking standards can result in excess parking. More innovative approaches to parking focus on providing parking to new developments based on the needs of the people living there. Some residents may not need access to a vehicular parking space, while other residents may need access to safe and secure bike parking spaces. In 2022, London removed parking minimums in many locations and significantly reduced the minimums throughout the rest of the city, and the MMP builds on this by recommending the creation of parking actions and infrastructure that supports multiple mobility modes, based on the needs of residents and visitors.

4.1.4.1 STRATEGIES AND ACTIONS

Strategy LU5: Ensure parking policies support sustainable mobility, climate change objectives, and efficient use of land.

Actions:

- Monitor and review parking supply, usage and industry best practices to inform further amendments to the **Zoning By-law,** including provisions for car share and electric vehicle (EV) charging stations
- Review London's Municipal Parking Management with representatives from relevant service areas to consider municipal parking best practices and strategies

Strategy LU6: Ensure that developments with large parking lots are designed to enable safe walking and cycling movements and facilitate seamless access between the abutting public streets, parking and building entrances.

Actions:

- Update the Site Plan Control By-law to ensure the provision of safe and convenient cycling circulation, in addition to the existing requirements for pedestrian circulation.
- Update the Transportation Impact Assessment Guidelines
 to provide the basis for the identification and evaluation
 of transportation related improvements for all modes of
 mobility (including walking, cycling and transit), in support
 of the increased trips generated by a proposed development.



DID YOU KNOW:

- In February 2024, the
 Zoning By-law was updated
 to require short-term
 bicycle parking for medium
 density development forms
 such as cluster townhouse
 developments whereas
 previously they were
 exempt.
- In December 2024, Council approved the amendment of the Zoning By-law to include a minimum number of electric vehicle charging stations for new development. A minimum of 5% of the provided vehicle parking spaces will be required to be electrical vehicle charging ports.



4.2 PUT PEOPLE FIRST IN LONDON'S MOBILITY SYSTEM

Historically, transportation networks in North American cities including London were developed with a focus on vehicles. Like many other cities, London is shifting its focus to design a mobility network that accommodates all users, including those who do not travel by vehicle, with the goal of fundamentally shifting the experience of moving around the city. This means providing safe, convenient, comfortable, and appealing infrastructure and programs for people who walk, cycle, take transit and drive. Focusing on travel from the perspective of people will enable vibrant streets that function as places in addition to transportation corridors.

4.2.1 WHERE LONDON IS TODAY

While London is making strides at creating streets that are more welcoming for people, the city continues to deal with the legacy of vehicle-centric planning and street design. This shows in current travel patterns. About one-third of all trips people in London begin and end in the same neighbourhood. Currently 38% of all trips are under three kilometres, yet driving is the most common mode for all trips over one kilometre. Many streets in London feature multiple lanes of fast-moving vehicles which can discourage walking, rolling, and cycling. These short trips provide an opportunity for mode shift to walking, cycling, and transit, but only if streets are more inviting places for people not in a vehicle. An important aspect of inviting streets is feeling safe and secure, but many people in London have reported concerns with road safety and personal security.

Providing mobility freedom to everyone in London means creating safe and comfortable experiences for people travelling across all modes, including those who do not travel by vehicle. London is currently working to improve its mobility system for all road users:

- London released its *Complete Streets Design Manual* in 2018. The *Complete Streets Design Manual* approach aims to consider and balance the needs of all road users (pedestrians, cyclists, transit riders, and motorists) and prioritize road safety.
- London has adopted Vision Zero, which has the intent to eliminate all traffic deaths and injuries
 while increasing safe, healthy, and equitable mobility for all. The City is also undertaking a range of
 road safety initiatives like active and safe routes to school, speed enforcement, pedestrian crossings,
 and bike lane improvements among others.
- The London Plan includes **TDM** policies that aim to promote behavioural change and encourage people in London to travel by walking, cycling, transit or carpooling. This is accomplished in collaboration with community partners.

4.2.2 WHERE LONDON WANTS TO BE

In London's mobility vision for the future, London will be an inclusive city where all residents and visitors have mobility freedom. This means that people of all ages and abilities have safe, convenient, appealing, and accessible mobility options to get them where they need to go, when they need to get there. People in London will feel secure and comfortable when they walk, bike, and roll between amenities and destinations. Vehicles, buses, bikes, and pedestrians will travel along the same streets together with the design of roads minimizing conflicts and collisions. The streets will be vibrant places with a pleasant environment, particularly for pedestrians. There will be opportunities for people in London to engage with and be involved in mobility planning in the city. The City will work with community partners to provide programs and TDM initiatives that encourage walking, cycling, and transit.

4.2.3 EXPECTED RESULT: LONDON'S STREET NETWORK IS INVITING FOR ALL USERS

Environmentally sustainable

Financially sustainable

Equitable

Healthy and safe

Integrated, connected, and efficient











Meeting active transportation goals requires London to look internally to ensure that policies, actions, procedures, and requirements that have been set earlier in the city's history align with current needs. The MMP calls for a substantial increase in the percentage of trips that are made by walking, cycling, and transit. The degree of required change means that London's streets must be inviting places for everyone, all the time. This includes all four seasons, day and night, in addition to mitigating the impacts of construction, to allow people to travel smoothly as London grows. This will require a variety of interventions over the lifespan of the MMP.

4.2.3.1 STRATEGIES AND ACTIONS

Strategy P1: Consider the level of service of all modes in transportation and mobility decision making.

Actions:

 Define target level of service (LOS) and evaluation processes for all modes [i.e. Multi-Modal Level of Service (MMLOS)] and incorporate into City planning policies, including *The London Plan* policy 326 and design standards. **Strategy P2:** Optimize winter maintenance of roads, active transportation facilities and transit stops.

Actions:

- · Identify a winter priority cycling network (including select off-street cycling links)
- Conduct Winter Maintenance Service Review which considers 2024/2025 winter service
 performance, alternative operations and provincial minimum maintenance standards. Also consider
 prioritization of winter maintenance of sidewalks, local and rapid transit stops (Related to E1)
- Budget planning for the implementation of a new **Operations Yard** to support efficient maintenance for all modes of mobility as London grows.

WHAT WE HEARD

• People highlighted the need to improve maintenance, especially winter maintenance of sidewalks, on-street and off-street cycling facilities and transit stops, some citing it as a barrier to accessing everyday needs at times.

Strategy P3: Accommodate the mobility needs of all road users during construction and other activities that impact facilities

Actions:

- Develop Multimodal Mobility Management During Construction Standards
- Update the Renew London system to include notification of detours and closures of the park pathway system

4.2.4 EXPECTED RESULT: PEOPLE IN LONDON FEEL SAFE AND SECURE WHEN TRAVELLING AROUND THE CITY

Environmentally sustainable

Financially sustainable

Equitable

Healthy and safe

Integrated, connected, and efficient











Travel decisions and one's ability to access important destinations in London should not be constrained by concerns for safety and personal security. The MMP seeks to improve London's streets so that residents and visitors feel secure travelling during the day and night and throughout the year. Continuous improvement will help London work towards Vision Zero goals and implement further safety improvements that can be tailored for women, girls, and equity-denied groups.

4.2.4.1 STRATEGIES AND ACTIONS

Strategy P4: Improve road safety for all road users.

Actions:

- Co-chair the London-Middlesex Road Safety Committee (LMRSC) and conduct regular meetings to
 collaborate with various public and private organizations to promote and increase safety for all road
 users through leadership, innovation, coordination and advocacy for Vision Zero which is a strategy
 to eliminate all traffic fatalities and severe injuries
- Prepare a Safe Mobility Action Plan to support achieving the Vision Zero strategy. Scope of work proposed to include:
 - warrant analyses of at-grade rail crossing with safety or delay issues according to Transport Canada Guidelines for grade separation (Related to R1 and E1)
 - identify and evaluate new and existing intersection locations suitable to be implemented as or replaced with a roundabout, to improve traffic flow and safety, and reduce long-term operations and maintenance costs (Related to R1 and E1)
 - · critical review and confirmation of City process to set speed limits
- Develop the framework to initiate implementation of appropriate roadside protection for on-street patios
- Road safety public education campaigns to increase awareness, education and promote safety.
 Topics shall include roundabouts, pedestrian crossovers (PXOs), transit stops with bike lanes, and area speed limits (ASL)
- Identify budget and operational requirements for the implementation of side guards on City-owned heavy-duty trucks
- Update the traffic calming program including a jurisdictional review of existing strategies
- Develop traffic calming standards for new subdivisions and update the DSRM
- Continue to pro-actively implement traffic calming in school zones

WHAT WE HEARD

• People often expressed concerns about observed unsafe driver behaviours including speeding and aggressive driving, and a general lack of respect and awareness for pedestrians and cyclists.

Strategy P5: Continue to expand and improve illumination throughout the mobility network, with the exception of park pathways and trails where illumination may have a negative impact on the ecosystem.

Actions:

- Continue to **expand and improve illumination** throughout the mobility network. On park pathways and trails, illumination may not be implemented due to ecosystem impacts
- Continue to replace existing high-pressure sodium (HPS) street illumination with light-emitting diode (LED) luminaires to improve lighting levels and conserve energy
- Identify funding opportunities to continue to implement **localized illumination at transit stops** along corridors with low pedestrian lighting levels (Related to T5 and E4)

WHAT WE HEARD

- People raised personal safety as an important issue especially when walking, cycling or accessing transit.
- People feel unsafe walking around at night mentioning low lighting and visibility as a concern, in particular women and girls.



4.2.5 EXPECTED RESULT: LONDON'S STREETS ARE VIBRANT PUBLIC SPACES THAT SUPPORT MULTI-MODAL TRAVEL AND OTHER CITY LIFE

Environmentally sustainable

Financially sustainable

Equitable Healthy and safe

Integrated, connected, and efficient











London's streets are used as ways to reach places, but many are also places in and of themselves. Residents and visitors are more likely to walk and cycle along London's streets when they can do so in a comfortable manner and with adequate amenities. This could include places to sit, trees for shade, and convenient and safe places for bike parking that can accommodate a wide range of bike designs. Creating positive and vibrant streetscapes will help London create better spaces for people, increase walking, cycling, and transit mode share, reduce GHG emissions, and support local businesses.

4.2.5.1 STRATEGIES AND ACTIONS

Strategy P6: Support *The London Plan* policies to design streetscapes in support of the planned vision for the place type and contribute to the character and sense of place.

Actions:

- Update **DSRM** to reference the MMP **Enhanced Pedestrian Areas Map** as one indication of where wider sidewalks are warranted and where other streetscape elements should be considered such as pedestrian-scale lighting, seating and other street furniture, integration of locally relevant public art, and weather protection measures for people. (Related to P6 and C3)
- Identify funding opportunities to continue to implement the **Downtown Wayfinding Plan** making it easy for people to navigate their way around and access key destinations (Related to WC3)
- Develop a Wayfinding Plan for areas outside of the downtown and identify funding opportunities to implement it (Related to WC3)
- · Continue to wrap traffic signal boxes with Public Art
- Create a Clarence Street Connector with an enhanced pedestrian environment linking Richard
 B. Harrison Park in SoHo and Victoria Park in the downtown, as per Our Move Forward: London's
 Downtown Plan.

In areas where there is, or there is expected to be in the future, a high volume of pedestrians, elements to enhance the pedestrian environment should be considered. Enhanced pedestrian areas were identified based on *The London Plan* place types, Secondary Plans, and Business Improvement Areas and are shown in **Exhibit 4.6.**

The map includes areas where enhanced streetscape elements currently exists or where they should be considered in the future. This map serves as a tool to inform planning and design decisions within identified corridors. For example, the recommended rapid transit corridors and various road projects such as the Bradley Avenue extension, are identified on the Enhanced Pedestrian Areas Map and enhanced streetscape elements should be considered during the planning and design of those projects.

Enhanced pedestrian elements include pedestrian-scale lighting, seating and other street furniture, integration of locally relevant public art, and weather protection measures for people. There is no one-size-fits-all design solution. Designs must be tailored to and appropriate for the specific location and could include all, some or none of the example design features. There are many cases where these features may be appropriate outside of an enhanced pedestrian areas as well.

EXHIBIT 4.5: EXAMPLE ENHANCED PEDESTRIAN ENVIRONMENTS IN LONDON









Richmond Row

Old East Village

Downtown

Wortley Village



57

EXHIBIT 4.6: ENHANCED PEDESTRIAN AREAS MAP



4.2.6 EXPECTED RESULT: COMMUNICATION AND ENGAGEMENT FURTHERS PEOPLE IN LONDON'S INVOLVEMENT IN MOBILITY PLANNING AND INITIATIVES

Environmentally sustainable

Financially sustainable

Equitable

Healthy and safe

Integrated, connected, and efficient











London's future mobility system is designed for the community but is also shaped with help from the community and the people who live in it every day. People in London are most familiar with local transportation issues in their community and understand their daily travel needs better than anyone. The MMP aims to set the stage for proactively engaging and empowering residents to improve their mobility system.

4.2.6.1 STRATEGIES AND ACTIONS

Strategy P8: Empower local communities and organizations to implement low-cost, temporary changes to the built environment for the purpose of placemaking and traffic calming.

Actions:

- Develop a toolkit which enables groups and organizations to implement temporary solutions for the purpose of placemaking and traffic calming
- Identify funding opportunities from other levels of government

Strategy P9: Continue to communicate and engage with the community on the Mobility Master Plan and its implementation.

Actions:

 Develop a communications plan to keep the community informed on the implementation and success of the Mobility Master Plan



Figure 1: Calgary placemaking project aimed at calming traffic speeds

4.3 MANAGE ROAD CAPACITY STRATEGICALLY

London's road network serves personal, freight, and service vehicles moving throughout the city. The road network supports London's economic prosperity and livability. Like most North American economic and regional hubs, congestion is an ongoing challenge. Adding new or expanded road infrastructure to meet demand, such as new and widened roads, takes significant capital investment and has far-reaching impacts on mobility, public space, natural resources, and safety. Even measures like municipal high occupancy vehicle (HOV) lanes have limited effectiveness in managing vehicle demand; compliance with occupancy requirements is often poor and enforcement is challenging and resource intensive.

Managing road capacity strategically means maximizing the use of the existing road network and exhausting options to enhance people movement before expanding roads. Managing road capacity also means limiting road expansion to only the most strategically necessary locations. There is a wide range of tools that can be used to optimize the use of London's roads, from location-specific design improvements to broader TDM programs that incentivize behavioural change. Making the most of existing infrastructure in a strategic manner will help residents and visitors travel more efficiently by foot, mobility device, bike, bus, and personal vehicle along London's roads.

4.3.1 WHERE LONDON IS TODAY

The number of personal vehicles, trucks moving freight, and service vehicles on London's roads continues to grow. As of 2023, London had 3,746 lane kilometres of roads with many major corridors experiencing peak period rush hour congestion. ¹⁷ Streets currently experiencing congestion include Oxford Street, Wonderland Road, parts of Wellington Road, Adelaide Street North, Wharncliffe Road South, and Highbury Avenue. The physical barriers of the Thames River and VIA rail corridor restrict movements to specific crossings, which contributes to peak period "pinch points" and further exacerbates congestion on several important corridors. Many intersections also experience operational issues during peak times contributing to delays.

WHAT WE HEARD

- Many people expressed frustration with the congestion on Wonderland Road, especially during rush hour. Sections with high levels of congestion noted by respondents included Wonderland Road from Bradley Ave West to Oxford Street.
- People expressed the need for another north/south road to alleviate congestion on Wonderland Road and Hyde Park Road and more ways to navigate around the river in general.

17 City of London (2023). City of London Corporate Asset Management Plan https://london.ca/sites/default/files/2023-10/Corporate%20Asset%20Management%20Plan%202023.pdf

Some of London's streets today, outside of the downtown, contain gravel shoulders and ditches which makes it challenging to implement walking and cycling facilities. The lack of sidewalks and bike facilities on these streets can create a hostile environment for pedestrians and cyclists, particularly at night if there are no streetlights. There is a need to upgrade existing roads to provide adequate facilities for all road users.

Curb lanes on certain corridors without off-street parking/loading facilities for private sites commonly experience stopping infractions in live lanes of traffic which slow down traffic movement and create unsafe conditions for cyclists who need to move around stopped vehicles in live traffic. Some curb lanes are also used for parking at certain times of day, while also needing to accommodate delivery for businesses.

There are competing demands for London's road space, and congestion negatively impacts all types of road users and their quality of life. Traffic congestion makes it harder for drivers to accurately predict travel times and causes frustration. It puts transit behind schedule which can lead to missed bus transfers further increasing travel delays and causing stress. Traffic congestion also delays service and delivery vehicles which can have a negative impact on businesses. There is a need to make better use of London's road space by implementing strategic road improvements to address key capacity, operational and safety issues as well as enable travel by all modes, and the movement of goods in an integrated and cohesive manner.

4.3.2 WHERE LONDON WANTS TO BE

In London's mobility vision for the future, drivers, cyclists and transit riders will experience minimal increases in delay despite significant population growth. People will have fast and reliable travel options to get where they need to go with the reliable and connected rapid transit network, continuous and complete cycling network, and safe walking routes. London's roads will move more people more efficiently in a manner that is safe for all types of road users. Roads will facilitate the integrated movements of walking, rolling, cycling, taking transit, and driving vehicles in an integrated and cohesive manner.

Trucks and goods movement vehicles will experience greater travel reliability and clarity on routing; those delivering to local businesses will have delivery areas that are convenient and efficient. Curb lanes and curb spaces will enable goods to reach local businesses in a manner that minimizes conflict with other people travelling along London's roads and sidewalks.



4.3.3 EXPECTED RESULT: THE NEED FOR NEW ROAD CAPACITY IS PROVIDED BY TRAFFIC FLOW AND OPERATIONAL IMPROVEMENTS, MULTI-MODAL IMPROVEMENTS, AND SUPPORTING TDM PROGRAMS

Environmentally sustainable

Financially sustainable

Equitable

Healthy and safe

Integrated, connected, and efficient











Infrastructure investment is large and important so needs to be strategic. There are a wide range of measures that can be used to address traffic congestion, and many of these improvements are cheaper, more environmentally sustainable, and more efficient than major road projects. The MMP includes a blend of initiatives at different locations throughout the city that will help to reduce congestion and provide safe ways of travel for all people in London in a cost-effective manner. While driving or riding in a vehicle will remain an important travel option in London, increasing the focus on multimodal options reduces the need for costly road expansion. Recommended road projects include ones that address traffic capacity and operational issues as well as provide the opportunity to upgrade roads to meet urban and complete street standards in developing areas. However infrastructure improvements alone are not enough. Managing road capacity strategically also means significant TDM programming to manage demand for travel by personal vehicle and increase the use of walking, cycling, and transit.

DID YOU KNOW:



Smart Commute London encourages and makes it easier for people to walk, cycle, take transit and carpool to work which helps manage road congestion and support achieving London's climate action goals. Smart Commute London supports include:

- Trip planning tool Smart Commute London provide a trip planning tool to help you plan your commute, log trips, and find a buddy to commute with by carpooling, walking, cycling and transit on SmartCommute.ca or through the Smart Commute app.
- Promotional tools campaigns, events and educational material to encourage employees to travel sustainably.
- Emergency Ride Home If you use a sustainable method to commute to work and have an unforeseen emergency, you can request reimbursement for the cost of an emergency trip home.
- Workplace surveys and assessments Employee commuting surveys and workplace site
 assessments can be conducted to understand transportation habits and meet the needs of
 individual workplaces.
- Business bike rack program Need more parking for employees commuting by bike? The City's Business Bike Rack Program can help.... and more!



4.3.3.1 STRATEGIES AND ACTIONS

Strategy R1: Manage conflicts and minimize delays by implementing improvements to the city's transportation network

Actions:

- · Implement the improvements identified on the MMP Road Projects Plan
- Re-start the Discover Wonderland Road Environmental Assessment, with expanded limits from Southdale Road to Fanshawe Park Road, in order to construct six general purpose, through lanes along the corridor with a long-term build-and-convert option to Rapid Transit
- As part of development of the Safe Mobility Action Plan, identify and evaluate new and existing
 intersection locations suitable to be implemented as or replaced with a roundabout, to improve and
 traffic flow and safety, and reduce long-term operations and maintenance costs.
 (Related to P4 and E1)
- As part of development of the **Safe Mobility Action Plan** update, conduct warrant analyses of atgrade rail crossing with safety or delay issues according to Transport Canada Guidelines for grade separation to identify and prioritize locations for improvements. (Related to P4 and E1)

Strategy R2: Improve traffic signal network operations with smart traffic infrastructure and traffic signal management

Actions:

- Develop a **Transportation Management Centre (TMC)** Policies and Strategies document outlining its role across all modes and opportunities for the future.
- Pilot **adaptive traffic signals** on Wonderland Rd S, assess performance, optimize, and evaluate the cost benefit of expanding the program
- Continue to collect and analyze traffic counts to inform the planning and implementation of traffic signal infrastructure

Strategy R3: Improve the movement of through traffic along corridors through good access management

Actions:

- Identify, plan for and implement access management improvements on corridors with an excess of entrances and conflicting movements
- Update the **Site Plan Control By-law** to require separate internal pick-up/ and drop-off areas and loading/unloading zones in developments

Strategy R4: Mitigate and minimize road and lane closures due to road construction, utility work and construction

Actions:

- Develop a **Special Provision** for construction contracts which clearly outlines restrictions on construction operations, permitted times for lane and road closures, extended duration penalties, and road closure notification requirements.
- Use incentives/disincentives to encourage contractors to optimize construction to minimize road and lane closures.
- Implement mechanisms to make developers more accountable for unnecessarily long road and lane
 closures.
- Update the **Heavy Loads on Roads By-law** to include oversize vehicles and superloads which will allow transportation staff to determine when engineering review is required and what improvement measures may be warranted to provide safe passage.

4.3.4 EXPECTED RESULT: CURBSIDE SPACE IS MANAGED IN A MANNER THAT SUITS THE CONTEXT OF EACH STREET

Environmentally sustainable

Financially sustainable

Equitable

Healthy and safe

Integrated, connected, and efficient



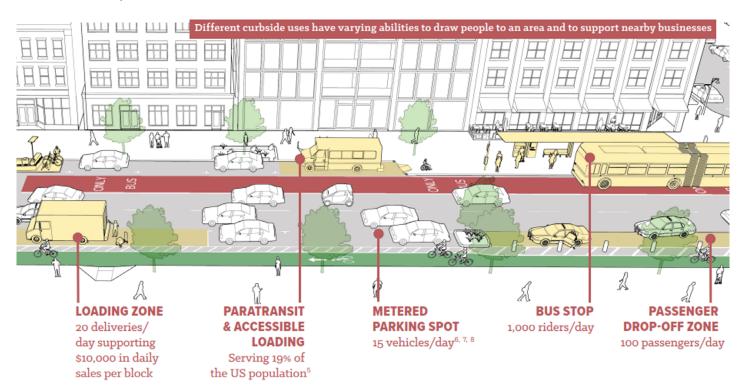








EXHIBIT 4.8: NATIONAL ASSOCIATION OF CITY TRANSPORTATION OFFICIAL (NACTO) CURB APPEAL, 2017



New technologies and mobility services are changing the way that curbs are used. Local businesses need space for delivery vehicles, passengers need space for pick-ups and drop-offs, buses need space for riders to board, and more. The balance of these needs changes at different locations in London, and more compact areas must accommodate larger volumes of people and goods at the curbside. **Exhibit**4.8 illustrates an example of a busy urban corridor which accommodates various curb space needs in an organized and functional way. The MMP promotes the balanced management of these different needs and groups in ways that are appropriate to the context and land uses of various streets.

4.3.4.1 STRATEGIES AND ACTIONS

Strategy R5: Manage curb space in a manner that suits the context of each street.

Actions:

• Develop **curb space management strategies** to improve how curb space is managed including for vehicle and bike parking; EV charging; the movement of vehicles; transit; cycling; pick-ups/drop-offs; delivery of online orders; loading/unloading; waste pick-up; and access.

4.3.5 EXPECTED RESULT: LAST MILE DELIVERY SERVICES ARE EFFICIENT, MODERNIZED, AND BALANCED WITH THE NEEDS OF OTHER ROAD USERS

Environmentally sustainable

Financially sustainable

Equitable

Healthy and safe

Integrated, connected, and efficient











London's streets are busy places that facilitate the movement of residents and visitors, but also the movement and delivery of goods. The efficient movement of both people and goods is critical for the city to function well, and there is an opportunity to explore new ways of moving goods to improve sustainability and minimize conflicts with other road users. Last mile delivery service is the most inefficient process in the supply chain in particular in more compact areas with limited space and congestion. Finding ways to support and encourage more smaller human-powered and electrical vehicles will enable better movement of goods and help manage road congestion. The reliable movement of goods both within and to/from the city is important for London's businesses and the economy as a whole.

4.3.5.1 STRATEGIES AND ACTIONS

Strategy R14: Encourage the use of smaller human-powered and electrical vehicles for last mile delivery services.

Actions:

• Establish a **Micromobility Working Group** to discuss emerging technologies, trends and legislation and identify opportunities to support, accommodate and embrace smaller, human-powered and electric vehicles (such as cargo e-bikes) such as through By-Law updates.

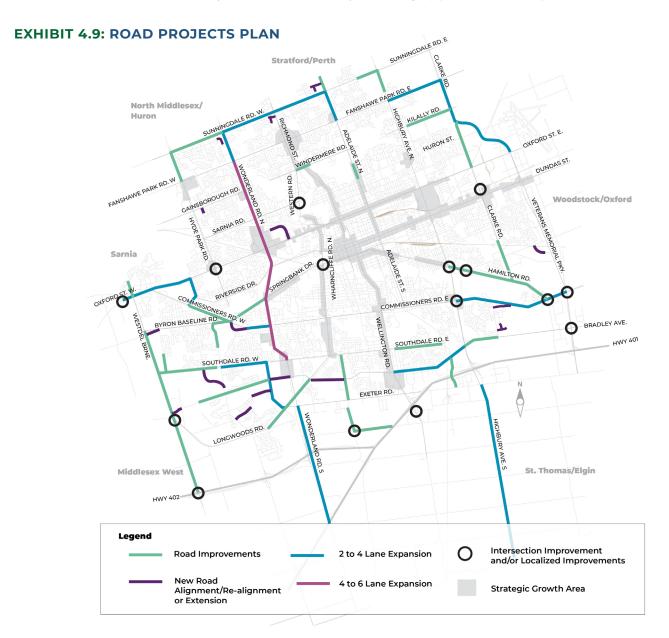
4.3.6 LONDON'S FUTURE ROAD NETWORK

The expected results described above highlight the need to make the most efficient use of London's existing road infrastructure to accommodate growing travel demand in a cost-efficient and environmentally sustainable manner. Accordingly, the MMP recommended road projects address critical traffic capacity and operational issues as well as provide the opportunity to improve the overall people moving capacity of the corridor with multi-modal improvements. Managing road capacity strategically also means significant TDM programming to manage demand for travel by personal vehicle and increase the use of walking, cycling, and transit.

This future road network is shown below. Road infrastructure recommendations include the following project types:

- Intersection improvements and/or localized improvements: Projects that are geared towards improving intersection operations such as roundabouts, adding turn lanes, geometry improvements, etc.
- Road improvements: Primarily includes projects that upgrade a road with a rural cross section (roads that typically include gravel shoulders and drainage ditches) to an urban cross section which provides the opportunity to add complete streets features such as sidewalks and bike facilities in growing areas.
- New road alignment/re-alignment or extension: Re-aligning existing roads to address operational and/ or safety issues and new extensions to existing roads.
- Road expansions: Adding lanes to an existing road.

All recommendations are subject to further study, funding applications and public consultation.



4.4 MAKE TRANSIT THE OPTION OF CHOICE FOR MORE TRIPS

Encouraging more people in London to choose transit more often means making transit an appealing, comfortable, and easy choice. Most people in London could reasonably make some trips using transit instead of driving. There is a need to reduce barriers and improve the transit experience, travel times, and transit vehicle frequencies to enable a transit future for London.

4.4.1 WHERE LONDON IS TODAY

The LTC offers 31 local routes, six express routes, and six community routes that run throughout the week. In 2019, only 8% of all trips in London were made by transit. While the number in Central London is higher at 13%, where population density is higher, outlying areas where significant population growth is expected have a much lower mode share. While many people in London use transit to meet their daily needs, there are several key barriers that discourage more people from taking transit:

- Service frequency: While service planning is outside the scope of the MMP, many people in London live outside of the standard 400 metre travel distance from a frequent transit route making the choice to use transit a more difficult one. Increasing investments in transit operations will improve how many people have access to frequent transit making it easier for them to choose to take transit.
- Coverage: Not all homes and businesses are within a convenient pedestrian travel distance of 400 metres to bus stops; however, comfortable cycling connections could enable more people to reach transit faster. Some new neighbourhoods and industrial areas are yet to be served by transit, which means that residents and employees do not have a convenient option to use transit.
- Service Reliability: Most buses currently operate in mixed traffic meaning any traffic congestion that impacts personal vehicles also impacts bus movement. It can take more than double the time to reach a destination using transit compared to a personal vehicle for many trips. Not all residents have access to a personal vehicle, many are reliant on transit. Many of LTC's highest ridership routes operate on many of the most congested corridors in the city. This means that transit needs infrastructure investments (i.e. dedicated lanes, queue jump lanes, transit signal priority) to improve transit travel time and reliability of the service.

WHAT WE HEARD

- People are interested in rapid transit connections to key destinations like Western University, the London Airport, the VIA Rail station, and Victoria Hospital & Children's Hospital.
- · People want more reliable transit service throughout the city.
- People requested longer transit service hours and for transit service to be extended to more industrial areas and new subdivisions.

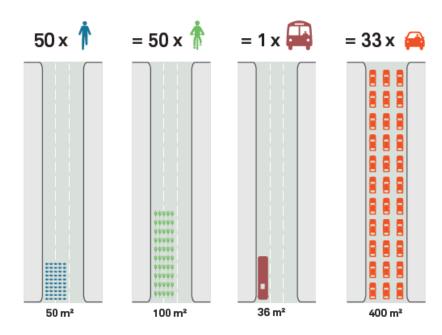
4.4.2 WHERE LONDON WANTS TO BE

In London's mobility vision for the future, transit infrastructure improvements and strategic actions will enable 13% of all trips in London to be taken by transit, which is a five percentage point increase compared to today. The connected rapid transit network will provide more options for travel that are frequent and reliable. This will include dedicated transit-only lanes which allow buses to bypass traffic congestion making transit travel time more competitive to travel by personal vehicle. Transfers between routes or modes will be made seamless through development of mobility hubs. New developments and industrial areas will have access to transit. All people in London will have safe and comfortable access to transit stops and be able to use transit to meet their daily needs. Transit will be an easy choice: convenient, frequent, fast, and reliable. Attractive transit will encourage people to take transit more often which will free up space on the roadway for other users, help manage road congestion, and support achieving our CEAP goals. **Exhibit 4.10** shows the space required to accommodate 50 people by various travel modes.

EXHIBIT 4.10: SPACE EFFICIENCY BY TRAVEL MODE, NACTO

Space Occupied by 50 People

While a bus needs three times as much space as a car, its carrying capacity per lane is unrivaled among other on-street modes. As land in urban areas becomes increasingly scarce, use the space within the street most efficiently to serve the largest number of people.



Source: https://www.carfreeamerica.net/road-diet-guide

"Shared **Mobility Hubs,** like bike-sharing stations and car-sharing spots, are more than just transit points—they're vibrant social hubs. People naturally gather, connect, and engage at these spots, creating a sense of belonging, and fighting social isolation. An example of this are bike stations near parks, cafes, and community centers, where people stop to chat and enjoy their surroundings."

- Movmi 18

Movmi (2024). The Connection Between Transportation and Social Wellness: Three Key Areas of Impact. Accessed January 2025. < https://movmi.net/blog/the-connection-between-transportation-and-social-wellness-three-key-areas-of-impact/#:~:text=Shared%20mobility%20hubs%2C%20like%20bike,belonging%20and%20fighting%20social%20isolation>

4.4.3 EXPECTED RESULT: TRANSIT IS CONVENIENT, EFFICIENT AND HAS AN EXPANSIVE SERVICE AREA

Environmentally sustainable

Financially sustainable

Equitable

Healthy and safe

Integrated, connected, and efficient











Encouraging people in London to take more trips using transit requires improved infrastructure to enable transit travel times to be more reliable and closer to that of vehicles. Reducing the duration of transit trips can be accomplished in many ways, and the MMP supports an integrated set of improvements that help provide more reliable transit service and reduce transit travel times by helping buses avoid traffic congestion. In addition to investment in mobility infrastructure improvements, the provision of transit revenue vehicle hours will need to more than double by 2050 compared to 2019 with corresponding increases in operating costs. Increasing revenue vehicle hours also requires purchasing more buses and potentially the expansion of existing storage facilities. Together, these infrastructure improvements and investment in transit operating costs will help make transit an appealing, attractive, and efficient choice for people in London making all different types of trips.

4.4.3.1 STRATEGIES AND ACTIONS

Strategy T1: Improve transit travel times to be more competitive to vehicular travel time

Actions:

 Expand London's developing rapid transit network of dedicated transit lanes and implement transit priority signals and queue jump lanes as per the MMP Transit Priority Network Plan

Strategy T2: Expand transit service areas, hours and frequency to improve access to more people, employment and other everyday needs and destinations

Actions:

- Determine the appropriate level of increased municipal funding for transit operations to improve service levels and accommodate a growing city
- Identify opportunities to secure funding from other levels of government such as assessment growth funding and permanent transit funding

EXHIBIT 4.11: DEDICATED
TRANSIT LANES IN LONDON
AT KING STREET AND
WELLINGTON STREET



DID YOU KNOW:

The LTC 2025-2029 Service Plan included various outstanding recommended service improvements including:

- · Starting all routes earlier and extending routes later
- · Extending service into new growth areas
- Improving frequencies on existing routes to be no more than two times the frequency on connecting Rapid Transit routes
- · Improving operating times and frequencies of routes currently serving industrial areas

To implement the above improvements, an additional 300,000 annual service hours would be required, in addition to what was approved as part of the 2025-2029 Service Plan.

WHAT WE HEARD

- · People want longer service hours to industrial areas including south of Highway 401.
- Employers find it difficult to attract employees without reliable transit.

Strategy T3: Consider existing transit routes and potential transit detour routes when planning and designing roads and cycling infrastructure

Actions:

 Update DSRM to provide guidance on how to plan for and accommodate turning movements for transit and emergency service vehicles when designing roads including protected intersections (Related to H4)



4.4.4 EXPECTED RESULT: TRANSIT SERVICE IS SAFE AND EASY TO ACCESS

Environmentally sustainable

Financially sustainable

Equitable

Healthy and safe

Integrated, connected, and efficient











Making a trip on transit is about more than just riding the bus because it also includes getting to and from the bus stop. Improving the convenience and reliability of transit service should be accompanied by improvements to sidewalks and cycling facilities that connect bus stops to homes, jobs, services, and other major destinations. The MMP aims to improve infrastructure and amenities to, from, and at transit stops to enable people in London to seamlessly transfer between transit, walking, cycling, and emerging shared services like e-scooters and e-bikes.

Using transit should be a pleasant experience for all riders, including people with disabilities, youth, seniors, Indigenous communities, and other equity-denied groups. Riders of all ages, abilities, incomes, and backgrounds should be able to understand how to use transit and feel safe while doing so.

4.4.4.1 STRATEGIES AND ACTIONS

Strategy T5: Make it safe and easy to access and use transit stops

- Develop the design of new subdivisions to accommodate future transit stops as part of the development of **New Neighbourhood Guidelines** (Related to E4 and LU3)
- Prioritize the addition of sidewalks where there are transit stops with no connecting sidewalk including through Neighbourhood Connectivity Plans and the New Sidewalk Program. (Related to E4 and WC1)
- Continue to implement PXOs at priority locations including those which provide access to transit stops (Related to E4 and WC2)
- Identify funding opportunities to continue to implement **localized illumination at transit stops** along corridors with low pedestrian lighting levels (Related to E4 and P5)
- Develop and update the **DSRM** with **transit stop design standards** including considerations for riders with low vision (Related to E5)
- Budget planning and implementation of bike racks at transit stops (Related to E4)

EXHIBIT 4.12: BIKE PARKING AT A TRANSIT SHELTER IN LONDON





DID YOU KNOW:

- All rapid transit stations are equipped with security cameras, enhanced lighting, tactile plates, tempered glass, wayfinding signage, public artwork displays, and variable message signs which provide real time bus arrival information both visually and audibly.
- · LTC has a Travel Safe Program which includes:
 - Courtesy stops Rider requested Courtesy Stops along LTC routes where safety permits
 - On-board Safety On-board audio-video surveillance and ability for drivers to contact the police
 - Community Safety With close to 200 buses on the road, LTC has many eyes on the community to assist when needed LTC evaluates and prioritizes existing transit stops for the implementation of shelters through an annual program. Locations are prioritized based on criteria such as number of boardings, service frequency, site conditions and service area.

EXHIBIT 4.13: RAPID TRANSIT STATION IN LONDON



Strategy T6: Make transit services accessible for all.

Actions:

 Complete a review of all subsidized transit programs including children under 12, youth, seniors, visually impaired, and income-related, as well as the post-secondary programs with Western University and Fanshawe College (Related to E5)



Relevant CEAP actions supported by the MMP include:

 Continue to support the annual service improvements to the conventional and specialized transit services

DID YOU KNOW:

- The City currently has five specific subsidy programs in place related to the provision of a reduced transit fare for specific groups; free transit for children 12 and under, free transit for customers with visual impairment, senior tickets priced at 25% off of the adult ticket price, income-related monthly passes offered at a 36% discount from the adult pass price (Citipass), and youth monthly passes (ages 13-17) offered at a 36% discount from the Citipass (youth tickets priced at 20% off of the adult ticket price)
- All LTC buses provide audible announcements on onboard and external to the bus. Onboard audible announcements identify upcoming stops. Externally audible announcements identify the route a bus is on when the doors open at a stop
- All Rapid Transit Stations as well as 32 existing local stops have variable message signs which provide real time bus arrival information both visually and audibly

4.4.5 LONDON'S FUTURE TRANSIT NETWORK

The expected results described above highlight the need for enhanced transit infrastructure to enable a convenient, efficient, accessible, safe, and connected transit experience for London's residents and visitors. Accordingly, the MMP recommends a future transit network to enable a future where transit is the option of choice for more trips. This future transit network is shown below.

Transit infrastructure recommendations include three project types:

- · Rapid transit corridors: Dedicated lanes:
 - Potential road widening to provide new red curbside or centre running lanes that are used only by buses. This is complimented by enhanced transit shelters.
- **Transit priority corridors:** Widening only where needed, for transit improvements which could include the following:
 - Queue jump lanes: Lanes that allow buses to move to the front of the queue and by-pass traffic congestion at intersections
 - Regulatory measures: Time of day restrictions for lanes, parking and turning restrictions
 - Transit signal priority: Adjusting signal timing at intersections to prioritize transit movements
- Transit friendly corridor: Enhanced transit operations such as Express Routes which could include:
 - Transit signal priority: Adjusting signal timings at intersections to prioritize transit movements



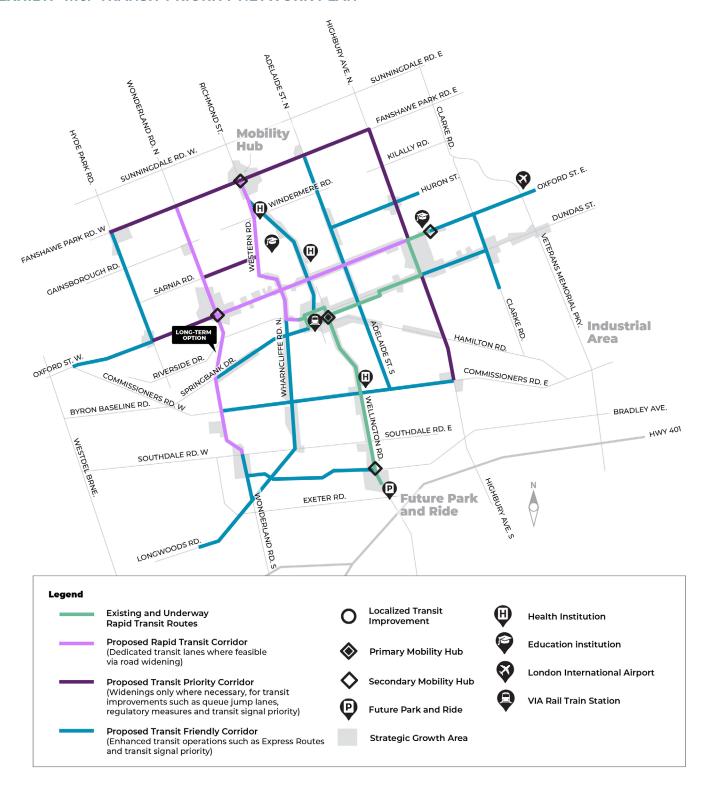
EXHIBIT 4.14: QUEUE JUMP LANE, NACTO



EXHIBIT 4.15: DEDICATED BUS LANE IN LONDON



EXHIBIT 4.16: TRANSIT PRIORITY NETWORK PLAN



4.5 MAKE WALKING, ROLLING AND CYCLING PREFERRED MOBILITY OPTIONS TO MEET DAILY TRAVEL NEEDS

London is actively working to build a city that fosters active mobility by expanding and connecting pedestrian and cycling routes. The MMP will build on progress to date and address network gaps and accessibility concerns. There is also an opportunity to upgrade and enhance walking and cycling infrastructure to provide high-quality facilities for users. This is part of a visionary approach to planning to 2050 making walking, rolling, and cycling - easy, efficient, and comfortable choices for many trips more often.

4.5.1 WHERE LONDON IS TODAY

As of 2019, approximately 13% of all trips taken in London are done by walking and 2% by cycling. Walking is more common for short trips: about 55% of trips under one kilometre are walking trips (about a 12 minute journey). Further, one-third of all trips in London start and end in the same neighbourhood, a large number of these for school trips. Many of these short trips could be comfortably completed by walking, rolling or cycling, but over 60% of trips that are one to three kilometres are made by personal vehicle (as a driver or passenger). While cycling mode share today is highest for school trips, there is an opportunity to build on this success and establish long-term cycling habits and culture. In addition, longer trips could also be reasonably completed on a bicycle, if infrastructure is safe, direct, and easy to navigate and there is secure bike parking available at the destination.

Direct, on-street connections for cycling have been continuously built since the *London Cycling Master Plan*'s creation (last updated in 2016). Some sections of infrastructure, although direct, do not reflect updated approaches to safety and separation from vehicular traffic and experience low ridership. The MMP carries forward the approved infrastructure routes in the Cycling Master Plan with recommended updates.

Challenges also remain with the street network itself. Wide arterial roads in London often act as a barrier to walking and cycling. Signalized crossings often include long crossing distances where arterial roads meet. Large intersections encourage higher turning speeds which can put pedestrians at risk when drivers are in attentive. Safe and well-maintained pedestrian and cycling crossing infrastructure is critical, particularly along London's busy and wide arterial roads. Where there are long distances between controlled intersections along a roadway safe pedestrian crossing points should be provided such as pedestrian crossovers (PXOs)...

The off-road park pathway system continues to see high usage from people walking, rolling, and cycling, and serves a variety of trips both recreational and utilitarian. New pathways continue to be built in new neighbourhoods, and in recent years significant progress has been made in completing key missing links along the Thames Valley Parkway.

Exhibit 4.17 shows a newly installed PXO with signs, lights, and pavement treatment to alert drivers of pedestrians.

EXHIBIT 4.17: A PXO ON CAPULET LANE.



WHAT WE HEARD

- Many people recognize the connection between wider roads and more lanes with reduced safety and higher incidences of speeding; some drivers avoid major arterials due to feeling unsafe, even in a vehicle.
- Many people stressed the desire for greater levels of separation between vehicle traffic and cyclists.
- Many people describe challenges with walking in new neighbourhoods at the periphery of London, including a lack of sidewalks and access to businesses.

4.5.2 WHERE LONDON WANTS TO BE

In London's mobility vision for the future, 19.5% or more of trips in London will be completed by active transportation. People in London will feel empowered to walk, roll, or bike for more trips with new infrastructure and programs that support this choice. Those who have been getting around through active modes will find improvements in safety and gaps in infrastructure systematically addressed, with more sidewalks connecting to and from the front doors of destinations. Pedestrians will feel safer crossing at both signalized and unsignalized intersections. Cyclists of all ages will ride along higher-quality facilities where they will feel safe travelling on roads alongside other vehicles. Bike parking will be available where it's needed, and some trips will be able to be completed using shared micromobility services.

More elementary and high school students will feel safe and comfortable walking or cycling to school, reducing congestion and air quality impacts around school drop-off times and supporting student physical activity.

Shared micromobility services refer "to small and lightweight human- or electric powered transportation devices, such as bikes, e-bikes, or e- scooters that are rented through a mobile app or kiosk and used on an as needed basis for short trips, typically up to one hour"

- Transportation Association of Canada ¹⁹

Transportation Association of Canada (2025). Shared Micromobility Services in Canadian Communities. Accessed March 2025. https://www.tac-atc.ca/wp-content/uploads/PTM-SMMSCC-E.pdf



4.5.3 EXPECTED RESULT: THE WALKING AND CYCLING NETWORK IS CONNECTED AND PROVIDES SAFE, CONVENIENT AND DIRECT ROUTES

Environmentally sustainable

Financially sustainable

Equitable

Healthy and safe

Integrated, connected, and efficient











The historical development of cities across North America focused on the vehicle as the primary mode of transportation, and the streets were designed accordingly to prioritize vehicles. Yet today, more and more people are making trips by walking, rolling or cycling, and increasing active transportation rates is an important part of working towards London's mode share target. There is a need to introduce new infrastructure and actions so that London's streets and intersections are safe and pleasant for all those who travel along them.

WHAT WE HEARD

• Londoners emphasized safety concerns and the lack of infrastructure (both bike lanes and sidewalks) as issues impacting the experience of using these modes, as well as their decision to cycle, walk, or roll. Many noted that they would like to walk or cycle for more trips, but sometimes long trip distances and the lack of safe infrastructure are barriers.

4.5.3.1 STRATEGIES AND ACTIONS

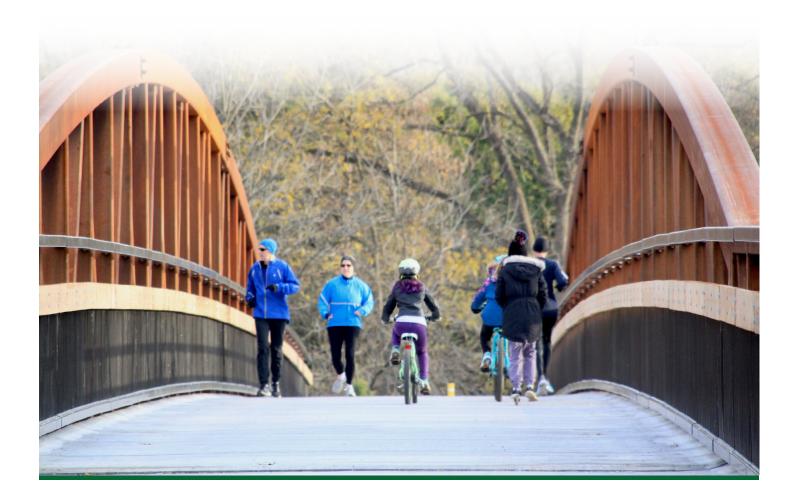
Strategy WC1: Support *The London Plan* policies to provide walkable communities and a continuously linked cycling network throughout the city.

- Implement cycling facilities and sidewalk infrastructure recommended on the MMP Cycling Network Plan and Sidewalk Projects Plan
- Continue to fill gaps in the sidewalk network on residential streets, including through the New
 Sidewalk Program and development of Neighbourhood Connectivity Plans, prioritizing locations
 based on proximity to schools, transit, shopping, community amenities and equity-denied groups.
 (Related to T5, E1 and E4)
- Better define the relationship between road corridor cycling facilities and the park pathway system and develop a **framework for integration**

- Identify **funding opportunities** from other levels of government to more quickly address critical walking and cycling infrastructures gaps
- Develop a funding strategy for rehabilitation of aging cycling and pedestrian facilities as part of the City's Asset Management Program
- Amendment(s) to *The London Plan* including Table 6 and specific policy direction on the criteria for implementation of dedicated cycling facilities on neighbourhood connectors (Related to LU3)

Strategy WC2: Provide safe, easy and convenient road crossings for pedestrians and cyclists which minimize out-of-the-way travel.

- Continue to implement **PXOs** at priority locations based on considerations such as traffic volumes, pedestrian volumes, distance between adjacent crossing locations, connections to parks, off-road paths, community centres, schools and transit stops. (Related to T5 and E4)
- · Continue to evaluate and implement Leading Pedestrian Intervals, where appropriate.
- · Continue to evaluate and implement bike signals and leading bicycle intervals, where appropriate.
- Participate in Ontario Traffic Council (OTC) pilot program of combined pedestrian and cycling midblock crossing alternatives



4.5.4 EXPECTED RESULT: IT IS AN EASY AND PLEASANT EXPERIENCE TO WALK OR CYCLE IN THE CITY AND THE BENEFITS OF IT ARE **PROMOTED**

Environmentally sustainable



Financially

sustainable

Equitable

Healthy and safe

Integrated, connected, and efficient









Encouraging people in London to make more trips using active transportation requires easily accessible information about London's paths and cycling routes. Clear and up-to-date information will help people in London when they plan their active transportation trips, while signage and wayfinding helps to provide direction during active transportation trips. The MMP aims to make walking and cycling easier, more convenient, and accessible for everyone, including those who have a disability.

London's population is diverse and includes a wide range of ages and abilities. Increasing active travel in London requires a cycling network that can be used for all types of daily trips throughout all seasons, including commuting to work, dropping a child off at school, or going for a leisurely ride. This network also requires convenient and safe bike parking at destinations that can accommodate a wide range of bike designs, including secure bike parking facilities where appropriate. The MMP aims to introduce new infrastructure and actions that enable safe cycling all year round for everyone, including providing adequate facilities to park and store a wide range of bike designs, and access to bike share services. Enabling more people in London to walk or bike requires more than just building infrastructure. Pairing infrastructure efforts with educational programs, communications strategies, and local partnerships helps to encourage active transportation participation across communities of all backgrounds. Fostering active transportation use for children, youth, and newcomers will help to develop long-term walking and cycling habits and culture as part of growing an active transportation culture in London.

4.5.4.1 STRATEGIES AND ACTIONS

Strategy WC3: Make it easy for people to navigate the city by walking and cycling

- · Identify funding opportunities to continue to implement the Downtown Wayfinding Plan making it easy for people to navigate their way around and access key destinations (Related to P6)
- · Develop a Wayfinding Plan for areas outside of the downtown, including for on and off-road walking and cycling facilities, and identify funding opportunities to implement it (Related to P6)
- Continue to update the Bike and Walk Map annually

Strategy WC4: Make it easy to access a bike and provide cycling amenities

Actions:

 Continue to provide the business bike rack program as part of Smart Commute London, offering support, advice, and access to at-cost bike racks to business owners



Relevant CEAP actions supported by the MMP include:

- Review and determine types and appropriate level of support for micro-mobility (e.g., bike share) services
- Finalize and implement a city-wide bike parking plan, including neighbourhood bike parking and secure bike parking services

Strategy WC5: Support *The London Plan* policies to design streetscapes in support of the planned vision for Place Types, which will contribute to the character neighbourhoods and enhance the sense of place

Actions:

- Develop a **toolkit** which enables groups and organizations to implement temporary solutions for the purpose of **placemaking** (Related to P8)
- Update the DSRM to reference the MMP Enhanced Pedestrian Areas Map as one indication of where streetscape elements should be considered such as pedestrian lighting, integration of locally relevant public art, street furniture, seating, and weather protection. (Related to P6 and C2)

Relevant 2023-2027 Strategic Plan actions include:

- · Action 508 Continue to wrap traffic signals boxes with Public Art
- Action 509 Create Public Art that represents the identity of communities in conjunction with Rapid Transit bus shelters



Strategy WC6: Promote walking and cycling and embed it in our culture

Actions:

- Promote **public education material** to increase awareness of the benefits of walking and cycling and promote safety. Topics may include how to use pedestrian crosswalks, navigating transit stops with adjacent bike lanes, moving safely through roundabouts, and the health benefits of active transportation (Related to P4)
- Work with Active and Safe Routes to Schools to provide educational information to schools and promote walking and cycling

For Road Safety and Winter Maintenance see Section 2.0 Putting People First in London's Mobility System

4.5.5 LONDON'S FUTURE ACTIVE TRANSPORTATION MOBILITY

The expected results described above highlight the need for new active transportation infrastructure to fill gaps and serve new areas to provide a connected, comfortable, and high-quality network for London's active transportation users. Active transportation infrastructure includes both sidewalks and cycling facilities.

Cycling facilities come in many different types – some facilities built in years past provide minimal separation from traffic. More modern cycling facilities with greater separation from traffic through physical barriers are shown in **Exhibit 4.18.**

EXHIBIT 4.18: EXAMPLE CYCLING FACILITY TYPES IN LONDON



Protected Bike Lane



Cycle Track



Bike Boulevard



Protected Intersection



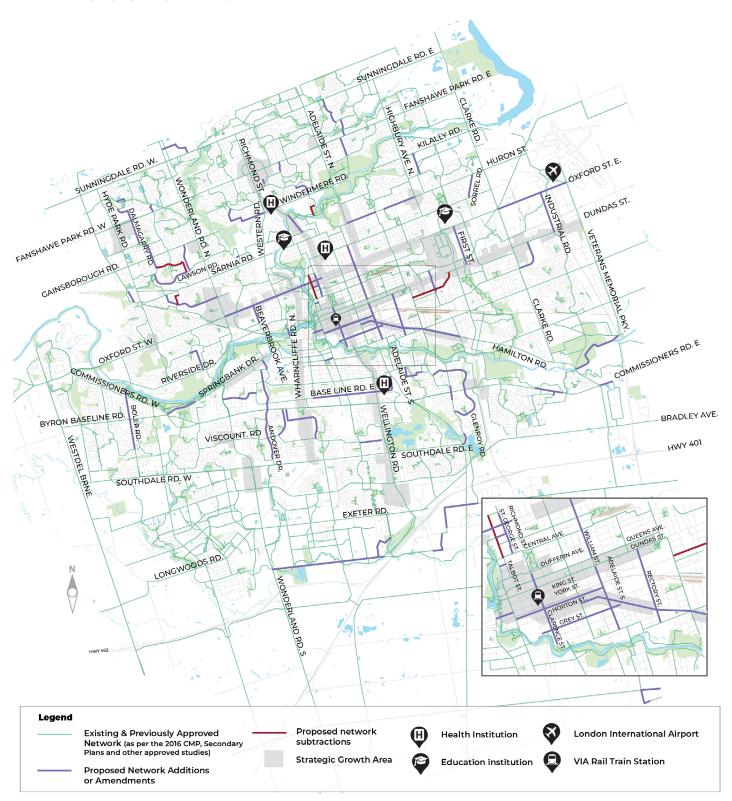
Shared Pathway



Multi-Use Recreational Trail

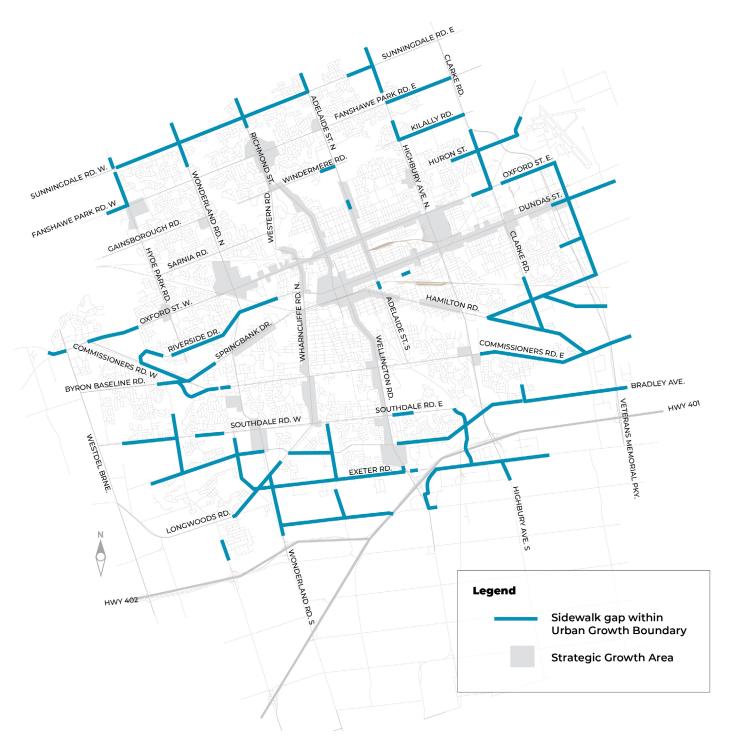
Accordingly, the MMP recommends a continuous and connected cycling network to enable a future where walking is a preferred mobility options to meet daily travel needs. The MMP recommended Cycling Network Plan is shown in **Exhibit 4.19** below.

EXHIBIT 4.19: CYCLING NETWORK PLAN



Sidewalks provide separation from moving traffic and should be continuous so Londoners can reach their destinations safety and efficiently. Some major roads within the London Urban Growth Boundary are missing sidewalks – a critical component of supporting people walking and rolling. The MMP recommended Sidewalk Projects Plan is shown below in **Exhibit 4.20.**

EXHIBIT 4.20: SIDEWALK PROJECTS PLAN



4.6 SUPPORT LONDON'S ROLE AS A REGIONAL HUB

Many residents in nearby municipalities travel to London frequently to access jobs, services, and social opportunities. Conversely, some people in London leave the city for work; a trend that will increase with large employers locating in the region. Significant volumes of goods also travel to, from, and through London and other large municipalities in the province. Efficient and convenient mobility connections for trips between London, its surrounding municipalities, and other large municipalities in the province are critical for maintaining London's role as a regional hub and key economic centre.

4.6.1 WHERE LONDON IS TODAY

London is a vibrant hub with numerous destinations that attract people from surrounding municipalities. This includes:

- Educational institutions like Western University and Fanshawe College;
- Healthcare facilities like University Hospital, St. Joseph's Hospital, and Victoria Hospital;
- · Retail centres like CF Masonville Place, White Oaks Mall and SmartCentres London Northwest; and,
- Entertainment and tourism like Canada Life Place and RBC Place.

Many people travel into London to access the destinations listed above, as 9% of morning peak period trips are trips entering London. However, people in London also travel to nearby municipalities, as 6% of morning peak period trips leave London. Most of these trips are made by personal vehicle. Recently introduced inter-community transit services have provided additional options to connect to nearby centres.

People in London also travel to and from other municipalities in the province. London's connections to other regional hubs in Ontario include road connections for vehicle and goods movement (Highway 401 and 402), regional rail (VIA), inter-community transit (Middlesex Connect, Perth County Connect, Huron Shores Area Transit and T:GO), regional bus services (FlixBus, Megabus, Trailways, OnEx Bus, and London International Airport (for long distance travel).

As the population of London's neighbouring communities continues to increase, inter-municipal travel will increase between now and 2050. Unless there are investments in other mobility options, these trips will continue to be made predominantly by personal vehicle.

4.6.2 WHERE LONDON WANTS TO BE

In London's mobility vision for the future, there will be more people and jobs in London and its surrounding municipalities. Infrastructure improvements will enable a greater share of these trips to be made using walking, cycling, and transit. This includes upgrades to paths and trails that provide high-quality walking and cycling routes while preserving natural heritage areas.

London's population and employment growth will expand the city's role as a key regional hub, which will in turn increase the demand for long-distance trips between London and other regional hubs. London's bus and rail stations will be improved to increase the convenience and speed of these long-distance trips, as London will work with neighbouring transit agencies and transit providers to enable seamless travel by bus and train.

In addition to people movement, long-distance goods movement is a key economic activity that must be accommodated by the mobility network. Strategically planned regional goods movement corridors will enable trucks and large vehicles to carry goods in and out of London safely and efficiently while minimizing the impact on communities and the environment. London's mobility network will attract and retain more people and jobs to support its overall economic competitiveness.

4.6.3 EXPECTED RESULT: LONDON IS A PLACE THAT CAN BE EASILY ACCESSED TO AND FROM LOCATIONS BEYOND ITS BORDERS

Environmentally sustainable

Financially sustainable

Equitable

Healthy and safe

Integrated, connected, and efficient











4.6.3.1 STRATEGIES AND ACTIONS

Strategy H1: Improve travel options and connections between London and surrounding communities.

- Support inter-community transit including through the continued identification and accommodation of **inter-community bus stops** within the city
- Support surrounding communities in applying for Provincial funding for inter-community transit such as through the Ontario Transit Investment Fund



Strategy H2: Advocate for and work with other levels of government to improve regional mobility options

Actions:

- Engage in discussions with neighbouring municipalities and the Province to work collaboratively on a **ring road** and integrated transportation network that would help move people, goods and services within and across the region
- Work with other levels of government to advocate for extension of the proposed high speed rail from Toronto to Quebec City to extend to London.
- Work with other levels of government to support the planning and implementation of improvements to **passenger rai**l in Southwestern Ontario



Relevant CEAP actions supported by the MMP include:

 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

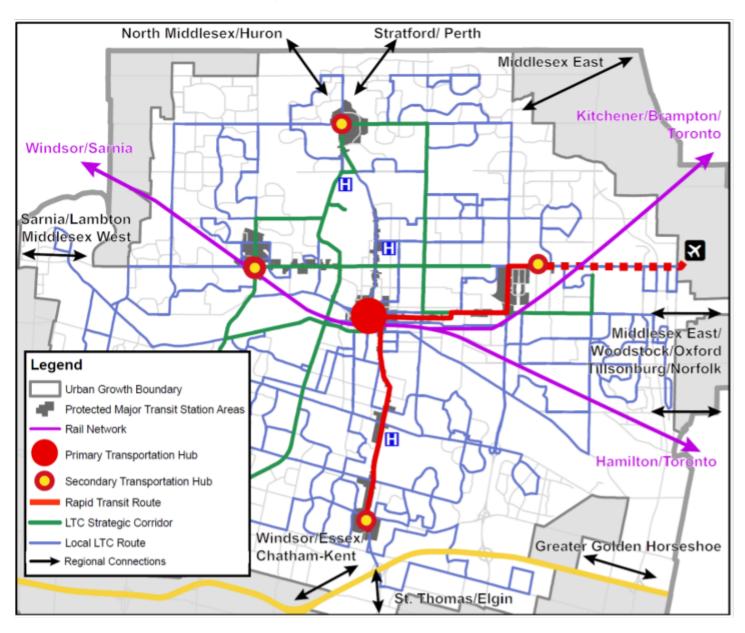
Strategy H3: Plan for and develop Mobility Hubs which provide convenient connections to/from inter-community and regional transportation and London's multi-modal network

Actions:

• Identify strategies to support the planning and development of **Mobility Hubs** as outlined in the Conceptual Framework for Regional Transportation.



EXHIBIT 4.21: PRIMARY AND SECONDARY REGIONAL TRANSPORTATION HUBS IN LONDON, CIVIC WORKS COMMITTEE DECEMBER 14, 2021





ClimateAction Relevant CEAP actions supported by the MMP include:

· Support development of gateway parking and transit connection(s) (e.g., Park and Ride)

4.6.4 EXPECTED RESULT: GOODS MOVE TO AND FROM LONDON SAFELY AND EFFICIENTLY WITH MINIMAL COMMUNITY AND ENVIRONMENTAL IMPACT

Environmentally sustainable

Financially sustainable

Equitable

Healthy and safe

Integrated, connected, and efficient











London is home to many freight generating land uses, including industrial employment that generates significant truck traffic. This movement of goods is critical for London's economic growth, yet truck traffic can also pose mobility and quality of life challenges, including potential safety concerns, noise, and emissions. The MMP aims to facilitate goods movement strategically to enable efficient truck movements throughout London while minimizing noise and other negative impacts on residential communities and sensitive environmental areas.

4.6.4.1 STRATEGIES AND ACTIONS

Strategy H4: Plan for and accommodate the movement of large trucks, where appropriate, while mitigating overly wide roads and high-speed turns

Actions:

- Update the **DSRM** to provide guidance on how to select a **design vehicle** (the largest vehicle that routinely uses a facility) and **control vehicle** (the largest vehicle that will infrequently use a facility), and how to design roads to accommodate both without over designing roads (Related to T3)
- Develop and update the **DSRM** with design standards for **industrial streets** to accommodate the safe movement of goods as well as other road users

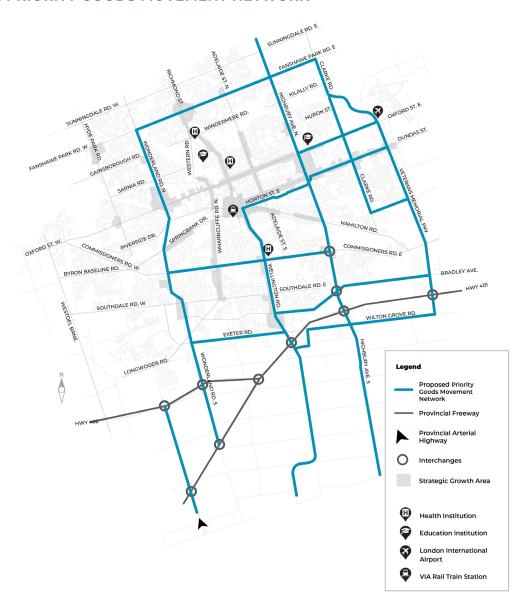
Strategy H5: Plan for and accommodate Long Combination Vehicles, where appropriate

- Continue to support the Province's Long Combination Vehicle (LCV) Program by reviewing LCV route approval requests and the improvements required to support turning movements
- Update the DSRM such that the MMP Priority Goods Movement Network and industrial subdivisions
 are designed to accommodate the potential movement of LCV's in the future via pavement widening
 which does not impact signals, utilities or property
- Add currently approved LCV routes to London's CityMap database so that that impact of road and lane closures can be better understood

4.6.5 LONDON'S PRIORITY GOODS MOVEMENT NETWORK

The expected results described above highlight the need for roads to efficiently accommodate demand from both people and goods in an integrated and cohesive manner. Accordingly, the MMP recommends a priority goods movement network. The priority goods movement network is a subset of the full truck route network that is strategically important for connecting major generators and moving goods within and through the city. The priority goods movement network is where higher volumes of trucks are expected and should be directed towards. The priority goods movement network provides a continuous network of routes with design features that support the unique movement of trucks. These can include among others, turning lanes, turning radii, truck aprons at intersections, and loading zones. Other modes are not precluded from being accommodated on the network; however, the network designation should inform design considerations for other modes (e.g., cycling facilities should be separated). A priority goods movement route designation can also help inform targeted improvements to intersections.

EXHIBIT 4.22: PRIORITY GOODS MOVEMENT NETWORK



4.7 PROVIDE A MOBILITY SYSTEM THAT ENABLES MORE EQUITABLE PARTICIPATION IN CITY LIFE

Mobility freedom in London is about enabling people to access destinations and participate in society. Different people in London have different needs and face different barriers to participation. An equitable mobility system is one that proactively works to narrow disparities and provides affordable and accessible options for travel. The MMP will play a critical role in shaping a future London that provides quality access to opportunities for everyone.

4.7.1 WHERE LONDON IS TODAY

London is a diverse city: approximately one quarter of London's population was comprised of new Canadians in 2021; London is home to approximately 20,000 Indigenous peoples; and almost 10% of London's population was aged 75+ in 2021. The ability and needs of these different groups vary, as people can experience barriers to mobility for numerous reasons such as race, gender, ability, age, language, socio-economic status, and more. There are also equity-denied groups that can face heightened systematic barriers to accessing London's mobility network. Examples of mobility barriers facing different groups of people today can include, lack of infrastructure (like missing pedestrian crossings), feeling unsafe or experiencing discrimination in public spaces or while taking transit, inability to afford bus fares, and more. Easy access to everyday needs such as groceries also varies throughout the city.

London is also facing a housing and affordability crisis. Despite these rising costs, people in London still need to travel around the city to meet their daily needs. The cost of transportation can be a barrier; some people cannot afford a personal vehicle and even the cost of transit can limit the ability of low-income residents to participate in the labour market. There is a need to provide affordable mobility options to enable all people in London to access jobs and support themselves and their families.

Equity-denied groups are "groups of people who have been historically disadvantaged and underrepresented. These groups include but are not limited to the four designated groups in Canada – women, visible minorities, Aboriginal Peoples, and people with disabilities – and people in the LGTBQ2+ community/people with diverse gender identities and sexual orientations. [Equity-denied] groups identify barriers and unequal access, and actively seek social justice and reparation."

- Adapted from Canadian Centre for Diversity and Inclusion (2022)

The city is already working to increase equity through numerous initiatives like the *Anti-Racism* and *Anti-Oppression Framework*, *Safe Cities London Action Plan* (2021-2024), *Age Friendly Impact Assessment* (2016), *Community Diversity and Inclusion Strategy, Discrimination Experienced by Immigrants, Visible Minorities, and Indigenous Peoples in London and Middlesex* (2021), and *Safe Cities London Scoping Study* (2020).

4.7.2 WHERE LONDON WANTS TO BE

The London Plan calls for an equitable city that meets "the needs of people of all ages, incomes, and abilities, allowing for aging in place and accessibility to amenities, facilities, and services". The MMP will build on the City's foundational equity work to date, and the future mobility system will reduce or remove systematic barriers to mobility, particularly those facing equity-denied groups. mobility system will enable residents and visitors to freely move around the city to meet their needs regardless of any aspect of identity or socio-economic characteristics and without facing discrimination or harassment. All people in London will be able to afford and access numerous mobility options to easily get to where they need to go, when they need to get there.

4.7.3 EXPECTED RESULT: EQUITY IS AT THE FOREFRONT OF MOBILITY SYSTEM DECISION MAKING

Environmentally sustainable

Financially sustainable

Equitable

Healthy and safe

Integrated, connected, and efficient











An equitable mobility system is one where all people in London have safe, efficient, and accessible mobility choices, including equity-denied groups. This means adopting new ways of collecting travel data to better understand the experiences and barriers faced by different groups of people in different locations, and understanding the unintended consequences of mobility decisions. Looking at the mobility system in this way also means making sure that equity considerations are at the centre of the process when making decisions about what mobility infrastructure should be built and where, in addition to keeping equity at the forefront of mobility action decisions.

4.7.3.1 STRATEGIES AND ACTIONS

Strategy E1: Use the equity tool and other equity data for transportation project and program planning

- Apply the equity tool and embed equity in the decision-making process to update the Traffic Calming Program (Related to P4)
- Apply the equity tool and embed equity into development of the Safe Mobility Action Plan (Related to P4 and R1)
- Apply the equity tool and embed equity in the development of the Neighbourhood Connectivity
 Plan process which pro-actively plans critical sidewalk connections to be addressed through local
 road reconstruction projects (LRRP), infrastructure renewal projects (IRPs) and the New Sidewalk
 Program (Related to LU2, WC1 and E4)

- Apply the equity tool as part of the Winter Maintenance Service Review to consider diverse needs (Related to P1)
- Develop a Transportation Equity Opportunity Zones index map informed by data on equity deniedpopulations, transportation and mobility barriers, and proximity to everyday needs

Strategy E2: Address inequities with service request systems

Actions:

- Proactively conduct speed and volume studies on roads planned for local road reconstruction to determine if traffic calming design features should be considered
- Pro-actively plan critical sidewalk connections as part of the development of Neighbourhood
 Connectivity Plans for implementation through local road reconstruction projects (LRRP),
 infrastructure renewal projects (IRPs) and the New Sidewalk Program (Related to E1, LU2 and WC1)

Strategy E3: Engage equity-denied groups in transportation and mobility planning

- Consult with Youth Coalition Combating Islamophobia to discuss and identify transportation and mobility measures which may increase Muslim safety in specifically vulnerable locations such as at mosques
- Consult with N'Amerind to discuss future potential opportunities to seek funding from other levels
 of government for transportation and mobility improvements which would specifically and directly
 benefit the Indigenous community such as through the Indigenous Transportation Initiatives Fund
- Consult with Youth London to discuss opportunities to increase youth involvement in mobility decision making
- · Identify other opportunities to engage with equity-denied groups



4.7.4 EXPECTED RESULT: PEOPLE OF ALL AGES AND ABILITIES HAVE A RANGE OF SAFE, APPROPRIATE, AND EFFECTIVE MOBILITY OPTIONS

Environmentally sustainable

Financially sustainable

Equitable

Healthy and safe

Integrated, connected, and efficient











The mobility system must enable safe and efficient mobility choices for all people in London regardless of age, ability, or socio-economic status. The MMP aims to improve the travel experience for people in London, including those with limited mobility or other mobility challenges. Providing inclusive access to walking, rolling, cycling, and transit will help foster strong and vibrant communities for today and for the next generation. This includes measures geared towards enabling easy access to bus stops and improving intersections for pedestrians.

4.7.4.1 STRATEGIES AND ACTIONS

Strategy E4: Make it safe and easy to access and use transit stops

Actions:

See T5 in Section 4.4.4.1

Strategy E5: Make transit services accessible for all

Actions:

· See **T6** in **Section 4.4.4.1**

Strategy E6: Consult with the Accessibility Community Advisory Committee (ACAC)

Actions:

- Consult with the ACAC on the provision of accessible parking spaces
- Consult with the ACAC on the development of transit stop design standards including in consideration for riders with low vision (Related to E12 and T6)

EXHIBIT 4.23: WHEELCHAIR ACCESSIBLE PUBLIC TRANSIT BUS



4.8 PREPARE FOR CHANGE

London is experiencing a rapidly changing context that extends beyond population and employment growth. The city is facing a climate emergency, and new technologies and trends are emerging that will shift how and where people move. There is a need for the MMP to build on work that has been done to address these challenges, in order to develop resiliency and seize new opportunities for London's future mobility system in a way that advances the mobility vision.

4.8.1 WHERE LONDON IS TODAY

Unlike many parts of the world, London's GHG emissions peaked in the mid-2000s. However, the city's GHG emissions today are not on track to meet the targets set out in CEAP. The transportation sector is responsible for approximately 45% of London's GHG emissions, with personal vehicles making up about 31%. Shifting more trips to walking, cycling, and transit presents an opportunity to significantly reduce London's GHG emissions.

Like cities around the world, new technology is also changing the mobility landscape and London is already working to adopt and support new transportation technologies, for example:

- E-bikes and e-scooters are present in the city, electric vehicle charging stations are installed at most major community centres, and LTC is proceeding with an electric bus pilot program with ambitions to transition to a zero-emissions bus fleet.
- Considerations are ongoing for a shared micromobility system that would enable residents and visitors to rent bikes and e-bikes.
- City Council approved an extensive *Connected and Automated Vehicle (CAV) Plan* in June 2023 to focus on supporting CAV deployment and integration.

4.8.2 WHERE LONDON WANTS TO BE

In London's mobility vision for the future, London will achieve its CEAP target of net zero GHG emissions by 2050. People in London will make fewer trips by personal vehicle and instead walk and cycle (on bikes and e-bikes) along safe high-quality infrastructure including trails. More trips will also be taken using transit, including on electric buses that do not use fossil fuels. Trips that are taken by personal vehicle will largely be in electric vehicles, with electric vehicle charging infrastructure easily accessible. Mobility infrastructure will also be built with resiliency to extreme weather events.

London will have comprehensive processes and frameworks to continually improve the mobility system. This includes enhanced data collection measures to understand how people in London travel and applying the Climate Lens Framework when designing and implementing mobility infrastructure recommendations.

London will also have frameworks in place to proactively manage new technologies and business models in ways that advance London's mobility goals.

4.8.3 EXPECTED RESULT: LONDON ACHIEVES NET-ZERO GHG EMISSIONS BY 2050

Environmentally sustainable

Financially sustainable

Equitable

Healthy and safe

Integrated, connected, and efficient











The transportation sector is one of the largest emitters of GHG emissions. Creating a city where most trips are made using zero-emission vehicles, walking, cycling, and transit, is part of the city's broader push towards the CEAP target of net-zero community GHG emissions by 2050.

4.8.3.1 STRATEGIES AND ACTIONS

Strategy C1: Support implementation of CEAP

Actions:

As per CEAP, apply the Climate Lens Framework to Transportation Projects



Relevant CEAP actions supported by the MMP include:

- Develop a plan to convert 100% of LTC's bus fleet to zero emission vehicles, based on the Canadian Urban Transit Research & Innovation Consortium study results, LTC approval and City approval
- Develop procurement processes to ensure all fleet procurements fully examine alternatives and opportunities to reduce and/or eliminate fossil fuel use in City fleet, including through the procurement of cars, vans, SUVs, and pick-ups trucks that are electric vehicles or other zero emission vehicles
- · Develop an electric mobility plan for London
- Continue to work with community partners (e.g., MLHU, London Cycle Link, etc.) to engage Londoners on walking, cycling, transportation choices such as carpooling, transit use, and intercity bus/rail travel
- Work with community partners to promote existing provincial and/or federal programs that engage Londoners on adopting electric vehicles

DID YOU KNOW:

In June 2023, Council approved the Connected and Automated Vehicle Plan which includes
discouraging 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.

4.8.4 EXPECTED RESULT: LONDON'S MOBILITY SYSTEM IS RESILIENT TO THE IMPACTS OF CLIMATE CHANGE AND IS ADAPTED TO FUTURE CLIMATE CONDITIONS

Environmentally sustainable

Financially sustainable

Equitable

Integrated, connected, and efficient









Healthy and safe



Rising global temperatures will bring fewer days with ice and snow on the ground, which will encourage more walking and cycling trips in the winter. However, this also means that extreme weather events are more common and growing in intensity. Because of this, it is critical to manage and design infrastructure to be resilient to more freezing/thawing cycles, extreme rainfall, and other extreme weather events. This approach helps to maintain high quality roads and paths, reduce infrastructure repair costs, and minimize impacts on the natural environment of climate change related events. It is also important to consider how extreme weather such as extreme heat impacts the experience of people walking, cycling, and using transit, and design infrastructure with the user-experience in mind.

4.8.4.1 STRATEGIES AND ACTIONS

Strategy C2: Update design standards and requirements to build infrastructure that is more environmentally sustainable, resilient to the changing climate, and provides people with protection from weather where appropriate

- Identify opportunities to test materials and technologies in support of building more
 environmentally sustainable and resilient infrastructure such as sustainable asphalt and concrete
 alternatives and the re-use of crushed aggregate
- Update the DSRM to reference the MMP Enhanced Pedestrian Areas Map as one indication of where
 weather protection measures for people should be considered (Related to P6 and WC5)
- Update the DSRM to provide improved standards in support of healthy tree growth

4.8.5 EXPECTED RESULT: REGULAR AND CONSISTENT DATA COLLECTION AND ANALYSIS PROVIDE INSIGHTS ON TRAVEL PATTERNS OVER TIME AND INFORM MOBILITY-RELATED DECISIONS

Environmentally sustainable

Financially sustainable

Equitable

Healthy and safe

Integrated, connected, and efficient











COVID-19 caused a significant shift in work and travel behaviour. Since the pandemic, many people still work from home and travel demand has shifted away from traditional morning and evening rush-hour periods towards daytime, later evening, and weekend travel. The MMP aims to collect a wider range of data more frequently to develop a comprehensive understanding of how people travel in the post-pandemic era and inform mobility infrastructure recommendations and actions. This data will facilitate mobility-related decision making that best meets the needs of people in London.

4.8.5.1 STRATEGIES AND ACTIONS

Strategy C3: Develop a data collection and monitoring program to better monitor and understand changes in travel behavior over time

Actions:

- Identify budget required to implement the **MMP monitoring plan** including tracking of mode share and travel patterns in London.
- Identify budget required to conduct an updated travel demand survey to inform mobility planning and implementation



Relevant CEAP actions supported by the MMP include:

• Use Cycling Performance Measures to track the progress and use of cycling infrastructure, supports and programs



5. DELIVERING THE PLAN



The MMP is a pragmatic plan that maps out the steps London will take to achieve a fully integrated and efficient mobility system. The following sections describe how the MMP will be brought to life. This includes the costs of mobility infrastructure recommendations, how they will be paid for, and how mobility infrastructure recommendations and actions will be monitored.

5.1 COSTING AND FUNDING AT A GLANCE

The MMP is a cost-effective plan, in line with the MMP guiding principle of financial sustainability:



Financially sustainable: This means ensuring that mobility infrastructure and programs provide good value for the investment for current and future generations. This includes a mobility system whose lifecycle costs are cost-efficient for the city and taxpayers to build, operate, and maintain in the short-and long-term, but also mobility options that are affordable for individuals to use. A financially sustainable mobility system is one where the need for costly new infrastructure is minimized and where mobility options are available to Londoners of all income levels.

The mobility infrastructure recommendations and actions described throughout **Section 4** will make London more connected, accessible, and liveable in a way that provides good value for the investment for current and future generations. The following section describes the cost of the mobility infrastructure recommendations, which are subject to Council approval through future multi-year budget processes. In addition to investments in mobility infrastructure improvements, the provision of transit revenue vehicle hours will need to more than double by 2050 compared to 2019 with corresponding increases in operating costs. Increasing revenue vehicle hours requires purchasing more buses and potentially the expansion of existing storage facilities.

5.1.1 MOBILITY INFRASTRUCTURE COSTS

The MMP includes initial estimates of total capital costs for the mobility infrastructure recommendations between now and 2050 to provide an approximate magnitude of required investments. The MMP is a city-wide long-term plan, and capital cost estimates were developed at a high level based on project category and length. The detailed cost estimating, detailed project phasing, and identification of funding options occurs through the Development Charges (DC) Background Study, project scoping through planning, and future Multi-Year Budget processes. This includes further scrutiny of mobility infrastructure recommendations and the individual components and cost factors. The initial estimated cost of the mobility infrastructure recommendations within the 2050 horizon year are listed below in **Exhibit 5.1.**

EXHIBIT 5.1: ESTIMATED MOBILITY INFRASTRUCTURE RECOMMENDATION CAPITAL COSTS BY CATEGORY

Category	Capital Cost Estimates (2025 \$)
Roads ²⁰	\$2,100 to 2,200 million
Transit	\$550 - 650 million
Cycling ²⁷ (on roads and in parks)	\$170 - 190 million
Sidewalks ²² (major roads only)	\$20 million

Further financial analysis through the 2028 DC Background Study process may affect the prioritization of mobility infrastructure recommendations. The above costs do not include operating costs such as winter and summer maintenance of streets and sidewalks and the associated equipment, which are generally pursued through the annual assessment growth process. Additional transit operating costs can be pursued through the annual assessment growth process where aligned with the Assessment Growth Policy. Further financial analysis is also required for the costs of the actions described throughout Section 4. Many of the actions identified may be accommodated through existing program budgets, however new and/or expanded actions may require additional funding through the multi-year budget process.

5.1.2 FUNDING SOURCES

The MMP mobility infrastructure recommendations and actions will be funded through a combination of internal and external funding sources. Funding sources include:

- Capital Levy (Property tax supported): London's main source of revenue is property taxes, a portion of which is capital levy (pay-as-you-go financing), which contributes annually to funding the City's transportation capital program.
 - Developer-implemented neighbourhood connector streets that show in the road network map in **Section 4.4.6** are not included in cost estimates. The cost of mobility infrastructure recommendations identified beyond 2050 are also not included.
 - The cycling cost is approximately equally split between cycling facilities within the road allowance and pathways and

²² The MMP sidewalk assessment was limited to major roads. A similar magnitude of needs exists on neighbourhood streets based on the current New Sidewalk Program list.

- Reserve Funds (Property tax supported): The City of London has dedicated savings held in Capital
 Asset Renewal and Replacement reserve funds that can be used to support the life cycle needs of the
 transportation network.
- **Debt (Property tax supported):** Predominantly used for service improvement projects or the non-growth portion of projects in the DC Background Study, debt can also be a source of funding for capital projects included in the Master Mobility Plan.
- Development charges: Fees that developers pay when constructing new buildings contribute to the capital cost of the infrastructure required to serve new development (i.e. new and expanded roads, traffic signals and complete streets amenities such as sidewalks and streetlighting). Development charges revenue is held in the city services obligatory reserve funds and can be used directly as a funding source for capital projects, or to support paying debt servicing costs of non-tax supported debt required to fund a capital project, in accordance with the Development Charges Act and the City's DC Background Study.
- **Permanent Federal and Provincial Funding:** Provincial Gas Tax and the Canada Community-Building Fund (CCBF) helps fund transit service and life cycle renewal of roads and bridges.
- Infrastructure Funding Programs: The capital mobility infrastructure recommendations identified in the MMP have the potential to be eligible for Federal and Provincial infrastructure funding programs as available.

5.2 MONITORING IMPLEMENTATION AND SUCCESS OF THE PLAN

London is changing (as described in **Section 3**), and the MMP is intended to address current and forecasted mobility needs. Monitoring implementation of the plan and the success of it is critical to ensure progress in achieving the vision and to help identify areas where further improvements or adjustments may be needed in response to evolving challenges or opportunities. Monitoring the implementation and success of the plan also builds trust in the community by providing transparency and accountability.

Monitoring of the implementation of the plan will include tracking progress on actions including the implementation of mobility infrastructure recommendations.

Success of the plan will be monitoring by Key Performance Indicators (KPIs). These performance indicators possess several key characteristics to ensure their effectiveness:

- Practical: City staff have available data and information to feasibly measure each of the KPIs.
- Precise: The KPIs enable results to be measured (quantity, quality, time frame).
- · Simple: People in London will be able to understand the KPIs.
- Transparent: People in London will be able to view the progress made towards each KPIs.
- **Integrated:** The MMP performance monitoring framework builds upon and aligns with other London frameworks like the **Strategic Plan Performance Dashboard.**
- · Comprehensive: The performance indicators will reflect the MMP Areas of Focus and mobility modes.

EXHIBIT 5.2: MMP KEY PERFORMANCE INDICATORS

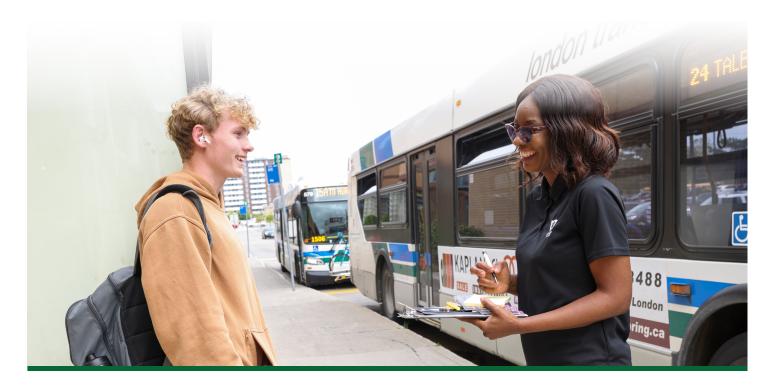
Performance indicator	Data source	Frequency	Use the mobility system to support London's desired future land use	Put people first on London's streets	Manage road capacity at key locations	Make transit the option of choice for more trips	Make walking and cycling attractive mobility options to meet daily travel needs	Support London's role as a regional hub	Provide a mobility system that enables more equitable participation in city	Prepare for change
Walking, cycling, and transit commuter mode share (Note 1)	Statistics Canada	Every four years	✓	✓	√	✓	√	√	✓	✓
Average commuting duration by mode	Statistics Canada	Every four years	✓	✓	✓	✓	√	✓	✓	✓
Travel Time Index (TTI) which is the ratio of peak vs. non-peak travel times	City of London	Annually	✓	√	✓	✓	√	√	✓	✓
Vehicle kilometres travelled per capita	Statistics Canada	Every four years	✓		✓					✓
Resident satisfaction with roads	City of London	Annually			√					
Percentage of new units within 400m walking distance of an existing Rapid Transit, Express Route or Arterial Route bus stop	City of London	Annually	✓			✓			✓	
Percentage of population within 400m of a transit stop	Statistics Canada	Every four years	✓			✓			✓	
Average number of jobs that can be reached within a 45 minute transit trip	LTC	Annually	√			√		√	✓	

EXHIBIT 5.2: MMP KEY PERFORMANCE INDICATORS - CONTINUED

Performance indicator	Data source	Frequency	Use the mobility system to support London's desired future land use	Put people first on London's streets	Manage road capacity at key locations	Make transit the option of choice for more trips	Make walking and cycling attractive mobility options to meet daily travel needs	Support London's role as a regional hub	Provide a mobility system that enables more equitable participation in city	Prepare for change
Travel time competitiveness between key destinations (transit vs vehicle)	Google Maps	Annually		✓	✓	✓			✓	√
Transit vehicle hours per capita	City of London	Annually				✓		✓	✓	
Percentage of residents within 400 m of a cycling facility	City of London	Annually		✓	√		✓		✓	
Resident satisfaction with Transit	City of London	Annually							✓	
Walk score	walkscore.com	Annually		√	✓		√	✓	✓	
Percentage of respondents that feel safe and secure on transit	LTC The Voice of the Customer Survey	Annually								
Transportation GHG emissions per capita	CEAP annual report	Annually		√		✓			✓	
Percentage of transit fleet that is zero- emission vehicles	LTC	Annually			√	✓	√			✓

The **practical** and **precise** monitoring framework principles emphasize the need for updated and high-quality data to effectively measure the performance of the KPIs. Expanding London's data collection practices and partnering with external data providers can help increase the number and types of performance indicators that can be measured. The data sources below represent opportunities for London to increase data access and enable more detailed future performance indicators:

- Third party and big data providers: Many external organizations offer products and services that include detailed data sets about travel behaviour. This includes big data providers that offer extremely large data sets that are typically collected passively through use of internet-connected devices like smart phones with appropriate privacy protections. London will continue to explore partnering with third party and big data providers to gain a greater understanding of how people in London live, work, and travel, particularly in the post-pandemic era. This could include organizations and products such as CurbIQ, Google Environmental Insights Explorer (EIE), TomTom, StreetLight Data, and Urban SDK among others.
- Local partners: There are numerous mobility-related organizations and non-profits in London that are working to improve mobility. The City currently works with partners such as the Middlesex London Health Unit, health care institutions and emergency services, there may be an opportunity to partner further with local organizations to integrate with broader City mobility planning and increase data access. This could include organization like Pillar Non-Profit Network, Safe Cities and the London Middlesex Local Immigration Partnership.



Appendices

- Appendix A: Project evaluation framework
- Appendix B: Mobility infrastructure recommendation and phasing maps
- Appendix C: Full list of strategies and actions



APPENDIX A PROJECT EVALUATION FRAMEWORK

ROAD INFRASTRUCTURE PROJECT EVALUATION FRAMEWORK

Guiding Principle	How can a road infrastructure project advance this Guiding Principle?	Key Indicator	Score		
Benefit Score					
Integrated, connected	Provide travel time savings	Travel time on the road link in the PM peak hour	Scores normalized according to highest-scoring project within each category (10 points maximum)		
and efficient (20 points max.)	Facilitate goods movement	Heavy trucks in maximum peak period >100, adjacent to freight trip generators, and/ or near CN/CP facilities	· +10 All three · +5 One or two · +0 None		
Environmentally	Minimize the impact on natural heritage	Impact on natural heritage	 +10 Minimal impact on natural systems +5 Converts treed or vegetated areas to a roadway +0 Within, adjacent to, or crosses a mapped feature of the natural heritage system 		
sustainable (20 points max.)	Minimize potential for induced demand & GHG emissions	Projects that may encourage people to make more trips by driving will score lower	 +10 Low potential for induced demand +5 Moderate to high potential for induced demand due to modal shift +0 High potential for induced demand due to modal shift 		
Equitable	Improve access for equity- denied populations	Directly serves an area with a high prevalence of equity- denied populations, with minimal or no negative impact (e.g. significant property impacts, loss of neighbourhood green space etc.)	+10 Improves/provides access for an area with high prevalence of equity-denied populations +0 Project has minimal or negative impact on an area with high prevalence of equity-denied populations (air quality, noise, property impacts, barrier effect, loss of neighbourhood green space, etc.)		
(20 points max.)	Provide services useful to people whose trip originates in an area with a high prevalence of equity-denied populations	Number of people using the project who live in an area with a high prevalence or equity-denied populations	Scores normalized according to highest-scoring project within each category (10 points maximum)		
Healthy and safe	Promote sustainable mode use	Integrates walking, cycling and/or transit facilities/ features directly into the road project	+10 Provides new or improves connections for sustainable modes +0 Does not incorporate/creates barriers for other modes or induces vehicle travel		
(20 points max.)	Provide an opportunity to address a known/existing road safety issue	Projects with the greatest Potential for Safety Improvements (PSI)	Scores normalized according to highest-scoring PSI (10 points maximum)		
Cost Score					
Financially sustainable (20 points max.)	Provide good value for the financial investment	Lifecycle cost per point	Scores normalized according to highest- scoring project within each project category		

TRANSIT INFRASTRUCTURE PROJECT EVALUATION FRAMEWORK

Guiding Principle	How can a transit infrastructure project advance this Guiding Principle?	Key Indicator	Score		
Benefit Score					
Integrated, connected	Encourage increases in transit ridership	Number of additional riders who are expected to use the transit corridor in 2050 relative to today	Scores normalized according to highest-scoring project within each category (10 points maximum)		
and efficient (20 points max.)	Provide travel time savings and improve reliability	Travel time savings and reliability improvements relative to today	Scores normalized according to highest-scoring project within each category (10 points maximum)		
Environmentally sustainable (20 points max.)	Minimize the impact on natural heritage	Impact on natural heritage	+20 Minimal impact on natural systems +10 Converts treed or vegetated areas to a roadway +0 Within, adjacent to, or crosses a mapped feature of the natural heritage system		
Equitable (20 points max.)	Improve access for equity- denied populations	Directly serves an area with a high prevalence of equity- denied populations, with minimal or no negative impact (e.g. significant property impacts, loss of neighbourhood green space etc.)	+10 Project provides new or improved access to an area with high prevalence of equity denied populations +0 Project has minimal or negative impact on an area with high prevalence of equity denied populations (air quality, noise, property impacts, barrier effect, loss of neighbourhood green space, etc.)		
	Provide services useful to riders whose trip originates in an area with high prevalence of equity- denied populations	Number of riders using the project who live in area with a high prevalence of equity denied populations	Scores normalized according to highest-scoring project within each category (10 points maximum)		
Healthy and safe (20 points max.)	Provide good access to diverse destinations without a car	Directly serves a variety of destinations	Assign points to each Place Type, as defined in The London Plan, in which the project is located or passes through: +4 Downtown, Transit Villages, Institutional (including educational and health care institutions) and the Airport +3 Rapid Transit Corridor +2 Urban Corridor, Shopping Area, Main Street +1 Green Space, Heavy Industrial, Light Industrial, Commercial Industrial, Future Industrial Growth Scores will be normalized according to highest-scoring project within each category (10 points maximum)		
	Provide an opportunity to address a known/existing road safety issue	Projects with the greatest Potential for Safety Improvements (PSI)	Scores normalized according to highest-scoring PSI (10 points maximum)		
Cost Score					
Financially sustainable (20 points max.)	Provide good value for the financial investment	Lifecycle cost per point	Scores normalized according to highest-scoring project within each category		

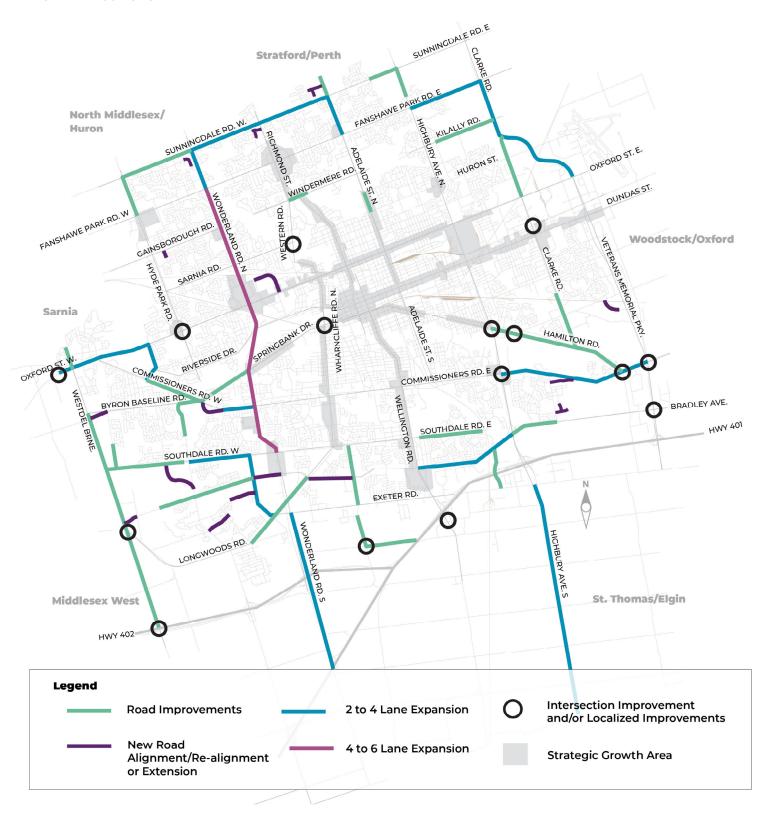
CYCLING IMPACT ANALYSIS EVALUATION FRAMEWORK

Guiding Principle Benefit Score	How can a cycling project advance this Guiding Principle?	Key Indicator	Score	
	Improve and expand cycling network reach and connectivity	Links that are assigned a Level of Traffic Stress (LTC) 3 or 4, indicating a moderate to high level of discomfort for the majority of the population	A link will score more highly if it represents a segment of increased cyclist discomfort and a gap in the existing low stress connected network + 15 LTS 4 Link +7.5 LTS 3 Link +0 LTS 1 or 2 Link (15 points maximum)	
Integrated, connected and efficient (20 points max.)	Serve areas of current or potential high-cycling-demand	Population and employment density within a 250 m buffer of the facility	 +15 Densest areas (>45 people and jobs per hectare) +7.5 Moderately dense areas (25-44 people and jobs per hectare) +0 Least dense areas (up to 24 people and jobs per hectare) (15 points maximum) 	
	Improve inter-modal connectivity	Connects with major transit stop	+15 connects with major transit stop +0 does not connect to major transit stop (15 points maximum)	
Environmentally sustainable (20 points max.)	Encourage a shift towards cycling for short-distance trips (3 km or less)	Number of existing auto trips under 3 km within a 250 m buffer of the facility (auto trips weighted based on the size of the buffered area) 1	+20 Highest concentration of short trips (over 100) +10 Moderate concentration of short trips (between 25 and 100) +0 Lowest concentration of short trips (up to 24) (20 points maximum)	
Equitable (20 points max.)	Improve access for equity- denied populations	Directly serves an area of high social risk	+20 Project provides new or improved access to areas of high social risk +0 No impact on areas of high social risk	
Healthy and safe	Provide good access to diverse destinations without a car	Number of trip generators within a 250 m buffer of the facility (schools, parks, libraries, community/recreation centres, major shopping centres).	Each trip generator is assigned 5 points except schools are weighted at double (10 points). (Normalized to maximum 10 points)	
(20 points max.)	Provide an opportunity to address a known/existing road safety issue	Collision history	 +10 Collision density of > 4 collisions per km² +5 Collision density of > 2 collisions per km² +0 Collision density of < 2 collisions per km² 	
Cost Score				
financial investment stage that facility types are considered			onsidered in Step 2: Feasibility Review as it is at that nsidered. Step 3: Network lens is also important as tor in cost/complexity against nearby alternatives	

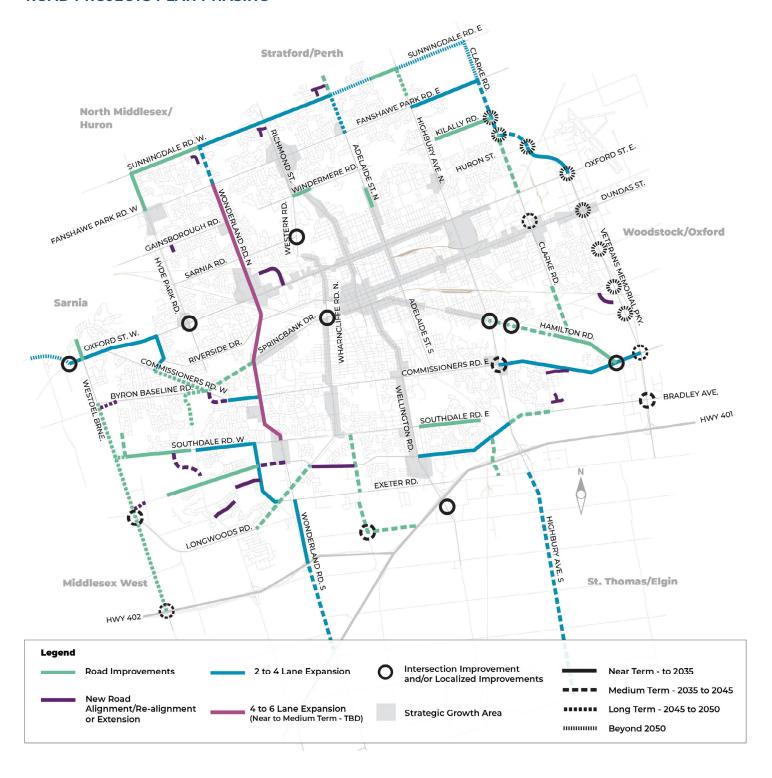
While transit stops are considered an important trip generator, they are considered under the "Improve inter-modal connectivity" indicator and are therefore not included here.

APPENDIX B MOBILITY INFRASTRUCTURE RECOMMENDATION AND PHASING MAPS

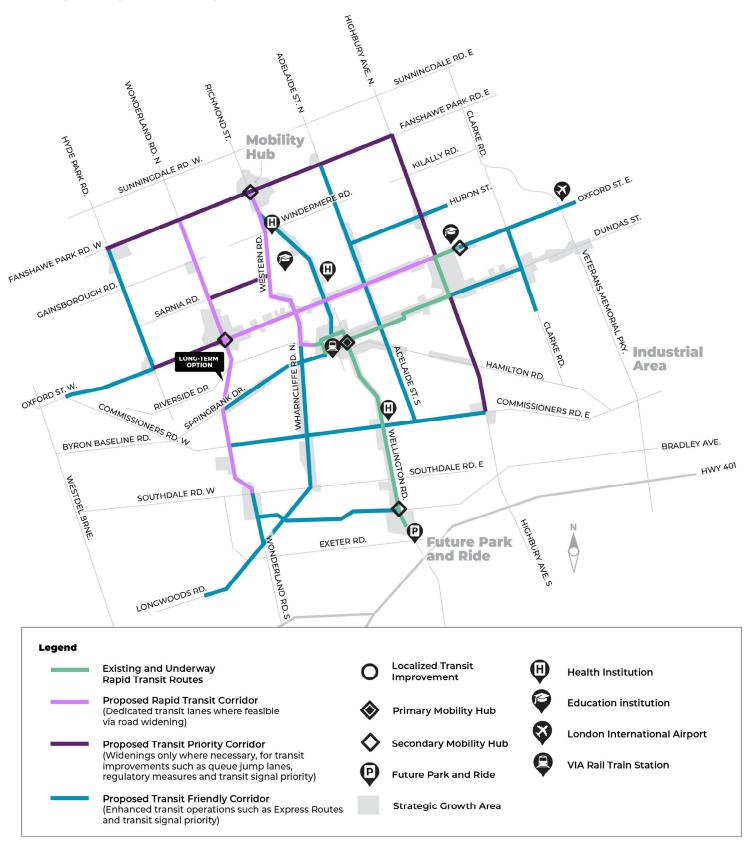
ROAD PROJECTS PLAN



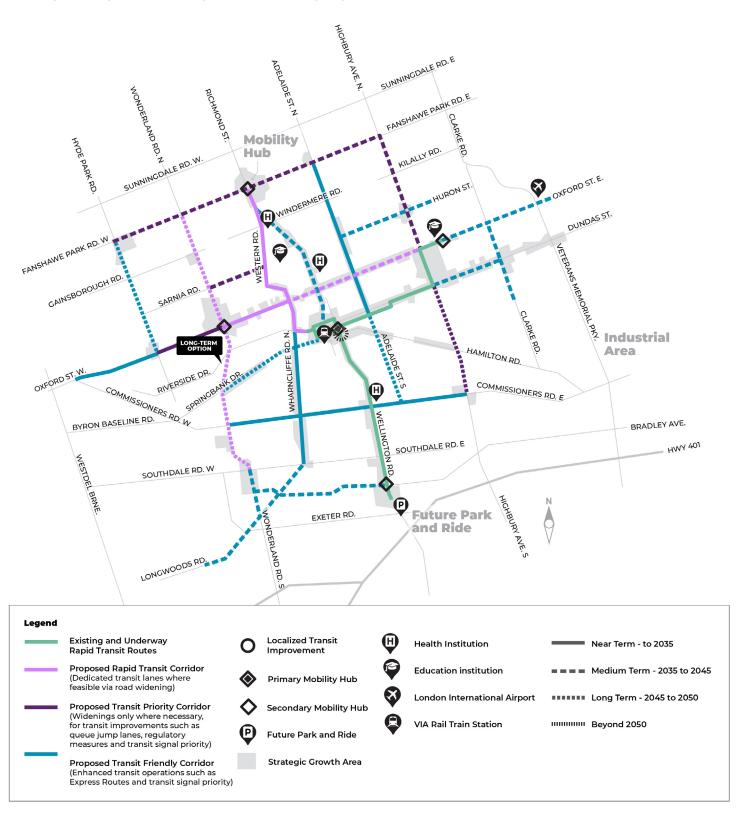
ROAD PROJECTS PLAN PHASING



TRANSIT PRIORITY NETWORK PLAN



TRANSIT PRIORITY NETWORK PLAN PHASING



CYCLING NETWORK PLAN



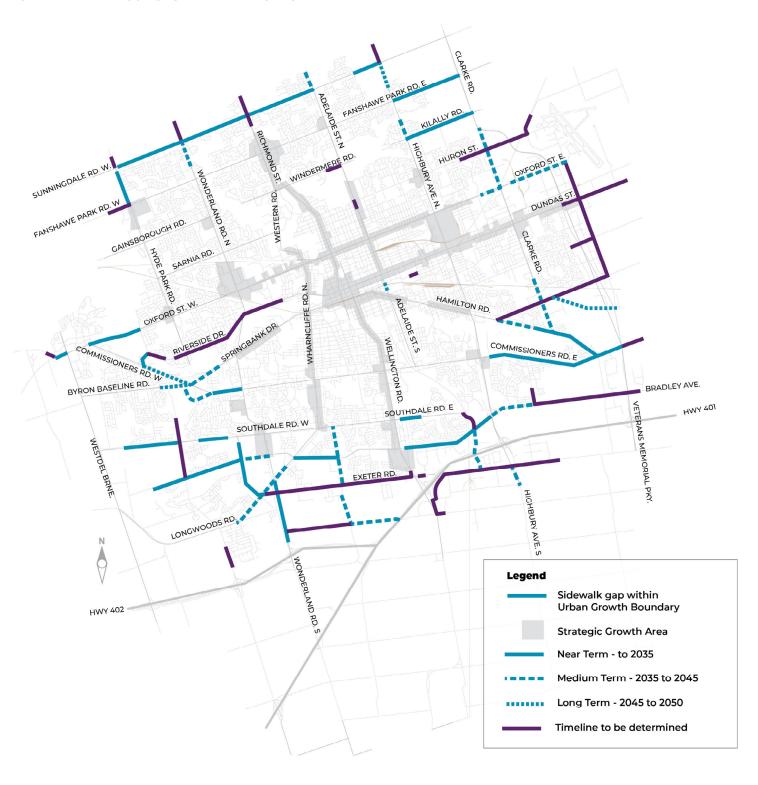
CYCLING NETWORK PLAN PHASING



SIDEWALK PROJECTS PLAN



SIDEWALK PROJECTS PLAN PHASING



APPENDIX C FULL LIST OF STRATEGIES AND ACTIONS



AREA OF FOCUS: USE THE MOBILITY SYSTEM TO SUPPORT LONDON'S DESIRED FUTURE LAND USE

EXPECTED RESULT: COMMUNITY PLANNING AND DEVELOPMENT PRACTICES BUILD COMMUNITIES THAT PROMOTE MORE WALKING, CYCLING, AND TRANSIT

STRATEGIES AND ACTIONS:

Strategy LU1: Support *The London Plan* policies to design neighbourhood street networks and block sizes to ensure connectivity and support transit and active mobility.

 Action: Develop New Neighbourhood Guidelines which include guidance on street network layout and design

Strategy LU2: Where street/block pattern is not supportive of active mobility and access to transit, work with landowners to provide active mobility connections through large sites and/or acquire land to provide municipal walkways and cycling shortcuts to improve neighbourhood connectivity.

- Action: Identify needs and opportunities to improve connectivity in existing neighbourhoods based on community feedback and through the development of Neighbourhood Connectivity Plans
- Action: Budget planning to acquire property for active mobility connections

Strategy LU3: Support *The London Plan* policies to incorporate active mobility facilities and transit planning considerations into the design of new neighbourhoods.

- Action: Amendment(s) to The London Plan including Table 6 and specific policy direction on implementation of dedicated cycling facilities on neighbourhood connectors (Related to WCI)
- Action: Develop New Neighbourhood Guidelines which include planning consideration for future transit routes and transit stop needs
- Action: Design Specification and Requirements Manual (DSRM) updates including design standards for neighbourhood connectors with boulevard cycle tracks

Strategy LU4: Support *The London Plan* policies to create walkable communities that incorporate a mix of land uses in appropriate locations so that people can access their daily needs.

- Action: Amendment(s) to The London Plan including Table 10 Range of Permitted Uses in Neighbourhoods Place Type
- · Action: Amendment(s) to The London Plan including Strategic Growth Areas
- Action: Amendment(s) to the **Zoning By-law** including as-of-right zones to facilitate mixed-use developments, higher-density, and greater heights
- Action: Develop New Neighbourhood Guidelines in support of creating mix-used complete communities

EXPECTED RESULT: PARKING IS PROVIDED AND MANAGED IN A WAY THAT SUPPORTS WALKING, CYCLING, AND TRANSIT AND A PEOPLE-ORIENTED CITY

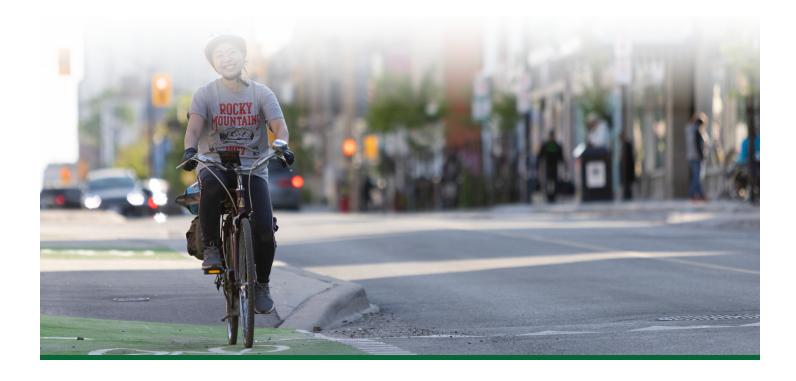
STRATEGIES AND ACTIONS:

Strategy LU5: Ensure parking policies support sustainable mobility, climate change objectives, and efficient use of land.

- Action: Monitor and review parking supply, usage and industry best practices to inform further
 amendments to the Zoning By-law, including provisions for car share and electric vehicle (EV)
 charging stations
- Action: Review London's Municipal Parking Management with representatives from relevant service
 areas to consider municipal parking best practices and strategies

Strategy LU6: Ensure that developments with large parking lots are designed to enable safe walking and cycling movements and facilitate seamless access between the abutting public streets, parking and building entrances.

- Action: Update the Site Plan Control By-law to ensure the provision of safe and convenient cycling circulation, in addition to the existing requirements for pedestrian circulation
- Action: Update the Transportation Impact Assessment Guidelines to provide the basis for the
 identification and evaluation of transportation related improvements for all modes of mobility
 (including walking, cycling and transit), in support of the increased trips generated by a proposed
 development



AREA OF FOCUS: PUT PEOPLE FIRST IN LONDON'S MOBILITY SYSTEM

EXPECTED RESULT: LONDON'S STREET NETWORK IS INVITING FOR ALL USERS

STRATEGIES AND ACTIONS:

Strategy P1: Consider the level of service of all modes in transportation and mobility decision making.

 Action: Define target level of service (LOS) and evaluation processes for all modes [i.e. Multi-Modal Level of Service (MMLOS)] and incorporate into City planning policies, including *The London Plan* policy 326 and design standards

Strategy P2: Optimize winter maintenance of roads, active transportation facilities and transit stops.

- Action: Identify a winter priority cycling network (including select off-street cycling links)
- Action: Conduct Winter Maintenance Service Review which considers 2024/2025 winter service
 performance, alternative operations and provincial minimum maintenance standards. Also consider
 prioritization of winter maintenance of sidewalks, local and rapid transit stops
 (Related to E1)
- Action: Budget planning for the implementation of a new Operations Yard to support efficient maintenance for all modes of mobility as London grows

Strategy P3: Accommodate the mobility needs of all road users during construction and other activities that impact facilities.

- · Action: Develop Multimodal Mobility Management During Construction Standards
- Action: Update the Renew London system to include notification of detours and closures of the park pathway system

EXPECTED RESULT: PEOPLE IN LONDON FEEL SAFE AND SECURE WHEN TRAVELLING AROUND THE CITY

STRATEGIES AND ACTIONS:

Strategy P4: Improve road safety for all road users.

- Action: Co-chair the London-Middlesex Road Safety Committee (LMRSC) and conduct regular
 meetings to collaborate with various public and private organizations to promote and increase safety
 for all road users through leadership, innovation, coordination and advocacy for Vision Zero which is
 a strategy to eliminate all traffic fatalities and severe injuries
- Action: Prepare a Safe Mobility Action Plan to support achieving the Vision Zero strategy. Scope of work proposed to include:
 - warrant analyses of at-grade rail crossing with safety or delay issues according to Transport Canada Guidelines for grade separation (Related to R1 and E1)
 - identify and evaluate new and existing intersection locations suitable to be implemented as or replaced with a roundabout, to improve traffic flow and safety, and reduce long-term operations and maintenance costs (Related to R1 and E1)
 - · critical review and confirmation of City process to set speed limits
- Action: Develop the framework to initiate implementation of appropriate roadside protection for on-street patios
- Action: Road safety public education campaigns to increase awareness, education and promote safety. Topics shall include roundabouts, pedestrian crossovers (PXOs), transit stops with bike lanes, and area speed limits (ASL)
- Action: Identify budget and operational requirements for the implementation of side guards on City-owned heavy-duty trucks
- · Action: Update the traffic calming program including a jurisdictional review of existing strategies
- · Action: Develop traffic calming standards for new subdivisions and update the DSRM
- · Action: Continue to pro-actively implement traffic calming in school zones

Strategy P5: Continue to expand and improve illumination throughout the mobility network, with the exception of park pathways and trails where illumination may have a negative impact on the ecosystem.

- Action: Continue to expand and improve illumination throughout the mobility network. On park pathways and trails, illumination may not be implemented due to ecosystem impacts
- Action: Continue to replace existing high-pressure sodium (HPS) street illumination with lightemitting diode (LED) luminaires to improve lighting levels and conserve energy
- Action: Identify funding opportunities to continue to implement localized illumination at transit stops along corridors with low pedestrian lighting levels (Related to T4 and E4)

EXPECTED RESULT: LONDON'S STREETS ARE VIBRANT PUBLIC SPACES THAT SUPPORT MULTI-MODAL TRAVEL AND OTHER CITY LIFE

STRATEGIES AND ACTIONS:

Strategy P6: Support *The London Plan* policies to design streetscapes in support of the planned vision for the place type and contribute to the character and sense of place.

- Action: Update DSRM to reference the MMP Enhanced Pedestrian Areas Map as one indication of
 where wider sidewalks are warranted and where other streetscape elements should be considered
 such as pedestrian-scale lighting, seating, locally relevant public art, other street furniture, and weather
 protection measures for people (Related to P6 and C3)
- Action: Identify funding opportunities to continue to implement the Downtown Wayfinding Plan
 making it easy for people to navigate their way around and access key destinations (Related to WC3)
- Action: Develop a Wayfinding Plan for areas outside of the downtown and identify funding opportunities to implement it (Related to WC3)
- · Action: Continue to wrap traffic signal boxes with Public Art
- Action: Create a Clarence Street Connector with an enhanced pedestrian environment linking Richard B. Harrison Park in SoHo and Victoria Park in the downtown, as per Our Move Forward: London's Downtown Plan

EXPECTED RESULT: COMMUNICATION AND ENGAGEMENT FURTHERS PEOPLE IN LONDON'S INVOLVEMENT IN MOBILITY PLANNING AND INITIATIVES

STRATEGIES AND ACTIONS:

Strategy P7: Empower local communities and organizations to implement low-cost, temporary changes to the built environment for the purpose of placemaking and traffic calming.

- Action: Develop a toolkit which enables groups and organizations to implement temporary solutions for the purpose of placemaking and traffic calming
- Action: Identify funding opportunities from other levels of government

Strategy P8: Continue to communicate and engage with the community on the Mobility Master Plan and its implementation.

• **Action:** Develop a **communications plan** to keep the community informed on the implementation and success of the Mobility Master Plan



AREA OF FOCUS: MANAGE ROAD CAPACITY STRATEGICALLY

EXPECTED RESULT: THE NEED FOR NEW ROAD CAPACITY IS PROVIDED BY TRAFFIC FLOW AND OPERATIONAL IMPROVEMENTS, MULTI-MODAL IMPROVEMENTS, AND SUPPORTING TDM PROGRAMS

STRATEGIES AND ACTIONS:

Strategy R1: Manage conflicts and minimize delays by implementing improvements to the city's transportation network.

- · Action: Implement the improvements identified in the MMP Road Projects Plan
- Action: Re-start the Discover Wonderland Road Environmental Assessment, with expanded limits
 from Southdale Road to Fanshawe Park Road, in order to construct six general purpose, through
 lanes along the corridor with a long-term build-and-convert option to Rapid Transit
- Action: As part of development of the Safe Mobility Action Plan, identify and evaluate new and
 existing intersection locations suitable to be implemented as or replaced with a roundabout, to
 improve and traffic flow and safety, and reduce long-term operations and maintenance costs
 (Related to P4 and E1)
- Action: As part of development of the Safe Mobility Action Plan update, conduct warrant analyses of at-grade rail crossing with safety or delay issues according to Transport Canada Guidelines for grade separation to identify and prioritize locations for improvements. (Related to P4 and E1)

Strategy R2: Improve traffic signal network operations with smart traffic infrastructure and traffic signal management.

- Action: Develop a Transportation Management Centre (TMC) Policies and Strategies document outlining its role across all modes and opportunities for the future
- Action: Pilot adaptive traffic signals on Wonderland Rd S, assess performance, optimize, and evaluate the cost benefit of expanding the program

 Action: Continue to collect and analyze traffic counts to inform the planning and implementation of traffic signal infrastructure

Strategy R3: Improve the movement of through traffic along corridors through good access management.

- Action: Identify, plan for and implement access management improvements on corridors with an
 excess of entrances and conflicting movements
- Action: Update the Site Plan Control By-law to require separate internal pick-up and drop-off areas and loading/unloading zones in developments

Strategy R4: Mitigate and minimize road and lane closures due to road construction, utility work and construction.

- Actions: Develop a Special Provision for construction contracts which clearly outlines restrictions
 on construction operations, permitted times for lane and road closures, extended duration penalties,
 and road closure notification requirements
- Action: Use incentives/disincentives to encourage contractors to optimize construction to minimize road and lane closures
- Action: Implement mechanisms to make developers more accountable for unnecessarily long road and lane closures
- Action: Update the Heavy Loads on Roads By-law to include oversize vehicles and superloads
 which will allow transportation staff to determine when engineering review is required and what
 improvement measures may be warranted to provide safe passage

EXPECTED RESULT: CURBSIDE SPACE IS MANAGED IN A MANNER THAT SUITS THE CONTEXT OF EACH STREET

STRATEGIES AND ACTIONS:

Strategy R5: Manage curb space in a manner that suits the context of each street.

• Action: Develop curb space management strategies to improve how curb space is managed including for vehicle and bike parking; EV charging; the movement of vehicles; transit; cycling; pick-ups/drop-offs; delivery of online orders; loading/unloading; waste pick-up; and access

EXPECTED RESULT: LAST MILE DELIVERY SERVICES ARE EFFICIENT, MODERNIZED, AND BALANCED WITH THE NEEDS OF OTHER ROAD USERS

STRATEGIES AND ACTIONS:

Strategy R6: Encourage the use of smaller human-powered and electrical vehicles for last mile delivery services.

• Action: Establish a Micromobility Working Group to discuss emerging technologies, trends and legislation and identify opportunities to support, accommodate and embrace smaller, human-powered and electric vehicles (such as cargo e-bikes) such as through By-Law updates



AREA OF FOCUS: MAKE TRANSIT THE OPTION OF CHOICE FOR MORE TRIPS

EXPECTED RESULT: TRANSIT IS CONVENIENT, EFFICIENT AND HAS AN EXPANSIVE SERVICE AREA

STRATEGIES AND ACTIONS:

Strategy T1: Improve transit travel times to be more competitive to vehicular travel time.

 Action: Expand London's developing rapid transit network of dedicated transit lanes and implement transit priority signals and queue jump lanes as per the MMP Transit Priority Network Plan

Strategy T2: Expand transit service areas, hours and frequency to improve access to more people, employment and other everyday needs and destinations.

- Action: Determine the appropriate level of increased municipal funding for transit operations to improve service levels and accommodate a growing city
- Action: Identify opportunities to secure funding from other levels of government such as assessment growth funding and permanent transit funding

Strategy T3: Consider existing transit routes and potential transit detour routes when planning and designing roads and cycling infrastructure

 Action: Update DSRM to provide guidance on how to plan for and accommodate turning movements for transit and emergency service vehicles when designing roads including protected intersections (Related to H4)

EXPECTED RESULT: TRANSIT SERVICE IS SAFE AND EASY TO ACCESS

STRATEGIES AND ACTIONS:

Strategy T4: Make it safe and easy to access and use transit stops.

- Action: Develop the design of new subdivisions to accommodate future transit stops as part of the development of New Neighbourhood Guidelines (Related to E4 and LU3)
- Action: Prioritize the addition of sidewalks where there are transit stops with no connecting sidewalk
 including through Neighbourhood Connectivity Plans and the New Sidewalk Program (Related to
 E4 and WC1)
- Action: Continue to implement PXOs at priority locations including those which provide access to transit stops (Related to E4 and WC2)
- Action: Identify funding opportunities to continue to implement localized illumination at transit stops along corridors with low pedestrian lighting levels (Related to E4 and P5)
- Action: Develop and update the DSRM with transit stop design standards including considerations for riders with low vision (Related to E5)
- · Action: Budget planning and implementation of bike racks at transit stops (Related to E4)

Strategy T5: Make transit services accessible for all.

 Action: Complete a review of all subsidized transit programs including children under 12, youth, seniors, visually impaired, and income-related, as well as the post-secondary programs with Western University and Fanshawe College (Related to E5)



AREA OF FOCUS: MAKE WALKING, ROLLING AND CYCLING PREFERRED MOBILITY OPTIONS TO MEET DAILY TRAVEL NEEDS

EXPECTED RESULT: THE WALKING AND CYCLING NETWORK IS CONNECTED AND PROVIDES SAFE, CONVENIENT AND DIRECT ROUTES

STRATEGIES AND ACTIONS:

Strategy WC1: Support *The London Plan* policies to provide walkable communities and a continuously linked cycling network throughout the city.

- Action: Implement cycling facilities and sidewalk infrastructure recommended on the MMP
 Cycling Network Plan and Sidewalk Projects Plan
- Action: Continue to fill gaps in the sidewalk network on residential streets, including through the New Sidewalk Program and development of Neighbourhood Connectivity Plans, prioritizing locations based on proximity to schools, transit, shopping, community amenities and equity-denied groups. (Related to T4, E1 and E4)
- Action: Better define the relationship between road corridor cycling facilities and the park pathway system and develop a framework for integration
- Action: Identify funding opportunities from other levels of government to more quickly address critical walking and cycling infrastructures gaps
- Action: Develop a funding strategy for rehabilitation of aging cycling and pedestrian facilities as part
 of the City's Asset Management Program
- Action: Amendment(s) to The London Plan including Table 7 and specific policy direction on the criteria for implementation of dedicated cycling facilities on neighbourhood connectors (Related to LU3)

Strategy WC2: Provide safe, easy and convenient road crossings for pedestrians and cyclists which minimize out-of-the-way travel.

- Action: Continue to implement PXOs at priority locations based on considerations such as traffic volumes, pedestrian volumes, distance between adjacent crossing locations, connections to parks, off-road paths, community centres, schools and transit stops (Related to T4 and E4)
- · Action: Continue to evaluate and implement Leading Pedestrian Intervals, where appropriate
- Action: Continue to evaluate and implement bike signals and leading bicycle intervals,
 where appropriate
- Action: Participate in Ontario Traffic Council (OTC) pilot program of combined pedestrian and cycling mid-block crossing alternatives

EXPECTED RESULT: IT IS AN EASY AND PLEASANT EXPERIENCE TO WALK OR CYCLE IN THE CITY AND THE BENEFITS OF IT ARE PROMOTED

STRATEGIES AND ACTIONS:

Strategy WC3: Make it easy for people to navigate the city by walking and cycling.

- Action: Identify funding opportunities to continue to implement the **Downtown Wayfinding Plan** making it easy for people to navigate their way around and access key destinations (Related to P6)
- Action: Develop a Wayfinding Plan for areas outside of the downtown, including for on and offroad walking and cycling facilities, and identify funding opportunities to implement it (Related to P6)
- · Action: Continue to update the Bike and Walk Map annually

Strategy WC4: Make it easy to access a bike and provide cycling amenities.

 Action: Continue to provide the business bike rack program as part of Smart Commute London, offering support, advice, and access to at-cost bike racks to business owners

Strategy WC5: Support **The London Plan** policies to design streetscapes in support of the planned vision for Place Types, which will contribute to the character neighbourhoods and enhance the sense of place.

- Action: Develop a toolkit which enables groups and organizations to implement temporary solutions for the purpose of placemaking (Related to P7)
- Action: Update the DSRM to reference the MMP Enhanced Pedestrian Areas Map as one indication
 of where streetscape elements should be considered such as pedestrian lighting, integration of
 locally relevant public art, street furniture, seating, and weather protection. (Related to P6 and C2)

Strategy WC6: Promote walking and cycling and embed it in our culture.

- Action: Promote public education material to increase awareness of the benefits of walking and cycling and promote safety. Topics may include how to use pedestrian crosswalks, navigating transit stops with adjacent bike lanes, moving safely through roundabouts, and the health benefits of active transportation (Related to P4)
- Action: Work with Active and Safe Routes to Schools to provide educational information to schools and promote walking and cycling



AREA OF FOCUS: SUPPORT LONDON'S ROLE AS A REGIONAL HUB

EXPECTED RESULT: LONDON IS A PLACE THAT CAN BE EASILY ACCESSED TO AND FROM LOCATIONS BEYOND ITS BORDERS

STRATEGIES AND ACTIONS:

Strategy H1: Improve travel options and connections between London and surrounding communities.

- Action: Support inter-community transit including through the continued identification and accommodation of inter-community bus stops within the city
- Action: Support surrounding communities in applying for Provincial funding for inter-community transit such as through the Ontario Transit Investment Fund

Strategy H2: Advocate for and work with other levels of government to improve regional mobility options.

- Action: Engage in discussions with neighbouring municipalities and the Province to work
 collaboratively on a ring road and integrated transportation network that would help move people,
 goods and services within and across the region
- Action: Work with other levels of government to advocate for extension of the proposed high speed
 rail from Toronto to Quebec City to extend to London
- **Action:** Work with other levels of government to support the planning and implementation of improvements to **passenger rail** in Southwestern Ontario

Strategy H3: Develop Mobility Hubs which provide convenient connections to/from inter-community and regional transportation and London's multi-modal network.

• **Action:** Identify strategies to support the planning and development of **Mobility Hubs** as outlined in the Conceptual Framework for Regional Transportation

EXPECTED RESULT: GOODS MOVE TO AND FROM LONDON SAFELY AND EFFICIENTLY WITH MINIMAL COMMUNITY AND ENVIRONMENTAL IMPACT

STRATEGIES AND ACTIONS:

Strategy H4: Plan for and accommodate the movement of large trucks, where appropriate, while mitigating overly wide roads and high-speed turns.

- Action: Update the **DSRM** to provide guidance on how to select a **design vehicle** (the largest vehicle that routinely uses a facility) and **control vehicle** (the largest vehicle that will infrequently use a facility), and how to design roads to accommodate both without over designing roads (Related to T3)
- Action: Develop and update the **DSRM** with design standards for **industrial streets** to accommodate the safe movement of goods as well as other road users

Strategy H5: Plan for and accommodate Long Combination Vehicles, where appropriate.

- Action: Continue to support the Province's Long Combination Vehicle (LCV) Program by reviewing
 LCV route approval requests and the improvements required to support turning movements
- Action: Update the DSRM such that the MMP Priority Goods Movement Network and industrial subdivisions are designed to accommodate the potential movement of LCV's in the future via pavement widening which does not impact signals, utilities or property
- Action: Add currently approved LCV routes to London's CityMap database so that that impact of road and lane closures can be better understood



AREA OF FOCUS: PROVIDE A MOBILITY SYSTEM THAT ENABLES MORE EQUITABLE PARTICIPATION IN CITY LIFE

EXPECTED RESULT: EQUITY IS AT THE FOREFRONT OF MOBILITY SYSTEM DECISION MAKING

STRATEGIES AND ACTIONS:

Strategy E1: Use the equity tool and other equity data for transportation project and program planning.

- Action: Apply the **equity tool** and embed equity in the decision-making process to update the **Traffic Calming Program** (Related to P4)
- Action: Apply the equity tool and embed equity into development of the Safe Mobility Action Plan (Related to P4 and R1)
- Action: Apply the equity tool and embed equity in the development of the Neighbourhood
 Connectivity Plan process which pro-actively plans critical sidewalk connections to be addressed
 through local road reconstruction projects (LRRP), infrastructure renewal projects (IRPs) and the New
 Sidewalk Program (Related to LU2, WC1 and E4)
- Action: Apply the equity tool as part of the Winter Maintenance Service Review to consider diverse needs (Related to PI)
- Action: Develop a Transportation Equity Opportunity Zones index map informed by data on equity denied-populations, transportation and mobility barriers, and proximity to everyday needs

Strategy E2: Address inequities with service request systems.

- **Action:** Proactively conduct **speed and volume studies** on roads planned for local road reconstruction to determine if traffic calming design features should be considered
- Action: Pro-actively plan critical sidewalk connections as part of the development of Neighbourhood Connectivity Plans for implementation through local road reconstruction projects (LRRP), infrastructure renewal projects (IRPs) and the New Sidewalk Program (Related to E1, LU2 and WC1)

Strategy E3: Engage equity-denied groups in transportation and mobility planning.

- Action: Consult with Youth Coalition Combating Islamophobia to discuss and identify transportation and mobility measures which may increase Muslim safety in specifically vulnerable locations such as at mosques
- Action: Consult with N'Amerind to discuss future potential opportunities to seek funding from other levels of government for transportation and mobility improvements which would specifically and directly benefit the Indigenous community such as through the Indigenous Transportation Initiatives Fund
- Action: Consult with Youth London to discuss opportunities to increase youth involvement in mobility decision making
- · Action: Identify other opportunities to engage with equity-denied groups

EXPECTED RESULT: PEOPLE OF ALL AGES AND ABILITIES HAVE A RANGE OF SAFE, APPROPRIATE, AND EFFECTIVE MOBILITY OPTIONS

STRATEGIES AND ACTIONS:

Strategy E4: Make it safe and easy to access and use transit stops.

· Action: See T4 in Appendix C, page 133

Strategy E5: Make transit services accessible for all.

Action: see T5 in Appendix C, page 133

Strategy E6: Consult with the Accessibility Community Advisory Committee (ACAC).

- Action: Consult with the ACAC on the provision of accessible parking spaces
- Action: Consult with the ACAC on the development of transit stop design standards including in consideration for riders with low vision (Related to E1 and T5)



AREA OF FOCUS: PREPARE FOR CHANGE

EXPECTED RESULT: LONDON ACHIEVES NET-ZERO GHG EMISSIONS BY 2050

STRATEGIES AND ACTIONS:

Strategy C1: Support implementation of CEAP.

· Action: As per CEAP, apply the Climate Lens Framework to Transportation Projects and Programs

EXPECTED RESULT: LONDON'S MOBILITY SYSTEM IS RESILIENT TO THE IMPACTS OF CLIMATE CHANGE AND IS ADAPTED TO FUTURE CLIMATE CONDITIONS

STRATEGIES AND ACTIONS:

Strategy C2: Update design standards and requirements to build infrastructure that is more environmentally sustainable, resilient to the changing climate, and provides people with protection from weather where appropriate.

- Action: Identify opportunities to test materials and technologies in support of building more
 environmentally sustainable and resilient infrastructure such as sustainable asphalt and concrete
 alternatives and the re-use of crushed aggregate
- Action: Update the **DSRM** to reference the MMP **Enhanced Pedestrian Areas Map** as one indication of where weather protection measures for people should be considered (Related to P6 and WC5)
- · Action: Update the DSRM to provide improved standards in support of healthy tree growth

EXPECTED RESULT: REGULAR AND CONSISTENT DATA COLLECTION AND ANALYSIS PROVIDE INSIGHTS ON TRAVEL PATTERNS OVER TIME AND INFORM MOBILITY-RELATED DECISIONS

STRATEGIES AND ACTIONS:

Strategy C3: Develop a data collection and monitoring program to better monitor and understand changes in travel behavior over time.

- Action: Identify budget required to implement the MMP monitoring plan including tracking of mode share and travel patterns in London
- Action: Identify budget required to conduct an updated travel demand survey to inform mobility planning and implementation



