

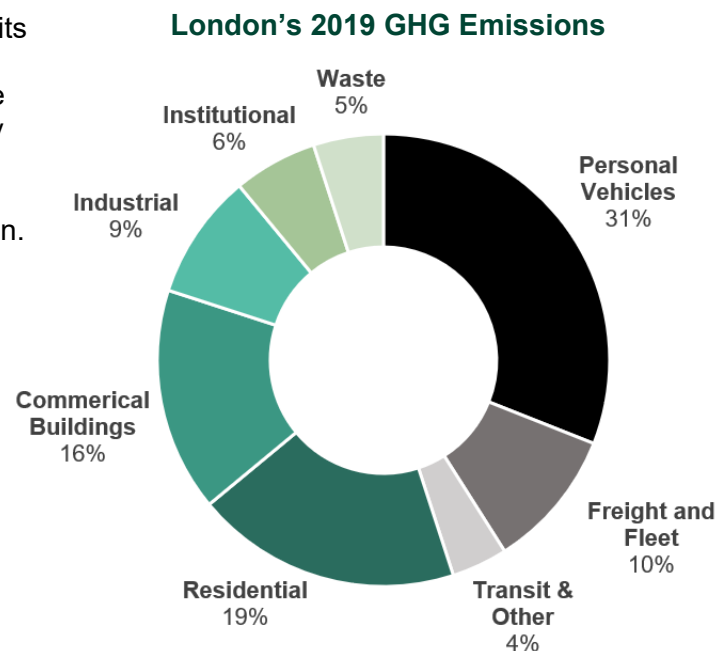
The Mobility Master Plan will be a vital tool guiding the reduction of London's greenhouse gas emissions and adaptation to the changing climate.

Climate Change and Transportation

WHAT IS THE RELATIONSHIP BETWEEN CLIMATE CHANGE AND TRANSPORTATION?

Mobility decisions made today have a major impact on London's ability to meet its Climate Emergency Action Plan (CEAP) goals leading up to 2050. This is because mobility related activities represent nearly half of London's total annual greenhouse gas emissions (GHGs) with personal vehicles contributing the largest proportion.

The changing climate is also resulting in damage to the mobility system itself through increasingly extreme weather including heat waves, ice storms, flooding, and more pothole-forming freeze and thaw cycles annually. The large amounts of impervious surfaces for roads and parking lots further increase the impacts of the changing climate through the 'heat island effect' and stormwater runoff. As a result, the mobility system has a big role to play in reducing London's GHGs and adapting to a changing climate.



Source: 2019 Community Energy and Greenhouse Gas Emissions Inventory, 2022

WHERE DOES LONDON WANT TO BE IN THE FUTURE?

After declaring a climate emergency in 2019, London's CEAP set three goals including achieving net-zero emissions by 2050, increasing resilience to climate change impacts and bringing everyone along. The CEAP outlines actions across many sectors to meet these goals, including numerous mobility and land use related initiatives. For Londoners, these actions mean:

- Promoting the development of compact, mixed-use and complete communities with everyday needs located closer to home.
- Expanding and improving walking and cycling infrastructure.
- Making transit services more convenient and reliable.
- Reducing reliance on personal vehicles.
- Reducing or eliminating fossil fuel use for all modes.

With the mobility system being a major contributor to London's annual GHGs, the Mobility Master Plan (MMP) will be an important document guiding the implementation of these initiatives towards achieving these essential goals.

Net-zero emissions means offsetting any remaining GHGs through London's urban forest and other natural and technology-based carbon-capture.

Learn more about London's plans to address climate change online at getinvolved.london.ca/climate

HOW WILL THE MOBILITY MASTER PLAN SUPPORT LONDON'S CLIMATE EMERGENCY ACTION PLAN GOALS?

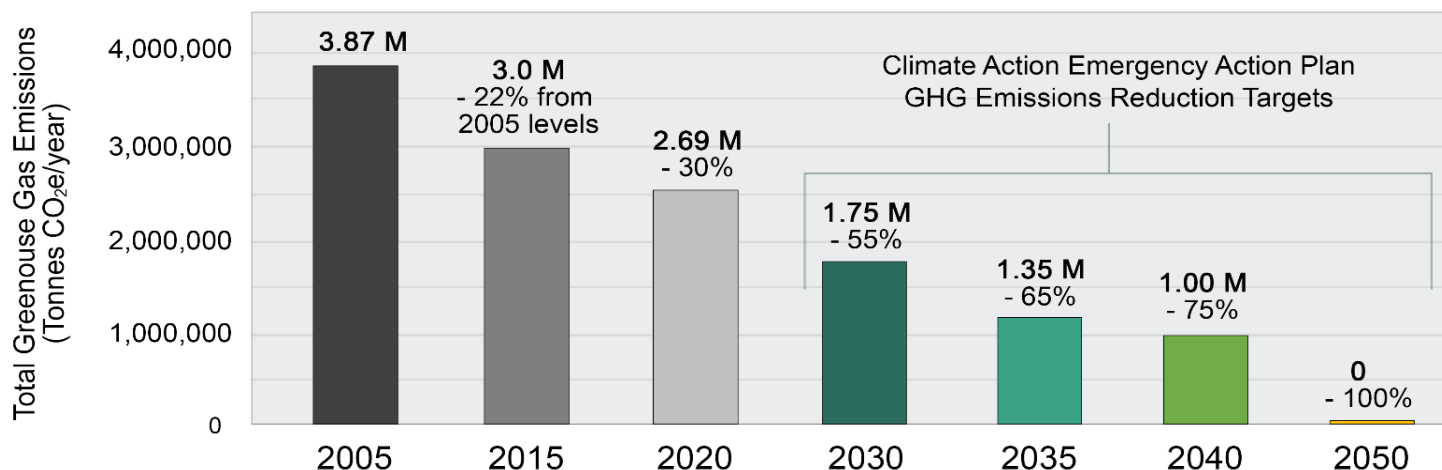
Reducing reliance on personal vehicles – Walking, cycling and transit produce significantly less GHG emissions than most vehicles, making their increased use a key component of meeting the CEAP goals. To increase their use, these travel options need to be convenient, safe, affordable and reliable for more people and more trips. For example, initiatives such as significant recent expansions to the cycling network and investments in rapid transit will make cycling and taking transit more viable options for people, reducing reliance on personal vehicles. The MMP will develop policies and identify gaps in walking, cycling and transit infrastructure and supports to meet transportation needs and achieve emission reductions.

Promoting the development of compact, mixed-use and complete communities – Complete communities are designed with most daily needs in close proximity to each other resulting in shorter trips which are more conducive to walking and cycling. Continuous networks of sidewalks and protected cycling infrastructure are also essential components of any complete community making it easier for people to choose to walk or cycle. The MMP will develop policies that promote the development of complete communities, so people are able to choose to walk and cycle for more trips more often which helps reduce GHG emissions. Complete communities that support walking and cycling also makes it easier to access transit services for longer trips.

Supporting a transition to zero emissions vehicles – While London is planning a future that relies less on personal vehicles, driving or riding in a vehicle will remain an essential mobility option for the coming decades. Zero emission vehicles (ZEVs) nearly eliminate direct tailpipe emissions from vehicle operation making their uptake important for London's climate action. To support the transition to ZEVs, broadly available charging/alternative re-fueling infrastructure will be required. ZEV uptake must be done in combination with increased walking and cycling, as a continued dependence on private vehicles continues to present challenges related to road safety, public health, land use, congestion and creating vibrant city spaces among others. To curb emissions even further, London Transit Commission is also working towards a zero-emission bus fleet. The MMP will support London's transition to ZEVs, while prioritizing making walking, cycling and transit more viable options.

Planning for mobility infrastructure that supports climate resilience and environmental sustainability – Mobility infrastructure itself has a role to play in supporting climate resilience and environmental sustainability. Low-impact design practices help to both reduce emissions produced in the development of new infrastructure and increase climate resilience by employing techniques to withstand and reduce the impact of climate events. For example, low-impact development features that improve the absorption of stormwater runoff can reduce and potentially avoid flooding, preventing damage to transportation and other infrastructure, while also potentially preserving water quality. The MMP will embed sustainability and resiliency into future mobility system plans by developing policies that promote low-impact construction techniques, materials, and overall infrastructure design throughout the mobility network.

London's GHG Emission Reduction Targets



Source: Climate Emergency Action Plan, 2022