

Climate Change Risks to Goods Movement



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Importance of Goods Movement in Peel

- Approximately \$1.8 billion of goods move through Peel Region every day
- Goods movement industries contributed:
 - \$49 billion of GDP to Peel's economy
 - 48% of all industrial and commercial taxes in Peel
 - 43% of jobs in Peel



Goods movement-dependent industries represent **4 out of every 9 jobs** in Peel.

At a Glance

29%



Of the weight of goods shipped in Ontario originates or ends up in Peel Region



Over one in every three truck trips (36%) in Ontario start or end in Peel Region



Of the goods value shipped by truck in Ontario originates or ends up in Peel Region

Over 1/2
of the 951 000 weekly truck trips in Ontario use Peel roads

8.6 Million
Kilometers driven on a weekly basis by trucks on Peel roads

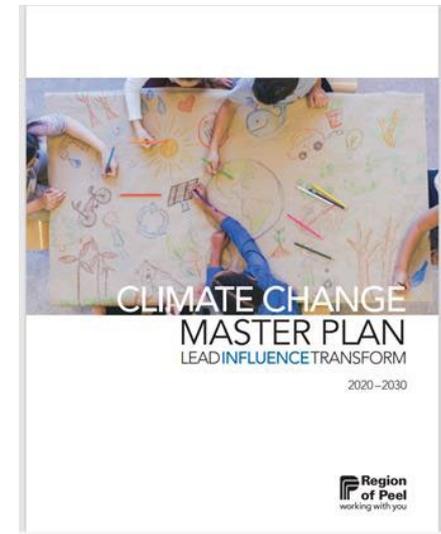
Climate Change Risks to Goods Movement Study Results

- In 2019, the Audit and Risk Committee (ARC) requested that a Study be conducted to assess climate change risks to the goods movement sector
- The Study involved a literature review of key climate change hazards and outlined a framework for a detailed assessment of the movement of goods within Ontario and the Great Lakes Region, including Peel
- The Study found that the Goods Movement Sector is vulnerable to a range of climate-related hazards such as extreme precipitation, intense heat, and freeze-thaw cycles, and that climate-driven disturbances to goods movement in Ontario are likely to cause financial losses, affect human health and safety, and reduce overall productivity
- The ARC received the Study in May 2022 and requested that staff present the findings and next steps to Regional Council



Integrating Climate Change into Regional Plans

- The Region's commitment to respond to the climate emergency is guided by the Region's Climate Change Master Plan
- The role of the Region, in relation to supporting the Goods Movement Sector from the effects of climate change, is to plan, build and maintain a sustainable and resilient transportation infrastructure system
- In addition, the Region works with agency partners through the Peel Climate Change Partnership, which includes Conservation Authorities, to assess vulnerabilities and propose strategies to increase community resiliency
- Ontario municipalities are required to address climate change impacts through a range of policies, plans, and programs such as:
 - Official Plan Policies
 - Master Plans
 - Asset Management Plans
 - Environmental Assessments



Adapting Peel's Infrastructure to Support Goods Movement - Initiatives Underway

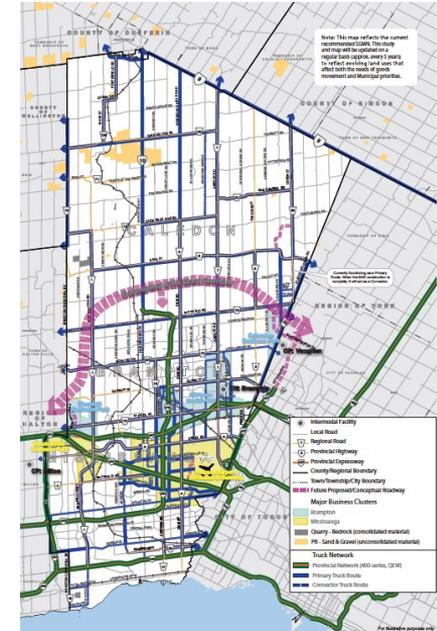
- Climate change adaptation initiatives are currently underway to better understand future climate scenarios and plan for sustainable transportation services and infrastructure including:
 - Updating asset lifecycle strategies to ensure our transportation network is resilient
 - Planning to identify critical goods movement routes and alternate routes in times of emergency
 - Incorporating climate change scenarios into the stormwater capacity model
 - Applying updated stormwater design criteria that identifies and evaluates climate change risks and impacts at a project level



How the Region will Support the Goods Movement Sector through Infrastructure Adaptation

- The Region will continue to leverage transportation planning, asset management planning and climate risk assessment processes to anticipate and plan for adaptation measures and inform emergency preparedness
 - The Region's Transportation Master Plan update will include a review of the Strategic Goods Movement Network
 - Staff will undertake Corporate-wide climate change risk assessment, including transportation assets
 - The Region will leverage Conservation Authority capacity to support Region of Peel climate change planning efforts (e.g. flood mapping)
 - The Region will enhance infrastructure design standards and maintenance routines to take into account climate change impacts
- The Region acknowledges the importance of our role in supporting the goods movement sector through the sound planning and management of our transportation network and is well positioned to respond

Strategic Goods Movement Network



Thank you!