



Central Okanagan Regional Goods Movement Study

Report Presentation

June 2023



Purpose and objectives of this study

1. **Better understand existing goods movement** to, from, through, and within the Central Okanagan region.
2. **Analyze current and future trends** that will influence the movement of goods to, from, through, and within the Central Okanagan region.
3. **Develop strategies, recommendations, and innovative solutions** that will support the safe, efficient, and sustainable movement of goods as the region grows. Recommendations will help to inform future provincial, regional, and local transportation planning decisions.

Objectives

Assess industry access and constraints to/from, through, and within regional, provincial, national, and international markets

Assess the relationship between industry, transportation, land use and economic development

Identify long-term congestion management strategies

Identify sustainable urban goods movement strategies

Review current and future travel and technology trends

Assess the truck route network

Methodology

Study based on stakeholder engagement, data analysis and literature review

➤ **Goods movement stakeholders shared their issues and opportunities:**

- Meetings with 23 local businesses/shippers, truck carriers, infrastructure owners, industry associations, municipalities, two First Nations and Kelowna International Airport
- Web survey of small businesses, circulated by the Kelowna Chamber of Commerce to members

➤ **Big Data used to analyze relationship between goods movement, economic activity and land use:**

- Truck GPS data (Geotab Altitude data; Central Okanagan sample of ~260,000 trips from 2019)
- MoTI Traffic Data Program (counts)
- Business establishment data (licensed from Scott's Directories)
- Land use data compiled from municipalities and First Nations in the region

➤ **Literature review looked at trends, technologies and decarbonization opportunities**

Goods movement and logistics are being shaped by several emerging trends

➤ Overarching disruptors are reshaping goods movement and logistics around the world and are being felt in the Central Okanagan, notably:

- Climate change
- Supply chain disruptions
- Digitalization

➤ Global logistics trends and emerging technologies are also relevant, such as:

- Automation of manufacturing
- E-commerce growth

➤ Mitigating the impact of climate change (decarbonization)

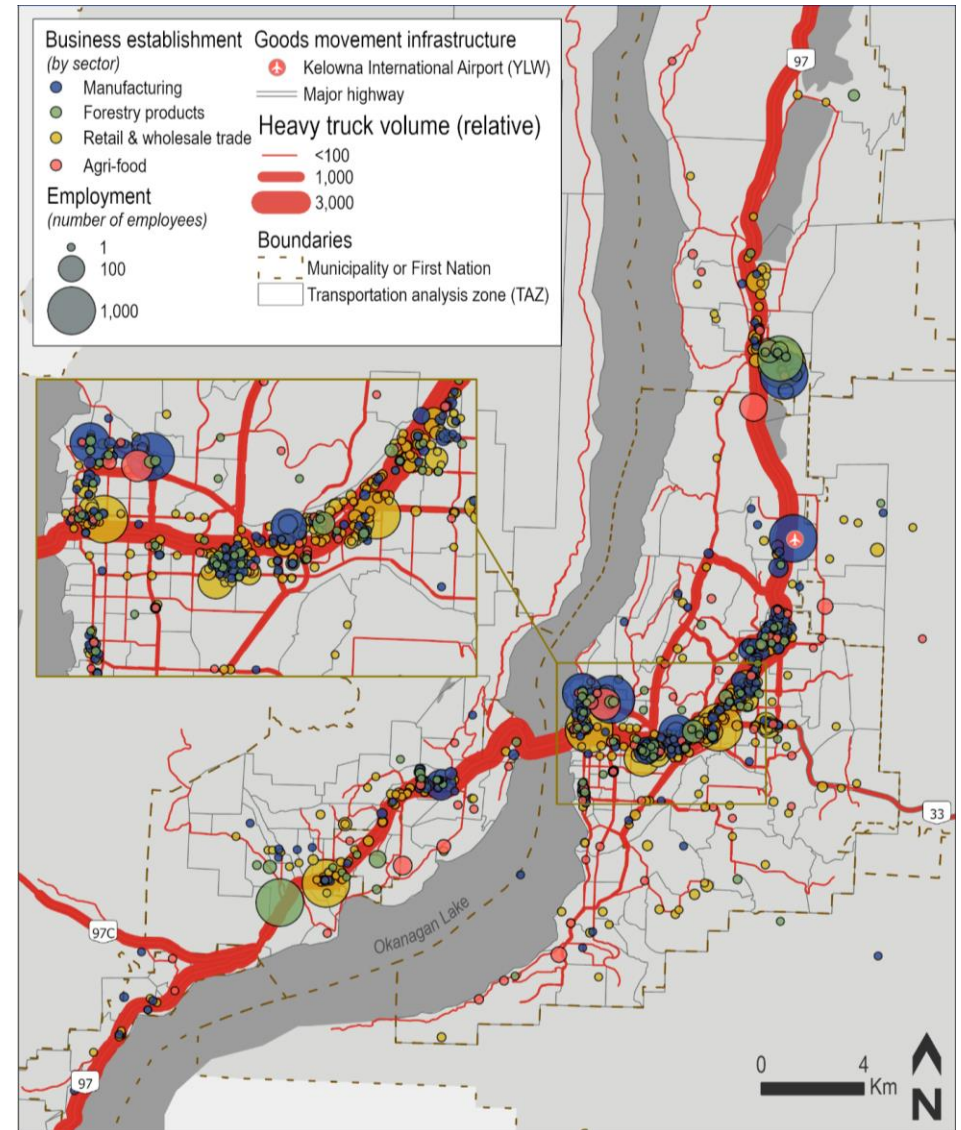
- Driving the uptake of zero-emission and other alternative fuel vehicles (i.e., ZEVs)



Source: CPCS, DKCI, Drive BC and City of Kelowna

Highway 97 is the primary goods movement corridor

- Volume of goods movement activity on Highway 97 larger than on any other corridor in region
- 70%+ of goods-generating businesses and logistics providers are clustered along Highway 97, measured by jobs within 1 km of Highway 97
 - Approximately 70% of the businesses in agriculture/food processing (agri-food), forestry products, other manufacturing, and wholesale and retail trade
 - Approximately 87% of transportation and warehousing businesses
- Light-duty vehicle volumes are the majority of traffic, however medium- and heavy-duty vehicle volumes are growing more quickly

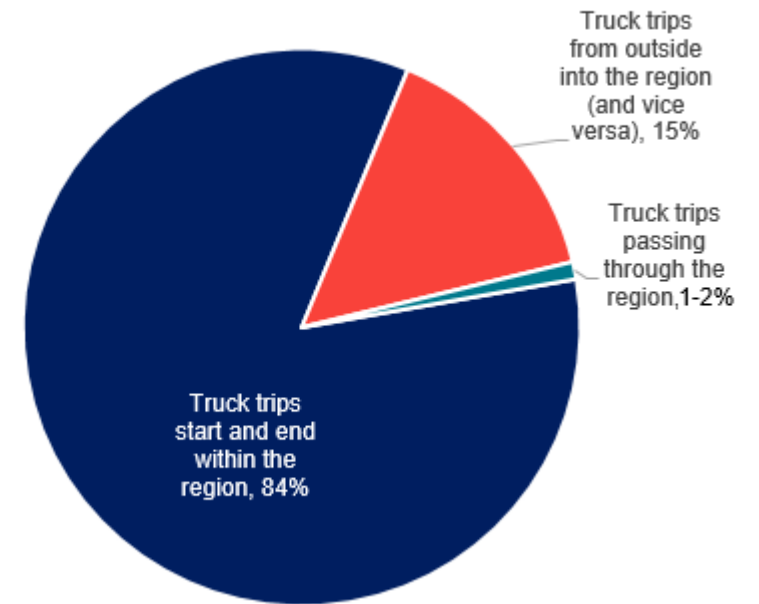


Source: CPCS based on Geotab and Scott's Directories data

Most goods movement activity in the Central Okanagan is serving the region

Trucks are not just passing through . . .

- **84%** of truck trips are entirely within the Central Okanagan (start and end within the region)
- **15%** truck trips originate from outside the region with a destination inside the region (and vice versa)
- **1-2%** truck trips are passing through the region (both trip ends are external to the region)



Source: CPCS based on Geotab data. Note, this graphic assumes 10-minute stop duration to estimate through trips.

Problem Statement

- Problems are challenges that are impacting or could impact goods movement.
- Problem Statement based on our review of goods movement data and discussion with industry stakeholders.
- Many of the problems may be driven by similar trends and are interrelated.



Strategic Directions

- To help address these issues, the report includes **6 Strategic Directions**. These are supported by **26 actions** and **42 recommendations**
- A. *Manage congestion on Highway 97 and develop a strategic goods movement network***
 - B. *Increase resiliency of road and air access to/from the Central Okanagan, including support for intermodal (rail-truck) terminals in the BC Interior***
 - C. *Protect industrial land supply and coordinate with transportation infrastructure projects***
 - D. *Plan for goods movement in urban areas***
 - E. *Accelerate adoption of zero-emissions goods movement vehicles and provide supporting infrastructure***
 - F. *Improve public and private sector collaboration on goods movement***

Strategic Direction A

Manage congestion on Highway 97 and develop a strategic goods movement network

Operations and infrastructure - Recommendation Highlights:

- **Operational reviews, including signal timing, progressions and phasing improvements.**
- **Parallel road infrastructure along Highway 97, including the **Clement Avenue extension.****
- **Intersection improvements at Airport Way / Highway 97.**
- **Parallel roads that tie into trade lands at YLW, such as the extension of Rutland Road North/ Al Horning Way.**

Strategic Direction A

Manage congestion on Highway 97 and develop a strategic goods movement network

Ensure goods movement is given appropriate weighting in future corridor planning - Recommendation Highlights:

- **Goods movement metrics** in MOTI's Multiple-Account Evaluation and municipal transportation planning.
- **Strategic Goods Movement Network (SGMN)** designation.
- **Truck route network** update.

Strategic Direction B

Increase resiliency of road and air access to/from the Central Okanagan, including support for intermodal (rail-truck) terminals in the BC Interior

Infrastructure - Recommendation Highlights:

- **Highway infrastructure improvements** outside the region:
 - **In the Fraser Valley** and on **Highway 1** to Calgary.
 - Upgrade **Highway 3** as an alternative to Highway 5.
- **Support for multimodal rail terminal development** in the Interior.
- **Role for Kelowna International Airport** during highway closures.



Strategic Direction B

Increase resiliency of road and air access to/from the Central Okanagan, including support for intermodal (rail-truck) terminals in the BC Interior

Driver performance and service - Recommendation Highlights:

- **Information technology (IT) solutions and educational material** to improve planning and productivity:
 - **Province-wide truck route guidance app.**
 - **Guidance to shippers to help get their goods to market.**

- **Driver amenity improvements** (e.g., truck parking, rest stops, new or upgraded facilities, etc.).

Strategic Direction C

Protect industrial land supply and coordinate with transportation infrastructure projects

Recommendation Highlights:

- **Protect existing industrial land supply.**
- **Ensure sufficient zoned and designated land for emerging industries.**
- **Integrate warehouses and distribution centres in denser urban areas.**
- **Protect trade & industrial lands at/around YLW.**
- **Enhance truck access and manage truck flows to the **Jim Bailey Industrial Area:****

 - Work to minimize impacts of truck activity on residents and Duck Lake reserve.



Strategic Direction D

Plan for goods movement in urban areas

Recommendation Highlights:

- Improve the flow of first- and last-kilometre deliveries made on-street:
 - Conduct an urban goods movement operational review, e.g., off-hours delivery, on-street loading
- In new developments, limit on-street deliveries, for example:
 - Residential: include secure courier drop-off areas
 - Non-residential: Site plans that consider loading bays and delivery truck circulation and parking needs



Source: DKCI

Strategic Direction D

Plan for goods movement in urban areas

Recommendation Highlights:

- Prepare for and support emerging sustainable delivery practices:
 - Micro-hubs, cargo bikes, electric vans, ride-hailing, drones.
- Promote safety of goods movement vehicles to reduce impacts on vulnerable road users:
 - Consider additional safety devices on medium- and heavy-duty goods vehicles.



Source: BC MOTI and CPCS

Strategic Direction E

Accelerate adoption of zero-emissions goods movement vehicles and provide supporting infrastructure

Recommendation Highlights:

- **Green provincial and municipal fleets.**
- **Market incentives and supportive infrastructure:**
 - Public charging and **low/zero-emissions refueling stations.**
 - **Support for uptake of new technologies** by goods transporters and couriers, especially independents.
- **Preparations for other new technologies.**



Source: Steve Jurvetson/Wikipedia/CC BY 2.0

Strategic Direction F

Improve public and private sector collaboration on goods movement

Recommendation Highlights:

- Continued **public and private sector collaboration.**
- **Goods movement data collection.**
- **Importance of goods movement to the economy and people's lives.**



Source: City of Kelowna

Implementation will involve partnerships

Strategic direction	Key partners*
Strategic direction A: Manage congestion on Highway 97 and plan for goods movement	MOTI, Central Okanagan governments
Strategic direction B: Increase resiliency of road and air access to/from the Central Okanagan, including support for intermodal (rail-truck) terminals in the BC Interior	MOTI, Central Okanagan governments, BC Trucking Association, RCMP, infrastructure developers
Strategic direction C: Protect industrial land supply and coordinate development of these lands with transportation infrastructure projects	MOTI, Central Okanagan governments
Strategic direction D: Plan for goods movement in urban areas	Central Okanagan governments, local businesses, delivery companies, developers, MOTI
Strategic direction E: Accelerate adoption of zero-emissions goods movement vehicles and provide supporting infrastructure	MOTI, Central Okanagan governments, BC Hydro
Strategic direction F: Continue to improve public and private sector collaboration on goods movement	MOTI, Central Okanagan governments, BC Trucking Association, local business groups and economic development associations

*MOTI includes partner provincial ministries where relevant, e.g. Ministry of Environment and Climate Change Strategy (Strategic Direction E)

Why this matters

- **Goods movement is fundamental to the region's wellbeing and prosperity**
 - Enables supply of goods and services while opening doors to domestic and global markets.
 - But congestion and other challenges add real costs to goods movement and reduce competitiveness.
- **Goods movement is a vital component of local economic, planning and sustainability plans – but is often overlooked**
 - Part of the problem (e.g., congestion) but also part of the solution (e.g., decarbonized vehicles).
 - Solutions require a cooperative effort among all local public- and private-sector stakeholders.
- Recommendations aim to **make goods movement safer, more efficient and more sustainable**





Questions





Thank you!

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