3. Curbside management tactics

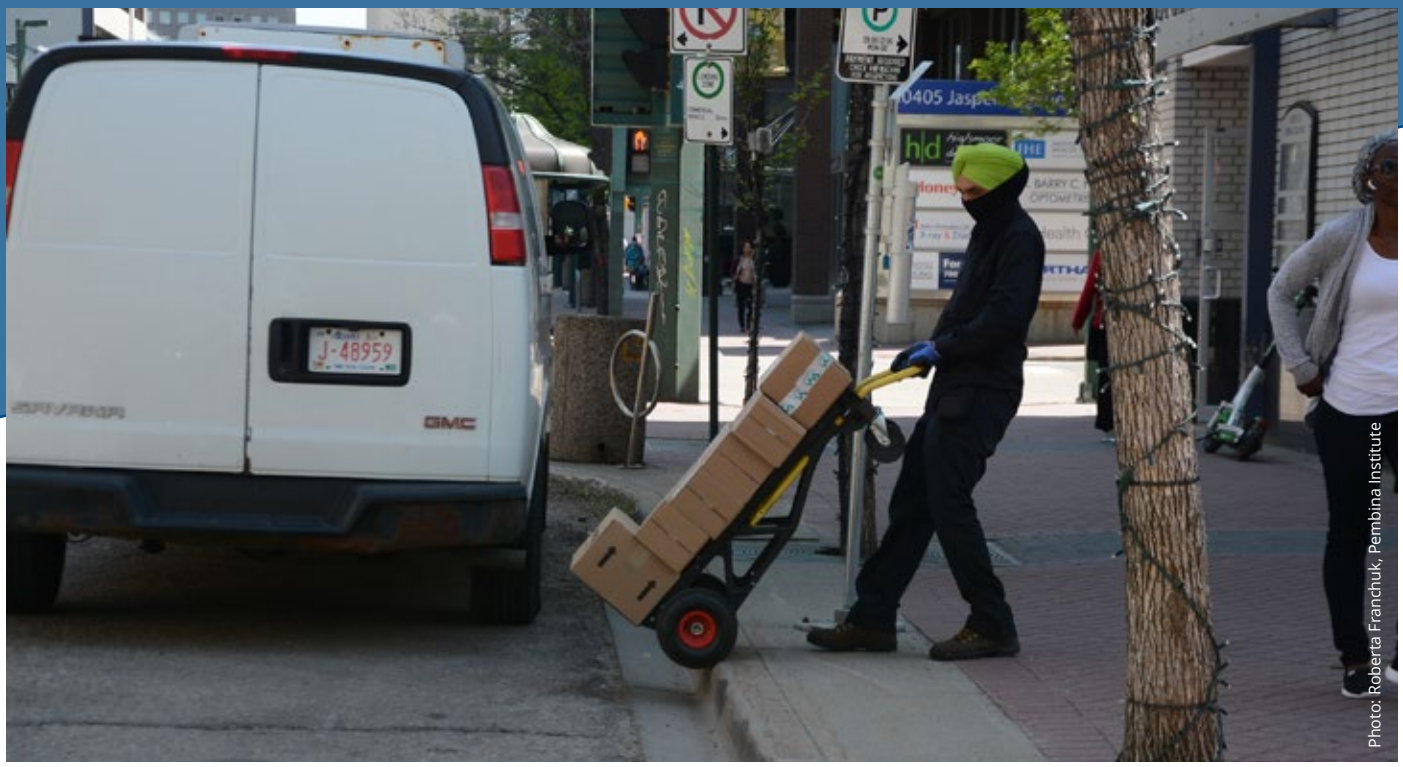

Photo: Roberta Franchuk, Pembina Institute

Increased competition for the curbside means increased traffic, congestion and safety risks.

Challenge: Parking violations such as double or illegal parking and longer cruising times of freight vehicles as they find loading spaces lead to more congestion, higher air pollutant emissions, and a higher risk of traffic-related injuries.

Solution: **Curbside management tactics** are essential as competition for the curb grows. Under this umbrella, there are three main strategies that could be combined or applied independently to manage activity at the final destination of last-mile deliveries: 1) allowing for deliveries during off-peak hours; 2) establishing and pricing courier loading zones; and 3) regulating the kinds of vehicles, such as allowing cargo bikes, in loading zones.

Taking Action

Amend or create new regulations

Establish financial or non-financial mechanisms

Provide loading zone access to smaller or zero-emission delivery vehicles

Why: In dense urban centers, curbside space is in high demand not only by delivery vehicles, but also other road users including ride-sharing vehicles, cyclists, buses, taxis, garbage trucks, emergency services, food trucks, and construction workers. Increased competition for the curbside means increased traffic with more delivery vans and trucks cruising streets looking for a space to park, increased congestion, and more safety risks for pedestrians. Now

more deliveries are going directly to customers' homes instead of businesses, making this a challenge in residential neighborhoods, too. Pricing parking spots in popular courier zones helps prioritize parking access to couriers and reduces carbon and air pollution by reducing vehicle idling and parking search times. To reduce the likelihood of congestion and traffic-related injuries, cities can try to reduce truck volumes on the road during peak hours by allowing for smaller delivery vehicles like cargo bikes to park in vehicle loading zones, or by enabling trucks to complete deliveries during off-peak hours when there is less activity on the road overall. Off-peak deliveries also help reduce air pollutants by allowing trucks to complete their deliveries faster.

City spotlights: Zaragoza, Spain; Eindhoven, Netherlands; Region of Peel, Canada; Washington, D.C., U.S.; City of Toronto, Canada; New York City, U.S.

> Most recently, as a COVID-19 response measure, both Zaragoza, Spain and Eindhoven, Netherlands, implemented off-peak tactics. In Zaragoza, loading and unloading hours were extended to 24 hours per day for businesses; in Eindhoven, delivery hours were extended to 24 hours per day for supermarkets to alleviate congestion from distribution of groceries.
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> In 2019, the Smart Freight Centre conducted an off-peak delivery pilot in Ontario's Peel Region between March and August. They shifted approximately 1,600 deliveries to 14 retail stores in the region to off-peak hours between 7 p.m. and 7 a.m. Compared to day-time deliveries, off-peak deliveries were 18 percent faster, emitted 11 percent less greenhouse gases per kilometer, and reduced air pollutants by up to 15 percent. A follow-up study on the topic is currently underway.
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> When it comes to freight zone pricing, the District Department of Transportation (DDOT) in Washington, D.C., implemented a commercial loading zone pricing scheme in 2015, which decreased the number of double-parking violations and non-truck parking in loading zones by more than 50 percent. Although the pricing scheme was initially met with pushback from delivery companies after it launched as a pilot in 2007, companies were eventually willing to pay the curbside fee once they realized the efficacy of the program (e.g. increased parking reliability, time savings for loading and unloading). DDOT recognizes in its Commercial Loading Zone policy that curbside pricing can also be used to achieve environmental goals, noting that commercial loading zones should be established and managed in such a way that mitigates congestion and improves air quality simultaneously.
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> In 2015, the City of Toronto implemented courier loading zones to provide designated curbside space for "short-stop deliveries" with a maximum stop time of 20 minutes. The city was required to change its municipal code in order to make the delivery parking zone enforceable by law.
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> Providing cargo bikes with preferential curbside access can also be effective. Also in 2019, New York City announced a program that would allow e-cargo bikes to park in existing commercial loading zones that are usually reserved for trucks and vans. The program was implemented as part of New York City's efforts to improve road safety, tackle congestion, and reduce transportation GHG emissions.

For implementation:

- Curbside management tactics do not require equipment or new infrastructure, they can be implemented simply by creating or amending regulations, such as allowing deliveries in off-peak hours.
- Establish financial (e.g. Washington D.C.) or non-financial mechanisms (e.g. Toronto) to prioritize curbside use for commercial vehicles such as preferential pricing at loading zones.
- Improve the range of how commercial loading zones are used either by creating dedicated commercial loading zone areas and/or enabling smaller zero-emission delivery vehicles to access the same areas as courier trucks.