PUTTING WHEELS ON THE BUS

Unlocking the Potential of Public Transit to Cut Carbon Emissions in Canada

February 2024

environmental defence

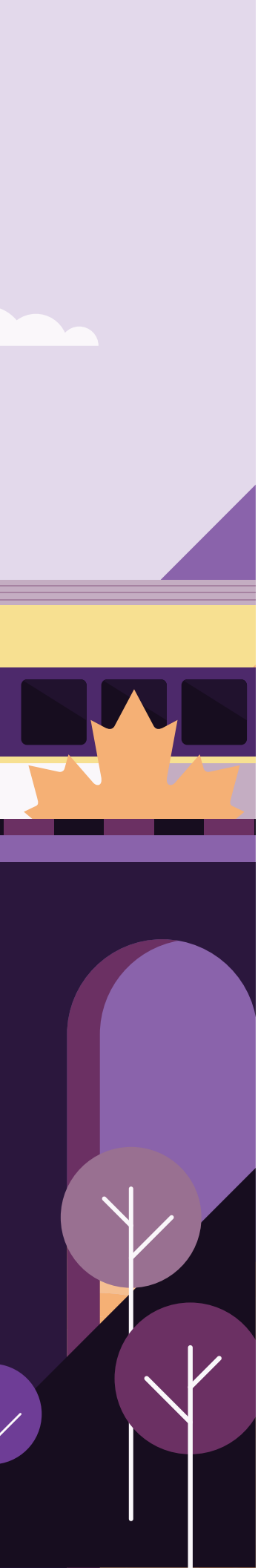
Équiterre

About Environmental Defence
Environmental Defence is a leading Canadian environmental advocacy organization that works with government, industry and individuals to defend clean water, a safe climate and healthy communities.

For over 35 years, Environmental Defence has worked at the municipal, provincial and federal levels of government to safeguard our freshwater, create livable communities, decrease Canadians' exposure to toxic chemicals, end plastic pollution, tackle climate change and build a clean economy.

About Équiterre
Équiterre seeks to make the necessary collective transitions toward an equitable and environmentally sound future more tangible, accessible, and inspiring. Since 1993, Équiterre has been helping to find solutions, transform social norms, and encourage ambitious public policies through research, support, education, mobilization, and awareness-building initiatives.

This progress is helping to establish new principles for how we feed ourselves, how we get around, and how we produce and consume, that are designed for our communities, respectful of our ecosystems, in line with social justice, and of course, low in carbon.



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EXECUTIVE SUMMARY

To confront the climate crisis, Canada must rapidly reduce greenhouse gas emissions in the transportation sector, which constitute a quarter of Canada's total emissions.

Despite the zero-emissions vehicle (ZEV) adoption targets in the *2030 Emissions Reduction Plan and Action Plan for Clean On-Road Transportation,* the federal government has no targets to increase public and active transportation use.

This is a problem because it indicates that Canada's strategy for reducing transportation emissions lacks a focus on shifting travel demand away from private vehicles, something that is present in national and sub-national climate plans from around the world, including British Columbia, Quebec, California, Scotland, Ireland and New Zealand.

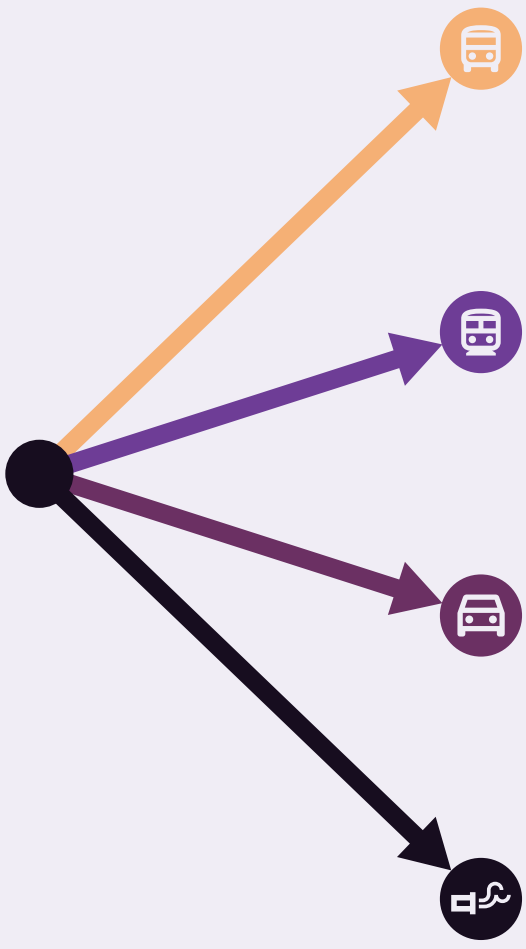
To shape post-pandemic mobility in cities, the International Transport Forum (ITF) has recommended the adoption of the 'decide and provide' framework. This framework understands that it is ultimately policy choices which determine travel demand patterns. How we move can be shaped in a sustainable direction by making different policy choices that emphasize sustainable modes like public transit, walking, cycling, and building a compact urban form. But this means creating a vision for the future and acting on it.

Canada is nearly 40 per cent below the Organization for Economic Cooperation and Development (OECD) average for public transit utilization (ridership per capita) in urban areas with transit service. But with the creation of the forthcoming *Permanent Public Transit Fund*, Canada has a historic opportunity to catch up to our global peers on public transit performance.

According to modelling conducted by Dunsky Energy + Climate Advisors, commissioned by Environmental Defence and Équiterre, if the forthcoming *Permanent Public Transit Fund* includes policies such as public transit operating funding, federal strings to encourage housing density near public transit, zero-emission bus procurement requirements and incentives for cities to speed up public transit service with dedicated bus lanes, Canada can:

- Double public transit ridership by 2035.
- Achieve more than 30 per cent of all travel in major cities (populations above 400,000 people) being made by public transit, and 20 per cent overall across Canada.
- Reduce Vehicle Kilometres Travelled (VKT) by 35 per cent below 2019 levels by 2035.
- Cumulatively reduce transport-related carbon emissions by 65 million tonnes by 2035.

Progress so far on improving public transit service has stalled and is now going backwards. Public transit service levels, measured in vehicle service kilometres per person, is now 7 per cent lower than it was in 2016, the year that the federal government introduced the *Investing in Canada Infrastructure Program (ICIP),* which included $23.5 billion in public transit investments. Despite this program, there were fewer buses in service in peak periods across Canada in 2022 than there were in



2X

Double public transit ridership by 2035.

30%

Achieve more than 30 per cent of all travel in major cities (populations above 400,000 people) being made by public transit, and 20 per cent overall across Canada.

35%

Reduce Vehicle Kilometres Travelled (VKT) by 35 per cent below 2019 levels by 2035.

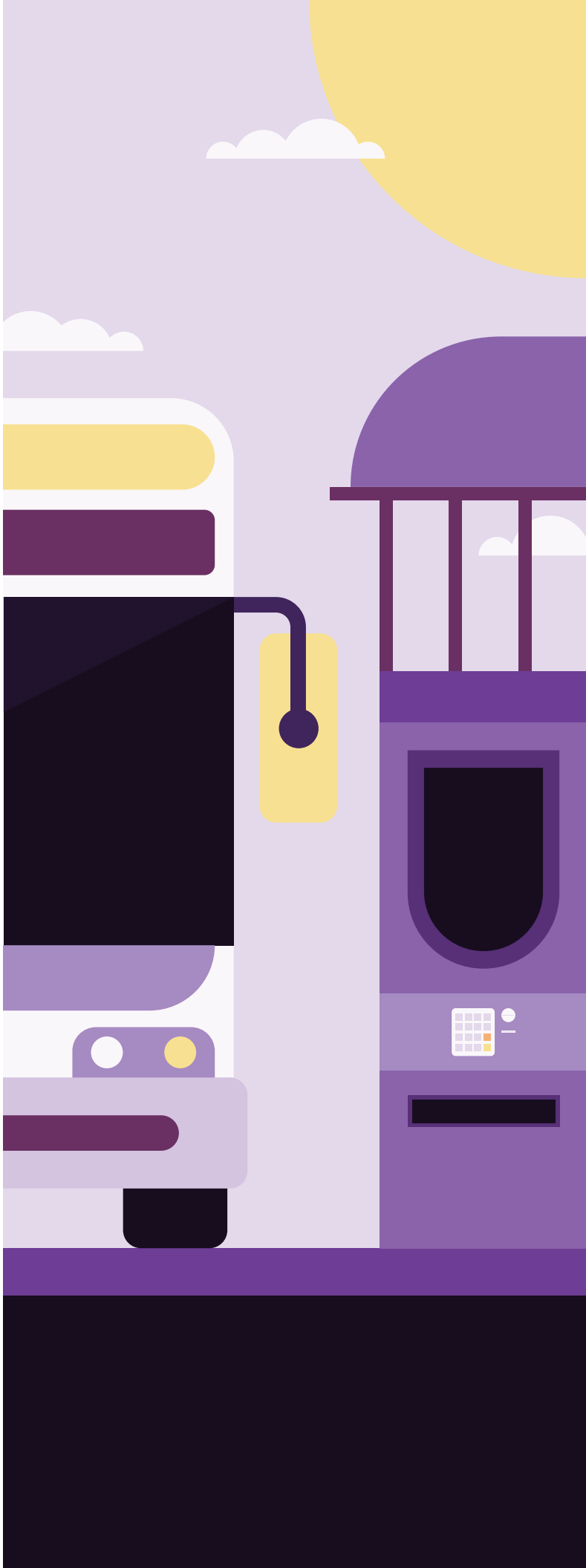
65,000,000

Cumulatively reduce transport-related carbon emissions by 65 million tonnes by 2035.

2013, a year when transit systems served 2.7 million fewer people. Canada's policy of providing only capital funding, but not operating funding, has led to the rise of the phenomenon of 'buses without drivers' with an estimated 1,700 buses across Canada sitting idle (as 'excess spares') that could be in service.

Many public transit systems across Canada continue to struggle with pandemic-related reductions in ridership, and this has created significant financial challenges for municipalities. Canada provided emergency operating funding to transit systems during the pandemic and prompted provinces to share costs to avert dramatic service cuts and prevent a 'downward spiral'. However, this funding was only temporary, and the absence of continued federal leadership on operating funding poses the risk of missing Canada's climate goals and undermining much needed efforts to increase housing supply near frequent public transit.

Federal and provincial governments must create long term, reliable operating funding streams for public transit systems that enable both ridership recovery to pre-pandemic levels and long-term climate-aligned growth beyond it. Having the operating cost burden fall primarily on local



governments and passenger fares has created chronic instability to changes in market forces and political cycles. It reinforces the tendency towards vicious cycles of cutting service, further losses in passenger revenues, and further cuts. Getting off this roller-coaster will require a diverse set of new, stable revenue tools, from a variety of tax sources and fiscal support from all orders of government.

If made available, cities should use this transit operating funding to adapt to post-pandemic travel patterns by improving travel options for non-commute trips, such as shopping, visiting friends, accessing social services or getting groceries. This will help public transit systems achieve greater financial stability by reducing reliance on revenues from one singular trip type: commuting to 9 to 5 jobs, while also benefiting the travel patterns of equity-seeking groups at the same time.

To reach the outcomes of the scenario modelled in this report, total public transit service levels across Canada must increase by 109 per cent by 2035. Assuming the federal government takes a 40 per cent share in the operating funding increase needed to support this service increase, we estimate that this would come at a fiscal cost of $35.4 billion over the next 12 years (2024-2035) above existing commitments, which averages to approximately $3 billion per year.

To place this fiscal cost in context, this could be paid for entirely by increasing the general federal tax rate on corporate profits by a single percentage point. It would comprise approximately 0.5 per cent of total projected federal expenditures in 2024.

The modelling conducted by Dunsky Energy + Climate Advisors, available in a separate technical companion report, highlights the strong linkage between housing density, public transit and emissions reductions.

“GETTING OFF THIS ROLLER-COASTER WILL REQUIRE A DIVERSE SET OF NEW, STABLE REVENUE TOOLS, FROM A VARIETY OF TAX SOURCES AND FISCAL SUPPORT FROM ALL ORDERS OF GOVERNMENT”

The emissions reductions from changing the built environment of our towns and cities is enabled by robust public transit service and infrastructure and has the greatest impact among all policy measures. As Canada tackles both the housing and climate crises, public policies must be pulling in the same direction: we cannot be building dense housing near transit stations while cutting how frequently the service is running, and we cannot be building public transit infrastructure in a sea of low density single-detached homes.

The federal government should attach strings to public transit investments to drive multiple outcomes and encourage best practices, including delivering housing supply and housing affordability near public transit, encouraging operational efficiency and requiring transit fleet electrification.

All of these policy interventions can be achieved with the program design of the *Permanent Public Transit Fund* and negotiated infrastructure settlements with provinces, territories and cities.

As our country grows, Canada cannot continue with the status quo of furthering car-dependent urban sprawl. Instead of grinding our cities to a halt with gridlock, we can instead choose to grow public transit systems and leverage infrastructure investments to shift the built form of our cities to support higher public transit use, less traffic, housing abundance and zero emissions mobility that is universally accessible to all. As highlighted by the modelling by Dunsky Energy + Climate Advisors, this is not only possible - but within reach.

POLICY RECOMMENDATIONS

FUND PUBLIC TRANSIT OPERATIONS TO ENABLE RIDERSHIP GROWTH

- Make full use of expanded public transit service capacity to actually provide more service, stop cuts and prevent the public transit 'downward spiral'.
- Transform commuter-centric public transit network designs towards supporting a broader range and variety of trip types with all-day frequent bus service.
- Create operating funding incentives that encourage efficiency and the increased provision of dedicated transit rights-of-way.

LINK HOUSING OUTCOMES TO PUBLIC TRANSIT INVESTMENTS

- Require all public transit funding agreements with major cities to include 'Supportive Policies Agreements' with land-use standards such as pre-zoned housing density minimums near public transit and the elimination of minimum parking requirements.
- Supportive Policies Agreements should encourage public transit systems to redevelop transit-owned parking lots into housing and amenities, while supporting transit systems to enable 'first and last mile' connections to transit stations by sustainable travel modes.

ADVANCE EQUITY GOALS WITH PUBLIC TRANSIT

- Help public transit systems adapt to post-pandemic travel patterns and better serve the travel patterns of equity-seeking groups by supporting the increase of transit service outside of peak periods.
- Make low-income fare discounts eligible for federal operations funding.
- 'Supportive Policies Agreements' should require anti-displacement strategies to ensure that those most likely to take public transit can actually afford to live near it.

ESTABLISH ZERO EMISSION BUS AND ROLLING STOCK PROCUREMENT REQUIREMENTS

- Shift from funding a series of one-off electrification projects and procurements to making zero-emissions public transit a core feature and requirement of ongoing, permanent capital funding.
- Establish phased-in procurement requirements for zero-emission public transit vehicles as a condition for federal funding, similar to Quebec's requirement for only zero-emission buses 2026 onwards.
- Create flexibility based on community size, with an earlier deadline for large cities and later deadlines for small communities, while scaling-up capital funding to compensate for increased procurement costs.

SET CLEAR MODE SHIFT AND VEHICLE KILOMETRES TRAVELLED (VKT) REDUCTION TARGETS

- Set a target to double public transit ridership from 2023 levels by 2035 and a target to reduce vehicle kilometres travelled by 35 per cent by 2035.
- Supportive Policies Agreements with major cities should require municipalities to have Sustainable Urban Mobility Plans (SUMPs), and the federal government should establish minimum mode shift targets expected by community size.
- Accelerate the Permanent Public Transit Fund to begin in 2024 rather than 2026.