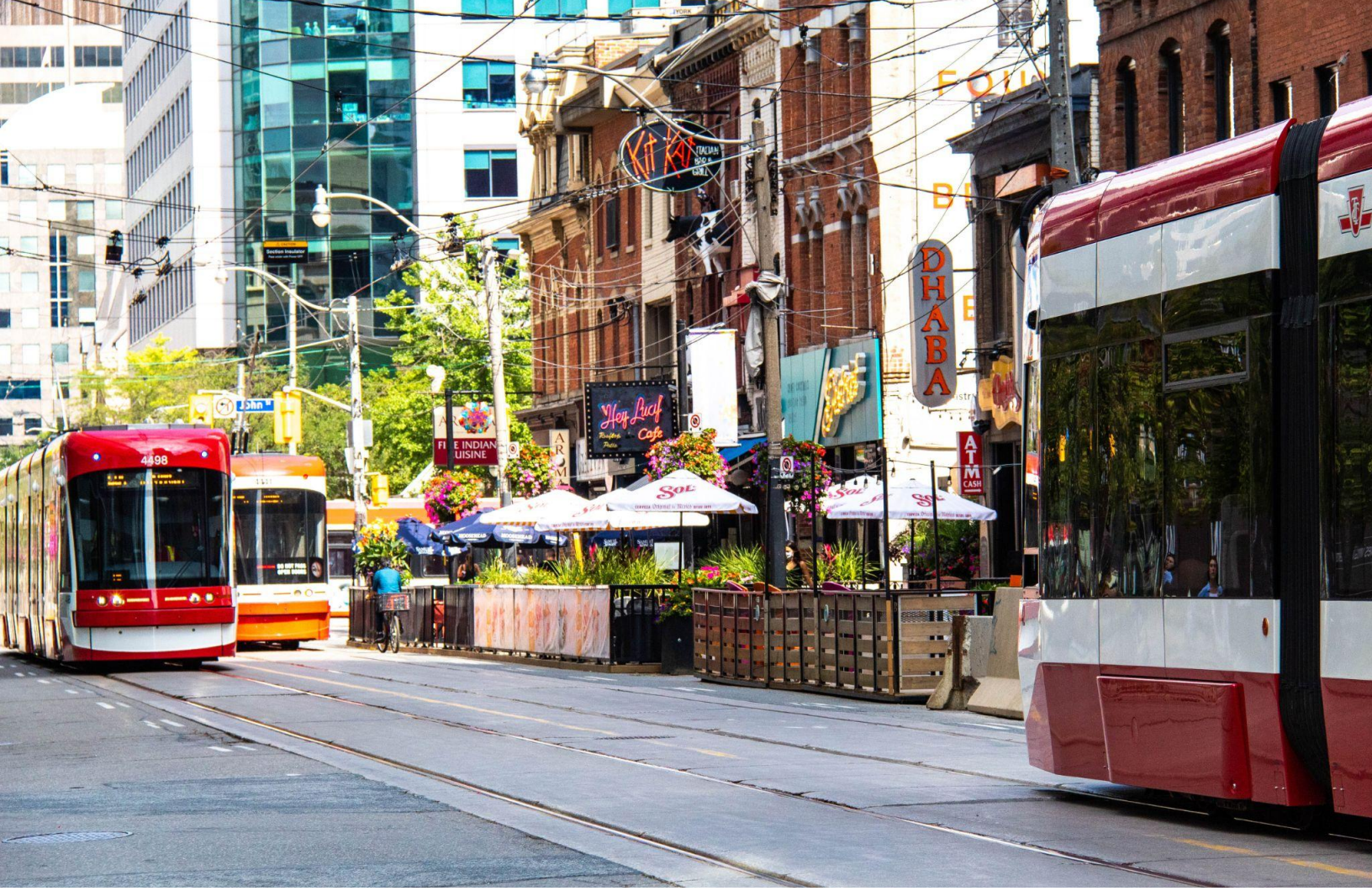

Public Transit and the Path to Net Zero:

Submission to consultations on permanent public transit funding in Canada

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Introduction

There are three pillars at the root of GHG emissions in the transportation sector, which constitute a quarter of Canada's carbon footprint. These three pillars are the carbon intensity of energy, the efficiency of the energy that is used, and the travel demand for that energy. A strongly integrated mix of complementary policies are needed for deep decarbonization of road transport.[1] These policy mixes can and should include regulatory measures (low carbon fuel standard, vehicle emissions standards, ZEV mandates), economic measures (carbon pricing, financial incentives), and most importantly - systemic measures to tackle the third pillar - denser cities, infrastructure investment and improved public transit. These measures reduce private car travel demand by reducing car dependency – through better urban planning and making alternative, sustainable modes like transit, walking and cycling convenient and attractive.

We believe that the permanent public transit fund is a historic opportunity to decarbonize the transport sector, while delivering a more inclusive economy and fostering greater social equity. But to deliver on this promise, **the design of the permanent public transit fund must recognize the following 10 principles:**

1) Public transit is an essential service, not a business.
2) Adapting to post-pandemic mobility patterns means delivering more equitable service.
3) The most powerful tool urban policymakers have to address catastrophic climate change is the humble city bus.
4) Boosting transit service supply takes both capital and operations funding.
5) Vast regional inequities in public transit service should not be perpetuated by policy design.
6) Land use matters: Public transit investment must drive densification and mix of uses.
7) The fundamental objectives of permanent transit funding won't be realized if the process of connecting dollars to projects isn't fixed.
8) Build on what works, and fix what isn't working.
9) Low public sector capacity to design and build major projects inflates capital costs.
10) Mode share should be measured properly and without bias.

Summary Recommendations

- **The federal government should make its emerging role in funding public transit operations permanent**, to foster modal shift, create more equitable transit service, reduce regional disparities, optimize the use of existing transit fleet capacity and help mitigate driver shortages.
- **The permanent public transit fund should distinguish between funding bus service and major capital projects,** by establishing a baseline, core transit funding stream structured similar to the Canada Community-Building Fund (CCBF) with capital and operations funding primarily for bus service, separate from a cost-shared major projects stream that would function much like existing transit funding under the Investing in Canada Infrastructure Program (ICIP).
- **The federal climate plan should set clear targets for an increased mode share of sustainable transportation** and tie these objectives to municipal reporting and planning requirements.
- **The federal government should accelerate permanent transit funding by two fiscal years** to make quicker progress on housing supply and emissions reductions and align with the accelerated winding down of ICIP. Additionally, scale up the funding profile of the permanent public transit funding program to successfully achieve its ambitious policy objectives.

- **The federal government should require 'Supportive Policies Agreements' with municipalities to be signed as part of business cases for all major capital projects** to increase housing supply and transit ridership.

Public transit is an essential service, not a business.
As the pandemic hammered public transit systems worldwide, devastating ridership and finances – there was one important thing that everyone recognized. Public transit is an essential service – and it has to keep running. It provided a key role taking essential workers to and from work, with critical linkages to employment, services like healthcare and ensured that millions of Canadians could get their groceries home to put on the table. While many Canadians could take refuge from the pandemic by working from home, frontline workers kept the lights on. We relied on them – and they relied on transit. The government of Canada – like many others across the globe recognized this and delivered two direct infusions of funding for public transit operations worth billions of dollars during the pandemic – to keep transit running.

The pandemic highlighted how over-reliant Canadian transit systems are on fare revenues to fund operations.

As we look to rebuild transit from the trauma inflicted by the pandemic and grow service to meet the challenges of the future, it is important to recognize that public transit is a service, not a business. Even as we emerge from the pandemic and we've stopped clapping for essential workers long ago – we still know that everyone benefits from good public transit. Whether you are someone looking for a job, or an employer trying to fill a vacancy. Whether you're a driver who wants less traffic or a transit rider who wants a clean and convenient commute. Good public transit benefits all Canadians, and the permanent public transit funding program is a historic opportunity to improve quality of life and tackle key challenges like climate change, housing affordability and building an inclusive, clean economy.

Adapting to post-pandemic mobility patterns means delivering more equitable service.

The pandemic has forever changed public transit – and if we are to harness its power to reduce emissions, build an inclusive economy, and tackle affordability challenges – we must change with it. As more Canadians continue to work from home or only return to the office 2-3 days per week, ridership patterns are now less commuter-focused than ever before, and demand peaks are now flatter.[2] We can no longer continue to rely on hub-and-spoke style transit planning and allocating service to prioritize commuters that aren't coming back to the office. Throughout the pandemic, transit demand has remained strong for low-income neighbourhoods where manual, service, and other workers who need to physically be at their workplace are more likely to live. These workers tend to be racialized. These jobs are also more likely to involve shifts outside of regular 9-5 working hours.

The pandemic proved that public transit was a key enabler of every aspect of daily life, not just a means of serving peak-hour commuting.

As many transit systems have already begun to realize, reallocating service to be spread out more evenly throughout the day, and increasing off-peak frequency to adapt to post-pandemic mobility patterns also delivers more equitable service at the same time.[3] Doubling down on this shift would be particularly transformative for Canadians who are transit dependent (e.g. women, seniors, members of the BIPOC community). For example, women – who constitute the majority of transit riders – are more likely to use

transit in off-peak hours and are more likely to take non-work-related trips and would significantly benefit from a reduced emphasis on rush-hour-oriented service.[4]

Slow, infrequent service tends to impact low-income transit riders, women and racialized transit riders the most. Increasing how frequently the bus comes and implementing priority measures increases ridership because it cuts wait times and makes bus travel times more competitive with driving. Funding transit operations is essential to improving equity and delivering on climate goals.

Many commuter rides have been lost due to increased working from home. But just because someone is working from home for most of the week doesn't mean they won't need transit for other trips like visiting loved ones, going shopping, or accessing social services. Shifting those non-work-related trips out of the automobile and onto transit is the future of ridership growth. We have a historic opportunity to better balance service from a hub and spoke model designed primarily around a traditional commute to work to providing more seamless, all day 'everywhere-to-everywhere' service. This kind of service relies on a core grid of high frequency transit service that comes so often that Canadians can 'show up and go' without worrying about the need to check a schedule.[5]

The most powerful tool urban policymakers have to address catastrophic climate change is the humble city bus.

Canada has significant potential to reduce transportation sector emissions in our cities through modal shift. Over half (55%) of all commutes in a car, truck or van are trips below 10km in length, and fully 1 in 3 (32%) are trips below 5km or less.[6] Many of these short trips could be replaced by sustainable modes of transportation, which would have a dramatic impact on reducing GHG emissions.[7] The federal government's intention to move forward with a zero-emissions vehicle mandate is a powerful method of reducing transport emissions, but its climate benefits are notably 'back-loaded', as it takes a significant amount of time for new car sales to trickle into dominating the on-road vehicle fleet. Shifting travel demand towards sustainable modes is an important tool to reduce transport emissions very quickly, in particular by harnessing the power of the noble bus.[8]

The federal government has successfully halted the dreaded 'downward spiral' of public transit. It's now time to put the 'virtuous cycle' into motion.

In TransLink's (Vancouver's transit system) latest 10-year plan – doubling bus service and making major advances on Bus Rapid Transit (BRT) projects are top priorities. At the same time, they are continuing to move forward with planned major rail projects - as reduced demand related to the post-pandemic period is likely to disappear by the time the construction on these projects is finished.[9] But in that 10-year near term, there is significant additional ambition on the bus network side - because there is a strong recognition both in the equity value of bus service – but also its power to supercharge ridership growth, fast. TransLink estimates that it can build BRT at $15-million per kilometre, versus $400-million per kilometre for SkyTrain, the region's rail based rapid transit system, in a fraction of the time.[10] That lower capital cost, however, comes with a trade-off – you need long-term, predictable operating funding to run a service that is more labour-intensive than the automated SkyTrain rail system. TransLink estimates that their 10-year priorities will require a 50% increase in annual operating spending once fully implemented.

Looking across the rest of the country – we see that the bus is the transit mode that the vast majority of Canadian transit riders (60%) interact with on a daily basis.[11] But travel times are slow - according to the 2016 census, the average car commute took 24.1 minutes, while it was 44.8 minutes for public transit commuters.[12] Why? Traveling by bus is inherently slower than the car because it needs to constantly accelerate and decelerate to a stop every time it picks up or drops off passengers. This travel time disadvantage gets compounded when the bus has to weave in and out of traffic and wait at red lights. This imposes hidden costs on transit riders and makes travel by car more attractive. If we really want to move the dial on shifting travel behaviour to more sustainable modes – policymakers must compensate for this. More BRT projects, such as those envisioned in TransLink's 10-year plan, that will strategically reallocate road space currently used by cars for bus use and give transit priority at traffic lights are sorely needed in Vancouver and across the country. They shouldn't be put at a disadvantage compared to capital-intensive rail projects because the federal government does not fund operations.

These kinds of measures increase the cost efficiency of bus service too – because less time is wasted paying the driver to sit in traffic and more time is spent paying the driver to take people where they want to go. But moving to frequent, reliable, all-day service also benefits bus drivers too. Many transit agencies are reporting having difficulty filling open driver jobs, and some have even resorted to making service cuts or delaying service improvements because they don't have enough staff.[13] This is because of the combination of the prevalence of unpopular 'split shifts' and union seniority meaning new drivers are the ones who have to work these kinds of shifts – making recruiting and retention difficult. Split-shifts are a common scheduling structure that exists in most cities as a result of rush-hour oriented service allocation. It means driving for a few hours in the morning peak, and then for a few hours for the evening peak, typically including a forced 'split' between the morning and evening parts of the shift where midday hours are unpaid. These unpaid hours are usually a waste, as the driver has little time to commute home to rest, or fit in time for themselves before having to go back to work. Shifting to more consistent all-day service can make work schedules more attractive because they allow operators to have more manageable work days, with more time for their families, school, or other activities.[14]

Boosting transit service supply takes both capital and operations funding.

The most significant driver of transit demand is service supply. It is far more important than any other policy lever available to policymakers. The more frequent and convenient service is, and the faster it runs, the more people will use it. This also works in reverse—if transit service is cut, it drives riders away. This reflects the phenomenon of 'induced demand'. Just as widening roads induces more traffic – making transit a more attractive choice makes people take it.

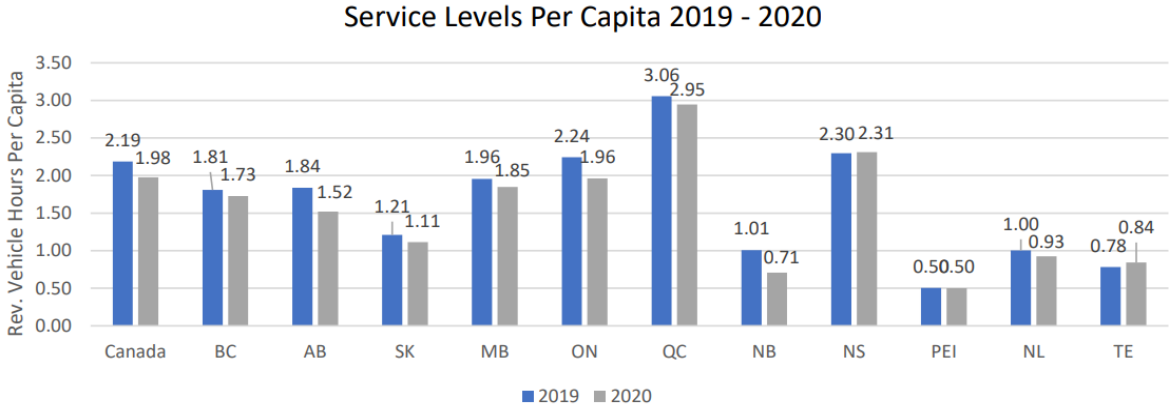
Determinants of Public Transit Ridership[15,16]	
A 10% increase in…	*Results in X ridership change*
Service Supply Factors	
Transit Service Kilometres	+8.3%
Transit Service Hours	*+10%*
Population and Density Factors	
Population	+3.4%
Urban Sprawl (Geographic size of urban boundary)	-2.8%
Housing Density (proportion of apartments)	+5%
Housing Density (proportion of town houses)	+2.9%

Housing Density (proportion of single-family homes)	*-3.4%*
Proportion of Population with no car	*+4.5%*
Price Factors	
Average Transit Fare	-2.2%
Gasoline Price	1.4%

Boosting transit service supply takes both capital and operations – why does the Government of Canada only fund one side of the equation?

Transit service supply is determined by both transit capital infrastructure (ex; bus fleet size), and operating budgets necessary to hire drivers to put them into service. Before the Covid-19 pandemic, the federal government has historically only been involved in capital funding, while has left the role of funding operations to provinces and municipalities. But only three provinces have mechanisms or funding programs for transit operations: British Columbia, Ontario and Quebec. In most cases, municipalities are the primary funders of transit operations, but have limited fiscal tools to bring in additional revenues to expand transit operating budgets. Unlike in other countries, local governments in Canada cannot levy income or sales taxes. They rely almost entirely on property taxes and user fees. Municipalities manage over 60% of Canada's public infrastructure but only collect 10% of tax revenues.[17]

Vast regional inequities in public transit service should not be perpetuated by policy design



Note: These figures are adjusted only for population living within transit service areas, not total population for the entire province.

Due to significant differences across the country in both capital and operating funding, there is a significant disparity between regions in the level of transit service per capita (in communities with transit service). Provinces with lower levels of transit service also have lower rates of transit utilization (ridership per capita). To make matters worse, many of the provinces with poorer service and ridership outcomes under-utilize available capital funds for transit.[18] These issues are especially prevalent in the Atlantic and some Prairie provinces. Canada is potentially missing out on significant reductions in emissions because of this strongly uneven level of service.

Why do we have a universal approach to pricing carbon but a very uneven approach to funding transit?

The federal carbon price floor is scheduled to rise to $170/ton by 2030 and increase the price of gasoline by 37.57 cents/litre.[19] While all Canadians will be facing an increasing carbon price – some will have vastly different opportunities to reduce those costs to their pocketbook by shifting their travel behaviour simply by virtue of what region of the country their city is located. This regional inequity – if allowed to continue, poses the danger of stoking further political resentment against carbon pricing.

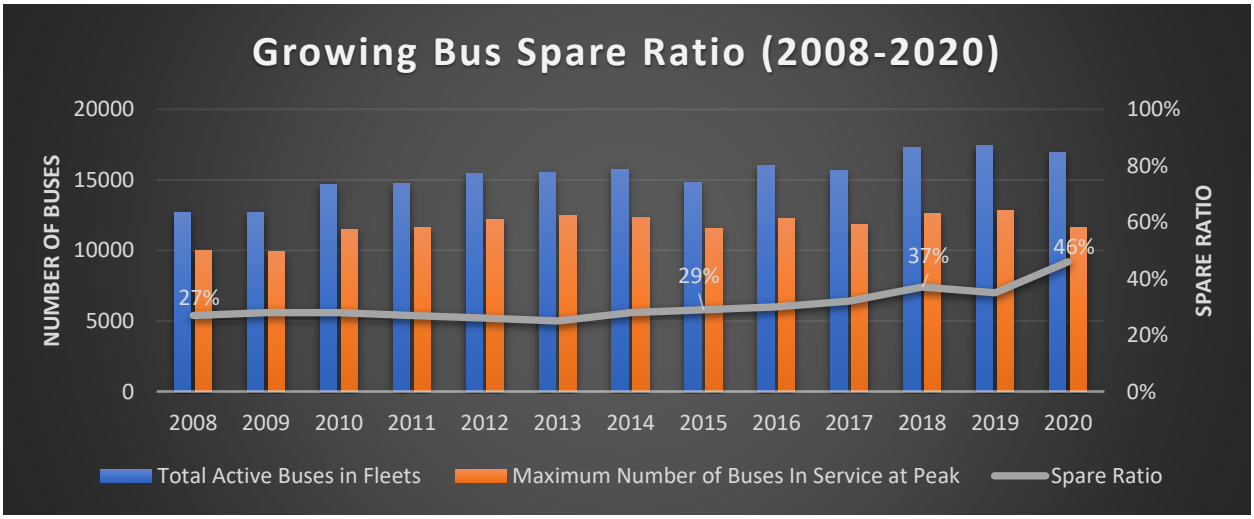
An Era of Abundance for Capital and Austerity for Operations

Since the beginning of the Investing in Canada Infrastructure Program (ICIP) in 2016, the federal government has dramatically increased its role in funding transit capital needs, but this has created an imbalance where the amount of service supplied is significantly beneath potential capacity. Municipalities have too limited fiscal tools to grow operating budgets to expand transit service, and many provinces have not stepped into this gap to permanently fund operations either.

Transit systems have a large and growing excess spare bus fleet capacity that could be put into service if they had the operating funds to do it.

The dichotomy between capital and operating funding is captured in growing rates of bus spare ratios. Bus service is more labour-intensive than rail service, which closely ties bus service supply to operating budgets, where the biggest expense is wages. The spare ratio is the difference between the total active fleet size and the fleet in service during peak periods. If the spare ratio is 20%, that means that 80% is essentially the maximum percentage of the fleet that is in service at any one time. Spares are needed for several operational reasons, and typically represent replacement buses to quickly respond to needs such as replacing a broken-down bus, unexpected large scale service disruptions, or it is in the garage for maintenance or inspection. Traditionally, a 20% spare ratio is considered the industry standard, to such an extent that it is the target number mandated in the United States by the Federal Transit Administration (FTA).

We've seen Canada-wide bus spare ratios dramatically grow over the past decade. The ratio has increased from an average of 27% in the period pre-ICIP (2008-2015) to 36% in the period post-ICIP (2016-2020) and jumped to 46% in 2020. Canada's historic investments in capital funding for bus fleets have managed to increase the number of active buses in fleets but have not increased the number of buses in service at peak – it has simply grown the spare ratio. This significantly undermines the value for



money the federal government is spending on transit capital because while fleets are growing – service is not growing at a commensurate pace because the federal government does not fund service. This trend may have begun as the result of Canada's particular institutional structure of municipal finance, but it has been exacerbated by the pandemic. The enduring loss of farebox revenues will also create an ongoing pressure on transit operating budgets that municipalities are ill-equipped to deal with on their own. This problem will continue until the federal government changes its 'capital-only' fiscal position.

If Canada's bus fleet was operating at a standard 20% spare ratio, it would mean an additional 2,500 buses being pulled out of garages and put into service. This is the potential 'headroom' for service expansion that would be possible with additional operating funds to hire drivers and mechanics. Additional operating funds also mean that more service can be put on the road off-peak, which requires more drivers, but not necessarily more buses. Service expansion could happen in months rather than years when compared to the construction of a rail project.

Land use matters: Public transit investment must drive densification and mix of uses

In the federal government's Emissions Reduction Plan, there is a bold new commitment to exploring tying transit investments to housing, land-use and urban mobility outcomes to achieve modal shift away from polluting cars and trucks.[20] This commitment presents a game changing opportunity for the evolution and growth of the sustainable urban mobility landscape in Canada.

Public transit is fundamentally about connecting people and places. It matters how many people are near transit service, and it matters whether transit connects to places people want to go. It may sound obvious, but transit in North America is often not planned around connecting people and places.[21] It is instead often grafted on top of road infrastructure and an urban form that is built for cars, or legacy rail corridors layed out and designed for long-distance shipping. It often gets built without being surrounded by dense housing, shops and urban amenities, and has poor connections for pedestrians and cyclists. It is instead built next to car-dominated roads, parking lots, and situated far from dense housing and attractive destinations, often because it is cheaper or less contentious to build it there.[22] We continue to build transit this way, and then wonder why, even years later, many residents continue to drive. The federal government is not getting the best value for money from its transit investments, because those investments are often not accompanied by the rapid changes in land use required to make public transit work efficiently. The solution to this problem is to place conditions on federal transit infrastructure investment by tying funds to land use standards.

The province of British Columbia requires that every major transit capital project comes with a 'Supportive Policies Agreement'. Supportive Policies Agreements are currently features of business cases for the Surrey-Langley Skytrain and the Broadway Subway in Vancouver.[23] These agreements acknowledge that municipalities have jurisdiction over land use policy, but also indicate that for a transit project to be successful, it takes supportive policies like increasing housing density, improving bus, pedestrian and cycling connections, and building 'complete communities' with commercial and public service amenities that support higher density near transit. Higher orders of government which invest billions of dollars in these projects have a right to ask that municipalities fulfill conditions and follow through with supportive policies under their control to ensure a project succeeds and delivers social, economic and environmental value for money.

The federal government should require Supportive Policies Agreements to be signed as part of business cases for all major capital projects. Federal standards related to municipal zoning attached to transit funding has the possibility of unlocking a significant increase in housing supply[24] – which the federal government aims to double over the next ten years. This housing supply must be kept within existing urban boundaries and neighbourhoods to prevent continued urban sprawl - and tying transit and housing together is the best way for the federal government to help drive this outcome. However, it is very important for this tool to be inclusive of the housing needs of those most likely to take transit – people with low incomes.[25] Specifically, the Government of Canada should use this tool to leverage transit investments to create more affordable housing units through:

- Minimum targets for the provision of non-market housing near transit through connections to programs like the Rapid Housing Initiative, the Housing Accelerator Fund, and provincial social housing programs;
- The preservation of existing affordable housing in the context of land-value uplift, with rent stabilization and anti-displacement strategies;
- Increasing housing density near transit improvements through zoning reform to permit higher densities and eliminate parking requirements along new and existing transit corridors and within a radius of transit hubs, within the framework of creating, walkable, transit-oriented, complete communities;
- Capturing increases in land values as a result of transit investments for the purposes of housing affordability, by leveraging increased zoning densities, and eliminated parking requirements to boost affordable housing supply with tools such as inclusionary zoning or density bonusing.

Additionally, the federal government should allow the purchase of land by a transit system to be an eligible expense under the major projects stream for the purposes of equitable transit-oriented development and lowering development costs for the provision of non-market housing near transit.

The fundamental objectives of permanent transit funding won't be realized if the process of connecting dollars to projects isn't fixed.

The fundamental objective of permanent transit funding is to build in-house capacity, reduce project uncertainty and enable long-term expansion planning.[26] Permanent transit funding can solve the boom-and-bust cycle that once plagued transit planning,[27] when systems were forced to ramp up plans as new, time-limited funding became available, only to wind down when the program ended. This cycle often meant the loss of institutional capacity to plan and build major projects in-house, losing talent to the private sector. Long-term predictable funding allows transit systems to create long-term expansion plans based on revenue and funding streams they can rely on. This kind of long term planning is necessary to grow transit service supply to meet the challenge posed by climate change. These long term plans create a project pipeline which sends a strong market signal to private sector suppliers, such as bus manufacturers that help guide decisions about investment and capital allocation, reducing the problem of supply chain bottlenecks which tends to plague the 'boom and bust' system.

When the Government of Canada designed the Investing in Canada Infrastructure Program (ICIP), it introduced the first ever long-term capital funding program for public transit at the federal level, recognizing the benefits of doing away with the 'boom and bust' cycle. Embedded in the design were capital allocations based on population and ridership for each province and transit system, so over the

life of the program – each city with a transit system essentially could know exactly how much funding was available to them and they could build expansion plans based on that. But a problem emerged as a result of these infrastructure agreements being negotiated just between the federal government and provinces – leaving municipalities out of the picture, despite local governments being the final owners of the infrastructure being funded. For each project to be eligible for funding, no matter how large or how small, the province had to initiate the project intake process, decide which projects it deemed important enough to fund based on its cost-share, and then pass them along to Infrastructure Canada.

It has since become evident of the inherent flaws in this process. Many of the small but important projects that a municipality needs for a functional transit system typically don't elicit much interest from provincial governments, which tend to be mostly interested in ribbon-cutting for major projects. Many provinces quickly became a bottleneck between the needs of municipal transit systems and available federal funding. As a result – the cities that got projects funded and built are the ones which have the most lobbyists – who directly advanced municipal transit interests to provinces. Transit systems in many provinces which don't have the experience or in-house capacity to lobby their provincial government have a very difficult time connecting federal dollars to projects, especially small – but still important ones.

Some provinces are far more advanced in their level of policy sophistication and engagement on transit issues than others. As the Canadian Urban Transit Association has pointed out – only four provinces (the ones where big cities are located) are actually utilizing available federal transit dollars for projects, while other provinces are letting their federal transit capital allocations sit idle.[28] Part of the problem is that provinces where most members of the provincial legislature come from non-urban ridings have a tendency to show little interest in providing a provincial cost-share to transit projects. Places which have low transit ridership, and are in most need of investment, also have the smallest political constituency of transit riders. This lack of political influence leads to a self-perpetuating cycle of under-investment and low transit utilization.

This is why it is important to stress that it does not matter how long funding timelines are for, or how much a transit system knows what capital is available to them, if the process of getting those dollars connected to projects is broken. Infrastructure Canada recognizes this problem, and it may be part of the reason why new programs like the Zero Emission Transit Fund (ZETF), Active Transportation Fund (ATF) and Rural Transit Solutions program (RTS) are designed to be 'direct-delivery' application-based programs where transit systems and municipalities can directly send their project proposals to Infrastructure Canada. But application based programs suffer from inherent flaws – they are often derided as being like a 'lottery-system' – with no certainty of funding making it impossible to plan long-term, and where big cities with the most in-house resources can often put together the best proposals.

Fundamentally, the problem is rooted in intergovernmental relations, and can be mitigated by carving out core transit funding from major projects funding, and forming a more direct fiscal relationship with municipalities with the new permanent public transit fund. Perhaps as a recognition of how infrastructure woes are rooted in intergovernmental relations, the new Minister of Intergovernmental Affairs, Infrastructure and Communities, Hon. Dominic LeBlanc, is in charge of both portfolios. These

twin responsibilities present an historic opportunity to put together infrastructure funding agreements with provinces and municipalities that solve transit funding problems permanently.

A more direct transit funding relationship between the federal government and municipalities, similar to the Canada Community Building Fund, would give the federal government the policy lever it needs to foster sustainable mobility and meet its climate goals.

The initial reason that justified requiring a provincial cost-share for all projects was to make federal dollars go further by inducing provinces to spend more, rather than have provinces respond by reducing their spending. But has this commitment to 'incrementality' worked? The Parliamentary Budget Office (PBO) has indicated repeatedly that there is little evidence of provincial incrementality as a result of the ICIP program and "while there may have been individual projects that required federal funding to get underway, overall spending was generally unchanged from its historical trend."[29]

This is largely because the four largest provinces (Alberta, British Columbia, Ontario and Quebec), account for 90 per cent of overall provincial capital spending, and have maintained spending levels despite increases in federal infrastructure transfers. In the case of transit – we often see these provinces asking the federal government to increase its own spending on public transit projects rather than the other way around. For example, Ontario requested an additional $7.5 billion on top of their original ICIP allocation for major rail expansion projects in the Greater Toronto and Hamilton Area.[30] But outside these provinces, this cost-share requirement, in particular for smaller projects that tend not to elicit much interest from provincial governments often just means that instead of federal dollars inducing provinces to spend more, no federal money gets spent at all. This very uneven pattern of investment perpetuates pre-existing regional inequities.

A more direct fiscal relationship with municipalities offers a solution. The PBO has found that the ICIP program did increase spending from municipalities - indicating that incrementality works when increasing transfers to local governments. The design of the core funding stream should take a lesson from the Ontario gasoline tax funding for public transit program, which secures incrementality with the provision that funds provided to each municipality are not to exceed 75% of municipal own-spending on transit.[31] This would penalize any municipality that would try to reduce own-spending on transit in response to the policy, and in many cases likely induce municipalities to spend more on transit in order to not have any of their transit allocation clawed back.

It is important to note that this fiscal relationship with municipalities can be built upon the foundation laid by the Canada Community Building Fund (CCBF), one of whose core principles includes the respect for provincial jurisdiction.[32] This fund has proven its success since its inception in 2005. Municipalities are empowered to select projects and oversee construction, reporting to provinces. The federal government sets national objectives, negotiates terms and conditions through provincial agreements, distributes funds, and manages overall direction. Provinces administer the program, ensure municipal compliance with terms and conditions, and report on results. The key difference is that similar to this program, municipalities should be able to connect federal dollars immediately to day-to-day projects and service improvements related to their bus fleets that they select and prioritize, rather than processing every project through multiple layers of provincial and federal approval - which is better left to transformative major capital projects like subways. Overall standards and reporting requirements for

the use of these funds can be included in administrative agreements signed by all three levels of government, rather than requiring onerous layers of approval for every single day-to-day project.

Like the CCBF, these administrative agreements can comply with provincial directives, such as the Government of Quebec's desire to have federal infrastructure funds pass through a Quebec government institution, in the case of the CCBF, this is the Société de financement des infrastructures locales du Québec (SOFIL).[33] The Government of Quebec is currently the only province which requires that 20% of the total federal and provincial funds for municipalities are allocated to public transit authorities. Adding the core transit funding stream to the existing CCBF framework when the 10-year administrative agreements expire in 2024 would essentially create a similar funding situation in every other province, with additional local infrastructure funds earmarked for transit, while the province of Quebec could add these additional funds to the existing 20% set aside for transit in SOFIL.

Where Federal Transit Policy Has Failed: The Case of New Brunswick

Before the pandemic, New Brunswick's transit service levels relative to their municipal service population were approximately half of the national average. When Statistics Canada measures convenient access to public transit by metropolitan area, the city of Saint John, New Brunswick ranks at the very bottom of the list, with only 49% of the city's population living within 500 metres of a public transit access point.[34] The nightmare that transit riders avoided in the rest of the country during the pandemic befell riders in New Brunswick. Premier Higgs rejected federal transit aid which other provinces received,[35] and as a result, transit service levels fell by 30% in New Brunswick in 2020—almost four times higher than the national average of an 8% decline.[36] This cut was on top of pre-existing barebones service levels.

Cuts to transit operations happened within a context where virtually no transit projects were being selected or funded in the province. This left a substantial amount of unspent federal money for transit that piled up. Before funds were scuttled, of the $165 million in capital funding originally allocated to the province of New Brunswick for public transit, only 1.4% of it had been spent.[37] When the 2022 federal budget announced that the deadline to allocate ICIP funds to projects was being accelerated to 2023 from 2025 – Minister LeBlanc stepped in to accommodate Premier Higgs' request to spend that transit money on roads instead.[38] This is despite the province's 3-year, $1.13 billion dollar transportation capital budget already being dedicated nearly entirely to roads, highways and bridges.[39]

Now the City of Saint John plans to take advantage of 'direct-delivery' federal transit funding for electric buses, in order to transition to a zero-emissions fleet.[40] This a positive step on climate – however, they are doing this without a strategy to improve overall service levels, which are very low. The design of federal funding programs currently creates a somewhat perverse incentive structure which results in transit systems prioritizing the lowest-impact GHG emission mitigation policy solution first. Transit systems have the funding to electrify their fleets without the funding to improve their service levels, despite strong evidence that service levels – and getting people out of their cars has a much greater impact on transportation sector carbon emissions than fleet electrification.[41] To put it more simply, it doesn't matter if a bus is electric if there is no accompanying strategy to get people to take it instead of driving.

Build on what works, and fix what isn't working

The permanent public transit fund should include a baseline, core transit funding stream structured similar to the Canada Community-Building Fund (CCBF), separate from a cost-shared major projects stream that would function much like existing transit funding under the Investing in Canada Infrastructure Program (ICIP). ICIP has been very successful at funding and building major capital projects like subways and light rail – and the major projects stream should continue to do exactly what ICIP is good at doing. With the added requirement of 'Supportive Policies Agreements' – this cost-shared stream can deliver even more for Canadians.

The core stream that goes directly to municipalities should be designed to fix what hasn't been working with ICIP. Having it fund operations will give the federal government a direct policy lever to increase service supply, including in off-peak periods to deliver more equitable service, more efficiently utilize existing fleet capacity, and act as an equalizer to reduce massive disparities in transit service levels between regions of the country. As the federal government would be giving up its provincial cost-share requirement for this stream to focus on the more important outcome of secure, dependable and predictable transfers – it should also attach new requirements to this funding to achieve national policy objectives.

Like the province of British Columbia, the federal government should set clear targets for an increased mode share of sustainable transportation in the federal climate plan. As part of reporting requirements for the core stream, communities could be required to adopt sustainable mode share targets in transit master plans and report on their progress. This requirement would be tied well to the objective of the program to enhance municipal capacity for long-term planning. Larger urban municipalities—those with at least 30,000 residents—own 80% of public transit rolling stock but currently only about half (56%) of these 94 larger urban municipalities have an asset management plan in place.[42]

Canada could finally join its international peers that already have national approaches to urban mobility planning,[43,44] which is considered among one of the most important policy interventions by international experts.[45] The European commission for example, promotes the use of Sustainable Urban Mobility Plans (SUMPs), as part of achieving the 'European Green Deal'[46] This planning paradigm is about moving people – not cars – and is the default urban mobility concept in Europe.

As this core funding stream will be primarily oriented towards bus service, the federal government could also create a zero-emissions bus procurement mandate as a condition of the funding. As different municipalities are at very different levels of readiness to transition to zero-emission bus fleets, it would be important to have flexibility in this mandate. For example, large cities could be only allowed to procure zero-emission buses with core transit stream funding post-2026, while medium and small municipalities could have a later deadline. With a procurement mandate, it would be important to offset the higher capital costs imposed on transit systems so electrification does not come at the expense of overall service expansion. This could mean scaling funding for the Zero-Emission Transit Fund (ZETF) appropriately. Alternatively, the federal government could consider continuing the key successful elements of ZETF, such as capacity building and planning assistance, while rolling the program into a funding expansion of the bus-focused core stream.

Additionally, the federal government could consider attaching Canadian content and final assembly requirements for the buses procured under this program, to help support employment in this sector, such as from bus manufacturers Nova Bus in Quebec and New Flyer in Manitoba. These rules could also be used as a bargaining chip in trade negotiations with the United States to secure a Canadian exemption for Buy America rules in the sector, similar to the recent victory with light-duty zero-emission vehicle purchase tax credits.

This core stream should also enable transit systems to reduce their overall reliance on fare revenues, and in particular empower transit systems to reduce fares for low-income riders. This will help ensure that transit's recovery is fair and inclusive – and reduce income barriers to sustainable mobility.

Building on what works, the funding streams should be allocated based on a formula which is weighted by 70% ridership and 30% population - the same as how funds have been distributed through ICIP and emergency operating funds during the pandemic.

With the acceleration of the Investing in Canada Infrastructure Program (ICIP) deadline for project submission from 2025 to 2023, as outlined in the latest federal budget, this creates a two-year gap where rolling intake for transit projects will cease before the permanent transit funding program begins in 2026. By accelerating permanent transit funding by two fiscal years, the federal government could eliminate this gap in the availability of core transit funding and negotiate it at the same time as the Canada Community Building Fund (CCBF) administrative agreements, which must be renewed in 2024. Given the importance of not disrupting the 'project pipeline' and the urgency of the climate and housing affordability crises, there is no time to waste.

The overall spending profile of the permanent public transit fund of $3 billion per year is too small to both sufficiently cover the 40% federal cost share of major projects and fund a significant expansion of bus service levels. For this reason, the major projects stream should be capitalized at $3 billion per year while the additional core stream should gradually rise to cover approximately 40% of total direct operating costs, or approximately $3.9 billion per year. Additionally, the Active Transportation Fund (ATF) and Rural Transit Solutions Fund (RTS) should become permanent programs and be capitalized to appropriately fund all worthy projects they have received applications for in excess of their current budget allocations. The federal government should also consider adding support for inter-city travel in the rural transit solutions program, and support the full range of capital costs of public bikeshare programs managed by transit agencies in the active transportation fund.

Low public sector capacity to design and build major projects inflates capital costs.

The core stream should also empower transit systems to build up institutional capacity to plan and deliver major projects in order to reduce capital costs. In Canada, major transit capital projects like subways cost far more now in real dollars than they did decades ago, despite having fewer stations per km, traverse simpler, less-dense contexts, and are being financed during a period of record low borrowing costs.[47] Capital costs of major projects are significantly higher in North America compared to European and Asian countries, and one of the core roots of the problem lies in a lack of in-house institutional capacity.[48] It is important to address the high capital costs of building transit in program design as it will mean more transit gets built, and rail projects won't be as cost-prohibitive for medium-sized cities.

A lack of in-house know-how to build major projects results in an over-reliance on private sector contractors, who respond by bidding higher to hedge against the risks transferred. It also leads to an informational and experience asymmetry between public sector project proponents and their private sector contractors, which leads to writing ineffective contracts, lack of supervision of adherence to contract terms, litigation and costly change-orders. Greater in-house capacity also empowers cities to execute smaller construction contracts strategically and clearly to ensure seamless interfacing and coordination, instead of bundling a project's discrete elements into one mega contract, which invites less competition and inflates capital costs.[49]

Despite private sector contractors charging a cost premium for transfer of project risks, there is little evidence that this risk transfer actually occurs. This was confirmed by a 2014 report from the Ontario Auditor General, which found Infrastructure Ontario's (the province's P3 agency) methodology for assessing risk was consistently biased and did not base its assumptions of risks on empirical data.[50] The failure of Ottawa's P3 LRT project should highlight that public-private partnerships should be discouraged in the design of the major projects stream. This could be done by reducing the total available federal cost share for these kinds of projects.

Instead, Infrastructure Canada should explore methods to reduce project capital costs by increasing the federal cost share for projects which follow best-practices such as; standardized station design, select contract bidders with a preference for higher technical scores, break up construction contracts into smaller pieces instead of bundling them together into one mega-contract, and have a preference for less expensive cut-and-cover building techniques. To accomplish this, the in-house capacity to create standards and oversight of major projects at the federal level should be addressed, with funding directed to build-up the capacity of the civil service at Infrastructure Canada.

Mode share should be measured properly and without bias.

The 2016 Census' Journey to Work Survey indicates that 12.4% of commuters take transit to work, which is approximately 2 million people. This has been traditionally what has been known as the modal share. However, this is a very imperfect measure because it excludes non-work related trips on transit. This means that trips made by people to any place other than work, trips on weekends, or by people who are not in the workforce (ex; retired, unemployed, students or children) are left out. This builds in a systemic bias to conversations around mode-share in Canada, especially gender bias. The evidence indicates that the travel patterns of women on transit tend to be much more geared towards off-peak periods, and they are more likely to make non-work-related household-sustaining trips, like buying groceries, taking kids to daycare, etc – and this is not captured by traditional measures based solely on commuter patterns.

CUTA ridership data indicates that in 2019, Canada had on average – over 6 million linked trips on transit every single day, which is significantly greater than 2 million people commuting. This creates the possibility of a significant gap in how we are measuring transit use. How we measure transit use has significant repercussions. For example, if we are only looking at work commuters as the baseline for ridership, an increase of people working from home can seem to spell disaster for transit, and the business case for building new transit infrastructure. This kind of claim emerged in policy discussions following a Statistics Canada study that found that a transition to full telework capacity could reduce the total number of commutes made in a given year by workers who were previously using public transit by roughly one half (52%).[51] But this argument completely ignores non-work related trips.

It should be noted that the Government of Canada already has a target for increasing modal share for public and active transportation by 25%, nested within the integrated bilateral agreements that form the basis of ICIP.[52] However, it is unclear what the baseline for this target is, what measures are in place to track progress, and how the federal government plans to achieve this target given it does not fund operations. This target is notably absent from the federal climate plan as well.

In order for the Government of Canada to set a proper target to increase the mode share of sustainable modes of transportation, it needs an effective and unbiased baseline of what the composition of trips actually looks like. For this reason, Infrastructure Canada should work with Statistics Canada to develop an ongoing mobility or household travel survey and follow-up with respondents of the long-form census which will help inform policy and form the basis of setting national climate targets.

A Historic Opportunity to Combat Climate Change

The permanent public transit fund is a historic opportunity to decarbonize the transport sector, while delivering a more inclusive economy and fostering greater social equity. It can be a powerful tool to leverage greater housing supply from investments in major capital projects, building on the strong success existing transit infrastructure programs have had at building subways and light rail. It can also form the basis for a transformation of urban mobility across Canada towards sustainable modes, reducing carbon emissions, improving our quality of life and dramatically reducing regional disparities. But to make this happen, we must end the dichotomy between operations and capital funding, we must create a more direct relationship between infrastructure owners and funders, and we must learn the lessons of the pandemic to transform transit to meet the challenges of the future.

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