

# INTRODUCTION

e have a choice to make. Do we want a future with more congestion, transport for those who can afford it, and higher

Or do we want a future with better connected communities, more equitable cities, and real action on climate change?

No issue affects mobility, equity, and climate change more than public transit. It is integral to a greener and socially inclusive economic recovery-post-Covid and long into the future. But building that future requires recognizing the pandemic has turned public transit's economics on their head.



To help transit recover and allow it in turn to help Canada recover, this report's most important recommendations are:

If we want people to participate in the economy, they need to get to work safely. No one should have to turn down a job because they don't want to risk their health during a crowded commute.

> Prime Minister Justin Trudeau announcing public transit's inclusion in the safe restart agreement



Some may say that public transit doesn't need ongoing investment. Perhaps, the office won't come back. Maybe the virus won't go away. That Covid-induced ridership declines are permanent.

We disagree.

There will be a recovery. We don't know when, but one will happen. And the question before us is what kind of recovery it will be. As we contemplate that question, we should focus on what will happen if the reason transit's economics have been upended is left unaddressed.

More than half of transit's operating costs traditionally came from the farebox. As ridership plummeted by about 90% when the pandemic first hit, transit systems suffered steep—in some cases, total—revenue declines. And while ridership has increased in the months since, it's still only about 40% of pre-pandemic levels and unlikely to fully return for some time.

If the revenue that used to come from the farebox is not replaced, a downward spiral is almost inevitable. It will begin with service cuts. As riders are made to wait longer and vehicles grow more crowded, transit will become less convenient and perceptions of unsafety will grow. More riders will turn to cars. Revenue will fall further. And then the cycle will begin again.

Anyone who can afford to drive, will, meaning the people hurt most by this will be our most vulnerable neighbours. Low-income workers, who are more likely to be women, Indigenous, and people of colour. Seniors and people living with disabilities. Allowing public transit to enter a downward spiral will make our communities more unequal.

At the height of the pandemic's first—and, we hope, last—wave, public transit still carried about a million people every day. Many of them were low-paid essential workers in the health, grocery, or janitorial sectors. Fully 80% didn't have access to a car. More than half earned under \$30,000 a year—most of them women. They are like many of our neighbours. Work or school is too far from home to walk or cycle, yet their income is too low to drive. If public transit is allowed to fail, we will abandon these people.

A Statistics Canada study from August underlines the danger. Four-in-five people who left public transit for other forms of transportation chose a private car. If this pattern solidifies, it will have enormous climate consequences and irreversible impacts on urban land use.

But a greener, more socially inclusive recovery is possible.

We know building public transit creates good, middle class jobs, often attracting private investment in the process. We know it can make significant strides towards our climate goals. Greenhouse gas reductions could be as much as 14.3 megatonnes a year. And we know it is an essential ingredient to active mobility to bring communities closer.

To help build back better, the Canadian Urban Transit Association convened a recovery task force. It includes transit systems, private companies in the transit sector, and experts in urban mobility. The recommendations that follow are not all in the purview of one government or another. Many require no additional funds beyond existing commitments.

Instead, they build on the support governments at all levels and of all stripes have shown—with our sincere thanks—public transit since the pandemic began. The understanding governments showed towards the importance of public transit to communities through its inclusion in the safe restart agreement was a lifeline for many transit systems. During the pandemic, significant capital announcements took place: Calgary's Green Line LRT; new electric buses for Oakville, Ont.; a procurement launch for Toronto's Scarborough subway extension; and the approval of a regional bus rapid transit program in Halifax. Construction is well underway on Montreal's REM project and Edmonton's Valley Line LRT.

Our recovery task force hopes to keep making progress for public transit, the riders who depend on it each day, and the communities it brings together. We can build back better. And we can choose a recovery from Covid-19 that makes us a more sustainable and fairer country.



# OPERATING PUBLIC TRANSIT SAFELY

**People won't ride public transit unless they think it's safe.** This means clean, not crowded, and riders wearing masks and observing hand-washing and other preventative protocols. It also means having reliable vehicles and tracks.

**People also won't ride public transit unless it's convenient.** This means service that's frequent enough service so riders don't have to wait for hours, which will push those who can afford it into individual cars. Thanks to the support of governments, transit has become a more viable option for more people recently. From 2008 to 2018, ridership increased by about 20%. If we provide service that works for people, they've shown they'll use it.

These two realities were recognized by federal, provincial, and territorial governments when they included public transit in the safe restart agreement. We're grateful and transit systems are putting this help to good use, benefitting their riders and the communities they connect. The reasons for supporting transit then are still true now. As the economy reopens, ridership is increasing. If we don't keep transit operating safely and conveniently, those who can afford it will drive. Those who can't afford it will wait.

But transit is about more than keeping communities connected, reducing emissions and congestion, and providing transport options to more people. It also creates jobs and can contribute to the recovery ahead. Building public transit infrastructure is a proven investment in economic growth and job creation. Sometimes, however, projects have long lead times. But **jobs can still be created today because many transit systems have deferred maintenance projects that are shovel ready.** Others could proceed with improving and modernizing key infrastructure, from electrical systems to station renovations. Covid-19 has also introduced additional needs such as keeping drivers safe by installing measures such as shields around bus drivers, and enhanced cleaning protocols for vehicles and stations.

The pandemic turned the economics of public transit on its head. More than half of operating costs—52% to be precise—come from the farebox, which is dependent on riders. While ridership is increasing as more people return to work or school, it remains significantly below pre-Covid levels. It is unlikely it will return for some time. No matter how safe public transit is, an Abacus Data poll indicated a quarter of former transit riders won't return until there's a vaccine..



Even before Covid, CUTA raised the need for operating funding with the federal government. Thanks to the success of the Investing in Canada Infrastructure Plan, fleets were enjoying robust expansion. It only included capital costs, however, and municipal budgets were unable to keep pace with the resulting increases in operating costs. With Covid, transit systems' challenge is not rising operating costs but steep revenue declines. Studies show a strong link between transit service levels and ridership. Should operating support end before ridership can adequately recover, declines in revenue would result in a downward spiral of service and ridership.



To prevent a downward spiral of service cuts leading to depressed ridership, we recommend the federal government continue to support operating funding. The level should be recalibrated at regular intervals to reflect actual ridership numbers and reflect that not all systems are municipally owned. There are many ways this funding could flow, including block grants and a blended transfer within the Gas Tax Fund. The federal government has an essential coordinating role to play in assessing an appropriate role for provinces and territories.

Transit operators...have done an incredible job ensuring people who need to get around have safe and reliable transit service during the outbreak.

This funding will help ensure transit services continue to be there.

Ontario Transportation Minister Caroline Mulroney speaking about the safe restart agreement.

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### **RECOMMENDATIONS SAMPLE PROJECTS Ongoing operating support** Revenue shortfalls due to declines in Continue to support operational funding to allow safe and convenient transit. Recalibrate funding at regular intervals to reflect actual ridership until pre-Covid ridership returns. Buildings & structures Accelerate State of Good Repair programs to keep transit clean, safe, and Signal systems reliable as systems regain ridership Track work This is an ideal time to catch up on deferred maintenance projects such as track Electrical systems work, rail system capacity improvements, and updating electrical systems, buildings, Rail system capacity improvements and structures. This will immediately create jobs while transit demand is lower. Information technology & equipment Continue to renew and expand transit fleets Fleet renewal and expansion Funding will allow transit systems to replace buses and trains that are at the end Bus system capacity improvements of their life. Additional vehicles will be required to prevent crowding on board and Bus depot expansion to continue to provide transport options for essential workers, vulnerable populations accommodate more vehicles and improve service to transit-dependent areas. Invest in making transit more reliable and faster Transit priority measures such as bus Investments allow cities to accelerate transit priority measures to improve availability, lanes and transit signal priority frequency, reliability, and speed of transit services to ensure appropriate capacity to accommodate the return of ridership. Establish a personal protective equipment (PPE) and enhanced cleaning upply pipeline Transit agencies mobilized quickly at the beginning of the pandemic to redesign and Personal protective equipment for retrofit transit vehicles, stations, and facilities to accommodate physical distancing. transit employees Many of the projects completed were unplanned capital expenses but were required Disinfecting systems and supplies to ensure our customer and employee safety. For example, transit agencies installed plexiglass driver barriers on entire bus fleets to provide separation between the transit operator and passengers. Help systems facilitate distancing on board At the onset of the pandemic, transit agencies moved quickly to redesign and retrofit transit vehicles, stations, and facilities to accommodate physical distancing. Operator shields onboard buses Most of the projects were one-time, unplanned capital expenses to ensure our customer and employee safety. For example, transit agencies installed plexiglass driver barriers on entire bus fleets to protect the transit operator from infection. Fund active transportation connections between transit stations and stops and active transportation such as walking or cycling Bicycle facilities at stations and on

Investments in active transportation projects such as separated bike lanes leading to transit stations allow for more integrated urban mobility. During the pandemic,

there has been exponential growth in active transportation and additional

infrastructure is needed to meet existing demand.

vehicles

stations and stops

Pedestrian connections to transit

# DECONGESTING CITIES AND CREATING JOBS

If we choose to design cities around the needs of individual cars, they will become more congested. Greenhouse gas emissions will rise. Increasingly, income will be the determining factor in accessing urban transportation. Congestion and inequity will become more entrenched and economic productivity will decrease.

As we recover, we can build a better future that improves social inclusion, acts on climate change, and reflects new commuting patterns. Continuing to expand public transit will help Canada continue to compensate for decades of under-building while creating good, middle class jobs to support the economic recovery. Already, \$20 billion in federal funds is committed through the ICIP program. To stimulate the economy further, more could be done. Across Canada, only about 55% of transit systems' capital projects are currently funded by each level of government.

The ability of public transit to stimulate the economy and create jobs is widely accepted and understood. Building Calgary's Green Line LRT, for example, is forecast to create up to 20,000 jobs. The continued build-out of the O-Train in Ottawa will create 850 new jobs.

But the benefit of ongoing capital investment in transit extends beyond the economy. To a large degree, existing transit infrastructure is designed to funnel workers from suburbs into downtown. Population and employment, however, are growing fastest in the suburbs. In fast-growing areas such as Surrey in Metro Vancouver or the 905 region in the Greater Toronto Area, people overwhelmingly want better public transit. Expanding public transit in these communities, which are among the most car-dependent, would have the added benefit of responding to new commuting patterns. Not from suburb to downtown, but rather from suburb to suburb and neighbourhood to neighbourhood.

Covid has reinforced the value of cities having space for people. It has sparked a worldwide expansion of new bicycle lanes and pedestrianized streets. The notion of a 15-minute city has taken root. We have an opportunity to build on this momentum. Let's not squander it by returning our cities to the needs of the car. Expanding public transit will help foster integrated urban mobility by enabling 15-minute cities by giving people more options—in many cases, faster than they would be able to travel by car.

### **RECOMMENDATIONS**

### Continue to build-out transit capital projects to complete transit networks, decongest our cities, and create jobs

This continues federal investment into the development and delivery of transit expansion projects include bus rapid transit, light rail, subways/metro, and commuter rail systems.

### **SAMPLE PROJECTS**

- Costs associated with the development and delivery of transit expansion projects
- Projects that support transit-oriented communities

### Accelerate transit capital projects that address crowding and capacity

Investments in projects that add vehicle and transit network capacity will accommodate ridership on services continuing to experience crowding. This would also help address issues with service reliability that pre-date the pandemic.

Projects that add facility or vehicle/ network capacity and redundancy

### Revolutionize our transit networks in the suburbs and beyond

Investment in transit projects that build connections between suburban communities to enhance transit service and better connect neighbourhoods beyond downtown cores, facilitate all-day ridership beyond commuter trips, and enhance access to suburban jobs and services.

Projects that support crosstown and regional network-building within our

### Leverage private sector investment to further build out our transit networks

Identify projects suitable for private investment with support from key partners, such as the Canada Infrastructure Bank.

cities and suburban communities



# PUBLIC TRANSIT FOSTERS SOCIAL INCLUSION

During the pandemic, public transit served our most vulnerable citizens every day. The often lower-income essential workers on whom we relied in turn relied on public transit. Most of them were women. Many were people of colour. The lower someone's income, the less able they were to work from home. For many seniors and people living with disabilities, transit was central to daily life and essential trips.

Another knock-on effect of Covid was widespread job loss, hitting many family budgets hard. For many households, transportation is among the largest expenses. Reductions in public transit service would add more pressure to already strained families and make finding new work more difficult. Cuts to transit may also leave some people unable to get to work, severing the link between employer and worker the wage subsidy program was designed to maintain.

The virus may have laid inequities bare, but it did not create them. And as we recover, we must ensure those already disadvantaged before the pandemic began are not left behind as the economy reopens. Women, Indigenous peoples, people of colour, seniors, and people living with disabilities are disproportionately transit-dependent. They need more, not fewer, ways to find employment, go to work, study, and see family, friends, and caregivers.

Public transit agencies have identified a suite of capital projects that can improve inclusion and equity further. These include improvements to make facilities more accessible and increase passenger safety. Many transit construction projects also provide direct opportunities for localized employment in priority neighbourhoods, providing training and work experience to vulnerable communities.

### **RECOMMENDATIONS**

Invest in transit projects that will meet the needs of groups disproportionately impacted by the pandemic (e.g. vulnerable communities, people of colour, seniors, women, and low-income workers)

This would entail expanding surface transit networks and fleets in transitdependent communities, passenger related safety improvements, and innovative on-demand transit for the first or last mile of a trip, as well as late-night trips.

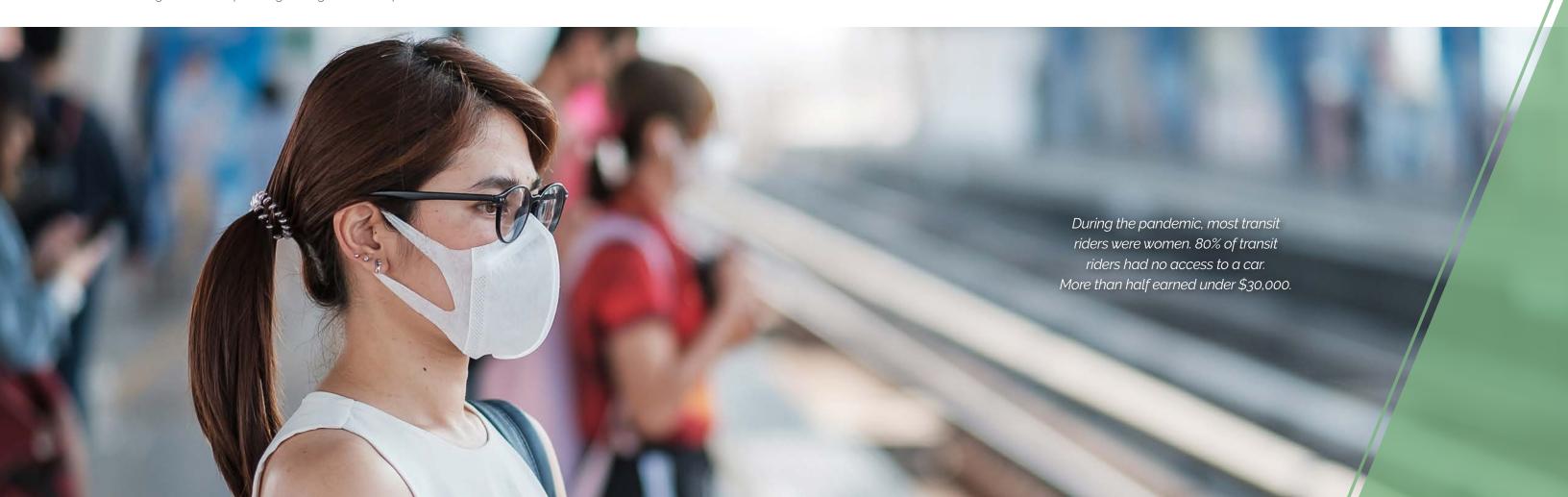
Support a barrier-free Canada by investing in accessibility and specialized transit services

Enable accessibility upgrades at transit stops and stations, and in specialized transit fleets.

Leverage the opportunities that transit capital projects present to create jobs within vulnerable communities

### **SAMPLE PROJECTS**

- Investments in surface transit networks (e.g. fleet and customer facilities)
- Passenger safety related facility improvements
- On-demand transit options for first/ last mile and late-night trips
- Accessibility upgrades at transit stops and stations
- Specialized transit investments in fleets



# ACTING ON CLIMATE CHANGE THROUGH PUBLIC TRANSIT

Public transit is one of our most effective tools to act on climate change. Someone taking even a diesel bus instead of a car will emit about 75% less greenhouse gas than by driving. **Its potential impact is immense—as much as a 14.3 megatonne reduction to emissions a year. That's equivalent to taking three million cars off the road.** It's the kind of transformational change Canada will need to meet the federal government's goal of net zero emissions by 2050.

Such longer-term targets reinforce the need to ensure public transit does not enter a downward spiral in the near-term. We are unlikely to meet climate goals without increasing transit's modal share by reducing single occupancy trips by car. In the process, we can help cities and neighbourhoods with higher density land use conducive to active mobility such as walking or cycling.

While replacing individual car use with public transit reduces emissions significantly, how we procure public transit is key to maximizing its ability to act on climate change. One excellent way is zero emission buses. Most commonly, these are electric, but there are hydrogen versions as well. Lower-emission natural gas buses also exist. Zero-emission vehicles are a double win for the climate, effectively lowering emissions twice. Once by replacing individual car use. And once by replacing the diesel on board. The challenge is they are much more expensive than diesel buses and require new charging infrastructure, both in depots and on route. Even in cities that have begun adopting zero emission buses, such as Edmonton and Toronto, achieving a full transition is dependent on governmental support.

The federal government has an ambitious goal of 5,000 new zero emission buses on the road at the end of its mandate. We support this goal although Covid's impact on transit systems' balance sheets will hinder their ability to cover higher costs. A subsidy program is one way to help. We recommend designing one based on the existing point-of-purchase iZEV program for electric cars. It should be stackable and delivered alongside ICIP's Public Transit Stream and include funding for related infrastructure such as chargers.

This would also deliver an economic benefit almost unique to Canada. We're one of very few countries with several electric vehicle manufacturers that build buses. Helping transit systems buy these Made-in-Canada solutions would help sustain good jobs here at home and avoid the layoffs that major manufacturers are coming given the anticipated drop in North American bus orders in 2021. Taking advantage of the capacity this creates will help position Canada as a global leader in helping other countries also make a transition to a lower-carbon future.

Given the long timelines involved—typically about 24 months from placing an order to receiving the vehicle and charging infrastructure—to help the government realize its goal, transit systems should be incentivized to begin their electrification analysis in the very near future. In some cases, this work is already complete and has identified that significant work will need to be done for retrofits to facilities.

### **RECOMMENDATIONS**

# **Decarbonize public transit through a new zero-emission bus and charging system procurement**

Invest \$1.9 billion to support transit systems procuring 5,000 zero-emission buses and associated charging infrastructure.

### Incentivize systems to begin electrification analysis now

It usually takes about 24 months between an order for a zero emission bus being placed and receiving the bus and related infrastructure. To help the government meet its target, systems should be helped getting their analysis done now.

### **SAMPLE PROJECTS**

- Zero-emission buses
- Charging Infrastructure Systems (onroute and depot charging)

- Analysis of electrification needs



# MAKING TRANSIT MORE EFFICIENT THROUGH INNOVATION

Covid forced public transit agencies to embrace efficiency and innovation. In Quebec City, a new app that allowed for contactless payment was rolled out. In York Region north of Toronto, decreased ridership on paratransit freed up smaller vehicles that replaced larger vehicles on routes experiencing significant drops in ridership. In Montreal, the STM is working on an app to warn riders if the bus they're intending to take is crowded. And across the country, transit systems big and small acted almost immediately to protect drivers; first, by rear-door boarding, and later by installing barriers around the driver to prevent infection.

As transit evolves, we can be more innovative. On-demand transit and microtransit—the use of small vehicles—are both likely to play larger roles. In Los Angeles and Berlin, the pandemic was the impetus behind deploying Mobility-as-a-Service—which lets people pay to use a bike, for example, with their transit payment card—and microtransit to improve service and lower costs. Electronic payment systems are likely to evolve to reduce or eliminate contact entirely. Transit systems will continue to find new efficiencies through technology and partnerships.

To help transit systems procure and design new innovative products and services, we recommend ear-marking funds with a dedicated program for the Transit Innovation Accelerator Fund. Funding can be sourced from reallocation and existing federal innovation programs within Infrastructure Canada, Natural Resources Canada, and Innovative Solutions Canada, among others. Funds would go towards projects that support ridership retention and growth, the lowering of costs, and asset optimization. For example, tracking how a bus is used and using the data to employ it more efficiently, or using technology to run subway cars closer together to increase service levels.

### **RECOMMENDATIONS**

### **Support contactless fare payment systems**

Contactless fare payment systems allow riders to purchase fares from home via their phone or internet and allow for all-door boarding on buses and trains to facilitate physical distancing. They also collect more detailed data than paper tickets or cash, allowing agencies to respond to changing ridership trends faster.

## Support systems evolving from transit-first-and-only agencies into mobility agencies

Transit agencies are evolving from providing only fixed-route services to enabling rider choice in mode and journey. Allowing riders to access services such as car and bike sharing through transit agencies will increase mobility options and lower household transportation costs. But this transformation is reliant upon innovative technology solutions and partnerships.

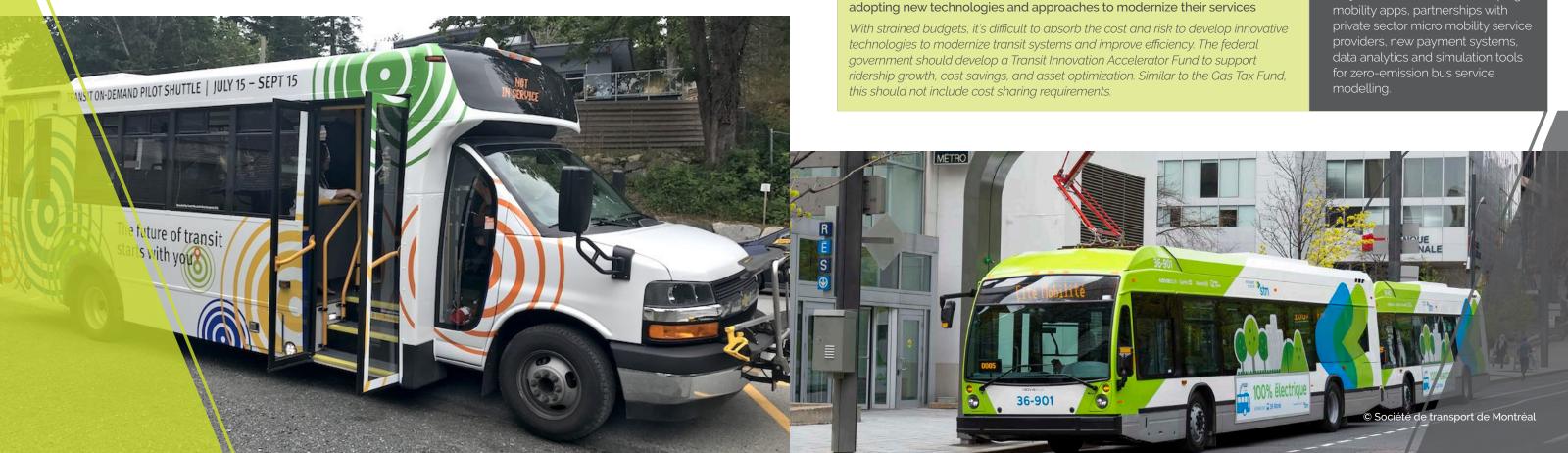
# Invest in new mobility technologies to support transit use

Technologies such as on-demand transit and micro mobility (shared scooters, bikes, etc.) can help riders solve the so-called "last mile" problem of transit. Namely, that stops are unlikely to be directly by their home or destination. Integrating these services into transportation systems is key to increasing ridership and reducing single occupancy vehicle trips.

# Establish a Transit Innovation Accelerator Fund to support transit agencies in

### **SAMPLE PROJECTS**

- Electronic fare collection systems (smart cards, open payment systems, and apps)
- Enable riders to use the same such as bikes and cars. ("Mobility-asa-service" technologies.)
- Technology solutions to enhance access to transit (e.g. on-demand transit platforms, micro mobility)
- Smaller vehicles and related facilities to support on-demand transit
- Projects could include developing mobility apps, partnerships with providers, new payment systems, for zero-emission bus service



# FUNDING FOR LONGER-TERM CAPITAL PROJECTS

Infrastructure Canada has two major funding programs for public transit: the public transit stream of the Investing in Canada Infrastructure Plan (ICIP) and the Gas Tax Fund. Together, they have made significant contributions to transit expansion and reducing individual car use.

ICIP was a monumental leap forward in federal infrastructure funding. We support its extension through a permanent transit fund given its proven success. By choosing a longer-term funding model, as opposed to short-term allocations, transit systems have been able to expand service and build transformative projects such as light rail. Unfortunately, the federal government continues to allow lapsed ICIP funds intended for transit projects to be reallocated for non-transit infrastructure.

The need for public transit funding has been exacerbated by the pandemic, but it was large before the virus arrived. In 2019, CUTA commissioned a survey of infrastructure needs across the country. It found almost \$60 billion in unfunded projects that can only be completed if new funding sources are made available. This means that even with the federal government's significant capital investment, 45% of agencies' capital plans remain unfunded.

### To address the continuing need for capital investment, we recommend the federal government:

- Accelerate the existing \$20 billion in the public transit stream of the Investing in Canada Infrastructure Program, which is back-loaded, for shovel-ready public transit projects.
- Keep dollars dedicated for transit earmarked for transit when reprofiling, reallocations, or funding lapses occur.
- Review requirements for municipal contributions to capital projects given Covid's impacts on municipal budgets and a lessened ability to borrow.
- Revisit stacking requirements to allow for more flexibility leveraging federal dollars from multiple sources.
- Continue the federal government's coordinating role in including provinces and territories in supporting public transit.
- Extend the ICIP beyond 2028 and fold it into the promised Permanent Transit Fund.

### RECOVERY TASK FORCE MEMBERS

We believe in public transit. We know how it can make our communities better and more connected. How it offers everyone ways to work, study, and maintain essential social ties. And how it's one of the best ways for us to address the other crisis of our time—climate change.

Nobody planned for the pandemic. Everyone wishes it never came. But it did, and we can't wish it away. What we can shape is the future. The choices made over the next year or two will have impacts for decades. We wanted to participate in CUTA's recovery task force because we know a future with fewer cars, lower emissions, more social inclusion and cities that work better is possible. But it's only possible if public transit continues to be supported today and keeps building for tomorrow.

**AECOM** 

Association du Transport Urbain du Québec

**BC** Transit

Brampton Transit, Ontario

Calgary Transit

**Edmonton Transit Service** 

Halifax Transit

London Transit Commission

Metrolinx, Greater Toronto Area

New Flyer Industries

OC Transpo, Ottawa

Réseau de Transport de la Capitale, Quebec City

Saskatoon Transit

Société de transport de Montréal Société de transport de Laval

St. John's Metrobus

Strathcona County Transit, Alberta

Thales

**Toronto Transit Commission** 

Transit Windsor

TransLink. Metro Vancouver



# SUMMARY: HOW TO BUILD TRANSIT BACK BETTER

OBJECTIVE	FUNDING OPTIONS NEW	EXISTING
Operating public transit safely	Continued operating support	<ul> <li>Removing the 15% SOGR in the ICIP public transit stream</li> <li>ICIP COVID Resilience stream</li> <li>GTF transfer</li> </ul>
Decongesting cities and creating jobs	• Extend ICIP post-2028 as a Permanent Transit Fund	<ul> <li>Accelerate current ICIP funding</li> <li>Leveraging other federal funding programs including the National Trade Corridors fund</li> <li>GTF transfer</li> </ul>
Use public transit to foster social inclusion	Extend ICIP post-2028 as a Permanent Transit Fund	<ul><li>ICIP Covid Resilience stream</li><li>Accelerate current ICIP</li><li>GTF transfer</li></ul>
Acting on climate change through public transit	<ul> <li>New zero-emission bus and charging system procurement program</li> <li>Extend ICIP post-2028 as a Permanent Transit Fund</li> </ul>	Accelerate current ICIP
Making public transit more efficient through innovation	<ul> <li>Create a Transit Innovation Accelerator Fund</li> </ul>	<ul> <li>Leverage existing innovation programs and streamline into the new fund</li> </ul>



