



city
of north
vancouver

MOBILITY STRATEGY

cnv.org/mobility

SPRING 2022

Our streets have many purposes for residents, businesses, and visitors.





This is our strategy to create healthy streets that work for everyone.



TABLE OF CONTENTS

Strategy At a Glance p 6

Provides a synopsis of the main issues and key actions.

Introduction p 9

Summarizes the opportunities and challenges that exist to create a healthier city with a transportation system that works for everyone. It also describes the work to develop the Mobility Strategy.

Vision and Goals p 19

Outlines a shared vision for the future of mobility in the City, with four supporting goals and how we propose to monitor our progress. It describes the proposed future transportation system and what is needed to achieve a safe, sustainable, vibrant, and connected network of streets that provides a high quality experience for everyone.

Strategies and Actions p 25

Presents 11 strategies, along with supporting actions that we can take to achieve our vision and goals for mobility in the City. It also introduces a new way for all of us to think about our streets – one that puts people first.

Implementation p 75

Describes how we will implement the final version of this strategy, including how the City will set priorities, and involve the public in our decision-making, build partnerships, and make the best use of resources.

Glossary p 78

Defines the mobility-related terms that we use throughout the Mobility Strategy along with footnote references.

THREE WAYS TO READ THIS STRATEGY

The Mobility Strategy is first and foremost for City staff to refer to and apply over the next decade. However, it is also written with emphasis on plain language, so that this strategy can be a communication tool with our community.

Recognizing that not everyone has time to read the entire strategy, we have recommendations below if you want a quick read:



3 minutes

Read the Mobility Strategy

At a Glance starting on the next page. This provides a synopsis of the main issues the City faces, and what the key actions are to make our streets work for everyone.



15 minutes

The Strategies and Actions

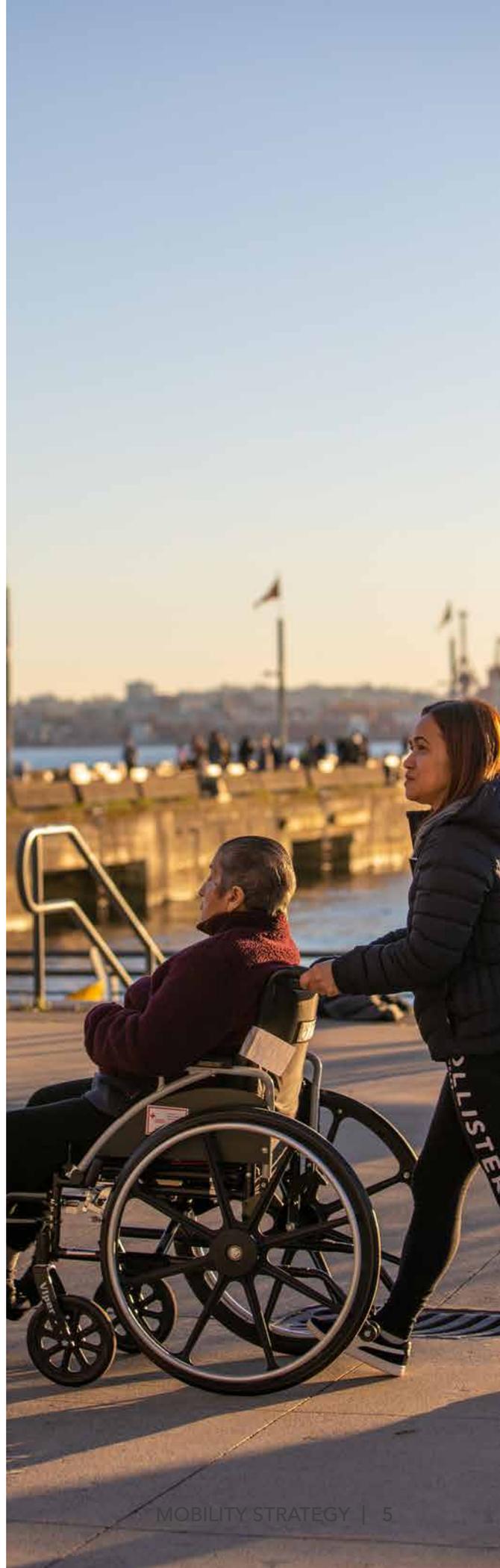
from pages 25-74 provides a comprehensive perspective on everything the City intends to implement over the next ten years to make our streets work for everyone.



1 hour

The complete text of the strategy

provides a full picture of the challenges and opportunities the City faces, along with the vision, goals, strategies, actions, sub-actions, and more!





We need to change the way we think about and use our streets

Mobility Strategy At a Glance

WHERE WE ARE TODAY

Sustainable mobility means thinking about different transportation modes, policies, infrastructure, and behaviours as an integrated system.

Doing so provides benefits to residents, workers, and visitors alike—from affordability, resilience, choice, and access to opportunity, to physical activity, safety, and reduced carbon emissions.

The City of North Vancouver has accomplished a lot over the last decade. We have expanded our sidewalk and cycling networks to create

connected systems, worked with TransLink and others to provide more reliable transit service, and introduced new travel options like ride-hailing and shared e-bikes.

In fact, these actions, along with our existing compact built form, have helped us achieve one of the highest mode shares for transit, walking, and cycling in the region—an important trend to continue! The City's commitment to sustainable transportation, safety, and integrating transportation and land use has put us in a good position to adapt as regional conditions change around us.

OUR CHALLENGE MOVING FORWARD

As the City and region grow, more trips are being taken within the same amount of street space. When people do not feel safe walking or cycling on our streets, or think that transit is too slow, they see driving as the best option, and choose to do just that. While nearly 1/3rd of our vehicle trips are under five kilometers, a distance many of us could walk, bike, or take transit, we drive out of convenience.

That's why traffic congestion is something that many experience on a near-daily basis. We have limited ability to provide more road space and know that building bigger roads is only a temporary solution that can often result in more traffic than there was previously! Providing more travel choices is the most effective way the City can make our streets more reliable for people who need to continue using a vehicle.

URGENTLY PLANNING FOR TODAY AND THE FUTURE

While we can't build our way out of congestion, **we can make it easier for people to choose different ways to move around.** Transit carries more people in the same space. Biking and walking can be convenient options for shorter trips. Compact, walkable development means people don't have to travel as far to meet their daily needs and allows for smaller delivery vehicles for goods movement.

The ways we travel and the options we have available continue to evolve. Mobility choices can improve our health and neighbourhood connections. The design of our streets and neighborhoods impacts the safety, comfort, reliability, and primary way we choose to travel for different trips. In order to maximize these benefits, we need to change the way we think about and use our streets!

THE MOBILITY STRATEGY IS A PLAN TO CREATE HEALTHY STREETS THAT WORK FOR EVERYONE

The Mobility Strategy is the City's blueprint to create a balanced transportation system that provides people with mobility choices and creates lively and inclusive places. It guides how the City will plan, design, maintain, operate, and invest in our transportation system for the next decade.

A collaborative, multi-year planning effort between the City, stakeholders (partners, peer agencies, and community organizations), and the public developed our shared vision and community goals, and helped identify a series of actions tailored for our City.

The Mobility Strategy provides our vision for the City of North Vancouver's transport system...



The Mobility Strategy is about creating and supporting an environment that provides a wide range of travel options that are high-quality, affordable, and sustainable. Support from partners and continuous engagement are necessary as the strategy is brought to life.

Ongoing input from the community will inform the sequencing and implementation of actions and identify if needs have changed.

A list of key actions and community priorities are provided below.

KEY ACTIONS IN THE MOBILITY STRATEGY TO ACHIEVE OUR VISION



Making walking and rolling a safer and more comfortable option for short trips by continuing to build compact and complete neighbourhoods and rapidly delivering an all ages and abilities (AAA) mobility lane network that connects all neighbourhoods and key destinations in the City.



Making transit a faster and more reliable option for more of our longer distance trips by delivering more transit priority measures to speed up buses and creating the enabling conditions for rapid transit expansion on the North Shore and across the Burrard Inlet.



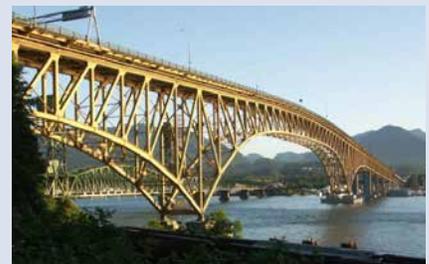
Reducing travel speed limits on more streets to decrease the risk of serious injuries and fatalities resulting from collisions and making the travel experience more comfortable for people walking and rolling.



Improving goods movement reliability and urban deliveries by enabling microhubs, delivery lockers, and more dedicated loading and unloading spaces across the City.



Rebalancing the space along our curbs to meet a wider range of needs, like parking, loading, and public spaces to maximize access for everyone.



Coordinating closely with the adjacent municipalities and the Province to improve the people and goods moving capacity of shared corridors, such as Highway 1.



INTRODUCTION

What is the Mobility Strategy?



This Mobility Strategy proposes a new blueprint for a modern, well-balanced transportation system in the City of North Vancouver that provides real mobility choices, creates great and inclusive places, and supports climate action.

The needs and demands on the City's streets and transportation system today are rapidly evolving and becoming increasingly complex. The actions and strategies included in the Mobility Strategy are proposed to guide transportation planning and policy decisions over the next ten years towards ensuring our streets can work better for everyone.

This strategy:

- ▶ **PUTS PEOPLE FIRST:** Everyone who lives or works in our community will be able to prosper, no matter who they are or how they move around the City.
- ▶ **SUPPORTS A THRIVING ECONOMY:** Our streets will support efficient goods movement, foster more foot traffic for local businesses, and make it easier for businesses to attract and retain workers.
- ▶ **RECOMMENDS ACTIONS TAILORED FOR OUR CITY:** The City, along with the region, is growing in population and employment. More people, jobs, services, uses, and activities are creating new demands on our streets. This strategy takes proven best practices from places that face similar challenges and opportunities and tailors these for our City's context.
- ▶ **PREPARES US FOR THE FUTURE OF MOBILITY:** The ways we travel and the options we have available continue to evolve. This strategy is about creating the enabling conditions to provide a variety of travel options for people in the City that are high-quality, affordable, and sustainable.

The Mobility Strategy was developed by taking a comprehensive assessment of our City's and region's mobility needs, challenges and opportunities and aims to reflect the values and priorities that we heard from the public and stakeholders through community dialogue and engagement.

Mobility and Transportation in the City

The City of North Vancouver is the urban core of the North Shore and gateway to the North Shore mountains and Sea-to-Sky corridor. Our streets help get people to school and work, support businesses, provide a place for people to gather, and connect us with the rest of the region.



HOW OUR RESIDENTS MOVE:

3-4

TRIPS ARE MADE PER PERSON EACH DAY

These include going to work or class, dropping our kids at school, or running errands.¹

70%

OF TRIPS ARE MADE USING A VEHICLE

Driving trips have decreased by 3% in the last decade even as our population has grown.²

30%

OF TRIPS ARE MADE WITHOUT A VEHICLE

Trips that include walking, rolling, or transit have increased about 3% in our City over the last decade.³

70%

OF OUR TRIPS STAY LOCAL

Most of our trips are shorter trips that stay on the North Shore.⁴

15km

IS THE AVERAGE DISTANCE WE DRIVE EACH DAY

Though driving trips have decreased, we are driving longer distances – 2 km more than a decade ago.⁵

See page 79 for footnote references.

OUR MOBILITY SYSTEM IS EXTENSIVE

The City's network of streets, sidewalks, mobility lanes, public trails, and bus lanes that stretch over 550 km, about the distance between North Vancouver and Vernon. That's about 20% of all space in the City. About three quarters of this space is dedicated to vehicles and nearly a third of that space is dedicated to parking. We don't have much space to expand the road network, so we must make the best use of what we have to accommodate a growing variety of needs and ways to move around safely and efficiently. This Strategy provides a range of actions that will guide us in ensuring our mobility network makes space for everyone.

20% OF THE CITY'S SPACE IS MADE UP OF ITS TRANSPORTATION NETWORK, WHICH STRETCHES OVER 550km

3/4 OF THIS SPACE IS DEDICATED TO VEHICLES, OF WHICH NEARLY 1/3 IS DEDICATED TO PARKING

OUR MOBILITY SYSTEM IS A SHARED RESPONSIBILITY

Multiple agencies, levels of government, and service providers are responsible for making our transportation system work. The City is responsible for streets and sidewalks. The Province is responsible for highways and interchanges. TransLink takes care of providing our bus and SeaBus service. Modo and Evo operate car-share services. Uber and Lyft offer ride-hailing services. Lime is piloting an e-bike share system. We share a boundary with the District of North Vancouver and thousands of people move between our two communities every day. This strategy outlines numerous actions where ongoing coordination and collaboration between the City, our partners, and our neighbouring jurisdictions (District of North Vancouver and Squamish (Sḵwxwú7mesh) Nation), will be needed to provide transportation services and solutions to meet a wide range of needs and support a seamless travel experience.

WE HAVE A STRONG FOUNDATION OF SUSTAINABLE MOBILITY TO BUILD UPON

We have accomplished a lot in the last decade. We have expanded our sidewalk and cycling network which has contributed to increases in the amount of walking and rolling trips. We have worked with TransLink and other partners to introduce more reliable transit services which has increased the amount of people who take transit. Our municipality has one of the highest rates of trips made by walking, rolling, and transit in the region and this is an important trend to continue as the City and region continue to grow. This strategy proposes a suite of actions and initiatives to ensure our City continues to be a leader in sustainable mobility in Metro Vancouver.

Our City and streets are changing. This strategy aims to urgently meet the needs of our streets today and tomorrow.



We are in the middle of a growing and changing region. Our City is part of Metro Vancouver – one of the fastest growing regions in Canada. In the last decade, our region has added nearly 330,000 new residents (a 14% increase). Places that our City is “on the way to” like the Sea-to-Sky corridor and the Sunshine Coast have seen growth as well.⁶ We are seeing the impact of this playing out on our streets today, with the number of people commuting between the North Shore and other parts of the region growing every day by nearly 10% in the same period.⁷ Many people choose to drive (70% of trips in the City)⁸ because transit is perceived to not be as convenient or efficient, and walking and rolling infrastructure is not sufficiently attractive and comfortable.

Our mobility options are rapidly evolving. New technologies and services are providing new travel options and challenges. E-bikes, ride-hailing, car-sharing, and rapid transit are all changing how we move around. Our smartphones provide us with real-time data at our fingertips, but are also linked to distracted driving incidents. The rise of e-commerce and online shopping means more trucks and delivery vehicles than ever before. Automated vehicles are also on the horizon.

Technology can create improved efficiency, but can also create more pressures on our streets, and in some cases, be a detriment to our safety.

Our mobility choices impact our climate and our well-being. Emissions from motorized vehicles generate carbon pollution, impact storm water management, add to the urban heat island effect, and impact our air quality. Our use of vehicles accounts for about 57% of our City’s total carbon emissions, which needs to be dramatically reduced in the next ten years.⁹ Higher rates of vehicle use are also linked to higher rates of obesity¹⁰, stress¹¹, chronic illness¹², and poorer mental health. We need to provide better options for sustainable travel in order to collectively reduce our carbon pollution, mitigate climate change, and improve our community health.

The demands on our streets are becoming increasingly complex. Our streets are places where we travel, connect, dine, rest, shop, and exercise. They support goods delivery and help our businesses, industries, and economy prosper. Our streets are places where we celebrate, meet with others, and conduct business. This wide range of demands on our streets makes planning and allocating space for different uses more challenging without proper guidelines.

See page 79 for footnote references.

How We Developed the Strategy

Development of this Mobility Strategy involved exploring the current context of our streets, the potential future mobility needs we might face, and considering the range of practices and steps that would be effective to achieve the outcomes we want for our streets.

We reached out to City residents, businesses, and visitors throughout our process to learn about their perspectives, ideas, and experience of traveling to, from, and throughout the City to ensure this Mobility Strategy reflected the values of our community and the people who use our streets every day.

Phase 1 engagement, during spring 2021, focused on the overarching strategy framework, and development of the vision, goals, and high-level strategies. We learned during this phase that we were on the right track, and used stakeholder and public feedback to start developing actions.

Phase 2 engagement, during spring 2022, focused on collecting input on over 100 specific actions for ways that we proposed to support our vision and goals, and whether these actions will be particularly influential at meeting our goals.

The Mobility Strategy was developed with significant support from stakeholders and the public:



KEY THEMES THAT EMERGED THROUGH THE TWO ENGAGEMENT PHASES



There is broad support for improvements to our walking and rolling networks. This includes building out our sidewalks, improving intersection curb cuts, and quickly building out our priority corridors for all ages and abilities (AAA) mobility lanes.

Mobility needs to be affordable and accessible. While there has been recent progress on providing affordable mobility options (such as the introduction of the R2 RapidBus), our transportation system can become even more equitable.



Transit needs to be faster and more reliable. There is recognition that transit is not competitive enough with private vehicle travel, and does not provide sufficient connections to the rest of the region.

Curb space is not meeting our needs. Finding parking is difficult for many, especially for people with disabilities, and for people delivering goods. There needs to be more dedicated spaces for specific users and better programs to manage the City's finite curb space.



There is interest in a faster transition to electric vehicles. In order for this to happen, residents are wanting to see more incentives for purchasing electric vehicles and more public charging infrastructure.

The prosperity of neighbourhoods and businesses depend on our streets. Residents and businesses recognize the importance of streets to not only efficiently move people and goods, but also as places for activation and place-making.



Increased traffic is making us feel frustrated, less safe, and is hurting our economy. Being stuck in traffic makes it difficult to plan our day, increases our stress, and can result in wasted productivity. It makes people feel less safe and has significant impacts on businesses attracting and retaining staff across the North Shore.

The need to design our City for all weather conditions. North Vancouver can often be dark and rainy, especially in the winter. Providing improved weather protection and light levels for people walking and rolling, and improving street markings for vehicles is essential.



We want to use our vehicles less. Residents are interested in walking and cycling more. Our community recognizes the negative impacts vehicles have on safety, physical health, the environment, and prosperity of our businesses.

We appreciate our dense, walkable neighbourhoods. Being able to reach many services and amenities within a short distance is something that residents appreciate about living in the City, and is seen as one of the best ways to limit vehicle use.



HOW WILL THE MOBILITY STRATEGY PROVIDE BENEFITS FOR THE DIFFERENT WAYS WE MOVE AROUND?

For trips made by driving:

All we need is a small drop in vehicle trips during peak hours to reduce congestion and create more reliable travel conditions (which we saw at the onset of the COVID-19 pandemic in 2020). In order to do this, we need to create improved conditions for more people to consider non-vehicle travel. Nearly one-third of vehicle trips in the City are less than five kilometres in length, a distance that many people could travel by walking or rolling. Enabling the shift to walking, rolling, and transit is the best action that the City can take to improve driving conditions on the North Shore. For people who need to drive, this strategy makes it easier for people to adopt electric vehicles and car-sharing as options.

For trips that involve moving goods:

The recent increase in urban deliveries has made it more difficult to find space to deliver and receive goods. We will take steps to establish a modernized network where goods movement and the economy are prioritized while limiting local neighbourhood impacts.

This will include improvements to the efficiency and safety of goods movement through more dedicated delivery spaces on our busiest streets, and developing solutions to right-size deliveries in our dense urban areas. Efficient deliveries benefit residents, businesses, and the economy by decreasing congestion and freeing up space for all travellers.

For trips made by walking or rolling:

The City already has high rates of walking and rolling (23% of trips),¹³ in part due to many residents living in close proximity to shops, services, and amenities. We plan to increase the accessibility of our network by improving our sidewalk infrastructure, introducing more amenities like places to rest, weather protection, secure bicycle parking, and wayfinding, and increasing place-making and public realm activation to make it more enjoyable to spend time on our streets. We will also continue expanding the Mobility Lane Network and use quick-build materials to increase our delivery efficiency. This Strategy has the benefit of enabling healthier communities, cleaner air, and less carbon pollution for everyone.

See page 79 for footnote references.



TERMINOLOGY

- ▶ **WALKING AND ROLLING:** When we talk about walking and rolling, we are referring to walking, using a mobility device (e.g., wheelchair), biking, skating, taking a scooter, or using a micromobility device (e.g., e-bike share).
- ▶ **ACCESSIBILITY:** When we say accessibility, we mean the ability for people to access activities, services, and opportunities.

For trips made by transit:

Transit has high people-moving capacity and can carry up to 50 people in the same amount of space as two vehicles. Increasing transit priority measures on the Frequent Transit Network is needed, as these routes are within walking distance for more than 75% of City residents.¹⁴ This will be paired with advocating for a North Shore-wide initiative for a rapid transit connection across the Burrard Inlet. These efforts to shift people to use transit will not only benefit transit users, but also drivers and goods movement by removing vehicle trips from our streets.

For emergency responders:

Increased traffic makes it challenging for our emergency responders to quickly travel where they need to go. We will continue to work closely with emergency responders on implementing signal pre-emption on key corridors for emergency vehicles, and improve street safety measures so that there are fewer incidents on our streets in the first place.

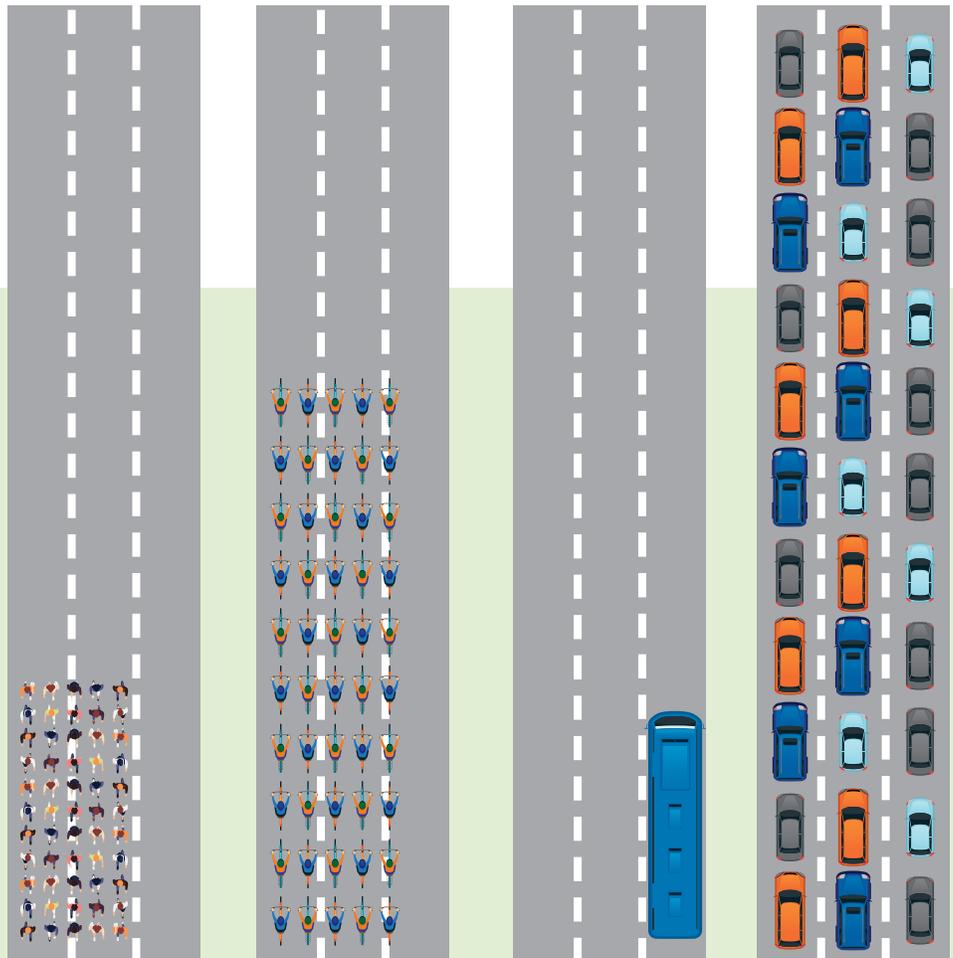
See page 79 for footnote references.

**50 people
ON FOOT**

**50 people
ON BICYCLES**

**50 people
ON A BUS**

**50 people
IN 33 CARS**



People who walk, cycle, or take transit occupy significantly less space than private vehicles, which is important to keep in mind with the limited amount of space we have on our streets.



We cannot build our way out of congestion

Vehicles are, and will continue to be, an essential part of moving people and goods on the North Shore and across the region. However, a recent study by the Province of British Columbia estimated that if current trends hold, vehicle use on corridors like the Upper Levels Highway will grow between 25% and 40% between now and 2050. We can't accommodate this level of vehicle traffic on our streets.¹⁵

Increased traffic is a challenge that we need to tackle, but building more lanes in the City will not solve the issue. There is limited ability to expand the road network due to our dense built form and complex topography.

Even if we could, adding road space usually makes traffic worse than it originally was after only a few years: this is called induced demand.

The City and our partners are working to address transportation and growth needs at the regional level. This Strategy aims to complement these efforts by focusing on what we can do the most at the local level: creating quality neighbourhoods that offer safe and convenient mobility options for people and local businesses to help create a shift that recognizes the automobile as just one choice amongst a wide range of travel options for the different kinds of trips we make every day.

See page 79 for footnote references.



VISION AND GOALS

The Vision

Healthy streets that work for everyone.

This vision for the City of North Vancouver's mobility future recognizes that City streets are under pressure, are becoming more dynamic, and serve more than just one function. Along with being used by cars, they facilitate the movement of transit, goods, and people walking and rolling. Beyond their transportation function, our streets are critical elements of our environmental, cultural, economic, and public utility infrastructure. They also serve as collective spaces for relaxation, socializing, shopping, exercise, and more. The vision is a commitment to enabling the many demands of our streets in ways that support our overall health and wellbeing.

The Goals

The vision is supported by four goals:



Our streets help our City prosper and be a vibrant place

A healthy city is one where streets and sidewalks hum with economic and social activity, where people meet and shop and enjoy the beautiful city we live in, side by side with efficient goods delivery. Our goal is to use our streets to improve our collective prosperity, health, and happiness.



Our streets support real and accessible choices for how we move around

The City's Official Community Plan (2014) prioritizes the development of a multimodal transportation system. This means creating a more integrated, reliable network that recognizes we all move throughout the City in different ways, and that our streets should support greater access to a range of mobility options.



Our streets are safe and comfortable

In 2016, the City adopted a goal of achieving zero fatalities and serious injuries on City streets. Safe streets are foundational to creating a healthy, people-oriented city.



Our streets reduce our impact on climate change and the environment

More than half of our community's greenhouse gas emissions (GHG) come from burning fossil fuels to power vehicles. This contributes to climate change, air pollution, and health impacts. In 2019, the City adopted a GHG reduction target of net zero emissions by 2050. The decisions we make about our transportation system will shape our ability to meet this commitment.

How We Will Monitor our Progress

The City will measure progress toward these goals to evaluate where we are succeeding and where we are falling short.

Goal	Where we want to be by 2030
Our streets help our City prosper and be a vibrant place	<ul style="list-style-type: none">▶ Increase foot traffic 20% on main streets from 2022 levels.
Our streets support real and accessible choices for how we move around	<ul style="list-style-type: none">▶ Increase transit and active mode share to 50% of our trips.▶ No increase in vehicle trips during peak hours.
Our streets are safe and comfortable	<ul style="list-style-type: none">▶ Reduce road-related deaths and serious injuries to zero.
Our streets reduce our impact on climate change and the environment	<ul style="list-style-type: none">▶ Reduce transportation emissions to achieve a 45% reduction below 2010 levels from all sources in the City.

The City will regularly monitor and report out on our progress towards achieving these goals. While the City will work to create the conditions that will enable us to meet our goals, we can't do it alone. All of us have a role to play in achieving the Mobility Strategy vision.

The five guiding principles below have been developed to ensure the City's and community's values are being maintained when developing the goals, targets and supporting actions of the Mobility Strategy. These principles are being applied to concurrent strategies discussed in the following section.

Shared Principles

- ▶ **We need to take actions that improve our collective health:** The City will prioritize actions that increase our sense of connection to each other and the natural world, while making it easier to meet daily needs.
- ▶ **We need to take resilient actions:** The City will prioritize proven, people-focused actions that increase the likelihood we will achieve our goals, even in dramatically changing circumstances.
- ▶ **We need to take equitable actions:** The City will prioritize actions that remove barriers that make it harder for some people to connect to each other and to opportunities than others.
- ▶ **We need to take actions that work towards truth and reconciliation:** The City will prioritize actions that address inequities and maintains a mutually respectful relationship between Indigenous and non-Indigenous peoples in the region.
- ▶ **We need to take timely actions:** The City will prioritize actions that will allow us to move quickly, recognizing the steps we take today will impact our future.

HOW DOES THE MOBILITY STRATEGY RELATE TO AND SUPPORT OTHER CITY AND REGIONAL PLANS?



City of North Vancouver Plans

The City of North Vancouver has four major strategies to guide our next decade of planning and decision-making in key areas: mobility, climate and the environment, community well-being, and the economy.

When complete, these strategies will provide modernized guidance to support advancing the broader goals and ambitions of the City's Official Community Plan. The Mobility Strategy supports, and is supported by, each of these Strategies through aligned goals, and coordinated actions.



THE CLIMATE AND ENVIRONMENT STRATEGY

will be the City's first comprehensive strategy to help us become a resilient and sustainable City where everyone thrives. This strategy will identify actions to cut carbon pollution from buildings, transportation and materials to achieve our climate targets, and improve the health, connectivity and biodiversity of our natural areas across the City. The Mobility Strategy aligns with this strategy by identifying actions that focus on mode shift and electrification to decrease transportation emissions, and provides more street space for nature and biodiversity.



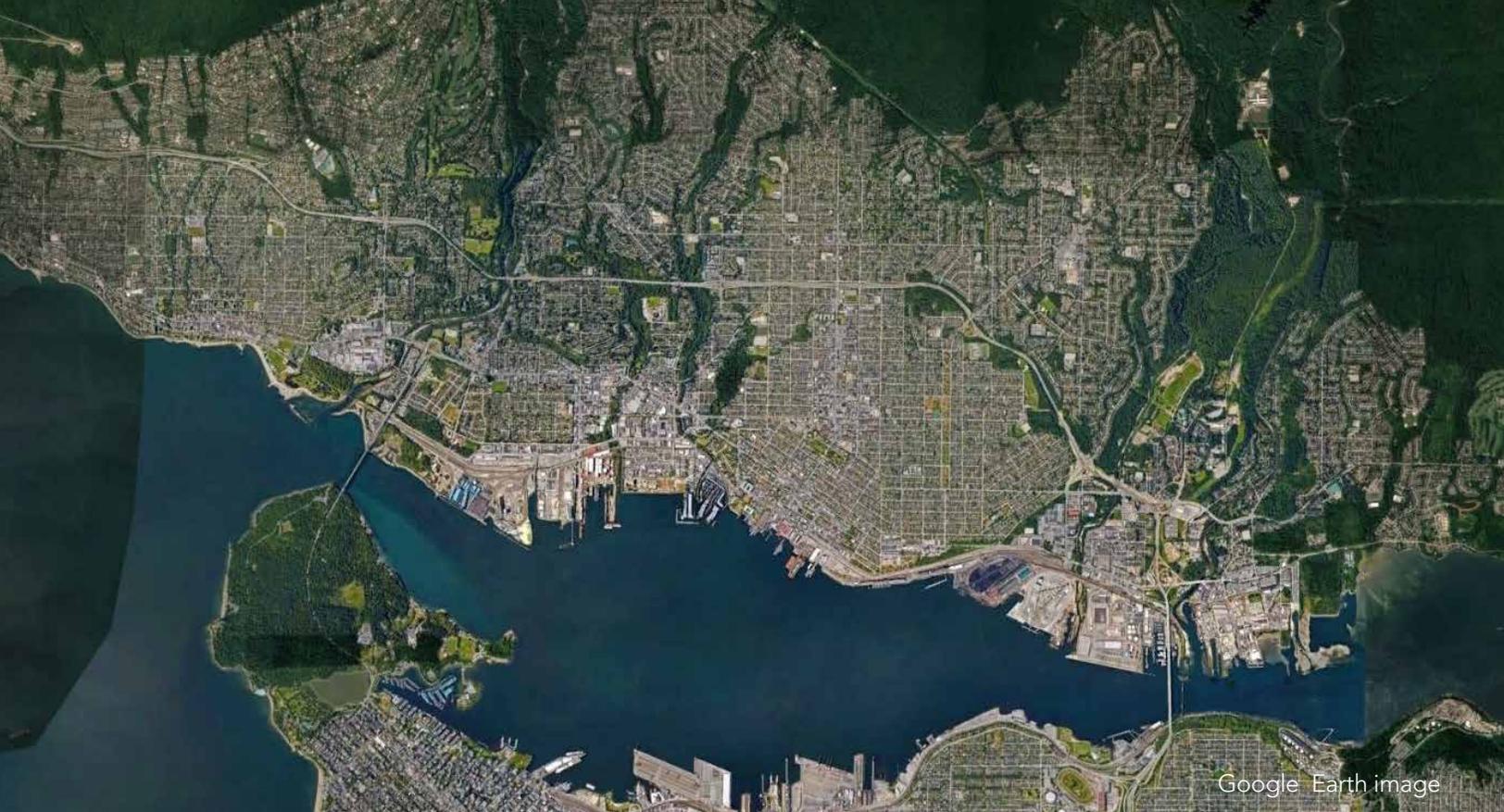
THE COMMUNITY WELLBEING STRATEGY

will provide direction through policies, programs, and projects for social, economic, environmental, health, cultural, and political conditions that are essential for individuals and communities to flourish and fulfill their potential. The Mobility Strategy aligns with this strategy by identifying actions to provide healthy and affordable transportation options for people to get around, and better integrating land use and transportation so that more amenities and services are in close proximity for many of our residents.



THE ECONOMIC STRATEGY

will provide a five-year framework to balance economic, social, and environmental objectives with specific actions that are integrated with other City plans and strategies. The overarching goal is to support community prosperity based on an inclusive, sustainable and resilient economy that provide opportunities for the growth of local business. The Mobility Strategy aligns with this strategy by identifying actions to improve the reliability of how people and goods move around, and establishes ways to make our commercial areas more attractive and prosperous through placemaking on our streets.



Google Earth image

Regional Plans

Beyond the City of North Vancouver, there are also several region-wide plans that were considered in developing this Mobility Strategy.

- ▶ **TRANSPORT 2050** is TransLink's Regional Transportation Strategy that was adopted in early 2022. The strategy has five goals for regional transportation: convenient, reliable, affordable, safe & comfortable, and carbon-free. The strategy identifies over 100 actions to improve transportation across all modes. The City of North Vancouver works closely with TransLink on providing improvements to transit, regional cycling networks, travel demand management policies, and maintaining reliability on our roads for people and goods movement.
- ▶ **METRO VANCOUVER'S CLIMATE 2050 TRANSPORTATION ROADMAP** lays out 52 actions for reducing emissions and increasing resiliency. The actions in this roadmap focus on working together to collectively reach climate objectives. The City of North Vancouver seeks to implement actions within this roadmap alongside other municipalities in the region to decrease greenhouse gas emissions from our transportation sector.
- ▶ **THE CLEAN AIR PLAN** is Metro Vancouver's air quality and greenhouse gas management plan. Actions in the plan will reduce air contaminant emissions and impacts, including greenhouse gases in the near-term and support a commitment to be a carbon-neutral region by 2050. The Mobility Strategy has aligned its air pollution and greenhouse gas emission targets to this plan, recognizing that there is a significant opportunity to reduce emissions from our transportation system.
- ▶ **METRO 2040** is Metro Vancouver's regional growth strategy. It is the vision for accommodating anticipated future growth to the region with considerations for diverse and affordable housing, transit and mobility, resilient employment, protected ecological and agricultural lands, and impacts of a changing climate. It is currently being updated (to Metro 2050) at the time of this strategy being written. The Mobility Strategy supports the goals of Metro 2040, particularly the goal of integrating land use and transportation planning to help people get out of their cars, supporting safe and efficient movement of goods and people, and reducing greenhouse gas emissions.

A NEW WAY

to think about our streets

Each street in our City has a different set of uses and functions that merits specific design considerations. There is no one-size-fits-all.

In order to better communicate how we design and allocate space on our streets, a set of street types has been developed that illustrate the typical transportation functions, land use context, and design objectives. The street types are introduced here and expanded upon starting on page 60.

MAIN STREETS are the main activity spines of the City for shopping, services, and amenities.

CITY CONNECTOR STREETS provide access across the City and to regional networks.

NEIGHBOURHOOD CONNECTOR STREETS connect Local Streets to the broader network.

LOCAL STREETS are low-volume, low-speed streets in residential neighbourhoods.

SHARED STREETS are curbsless streets that prioritize pedestrians and vibrancy.

SERVICE STREETS provide access to service and industrial areas in the City.

These street types are intended to provide guidance on how we plan and design our streets, and how we communicate these intentions with the broader community. These street types are mentioned several times throughout the strategies and actions in the next section to indicate prioritization, or where certain actions are expected to occur.



STRATEGIES AND ACTIONS



The strategies in this section represent the key steps our City proposes to take to help realize our vision for healthy streets that work for everyone. Each of the strategies contribute to multiple goals. Each strategy includes a range of specific projects, policies, and programs that we will aim to deliver over the next 10 years.

The strategies are organized around three themes:

THEME 1

Make it easier for everyone to choose sustainable and affordable options for the trips we take.

- ▶ **STRATEGY 1:** Make walking and rolling the easiest choice for more of our shorter distance trips.
- ▶ **STRATEGY 2:** Make transit the easiest choice for more of our medium and longer distance trips.
- ▶ **STRATEGY 3:** Make shared and zero-emission vehicles the easiest choice when we need to use a car.
- ▶ **STRATEGY 4:** Encourage people to make sustainable travel choices.

THEME 2

Improve our mobility experience through the design of our streets and neighbourhoods.

- ▶ **STRATEGY 5:** Improve the safety and comfort of vulnerable road users.
- ▶ **STRATEGY 6:** Rebalance the space along our curbs to meet a wide range of needs.
- ▶ **STRATEGY 7:** Reclaim more street space for people and nature.
- ▶ **STRATEGY 8:** Support sustainable mobility through how we grow and develop.

THEME 3

Improve reliability for people and goods to move around our City and region.

- ▶ **STRATEGY 9:** Keep urban freight, deliveries, and emergency vehicles moving.
- ▶ **STRATEGY 10:** Strengthen our connections within the City, and across the North Shore and Metro Vancouver.
- ▶ **STRATEGY 11:** Optimize our mobility system through proactive management, operation and access to information.

To make it easier to follow along and understand why we are proposing certain actions, we have added two types of callout boxes called Concept Callouts and Recent Progress. Look for these to learn more!

CONCEPT CALLOUT

RECENT PROGRESS

THEME

1

Make it easier for everyone to choose sustainable and affordable options for the trips we take.



Currently, using a vehicle is usually the most efficient way to get from one place to another, particularly for longer distance trips. As our City and the region grow in population, our streets are becoming increasingly congested, making vehicle travel less competitive and reliable. The best thing the City can do to maintain reliability on our streets is to provide safe, convenient, and sustainable options.

Make it easier for everyone to choose sustainable and affordable options for the trips we take.

STRATEGIES AND ACTIONS AT A GLANCE

1: Make walking and rolling the easiest choice for more of our shorter distance trips.

- A. Deliver a complete, universally accessible, and high-quality pedestrian network.
- B. Deliver an all ages and abilities Mobility Lane Network that connects all our neighbourhoods and key destinations.
- C. Make our walking and rolling networks easier to use and navigate for people of all ages and abilities.
- D. Provide abundant amenities that increase the enjoyment of walking and rolling.
- E. Improve access to shared micromobility services for everyone.

2: Make transit the easiest choice for more of our medium and longer distance trips.

- A. Create enabling conditions for enhanced transit service and coverage across the City.
- B. Support an inclusive transit system that is easy to understand, and accommodates people of all abilities.
- C. Create enabling conditions for mobility hubs to provide seamless connections between transit and other modes.

3: Make shared and zero-emission vehicles the easiest choice when we need to use a car.

- A. Support easier access to car-sharing and carpooling services.
- B. Support the transition to zero-emission vehicles.

4: Encourage people to make sustainable travel choices.

- A. Expand educational programs to encourage walking, rolling, and transit use.
- B. Collaborate with employers to increase sustainable commuting and reduce trips.
- C. Expand delivery of youth-oriented programs that support safe and active travel to school.
- D. Continue education and outreach programs for improving neighbourhood-wide and independent sustainable travel.
- E. Display corporate leadership by making it easier for City staff to travel sustainably.



STRATEGY 1

Make walking and rolling the easiest choice for more of our shorter distance trips.

Today, about 11% of vehicle trips in the City are under 1.5 km in distance and 29% are under five km – distances that could be easily travelled by walking or rolling, by many people if supporting conditions exist. Walking and rolling provide social, health, environmental, and economic benefits that will improve individual wellbeing along with more foot traffic for our local businesses.

ACTIONS

1A. Deliver a complete, accessible, and high-quality pedestrian network.

- i Provide a complete sidewalk network on both sides of the street of all streets within a reasonable walking distance (typically 400 metres) of all key pedestrian areas and destinations like schools, community centres and frequent transit corridors. Prioritize improving the quality and comfort of existing narrow sidewalks along and within a reasonable walking distance of the City's Main Streets.
- ii Deliver and encourage more pedestrian connections mid-block pathways across the City, with particular focus on north-south connections in the Lonsdale Regional City Centre, and improve connections over ravines, creeks, and through parks, where environmentally appropriate.
- iii Prioritize universal design and accessibility standards when designing or redesigning all streets, sidewalks, connections, and pathways using guidance from BC's Active Transportation Design Guide.

[more >](#)

STRATEGY 1 ACTIONS (CONT.)

1B. Deliver a AAA Mobility Lane Network that connects all our neighbourhoods and key destinations.

- i Complete the priority corridors for All Ages and Abilities (AAA) Mobility Lanes and provide improved North-South connections to key activity centres in the City. Identify new phases for network expansion on a regular basis as corridors are delivered.
- ii Ensure all new mobility lane infrastructure is designed to meet AAA standards.
- iii Upgrade existing mobility lane infrastructure to meet AAA standards, prioritizing investments on corridors with high use and the greatest potential for risk reduction.
- iv Make better use of low-cost, quick-build solutions, such as using temporary delineator posts to separate mobility lanes from vehicle traffic, and observing these temporary solutions in advance of upgrading to fully developed infrastructure.

1C. Make our walking and rolling networks easier to navigate.

- i Deploy a user-friendly mobility wayfinding system at key locations across the City, and provide this in an open format to encourage third-party development of wayfinding solutions. Coordinate with North Shore governments to ensure sub-regional alignment.
- ii Require the provision of direct, unobstructed, and protected routes for people walking or rolling, as part of the permitting process for construction and development, special events, and public works.

1D. Provide abundant amenities that increase the enjoyment of walking and rolling.

- i Expand amenities such as benches, secure bicycle parking, weather protection, and washroom facilities, and create an inventory and prioritization schedule with community input.
- ii Provide more greenspace on all streets, and achieve a double row of trees wherever feasible.
- iii Deliver a network of public micromobility charging stations, prioritizing delivery on Main Streets and Shared Streets.
- iv Ensure public micromobility parking spaces are designed to accommodate e-bikes and cargo bikes, especially along Main Streets and Shared Streets.

[more >](#)

STRATEGY 1 ACTIONS (CONT.)

1E. Improve access to micromobility for everyone.

- i Work with shared micromobility service providers to ensure there is equitable fleet distribution, and prioritization across the City's AAA Mobility Lane Network, and close to major destinations.
- ii Ensure affordable access, with incentives developed for people with low incomes or low personal vehicle access.
- iii Work with the Squamish (Sḱwx̱wú7mesh) and Tsleil-Waututh (səlilwətaʔt) Nations to expand shared micromobility services that support travel options for people living on North Shore reserve lands.
- iv Work with shared micromobility service providers to ensure devices do not impede other travellers through application of end-of-trip procedures and education programs.
- v Advocate for new incentives and loan programs from senior levels of government to support greater uptake of electric micromobility devices, including e-bikes and other emerging devices.

CONCEPT CALLOUT

AAA MOBILITY LANES AND THE AAA MOBILITY LANE NETWORK

AAA mobility lanes are facilities that include separated lanes with physical barriers and off-street paths on higher traffic streets, and signed neighbourhood bikeways on local streets with lower traffic volumes and speeds. Today, the City has approximately 15 km of AAA mobility lane infrastructure. In 2019, Council endorsed the priority corridors for AAA mobility lanes network expansion plan that would increase the total length of these facilities to approximately 25 km.

RECENT PROGRESS

E-BIKE SHARE PILOT PROGRAM

In the summer of 2021, the City and District of North Vancouver implemented a two-year pilot program with Lime to operate an e-bike share system, the first of its kind in the province.





STRATEGY 2

Make transit the easiest choice for more of our medium and longer distance trips.

One bus can carry the same number of people that would normally fit into about 50 cars. We currently make 17% of our trips by transit. Making transit more accessible, frequent, and reliable will make it easier for more people to use it. This will free up space on our streets and help everyone move more efficiently.

ACTIONS

2A. Create enabling conditions for enhanced transit service and coverage across the City.

- i Work with TransLink to expand and enhance local transit service, ensuring all businesses and residents are within a reasonable walking distance of the Major Transit Network. This involves protecting and designing space for fast and reliable transit.
- ii Work with TransLink to plan, design, and implement measures, such as signal priority and bus-only lanes, prioritizing investments at unreliable locations on the Frequent Transit Network.

2B. Support an inclusive transit system that is easy to understand, and accommodates people of all abilities.

- i Ensure all transit passenger facilities are designed to be universally accessible.
- ii Provide consistent digital and physical wayfinding and signage.
- iii Provide high-quality stops by working closely with partners to expand the availability of passenger waiting shelters, real-time information, benches, ample bike parking, improved lighting, and washrooms in high ridership and transfer areas.
- iv Advocate for TransLink to accelerate the delivery of key recommendations identified in the Transit Fare Review to improve the equity of the regional transit fare structure, including introducing fares that better reflect distance travelled on all transit modes and additional income-based discounts.

[more >](#)

STRATEGY 2 ACTIONS (CONT.)

2C. Create enabling conditions for mobility hubs to provide seamless connections between transit and other modes.

- i Support the establishment of mobility hubs in Lower Lonsdale, Central Lonsdale, and other sites with frequent or rapid transit. These hubs will include improved transit priority measures, increased availability of car-sharing and ride-hailing options, and plentiful walking and rolling infrastructure.
- ii Work with TransLink to provide more bike storage on public transit (both buses and the SeaBus) and increased secure bicycle storage at key transfer sites.

CONCEPT CALLOUT

MOBILITY HUBS

Mobility hubs are locations where different sustainable transportation modes are integrated seamlessly to help promote connectivity.



RECENT PROGRESS

R2 MARINE DRIVE RAPIDBUS

In April 2020, TransLink launched the R2 Marine Drive RapidBus, which provides a high-capacity, efficient and reliable connection between Park Royal and Phibbs Exchange. RapidBus offers a more efficient experience by providing fewer stops compared to local transit, all-door boarding, and redesigned streets that prioritize transit. By improving reliability, buses are able to go faster and provide an increased level of service.



STRATEGY 3

Make shared and zero-emission vehicles the easiest choice when we need to use a car.

Many of us need to use a vehicle on occasion. Making it easier to access shared and zero-emission vehicles is necessary to lessen our transportation impacts on the environment. The City of North Vancouver has moderately higher uptake of electric vehicles than other mid-sized municipalities in BC. While we reduce our emissions through decreased reliance on polluting vehicles, car-sharing is also important as it provides an affordable option to get around without needing to own a car, which can help to reduce congestion.

ACTIONS

3A. Support easier access to car-sharing and carpooling services.

- i Enable expansion of car-share vehicle fleets by ensuring adequate facilities exist for car-share vehicles, on- and off-street. This will be undertaken with regulations, incentives, and design guidelines.
- ii Enhance accessibility requirements for car-sharing fleets and work with service providers to increase fleet distribution to ensure effective spatial coverage across all neighbourhoods.
- iii Promote carpooling services and educate the public on how these services work, so that this option is accessible to those who need it.
- iv Work with service providers to increase car-share access for families, lower income households, and people with mobility limitations.

[more >](#)

STRATEGY 3 ACTIONS (CONT.)

3B. Support the transition to zero-emission vehicles.

- i Encourage a shift to electric vehicles (EVs) in the short-term, while exploring other low-emission transportation technologies such as hydrogen. This includes a shift for personal vehicles, as well as supporting the shift for transit, freight, and car-share vehicles.

- ii Accelerate the implementation of actions from the City's Electric Vehicle Strategy. This includes many actions such as improving access to Level 2 and DC fast chargers that are close to community centres and commercial areas, supporting equitable EV-ready retrofits of multi-family buildings and lower income rental buildings through promotion, education, and top-up rebates, and developing an 'electric-first' fleet and equipment policy for the City that prioritizes procurement of electric vehicles.

- iii Advocate for increased incentives and loan programs from senior levels of government to support greater uptake of EVs, particularly for lower income households.

CONCEPT CALLOUT

FUTURE OF AUTOMATED TRAVEL

There are examples of automated applications in the transportation system that are being explored on a pilot basis in the public realm (e.g., Amazon sidewalk delivery robots) however widespread automated vehicle adoption is not anticipated to occur until after the horizon date of this plan (2032). As such, there is not a significant focus on automated travel within the Mobility Strategy.

Even though automated vehicles will significantly change how we move around, there are some aspects that will not change.

- ▶ The City will continue to prioritize the safety and comfort of vulnerable road users and design streets in a way that puts people first.
- ▶ The City remains committed to moving people in a manner that is space-efficient. Walking, rolling, cycling and transit are all modes that can accommodate many people in a small amount of space compared to that of a private vehicle, whether it is operated by a human or not.

RECENT PROGRESS

ENABLING ELECTRIC VEHICLE USE

In recent years, the City has encouraged EV ownership by installing charging stations for public use. The City currently provides six Level 2 dual port charging stations and there are four DC fast chargers in the City. The use of these stations has increased exponentially each year, showing demand for more public charging stations.





STRATEGY 4

Encourage people to make sustainable travel choices.

In some cases, providing infrastructure is not enough to help change travel behaviour. Sometimes there is a lack of awareness, or education and exposure is needed to help people feel confident with new travel options. To this end, the City will reimagine and expand the range of programs and services that have been shown to increase sustainable travel.

ACTIONS

4A. Expand educational programs to encourage walking, rolling, and transit use.

- i Refine how educational programs are provided to facilitate more active travel, including school safe travel campaigns, individualized trip planning assistance, and promotion of new transit and mobility lane infrastructure.
- ii Create education programs tailored to specific community groups and demographics, and making programs available in a variety of languages.

4B. Collaborate with employers to increase sustainable commuting and reduce trips.

- i Encourage employers to provide high-quality end-of-trip facilities for people to comfortably walk and roll to work.
- ii Assist employers to establish corporate travel demand management (TDM) programs to reduce congestion on the network, particularly at peak hours. This may include providing incentives such as subsidized transit passes, and disincentives to driving, such as charging for parking.
- iii Engage major employers to update their policies and practices to encourage more flexible working hours and remote working policies, to reduce overall demand on our roads, particularly at peak hours.
- iv Coordinate with TransLink and municipalities to develop and implement a regional approach to employer TDM programs.

[more >](#)

STRATEGY 4 ACTIONS (CONT.)

4C. Expand delivery of youth-oriented programs that support safe and active travel to school.

- i Develop and update school travel plans on a regular basis, in coordination with school staff and students.
- ii Work with schools and surrounding residents and businesses to pilot new pick-up and drop-off protocols that reduce vehicle congestion around schools.
- iii Enable new programs to support walking and rolling to/from school, especially for younger children.
- iv Bring youth into the design of transportation improvements around schools, such as by co-designing signage and creating murals to demarcate no-stopping zones.

4D. Continue education and outreach programs for improving neighbourhood-wide and independent sustainable travel.

- i Work with partners to undertake educational campaigns with community groups, and provide tools for enhancing the understanding of conventional transit and HandyDART accessible services.
- ii Work with partners to promote awareness of the range of services, programs, and subsidies available from other agencies and levels of government that support affordable and independent travel.
- iii Establish a sustainable trip planning service for residents that require personalized assistance in planning their transit trips.
- iv Work with neighbourhood community groups to establish programming through GoCNV that promotes sustainable travel and include events, education, prizes, and other activities to enable residents to travel sustainably.

4E. Model corporate leadership by making it easier for City staff to travel sustainably.

- i Develop a new corporate TDM plan to reduce the strain that staff commuting puts on our street network, especially at peak hours.
- ii Create a staff mobility wallet to help facilitate multimodal and sustainable travel. Work with TransLink and shared mobility operators to provide flexible options.
- iii Expand the City's fleet of e-bikes for low-emissions business travel.

RECENT PROGRESS

SAFE AND ACTIVE SCHOOL TRAVEL PROGRAM

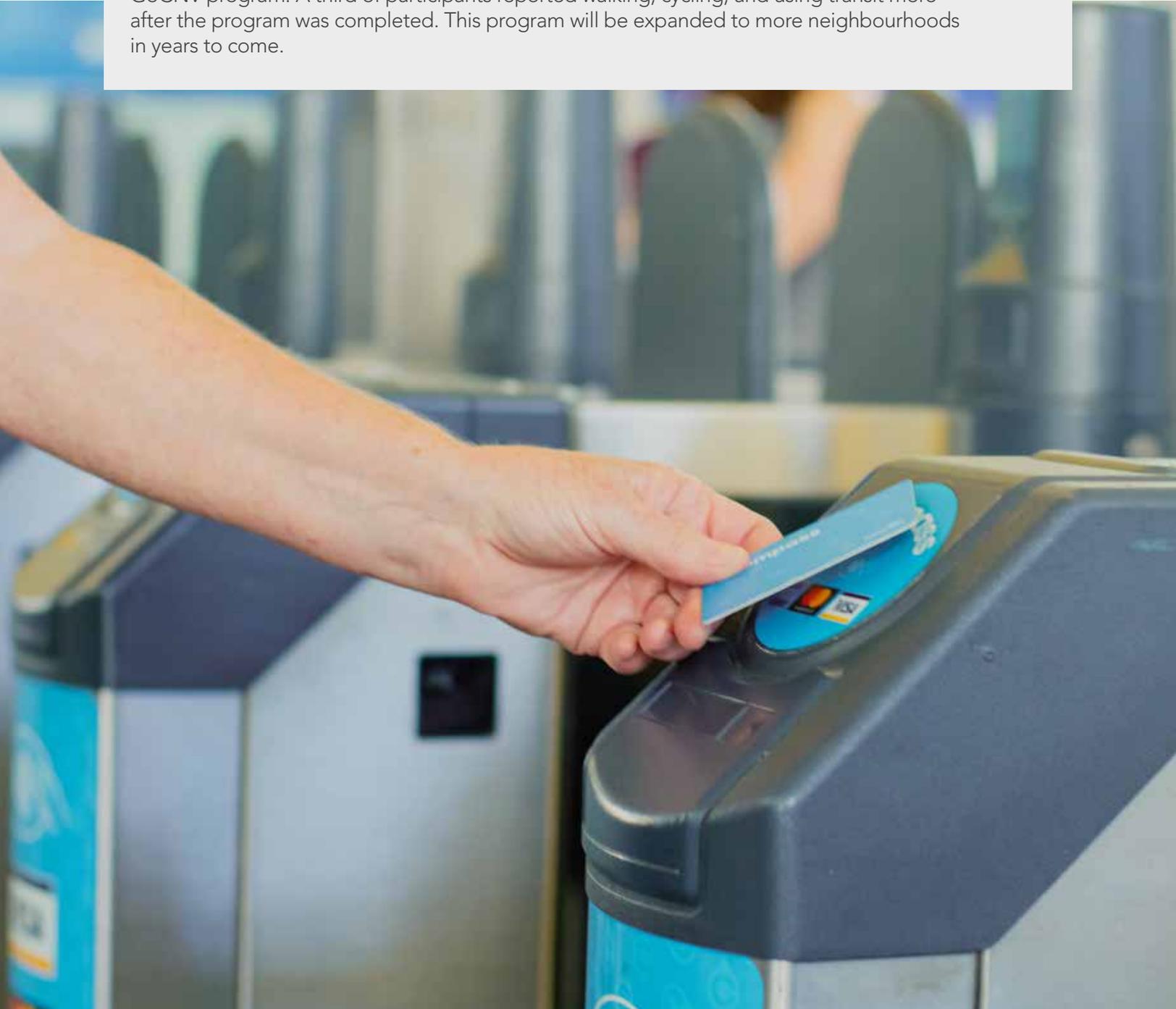
The City, in partnership with the North Vancouver School District, has worked with nine schools to encourage safe and healthy school travel habits through outreach and improvements to the transportation infrastructure around schools. School Travel Planning Facilitators work with administration, students, and families at each school for one to two years to identify barriers to active travel, encourage walking and rolling, and develop maps and a tailored action plan.

STRATEGY 4 (CONT.)

RECENT PROGRESS

GO CNV

GoCNV is a promotional program that encourages CNV residents to use sustainable travel over the summer months, including prizes, events, and other activities to keep residents travelling in a healthier and happier way. In 2019, the Central Lonsdale East community was selected to participate in the GoCNV program. A third of participants reported walking, cycling, and using transit more after the program was completed. This program will be expanded to more neighbourhoods in years to come.



THEME
2

Improve our mobility experience through the design of streets and neighbourhoods.



We know that the experience people have on our streets influences travel choice. We have heard from the community that more attractive and comfortable infrastructure is required for walking, rolling, and transit. Increasing the number of active and sustainable trips will also benefit people who have to drive, as there will be fewer people competing for the finite amount of space available on our streets. These design-focused strategies will improve the safety and comfort for travelling on our streets, improve the resilience of our network in the face of more extreme weather, and make our streets a more desirable place to spend time.

STRATEGIES AND ACTIONS AT A GLANCE

5: Improve the safety and comfort of vulnerable road users.

- A. Minimize the potential for conflict where different street users come together.
- B. Manage travel speeds and access to improve neighbourhood safety and livability.
- C. Support enforcement that reduces dangerous conduct and prioritizes protection for vulnerable road users.
- D. Make it easier for everyone to be seen while travelling.

6: Rebalance the space along our curbs to meet a wide range of needs.

- A. Review curb space use across the City to better meet the needs of street users.
- B. Ensure there are sufficient loading zones, pick-up and drop-off zones, and accessible parking spots in high-demand locations.

7: Reclaim more street space for people and nature.

- A. Foster vibrant public spaces and streets.
- B. Provide more street trees.
- C. Make our streets and public spaces rain-friendly.
- D. Reduce vehicle noise and vibrations.

8: Support sustainable mobility through how we grow and develop.

- A. Use land use and development to support shorter trips and sustainable mobility choices.
- B. Require most developments to provide Travel Demand Management (TDM) options for residents and/or employees.
- C. Reduce the amount of vehicle parking that developers are required to provide in new buildings and increase the amount of parking for sustainable modes.
- D. Set clear mobility expectations from new developments.



STRATEGY 5

Improve the safety and comfort of vulnerable road users.

Every year, there are an average of ten collisions on City streets that result in a serious injury or fatality. In recent years, people walking or rolling (vulnerable road users) have accounted for nearly all of the serious injuries and fatalities on City streets.

ACTIONS

5A. Minimize the potential for conflict where different street users come together.

- i Increase the separation of different users at our busiest intersections, particularly for the protection of vulnerable road users.
- ii Expand the use of measures like pedestrian- and cyclist-activated signals, dedicated and protected turning signal phases, centreline medians, “no right turn on red” restrictions, and advanced pedestrian and cyclist crossing phases at intersections that have high volumes of people using different transportation modes.

5B. Manage travel speeds and access to improve neighbourhood safety and livability.

- i Create a network of 30 km/h streets that includes Local Streets and streets around schools, parks, and community centres. Expand the network of Shared Streets, where vehicle traffic is limited to speeds of pedestrians.
- ii Decrease speed limits on other street types to improve safety and comfort for all travellers.
- iii Deliver design interventions to further encourage safe travel speeds, particularly on Local Streets, including road narrowing, speed bumps, raised crosswalks, and curb-bulges.
- iv Use access management interventions to manage through traffic on Local Streets that experience chronic traffic and shortcutting.

[more >](#)

STRATEGY 5 ACTIONS (CONT.)

5C. Support enforcement that reduces dangerous behaviour and prioritizes protection for vulnerable road users.

- i Update City bylaws to ensure the safety needs of our most vulnerable road users are prioritized.
- ii Continue to work with the North Vancouver RCMP to identify priority locations for regular enforcement presence at high-risk intersections and corridors.
- iii Work with the Province and North Vancouver RCMP to implement electronic enforcement to deter speeding, red light running and other dangerous behaviour at high-risk intersections and streets.
- iv Support the North Vancouver RCMP to reduce distracted drivers through education and enforcement.

5D. Make it easier for everyone to be seen while travelling.

- i Improve street and pathway light levels with prioritization at poorly lit intersections.
- ii Increase visibility of travel lanes, medians, crosswalks, and signage under all conditions by applying and maintaining retroreflective signage, tape and paint.

CONCEPT CALLOUT

REDUCED SPEED LIMITS

Speed is a fundamental factor in the severity of a crash or collision. A person walking or rolling that is hit by a car travelling at 50 km/h has a 10% chance of survival. The same person hit by a car travelling at 30 km/h has a 90% chance of survival. The faster a person is travelling, the less time they have to react to avoid a collision, and the more severe any resulting injuries will be.

RECENT PROGRESS

RIDGEWAY NEIGHBOURHOOD SLOW SPEED ZONE

In 2020, the City implemented a 30 km/h slow speed zone for the Ridgeway neighbourhood, bounded by St. Georges Avenue, East 13th Street, Grand Boulevard East, and East Keith Road. Data collected has shown the speed limit change has reduced travel speeds in the neighbourhood between 5% and 10%. The slow speed zone increases the safety and comfort of families and other vulnerable road users in the neighbourhood, while having limited impacts on vehicle travel time. Frontage improvements and intersection adjustments have been undertaken with temporary delineators, along with student-led street art from Ridgeway Elementary School at nearby intersections.





STRATEGY 6

Rebalance the space along our curbs to meet a wide range of needs.

Over 90% of the City's curb space is dedicated to parking. This leaves less room for a growing number of other uses, including transit, delivery vehicles, bikes and scooters, ride-hailing and taxis, all of which need a safe space to pull over. Tailoring our street design to prioritize a range of functions will create a more complete mobility network that enhances safety, efficiency, and comfort for all modes.

ACTIONS

6A. Review curb space use across the City to better meet the needs of street users.

- i Undertake a review of the City's Resident Exempt Parking Program, and work with residents and businesses to develop a more comprehensive approach to vehicle permitting that meets the needs of street users, manages spillover concerns associated with off-street reductions, and better reflects the high value of street space. This may include changes to permit costs and eligibility criteria, expansion of permit areas, or transitioning to an area-wide on-street parking model.
- ii Work with businesses to introduce pricing of on-street short-term parking spaces, to manage turnover and support better use of available off-street spaces.
- iii Work with residents and businesses to develop neighbourhood curb space plans to outline appropriate measures, regulations, and designs to better meet access and parking needs.

6B. Ensure there are sufficient loading zones, pick-up and drop-off zones, and accessible parking spots in high-demand locations.

- i Ensure at least one dedicated short-term loading zone exists on both sides of the street on every block in the City. Direct long-term loading/unloading to occur off-street.
- ii Explore options for an urban delivery program that tracks loading zone use to determine parking availability on high-demand corridors.
- iii Coordinate with ride-hailing companies and users to identify the effectiveness of existing pick-up and drop-off zones, and where adjustments may be needed especially on Main Streets and City Connector Streets.
- iv Provide more accessible on-street parking spaces in close proximity to shops, services, and key destinations across the City.



STRATEGY 7

Reclaim more street space for people and nature.

Streets are part of our public space network and cover roughly 20% of the City’s total land area, which can provide a meaningful opportunity to contribute to biodiversity. Green street elements bring life to the street, capture carbon, provide shading and cooling, and provide storm water management functions (e.g., to purify storm water runoff and reduce street flooding). Creating a better sense of place on our streets will help improve connections to our neighbours and communities.

ACTIONS

7A. Foster vibrant public spaces and streets.

- i Create concept designs for key streets in alignment with street types that will allow Council to provide direction for future right-of-way acquisition through development.

- ii Review opportunities to increase the number of plazas and parklets on our Main Streets, City Connector Streets, and Shared Streets. This may include expanding the City’s Living Lane initiative to transform under-used laneways into vibrant public spaces, while ensure essential transportation functions such as loading, parking, and emergency access are maintained.

- iii Work with the business community to extend the longevity of the City’s temporary patio program.

- iv Expand the amount of local and First Nations art, with priority on our Main Streets and Shared Streets.

- v Expand activation and place-making efforts to Neighbourhood Connector Streets and Local Streets, by providing more pocket parks, benches, and street art.

[more >](#)

STRATEGY 7 ACTIONS (CONT.)

7B. Support and enhance biodiversity along our streets.

- i Prioritize planting in underserved areas that have fewer street trees through the City's Street Tree Program. Main Streets and City Connector Streets will also be prioritized with anticipated high activity levels of walking and rolling.
- ii Provide a double row of street trees where space allows.
- iii Enhance urban corridors with planting of trees, hedgerows, and pollinator gardens, while maintaining intersection visibility for safe travel.

7C. Make our streets and public spaces rain-friendly.

- i Improve weather protection through wide, continuous, and well-designed awnings and canopies on our Main Streets.
- ii Improve the permeability of our streets for rainwater management and use low carbon materials during street reconstruction wherever possible.
- iii Enhance urban ecology and water quality outcomes by expanding the use of bioswales and rain gardens in areas where we reallocate space on our curbs.
- iv Work with the Squamish (Sḱw̱xwú7mesh) and Tsleil-Waututh (səlilwətaʔt) Nations to prioritize local flora in parklets and rain gardens.

7D. Reduce vehicle noise and vibrations.

- i Support specifications for goods movement and transit vehicles that reduce noise and vibrations.
- ii Incorporate transportation noise impacts into development review processes to ensure design, setbacks and materials mitigate noise.
- iii Establish speed limits and employ traffic calming measures to reduce noise and increase safety.
- iv Investigate the application of sound barriers on goods movement corridors.



STRATEGY 8

Support sustainable mobility through how we grow and develop.

As our City continues to grow over the next decade, new developments can help residents and employees access more travel options and programs that make it easier to move around without needing to rely on a vehicle for most of our trips. By prioritizing walkable and transit-oriented communities across the City, this can enable “car-light” lifestyles and shorter trips.

ACTIONS

8A. Use land use and development to support shorter trips and sustainable mobility choices.

- i Prioritize and encourage a dense and diverse mix of housing types, jobs, services, and amenities in areas well-served by frequent transit.
- ii Enable the concept of building 15-minute neighbourhoods, where there is easy access to jobs and services, and a range of housing types and tenures of different sizes and levels of affordability.
- iii Encourage local major trip generators to be situated adjacent to the Frequent Transit Network.
- iv Design buildings to contribute to a public realm that feels safe and supports sustainable mobility choices.

8B. Require most developments to provide Travel Demand Management (TDM) options for residents and/or employees.

- i Introduce a new program that right-sizes the amount and type of TDM measures required by developers based on location, type, and size of development.

[more >](#)

STRATEGY 8 ACTIONS (CONT.)

8C. Reduce the amount of vehicle parking that developers are required to provide in new buildings and increase the amount of parking for sustainable modes.

- i Reduce minimum vehicle parking supply standards in close proximity to the Frequent Transit Network.
- ii Establish vehicle parking maximums for multi-unit residential buildings.
- iii Increase the minimum requirements for bicycle parking, and require more horizontal bicycle parking and charging points to accommodate the increased popularity of cargo bicycles and e-bikes.
- iv Review possibilities for shared off-street vehicle parking among complementary uses, where appropriate.

8D. Set clear mobility expectations from new developments.

- i Develop improved guidance on mobility-related improvements that need to be accommodated through new development, using street types as a guide.
- ii Update the City's Development Cost Charges program to incorporate key projects that can be used for a wider range of mobility improvements, and ensure this is reviewed regularly to align with evolving needs.
- iii Ensure financial contributions for transportation generated through new developments are directed to the highest and best use for sustainable transportation outcomes.

CONCEPT CALLOUT

OVERBUILDING OUR PARKING SUPPLY

Parking supply exceeds demand for apartment buildings across the region, including in the City of North Vancouver. This adds a significant cost to residents, is environmentally impactful, and incentivizes people to own vehicles. Decreasing parking minimums improves the choice and flexibility in how businesses and residents use their properties to meet parking needs, will improve affordability through decreased parking costs, and moves us towards creating a vibrant and walkable city that is envisioned through the Mobility Strategy.¹⁶

TRAVEL DEMAND MANAGEMENT MEASURES

As more people and jobs come to the region, there is a need to ensure that many travel options exist. Our existing road network has limited capacity for more vehicle trips. TDM options can include provision of on-site car-share vehicles and parking spaces, subsidized transit passes, subsidies for bicycles, and individualized trip planning services. program was completed. This program will be expanded to more neighbourhoods in years to come.

See page 79 for footnote references.

STRATEGY 8 (CONT.)

RECENT PROGRESS

WALKABLE AND TRANSIT-ORIENTED COMMUNITIES

Transit-oriented communities are places that allow people to drive less and walk, cycle and take transit more by considering the design and density of how communities are developed and ensure well-connected outcomes that are served by frequent transit and are near to a range of services and amenities. The City of North Vancouver has been applying these principles particularly around Central and Lower Lonsdale so that residents are able to receive social, economic, environmental, transportation, and livability benefits.



THEME
3

Improve the reliability for people and goods to move around our City and region.



As our region continues to grow in population and jobs, efficient movement will be challenged as more trips take place. However, there are many ways to improve the transportation system's reliability. These include maintaining assets in a state of good repair, addressing the sources of unpredictability, and providing tools that share information with system users so people can make informed decisions for all trips.

STRATEGIES AND ACTIONS AT A GLANCE

9: Keep urban freight, deliveries, and emergency vehicles moving.

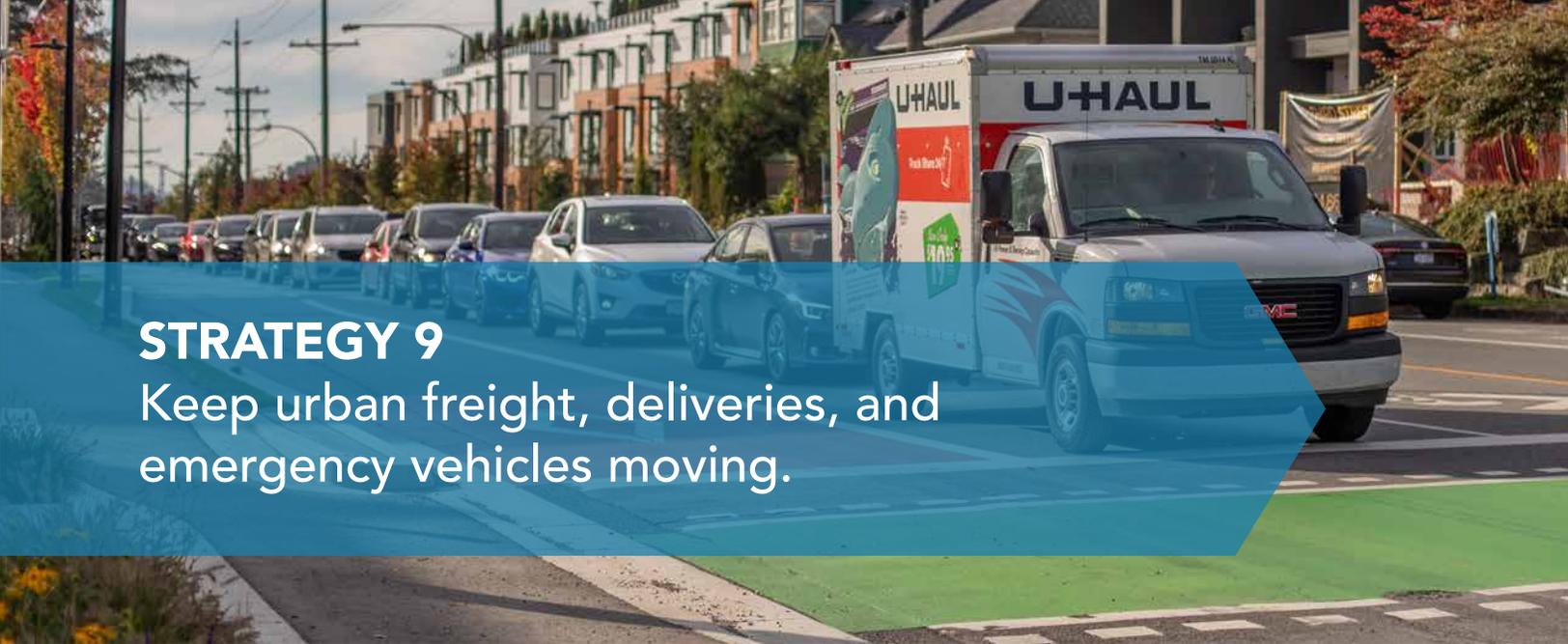
- A. Support local and regional goods movement.
- B. Promote and enable low- or zero-emission deliveries.
- C. Maintain and improve key emergency response routes.

10: Strengthen our connections within the City, and across the North Shore and Metro Vancouver region.

- A. Create enabling conditions for rapid transit expansion on the North Shore, and across the Burrard Inlet.
- B. Support and deliver initiatives that increase the reliability of our street network.
- C. Coordinate closely with the District of North Vancouver and the Squamish Nation on all boundary-adjacent mobility infrastructure and projects.

11. Optimize our mobility system through proactive management, operation and access to information.

- A. Develop better experience-focused service standards.
- B. Deploy frequent surveys and apply technology to monitor and inform predictive planning and maintenance priorities
- C. Work with TransLink and other partners to create a mobility management system to optimize signals, curbside regulations, and real-time traveller information.
- D. Work with TransLink, Metro Vancouver, and other partners to improve regional resilience of our transportation system to withstand future shocks and challenges.



STRATEGY 9

Keep urban freight, deliveries, and emergency vehicles moving.

The ability to have goods delivered quickly and reliably is an essential component of our economy and city living. The rise in online shopping and more dynamic supply chains has seen Canada Post parcel delivery double between 2012 and 2019.¹⁷ The increase in parcel delivery, along with population and employment increases are making it more difficult for efficient goods movement. This also creates difficult conditions for emergency vehicles to efficiently respond to incidents.

ACTIONS

9A. Support local and regional goods movement.

- i Protect a network of goods movement corridors in partnership with TransLink, Port of Vancouver, other North Shore municipalities, and First Nations.
- ii Support regional goods movement policies and programs as specified in Metro Vancouver's Regional Growth Strategy and TransLink's Regional Transportation Strategy.
- iii Explore opportunities to implement goods movement priority measures that do not increase general purpose traffic or impact the reliability of active transportation or transit.
- iv Reimagine the City's goods movement network so it meets the modern needs of the regional economic gateway and businesses in the City while minimizing impacts on surrounding neighbourhoods.

[more >](#)

See page 79 for footnote references.

STRATEGY 9 ACTIONS (CONT.)

9B. Promote and enable low- or zero-emission deliveries.

- i Explore the feasibility of a delivery microhub program that enables right-sized delivery vehicles (including bicycle couriers) for short-distance trips.
- ii Explore the feasibility of a permit system for commercial and delivery vehicles that incentivizes the use of low- or zero-emission vehicles (including bicycle and cargo bike couriers) or dissuades the use of traditional internal combustion engines.
- iii Increase the supply of secure delivery lockers so that recipients can pick up packages a short walk away from home or work.

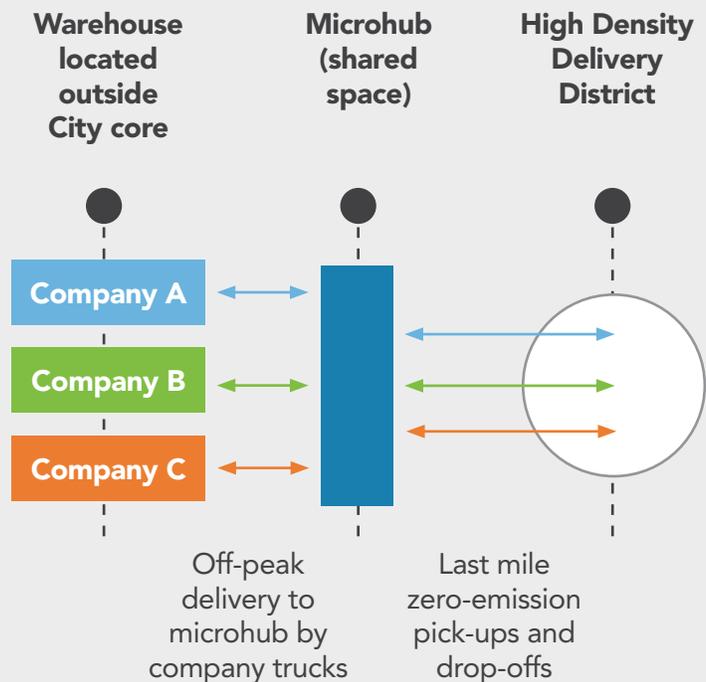
9C. Maintain and improve key emergency response routes.

- i Continue to coordinate with North Vancouver City Fire, the RCMP, and BC Ambulance Service to maintain and improve emergency response routes using heat maps of frequent routing.
- ii Continue to invest in signal pre-emption technology at intersections on Main Streets and City Connector Streets to facilitate efficient emergency response.
- iii Maintain frequent communication with emergency responders on street redesigns to ensure emergency vehicles continue to be prioritized.

CONCEPT CALLOUT

DELIVERY MICROHUBS

A delivery microhub is a new form of logistics facility that is particularly effective near final delivery points (e.g., less than five km from a destination). Microhubs provide the opportunity for multi-carrier consolidation and right-sizing to smaller and cleaner modes of transport, such as cargo bicycles or pedestrian couriers. This type of logistics space is particularly beneficial for urban areas where there are higher amounts of vehicle congestion (such as Lower Lonsdale). By consolidating deliveries from multiple carriers and redeploying packages to more efficient and smaller modes, goods are able to be delivered more efficiently, resulting in improved reliability, often at a decreased cost to the delivery provider.





STRATEGY 10

Strengthen our connections within the City, and across the North Shore and Metro Vancouver region.

More people than ever before are traveling to, from, and through the City and broader North Shore for work, school, and recreation. Our port-oriented industries mean we play a critical role in the region's gateway economy. Making it easier to get to and from our City is good for our livability and economy.

ACTIONS

10A. Create enabling conditions for rapid transit expansion on the North Shore, and across the Burrard Inlet.

- i Continue to work with the Squamish (Skwxwú7mesh) and Tsleil-Waututh (səlilwətaʔt) Nations, North Shore municipalities, TransLink, and the Province to leverage the recent Burrard Inlet Rapid Transit study findings and prioritize rapid transit investment to the North Shore.
- ii Continue to work with the Squamish (Skwxwú7mesh) and Tsleil-Waututh (səlilwətaʔt) Nations, North Shore municipalities, and TransLink to expand frequent transit offerings across the North Shore, particularly by introducing fast and reliable transit along Lonsdale Avenue to connect with Lynn Valley Town Centre.
- iii Align transit-oriented development opportunities with Major Transit Growth Corridors as outlined in Metro Vancouver's Regional Growth Strategy (Metro 2050).
- iv Work with TransLink to plan and deliver inter-regional express transit service between the North Shore and Sea-to-Sky corridor communities like Squamish and Whistler.

more >

STRATEGY 10 ACTIONS (CONT.)

10B. Support and deliver initiatives that increase the reliability of our street network.

- i Prioritize infrastructure projects that provide more connections between destinations for all modes in case one part fails due to an incident.
- ii Pair network improvement projects with traffic calming and access restrictions on Local Streets to prevent shortcutting from longer distance trips.
- iii Work with North Shore municipalities and the Squamish (Sḵw̱x̱wú7mesh) Nation toward implementing a Western Lower Level Route Expansion to increase redundancy of east-west routes.
- iv Support regional travel demand initiatives such as mobility pricing to improve the reliability of our street networks by reducing congestion in a way that is fair, equitable and reduces emissions.

10C. Coordinate closely with the District of North Vancouver, Squamish Nation, and Province on all boundary-adjacent mobility infrastructure and projects.

- i Develop an inter-jurisdictional boundary committee that discusses anticipated mobility impacts to respective jurisdictions. This could include maintaining a seamless experience for transit priority, mobility lanes, and sidewalk infrastructure, and reviewing any sizable developments.
- ii Coordinate current and long-range mobility planning with the Squamish (Sḵw̱x̱wú7mesh) Nation to support more seamless connections and service availability between respective jurisdictions.
- iii Maintain strong partnerships with North Shore governments to coordinate efforts on sub-regional transportation decisions.
- iv Work with the Province to deliver the recommendations of the Highway 1/99 North Shore Corridor Study, including improving the people moving capacity of the corridor through dedicated transit lanes and improving connections across Highway 1 for all modes of travel.
- v Work with partners on the North Shore and across the region towards the implementation of a regional EV charging network.

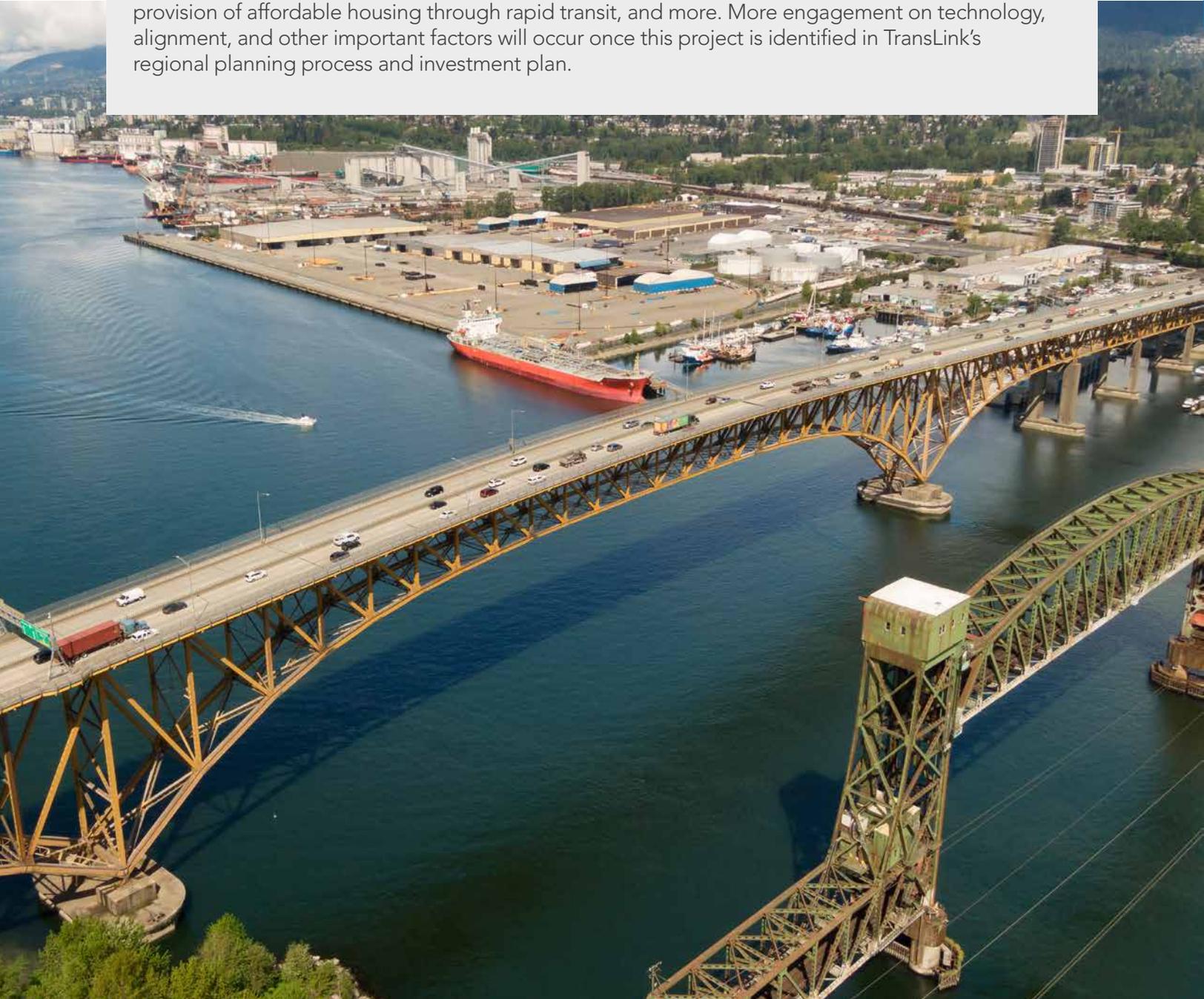
[more >](#)

STRATEGY 10 ACTIONS (CONT.)

RECENT PROGRESS

BURRARD INLET RAPID TRANSIT (BIRT)

Between 2019 and 2021, a feasibility study and benefits assessment were undertaken by North Shore municipalities, First Nations, and additional partners to better understand the impacts of rapid transit across the Burrard Inlet. The first part of this study created a short list of feasible alignments across the inlet, while the benefits assessment analyzed travel time savings, safety benefits, emissions benefits, agglomeration impacts, improved access to housing and jobs, provision of affordable housing through rapid transit, and more. More engagement on technology, alignment, and other important factors will occur once this project is identified in TransLink's regional planning process and investment plan.





STRATEGY 11

Optimize our mobility system through proactive management, operation and access to information.

The City of North Vancouver’s mobility system includes traffic signals, travel lanes, traffic regulations, and different trip options. Small disruptions have the potential to multiply into system-wide issues. Emerging technologies can help us be more proactive to prepare and respond.

ACTIONS

11A. Develop better experience-focused service standards.

- i Create an asset management strategy that defines objectives for mobility services and assets, describes activities required to manage these assets into the future, and identifies a financial plan to resource these activities.

- ii Align our asset management efforts to focus on the user experience, rather than solely focusing on asset condition.

- iii Provide an improved level of service for people walking and rolling during all seasons, including more leaf and debris clearing in the fall and more snow clearing of mobility lanes and critical pathways in the winter.

- iv Improve the infrastructure quality for sustainable modes first and pair this with TDM interventions to reduce impacts of new vehicle trips.

- v Make it easier for people to report maintenance issues through the CityFix portal.

- vi Work with partners to ensure maintenance of clean and safe street, lane, and sidewalk surfaces.

[more >](#)

STRATEGY 11 ACTIONS (CONT.)

11B. Deploy frequent surveys and apply technology to monitor and inform predictive planning and maintenance priorities.

- i Create a transportation data management plan that outlines how data is collected, maintained, and shared for all travel modes.
- ii Expand the use of real-time sensors to better understand ongoing street conditions and traffic so the City can make adaptations to signals and lanes in real time, and also prioritize where we undertake maintenance.
- iv Prioritize real-time sensors primarily on Main Streets, City Connector Streets, and known conflict zones where safety issues are an immediate priority.

11C. Work with TransLink and other partners to create a mobility management system to optimize signals, curbside regulations, and real-time traveller information.

- i Investigate the application of off-street public and private parking lot smart sensors that provide real-time information to drivers on the availability of parking.
- ii Create opt-in digital programs that notify street users of current and ongoing construction activities, helping people adjust their routes to avoid delays and congestion.
- iii Provide real-time curb and street data as part of the City's digital wayfinding program. This can encourage third-party providers to use of this data, expanding the reach of City capabilities.

11D. Work with TransLink, Metro Vancouver, and other partners to improve regional resilience of our transportation system to withstand future shocks and challenges.

- i Provide redundancy in travel options on our streets by developing and improving active transportation and transit links that provide low-cost, low-emission ways to get around.
- ii Continue to focus development growth in the Lonsdale Regional Centre and along Major Transit Growth Corridors.
- iii Implement other municipal actions from the Metro 2050 / Transport 2050 Regional Resilience Framework with support from regional authorities.
- iv Continue to work closely with North Shore Emergency Management, North Shore municipalities, and First Nations communities to routinely update evacuation and emergency response routes to ensure the network is prepared for emergencies.
- v Work with North Shore and regional partners to share information and data related to hazards, risks, and vulnerabilities, and to identify critical infrastructure and system interdependencies.

[more >](#)

STRATEGY 11 (CONT.)

RECENT PROGRESS

REGIONAL RESILIENCE

In 2021, TransLink and Metro Vancouver explored what the region and municipalities can do to improve regional resilience. The study reviewed what communities and organizations can do to prepare, avoid, absorb, recover, and adapt to the effects of a wide range of shocks and stresses in an efficient manner through the preservation, restoration, and adaptation of essential services and functions, while learning from these shocks and stresses to build back better. The study includes a number of actions that municipalities such as the City of North Vancouver can take to improve the resilience of our transportation system.



Street Types, Expanded

Our streets are a finite resource. This limited space must balance the needs of all the ways people move around our City, while also achieving the goals in this Mobility Strategy.

Our streets have different needs and functions that merit different design considerations. To account for these needs, we require new ways to think about and categorize our streets.

The street types on the following pages provide guidance on how we will prioritize different features that consider street function, local land use context,

and community objectives together. These street types are intended to support the City's existing road classification system of arterial, collector and local roads to ensure we are better considering the range of elements that make different streets work for everyone.

WHAT THE STREET TYPES ARE MEANT TO ACCOMPLISH

- ▶ **Develop a common language and vision around our streets for future community engagement.** Our streets are not going to change overnight but there will be a shift over the next decade to support us achieving the goals in the Mobility Strategy. These street types will be used as an engagement medium when beginning projects that will transform our streets.
- ▶ **Indicate what can be expected for specific street features.** These street types are intended to provide a framework for how we prioritize elements on our streets through the likely (and unlikely) features that are listed for each one.
- ▶ **Tie building form and design to our streets.** The City has made concerted efforts to align building designs with the adjacent streetscape. These street types will provide a starting point and add clarity on the look and feel of our streets going forward, allowing for building designs to match these desirable functions.
- ▶ **Provide guidance on which streets are appropriate for certain policies and actions.** Street types are frequently referred to in the Mobility Strategy actions above in order to prioritize where policy changes may occur.





The Mobility Strategy establishes six street types that are driven by an overall vision for the intended future state of our streets. They are based on land use context, transportation function, and design objectives.

MAIN STREETS are the core activity spines of the City for shopping, services, and amenities.

CITY CONNECTOR STREETS provide access across the City and to regional networks.

NEIGHBOURHOOD CONNECTOR STREETS connect Local Streets to the broader network.

LOCAL STREETS are low-volume, low-speed streets often in residential neighbourhoods.

SHARED STREETS are curbsless streets that prioritize pedestrians and vibrancy.

SERVICE STREETS provide access to service and industrial areas in the City.

Each street type is explained on the following pages and includes a description, design and mobility objectives, and a table indicating what features are likely to be prioritized.

Transitioning our streets to ensure they reflect the key objectives and features of the street types will occur using available right-of-way through a combination of street and corridor design and reconstruction initiatives, and through property redevelopment.

> See page 74 for a map showing all street types.

WHAT ABOUT LANEWAYS?

Laneways are a critical part of our mobility network, and provide space for essential transportation functions such as loading, parking, and emergency access along with opportunities to enhance them as activated spaces.

Laneways will seek to accomplish the following across the City:

- ▶ Support local vehicle access and storage, and allow streets themselves to make space for sustainable modes, and for greening through street trees and rain gardens.
- ▶ Facilitate off-street waste collection and loading/unloading access for residences.
- ▶ Where possible, transform under-used laneways into vibrant public spaces.
- ▶ Support safe local access for all modes by ensuring slow speeds and preventing shortcutting.
- ▶ Support sustainability and livability of dwellings facing the laneway by incorporating green infrastructure where appropriate for the context.

Main Streets

Main Streets are the core commercial activity spines of the City that provide residents, visitors, and workers with daily essentials and a range of services.

These streets often face the greatest challenges in balancing the needs of 'going to' and 'going through'.

Main Streets are active places with pedestrian-oriented shopping, employment, and entertainment, yet must also accommodate the movement of people and the movement of goods. Pick-up and delivery of goods ideally occurs in adjacent laneways, where they exist, creating more space on the street for the movement of people. Main Streets are part of our Frequent Transit Network, with transit movements being prioritized where possible.

The design of these streets encourages slower vehicle speeds and a high-quality public realm to clearly communicate that walking, rolling, and transit access are priorities, while still accommodating goods movement and deliveries. Main Streets are easily identifiable and carry a character of a city centre.



Design and Mobility Objectives

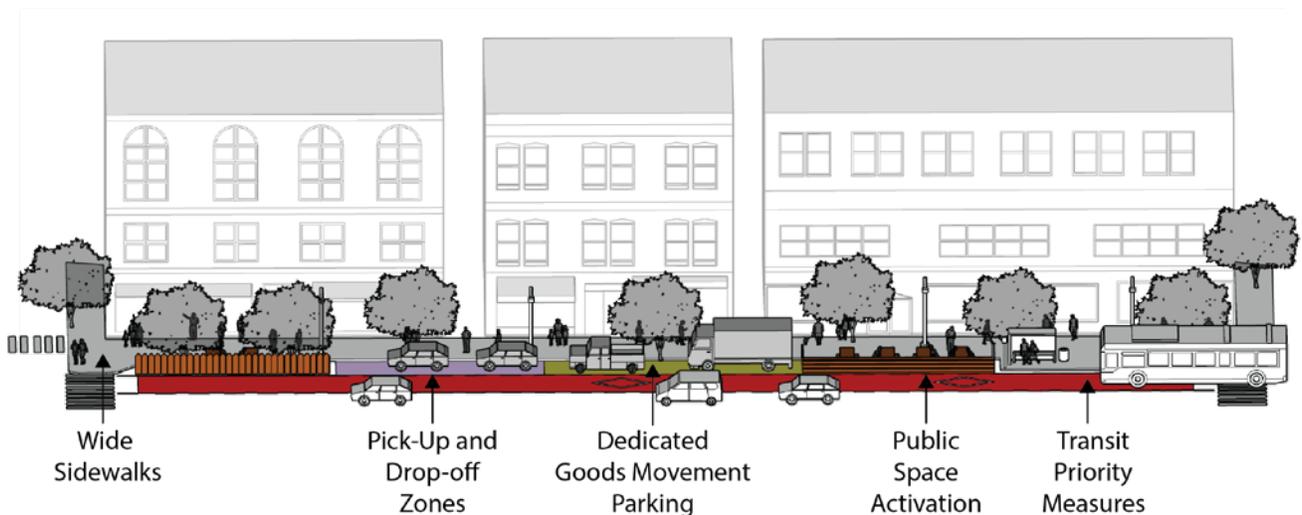
- ▶ Encourage vehicle speeds of approximately 40 km/h.
- ▶ Make transit easily accessible and the most intuitive choice of vehicle travel.
- ▶ Prioritize pedestrian movement through a comfortable public realm with wide frontages that allows for lingering and non-linear movement.
- ▶ Accommodate reliable goods movement and transit priority.

Adjacent Land Use

- ▶ Primarily high-density, mixed-use built form with retail, commercial, office, and residential uses.

MAIN STREETS (CONT.)

STREET FEATURES	Likely	Possible	Unlikely
Travel Choice and Access			
Wide sidewalks	X		
Street furnishings (e.g., benches, planter boxes)	X		
Bicycle and micromobility parking	X		
Accessible parking for people with disabilities	X		
Short-term on-street vehicle parking		X	
Long-term on-street vehicle parking			X
Transit priority measures (e.g., bus-only lanes)	X		
Ride-hail and taxi zones	X		
Signalized intersections	X		
Safety and Comfort			
Protected or off-street AAA Mobility Lanes	X		
Neighbourhood bikeways			X
Sidewalk corner bulges	X		
Sidewalk mid-block bump outs		X	
Traffic calming measures			X
Lower speed limits	X		
Climate Change and the Environment			
Single row of street trees	X		
Double row of street trees		X	
Bioswales and rain gardens	X		
Prosperity and Vibrancy			
On-street short-term delivery load zones		X	
Laneway short-term delivery load zones	X		
Parklets, patios and plazas	X		
Unique surface treatments (e.g., printed asphalt)		X	
Space for events and activation	X		



City Connector Streets

City Connector Streets move higher volumes of people and goods throughout the City and connect to the regional transportation system, including Highway 1 and major streets in the District of North Vancouver.



Space-efficient modes like walking, rolling, and transit help move the most people in the least amount of space. Many City Connector Streets are part of our Frequent Transit Network.

These streets safely accommodate the needs of larger vehicles while prioritizing pedestrian safety along and across the corridors.

AAA mobility lanes will also be likely features found on City Connector Streets, allowing network connectivity for wheeled users.



Design and Mobility Objectives

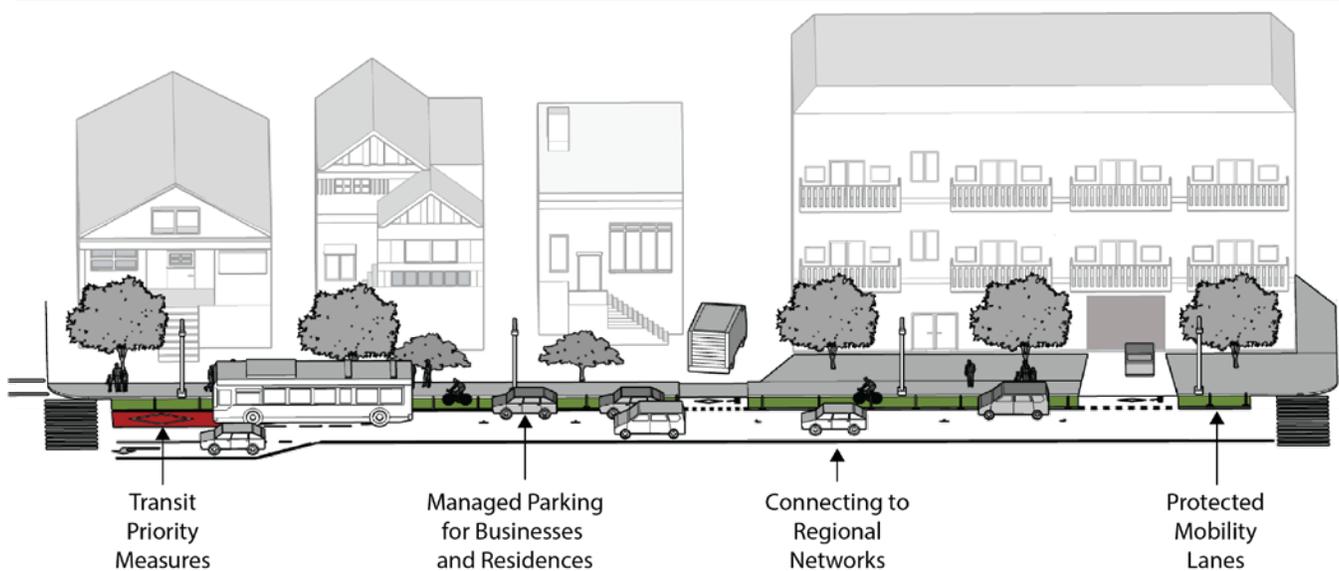
- ▶ Encourage vehicle speeds of approximately 40 km/h.
- ▶ Support public spaces, landscaping, and other elements that contribute to a more pedestrian-friendly experience.
- ▶ Maintain critical connectivity for travelling through the City for all modes.
- ▶ Prioritize space-efficient travel modes (transit, walking, and cycling), especially during peak travel periods.

Adjacent Land Use

- ▶ No specific adjacent land use. City Connector Streets include a mix of uses across the City.

CITY CONNECTOR STREETS (CONT.)

STREET FEATURES	Likely	Possible	Unlikely
Travel Choice and Access			
Wide sidewalks		X	
Street furnishings (e.g., benches, planter boxes)	X		
Bicycle and micromobility parking	X		
Accessible parking for people with disabilities	X		
Short-term on-street vehicle parking		X	
Long-term on-street vehicle parking		X	
Transit priority measures (e.g., bus-only lanes)	X		
Ride-hail and taxi zones		X	
Signalized intersections	X		
Safety and Comfort			
Protected or off-street AAA Mobility Lanes	X		
Neighbourhood bikeways			X
Sidewalk corner bulges	X		
Sidewalk mid-block bump outs			X
Traffic calming measures			X
Lower speed limits	X		
Climate Change and the Environment			
Single row of street trees		X	
Double row of street trees		X	
Bioswales and rain gardens	X		
Prosperity and Vibrancy			
On-street short-term delivery load zones		X	
Laneway short-term delivery load zones	X		
Parklets, patios and plazas		X	
Unique surface treatments (e.g., printed asphalt)			X
Space for events and activation			X



Neighbourhood Connector Streets

Neighbourhood Connector Streets support transitions from Main Streets and City Connector Streets into residential areas.

They provide necessary through movements in neighbourhoods while balancing the safety and access needs of neighbourhood residents.

Neighbourhood Connector Streets are designed to encourage slower traffic speeds and minimize the number of travel lanes in order to enhance pedestrian and cyclist safety. Some Neighbourhood Connector Streets are part of the City's AAA Mobility Lane Network and will continue to provide safe and comfortable infrastructure for active travel. These streets also provide pedestrian-scale streetscape features, and walkways protected from vehicle traffic.



Design and Mobility Objectives

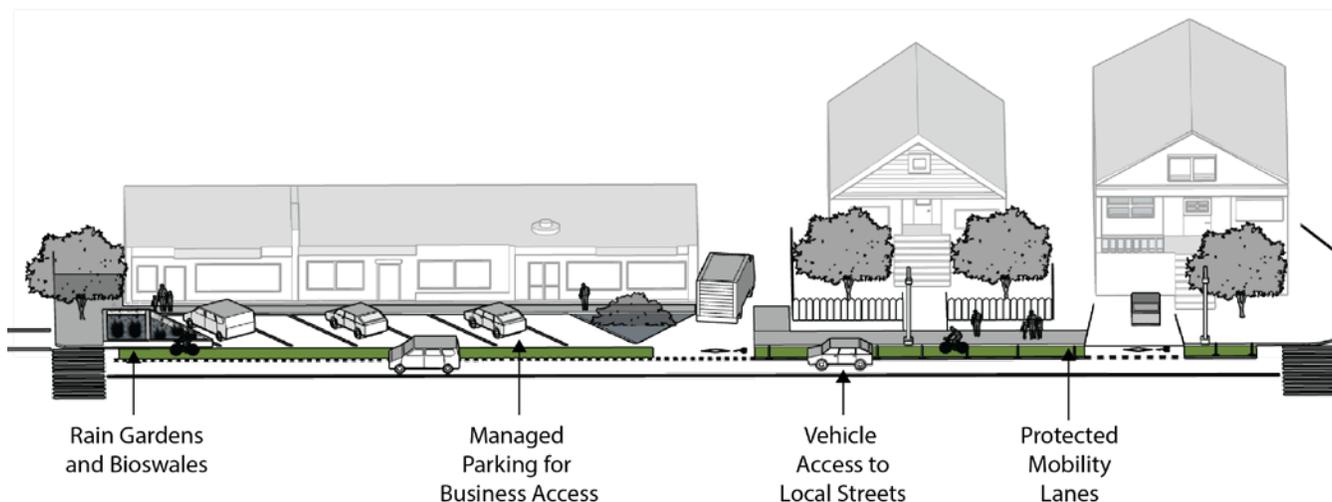
- ▶ Encourage vehicle speeds of approximately 40 km/h.
- ▶ Support public spaces, landscaping, and other elements that contribute to a more pedestrian-friendly experience.
- ▶ Prioritize safe and comfortable walking and rolling connections.
- ▶ Connect neighbourhoods to community destinations and provide access to residences.
- ▶ Facilitate loading/unloading activities from nearby Main Streets and City Connector Streets.

Adjacent Land Use

- ▶ Primarily low- to medium-density residential, with some mixed-use commercial and retail services.

NEIGHBOURHOOD CONNECTOR STREETS (CONT.)

STREET FEATURES	Likely	Possible	Unlikely
Travel Choice and Access			
Wide sidewalks	x		
Street furnishings (e.g., benches, planter boxes)		x	
Bicycle and micromobility parking	x		
Accessible parking for people with disabilities		x	
Short-term on-street vehicle parking	x		
Long-term on-street vehicle parking		x	
Transit priority measures (e.g., bus-only lanes)			x
Ride-hail and taxi zones			x
Signalized intersections		x	
Safety and Comfort			
Protected or off-street AAA Mobility Lanes		x	
Neighbourhood bikeways		x	
Sidewalk corner bulges	x		
Sidewalk mid-block bump outs		x	
Traffic calming measures		x	
Lower speed limits		x	
Climate Change and the Environment			
Single row of street trees			x
Double row of street trees	x		
Bioswales and rain gardens	x		
Prosperity and Vibrancy			
On-street short-term delivery load zones	x		
Laneway short-term delivery load zones	x		
Parklets, patios and plazas		x	
Unique surface treatments (e.g., printed asphalt)			x
Space for events and activation			x



Local Streets

Local Streets are low-speed, low-volume streets that provide access to residences and community destinations such as parks, schools, and gathering spaces.

Local Streets are often found in lower-density residential areas and prioritize safety, local access, and longer-term vehicle storage for neighbourhood residents. They invite residents to use the streets as common gathering places.

Local Streets have more traffic calming and access management measures to dissuade cut-through traffic. Because Local Streets have lower traffic volumes, they can facilitate local street bikeways that still allow for safe and comfortable travel, as part of our broader AAA Mobility Lane Network. Some local streets may be appropriate for considering pilot design interventions. These could include traffic calming for improved livability, or creation of 'green streets', where vegetation, street trees, and rain gardens are provided to capture rainwater, cleanse storm water runoff, and create a more calm and restorative streetscape to a further degree.



Design and Mobility Objectives

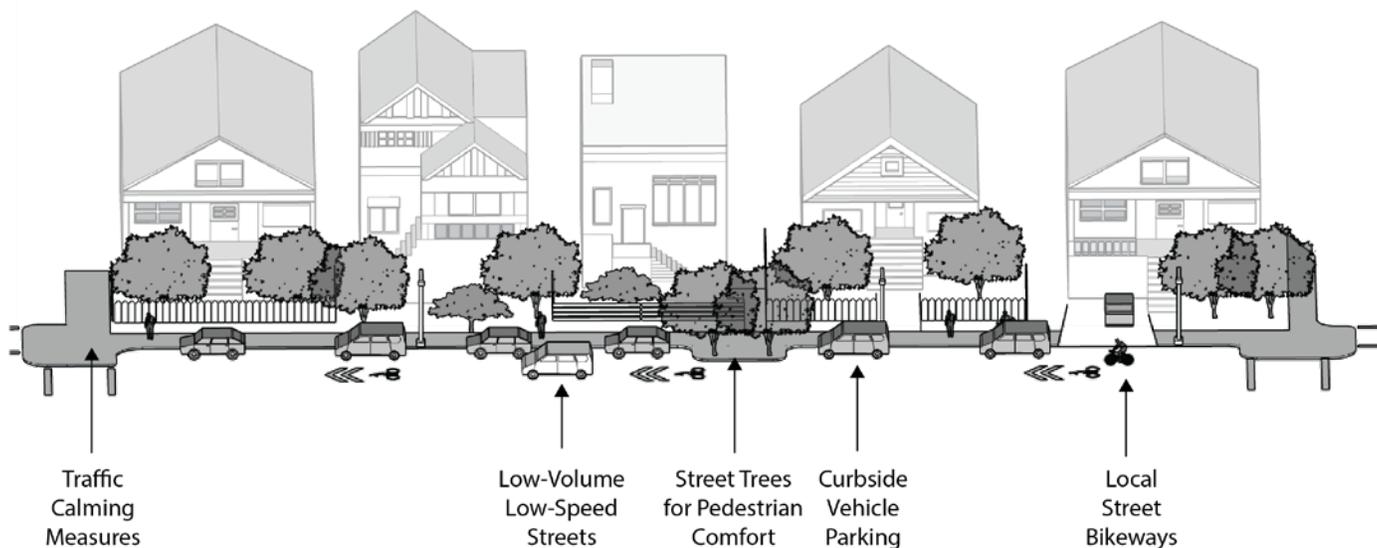
- ▶ Encourage vehicle speeds of approximately 30 km/h.
- ▶ Design streets that allow people to walk or roll safely and comfortably.
- ▶ Decrease vehicle speeds, volumes, and shortcutting.
- ▶ Make streets more family-friendly through traffic calming and greening.

Adjacent Land Use

- ▶ Primarily low-density residential along with community destinations.

LOCAL STREETS (CONT.)

STREET FEATURES	Likely	Possible	Unlikely
Travel Choice and Access			
Wide sidewalks	X		
Street furnishings (e.g., benches, planter boxes)	X		
Bicycle and micromobility parking		X	
Accessible parking for people with disabilities		X	
Short-term on-street vehicle parking	X		
Long-term on-street vehicle parking	X		
Transit priority measures (e.g., bus-only lanes)			X
Ride-hail and taxi zones			X
Signalized intersections			X
Safety and Comfort			
Protected or off-street AAA Mobility Lanes			X
Neighbourhood bikeways	X		
Sidewalk corner bulges	X		
Sidewalk mid-block bump outs	X		
Traffic calming measures	X		
Lower speed limits	X		
Climate Change and the Environment			
Single row of street trees		X	
Double row of street trees	X		
Bioswales and rain gardens	X		
Prosperity and Vibrancy			
On-street short-term delivery load zones	X		
Laneway short-term delivery load zones		X	
Parklets, patios and plazas		X	
Unique surface treatments (e.g., printed asphalt)			X
Space for events and activation			X



Shared Streets

Shared Streets are people-first spaces that allow local access for residents, workers, and service and delivery vehicles.

They can be permanent or temporary in nature, from piloting short-term closures on other street types, to streets that are permanently spaces for gathering, activations, and excitement.

Through design elements - including street furnishings, traffic calming measures, street art, and unique curbless paving materials - speeds are limited for all travel modes. They provide flexible space for people to play and gather, and offer opportunities for activation and programming to accommodate street fairs, markets, or spillover space during other events in adjacent parks or buildings.



Design and Mobility Objectives

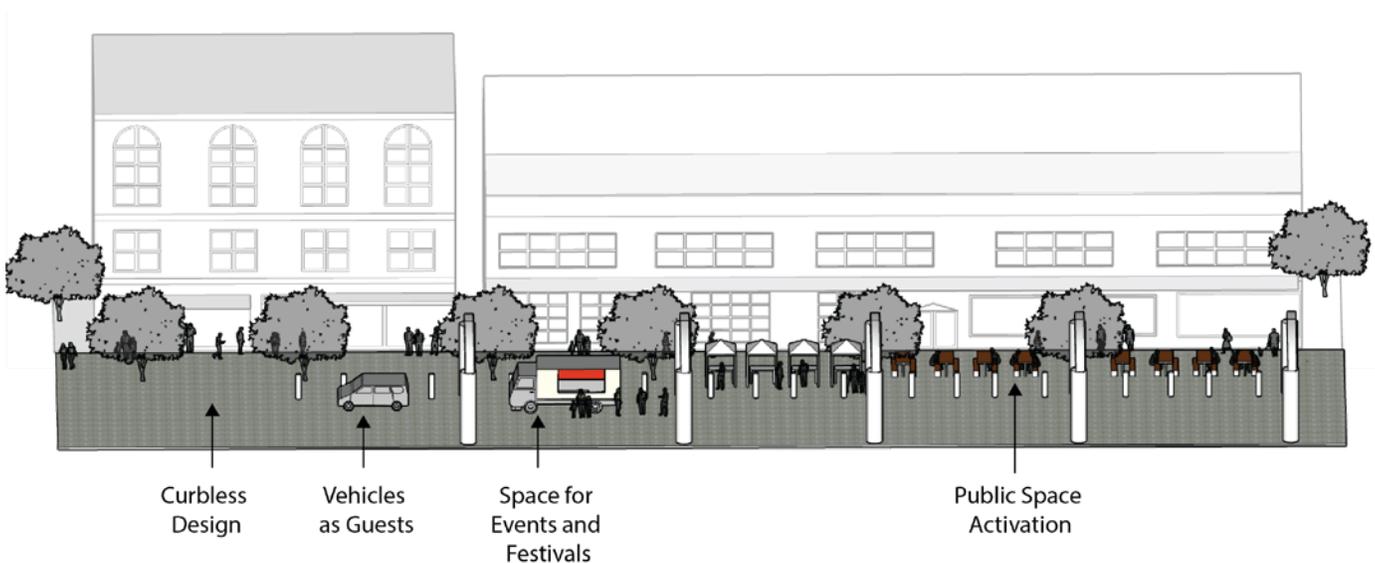
- ▶ Encourage vehicle speeds similar to a pedestrian pace.
- ▶ Prioritize pedestrian movements and activation through parklets, pocket plazas, and patios.
- ▶ Minimize traffic volumes and speeds through traffic calming and access limitations.

Adjacent Land Use

- ▶ Primarily high- to medium-density mixed-use residential, commercial, retail, and entertainment areas.

SHARED STREETS (CONT.)

STREET FEATURES	Likely	Possible	Unlikely
Travel Choice and Access			
Wide sidewalks			X
Street furnishings (e.g., benches, planter boxes)	X		
Bicycle and micromobility parking	X		
Accessible parking for people with disabilities		X	
Short-term on-street vehicle parking			X
Long-term on-street vehicle parking			X
Transit priority measures (e.g., bus-only lanes)			X
Ride-hail and taxi zones		X	
Signalized intersections			X
Safety and Comfort			
Protected or off-street AAA Mobility Lanes		X	
Neighbourhood bikeways		X	
Sidewalk corner bulges		X	
Sidewalk mid-block bump outs		X	
Traffic calming measures	X		
Lower speed limits	X		
Climate Change and the Environment			
Single row of street trees		X	
Double row of street trees	X		
Bioswales and rain gardens	X		
Prosperity and Vibrancy			
On-street short-term delivery load zones	X		
Laneway short-term delivery load zones		X	
Parklets, patios and plazas	X		
Unique surface treatments (e.g., printed asphalt)	X		
Space for events and activation	X		



Service Streets

Service Streets provide access to industrial, commercial, and manufacturing businesses within the City.



They are integral to our economic activity and design and maintenance considerations include use by large vehicles, including freight and goods delivery vehicles.

While there may be less walking and rolling along Service Streets, they still provide employees options for their commute, and serve as through-routes to adjacent land uses or connections between destinations. Sidewalks and mobility lane infrastructure aid in providing predictable movements for these vulnerable users.



Design and Mobility Objectives

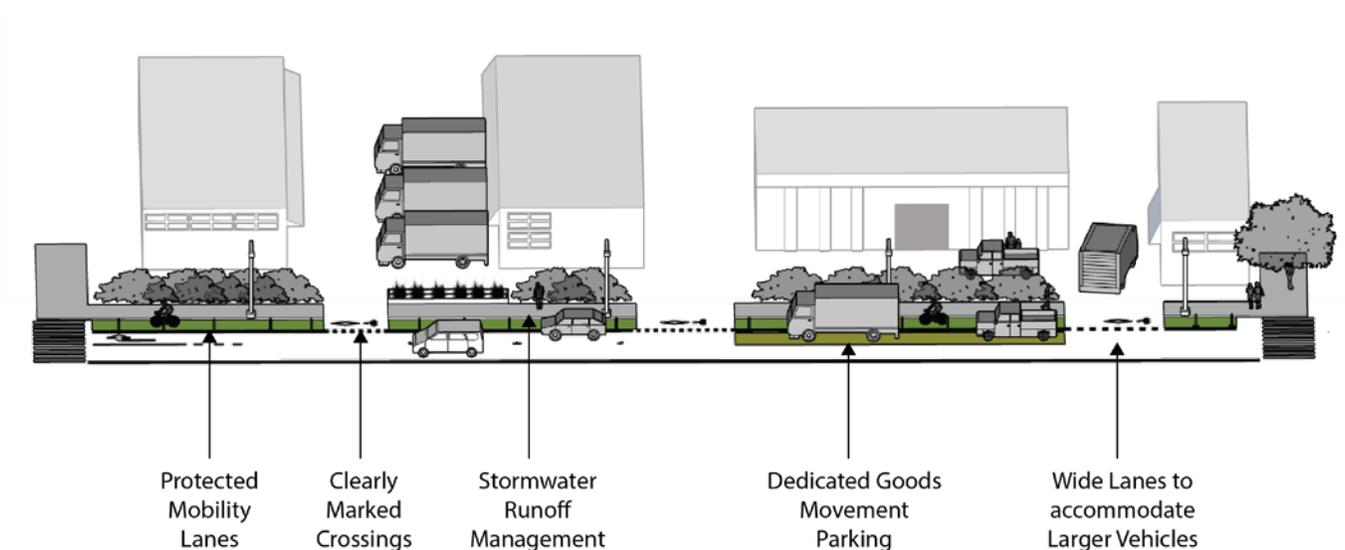
- ▶ Encourage vehicle speeds of approximately 40 km/h.
- ▶ Connect workers to jobs and customers to goods and services for all travel modes.
- ▶ Decrease conflicts by providing facilities that promote predictable user movements.
- ▶ Minimize environmental impacts such as storm water runoff, noise, and vibrations.

Adjacent Land Use

- ▶ Primarily low- to medium-density industrial, commercial, and manufacturing areas.

SERVICE STREETS (CONT.)

STREET FEATURES	Likely	Possible	Unlikely
Travel Choice and Access			
Wide sidewalks		x	
Street furnishings (e.g., benches, planter boxes)		x	
Bicycle and micromobility parking	x		
Accessible parking for people with disabilities	x		
Short-term on-street vehicle parking		x	
Long-term on-street vehicle parking			x
Transit priority measures (e.g., bus-only lanes)		x	
Ride-hail and taxi zones			x
Signalized intersections	x		
Safety and Comfort			
Protected or off-street AAA Mobility Lanes	x		
Neighbourhood bikeways			x
Sidewalk corner bulges	x		
Sidewalk mid-block bump outs		x	
Traffic calming measures			x
Lower speed limits		x	
Climate Change and the Environment			
Single row of street trees	x		
Double row of street trees		x	
Bioswales and rain gardens	x		
Prosperity and Vibrancy			
On-street short-term delivery load zones	x		
Laneway short-term delivery load zones	x		
Parklets, patios and plazas			x
Unique surface treatments (e.g., printed asphalt)			x
Space for events and activation			x



STREET TYPES MAP



This map provides an overview of what street type applies to each of the streets in the City. No street will change overnight; projects will occur over the lifespan of this Mobility Strategy. There will continue to be an emphasis on community engagement for each project that transforms our streets.

Each street segment in our City is unique, and street features will differ for every street, even if it falls in the same street type category. Street types will be subject to refinement through other planning efforts (e.g., corridor plans or area plans) and coordination with adjacent jurisdictions (District of North Vancouver and Squamish (Skwxwú7mesh) Nation).



IMPLEMENTING THE STRATEGY



Delivering the Mobility Strategy

The Mobility Strategy provides over 100 actions that encompass a wide range of policies, projects, and programs.

Funding and resources are limited and we cannot deliver all actions in this Strategy at once. All departments in the City provide a list of projects and programs each year that are evaluated based on how well they support the City's Official Community Plan, Council's Strategic Plan, and other City priorities. Policy development and implementation is also considered through department work programs on an annual basis. Transportation projects and programs are funded through the City's capital planning process and will be identified through our annual Corporate Business Plans.

Over the next decade, the City will develop a work plan each year that portions out specific components of the Mobility Strategy for further planning and implementation for Council's consideration. Ongoing engagement with our community, partners, and stakeholders will help make these decisions, along with how projects, policies, and programs are designed and implemented.

TERMINOLOGY

- ▶ **POLICIES** are rules, guidelines, principles, or frameworks that are adopted through City bylaws. For mobility, these are generally designed to incentivize or disincentivize certain types of behaviour for how we use our streets and how we get around.
- ▶ **PROGRAMS** are a set of measures or activities that are usually conducted within a specific time period but can be ongoing. Mobility examples include sustainable travel education programs (such as Go By Bike Week) that the City coordinates to encourage people to try different ways of travelling.
- ▶ **PROJECTS** focus on the development and maintenances of services, facilities and systems. Mobility project examples include expanding our AAA mobility lane network, and improving our sidewalks to be universally accessible.

Implementation Principles

As projects, programs, and policies are considered through the above-noted process, the City will apply five implementation principles that will shape how we do business and implement the actions and strategies within the Mobility Strategy.

1

CONTINUOUS MONITORING: We cannot improve what we don't measure. All policies and projects will be established with a monitoring and measurement program so that we can continually improve. The City will also expand its efforts at proactively collecting data to better understand needs and trends in advance of challenges.

2

PILOT, LEARN, ADAPT: Planning can go a long way in anticipating outcomes, but we can often learn just as much, if not more, from monitoring on-the-ground outcomes. We will continue to pilot and learn from new approaches, and adapt ideas that are proven to be effective.

3

TALK AND ENGAGE: We are developing solutions for residents, visitors, and businesses in the City. We intend to continue to maintain the conversations and engage our stakeholders throughout the ten year horizon of the Mobility Strategy.

4

STRONG PARTNERSHIPS: The City can often be constrained in implementing transportation solutions if they extend beyond municipal boundaries or require regional or provincial input. We have strong relationships with our peer agencies and will continue to build on these relationships as we implement the Draft Mobility Strategy.

5

DO MORE WITH LESS: Where appropriate, the City will accelerate the delivery of infrastructure through the use of inexpensive alternatives. This pairs well with the piloting approach outlined above and will allow the City to move quickly and use funding wisely.

Working Together to Create Healthy Streets for Everyone

This Mobility Strategy is a long-range transportation document that culminates two years of working together with the community to establish a vision of how we want our streets to change over the next decade.

The City of North Vancouver is able to establish the enabling conditions for overcoming the largest issues we face on our streets such as traffic congestion, road safety, environmental impacts, and economic competitiveness. At the same time, all of us are accountable for considering how we travel every time we leave home, so that the vision and goals of this plan can be realized.

This strategy seeks to create the enabling conditions for residents, businesses, and visitors in our City to make the best choices when it comes to their trips. We look to individuals in the community, along with our stakeholders and partners, to help us create healthy streets that work for everyone.



Glossary of Terms

The Draft Mobility Strategy includes the following terms when describing our mobility system.

Accessibility: Transportation accessibility refers to people's ability to reach services, activities, and destinations (collectively referred to as opportunities).

Active transportation: Human-powered travel, such as walking or cycling; it also includes wheelchairs and some power-assisted devices. See micromobility and sustainable modes.

All Ages and Abilities (AAA) mobility lanes: These are facilities that are safe, comfortable, and equitable for users of all ages and abilities. They include separated lanes with physical barriers, off-street paths, and signed neighbourhood bikeways on local streets. They are used by people on bicycles, scooters, skateboards, and a growing number of people-powered and electric-assist modes.

Car-sharing: A service that provides members with short-term access to a fleet of vehicles for trips within a specific area (e.g., Evo, Modo).

Dedicated Delivery Spaces: This refers to curbside spaces that are restricted to use by commercial vehicles for efficient loading and unloading of materials and goods.

Double Row of Trees: Two rows of street trees on either side of a sidewalk, one row separating a sidewalk from the lanes of traffic, and the other row separating the sidewalk from adjacent built form.

Frequent Transit Network: The network of streets where bus transit service is provided at least every 15 minutes in both directions all day and into the evening, every day of the week.

Major Transit Growth Corridors: Corridors identified by Metro Vancouver as good potential locations for regionally-significant levels of transit-oriented growth.

Major Transit Network (MTN): This is the highest order of transit — with services that are high-capacity, high-frequency, fast, and reliable, travelling in dedicated rights-of-way all day, every day in both directions.

Microhub: Also known as a delivery microhub, microhubs are a type of logistics space where goods and packages are redistributed from larger vehicles (i.e., trucks) to smaller and lower emission vehicles (e.g., cargo bikes) for final delivery.

Micromobility: Travel using small, lightweight devices such as e-bikes or e-scooters that can be powered by people or through electric-assist. See active transportation and sustainable modes.

Mobility hub: A location where different sustainable transportation modes are integrated seamlessly to help promote connectivity.

Mode share: The percentage of trips made by one mode of travel relative to the total number of trips made using all modes.

Mode shift: A change from one travel mode to another.

Ride-hailing: A service that provides users with a vehicle trip that they book using an app (e.g., Uber, Lyft).

Sustainability: Sustainability means meeting our own needs without compromising the ability of future generations to meet their own needs. In the transportation sense, this is largely accomplished through a switch to active transportation and sustainable modes. See active transportation and sustainable modes.

Sustainable modes: Forms of travel that result in far fewer greenhouse gas emissions than vehicles powered by natural gas or petroleum products (e.g., cars, vans), such as public transit, zero-emission vehicles, active transportation, and micromobility vehicles. These modes are also economically sustainable.

Transit priority measures: Measures that reduce delays and increase reliability of transit services in congested traffic, such as dedicated lanes, queue jump lanes, and signal priority at busy intersections.

Transportation equity: Designing transportation systems that have a fair distribution of resources, benefits, and costs, and designing our streets to be accessible and affordable for everyone in the community.

[more >](#)

Transportation resilience: The ability of our transportation system to continue to function and quickly rebound in the face of stresses and shocks.

Travel demand management / TDM: Incentives, disincentives, and changes that encourage the use of sustainable modes and discourage private vehicle travel, such as providing subsidized transit passes for university students or dedicating a car-share parking spot in a community to reduce the need for individual car ownership. This also includes managing road space and optimizing efficiency (e.g., time-restricted lanes).

Universal design: Designing our streets and transport system in a way that accommodates the widest range of potential users, including people with mobility and visual impairments (disabilities) and other special needs.

Vehicle: For this strategy, vehicle, car, and automobile are synonymous.

Vulnerable road users: People walking and rolling are vulnerable road users. These people are most at risk of injury if involved in a collision with a vehicle. See Walking and Rolling.

Walking and rolling: When we talk about walking and rolling, we are referring to walking, using a mobility device (e.g., wheelchair), biking, skating, taking a scooter, or using a micromobility device (e.g., e-bike share).

FOOTNOTE REFERENCES

1. TransLink Regional Trip Diary, 2017.
2. TransLink Regional Trip Diary, 2017
3. TransLink Regional Trip Diary, 2017
4. North Shore Transportation Panel Survey, 2019.
5. North Shore Transportation Panel Survey, 2019.
6. Statistics Canada Census of Population. 2021.
7. BC Ministry of Transportation and Infrastructure Highway 1/99 North Shore Corridor Study. 2022.
8. TransLink Regional Trip Diary, 2017.
9. City of North Vancouver Climate and Environment Strategy Phase 1 Engagement Discussion Guide, 2021
10. Lopez, Lee, and Friis. The link between obesity and the built environment. Evidence from an ecological analysis of obesity and vehicle miles of travel in California. 2006.
11. Hansson et al. Relationship between commuting and health outcomes in a cross-sectional population survey in southern Sweden. 2011.
12. Crabtree. Well-Being Lower Among Workers With Long Commutes. 2010.
13. North Shore Transportation Panel Survey, 2019.
14. City of North Vancouver internal analysis, 2021.
15. BC Ministry of Transportation and Infrastructure Highway 1/99 North Shore Corridor Study. 2022.
16. Metro Vancouver Regional Parking Study, 2018.
17. Canada Post

ACKNOWLEDGEMENTS

The City of North Vancouver would like to acknowledge the involvement and support from Nelson\Nygaard, Access Planning, Bunt & Associates, Scribe Technical Writers & Editors, and Karin Mark Writing, Design, and Communications.

Working together, we can
create healthy streets that
work for everyone.



cnv.org/mobility