

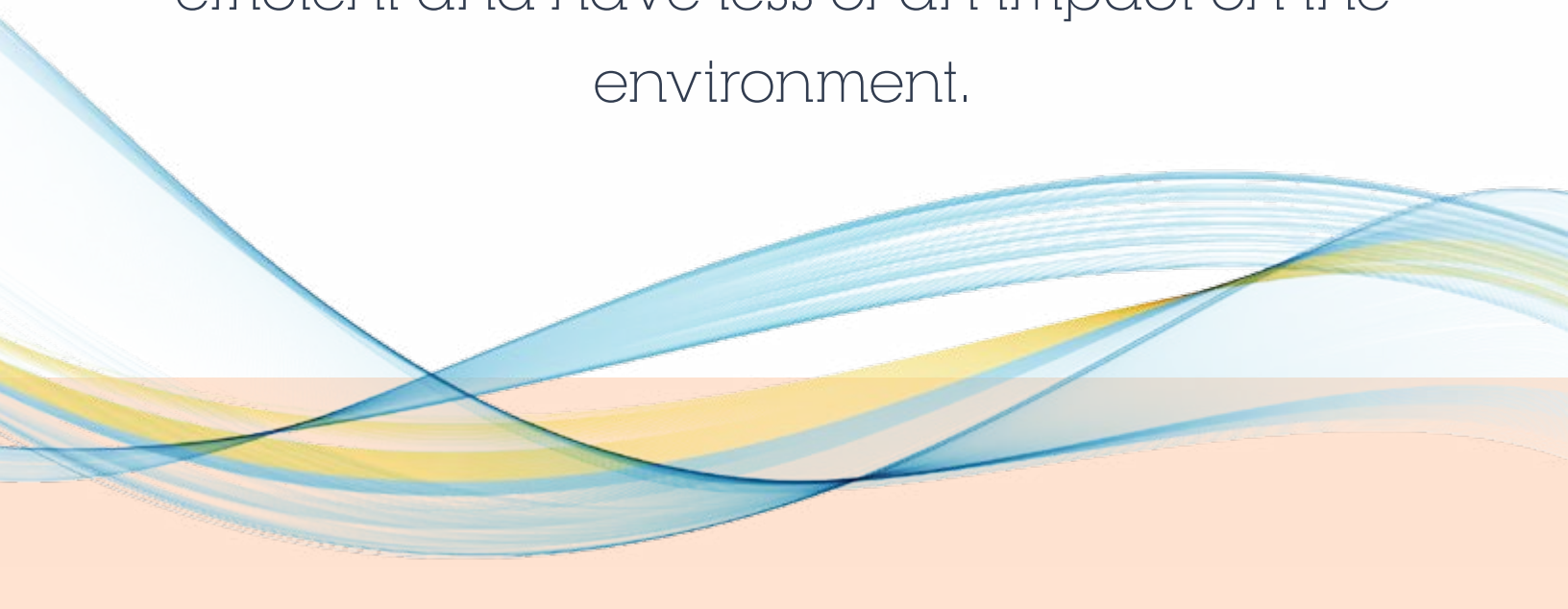


## SUSTAINABLE TRANSPORTATION

### Action Plan



Sustainable transportation means choosing transportation options that are more efficient and have less of an impact on the environment.

Decorative wavy lines in shades of blue and green flow across the bottom of the page, transitioning into a light orange background.



# Climate change is happening **now.**

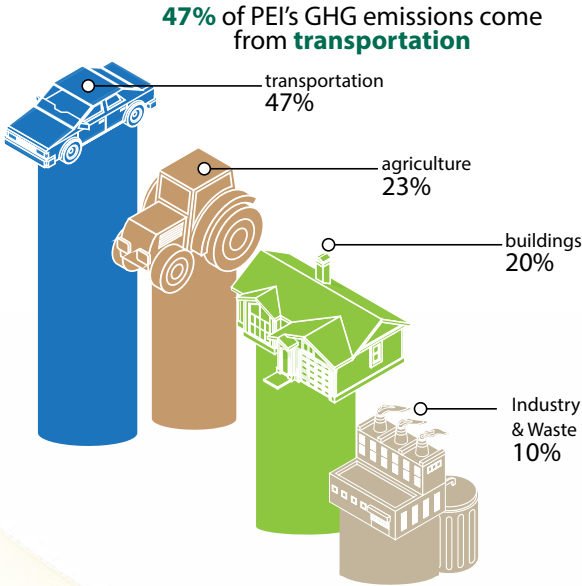
Reducing our Greenhouse Gas Emissions (GHG) will slow down (or mitigate) climate change. In PEI, approximately 47% of our greenhouse gas emissions (GHGs) come from transportation.

*To lower PEI's total GHG emissions, the transportation sector emissions need to be reduced.*

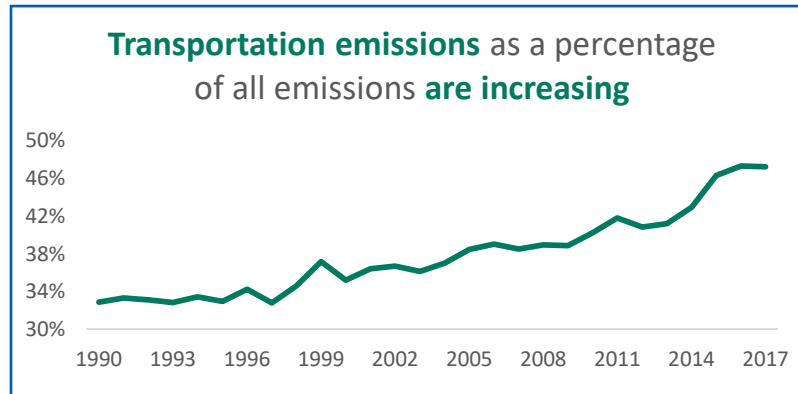
# Why does PEI need a Sustainable Transportation Action Plan?

Transportation is important - it provides people with a means to get from one place to another. Transportation is not just about personal vehicles. It includes many other ways of travelling (modes), including walking, biking and public transit.

All of these modes form our transportation system. Each mode has its advantages and disadvantages. For example, cars can be a quick and convenient way to get around, but they are also expensive to own and operate.



## SUSTAINABLE TRANSPORTATION ACTION PLAN



Data from Table A12-3: GHG Emissions for Prince Edward Island by Canadian Economic Sector, 1990-2017, National Inventory Report (2017).

Emissions from the transportation sector have been increasing. Transportation emissions have increased by 37% from 1990 to 2017 (from 0.63 Mt CO<sub>2</sub> eq to 0.86 Mt CO<sub>2</sub> eq).

More people are driving than ever before. Per person, PEI has the most kilometers of paved road in Canada and the second highest number of vehicles registered.

Another reason for this increase is that Islanders are buying larger vehicles. In the past, smaller more fuel efficient passenger cars were more popular. Since 2014, trucks, sport utility vehicles (SUVs), and vans have become more popular than passenger cars.

Different modes of transportation have different impacts on GHG emissions. Sustainable transportation means choosing transportation options that are more efficient and have less of an impact on the environment.

To lower PEI's total GHG emissions, emissions from the transportation sector need to be reduced. This can be accomplished by driving less, using alternate modes of transportation (like walking, biking, and public transit), or driving more fuel efficient vehicles such as electric vehicles.

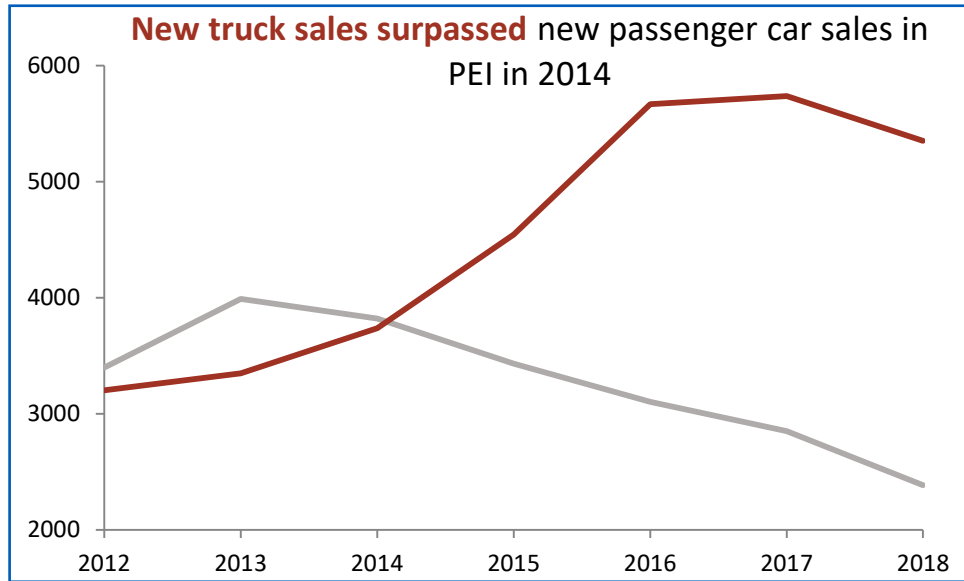
## Recommendations for a Sustainable Transportation Action Plan

**2016/2017 Provincial Energy Strategy** – develop a sustainable transportation strategy that makes sense for PEI

**A Climate Change Action Plan for PEI (2018)** - develop initiatives that contribute to a more sustainable transportation system

**Belonging and Thriving: A Poverty Reduction Action Plan** for Prince Edward Island (2019 – 2024) - Work with community service providers to develop a provincial transportation action plan

PRINCE EDWARD ISLAND



Statistics Canada, New Motor Vehicle Sales, Table 20-10-0001-01

A Sustainable Transportation Action Plan is more than a plan to reduce emissions. There are many health benefits of using alternative modes of transportation and reducing the use of personal vehicles. For example, walking and biking more leads to healthier lifestyles and can reduce the strain on our health care system.

Air pollution from gas-powered vehicles affects people’s health and the environment. There are significant health benefits to reducing our transportation emissions and the associated air pollution from transportation.

There are clear linkages between transportation and poverty. People living in low income often struggle to meet their basic needs. Affordable and reliable modes of transportation can help people access social supports, employment, child care, education, and health services.

### Carpool Initiatives

The Government of Prince Edward Island has identified numerous carpool parking lots across PEI. Many of these parking lots were identified by Islanders who work together to find ways to carpool. Government is working to make these lots safer and more accessible for Islanders.



# What is Sustainable Transportation?

Sustainable transportation is the movement of people in a way that has a low impact on the environment. For the purposes of the Sustainable Transportation Action Plan, sustainable transportation includes:

- community transportation (including urban and rural transit);
- walking, biking and carpooling;
- cleaner and more efficient vehicle technologies; and
- community planning and design.

On PEI there is a culture of using personal vehicles instead of other modes of transportation. Many people are very reliant on their personal vehicles and find it difficult to consider using other ways to travel. Even with community transportation options, there will still be a need for personal vehicles. In these cases, the challenge is to drive less and make the use of those vehicles as efficiently as possible.

The action plan aims to provide Islanders with sustainable, affordable, safe and convenient transportation options. It will help Islanders consider the impacts of their transportation choices and provide opportunities for change.

Our built environment is a result of a reliance on personal vehicles and we assume that most people have access to a car or truck for transportation. For PEI to significantly reduce its transportation emissions, we have to change how we move from place to place and ensure that development supports active transportation and public transit options.



# Approach

The action plan was developed by a Sustainable Transportation Committee, which includes representatives from various provincial government departments. The Sustainable Transportation Committee developed the actions in the action plan after public and stakeholder consultation.

In the fall of 2018, Islanders were invited to provide comments on six transportation questions on-line. A summary of the consultations is available at [www.princeedwardisland.ca/transportationsurvey](http://www.princeedwardisland.ca/transportationsurvey). There also were two stakeholder sessions that provided business and municipal perspectives.

Public input from the Climate Change Action Plan, 2016/2017 Provincial Energy Strategy and A Poverty Reduction Action Plan for PEI also provided valuable transportation information that has been incorporated into this action plan.

Transportation was a recurring theme during the public engagement process for the Poverty Reduction Action Plan and many recommendations from that plan are reflected in this action plan.

The Sustainable Transportation Action Plan has four focus areas, each with a number of action items. The focus areas are:

1. Urban and Rural Transit
2. Vehicles and Transportation
3. Active Transportation
4. Community Design and Infrastructure

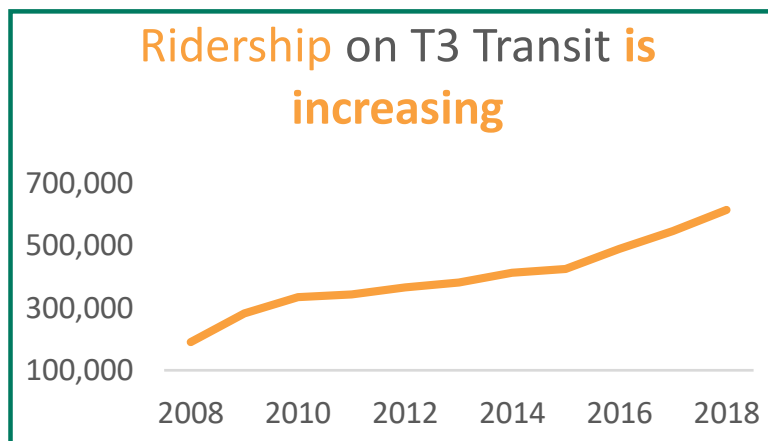
The Sustainable Transportation Action Plan complements the Climate Change Action Plan (CCAP) and contributes to the overall reduction of PEI's GHG emissions. It contains 27 actions for the four focus areas. The action plan was developed for a five-year timeframe (2020 – 2030). This will take us on our way to our 2030 GHG reduction target. Some actions will start immediately, while others will be phased-in over time.

We acknowledge that there are unique transportation challenges for people living in rural PEI. Some actions in this plan are better suited for urban areas where other actions can benefit those living in rural areas.

As actions are undertaken to make PEI's transportation system more sustainable, an inclusive approach will be required. Gender, Indigenous background, abilities, culture and other population lenses will need to be considered during the implementation of this action plan.

# T3 (Take Transit Today) Transit System

The T3 transit system offers urban transit services in Charlottetown, Summerside, Stratford and Cornwall. It provides rural transit services through its County Line Express service.



Statistics Canada, New Motor Vehicle Sales, Table 20-10-0001-01

The T3 Transit system is a great example of how a system can grow and adapt to the needs of users.

*In the last 10 years, the system has grown from 190,000 annual riders in 2008 to 626,000 in 2018.*

From one bus in Charlottetown, the system has grown to serve Charlottetown, Summerside, Cornwall, Stratford and some rural areas. T3 Transit now operates 13 buses daily.



# Urban and Rural Transit

## INCREASING THE USE OF TRANSIT ACROSS PEI

In this action plan, transit refers to the movement of people. Every day, Islanders require some sort of transit to get them where they want and need to go. The action plan seeks to reduce the GHGs from these trips, while ensuring convenience, safety and affordability. Supporting various forms of public transit can promote health and reduce our reliance on personal vehicles.

Public transit is often split into urban and rural transit. In PEI, urban transit refer to the bus systems within Charlottetown, Summerside, Cornwall and Stratford. Rural transit include the systems outside of these urban areas. Rural transit systems are usually smaller, service fewer people, may be operated by a private or community organization, and connect people within or between communities.



## Public Transit Considerations

It is important to understand the varying needs of PEI's population when creating or improving transit systems. A transit system that is ideal for an individual who works business hours from Monday to Friday could be different than the ideal transit system for a shift worker.

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*The Province of PEI has taken steps to make public transit more accessible. Public transit fees have been reduced by 10% as part of the initiative to return carbon levy revenue to Islanders.*

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There is a need to balance convenience, safety, accessibility and affordability for our province's diverse population. Age, gender, socioeconomic status, literacy and physical abilities must be considered.

Many people living on low incomes cannot afford the cost of a personal vehicle and rely on public transit to meet their transportation needs. The working hours for many low wage jobs may not align with public transit schedules.

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*“Having public transportation across the island would allow those who cannot afford a car to be able to get to work and keep their jobs. This would also allow them to reach potential jobs outside of their current area...” (Public Survey Respondent, Poverty Reduction Action Plan Public Engagement Report)*

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There is also great opportunity for innovation in addressing urban and rural transit needs. For example, some community mental health organizations have purchased vans which are driven by clients to transport other clients to employment.

Public transit safety is very important for all users, especially for those who are more vulnerable. Safety considerations must be incorporated into all of the actions that result from the Sustainable Transportation Action Plan. The actions must also respond to the transportation needs of underserved groups in PEI.



## Urban and Rural Transit Actions

1

**Action 1:** Work with transit operators and community transportation partners to make transit systems safe, affordable and convenient for all users. This includes:

- Increasing connectivity between destinations,
- Expanding routes and schedules,
- Ensuring information is accessible, and
- Promoting lower emission alternatives as they become available.

2

**Action 2:** Increase affordable, safe and inclusive community transportation services in rural areas.

3

**Action 3:** Promote and increase transit use through education and social marketing.

4

**Action 4:** Improve efficiencies and reduce emissions in the school transit system.

5

**Action 5:** Remove barriers to sustainable transportation for people with a low income.

# Vehicles and Transportation

## TRANSITIONING TO ELECTRIC AND LOW EMISSION VEHICLES ~ PROMOTING FUEL EFFICIENCIES ~ REDUCING DRIVING

On PEI, many people rely entirely on their personal vehicle for their transportation needs. Even with public transit systems, there will still be a need for personal vehicles. The challenge is to make the use of those vehicles as efficiently as possible or transition to zero or lower emissions vehicles.

There is a technological transition occurring in the car market. Electric vehicles (EVs) are quickly becoming a viable alternative to cars fueled by gasoline or diesel (standard internal combustion engines). New car sales of EVs have accelerated in Canada, with 2.2% of all passenger car sales being EVs in 2017. There are currently over 93,000 EVs on Canada's roads.

Battery electric vehicles have many benefits over standard internal combustion engines, such as:

- reduced maintenance costs,
- lower fuel costs, and
- zero emissions.

Many people have been hesitant to buy an electric vehicle. This could be because EVs are currently more expensive than similar cars that run on fuel. Other reasons that prevent people from buying an EV could be based on uncertainties surrounding EVs, such as charging requirements and vehicle range.

Through public education, the provincial government can provide information about EVs and demonstrate that EVs are suitable for PEI driving.

Although EVs will likely become the passenger vehicle of choice over time, they are not yet appropriate for all uses. Larger vehicles, such as trucks, are not yet readily available in an electric format. For these instances the best course of action is to make those vehicle types as fuel efficient as possible and to drive these vehicles in an efficient way.

There are many vehicle fleets that service Islanders, ranging from larger transport trucks to smaller delivery vehicles. The provincial government's light-duty fleet contains approximately 360 vehicles. The Province of PEI must be a leader by showcasing best practices for reducing emissions while saving transportation costs. The provincial government has electric vehicles within its fleet, with more purchases planned.



## ZERO EMISSIONS

### BATTERY ELECTRIC VEHICLE (BEV)

- Battery powered electric motor
- No gasoline engine
- Battery recharged by plugging in
- Zero tailpipe emissions

## LOWER EMISSIONS

### PLUG-IN HYBRID ELECTRIC VEHICLE (PHEV)

- Similar to a hybrid but has additional battery capacity
- Vehicle can run entirely on the battery
- When the battery runs out, vehicle runs on gasoline and generates battery power
- Battery can be charged by plugging in
- Typically lower emissions than conventional vehicles

### HYBRID ELECTRIC VEHICLE (HEV)

- Uses gasoline engine and battery powered motor that stores energy
- Does not plug in
- Typically lower emissions than conventional vehicles



## City Beach Express

The City Beach Express provides seasonal transportation between Charlottetown, North Rustico, Stanley Bridge and Cavendish. This service reduces the need for individual trips and it used by visitor, and resident, alike. The City Beach Express even offers employee transit pricing for people who need to commute from Charlottetown to Cavendish in the summer.

## Transportation West

Transportation West assists people who are unable to drive. They provide people with transportation for a variety of purposes, like attending appointments, social events, and programs and helping people get to work or run errands.

## Montague Rotary Bus

The Montague Rotary Bus Service transports seniors to church, doctor's appointments and shopping. The bus is driven by volunteers. Some trips are free, while others have a small charge.

## Vehicles and Transportation Actions

6

**Action 6:** Work with municipalities and businesses to create a province-wide EV charging network of internet accessible, smart charging stations.

12

**Action 12:** Work with local business fleet managers to promote efficiencies and the use of low and zero emission vehicles.

7

**Action 7:** Develop and deliver an EV and home charger incentive program to increase EV usage.

13

**Action 13:** Assess the provincial government's light duty fleet and identify vehicles that are suitable to be replaced with electric models.

8

**Action 8:** Develop and deliver an educational campaign about electric vehicles, low emissions vehicles, and efficient driving.

14

**Action 14:** Adopt provincial government procurement policies to increase the purchase of low and zero emission vehicles for its light duty fleet.

9

**Action 9:** Establish a registration fee structure that promotes the purchase of lower emission vehicles.

15

**Action 15:** Increase carpooling opportunities through additional infrastructure and public education.

10

**Action 10:** Develop a rebate program for retiring high emissions vehicles.

16

**Action 16:** Provide options for provincial employees to reduce commuting distance, such as tele-commuting and satellite work sites.

11

**Action 11:** Collaborate with the transport truck industry to administer efficiency education programs and explore technological advancements to reduce emissions.

17

**Action 17:** Monitor advances in technology and explore opportunities to electrify farm and marine transport, trucking and public transit.

# Active Transportation

## MORE PEOPLE USING ACTIVE TRANSPORTATION IN A SAFE WAY

Active transportation can include any form of self-propelled movement, such as biking, walking, skateboarding or rollerblading. At times it might seem challenging to use active transportation, however most people are surprised by how often they actually can use it.

Active transportation has many benefits, including:

- creating a more active and healthy population
- increasing accessibility for everyone
- saving people money
- reducing air pollution and GHG emissions
- reducing traffic and parking congestion
- creating independence for people

It can be a challenge to make active transportation part of our lives. It is often easier to hop in a car, but once a habit of using active transportation is formed, people often prefer that mode of transportation.

Encouraging people to build active transportation into their lives is only one part of the story. Active transportation also must be safe and easy for people to use. Safety was the largest concern noted about active transportation during the public consultations. Public infrastructure can be designed to promote safer and more convenient options and routes.

It is important to recognize that active transportation options are more readily available in urban areas. In many rural areas on PEI it can be challenging to incorporate active transportation into daily routines because of distance, safety, and infrastructure. If active transportation

options are limited for some rural residents, then other actions and unique solutions can be considered to reduce emissions from driving.

Planning for active transit requires an understanding of where people want to go. It is important to ensure connectivity between popular destinations and to other transit services. Limitations, like weather and distance between destinations, will need to be addressed when planning for active transit.

Our communities can be improved by having active transportation options for residents. Creating the infrastructure for active transportation will require careful planning and collaboration between all levels of government. Once the infrastructure is in place, policies and programs can help ensure ongoing safety needs are met.

## Active Transportation Actions

18

**Action 18:** Develop a comprehensive active transportation plan and public transit plan for all of PEI.

19

**Action 19:** Expand active transportation infrastructure, while improving safety and providing connectivity between places.

20

**Action 20:** Dedicate a percentage of the province's transportation budget to maintain and create new active transportation infrastructure.

21

**Action 21:** Work with municipalities to develop and support active transportation plans that improve cycling and pedestrian opportunities.

22

**Action 22:** Provide and promote active transportation options for schools and seek opportunities for pilot projects.

23

**Action 23:** Require active transportation assessments for all new provincial government buildings to incorporate facilities such as bike racks, showers and other appropriate amenities.



# Community Design and Infrastructure

## PROMOTING A HEALTHY BUILT ENVIRONMENT ~ BUILDING THE RIGHT INFRASTRUCTURE IN THE RIGHT PLACES

Our built environments are the places we build to work, live and play. A healthy built environment considers neighborhood design, transportation networks, natural areas, housing and food systems. Social and physical wellbeing are improved when all aspects of a healthy built environment are part of community design.

Community design and land use planning allows us to make decisions and plan for the future. Designing communities and creating proper infrastructure is important to achieve many of the action items in this plan. Where and how we build our homes, facilities and businesses can allow people better access to different modes of transportation, such as walking and biking. Our communities can be improved by locating housing closer to goods and services. In many urban areas, parking spaces take up

large amounts of land – this space could be used to provide housing that is closer to goods and services.

Aiming for a healthy built environment in community design and infrastructure (which includes using age-friendly principles) can help reduce the barriers to transportation experienced by vulnerable populations, including persons with disabilities, older adults and children.

Although many of the communities we live in have existed for decades, new subdivisions or service areas are developed as communities expand. Neighborhood design can improve connectivity by ensuring that efficient and safe networks are created as land is developed. It is easier to provide for transportation infrastructure in the design of new areas rather than installing it later. New active transportation networks need to

be considered during community design and new networks need to be connected to existing networks.

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*Complete, compact and connected communities will make it easier for people to use active transportation and public transit.*

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Road infrastructure is often overlooked in reducing emissions and making the transportation system more efficient. For example, roundabouts improve traffic flow and reduce vehicles idling. The Province of PEI has replaced several congested intersections with roundabouts and road infrastructure will continue to be improved to help reduce emissions.



## Community Design and Infrastructure Actions

24

**Action 24:** Encourage development patterns that support active transportation and public transit by identifying built up areas for future growth and by establishing standards for subdivision and development design.

26

**Action 26:** Revise legislation to enable the requirement to provide dedicated space for active transportation corridors.

27

**Action 27:** Ensure planning authorities consider the full range of transportation needs within their areas of jurisdiction.

25

**Action 25:** Continue to improve road infrastructure (such as cycling lanes, wider shoulders, and roundabouts) to construct and protect right-of-ways for active transportation and public transit corridors.



# Taking Action

The Sustainable Transportation Action Plan will cover a five-year time frame. The action plan identifies the steps that the Province of PEI will take to help create a sustainable transportation system for all Islanders.

As the action plan is implemented, the Province of PEI will continue to monitor advances in technology and be on the lookout for new opportunities. There will be new ideas and approaches that will come to light during the implementation of this plan. There will be flexibility in the plan's implementation to ensure that innovative ideas can be considered.

When new ideas are explored, it will be important to consider the outcomes on urban and rural lifestyles, poverty reduction and on the health of all Islanders. Inclusive approaches and collaborative partnerships with municipalities, Indigenous communities, and organizations will be necessary in order to make our transportation system more sustainable.

The Sustainable Transportation Committee will continue to monitor progress and the implementation of the action plan.

We can all do our part to make sustainable transportation choices. Now, more than ever, we need to take action to reduce our GHG emissions, lead more active lifestyles, and ensure people have access to the services they need.



# Doing your part

- ✓ Consider how you can work active transportation into your routine.
- ✓ Can you reduce the distance you travel to work?
- ✓ Take the bus.
- ✓ Show a family member how to use the bus.
- ✓ Drive your vehicle more efficiently.
- ✓ If you are buying a new vehicle, consider buying an electric vehicle or a lower emissions vehicle.



Transportation, Infrastructure and Energy

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