

2018

**Transportation and the
Environment Task Force**

**Active Transportation:
A Survey of Policies,
Programs and Experience**

October 2018

ACKNOWLEDGEMENTS

Initiated in September 2015, the Transportation and Environment Task Force conducted 37 conference call meetings over 24 months. In addition to their participation the Task Force welcomed information briefings from external practitioners in this sublet area. The Task Force was assisted by Manitoba Finance Business Transformation Technology in administration of a web-based survey instrument. Manitoba Infrastructure Corporate Services Information facilitated on-line GoToMeeting services for document sharing during conference calls. Manitoba Infrastructure Policy and Service Development provided additional support to the Task Force as requested.

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Executive Summary

The Public Health Agency of Canada defines active transportation as “... any form of human-powered transportation – walking, cycling using a wheelchair, in-line skating or skateboarding.”

Transportation ministries across Canada are interested in understanding the role, mandate and opportunities regarding active transportation in their jurisdictions. The Policy Planning and Support Committee (PPSC) tasked the Transportation and Environment Task Force to analyze and report on policy frameworks to address active transportation integration into Canada’s transportation system.

For the purposes of this report the information and analysis is conducted and presented in the context of a policy focus. Policies provide structure through adoption of overarching guidelines and principles for governance leading development of government business including legislation and regulations, programs, technical guidelines and projects.

The Business Dictionary describes [public policy](#) as the: “... Declared State objectives relating to the health, morals, and well-being of the citizenry. In the interest of public policy, legislatures and courts seek to nullify any action, contract, or trust that goes counter to these objectives even if there is no statute that expressly declares it void...”

In governance and politics the Business Dictionary goes on to define [policy](#) as the: “...basic principles by which governments are guided...” and “...declared objectives that governments seek to achieve and preserve in the interest of national / provincial / territorial [and municipal] communities...”

In conducting the background research, the Task Force attempted to clarify the policy drivers including safety, climate change, public health, and the roles and programs among a selected range of transportation ministries and authorities. The report summarises these findings and presents high-level policy considerations for Canadian federal, provincial and territorial transportation ministries.

The Task Force conducted a literature review and a survey was administered to gather information on active transportation policies, programs, projects and initiatives across Canada and in other selected jurisdictions.

The information gathered from this work indicates an existing spectrum of policy options, programs and projects across the country. Information from other jurisdictions highlights opportunities for policy leadership that facilitates active transportation integration, particularly at the interface of provincial and municipal governance.

Active Transportation policy options to consider include:

- Status quo.
- Adopt guidelines to assist jurisdictions in developing their own active transportation policies.
- Jurisdictions could work together to establish a Federal and Provincial/Territorial Active Transportation Working Group to develop policy guidelines to integrate active transportation into national and provincial/territorial transportation systems.

The Task Force conducted extensive research, surveys and reviews of active transportation policies, programs and projects across Canada and select countries. A high-level list of examples to advance active transportation is summarized in Table 1.

Table 1 Active Transportation Policy and Program Examples

	Examples	Immediate	Medium Term	Long Term
Policy	<p>Mirror international overarching policy frameworks that consistently endorse safety, support and leadership for AT.</p> <p>Formulate transportation policy that recognizes the safety of all road users including AT users.</p> <p>An AT policy which:</p> <ul style="list-style-type: none"> • Treats AT as an essential service with benefits for all of society, not simply as a hobby, a form of recreation or a luxury; • Acknowledges the fundamental right of Canadians to safely move from place to place under one's own power; • Measures, promotes and incorporates the economic and health benefits of AT into a broad range of policy decisions; and • Funds, builds and designs active transportation capacity in balance with other transportation modes, knowing Canadians choose AT when the choice is safe and practical. 	X		
Best Practices	<p>Develop strategic partnerships among different departments and levels of government, agencies and institutions to improve active transportation and share responsibilities to achieve policy objectives.</p> <p>Consider replicating examples of successful provincial and territorial AT policies and programs demonstrated in BC, Ontario, Quebec and PEI, as well as internationally at the federal level such as the US DOT Pedestrian and Bicycle Policy.</p> <p>Consider the potential demand and maintenance requirements for winter cycling when making infrastructure decisions for provincial and territorial highways.</p>	X	X	

	Examples	Immediate	Medium Term	Long Term
	Consider implications for active transportation when planning for building or re-building provincial or territorial roads.	X		
Legislation and Regulation	Consider reviewing existing legislation and regulations to incorporate AT.	X	X	X
Programs	Establish a five year rolling plan to achieve policy objectives. Establish an AT secretariat / coordinator / administration. Establish a national centre for development and dissemination of AT resources.	X	X	X
Projects	Consider the adoption of consistent AT facility design standards and/or guidelines. Develop and prioritise projects for implementation that achieve policy objectives. Create and maintain an inventory of AT facilities Capture large provincial AT plans / projects and use this to help market and increase AT activity, e.g. Blue Route. Collaborate with education authorities to develop comprehensive cycling training programs. Expand school travel planning to include all students' travel requirements and to include active modes of transportation. Introduce adult cycling and road sharing educational opportunities. Establish a comprehensive outreach program to increase awareness of active transportation options.	X X	X X X	X X
Budget Appropriations	Consider providing long-term funding for local governments dedicated to AT initiatives, including facilities and programs. Establish a five year rolling budget to achieve program and project priorities. Fund, build and design active-transportation capacity in balance with other transportation	X	 X X	 X

	Examples	Immediate	Medium Term	Long Term
	modes under provincial and federal jurisdiction.			
Consultation	Establish advisory groups	X		
Performance measures	<p>Develop a standardized data collection system to monitor and report pedestrian and cycling activity e.g. establish a cross- Canada survey that creates State of Active Transportation Reports that benchmark activity levels through surveys across Canada, e.g. Bicycling in Quebec</p> <p>Set directional targets for active transportation use (e.g. increasing active transportation mode share, increasing km of high quality facilities).</p>	X	X	X

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Preamble

Over the time frame the Task Force initiated information collection and analysis on active transportation universal events has taken place which influences the Task Force's work. At the Federal level Transport Canada's website discussion on active transportation highlights the role municipalities play in supporting active transportation.¹ The Pan-Canadian Framework on Clean Growth and Climate Change and federal –provincial agreements to reduce transportation sector greenhouse gas emissions amplify the opportunities for active transportation to address emission reduction targets. Similarly Transportation 2030 references green and efficient transportation however does not identify the potential for active transportation networks and connectivity in and between provincial and urban transportation systems. Similarly various active transportation policies, programs and projects have been implemented within provincial and territorial jurisdictions.

The Task Force completed an international literature scan and conducted a broad based survey of Canadian jurisdictions. The information gleaned from this work illustrates a range of opportunities available that promote the integration of active transportation into transportation systems. The policy and program landscape for transportation ministries is variable across the country.

The following considerations are based on a synthesis of information and examples the Task Force has had the opportunity to examine.

¹ Transport Canada, Road Transportation <https://www.tc.gc.ca/eng/policy/anre-menu-3021.htm> , **Date modified:** 2017-03-28

Observations and Conclusions

Federal Leadership

Funding is already available to provinces and territories that prioritize this area for investment in infrastructure. Consideration could be given to whether there is a role for the federal government to provide additional leadership, policy, programming and/or financial support to provincial and territorial jurisdictions in support of active transportation initiatives.

Provincial Leadership

Policy and programs support for Active Transportation is highly variable among provinces and territories. While acknowledged that active transportation often occurs within communities, bicycle and pedestrian use of rural provincial and territorial highways is observed. Recognizing safety concerns for these vulnerable road users, some provincial departments in Canada have demonstrated significant policy and program support for active transportation.

Best Practices

Examples of best practices for Active Transportation Policy, Programs and Projects are illustrated in this report.

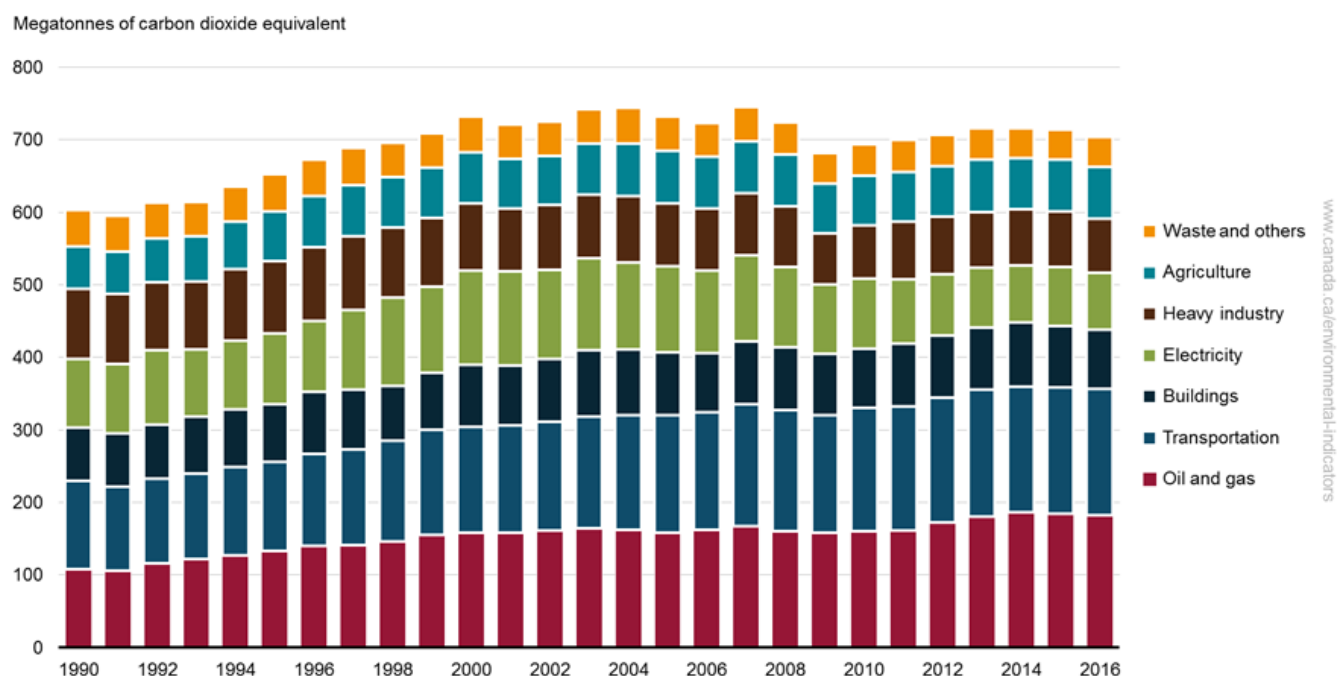
Introduction

Transportation and Climate Change in Canada

In 2014, Canada emitted 732 megatonnes (Mt) of greenhouse gas (GHG) emissions in total. The transportation sector was the second largest GHG emitter in Canada (after oil and gas), accounting for 171 Mt or 23% of total GHG emissions. Within the transportation sector, passenger and freight travel accounts for 95% of GHG emissions.

GHG emissions from the transportation sector grew by 32% from 1990 to 2014. While total emissions from passenger modes grew by 15%, emissions from cars declined by 30%, and emissions from light trucks (e.g. trucks, vans, sport utility vehicles) increased by 123%.

Figure 1. GHG Emission Canada 1990 – 2016



Source: Canadian Environmental Sustainability Indicators: Greenhouse Gas Emissions (<https://www.ec.gc.ca/indicateurs-indicators/default.asp?lang=en&n=F60DB708-1>)

Emissions from passenger and freight travel depend on a number of factors, including population, economic growth, vehicle type, fuel efficiency, and fuel type. Drivers' preference for light trucks over more fuel-efficient passenger cars has played a significant role in GHG emissions increases. Since 1990, the increase in number of light trucks accounts for more than three times the increase in the number of passenger on-road vehicles.

Over the years, the fuel efficiency of both passenger cars and light trucks has continued to improve. However, these improvements were still not sufficient to offset the increases in GHG emissions.²

² Natural Resources Canada (2015) Energy Efficiency Trends Analysis Tables – Transportation Sector – Energy Use Analysis.

Canada has a GHG emissions reduction target of 30% below 2005 levels by 2030. To achieve this goal, governments and industries must work together to implement measures to reduce GHG emissions in the transportation sector – for example, electric vehicle purchase incentives, investments in public transit expansion, investing and developing cycling infrastructure, etc.

Replacing regular, short vehicle trips with active transportation can also contribute to air pollution and GHG emissions reductions in the long term.

On December 9, 2016, First Ministers adopted the *Pan-Canadian Framework on Clean Growth and Climate Change*. The Framework takes a collaborative approach to reducing GHG emissions across Canada, and is based on four themes: carbon pricing, mitigation measures, adaptation and resilience, and clean technology. One of the transportation action items in the framework is *shifting from higher- to lower-emitting modes and investing in infrastructure*, including riding public transit or cycling instead of driving a car. Improvements to public transit infrastructure would help drive this shift.

Potential benefits of Active Transportation in Canada

In addition to reducing air pollution and GHG emissions, active transportation is associated with a number of other benefits. Some examples are:

- **Health** – Active transportation provides an opportunity to be physically active on a regular basis. Even small increases in physical activity can improve public health. Although there are many ways to be physically active, walking and cycling are among the most practical and effective, because it could be integrated into daily lives. Some health conditions associated with inadequate physical activity include: heart disease, hypertension, stroke, obesity, depression, diabetes, osteoporosis, cancer, and dementia.
- **Social** – Active transportation is accessible to Canadians and increases social interactions. More walking and cycling can help increase social acceptance of alternative modes. (from Victoria Transport Policy Institute – Evaluating Active Transport Benefits and Costs).
- **Alleviating Congestion** – Active transportation reduces road congestion by taking some travel demands off the roads and onto pedestrian sidewalks, bike lanes and trails instead. As shown in Figure 2, active transportation modes require less space to move the same number of people compared with vehicle travel. An expanded or improved active transportation network can also benefit transit ridership, as majority of transit trips begins or ends with walking.

A shift to active transportation modes can reduce the costs associated with traffic congestion, e.g. the incremental travel time, vehicle operating costs, stress and pollution emissions that a vehicle imposes on other road users (“Congestion Costs,” Litman 2009).

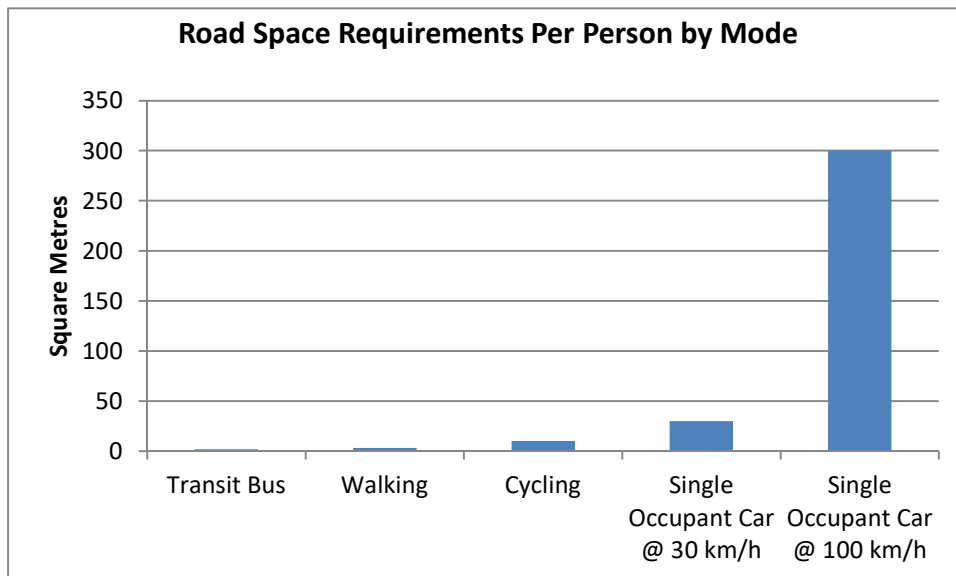
Active transportation can reduce or even eliminate the need to drive for short trips in urban areas as a significant portion of motor vehicle travel (often 10-30%) consists of short trips that could shift to active modes (Litman 2010). Where walking conditions are poor, such as along an urban arterial, people tend to drive even for short distances across the road or from one driveway to another, adding friction and cross traffic that creates delays.

Active transportation can reduce the need for chauffeuring people (special trips made to transport a non-driver) which often includes empty backhauls that adds to congestion. As a result, a mile of walking often reduces two vehicle-miles of travel.

Active transportation can encourage the use of public transit and rideshare travel (car- and vanpooling), which reduces longer vehicle trips. As a result, improving walking and cycling conditions

can reduce automobile trip generation and therefore traffic congestion. These impacts tend to be greatest in commercial districts, and near schools and recreational centers, where many short trips begin and end.

Figure 2. Road Space Requirements Per Person by Mode



- **Economic** – Active transportation saves money on fuel and parking. The development and maintenance costs of active transportation infrastructure are also far lower than other transportation infrastructure.

Improving alternative modes can allow some households to reduce their car ownership. Since motor vehicles are costly to own but relatively cheap to use, once households purchase an automobile they tend to use it, including some relatively low-value and short trips.

Table 2. Active Transportation Benefits and Costs: VTPI

Impacts	Improved NMT Conditions	Increased NMT Transport Activity	Reduced Automobile Travel	More Compact Communities
Potential Benefits	<ul style="list-style-type: none"> • Improved user convenience and comfort • Improved accessibility for non-drivers, which supports equity objectives • Option value • Higher property values • Increased security 	<ul style="list-style-type: none"> • User enjoyment • Improved public fitness and health • Increased community cohesion (positive interactions among neighbors due to more people walking on local streets) which tends to increase local security 	<ul style="list-style-type: none"> • Reduced traffic congestion • Road and parking facility cost savings • Consumer savings • Reduced chauffeuring burdens • Increased traffic safety • Energy conservation • Pollution reductions • Economic development 	<ul style="list-style-type: none"> • Improved accessibility, particularly for non-drivers • Transport cost savings • Reduced sprawl costs • Openspace preservation • More livable communities • Higher property values • Increased security
Potential Costs	<ul style="list-style-type: none"> • Facility costs • Lower traffic speeds 	<ul style="list-style-type: none"> • Equipment costs (shoes, bikes, etc.) • Increased crash risk 	<ul style="list-style-type: none"> • Slower travel 	<ul style="list-style-type: none"> • Increases in some development costs

Active transport can have various benefits and costs.

- **Road safety** – Any shift from private cars to active transportation will improve road safety and reduce fatalities and permanent injuries.
- **Shorter trips** – A shorter active trip could substitute longer motorized trips. For example, when people choose a local store rather than driving to more distant shops.
- **Increased public transit** – Walking and cycling improvements can support public transit travel, since most transit trips involve walking and cycling links.
- **Land use patterns** – Walking and cycling improvements help create more compact, multi-modal communities by reducing road and parking facility land requirements which reduces travel distances.

Barriers to Active Transportation in Canada

Traditional land use planning practices have created communities that are car-oriented and dispersed. These patterns have led to social norms, policies, and expectations that focus on vehicular transportation. Consequently, despite the many benefits of active transportation, there are several barriers to increasing levels of active transportation among Canadians. Examples include:

- **Social:** Driving could be a sign of social status and people may aspire to drive rather than walk or ride a bike, which can be associated with a sign of lower economic status. However, it is observed that cycling is more commonly pursued by higher educated (61% with a University diploma) and higher income (70% with an income over 80 000 \$) segment of the population (State of bicycling in Québec, 2010).
- **Road and physical infrastructure:** Limited safe walking and cycling infrastructure (such as large intersections with short crossing signals, circuitous pedestrian routes, and a lack of sidewalks, bike lanes, and bike parking) is a particular barrier to active transportation in Canada and North America where urban sprawl and low density urban development create higher capacity roads with few considerations for short distance active transportation trips.
- **Safety:** Many cyclists and pedestrians will have to interact with vehicle traffic and/or each other. Concern regarding the threat of collisions may discourage walking or biking. The Canada Transportation Act includes the following declaration on safety: "... It is declared that a competitive, economic and efficient national transportation system that meets the highest practicable safety and security standards and contributes to a sustainable environment and makes the best use of all modes of transportation at the lowest total cost is essential to serve the needs of its users, advance the well-being of Canadians and enable competitiveness and economic growth in both urban and rural areas throughout Canada..."³
- **Weather:** Cold, rainy, or otherwise inclement weather, as well as darkness, present an additional barrier for personal comfort and safety when walking or cycling. In Canada, winter is a major barrier to active transportation and many pedestrians and cyclists facilities are left unmaintained between November and March. The Winter Cycling Conference in February 2017 concluded that winter cycling is possible and is effective in many northern European countries.
- **Workplace environment:** Cycling to work may mean employees need to provide change room facilities and a safe place to park a bicycle; a lack of either of these facilities may discourage employees from

³ <http://laws-lois.justice.gc.ca/eng/acts/C-10.4/page-1.html?txthl=safety#s-5>

riding a bike to work. Lack of facilities for bicycle parking is also an important barrier providing security from potential theft and vandalism.

- **Programs and policy:** Existing policies and programs at various government levels can create barriers to increasing active transportation. For example, prioritizing cars in transportation planning hinders the ability to provide pedestrian and cyclist friendly built environments. Land use planning that encourage specialized services (e.g. specific school programs, specialized health centers) and business (e.g. big box retailers) at different locations of the city also create barriers for active transportation. Neighborhoods with dense urban development and good connectivity show higher level of active transportation (1.5 % cycling trips for all trips for Greater Montreal Area but 10,8 % cycling trips in Le Plateau neighborhood – Origin-destination survey Montreal 2013).

Describing the Role of Transportation Ministries in Active Transportation

To successfully encourage active transportation, efforts are required from various actors, including: government policy frameworks enabling the integration of active transportation into transportation systems and networks; programs; funding for active transportation infrastructure; technical guidelines; non-profit organizations to raise awareness; land use planning frameworks/standards that support transit-oriented and pedestrian friendly communities; etc.

This report focuses on the role of federal and provincial transportation ministries in active transportation.

Survey Results

The task force, assisted by the Government of Manitoba, undertook development of an online survey and compilation of results generating a jurisdictional scan for the purposes of:

- Inventorying the current mandates and roles, including policy, legislation and regulations various transportation ministries have regarding active transportation;
- Drawing a portrait of the most recent initiatives, undertaken and planned, by federal, and provincial transportation departments, and municipal governments across Canada that support active transportation. Such initiatives would include policies, legislation, regulations and programs that support the consumer adoption of active transportation, encourage the integration of active transportation into transportation systems and/or incent the private sector to adopt active transportation practices;
- Documenting additional federal and international initiatives addressing active transportation, e.g. Health Canada, the Canadian Partnership Against Cancer, California/Oregon DOT, US FHWA, etc.

The task force drafted the survey instrument questions and prepared an email invitation targeted to federal, provincial, territorial and municipal governments, non-government organizations and other practitioners known to the task force. Manitoba Infrastructure facilitated distribution of the invitations to Manitoba, Ontario and New Brunswick through a special email address. Other task force members managed distribution of the invitation within their jurisdictions. Extensions and reminders were provided to encourage participation in the survey. The responses were collected on line and summarized on behalf of the task force.

Questionnaire Objective

The Transportation and Environment Task Force conducted a questionnaire to gather detailed information on active transportation policies and programs in Canada. The questionnaire used multiple choice and open-ended questions. This analysis examines the different roles and responsibilities organizations have within the field of active transportation, the rationale for their involvement in active transportation, legislation and regulations specific to active transportation, and funding.

Respondent profile

The questionnaire was answered by 44 respondents, representing one federal government department, 14 municipalities, 6 non-government organizations (NGO), 20 provincial and territorial government departments, and three transit service providers. Respondents were located throughout Canada with the majority coming from Québec. Notably, survey recipients representing large urban centres such as Toronto, Vancouver, Ottawa, and Edmonton did not participate in this questionnaire; Newfoundland was also not represented. Furthermore, the Federal Ministry of Transportation did not participate. As a result, potential federal initiatives in active transportation, such as Bill C-312 which calls for a National Cycling Strategy, may not be captured in the responses. A geographical breakdown indicates that the majority of respondents were from Québec, Manitoba and Prince Edward Island.

Figure 3. Jurisdictional and Organizational Breakdown

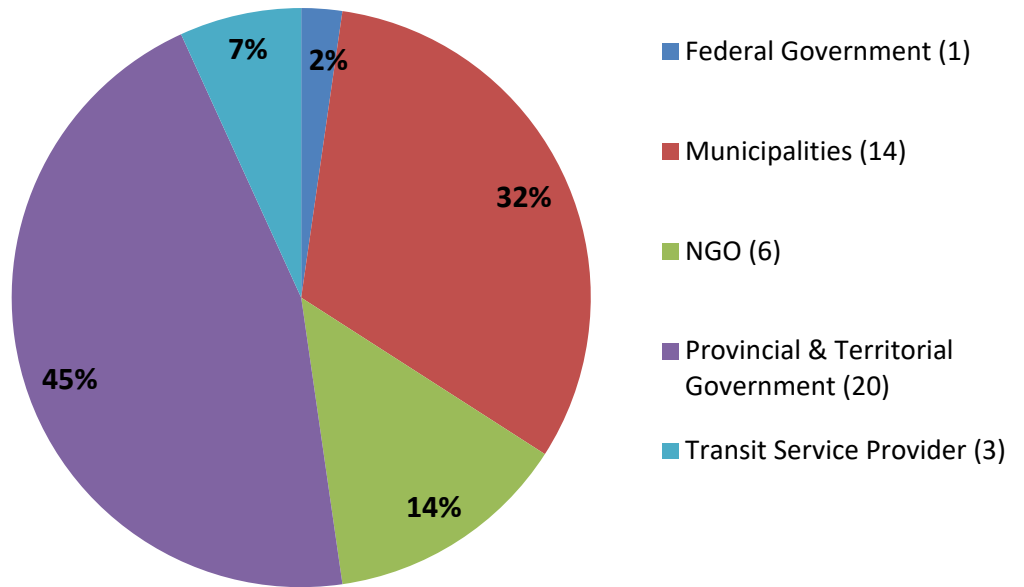


Figure 4. Geographical Breakdown

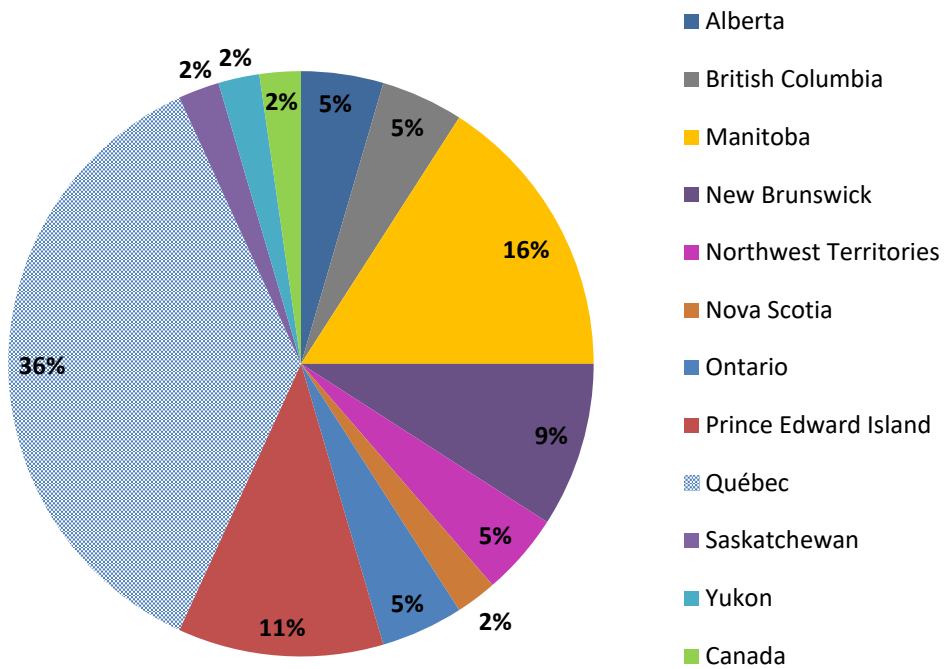


Table 3. Organizations Primary Activity

Jurisdiction	No. of Responses	Transportation	Municipal Affairs Planning	Energy	Environment	Health	Education
Federal Government	1	0	0	0	0	1	0
Municipality	14	9	14	1	5	0	0
NGO	6	5	1	0	3	2	4
Province Territory Government	20	12	3	2	3	2	3
Transit Service Provider	3	3	0	0	0	0	0
Grand Total	44	29	18	3	11	5	7

Approach to active transportation

Based on this survey, municipal, provincial, territorial, and federal governments, NGOs, and transit service providers are all involved in active transportation. However, both the scope of and reasons for involvement in active transportation depend on the type and mandate of the organization. Municipalities focus on active transportation infrastructure maintenance, policy development, project implementation and outreach. This aligns with the operational role municipalities have in the delivery of public transportation in Canada. At the provincial and territorial government levels, transportation ministries focus on policy development and project implementation, funding and outreach, research, program design and maintenance. Ministries that are involved in active transportation but whose primary focus is not transportation, for example ministries of health, education, or tourism, are instead involved in policy development, funding, and outreach as it ties into their mandates. With education cited as a primary activity, NGOs are largely involved in outreach, awareness and promotion of active transportation. Finally, with mandates to provide public transportation, the three transit service providers that responded to the survey are involved in policy development, project implementation, maintenance, and funding.

Different types of organizations selected different key reasons for their involvement in active transportation. All municipal respondents included recreation and tourism as a reason to pursue active transportation; safety and public health were the next most chosen reasons. While all NGOs selected public health as a reason for involvement, NGOs chose tourism least often. Moreover, NGOs selected congestion much more often than other types of organizations did. Provinces and territories were least motivated by congestion concerns as a reason to be involved in active transportation. Transportation ministries chose safety as the most important issue, followed by recreation and tourism, and air emissions. Provincial and territorial departments involved in non-transportation related activities, such as health, climate change and education, equally chose air emissions, recreation and tourism, and public health as reasons for involvement. Transit Service Providers selected air emissions, safety and congestions for reasons for involvement. Despite all of the respondents being involved in active transportation, their reasons for involvement varied significantly depending on the type and mandate of the organization.

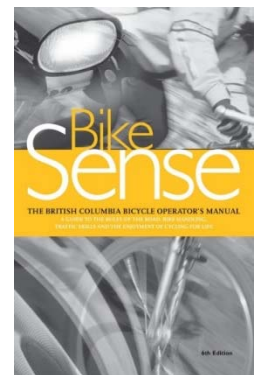
The specific goals for active transportation that respondents provided generally aligned with their reasons for being involved in active transportation. Active transportation is viewed as a way to improve safety, increase public health benefits and reduce greenhouse gases and congestion. To achieve these broader outcomes, respondents listed more specific goals such as increasing connectivity, accessibility and active transportation usage. Despite the alignment of goals and rationale for involvement, only 19 out of 44 respondents had specific goals relating to active transportation. Fifteen of those respondents also have formal plans or policies that specifically encourage active transportation.

Table 4. Summary of Survey Findings

Level of Government / Organization	Scope of Involvement in Active Transportation	Areas of Focus
Federal Government	Program design, funding	Public Health
Provincial /Territorial Government	Policy development, project implementation, outreach, infrastructure maintenance, funding, research, program design	Road safety, recreation, tourism, air emissions, public health
Municipal Government	Policy development, project implementation, outreach, infrastructure maintenance	Recreation, tourism
Non-profit Organizations	Outreach, awareness and promotion	Public health
Transit Providers	Policy development, project implementation, infrastructure maintenance, funding	Air emissions, safety, congestion

Policies and Plans

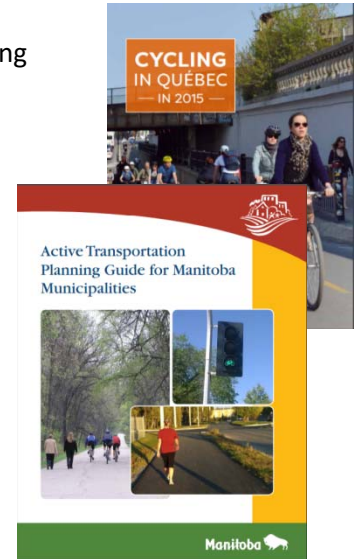
Twenty-five respondents have formal plans or policies that specifically encourage active transportation. This includes provincial ministries from British Columbia, Québec, Manitoba, Ontario, Nova Scotia, and Yukon. It also includes Calgary, Winnipeg, three municipalities from Ontario, and four municipalities from Quebec. Organizations whose primary focus was not transportation, such as those involved in climate change, health and recreation did not have a formal plan or guiding policies that encourage active transportation. Despite not having these documents, these organizations pursue active transportation initiatives. For example, Manitoba Health provides indirect funding towards active transportation.



Areas of Involvement

Provincial and territorial government are involved in active transportation through different initiatives such as developing regional strategies, constructing multi-use trails near highways, building bike infrastructure and supporting municipalities by providing grants. Provinces have a significant role in the development of active transportation facilities through funding and developing guidelines and regulations. The Ontario Municipal Cycling Infrastructure Program is a dedicated fund to help municipalities build cycling infrastructure. Finally, *La Route Verte* in Québec is a well-established network of cycling trails and bikeways that was built through a partnership between Vélo Québec, the province and municipalities.

Municipalities are involved in active transportation through project implementation, awareness and education. Municipalities engage citizens and develop and distribute educational materials about active transportation initiatives in the municipality. Like municipalities, NGOs are heavily involved in communications, promotion, education and awareness. This similarity may help explain why municipalities and NGOs generally have more dedicated full-time equivalent (FTE) positions to active transportation than their provincial or territorial counterparts. These human resources may be required for the organizational demands associated with active transportation promotion and program implementation in municipal governments and NGOs.



Collaboration

Active transportation is a field that both impacts and is impacted by many areas and consequently requires collaboration. Collaboration exists through the development of regional plans, programs, and the implementation and development of active transportation policies. Some survey respondents noted that municipalities, NGOs, transit service providers and provincial and territorial governments would often work together on advisory boards relating to active transportation. For example, the development of a Regional Active Transportation Plan resulted from collaboration between the PEI Department of Transportation and Infrastructure Renewal, City of Charlottetown, Town of Cornwall, and Town of Stratford. The province of Manitoba's active transportation Provincial Stakeholder Advisory Committee acts as forum in which the province, NGOs, and municipalities can discuss active transportation. Lastly, a key example of collaboration across different sectors is the Route Verte. The provincial government, municipalities, and NGOs have worked together in developing, implementing and maintaining *La Route Verte*, a province-wide network of bikeways, cycling, and multiuse trails. In addition to inter-governmental collaboration, respondents representing provincial and territorial governments stated that cross ministry collaboration is also key source of partnership in active transportation. For example, Ontario's Cycling Strategy was the result of collaboration between the Ministry of Transportation and the Ministry of Tourism, Culture and Sport. Overall, responses reflected that active transportation in Canada is a field that is highly collaborative across and within jurisdictions.

Regulations and Legislation

Only about half of the respondents are aware of specific regulations or legislation in their jurisdiction which governs active transportation. Respondents who were aware of specific regulations or legislation were from municipal, provincial or territorial governments. Municipalities such as Charlottetown and Ville De Longueil have developed regulation and legislation pertaining to active transportation. In addition, provinces such as Québec and Nova Scotia have also developed legislation regulating active transportation. Little information was provided about the details of these regulations and legislation.

In terms of cycling and recreational infrastructure, most municipalities, provinces and territories accept the implementation of on-road bike facilities and non-motorized recreational paths. The criteria used to approve on-road bike facilities and non-motorized recreational paths rely heavily on local context. Specifically, respondents indicated that projects are approved if they are financially feasible and align with the provincial guidelines set out in transportation plans and operational manual.

Funding

The majority of respondents who possess a capital budget for active transportation were municipalities. Some municipal active transportation respondents had a well-developed annual capital budget. Other municipalities have allocated one time or “ad hoc” funding towards the expansion or development of an active transportation network. Municipalities use their budgets for expanding active transportation, as well as building and maintaining physical infrastructure. The dedicated budgets for active transportation possessed by municipalities have allowed the development of cycle tracks, recreational paths, and the promotion of cycling safety.

At the provincial level, active transportation is funded both directly and indirectly depending on the province. Québec, British Columbia and Ontario have dedicated specific funding towards the development of active transportation. The government of Ontario is providing \$10 million in one-time grant funding through the Ontario Municipal Cycling Infrastructure Program (OMCIP). Grants such as BikeBC and the now closed Programme Véloce II have been used to directly fund the expansion of active transportation infrastructure. Both grants are 50-50 cost sharing models designed to help expand active transportation and financially support local governments. Respondents who indicated their jurisdiction provides direct funding to active transportation all represented provincial and territorial transportation ministries.

Provinces and territories also indirectly contribute to active transportation through funding for highway maintenance, road construction, climate change, and traffic safety. In some cases, a portion of a project budget aimed at improving a highway may be used for active transportation infrastructure through traffic improvements. As a result, the amount of money put towards active transportation may vary from project to project and can be difficult to calculate exactly. For example, the British Columbia Ministry of Transportation and Infrastructure budget for active transportation on provincial rights-of-way is incorporated into highway project budgets. Grants relating to climate change and public health help indirectly fund active transportation. In Alberta, grants for traffic safety, health, physical activity and recreation improvements can fund active transportation projects, but these grants are not exclusively for active transportation projects. For example, a cycling or walking project funded through the Alberta Traffic Safety Fund would have to focus on improved public safety. This indirect nature of funding for active transportation aligns with a large majority of respondents being motivated by differing aspects relating to active transportation and that active transportation has wide reaching benefits.

Success Stories

Success in active transportation has occurred throughout Canada. Québec's *La Route Verte* is a success story that has created a large network of active transportation to develop in the Province. The Government of Québec collaborates with the NGO Vélo Québec and various municipalities on planning and constructing a bikeway that spans over 5000 km. Inter-governmental cooperation between municipalities and the Government of Québec was crucial in creating this robust active transportation network. Calgary has seen an increase in ridership following the construction of its Centre City Cycle Track Network. A respondent from Winnipeg stated that the gradual expansion of protected bike lanes was seen as a real step towards creating better and safer active transportation.

Observation

Active transportation is a field made up of various actors including municipalities, provincial, territorial and federal governments, NGOs, and transit service providers. The scope and rationale for involvement in active transportation depends on the type and mandate of the organization. Active Transportation is a field that is highly collaborative where actors have distinct roles. Provinces and Territories develop regional strategies, build active transportation infrastructure, and help fund municipal active transportation initiatives.

Municipalities and NGOs are involved in program implementation and communication in the form of awareness and education. Despite their well-defined roles, collaboration is essential to active transportation. *La Route Verte*, and the Regional Active Transportation Plan in PEI are key examples of collaboration between NGOs, municipalities, and provincial and territorial governments. Active transportation is funded through provincial contributions aimed directly at active transportation, or by funding that is associated with climate change, traffic safety and motor vehicle infrastructure. Municipalities are more likely to dedicate a portion of their capital budgets to active transportation.

Based on this analysis, continuing to develop strategic partnerships among different sectors and levels of government will help improve active transportation. Strategic partnerships and collaboration must recognize the multi-faceted nature of active transportation. Finally, as many funding sources for active transportation are currently ad hoc, developing stable capital and operational funding for active transportation may help increase the number of active transportation initiatives.

Findings of Jurisdictional Scans – Policies, Programs and Experience

Government of Canada

Active Transportation – Federal Government

Transport Canada, together with other levels of government, has established a new task force to discuss safety measures to reduce injuries and fatalities involving cyclists, pedestrians and heavy trucks. This task force, established through the Canadian Council of Motor Transport Administrators, will explore cameras, sensor systems, side guards, as well as educational safety and awareness programs. To complement the work of the task force, Transport Canada will undertake a new study to examine the benefits of modern technologies to reduce collisions between vulnerable road users (cyclists and pedestrians) and heavy trucks.

In addition to working with other jurisdictions, the federal government also looks to foster collaboration across sectors to support active transportation. The Public Health Agency of Canada's Multi-sectoral Partnerships to Promote Healthy Living and Prevent Chronic Disease program provides support for projects that improve public health, including projects that advance active transportation. This program promotes innovative solutions to public health challenges by providing the co-investment needed to test or scale-up promising primary prevention interventions.

As an example, through the Creating Connections project, the Government of Canada is partnering with Elgin St. Thomas Public Health and local developers to improve walkability in the City of St. Thomas. Families, community members and municipal officers are engaged in a process of identifying and prioritizing physical infrastructure improvements that will be implemented by developers in designated neighbourhoods in order to enhance walkability and health.

Alberta

<p>Policy</p>	<p>In 2011, the Government of Alberta released the ten year <i>Active Alberta</i> policy. The vision of this policy is for Albertans to enjoy a high quality of life, improved health and wellness, strong communities, economic benefits and personal fulfillment, through recreation, active living, and sport. The <i>Active Alberta</i> policy will refocus government initiatives, challenge partners, and encourage Albertans to become more active. The policy has strategic priorities specifically about active transportation, including:</p> <ul style="list-style-type: none"> • Work with partners to identify and implement best practices in land use and transportation planning to facilitate active transportation (walking, cycling); and • In alignment with Land-use Framework Regional Plans, work with partners to identify and respond to regional recreation demands and trends, with consideration given to land use planning, design standards and its influence on active transportation. <p>The Active Alberta policy document can be found here: http://www.culturetourism.alberta.ca/recreation/active-alberta/pdf/Active-Alberta-Policy.pdf</p>
<p>Legislation & Regulation</p>	<p>Power bicycles, including electric bikes, currently fall under the Rules and Regulations Applying to Small Vehicles. This document can be found here: http://www.transportation.alberta.ca/Content/docType41/Production/small_vehicle_booklet_final.pdf</p>
<p>Programs & Projects</p>	<p>Alberta Transportation is working with other municipalities in Alberta on an Alberta Bicycle Facility Design Guide to develop design guidelines for cycling facility standards that can be applied consistently across the province.</p>
<p>Best Practices</p>	<p>In recognition and support of the Active Alberta policy, Alberta Transportation has developed comprehensive policies, guidelines and standards for installing, operating and maintaining trails in highway rights-of-way. Alberta Culture and Tourism is also involved in active transportation, particularly related to increasing recreational and cycling tourism opportunities.</p>
<p>Budget Appropriations</p>	<p>The Alberta Active Living Grant and the Recreation and Physical Activity Project Grant are two grants administered by the Recreation and Physical Activity Division of Alberta Culture and Tourism. The Alberta Active Living Grant provides funding to assist Alberta Active Living Partners organizations and Alberta TrailNet Society with annual operating and programming costs. These organizations do not have to have active transportation in their mandate to receive these funds. The Recreation and Physical Activity Project Grant supports projects that foster cooperation, innovation and research in recreation and physical activity programming. Projects can include, but are not limited to active transportation.</p> <p>For example, Safe Healthy Active People Everywhere (SHAPE) has received Alberta Active Living Grant operational funding and project funding. SHAPE provides encouragement and support to school communities to encourage their students to walk or bike to school.</p>

	The Alberta Traffic Safety Fund (ATSF) encourages communities and other traffic safety stakeholders to identify and address traffic safety priorities and to develop and implement preventative and collaborative traffic safety projects. Projects aimed at increasing pedestrian and cyclist safety are eligible for ATSF funding. Currently, there is no separate budget line dedicated to active transportation.
Consultation	
Performance Measures	The Active Alberta outcomes related to active communities include: <ul style="list-style-type: none"> • Communities are designed and developed to support recreation, active living and sport where people live, learn, work and play; • Communities benefit from the economic impacts of recreation, active living and sport, including job creation and visitor attraction; • More Albertans are using active transportation in their daily lives; and • Albertans report that their communities are safe and inclusive.
Commitments	
Other	

British Columbia	
Policy	The B.C. Ministry of Transportation and Infrastructure has provincial cycling policy designed to provide safe, accessible, and convenient cycling facilities on B.C. highways. ⁴ The policy states that provisions for cyclists will be made on all new and upgraded provincial highways, with exceptions subject to a consistent evaluation procedure, and that consultation with stakeholders and local governments will be conducted. It also specifies that uniform signing and marking will be provided to cyclists on all provincial highways.
Legislation & Regulation	<i>Motor Vehicle Act</i> ⁵ – cyclists have the same rights and responsibilities as a driver of a vehicle
Programs & Projects	The Ministry of Transportation and Infrastructure operates BikeBC, a cost-sharing program that provides cycling infrastructure funding to local governments and First Nations, to encourage healthy living and to reduce emissions. BikeBC has project selection criteria and a competitive application process. In 2017/2018, \$9.25 million was awarded to a total of twenty-six local governments. More information on the BikeBC program may be found here: http://www2.gov.bc.ca/gov/content/transportation/funding-engagement-permits/funding-grants/cycling-infrastructure-funding <ul style="list-style-type: none"> • Bike to Work Week. The Ministry of Transportation and Infrastructure provides a grant to the Bike to Work BC Society⁶ to run Bike to Work and School Week events across the province each year. • Trans Canada Trail signs. Where no other option for a trail is possible, the Ministry of Transportation and Infrastructure is allowing the Trans Canada Trail Society to place wayfinding signs on rights-of-way, which will be used by

⁴ <http://www2.gov.bc.ca/gov/content/transportation/driving-and-cycling/cycling/cycling-regulations-restrictions-rules/cycling-policy>

⁵ http://www.bclaws.ca/civix/document/id/complete/statreg/96318_00

⁶ <https://www.biketowork.ca/>

	pedestrians, cyclists, and equestrian users.
Best Practices	The Ministry of Transportation and Infrastructure has an Active Transportation and Climate Action Policy group within the Transportation Policy and Programs Department. This team has increased from one to four staff as of January 2017 (one manager, two policy analysts, one program assistant). The group is responsible for active transportation policy development, regulatory amendments, and program design and implementation. The group regularly liaises with other ministry departments (e.g. Engineering, Regional Operations) as well as with other B.C. ministries and federal-provincial-territorial groups.
Budget Appropriations	The BikeBC budget for 2017/2018 was \$9.25 million. Since 2001, the ministry has invested over \$230 million in cycling grants and infrastructure projects (this includes the BikeBC cost-sharing program as well as investment in provincial infrastructure on highways). The Ministry also provides funding to the Bike to Work Week Society to encourage cycling to work and school in 53 communities each year.
Consultation	Ministry Cycling Policy specifies that the ministry will consult with cycling stakeholders on the addition of cycling facilities to new and upgraded provincial highways. As an example, the McKenzie Interchange project team has been consulting with local governments and cycling groups on the Active Transportation component of the project. Cycling stakeholders were engaged during the development of the transportation investment plan for the ministry, as well as during development of B.C.'s climate change plans.
Performance Measures	The BikeBC Program tracks project advancement milestones and completion. The Ministry of Transportation and Infrastructure is also beginning to track mode share, with the aim of increasing active transportation mode share over time.
Commitments	
Other	

Manitoba	
Policy	<p>MI has identified a lead Branch within the Transportation Policy Division for developing active transportation policy. Work is underway and a draft policy is nearing completion. The policy will focus on actions to be taken by MI in locations of high AT activity.</p> <p>Numerous government departments have an interest in active transportation for various reasons including active living, local commuting, education, public safety, etc. As a regular course of business, MI works with other departments as and when required to address active transportation.</p> <p>MI has produced guidelines for trail developers (Guidelines for the Construction of Recreational Trails on or in Proximity to a Departmental Road) and municipal authorities (NEW: Active Transportation Planning Guide for Manitoba)</p>

	<p>Municipalities) to provide guidance with respect to the planning and development of AT facilities.</p>
Legislation & Regulation	<p>Highway Traffic Act, Highways & Transportation Act, Highway Protection Act, Municipal Act</p>
Programs & Projects	<p>MI does not have any programs that are specifically focused on delivering capital construction or maintenance of active transportation facilities.</p> <p>A sample of active transportation related projects that MI has undertaken include:</p> <ul style="list-style-type: none"> • An active transportation and emergency vehicle underpass is being constructed as part of a new interchange project on Winnipeg’s North Perimeter Highway (PTH 101). • AT overpass on PTH 59 at Birds Hill Provincial Park • MI lists active transportation as one of several factors supporting the implementation of paved shoulders. • The demand for active transportation is the primary influencing factor with respect to including sidewalks on bridges. MI has approximately 60 bridges with sidewalks.
Best Practices	<ul style="list-style-type: none"> • Local governments and/or trail organizations are primarily responsible for the ownership and maintenance of local active transportation facilities, which includes design, construction, operation, maintenance, funding, liability, and stewardship. • Where practical, facilities that separate vehicular traffic from pedestrians and cyclists are preferred. • Local governments and/or trail developers are responsible for maintaining off-highway or separated active transportation facilities. On-highway active transportation related facilities will be maintained by MI in order to protect highway safety and operations. • MI will work with local governments and trail developers to ensure that active transportation facilities are well planned and designed to protect highway safety and operations. • Manitoba Infrastructure’s primary priority is safety and efficiency for all users of the network either motorized or non-motorized. To this end, MI receives and reviews applications for any Active Transportation or recreational trails that are to be developed in the proximity of a provincial highway. Applications are reviewed and permits/permissions are granted if proposed trails meet the requirements of the aforementioned guidelines for trail developers. • If a capital project is being proposed in a location identified as exhibiting high active transportation use (i.e. the location is identified as an AT “hot spot” in the

	Manitoba Active Transportation Trigger Map), the department will further assess the priority of a treatment option based on level of risk.
Budget Appropriations	
Consultation	MI works with and provides stewardship services to trail developers and municipal governments to provide guidance with respect to the planning and development of active transportation facilities in the vicinity of provincial highways.
Performance Measures	As yet, Manitoba Infrastructure has not established performance measures for the provision and performance of active transportation facilities. The Department is embarking on a program to collect active transportation related traffic and collision data to support benchmarking and measuring performance of active transportation facilities.
Commitments	
Other	

New Brunswick	
Policy	<p>New Brunswick does not have a policy statement regarding the integration of AT into the provincial transportation system at this time. However, New Brunswick is supporting active transportation through the province’s Climate Change Action Plan:</p> <ul style="list-style-type: none"> • In urban areas, and where possible elsewhere, preferentially locate public buildings in areas accessible by public transit, walking and cycling • Collaborate with municipal and local governments to expand cleaner alternative transportation options such as electric vehicles, public transit, carpooling, ride-sharing, bicycling and walking • Encourage community and regional land-use planning practices that incorporate energy efficiency, energy conservation, carbon sequestration, reduced emissions, support healthy built environments and which incorporate and encourage communities to improve the availability and accessibility of safe alternative forms of transportation such as walking, cycling and public transit
Legislation & Regulation	
Programs & Projects	
Best Practices	
Budget Appropriations	
Consultation	
Performance Measures	
Commitments	
Other	

Northwest Territories

Policy	The Department of Infrastructure has developed a Northwest Territories Road Safety Plan, which identifies vulnerable road users such as pedestrians and cyclists as a key road safety target group and provides trends in vehicle collisions with vulnerable road users.
Legislation & Regulation	The Northwest Territories <i>Motor Vehicles Act</i> has a number of sections that deal with active transportation. Sections 158 to 168 sets out the duties of pedestrians at traffic signals. Sections 250 to 257 sets out the duties of drivers and pedestrians and the pedestrian's use of crosswalks and sidewalks. Section 246 sets out the duties of bicyclists. The Department of Infrastructure is reviewing its legislation, including the <i>Motor Vehicles Act</i> with a view to updating it in the near future.
Programs & Projects	<p>Capital construction or maintenance of active transportation facilities is largely delivered by municipalities. Federal funding for Public Transit improvements in the City of Yellowknife was secured by the Department of Municipal and Community Affairs under phase 1 of the Investing in Canada Plan and an additional \$11.1 million is available for Public Transit under Phase 2 of the Investing in Canada Plan.</p> <p>The Department of Infrastructure has been involved in a number of initiatives and projects in recent years. These initiatives include:</p> <ul style="list-style-type: none"> • Installation of "Share the Road" signs on Highways #3, #4 and the Yellowknife Access Road in and near Yellowknife (2008); • The NWT Road Safety Plan was prepared in 2015 to guide road safety programs over the next four years with a goal of reducing fatalities and injuries on highways, winter roads, community roads, ice crossings and trails. The Plan addresses the safety of vulnerable road users, including cyclists and pedestrians; • The Drive Alive Program, which ran from 2008 to 2014, included public awareness campaigns targeting the safety of pedestrians and cyclists. Between 2010 and 2012, the Department distributed bike helmets to school-aged children living in small communities; • The Department considered on-road bike facilities in the reconstruction of the first 7.5 kilometres of Highway #4 based on input from public open houses between 2007 and 2012. As a result, 2 metre wide paved shoulders were incorporated to accommodate cyclists. The reconstructed highway opened in 2014; • In November 2016, the City of Yellowknife constructed a multi-use trail parallel to the Yellowknife Access Road to improve the safety of active transportation users. The trail was constructed within the highway right-of-way. Work to construct a pedestrian pathway that will connect to and extend the trail is underway and installation of a crosswalk in the same location to facilitate safe access to the multi-use trail is expected to be completed by November 2017; • The Department of Infrastructure designed and installed a zebra crosswalk with rectangular rapid flashing lighting on overhead pedestals for the Town of Hay River to provide safe access for pedestrians to the new Hay River Health Centre; • Chapter 8 of the Basic Licence Driver's Handbook contains information on sharing the road with pedestrians and cyclists. The Handbook was last updated in 2007. The Department is reviewing several driver handbooks that it issues

	with a view to updating them in the near future.
Best Practices	Due to the small size of most NWT communities, active transportation within municipalities, like cycling and walking, is already quite common. Long distances between communities make these activities less common along major highways. The Department of Infrastructure has made an effort to accommodate alternate road users on access roads and highways near communities by widening shoulders, installing crosswalks, or pedestrian pathways.
Budget Appropriations	
Consultation	Community governments are primarily responsible for the ownership and maintenance of active transportation facilities within the corporate limits of a community, which includes design, construction, operation, and maintenance. The Department of Infrastructure is willing to work with and provide stewardship services to trail developers and community governments to provide guidance with respect to the planning and development of active transportation facilities in the vicinity of territorial highways. An example is working with the City of Yellowknife in November 2016 during the construction of the multi-use trail parallel to the Yellowknife Access Road.
Performance Measures	The Department of Infrastructure will begin publication of an annual performance measures report that better reflects the mandate of the newly amalgamated Department. Reporting on performance measures related to active transportation facilities may be considered in that context.
Commitments	
Other	

Nova Scotia

Policy	<p>The policy framework for active transportation includes Choose How You Move (NS Sustainable Transportation Strategy 2013), the Environmental Goals and Sustainable Prosperity Act (EGSPA 2007, and amended in 2012), Thrive! (The Plan for a Healthier Nova Scotia 2012), and the Nova Scotia Tourism Agency (NSTA) strategic plan (2015).</p> <p><i>Choose How You Move</i> supports the vision of an integrated network of sustainable transportation infrastructure across Nova Scotia that connects people within and between communities. The Province works with municipalities on planning, priorities, design and active transportation infrastructure funding.</p> <p>EGSPA emphasizes the importance of integrating environmental sustainability and economic prosperity through its goals and objectives. The 25 goals of EGSPA relate to ecosystem protection, air emissions, renewable energy, water quality, contaminated sites, solid waste, sustainable purchasing, and energy efficient buildings. EGSPA provides a legislative framework for sustainability for the province.</p> <p><i>Thrive!</i> is a deliberate, collaborative approach to change the environments where we live, work, learn, play, and commute, making them more supportive of healthy eating and physical activity. It has 4 directions: Support a Healthy Start for Children and Families, Equip People with Skills and Knowledge for Lifelong Health, Create More</p>
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	<p>Opportunities to Eat Well and Be Active, and Plan and Build Healthier Communities.</p> <p>The NSTA strategic plan outlines 4 goals, which are as follows: attract first-time visitors to Nova Scotia, invest in markets of highest return, focus on world class experiences, and build Nova Scotia’s tourism confidence. Active transportation infrastructure can play a key role in making Nova Scotia a great tourist destination.</p>
<p>Legislation & Regulation</p>	
<p>Programs & Projects</p>	
<p>Best Practices</p>	<ul style="list-style-type: none"> • The Department of Transportation and Infrastructure Renewal (TIR) continues to work with key partners to develop and promote the Blue Route, a provincial bicycling network (http://bicycle.ns.ca/blue-route/). Once completed the network will be approximately 3000 km in length. The route is on trails and municipal and provincial roadways. There are two sections of the blue route currently open and promoted. These sections together are approximately 111 km open in two parts of the province. • TIR has established a bicycling signage policy that will be supported by procedures. The policy will outline procedures for designating provincial highways as bicycling routes, parts of the Blue Routes, and/ or parts of the Trans Canada Trail • Paved Shoulder Width Policy for Active Transportation (TIR) The Department is committed to supporting Active Transportation with the introduction of paved shoulders on provincial roads. Paving of shoulders will be considered during repaving, reconstruction or construction on provincial roadways, subject to certain conditions. • Trail Policy (TIR) The Department is committed to support development of the Trans Canada Trail and will work with all recognized trail organizations and municipal units. Trail groups continue to construct new trails and to expand the existing trail network. In addition, trail groups have been given the authority by Department of Natural Resources (DNR) to use the former railway corridor as part of their trail network. In accordance with this Policy and corresponding procedure, TIR may authorize recognized trail associations or municipal units to develop safe trails or trail crossings which are compliant with acts, regulations, Department procedures, safety goals, objectives and resource management. • Connect2 (Department of Energy) - is a grant program that is based on a vision that all trips under two kilometres to key destinations in Nova Scotia communities can be made using sustainable modes of transportation. Connect2 will cost share up to 50% of the cost of a project. The program considers applications under two categories: <ul style="list-style-type: none"> ○ Sustainable Transportation Infrastructure and Design: Support for active transportation (AT) infrastructure or design, AT or transit plans, modeling or design for transportation improvements and transportation demand management, shared mobility services, engineering, and feasibility studies. ○ Sustainable Transportation Enabling: Education, public engagement, social marketing, data collection and evaluation, informational supports (signage, maps, technology), ideas or best practices that require more studies to advance sustainable transportation in Nova Scotia.

	<ul style="list-style-type: none"> ○ In the 2016-7 round, the province funded \$646,188 for various sustainable transportation projects. The 2017-8 round has recently closed, and commits \$600,000, pending budget approval.
Budget Appropriations	
Consultation	<ul style="list-style-type: none"> ● The Road Safety Advisory Committee (RSAC) is a forum for government to work in partnership with stakeholders from a variety of sectors, in order to advance road safety approaches to reduce death, injury and loss on Nova Scotia's roads. It includes government departments (TIR, Justice, Health and Wellness) and key stakeholder groups, including an active and sustainable transportation representative. <ul style="list-style-type: none"> ○ RSAC has established a subcommittee to examine the issue of safety for active transportation users in Nova Scotia. Their objective is to investigate the opportunities for amendments to the Motor Vehicle Act (MVA) to help improve safety related to active transportation on public roads. The subcommittee will make recommendations to RSAC for consideration. ● TIR staff represent the department on an interdepartmental committee focused on the development and implementation of a provincial active transportation policy and plan ● <i>Blue Route</i> route sections are identified based on the planning priorities listed below and incorporates input from meetings and consultations with stakeholders around the province.
Performance Measures	EGSPA Performance Measures http://novascotia.ca/nse/egspa/ Thrive! Report https://thrive.novascotia.ca/sites/default/files/Thrive-Report2014.pdf Sustainable Transportation Indicators (NS) https://novascotia.ca/sustainabletransportation/tracking-progress.asp
Commitments	
Other	

Ontario	
Policy	Ontario's Cycling Strategy, #CycleON), is a 20 year-vision to promote cycling and cycling safety in Ontario, implemented through multi-year action plans.
Legislation & Regulation	
Programs & Projects	
Best Practices	<p>As part of #CycleON Action Plan 1.0, released in 2014, the Province is investing \$25 million over three years to build cycling infrastructure. This includes \$15 million for provincial cycling infrastructure and the \$10 million Ontario Municipal Cycling Infrastructure Program (OMCIP), which is helping 37 municipalities build or improve cycling infrastructure.</p> <p>Additionally, to improve cycling infrastructure and increase cycling tourism opportunities in Ontario, the Ministry of Transportation (MTO) is working toward identifying a province-wide network and provincial barriers to local cycling networks.</p>

	<p>The final network plan will help to prioritize future infrastructure investments on provincial highways. Once the province-wide network is identified, MTO will work with municipalities and other partners to develop strategies to implement provincial and municipal portions of the network.</p> <p>The Province is also supporting cycling through the Climate Change Action Plan (CCAP), released June 8, 2016. The CCAP commits to improving commuter cycling by accelerating and enhancing the implementation of #CycleON: Ontario’s Cycling Strategy and its related Action Plan. To help achieve these objectives, the CCAP identifies an intended investment of \$150 million to \$225 million from cap and trade proceeds to support the creation of better cycling networks, more cycling facilities in urban areas, and more bike parking at transit stations and provincially owned, publicly accessible facilities. Ontario is finalizing the program details and is aiming to launch it in 2017.</p>
Budget Appropriations	
Consultation	<p>MTO held eight regional engagement sessions across the province in November 2016 to seek technical feedback on the network concept. There will be broader consultation on a draft province-wide cycling network on the Environmental Registry in winter 2017.</p> <p>In fall 2016, MTO also held a public consultation on a proposed program under CCAP to improve commuter cycling networks. The input received will help guide the program design and ensure that investments in commuter cycling networks lead to a shift from motor vehicle trips to cycling trips.</p>
Performance Measures	<p>To deliver on the #CycleON strategy, the province is currently implementing #CycleON Action 1.0. MTO will work with partner ministries to:</p> <ul style="list-style-type: none"> • Develop long-term performance measures; • Continue to track the progress of items in Action Plan 1.0; and develop future action plans.
Commitments	
Other	

Québec	
Policy	<p>Québec’s Bicycle Policy “<i>Du Loisir à l’utilitaire: Le vélo, un moyen de transport à part entière</i>”, released in 2008, aims to foster a bicycle-friendly culture in the province with a series of measures designed to promote cycling as a recreational activity and, gradually, as a means of transportation. In so doing, it contributed to sustainable development in Québec.</p> <p>A new Active transportation 2018-2023 Action Plan was also announced on April 17th 2018 by the Québec government, as part of the 2030 Sustainable Mobility Policy (<i>Politique de mobilité durable 2030</i>).</p>
Legislation & Regulation	<p>The Highway Safety Code (HSC) was modified in 2016 to specify a minimum distance required when exceeding a cyclist (1 m on roads where the posted speed is 50 km / h</p>

	and less; 1.5 m on roads where the posted speed is over 50 km / h). New amendments to the HSC were also sanctioned on April 18 th 2018 (with the <i>Bill n°165</i>) to improve road sharing safety. Among all the improvements of the security aspects of cycling and walking, the HSC now includes specific dispositions for the implementation of shared streets and bicycle boulevards.
Programs & Projects	Ministère des Transports du Québec (MTQ) is offering financial support to its municipal partners for the development of active transportation infrastructures in urban area (with the <i>Programme d'aide financière au développement des transports actifs dans les périmètres urbains</i>) and for the maintenance of the Route verte, the national veloroute (with the <i>Programme d'aide financière à l'entretien de la Route verte</i>). With the new 2030 Sustainable Mobility Policy, additional budget was announced for those programs and new initiatives like the financial support to municipal partners for the Route verte development (<i>Programme d'aide financière au développement de la Route verte et de ses embranchements</i>) and for the active transportation infrastructures conservation and improvement (<i>Programme d'aide financière à la conservation des infrastructures de transport actif</i>). The new policy also provide budget for the development of bike sharing services in urban areas.
Best Practices	<p>Between 2018 and 2023, the government plans to invest \$125 million to improve mobility and safety for cyclists, and to ensure the maintenance and sustainability of the Route verte, in collaboration with municipal stakeholders.</p> <p>The Route Verte is a fine example of a fully signposted system of bikeways in North America with 5,108 kilometres (as of 2017) and seven routes crisscrossing the province. Two out of every five kilometres (1,884 kilometres) are off-road paths. The remaining 3,224 kilometres are made up of bike lanes, paved shoulders alongside panoramic highways or quiet rural roads running through picturesque towns and villages. In addition, throughout this cycling network or its regional branches, there are 500 tourist accommodation establishments and campsites certified <i>Bienvenue cyclistes!</i> which offer a welcome and services adapted to the needs of cyclists.</p> <p>The national cycling network of the Route verte represents 42% of Québec's approximately 12,000 km of bikeways. The MTQ has been the government department responsible for setting up the Route verte since 1995.</p> <p>Also, a committee of provincial ministries led by the MTQ, oversees the development of the Route verte and coordinates the joint effort to promote active transportation with several other partners, including Vélo Québec. The ministries on this committee are:</p> <ul style="list-style-type: none"> • Ministère des Transports du Québec (MTQ) • Ministère des Affaires municipales et de l'Habitation (MAMH) • Ministère de l'Environnement et de la Lutte contre les changements climatiques • Ministère de l'Éducation, de l'Enseignement supérieur (MEES) • Ministère du Tourisme (TQ) • Ministère de l'Agriculture, des Pêcheries et de l'Alimentation (MAPAQ) • Ministère du Travail, de l'Emploi et de la Solidarité sociale (MTESS) • Ministère de l'Énergie et des Ressources naturelles (MRN) • Ministère de l'Économie et de l'Innovation (MEI) • Ministère des Forêts, de la Faune et des Parcs (MFFP) • Secrétariat à la jeunesse

	<p>At the municipal level, several municipalities are promoting cycling. For example, the City of Montréal now maintains all year-round a network of cycling paths, favoring the use of bicycles as a means of transportation all year-round.</p> <p>Safety is a key element of the Québec Bicycle Policy and involves many partners and several types of measures, including promotion to cyclist of all ages and drivers.</p>
Budget Appropriations	<p>Apart from the 125 M\$ for active transportation initiatives for 2018-2023, active transportation developments on the MTQ's roads are funded with the "<i>Fonds des réseaux de transport terrestres</i>", the same way as road infrastructure in general. This fund is partly financed with the gas tax. Some of the main initiatives for active transportation are also part of the 2013-2020 Climate Change Action Plan, whose budget is derived from the Green Fund, and is Québec's main tool for fighting climate change.</p>
Consultation	<p>Québec's main consultation activities include:</p> <ul style="list-style-type: none"> • Origin and destination surveys in the largest urban centers (e.g. approximately every 5 years in Montréal) • Study on cycling in the province of Québec with a household survey by Vélo Québec (every 5 years; last study in 2015) • Some cities also recently added bicycle counters on their busiest cycling route or did pilot project with a smart phone application (e.g. City of Montréal, City of Québec) to gather real time data (e.g. bicycle counts at different hours of the day, paths used by the cyclists in the City). The MTQ provided the municipalities for 20 automatic counters that were installed on the Route verte. The network of counters for cyclists in Québec now reaches a total of approximately 40 devices.
Performance Measures	<p>For 2030, the active transportation targets are :</p> <ul style="list-style-type: none"> • Increase the share of active trips compared to other modes of transportation by doubling cycling trips, and maintaining the share of walking trips at 10.3% • Reduce by 25% the number of pedestrian and cyclist casualties • Ensure the consolidation and expansion of the Route verte by adding 858 km
Commitments	(See performance measures)
Other	<p>For more information</p> <ul style="list-style-type: none"> • Ministère des Transports du Québec (MTQ): https://www.transports.gouv.qc.ca/fr/modes-transport-utilises/velo/Pages/velo.aspx and https://www.transports.gouv.qc.ca/fr/modes-transport-utilises/pietons/Pages/default.aspx • Québec Active Transportation 2018-2023 Action Plan (released in 2018 with the 2030 Sustainable Mobility Policy) : https://www.transports.gouv.qc.ca/fr/ministere/role_ministere/Pages/politique-mobilite-durable.aspx • Québec Bicycle Policy (2008) : http://www.bv.transports.gouv.qc.ca/mono/0979376.pdf • Vélo Québec - Cycling in Quebec in 2015 : http://www.velo.qc.ca/en/Publications/Cycling-in-Quebec • Route verte : http://www.routeverte.com/e/

Yukon

Policy	The Department of Highways and Public Works, Government of Yukon, currently has
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	<p>no policy to incorporate active transportation considerations into transportation infrastructure.</p> <p>The City of Whitehorse commissioned a study in 2014 (Transportation Demand Management Plan; http://www.whitehorse.ca/home/showdocument?id=4250) to review and consider strategies to more efficiently make use of transportation options and resources within the City. The Plan identified six major strategies, one of which is to improve upon active transportation options available to the public. Moving forward, a dedicated Transportation Demand Management Coordinator will be responsible for implementing and leading the delivery of the plan on behalf of the City, including those aspects related to active transportation.</p>
<p>Legislation & Regulation</p>	<p>Yukon’s Motor Vehicles Act does address and consider the use bicycles as well as pedestrian use of roads and highways in Yukon. Specifically, Part 13, sections 211 to 213 of the Act speaks to the operation of bicycles and Part 15, sections 220 to 234 considers pedestrians and pedestrian traffic on Yukon roadways. Additionally, considerations for pedestrian traffic on Yukon roads can be found throughout the Act.</p> <p>The Motor Vehicles Act also gives Municipalities the ability to develop bylaws specific to the use and operations of bicycles. The City of Whitehorse has developed and implemented the Whitehorse Bicycle Bylaw, that regulates the operation of bikes within city limits, and the Whitehorse Zoning Bylaw also regulates bicycle parking requirements for new construction.</p>
<p>Programs & Projects</p>	<p>The Department of Highways and Public Works, Government of Yukon, currently does not have any programs that are related to or focused on the delivery of active transportation infrastructure or facilities.</p> <p>Although the Department of Highways and Public Works does not have a formal policy, program or best practices related to active transportation, there are projects that the Department has been involved in that consider and incorporate active transportation.</p> <ul style="list-style-type: none"> • During the recent reconstruction of a portion of the Alaska Highway Corridor in the Whitehorse area, a gravel topped multiuse trail structure was constructed in the highway right of way, adjacent to the highway, to accommodate hikers, cyclists and other forms of non-vehicular traffic. • The Alaska Highway Whitehorse Corridor Functional Plan. The functional plan for this portion of the Alaska Highway considers options to accommodate and meet active transportation. These include a consideration to widen the shoulder of the highway to accommodate cyclists as well as the option and potential for the development of multi-use trails in the highway right of way. <p>Elsewhere throughout the Territory, where the reconstruction of existing roads or construction of new roads is being considered, if active transportation interests are identified, they are considered in the design and development of the project. If there is sufficient justification to include active transportation options into the design of the project, they are warranted and are technically and financially feasible, options such as cycling lanes, hiking trails or multi-use trails in the right of way, could then be considered and incorporated into part of the reconstruction/construction project.</p>

	<p>From a municipal perspective, the City of Whitehorse has developed a Transportation Demand Management Plan as part of their aim to become a leader in sustainable transportation. This plan assists in their effort to plan and deliver self-contained neighborhoods and city infrastructure that promote active transportation and public transit. The Transportation Demand Management Plan identifies a number of initiatives to undertake to promote and encourage active transportation within the City. Some of these include:</p> <ul style="list-style-type: none"> • Development of a Trails and Active Transportation Plan; this will address the needs and demands of Whitehorse’s sidewalk, trail and bike transportation network over the foreseeable future of 25 years. • Improve Priority Routes between the downtown core and Whitehorse neighbourhoods; this will identify existing trail and pathway connections, inventory their current status/conditions and identify gaps and work required to complete a network of paths between the downtown and the surrounding neighbourhoods. • Review Maintenance Practices; review and promote maintenance practices on priority active transportation routes within the city; these could include winter trail and road up-keep, line/road painting in the spring; removal of trail obstructions year round, sweeping and clearing trails of debris and road grit. • Expansion of Bike Trip-End facilities; this would include the development of and increased access to bike storage lockers, shower facilities, change rooms and locker facilities. • Engagement of community groups; the City would coordinate and engage community groups when planning and designing public infrastructure to ensure “complete streets” approach to road design.
Best Practices	The Department of Highways and Public Works, Government of Yukon, currently does not have best practices with respect to the incorporation of active transportation considerations into transportation infrastructure.
Budget Appropriations	
Consultation	To date, no consultation has taken place between the Department of Highways and Public Works, Government of Yukon, and other stakeholders.
Performance Measures	To date the Department of Highways and Public Works, Government of Yukon, has not developed any performance measures.
Commitments	
Other	

SUMMARY TABLES

	Policy	Legislation	Funding	Programming Promotion and Education	Planning and Design Standards, Guidelines, and Resources	Network Development	Interjurisdictional Relationships
Australia	The Australian National Cycling Strategy (2011-2016) sets out to facilitate cycling as a viable, safe, and enjoyable mode of transport, through network development, transportation and land use planning activities, monitoring and evaluation, investments, and consistent national practices.	States/territories have legislation that set out rules of the road as they apply to cyclists and motorists' responsibilities when sharing the road. Mandatory helmet laws implemented in each state and territory between 1990 and 1992.	\$112.8 million invested in cycling related infrastructure, education and promotional programs during 2013-14. In 2009, \$40 million was made available as part of the Commonwealth Government's stimulus package to invest in cycling related infrastructure.	Each state and territory is responsible for developing programs to increase use of active transportation modes and improve safety.	Cycling Aspects of Austroads Guides contains information that relates to the planning, design and traffic management of cycling facilities.	Network planning and development is the responsibility of municipal governments; state/territorial governments are responsible for networks outside of municipal boundaries.	The Australian Bicycle Council works in conjunction with the Australia Local Government Association to coordinate the efforts of local government authorities in encouraging increases in cycling.

	Policy	Legislation	Funding	Programming Promotion and Education	Planning and Design Standards, Guidelines, and Resources	Network Development	Interjurisdictional Relationships
Finland	The “National strategy for walking and cycling 2020 (Kävelyn ja pyöräilyn valtakunnallinen strategia 2020)” was published in 2011 by the Ministry of Transport and Communications.	Currently under revision. In April 2016 , Finland confirmed that the legal provisions on transport market will be brought together under one act, the Transport Code, which will cover all transport modes and aim for a better interoperability of the different parts of the transport system, for people and businesses.	Pedestrian and cycling networks are primarily the responsibility of municipalities. At the national level, the primary focus for the financing is maintaining the existing networks, financing local promotion campaigns, organizing seminars and publishing documents on various issues to promote active transportation.	Various campaigns exist in Finland targeting behavioural change and aiming to reach different age and focus groups.	At the national level, the Ministry of Transport and Communications and the Finnish Transport Agency are two of the main organisations involved with active transportation. At the regional level, many municipalities are also very proactive (e.g.: City of Oulu)	The cycling network in Finland can be categorized with regional routes , national routes and with the EuroVelo routes .	Finland is collaborating to various European initiatives related to active transportation and health, including with the World Health Organisation (WHO) . In 2015, a Declaration on Cycling as a climate friendly Transport Mode was adopted in Luxembourg by the European Union Ministers and Secretaries of State in charge of Transportation.

	Policy	Legislation	Funding	Programming Promotion and Education	Planning and Design Standards, Guidelines, and Resources	Network Development	Interjurisdictional Relationships
France	A national action plan for active mobility (Plan d'action mobilités actives (PAMA)) was released in 2014 (The "PAMA 2" is expected to be released in 2016).	The security of cyclists and pedestrian is a priority in the national legislation. Other national statutes and regional statutes related to sustainable development and mobility , including land planning , energy transition and green growth , also has a positive impact on cycling and walking.	For the year 2009, it was estimated and presented to the European Cyclists' Federation that approximately 470 million Euro, mostly from regional and local authorities, were invested for the cycling strategies in France (7.1 Euro per capita).	Programming, promotion and education are joint efforts of the French Government at the national level, with territories, cities, the educational sector, associations and other partners.	Several French ministries are providing sources of information at the national level.	National and regional cycling network development planning in collaboration with the Departments & Regions Cycling Network (bringing together 71 communities Regions (59 departments, 6 regions and 6 EPCI), representing over 75 % of the population in France).	Collaboration at the national, regional and local levels in France, as well as with the European Union.

United States (Federal)

Policy	Legislation	Funding	Programming Promotion and Education	Planning and Design Standards, Guidelines, and Resources	Network Development	Interjurisdictional Relationships
Policy requires that transportation agencies improve the safety and convenience of bicycle and pedestrian facilities, as an integrated part of their transportation systems.	Legislation ensures that bicycles and pedestrians are incorporated within federally funded projects, considered within state and metropolitan planning processes, and protected from network disruptions.	Total investment (1992-2015): \$11,229.64 million; average investment (2011-2015): \$794.98 million per year; cost share: typically 80% or more of project costs.	The responsibility of state bicycle and pedestrian coordinators. Promotion and education programming seeks to increase users and improve safety.	Developed at a federal level by FHWA and by other national organizations, including American Association of State Highway and Transportation Officials and the National Association of City Transportation Officials.	Requires metropolitans and states to consider bicycles and pedestrians within their transportation planning processes. Network planning is a responsibility of states and metropolitans.	The Federal Highway Administration has a bicycle and pedestrian contact, and each division within the FHWA has a point of contact; each state also has a bicycle and pedestrian coordinator. Cost sharing also allows jurisdictions to collaborate on projects.

	Policy	Legislation	Funding	Programming Promotion and Education	Planning and Design Standards, Guidelines, and Resources	Network development	Interjurisdictional Relationships
Oregon	Bicycle and pedestrian plan strives to enable people of all ages, incomes, and abilities in both the rural and urban context to access safe and well-connected networks.	The provision of pedestrian and bicycling facilities in all urban and rural road construction projects required; also addresses bicycle and pedestrian facilities, traffic, exemptions from the motor vehicle code, and committees and programs.	Primarily available for through the department's Enhance Project Funding; additional funding is also available.	Provides programming and resources for schools, tourists/ recreation, and bicyclists.	Developed the <i>Bicycle and Pedestrian Design Guide</i> in 2011 – topics relate to geometric and traffic control guidelines.	Cycling maps are available online.	Department provides local bicycle and pedestrian representative's contact information online; Oregon Bicycle Advisory Committee acts as a link between public and the department.

	Policy	Legislation	Funding	Programming Promotion and Education	Planning and Design Standards, Guidelines, and Resources	Network development	Interjurisdictional Relationships
Colorado	Bicycle and pedestrian needs are routinely accounted for within transportation projects through education and enforcement, planning, programming, design, construction, operation, and maintenance of facilities and their use.	Regulates pedestrian traffic, and driver's responsibilities to cyclists, pedestrians, and persons with disabilities; operation of bicycles and other human-powered vehicles.	General transportation funding programs are available for bicycle and pedestrian projects. Funds are prioritized for projects that increase safety and mobility for all modes, focus on high priority bicycle corridors, or address costly improvements or maintenance requirements.	Provides bicyclists/ pedestrians and event planners with information, resources, and links related to health, networks, promotion, safety, and economics.	Provides design and planning guidance through the <i>Roadway Design Guide's</i> Bicycle and Pedestrian Facilities chapter (includes geometric and traffic control guidance on various facilities in both the rural and urban contexts), while also endorsing other American guidelines.	Requires bicycle and pedestrian considerations throughout planning, programming, design, construction and maintenance operations; specific scenarios may be exempted from this.	A resource for rural Transportation Planning Regions, and provides technical and educational support.

APPENDIX 1
LITERATURE REVIEW

Australia

Policy

The Australian National Cycling Strategy (2011-2016) sets out to facilitate cycling through six priority objectives: i) promote cycling as both a viable and safe mode of transport and an enjoyable recreational activity; ii) create a comprehensive and continuous network of safe and attractive routes to cycle and end-of-trip facilities; iii) consider and address cycling needs in all relevant transport and land use planning activities; iv) enable people to cycle safely; v) improve monitoring and evaluation of cycling programs and develop a national decision-making process for investment in cycling; and vi) support the development of nationally consistent guidance for stakeholders to use and share best practice across jurisdictions.

Source:

Australian National Cycling Strategy (2011-2016)

<http://www.bicyclecouncil.com.au/files/publication/National-Cycling-Strategy-2011-2016.pdf>

Legislation

All states and territories have legislation in place that set out: i) rights and duties of cyclists when using the road, bicycle facilities, or shared use paths, ii) duties of motorist when sharing the road with cyclists, including a minimum of 1 m passing distance on urban streets (1.5 m on rural highways), and iii) cyclist safety equipment (including lights and reflectors).

Mandatory helmet laws were first introduced in Victoria in July 1990, followed in January 1991 by laws for adult cyclists in New South Wales and all age-groups in Tasmania. In July 1991, New South Wales extended the law's reach to child cyclists. In the same month, laws applying to all cyclists were adopted in South Australia and in Queensland, where the law was not enforced until 1 January 1993. In January 1992 helmet laws were introduced in the Northern Territory and Western Australia and in July 1992 in the Australian Capital Territory.

Sources:

- Wikipedia – Bicycle Helmets in Australia:
https://en.wikipedia.org/wiki/Bicycle_helmets_in_Australia
- Cycling Rules: Rules Affecting Cyclists and Motorists in Western Australia:
http://www.transport.wa.gov.au/mediaFiles/active-transport/AT_P_CyclingRulesWABooklet.pdf
- Cyclist Road Rules and Safety – South Australia:
<https://www.sa.gov.au/topics/transport-travel-and-motoring/cycling/cyclist-road-rules-and-safety>

Funding

In 2013-2014, \$112.8 million was invested by all states and territories in cycling related infrastructure, education, and promotional programs. In 2009, \$40 million was made available as part of the Commonwealth Government's stimulus package to invest in cycling related infrastructure. In 2011 the Australian Bicycle Council and the Australia Local Government Association surveyed Australian local government authorities about their efforts to encourage more cycling. Councils responding to the survey spent more than \$72 million on bicycle-related programs in 2009-10.

Sources:

- [National Cycling Strategy: Implementation Report 2014](#)

- <https://www.onlinepublications.austroroads.com.au/items/AP-C93-15>
- [Australian Local Government Bicycle Account 2011](#)

Programming Promotion and Education

Each state and territory is primarily responsible for developing programs to increase use of active transportation modes and improve safety; however, the federal Department of Infrastructure and Transport has a role. For example, the report [walking, riding and access to public transport](#) sets out how the federal government will work to increase the proportion of Australians living in urban and suburban environments who use walking and cycling for short trips, together with building a better public transport system.

Planning and Design Standards, Guidelines, and Resources

Cycling Aspects of Austroads Guides contains information that relates to the planning, design and traffic management of cycling facilities. The most relevant guides are the Guide to Road Design, the Guide to Traffic Management and the Guide to Road Safety. It is intended as a guide for engineers, planners, and designers involved in the planning, design, construction and management of cycling facilities. Throughout the document, practitioners are referred to relevant Austroads Guides for additional information.

Network Development

Network planning and development is the responsibility of municipal governments and state/territorial governments for networks outside of municipal boundaries.

Interjurisdictional Relationships

The Australian Bicycle Council works in conjunction with the Australia Local Government Association to coordinate the efforts of local government authorities to encourage more cycling.

Austroroads is an interjurisdictional and interdisciplinary group responsible for developing policy, planning, and design guides for active transportation. This group is governed by a board consisting of the chief executive officer (or an alternative senior executive officer) of each of its 11 member organisations, which includes the following:

- Roads and Traffic Authority New South Wales
- Roads Corporation Victoria
- Department of Transport and Main Roads Queensland
- Main Roads Western Australia
- Department for Transport, Energy and Infrastructure South Australia
- Department of Infrastructure, Energy and Resources Tasmania
- Department of Lands and Planning Northern Territory
- Department of Territory and Municipal Services Australian Capital Territory
- Commonwealth Department of Infrastructure and Transport
- Australian Local Government Association
- New Zealand Transport Agency

Austroroads developed the National Cycling Strategy 2011-16. This document is designed to provide focus on areas where it is critical that all jurisdictions maintain momentum and where a national strategy can add real value, co-ordinating and taking action at a national level. The Strategy sets out a framework of six key priorities: (1) cycling promotion; (2) infrastructure and facilities; (3) integrated planning; (4) safety; (5) monitoring and evaluation, and; (6) guidance and best practice. These key priorities have generic actions that can be applied within states, territories and local governments in accordance with community aspirations, priorities, and available resources. This document acknowledges that the

majority of cycling infrastructure, services, and events are provided by the states, territories and local government, as part of their normal business delivery.

Austrroads and Australian Bicycle Council released the [National Cycling Strategy: Implementation Report 2014](#) in 2015 to outline the progress made toward the National Cycling Strategy. Some of the results during 2013-14 include:

- State and territory stakeholders invested \$112.8 million in cycling related infrastructure, education, and promotional programs during 2013-14
- 1.3 million bicycles were sold in Australia, the fifteenth consecutive year that bike sales exceeded car sales
- Numerous safety action plans and campaigns undergone

At a state/territory level, governments are setting walking and cycling objectives, implementing programs to encourage more walking and cycling, and investing in infrastructure. Examples are provided below.

- The Australian Capital Territory established the [Active Transport Office](#) to enable more Canberrans to choose walking and cycling as their mode of transport and ensure better integration of transport modes across the city. The new Active Transport Office will operate as a single point of contact for walking and cycling issues and will include the creation of an 'Active Transport Coordinator,' who will be a high profile public contact on these issues.
- [Active Travel](#), Section 3 of Transport for Canberra policy, provides cycling and walking objectives for the territory government. The Australian Capital Territory is also working together with schools through the [Ride or Walk to School program](#) as a way to reach out to students.
- The New South Wales Government, Department of Transport, invested \$33 million in cycling infrastructure during 2013-14, much of this in the Sydney metropolitan area and across the state (see [Sydney's Cycling Future: Cycling for everyday transport](#)).
- The Northern Territory Government, Department of Transport has online information about walking and cycling in the territory. The department's website also has maps of walking and cycling routes/paths for Darwin and surrounding regions, Alice Springs, Katherine, and Tennant Creek.
- New South Wales and Queensland have quantified costs and benefits of cycling and walking, to aid in decision making and investments: [Walking for travel and recreation in NSW: What the data tells us](#); [Cost and health benefit of active transport in Queensland](#)
- The South Australian Government, Department of Transport and Infrastructure, has established the [Cycle Instead](#) website. The government's goal is to double the number of people cycling in South Australia by 2020.
- The [South Australia's Strategic Plan](#) website contains information on programs, infrastructure projects, grants, and resources for the cycling community.
- The Government of South Australia, Department of Planning, Transport and Infrastructure developed [Streets for People: compendium for South Australian practice](#) in 2012 to inform and guide the development of pedestrian and cycle friendly environments that promote health and strengthen communities.
- The Tasmanian Government has established the 'Trails and Bikeways Funding Program' that provides \$4 million in matching funds to councils and community organisations for cycleways and walking trails projects ([Tasmania Walking and Cycling for Active Transport Strategy](#)).
- [Measuring Walking: a Guide for Councils](#) explains the issues and options for measuring pedestrian activity and looks at the advantages and disadvantages of various methods. The report also offers recommended approaches to common scenarios and outlines a range of Victorian case studies.

- Government of Western Australia, Department of Transport, developed the [Planning and designing for pedestrians: guidelines](#) (2012), which provides detailed guidance to local government authorities on providing for pedestrians in the road environment.
- Government of Western Australia, Department of Transport, developed the website [Cycling](#) to provide information and resources for people who commute by bike, or wish to explore Perth and regional Western Australia by bike.
- Government of Western Australia, Department of Transport, offers a range of initiatives to promote active transport to school. The Walking School Bus and [TravelSmart to Schools](#) are two such programs.

In 2011, the Australian Bicycle Council and the Australia Local Government Association surveyed Australian local government authorities about their efforts to encourage more cycling ([Australian Local Government Bicycle Account 2011](#)). The survey was an initiative of the Australian National Cycling Strategy 2011-16, which aims to double the number of Australian cyclists by 2016. Key results from this survey:

- Councils responding to the survey spent more than \$72 million on bicycle-related programs in 2009-10.
- Survey participants reported receiving \$26 million from the Australian Government and \$26 million from state/territory governments toward cycling projects.
- More than two-thirds of responding councils either have a bicycle strategy or are working towards one.
- As at June 2010, councils responding to the survey reported having constructed approximately 11,700 km of cycling infrastructure. When currently planned cycle networks are completed the infrastructure will measure more than 17,800 km.

References/Information Sources:

The Australian National Cycling Strategy (2011-2016):

<http://www.bicyclecouncil.com.au/files/publication/National-Cycling-Strategy-2011-2016.pdf>

Walking, Riding and Access to Public Transport – Supporting Active Travel in Australian Communities – Ministerial Statement, Australian Government, Department of Infrastructure and Transport (2013).

https://infrastructure.gov.au/infrastructure/pab/active_transport/files/infra1874_mcu_active_travel_report_final.pdf

Australian Sports Commission Clearing House for Sport – Active Transportation:

https://www.clearinghouseforsport.gov.au/knowledge_base/organised_sport/sport_and_government_policy_objectives/active_transport

An Australian Vision for Active Transport, prepared by Australian Local Government Association, Bus Industry Confederation, Cycling Promotion Fund, National Heart Foundation of Australia and International Association of Public Transport:

<https://heartfoundation.org.au/images/uploads/publications/Active-Vision-for-Active-Transport-Report.pdf>

Benefits of Investing in Cycling in New Zealand Communities:

<http://www.nzta.govt.nz/assets/Walking-Cycling-and-Public-Transport/docs/benefits-of-investing-in-cycling/cyclelife-benefits-booklet.pdf>

Growing Cycling Tourism in Victoria:

http://tra.gov.au/documents/srr/DVS_Growing_Cycling_Tourism_in_Victoria_FINAL.pdf

National Cycling Strategy: Implementation Report 2014:

<https://www.onlinepublications.austroads.com.au/items/AP-C93-15>

Australasian Pedestrian Facility Selection Tool:

<https://www.onlinepublications.austroads.com.au/items/AP-R472A-15>

Safer Journeys for People Who Cycle: Cycling Safety Panel Final Report and Recommendations:

<http://www.saferjourneys.govt.nz/assets/Panel-Report-Safer-cycling.pdf>

Pedestrian and Road Safety:

http://bitre.gov.au/publications/2015/files/is_070.pdf

Australian Cycling Safety: Casualties, Crash Types and Participation Levels:

http://bitre.gov.au/publications/2015/files/is_071_ph.pdf

Australian Cycling Participation 2015:

http://bitre.gov.au/publications/2015/files/is_071_ph.pdf

Cycling Aspects of Austroads Guides:

http://bitre.gov.au/publications/2015/files/is_071_ph.pdf

Assessment of the Effectiveness of On-road Bicycle Lanes at Roundabouts in Australia and New Zealand:

http://bitre.gov.au/publications/2015/files/is_071_ph.pdf

Naturalistic Cycling Study: Identifying Risk Factors for Cyclists in the Australian Capital Territory (TRB e-Newsletter October 14, 2014):

http://www.monash.edu/_data/assets/pdf_file/0019/217306/muarc322.pdf

Cycling Infrastructure: Selected Case Studies:

<https://www.onlinepublications.austroads.com.au/items/AP-T282-14>

Low Cost Interventions to Encourage Cycling: Selected Case Studies:

<https://www.onlinepublications.austroads.com.au/items/AP-T281-14>

Injured Cyclist Profile: An In-Depth Study of a Sample of Cyclists Injured in Road Crashes in South Australia:

<http://www.trb.org/Main/Blurbs.aspx?fields=ENewsletterType> | International Research News

Evaluation of the C-Roundabout an Improved Multi-Lane Roundabout Design for Cyclists:

<http://www.nzta.govt.nz/assets/resources/research/reports/510/docs/510.pdf>

The Conspicuity of South Australian Cyclists: Implications for Safety:

<http://casr.adelaide.edu.au/publications/list/?id=1347>

Improving the Cost-Benefit Analysis of Integrated PT, Walking and Cycling:

<http://www.trb.org/Main/Blurbs.aspx?fields=ENewsletterType> | International Research News

Minimum Design Parameters for Cycle Connectivity:

<http://www.trb.org/Main/Blurbs.aspx?fields=ENewsletterType> | International Research News

Cycling on Higher Speed Roads:

<http://www.trb.org/Main/Blurbs.aspx?fields=ENewsletterType> | International Research News

Finland

Policy

The “National strategy for walking and cycling 2020 ([Kävelyn ja pyöräilyn valtakunnallinen strategia 2020 \(English summary available\)](#))” was published in 2011 by the Ministry of Transport and Communications in close cooperation with the Finnish Transport Agency, centres for economic development, transport and the environment, cities and municipalities, the Ministry of the Environment and the third sector. It aims:

- to increase the share of journeys undertaken on foot or by bicycle by 20 % by 2020, or 300 million trips (a corresponding decrease should take place in short passenger car trips), compared to the year 2005
- to ensure that walking and cycling have their own positions in the transport system recognised alongside other modes of transport
- to engage the close cooperation of different kinds of organisations and levels of government to promote active transportation and the benefits for both society and people

The “National Action Plan for Walking and Cycling 2020 ([Kävelyn ja pyöräilyn valtakunnallinen toimenpidesuunnitelma 2020](#))” was also released in 2012 by the Finnish Transport Agency. It aims to encourage and enable people to choose walking or cycling for at least a portion of their trips, increase the modal shares of walking and cycling with measures dedicated to municipalities of all sizes and for all population groups. It also addresses security and road safety. The action plan highlights the following four main topics: 1) Changing the attitudes, 2) Infrastructure, 3) Community structure, and 4) Administrative structure and legislation.

Furthermore, in 2013, the Ministry of Social Affairs and Health adopted a national strategy entitled “[On the Move](#)”, to promote physical activity for health and well-being, including cycling and walking (up to 2020).

Legislation

In [April 2016](#), Finland confirmed that the legal provisions regarding the transport market will be brought together under one act, the Transport Code, which will cover all transport modes and aim for a better interoperability of the different parts of the transport system, for people and businesses. The Transport Code will continue to pave the way for the concept “[Mobility as a Service](#)” of Finland, with the reforms in parallel of regional and county administration. The Ministry of Transport and Communications sent the draft proposal out for comments (deadline in June 2016) for the Transport Code on road transportation. Consultations on market regulation, other transport modes and other issues are also planned for the summers of 2017 and 2018.

According to a [2014 presentation by the Tampere University of Technology](#): “In Finland, the law states that maintenance and public sanitation of streets and certain public areas are the responsibility of the municipality. The owner of a plot has a duty to take care of the maintenance of the pavement next to plot by keeping it clear of snow and taking care of gritting and salting, for example. (...) It is also possible for the municipality to take over the maintenance of the pavements belonging to the plot owner.”

Funding

In Finland, the most important pedestrian and cycling networks are the responsibility of municipalities. For example, for the City of Oulu, it was estimated in 2014 that the cost to maintain 800 km of bicycle and pedestrian routes was 1.5 million Euros (used at 85 % for winter maintenance, and the remaining for small repairs and cleaning during summer).

At the national level, the primary focus for the financing is currently maintaining the existing networks, financing local promotion campaigns, organizing seminars and publishing documents on various issues to promote active transportation.

Programming Promotion and Education

Various campaigns exist in Finland targeting behavioural change and aiming to reach different age and focus groups (e.g.: initiatives of the [Finnish Transport Agency](#), [Finnish Cycling Embassy](#), and [Network of Finnish Cycling Municipalities](#), as well as the [Kilometrikisa](#) competition, the [Finnish database of walking and cycling](#), the [ThinkBike workshops and Cycling Festival Europe](#), etc.).

Planning and Design Standards, Guidelines, and Resources

- [Finland Physical Activity Factsheet](#), European Commission, World Health Organization – Regional Office for Europe, 2015
- [National winter cycling study \(Talvipyöräilyn laajuus, sen esteet ja motiivit sekä terveystvaikutukset\)](#), Ministry of Transport and Communications, 2003 (in Finnish)
- Poster “[Safety for pedestrians and cyclists](#)”, Guide “[On foot and by bicycle](#)” and [Quiz](#), [Liikenneturva](#), 2014
- [Presentation on “Best practices for cycle path winter maintenance processes”](#), Tampere University of Technology, 2014
- [Presentation on “Best European Practices in Promoting Cycling and Walking”](#), Tampere University of Technology, 2012
- [Presentation on “Mobility as a Service”](#), [Tekes](#) - The Finnish Funding Agency for Innovation, 2015
- [Presentation on pedestrian and cycling route winter maintenance best practices \(Jalankulku- ja Pyöräilyväylien talvikunnossapito\)](#), Finnish Transport Agency, 2014 (in Finnish)
- [Presentations on “Cool winter cycling”](#), Winter Cycling Federation, 2013 and 2014
- Publication “[Promoting pedestrian and bicycle traffic in Finland](#)”, Ministry of Transport and Communications, 2005
- Publication on “[Service level of pedestrian and cycle routes \(Kevyen liikenteen väylien kunnossapitotaso\)](#)”, Finnish Road Administration, 2000 (in Finnish, with an Abstract in English)
- Publication on “Pedestrian and cycling routes planning ([Jalankulku- ja pyöräilyväylien suunnittelu](#))”, Finnish Transport Agency, 2013 (in Finnish)
- Publication “Transport, energy efficiency measures as part of the EU's 2030 climate and energy targets the achievement of the effects, costs and the division of labor for Finland ([Liikenteen energiatehokkuustoimenpiteet osana EU:n 2030 ilmasto ja energiatavoitteiden saavuttamista: vaikutukset, kustannukset ja työnjako](#))”, Finnish Government, 2015 (in Finnish, with an Abstract in English)
- Publication on “[Walking and cycling \(Kävelyn ja pyöräilyn terveystvaikutusten taloudellinen arviointi joensuussa\)](#)”, Finnish Transport Agency, KKI and Joensuu, 2013 (in Finnish)

Network Development

The cycling network in Finland can be categorized with [regional routes](#), [national routes](#) and with the [EuroVelo routes](#). Some cities also have formal plans to develop their pedestrian and cycling networks:

- The City of Oulu developed pedestrian, cycling and [winter cycling plans](#). The city also estimates that *“as much as 20 percent of all trips in Oulu are made by bicycle, while the corresponding figure for the rest of the country is about 11”*. During the winter, maintenance of pedestrian and bicycle routes is prioritized over car routes. Street lighting is also on all pedestrian and bicycle ways ([2013](#))
- The [Helsinki Regional Transport Authority](#), at a regional level, aims with its [Vision 2025](#) to *“increase in traffic to public transport, walking and cycling”*. Its [2015 Plan](#) also highlights efforts to make pedestrian environments *“more attractive and safer”*, develop *“parking, information and maintenance services for cycling”*, define *“a method for monitoring cycling”* and develop *“Park & Ride for cars and bicycles facilities”* as part of the public transport system. The web site of the organization also provide a [“Journey Planner for Walking and Cycling”](#), an interactive map with points of interest, scenic routes, bike parking, bus connections, steep hills, etc.

Interjurisdictional Relationships

Finland is collaborating with various European initiatives related to active transportation and health, including with the [World Health Organisation \(WHO\)](#). In 2015, a [Declaration on Cycling as a climate friendly Transport Mode](#) was adopted in Luxembourg by the European Union Ministers and Secretaries of State in charge of Transportation.

France

Policy

A national action plan for active mobility ([Plan d'action mobilités actives – PAMA](#)) was released in 2014 with six priorities:

- Develop intermodality with public transports and active modes
- Share the public space and securing the active modes
- Enhance economic issues related to cycling
- Consider active mobility policies in urban planning and housing, including social housing
- Develop leisure routes and bicycle tourism
- Promote the benefits of walking and cycling

It was estimated in [September 2015](#) that over 80 % of the 25 measures of the PAMA had been completed or engaged, including:

- Road safety code modifications to facilitate cycling and walking, as well as for the security of cyclists and pedestrians
- The adoption of a bicycle mileage allowance for private companies, following the results from a pilot project
- The opportunity to book a place for a bicycle when buying on-line rail tickets
- The obligation for rail stations to define secure bike parking plans
- Promotion of cycling, including with schools and colleges
- The preparation of new educational tools on risks related to road sharing with cyclists, pedestrians and heavy vehicles

The “PAMA 2” is expected to be released in 2016.

Legislation

To regulate cycling and walking at a national level:

- In 1996 a law on rational use of the energy and air pollution made it mandatory in urban area for any new urban road or rebuilding of existing urban road to provide bicycle infrastructure (bicycle path, bicycle lane, 30 kph zone, etc.). Cities started to apply it in the early 2000, and step by step networks are arising in many cities.
- In 2005 a law on universal accessibility made it mandatory when building or rebuilding a street to provide accessible sidewalks in urban areas and to consider a continuous and uninterrupted walking route (“rendre accessible et continue la chaine de déplacement voirie transport”)
- In 2008, a decree ([Décret 2008-754 du Code de la route – Street use code](#)) introduced the “principle of prudence” for all road users, setting that the most protected user should be vigilant towards those less protected, the concept of new “pedestrian priority zones (zones de rencontres)”, open to all modes of transport, but where pedestrians have priority over all. It also introduced the principle of widespread counterflow cycling in every pedestrian priority zone and 30 kph zones. This measure, which favours active modes, has become common in urban areas.

Three notions were reinforced:

- [Mutual respect of all stakeholders using the public road](#), reminding that motorists need to be vigilant towards the most vulnerable

- Strengthening security, with clear signage, traffic rules and bicycle parking, but also with the mandatory wearing of a safety vest for the cyclists [in given situations](#)
- Environmental design, promoting methods of traffic calming in cities

Since 2008, other decrees were adopted for active transportation, including the following:

- The November 2010 decree ([Décret n° 2010-1390](#)) introduced new dispositions to prioritize pedestrians at road crossings, and to allow cyclists to give-way at red traffic lights when turning right (Articles 17 and 18).
- In January 2012 introduced pedestrian directional signs, and no through traffic except pedestrian and cyclists ([Arrêté sur la signalisation routière](#)).
- The July 2015 decree on “road sharing” ([Décret Partage de la voirie](#)) indicated that vehicle parking on a bicycle or walking passage is eligible to a 135 Euro fine (previously it was 35 Euros). It also presented guidelines for new city developments and road markings for continuous cycling facility (a continuous cycling facility does not have gaps in a cycling path on a busy street, the crossing locations of roads are easy to find and without major detours, the crossing of roads is facilitated and protected, street repairs taking into account the security of cyclists, etc.).
- The September 2015 decree allowed local authorities to introduce new traffic sign rules. For example, expanded use of the give-way at traffic red lights (whatever direction as long as there is little conflict with other vehicles) and markings on the road surface were used to increase readability of “pedestrian priority zone and 30 kph zone” ([Arrêté relatif à la modification de la signalisation routière en vue de favoriser les mobilités actives](#)).

Also, at the national level:

- A law on energy transition and green growth ([Loi relative à la transition énergétique pour la croissance verte](#)), published in 2015, defines key strategic elements for the development of clean mobility, including the modal shift from the private car to public transit, cycling, and walking ([Article 40](#)), highlighting the legal context of:
 - The "bicycle mileage allowance supported by private employer for their employees" (indemnité kilométrique vélo; [Article 50](#)) provides mileage for employees travelling with a bicycle or an electric bike between their residence and their workplace. The amount is fixed by [decree](#). In January 2016, this measure was voluntary for private companies (pilot project). The indemnity for the employee was [0.25 Euro/km](#), with a maximum [200 Euro/year](#) exempt from social tax.
 - “Mobility plans for enterprises” (mandatory in 2018, for all enterprises with over 100 employees located in urban areas), to optimize the efficiency of the displacements related to their activities, and to promote alternative modes of transportation for their employees ([Article 51](#))
- The law on the reform of rail ([loi sur la réforme ferroviaire](#)), introduced in 2014, presents the obligation for SNCF Mobilités to establish a plan for secure bike parking for defined traveler stations

Other national statutes and regional statutes related to [sustainable development and mobility](#), including land planning (e.g.: [law MAPAM](#), [law ALUR](#)), can also have a positive impact on cycling and walking:

- Transport organizations, that conventionally considered motor vehicles, are expanding to consider multimodal mobility. This includes gaining responsibility for cycling and walking strategies. For example, in 2016, Lyon Metropole has issued its first active mobility plan (pedestrian and cyclist).

Funding

Funding for active transportation comes from various sources, at various levels (national/territorial/municipal), as well as collaborations through the European Union. For example:

- The City of Paris plans to invest over 150 million Euro between 2015 and 2020 to double the length of its bicycle paths, from 700 km to 1400 km, with new cycling facilities, parking areas, as well as purchase aids for electric bikes, scooter and cargo bicycles ([Plan Vélo 2015-2020](#))
- Lyon metropole plans to invest over 160 million Euros for 400 projects aiming at developing walking and cycling in six years. Bicycles path will grow from 600 km in 2015 to 1000 in 2020, 100 velo'v station will be added with 1000 bikes.
- The project "[Bike2Work](#)" is co-funded by the Intelligent Energy Programme of the European Union
- A cycling path between France and Switzerland (40 kilometres) was granted funding from the "[programme Interreg IV A France – Suisse](#)"

For the year 2009, it was estimated and presented to the [European Cyclists' Federation](#) that approximately 470 million Euro, mostly from regional and local authorities, were invested for cycling strategies in France (7.1 Euro per capita).

Programming Promotion and Education

Initiatives of the French Government, cities and regions, the educational sector and associations, include:

- Bike repair learning and bicycle marking sessions, as well as other courses adapted to different types of focus groups in France (e.g. with the associations [Vive le vélo](#) and [FUB](#))
- Counselling for private companies, located in several cities, with the pilot project "bicycle mileage allowance (Indemnité kilométrique vélo)" (with the [Agence de l'Environnement et de la Maîtrise de l'Énergie – ADEME](#))
- Promotion campaigns "Bike2Work" (e.g. with [Nantes Métropole](#)), "European week of mobility([Semaine européenne de la mobilité](#))" (in collaboration with ADEME and other countries) and the "National cycling week for schools and colleges ([Semaine nationale du vélo à l'école et au collège, pour des mobilités citoyennes](#), in collaboration with the French Government, which includes three Ministries)"
- The Cerema (Centre d'études et d'expertise sur les risques, l'environnement, la mobilité et l'aménagement), "[Documentation and Informations](#)" Web Portal (In French)
- The contest "[Talents du vélo 2016](#)" to rewards an individual or a team for their exemplary actions and commitments to promote everyday urban biking (organized by the association "[Club des villes et territoires cyclables](#)")
- An interactive tool to compare GHG emissions of cycling and other modes of transportation ([Comparateur EcoDéplacement](#) – ADEME)

Planning and Design Standards, Guidelines, and Resources

At the national level, several French governmental ministries and organizations are involved, including:

- The [Ministère de l'Écologie, du Développement durable et de l'Énergie](#) (MEDDE) (e.g.: resources for sustainable mobility)
- The [Ministère des Affaires sociales et de la Santé](#) (e.g.: documentations related to the benefits of health)

- L'[Agence de l'Environnement et de la Maîtrise de l'Énergie](#) (e.g.: resources for sustainable mobility, programs, and promotion)
- The [Ministère de l'intérieur](#) (e.g.: resources for security)

Other manuals and resources include, for example :

- Fact sheet – [Disabilities and practices – Mental, cognitive and psychological disabilities](#), Cerema, 2014
- Guideline - [Developing national action plans on transport, health and environment. A step-by-step manual for policy-makers and planners](#), European initiative with the World Health Organization, France, Switzerland and Austria, 2014
- Guideline – [Signs and signals for cyclists and pedestrians - Comparison of rules and practices in 13 countries](#) (including France), Cerema, MEDDE and the World Health Organisation, 2013
- Practical guide on how to use a bicycle ([Guide pratique "Utiliser le vélo au quotidien"](#)), ADEME, 2014 (in French)
- Practical guide to optimise bicycle displacements ([Guide pratique "Optimiser ses déplacements"](#)), ADEME, 2015 (in French)
- Recommendations for the development of active modes in low density areas ([Note pour le développement des modes actifs en zones peu denses](#)), Cerema, 2016 (in French)

Network Development

[National and regional cycling network](#) development planning, in collaboration with the [Departments & Regions Cycling Network](#) (bringing together 71 communities Regions (59 departments, 6 regions and 6 EPCI), representing 51 million persons in France (over 75 % of the [population](#))), aims to better connect cities and the territories. The 2015 progress report of the action plan ([Schéma national des véloroutes et voies vertes \(SN3V\)](#)) indicates that:

- At the national level: A network of 11,000 km is available (the long term goal is to reach 21,000 km with the SN3V). Between 2010 and 2015, over 4800 km of cycle routes and greenways were added
- At the regional level: Routes of regional interest complement the routes specified in SN3V, (adding another 9000 km to 21,000 km of the SN3V)

L'[Observatoire national des véloroutes et voies vertes \(ON3V\)](#) presents tools to visualize the national and regional cycling network. It also provides analysis of its bicycle counting (average of [+ 12 % in 2014](#) of the bicycle counting on seven monitored routes).

At the national level, the [Priority 5 of the PAMA](#) also aims to increase the share of cycling holidays in all tourist stays from 3% in 2014 to 6% in 2020. It is estimated it could create 12,000 tourism jobs, half in tourist accommodation and restaurants, and 2 billion Euro of additional revenue.

Interactive maps of cycling paths in France are also offered by the associations "[Association Française pour le développement des Véloroutes et Voies Vertes](#)" and with "[Vive le vélo](#)".

Interjurisdictional Relationships and Collaboration

Working groups involving French ministries and other organizations, local regions, users, bicycle manufacturers and associations support the promotion of active mobility. For example, coordinating the development of increased cycling ([Coordination Interministérielle pour le Développement de l'Usage du Vélo – CIDUV](#)), elaborating the [PAMA](#) and implementing its measures, [data sharing](#) for cycling network

performance, considering [bicycle marking](#) against stealing and stolen bicycle retrieval (bicycode run by the Fédération française des Usagers de la Bicyclette), analyzing the performance of the “bicycle mileage allowance” (with the [Observatoire de l'indemnité kilométrique vélo](#)), as well as collaborating with the Pan-European Program ([PEP](#)) [Partnership on the promotion of cycling](#).

United States

Policy

The United States Department of Transportation's (DOT) bicycle and pedestrian policy requires that transportation agencies improve the safety and convenience of bicycle and pedestrian facilities, as an integrated part of their transportation systems. The following policy statements are recommended actions for states, local governments, professional associations, community organizations, public transportation agencies, and other government agencies:

- Considering walking and bicycling as equals with other transportation modes
- Ensuring that there are transportation choices for people of all ages and abilities, especially children
- Going beyond minimum design standards
- Integrating bicycle and pedestrian accommodation on new, rehabilitated, and limited-access bridges
- Collecting data on walking and biking trips
- Setting mode share targets for walking and bicycling and tracking them over time
- Removing snow from sidewalks and shared-use paths
- Improving nonmotorized facilities during maintenance projects

Source: [United States Department of Transportation Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations](#)

Legislation

Legislation ensures that bicycles and pedestrians are incorporated within federally funded projects, considered within state and metropolitan planning processes, and protected against network disruptions. Bicycle and pedestrian legislation is included in Title 23 of United States Code, which addresses the following:

- Funding: availability of federal funding programs for bicycle and pedestrian projects
- Bridges: provision of bicycle facilities on bridges during federally funded replacement or rehabilitation projects, when bicycles are permitted to operate on either side of the bridge and costs are reasonable
- Planning and design: metropolitan planning organizations and states shall consider bicycles and pedestrians in comprehensive transportation plans, as well as new construction and reconstruction projects, unless bicycles and pedestrians are not permitted; transportation plans and projects shall also consider bicycle and pedestrian safety
- Motorized vehicle restrictions: trails and pedestrian walkways permit motorized vehicles under specific conditions
- Transportation purposes: the use of bicycles for transportation, not recreation, is considered
- Definitions: the following terms are defined: bicycle transportation facility, electric bicycle, pedestrian, and wheelchair
- Protection of nonmotorized transportation traffic: projects that adversely impact or reduce the safety of nonmotorized corridors, without providing an alternative, are not approved by the secretary

Source: [Bicycle and Pedestrian Legislation in Title 23 United States Code](#)

Funding

The United States DOT, Federal Transit, and Federal Highway Funds supported bicycle and pedestrian infrastructure with a total investment of \$11,229.64 million between 1992 and 2015, with an average investment of \$794.98 million per year from 2011 to 2015. Federal-aid highway funding programs typically cover 80% or more of project costs and the remaining funds are the responsibility of the state or local jurisdiction.

The following federal funds apply to bicycle and pedestrian planning, facilities, safety, accessibility, streetscaping, data collection and monitoring, wayfinding, and resources, as well as state or local coordinator and safety positions (percentages indicate the total percentage of bicycle and pedestrian funding that was drawn from the funding source between 1992 and 2015):

- Congestion Mitigation and Air Quality Improvement Program (11%)
- Transportation Alternatives Program (3%)
- Surface Transportation Program (54%), which includes the following:
 - Transportation Enhancement Activities
 - Highway Safety Improvement Program
- Safe Routes to School and Nonmotorized Transportation Pilot Programs (9%)
- Recreational Trails Program (2%)
- American Recovery and Reinvestment Act (6%)
- Other (14%), including the following and others:
 - Transportation Investment Generating Economic Recovery
 - Federal Transit Administration
 - Associated Transit Improvement
 - National Highway Performance Program / National Highway System
 - Statewide or Metropolitan Planning
 - State and Community Highway Safety Grant Program
 - Federal Lands and Tribal Transportation Programs

Sources:

- [1992-2015 Federal-Aid Funding](#)
- [Bicycle and Pedestrian Funding Opportunities: United States Department of Transportation, Federal Transit, and Federal Highway Funds](#)
- [FHWA Guidance: Bicycle and Pedestrian Provisions of Federal Transportation Legislation](#)

Programming Promotion and Education

Bicycle and pedestrian programming is the responsibility of state bicycle and pedestrian coordinators. Promotion and education programming seeks to increase users and improve safety.

Source: [FHWA Guidance: Bicycle and Pedestrian Provisions of Federal Transportation Legislation](#)

Planning and Design Standards, Guidelines, and Resources

Bicycle and pedestrians planning and design standards, guidelines, and resources are developed at a federal level by FHWA and by other national organizations, including the American Association of State Highway and Transportation Officials and the National Association of City Transportation Officials. The below standards, guidelines, and resources are endorsed by United States DOT for bicycle and pedestrian planning and design. States may also develop standards, guidelines, and resources.

Standards

- Manual on Uniform Traffic Control Devices (MUTCD), FHWA (required for all public streets and highways).
- A Policy on Geometric Design of Highways and Streets, 2011, AASHTO (required standards for NHS highways).

Guidelines

- A Policy on Geometric Design of Highways and Streets, 2011, AASHTO (for non-NHS highways).
- Small Town and Rural Multimodal Networks, 2016, FHWA
- Designing Walkable Urban Thoroughfares: A Context Sensitive Approach, 2010, Institute of Transportation Engineers (ITE) and Congress for the New Urbanism. [508-compliant]
- Guide for the Development of Bicycle Facilities, 2012, AASHTO.
- Guide for the Planning, Design, and Operation of Pedestrian Facilities, 2004, AASHTO.
- Proposed Guidelines for Pedestrian Facilities in the Public Right-of-Way, 2011 and 2013, U.S. Access Board.
- Roadside Design Guide, 2011, AASHTO.
- Urban Bikeway Design Guide, 2012, National Association of City Transportation Officials.
- Urban Street Design Guide, 2013, National Association of City Transportation Officials.

Resources

- A Guide for Maintaining Pedestrian Facilities for Enhanced Safety, 2013, FHWA.
- Bicycle and Pedestrian Design Guidance, FHWA (links to multiple resources).
- Bicycle and Pedestrian Funding, Design, and Environmental Review: Addressing Common Misconceptions, 2015, DOT and FHWA.
- BIKESAFE, 2014, FHWA.
- Context Sensitive Solutions, FHWA (links to multiple resources).
- Handbook for Designing Roadways for the Aging Population, 2014, FHWA.
- Highway Capacity Manual, 2010, Transportation Research Board.
- Highway Safety Manual, AASHTO (links to multiple resources).
- Pedestrian and Bicycle Information Center, FHWA-supported (links to multiple resources).
- PEDSAFE, 2013, FHWA.
- Performance Based Practical Design Webpage, FHWA (links to multiple resources).
- Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations, 2010, DOT.
- Proven Safety Countermeasures, FHWA (links to multiple resources).
- Road Diet Informational Guide, 2014, FHWA.
- Separated Bike Lanes Planning and Design Guide, 2015, FHWA.
- Urban Street Geometric Design Handbook, 2008, ITE.

Sources:

- [FHWA Guidance: Bicycle and Pedestrian Provisions of Federal Transportation Legislation](#)
- [FHWA Resources](#)

Network Development

Bicycle and pedestrian accommodations are mandated within transportation planning processes, according to federal law. United States DOT further requires state DOTs and metropolitan planning organizations to produce transportation plans for at least the next 20 years and transportation improvement programs for at least the next four years. State coordinators contribute to developing connected bicycle and pedestrian networks, and coordinate efforts between other jurisdictions and organizations.

Interjurisdictional Relationships

The Federal Highway Administration has a bicycle and pedestrian contact, and each division within the FHWA has a point of contact; each state also has a bicycle and pedestrian coordinator. Funding for state and local coordinators and safety positions is available through the United States DOT. Cost sharing also allows jurisdictions to collaborate on projects.

State coordinators act as the point person within the state, coordinating undertakings among state offices, other states, local organizations, and user groups; providing necessary technical expertise; and seeking to improve bicycle and pedestrian conditions. State coordinators are expected to increase walking and bicycling through the development of policy, implementation and promotion of facilities, and through public education and safety programs. Additionally, state coordinators develop connected pedestrian and bicycle networks, collect user data, and evaluate facility performance.

The coordinator is a full-time position; although, some states employ more than one staff member or use bicycle and pedestrian offices to fulfill these roles.

Source: [FHWA Guidance: Bicycle and Pedestrian Provisions of Federal Transportation Legislation](#)

Oregon

Policy

Oregon Department of Transportation's (DOT) bicycle and pedestrian plan strives to enable people of all ages, incomes, and abilities in both the rural and urban context to access safe and well-connected networks. Bicycling and walking are valued as ways to enjoy scenic beauty, contribute to diverse and vibrant communities, and improve health and quality of life. The given policies support the following goals: safety, accessibility and connectivity, mobility and efficiency, community and economic vitality, equity, health, sustainability, strategic investment, as well as coordination, cooperation, and collaboration.

Source: [Oregon Bicycle and Pedestrian Plan](#)

Legislation

In 1971, ORS 366.514, or the bike bill, was passed, requiring the provision of pedestrian and bicycling facilities in all urban and rural road construction projects. These facilities are required within road right-of-way's, and not on park trails or other facilities. State highway funding is expected to go towards pedestrian and bicycle facilities.

The following additional statutes address pedestrian and bicycle topics:

- Provision of Bicycle and Pedestrian Facilities
- Regulation of Bicycle and Pedestrian Traffic
 - Duties of Pedestrians
 - Duties of Bicycles
 - Duties of Drivers to Bicyclists And Pedestrians
- Bicycle and Pedestrian Exemptions from the Motor Vehicle Code
- State Committees and Programs

Sources:

- [Statutes Pertaining to Pedestrians and Bicycles](#)
- [“Bike Bill” and Use of Highway Funds](#)

Funding

Funding is primarily available for bicycle and pedestrian projects through the department’s Enhance Project Funding. Additional funding is provided through Funding Walking and Biking Improvements, Bikes Belong, Recreational Trails, Transportation Enhancement Program, and Safe Routes to School. Oregon DOT’s Active Transportation section administers funding and strategic management for various multimodal, community-focused, and statewide transportation system programs. In this context, active transportation includes bicycles, pedestrians, and transit.

Sources:

- [Bicycle and Pedestrian Program Grants](#)
- [Active Transportation Section](#)

Programming Promotion and Education

Oregon DOT provides programming and resources for schools, tourists/recreation, and bicyclists.

Sources:

- [Safe Routes – Oregon Safe Routes to School](#)
- [Bicycle touring/recreation](#)
- [Bicycle and Pedestrian Program – Publications](#)

Planning and Design Standards, Guidelines, and Resources

Oregon DOT developed the *Bicycle and Pedestrian Design Guide* in 2011 –topics relate to geometric and traffic control guidelines.

Source: [Bicycle and Pedestrian Design Guide](#)

Network Development

Oregon DOT cycling maps are available online.

Source: [Bicycle and Pedestrian Program – Maps](#)

Interjurisdictional Relationships

Oregon DOT provides local bicycle and pedestrian representative’s contact information online for counties, cities, and metropolitan planning organizations. The public is encouraged to contact these people with their concerns and suggestions, with some jurisdictions also collecting input from citizen advisory committees.

The Oregon Bicycle Advisory Committee acts as a link between the public and the department, while advising the department on the regulation of bicycle and pedestrian traffic, and the provision of facilities. This committee gathers the input of citizens, local officials, and the department’s regional staff. The committee includes a representative from the following: a land-use planner from a local government, an environmental group, a business selling or repairing bicycles, the Oregon Recreation Trails Advisory Council, a youth under 21 years at the time of appointment, and three members at large.

Colorado

Policy

Colorado Department of Transportation's (DOT) policy sets out to improve bicycle and pedestrian safety and mobility through education and enforcement, planning, programming, design, construction, operation, and maintenance of facilities and their use. Bicycle and pedestrian needs are routinely accounted for within transportation projects, and documentation is required if bicycles and pedestrians are not considered.

Source: [Colorado Department of Transportation Policy Directive](#)

Legislation

The following topics are addressed in Colorado's *Model Traffic Code for Colorado*:

- Regulation of pedestrian traffic, and driver's responsibilities to pedestrians and persons with disabilities
- Bicycle and personal mobility device equipment
- Drivers crowding or threatening bicyclists
- Operation of bicycles and other human-powered vehicles

Source: [Model Traffic Code for Colorado](#)

Funding

General transportation funding programs are available for bicycle and pedestrian projects. Funds are prioritized for projects that increase safety and mobility for all modes, focus on high priority bicycle corridors, or address costly improvements or maintenance requirements. This is ensured at a project scoping level, where bicycle and pedestrian accommodation is a required consideration. Bicycle and pedestrian accommodation estimates are required in the Statewide Transportation Improvement Program. The following goals and investment decision criteria guide the department:

- Enhance safety
- Increase bicycling and walking activity
- Expand recreational opportunities and enhance quality of life
- Improve public health
- Improve environment, air quality, and fossil fuel independence
- Provide Transportation Equity
- Maximize transportation investments
- Improve state/regional economy

Source: [Statewide Bicycle and Pedestrian Plan](#)

Programming Promotion and Education

Colorado DOT provides bicyclists/pedestrians and event planners with information, resources, and links related to health, networks, promotion, safety, and economics. Specific programming areas include the following:

- Health information
- Colorado Bicycling Map
- Colorado Bike Month

- Bike to Work Day
- Share the Road Campaign
- State roadway special event guideline
- Economics of bicycling/walking
- Safety information and resources

Source: [Colorado Department of Transportation Bicycle and Pedestrian Program](#)

Planning and Design Standards, Guidelines, and Resources

The Colorado DOT provides design and planning guidance through the *Roadway Design Guide's* Bicycle and Pedestrian Facilities chapter, while also endorsing other American guidelines. The Bicycle and Pedestrian Facilities chapter includes geometric and traffic control guidance on various bicycle and pedestrian facilities in both the rural and urban contexts. As a local and regional tool, Colorado DOT provides the *Colorado Guide for the Development of Local and Regional Bicycle and Pedestrian Plans*.

The Colorado DOT also has a data collection program for bicycles and pedestrians. New and reconstruction projects are informed by continuous or short duration counts.

Sources:

- [Roadway Design Guide Chapter 14: Bicycle and Pedestrian Facilities](#)
- [Colorado Guide for the Development of Local and Regional Bicycle and Pedestrian Plans](#)
- [Colorado Department of Transportation Bicycle and Pedestrian Program](#)

Network Development

The Colorado DOT requires bicycle and pedestrian considerations throughout planning, programming, design, construction and maintenance operations. A map of the current statewide bicycle network is provided online.

A state project may not consider bicycles and pedestrians in a project if the roadway is prohibited for their use, the cost of establishing the facility is greater than twenty percent of the project cost, or where populations are low and there is no demand. Rational for excluding bicyclists and pedestrian must be provided to the regional transportation director and bicycle/pedestrian coordinator.

Sources:

- [Colorado Department of Transportation Bicycle and Pedestrian Program](#)
- [Colorado Department of Transportation Bike and Pedestrian Procedural Directive](#)
- [Colorado Bicycle and Byways Map](#)

Interjurisdictional Relationships

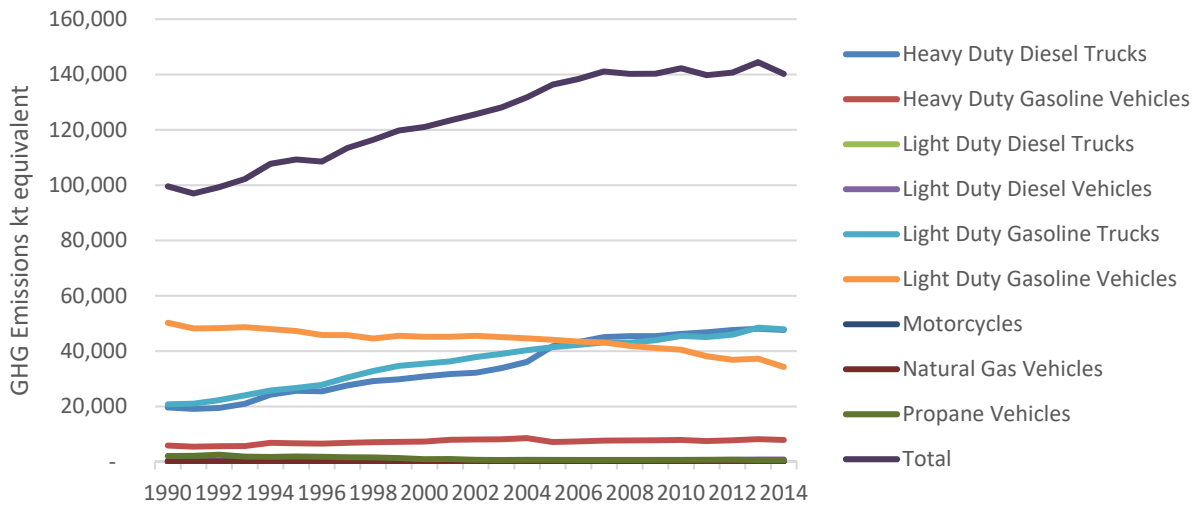
The Colorado DOT is a resource for rural Transportation Planning Regions, and provides technical and educational support. Metropolitan Planning Organizations are required to account for bicycles and pedestrians. As a local and regional tool, Colorado DOT also provides the *Colorado Guide for the Development of Local and Regional Bicycle and Pedestrian Plans*.

Sources:

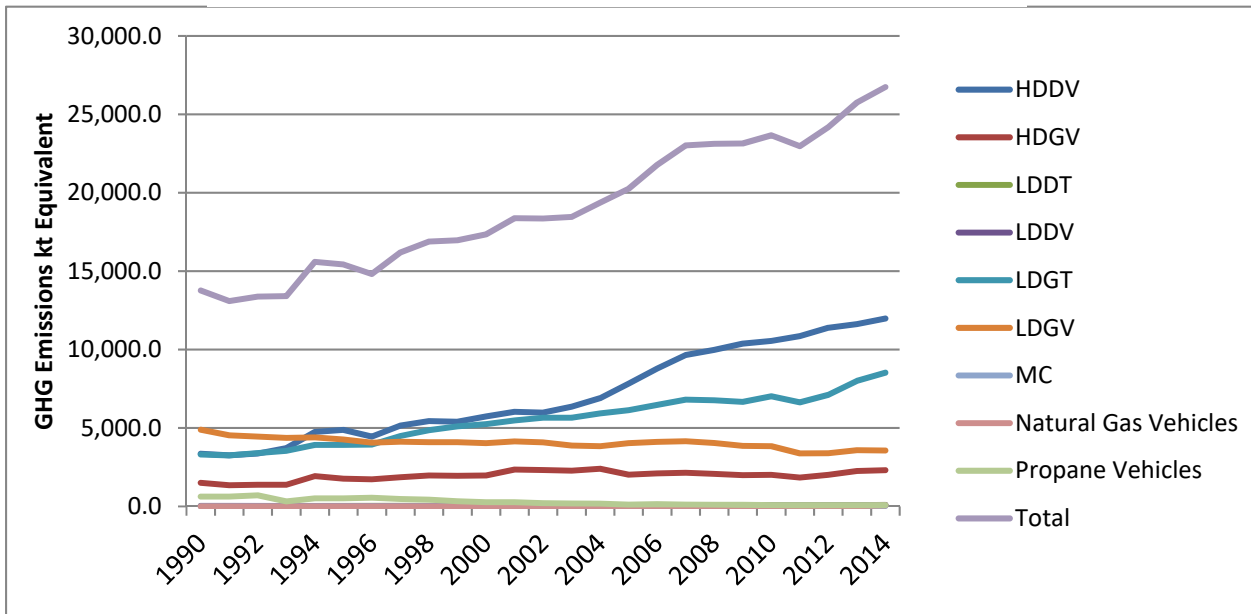
- [Colorado Department of Transportation Bike and Pedestrian Procedural Directive](#)
- [Colorado Guide for the Development of Local and Regional Bicycle and Pedestrian Plans](#).

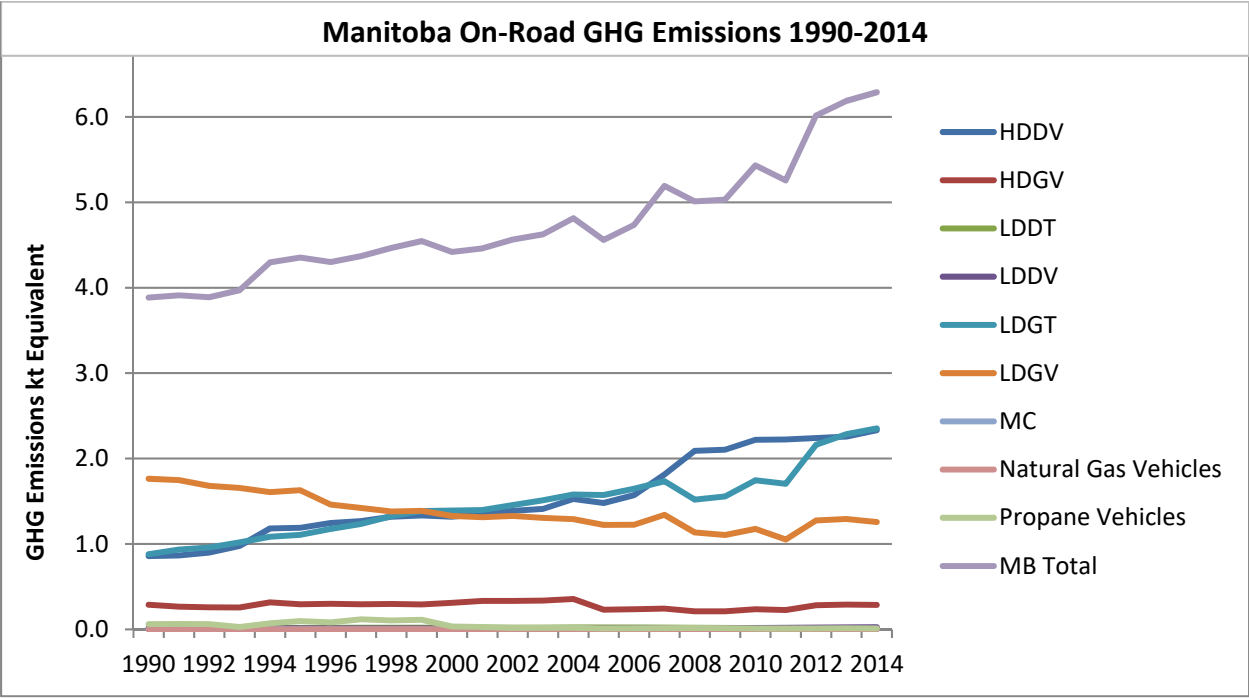
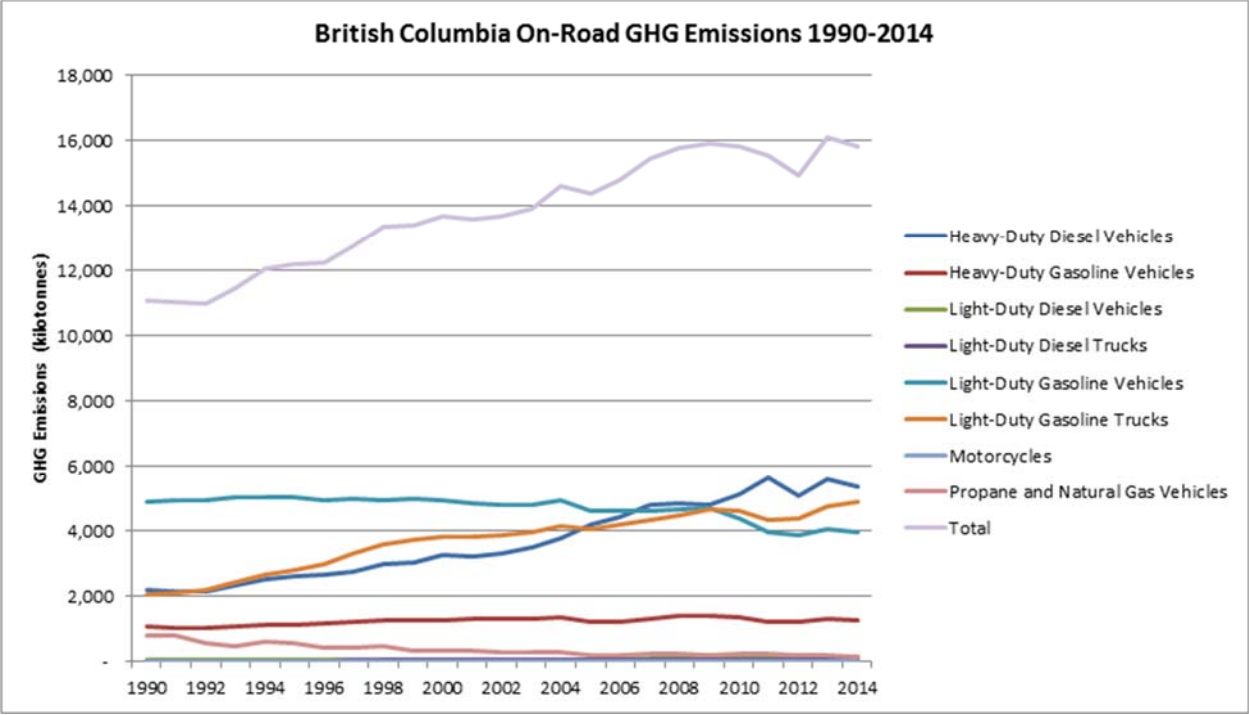
APPENDIX 2
ON-ROAD GHG EMISSIONS 1990-2014

Greenhouse Gas Emissions from On-Road Transportation: Canada (1990-2014)

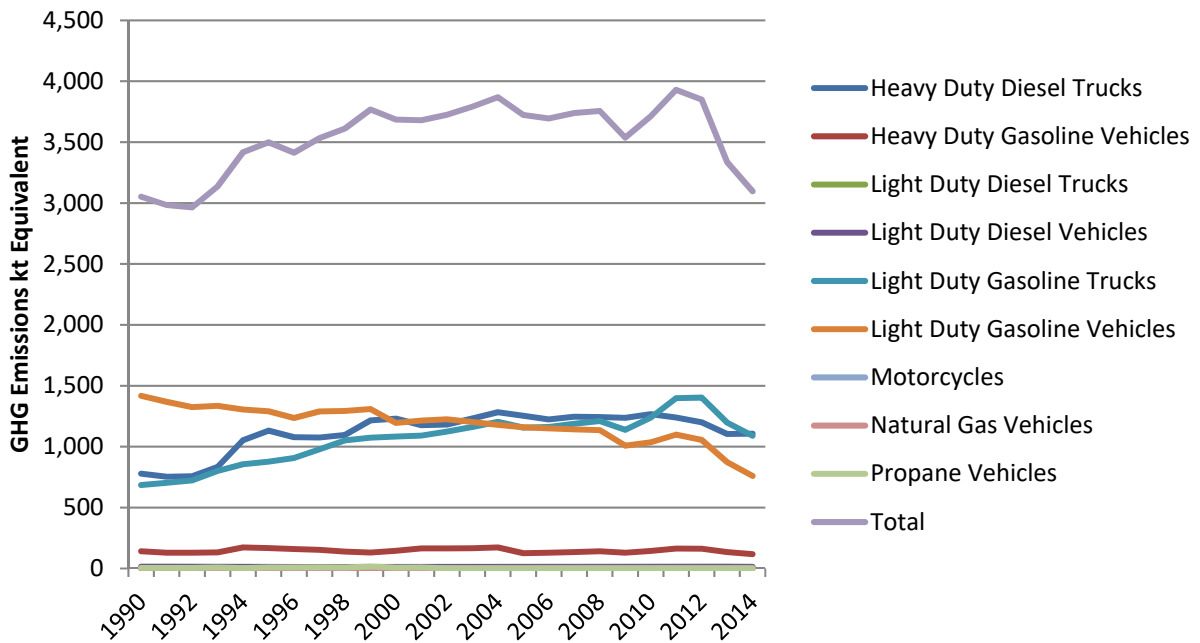


Alberta On-Road GHG Emissions 1990 -2014

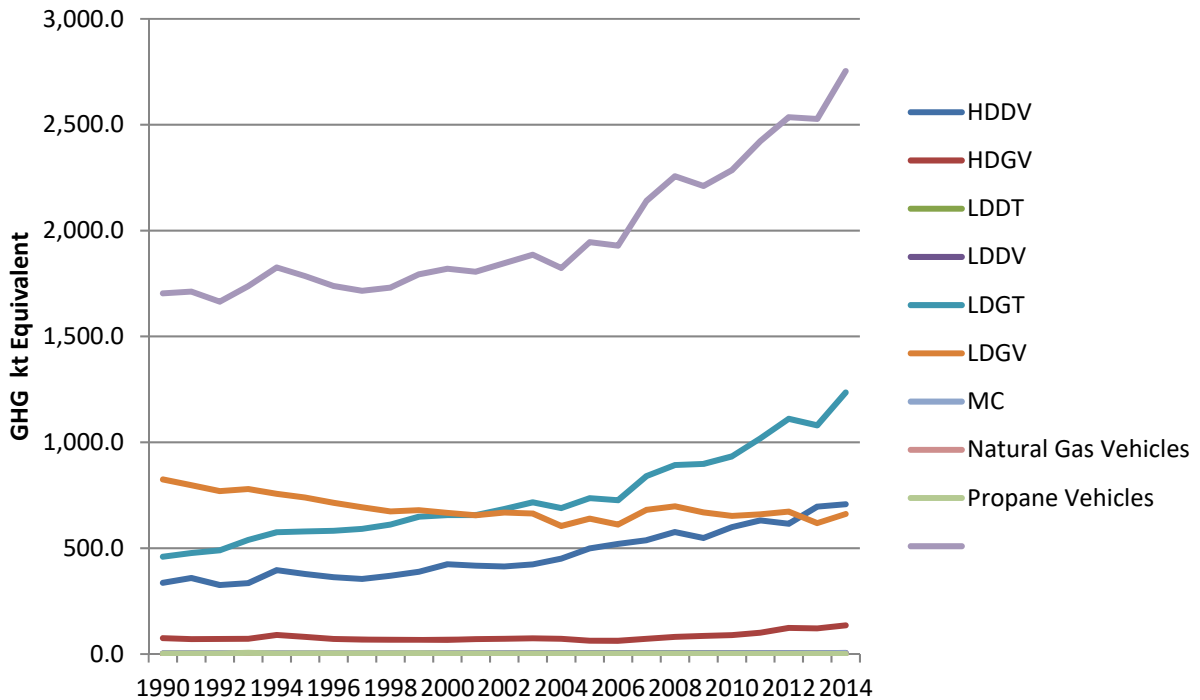


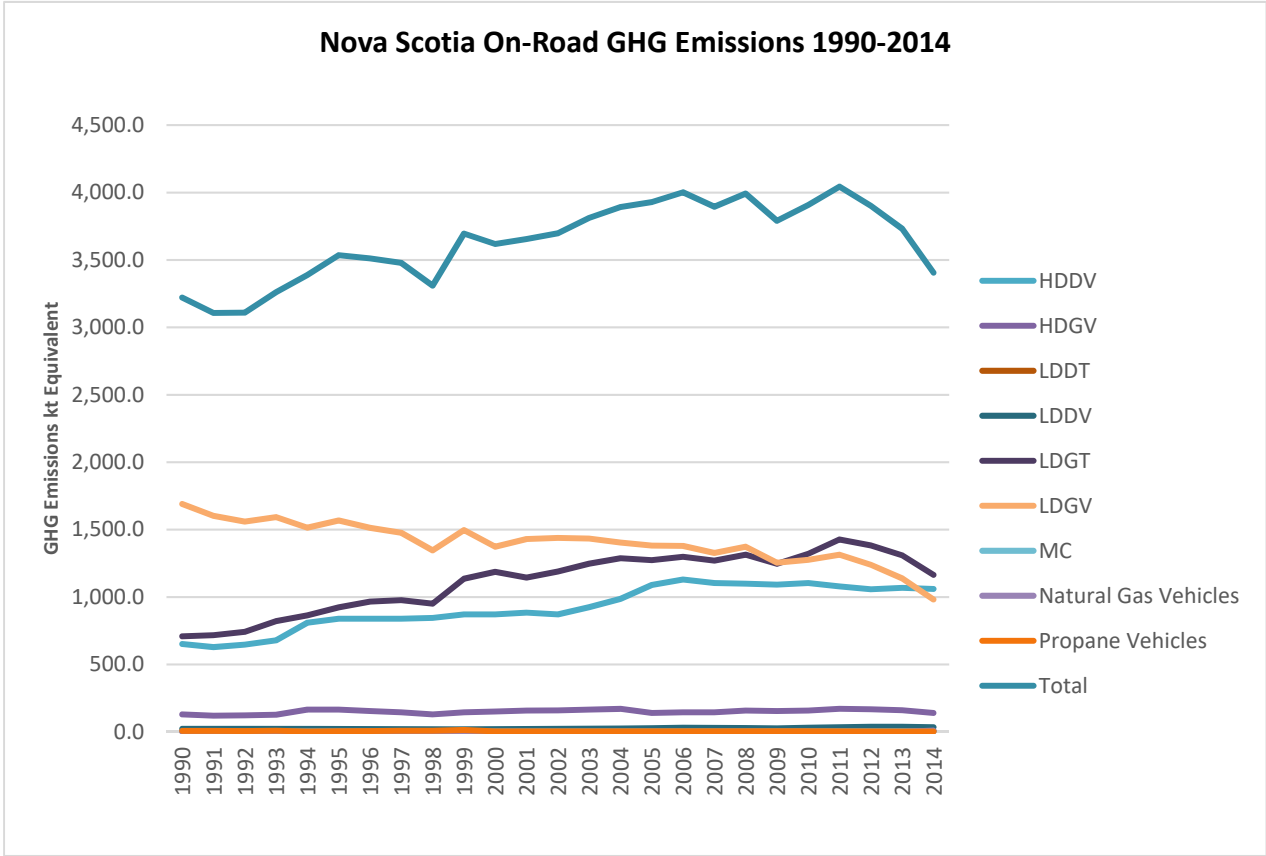
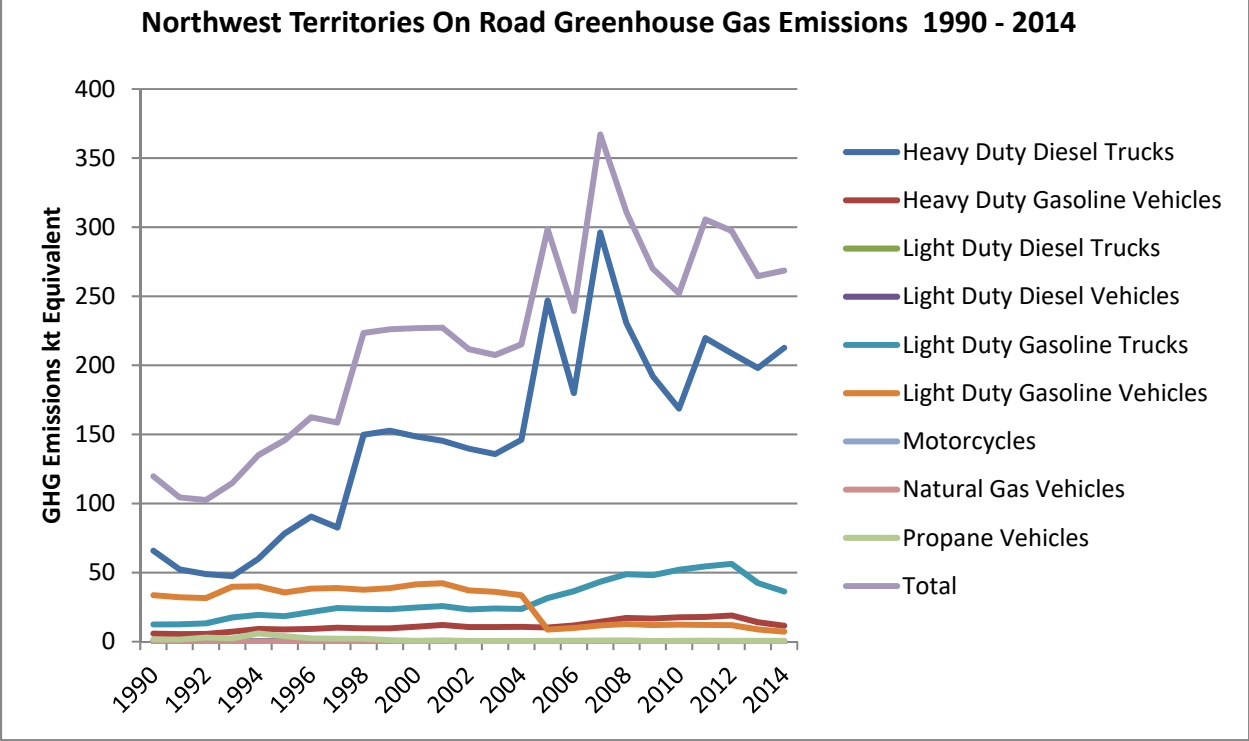


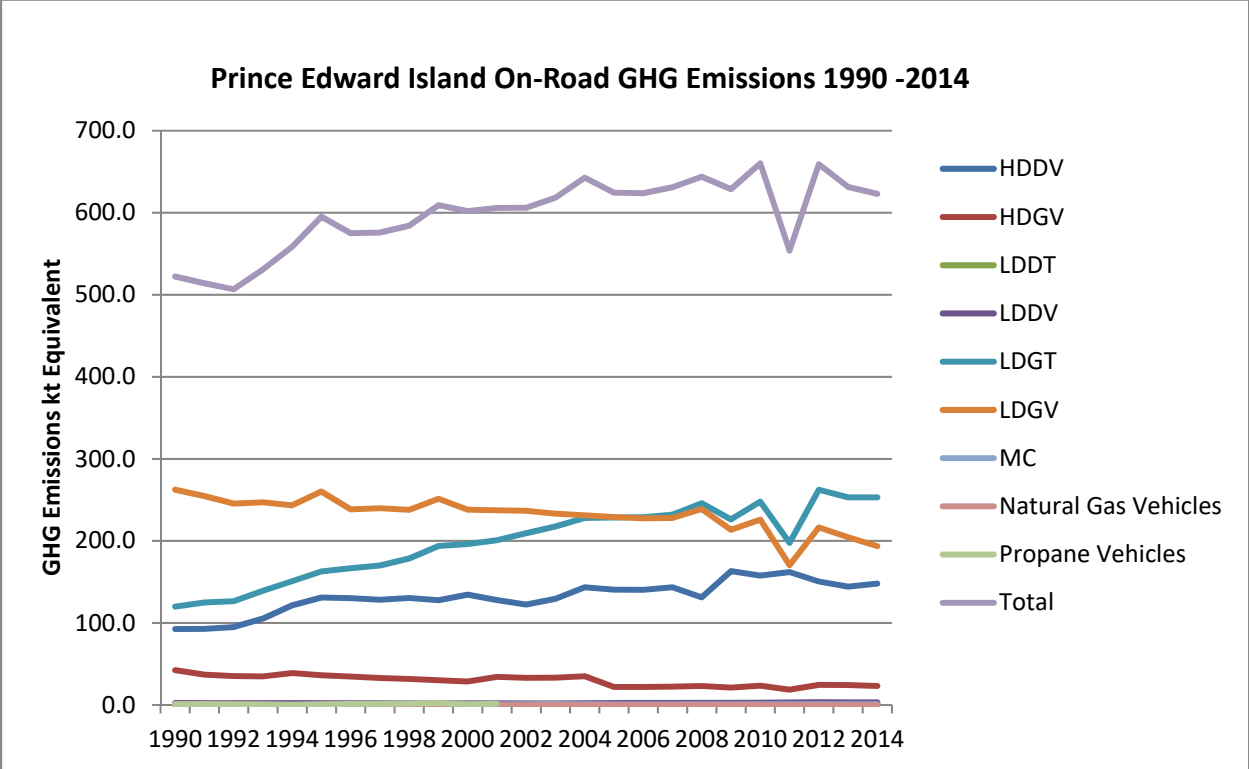
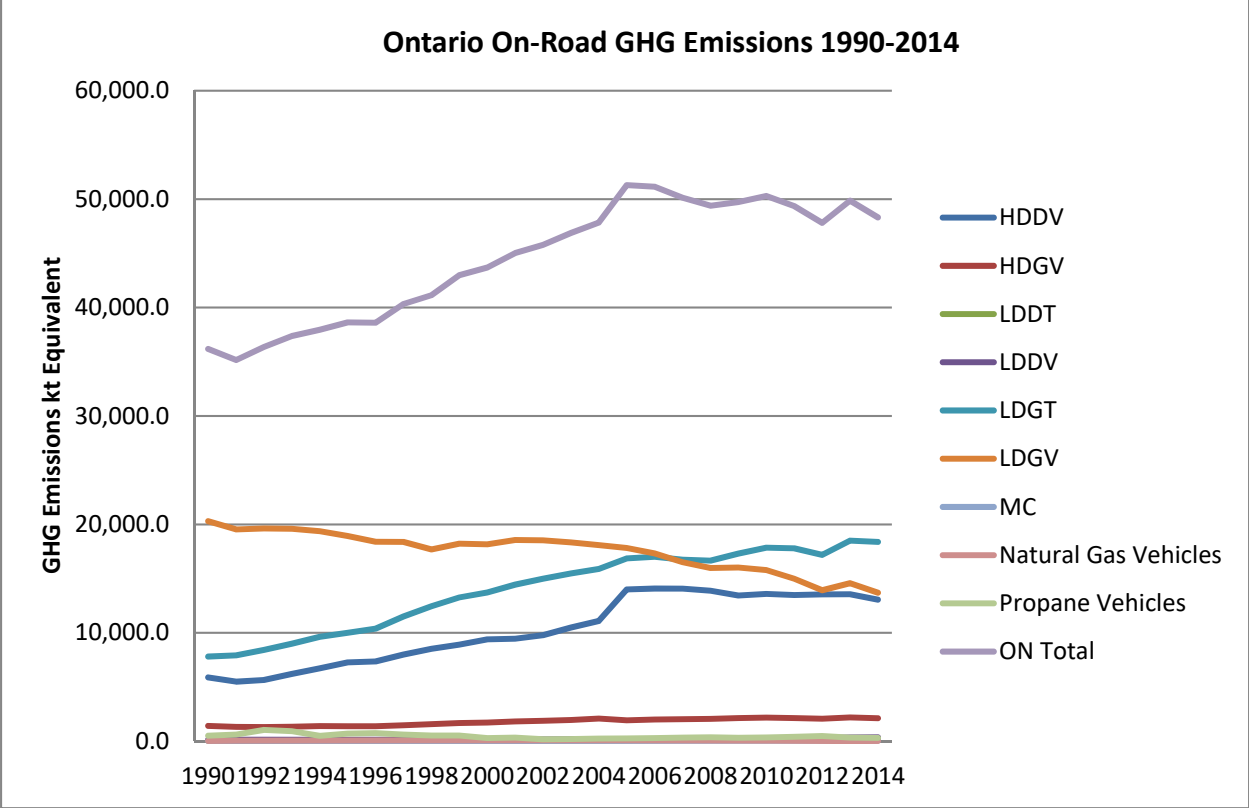
New Brunswick On-Road Greenhouse Gas Emissions 1990-2014



Newfoundland and Labrador On-Road GHG Emissions 1990-2014







Saskatchewan On-Road GHG Emissions 1990-2014

