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## **NATIONAL CYCLING STRATEGIES: INTERNATIONAL COMPARISONS**

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## NATIONAL CYCLING STRATEGIES: INTERNATIONAL COMPARISONS

The following table provides information on cycling strategies in selected Organisation for Economic Co-operation and Development (OECD) Countries. For European countries, the European Cyclists' Federation has a website<sup>1</sup> that provides an overview of national cycling policies, many of which are included in the table below.

**Table 1 – Overview of Selected Countries' National Cycling Strategies**

Country	Strategy	Funding	Objectives and Priorities	Outcomes
<b>Austria</b>	<p><a href="#">Cycling Master Plan 2015-2025</a></p> <p>The Federal Ministry of Agriculture, Forestry, Environment and Water Management offers four advisory and funding programs to help provinces, municipalities, businesses, tourism associations, schools and youth organizations with cycling promotion schemes:</p> <ol style="list-style-type: none"> <li>1. Mobility management for businesses, property developers and fleet operators</li> <li>2. Mobility Management for children, parents and schools</li> <li>3. Mobility management for cities, municipalities and regions</li> </ol>	<p>Over €34 million (C\$49 million) to provinces, municipalities, businesses and associations between 2007 and 2014 (under previous versions of the plan)<sup>3</sup></p> <p>The current plan does not indicate how much funding will be allocated over the course of the plan.</p>	<p>Overall, goal is to increase cycling mode share to 13% by 2025. Six priorities are outlined in the plan:</p> <ol style="list-style-type: none"> <li>1. The klimaaktiv mobil cycling campaign: nation-wide coordination of cycling to ensure consultation, promotion and awareness-building with regard to cycling.</li> <li>2. Cycle-friendly conditions: Cycle-friendly settlement structures, the development of infrastructure, cycle-friendly legal conditions and a pan-European Master Plan for Cycling Promotion.</li> <li>3. Information systems and awareness raising: Promoting an appreciation of cycling as an everyday means of transport.</li> <li>4. Optimizing connections to other means of transport.</li> <li>5. Economic factor: the development and marketing of high-quality products and services from Austria.</li> <li>6. Promotion of health<sup>4</sup></li> </ol>	<p>Under a previous version of the plan, cycling mode share increased from 5% in 2006 to 7% in 2010.<sup>5</sup></p> <p>The current plan anticipates economic, health and environmental benefits.<sup>6</sup></p>

<sup>1</sup> European Cyclists' Federation, [National cycling policies](#).

	4. Mobility management for leisure, tourism and young people <sup>2</sup>			
<b>Australia</b>	<p><a href="#">The Australian National Cycling Strategy 2005–2010</a>, followed by <a href="#">The Australian National Cycling Strategy 2011–2016</a>.</p> <p>The Australian National Cycling Strategy (NCS) was developed as a “coordinating framework” identifying responsibilities of all levels of government, community and industry stakeholders.<sup>7</sup></p> <p>The national strategy is overseen by the Australian Bicycle Council (ABC). The ABC was established in 1999 and consists of representatives from all levels of Australian governments, community groups, non-government cycling organisations and the bicycle industry. The ABC reports annually on progress to the national government’s</p>	<p>As part of a 2009 stimulus package, the Australian government dedicated \$40 million (C\$38 million) to the National Bike Path Projects initiative that aims to develop, extend and refurbish cycling infrastructure across Australia. The government reported that this fund will support over 170 projects and approximately 1,900 jobs in local communities across Australia.<sup>10</sup></p> <p>In addition, in May 2011, the Minister for Infrastructure and Transport launched the National Urban Policy, which included \$20 million (C\$19 million) towards the Liveable Cities program to support active transport (walking and cycling) and innovative solutions for poor urban design, high levels of car dependency, traffic congestion, a lack of open space and rising carbon emissions.<sup>11</sup></p>	<p>To double the number of cyclists in Australia between 2011 and 2016. The 2011–2016 NCS focuses on six priority areas:</p> <ul style="list-style-type: none"> <li>• <i>Cycling promotion</i>, e.g., continuing development of marketing campaigns and initiatives (e.g., national Ride to Work day, Australian Bicycling Achievement awards); and promotion of employer programs and facilities;</li> <li>• <i>Infrastructure and facilities</i>, e.g., National Bike Path Projects; and investment in cycling networks and end-of-trip facilities by all levels of government;</li> <li>• <i>Integrated planning</i>, e.g., coordination of cycling action plans; and land use planning and infrastructure strategy by all states and local governments;</li> <li>• <i>Road safety</i>, e.g., safety campaigns in regional jurisdictions; publication of safety guides; monitoring of cycling incidents and counter measures; national partnership with research institutions; regional development of programs targeting road safety and perception of safety; and local implementation of nationally</li> </ul>	<p>Australia reported the following outcomes from its 2005–2010 NCS:</p> <ul style="list-style-type: none"> <li>• The number of recreational cyclists increased by 21% between 2005 and 2008;</li> <li>• 64% of local authorities implemented a bicycle strategy (2005–2010 NCS Priority 1 – Improved Coordination);</li> <li>• A number of initiatives across the country integrated cycling within residential and commercial planning. One key initiative was the publication of a series of design guides, including “The Guide to Road Design – Part 6A: Pedestrian and Cyclist Paths” (2005–2010 NCS Priority 2 – Integrated Planning);</li> <li>• Cyclist road deaths decreased by almost 3% between 2004 and 2009. A number of road safety initiatives, campaigns and</li> </ul>

<sup>3</sup> Ibid.

<sup>4</sup> klimaaktiv, [Cycling Masterplan 2015-2025](#).

<sup>5</sup> Ibid.

<sup>6</sup> Austria, Federal Ministry of Agriculture, Forestry, Environment and Water Management (May 2015).

<sup>2</sup> Austria, Federal Ministry of Agriculture, Forestry, Environment and Water Management, [Cycling Master Plan 2015-2025](#), May 2015.

<sup>7</sup> Australian Bicycle Council, [“The Australian National Cycling Strategy 2011–2016,”](#) Publication No. AP-C85/10, Astroads Ltd., 2010.

<p><b>Australia (cont'd)</b></p>	<p>Standing Council on Transport and Infrastructure.<sup>8</sup></p> <p>The Department of Infrastructure and Regional Development does not plan on funding the administration of ABC after the end of 2016. In the future, the department has indicated that cycling should be considered in the context of a broader “active transport” framework.<sup>9</sup></p>		<p>consistent community bicycle skills training program;</p>	<p>publications were also perceived successes (2005–2010 NCS Priority 4 – Road Safety);</p> <ul style="list-style-type: none"> <li>• Numerous strategies and campaigns (e.g., TravelSmart programs, the national Ride to Work day, and the Australian Bicycling Achievement Awards) were implemented and raised the profile of cycling across the country (2005–2010 NCS Priority 5 – Support and Promotion);</li> </ul>
<p><b>Australia (cont'd)</b></p>			<ul style="list-style-type: none"> <li>• <i>Monitoring and evaluation</i>, e.g., nationwide approach to data collection; local jurisdictions to submit annual monitoring reports to ABC Secretariat; and development of decision-making process for assessing costs and benefits of investment in cycling by ABC;</li> <li>• <i>Guidance and best practices</i>, e.g., publication of nationally consistent guidelines by ABC; support of local governments by ABC; monitoring of cycling policy issues and identification of new areas requiring guidance by ABC; and continued development of Cycling Resource Centre website by ABC.<sup>12</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Skills were developed through a nationwide training certificate scheme (2005–2010 Priority 6 – Increased Professional Capacity);</li> <li>• There were mixed reviews of the strategy’s success, as some consultants felt that some initiatives did not result directly from the NCS, and that the \$40 million (C\$38 million) of funding from the government’s stimulus package was not obviously tied to the NCS.<sup>13</sup></li> </ul>

<sup>10</sup> Government of Australia, “[Budget 2011–12: Investing in Regional Australia](#),” Statement by the Honourable Simon Crean, M.P., Minister for Regional Australia, Regional Development and Local Government, 10 May 2011.

<sup>11</sup> Minister for Infrastructure and Transport, “[Our Cities, Our Future](#),” News release, 18 May 2011.

<sup>8</sup> Australian Bicycle Council, “[Terms of Reference](#),” *About Us*.

<sup>9</sup> Australian Bicycle Council, [Australian Bicycle Council – Communique](#), 17 September 2015.

<sup>12</sup> Australian Bicycle Council (2010).

<sup>13</sup> *Ibid.*, pp. 14–17.

<p><b>Czech Republic</b></p> <p><b>Czech Republic (cont'd)</b></p>	<p>Czech National Cycling Development Strategy 2013 – 2020 (<a href="#">English summary</a>)</p> <p>The Ministry of Transport is the main department responsible for the strategy's implementation. The strategy calls for cooperation between all three levels of government, as well as the private and voluntary sectors.</p>	<p>N/A</p>	<p>The goal of the strategy is to increase urban cycling modal share and the efficiency of building cycling infrastructure. It also aims to improve coordination among the national, municipal and regional governments.<sup>14</sup></p>	<p>The strategy has a target of 25% modal share for cycling by 2025.</p>
<p><b>Denmark</b></p>	<p>Denmark's <a href="#">Cycling Fund</a> was established as a five-year program as part of a Green Transport Policy.</p> <p>The Cycling Fund appears to have ended in 2014 but cycling funds remain available from other programs for Cycle Super Highways and better bicycle parking.<sup>15</sup></p>	<p>The objective of the Danish Cycling Fund was to facilitate projects that improve conditions for cyclists and that make cycling an attractive, widespread and safe form of transport for commuting and for leisure purposes. The Danish national government committed to spending DKK 1 billion (C\$193 million) on its Cycling Fund from 2009 to 2014 for infrastructure spending as well as co-financing (of up to 40%) of regional cycling infrastructure and promotion projects.<sup>16</sup> In addition to the Cycling Fund, the national government allocated DKK 189 million (C\$36 million) for the establishment of Cycle Super Highways in major cities.<sup>17</sup></p>	<p>According to a report by the Danish Road Directorate, many successful projects would not have been realized without the contributions from the Cycling Fund. The national strategy is accredited for the implementation of comprehensive, innovative and related projects, and for kick-starting projects at the local municipal and business levels.<sup>18</sup></p> <p>Further, a Danish political consultant estimated that the cycle super highways have the potential of increasing the number of cyclists in Denmark by 30%, and of saving approximately 7,000 tons of CO<sub>2</sub> and</p>	

<sup>14</sup> Czech Republic, Ministry of Transport, [Czech National Cycling Development Strategy 2013-2020](#). [English summary]

<sup>15</sup> Cycling Embassy of Denmark, [The Danish National Cycling Fund has been spent](#), 11 February 2015.

<sup>16</sup> Mia S. Lagergaard and Henrik N. Jensen, "[Results of the Danish Bicycle Fund](#)," Vejdirektoratet Danish Road Directorate, 2012, p. 7.

<sup>17</sup> Vejdirektoratet Danish Road Directorate, "[Cycling Fund 2012: Status Report and Selected Examples](#)," Report 435, May 2013, p. 6.

<sup>18</sup> Lagergaard and Jensen (2012), p. 23.

				about DKK 300 million (C\$58 million) in health costs per year. <sup>19</sup>
<b>Finland</b>	<p>National Action Plan for Walking and Cycling 2020 (<a href="#">English summary</a>)</p> <p>The action plan is part of a strategy published in 2011 by the Ministry of Transport and Communications.</p> <p>The action plan aims to encourage and enable people to opt for walking or cycling for at least a portion of their journeys.</p> <p>The proposed measures are to be used in central and local government plans, guidelines and implementation procedures.</p>	N/A	<p>The action plan sets out four priorities:</p> <ol style="list-style-type: none"> <li>1. A shift in attitudes towards walking and cycling;</li> <li>2. Infrastructure;</li> <li>3. Community structure; and</li> <li>4. Administrative structure and legislation.<sup>20</sup></li> </ol>	The target in the action plan is to increase the number of journeys taken by foot or bicycle by 20% by 2020. <sup>21</sup>
<b>France</b>	<p><a href="#">Plan d'action mobilités actives (PAMA)</a></p> <p>The plan was overseen by the Ministère de l'environnement, de l'énergie et de la mer, and the Ministère délégué aux transports, à la mer et à la pêche. It focuses broadly on "active" transportation, and not</p>	N/A	<p>The 25 measures were divided into six themes:</p> <ol style="list-style-type: none"> <li>1. Develop the inter-modality of public transit and active transport.</li> <li>2. Share public space and improve the safety of active modes of transportation.</li> <li>3. Promote the economic benefits related to cycling</li> </ol>	<p>In September 2015, it was announced that 80% of the 25 measures had been implemented, including, for example:</p> <ul style="list-style-type: none"> <li>• changes to the highway code to facilitate the movement of pedestrians and cyclists;</li> <li>• a six-month pilot project with 18 businesses, where employees were</li> </ul>

<sup>19</sup> Cycling Embassy of Denmark, "[Cycle Super Highways to Generate More Cyclists in Greater Copenhagen Area](#)," 6 June 2012.

<sup>20</sup> Finland, Ministry of Transport and Communications, [National Action Plan for Walking and Cycling 2020: Summary](#), 2012.

<sup>21</sup> Ibid.

	<p>just on cycling. It outlined 25 measures to be implemented by the end of 2014.</p> <p>A follow up plan, “PAMA 2,” is currently in development.<sup>22</sup></p>		<p>4. Consider active mobility policies in urban planning and housing, particularly in social housing.</p> <p>5. Develop leisure cycling itineraries and cycling tourism.</p> <p>6. Facilitate the rediscovery of the benefits of walking and cycling.<sup>23</sup></p>	<p>given a per-kilometre allowance for cycling to work; and</p> <ul style="list-style-type: none"> <li>the option of reserving a place for your bicycle online when buying certain train tickets.<sup>24</sup></li> </ul>
<b>Germany</b>	<p>Germany’s federal government approved a new <a href="#">National Cycling Plan 2020</a> [available in German only] in 2012, to succeed its <a href="#">National Cycling Plan 2002–2012: Ride your bike! Measures to promote cycling in Germany</a>, after an extensive consultation process.<sup>25</sup> The National Cycling Plan 2020 builds on previous plans and continues to promote cycling in Germany and addresses responsibilities of all levels of government.<sup>26</sup> The German national plan accounts for the division of</p>	<p>It is estimated that Germany’s federal government spent over €1.1 billion (C\$1.6 billion) from 1980 to 2000, in order to double the extent of bikeways along federal highways. The federal government currently contributes €100 million (C\$144 million) per annum for additional bikeway extensions, cycling research, and demonstration projects.<sup>27</sup> In addition, revenues from a federal motor fuel tax, in the amount of approximately €2 billion (C\$2.9 billion) per annum, are earmarked for a special urban transport investment fund. This federal fund matches state and local government funding at 70%–85% and supports governments in building cycling facilities (paths, lanes, bridges, traffic signals, signs, parking, etc.).<sup>28</sup></p>	<p>Germany’s National Cycling Plan 2020 aims to promote cycling in Germany by raising awareness of cycling as a mode of transport in rural areas and by improving traffic safety.<sup>29</sup> Key elements include:</p> <ul style="list-style-type: none"> <li><i>Cycling promotion</i>, through raising of awareness and implementation of innovative measures and pilot projects;</li> <li><i>Integration of <a href="#">electromobility</a></i> (pedelecs, i.e., pedal electric cycles or electric bicycles) into the cycling world; and</li> <li><i>Improvement of transport safety</i>.<sup>30</sup></li> </ul> <p>The plan also covers action items in the areas of development and planning, infrastructure and communication (including an Internet portal launched by the federal government).<sup>31</sup></p>	<p>The German 2002–2012 National Cycling Plan has been viewed as a “great success,” with the share of cycling as a mode of transportation increasing by 17% between 2002 and 2008. This increase is especially evident as the share remained on average less than 10% up until the late 1990s. It also represents the highest growth rate of all modes of transportation. In addition, cities’ cycling infrastructure greatly improved, with the creation of “cycling units” in regional administrations. The national strategy is seen to have changed the image of cycling in Germany: today, young people and the urban middle</p>

<sup>22</sup> France, Ministère de l’environnement, de l’énergie et de la mer, “[Plan d’action mobilités actives \(PAMA\)](#),” *News Release*, 30 September 2015.

<sup>23</sup> France, Ministère de l’environnement, de l’énergie et de la mer, and Ministère délégué aux transports, à la mer et à la pêche, [Plan d’action mobilités actives \(PAMA\)](#), 5 mars 2014.

<sup>24</sup> France, Ministère de l’environnement, de l’énergie et de la mer (September 2015).

<sup>25</sup> Germany’s Federal Ministry of Transport, Building and Urban Development, “[German Federal Government agrees on National Cycling Plan 2020](#),” citing BMVBS [Bundesministerium für Verkehr, Bau und Stadtentwicklung], Number 188/2012, 5 September 2012.

<sup>26</sup> Ibid.

<sup>27</sup> John Pucher and Ralph Buehler, “[Making Cycling Irresistible: Lessons from the Netherlands, Denmark, and Germany](#),” *Transport Reviews*, Vol. 28, 2008, p. 17.

<sup>28</sup> Ibid.

<p><b>Germany (cont'd)</b></p>	<p>responsibilities between federal and local governments in Germany, with the federal government focusing on the legal framework and overseeing policy areas related to cycling. More details regarding the division of powers is available in a <a href="#">2010 publication by the German Institute of Urban Affairs</a>.</p>			<p>class recognize cycling as a comfortable, convenient and environmentally friendly mode of transportation.<sup>32</sup></p>
<p><b>Hungary</b></p>	<p><a href="#">National Cycling Program (2014-2020)</a></p> <p>The Hungarian Transport Administration is responsible for the program, which follows a previous program that covered the 2007-2014 period.</p>	<p>The total cost of the 24 measures identified in the plan is €297 million (C\$426 million).<sup>33</sup></p>	<p>The programme identifies 24 measures to work towards four broad objectives:</p> <ol style="list-style-type: none"> <li>1. Infrastructure development</li> <li>2. Raising awareness</li> <li>3. Recreational cycling</li> <li>4. Bicycle industry and trade</li> </ol> <p>Some of the 24 measures include cyclist-friendly neighbourhoods, regional, national and European cycling networks, bike-sharing schemes, the support of the bicycle industry, and the promotion of cycle tourism.<sup>34</sup></p>	<p>According to the program, its implementation will have the following impacts:</p> <ul style="list-style-type: none"> <li>● Increase of €47.6 million (C\$68.3 million) per year for tourism;</li> <li>● Reduce carbon emissions by 200 tonnes per year;</li> <li>● Realize health benefits worth €16 million (C\$23 million) per year;</li> <li>● Add over 1,000 km of cycling routes; and</li> </ul>

<sup>29</sup> Germany's Federal Ministry of Transport, Building and Urban Development, "[German Federal Government agrees on National Cycling Plan 2020](#)," citing BMVBS [Bundesministerium für Verkehr, Bau und Stadtentwicklung], Number 188/2012, 5 September 2012.

<sup>30</sup> Michael C. Laubenheimer, "[New German National Cycling Plan refers to PRESTO](#)," Rupprecht Consulting, 5 September 2012.

<sup>31</sup> Ibid.

<sup>32</sup> Daniel Bongardt, "[Cycling Expertise: German Experiences, Chinese Opportunities](#)," *Sustainable Transport in China*, 26 July 2013.

<sup>33</sup> Hungarian Transport Administration, *National Cycling Programme: Hungary 2014–2020*, 2015.

<sup>34</sup> Ibid.



				<ul style="list-style-type: none"> <li>• Increase of €9.5 million (C\$13.6 million) per year in bike sales.<sup>35</sup></li> </ul>
<b>Ireland</b>	<p><a href="#">National Cycle Policy Framework, 2009-2020</a></p> <p>The policy is part of the government's broader transport policy for the 2009-2020 period.</p>	N/A	<p>The policy outlines 19 objectives, grouped into the following categories:</p> <ul style="list-style-type: none"> <li>• Infrastructure</li> <li>• Communication/education</li> <li>• Financial resources</li> <li>• Legislation and enforcement</li> <li>• Human resources and coordination</li> <li>• Evaluation and effects<sup>36</sup></li> </ul>	<p>A target, set by the Minister of Transport, that 10% of all commuting trips by 2020 will be by bike.</p> <p>The policy also highlights other potential benefits, such as improved quality of life, a stronger economy and an enhanced environment.</p>
<b>The Netherlands</b>	<p>The Netherlands is the country with the most bicycle usage in the developed world,<sup>37</sup> with an estimated 14 million bicycle trips every day.<sup>38</sup> The Dutch Ministry of Transport has been actively supporting and promoting cycling as a mode of transportation since the 1970s.<sup>39</sup> The 1990 national strategy, the <a href="#">Bicycle Master Plan (BMP)</a>, was concluded in 1997.<sup>40</sup> Although the Dutch government has not created a successor plan, the central government's</p>	<p>In the Netherlands, the federal government invests approximately €49 million (C\$70 million) per annum, or €3 (C\$4) per annum per capita, on its cycling strategy.<sup>42</sup> It is estimated that a total of €450 million (C\$646 million) per annum is invested by all levels of government.<sup>43</sup></p> <p>For the 2009–2020 period, the Dutch national ministry of transportation and waterways has committed €21 million (C\$30 million) for the development of 16 bicycle highways to reduce congestion. Local and regional governments will be investing €80 million (C\$115 million) for this purpose.<sup>44</sup></p>	<p>The main goal of the BMP was “[p]romoting bicycle use while simultaneously increasing bicycle safety and appeal.”<sup>45</sup> In order to reach this objective, the BMP sought to shift commuters from cars to bicycles (or to combined use of bicycles and public transport), to increase road safety for cyclists, to develop bicycle parking facilities, to prevent bicycle theft and to transfer relevant knowledge to stakeholders.<sup>46</sup></p> <p>Under the BMP, the national government's focus was on: promoting bicycle traffic, stimulating innovative development, collecting and distributing knowledge, making financial contributions, seeing to legislation and creating a basis for bicycle policy by the local and regional governments.<sup>47</sup></p>	<p>Positive outcomes that may have resulted from the implementation of the BMP include:</p> <ul style="list-style-type: none"> <li>• The average daily kilometres cycled per resident increased from 1.7 to 2.5 between 1978 and 2005;</li> <li>• Cycling in the Netherlands is evenly distributed among the population, with 55% of cyclists being female, and with high rates of children, adolescents and seniors biking. Analysts attribute part of this phenomenon to separate cycling facilities and other initiatives that</li> </ul>

<sup>35</sup> Ibid.

<sup>36</sup> Ireland, Department of Transport, [Ireland's First National Cycle Policy Framework](#).

<sup>37</sup> Ibid.

<sup>38</sup> European Cyclists' Federation, ["The Daily Dutch Cycle: 14 million bicycle trips a day,"](#) 27 March 2013.

<sup>39</sup> Martens (2007).

<sup>40</sup> Ibid.

	bicycle policies and support still continue. <sup>41</sup>			make cycling seem accessible, safe and convenient;
<b>The Netherlands (cont'd)</b>	The Dutch took a decentralized approach in the BMP, allowing municipalities and provinces to design and implement cycling measures. <sup>48</sup> Nevertheless, the national government gave significant support to the national plan. The BMP stated that the role of the national government was “initially of a catalytic nature.” <sup>49</sup>	In addition, for the 2012–2020 period, the Dutch national government has committed to investing €107 million (C\$154 million) for bicycle parking at railway stations (40% of train travellers arrive by bicycle). Between 2007 and 2012, the government allocated €121 million (C\$174 million), or €20 million/annum (C\$29 million/annum), to create 300,000 additional bicycle parking spots. <sup>50</sup>	In addition, the Dutch government supports a national scheme to promote cycling as a mode of transportation to the workplace. In the Netherlands, an employer may provide employees with bicycles valued at up to €749 (C\$1,075), once every three years. Employees also benefit from a tax-free commuting allowance €0.19 (C\$0.27) per kilometre from their employer. <sup>51</sup>	<ul style="list-style-type: none"> <li>• Cycling safety has greatly improved since 1970, with an 81% decrease in the cycling fatality rate from 1978 to 2006, likely because of massive local undertakings to improve cycling infrastructure and to restrict car use; and</li> <li>• The bikeway network doubled in length, from 9,282 km to 18,948 km between 1978 and 1996.<sup>52</sup></li> </ul> <p>A 2015 study quantified the health benefits of high cycling levels in the Netherlands:</p> <ul style="list-style-type: none"> <li>• about 6,500 deaths per year are prevented due to cycling</li> </ul>

<sup>42</sup> European Cyclists' Federation (2013).

<sup>43</sup> Tom Godefrooij, “[40 years cycling-inclusive policies: Lessons learnt in the Netherlands](#),” *Dutch Cycling Embassy*, June 2012, p. 39.

<sup>44</sup> European Cyclists' Federation (2013).

<sup>45</sup> Ministry of Transport, Public Works and Water Management, Directorate-General for Passenger Transport, “[The Dutch Bicycle Master Plan: Description and evaluation in an historical context](#),” March 1999, p. 49.

<sup>46</sup> Ibid.

<sup>47</sup> Organisation for Economic Co-operation and Development [OECD], “[National Policies to Promote Cycling](#),” 2004, p. 69.

<sup>41</sup> Ibid. A component of the 2006 National Transport Strategy is how to integrate cycling as an integral part of local and regional planning.

<sup>48</sup> OECD, European Conference of Ministers of Transport, “[National Policies to Promote Cycling](#),” *Implementing Sustainable Urban Travel Policies: Moving Ahead*, 2004, p. 68.

<sup>49</sup> Ibid., p. 69.

<sup>50</sup> Ibid.

<sup>51</sup> OECD, [OECD Economic Surveys: Netherlands](#), Vol. 2010/10, June 2010, p. 68.

<sup>52</sup> Pucher and Buehler (2008), pp. 10–22.

				<ul style="list-style-type: none"> <li>• life expectancy is six months longer than other Europeans</li> <li>• the health benefits translate into economic benefits worth about 3% of Dutch GDP</li> </ul> <p>Overall, the study concluded that policies that promote cycling are likely to yield a high benefit to cost ratio in the long term.<sup>53</sup></p>
<b>Norway</b>	<p><a href="#">National Cycling Strategy 2014-2023</a> (available in Norwegian only)</p> <p>According to the European Cyclists' Federation, the strategy has been integrated into Norway's broader <a href="#">National Transport Plan 2014-2023</a>.<sup>54</sup></p>	N/A	The strategy focuses on several areas, such as funding, infrastructure and communications. <sup>55</sup>	The goal of the strategy is to reach a cycling modal share of 8% by 2023. <sup>56</sup>
<b>Scotland</b>	<p><a href="#">Cycling Action Plan for Scotland</a></p> <p>The plan acts as a framework for delivering the Scottish government's vision for cycling. It sets out what the Scottish government will do, what it expects others to do, and what outcomes it expects to achieve.</p>	£40 million (C\$73 million) was spent on walking and cycling initiatives between 2008 and 2011. <sup>57</sup>	<p>Scottish Ministers are expected to play a leadership role through, among other things:</p> <ul style="list-style-type: none"> <li>• Setting an ambitious vision for cycling;</li> <li>• Investing in the strategic national cycle network and its links to key destinations;</li> <li>• Working in partnership to ensure that the national network links with local cycling and pedestrian networks;</li> </ul>	The plan has a target of 10% by 2020 for cycling's modal share. <sup>59</sup>

<sup>53</sup> Elliot Fishman et al, "[Dutch cycling: Quantifying the health and related economic benefits](#)," *American Journal of Public Health*, Vol.105, No.8, April 2015.

<sup>54</sup> European Cyclists' Federation, [National cycling policies](#).

<sup>55</sup> Ibid.

<sup>56</sup> Ibid.

<sup>57</sup> The Scottish Government, [Cycling Action Plan for Scotland](#), 2010.

			<ul style="list-style-type: none"> <li>• Working in partnership to ensure that roads are safe for all, including cyclists;</li> <li>• Helping coordinate the actions of different partners; and</li> <li>• Investing in community cycling.<sup>58</sup></li> </ul>	
<b>United States</b>	<p>In 1994, the United States (USA) published its National Bicycling and Walking Study. A <a href="#">15-Year Status Report</a> was published in 2010.</p> <p>In March 2010, the Department of Transportation (DOT) issued a <a href="#">Policy Statement on Bicycle Pedestrian Accommodation Regulations and Recommendations</a> to reinforce the continued importance of its commitment to the development of fully integrated active transportation networks.<sup>60</sup></p> <p>In 2014 the DOT launched its <a href="#">Safer People, Safer Streets Initiative</a>. As part of the initiative, the DOT's field offices are convening transportation</p>	<p>The aim of the National Bicycling and Walking Study was stated in 1994 as: “[to] increase use of bicycling, and encourage planners and engineers to accommodate bicycle and pedestrian needs in designing transportation facilities for urban and suburban areas, and increase pedestrian safety through public information and improved crosswalk design, signaling, school crossings, and sidewalks.”<sup>61</sup></p> <p>Numerous federal infrastructure programs for surface transportation can be used for pedestrian and cycling initiatives. A detailed breakdown of program funding from 1992 to 2015 is available on the DOT's <a href="#">Federal-Aid Highway Program Funding for Pedestrian and Bicycle Facilities and Programs</a> website.</p>	<ul style="list-style-type: none"> <li>• Working in partnership to ensure that roads are safe for all, including cyclists;</li> <li>• Helping coordinate the actions of different partners; and</li> <li>• Investing in community cycling.<sup>58</sup></li> </ul>	<p>According to the status report and a 2010 study by the Outdoor Foundation:</p> <ul style="list-style-type: none"> <li>• The share of walking and bicycling trips as a mode of transportation increased from 7.9% in 1990 to 10.9% in 2009 (however, that is short of the stated goal of 15.8% by at least one of the two modes);</li> <li>• The number of bicyclists killed in motor vehicle crashes decreased by 12% (from 814 in 1993 to 716 in 2008). Bicycle injuries decreased 14.7% (from 61,000 to 52,000) between 1995 and 2008;<sup>62</sup></li> <li>• The cycling industry as a whole contributes US\$133 billion (C\$167 billion) annually to the U.S. economy;</li> <li>• The cycling industry generates US\$17.7 billion (C\$22.2 billion) in</li> </ul>

<sup>59</sup> Ibid.

<sup>58</sup> Ibid.

<sup>60</sup> U.S. Department of Transportation, [“Policy Statement on Bicycle Pedestrian Accommodation Regulations and Recommendations,”](#) May 2010.

<sup>61</sup> U.S. Department of Transportation, [“The National Bicycling and Walking Study: 15-Year Status Report,”](#) Pedestrian and Bicycle Information Centre, 2010, p. 2.

<sup>62</sup> Ibid., p. 8.

	<p>agencies to conduct road safety assessments in each state, launching a Mayors' Challenge, and working with stakeholders to remove barriers to improving non-motorized safety.</p>		<p>annual federal and state tax revenues; Produces approximately US\$53.1 billion (C\$66.6 billion) annually in retail sales and services; and</p> <ul style="list-style-type: none"> <li>• The cycling industry supports approximately 1.1 million jobs across the country.<sup>63</sup></li> </ul>
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Source: Table compiled by the author based on data from the sources cited.

<sup>63</sup> The Outdoor Foundation, ["The Active Outdoor Recreation Economy,"](#) 2010.