

# Bike Lane<sup>1</sup> Benefits

As climate change<sup>2</sup> becomes a more pressing<sup>3</sup> issue, more and more western communities are developing cycling lanes<sup>4</sup> in attempts to become greener. The sensibility<sup>5</sup> of these measures is now being reinforced<sup>6</sup> by recent studies that suggest such undertakings may also benefit the economies<sup>7</sup> of those communities as well, as David Knott finds out<sup>8</sup>. ►



warm

- <sup>1</sup> bike lane /bɑ:k leɪn/ | ścieżka rowerowa
- <sup>2</sup> climate change /klaɪmət tʃeɪndʒ/ | zmiany klimatyczne
- <sup>3</sup> pressing /preɪsɪŋ/ | pilny
- <sup>4</sup> cycling lane /saɪkɪŋ leɪn/ | ścieżka rowerowa
- <sup>5</sup> sensibility /senseɪbəlɪti/ | rozsądność
- <sup>6</sup> to reinforce /to rɪˈɪnfo:s/ | wzmacniać
- <sup>7</sup> economy /iˈkɒnəmi/ | gospodarka
- <sup>8</sup> to find out /to faɪnd aʊt/ | odkryć, dowiedzieć się

## Health Benefits

The emissions<sup>10</sup> of cars compared with the negligible<sup>11</sup> environmental impact of a bicycle is one of the largest-scale<sup>12</sup> advantages that bike lanes provide for the overall<sup>13</sup> health of society. Every kilometer traveled cycling rather than by car prevents an average of 0.3 kg of CO<sub>2</sub> being released into the atmosphere; it also prevents the release of other harmful pollutants<sup>14</sup> such as carbon monoxide<sup>15</sup> which can cause respiratory illnesses<sup>16</sup> like bronchitis<sup>17</sup>, as well as cardiovascular diseases<sup>18</sup>. As cycling also means fewer cars on the road, deaths resulting from car accidents decline<sup>19</sup> when bike lanes are used – a study of 11 Midwestern<sup>20</sup> American cities revealed that if people would minimally change their habits when running errands<sup>21</sup> in the four warmest months, as many as 1,000 lives could be saved annually<sup>22</sup>.

But however beneficial<sup>23</sup> cycling lanes may be to the planet and society as a whole<sup>24</sup>, the effects of such spaces on an individual, daily cyclist are more direct and visible<sup>25</sup> in most cases. The regular exercise burns calories<sup>26</sup> and results in weight loss – in a rider's first year of cycling to work they will lose an average of<sup>27</sup> 13 pounds. It also builds stamina<sup>28</sup> and improves overall fitness, particularly cardiovascular, cutting down

one's risk of heart disease. Commuting<sup>29</sup> by bike also has a positive impact on one's mental state<sup>30</sup>, eliminating much of the stress associated with driving in traffic and providing a meditative effect, allowing the mind to wander<sup>31</sup>, which has a positive effect on overall stress levels.

A relatively new step in the creation of bike lanes is the proliferation<sup>32</sup> of 'protected<sup>33</sup>' lanes, spaces for cyclists with some form of separation between those on bikes and motorized traffic. These separate lanes provide additional peace of mind<sup>34</sup> for cyclists and pedestrians<sup>35</sup>, with good reason: in areas of New York City, where certain streets have been converted to<sup>36</sup> protected cycling lanes with the hopes of lessening<sup>37</sup> traffic in downtown<sup>38</sup> areas near Broadway and Fifth Avenue, injuries to cyclists are down 63 percent; pedestrians, 35 percent.

## Community Benefits

Local communities stand to reap<sup>39</sup> the rewards from installing protected cycle lanes. With decreased levels of automobile traffic<sup>40</sup>, road infrastructure will suffer less wear and tear<sup>41</sup>, either saving the community money or enabling greater spending on other programs, including creating more green spaces for residents. Less road traffic also means lower levels of noise pollution<sup>42</sup>, which

has an adverse<sup>43</sup> impact on residents<sup>44</sup> and pedestrians alike<sup>45</sup>.

Overall, bikes and cyclists produce less rubbish than cars and drivers, and they have less impact when not in use. Up to 10 bicycles can fit in the space needed to park one car, also opening up more areas for beautification programs<sup>46</sup> or pedestrian paths<sup>47</sup>. The greatest benefit that a bike infrastructure can bring to a city or community has to do with the fact that it makes a place more attractive for a new breed<sup>48</sup> of young professionals, who economic forecaster<sup>49</sup> Richard Florida calls the "creative class". Nowhere is this change seen more starkly<sup>50</sup> than in Chicago: "It's no coincidence<sup>51</sup> that the first protected bike lanes were on Kinzie Street, and that's exactly where Google-Motorola Mobility is putting their headquarters<sup>52</sup> with 2,800 jobs," said Chicago mayor<sup>53</sup> Rahm Emanuel.

## Economic Benefits

Transportation options affect the viability<sup>54</sup> of certain locations in both professional and domestic<sup>55</sup> terms. Similar to Google-Motorola Mobility, home buyers also put a great deal of importance on<sup>56</sup> access to bike paths. The Shepherd's Vineyard Bikeway in North Carolina, USA has led realtors<sup>57</sup> in that state to increase the price of 40 new adjacent<sup>58</sup>

<sup>9</sup> **health** /helθ/ | zdrowie, zdrowotny

<sup>10</sup> **emissions** /i'miʃnz/ | tu: spaliny

<sup>11</sup> **negligible** /'neglɪdʒəbl/ | znikomym

<sup>12</sup> **large-scale** /lɑ:dʒ skeɪl/ | na dużą skalę

<sup>13</sup> **overall** /əʊvər'ɔ:l/ | ogólny

<sup>14</sup> **pollutant** /pə'lju:tənt/ | substancja zanieczyszczająca środowisko

<sup>15</sup> **carbon monoxide** /'kɑ:bən mən'ɒksaɪd/ | tlenek węgla

<sup>16</sup> **respiratory illness** /re'spɪrətəri 'ɪlnəs/ | choroba układu oddechowego

<sup>17</sup> **bronchitis** /brɒŋ'kaɪtɪs/ | zapalenie oskrzeli

<sup>18</sup> **cardiovascular disease** /kɑ:diəʊ'væskjələ dɪ'zi:z/ | choroba układu krążenia

<sup>19</sup> **to decline** /tə dɪ'klaɪn/ | zmniejszyć się

<sup>20</sup> **Midwestern** /mɪd'westən/ | środkowo-zachodni, tu: dotyczący północno-środkowej części USA

<sup>21</sup> **to run errands** /tə rʌn 'erəndz/ | załatwiać sprawunki

<sup>22</sup> **annually** /'ænjʊəli/ | rocznie

<sup>23</sup> **beneficial** /benɪ'fɪʃl/ | korzystny

<sup>24</sup> **as a whole** /əz ə həʊl/ | jako całość

<sup>25</sup> **visible** /'vɪzəbl/ | widoczny

<sup>26</sup> **calories** /'kælərɪz/ | kalorie

<sup>27</sup> **an average of** /ən 'ævərɪdʒ əv/ | przeciętnie

<sup>28</sup> **stamina** /'stæmɪnə/ | wytrzymałość

<sup>29</sup> **to commute** /tə kə'mju:t/ | dojeżdżać do pracy/szkoły

<sup>30</sup> **mental state** /'mentl steɪt/ | stan psychiczny

<sup>31</sup> **to wander** /tə 'wɒndə/ | błądzić

<sup>32</sup> **proliferation** /prə'ɪfɪə'reɪʃn/ | wysyp, rozkwit

<sup>33</sup> **to protect** /tə prə'tekt/ | chronić

<sup>34</sup> **peace of mind** /pi:s əv maɪnd/ | spokój ducha

<sup>35</sup> **pedestrian** /pe'destrɪən/ | pieszy

<sup>36</sup> **to convert something to** /tə kən'vɜ:t 'sʌmθɪŋ tə/ | przekształcić coś na

<sup>37</sup> **to lessen** /tə 'lesn/ | zmniejszyć

<sup>38</sup> **downtown** /daʊn'taʊn/ | śródmiejski

<sup>39</sup> **to reap** /tə ri:p/ | zgarnąć

<sup>40</sup> **automobile traffic** /'ɔ:təməbi:l 'træfɪk/ | ruch samochodowy

<sup>41</sup> **wear and tear** /weər ən teə/ | zużycie materiału

<sup>42</sup> **noise pollution** /nɔɪz pə'lju:ʃn/ | zanieczyszczenie hałasem

<sup>43</sup> **adverse** /əd'vɜ:s/ | niekorzystny

<sup>44</sup> **resident** /'rezɪdənt/ | mieszkaniec

<sup>45</sup> **alike** /ə'laɪk/ | zarówno, także

<sup>46</sup> **beautification program** /bju:tɪfɪk'eɪʃn 'prəʊgræm/ | program odnowy

<sup>47</sup> **pedestrian path** /pe'destrɪən pɑ:θ/ | droga dla pieszych

<sup>48</sup> **breed** /brɪ:d/ | tu: rodzaj

<sup>49</sup> **forecaster** /'fɔ:kɑ:stə/ | prognostyk

<sup>50</sup> **starkly** /stɑ:kli/ | wyraziście

<sup>51</sup> **coincidence** /kəʊ'ɪnsɪdəns/ | zbieg okoliczności

<sup>52</sup> **headquarters** /hed'kwɔ:təz/ | siedziba główna

<sup>53</sup> **mayor** /meə/ | burmistrz

<sup>54</sup> **viability** /vaɪə'bɪləti/ | wykonalność, tu: dostępność

<sup>55</sup> **domestic** /də'mestɪk/ | domowy

<sup>56</sup> **put importance on** /put ɪm'pɔ:təns əv/ | przykładać wagę do

<sup>57</sup> **realtor** /'ri:əltə/ | agent nieruchomości

<sup>58</sup> **adjacent** /ə'dʒeɪsnt/ | przyległy

homes by USD 5,000, and a recent study by the University of Delaware showed that the proximity to<sup>59</sup> a bike path could increase property<sup>60</sup> values by as much as USD 9,000.

A broader study done in Sydney, Australia showed that the economic benefit for the city was double for cycling lanes than for motorway<sup>61</sup> projects – projecting a USD 506 mln net benefit for a proposed 200km cycleway<sup>62</sup> network<sup>63</sup>. In the forementioned<sup>64</sup> study of 11 Midwestern American cities and the changes that increased cycling would bring about, the economies would benefit by saving USD 3.8 bln in health and repair costs through improved fitness and fewer accidents, while improved air quality would potentially save those cities USD 3.5 bln annually.

However, a more immediate benefit of cycling lanes is that to small business serviced by such bike paths. Bike advocates<sup>65</sup> have long claimed that cyclists bring economic benefit to local businesses: “When people travel by bike, they tend to eat, shop, and play more locally,” Martha Roskowski, a spokesperson<sup>66</sup> for Bikes Belong recently told NBC News. Two new studies, one conducted in New York City and the other in Portland, Oregon, have confirmed that belief.

The first study, called “Measuring the Streets”, conducted by the New York City Department of Transportation (DOT) showed that businesses near bike lanes performed on average better than similar establishments<sup>67</sup> elsewhere in that particular borough. Where DOT installed parking-protected bike lanes in Manhattan, sales<sup>68</sup> were 16 times higher than the borough-wide<sup>69</sup> average. “Consumer Behavior and Travel Mode Choices”, the second study, showed that drivers spent more per visit<sup>70</sup> than cyclists, but that cyclists visited the same local establishments more regularly and that their net spending<sup>71</sup> was greater overall.

The results of this study, coupled with the personal savings that individuals can expect when owning a bike compared with owning a car – in the neighborhood of<sup>72</sup> USD 10,000 a year – are leading more and more authorities to look seriously at cycling infrastructure projects. John



“When people travel by bike, they tend to eat, shop, and play more locally.”

Pucher, a professor at Rutgers University’s Bloustein School of Planning and Public Policy, has consistently pointed to the environmental and personal health

benefits of cycling, but now, with concrete research to refer to, he is hoping that policy makers will realize that cycling “is good for the bottom line<sup>73</sup>, too”. ■

<sup>59</sup> **proximity to** /prɒk'sɪməti tə/ | bliskość do

<sup>60</sup> **property** /'prɒpəti/ | nieruchomości

<sup>61</sup> **motorway** /'məʊtəweɪ/ | autostrada

<sup>62</sup> **cycleway** /'saɪklweɪ/ | ścieżka rowerowa

<sup>63</sup> **network** /'netwɜ:k/ | sieć

<sup>64</sup> **forementioned** /ə'fɔ:'menʃnd/ | wyżej wymieniony

<sup>65</sup> **advocate** /'ædvəkət/ | zwolennik

<sup>66</sup> **spokesperson (plural: spokespersons or spokespeople)** /'spəʊkspɜ:sn ('spəʊkspɜ:snz, 'spəʊkspi:pl)/ | rzecznik

<sup>67</sup> **establishment** /'ɪ'stæblɪʃmənt/ | obiekt

<sup>68</sup> **sales** /seɪlz/ | zyski ze sprzedaży

<sup>69</sup> **borough-wide** /'bɒrə weɪd/ | dzielnicowy, obejmujący dzielnicę

<sup>70</sup> **per visit** /pə 'vɪzɪt / | podczas jednej wizyty

<sup>71</sup> **net spending** /net 'spendɪŋ/ | wydatki netto

<sup>72</sup> **in the neighbourhood of** /ɪn ðə 'neɪbəhʊd əv/ | w okolicach

<sup>73</sup> **the bottom line** /ðə 'bɒtəm laɪn/ | ostateczny rozrachunek