CYCLE TRACK SAFETY REMAINS UNPROVEN

Lusk et al. claim that American Association of State Highway and Transportation Officials (AASHTO) guidelines discourage “physically separated and bicycle-exclusive paths adjacent to sidewalks.” In fact, these guidelines prohibit bicycle lanes on the roadway separated from travel lanes by parked cars or a raised barrier. They permit bike paths adjacent to the roadway where there is “minimal cross flow by motor vehicles.”

The facilities in the authors’ sample that clearly contradict these AASHTO guidelines are First Avenue North in Minneapolis, Minnesota, and First, Second, Eighth, and Ninth Avenues in New York City. Using the authors’ figures, the bicycle crash rate for these facilities averages 7.0 per 100,000 kilometers traveled compared with only 0.6 per 100,000 kilometers for the remainder of the authors’ sample. An explanation for the difference is that the former group averages 11.3 intersections per kilometer whereas the latter averages only 1.7 (Table 1).

Lusk et al. claim that the crash rate for their sample “is low relative to reported crash rates on roadways in the United States and Canada.” However, 3 of the 4 comparison rates they cite are based on self-reports of all collisions for specific populations (bicycle messengers in Boston, MA; bicycle commuters in Toronto or Ottawa), and not on police reports of car–bicycle collisions for all bicyclists—which makes them completely inappropriate to use as a benchmark. The 2009 National Household Transportation Survey estimates 14.413 10^8 annual kilometers of bicycle travel in the United States. Dividing by the 51,000 estimated police-reported bicyclist injuries in 2009 provides a national rate of 3.5 bicycle crashes per 10^6 kilometers. The facilities that are expressly prohibited by the AASHTO guidelines have a crash rate that is on average twice as high as the national average. It is premature to say this work provides additional evidence that urban cycle tracks increase bicyclist injuries attributable to intersection risk, because the authors’ methods do not account for confounders such as traffic speed and volume. But it is safe to conclude that this article has produced no evidence to support its claim that “bicycling on cycle tracks is safer than bicycling on roads.”

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References
<table>
<thead>
<tr>
<th>Side paths on city streets</th>
<th>Length, km</th>
<th>Crash Report Period, Year</th>
<th>Crashes, No.</th>
<th>Average Daily Bicycle Count, No.</th>
<th>Bicycle km/Year</th>
<th>Exposure, km</th>
<th>Crashes/Million km</th>
<th>Intersections No./km</th>
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</thead>
<tbody>
<tr>
<td>First Avenue North, Minneapolis, MN</td>
<td>0.76</td>
<td>1.8</td>
<td>4</td>
<td>330</td>
<td>91 542</td>
<td>164 776</td>
<td>24.3</td>
<td>6</td>
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<tr>
<td>First Avenue, New York City (First to 34th)</td>
<td>2.65</td>
<td>0.3</td>
<td>3</td>
<td>1854</td>
<td>1 793 282</td>
<td>537 984</td>
<td>5.6</td>
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<td>Second Avenue, New York City (34th to first)</td>
<td>2.60</td>
<td>0.5</td>
<td>5</td>
<td>1620</td>
<td>1 537 380</td>
<td>768 690</td>
<td>6.5</td>
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<tr>
<td>Eighth Avenue, New York City (West 14th to West 34th)</td>
<td>1.57</td>
<td>2.3</td>
<td>20</td>
<td>2085</td>
<td>1 194 809</td>
<td>2 748 061</td>
<td>7.6</td>
<td>19</td>
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<tr>
<td>Ninth Avenue, New York City (14th-33rd)</td>
<td>1.57</td>
<td>2.4</td>
<td>13</td>
<td>1576</td>
<td>903 127</td>
<td>2 167 504</td>
<td>6.0</td>
<td>17</td>
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<tr>
<td>Total</td>
<td>9.26</td>
<td>7.3</td>
<td>45</td>
<td>...</td>
<td>...</td>
<td>6 411 298</td>
<td>7.0</td>
<td>103</td>
</tr>
</tbody>
</table>

| Side Paths with minimal cross flow<sup>g</sup> | | | | | | | | |
| Calle Barcelona, Carlsbad, CA | 2.11 | 3.6 | 0 | 25 | 19 254 | 69 314 | 0 | 5 | 2.4 |
| East Palomar Street, Chula Vista, CA | 3.28 | 8.6 | 1 | 201 | 240 637 | 2 069 480 | 0.5 | 4 | 1.2 |
| Friars Road, San Diego, CA | 3.46 | 3.6 | 1 | 280 | 353 612 | 1 273 003 | 0.8 | 1 | 0.3 |
| Beach Street, Santa Cruz, CA | 1.22 | 1.0 | 1 | 695 | 309 484 | 309 484 | 3.2 | 0 | 0.0 |
| High Street, Santa Cruz, CA | 0.16 | 2.0 | 0 | 196 | 11 446 | 22 893 | 0 | 1 | 6.3 |
| 13th Street, Boulder, CO | 0.34 | 3.5 | 0 | 1157 | 143 584 | 502 543 | 0 | 0 | 0.0 |
| Broadway, Boulder, CO | 4.83 | 3.5 | 2 | 1712 | 3 018 170 | 10 563 596 | 0.2 | 13 | 2.7 |
| Apopka Vineland Road, Orlando, FL | 1.93 | 4.0 | 0 | 21 | 14 793 | 59 174 | 0 | 5 | 2.6 |
| Vassar Street, Cambridge, MA | 0.32 | 5.0 | 1 | 564 | 65 875 | 329 376 | 3.0 | 0 | 0.0 |
| Loring Bikeway, Minneapolis, MN | 1.13 | 4.0 | 4 | 814 | 335 734 | 1 342 937 | 3.0 | 3 | 2.7 |
| Prospect Park West (Bartel Pritchard Square to Union Street), Brooklyn, NY | 1.51 | 0.8 | 0 | 1654 | 911 602 | 729 282 | 0 | 2 | 1.3 |
| Ayers Road, Eugene, OR | 0.80 | 5.0 | 0 | 144 | 42 048 | 210 240 | 0 | 3 | 3.8 |
| Reed Market Road, Bend, OR | 1.19 | 4.0 | 0 | 109 | 47 344 | 189 377 | 0 | 0 | 0.0 |
| Dorset Street, Burlington, VT | 1.85 | 1.0 | 0 | 36 | 24 309 | 24 309 | 0 | 4 | 2.2 |
| Total | 24.13 | 49.6 | 10 | ... | ... | 17 695 007 | 0.6 | 34 | 1.7 |

Note. Totals may be rounded.
<sup>a</sup>Length of cycle track per Lusk et al., except the measure for First Avenue North, Minneapolis, MN was calculated based on the distance between 8th Street and N. Washington Avenue.
<sup>b</sup>Time period during which crash data were available.
<sup>c</sup>Police- or community-reported crashes during the reporting period.
<sup>d</sup>Based on bicycle counts (adjusted, via expansion factors, for time of day, day of week, and month) and duration of counting period.
<sup>e</sup>Length of cycle track multiplied by average daily bike count multiplied by 365.
<sup>f</sup>Bicycle km/year multiplied by crash reporting period.
<sup>g</sup>These paths are located in suburban areas with few intersections, or are adjacent to a park, campus, or beach, or are only 1 block long.