Bike Safety in Philadelphia Pipe Dream or Possibility?

Bicycle Safety in Philadelphia



Traffic Statistics of Bicycle Accidents

- 12% of Philadelphia streets are responsible for 50% of all traffic deaths and severe injuries from 2012--2016
- 2016 Highest traffic deaths per capita of major cities (44% of those killed were walking or biking)
- 2017 96 people killed in traffic crashes
 - 40 pedestrians
 - 3 bicyclists

Pennsylvania Bicycle Accidents		
Year	Total Crashes	Fatalities
2013	1,383	11
2014	1,309	19
2015	1,272	16
2016	1,304	16
2017	1,141	21

Sources of Law Affecting Cyclists

- State Law: the Vehicle Code (Pedalycles) and Rules of the Road
- City Ordinance: The Philadelphia Code
- Infrastructure: Law of the Jungle

The Pennsylvania Vehicle Code

- 75 Pa. C.S. § 3501, et seq.
 - bicycles considered vehicles. 75 Pa. C.S. § 3501(a).
 - helmets required only for riders under age 12. 75 Pa. C.S. § 3510(a).
 - drivers are responsible for not opening doors into cyclists. 75
 Pa. C.S. § 3705.
 - Cars are supposed to provide four (4) feet of distance between them and the bicycle when passing. 75 Pa. C.S. § 3303.
 - Bicycles are to stay either to the far left or far right of traffic, and cars turning are supposed to give way to the bicycle. 75 Pa. C.S. § 3331(e).

The Philadelphia Code

- Chapter 12-800: Bicycle Regulations and Penalties
 - Cyclists are supposed to obey traffic lights and stop signs.
 12-802.
 - No riding bicycles on sidewalks unless under age 12 or specific sign posted allowing; subject to \$50 fine. 12-808.
 - All bicycles are supposed to have bells or other audible device. 12-809.

Infrastructure

- Standard traffic signals may not detect bicycles.
- Making a left turn on a two way street is difficult for a bicyclist in traffic.
- Narrow city streets: difficult to leave 4 feet between cyclists and motor vehicles.
- Busses, cabs, and ride-share vehicles often pull over toward curbs.
- Bicycle lanes, or lack thereof.

Infrastructure's Effect on Bicyclists Habits

- Philadelphia has more bicycle commuters than any other major American city.
- There has been a 14% increase in bicyclists in the last 5 years.
- Where there is no bike lane, 19.8% of cyclists chose to ride on the sidewalk (compared to 8.2% when there was a bike lane), and nearly twice as many riders chose to ride against traffic (the wrong way) without bike lanes
- Nonetheless, there has been a 27% decrease in sidewalk riding in the past 5 years, along with a 44% decrease in wrong-way riding.

Vision Zero

- Executive Order 11-16 signed by Mayor Kenney on November 7, 2016
- Target of zero traffic-related deaths by 2030
- Three-year action plan implemented in September 2017
- Goals
 - Reduce number of severe traffic crashes in Philadelphia
 - Improve the overall performance of the street system, and prioritize those who are most vulnerable
 - Reduce chronic diseases by promoting active transportation
 - Shift trips from motorized to active modes of transportation

History of Bicycle Lanes in Philadelphia

- 1991 Walnut Street bridge redesign did not include a bike lane
- 1992 Nationally-renowned endocrinologist Maurice Attie killed by drunk driver riding on West River Drive of the Schuylkill
 - Led to limiting traffic on West River Drive and banning vehicles during portions of weekends
- 1992- Federal funding for bike-related projects became available (rapidly increasing thereafter)
- 1995 one painted bike lane on Columbus Boulevard until EPA threatened to cut transportation funds if solo drivers did not decrease
- 2000 150 to 200 miles of bike lanes in Philadelphia
- 2015 430 miles (or 230 "street miles") of bike lanes
- Today Bike lanes continue to increase along with a plan to install more than 30 miles of "protected" bike lanes

Commuter Preferences

- Even with the increase of bicycle use recently, only 2.2% of Philadelphians commute by bicycle.
- Effect on cars: 2,116 parking tickets for motor vehicles illegally parked in bike lanes during the first five months of 2018.
- Cost and opportunity cost: the 1.1 mile bike lane on Chestnut between 34th and 45th Streets cost approximately \$50,000 and weeks of construction.
- Examples from other cities: in Copenhagen, Denmark, the percentage of bike commuters reached almost 50% by 2014, but has since declined after substantial investment in infrastructure. The shift has been attributed to better public transit and a renewed preference for driving after construction related to infrastructure.

Sources: (1) 2017 Bike PHL Facts, Bicycle Coalition of Greater Philadelphia, http://www.arcgis.com/apps/Cascade/index.html?appid=6b42ffc54fb941df90cd0be7bd41aac3. (2) O'Sullivan, Feargus, In Copenhagen, Bike Commuting Gets a Little Less Popular, www.citylab.com/transportation/2017.

Bike Share and the Equity of Bicycles

- Where bicycles and bicycle lanes are located is also a socioeconomic issue.
- Much focus on Center City.
- Bike Share promises to be a low-cost alternative to bicycle ownership.
- But, putting in a bicycle dock takes time and resources, and some neighborhoods are prioritized over others.
- The future could include dockless bicycles (currently being tester in Camden).

Source: Carroll, Thom, Are "Dockless" Bicycles a fit for Philly?, http://www.phillyvoice.com/are-dockless-bicycles-fit-philly



Framing the Debate

- Should cyclists be given preferential treatment by the law and regulations?
- Should public funds be devoted to infrastructure for cyclists?
- Should motorists have to be deferential to cyclists?
- Will bicycle lanes strike the right balance?

City Council Debate

The City of Philadelphia recently upgraded bike infrastructure by creating a parking-protected bike lane on Chestnut Street stretching from 45th to 34th streets. The Streets Department would like to expand the bike lane to 23rd Street.

Amid constituent backlash, local councilwoman has introduced a bill that would require city council to approve "any modification to an existing bike lane that would affect the flow of traffic".