The number of cyclists entering Center City on northbound streets during the morning rush hour, 8:00 a.m. to 9:00 a.m., in mid-September was up 22% over the Center City District’s last count in 2014 and up 79% since CCD first began surveying bicycle commuting patterns in 2010 (Figure 1)¹. On 11 northbound streets, plus the South Street entrance to the northbound Schuylkill River Trail, 1,400 bicyclists entered downtown during the peak weekday, morning rush hour with new highs observed on every street surveyed (Figure 2). The only two streets with dedicated bike lanes, 13th and 22nd Streets, remained most used, accounting for 37% of all rush hour cyclists, a dominant position they have occupied in all annual surveys. The CCD has chosen to survey only northbound routes into Center City because the street grid is continuous from river to river, unlike the discontinuities created by the bridges and tunnels of the Vine Street Expressway.

Indego bike share was introduced in Philadelphia in April 2015 and it constituted 6% (an average of 87 per day) of bicycle traffic observed during the morning rush hour. Based on data published by the City, the morning rush accounts for 20% of all weekday Indego trips, 25% of which originate south of the central business district and end in the core of downtown.

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1: Surveyors were positioned north of Spruce Street on each street heading into Center City from the south. Having opened in late 2014, the ramp from the South Street Bridge to the Schuylkill River Trail is effectively a new northbound “street” and was included in this year’s counts for the first time. Counts were conducted during the morning rush hour (8:00 a.m. to 9:00 a.m.) on four weekday mornings, September 14-15 and 20-21, 2016. The weather was clear and sunny each day. Figures shown are four-day averages. Observed daily counts were quite consistent with little variation day-to-day, generally diverging from the average by less than 10%.
The U.S. Census Bureau first included bicycling as a commuting mode in 1990 when 0.6% of Philadelphia commuters responded that they biked to work.² By 2015, the citywide number had risen to 2.2%. In Greater Center City, the American Community Survey (ACS) from 2014 (the most recent available for that geography) reported 5.9% commuting by bicycle, with percentages rising to 11% from Pennsport, 10% from Passyunk Square and 8% from both the Point Breeze and Graduate Hospital neighborhoods.

The dense, compact form of Philadelphia’s live-work downtown creates the necessary preconditions for bicycle commuting. First, 42% of working residents who live in Greater Center City work in Greater Center City. Second, the relative flatness of downtown’s topography eliminates much of the physical stress of bike riding. Nationwide, the average distance of a bicycle commute is 3.9 miles.³ Measuring from the geographic center of Center City (City Hall), 3.9 miles includes North Philadelphia as far north as Allegheny Avenue; West Philadelphia, just beyond 56th Street; and virtually all of South Philadelphia — an area that contains approximately 40% of Philadelphia’s population.⁴ Third, Philadelphia’s comprehensive public transit system facilitates cycling as an alternative to car ownership by providing a viable option during inclement weather. Finally, Philadelphia’s 17th century street grid is both an advantage and challenge for bicycle infrastructure. Narrow streets, curbside parking and relatively short blocks with frequent stops act as de facto traffic calming, keeping vehicle speeds closer to bike-friendly velocities. But narrow streets also leave little room to insert dedicated bike lanes without removing parking or existing vehicle travel lanes. The conflicts that emerge within these constraints between the needs of different modes are probably one of the reasons why Philadelphia has lagged behind many of its peers when it comes to introducing more bike lanes. With the exception of the bike lane on Fairmount Avenue west of Broad Street, there has been no significant expansion of the cycling lane network in Center City since the buffered bike lane on 13th Street was implemented in 2011. Philadelphia’s limited enforcement of many forms of illegal parking by trucks, as well as illegal behavior by motorists and cyclists, also compound the challenges.

Yet there is much common ground. Central Philadelphia Development Corporation recently surveyed downtown transportation professionals and its members – a cross section of downtown business leaders and workers – about the management of Center City streets. Both those who identified themselves as commuters who drive regularly and never ride a bike, and those who bike regularly and never drive, identified potholes, uneven pavement surfaces and the lack of traffic enforcement as the top transportation priorities to be addressed.

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² The Census asks commuters for their “principal mode of travel.” Someone who rides a bicycle to the train station and then boards the train would be recorded as a “train commuter.” The American Community Survey conducts surveys throughout the year – asking about the mode used in the preceding week, which means the seasonal variation in levels of cycling is factored into the average.

³ Federal Highway Administration, National Household Travel Survey 2009

⁴ Outside of Greater Center City, an average of 25% of the working residents of all neighborhoods work downtown. The average walking commute distance is 1.1 miles, which extends to Fairmount Avenue on the north, Washington Avenue to the South, and to the easternmost edge of West Philadelphia.
It is important to note that this survey does not capture commuters on shifts later than traditional 9 to 5 hours, working in the restaurant, hospitality and entertainment industries in Center City.

It is also important to acknowledge generational and ethnic variations in bicycle use. Bicycle commuters tend to be younger (Figure 3), while the membership of the core Center City residential civic associations, most impacted by bike lanes and proposals to insert buffers to protect bike lanes, tends to be older, though many may have children who would benefit from protected bike lanes.⁵

According to the ACS, 77% of individuals who commute to work by bicycle in Philadelphia are non-Hispanic whites, the next largest group are Hispanics (of any race), who represent 9% of bicycle commuters, followed by Black/African American at 6%, and Asian at 5% (Figure 4).

BIKE LANES

Philadelphia has approximately 316 miles of bike lanes (including sharrows and trails), 42 miles of which are in Greater Center City (Figure 5). Most of Philadelphia’s bike lanes are situated next to on-street parking – typically without a buffer, such as plantings or plastic bollards used in other cities – which puts cyclists at risk of collision with an opening car door. Only 16% of Center City’s bike

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⁵: It is important to note that this survey does not capture commuters on shifts later than traditional 9 to 5 hours, working in the restaurant, hospitality and entertainment industries in Center City.
lanes, and just 4% of bike lanes citywide, are buffered (Figure 6). The City recently opened the first parking protected bike lane in Philadelphia on 0.6 miles of Ryan Avenue in the Northeast, a first step towards meeting the Kenney Administration’s pledge to build 30 miles of protected bike lanes in the next five years. Bicycle lanes, sharrows, and trails represent about 12% of all city street mileage (15% of Greater Center City streets), meaning that at least some portion of virtually every bike trip will include a segment on streets without bicycle infrastructure.

CONCLUSION

Advocates for bike commuting point to the physical health and air-quality benefits, as well as its role in congestion mitigation. Those with reservations highlight the constraints of narrow streets, the inconvenience to other modes of transportation, and particularly, loading and delivery challenges on residential streets. There, of no doubt, also a generational dimension to the discussion and a cultural tension between those who prize auto-mobility and those who prioritize sustainability. It’s also worth highlighting that 40% of Greater Center City’s residents are ages 20 to 34 and 37% of the people who moved into Philadelphia between 2010 and 2014, moved into Center City (25%) or University City (12%). So this is also a question of how Philadelphia accommodates change and, in that process, all perspectives will need to be balanced in shaping a workable plan.

FIGURE 4: PROPORTION OF BICYCLE COMMUTERS BY RACE/ETHNICITY

![Pie chart showing the proportion of bicycle commuters by race/ethnicity.](image-url)

*Non-Hispanic (Hispanics may be of any race)
Source: US Census Bureau, American Community Survey 2014 5-year sample
FIGURE 6: BICYCLE LANE STATISTICS, PHILADELPHIA AND GREATER CENTER CITY

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<th>TYPE</th>
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<th>GREATER CC STREETS</th>
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<tr>
<td>TOTAL</td>
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Source: Center City District Calculation from Philadelphia Streets Department Data