



BICYCLE COMMUTING

DECEMBER 2018

CENTER CITY DISTRICT,
CENTRAL PHILADELPHIA DEVELOPMENT CORPORATION &
CENTRAL PHILADELPHIA TRANSPORTATION MANAGEMENT ASSOCIATION

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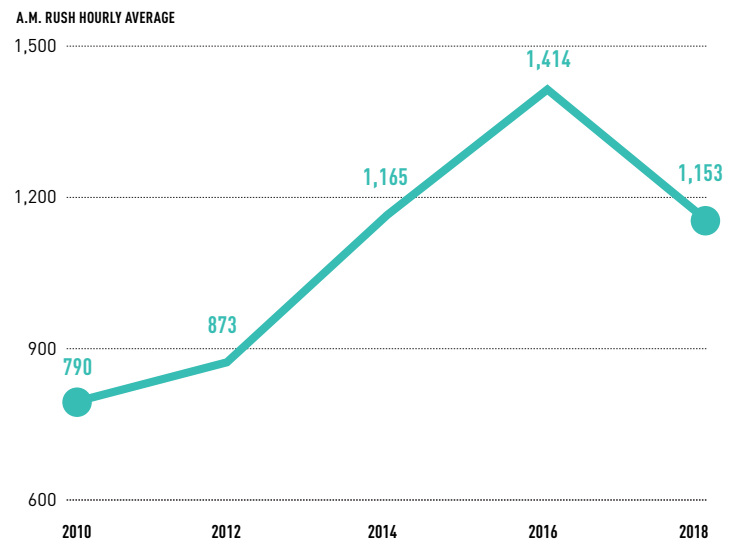
PETER TOBIA

Cities across the United States have been recalibrating their streets to accommodate increasing levels of bicycling. In the last decade Philadelphia has added over 300 miles of bike lanes, introduced the Indego bike share program and doubled the cycling mode share from 1.2% to 2.6% citywide. Within Center City and South Philadelphia, mode shares for cycling have risen to 7.3% and 8.1% respectively, according to the 2017 American Community Survey performed by the US Census Bureau.

In the past two years however, cycling growth appears to have reached a plateau. Center City District's early October 2018 counts of morning bicycle commuters entering Center City from the south declined 18% from 2016 levels, returning approximately to where they were in 2010. While weather may have been a factor, Indego bike share trips for the first nine months of 2018 were also down 15% compared to the first nine months of 2017.¹

This year's decline is the first observed in the eight years of the CCD's biennial count program. The limited duration and frequency of data collections for each year's observations precludes drawing any definitive conclusions. It could simply be that this fall's humid weather depressed ridership, even though all counts were done on days without rain. But, growing traffic congestion in Center City, which is delaying transit and private vehicles as well, may also be impacting the willingness of individuals to commute by bicycle.

FIGURE 1: AVERAGE HOURLY MORNING RUSH BICYCLE COMMUTERS - NORTHBOUND TO CENTER CITY, 2010-2018



Source: Center City District 2010-2018 Bicycle Surveys

¹ Surveyors were positioned north of Spruce Street on each street heading into Center City from the south, as well as the ramp from the South Street Bridge to the Schuylkill River trail. Counts were conducted during the morning rush hour (8 a.m. to 9 a.m.) on four weekday mornings, October 3-4 and 9-10, 2018. The weather was overcast and humid. Figures shown are four-day averages. Observed daily counts showed little variation day-to-day, generally diverging from the average by less than 10%.



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The distribution of cyclists by street followed the same pattern as previous years, with the highest numbers of riders observed on the streets with the best bike infrastructure, 13th and 22nd streets (Figure 2). Counts were down on all but two of the 12 streets surveyed, suggesting that any localized explanation (like construction on a particular street) is not likely to be the cause. The findings are similar to those made by the Bicycle Coalition counts in Center City, which show ridership leveling off in recent years.²

From the inception of the Indego bike share system in April 2015 through September 2018 (the most recent data available), riders have taken approximately 2.4 million trips on Indego bicycles, driven in large part by commuting trips.³ The system was launched with approximately 500 bicycles at 68 stations and has grown to 1,300 bicycles at 130 stations. From the first full year of the program to the second (i.e. May 2015–April 2016, compared to May 2016–April 2017), the program grew by 33%, however the second to third year grew by a more modest 7%. Total trips in the first nine months of 2018 are so far down 15% from the first nine months of 2017 (Figure 3).

That the volume of cyclists commuting might plateau or decline is not surprising. Ridership increased earlier in this decade as new bike lanes were installed. The number of lanes has not expanded since 2011; existing lanes have not been routinely restriped and the number of potholes appears to have increased. The growing use of Uber and Lyft may also cut into the cycling mode share, as it has with transit. Increases in traffic congestion and lanes blocked by illegal parking may also discourage people from cycling because clogged streets can be unsafe.

CENTER CITY DISTRICT'S 2018 COUNTS OF MORNING BICYCLE COMMUTERS EARLIER THIS FALL DECLINED 18% FROM 2016 LEVELS, RETURNING APPROXIMATELY TO WHERE THEY WERE IN 2014

2: 2017 Bike PHL Facts, The Bicycle Coalition of Greater Philadelphia

3: 49% of weekday trips and 37% of trips overall have occurred during commuting hours

FIGURE 2: AVERAGE HOURLY BICYCLE MORNING RUSH COMMUTERS BY STREET (NORTHBOUND STREETS AT SPRUCE STREET, 8 A.M. TO 9 A.M.)

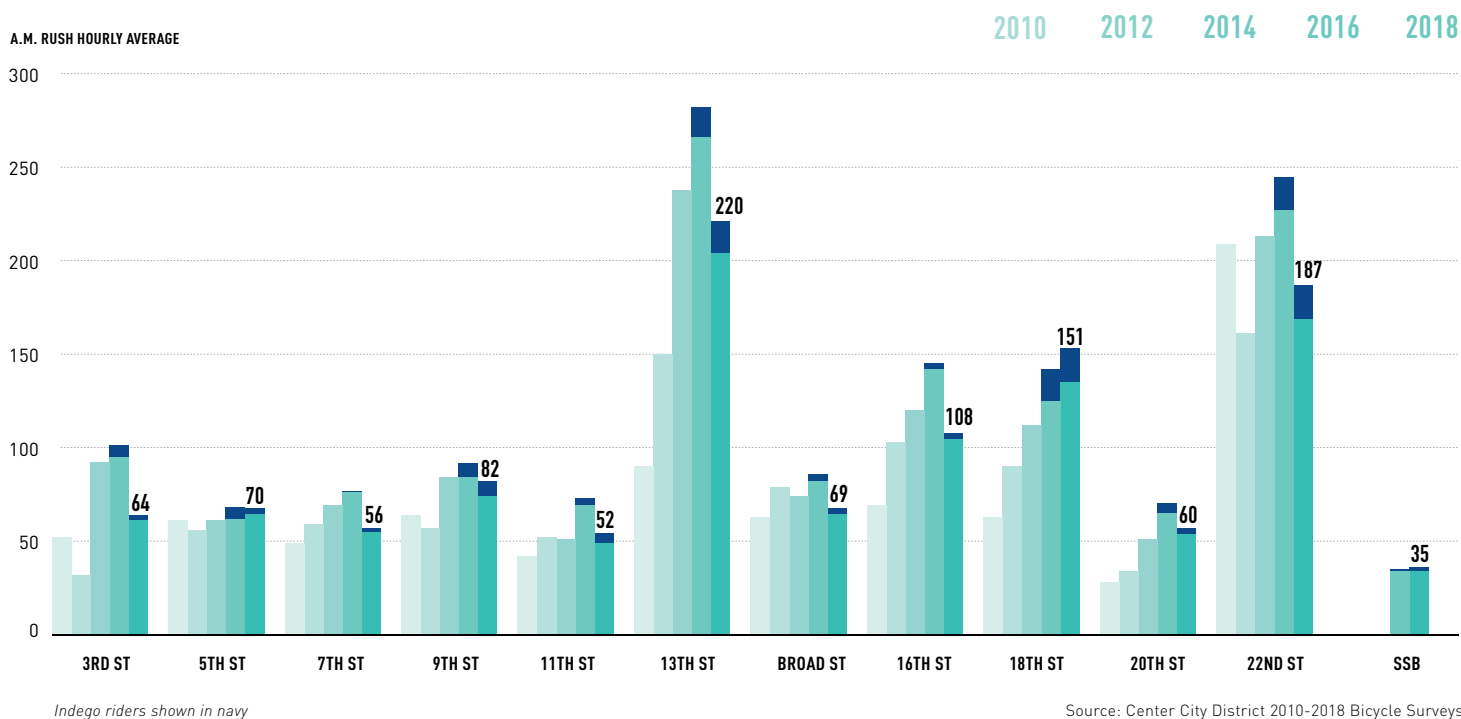
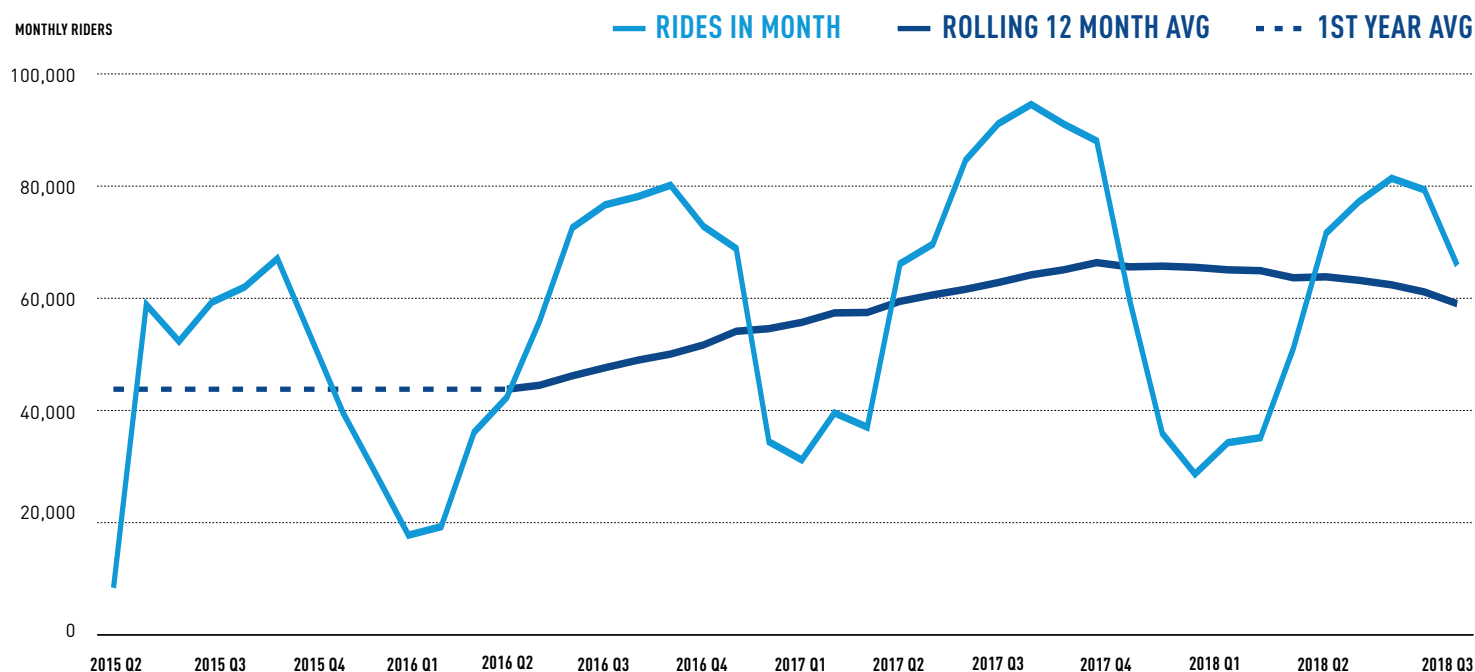


FIGURE 3: INDEGO MONTHLY RIDERSHIP, 2015-2018



Cycling is highly weather dependent and Indego usage clearly shows those seasonal peaks and valleys. But after a steady climb from its introduction in 2015, ridership reached a plateau in 2018

Source: Indego

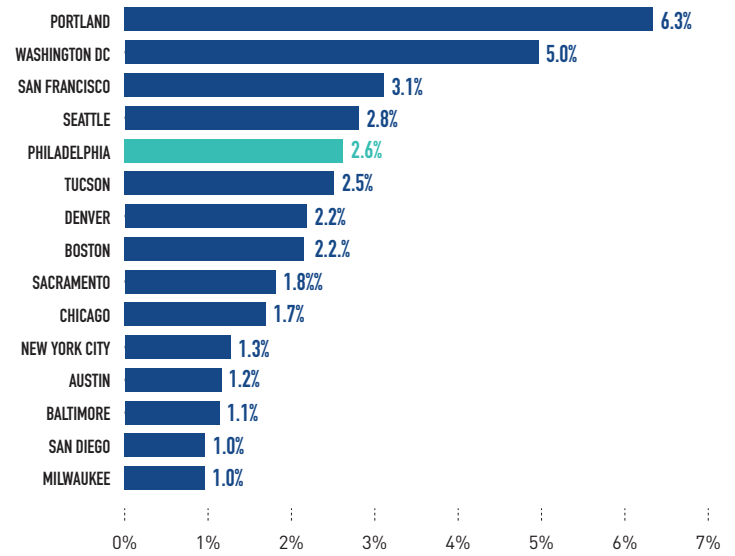
CONTEXT

The dense, compact form of Philadelphia’s live-work downtown creates excellent preconditions for bicycle commuting: (1) 42% of working residents who live in Greater Center City work in Greater Center City; (2) Center City’s residents skew younger and this demographic is more inclined to cycle; (3) the relative flatness of downtown’s topography eliminates much of the physical stress of bike riding; (4) Philadelphia’s comprehensive public transit system facilitates cycling as an alternative to car ownership by providing a different option during inclement weather. All of these factors are apparent in Figure 5, which shows the much higher cycling mode share for residents of Center City and South Philadelphia.

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 accommodate dedicated bike lanes without removing parking or existing vehicle travel lanes and that has created a lot of friction in the effort to expand bike lanes.

Statistics from the U.S. Census Bureau’s American Community Survey show Philadelphia ranks 5th in the nation among major cities by bicycle commute mode share with 2.6% of workers commuting by bike (17,180 people) in 2017 (Figure 4). Among cities with a population over 1 million, Philadelphia has the highest percentage of commuters who bike. While the mode share of bicycling is

FIGURE 4: TOP 15 CITIES BY BICYCLE COMMUTER MODE SHARE FOR CITIES WITH POPULATION 500,000 OR MORE



Source: U.S. Census Bureau, American Community Survey 2017 1-Year Estimates

relatively low, it has grown significantly over the past 10 years, with the number of bicycle commuters more than doubling since 2006, when mode share was only 1.2%. Rates of bicycle commuting are highest in Center City and South Philadelphia, with mode shares of 7.3% and 8.1%, respectively (Figure 5).





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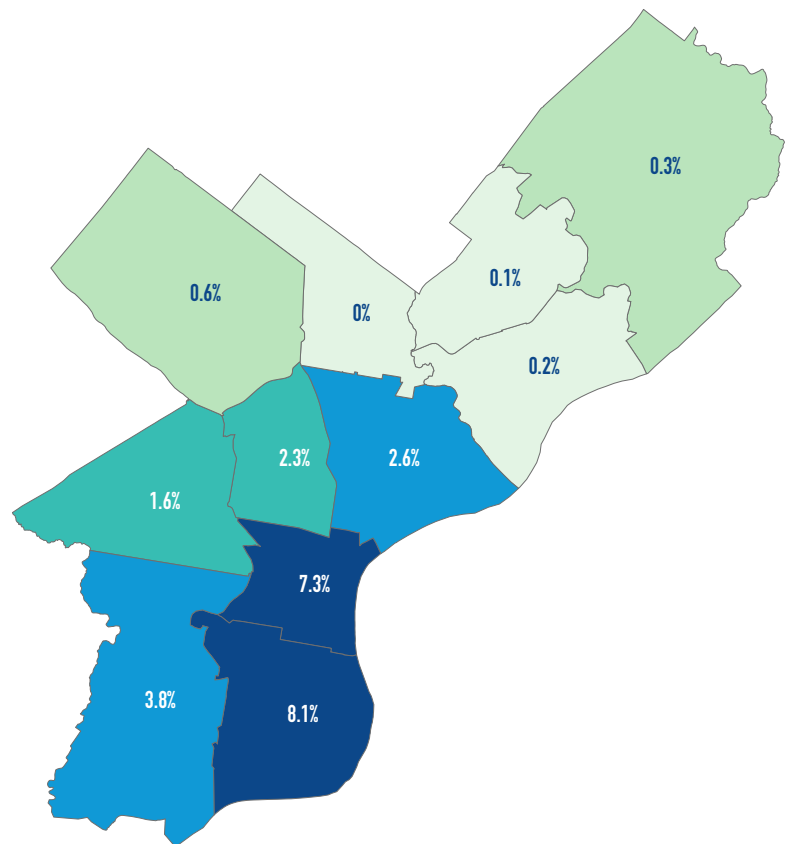
COMING SOON? DOCKLESS & ELECTRIC

Dockless and electric bikes or scooters have been introduced in more 70 American cities and could make their Philadelphia debut in the near future. Because e-bikes and scooters don't require a lot of physical effort, they could have a broader appeal than traditional pedal bikes. At the same time, without stronger, more consistent enforcement of regulations for all modes, the introduction of e-bikes and scooters could create more confusion and conflicts on roadways. Alternatively, the companies seeking to introduce these new technologies could become major advocates for improved and protected lanes, for smaller-sized commuting modes.

CONCLUSION

Car and bus drivers, passengers, cyclists, delivery companies and pedestrians all agree that navigating Center City's streets is not getting any easier. Downtown congestion is an inevitable byproduct of success. Accommodating 300,000 jobs, 190,000 residents, as well as a robust hospitality, retail, dining, and cultural scene in Greater Center City's 8.2 square miles is a challenge. But that does not mean we should neglect or be paralyzed by the situation. Keeping people moving on Center City's narrow streets is essential to our competitiveness and quality of life. It is a challenge that requires more coordinated and better funded management, the use of new technologies, a more thoughtful allocation of space and the equal enforcement of regulations for cars, deliveries, parking, public transit, cycling and walking.

FIGURE 5: BICYCLE COMMUTING MODE SHARE IN PHILADELPHIA



Source: U.S. Census Bureau, American Community Survey 2017 1-Year Estimates