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DATE: 6/29/2020
RE: Bicycle Parking Downtown Lawrence

Background

In late 2015, the Douglas County Community Foundation awarded an \$8,900 LiveWell Community Wellness Grants to the City of Lawrence to install bicycle parking downtown.

Twenty-two inverted U racks (accommodating two bikes per rack) of on-sidewalk bicycle parking and seven bicycle corral locations (holding four to ten bikes per corral) were installed, with the most recent installations in November 2017.

- 8th & Massachusetts St (SE Corner) – June 2016
- 100 East 9th St (parallel parking space closest to alley) – June 2016
- 707 Vermont St (Library) – March 2017
- Massachusetts Street & 10th Street (NW Corner) – November 2017
- 1000 block of Massachusetts Street – November 2017
- 9th & New Hampshire (NE & SE Corners) – November 2017 (temporarily removed for 9th street construction)



1000 Block of Massachusetts St



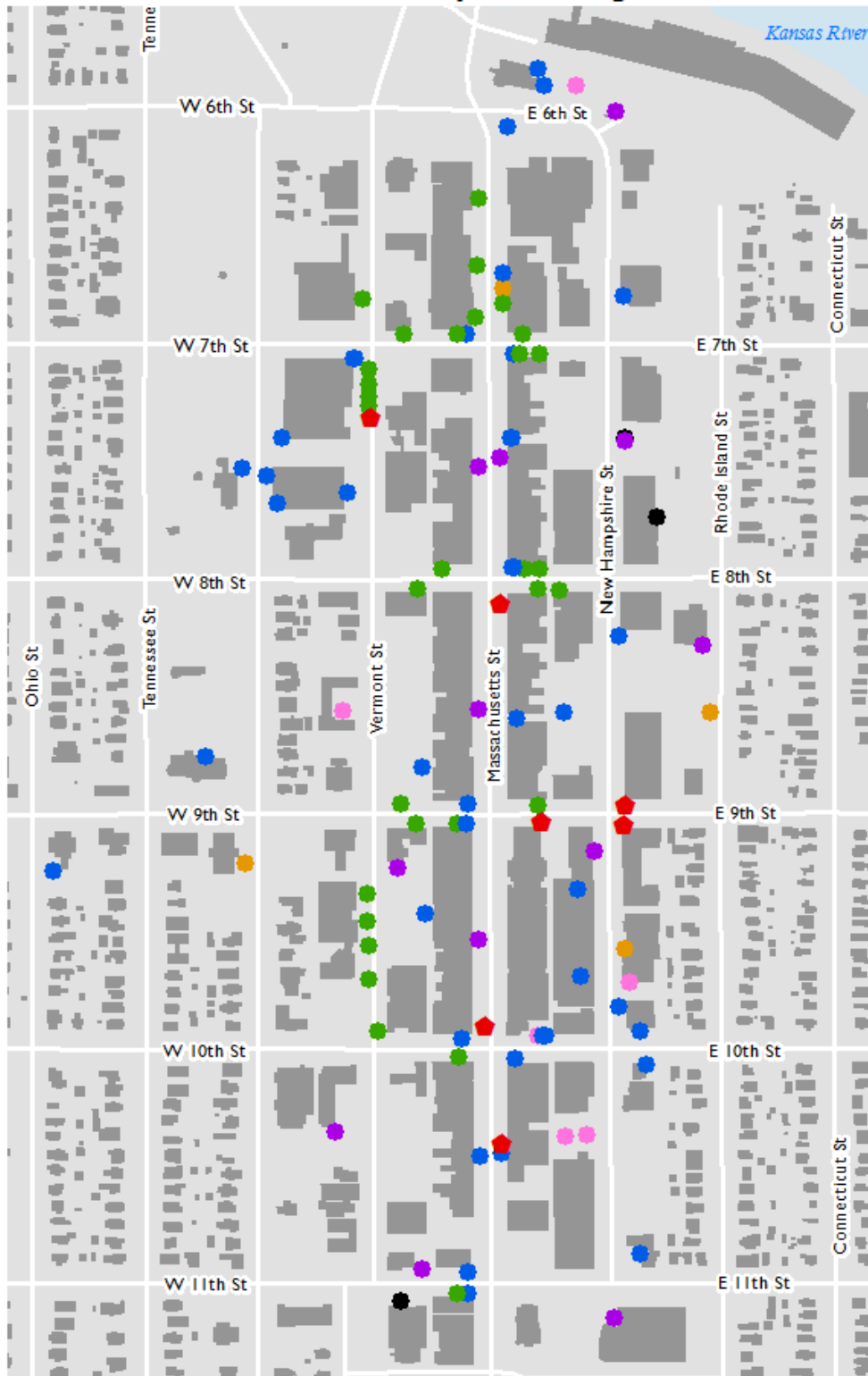
9th and New Hampshire (SE Corner)

Since 2011, the City and downtown development projects have added 154 bicycle parking spaces downtown.

In 2016, prior to the installation of the pilot project, downtown bike parking counts were conducted. View the data and the subsequent bike parking and amenities policy review at <https://assets.lawrenceks.org/mpo/bicycle/BikeParkInvRecommendations-2016.pdf>

The Bicycle Corral locations were installed as a pilot project that was approved through December 2017. After gathering one year's worth of data the project was set to expire but, due to delayed installation of bicycle corrals, the data for the pilot project was incomplete at that time. Extending the project allowed for data to be collected in 2018, demonstrating significant improvement to the operation of those facilities. To evaluate the pilot project, bicycle parking was observed and recorded downtown.

Downtown Lawrence Bicycle Parking Locations



May 2017 Counts

The overall number of parked bicycles observed for May 2017 was 34% lower than the previously observed number of parked bicycles in September 2016 and could be due to inclement weather. However, the number of parked bicycles not on racks stayed relatively similar to the September 2016 counts, showing that bicyclists in the downtown area are still using illegal non-rack locations including trees and light poles. As shown in the maps below, the bike corral at 8th and Massachusetts Street met the demand for bicycle parking thereby remedying the insufficient bicycle parking issue in the half block.

September 2017 Counts

In mid-September the MPO measured the overall number of parked bicycles observed in downtown area. The counts indicate September 2017 had an increase of 19% in observed number of parked bicycles since the May 2017 counts. Additionally, the total number of parked bicycles not on racks decreased by 14% between May and September of 2017, indicating that the additional parking stalls have made significant improvements to the overall bicycle parking capacity.

May 2018 Counts

May 2018 counts revealed the overall number of parked bicycles observed was 6% lower than the previous observation of parked bicycles in September 2017. The total number of parked bicycles not on racks decreased by 7% between May 2018 and September 2017. Additional parking stalls appear to have made improvements to the overall parking capacity.

September 2018 Counts

From May to September of 2018 the total capacity of bike parking downtown increased from 494 to 516 spaces. From September 18th through September 22nd volunteers observed a 71% increase in the overall number of parked bicycles in the downtown area. Despite the increase in bike ridership, the percentage of parked bicycles not on racks decreased from 15 to 11 percent, indicating additional parking stalls have improved parking habits among riders.

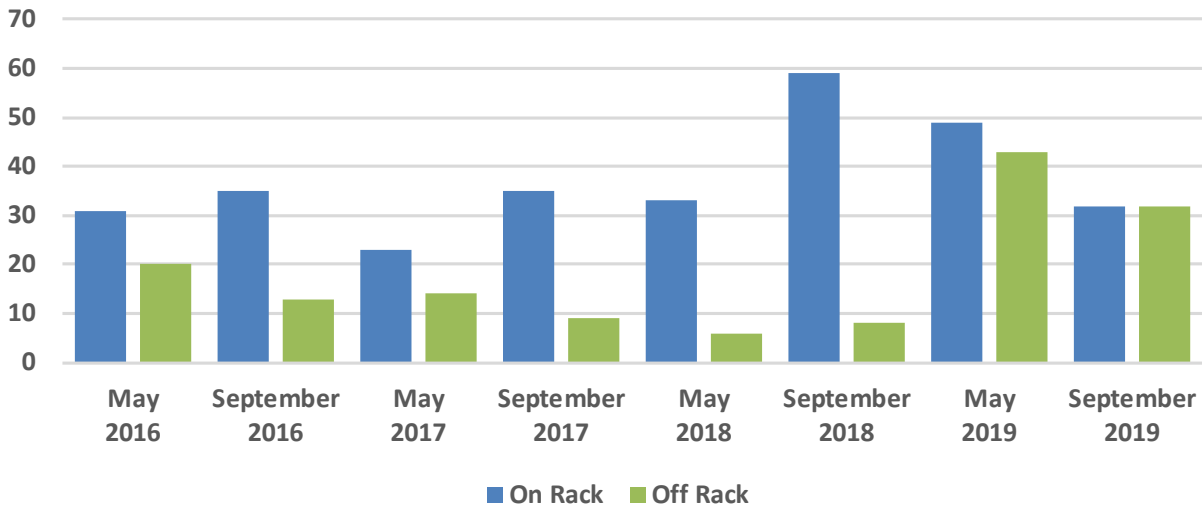
May 2019 Counts

From September 2018 to May 2019 the total capacity of bike parking downtown increased from 516 to 532 spaces. From April 25th through May 11th volunteers observed a 37% increase in the overall number of parked bicycles in the downtown area. However, the percentage of parked bicycles not on racks increased from 11 to 47 percent, indicating that parking habits among bike riders dramatically worsened since September of 2018 despite increased access to bike parking racks.

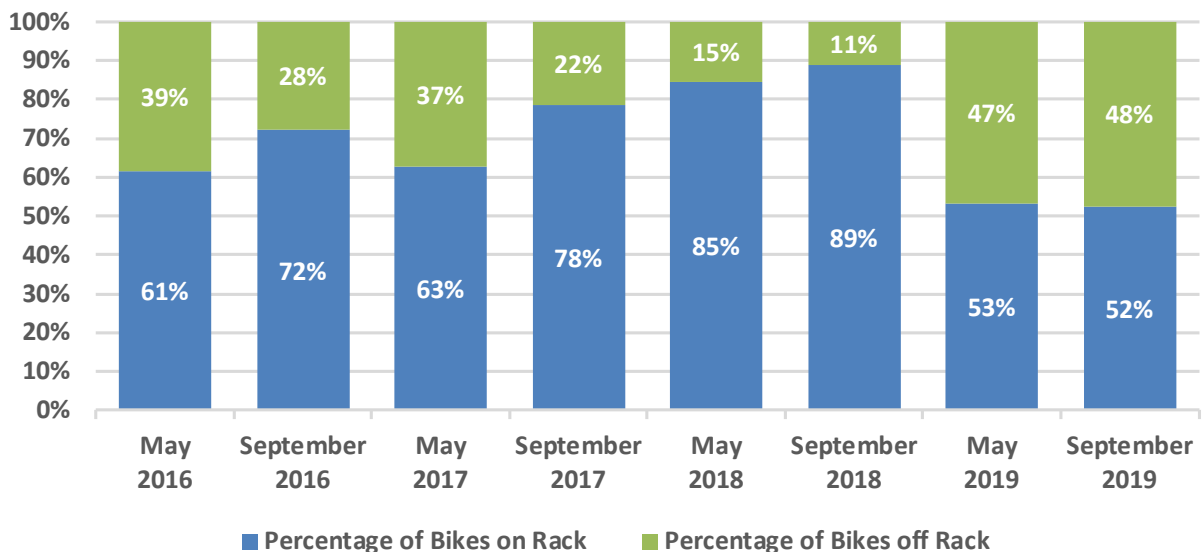
September 2019 Counts

From September 14th through September 19th volunteers observed a 24% decrease in the overall number of parked bicycles in the downtown area compared to May 2019. Along with the decrease in bike ridership, the percentage of parked bicycles not on racks increased from 47 to 48 percent, indicating that this year saw very little change in the parking habits from May to September, but they were dramatically worse compared to 2018's parking habits as a whole.

Number of Bicycles Per Day



Percent of Parking by Rack Type

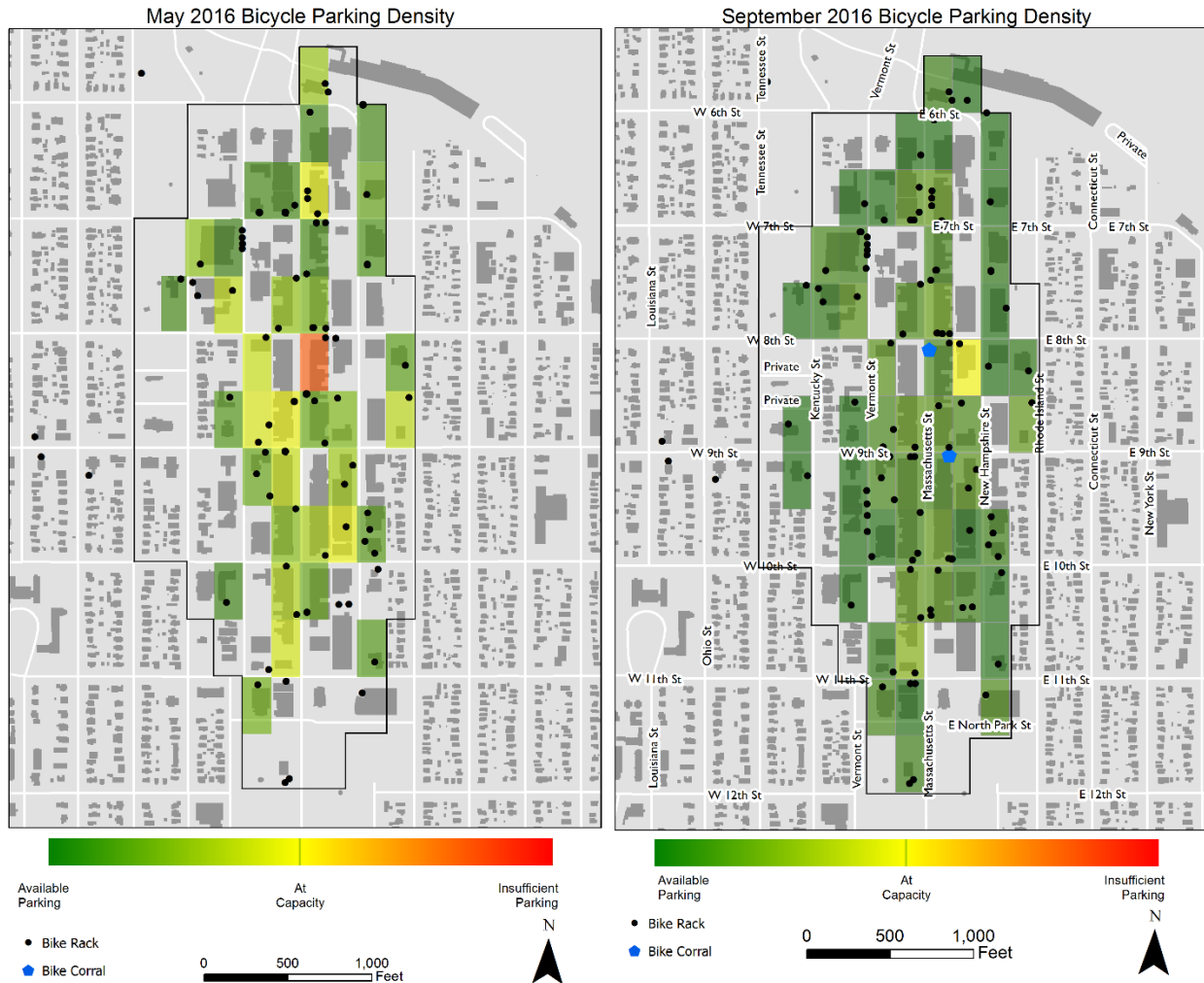


Bicycle Parking Density

The maps below show the density of observed parked bicycles compared to the capacity of bicycle parking in individual quadrants, each of which is comprised of a half city block. The color scale shows a graduation from green to red, symbolizing capacity level. Green areas indicate there is adequate bicycle parking. Yellow areas are at capacity, showing there may be need for additional infrastructure to accommodate a higher demand of bicycles in the vicinity. Red areas indicate there is insufficient parking, signifying the need to provide additional amenities due to increased bicycle use in the quadrant.

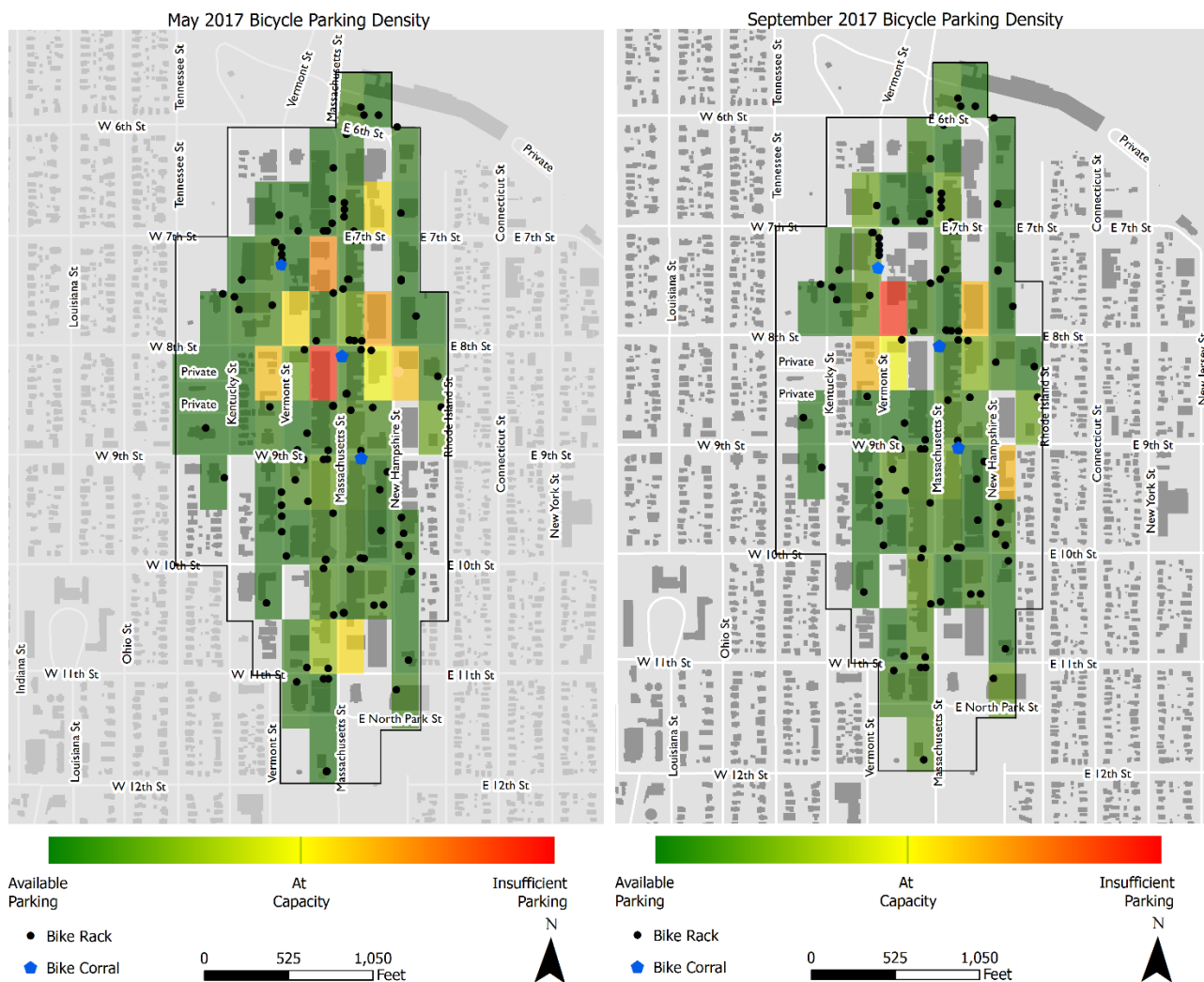
2016 Maps

The May 2016 map below was derived before the Pilot Project installation occurred. Two bicycle corrals and 20 inverted U racks (adding 60 new parking spaces) were installed over the summer. Counts were done in May and September of 2016:



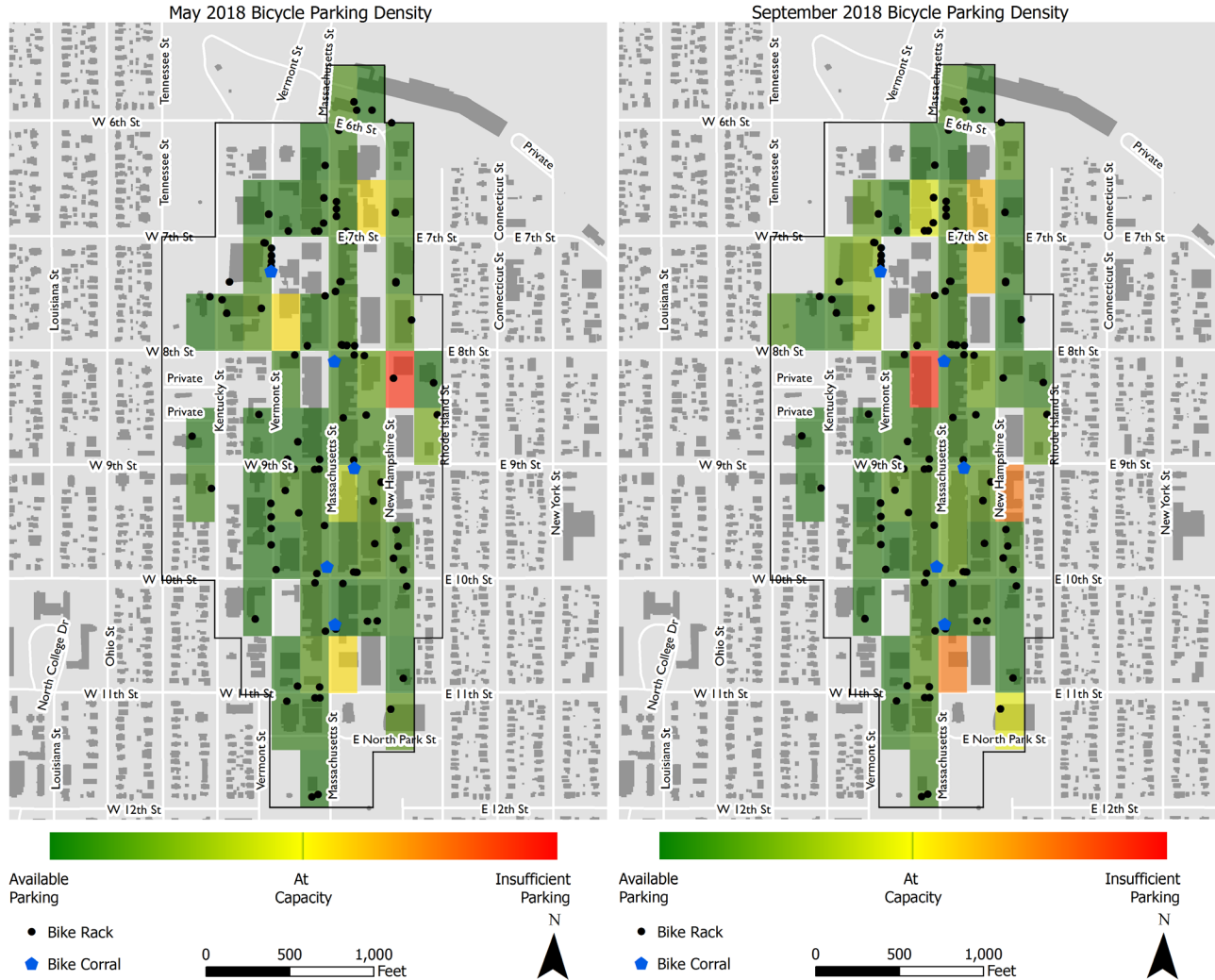
2017 Maps

The maps below were created with data from the May and September 2017 counts (prior to the final 4 corral installation):



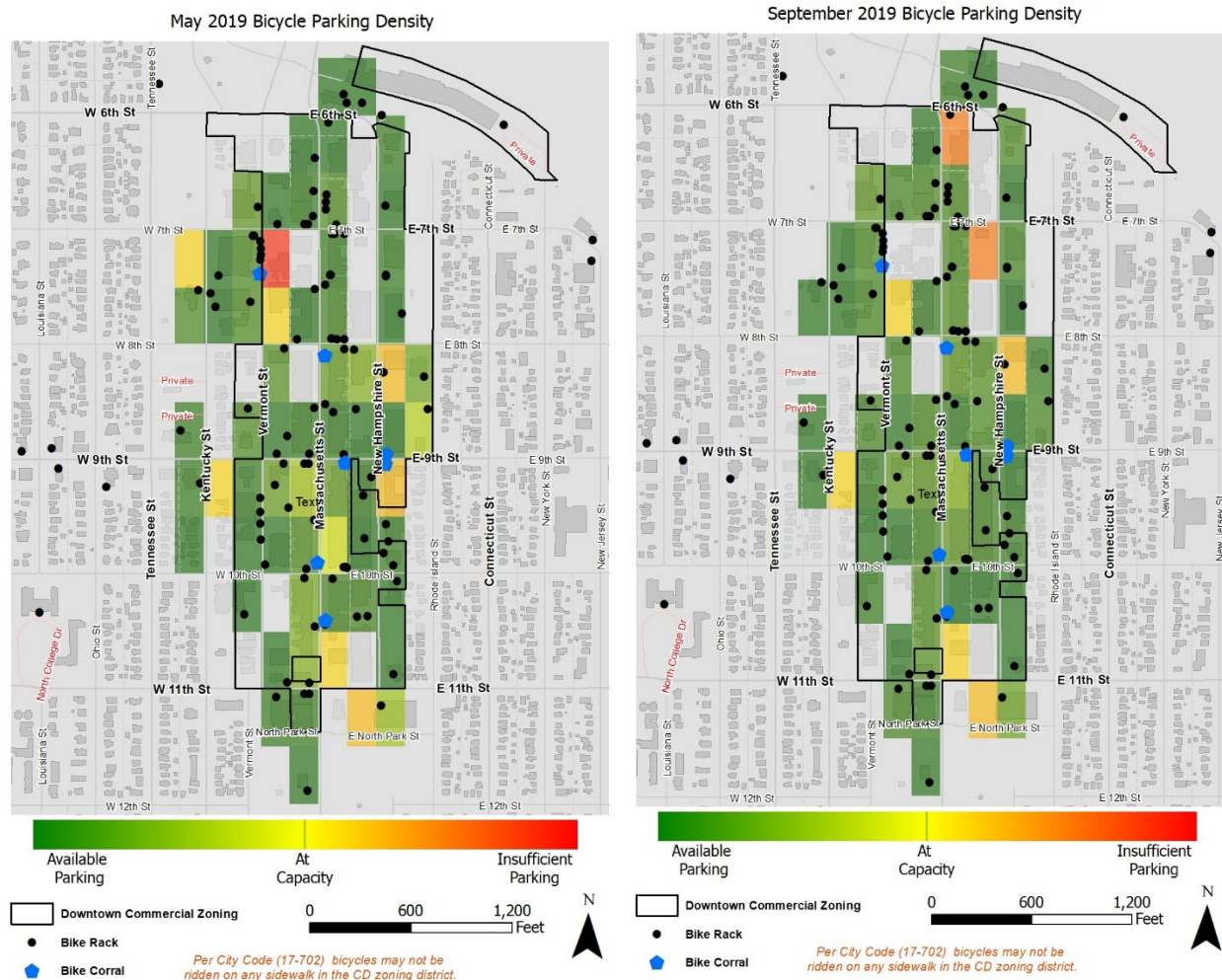
2018 Maps

The 9th and New Hampshire racks were removed for road construction on 9th street and were not included in the September 2018 analysis. The maps below were created with data from the May and September 2018 counts:



2019 Maps

The 9th and New Hampshire racks, which were removed in 2018, were not re-installed before these counts were conducted. Thus they were not included in the 2019 analysis. The maps below were created with data from the May and September 2019 counts:



Conclusion

The data collected shows specific areas should be further observed and re-evaluated due to demand and corrals should remain to incentivize biking downtown. Increased bike traffic downtown necessitates a need for further monitoring. Bike parking counts and mapping can be utilized to monitor demand for those types of facilities. Staff will continue to evaluate downtown bike parking usage by conducting peak day and night counts and will work to increase awareness of legal bicycle parking options in the downtown area as well as opportunities to implement long-term parking facilities.