

Bikes, Buses, and Boston

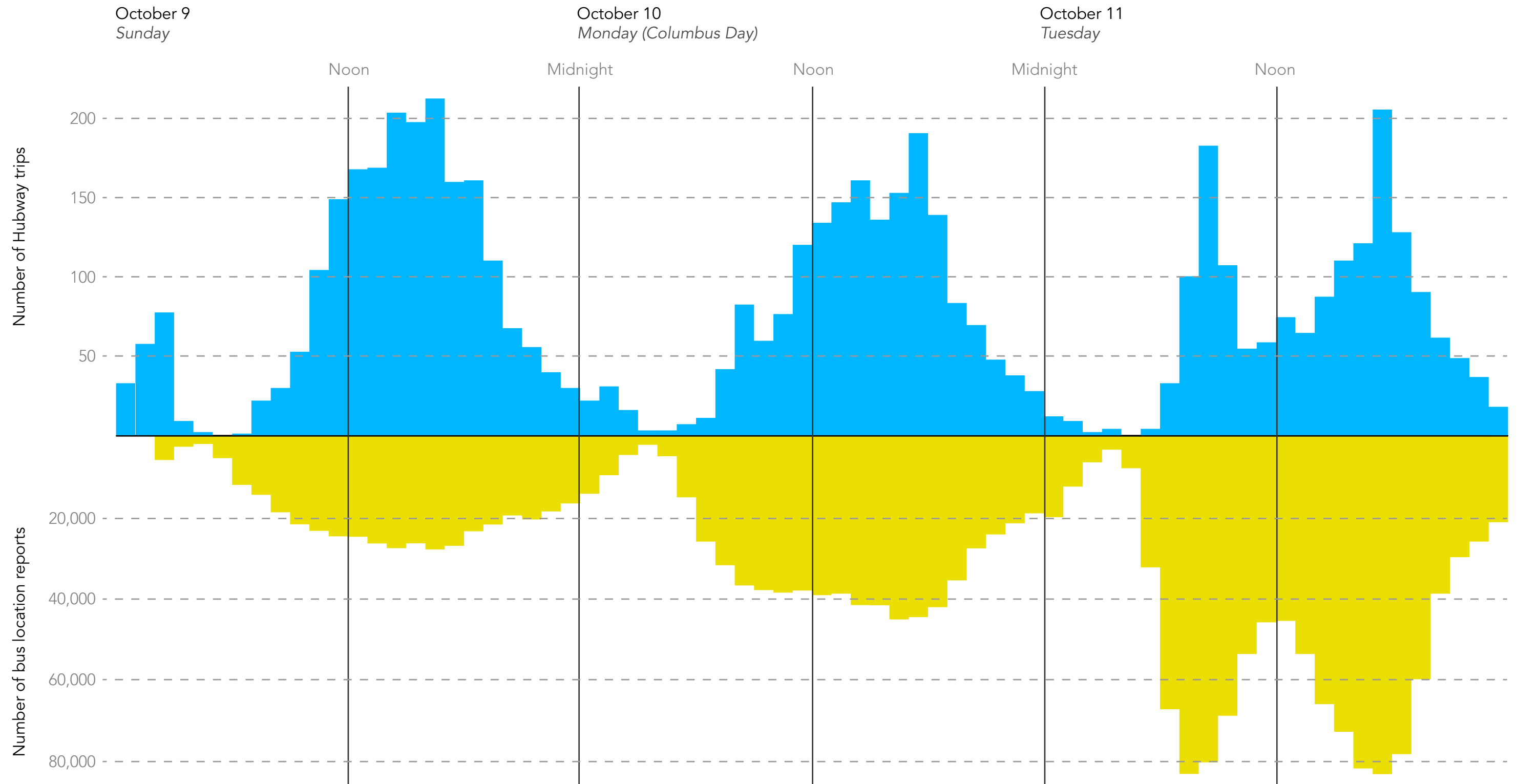
Potential routes for all trips between Hubway stations, reported MBTA bus locations, and buses reporting open doors within 500 ft of Hubway stations; Oct. 9–11, 2011

Three days in the life

Real-time MBTA bus location data and Hubway bicycle trip data from October 9–11, 2011 reveal patterns for three typical types of days for these transportation systems: a Sunday, a Monday holiday, and a weekday. The chart below shows the number of bicycle trips and bus location reports per hour over the three days. Unlike bus trips, which run much more often on weekdays, Hubway bicycle trips occur in similar numbers on each day, and in fact more on Sunday, suggesting that the bike-sharing program is often used for leisure trips—and after bars close late on Saturday night. Both buses and bikes show commuter patterns on a weekday, however, with peaks during the morning and evening rush hours.

2,273,909
Total number of bus location reports

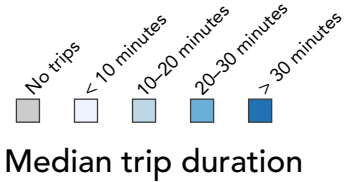
5,562
Total number of Hubway trips



Hubway bike trip durations

The duration of trips between Hubway stations is affected by several factors. First and most obvious is distance. Second is the pricing scheme, under which riders incur additional charges for trips longer than 30 minutes. The data reveal a third factor, which is the member type. "Casual" members, who sign up on the spot for one or three days of membership, tend to take longer trips—which likely include many leisure rides—while registered annual members' trips are shorter—presumably due in part to more usage for day-to-day commuting.

The charts here show the median trip duration from stations named in rows to those named in columns, for both casual and registered members. Notice that many station pairs saw no trips at all, and that trips returning to the same station from which they departed (the cells in a diagonal from top left to bottom right) are fairly consistently long, especially for casual members.



Casual Members

Registered Members

