
This thesis examines the largely successful bike-sharing system “Le Vélib’” in Paris. By probing the travel behavior and modal shifts of Vélib’ users, the goal of this research is to investigate the interplay between both real and perceived effects of bike-sharing as a new transportation option in the city. Informed by the cognitive mapping literature, the study methodology involved the gathering of route sketches from Vélib’ users’ and analyzing the resulting maps in relation to modal shifts to Vélib’, trip purpose, and trip distance estimation. In addition, the thesis uses GIS to test for spatial patterns according to levels of station use. The findings in this paper include the following: among a significant portion of Vélib’ users, the Vélib’ system serves as a substitute commuter mode from bus and metro use; longer Vélib’ trips tend to be underestimated; and a walkability measure of 200 meters to the nearest bike station appears to influence stations’ level of use. Ultimately, although the data are insufficient to be conclusive, this thesis proposes that initial system scale and density of bike stations contribute to the overall success of a bike-sharing program, as measured by both ridership and modal shifts.