

Technological Infrastructure Required

The largest infrastructure required for this project are the bicycle rental kiosks. These must be sturdy, weatherproof structures with solidly locking slots for the bicycles. They must also have a payment station that preferably takes both cash and credit and/or debit cards for payment. Consideration must be taken as to how the bicycle stands will be powered. The units that UCLA is looking at moving forward with are solar-powered, taking advantage of the often fair Southern California weather, and enabling a wider range of locations as to where the units may be placed, as concerns about installing power lines are unnecessary.

On the bikes themselves, the use of small radio tracking chips would help ensure that in the case one or more did go missing, they could be more easily tracked. Theoretically, location data could also be gathered with such a chip, allowing for the collection of travel data.

This project would also use a smartphone app, perhaps in conjunction with a mobile-optimized website, to offer more information on the project. Maps of related information (bike paths, bike racks, project kiosks, etc.) could be relayed to participants, along with specific bike availability per kiosk. If users could create an account within the program, they could also feasibly make bike reservations in advance, or extend a current checkout period if they realize that they will be late returning the bicycle. The app would also be another potential location for sponsored advertising, alongside physical advertising at kiosks, and possibly on the bikes themselves.