Public Transit Design for Smart Growth: Using Choice Experiments to Quantify Tradeoffs, Values and Funding Implications

The proposed research will quantify the value of public transit using choice experiments in the form of stated preference surveys. The attributes investigated will reach beyond the traditional mobility-centric aspects of transit: focus will be placed on the non-market elements of transit that tend to create value in terms of community building and smart growth by using the innovative context of a hypothetical bond referendum. We will incorporate multiple attribute configurations into our design by identifying the tradeoffs the general public makes and are willing to pay for in a transit system. Three key policy questions will be addressed: 1) For whom should public transit systems be designed?, 2) How does design strategy impact ridership and overall system value?, and 3) What are the implications of #1 and #2 for the funding of future public transit? As a corollary this work will provide new insight into the tradeoffs involved in rail versus bus transit, from the perspective of riders, potential riders, and non-riders. It is hypothesized, for example, that commonly cited preferences for rail over bus transit are held primarily by user segments less focused on mobility and more on quality of life or placemaking. The proposed work is the first phase of a two-phase project. In this first phase we will develop and pilot-test the instruments to be fully deployed during the second, separate phase of the project. In the end, a clearer picture of the value of transit will emerge, identifying those who do pay using conventional devices, those who are willing to pay, and how to better align the two.

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