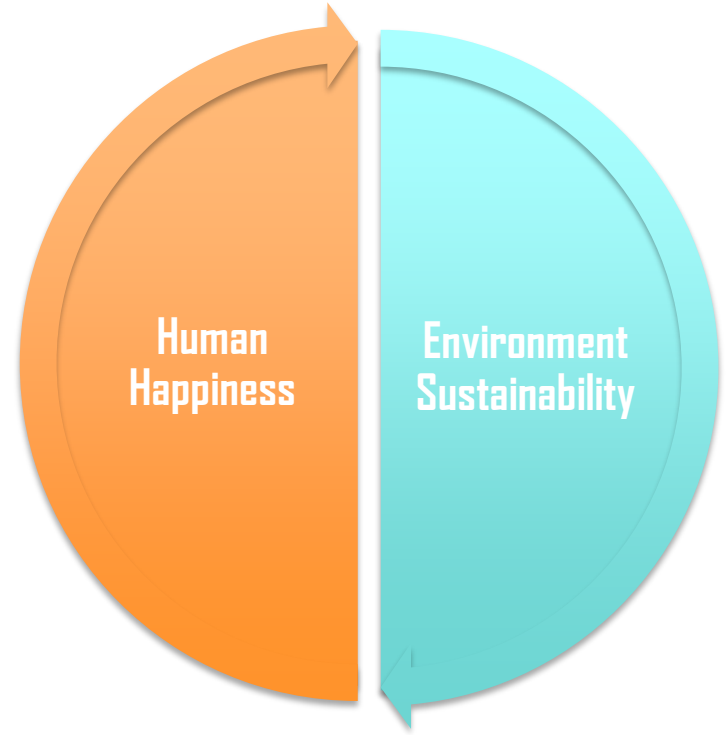
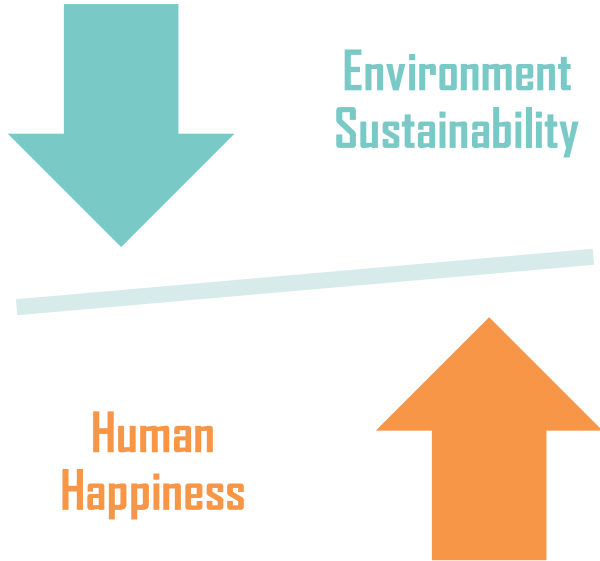


Happy Cities: Maximizing Human Well-Being through Urban Design in China and the U.S.

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December 16, 2019

Trade-off or Co-benefit?



Urban Design and Happiness

- Applying the **broaden and build theory of positive emotions** to the spatial dimension
- Creating and designing public spaces that evoke positive emotions and reduce negative emotions

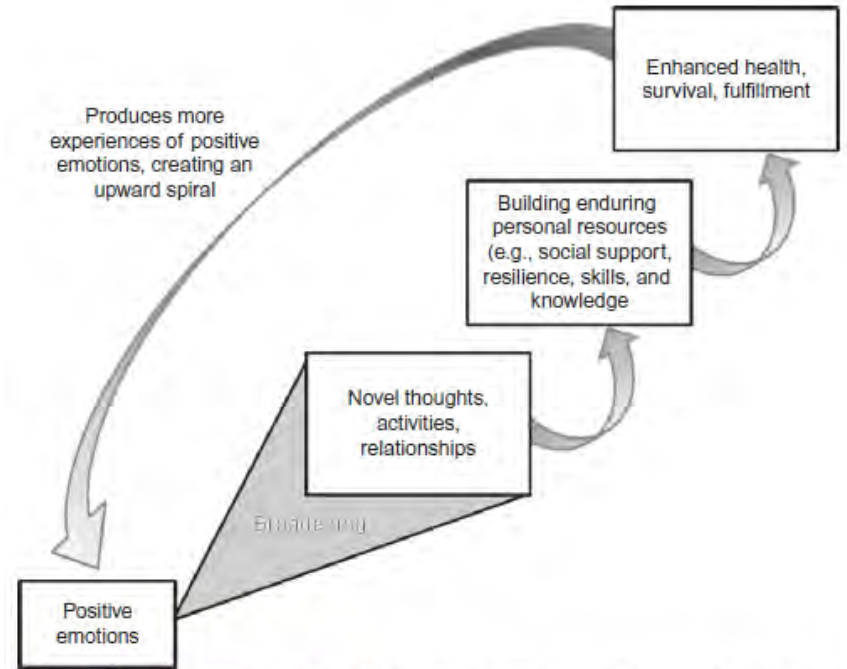


Figure 1.1 The broaden-and-build theory of positive emotions. Adapted from Fredrickson and Cohn (2008, Fig. 48.1)

Transportation is an Emotional Landscape

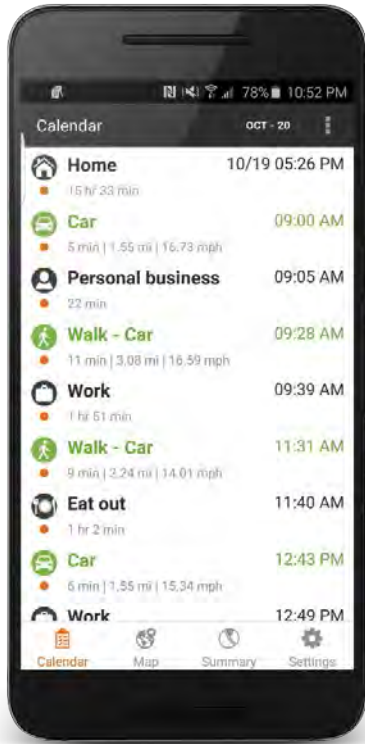




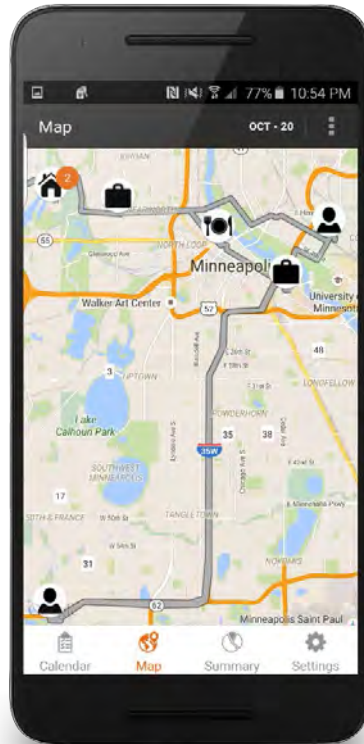
In any U.S. urban area, significant portions of land area is devoted to streets, parking, public transit, bicycle lanes, and sidewalks.



Measuring Human Behavior & Experience



Calendar View



Map View

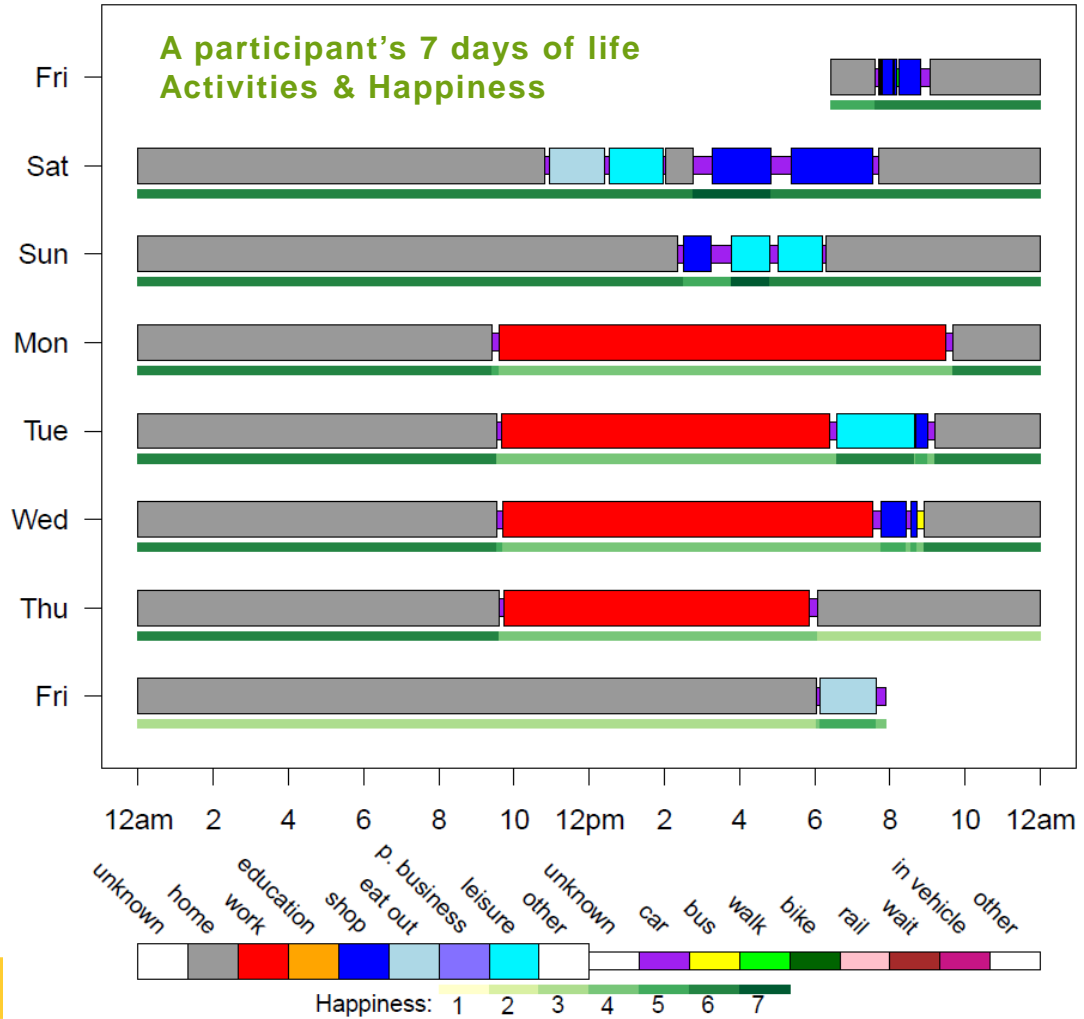


Annotation



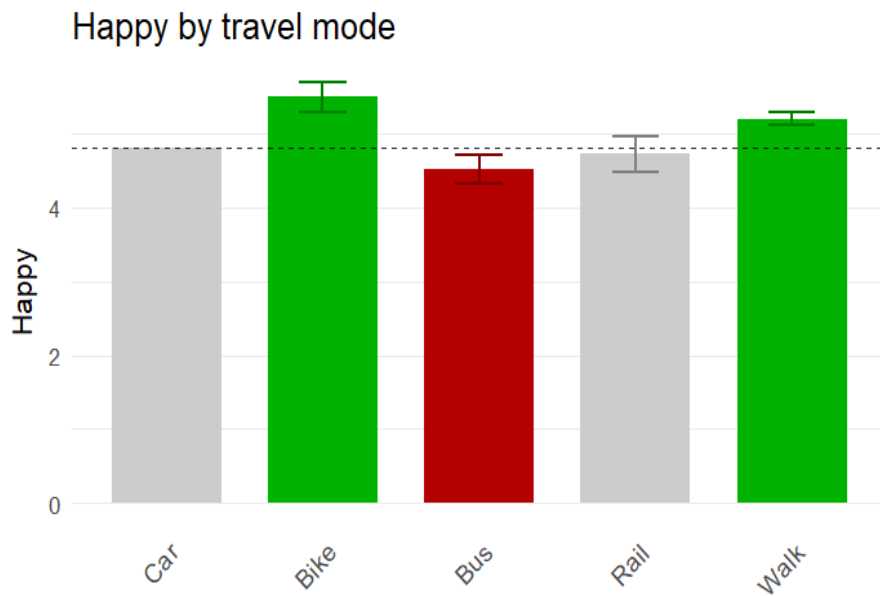
Summary

Continuous and Sequenced Data on Behavior and Emotional Experience

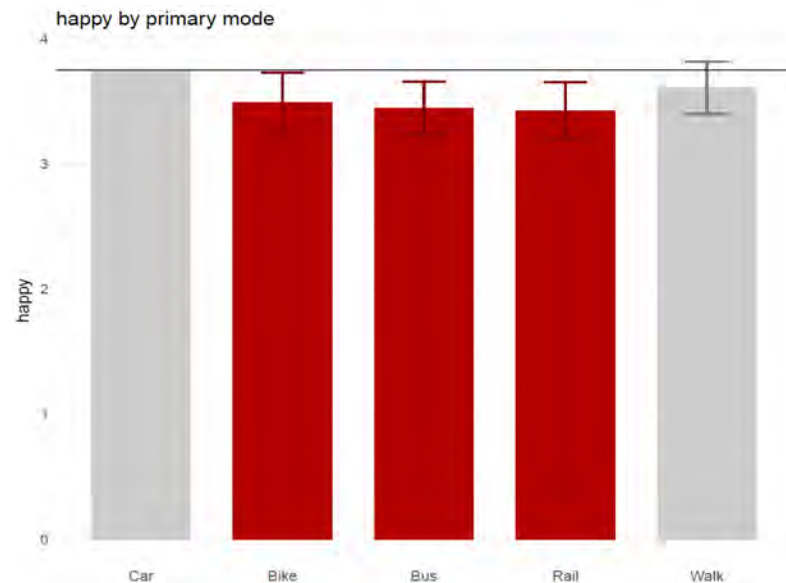


Happy by travel mode

Minneapolis, USA

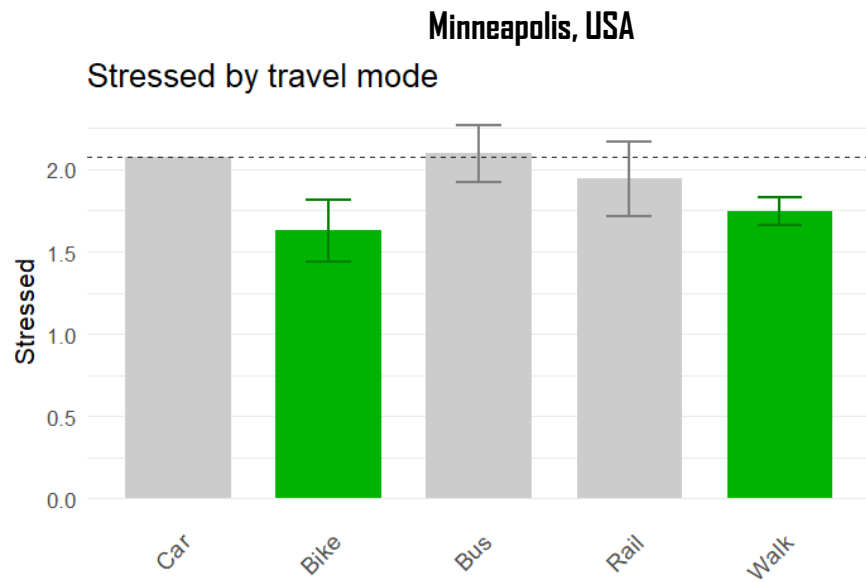


Shenzhen, China

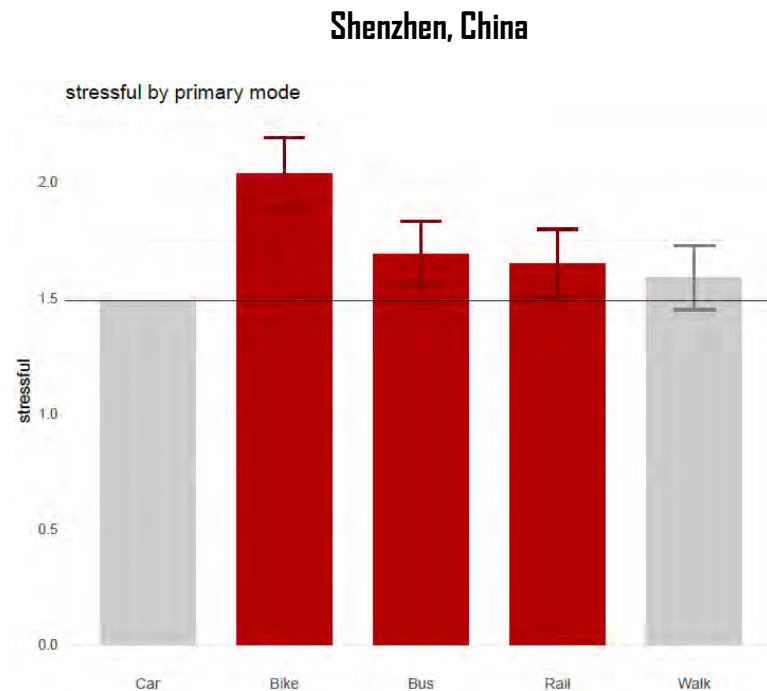


Adjusted for age, sex, race, employment status, income, family status, general health, life satisfaction, optimism/pessimism, disability, neighborhood characteristics, and trip duration.

Stressed by travel mode

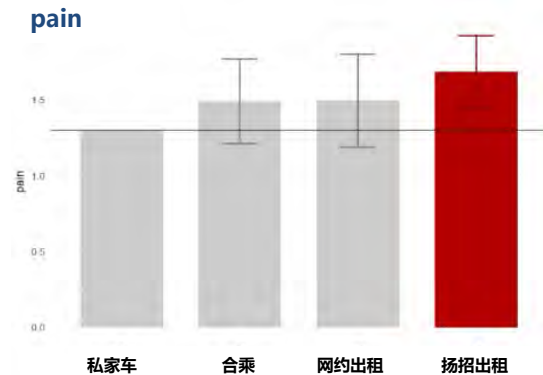
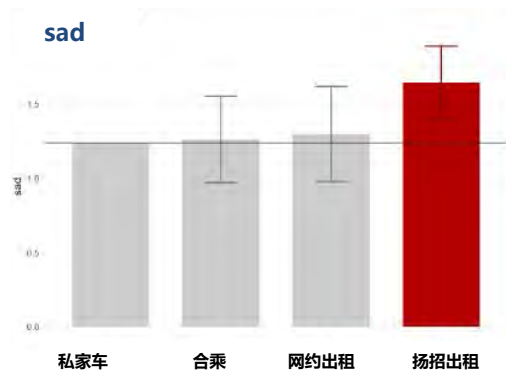


Adjusted for age, sex, race, employment status, income, family status, general health, life satisfaction, optimism/pessimism, disability, neighborhood characteristics, and trip duration.

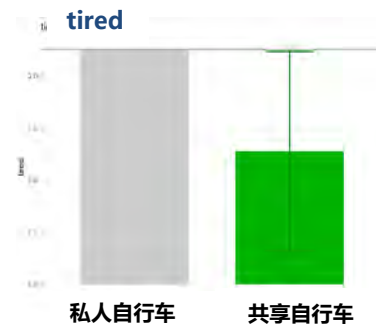
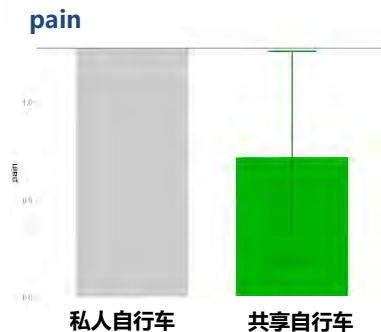


Shenzhen New Mobility Options

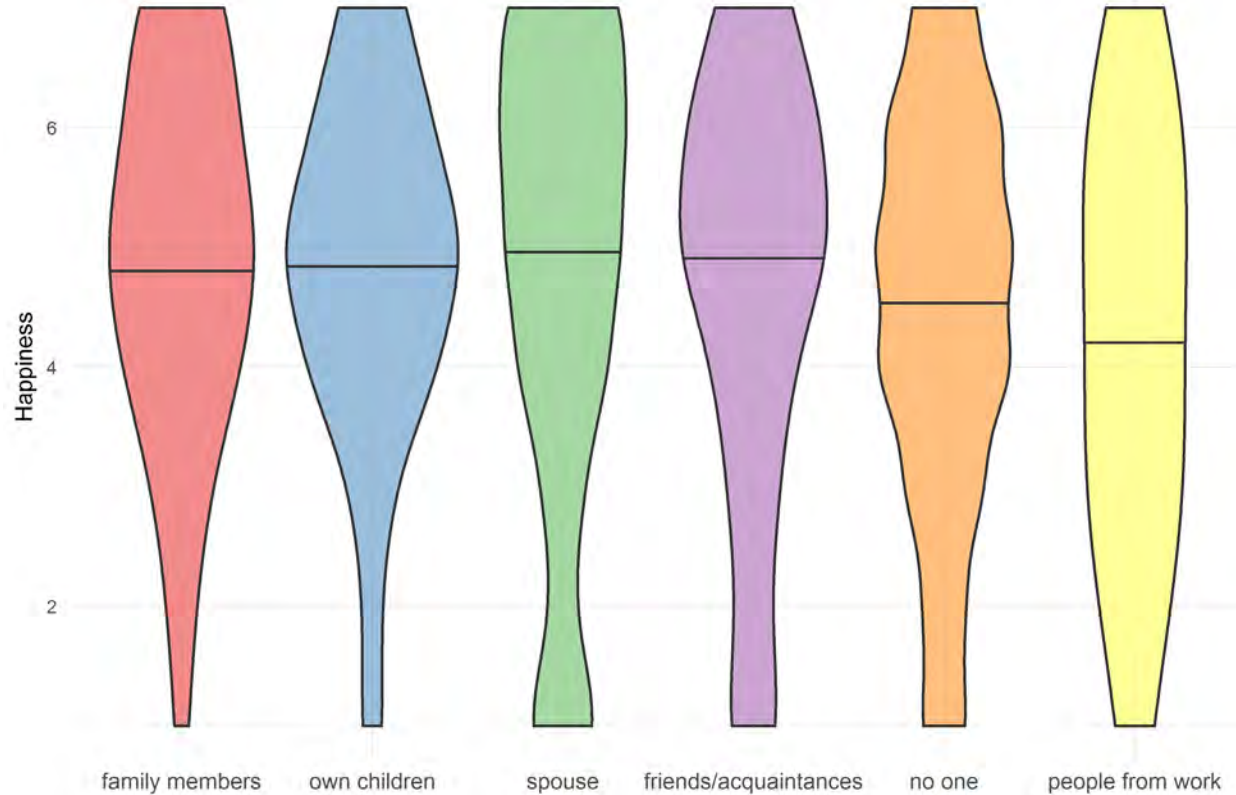
- **Street Taxi vs. Ridesharing**



- **Private bike vs Public Bike**



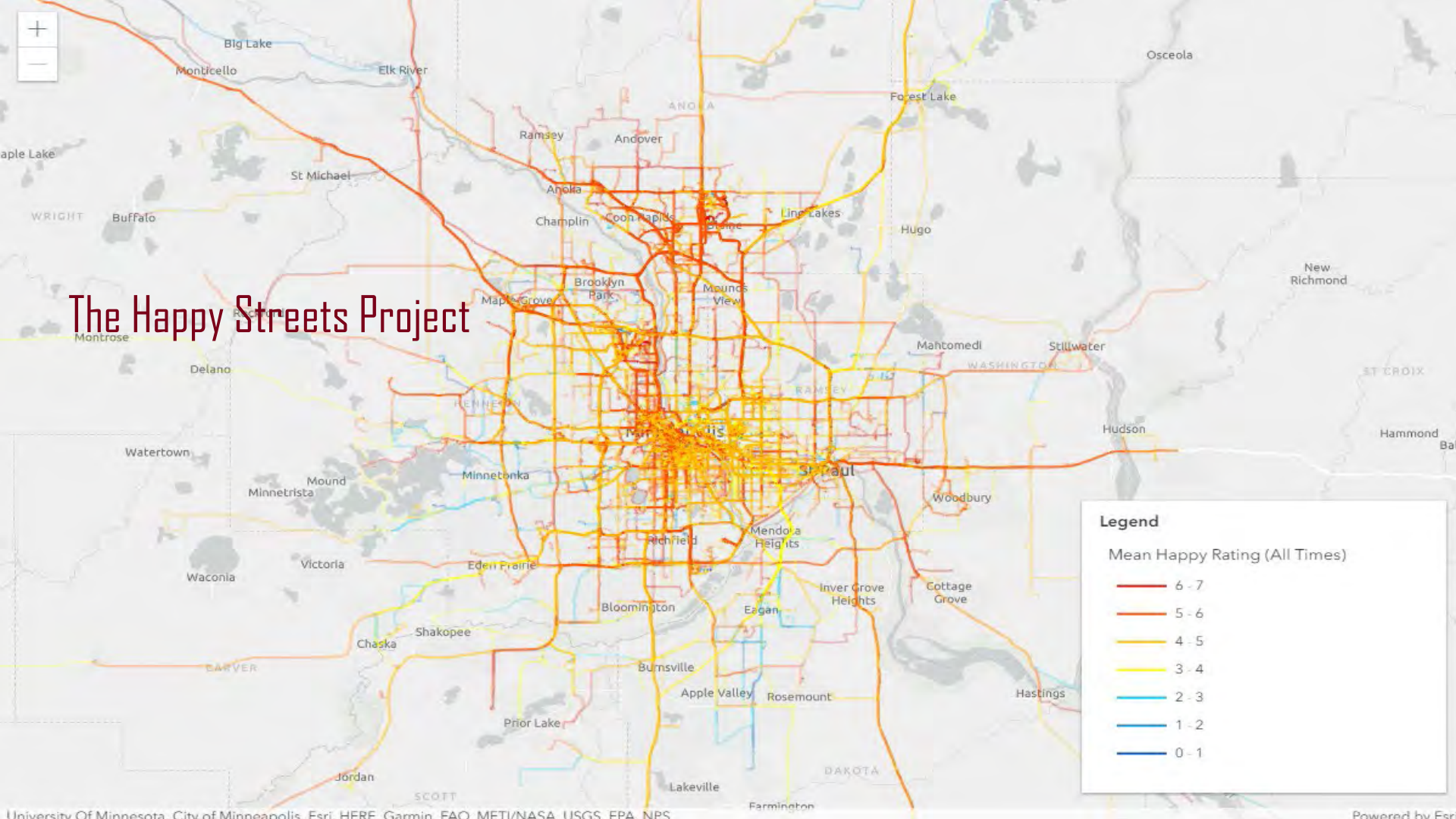
Happiness by Trip Companion



Which factors
most important?



The Happy Streets Project



Thank you.

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