

5-2015

## Peak of the Day, or the Daily Grind?

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### Recommended Citation

Smith, Oliver Blair. Peak of the Day, or the Daily Grind? 2015-711. Portland, OR: Transportation Research and Education Center (TREC), 2013.

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## PEAK OF THE DAY, OR THE DAILY GRIND?

*Survey research explores the relationship between commuting and overall happiness.*

### The Issue

Millions of Americans commute. The daily trip from home to work and back can have a profound effect on an individual's perceived quality of life. "Subjective well-being" is a term rooted in psychology that is defined as an evaluation of one's happiness or life satisfaction. NITC dissertation fellow Oliver Smith of Portland State University investigated the CWB, or "commute well-being," of 828 workers in Portland, Oregon. CWB is a measure of how individuals feel about their commute to work.

Previous literature suggests a need for greater incorporation of psychological factors into the study of travel behavior. If policymakers can demonstrate increased well-being as a result of desired modes of transportation, it could help them to better market healthier, more livable transportation policies. Additionally, understanding individuals' motivations and what determines their route choices can lead to more sophisticated travel demand models, with greater accuracy in predicting trips. Other studies on the psychology of commuting have been conducted, but this study is the first to use a U.S.-based population sample with commuters from a non-university setting, answering survey questions based on the latest advances in commuting psychology.

### The Research

The research was guided by the question, "What factors contribute to well-being in the domain of commute travel?" Smith used data gathered in the winter of 2012 from commuters traveling to work in central Portland, Oregon using car, public transit, and bicycle. The workers were surveyed about their attitudes and travel preferences and about their overall satisfaction with



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### THE ISSUE

How people feel about their daily commuting experiences can have a significant impact on their overall well-being.

### THE RESEARCH

Commuters were surveyed in order to learn:

- Their daily travel preferences and values;
- The modes they use and how they feel about their experiences;
- Whether their overall well-being is affected by their commute.

### IMPLICATIONS

A better understanding of the psychology behind transportation choices can help planners to better meet the needs of transportation system users.

*Photo: Commuters in downtown Portland, Oregon*

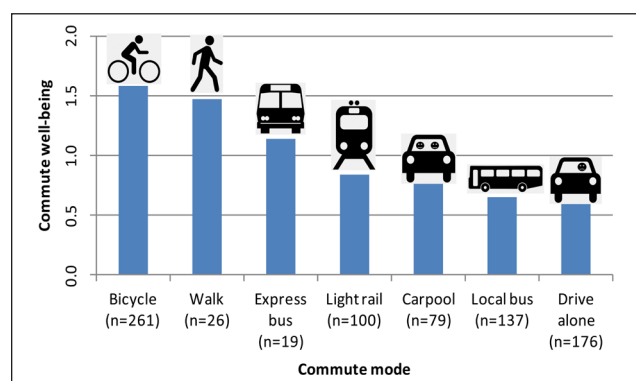
life. To quantify a person's CWB, Smith used a composite measure based on seven questions that measure both emotional and cognitive responses to the commute. Participants were asked to rate the intensity of their feelings of tension, relaxation, excitement and other emotional responses that resulted from their daily travel. As secondary research questions, Smith investigated how CWB differs among the working population, between specific mode users, and among residents with varying levels of accessibility.

For all travel modes, Smith hypothesized that contextual trip factors such as distance, congestion, and peak-hour commuting would be associated with lower CWB. Anticipating that people would have different values and preferences regarding commuting, Smith hypothesized that travelers who commute using modes that align with their preferences would have higher CWB. For example, those who value sustainability but require a car to make their commute would have low CWB, while those who value the autonomy of car travel but do not have a car would also have low CWB. Whatever the values of the individual, Smith expected to find a positive association between CWB and overall subjective well-being.

## Implications

As Smith had hypothesized, an analysis of the survey results revealed that those who bike and walk to work have significantly higher commute well-being than transit and car commuters. Taking distance and route-related factors into account, the predictability of commuting conditions affects travel satisfaction, with greater reliability leading to greater commute satisfaction.

Travel mode, travel time, traffic, income, health, attitudes about travel and satisfaction with one's job and place of residence were all important factors in shaping CWB. This research helps expand existing theory by demonstrating



### Variation in commute well-being by mode

Respondents who walk and bike to work expressed more positive responses to their commutes overall than those who drive and use public transit. This graph shows the different levels of CWB reported for each mode.

how CWB can be

measured and modeled; how accessibility, distance and travel time impact CWB and how individual mode choices interact with attitudes to impact CWB.

Transportation research and planning has historically focused heavily on individuals' decisions about travel and less on the experiences resulting from their decisions. Travel demand models that do not consider individuals' subjective experiences may fail to capture key factors, such as feelings of freedom or personal safety associated with travel. Accounting for subjective well-being in travel experiences stands to improve the accuracy of such models as well as result in policies which tend to increase well-being. With a focus on well-being as a desired outcome, policies should begin to shift toward creating healthier, more livable communities.

## PROJECT INFORMATION

**TITLE:** Peak of the Day or the Daily Grind: Commuting and Subjective Well-Being

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**PROJECT NUMBER:**  
2015-711

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**MORE INFORMATION**  
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