

Reviewing concepts, measures, and evidence of the Positive Utility of Travel

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1 Background

The transportation paradigm

- Traveling is a **means to an end**: going someplace or getting somewhere.
- Travel demand is a **derived demand** (from demand for spatially-separated activities).
- Travel time is a **disutility** to be minimized.
- These perspectives dominate **travel behavior analysis** and **travel demand modeling**.

Alternative perspectives

- Maslow's (1943) hierarchy of needs** motivating human behavior are: homeostasis (maintaining the body), safety, love, esteem, and self-actualization (achieving one's potential).
- Motivation theory (Ryan & Deci, 2000) distinguishes **extrinsic motives** (the activity is a means to an end) from **intrinsic motives** (the activity is done for its own sake).
- Psychological subjective well-being (Ryan & Deci, 2001) includes **hedonic** (pleasure, happiness, desires) and **eudaimonic** (purpose, goals, self-realization) aspects.

2 What is the positive utility of travel?

Mokhtarian & Salomon (2001)

The tripartite nature of the **affinity for travel**:

- The activities conducted at the destination.
- The activities conducted while traveling.
- The activity of traveling itself.

The **positive utility of travel (PUT)** includes **any benefits accrued to the traveler through the act of traveling**.

Destination activities

Benefits from reaching a destination with activity potential.

Travel is: a means to a productive end.



Note: This is not a focus of this study.

Travel activities

Benefits from travel-based multitasking:

- "Active" activities
- "Passive" activities
- Exercise or physical activity

Travel is: the setting for other activities.



Travel experiences

All other benefits:

- Affective enjoyment
- Symbolic expressions/fulfillment
- Travel as the activity

Travel is: a) the setting for experiences, b) a means to a fulfilling end, and c) an end in and of itself.



References

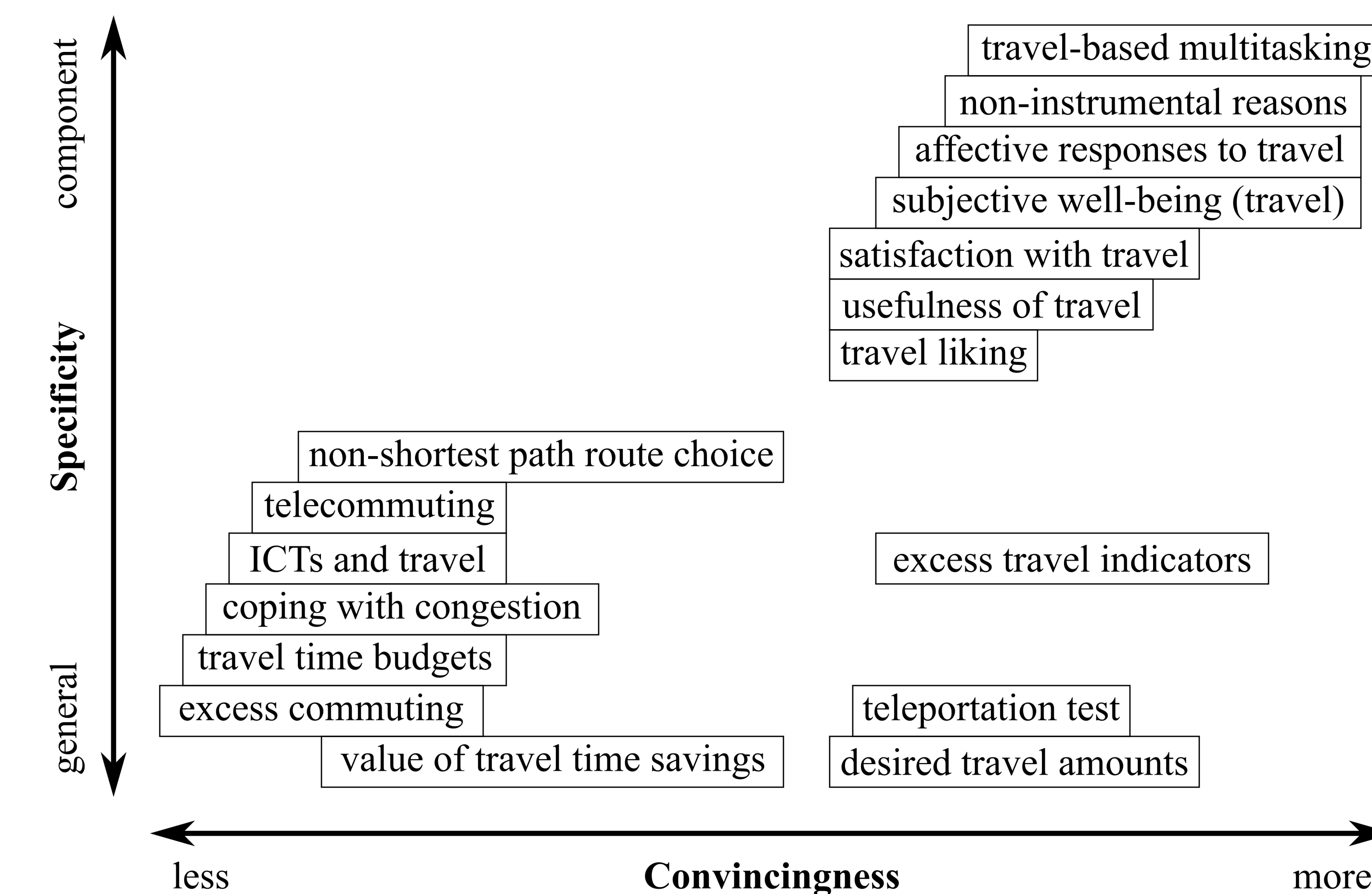
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3 How to measure PUT?



4 Implications of PUT

Transportation planning

- Improve estimates of the **value of travel time savings (VTTS)**, a key input for major transportation project cost-benefit analysis.
- Create more sensitive travel demand forecasting models.

Transportation policy

- Design **interventions**—via facilitating multitasking and creating more positive experiences—to encourage walking, bicycling, transit.

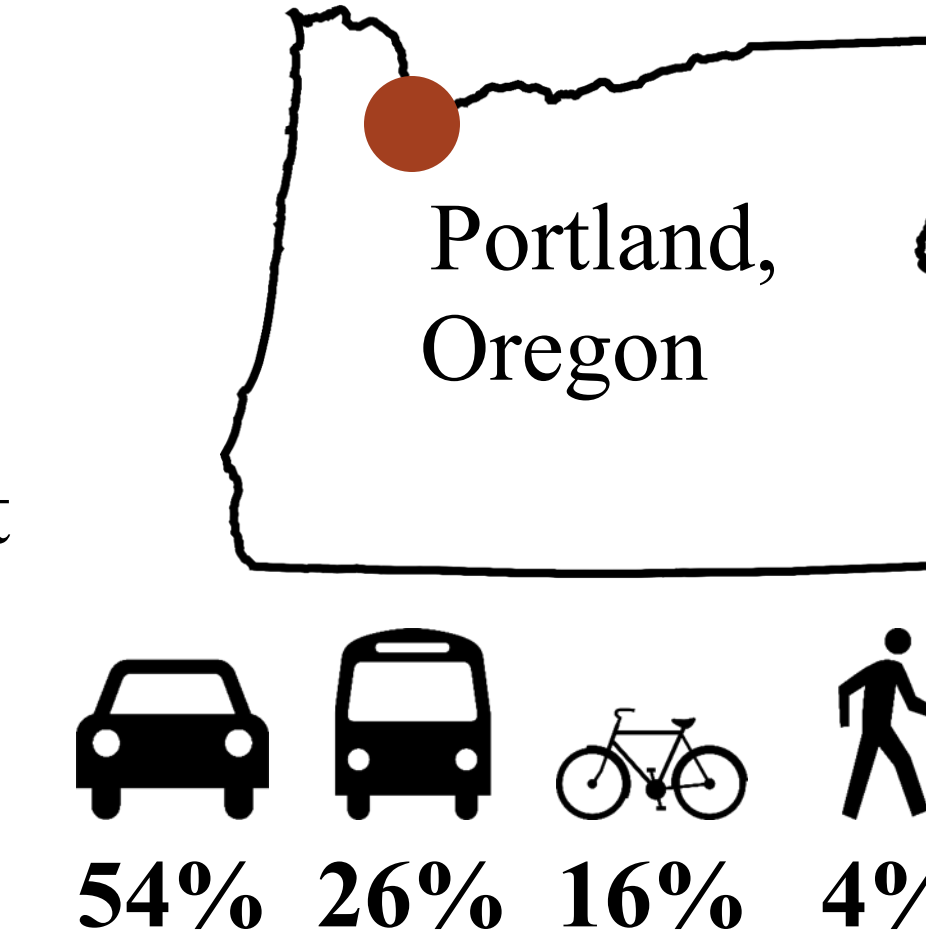
The future

- Anticipate potential travel behavior impacts of ubiquitous **shared mobility and connected-autonomous vehicles**.
- Driving resources can be reallocated to more active travel-based multitasking.
- Vehicle designs continue to emphasize passenger comfort and entertainment.

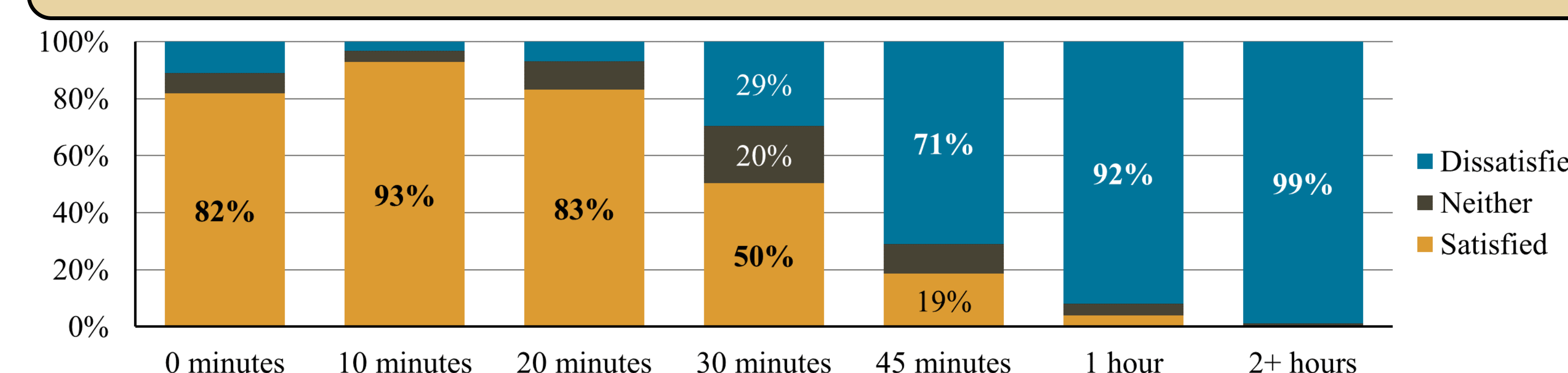


5 Data collection & preliminary results

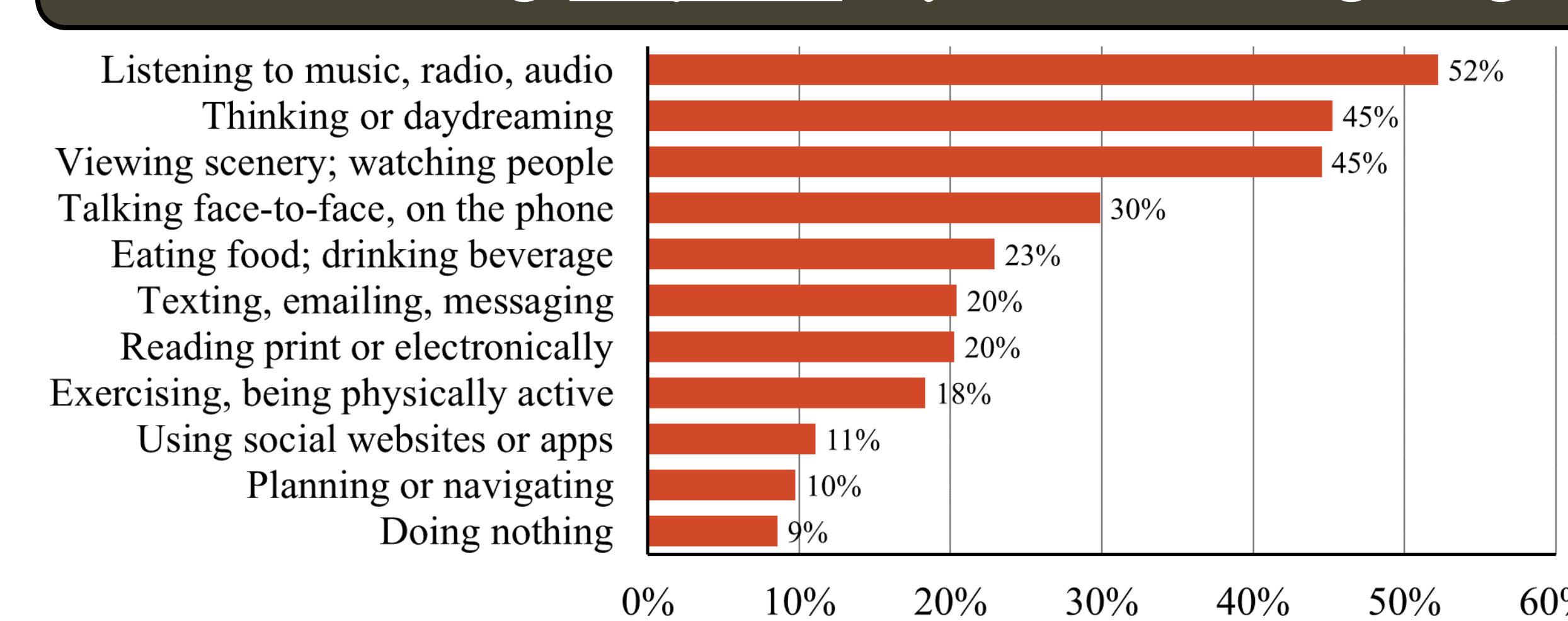
- Online questionnaire and travel diary survey
 - Demographics, socioeconomics, general attitudes
 - Typical & most recent commute info
 - General PUT for typical commute
 - Travel activities & travel experiences for most recent commute mode and modal alternatives
- Open mid-October to mid-December, 2016
- ~ **650 commuters & commutes to work**



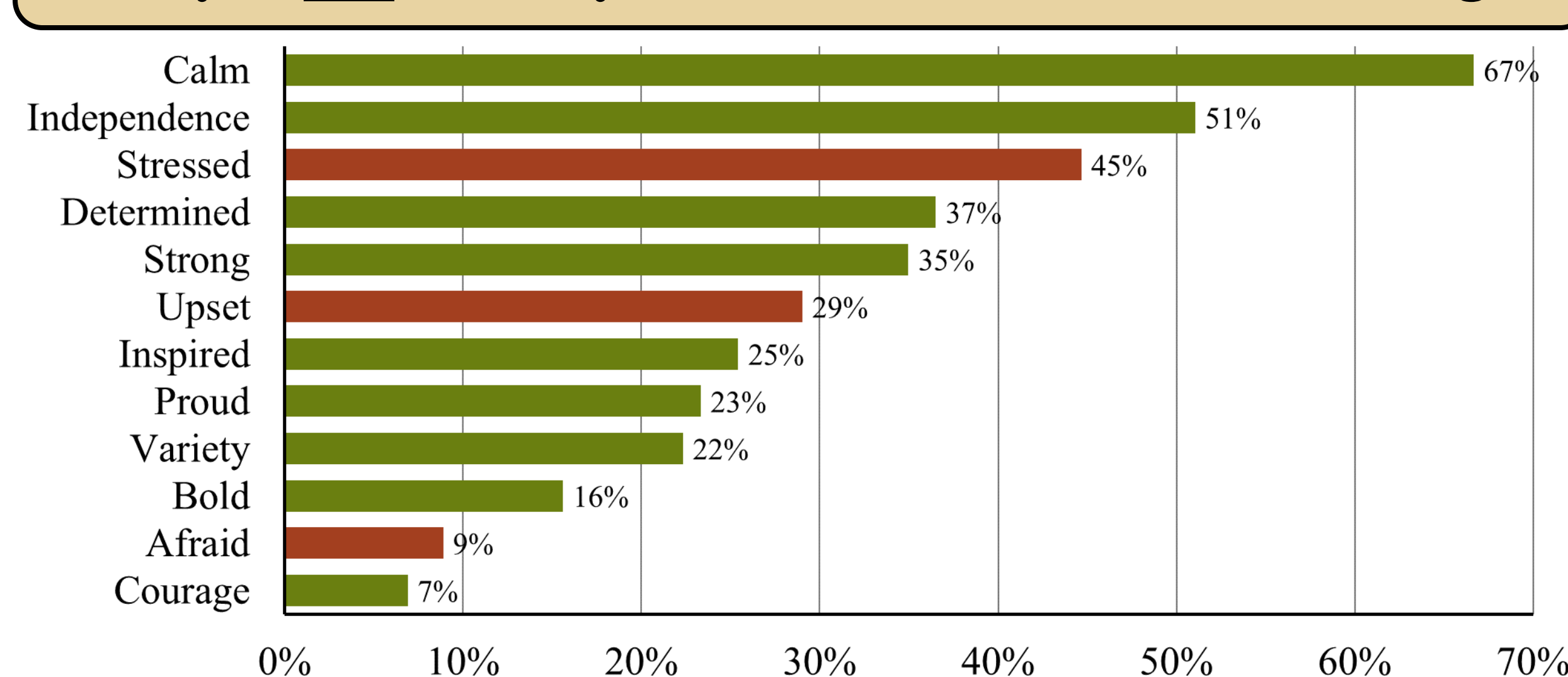
How satisfied would you be with the following commute travel times?



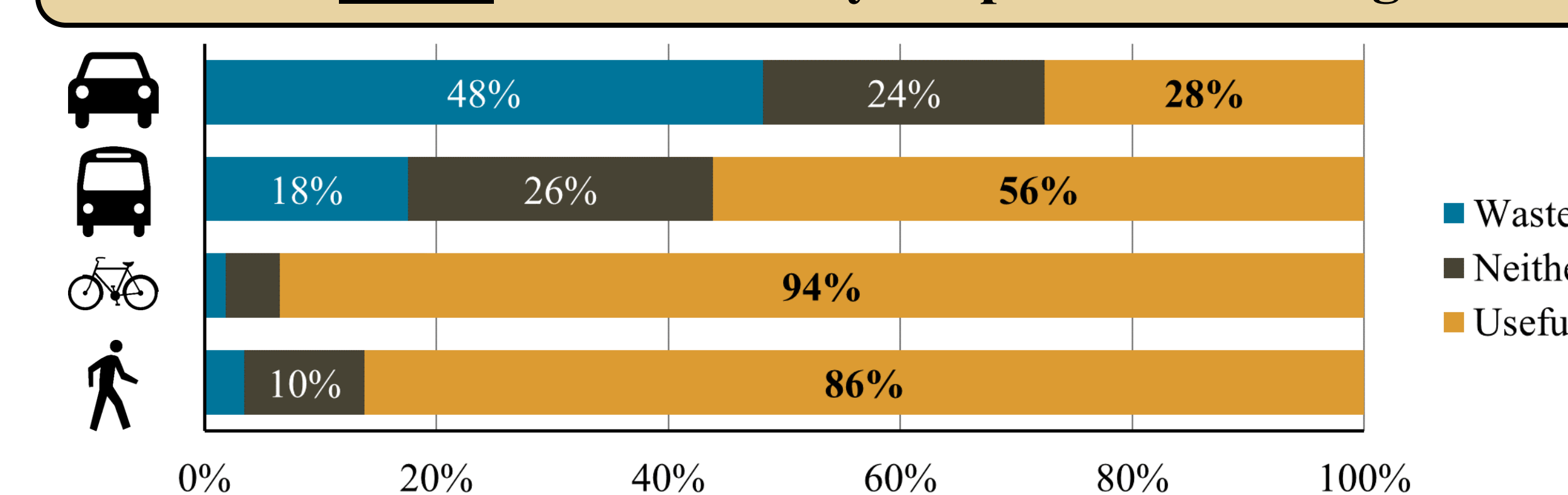
While commuting, did you do any of the following things?



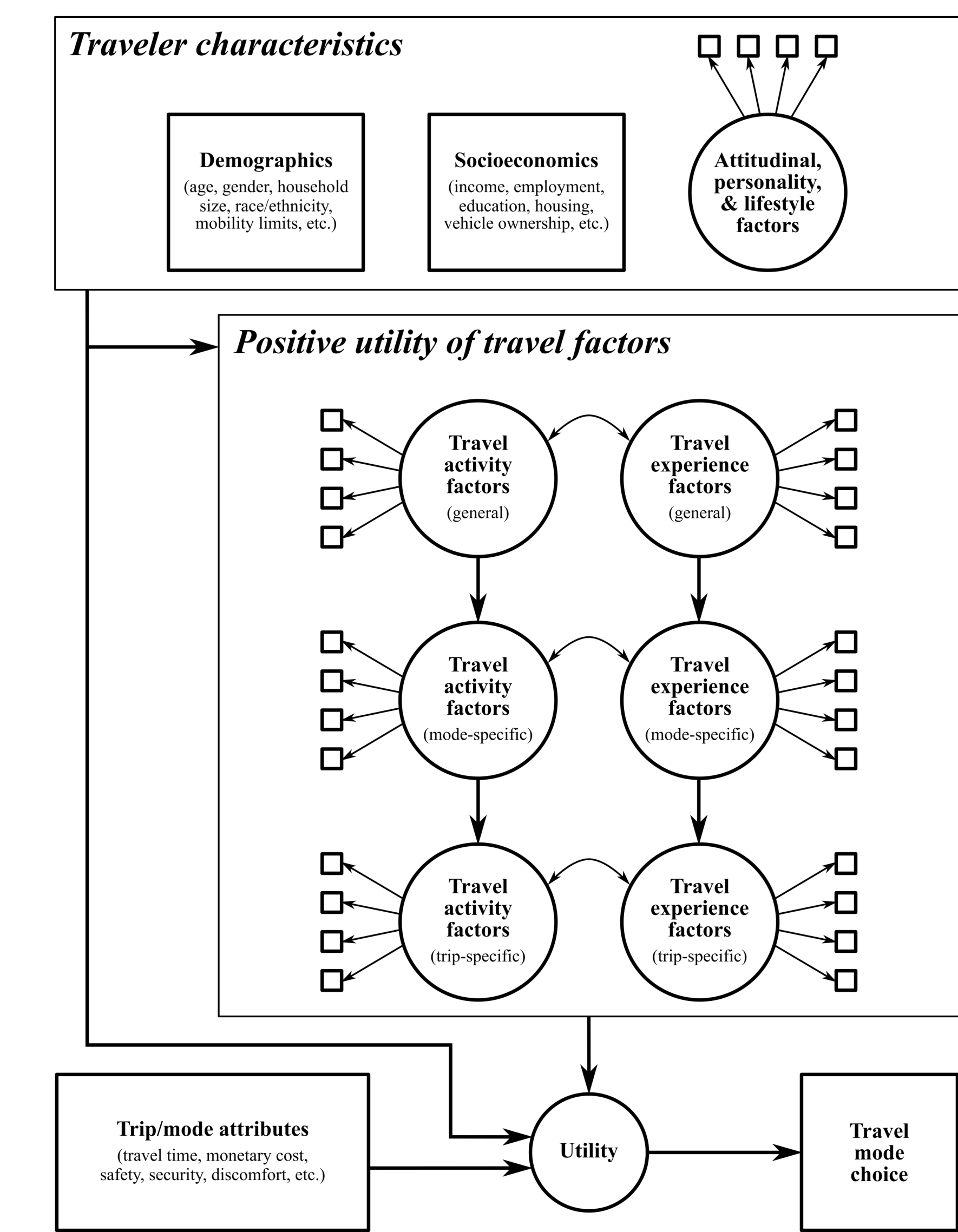
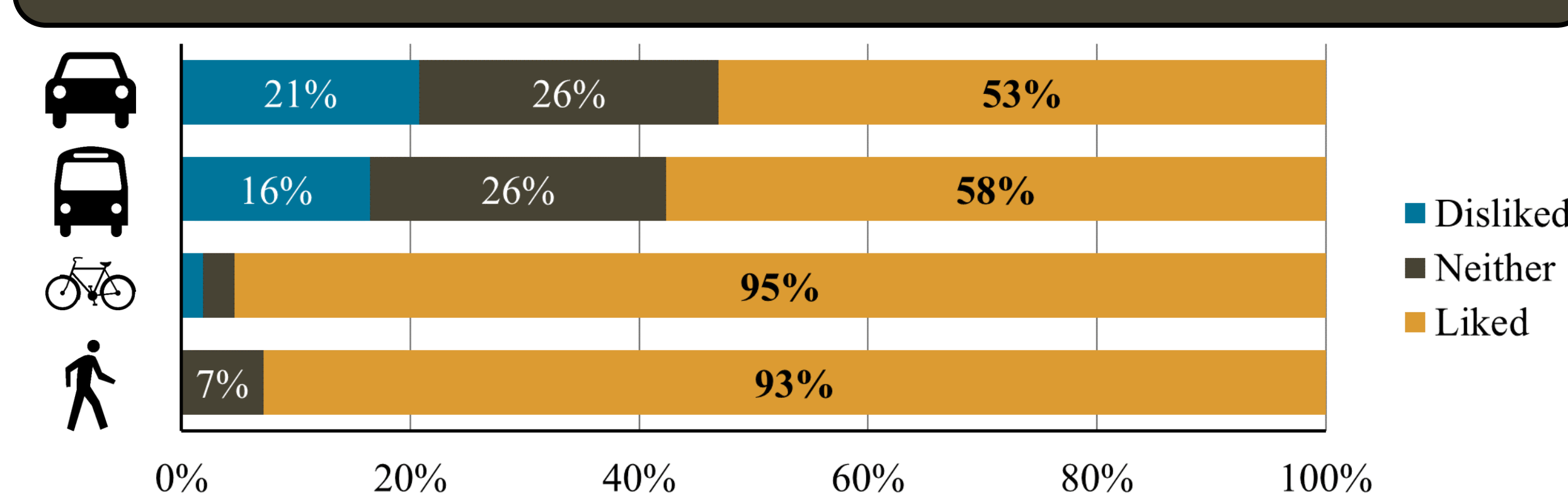
Did you feel this way, at least a little, while commuting?



In terms of its value to you, how useful was the time you spent commuting?



How much did you like your most recent commute?



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