

# Conceptualizing and measuring the positive utility of travel

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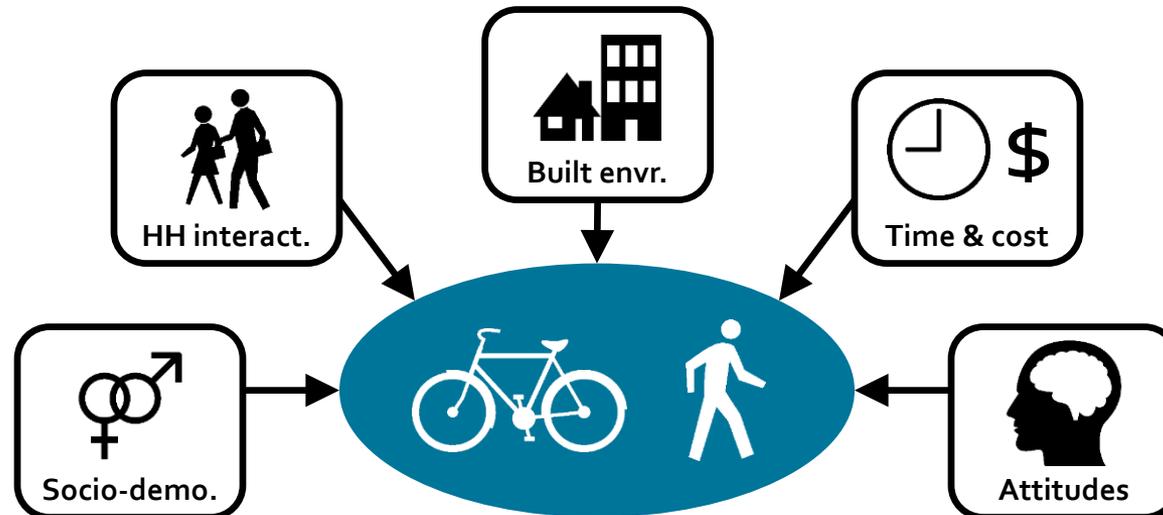
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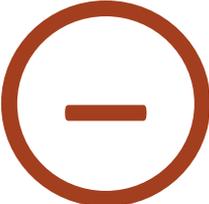
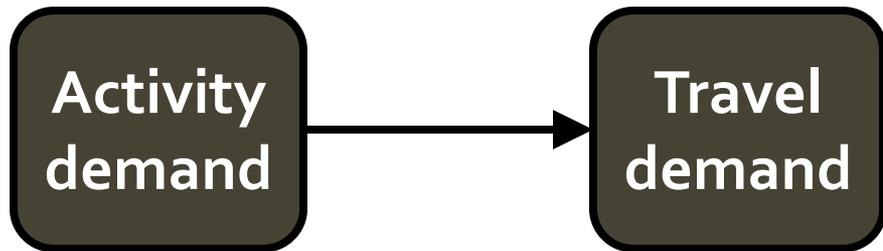
ACSP 56th Annual Conference, Portland, OR  
Session 14.32, Saturday 5 November 2016

- **Background**
- **What is the positive utility of travel (PUT)?**
- **How is PUT measured?**
- **Why should we study PUT?**

# Background



# Background



**Travel as a disutility**

## Economics:

weight associated with outcome of preference-satisficing decision



## Psychology:

pleasure, happiness, fulfillment, and subjective well-being

**Motivations** {  
Extrinsic (instrumental) vs. intrinsic (autotelic)  
Hedonic (affective) vs. eudaimonic (symbolic)

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

Mokhtarian & Salomon's (2001) "affinity for travel"

1. The activities conducted at the destination.
2. The activities that can be conducted while traveling.
3. The activity of traveling itself.

# Destination activities

“The activities conducted at the destination.” (MS, 2001)

**Definition:** *Benefits from reaching a destination with activity potential.*

**Travel as...** A means to a productive end: going somewhere.

**Motivations:** Extrinsic, instrumental.

**Examples:**



<https://www.flickr.com/photos/scottdavies/5671889074/>



<https://www.flickr.com/photos/krawcowicz/4279213591/>

# Travel activities

“The activities that can be conducted while traveling.” (MS, 2001)

**Definition:** *Benefits from activity participation during travel.*

**Travel as...** The setting for other activities.

**Motivations:** Extrinsic, instrumental.

**Examples:**



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<https://www.flickr.com/photos/ai-dealer/4616142327/>



# Travel experiences

“The activity of traveling itself.” (MS, 2001)

<b>Definition:</b>	<i>Affective enjoyment of the travel experience.</i>	<i>Symbolic expression or fulfillment from the travel experience.</i>	<i>Travel as the activity.</i>
<b>Travel as...</b>	The setting for experiences.	A means to a fulfilling end.	An end in and of itself.
<b>Motivations:</b>	<b>Intrinsic, autotelic.</b>		
	Hedonic, affective.	Eudaimonic, symbolic.	

**Examples:**



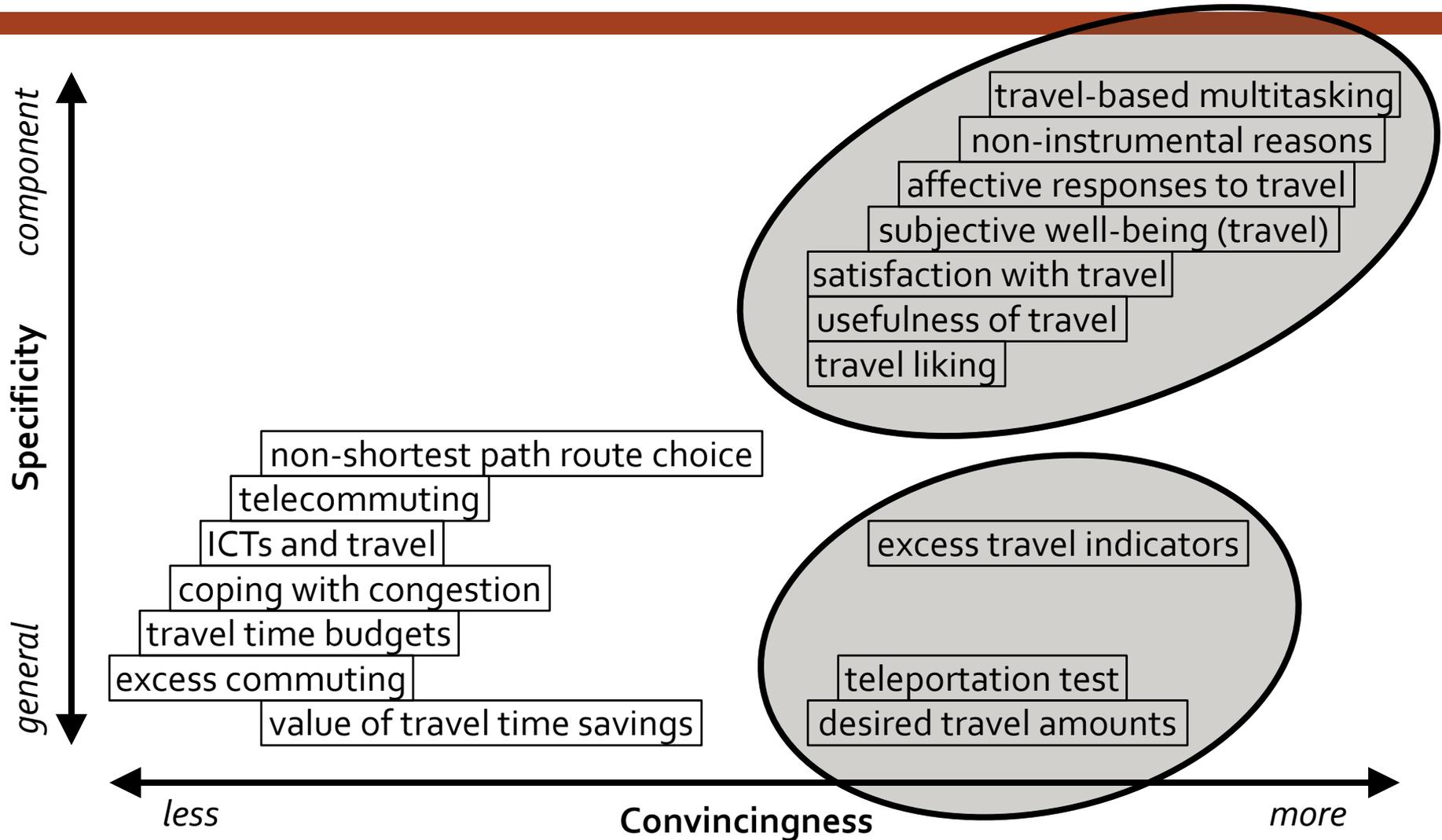
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<https://www.flickr.com/photos/aerialcamera/10238940444/>



# Evidence of PUT



## Excess travel indicators

Mokhtarian, P. L., & Salomon, I. (2001). How derived is the demand for travel? Some conceptual and measurement considerations. *Transportation Research Part A: Policy and Practice*, 35(8), 695-719. doi: 10.1016/S0965-8564(00)00013-6

Do you ever make a trip for any of the following reasons?

- By a longer but more scenic route than normal
- With no particular destination in mind
- Just to get out of the house

## Desired travel amounts

Redmond, L. S., & Mokhtarian, P. L. (2001). The positive utility of the commute: Modeling ideal commute time and relative desired commute amount. *Transportation*, 28(2), 179-205. doi:10.1023/A:1010366321778

What would be your *ideal one-way* commute travel time?

Would you like to walk, bike, drive, and ride transit *less, the same, or more* than you currently do?

Suppose you could snap your fingers and be instantly transported or “teleported” between home and work. Would you *teleport*, or would you prefer to *spend some time commuting? Why?*

## Teleportation test

Russell, M., & Mokhtarian, P. (2015). How real is a reported desire to travel for its own sake? Exploring the ‘teleportation’ concept in travel behaviour research. *Transportation*, 42(2), 333-345. doi:10.1007/s11116-014-9546-1

## While commuting, what did you do?

- Talk face-to-face
- Talk on the phone
- Read print or electronic
- Write or edit documents
- Listen to music, radio
- Eat; drink
- Care for others
- Exercise
- View scenery
- Rest; sleep

## Activity participation

Berliner, R. M., Malokin, A., Circella, G., & Mokhtarian, P. L. (2015). Travel-based multitasking: Modeling the propensity to conduct activities while commuting. Presented at the 84th Annual Meeting of the Transportation Research Board, Washington, DC. Retrieved from <http://trid.trb.org/view.aspx?id=1338990>

Guo, Z., Derian, A., & Zhao, J. (2015). Smart devices and travel time use by bus passengers in Vancouver, Canada. *International Journal of Sustainable Transportation*, 9(5), 335–347. doi:10.1080/15568318.2013.784933

Kenyon, S. (2006). The 'accessibility diary': Discussing a new methodological approach to understand the impact of Internet use upon personal travel and activity participation. *Journal of Transport Geography*, 14(2), 123–134. doi:10.1016/j.jtrangeo.2005.10.005

## Activity duration

Singleton, P. A. (2016). Conceptualizing and measuring the positive utility of travel. Presented at the 56th Annual Conference of the Association of Collegiate Schools of Planning.

While commuting, what percentage of your travel time did you spend doing these things?

## Activity quality

Rosenfield, A., & Zhao, J. (2016). Making the commute count: Quality of productive travel time use. Presented at the 56th Annual Conference of the Association of Collegiate Schools of Planning.

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## Overall usefulness

Lyons, G., Jain, J., Susilo, Y., & Atkins, S. (2013). Comparing rail passengers' travel time use in Great Britain between 2004 and 2010. *Mobilities*, 8(4), 560–579. doi:10.1080/17450101.2012.743221

On a scale from *wasted to useful*, how would you rate your commute?

## Travel affect, satisfaction

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scale. *Journal of Personality and Social Psychology*, 54(6), 1063–1070. doi:10.1037/0022-3514.54.6.1063

Ettema, D., Friman, M., Gärling, T., Olsson, L. E., & Fujii, S. (2012). How in-vehicle activities affect work commuters' satisfaction with public transport. *Journal of Transport Geography*, 24, 215–222. doi:10.1016/j.jtrangeo.2012.02.007

Did you *feel* any of the following while commuting?

- Excited
- Strong
- Proud
- Calm
- Energized
- Happy
- Bold
- Content
- Relaxed

## Subjective well-being

Ory, D. T., & Mokhtarian, P. L. (2005). When is getting there half the fun? Modeling the liking for travel. *Transportation Research Part A: Policy and Practice*, 39(2), 97–123. doi:10.1016/j.jtra.2004.09.006

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Did commuting allow you to *fulfill your desire, express, or improve* \_\_\_?

- Variety
- Adventure
- Privacy
- Independence
- Social status
- Self-identity
- Self-confidence
- Mental health
- Physical health

How much did you *like* this trip?

## Travel liking

Ory, D. T., & Mokhtarian, P. L. (2005). When is getting there half the fun? Modeling the liking for travel. *Transportation Research Part A: Policy and Practice*, 39(2), 97–123. doi:10.1016/j.jtra.2004.09.006

# Applications

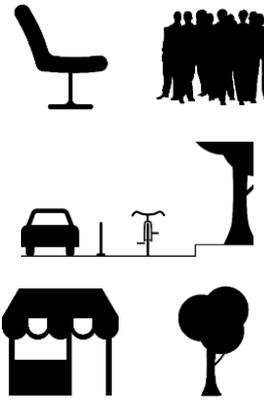
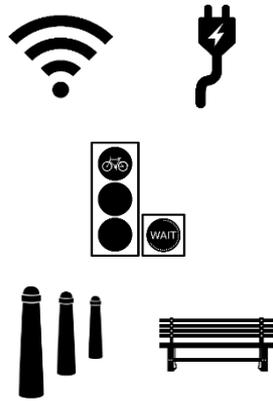
Value of travel time savings → Cost-benefit analysis

Mode Choice



Activity

Experience



<https://www.google.com/selfdrivingcar/images/gallery/prototype-early.jpg>

# Results (in progress)

Commute trip  
mode shares  
(N = 372)



49%



30%

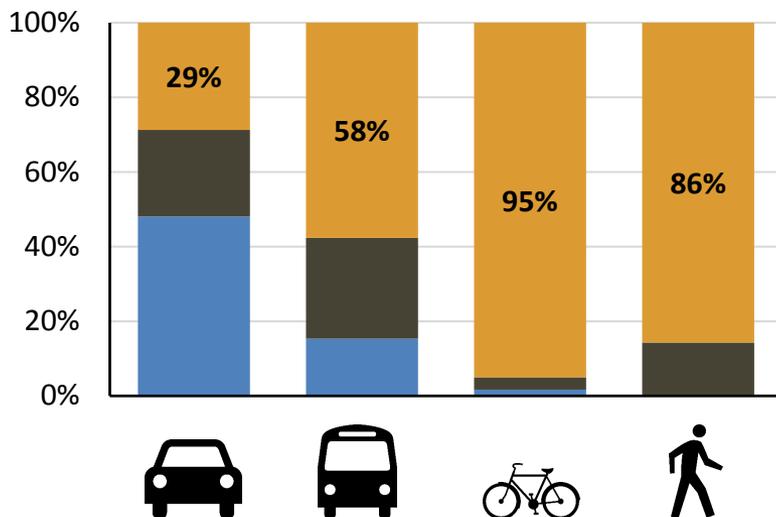


16%

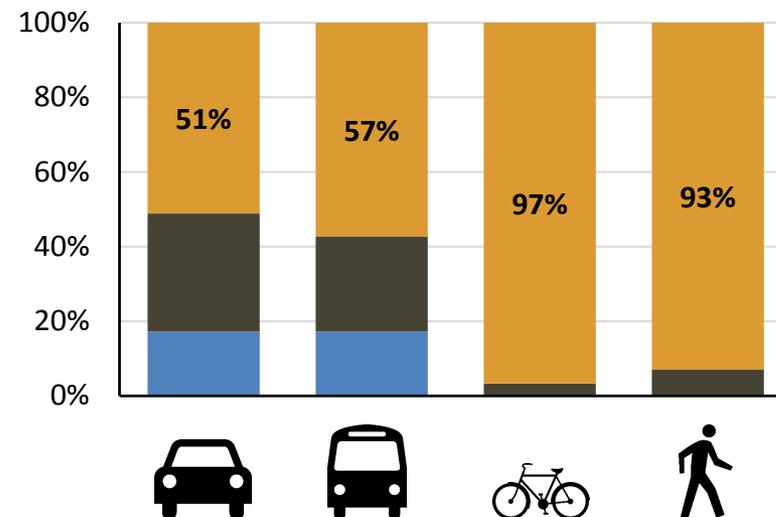


4%

■ Wasted ■ Neither ■ Useful



■ Disliked ■ Neither ■ Liked



# Questions?



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