

Accepted Manuscript

A novel approach to estimating the demand value of public safety

Christoph M. Rheinberger, Felix Schläpfer, Michael Lobsiger

PII: S0095-0696(17)30349-2

DOI: [10.1016/j.jeem.2018.04.002](https://doi.org/10.1016/j.jeem.2018.04.002)

Reference: YJEEM 2120

To appear in: *Journal of Environmental Economics and Management*

Received Date: 27 May 2017

Revised Date: 10 March 2018

Accepted Date: 3 April 2018

Please cite this article as: Rheinberger, C.M., Schläpfer, F., Lobsiger, M., A novel approach to estimating the demand value of public safety, *Journal of Environmental Economics and Management* (2018), doi: 10.1016/j.jeem.2018.04.002.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



A Novel Approach to Estimating the Demand Value of Public Safety

Christoph M. Rheinberger, Felix Schläpfer, Michael Lobsiger*

April 10, 2018

Abstract

We present a novel approach for estimating the demand value of public safety and apply it to road safety improvements in Switzerland. Survey responses by more than 1,000 eligible voters to questions about how much public spending on road safety should increase are combined with observations of their income tax and road usage to derive the value of a statistical accident avoided. A risk-risk tradeoff elicitation allows decomposing this value into willingness-to-pay values for various degrees of accident severity. Our most comprehensive estimate of the value per statistical life is CHF 4.2 million (corresponding to \$4.5 million or €3.5 million). We explore the sensitivity of the elicitation approach to anchoring and other framing effects and find that our approach is as least as scope sensitive as other stated preference approaches.

JEL classification: H41, I38, J17

*CMR: European Chemicals Agency, Helsinki, Finland (e-mail: rheinberger.cm@gmail.com); FS: Kalaidos University of Applied Sciences, Zurich, Switzerland (e-mail: felix.schlaepfer@kalaidos-fh.ch); ML: B,S,S. Economic Consultants Ltd., Basel, Switzerland (e-mail: michael.lobsiger@bss-basel.ch). The research presented in this paper was funded by the Swiss Federal Road Office through project no. VSS 2011/104. We thank Henrik Andersson, Fredrik Carlsson, Sue Chilton, James Hammitt and Rebecca McDonald, and two anonymous reviewers for helpful comments on an earlier version of the paper. All opinions expressed in the paper are ours and should not be construed to represent endorsement by the Swiss Federal Road Office or any other agency.

Download English Version:

<https://daneshyari.com/en/article/7361365>

Download Persian Version:

<https://daneshyari.com/article/7361365>

[Daneshyari.com](https://daneshyari.com)