

Questions and Frontiers in Spatial
Dimensions of Stated Preferences:
**What are the questions that we need to
answer, and what are the important
research frontiers?**

Ståle Navrud

School of Economics and Business

Norwegian University of Life Sciences

E-mail: stale.navrud@nmbu.no

<https://www.nmbu.no/emp/stale.navrud>

Extent of the market

- How to determine the extent of the market; i.e. the «affected» population/households to survey and aggregate over?
 - difficult; especially for non-use values
 - often determined by administrative borders (e.g. municipalities, counties, states, country), but households outside the determined borders might also have utility (or disutility) from the valued change in environmental quality
 - one possible solution is to survey a broader population, and ask follow-up questions to determine the level of attachment to the location and environmental good/ecosystem service in question
- Will in many cases be more important to determine the number of affected households than the mean willingness-to-pay (WTP) estimate for aggregate benefits (or costs) in CBAs

Perceived versus measured distance (to study site and substitute sites)

- Discrepancy between *measured* and *perceived/actual distance*, travel costs (including time costs)
- Measured distance as the crow flies or shortest distance along a road system is used as a proxy measure for perceived/actual distance and costs; while people might take «the long (more enjoyable) road», and have enjoyed the trip in a way that reduce time costs (compared to their opportunity cost of time) and could even have net benefits from travelling to e.g. a recreational site. Important since it would influence use value per recreational day from Travel Cost models, but also create noise in Stated Preference studies of both use and non-use values
- Measured distance might be the wrong measure for determining the regional variation in WTP, and thus there might not be a linear distance decay in WTP among non-users (and also users, when then number of substitute sites varies throughout the case study area).
- In Revealed and Stated Preference surveys - Rather let individuals identify what they consider as their substitute sites (and let them identify these sites and their travel routes on maps in online surveys), and report perceived distance and travel/time costs

Spatial issues in Benefit Transfer

- Need to select a study site/original study to transfer from that have surveyed *the same level administrative population* as the population for which the value estimate is needed at the policy site (e.g. transferring the locally impacted households' WTP to avoid coastal oil spill damages at a specific site (study site) to a policy site where the mean WTP of households nationally are needed to assess e.g. the benefits of a national oil spill prevention plan (see e.g. Navrud et al 2017))
- Especially for use values, the availability and quality of substitutes have to be accounted for in benefit transfer; through selecting appropriate study sites to do unit value transfer from or by benefit function transfers/ meta regression transfer)

Navrud, S., H. Lindhjem and K. Magnussen 2017: Valuing Marine Ecosystem Services Loss from Oil Spills for Use in Cost-Benefit Analysis of Preventive Measures. Chapter 5 (p. 124-137) in Nunes, P. A.L.D., L. E. Svensson, and A. Markandya (eds.) 2017: *Handbook on the Economics and Management of Sustainable Oceans*. Edward Elgar Publishing, Cheltenham, UK.