



Travel Cost Method

Description

The Travel Cost method proposes that the cost of travel to a recreational site or tourist destination can be taken as an estimate of the willingness to pay (WTP) discussed under [contingent valuation](#) ❖. The individual values are aggregated to give a value for the site i.e. it uses the costs incurred by individuals travelling to reach a site as a proxy for value.

The theory is based on the hypothesis that a visit to a site will be taken if the benefits are at least equal to the costs associated with the visit, and travel cost is taken to be one of the main determinants of visitation. Other determinants are availability of substitutes, income, education, and multiple destination trips - modifications to the basic model are used to 'get around' these issues.

The process used is to survey visitors to a site and ask them for their travel costs and how often (frequency) they come to the site. By doing this you can construct a demand curve for the site (and the value is equal to the area under the demand curve).

One of the purposes of applying the travel cost method is to try to work out how recreationalists would behave if particular levels of fee were set for that area/activity.

Travel costs should include an estimate of time costs.

Note that the TCM is a revealed preference method because it relates to actual visits - i.e. it is based on how people actually behave faced with 'real' costs (as opposed to contingent valuation methods which relate to hypothetical costs).

There have been a number of refinements to the original model, which was based on people travelling from a series of zones.

How and when the tool is used

The TCM has been used extensively in the USA to value rural recreation (fishing, forestry visits and hunting), and the UK (forests). In New Zealand the best known tourism application is a major study of Mt Cook National Park in the mid 1980s.

Before 1990 12 Travel Cost Method studies of recreational facilities were conducted in New Zealand, but from 1990 to 1999 only one study was done. Comparatively, prior to 1990 there were eight Contingent Valuation studies of recreational facilities and 6 of environmental amenity, while between 1990 and 1999 there were a further eight Contingent Valuation studies of recreation facilities, 15 of environmental amenity, 12 road transport and four 'other'.

Application

Travel cost methods have not been used in New Zealand much since 1990. Possible reasons given are:

- the ability of Contingent Valuations Methods to value items not applicable in Travel Cost Method
- the inability to use revealed preference studies for most environmental amenity and road transport characteristic valuation tasks
- the perceived ease of application of Contingent Valuation Methods.

Our evaluation

The Travel Cost Method is a very useful tool to apply to assess the non-market value of a particular area or activity. However, it is best applied to an existing area of activity. It is also very expensive to undertake a survey. It is probably best applied when looking to justify application of further resources to an area of activity.