Conference Paper

Long distance travel in Europe today
Experiences with a new survey

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Long distance travel in Europe today: Experiences with a new survey (KITE-Survey)

Frei, Kuhnimhof, Axhausen

General problems of long distance travel surveys

Long distance travel is a growing travel market segment, but reliable data and statistics about long distance travel are rather rare. This has its origin mainly in the core of the design problem of long distance travel surveys, which is the exclusion of journeys below a minimum distance or duration. This causes long distance travel definition problems, recall problems and fatigue effects. The specific challenge of long-distance travel surveys is to find a balance between the need to capture the correct number of all such journeys, while obtaining detailed information for at least some of them.

Survey idea

To overcome the problems of long distance travel surveys, a protocol of three steps was used:

First, a screening by CATI/Face-to-Face is implemented to screen the relevant respondents and filter out frequent long distance travelers.

Second, a journey roster is employed which retrieves the basics of the journeys undertaken during the reporting period.

Third, create detailed stage descriptions for the three most recent journeys in the second step.

Survey period and response rate

The survey was carried out in Switzerland, Portugal (CATI) and the Czech Republic (Face-to-Face Interviews) between November 2008 and March 2009. In each country about 1’100 interviews were conducted with a response rate of 24.3 (CH), 21.6 (PT) and 64.0(CZ).

Results

To calculate the numbers of long distance journeys the frequency of regular journeys, the date of non-regular and last journeys was combined using a survival function \( S(t) = \Pr(T > t) \) to calculate the mean time between long distance journeys. This is the inverse of the cumulative distribution function and imputes the unknown, censored information for the observed data (Table 1).

Table 1: Journey intervals in the KITE survey

<table>
<thead>
<tr>
<th>Data source</th>
<th>Censored</th>
<th>Uncensored</th>
<th>Right-censored</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last long distance journeys before the 8 week reporting period</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regular journeys</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Non-regular journeys: First one reported</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Last one reported</td>
<td></td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

The calculated mean survival time is 41.2 days, which corresponds to 8.4 journeys per person per year: 8.2 in Switzerland, 9.0 in the Czech Republic, and 8.2 in Portugal.

Figure 2 shows the figures on long distance travel demand for four selected European countries as a comparison to the results of the KITE survey.

Figure 2: Long distance travel demand (journeys > 100 km crow-fly distance) in European countries by different surveys