Carsharing Stated Preference (SP)

Francesco Ciari

Kay W. Axhausen

Travel Survey Metadata Series

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Abstract

A recent study aimed to estimate the potential of carpooling in Switzerland. Part of this study was a survey in which the attitude of the public towards this transport option was investigated using both multi-response questions and stated preference (SP) experiments. In order to gain an insight on how innovative modes are perceived in general, the SP part was composed of two different experiments, one of them including carsharing as alternative. In the first experiment respondents were choosing among car, public transport, carpooling as driver and carpooling as passenger. In the second experiment respondents were choosing among car, public transport and carsharing. This paper reports on the multinomial logit choice models, which were estimated based on participants’ responses. Both SP experiments were based on a trip reported by participants during a phone interview. For each experiment two specifications, a linear and a nonlinear one were estimated. The nonlinear specification allows investigating the impact of selected socio-demographic variables, in this case income and travel time, on the parameters of the models and on willingness to pay indicators. Such indicators permit to complement the qualitative discussion of the results with quantitative analyses and provide a useful background for policy evaluation and planning.

Experiment 2: Carsharing

In the second SP experiment the alternatives considered were car, public transport and carsharing. In this case all respondents received the same set of alternatives while the number of situations was limited to six. An issue which had to be tackled was the cost of carsharing travel. The norm in SP experiments with car and public transport as available modal options is to take into account the cost of the ticket for public transport travel and the cost of the gasoline for car travel. It is commonly accepted that gasoline cost is what car users perceive as the cost of a trip with that mode. The parking cost can be eventually added. In the case of carpooling this was appropriate, since carpooling implies the use of a private car. In the case of carsharing the usage fee covers other costs which are not usually taken into account in such experiments, nor generally by the driver of a private car as cost of a particular trip; car insurance and amortization costs are the most important. For that reason, in the second SP experiment total kilometer costs were used. The kilometer cost was calculated using appropriate tables available on the web page of a Swiss automobile club (14). In order to have personalized costs, twelve different categories were considered according to the type of car (using price as proxy, with four levels) and to the yearly mileage (with three levels). Consumption, as in the previous exercise, was the one declared by the respondent. The cost for carsharing usage was calculated using the current prices of the Swiss operator Mobility (15). The carsharing car was, as far as possible, of the same or similar category as the respondent’s own car. Mobility’s fleet includes most, but not all car types. Another issue is how to take into account the duration related part of the carsharing fee. Carsharing users, in general, pay a fee, which is the sum of a distance dependent
fee and a duration dependent fee. The latter depends on the rental time, which broadly corresponds to the duration of the round-trip tour; at least in the case of carsharing systems like Mobility which do not allow one-way rentals. Ideally, one would compare tours and not trips; however, since it was not possible to have the precise information needed for the whole tour, the experiment is based on a choice at the trip level. The ranges for the second experiment are reported in Table 2. They were chosen with the same criteria as for the first experiment.

**Keywords**

CarSharing

**Preferred citation style**

1.0 Document Description

Citation

Title: CarSharing SP
Identification Number: CarSharingSP
Authoring Entity: Dr. Francesco Ciari (IVT, ETH Zürich)
Prof. Dr. Kay W. Axhausen (IVT, ETH Zürich)
Date of Production: 2013-04-08
Software used in Production: Nesstar Publisher

2.0 Study Description

Citation

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Study Scope

A recent study aimed to estimate the potential of carpooling in Switzerland. Part of this study was a survey in which the attitude of the public towards this transport option was investigated using both multi-response questions and stated preference (SP) experiments. In order to gain an insight on how innovative modes are perceived in general, the SP part was composed of two different experiments, one of them including carsharing as alternative. In the first experiment respondents were choosing among car, public transport, carpooling as driver and carpooling as passenger. In the second experiment respondents were choosing among car, public transport and carsharing. This paper reports on the multinomial logit choice models, which were estimated based on participants’ responses. Both SP experiments were based on a trip reported by participants during a phone interview. For each experiment two specifications, a linear and a nonlinear one were estimated. The nonlinear specification allows investigating the impact of selected socio-demographic variables, in this case income and travel time, on the parameters of the models and on willingness to pay indicators. Such indicators permit to complement the qualitative discussion of the results with quantitative analyses and provide a useful background for policy evaluation and planning. Experiment 2: Carsharing In the second SP experiment the alternatives considered were car, public transport and carsharing. In this case all respondents received the same set of alternatives while the number of situations was limited to six. An issue which had to be tackled was the cost of carsharing travel. The norm in SP experiments with car and public transport as available modal options is to take into account the cost of the ticket for public transport travel and the cost of the gasoline for car travel. It is commonly accepted that gasoline cost is what car users perceive as the cost of a trip with that mode. The parking cost can be eventually added. In the case of carpooling this was appropriate, since carpooling implies the use of a private car. In the case of carsharing the usage fee covers other costs which are not usually taken into account in such experiments, nor generally by the driver a of a private car as cost of a particular trip; car insurance and amortization costs are the most important. For that reason, in the second SP experiment total kilometer costs were used. The kilometer cost was calculated using appropriate tables available on the web page of a Swiss automobile club (14). In order to have personalized costs, twelve different categories were considered according to the type of car (using price as proxy, with four levels) and to the yearly mileage (with three levels). Consumption, as in the previous exercise, was the one declared by the
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3.0 File Description

File: CarSharing SP.NSDstat

- Number of cases: 4350
- No. of variables per record: 41
- Type of File: NSDstat 200501

4.0 Variable Description

Variable Groups

- Person
- SP CarSharing

Person

Variables within Person

- Interview-Nummer
- Choice
- Car Sharing Cost
- Car Sharing Parking Cost
- Geschlecht
- Alter
- alter (ungruppiert)
- Frage 4.10: Wie viele Personen leben in ihrem Haushalt, Sie eingerechnet?
- Frage 43.00: Sind Sie erwerbstätig?
- Frage 1.45: Haben Sie persönlich ein Bahn- oder Verbundabonnement?
- Frage 32.00: Wieviele Autos sind in Ihrem Haushalt vorhanden?
- Frage 47.00: Welche Schule haben Sie zuletzt besucht?
- Frage 1.51: Sie besitzen also ein GENERAL-ABONNEMENT. Handelt es sich dabei um das normale Erwachsenen GA, das Partner GA, ein Familien GA oder um ein anderes spezielles GA? (Original)
- Car Sharing Member
- Car Sharing genutzt
- Car Pooling
- Muttersprache
- Frage 33.00: Wie können Sie - auch wenn im Haushalt nicht vorhanden - über ein Auto verfügen? Sie können mir sagen immer, gelegentlich - oder nie.
- Frage 613.10: Benütztes Verkehrsmittel
- Frage 615.00: Zurückgelegte KM (1 Kommastelle)
- Frage 613.00: Zu welchem Hauptzweck haben Sie diesen Weg unternommen?
- Car Pooling Erfahrung
- Einkommen
- Mode
- im Besitz eines Ga's?
- Anderes Abo für OEV?
- Einkommen in CHF
- Wahl bei Car Pooling SP
### Variables

#### Variable: Interview-Nummer

**Location:**

- **Width:** 8
- **Range of Valid Data Values:** 201038307 to 201135436
- **Range of Invalid Data Values:** 9999
- **Summary Statistics:**
  - **Minimum:** 201038307
  - **Maximum:** 201135436
  - **Mean:** 201105379.264
  - **Standard deviation:** 20182.112

**Variable Format:** numeric

#### Variable: Choice

**Location:**

- **Width:** 8
- **Value** | **Label** | **Frequency**
  - 1 .
  - 2 .
  - 3 .

- **Range of Valid Data Values:** 1 to 3
- **Summary Statistics:**
  - **Minimum:** 1
  - **Maximum:** 3
  - **Mean:** 2.191
  - **Standard deviation:** 0.672

**Variable Format:** numeric

#### Variable: Car Sharing Cost

**Location:**

- **Range of Valid Data Values:** 0.832 to 439.67
- **Width:** 17

**Summary Statistics:**
### Car Sharing Parking Cost

**Location:**
- **Range of Valid Data Values:** 3.2 to 252

**Summary Statistics:**
- **Minimum:** 3.2
- **Maximum:** 252
- **Mean:** 10.516
- **Standard deviation:** 20.627

**Variable Format:** numeric

### Car Sharing Travel Time (in Vehicle)

**Location:**
- **Range of Valid Data Values:** 3.2 to 308.4

**Summary Statistics:**
- **Minimum:** 3.2
- **Maximum:** 308.4
- **Mean:** 36.849
- **Standard deviation:** 38.015

**Variable Format:** numeric

### Car Sharing Walking Time

<table>
<thead>
<tr>
<th>Value</th>
<th>Label</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td>1688</td>
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<tr>
<td>5</td>
<td></td>
<td>1564</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>1098</td>
</tr>
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</table>

**Range of Valid Data Values:** 0 to 10

**Summary Statistics:**
- **Minimum:** 0
- **Maximum:** 10
- **Mean:** 4.322
- **Standard deviation:** 3.944

**Variable Format:** numeric

### Car Sharing Public Transport Time

<table>
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<tr>
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<th>Frequency</th>
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<tbody>
<tr>
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<td>1802</td>
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<td>6</td>
<td></td>
<td>1454</td>
</tr>
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**Range of Valid Data Values:** 0 to 6
Summary Statistics:
Minimum : 0
Maximum : 6
Mean : 3.248
Standard deviation : 2.283
Variable Format: numeric

Variable: Private Car Cost (Gasoline)
Location: Range of Valid Data Values: 0.549 to 747.4
Width: 18
Summary Statistics:
Minimum : 0.549
Maximum : 747.4
Mean : 44.834
Standard deviation : 63.491
Variable Format: numeric

Variable: Private Car Parking Cost
Location: Range of Valid Data Values: 3.2 to 6
Width: 3
Summary Statistics:
Minimum : 3.2
Maximum : 6
Mean : 4.777
Standard deviation : 1.161
Variable Format: numeric

Variable: Private Car Travel Time (in Vehicle)
Location: Range of Valid Data Values: 3.2 to 318
Width: 4
Summary Statistics:
Minimum : 3.2
Maximum : 318
Mean : 40.787
Standard deviation : 37.339
Variable Format: numeric

Variable: Private Car Walking Time
Location: Range of Valid Data Values: 0 to 10
Width: 17
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<tr>
<th>Value</th>
<th>Label</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
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<td>0.</td>
<td>0</td>
<td>1702</td>
</tr>
<tr>
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<td>5</td>
<td>979</td>
</tr>
<tr>
<td>10.</td>
<td>10</td>
<td>1669</td>
</tr>
</tbody>
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Summary Statistics:
Minimum : 0
Maximum: 10
Mean: 4.962
Standard deviation: 4.402
Variable Format: numeric

**Variable: Public Transport Cost (Ticket)**
Location: Range of Valid Data Values: 0.64 to 244.8
Width: 18
**Summary Statistics:**
- Minimum: 0.64
- Maximum: 244.8
- Mean: 15.039
- Standard deviation: 20.531
Variable Format: numeric

**Variable: Public Transport Travel Time (in Vehicle)**
Location: Range of Valid Data Values: 3.2 to 418.8
Width: 17
**Summary Statistics:**
- Minimum: 3.2
- Maximum: 418.8
- Mean: 61.996
- Standard deviation: 50.662
Variable Format: numeric

**Variable: Public Transport Walking Time**
Location: Range of Valid Data Values: 0 to 118.8
Width: 20
**Summary Statistics:**
- Minimum: 0
- Maximum: 118.8
- Mean: 11.193
- Standard deviation: 9.235
Variable Format: numeric

**Variable: Public Transport Waiting Time**
Location: Range of Valid Data Values: 0 to 116.4
Width: 18
**Summary Statistics:**
- Minimum: 0
- Maximum: 116.4
- Mean: 9.988
- Standard deviation: 11.309
Variable Format: numeric

**Variable: Public Transport Transfers**
Location: Value | Label | Frequency
### Range of Valid Data Values

0 to 12

### Summary Statistics:

- **Minimum**: 0
- **Maximum**: 12
- **Mean**: 1.692
- **Standard deviation**: 1.924

**Variable Format**: numeric

#### Variable: Geschlecht

<table>
<thead>
<tr>
<th>Value</th>
<th>Label</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 Männer</td>
<td>2447</td>
</tr>
<tr>
<td>2</td>
<td>2 Frauen</td>
<td>1903</td>
</tr>
<tr>
<td>9999</td>
<td>9999 Keine Angabe</td>
<td>0</td>
</tr>
</tbody>
</table>

Range of Valid Data Values: 1 to 2

Range of Invalid Data Values: 9999

#### Summary Statistics:

**Variable Format**: numeric

#### Variable: Alter

<table>
<thead>
<tr>
<th>Value</th>
<th>Label</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>15 - 19 Jahre</td>
<td>72</td>
</tr>
<tr>
<td>20</td>
<td>20 - 29 Jahre</td>
<td>306</td>
</tr>
<tr>
<td>30</td>
<td>30 - 39 Jahre</td>
<td>716</td>
</tr>
<tr>
<td>40</td>
<td>40 - 49 Jahre</td>
<td>1298</td>
</tr>
<tr>
<td>50</td>
<td>50 - 59 Jahre</td>
<td>1023</td>
</tr>
<tr>
<td>60</td>
<td>60 - 69 Jahre</td>
<td>629</td>
</tr>
<tr>
<td>70</td>
<td>70 - 84 Jahre</td>
<td>306</td>
</tr>
<tr>
<td>9999</td>
<td>9999 Keine Angabe</td>
<td>0</td>
</tr>
</tbody>
</table>

Range of Valid Data Values: 15 to 70

Range of Invalid Data Values: 9999

#### Summary Statistics:

- **Minimum**: 15
- **Maximum**: 70
Variable: **alter (ungruppiert)**

Location:  
Range of Valid Data Values: 16 to 84

Width: 8  
Range of Invalid Data Values: 9999

**Summary Statistics:**

- Minimum : 16
- Maximum : 84
- Mean : 48.348
- Standard deviation : 13.74

Variable Format: numeric

**Variable: Frage 4.10: Wieviele Personen leben in Ihrem Haushalt, Sie eingerechnet?**

<table>
<thead>
<tr>
<th>Value</th>
<th>Label</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 .</td>
<td>440</td>
<td></td>
</tr>
<tr>
<td>2 .</td>
<td>1773</td>
<td></td>
</tr>
<tr>
<td>3 .</td>
<td>673</td>
<td></td>
</tr>
<tr>
<td>4 .</td>
<td>1034</td>
<td></td>
</tr>
<tr>
<td>5 .</td>
<td>341</td>
<td></td>
</tr>
<tr>
<td>6 .</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>7 .</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

Range of Valid Data Values: 1 to 7

Range of Invalid Data Values: 9999

**Summary Statistics:**

- Minimum : 1
- Maximum : 7
- Mean : 2.849
- Standard deviation : 1.243

Variable Format: numeric

**Variable: Frage 43.00: Sind Sie erwerbstätig?**

<table>
<thead>
<tr>
<th>Value</th>
<th>Label</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 .</td>
<td>1 Ja, vollzeittlich (ab 37 Std. pro Woche)</td>
<td>2246</td>
</tr>
<tr>
<td>2 .</td>
<td>2 Ja, Teilzeit (bis 36 Std. pro Woche)</td>
<td>1093</td>
</tr>
<tr>
<td>3 .</td>
<td>3 Nein</td>
<td>1011</td>
</tr>
<tr>
<td>9999 .</td>
<td>9999 Keine Angabe</td>
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</tr>
</tbody>
</table>

Range of Valid Data Values: 1 to 3

Range of Invalid Data Values: 9999

**Summary Statistics:**

Variable Format: numeric

**Variable: Frage 1.45: Haben Sie persönlich ein Bahn - oder Verbundabonnement?**

<table>
<thead>
<tr>
<th>Value</th>
<th>Label</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 .</td>
<td>1 Ja, vollzeittlich (ab 37 Std. pro Woche)</td>
<td>603</td>
</tr>
<tr>
<td>Value</td>
<td>Label</td>
<td>Frequency</td>
</tr>
<tr>
<td>-------</td>
<td>--------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>0</td>
<td>0 Keines</td>
<td>169</td>
</tr>
<tr>
<td>1</td>
<td>1 Auto</td>
<td>2066</td>
</tr>
<tr>
<td>2</td>
<td>2 Autos</td>
<td>1720</td>
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<td>3</td>
<td>3 Autos</td>
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<tr>
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<td>4 Autos</td>
<td>72</td>
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</tr>
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</table>

Range of Valid Data Values: 0 to 9
Range of Invalid Data Values: 9999

Summary Statistics:

Minimum : 0
Maximum : 6

Variable Format: numeric

Variable: Frage 47.00: Welche Schule haben Sie zuletzt besucht?

<table>
<thead>
<tr>
<th>Value</th>
<th>Label</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Primar-/Sekundar-/Real-/Bezirkschule</td>
<td>241</td>
</tr>
<tr>
<td>2</td>
<td>Berufsschule/Lehre/Gewerbeschule</td>
<td>2076</td>
</tr>
<tr>
<td>3</td>
<td>Mittelschule/Gymnasium/höhere Schulen (UNI/ETH)</td>
<td>2033</td>
</tr>
<tr>
<td>9999</td>
<td>9999 Keine Angabe</td>
<td>0</td>
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</table>

Range of Valid Data Values: 1 to 3
Range of Invalid Data Values: 9999

Summary Statistics:

Variable Format: numeric

Variable: Frage 1.51: Sie besitzen also ein GENERAL-ABONNEMENT. Handelt es sich dabei um das normale Erwachsenen GA, das Partner GA, ein Familien GA oder um ein anderes spezielles GA? (Original)

<table>
<thead>
<tr>
<th>Value</th>
<th>Label</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>3934</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>01 GA Erwachsene</td>
<td>314</td>
</tr>
<tr>
<td>2</td>
<td>02 GA-Plus Duo Partner</td>
<td>24</td>
</tr>
</tbody>
</table>
4. 04 GA-Plus Familia Jugend (16-25 Jahre)  6
5. 05 GA-Plus Familia Partner  6
6. 06 GA Familia Kind (bis 15 Jahre)  0
7. 07 GA Junior (16-25 Jahre)  18
8. 08 GA Junior für Studierende 25-30 J.  12
9. 09 GA Senior  30
10. 10 GA Behinderte  6
11. 11 Schnupper-GA  0
12. 12 GA Lernende (wird durch Firma gestellt)  0

Range of Valid Data Values: 0 to 12
Range of Invalid Data Values: 9999

**Summary Statistics:**

Variable Format: numeric

**Variable: Car Sharing Member**

<table>
<thead>
<tr>
<th>Location</th>
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<td></td>
<td>4130</td>
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Summary Statistics:

Variable Format: character

**Variable: Car Sharing genutzt**

<table>
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<td></td>
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Summary Statistics:

Variable Format: character

**Variable: Car Pooling**

<table>
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<td>223</td>
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Range of Valid Data Values: 1 to 9

**Summary Statistics:**

Variable Format: numeric

**Variable: Muttersprache**

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<tr>
<th>Location</th>
<th>Value</th>
<th>Label</th>
<th>Frequency</th>
</tr>
</thead>
</table>


### Variable: Frage 33.00: Wie können Sie - auch wenn im Haushalt nicht vorhanden - über ein Auto verfügen? Sie können mir sagen immer, gelegentlich - oder nie.

<table>
<thead>
<tr>
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<th>Label</th>
<th>Frequency</th>
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</tr>
<tr>
<td>2</td>
<td>gelegentlich</td>
<td>566</td>
</tr>
<tr>
<td>3</td>
<td>nie</td>
<td>42</td>
</tr>
<tr>
<td>9999</td>
<td>9999 Keine Angabe</td>
<td>0</td>
</tr>
</tbody>
</table>

**Range of Valid Data Values:** 1 to 3

**Range of Invalid Data Values:** 9999

**Summary Statistics:**

Variable Format: numeric

### Variable: Frage 613.10: Benutztes Verkehrsmittel

<table>
<thead>
<tr>
<th>Value</th>
<th>Label</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0 Taxi</td>
<td>6</td>
</tr>
<tr>
<td>1</td>
<td>1 Auto als Fahrer</td>
<td>2554</td>
</tr>
<tr>
<td>2</td>
<td>2 Auto als Beifahrer</td>
<td>984</td>
</tr>
<tr>
<td>3</td>
<td>3 Tram/Bus</td>
<td>84</td>
</tr>
<tr>
<td>4</td>
<td>4 Motorrad/Töff</td>
<td>18</td>
</tr>
<tr>
<td>5</td>
<td>5 Bahn / Bergbahn</td>
<td>692</td>
</tr>
<tr>
<td>6</td>
<td>6 Car (Ohne Fahrplan)</td>
<td>12</td>
</tr>
<tr>
<td>7</td>
<td>7 Flugzeug</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>8 Schiff</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>9 Seilbahn</td>
<td>0</td>
</tr>
<tr>
<td>9999</td>
<td>9999 Keine Angabe</td>
<td>0</td>
</tr>
</tbody>
</table>

**Range of Valid Data Values:** 0 to 9

**Range of Invalid Data Values:** 9999

**Summary Statistics:**

Variable Format: numeric

### Variable: Frage 615.00: Zurückgelegte KM (1 Kommastelle)

**Range of Valid Data Values:** 2 to 333

**Range of Invalid Data Values:** 9999

**Summary Statistics:**

Minimum : 2
Maximum : 333
Mean : 42.623
**Standard deviation:** 47.94

**Variable Format:** numeric

**Variable:** Frage 613.00: Zu welchem Hauptzweck haben Sie diesen Weg unternommen?

<table>
<thead>
<tr>
<th>Location</th>
<th>Value</th>
<th>Label</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width: 8</td>
<td>0 .</td>
<td>0 Rückfahrt nach Hause</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1 .</td>
<td>1 Arbeit</td>
<td>1726</td>
</tr>
<tr>
<td></td>
<td>2 .</td>
<td>2 Ausbildung</td>
<td>102</td>
</tr>
<tr>
<td></td>
<td>3 .</td>
<td>3 Geschäftsreise</td>
<td>203</td>
</tr>
<tr>
<td></td>
<td>4 .</td>
<td>4 Freizeitfahrt Ausflug / Nutzfahrt</td>
<td>2223</td>
</tr>
<tr>
<td></td>
<td>5 .</td>
<td>5 Ferien</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td>9999</td>
<td>9999 Keine Angabe</td>
<td>0</td>
</tr>
</tbody>
</table>

**Range of Valid Data Values:** 0 to 5

**Range of Invalid Data Values:** 9999

**Summary Statistics:**

**Variable Format:** numeric

**Variable:** Car Pooling Erfahrung

<table>
<thead>
<tr>
<th>Location</th>
<th>Value</th>
<th>Label</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width: 8</td>
<td>0 .</td>
<td></td>
<td>3891</td>
</tr>
<tr>
<td></td>
<td>1 .</td>
<td></td>
<td>459</td>
</tr>
</tbody>
</table>

**Range of Valid Data Values:** 0 to 1

**Summary Statistics:**

Minimum : 0

Maximum : 1

Mean : 0.106

**Standard deviation : 0.307**

**Variable Format:** numeric

**Variable:** Einkommen

<table>
<thead>
<tr>
<th>Location</th>
<th>Range of Valid Data Values: 1 to 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width: 3</td>
<td></td>
</tr>
</tbody>
</table>

**Summary Statistics:**

Minimum : 1

Maximum : 9

Mean : 4.571

**Standard deviation : 1.939**

**Variable Format:** numeric

**Variable:** Mode

<table>
<thead>
<tr>
<th>Location</th>
<th>Value</th>
<th>Label</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width: 8</td>
<td>1 .</td>
<td>miv</td>
<td>2554</td>
</tr>
<tr>
<td></td>
<td>2 .</td>
<td>cpm</td>
<td>984</td>
</tr>
<tr>
<td></td>
<td>3 .</td>
<td>oev</td>
<td>704</td>
</tr>
<tr>
<td></td>
<td>4 .</td>
<td>other</td>
<td>108</td>
</tr>
</tbody>
</table>
**Range of Valid Data Values**: 1 to 4

**Summary Statistics**:

Minimum : 1  
Maximum : 4

**Variable Format**: numeric

**Variable: im Besitz eines Ga’s?**

<table>
<thead>
<tr>
<th>Value</th>
<th>Label</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 .</td>
<td>nein</td>
<td>3934</td>
</tr>
<tr>
<td>1 .</td>
<td>ja</td>
<td>416</td>
</tr>
</tbody>
</table>

**Range of Valid Data Values**: 0 to 1

**Summary Statistics**:

Minimum : 0  
Maximum : 1

**Variable Format**: numeric

**Variable: Anderes Abo für OEV?**

<table>
<thead>
<tr>
<th>Value</th>
<th>Label</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 .</td>
<td>nein</td>
<td>1912</td>
</tr>
<tr>
<td>1 .</td>
<td>ja</td>
<td>2438</td>
</tr>
</tbody>
</table>

**Range of Valid Data Values**: 0 to 1

**Summary Statistics**:

Minimum : 0  
Maximum : 1

**Variable Format**: numeric

**Variable: Einkommen in CHF**

| Range of Valid Data Values: 1500 to 17000

**Summary Statistics**:

Minimum : 1500  
Maximum : 17000

Mean : 8238.23  
Standard deviation : 3834.21

**Variable Format**: numeric

**Variable: Wahl bei Car Pooling SP**

<table>
<thead>
<tr>
<th>Value</th>
<th>Label</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 .</td>
<td>1079</td>
<td></td>
</tr>
<tr>
<td>1 .</td>
<td>3271</td>
<td></td>
</tr>
</tbody>
</table>

**Range of Valid Data Values**: 0 to 1

**Summary Statistics**:

**Variable Format**: numeric
Variable:

Location: Range of Valid Data Values: 0 to 330

Width: 8

Summary Statistics:

Minimum: 0

Maximum: 330

Mean: 38.621

Standard deviation: 47.838

Variable Format: numeric