

# **“Sustainability and Employment by Marketing”**

**GERMANY**

## INTRODUCTION

Following years of experience in marketing, *Socialdata (The Institute for Transport and Infrastructural Research GmbH in Munich, Germany)*, has developed a concept to combine marketing measures and the promoting employment in the public transport sector. Previous evaluation of marketing projects showed that marketing campaigns were very successful in encouraging people to use public transport more often. In Individualised Marketing projects bus drivers did home visits to deliver test tickets to the household and to inform them about public transport issues. This experience led to the idea to educate employees of public transport companies as customer advisors and involve them in marketing campaigns. This was a new idea and was proposed as pilot case study for TAPESTRY. The case study "Employment and Sustainability by Marketing (SEM)" was created and applied within *Stuttgarter Straßenbahnen AG (SSB AG)*, a public transport company in Stuttgart.

The concept behind the project was to train employees of the public transport company, who had regular contact with customers as mobility advisors, who could then work in marketing campaigns, conduct home visits or take part in events. SEM predicted that the employees would contribute to the marketing campaign through their training as mobility advisors. The additional training would create increased job satisfaction among employees because of the variety of work that they could now be involved in.

Socialdata worked in partnership with SSB AG to create two elements for the SEM project: the first being a line marketing action and the second the creation of a dialogue or communication with customers. Within the line marketing action some employees of the public transport company were trained as mobility advisors. The dialogue marketing was designed to inform the residents, who lived along the bus route, about public transport.

The following chapters describe the concept and implementation of the line and dialogue marketing in more detail.

## ELEMENTS OF THE PROJECT

### Process and reason for choice

The basic concept was to implement an integrated marketing approach for a specific bus route by creating dialogue with users and potential users and a line marketing activity involving public transport employees. Single and separate actions on buses and in households that were already implemented and evaluated elsewhere were not being repeated. The decision for this concept was taken by the SSB because it was an innovative method offering an additional service to the customers. Also the training of the employees, as customer advisors, is new and requires full assessment of the impacts. The bus route number 42 in Stuttgart was chosen because it already offered a good service and was well used. SSB also anticipated that the dialogue marketing with households along the route 42 corridor would support the actions of the line marketing activity.

### Objectives

The main objectives of this pilot study were:

- To raise awareness of public transport company employees
- To create a dialogue between the public transport company and its customers
- To increase demand of the service
- To protect jobs by ensuring the need for more personnel
- To improve the public transport companies service through more customer consultation
- Increase knowledge of the line and route among customers

The objectives of the study are consistent with the strategic objectives of the public transport operator. Consultation with customers could potentially improve the service offered by SSB who are continually seeking to offer a good service to their customers. Detailed information about the lines and routes would raise awareness about public transport. As marketing is very important aspect of SSB's service it was vital to have trained employees to work on the different marketing campaigns.

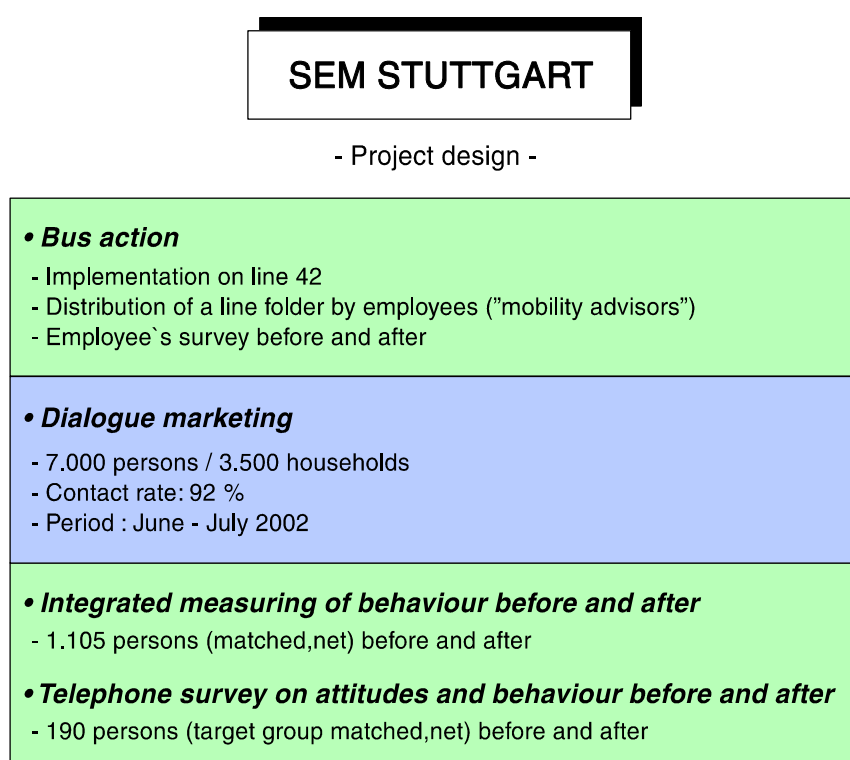
### Leaders and partners

The public transport in Stuttgart is very well developed and is highly regarded in Germany. SSB, the local public transport operator in the city, spends a lot of money in order to offer a good service to customers and is always interested in new approaches to improve their service and acquire new customers. The approach of the bus marketing activity was new for SSB, so in partnership with Socialdata they created this pilot project. A further partner in this project

was the private consultation office *Partizipation und Mobilität*, who trained the mobility advisors and organised the bus marketing activity. *Socialdata*, a private institute for transport and infrastructural research, was the leader and co-ordinator of the project. The SSB funded the project by 50 % with 50% provided by the European Commission project TAPESTRY.

## Details

At the outset of the project the focus was on the bus marketing activity. Additionally SSB wanted to create more impact by implementing the dialogue marketing on route 42. The project was designed as follows:



**Figure 1: Project design**

The process of the bus activity involved employees of the public transport company, SSB, working on the bus where they were in direct contact with the customers. Volunteers were sought to take the role of mobility advisor to avoid negative experiences for employees and the customer. For the bus activity six employees were available. The employees worked in different sectors of the service, such as drivers and ticket collectors.

The private office for consultation *Partizipation und Mobilität* was in charge of training the employees as mobility advisors. The employees were educated various aspects of theory and practice. During the training the following issues were covered:

- Mobility in Stuttgart
- Creating a line folder

- Communication with customers
- Analysis of the marketing approach

The work on an existing folder by mobility advisors was important and guaranteed that mobility advisors were able to give detailed information during the bus action. An important attribute of potential mobility advisors was a good working knowledge about the bus routes.

Route 42 was chosen because it offered a good service and provided links to many important facilities. There were also important connections to the metro or urban rail from this route. The fact that the route is located near the city centre guaranteed that a greater target group can be reached.

After the external training of the employees to mobility advisors, the implementation of the bus action started from the beginning of June 2002. It ran for four days at off-peak times during the week from 9 am to 12 am. The task of the mobility advisors was to distribute the self-designed line folder to the customers. During this time the customers had the chance to ask all kinds of questions concerning the public transport service and route. Around 2500 folders were distributed during the bus action to the customers. The mobility advisors were accompanied by their trainer who could help in questions of communication. After the bus action there was an internal discussion between the trainer and the mobility advisors to exchange their impressions and experiences.

In order to get a better picture about their attitudes, the six chosen mobility advisors were surveyed before and after the bus action. The same number of people were surveyed for the control group. The before survey was conducted in May 2002 and the after survey in October 2002.

Parallel to the bus action, the dialogue marketing with inhabitants in the corridor of the 42 bus route took place. A corridor along the route was targeted. In total 7.000 people in the target area were contacted. To know more about the effects of the dialogue marketing, 1103 people (matched sample) were surveyed before and after the event. The before survey was conducted in June 2002 and the after survey in October 2002. A telephone survey on attitudes and behaviour before and after the campaign was also conducted. 190 people from the target group and 76 people from the control group were surveyed before and after the events.

## CAMPAIGN IMPLEMENTATION

### Responsibilities

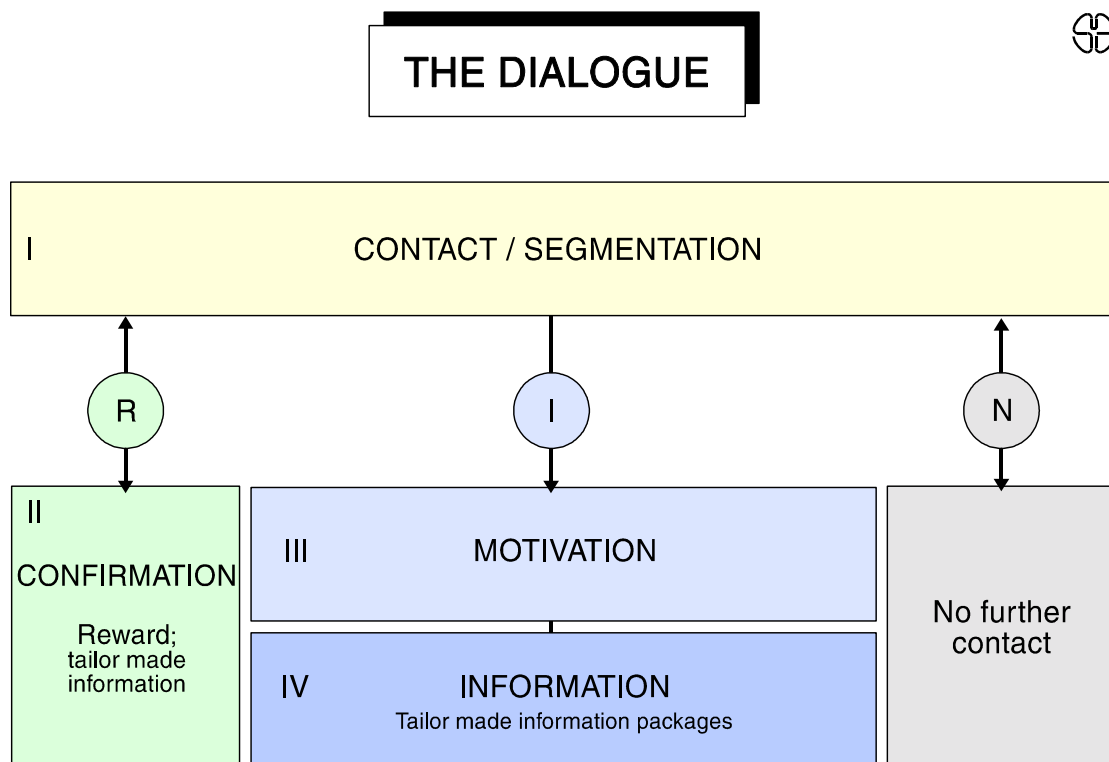
*Socialdata* was responsible for the implementation of the case study. The personnel for the bus action were supplied by the SSB for the duration of the project. The private consultation office *Partizipation und Mobilität*, a subcontractor of *Socialdata*, was in charge of training the mobility advisors and planning the action. The dialogue marketing was organised and implemented by *Socialdata*.

### The process

The implementation of the bus action started from the beginning of June 2002. It ran for four days at off-peak times during the week from 9 am to 12 am. The task of the mobility advisors was to distribute the self-designed line folder to the customers. During this time the customers had the chance to ask all kinds of questions concerning the public transport service and route. Around 2500 folders were distributed during the bus action to the customers.

For the implementation of the dialogue marketing in Stuttgart *Socialdata* used the following concept:

The concept previews a step-by-step procedure to identify households, which intend to use more often public transport through a direct contact approach. See Figure 2.



**Figure 2: The dialogue**

During the contact phase, (phase I) all households / persons in a defined area received an introductory letter promoting the campaign. In the following weeks the households received a questionnaire, which asked about their use of different modes of transport. At the same time the questionnaire asked if the households were interested in receiving free information and material about public transport.

In the segmentation phase, the information obtained during the contact phase was used to divide the contacted persons / households into three main groups according to specific criteria:

- Group 'I' (interested / interesting households) were contacted in the following phase.
- Group 'R' (at least one member of the household uses public transport regularly) was distinguished between those who do not require further information 'R without', and 'R with', as some regular users also needed up-dated information.
- Group 'N' (not interested / not interesting households) were not contacted anymore.

In the confirmation phase (phase II) the group "R with" and "R without" were rewarded with a small present for their use of public transport.

In the motivation phase (phase III) the group "I" and "R with" were asked for their information requirements (by mail with a service sheet).

Their information requirements were fulfilled by *Socialdata* in the information phase (phase IV).

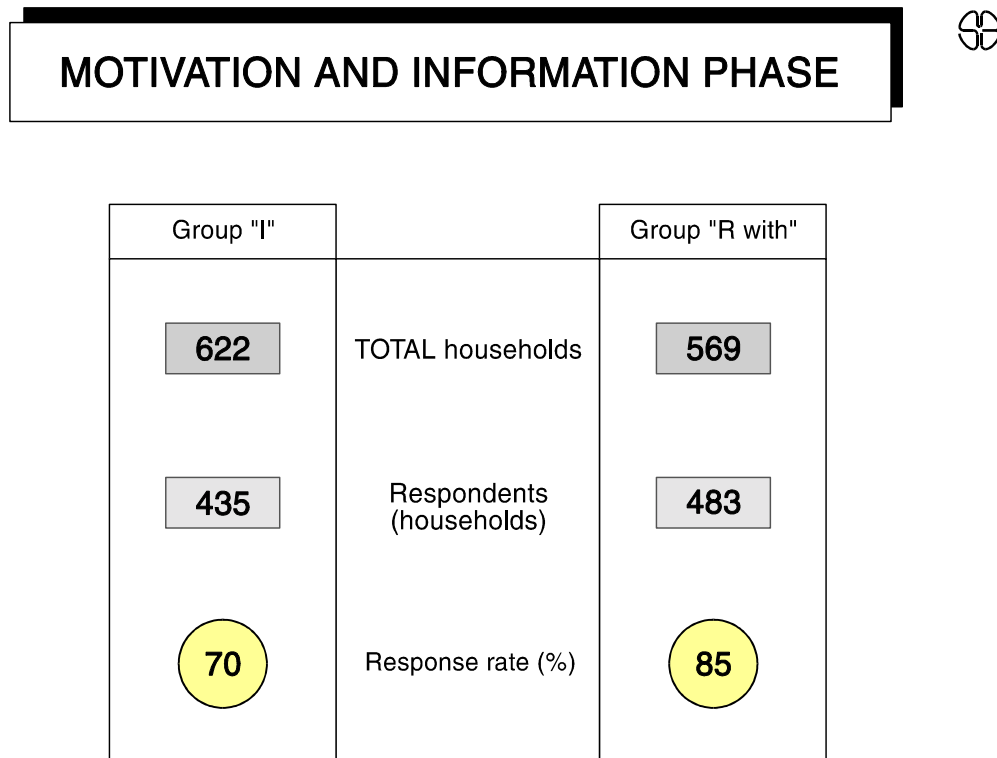
The dialogue marketing campaign was conducted from June to July 2002. During the campaign approximately 7.000 people were contacted in 3.500 households. 3.221 households could be segmented. This gave a response rate of 92 %. The results of the segmentation are as follows:

- Group "R without": 702 households (22 %)
- Group "R with": 569 households (18 %)
- Group "I": 622 households (19 %)
- Group "N": 1.328 households (41 %)

Nearly two thirds of the contacted households were selected for participation in the service campaign. 41 % of the households were not interested in taking part in the marketing campaign. Group "N" were not contacted after the contact/segmentation phase.

After the segmentation, group "R with" and "R without" were rewarded with a gift for using public transport. A choice of six gifts were available including an SSB calculator, an SSB mini torch and an SSB clock. In total 1.294 gifts were distributed.


Most of the households with at least one regular user of public transport were interested in the information material (group “R with”, 483 of 569 households). In the information phase group “R with” and group “I” were able to order the information material by a service sheet.



**Figure 3: Motivation and information phase**

As shown in the figure below a lot of information material was distributed. This illustrates the high level of interest shown by respondents of group “I” and “R with”. The high response rate of 70 % in group “I” and 85 % in the group “R with” demonstrates the need for more information. It is interesting to note that the response rate of the group “R with” was higher than in the group “I”. That means that there was a great demand for information in the group of regular users too.

**DIALOGUE MARKETING**



- Information -

Group "I" (%)		Group "R with" (%)
71	• Bus timetable no. 42	66
50	• Timetable for urban rail	43
46	• Bus stop timetable	42
13	• PersonalJourney plans	19
50	• Leaflet "Fares and ticket guide"	33
26	• Leaflet "Tickets for everyone"	19
32	• Leaflet "Tickets for seniors / pass orange"	16
70	• Transport network in Stuttgart	67
47	• Leaflet "With the SSB in the natural reserve"	56

**Figure 4: Requested information material**

The most sought after information was the bus timetable for the bus no. 42 and the transport network for Stuttgart. There was also a high demand for the brochure "*With the SSB in natural reserve*" and the timetable for urban rail.

### Costs

The cost for the implementation of this campaign was 45.000 € which was paid by the SSB. Additionally there was a cost for the training of the mobility advisors which was met by the consultation office *Partizipation und Mobilität*. The cost for the training was 18.000 € This brought the total cost to 63.000 €

## CAMPAIGN ASSESSMENT

### Methodology

In the previous chapters two main elements of the project were described: the bus action and dialogue marketing. The bus action was evaluated with a before and after survey of the employees to find out more about their attitudes and behaviour. In order to compare the results of the target group, a control group of six people was created. These groups consisted of staff who worked for the public transport operator in different areas, some of whom had customer contact and some who didn't.

In the before survey both groups answered the same questionnaire. The questions covered:

- opinions about the situation and the development of the circulation in general in Stuttgart
- use of different modes of transport
- the importance of different modes for the inhabitants of Stuttgart
- points of criticism concerning public transport and the measures which should be taken.

In addition to these questions the target group was asked questions concerning the bus action. For the after survey for the control group, the before survey was used but with some alterations. The before and after surveys were conducted as one to one interviews. The before survey of the control and target group was conducted in May 2002 and the after survey in October 2002.

The marketing campaign was assessed to discover whether there was a higher use of public transport following information provision and if the campaign was accepted by the target group. In the before survey people were surveyed by mail. In the after the target people were surveyed by telephone. Additionally there were before and after surveys about behaviour and attitudes which were conducted by telephone in June 2002 and October 2002.

### Target groups

Six employees of SSB took part in the bus action event. Four of them were male and two female. The age of the mobility advisors was between 27 and 46 years, the average age was 37 years. Five of these employees worked in customer relations, and one employee worked in the driving service. In the control group six employees were chosen. The age of this group was between 28 and 41 years (average 35 years). Five of these employees were working in areas with customer relation too.

For the dialogue marketing the total of 7000 persons in 3500 households were contacted. 1103 respondents of the dialogue marketing were surveyed before and after in an integrated measurement. The target group for the integrated measurement were respondents of the group "R" and "T".

190 people were surveyed in the target group for the survey on attitudes and behaviour. The respondents belonged to the group “R” and “I”. A control group was created with 76 people, who were also surveyed before and after. These were selected in group “N”.

### **Results of employees survey**

The following section shows the results of the before and after surveys with the employees. Although the sample size was low some of the results are presented in percentages to make comparison easier. This means that the results cannot be applied to the total of SSB employees.

The target and control group were asked to estimate the growth in development of private motorised modes in Stuttgart. Both groups believed that the private motorised modes had increased in the last ten years and that this development was negative. They indicated the following reasons:

- Negative effects on environment and health
- Increased demand for parking
- Disadvantages for public transport (caused by more use of motorised private modes)
- Higher risk of accidents
- Economical reasons

In the after survey the results of the before survey were confirmed. In addition the target group in the after survey also mentioned traffic jams, impacts on air, stress and traffic which are caused by the increase in private motorised modes.

When asked which mode of transport they were using, all respondents of the target and control group (before and after) indicated that they were using public transport almost every day.

The perception of public transport by the target and control group was almost the same. In the before and after survey no clear differences were recognisable. Many of the participants were of the opinion that public transport had improved in the last years due to a better service and offers, improvements in the frequency, political promotion, strengthened investments and road support. Most of the respondents anticipated that public transport would improve in future years. The reasons for this were the further development of public transport, the creation of new lines, improved communication, optimisation of lines, and improved frequencies, as well as better service and investments. Improvements to the system and the supply were important measures. Some of the participants thought that improved public transport would be achieved by better services and more customer orientation. The minority thought that public transport would be worse in the future because of increased competition leading to achievement restrictions.

Increased use of public transport in Stuttgart was considered possible by the majority. In their opinion (target and control group), measures concerning the system and fares were necessary to increase the use of public transport. It was interesting to note that in the after survey the target group revealed that it was important that car drivers changed their minds. Otherwise they thought that marketing was not appropriate for acquiring new passengers.

Table 1: Is increased use of public transport possible?

	<b>Before TG + CG %</b>	<b>After TG + CG %</b>
(Rather) yes	100	100
(Rather) no	-	-
Total	100	100

Table 2: Conditions for increased use of public transport

	<b>Before</b>	<b>After</b>	
	<b>TG + CG</b>	<b>TG</b>	<b>CG</b>
System / infrastructure	++	++	++
Restriction for private motorised modes	+	+	+
Tariff system	+	+	+
PR / marketing	-	+	-

*Frequency of responses indicated with ++, + or -*

Concerning the system it was suggested that frequencies be improved and direct lines and correspondences created in order to increase the public transport use. When looking at costs the respondents regarded lower fares, a simpler tariff system and a more flexible ticket organisation as appropriate measures. They considered political support for the public transport as ‘necessary’.

The respondents were asked how they would decide in case of deciding between passenger car and public transport. All respondents preferred public transport outlining the disadvantages for the private car traffic in both the target and control group in before and after surveys.

For the same decision the respondents were asked for a percentage estimate of how, according to their opinion, the citizens of Stuttgart would choose. For the target group the following table shows the results:

Table 3: Conflict public transport: car traffic : estimation of the citizens by employees

	<b>Target group</b>	
	<b>before %</b>	<b>After %</b>
Favour public transport	43	61
Favour private car traffic	57	39
Total	100	100

They were then asked about deciding between pedestrians and passenger car as well as choosing between bicycle traffic and passenger car. Summarising the respondents in the after survey, it is estimated that the inhabitants of Stuttgart are oriented to environmentally friendly modes.

Table 4: Expectations to the traffic planning / -policies: Estimation of the citizens by employees

	Target group	
	before %	After %
Preference for environmentally friendly modes	38	51
Preference for passenger car	62	49
Total	100	100

In the before survey the respondents believed that the citizens of Stuttgart had a preference for the passenger car. This opinion changed in the after survey where the respondents had a preference for public transport.

The participants were asked what type of complaints they heard most frequently from the public transport users and if the complaints were justified. Here there was a great agreement between the target and control group. The most common complaints concerned prices, delays, communication and cleanliness but they were regarded as unjustified.

Table 5: Noticed complaints of the passengers

Complaints	Responses	(rather) unjustified	Measures
price	++	--	price reduction and stabilisation simpler tariff system
delays	++	--	better information about reasons
communication	++	-	line optimisation - closer clocking closer frequency

			driver is waiting in off-peak-times
cleanliness	++	-	cleaning occasionally mobile cleaning team
information	+	+	
personal security	+	-	additional vehicles
overstocking	+	-	

In the after survey, the use of the ticket machine arose as a new complaint; it was not mentioned in the before survey.

The target and control group also expressed which points were important for the citizens of Stuttgart regarding their choice of transport mode. In the following table the frequency of responses is indicated with ++, + or -.

Table 6: Estimation concerning mode choice

	Target group		Control group	
	before	after	before	after
Time	++	++	++	++
Costs	++	+	+	+
Reliability	++	++	+	+
Comfort	++	++	+	+
Temporal independence	++	+	+	+
Comfort	+	++	+	++
Road safety	++	++	++	++
Personal security	++	++	++	++
Image	++	+	+	+
Enjoyment of driving	-	+	-	-
Environment friendly	-	+	-	-

In both groups, time, reliability, temporal independence, personal security and costs were mentioned as important points. In the before and after comparison it was clear that the concerns of the target group turned to the quality of service demanded by passengers.

A further question concerned the perception of the SSB from the point of view of colleagues and the public. In the before and after surveys the target group revealed an improved perception from colleagues but also revealed a decrease in the positive perceptions from the public's point of view. In the control group there were no significant changes.

Table 7: Assessment SSB

	<b>Target group</b>			
	<b>By colleagues</b>		<b>By public</b>	
	<b>before %</b>	<b>after %</b>	<b>before %</b>	<b>after %</b>
Positive	63	67	71	65
Negative	37	33	29	35
Total	<hr/> 100	<hr/> 100	<hr/> 100	<hr/> 100

	<b>Control group</b>			
	<b>By colleagues</b>		<b>By public</b>	
	<b>before %</b>	<b>after %</b>	<b>before %</b>	<b>after %</b>
Positive	67	64	59	62
Negative	33	34	41	38
Total	<hr/> 100	<hr/> 100	<hr/> 100	<hr/> 100

Three different statements were submitted to respondents for evaluation. The statement “It is necessary to reduce the car traffic in Stuttgart”, was agreed by all 12 respondents of the control and target groups. Both groups totally agree with the statement that “the air pollution caused by the car traffic is injurious to health”. All members of the target and control group believed that they would contribute personally to the air pollution if they drove a car.

For the statement, “if people used their car less their neighbours would do it too”; most of the respondents of the target group answered this question with a ‘yes’, while most of the control group answered with a ‘no’. In the after survey all members of the target group answered with a ‘yes’.

Table 8: Estimation of car use („Would you use your car less, if your neighbours did it too“?)

	Target group		Control group	
	before %	after %	before %	after %
(Rather) yes	67	100	50	20
(Rather) no	33	-	50	80
Total	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>

Another question concerned the public's perception of public transport.

Table 9: Citizens' estimation of public transport in Stuttgart

	Target group		Control group	
	before %	after %	before %	after %
(Rather) positive	50	50	33	20
Undecided	50	50	50	60
(Rather) negative	-	-	17	20
Total	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>

Here half of the target group believed that citizens in Stuttgart assessed public transport rather positively while the other half was undecided. In the control group, 33 % of the respondents thought that it was positive and 50 % of the asked persons were undecided. Only 17 % considered it rather negative. In the after survey there were no substantial changes in both groups.

The mobility advisors, who had participated in the bus action, were also questioned about this marketing instrument in the after survey.

They were asked how they judged the interest of the passengers in the bus action.

Table 10: Estimation of interest of the passengers in the bus action

	<b>Target group %</b>
(Very) great	100
(Very) low	-
Total	<hr/> 100

Table 10 shows that the interest was evaluated as great. When asked if they thought that more passengers would use the bus line 42 after the bus action, 50% said yes and 50% said no.

Table 11: Expecting passenger increase on bus line 42

	<b>Target group %</b>
Yes	50
No	50
Total	<hr/> 100

In general the employees indicated positive experiences with the practical work of the bus action. The following comments were made by the employees:

Great interest of the passengers concerning the line folder  
 Positive feedback of the passengers during the campaign  
 Passengers wish repetition on other lines  
 Direct contact with customers was important for SSB employees  
 Mobility advisors wish to repeat the campaign on other lines  
 Campaign was well organised and implemented

Their own experiences were all positive too.

Table 12: Evaluation of own experience with bus action

	<b>Target group %</b>
Positive	100
Negative	-
Total	<hr style="width: 50%; margin: 0 auto;"/> 100

The personal consultation of the passengers, the good organisation, the good interaction of theory and practice, the co-operation of the SSB-departments and the targeted information of the passengers all contributed to a positive evaluation by the mobility advisors. In principle all employees were satisfied with the implementation of the marketing action.

Table 13. Evaluation of bus action

	<b>Target group %</b>
(Very) good	100
(Very) bad	-
Total	100

Reasons given for the positive responses to this question were

- the associated positive image of public transport
- the personal contact with passengers
- the possibility to inform directly
- the positive impressions of the passengers
- the improvements which were possible following customer's requests

Finally it was asked whether this kind of marketing campaign should be repeated.

Table 14: Bus action in future

	<b>Target group %</b>
Yes, without changes	-
Yes, with changes	100
No	-
Total	100

All respondents approved a repetition of the action incorporating some changes. Following the experiences of the mobility advisors it was recommended to conduct the action over a longer period and to combine it with changes in the public transport supply. It was also recommended to select a less frequented line for further actions. As the project was implemented under time pressure it would be desirable to give more time for preparation for the next action.

One result of the bus action was that positive experiences were gained and the repetition of an appropriate action on other lines was considered desirable. The recommendation was made to use the mobility advisors' experience once the marketing instrument had been developed further.

### Results of the effect measurement

The dialogue marketing part of the project conducted with households in the target area of the bus line 42 was evaluated before and after to determine its impacts. In order to keep the expenditure low there was no independent mobility survey but an "Integrated measuring of behaviour" before and after. This method of measurement analysed the average use of public transport before and after the action. It was based on the data of 1.103 people (matched sample) who were asked about their use before in the contact phase and after the campaign. This survey was conducted by telephone. All three IndiMark® groups (I, R, N) were included in this measurement.

**Figure 5: Public transport usage (total)**

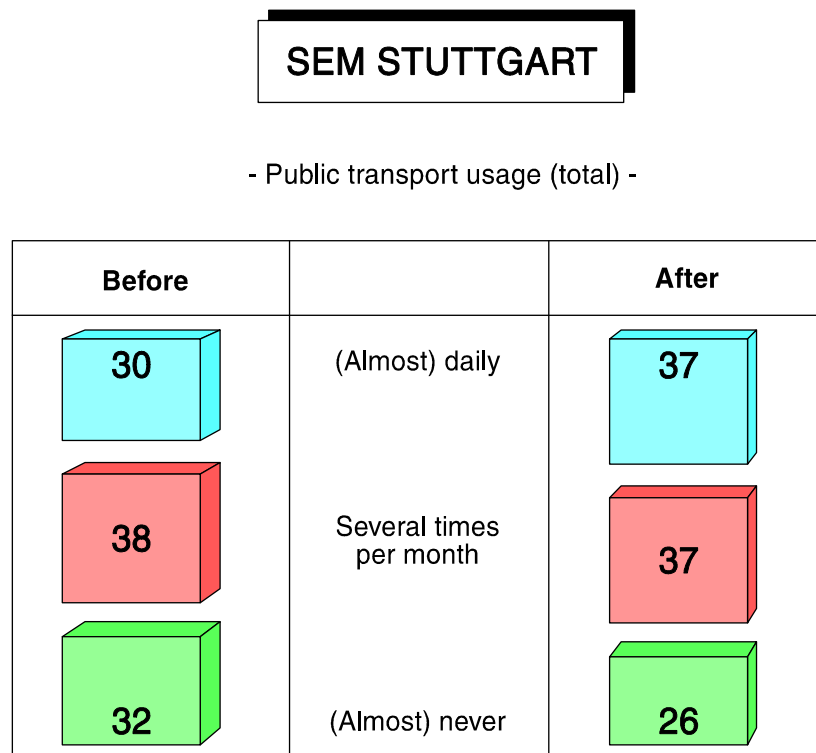


Figure 5 shows that prior to the dialogue marketing nearly a third (30 %) of the inhabitants in the target area of the bus line 42 used public transport every day, just over a third (38 %) used public transport several times per month and a third (32 %) never used public transport.

In the after survey they were asked how often they used the bus line 42.

Table 15: Use of bus line 42

	<b>After %</b>
(Almost) daily	30
Several times per month	38
(Almost) never	32
Total	<hr style="width: 50px; margin: 0 auto;"/> 100

The use of the line 42 was lower than the use of public transport in general.

Nine per cent of the target group indicated that they were using the bus line 42 more frequently than before.

Table 16: Use of bus line 42

	<b>After %</b>
More frequent use as before the action for <sup>*)</sup> :	9
Trips to work	4
Trips for education	1
Trips for shopping	7
Trips for leisure	4
No	91
Total	<hr style="width: 50px; margin: 0 auto;"/> 100

<sup>\*)</sup> Multiple responses

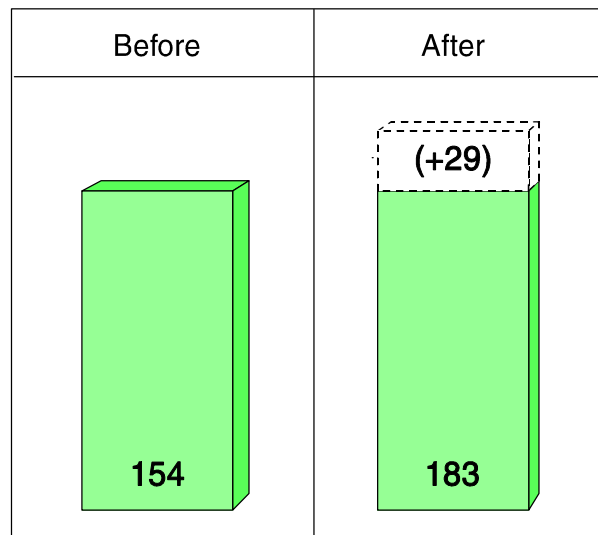
They used bus line 42 more frequently for shopping trips but also for other purposes.

If the indication for the average use of public transport is supported with an (estimated) frequency of use, then a calculated value for the average number of people per year can be determined.

Therefore the use of transport before the marketing action was 154 trips per person per year. After the action a value of 183 trips per person per year was calculated.

**Figure 6: Public transport: trips per**

**SEM STUTTGART**
⊕  
 - Public transport trips per person/year/(total) -



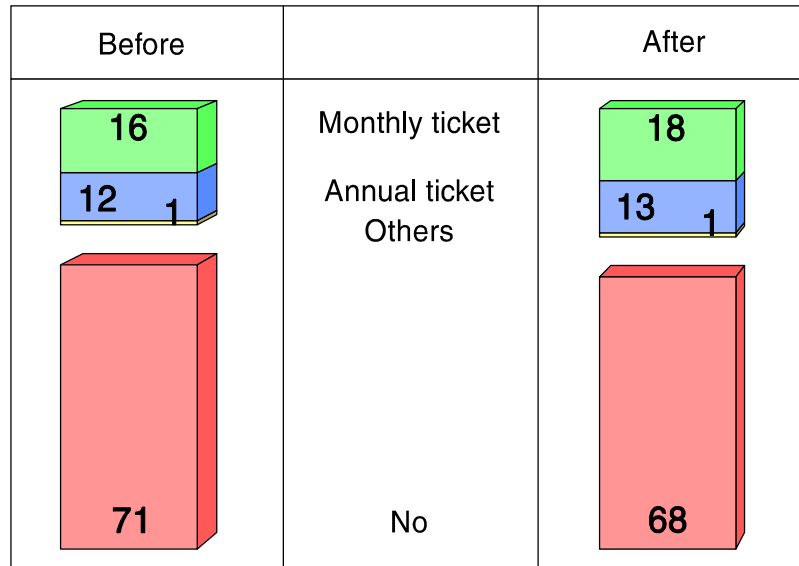
**person / year (total)**

The service campaign with the households showed an increase in public transport use by 19 %. A further indicator was the ownership of a season ticket for the public transport – see Figure 7.

**SEM STUTTGART**



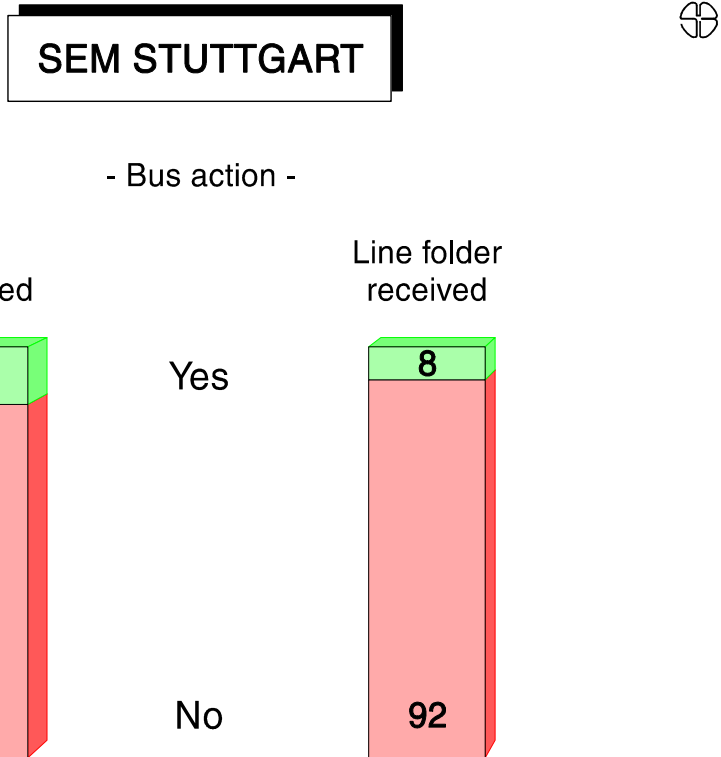
- Ownership of a PT season ticket -



**Figure 7: Ownership of a PT season ticket**

The number of owners of season tickets increased from 29 to 32 %. The number of owners of a monthly or annual ticket increased too.

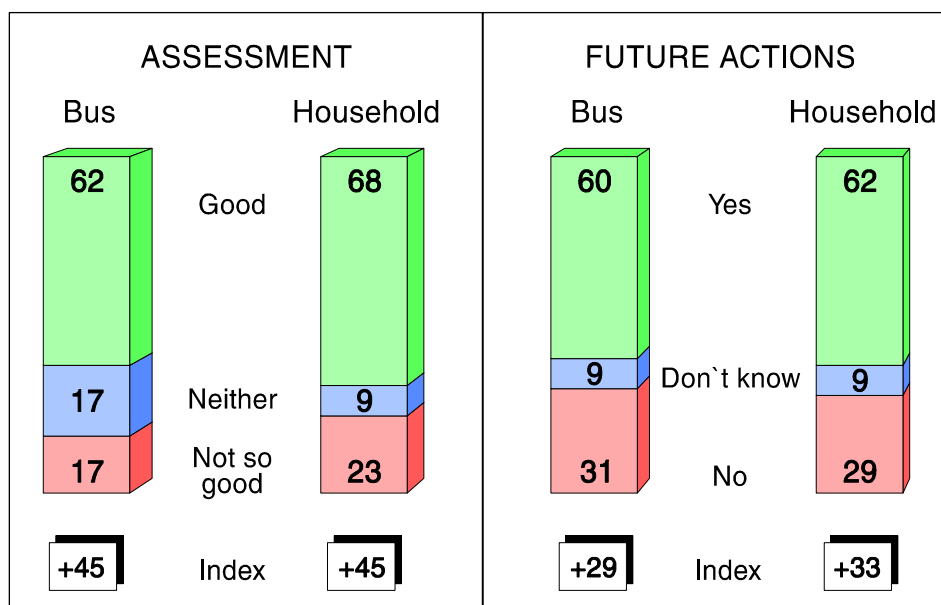
In addition to the service campaign an information campaign was implemented on line 42. Every seventh inhabitant in the target area of line 42 indicated that she/he had noticed the bus action. So every second person of this target group received a line folder.



**Figure 8: Bus action**

Respondents were then asked how they evaluated the service campaign and the bus action. 14 % of the respondents had realised that there was an action on line 42. So 8 % indicated that they had received a line folder by a mobility advisor in the bus.

## SEM STUTT GART



**Figure 9: Evaluation and further actions**

The on bus action was evaluated by two third of the households. But the number of respondents who had no opinion of the bus campaign was high. A satisfaction index was created from the number of people who stated the action was good, minus the number of those who were not satisfied with the action, meaning that the service action in the households and the bus action got the same evaluation (+45). The households were satisfied by the service campaign and the bus action as well.

Nearly two thirds of respondents welcomed further actions of this kind. One third were not in favour of future actions. The index for the action in households was +33 and for the bus action +29. The reasons for repeating such actions were:

- Customer service
- Information provision
- Citizen's participation

A main reason against the actions was that there was no individual need.

## Results of the telephone survey on attitudes and behaviour

In the following section, the results of the additional telephone survey on attitudes and behaviour are presented for the target and control groups in the before and after surveys. A matched target group of 190 persons took part in the before and after surveys. The target group consisted of the respondents from the action campaigns. For the dialogue marketing 7.000 persons in 3.500 households were contacted. Every household that responded was segmented to a group:

- I (interested/interesting in/for use of public transport)
- R (at least one regular user of public transport)
- N (not interested / interesting in/for action/use of public transport).

For the additional telephone survey the households were selected by groups “R” and “I”. A control group with 77 persons was created from the respondents of group N who did not participate at the campaign. They were surveyed before and after the campaign.

In the following section the results of this survey, which concern behaviour and attitudes, are presented.

Table 17

	Target group				Control group			
	Car		Bus		Car		Bus	
How often you are using following modes to drive in the inner city in off-peak-times?	before %	after %	before %	after %	before %	after %	before %	after %
5 or more days / week	5	3	19	24	17	16	0	3
2 to 4 days / week	8	7	39	37	15	7	13	11
once / week	14	7	10	13	11	10	17	17
at least once / month	6	8	12	11	9	8	20	26
at least once / year	1	5	6	5	1	2	16	8
less often / never	66	70	14	10	47	57	34	35
Total	100	100	100	100	100	100	100	100

In the before survey 66 % of respondents indicated they were using the car less often or never for travelling in the inner city at off-peak times. In the after survey this value increased to 70 %. 14 % of the respondents were using the car once a week for their trips to the city. In the after survey only 7 % were taking the car.

For bus use, 39 % of respondents stated that they used the bus to travel in the city 2 to 4 days / week. This number reduced by 2 % in the after survey. 19 % indicated that they took the bus 5 or more days / week. In the after survey this share increased to 24 %, meaning that nearly two thirds were using this mode on a regular basis.

In the control group a large number of respondents were not using their car to make trips to the inner city. In the after survey this share increased from 47% to 57%. Five days or more the car was used by 17 % to drive in the inner city. In the after survey there was a decrease by 1%. In the control group most of the respondents were not using the bus to drive in the inner city (34 %). This value increased by 1 % in the after survey. An increase was seen in the control group in the after survey when 3 % of them said they were using the bus 5 or more days to travel to the city when in the before survey none of them were using the bus.

Table 18

	Target group		Control group	
	before %	after %	before %	after %
Do you agree with the statement that you will take the bus line 42 for your next trip in the inner city?				
Strongly agree	33	40	11	16
Agree	18	24	14	9
Neither agree nor disagree	22	15	25	17
Disagree	12	8	13	7
Strongly disagree	15	13	37	51
Total	100	100	100	100

In the before survey, over half of the respondents in the target group agreed they would take the bus no. 42 for their next trip in the inner city. 27 % would not and 22 % had no opinion. In the after survey there was a significant increase from 13 % to 64 % for the intention to take the bus for the next trip.

In the before survey 37 % respondents in the control group disagreed strongly that they intended to use the bus for their next trip to the inner city. In the after survey this number increased to 51%. In total, 25 % of the respondents agreed in the before and after surveys.

Table 19

	Target group		Control group	
	before %	after %	before %	after %
How do you find the situation in Stuttgart concerning the impacts of traffic?				
Well tolerable	5	1	1	4
Tolerable	42	37	37	42
Less tolerable	41	45	49	33
Not tolerable	12	17	13	21
Total	100	100	100	100

In the before survey nearly the same number of respondents showed that the impacts of traffic were tolerable (42 %) and less tolerable (41 %). In the after survey most of the responses indicated that the situation concerning the impacts of traffic was intolerable (62 %).

Two thirds of the respondents in the control group found the situation in Stuttgart concerning the impacts of traffic less tolerable or intolerable. This number decreased in the after survey to 54 %. In the before survey 38% of respondents stated the situation as well tolerable or tolerable and in the after survey by 46 % of respondents.

Table 20

	Target group		Control group	
	before %	after %	before %	after %
Something needs to be done to reduce the number of cars on the roads in Stuttgart.				
Strongly agree	47	51	24	30
Agree	24	35	30	24
Neither agree nor disagree	16	7	20	19
Disagree	6	5	13	18
Strongly disagree	7	2	13	9
Total	100	100	100	100

71% of respondents agreed with the above statement in the before survey. In the after survey this number increased to 86 %. The number of people that disagreed was reduced to 7 % in the after survey.

54% of respondents in both the before and after surveys stated that they agreed that the number of cars on the roads should be reduced. 26 % of the respondents in the before survey and 27 % in the after survey disagreed with this statement.

Table 21

	Target group		Control group	
	before %	after %	before %	after %
“I am contributing to air pollution when driving a car”.				
Strongly agree	30	36	37	29
Agree	17	17	29	26
Neither agree nor disagree	20	18	18	23
Disagree	10	3	9	4
Strongly disagree	23	26	7	18
Total	100	100	100	100

In the before survey 47 % of the respondents agreed to the statement that they were contributing to air pollution when they were driving a car. In total 33 % disagreed with the statement. In the after survey more than half agreed. Only 29 % of the respondents in total disagreed with this statement.

Most of the respondents in the control group agreed they were contributing to air pollution when they were driving a car (66 %). This share was reduced in the after survey to 55 %. Only 15 % disagreed with the statement. In the after survey the share of disagreement is 22 %.

Table 22: For your journeys to the city in off-peak times to what extent do you agree with the following statement for the car? (Target group)

	strongly agree		agree		neither agree nor disagree		disagree		strongly disagree	
	before %	after %	before %	after %	before %	after %	before %	after %	before %	after %
Gets me quickly to the city	19	20	24	20	35	33	15	20	7	7
Does not cost very much	8	10	21	18	43	30	22	31	6	11
Is reliable	41	37	22	32	32	26	3	4	2	1
Is convenient door-to-door	54	32	14	31	28	28	2	6	2	3
Allows me to travel when I want to	61	50	12	20	26	28	0	0	1	2
Is comfortable	40	42	23	22	31	29	2	6	4	1
Is safe in traffic	30	28	23	28	40	33	4	9	3	2
Offers good personal security	44	43	34	32	18	18	2	6	2	1
Has a good image	22	18	15	21	47	41	11	11	5	9
Is a an enjoyable way to travel	34	42	28	33	27	18	5	4	6	3
Helps the environment	4	4	13	9	34	28	34	33	15	26

Note: “Before” and “After” each adds to 100 % per line

Table 23: For your journeys to the city in off-peak times to what extent do you agree with the following statement for the car? (Control group)

	strongly agree		agree		neither agree nor disagree		disagree		strongly disagree	
	before %	after %	before %	after %	before %	after %	before %	after %	before %	after %
Gets me quickly to the city	33	36	22	22	26	25	15	10	4	7
Does not cost very much	28	20	25	24	30	33	16	18	1	5
Is reliable	43	33	26	37	27	28	4	3	0	0
Is convenient door-to-door	62	53	17	30	14	9	4	7	3	1
Allows me to travel when I want to	68	54	20	34	12	11	0	1	0	0
Is comfortable	53	53	27	30	17	11	3	5	0	1
Is safe in traffic	41	38	29	34	20	10	8	15	2	3
Offers good personal security	37	34	35	34	24	27	3	4	1	1
Has a good image	28	16	12	26	50	46	5	7	5	5
Is a an enjoyable way to travel	47	46	25	33	20	15	7	5	1	1
Helps the environment	8	5	14	22	38	24	24	34	16	15

Note: “Before” and “After” each adds to 100 % per line

Tables 22 and 23 present the detailed results to the question of whether they agree or disagree with statements concerning the use of cars for trips in the inner city at off-peak times. Table 24 shows the percentage for each.

Table 24: For your journeys to the city in off-peak times to what extent do you agree with the following statement for the car (share of agreement)?

	Target group		Control group	
	before %	after %	before %	after %
Gets me quickly to the city	43	39	55	58
Does not cost very much	29	28	53	43
Is reliable	63	69	70	70
Is convenient door-to-door	68	63	79	83
Allows me to travel when I want to	73	70	81	88
Is comfortable	63	64	80	83
Is safe in traffic	53	56	70	72
Offers good personal security	79	76	72	68
Has a good image	37	39	40	42
Is a an enjoyable way to travel	62	75	72	79
Helps the environment	17	13	19	28

In general, the majority of the respondents in the target group agreed with the statements. Only for statements relating to the cost and image was the number in agreement low.

Within the control group there was a general level of agreement with the statements concerning the car. When thinking about whether the car has a good image, most of the respondents could not decide if they agreed or disagreed with this statement. Of all statements, respondents only disagreed that the car helped the environment. In the before and after surveys there were no changes concerning the results.

Table 25: For your journeys to the city in off-peak times to what extent do you agree with the following statement for the bus? (Target group)

	strongly agree		agree		neither agree nor disagree		disagree		strongly disagree	
	before %	after %	before %	after %	before %	after %	before %	after %	before %	after %
Gets me quickly to the city	50	48	30	36	13	8	6	7	1	1
Does not cost very much	18	18	33	36	21	21	21	17	7	8
Is reliable	41	36	37	39	13	8	8	14	1	3
Is convenient door-to-door	34	28	41	41	16	14	4	12	5	5
Allows me to travel when I want to	28	24	38	45	15	11	15	16	4	5
Is comfortable	31	26	35	41	16	17	14	12	4	4
Is safe in traffic	54	51	34	39	8	6	3	4	1	0
Offers good personal security	52	45	30	39	10	6	5	8	3	2
Has a good image	40	36	24	38	29	15	6	7	1	4
Is a an enjoyable way to travel	38	31	39	50	12	10	8	7	3	2
Helps the environment	43	34	36	45	15	11	5	7	1	3

Note: “Before” and “After” each adds to 100 % per line

Table 26: For your journeys to the city in off-peak times to what extent do you agree with the following statement for the bus? (Control group)

	strongly agree		agree		neither agree nor disagree		disagree		strongly disagree	
	before %	after %	before %	after %	before %	after %	before %	after %	before %	after %
Gets me quickly to the city	34	29	32	26	24	28	10	7	0	10
Does not cost very much	6	5	29	18	24	37	33	24	8	16
Is reliable	30	22	34	29	28	36	7	9	1	4
Is convenient door-to-door	13	14	44	32	21	37	13	13	9	4
Allows me to travel when I want to	21	9	28	17	22	46	21	15	8	13
Is comfortable	20	12	26	32	28	35	21	13	5	8
Is safe in traffic	42	33	38	33	15	26	4	3	1	5
Offers good personal security	24	21	37	32	27	21	8	21	4	5
Has a good image	25	10	26	33	33	46	11	7	5	4
Is a an enjoyable way to travel	17	18	36	37	22	30	17	11	8	4
Helps the environment	29	25	41	35	20	32	8	8	2	0

Note: “Before” and “After” each adds to 100 % per line

The same questions were asked for bus use. Tables 25 and 26 show the detailed responses for this question. Percentage responses are given in Table 27.

Table 27: For your journeys to the city in off-peak times to what extent do you agree with the following statement for the bus (share of agreement)?

	Target group		Control group	
	before %	after %	before %	after %
Gets me quickly to the city	81	84	66	55
Does not cost very much	51	54	35	23
Is reliable	78	75	65	51
Is convenient door-to-door	74	70	57	46
Allows me to travel when I want to	66	68	49	26
Is comfortable	66	67	46	43
Is safe in traffic	88	89	80	66
Offers good personal security	82	84	60	53
Has a good image	64	74	51	43
Is a an enjoyable way to travel	77	81	53	55
Helps the environment	80	79	70	61

The results show that most of the respondents agreed with all statements concerning the bus.

In the control group there was an agreement concerning the statements relating to bus use, but there were some exceptions. There was a low agreement with the statement that the bus did not cost very much. The control group showed another different opinion to the target group. In the after there was a lower agreement concerning the statement that the bus allowed you to travel when you wanted it while the respondents from the before survey agreed with the statement. The same result occurred for the statement that the bus had a good image. In the before survey they agreed and in the after survey they could not agree or disagree.

Table 28

	Target group		Control group	
	before %	after %	before %	after %
Do you think that most people would use the bus line 42 more frequently if their friends / relatives did?				
Yes definitively	4	4	3	1
Yes, probably	7	19	8	8
I am not sure	46	39	39	32
No, probably not	23	15	22	25
No, definitively	20	23	28	34
Total	100	100	100	100

In the before survey with regard the above statement, 46 % of respondents were not sure. Only 11 % thought that their friends / relatives would use the bus line 42 too when they did. 43 % thought their friends / relatives would not do it. In the after survey there was an increase to 19 % for respondents who thought that most of the people would use the bus line 42 more frequently if their friends / relatives did it too. The share of the respondents that had no opinion or did not agree with the statement was nearly the same.

In the control group in the before survey, most of the respondents thought that their friends or relatives would not use bus no. 42 when they did it themselves (50 %). In the after survey there was an increase by 9 % concerning this attitude. Only 11 % in the before survey, and 9 %, in the after survey, thought that their behaviour could encourage their friends and relatives too.

Table 29: How important is each of the following factors to you when deciding on the way you travel to the city in off-peak times? (Target group)

	very important		important		fairly important		not at all important	
	before %	after %	before %	after %	before %	after %	before %	after %
Gets me quickly to the city	46	37	38	50	13	10	3	3
Does not cost very much	56	53	38	43	4	4	2	1
Is reliable	61	56	35	40	2	4	2	0
Is convenient door-to-door	38	34	45	56	14	10	3	0
Allows me to travel when I want to	38	35	45	40	15	23	2	2
Is comfortable	31	17	42	53	25	27	2	3
Is safe in traffic	70	58	26	40	3	2	1	0
Offers good personal security	66	57	27	42	6	1	1	0
Has a good image	24	15	33	54	34	17	9	14
Is a an enjoyable way to travel	35	21	51	74	13	5	1	0
Helps the environment	53	44	40	53	6	2	1	1

Note: “Before” and “After” each adds to 100 % per line

Table 30: How important is each of the following factors to you when deciding on the way you travel to the city in off-peak times? (Target group)

	very important		important		fairly important		not at all important	
	before %	after %	before %	after %	before %	after %	before %	after %
Gets me quickly to the city	48	42	25	41	22	13	5	4
Does not cost very much	41	38	40	46	14	16	5	0
Is reliable	50	39	43	54	7	7	0	0
Is convenient door-to-door	32	28	51	59	17	12	0	1
Allows me to travel when I want to	37	34	38	42	24	24	1	0
Is comfortable	21	18	48	48	30	34	1	0
Is safe in traffic	57	61	35	35	8	4	0	0
Offers good personal security	50	58	42	34	8	8	0	0
Has a good image	16	13	29	45	33	24	22	18
Is a an enjoyable way to travel	25	12	55	83	20	4	0	1
Helps the environment	39	34	49	58	12	4	0	4

Note: “Before” and “After” each adds to 100 % per line

The following table gives an overview of the percentage responses from respondents.

Table 31: How important is each of the following factors to you when deciding on the way you travel to the city in off-peak times (share of importance)?

	Target group		Control group	
	before %	after %	before %	after %
Gets me quickly to the city	84	87	72	83
Does not cost very much	94	95	80	84
Is reliable	96	96	93	93
Is convenient door-to-door	84	90	83	87
Allows me to travel when I want to	83	76	75	76
Is comfortable	73	71	69	66
Is safe in traffic	96	98	92	96
Offers good personal security	94	99	92	92
Has a good image	57	68	45	58
Is a an enjoyable way to travel	86	95	80	95
Helps the environment	94	98	88	92

In the before and after surveys nearly all factors were important for the way they travelled to the inner city where a nigh number answered with “important”.

In the control group nearly all factors were regarded as important in both before and after surveys. Only the statement that the transport mode had a good image had a low importance in the before survey.

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## **CONCLUSIONS**

In this pilot application of the SEM concept (SEM - Sustainability and Employment by Marketing) two projects were integrated for the first time: an action on the buses of line 42 by trained employees of SSB and a service action for households that lived in the target area of this line. Both campaigns generated a great deal of interest.

After the action the employees who worked on the buses had a better understanding of the interests and desires of the customers.

The measurement of the effects of the household action showed a clear increase of the public transport used measured by the increase in ownership of season tickets. The action got a good evaluation and the need for similar future actions – also of the bus action – was desirable.

The campaigns where the target groups were directly contacted, personally motivated and individually informed were not only well accepted but also had positive effects such as increasing demand for services and motivation of employees.

One exceptional outcome of the project has been the future development of more mobility advisors being appointed. The Board of Directors of the SSB were so impressed with the visible impacts of the bus action on employment that they have since decided to train 10 more bus drivers as mobility advisors. The project team are pleased with this outcome which confirms their project idea of an integrated marketing approach.