



**CiViTAS**  
Cleaner and better transport in cities

**PORTO**  
.....

# Implementation status report on Public Participation

ELAN Deliverable  
No. 2.10-D1

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**Project full title:** Mobilising citizens for vital cities

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**Measure:** 2.10-OPO Participatory planning for  
new intermodal interchange

**Author:** António Mendes da Silva



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x	WP2 Collective transport & intermodal integration		WP8 Transport telematics
	WP3 Demand management		WP9 Project coordination
	WP4 Influencing travel behaviour		WP10 Project management
	WP5 Safety, security & health		WP11 Research and Technological Development
	WP6 Innovative mobility services		WP12 Impact and process evaluation
			WP13 Dissemination, citizens' engagement, training and knowledge transfer

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## 1. Introduction

The Asprela quarter is located at the Northern end of Porto. Most of the traffic coming from the north of the country enters the city via this area, and usually people use their own vehicle or interurban buses to get to the city centre. The actual offer in terms of urban public transport is very good in this area. There is the metro and the public bus company STCP which offers several connections to various points of the city. However, what is missing is a location offering all these means of transportation from the same location which would improve access for the users and which would promote the modal shift.

Taking into account this situation, one of the objectives of CIVITAS-ELAN measure 2.10-OPO – entitled Participatory planning for new intermodal interchange – was to conduct a study upon which an available area for the implementation of this intermodal interchange could be chosen, upon which the conceptual design could be elaborated and which provided the basis to launch the public tender for the infrastructure construction.

As the title of this measure indicates one of the crucial features of the measure is the direct involvement of citizens in the planning phase. Therefore, citizens were given the opportunity to voice their opinion about the proposed interchange and to take an active role on the decision-making process. For this reason a face-to-face survey was conducted with the citizens of the Asprela area in March and April 2011 (406 questionnaires/ forms and 385 validated).

FEUP was responsible to define and reach a representative sample and the way to conduct the survey including a meeting with interviewers in order to prepare them explain the forms and the general objectives (see annex I). All data was also processed by FEUP. CMP set up the operation with 15 people. Previously (between 11 and 30 March 2011) a letter was distributed to inform residents in the Asprela area that a survey was about to be conducted (see annex II)

The variables to get were

- i) Number of trips;
- ii) Origin/ destination of the trip;
- iii) Start/ ending hour of the trip;
- iv) Purpose of the trips;
- v) Modes used on the trips;
- vi) Places to commute mode;

- vii) Trip direction (one way or return);
- viii) Opinion about interchanges;
- ix) Kind of interviewee (address, age, gender, level of qualifications, car ownership)

## 2. Survey features

The target population in Asprela area is estimated about 18000 inhabitants.



Fig. 1 – Study area

The survey was based in a representative sample. As the population is smaller than 100.000 individuals the sample was reached according the following expression (C A O'Flaherty. 1997)

$$n = \frac{\sigma^2 \times p \times (100 - p) \times N}{e^2 \times (N - 1) + \sigma^2 \times p \times (100 - p)}$$

Where,

$n$  – size of the sample;

$\sigma$  – Level of acceptance  $\left\{ \begin{array}{l} Se\ 95\% \ (\sigma = 1.96) \\ Se\ 90\% \ (\sigma = 1.64) \end{array} \right.$

$p$  – % of phenomenon occurs;

$N$  – Population;

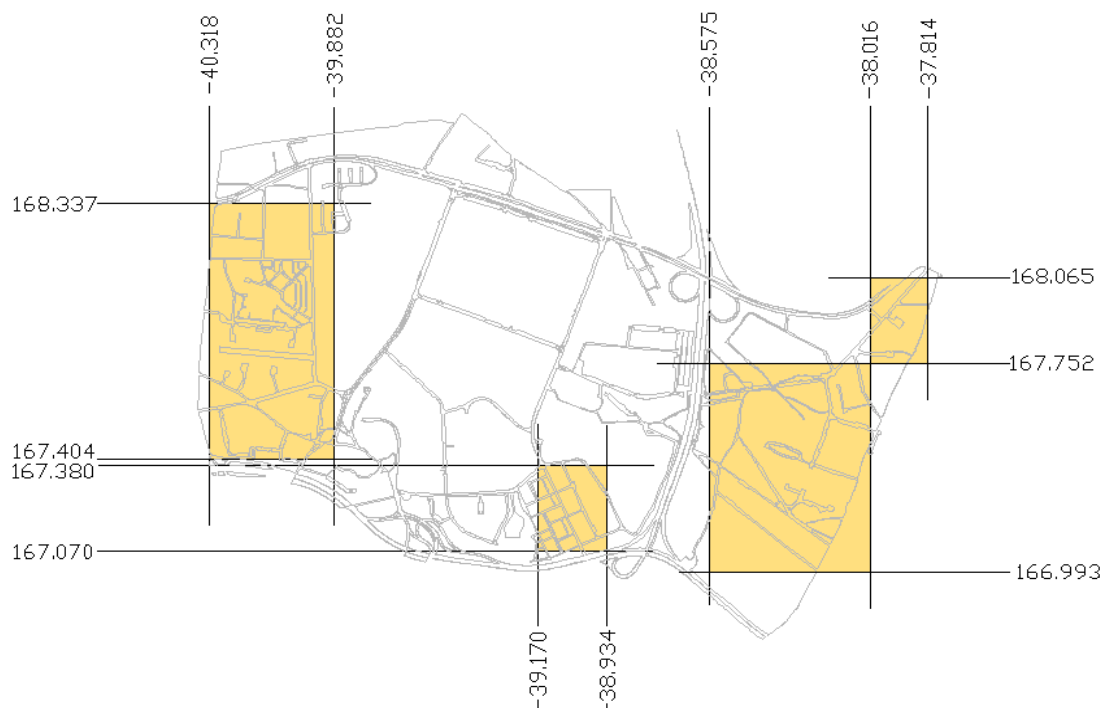
$e$  – Maximum error allowed  $\{ \mathbf{3\%}; \mathbf{5\%} \}$

thus,

$\sigma = 1,96$	Level of trust 95%	<b><math>n = 376</math></b> Individuals
$p = 50\%$	unfavourable situation	
$N = 18.000$		
$e = 5\%$		

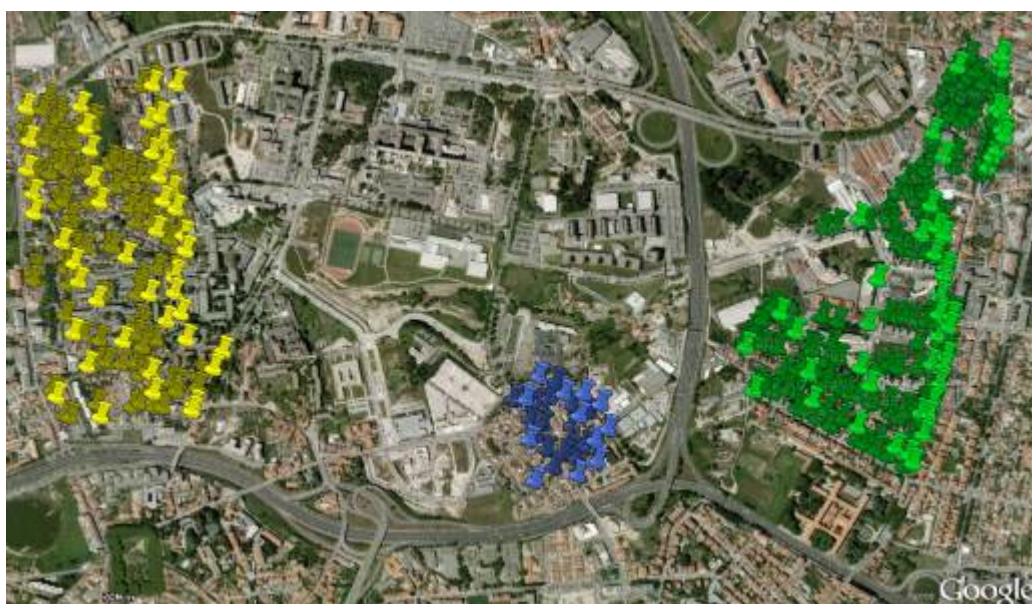
At the end 385 forms were left, enough for sufficient sample representativeness.

Fig. 2 shows the three zones chosen randomly using the Microsoft Office Excel random tool, defining small areas and limits referenced with coordinates.



**Fig. 2 – Zones to inquire**

The automatically results generated by computer can be observed in Fig. 3.



**Fig. 3 – Building and houses location to inquire**

Table 1 shows for each zone the limits, area and number of forms to be done.

**Table 1 –Zone’s features**

Zona	Limits	Area (m <sup>2</sup> )	%	Nº. Forms
1	x E [-40 318;-39 882] y E [167 404;168 337]	406 155	42,0	158
2	x E [-39 170;-38 934] y E [167 070;167 380]	73 377	7,6	29
3	x E [-38 575;-37 814] se x < -38 016, x E [167 404;168 337] se x ≥ -38 016, x E [167 752;168 065]	488 206	50,4	190

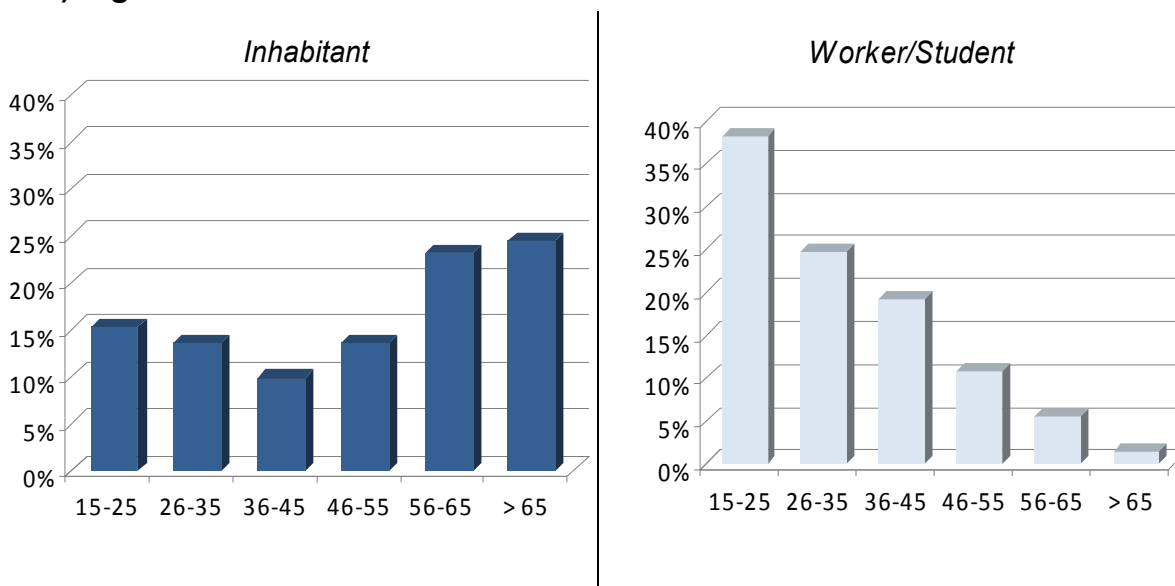
After this step, inside each zone FEUP selected an amount of buildings/ houses as can be seen in annex III. Also the way to approach any home was predicted and a method to select and ring the bell. Finally, the operation lasted about two months and all forms were filled in by CMP employees asking questions directly to residents.

### 3. Results

The following results arising directly from the survey are presented and labelled by “Inhabitant” in dark blue colour. Among these results FEUP joined other information (here presented by light blue colour) collected in April and May of 2009 also labelled as “worker/student”. This information was gathered via web at the major faculties and as well as in person in the Hospital de S. João and the Oncology Hospital. Thus, the main scope of the survey was to have a representative sample to know the “picture” of the inhabitants of the Asprela area, the profile in terms of mobility and also their opinion about the transport infrastructure and whether they use it or not. The results from two differences sources may allow CMP to have a more integrated vision in terms of “who” lives in the Asprela area and who works/ studies (mainly outside the Asprela area).

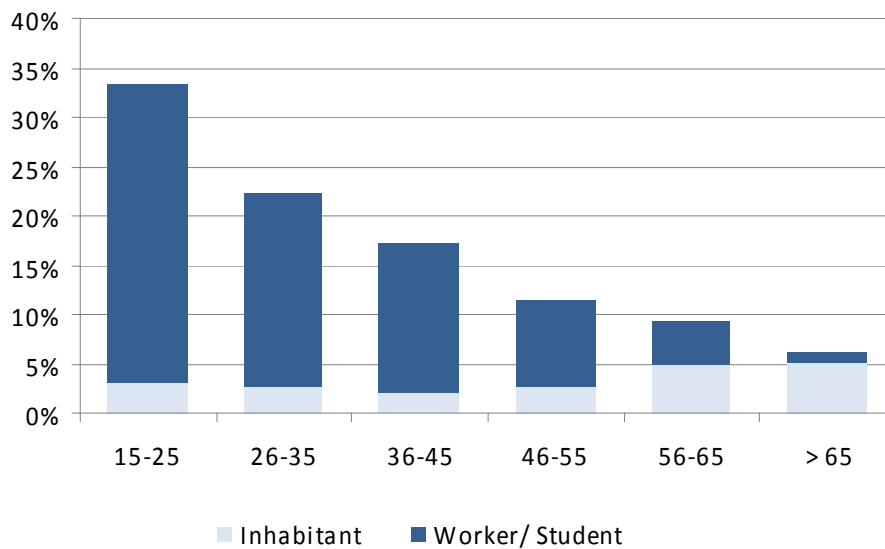
#### a) General view

##### i) Age

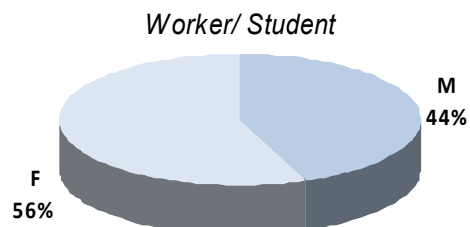
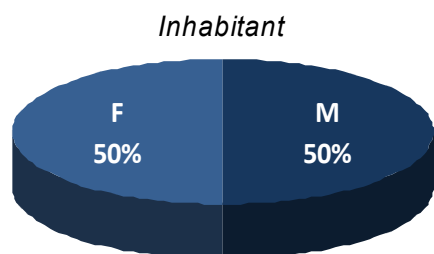




**Total**

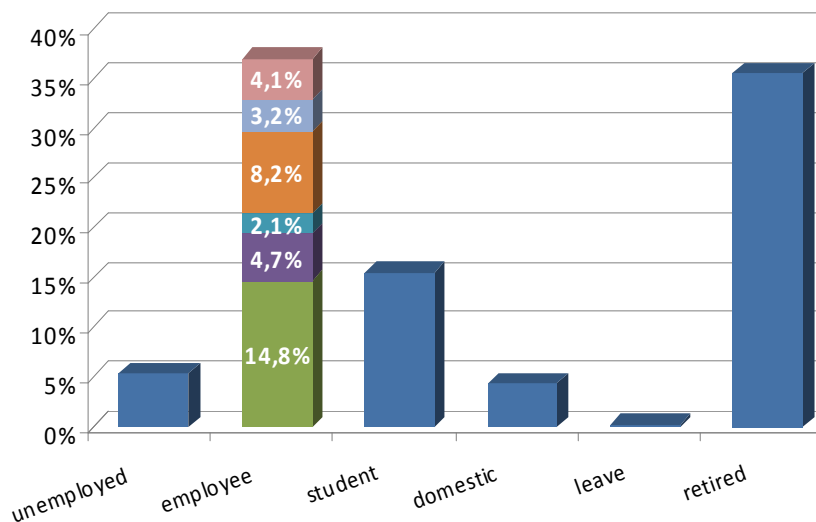


**ii) Gender**



### iii) Occupation

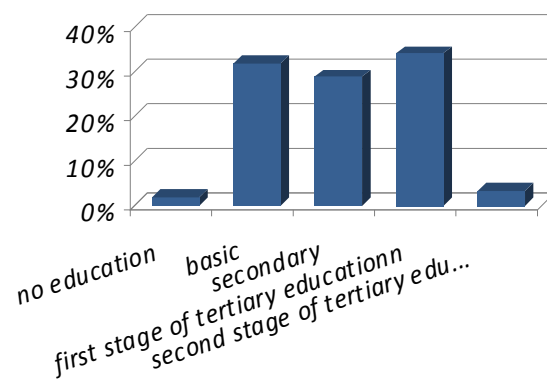
*Inhabitant*



- Elementary occupations
- Skilled agricultural, forestry and fishery workers
- Service and sales workers
- Clerical support workers
- Technicians and associate professionals
- Professionals

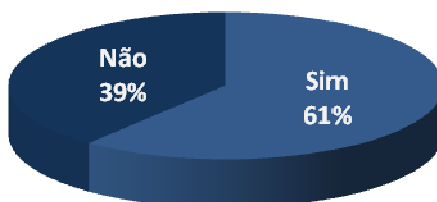
#### iv) Level qualification

*Inhabitant*



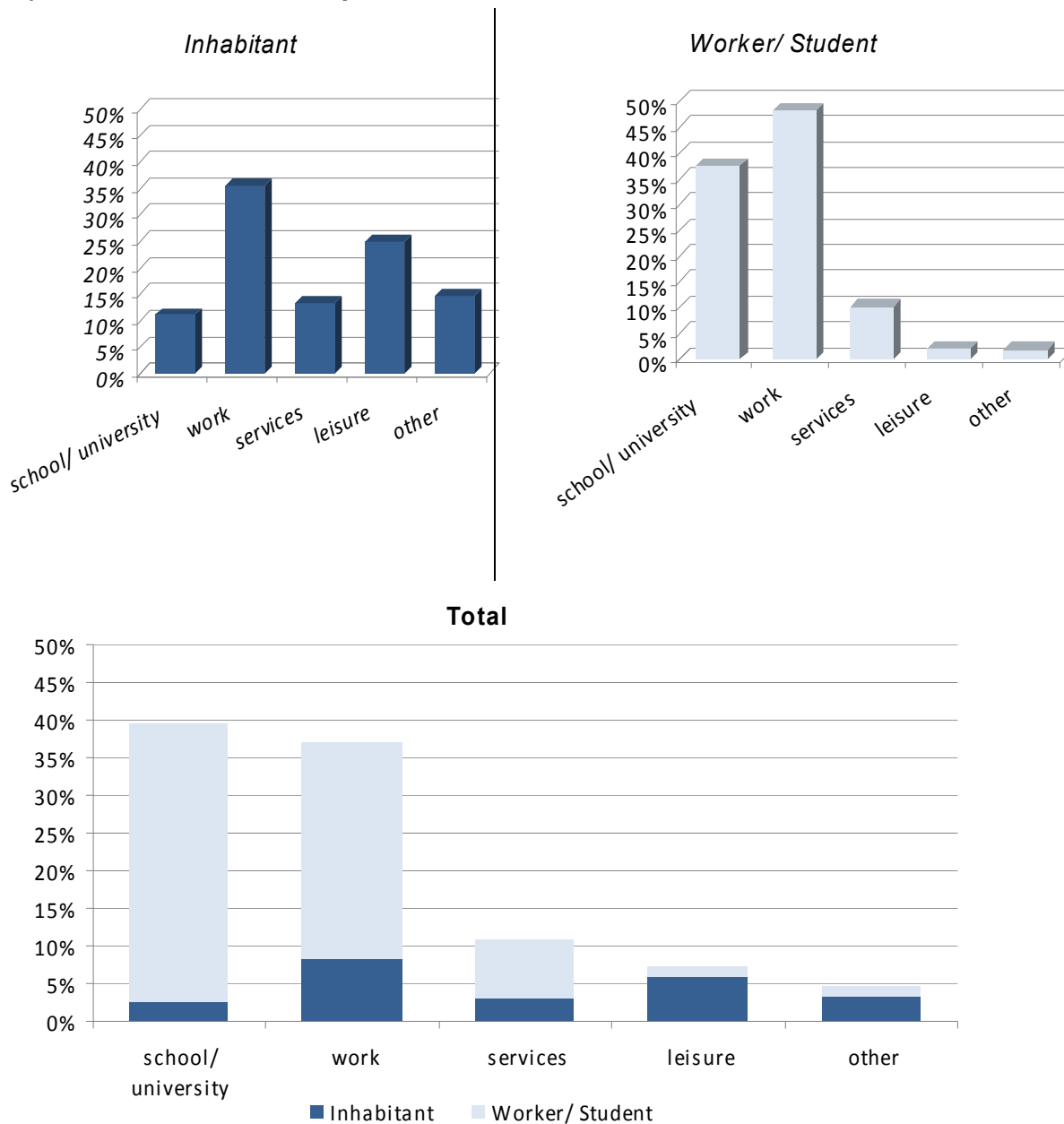
#### v) Own car

*Residentes*

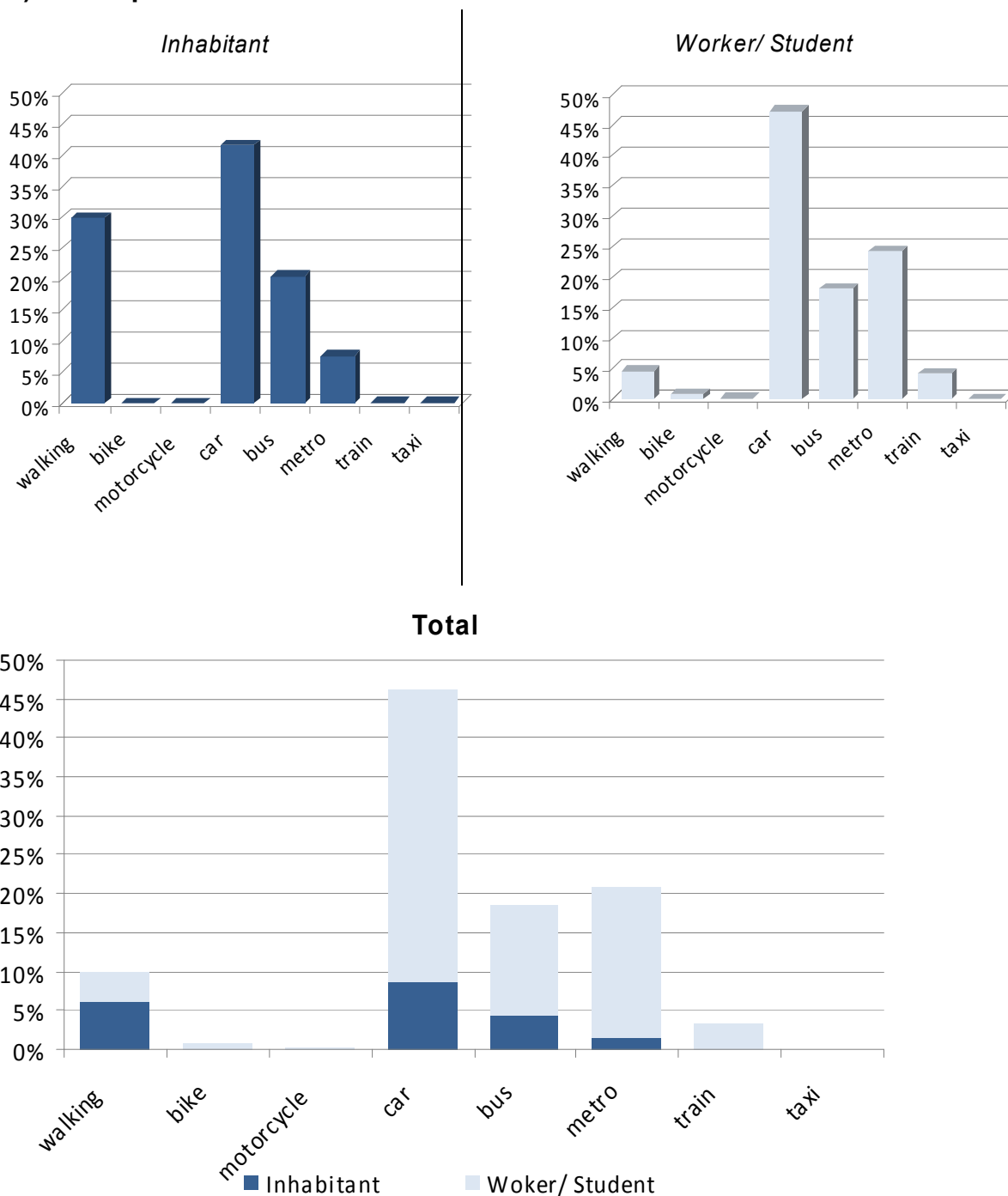


## b) Mobility

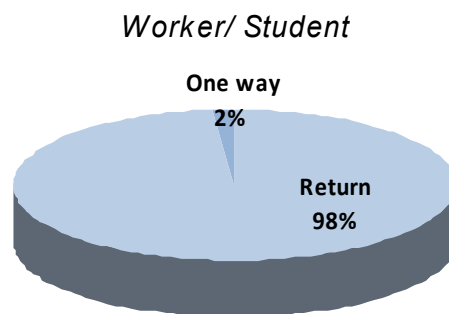
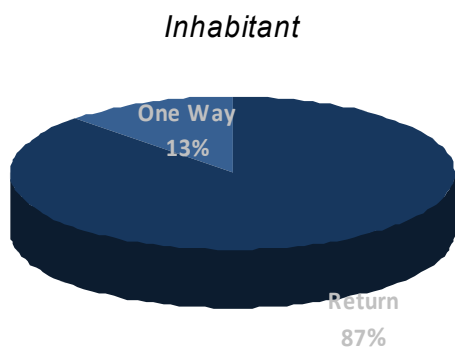
### vi) Reason to do the trip



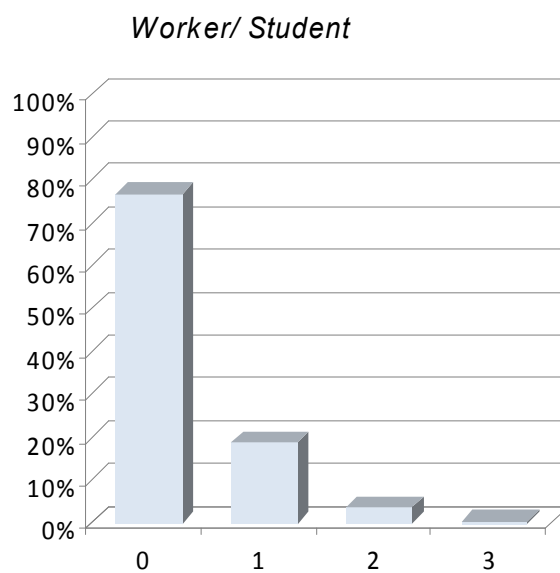
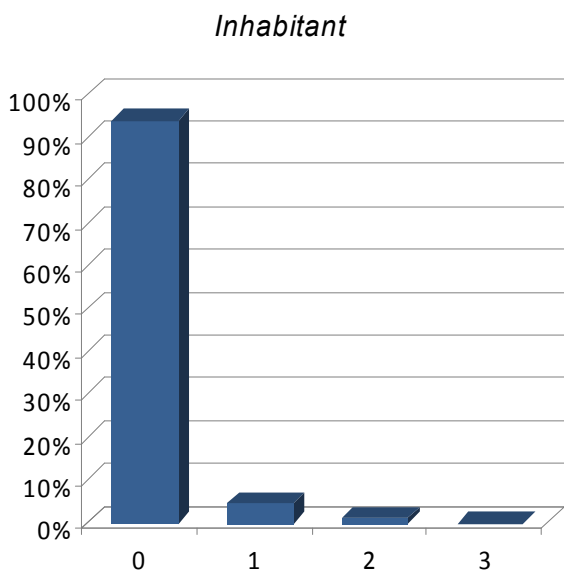
vii) Transport modes



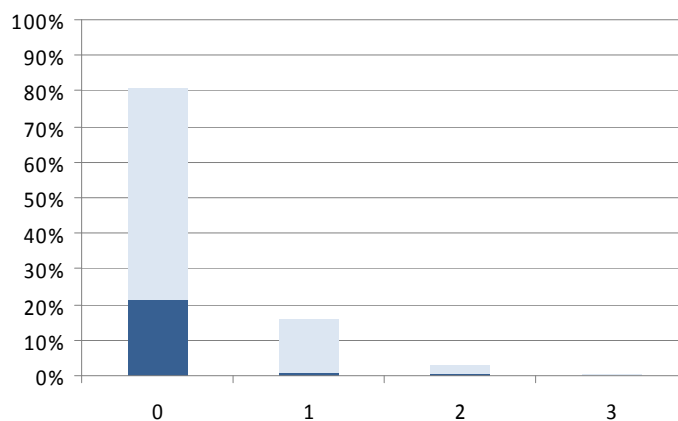
viii) Trip direction



ix) Modes' change



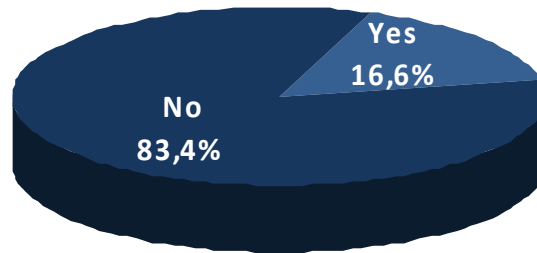
Total



**c) Opinion about interchange**

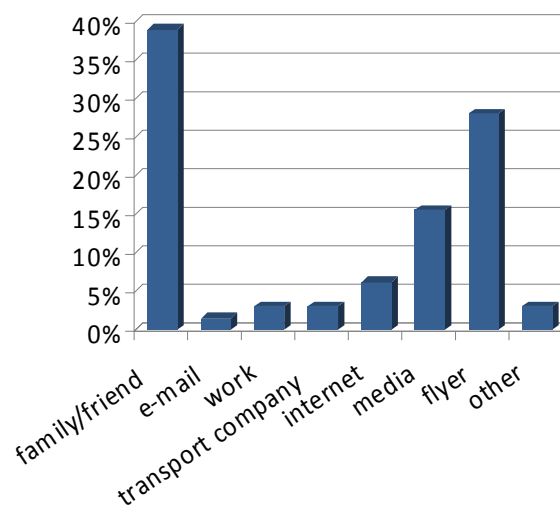
**x) Knowledge about studies for a construction of an intermodal interchange in Asprela**

*Inhabitant*



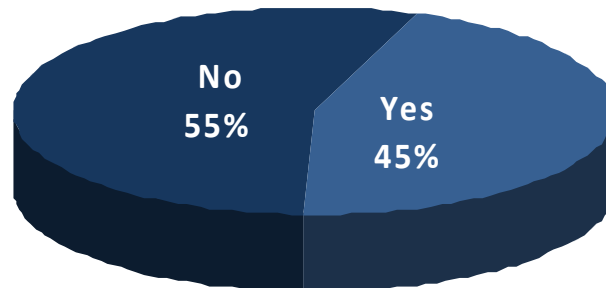
**xi) Means of information about the study**

*Inhabitant*



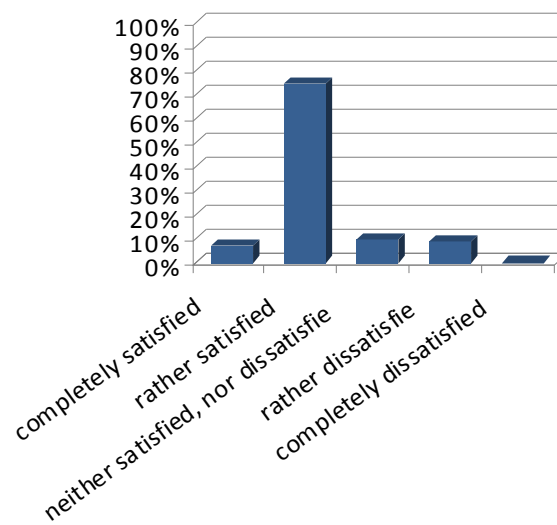
**xii) Using interchanges do change mode**

*Inhabitant*



**xiii) Interchange operation**

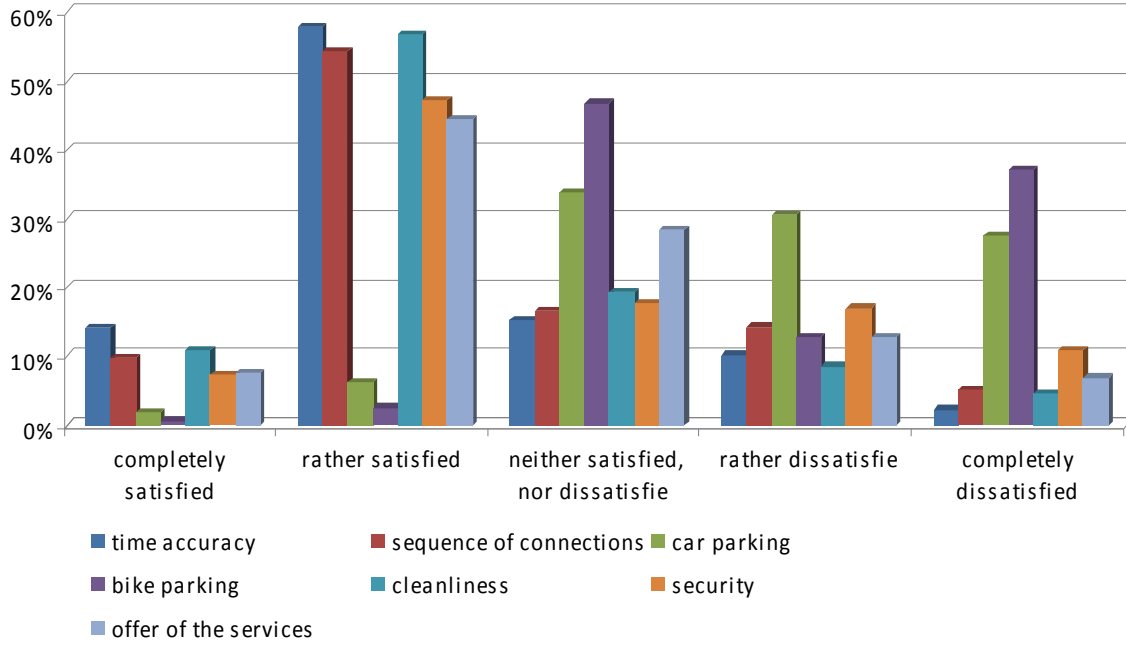
*Inhabitant*





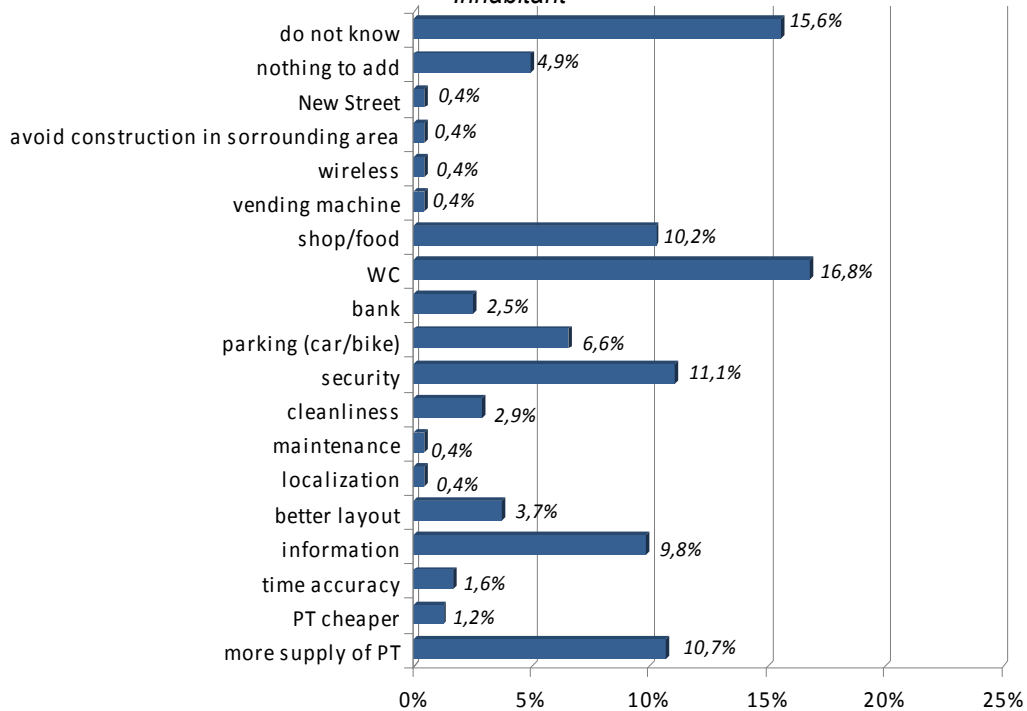
**xiv) Level of satisfaction**

*Inhabitant*

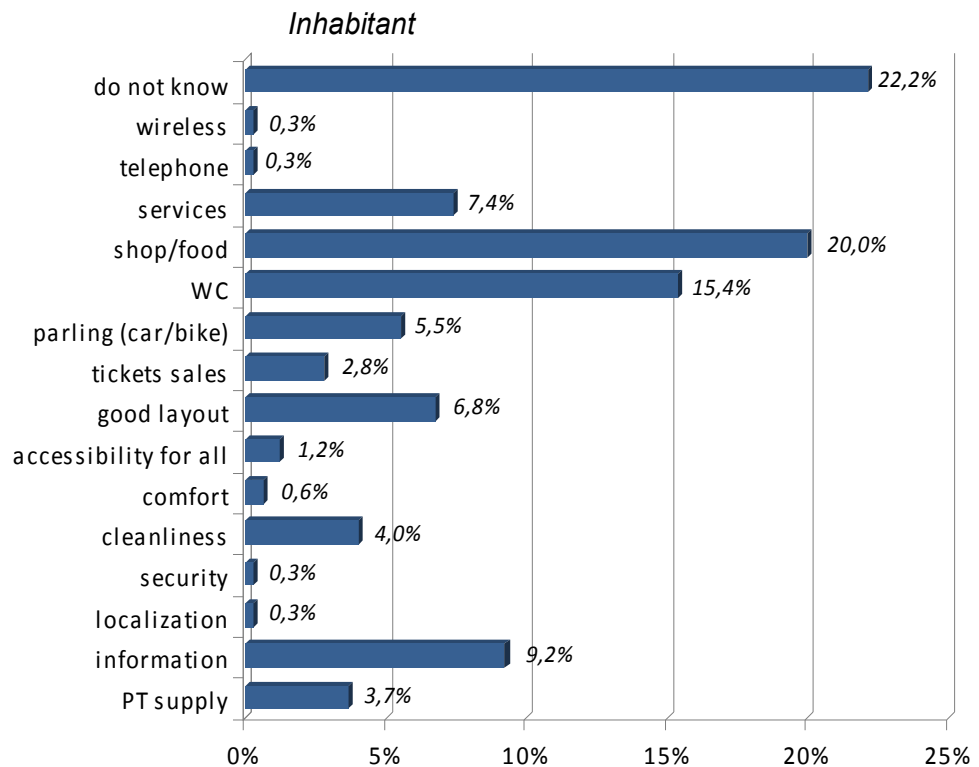


**xv) Recommendations for improvement of interchanges (commuters)**

*Inhabitant*



## xvi) Recommendations to be included in interchange (non-users)



As a follow-up activity questionnaires were conducted which included two questions (only for inhabitants) distinguishing those who use infrastructures or not. Via the survey recommendations for improving the interchanges (those who usually use them) and also recommendations on what to include at the interchange (those who usually don't use interchanges, i.e. non-users) were collected. In further studies (works project) this information will be considered, for example in the business plan work.

As graphs xv) and xvi) above indicate commuters are more concerned than non-users. The principal issue mentioned by commuters is security. In spite of the lack of data about crime this is a major question to be considered as this is the perception commuters are having. This may be related to the low presence of the police or to the general absence of guidance at the actual interchange.

After the analyses of the results and taking into account that this infrastructure has to meet the needs of the users, it was decided to include in the conceptual design some of the suggestions that were brought forward by the citizens, namely concerning the inclusion of some kind of services and maintenance of other existing services such as the Mobility Shop.



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## ANNEX I SURVEY

### Mobility Survey to Local Population in 2011

General data of the Interviewee	
<b>Address:</b>	
<b>Age:</b>	
<b>Gender:</b> Male Female	
<b>Occupation:</b> Unemployed Dependent worker <sup>(*)</sup> Independent worker <sup>(*)</sup> Student Housekeeper Sick leave Retired	
<b>Job<sup>(*)</sup>:</b> _____	
<b>Education level:</b> Without schooling Primary school High School Graduate Postgraduate	
<b>Do you have a car?</b> Yes No	

Mean of transport	1. On foot	Trip reason	1. School/Faculty
	2. Bicycle		2. Work
	3. Moto		3. Services (hospital, bank)
	4. Car		4. Leisure
	5. Bus		5. Other
	6. Metro		
	7. Train		
	8. Taxi		

Trip Number	Local		Reason	Hour (24h)				Go & Back	Split the trip in case of transhipment		Mean of transport
	Origin	Destination		Departure [h] [min]	Arrival [h] [min]	From	to				
								From	to		
								From	to		
								From	to		
								From	to		

Trip Number	Local		Reason	Hour (24h)				Hour (24h)	Split the trip in case of transhipment		Mean of transport
	Origin	Destination		Departure [h] [min]	Arrival [h] [min]	From	to				
								From	to		
								From	to		
								From	to		
								From	to		

Trip Number	Local		Reason	Hour (24h)				Go & Back	Split the trip in case of transhipment		Mean of transport
	Origin	Destination		Departure [h] [min]	Arrival [h] [min]	From	to				
								From	to		
								From	to		
								From	to		
								From	to		



Interface																											
<b>1) Did you know that studies are underway to build a transport interchange in the area of Asprela?</b>	Yes      No (question 3)																										
<b>2) How did you become aware of this project?</b>																											
<b>3) You normally use these infrastructures of transport or do you do some transshipment?</b>	Yes      No (question 7)																										
<b>4) Are you satisfied with the operation of the interface or when you performing transfers?</b>																											
Completely satisfied      Satisfied      Indifferent      Unsatisfied      Very unsatisfied																											
<b>5) Please, indicate your level of satisfaction in the following points:</b>																											
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 20%;">(1) Completely satisfied</th> <th style="width: 20%;">(2) Satisfied</th> <th style="width: 20%;">(3) Indifferent</th> <th style="width: 20%;">(4) Unsatisfied</th> <th style="width: 20%;">(5) Very unsatisfied</th> </tr> </table>	(1) Completely satisfied	(2) Satisfied	(3) Indifferent	(4) Unsatisfied	(5) Very unsatisfied	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px 5px;"><b>a) Punctuality of time charged in the interface.</b></td> <td style="padding: 2px 5px; text-align: center;">(1)(2)(3)(4)(5)</td> <td style="width: 30px;"></td> </tr> <tr> <td style="padding: 2px 5px;"><b>b) Timeout in the connection between transshipment services.</b></td> <td style="padding: 2px 5px; text-align: center;">(1)(2)(3)(4)(5)</td> <td></td> </tr> <tr> <td style="padding: 2px 5px;"><b>c) Provision of car parking.</b></td> <td style="padding: 2px 5px; text-align: center;">(1)(2)(3)(4)(5)</td> <td></td> </tr> <tr> <td style="padding: 2px 5px;"><b>d) Provision of bicycle parking.</b></td> <td style="padding: 2px 5px; text-align: center;">(1)(2)(3)(4)(5)</td> <td></td> </tr> <tr> <td style="padding: 2px 5px;"><b>e) Cleaning.</b></td> <td style="padding: 2px 5px; text-align: center;">(1)(2)(3)(4)(5)</td> <td></td> </tr> <tr> <td style="padding: 2px 5px;"><b>f) Security.</b></td> <td style="padding: 2px 5px; text-align: center;">(1)(2)(3)(4)(5)</td> <td></td> </tr> <tr> <td style="padding: 2px 5px;"><b>g) Provision of services (shops, post, etc.)</b></td> <td style="padding: 2px 5px; text-align: center;">(1)(2)(3)(4)(5)</td> <td></td> </tr> </table>	<b>a) Punctuality of time charged in the interface.</b>	(1)(2)(3)(4)(5)		<b>b) Timeout in the connection between transshipment services.</b>	(1)(2)(3)(4)(5)		<b>c) Provision of car parking.</b>	(1)(2)(3)(4)(5)		<b>d) Provision of bicycle parking.</b>	(1)(2)(3)(4)(5)		<b>e) Cleaning.</b>	(1)(2)(3)(4)(5)		<b>f) Security.</b>	(1)(2)(3)(4)(5)		<b>g) Provision of services (shops, post, etc.)</b>	(1)(2)(3)(4)(5)	
(1) Completely satisfied	(2) Satisfied	(3) Indifferent	(4) Unsatisfied	(5) Very unsatisfied																							
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<b>b) Timeout in the connection between transshipment services.</b>	(1)(2)(3)(4)(5)																										
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<b>f) Security.</b>	(1)(2)(3)(4)(5)																										
<b>g) Provision of services (shops, post, etc.)</b>	(1)(2)(3)(4)(5)																										
<b>6) What do you recommend to improve the infrastructure of the interface? .....</b>																											
..... <b>(End)</b>																											
<b>7) In your opinion, what should include the interface? .....</b>																											
.....																											

Interviewer name: \_\_\_\_\_

Date: \_\_\_ / \_\_\_ / \_\_\_\_



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## **ANNEX II LETTER DELIVERED BEFORE THE SURVEY**



We would like to appeal to your cooperation to fill in a survey about the mobility of inhabitants in the Asprela area, in the city of Porto, which will be held during the months of April and May 2011, under the European CIVITAS project.

The CIVITAS Initiative ([www.civitas.eu](http://www.civitas.eu)) launched by the European Commission in 2000, supports European cities to introduce and test innovative and ambitious measures to improve urban transport. In this context, the city of Porto plays a role of "learning city" in the consortium CIVITAS Plus, with the name "Civitas-Elan: Mobilizing Citizens for Vital Cities. The other European cities are: Ljubljana, Zagreb, Ghent and Brno. These cities have the following objectives:

- Promotion and implementation measures for sustainable and clean urban transport;
- Implementation of integrated measures of urban transport;
- Creating and supporting cooperation between cities and the dissemination of results within the local area, national and European level.

Through this survey we would like to know how the inhabitants of this area are moving and what is their opinion about the infrastructure of the transport that they use.

The survey will be conducted in 376 homes randomly selected; anyone at home aged over 15 years, residing in the Asprela area can be inquired.

The interview will be done at home directly by CMP employees duly identified. The operation will be only in the end of the afternoon, between **18:00h and 20:00h, during April and May 2011.**

The form includes a general view about the person who answers the questions and a slight picture describing the ordinary mobility and the opinion about interchanges. It lasts only about 10 minutes.

Your collaboration it's important to the success of the Project, so we shall kindly count on you.

Thank You.



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## **ANNEX III LIST OF BUILDINGS/ HOUSES TO INQUIRE**



Z1		
1	Rua de S Tomé	57
2	Rua da Azenha	213
3	Rua do Amial	8821
4	Rua de S Tomé	938
5	Rua de Santiago	63
6	Rua do Amial	1024
7	Rua de S Tomé	1100
8	Rua de Santiago	31
9	Rua de Santiago	14
10	Rua de S Tomé	259
11	Rua do Amial	1142
12	Rua da Ribeira Grande	155
13	Rua da Ribeira Grande	29
14	Rua da Azenha	34
15	Rua da Ilha Terceira	113
16	Rua do Coronel Almeida Valente	460
17	Rua de S Tomé	1014
18	Rua das Berlengas	34
19	Alameda de 25 de Abril	90
20	Rua do Conde d'Avranches	549
21	Rua da Azenha	333
22	Rua da Azenha	185
23	Rua da Azenha	195
24	Rua da Ilha Verde	31
25	Alameda de 25 de Abril	266
26	Alameda de 25 de Abril	141
27	Rua do Coronel Almeida Valente	191
28	Rua de S Tomé	973
29	Rua Académico Futebol Club	1191
30	Rua do Benjamim Gouveia	53
31	Rua da Azenha	324
32	Rua da Azenha	290
33	Rua de S Tomé	119
34	Rua do Coronel Almeida Valente	518
35	Rua do Coronel Almeida Valente	496
36	Rua de Sá Miranda	313
37	Rua de S Tomé	944
38	Rua de S Tomé	788
39	Rua do Amial	846
40	Alameda de 25 de Abril	84

Z1		
41	Rua de S Tomé	172
42	Rua do Coronel Almeida Valente	379
43	Rua de Leonardo Coimbra	270
44	Rua de Sá Miranda	293
45	Rua de S Tomé	981
46	Rua de S Tomé	975
47	Rua de S Tomé	900
48	Rua da Azenha	68
49	Rua da Ilha Brava	78
50	Rua de S Tomé	808
51	Alameda de 25 de Abril	260
52	Rua de S Tomé	149
53	Alameda de 25 de Abril	81
54	Rua do Dr Carlos Ramos	5
55	Rua do Conde d'Avranches	569
56	Rua do Amial	284
57	Rua do Amial	266
58	Rua do Coronel Almeida Valente	222
59	Rua da Ribeira Grande	111
60	Rua de Armando Cardoso	40
61	Rua de S Tomé	965
62	Rua de S Tomé	1028
63	Rua de S Tomé	986
64	Rua da Ilha Terceira	84
65	Rua do Coronel Almeida Valente	350
66	Rua de Sá Miranda	111
67	Rua Benjamim Gouveia	64
68	Rua de Armando Cardoso	57
69	Rua da Azenha	87
70	Rua de Santiago	65
71	Rua da Ilha Terceira	140
72	Rua do Amial	906
73	Rua de S Tomé	930
74	Rua de S Tomé	824
75	Rua da Ilha Terceira	107
76	Rua do Conde d'Avranches	86
77	Rua do Amial	696
78	Alameda de 25 de Abril	278
79	Alameda de 25 de Abril	145
80	Alameda de 25 de Abril	231

Z1		
81	Rua do Dr Carlos Ramos	53
82	Rua do Coronel Almeida Valente	302
83	Rua de Dionísio de Santos Silva	3
84	Rua de S Tomé	116
85	Rua da Ribeira Grande	29
86	Rua da Ribeira Grande	141
87	Rua da Azenha	237
88	Rua de S Tomé	906
89	Rua de S Tomé	263
90	Rua do Pico	32
91	Rua da Ilha de Porto Santo	55
92	Rua de S Tomé	166
93	Alameda de 25 de Abril	82
94	Rua do Conde d'Avranches	626
95	Rua do Conde d'Avranches	526
96	Rua do Amial	368
97	Rua de Sá Miranda	139
98	Rua de Leonardo Coimbra	285
99	Rua de Armando Cardoso	72
100	Rua de S Tomé	993
101	Rua da Azenha	254
102	Rua da Azenha	291
103	Rua da Ilha Brava	40
104	Rua da Cidade de Vigo	25
105	Alameda de 25 de Abril	288
106	Rua de S Tomé	684
107	Alameda de 25 de Abril	125
108	Rua de S Tomé	133
109	Rua do Conde d'Avranches	598
110	Rua do Coronel Almeida Valente	293
111	Rua do Amial	332
112	Rua de Armando Cardoso	152
113	Rua de Santa Maria	54
114	Rua da Ribeira Grande	16
115	Rua da Cidade de Vigo	124
116	Rua da Cidade de Vigo	125
117	Rua da Cidade de Vigo	46
118	Rua da Cidade de Vigo	95
119	Alameda de 25 de Abril	286
120	Rua Académico Futebol Club	39
121	Rua de S Tomé	706
122	Alameda de 25 de Abril	297
123	Rua da Agra do Amial	115

Z1		
124	Rua do Coronel Almeida Valente	185
125	Rua do Conde d'Aurora	46
126	Rua do Conde d'Aurora	30
127	Rua do Conde d'Aurora	130
128	Rua de Leonardo Coimbra	253
129	Rua Benjamim Gouveia	42
130	Rua do Amial	154
131	Rua da Azenha	282
132	Rua da Azenha	85
133	Rua de S Tomé	373
134	Rua da Ilha Verde	13
135	Rua da Cidade de Vigo	150
136	Rua da Ilha Terceira	105
137	Alameda de 25 de Abril	103
138	Rua do Dr Bernardino de Almeida	472
139	Rua do Coronel Almeida Valente	290
140	Rua do Coronel Almeida Valente	311
141	Rua do Coronel Almeida Valente	198
142	Rua do Amial	1092
143	Rua de Armando Cardoso	110
144	Rua de Armando Cardoso	20
145	Rua da Azenha	114
146	Rua de Santa Maria	46
147	Rua de S Tomé	201
148	Alameda de 25 de Abril	131
149	Rua do Dr Carlos Ramos	81
150	Rua de Sá Miranda	111
151	Rua da Ribeira Grande	93
152	Rua de Santiago	87
153	Rua de S Tomé	758
154	Rua de S Tomé	62
155	Alameda de 25 de Abril	68
156	Rua do Amial	692
157	Rua do Amial	670
158	Rua do Conde d'Avranches	618
159	Rua do Conde d'Avranches	561
160	Rua da Agra do Amial	15
161	Estrada Ext da Circunvalação	8739
162	Rua da Ribeira Grande	187
163	Rua da Azenha	338
164	Rua de S Tomé	313
165	Rua de S Tomé	68
166	Rua de S Tomé	1115

<b>Z1</b>		
167	Rua Armando Cardoso	27

<b>Z2</b>		
1	Rua do Actor Eduardo Brasão	265
2	Rua do Actor Eduardo Brasão	210
3	Rua do Congo	938
4	Rua do Congo	215
5	Rua de Águeda	31
6	Rua do Tua	33
7	Rua do Dr Manuel Laranjeira	887
8	Rua do Actor Ferreira da Silva	169
9	Rua do Actor Eduardo Brasão	222
10	Rua do Tâmega	14
11	Rua do Tâmega	172
12	Rua do Vouga	127
13	Rua do Vouga	29
14	Rua do Mondego	117
15	Rua do Actor Ferreira da Silva	760
16	Rua do Dr Manuel Laranjeira	790
17	Rua do Dr Manuel Laranjeira	793
18	Rua do Guadiana	198
19	Rua do Dr Manuel Laranjeira	725
20	Rua do Actor Eduardo Brasão	7
21	Rua do Actor Eduardo Brasão	51
22	Rua do Mondego	137
23	Rua do Actor Ferreira da Silva	87
24	Rua do Actor Eduardo Brasão	243
25	Rua do Dr Manuel Laranjeira	963
26	Rua do Dr Manuel Laranjeira	941
27	Rua do Actor Eduardo Brasão	69
28	Rua do Actor Eduardo Brasão	120
29	Rua do Actor Ferreira da Silva	119
30	Rua do Dr Manuel Laranjeira	61

<b>Z1</b>		
168	Rua da Cidade de Vigo	84

<b>Z3</b>		
1	Rua do Dr Eduardo Santos Silva	571
2	Rua do Dr Eduardo Santos Silva	565
3	Rua do Dr Eduardo Santos Silva	524
4	Rua Costa Cabral	2056
5	Rua Costa Cabral	1856
6	Travessa do Rio	56
7	Rua do Dr Eduardo Santos Silva	501
8	Rua do Dr Eduardo Santos Silva	467
9	Rua do Dr Eduardo Santos Silva	9
10	Travessa do Rio	53
11	Travessa do Rio	81
12	Travessa do Rio	69
13	Rua do Dr Honório de Lima	346C
14	Rua Costa Cabral	2719
15	Praceta Bernardo Ferreira Lacerda	57
16	Praceta Bernardo Ferreira Lacerda	44
17	Praceta Bernardo Ferreira Lacerda	18
18	Rua Costa Cabral	2649
19	Rua do Dr Eduardo Santos Silva	160
20	Rua Costa Cabral	2574
21	Rua Costa Cabral	96
22	Travessa da Areosa	99
23	Travessa da Areosa	86
24	Travessa da Areosa	108
25	Travessa da Areosa	158
26	Via Estruturante do Pólo II	57
27	Rua do Dr Eduardo Santos Silva	99
28	Via Estruturante do Pólo II	127
29	Rua do Dr Eduardo Santos Silva	100
30	Rua do Dr Eduardo Santos Silva	148
31	Rua da Areosa	229
32	Rua do Dr Eduardo Santos Silva	25
33	Rua da Igreja da Areosa	34
34	Rua do Prof António Cruz	140
35	Rua do Prof António Cruz	122
36	Rua do Prof António Cruz	52

37	Rua Costa Cabral	1701
38	Rua do Dr Honório de Lima	91
39	Rua do Dr Honório de Lima	297
40	Rua do Dr Honório de Lima	44
41	Rua Costa Cabral	1777
<b>Z3</b>		
42	Rua Costa Cabral	1806
43	Rua Costa Cabral	1802
44	Rua do Dr Eduardo Santos Silva	400
45	Rua do Dr Júlio de Matos	33
46	Rua do Dr Júlio de Matos	127
47	Rua do Dr Júlio de Matos	147
48	Rua do Dr Júlio de Matos	106
49	Rua do António Borges	180
50	Rua do Dr Júlio de Matos	203
51	Rua do Dr Júlio de Matos	261
52	Rua do Dr Honório de Lima	280
53	Rua do Dr Honório de Lima	346D
54	Rua do Honório Lima	284
55	Rua do Sagueiral	89
56	Rua do António Borges	53
57	Rua do António Borges	11
58	Rua do António Borges	31
59	Rua do António Borges	55
60	Rua Costa Cabral	1946
61	Rua do Sagueiral	147
62	Rua do Dr Honório de Lima	95
63	Rua da Fonte do Outeiro	450
64	Rua da Fonte do Outeiro	460
65	Rua da Fonte do Outeiro	461
66	Rua Costa Cabral	2098
67	Rua do Dr Eduardo Santos Silva	199
68	Rua do Dr Eduardo Santos Silva	213
69	Rua do Dr Eduardo Santos Silva	299
70	Rua da Igreja da Areosa	70
71	Rua da Areosa	133
72	Rua da Areosa	150
73	Rua da Areosa	190
74	Rua da Areosa	230
75	Travessa da Areosa	145
76	Rua do Dr Eduardo Santos Silva	338
77	Rua do Dr Eduardo Santos Silva	394
78	Rua do Dr Eduardo Santos Silva	424
79	Praceta Bernardo Ferreira Lacerda	60

80	Rua Costa Cabral	2558
81	Rua Costa Cabral	2602
82	Rua Costa Cabral	2670
<b>Z3</b>		
83	Rua do Dr Eduardo Santos Silva	571
84	Rua do Dr Eduardo Santos Silva	564
85	Rua do Dr Eduardo Santos Silva	59
86	Travessa do Rio	37
87	Travessa do Rio	2761
88	Travessa do Rio	97
89	Rua Costa Cabral	2675
90	Rua Costa Cabral	253
91	Rua Costa Cabral	2545
92	Rua da Areosa	205
93	Rua da Areosa	113
94	Via Estruturante do Pólo II	93
95	Rua do Dr Eduardo Santos Silva	118
96	Rua Costa Cabral	2235
97	Rua Costa Cabral	2181
98	Rua Costa Cabral	2124
99	Rua do Sagueiral	239
100	Rua do Sagueiral	211
101	Rua do Dr Júlio de Matos	436
102	Rua do Dr Honório de Lima	124
103	Rua do Dr Honório de Lima	346B
104	Rua do Dr Júlio de Matos	299
105	Rua do Dr Júlio de Matos	313
106	Rua do Dr Júlio de Matos	279
107	Rua do Dr Júlio de Matos	264
108	Rua do Dr Júlio de Matos	225
109	Rua do Sagueiral	86
110	Rua do Dr Honório de Lima	381
111	Rua do Dr Honório de Lima	307
112	Rua do Dr Honório de Lima	255
113	Rua do Dr Honório de Lima	260
114	Rua do Dr Honório de Lima	189
115	Rua do Dr Honório de Lima	88
116	Rua Costa Cabral	2667
117	Rua Costa Cabral	494
118	Travessa do Rio	2743
119	Rua Costa Cabral	2681
120	Praceta Bernardo Ferreira Lacerda	11
121	Rua Costa Cabral	2589
122	Rua da Areosa	105

123	Rua da Areosa	102	146	Rua Costa Cabral	2617
124	Rua da Igreja da Areosa	120	147	Rua do Dr Eduardo Santos Silva	180
125	Rua da Igreja da Areosa	102	148	Rua da Areosa	87
<b>Z3</b>			149	Rua da Areosa	19
126	Rua Costa Cabral	2129	150	Rua da Igreja da Areosa	54
127	Rua Costa Cabral	2140	151	Rua Costa Cabral	2141
128	Rua Costa Cabral	2067	152	Rua do Prof António Cruz	102
129	Rua Costa Cabral	264	153	Rua Costa Cabral	2033
130	Rua Costa Cabral	2022	154	Rua Costa Cabral	2037C
131	Rua do António Borges	160	155	Rua Costa Cabral	2036
132	Rua do Dr Júlio de Matos	191	156	Rua Costa Cabral	2010
133	Rua do Dr Honório de Lima	346A	157	Rua do Sagueiral	135
134	Rua do Dr Honório de Lima	327	158	Rua do Dr Júlio de Matos	320
135	Rua do Dr Honório de Lima	198	159	Rua do Sagueiral	342
136	Rua do Dr Honório de Lima	147	160	Rua da Fonte do Outeiro	294
137	Rua do Dr Honório de Lima	119	161	Rua do Dr Honório de Lima	427
138	Rua do Dr Júlio de Matos	49	162	Rua Costa Cabral	1828
139	Rua do Dr Júlio de Matos	73	163	Rua Costa Cabral	1860
140	Rua do Sagueiral	229	164	Rua das Barrocas	32
141	Rua da Fonte do Outeiro	526	165	Rua Costa Cabral	1857
142	Rua do Dr Honório de Lima	367	166	Rua Costa Cabral	2538
143	Rua do Dr Eduardo Santos Silva	513	167	Rua Costa Cabral	549
144	Rua do Dr Eduardo Santos Silva	540	168	Rua do Dr Eduardo Santos Silva	90
145	Rua Costa Cabral	2741			
<b>Z3</b>			188	Rua da Areosa	86
169	Rua do Dr Eduardo Santos Silva	72	189	Rua do Dr Honório de Lima	277
170	Rua Costa Cabral	2550	190	Rua Costa Cabral	2107
171	Rua Costa Cabral	2253	191	Rua do Prof António Cruz	86
172	Rua da Areosa	39	192	Rua Costa Cabral	1919
173	Rua Costa Cabral	2155	193	Rua Costa Cabral	1881
174	Praceta Bernardo Ferreira Lacerda	24	194	Rua Costa Cabral	1996
175	Rua Costa Cabral	18	195	Praceta Bernardo Ferreira Lacerda	99
176	Rua da Mercês	144	196	Rua Costa Cabral	1791
177	Rua do Dr Honório de Lima	57	197	Rua do Bairro da Areosa	48
178	Rua do Sagueiral	273	198	Rua da Areosa	81
179	Rua do Sagueiral	245	199	Rua do Bairro da Areosa	33
180	Rua da Fonte do Outeiro	462	200	Rua Costa Cabral	1888
181	Rua do Dr Honório de Lima	267	201	Rua do Dr Júlio de Matos	408
182	Rua do Dr Honório de Lima	150	202	Rua Costa Cabral	2633
183	Rua Costa Cabral	2703			
184	Rua Costa Cabral	2710			
185	Rua da Areosa	193			
186	Rua da Areosa	181			
187	Rua da Areosa	157			