



Survey of mobility patterns in the Hanseatic City of Rostock and surrounding regions focussing on cycling oriented commuters

Under the EU-project “*abc.multimodal*” (project period 2011 to 2014) the Hanseatic City of Rostock is cooperating with four other partners, the cities of Kalmar in Sweden, Gdansk in Poland, the ADFC German Cycling Association (Rostock) and the Polish non-governmental organisation PUMA, with the aim of promoting cycling in the context of urban mobility structures in the South Baltic Sea Region.

The objective is to integrate cycling into a multimodal transport system through the improvement of infrastructure and services and for cycling ultimately to become an integral part of urban mobility culture.

A master plan is to be developed based on target group analysis, ultimately leading to the elaboration and formulation of an action plan. An essential prerequisite for such target group analysis covering cycling oriented commuting patterns was a comprehensive survey of commuters, conducted by way of a questionnaire developed in cooperation and consultation with the city’s environmental office, the civil and harbour engineering department and the University of Rostock. The questionnaire served as the basis for personal interviews and was also made available via the Internet for confidential and anonymous completion online.

The survey was announced and publicised through a press release, issued in April 2012, and students as well as members of staff at the University of Rostock were invited by e-mail to participate and provided with a link for online completion of the commuter survey.

Principal target group of the survey were commuters travelling primarily by bike to and from school, university, their place of vocational training and/or place of work. Classified as commuters in this context were people that make regular use of different modes of transport for travelling between the city and communities located in the immediate surroundings, as well as people commuting between different quarters and districts within the City of Rostock (usually classified as commuters in the context of mobility surveys are only persons travelling between different communities).

The anticipated rate of return had originally been expected to provide around 2,000 questionnaires suitable for further evaluation. In the event, however, this target was significantly exceeded with an overall return of 4,036 questionnaires of which 3,549 were suitable for evaluation purposes, including 3,391 returns from commuters. Due to the methodology of dissemination and publicising of the survey a notably high level of participation by students and members of staff from the Rostock University could be recorded, thereby providing a statistically solid and specifically representative reflection of mobility patterns for this particular target group.

Around 60% of respondents that regularly commute by bike to school, university, their place of vocational training and/or place of work located within the City of Rostock or in adjacent communities are adolescents and young adults in the age group between 15 and 25 years – and it was this target group that participated most actively in the commuter survey. 1,910 of the respondents were young people up to the age of 25 years, and a further 1,250 participants in the survey belong to the 26-45 year-old age group. 88% of respondents were residents of the City of Rostock and 12% lived outside the city area in one of the surrounding communities.

Around two thirds of participants in the survey primarily commute within the city limits, between their home and respective place of work / educational training (schools, university, vocational training colleges etc.) and one third of respondents do commute daily to and from work.

	Purpose of travel / commuting	
	absolute	in %
Work	1.078	31,8
School / vocational training	207	6,1
University (studies)	1.919	56,6
Part time work (students)	187	5,5
N (sample size of survey)	3.391	100,0

96% of the respondents resident in Rostock commute to and from their place of work and/or education within the city boundaries, and out of the 423 respondents living outside the city area 92% commute into the City of Rostock.

In the case of 55% of respondents the distance of travel between home and their respective place of work, school, university or vocational training was less than 5 kilometres.

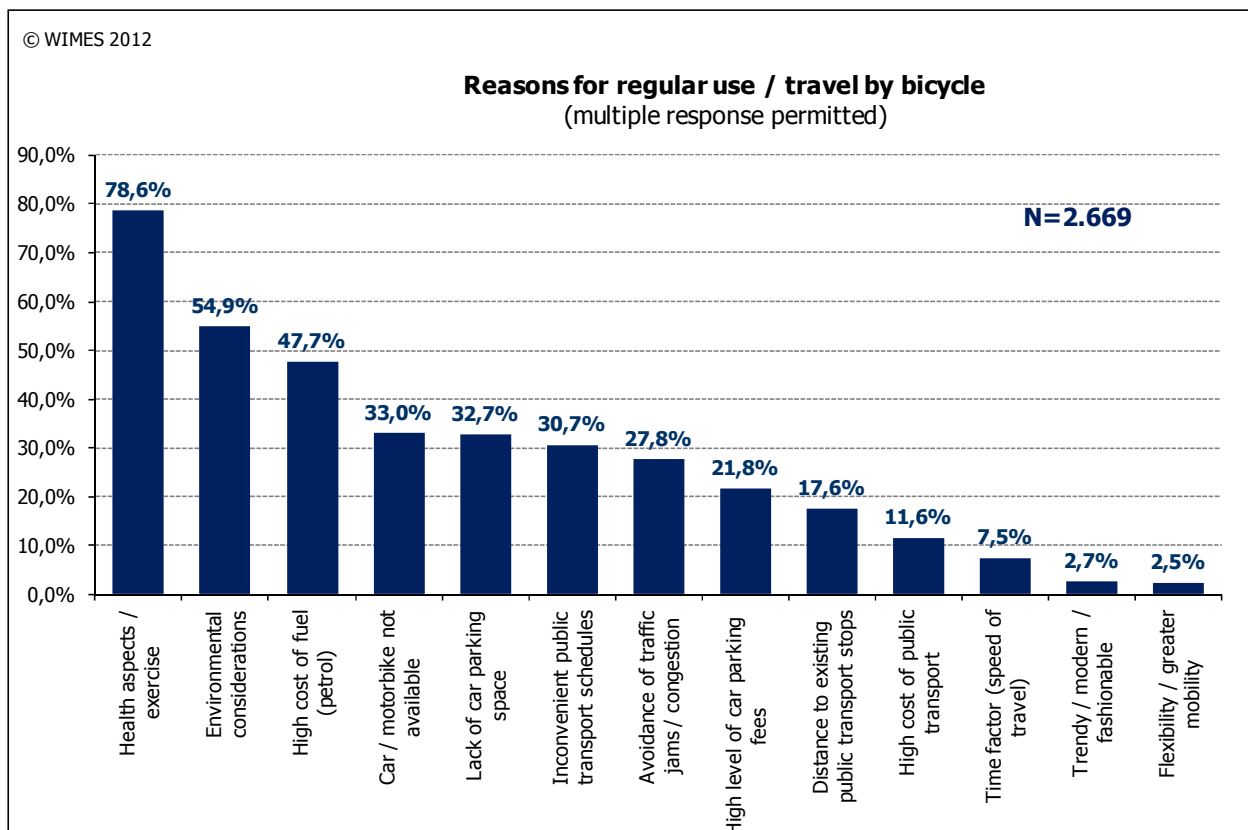
Average commuting distance (according to purpose of travel)					
	Work	School / vocational training	University (studies)	Part time work (students)	N (sample size)
up to 5 kilometres	516	43	1.186	88	1.833
ca. 5 - 10 kilometres	235	40	489	47	811
ca.10 - 20 kilometres	199	61	187	35	482
ca.20 - 50 kilometres	87	45	37	12	181
ca.50-100 kilometres	18	17	14	5	54
over 100 kilometres	23	1	6		30
Total respondents	1.078	207	1.919	187	3.391

Two thirds of respondents named cycling as their principal mode of transport, whereas one quarter of the commuters interviewed primarily use public transport facilities.

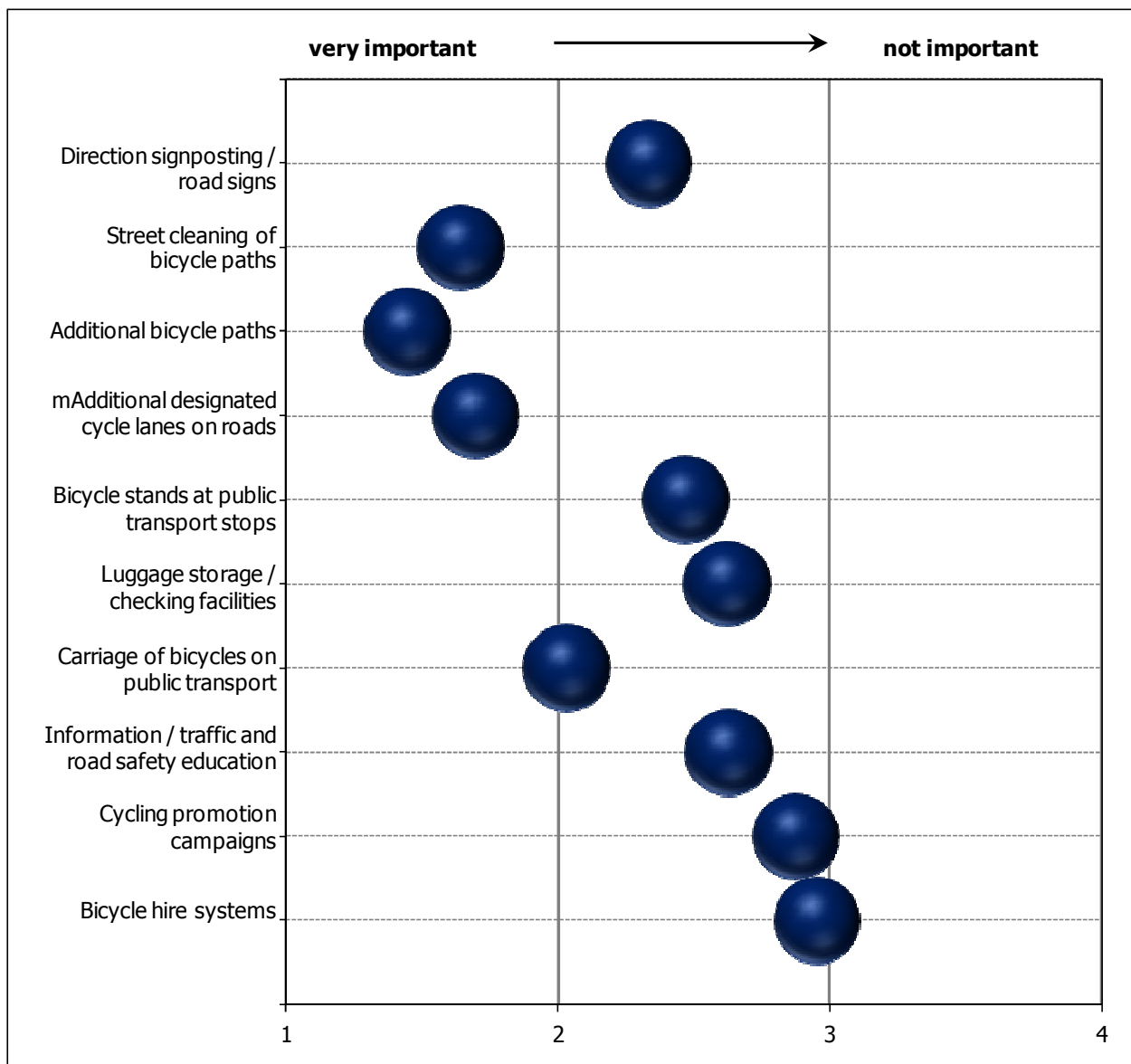
Principal mode of transport (according to purpose of travel)					
	Work	School / vocational training	University (studies)	Part time work (students)	N (sample size)
Public transport	200	117	474	36	827
Car / motorbike	239	39	74	32	384
Car sharing	5	8			13
Electric bike / Pedelec	4				4
Bicycle	630	43	1.371	119	2.163
Total respondents	1.078	207	1.919	187	3.391

Health aspects and environmental considerations are the reasons most frequently stated by cycling commuters for regularly using / travelling by bike to their respective place of work, school, university and/or vocational training facilities.

Reasons for regular use / travel by bicycle (multiple response permitted)		
N = 2,669 (sample size - cyclists only)	absolute	in %
Health aspects / exercise	2.098	78,6
Environmental considerations	1.466	54,9
High cost of fuel (petrol)	1.273	47,7
Car / motorbike not available	881	33,0
Lack of car parking space	874	32,7
Inconvenient public transport schedules	819	30,7
Avoidance of traffic jams / congestion	741	27,8
High level of car parking fees	582	21,8
Distance to existing public transport stops	469	17,6
High cost of public transport	309	11,6
Time factor (speed of travel)	201	7,5
Trendy / modern / fashionable	71	2,7
Flexibility / greater mobility	67	2,5
Fun factor	27	1,0



In response to the question “How important, for you personally, are following factors in terms of your use of bicycle“ participants in the survey replied as follows:



All in all it must be observed that, given the target group selection referred to above, the findings of this mobility survey cannot provide a representative picture of commuting patterns (in terms of the afore stated definition of commuters), but that such a representative commuter survey (based on random selection) should be pursued and conducted in future, in cooperation between the City of Rostock, the Administrative District of Rostock (Landkreis) and the State Regional Planning Authority. This would help to fill gaps in periodically conducted mobility surveys (e.g. SrV of the TU Dresden) and assist in the identification of potentials and demand for mobility management measures to be implemented by regional authorities as well as public and private sector transport organisations.

On the other hand does the “Survey of mobility patterns of cycling oriented commuters” deliver a highly representative picture of user patterns and behaviour for this target group, and in particular with regard to young cycling oriented commuters. We now do have a better understanding of their motivation and assessment, as well as expectations concerning the improvement of bicycle traffic conditions and facilities, i.e. infrastructure improvements such as the construction of new bicycle paths, road marking of designated cycle lanes or facilities for the carriage of bicycles on public transport are considered to be more important than the introduction of rent-a-bike systems or organising of cycling campaigns. Please note that the majority of respondents has already been “enthusiastic” bicyclist.