

## Decision Support for Cycle Planning - results from a questionnaire survey in Sweden



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IMPACT

Implementation Paths for ACTION towards sustainable mobility

<http://www.mistra.org/mobility>

Work Package 4

The role of decision support and information –  
when is knowledge leading to action?



## **Preface**

This report is a part of work package 4 within IMPACT, IMplementation Paths for ACTion towards sustainable mobility. The purpose of work package 4 is to investigate the potential role of (improved) decision support for the implementation of measures leading to sustainable mobility. The study has been funded by the TransportMistra programme (2004-2008).

I wish to express my gratitude towards a number of individuals that have contributed to this study. I want to thank Dr Annika Nilsson, Trivector Traffic AB for her substantial input and help with designing the questionnaire and Dr Miles Tight and Mary Kimble at University of Leeds for their help with the project plan and for reviewing the report. I am also grateful for the support and encouragement from Henrik Gudmundsson, Danish Technical University, Eva Ericsson, Lund University and Katarina Evanth, Trivector Traffic AB. Your contributions within IMPACT and our discussions have been very valuable when interpreting the survey results.

## Summary

This report presents findings from a questionnaire survey aimed at urban and transport planning officers in Sweden. The survey was carried out during May 2008.

235 officers from local and regional authorities as well as highway authorities responded to the questionnaire. This makes the study the largest in its pitch, within the Nordic countries. The study achieved a 45% response rate which gives confidence in the reliability of the results.

The survey informed an analysis on the role improved decision support for cycle planning may have for planning efficiency, i.e. authorities' ability to fulfil their local planning objectives (such as increased cycle use) in a cost-efficient way. A second purpose of the study was to identify key areas where change is needed in order for the authorities to meet their local targets within the field of cycle planning. The survey repeated several questions from an earlier British study making it possible to compare planning barriers in the UK and Sweden.

The survey results point in the direction that better decision support on a local, regional and national level in Sweden would improve planning efficiency. The study indicates that highway and local authorities with free-standing cycle planning documents are more successful, have fewer severe planning conflicts and are using their capital funding more efficiently (see e.g. Figures 2.8-2.9, 2.11). 'Good enough' decision support is likely to have two key benefits. Firstly, the survey indicates that good quality decision support increases planning efficiency so that cost-effective measures can be implemented. Secondly, improved decision support may also be a catalyst for meeting national transport policy objectives. Some other interesting survey findings were that:

- There is a relatively strong demand for improving decision support for cycle planning in Sweden, with the majority of respondents (54%) indicating that better decision support on a national/ regional level is *important* or *very important* in order to make it easier to implement better cycle facilities.
- Two out of three respondents (65%) indicated that it is *important* or *very important* that the way infrastructure is financed in Sweden changes in order to make it easier to implement measures leading to better cycle facilities in their local authority.
- The professional 'culture' in transport planning and the way local transport planning is carried out is considered a relatively high-ranked problem. For example, 47% of respondents in authorities with no or partly out of date planning documents for cycle planning indicated that the own organisation's transport planning 'culture' is a *significant* or *very significant* problem hindering the development of proposals for new or improved cycle facilities and successful implementation of them.

- Female respondents were more critical of the way which cycle facilities currently are planned than men. The majority of women (54%) indicated that their organisation did *not* plan for cycling in a *satisfactory systematic manner*. Only 39% of male respondents stated the same. Women had also experienced more difficult implementation problems.

The study shows that decision support for cycle planning is out of date in many organisations. The results of the survey were interpreted to show a need for new or significantly updated free-standing cycle planning documents in at least one out of three Swedish local and highway authorities. According to planning practitioners there is also a need to update many existing cycle planning documents with a more rigorous analysis of the present situation and users' problems in order to be able to implement the most cost-efficient measures.

## Sammanfattning (Summary in the Swedish language)

Denna rapport presenterar resultat från en enkätstudie riktad till svenska trafik- och stadsplanerare. Enkätstudien genomfördes i maj månad 2008.

235 tjänstemän i kommuner, på Vägverkets regioner och i länsstyrelser och regionala självstyrelseorgan svarade på enkäten. Det gör studien till den största i sitt slag i Norden. 45 % av de tillfrågade svarade på enkäten vilket ger resultaten hög tillförlitlighet.

Enkätens resultat användes för att analysera vilken ev. roll som ett förbättrat beslutsunderlag har för planeringens effektivitet, det vill säga myndigheters förmåga att uppfylla sina lokala mål (t. ex. ökad cykling) på ett kostnadseffektivt sätt. Ett andra syfte med studien var att identifiera behov av förändringar för att myndigheter ska kunna uppfylla sina intentioner inom cykelplaneringsområdet. Undersökningen upprepade flera frågor från en tidigare brittisk studie. Det har gjort det möjligt att jämföra planeringshinder och problem i Sverige och Storbritannien.

Studiens resultat indikerar att ett bättre beslutsunderlag för cykelplanering i Sverige skulle öka planeringens effektivitet. Studien indikerar att kommuner med särskilda cykelplaner är mer framgångsrika, har färre svåra planeringskonflikter och använder sina investeringsresurser mer kostnadseffektivt (se t. ex. Figurer 2.8-2.9, 2.11). Enkäten pekade på att ett tillräckligt genomarbetat beslutsunderlag främst har två positiva effekter, högre planeringseffektivitet genom att man i större utsträckning kan välja de mest kostnadseffektiva lösningarna. Ett förbättrat beslutsunderlag kan också fungera som en katalysator för att kunna nå riksdagens transportpolitiska mål. Några av de i övrigt mest intressanta resultaten från enkäten var att:

- Det finns en relativt stark efterfrågan på bättre beslutsunderlag för cykelplanering i Sverige. Det visar inte minst det faktum att en majoritet av svarspersoner (54 %) indikerade att bättre beslutsunderlag på nationell och regional planeringsnivå är *viktigt* eller *mycket viktigt* för att göra det enklare att genomföra åtgärder som leder till en bättre cykelinfrastruktur.
- Två av tre svarspersoner (65 %) angav att det är *viktigt* eller *mycket viktigt* att på regional/ nationell nivå förändra det sätt på vilket trafikinfrastruktur finansieras. Detta i syfte att underlätta för deras organisationer att genomföra åtgärder som leder till en förbättrad cykelinfrastruktur.
- Attityder och kultur inom trafikplanering liksom det sätt på vilket trafikplanering genomförs i Sverige ses som ett relativt stort problem. Exempelvis så angav 47 % av svarspersonerna i myndigheter helt utan eller med delvis inaktuella cykelplaneringsdokument att den egna organisationens trafikplaneringskultur är ett *betydande* eller *mycket betydande* problem som försvårar eller förhindrar utarbetande av förslag till och genomförande av förbättringar av cykeltrafikens infrastruktur.
- Kvinnliga svarspersoner var mer kritiska till det sätt på vilket cykelinfrastruktur planeras än män. Majoriteten kvinnor (54 %) angav att deras organisation *inte* planerar för förbättringar av cykeltrafik på ett

*tillräckligt systematiskt sätt.* Endast 39 % av manliga tjänstemän angav detsamma. Kvinnor angav också att de har upplevt större genomförandesvårigheter.

Avslutningsvis visar studien att det finns ett stort antal inaktuella cykelplaner i svenska organisationer med ansvar för trafik- och stadsplanering. Resultaten av studien har tolkats som att nya eller betydligt reviderade cykelplaner behöver tas fram i minst 1/3 av svenska kommuner och regionala myndigheter så som Vägverket och regioner med ansvar för trafikplanering. Det finns, enligt planerarna, även ett behov av att uppdatera många aktuella cykelplaner (som man planerar efter) med mer fullständiga data om nuläget och cyklisters problem så att de mest kostnadseffektiva förbättringsåtgärderna kan genomföras.

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# **1. Introduction**

## **1.1. Study objectives**

This report presents the results of a questionnaire survey to planning practitioners. The survey aimed to investigate, amongst other things, what planners think is difficult when implementing cycle facilities and what measures they see are the most important for improving the effectiveness of cycle network planning, including the potential role of better decision support.

The definition of decision support used within this study delimits Decision Support to a subset of the information that enters policy and/ or decision making processes, i.e. to expert mediated information resources (including information processing methods and tools), activities and input which are demanded by and explicitly communicated to support one or more steps in a particular policy process or decision chain (Gudmundsson et al 2009).

## **1.2. Methodology**

### **1.2.1. Questionnaire design**

A questionnaire survey was developed in two stages. First a draft questionnaire was produced. The draft questionnaire was tested on a handful people with knowledge of the Swedish cycle planning process, both researchers and planning practitioners. Many useful comments were made by these individuals and subsequently incorporated into the final questionnaire.

The final version of the questionnaire made use of some questions from a previous British study (Gaffron 2002, Gaffron 2003) in order to increase the interpretability of the survey.

### **1.2.2. Survey distribution**

A letter of invitation to participate in the survey was sent by email in May 2008. The letter included an internet link to a password-protected online survey. The email sent out was personally addressed and included each respondent's name and job title. Where applicable the name of any specific cycle project the respondent currently was or had recently been involved in was also mentioned in the letter.

### **1.2.3. Sample size**

The survey was distributed to a total of 520 people of which 399 officers in Swedish local authorities, 63 officers involved in the planning of cycle facilities at regional offices of the Swedish National Road Administration and 58 civil servants with responsibility for infrastructure planning and sustainable transport at Swedish regional authorities (officers at regional assemblies and county councils).

### **1.2.4. Send list**

The send list for the survey was compiled from a multitude of sources. A publicly available contact list for transport planners, transport engineers, urban planners and sustainable transport experts at local authorities was used to add names to the send list. The send list also included contacts provided by the National Road Administration as well as contact persons from the National Road Administration's

database over people responsible for managing cycle route construction. In addition, many individuals added to the send list were identified by scoping local authorities' websites for material on urban planning and cycle planning. All in all the survey send list contained a significantly larger number of people than any previously known separate list available for Swedish transport professionals working with cycle planning.

### **1.2.5. Professions included in the survey**

Up to five named individuals per local authority/ organisation were added to the send list. For the largest local authorities one officer from each of the following professions was added to the list: transport planning, transport engineering, master planning, urban design and development planning). For mid-sized local authorities up to three people were added to the list (one or two transport professionals and one land use/ town planner). Smaller local authorities were normally represented by one respondent only (most small local authorities seem to have only one individual dealing with cycling issues). In twenty or so cases more than the specified number of contacts was identified for a particular organisation. When this was the case the person most recently known to be involved in developing a cycle scheme was added to the send list.

In quite a few cases no particular contact person for the planning of cycle facilities could be identified. In these cases the head of the particular department responsible for the planning of cycle routes was added to the list.

### **1.2.6. Response rate**

The survey received 235 responses taking the general response rate to 45%. The responses can be broken down further:

- 182 responses from local authorities (45% response rate)
- 32 responses from the National Road Administration (51% response rate)
- 21 responses from regional planning authorities (36% response rate)

Some regional planning authorities have had many of their responsibilities for transport planning transferred to other organisations. This is a likely reason for the somewhat lower response rate amongst these organisations.

### **1.2.7. Potential biases**

The 45% response rate gives confidence in the generality of the findings. So do the fact that the survey covers both cycle experts spending more than 40% of their work time on cycle planning as well as those spending only a small proportion of their professional life on cycling-related planning issues (see Table 1.1).

As also shown in Table 1.1, most respondents worked in more than one type of urban area, e.g. with both inter-urban links and within built up areas. Hence the survey covers all main types of planning contexts.

Table 1.1. Amount of time respondents spend on cycle planning and cycle traffic issues in relation to the types of areas they work in (multiple answers possible)

Time spent on cycle issues during last year	No. of respondents	No. of respondents working in different areas (of those working a certain amount of time with cycle issues)					
		Metro-politan areas	Cities (30-100' inhab.)	Towns (6-29' inhab.)	Villages (≤5' inhab.)	Inter-urban links	Rural areas
61-100% of full-time employment	4	3 (3*)	1	-	1	2	2
41-60%	7	2 (1*)	3	3	-	1	1
21-40%	23	5 (4*)	12	6	6	14	4
6-20%	87	14 (5*)	39	34	25	29	8
≤ 5%	114	15 (8*)	33	46	48	41	17

\* Of which working in metropolitan inner city areas

As shown in Table 1.2, relatively few respondents indicated that they are working in metropolitan inner city areas. Any potential special circumstances regarding metropolitan inner city areas may there be somewhat underrepresented in the survey. This may be important to remember when interpreting the results.

Table 1.2. Geographical context of areas where respondents work.

Geographical context	Responses			Total
	Local authorities	Regional authorities	National Road Administration	
Metropolitan areas	30 (15*)	6 (4*)	3 (2*)	39 (21*)
Cities with 30-100' inhabitants	69	9	10	88
Towns with 6-29' inhabitants	69	10	10	89
Villages with ≤5' inhabitants	50	10	20	80
Inter-urban links	49	15	23	87
Rural areas	13	6	13	32

\* Of which working in metropolitan inner city areas

135 men (58%) and 98 women (42%) responded to the questionnaire (two people did not state their gender). It is well known that more men than women work in the transport planning profession in Sweden. No response bias was therefore anticipated in this respect.

## 2. Selected findings

### 2.1. Overview

This chapter presents the survey findings and is divided into six sub-sections. The first section illustrates the type of planning documents and planning objectives employed in Swedish planning and highways authorities. This section also illustrates the proportion of work time that the respondents had spent on cycling issues over the last 12 months.

A second section compares the presence of a cycle plan versus perceived planning success. This part aims to explore whether authorities with a valid cycle plan are more successful in improving cycle facilities than those without.

A third section explores difficulties and barriers for the development and implementation of cycle facilities (experienced by planning practitioners).

A fourth section investigates respondents' perceived need for change in order to make it easier for their organisation to implement better cycle facilities. The analysis presented in this section focuses on the potential role of improved decision support on local and regional levels.

A fifth section considers the role new and improved benchmarks in the form of good examples may play for improving the cost-effectiveness of cycle planning.

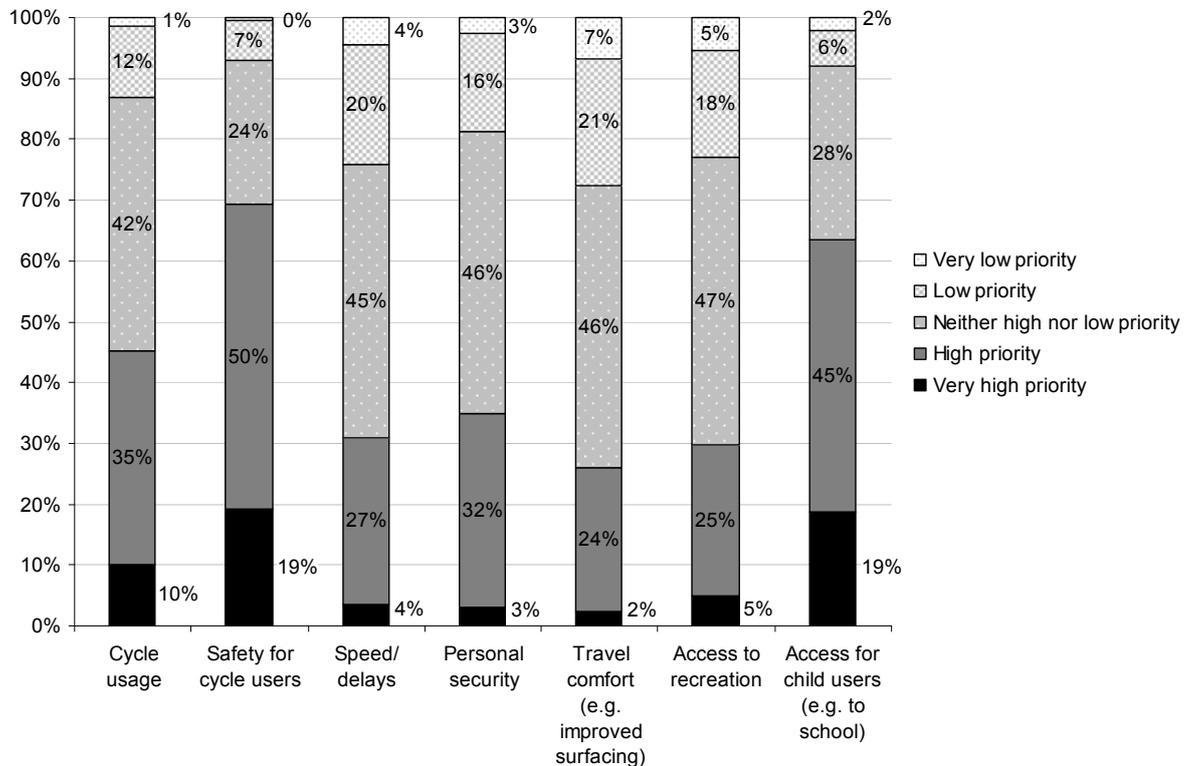
The sixth and final section explores differences between male and female respondents.

### 2.2. Planning objectives and type of documents

#### 2.2.1. Planning objectives

Figure 2.1 illustrates planning objectives that respondents say that their organisations give priority to within cycle planning. As shown in the figure, Swedish local and regional authorities' top priorities are traffic safety and access for child users. 69% of respondents indicated that the implementation of safety measures is given *high* or *very high priority*. Almost as many, 64% indicated that measures to increase or maintain access for child users are given *high* or *very high priority*. Less than a third of respondents (31%) indicated that increasing travel speed (e.g. through a denser network, more direct routes) and by reducing delays are given *high* or *very high priority*.

Figure 2.1. Proportion of respondents indicating that a particular planning objective is given or not given priority when cycle facilities have been implemented in their authority.



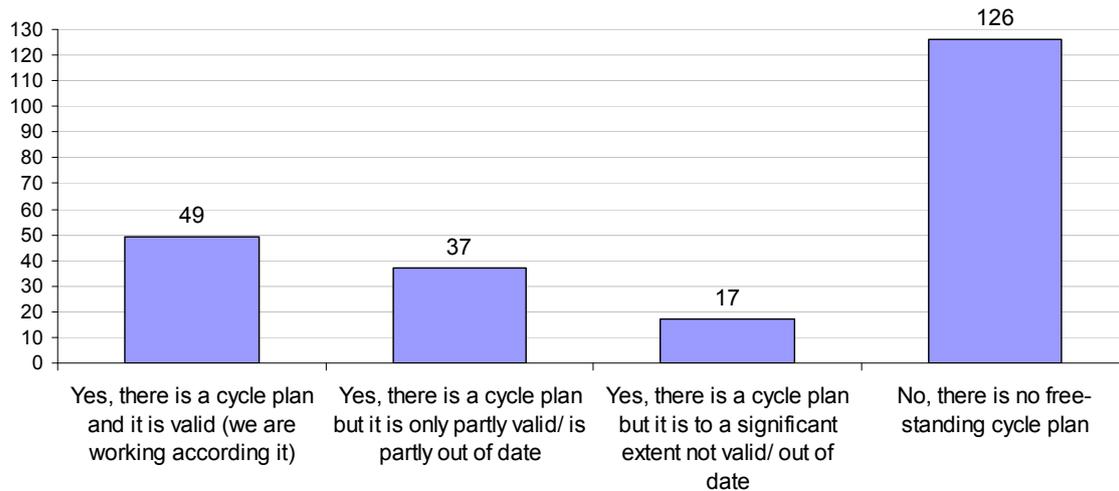
The questionnaire defined priority in terms of expenditure. For example, a respondent in an authority that has spent a large proportion of the ‘cycling budget’ on safety measures should state that this objective has been given *high* or *very high priority*. An objective that one has not really taken into consideration when implementing cycle facilities should be indicated as a *very low priority*.

### 2.2.2. Availability of different types of planning documents

As shown in Figure 2.2, the majority of respondents (126 or 55%) indicated that their organisations do *not* have a free-standing cycle plan or no cycle planning documents at all. Only 49 respondents (21%) indicated that their organisations have valid free-standing cycle plans<sup>1</sup>.

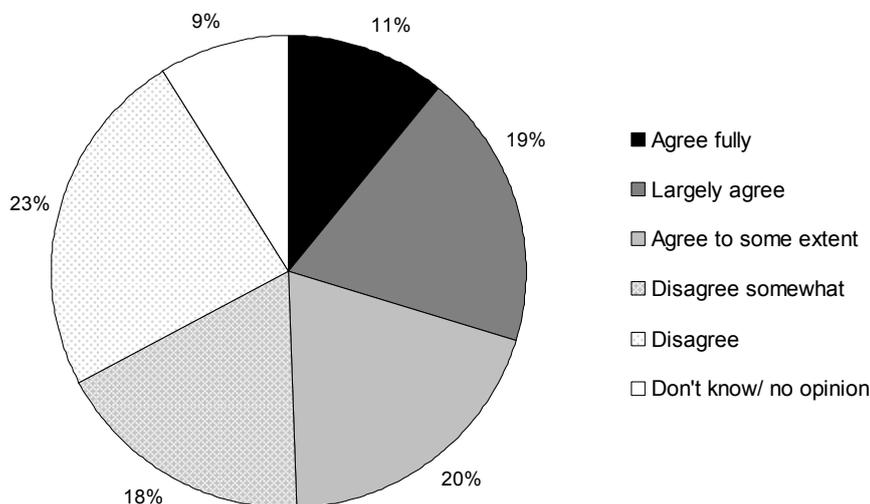
<sup>1</sup> The questionnaire defined a free-standing cycle plan as ‘a report that presents measures for improving cycle facilities (improvements to be carried out during one or more years ahead). A cycle plan may include pedestrian measures.

Figure 2.2. Number of respondents indicating that their organisation has a free-standing cycle plan (n 229)



Those that answered that their organisations have no free-standing cycle plans were asked to provide information on the extent to which cycle issues are dealt with in other planning documents that the authority might have. As shown in Figure 2.3, 30% of respondents in this group (30 respondents) *agreed fully* or *agreed largely* that their organisation has no up to date planning documents describing the needs and problems of cycle users, i.e. that their organisation solves cycle problems in an ad hoc way.

Figure 2.3. Proportion of respondents in organisations without a free-standing cycle plan that indicate that their organisation has *no* up to date planning documents describing the needs and problems of cycle users (n 101).

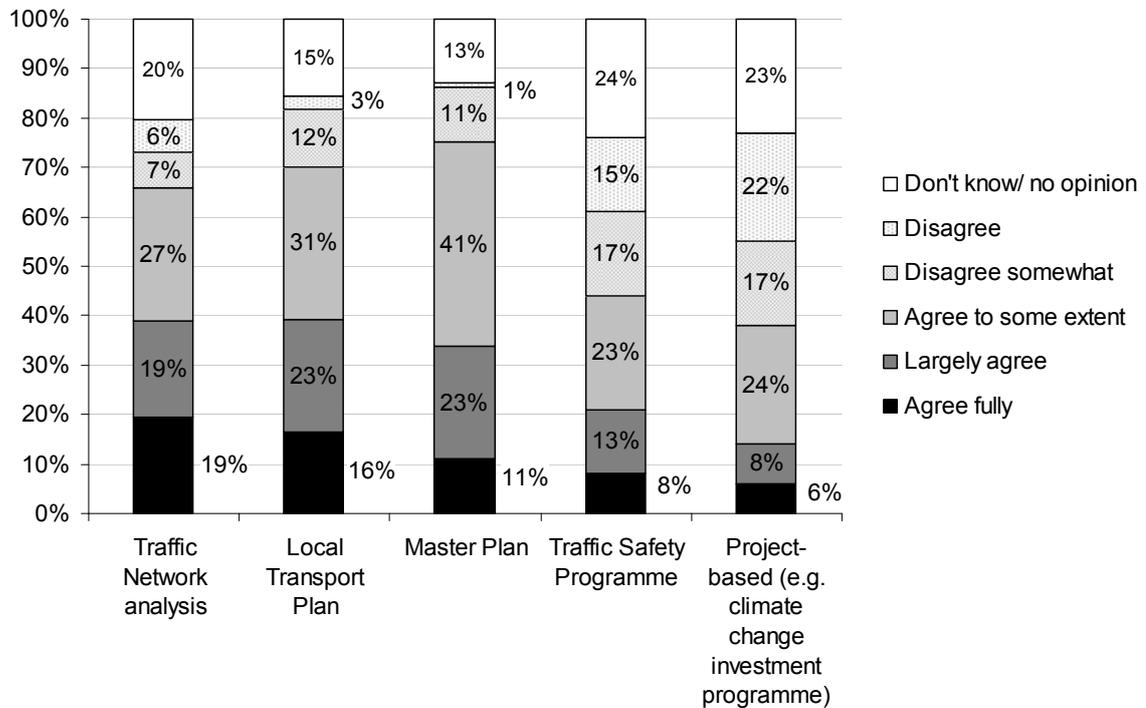


Note that around 25 respondents in organisations without free-standing cycle planning documents did not respond to the question above. This may be due to a design issue with the online questionnaire.

As shown in Figure 2.4, traffic network analyses were the most common form of decision support for cycle planning in the organisations that do not have a free-

standing cycle plan. Local transport plans, which are voluntary in Sweden, were the second most common form of decision support in organisations that do not have a free-standing cycle plan.

Figure 2.4. Proportion of respondents in organisations with *no* free-standing cycle plan that agree or disagree that their organisation deals with the needs of cycle users in particular types of planning documents (n 100 - 110)

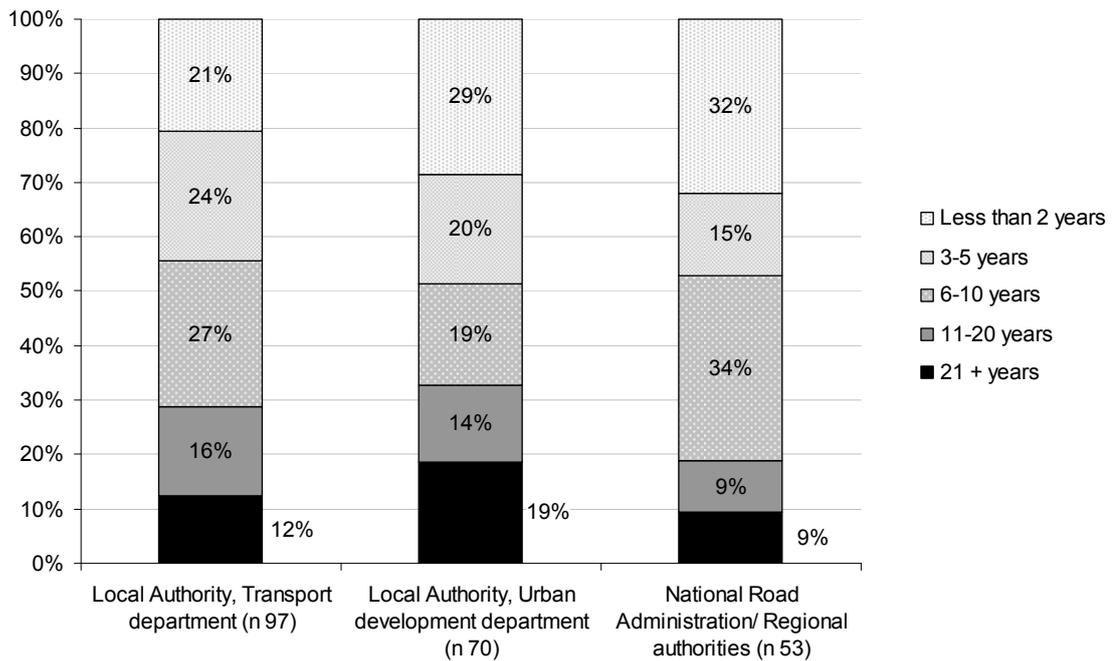


The responses in the don't know category may indicate that an organisation has no such planning document, e.g. that the particular organisation has no specific traffic safety programme.

### 2.2.3. Experience and proportion of work time spent on cycle issues

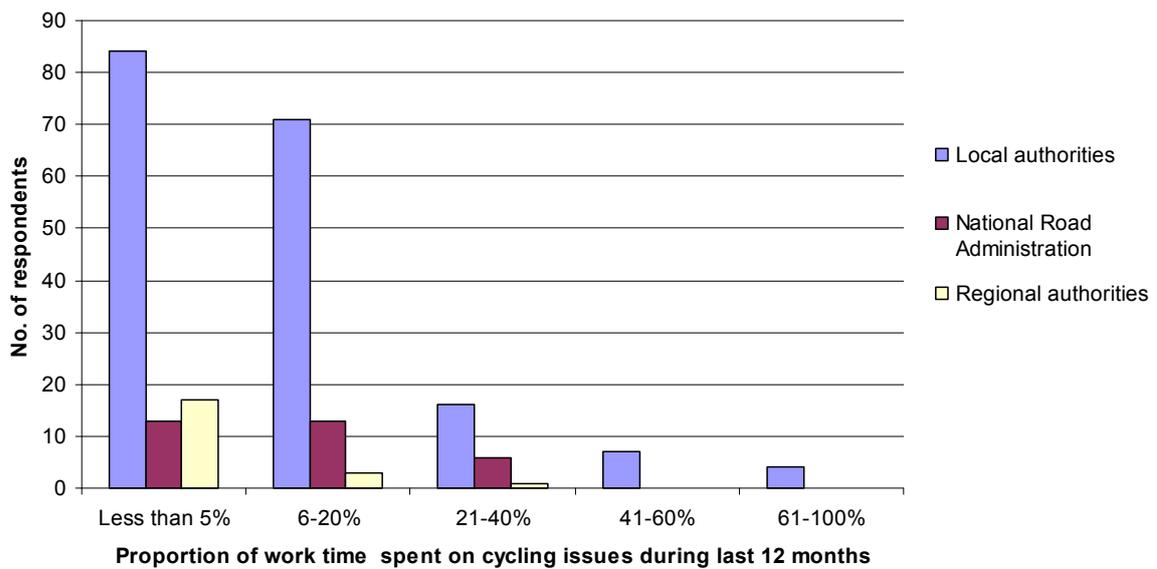
As shown in Figure 2.5, a relatively large proportion of respondents (45-50%) in all types of organisations have worked less than five years with cycle planning. The number of years that the respondents have worked with cycle traffic issues varies somewhat in different organisations. Urban development departments at local authorities seem to have the most experienced members of staff with 19% of those answering the questionnaire having more than 21 years experience in the field. One in three respondents (32%) in the National Road Administration and regional authorities has worked less than two years in the field. 6 out of 21 respondents (29%) from regional authorities had worked less than one year with cycle planning. Hence regional authorities seem to have the least experienced staff when it comes to dealing with cycle traffic and cycle planning.

Figure 2.5. Proportion of respondents with different levels of experience in cycle planning



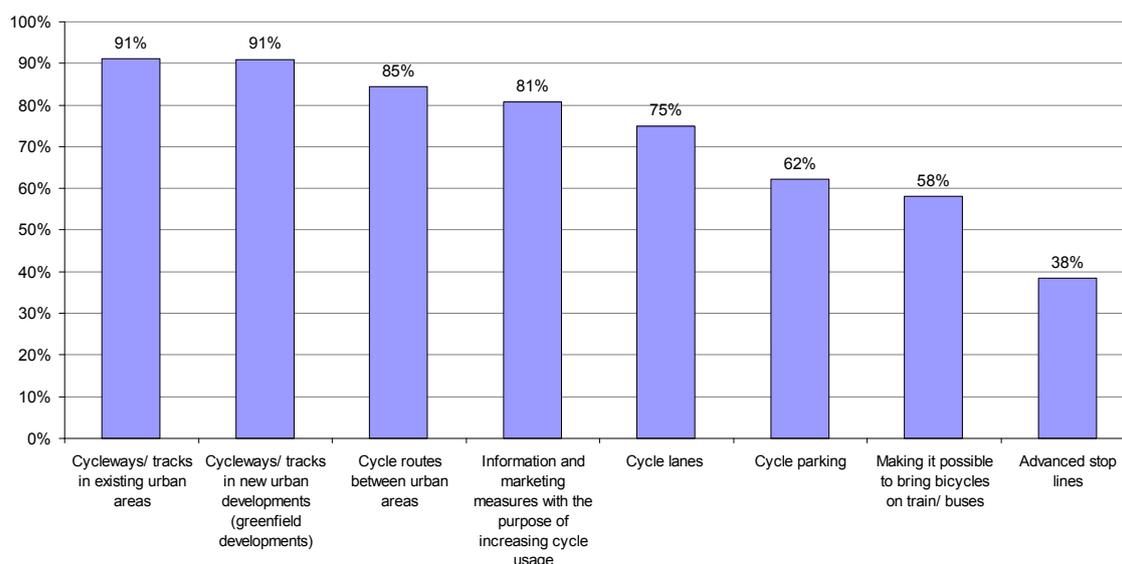
As shown in Figure 2.6, local authorities employ 79% of respondents working 1/5 or more of their time with cycling planning or cycle-related issues such as for example marketing cycle use.

Figure 2.6. Proportion of work time spent on cycling issues during last 12 months depending on type of organisation.



As shown in Figure 2.7, more than nine out of ten respondents had experience in planning new cycle facilities for existing urban areas. Much fewer respondents had experience in making it possible to bring cycles on public transport (58%) or in implementing advanced stop lines (38%).

Figure 2.7. Proportion of respondents having experience of implementing a particular measure



The findings presented in Figures 2.5 and 2.6 above seem to indicate that local authorities employ the most experienced staff within cycle planning. The National Road Administration and Regional authorities seem to have the least experienced cycle planning staff. For example, only 9% of the respondents from the National Road Administration have worked more than 21 years with cycle traffic. This is despite the fact that 45% of the organisation's staff is 50 years or older, i.e. is old enough to have this level of experience (SNRA 2008, p. 77).

### 2.3. Planning instruments, implementation success and efficiency

Decision support needs to be interpreted into actions. How this process is designed, who participates and what planning instruments are used may all affect outcomes. But what is the role of having a written cycle planning document?

As shown in Figure 2.8, the survey analysis indicated that there is a relatively strong relationship between implementation success and the availability of a cycle plan. For example, more than four of ten respondents (41%) in organisations with a valid cycle plan indicated that their organisations are *successful* or *very successful* in implementing cycle facilities. The same figure for local authorities without a cycle plan was less than two out of ten (16%).

Figure 2.8. Proportion of respondents indicating that their organisations are successful or not very successful in implementing improved cycle facilities, depending on the organisations availability of a cycle plan (n 220)

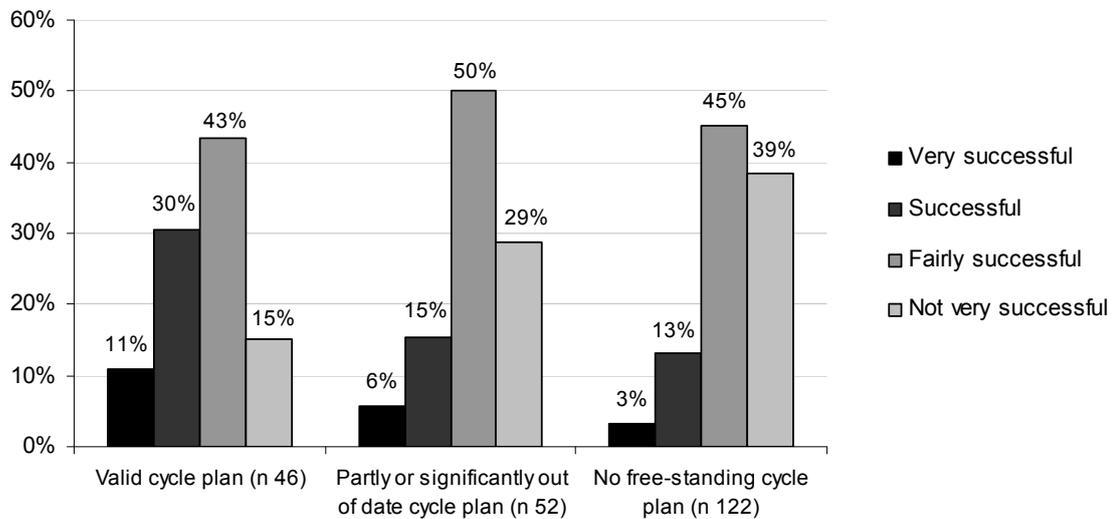
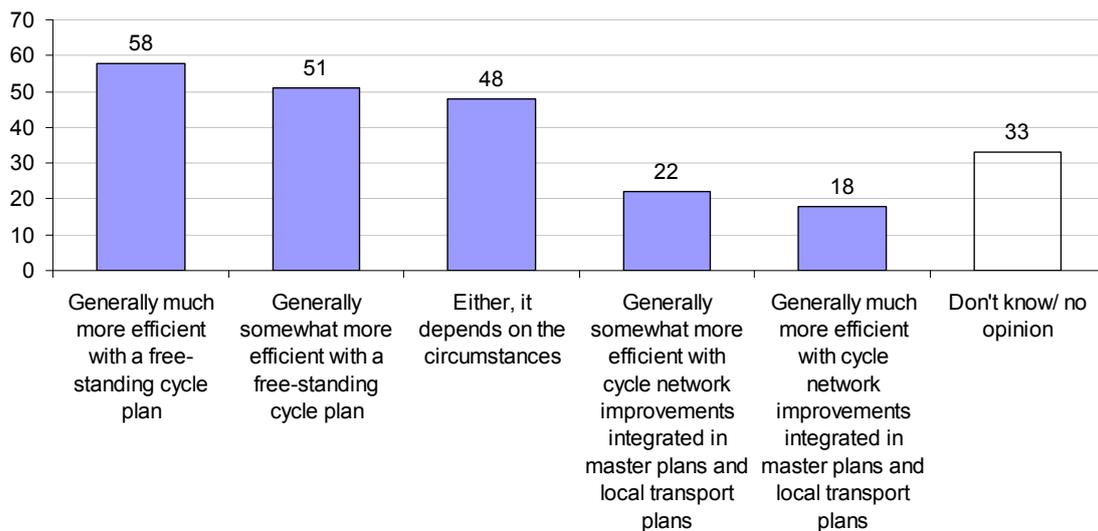


Figure 2.9 illustrates that 109 respondents (55% of those responding to this question) thought that having a free-standing cycle plan generally is somewhat or much more efficient than integrating cycle issues in master plans or local transport plans in order for an organisation to deliver on cycle issues. Only 40 out of 197 respondents (20%) thought the opposite.

Figure 2.9. Number of respondents indicating a preference for free-standing cycle plans versus those indicating a preference for integrating cycle network improvements in master plans/ local transport plans (n 197, 33 non-responses).



The findings in Figure 2.9 above can be compared to the responses to the earlier question where 46 respondents (21%) indicated that their organisation had a *valid* free-standing cycle plan (see Figure 2.8). The results together seem to indicate that

it would increase planning efficiency to develop new or improved cycle plans in a number of organisations included in the survey.

As shown in Figure 2.10, only 4% of respondents indicated that their organisations are planning improvements for cycle users in a *fully satisfactory methodical manner*. One in ten respondents indicated that there are *significant deficiencies* in local planning procedures, such “as actions being based on insufficient data on problems and potential improvements, data deficiencies which in turn reduce the ability of planners to identify cost-effective measures”.

Figure 2.10. Proportion of respondents indicating that their organisation is planning improvements for cycle users in a satisfactorily methodical manner

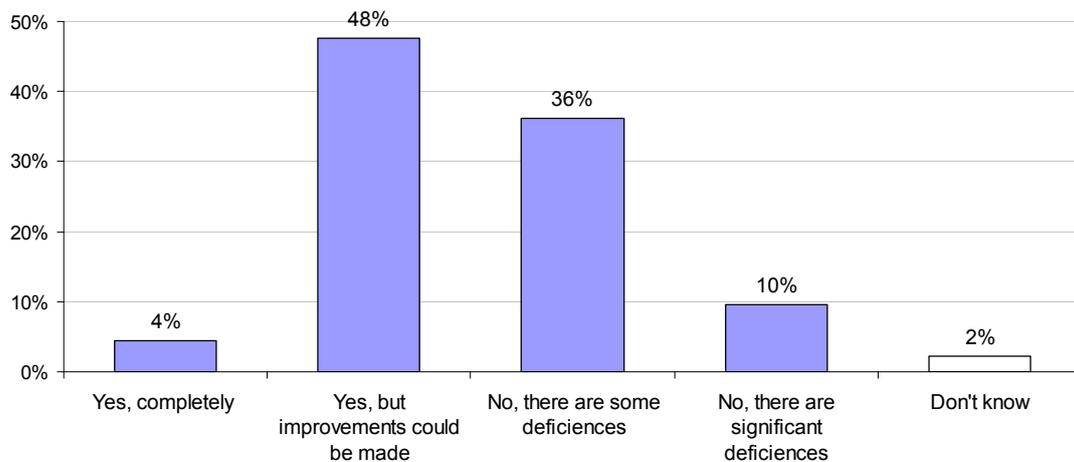
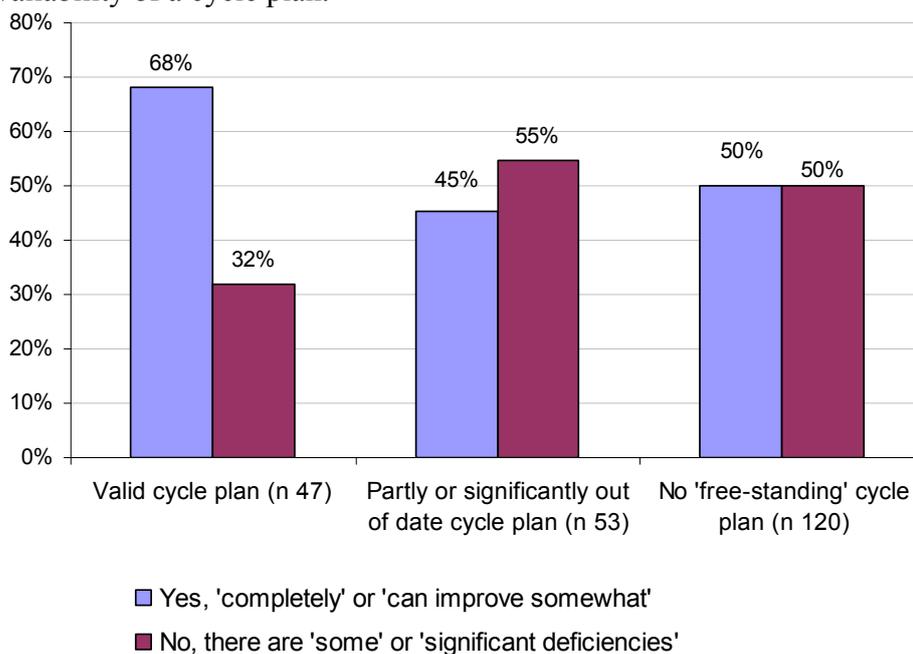


Figure 2.11. Proportion of respondents indicating whether their organisations plan for cycling in a *satisfactorily methodical manner*, depending on the organisations availability of a cycle plan.



As shown in Figure 2.11, respondents in organisations with a valid free-standing cycle plan to a greater extent indicated that their organisation is planning improvements for cycle users in a *satisfactorily methodical manner*. For example, more than one in eight respondents (13%) in organisations with a valid cycle plan indicated that their organisations are planning improvements for cycle users in a fully satisfactory way. The same figure for organisations without a free-standing cycle plan was 3%. However, still one in three respondents (32%) in organisations with a valid cycle plan indicated that their planning procedures have at least some deficiencies.

Respondents in organisations with *partly or significantly* out of date cycle plans were more likely to indicate that there are *some deficiencies* compared to those with no free-standing cycle plans. This means, as shown in Figure 2.11, that somewhat more respondents in organisations with partly or significantly out of date cycle plans (55%) stated that there are at least some deficiencies than those in organisations with no free-standing cycle plan (50%). This is a likely effect of the fact that some authorities that have chosen to integrate the planning of cycle facilities in a multimodal local transport plan.

13% of respondents in organisations with no free-standing cycle plan indicated that there are *significant deficiencies* to the way that their organisations plan improvements for cycle users. This was somewhat higher than for any other group including organisations with partly or significantly out of date cycle plans where 9% indicated the same.

From the findings presented in Figure 2.11, it seems clear that simply having a cycle planning document does not necessarily mean that the planning is carried out in a satisfactorily methodical manner. That said, many respondents indicated that having a free-standing cycle plan increases the likelihood for successful implementation. This finding is further supported by results from Question 13 in the questionnaire, the fact that nearly 45% of respondents in organisations that do *not* currently have a free-standing cycle plan (n 125) believed that having a cycle plan would mean an efficiency gain.

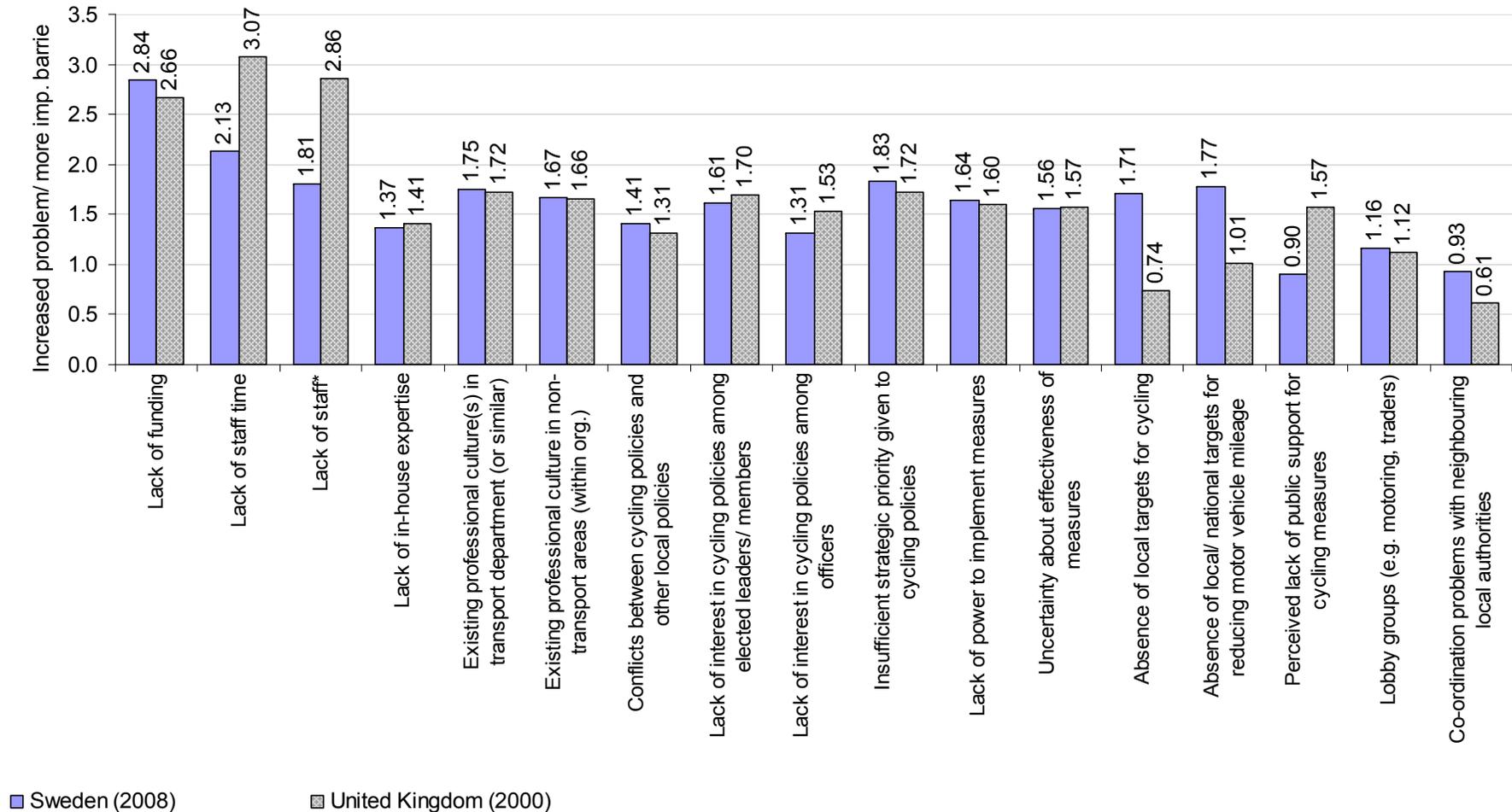
#### **2.4. Difficulties and barriers**

This section outlines the issues that those wanting to improve cycle facilities and cyclists' quality of travel need to tackle. The section is loosely divided into three parts. First implementation difficulties amongst Swedish authorities are explored. Secondly the results of the Swedish study are compared with findings from a previous British survey (Gaffron 2002). The third part investigates implementation difficulties experienced by respondents indicating that better decision support is important in order to improve cycle facilities in their local authority/ organisation.

Implementation 'difficulty indices' were calculated by awarding different answers different scores. This was in order to compare the results of the current Swedish survey with a previous British study. Five points were awarded for every respondent stating that an issue was a *very significant* problem, four points for those answering that an issue was a *significant* problem and so on.

Swedish respondents awarded lack of funding the highest implementation difficulty index with 2.84. Other important barriers to implementation in Sweden were lack of staff time (2.13), insufficient strategic priority given to cycling policies (1.83), absence of local/ national targets for reducing motor vehicle mileage (1.77) and existing professional culture(s) in transport department (1.75).

Figure 2.12. Proportion of respondents indicating that they have experienced certain implementation difficulties in their local authority/organisation (UK figures, see Gaffron 2002)



As shown in Figure 2.12, a comparison between the results of the Swedish study and the results of the previous British survey (Gaffron 2002) illustrates some noteworthy differences and similarities:

- Swedish as well as British respondents identified lack of funding as the most important implementation difficulty.
- lack of staff time and lack of staff<sup>2</sup> were perceived much bigger difficulties in the UK year 2000 than they are in Sweden today,
- absence of local and national targets for cycling is a significantly bigger issue in Sweden today than it was in the UK eight years earlier, and
- there is greater public support for cycling measures in Sweden today than it was in the UK eight years earlier when much of current UK cycle policies were developed.

Figure 2.13, on the next page, compares the answers given by respondents in authorities with no or partly out of date cycle planning documents (n 173) with the whole sample (n 220). As shown in the figure, organisations with no or little information on local cyclists' needs and problems are, perhaps unsurprisingly, experiencing significantly bigger problems with lack of funding (73% think lack of funding is a very significant or significant problem compared to 51% for local authorities with an up to date cycle plan).

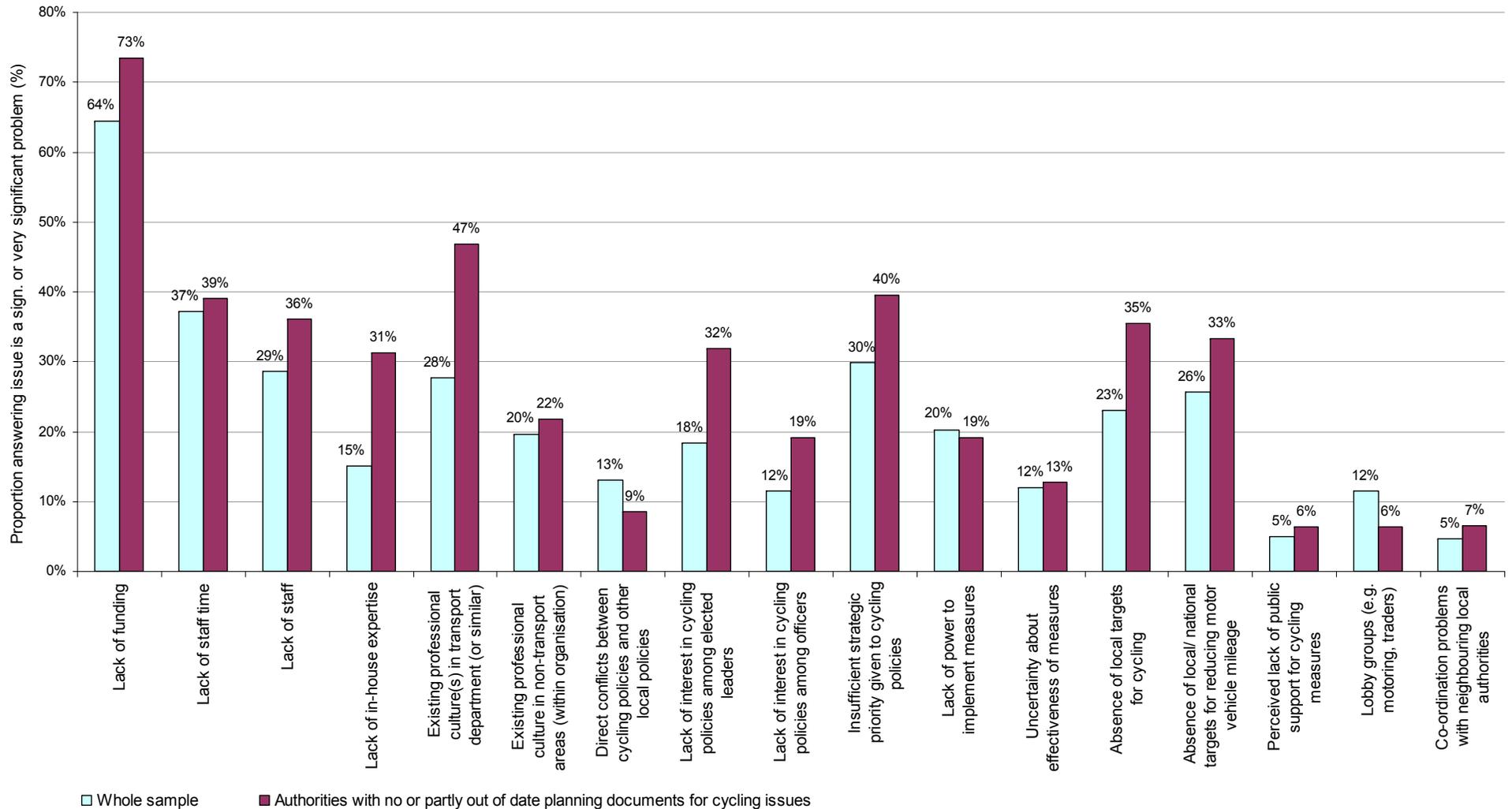
47% of respondents in authorities with no or partly out of date planning documents for cycling issues say that transport planning culture in their own organisation is a *significant* or *very significant* problem for developing proposals for new or improved cycle facilities and implementing them (the average figure for the whole sample is 28%). This means that respondents in authorities with little or no written decision support for cycle planning, to a greater extent, say that transport planning culture is a bigger problem for delivering cycle facilities than, for example, lack of interest among elected leaders.

Respondents in organisations with no or partly out of date cycle planning documents indicated that lack of in-house expertise in cycling planning was a greater problem than other respondents. No significant differences could be found in the perceived level of public support for cycle measures between the two groups of authorities. Nor were there any differences between the perceived availability of staff time. The survey results therefore indicated that different organisations to some extent experience different problems depending on whether they are 'forerunners' with an up to date cycle plan (benchmarks in their field) or 'climbers' on their way up, i.e. not currently having any documentation of the needs of cycle users.

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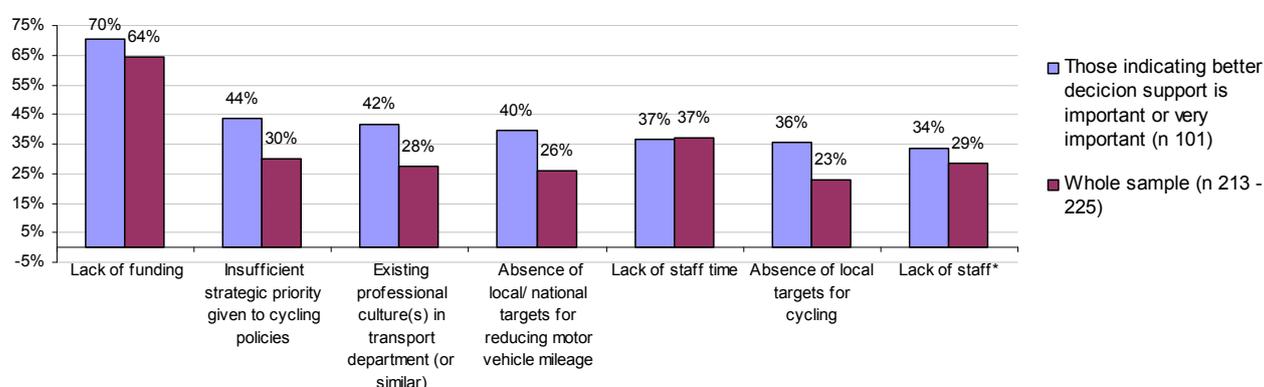
<sup>2</sup> Note that the Swedish survey may be seen as applying a somewhat narrower definition for the lack of staff category than the UK one. This was due to difficulties in finding an exact Swedish translation. Hence the UK survey read "*lack of staff*" while the Swedish questionnaire read "*lack of staff (e.g. staff turnover)*".

Figur 2.13. Proportion of respondents in authorities with no or partly out of date planning documents for cycling issues indicating that they have experienced certain issues as a *significant* or *very significant* problem



As shown in Figure 2.14, those that indicated that better decision support is *important* or *very important* in order to improve cycle facilities in their organisation experienced more serious implementation difficulties. In particular these respondents had experienced more and bigger problems with insufficient strategic priority given to cycling, problems with transport planning culture not being accommodating towards cycling, and lack of local targets for cycling and motor vehicle mileage reductions. Similar to the whole sample, lack of funding was considered the most important local implementation barrier.

Figure 2.14. Proportion of respondents indicating an issue as being a *significant* or *very significant* implementation difficulty in their local authority/ organisation



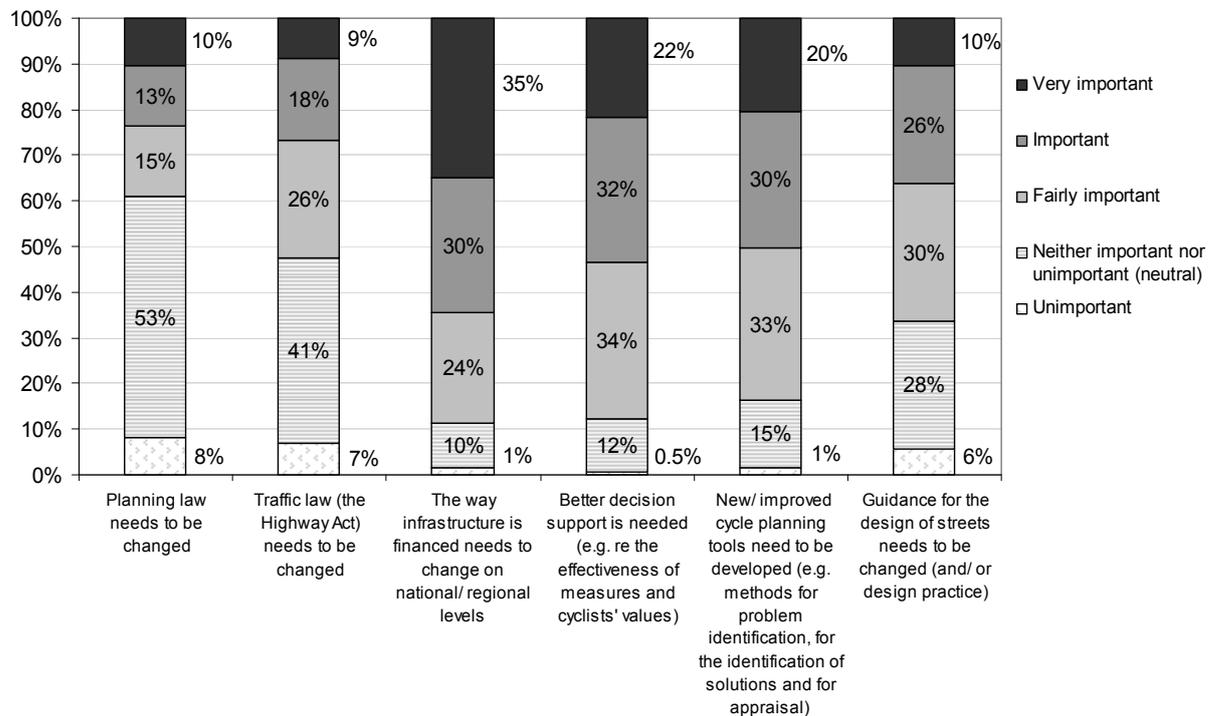
Uncertainty about effects of measures was *not* seen as a larger implementation difficulty amongst those that indicated that better decision support was important in order to make it easier to implement cycling facilities in their organisation (see Figure 2.12). Neither was uncertainty about effects seen as a particular implementation difficulty amongst those having out of date cycle plans nor amongst the respondents in general (see Figure 2.13).

## 2.5. Potential need for change

### 2.5.1. The role of improved decision support on a regional/ national level

A key purpose of the study was to investigate the extent to which planning practitioners perceive better decision support within cycle planning being something that can increase planning efficiency. As shown in Figure 2.15, the majority of respondents (54%) indicated that better decision support on a national level (e.g. better knowledge about the effectiveness of measures and cyclists' values) is *important* or *very important* in order to make it easier to implement cycle facilities. In addition, one in five respondents (20%) indicated that it is *very important* that new/ improved cycle planning tools are developed on a national/ regional level, e.g. improved methods for problem identification and for appraisal of measures.

Figure 2.15. Importance of certain changes on a *national/ regional level* in order to make it easier to implement improved cycle facilities (proportion of respondents giving different answers, n 144-211)

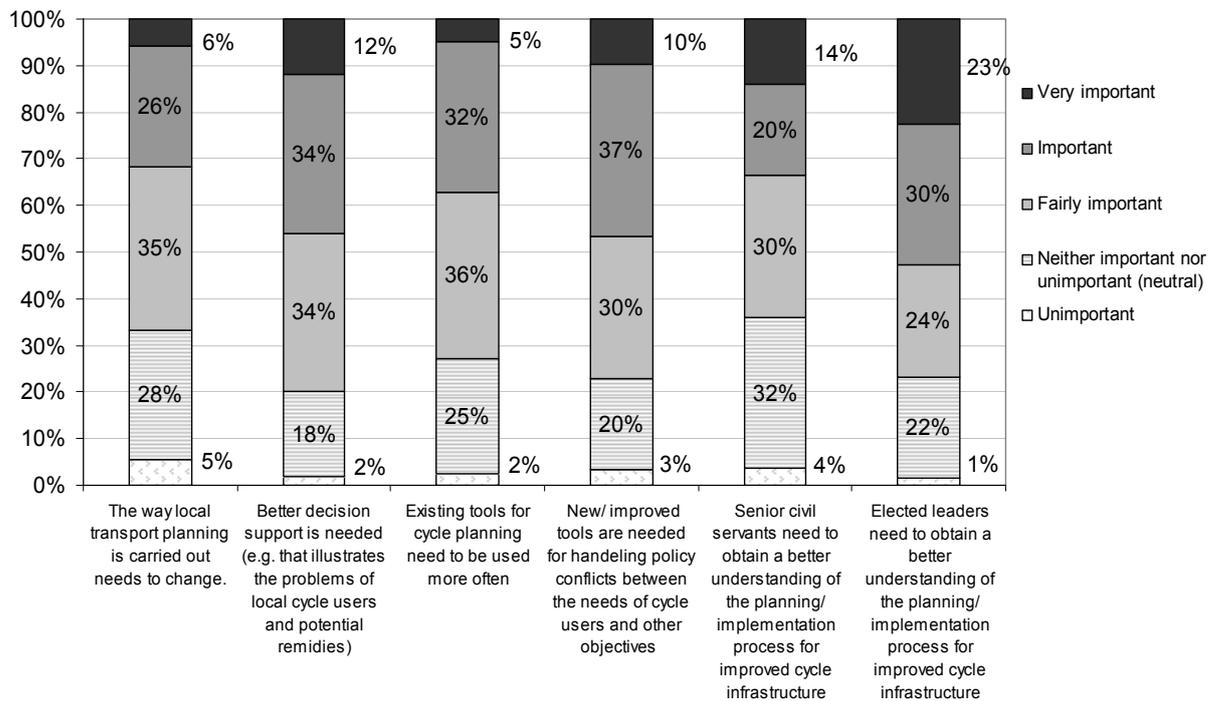


The most important change according to the respondents was changes to the way infrastructure is financed on a regional/ national level. Nearly two out of three respondents (65%) thought that a change to the way infrastructure is financed is *important* or *very important* in order to make it easier to implement cycle facilities. Nearly nine out of ten respondents (89%) thought this change was at least *fairly important*.

### 2.5.2. The role of improved local decision support

As shown in Figure 2.16, eight of ten respondents (80%) indicated that it was at least *fairly important* to develop better decision support for cycle planning in their local authority/ organisation in order to achieve improved cycle facilities. Nearly half of respondent (46%) thought that better decision support is an *important* or *very important* measure. New planning tools for handling policy conflict between the needs of cycle users and other objectives received similar attention, with 47% of respondents indicating that this was an *important* or *very important* issue. Slightly more important was however, according to the respondents, the need for elected leaders to obtain a better understanding of cycle planning, with around half of respondents (53%) indicating that this is an *important* or *very important* issue.

Figure 2.16. Importance of certain changes on a *local level/ within own organisation* in order to make it easier to implement improved cycle facilities (proportion of respondents giving different answers, n 202- 219).



The data presented in Figure 2.16 was analysed further by comparing the answers given by successful and less successful authorities. Unsurprisingly those that indicated that their own organisation is *not very successful* or *unsuccessful* in implementing cycle network improvements to a greater extent call for changes than respondents in successful organisations. Figure 2.17 illustrates this. Better decision support was the second most important change amongst those investigated. Nearly six in ten unsuccessful or not very successful organisations (59%) indicated that better decision support is needed. Only the need for local elected leaders to obtain a better understanding of cycle planning received a higher response rate.

Figure 2.17. Proportion of respondents answering that certain changes are *important* or *very important* in order to improve cycle facilities in their local authority/organisation.

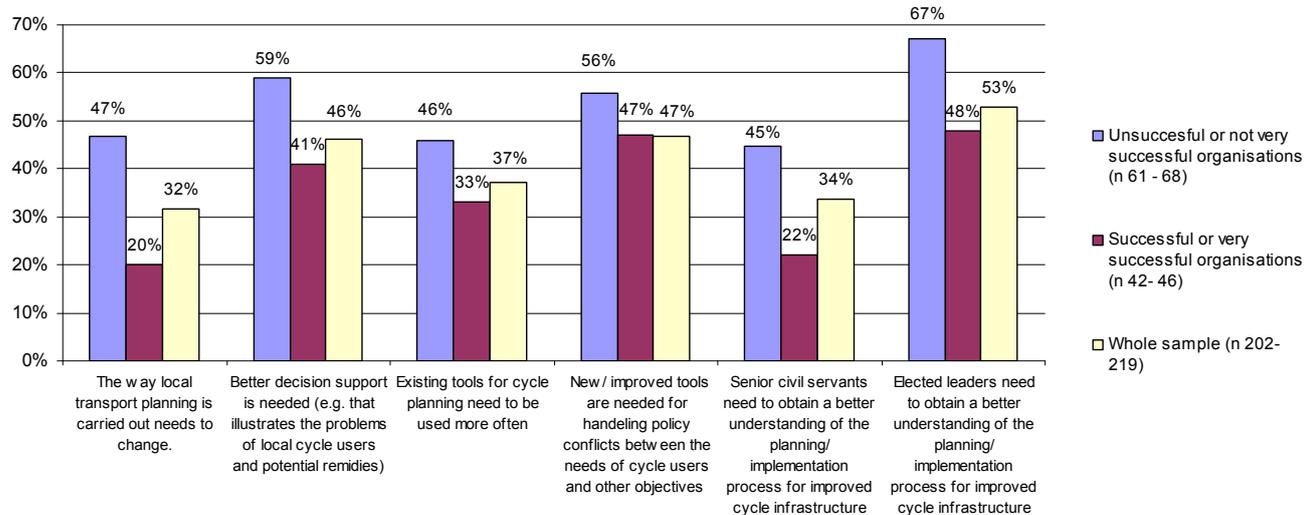
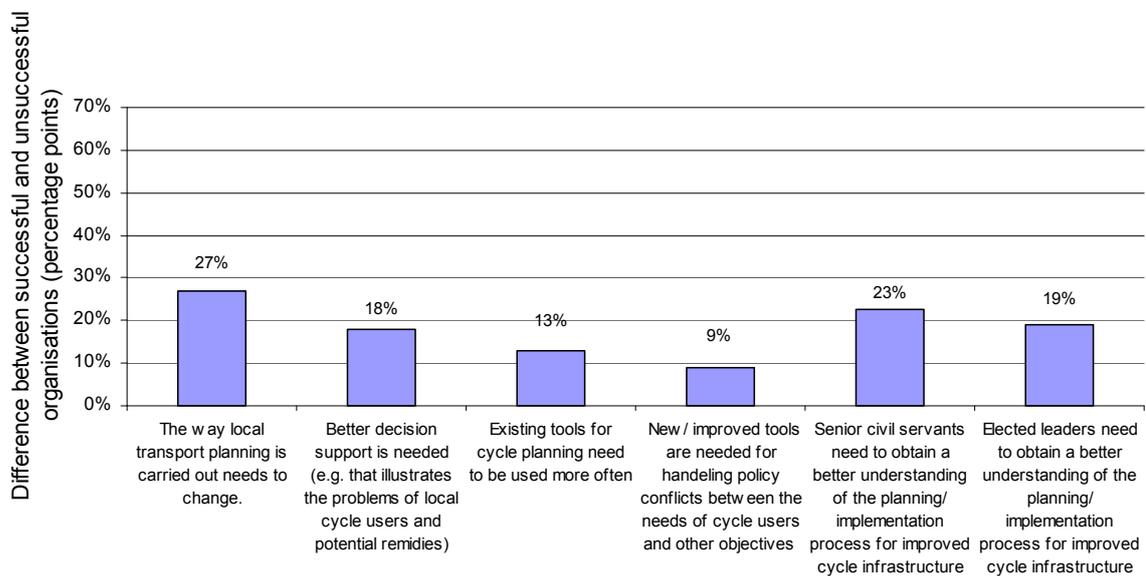


Figure 2.17 also shows that the biggest difference between successful and not very successful organisations was that of the need for local transport planning to change. Figure 2.18 illustrates this in further detail.

Figure 2.18. Proportion of respondents answering that certain changes are *important* or *very important*: differences between successful or very successful organisations vs. unsuccessful or not very successful organisations (percentage points)



As shown in Figure 2.18, there is a 27% percentage points difference between successful and not so successful organisations with unsuccessful or not very successful local authorities to a much larger degree finding it *important* or *very important* to change the way local transport planning is carried out. The second biggest difference between successful and less successful authorities is in the need for senior civil servants to obtain a better understanding of the planning/ implementation

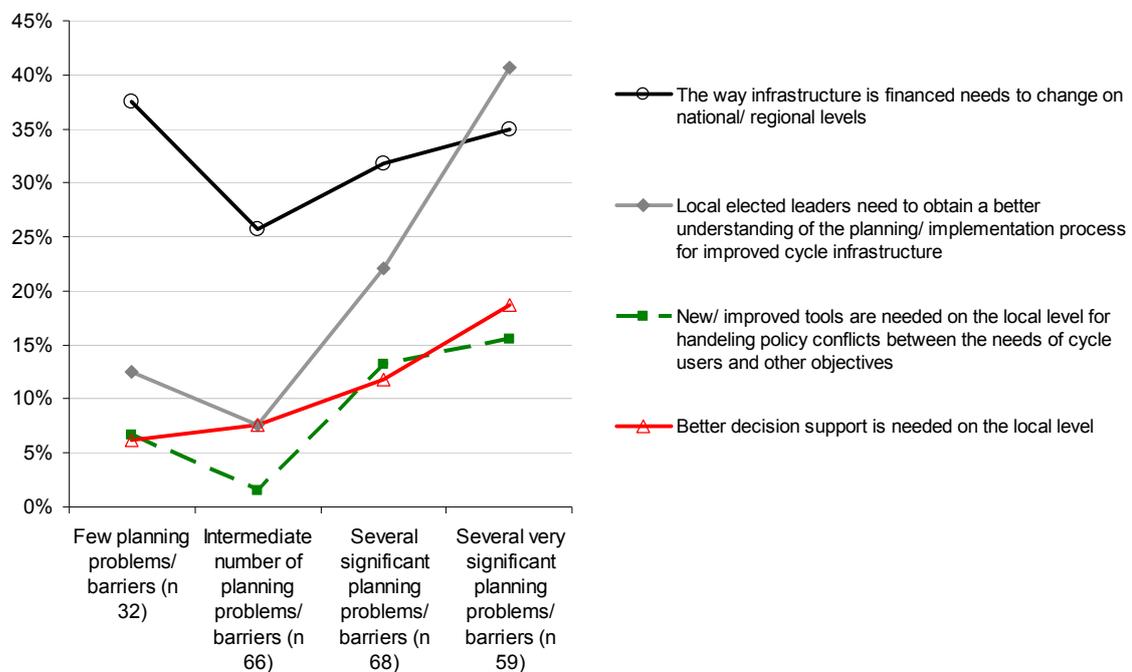
process for improved cycle infrastructure (23% percentage points difference between successful and not so successful organisations).

Many planners perceived a need for elected leaders to obtain a better understanding of the planning process for improved cycle facilities (see Figure 2.16). However, the difference between successful and not very successful authorities was somewhat smaller than for other factors (Figure 2.17). This seems to indicate that elected leaders' understanding of the cycle planning process is not the most crucial issue for success.

### 2.5.3. Short and long term impacts of potential measures

Figure 2.19 splits the sample into four groups depending on the number of problems that the respondent has experienced when developing and implementing cycle facilities. As shown in the figure, more than one in three or to be exact 38% of respondents with few planning problems indicated that a change to the way infrastructure is funded was *very important* (black line with circles). This may mean that better access to funding would lead to a relatively quick improvement of cycle facilities in many local authorities, perhaps because these organisations already have a cycle plan with agreed new links waiting to be implemented. For other changes there is a more expected relationship between respondents in organisations with few and those with many significant planning problems, i.e. the more problems the more likely it is that a particular change is important. Figure 2.19 illustrates some examples of this, e.g. better decision support on the local level.

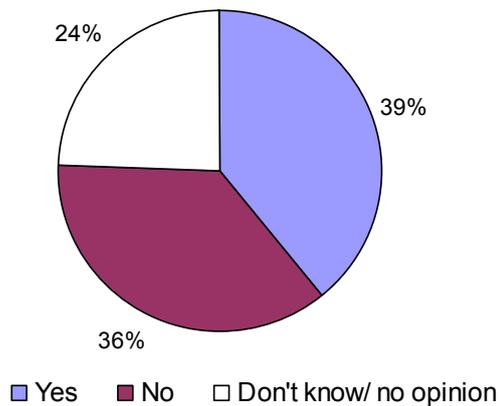
Figure 2.19. Proportion of respondents indicating that a particular change is *very important* depending on the number of problems they have experienced.



## 2.6. Decision support in the form of good examples

The penultimate question in the questionnaire asked respondents whether they thought that they had sufficient information about good planning examples so that they could make the most of other local authorities' or organisations' experiences. As shown in Figure 2.20, around one in three respondents (36%) indicated that they did *not* have sufficient access to good examples.

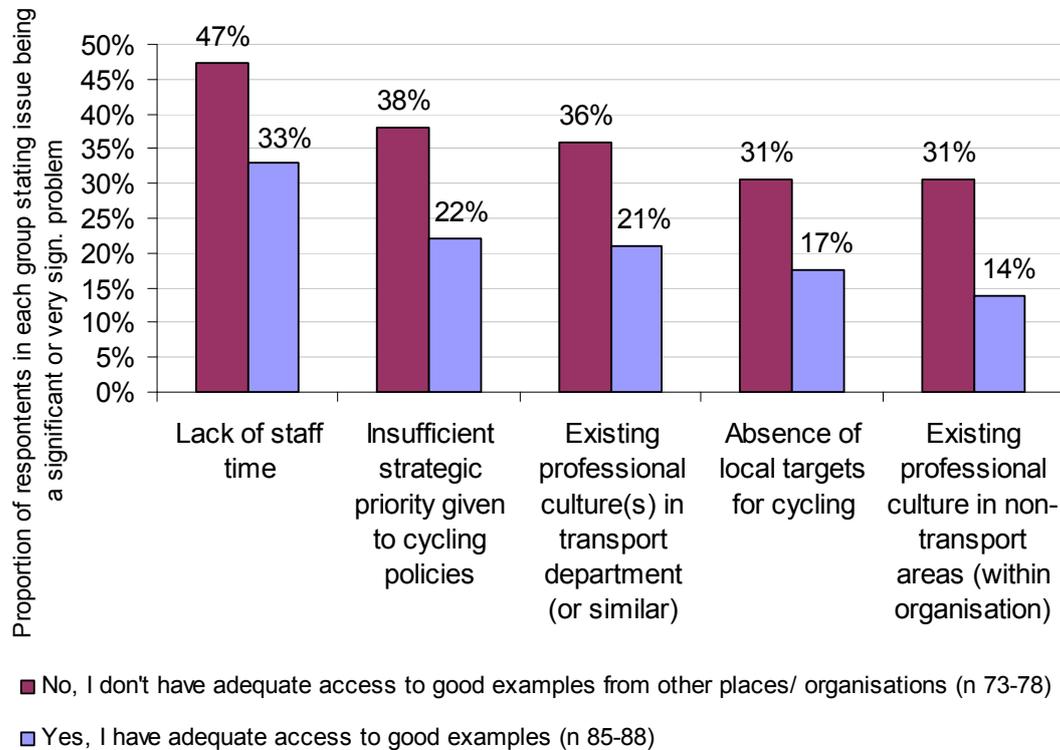
Figure 2.20. Proportion of respondents indicating that they and their colleagues have sufficient access to information on best practice examples of cycling policies and measures.



The results on this question could for example be compared with the finding that 46% of respondents indicated that better decision support is *important* or *very important* in order to improve cycle facilities in their local authority/ organisation (see Figure 2.16). This seems to indicate that the development of good examples has a role to play to spread knowledge and increase planning efficiency, but that other measures are needed too.

As illustrated in Figure 2.21, those who indicated that they do not have good enough access to other organisations'/ local authorities' experiences to a greater extent had problems with lack of time, insufficient strategic priority given to cycling policies and absence of local targets for cycling.

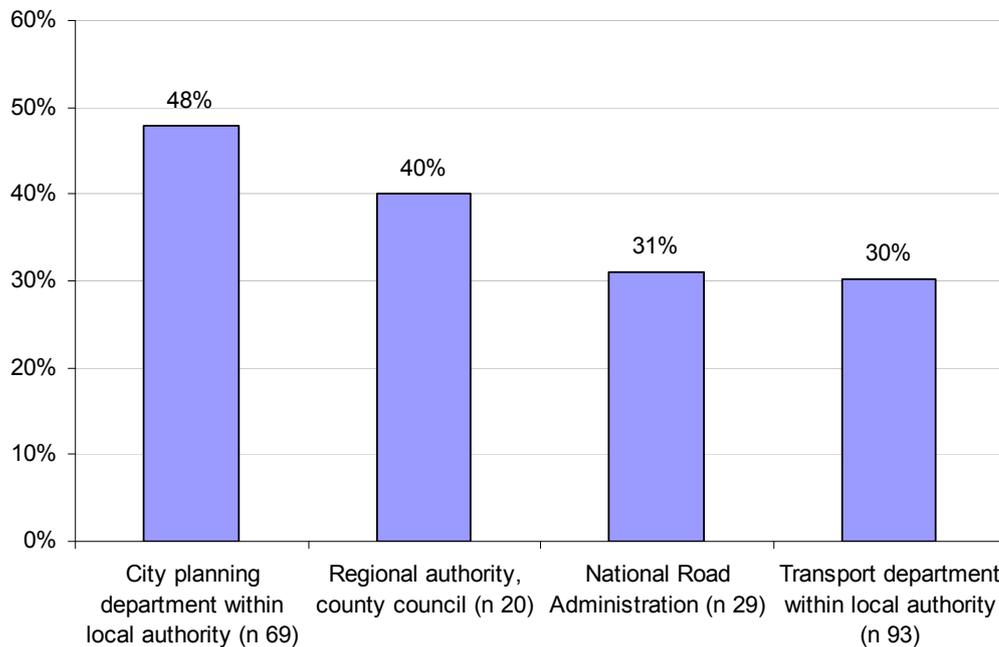
Figure 2.21. Proportion of respondents who have experienced a certain issue as being a *significant* or *very significant* problem when implementing new or improved cycle facilities, depending on their stated need for better access to good examples.



The issues illustrated in Figure 2.21 are those with the largest difference between those that indicated that they have adequate access to good examples and those that don't (where more than 30% of respondents in at least one sub-group found an issue being a *significant* or *very significant* problem).

Finally, Figure 2.22 illustrates differences between different groups of respondents depending on their place of work. As shown in the figure, respondents employed at city planning departments within local authorities and those employed at county councils to a greater extent indicated that they need better access to good examples.

Figure 2.22. Proportion of respondents not having adequate access to good examples from other places/ organisations depending on respondents' place of work



The findings illustrated in Figures 2.21 and 2.22 together with the findings displayed in Figure 2.14 may indicate that advice on the design of strategic decision support for regional cycle planning as well as advice on local target setting (perhaps especially for development planning) would be a good idea if national and regional authorities find it important to document and distribute new or improved good examples within the cycle planning field.

## 2.7. Differences between male and female respondents

The survey revealed some rather large differences between male and female respondents. For example, the majority of female respondents (54%) indicated that their organisation did *not* plan for cycling in a *satisfactory systematic manner*<sup>3</sup> while only 39% of male respondents provided the same answer, see Figure 2.17. One in seven women (14%) indicated that there are *significant deficiencies* in the way that their organisations plan for cycling. Less than one in fourteen male respondents (7%) provided the same answer.

<sup>3</sup> The questionnaire explained this term as a planning process that ‘collects enough data on the present situation, problems and opportunities so that the most cost-efficient measures can be implemented’.

Figure 2.23. Proportion of male and female respondents that indicated that their organisations plan for cycling in a *satisfactory systematic manner*.

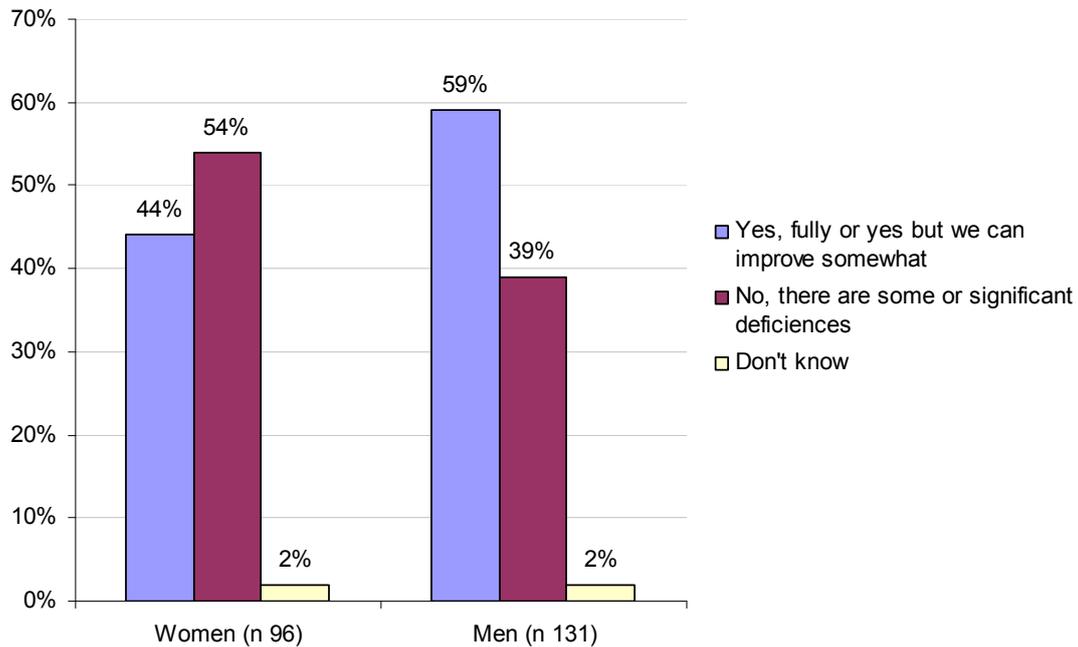
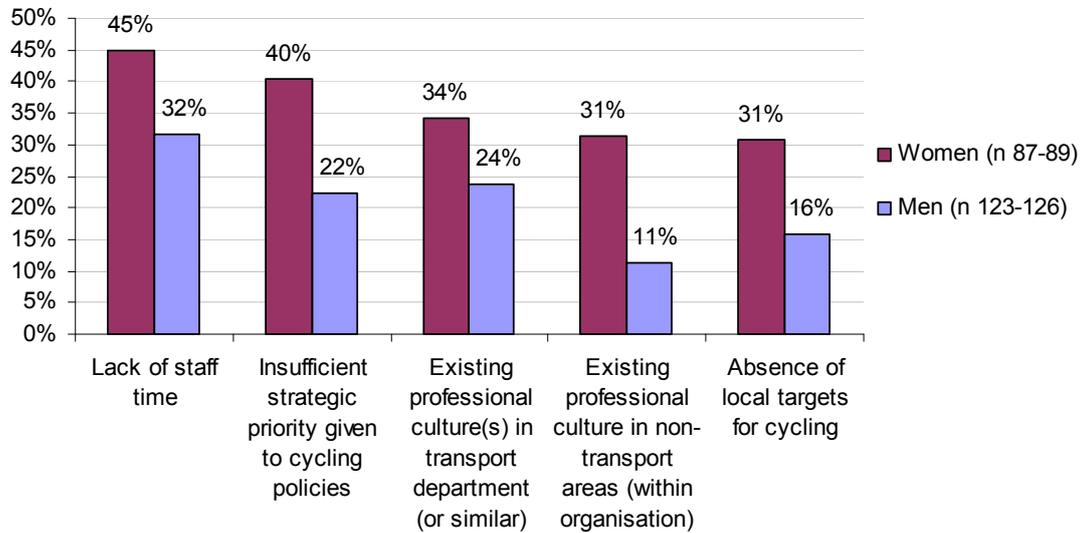


Figure 2.24 illustrates categories with the largest differences between the answers provided by men and women (where more than 30% of respondents in at least one sub-group found an issue being a *significant* or *very significant problem*). As shown in the figure, female respondents had generally experienced greater difficulties than men when trying to implement improved cycle facilities. In particular, female respondents had experienced larger problems with lack of staff time, insufficient strategic priority given to cycling policies and problems with not meeting the expectations of the transport planning culture within their organisation.

It should be noted that lack of an adequate funding stream was an important problem experienced by the majority of both male and female respondents. This is not illustrated in Figure 2.24 (see Figure 2.12 instead).

Figure 2.24. Proportion of male and female respondents who have experienced a certain issue as being a *significant* or *very significant* problem when implementing improvements to cycle facilities



It is interesting to note that, in an transport planning organisation with few women, a more equal gender representation amongst transport and urban planners would probably be close to bring about a swing in the majority's perception of the whether the own organisation is planning for cycling in a satisfactorily methodical manner or not (see Figure 2.23).

### 3. Summary of actions promoted by respondents

The survey results indicated that there are several areas where change is desirable and/ or needed in order to make it easier to implement improved cycle facilities. Several of the issues that respondents raised are directly related to the role of decision support.

The following four bullet points show measures that the majority of respondents (more than 50%) indicated were *important* or *very important* in order to make it easier to implement improved cycle facilities:

- changes to the way infrastructure is financed,
- better decision support on a regional/ national level regarding, for example better knowledge on cyclists' values and the effectiveness of measures,
- development of new problem identification and appraisal tools for cycle planning, and
- better understanding the planning/ implementation process for improved cycle infrastructure among local councillors

The most important measure according to the respondents was a change in the way infrastructure is financed on a regional/ national level. Nearly two out of three respondents (65%) thought that a change is needed in the way infrastructure is financed in Sweden in order to make it easier to implement cycle facilities. The survey also shows that there is a strong demand for new cycle planning tools and better decision support for cycle planning across all survey respondents. For example, the majority of respondents (54%) indicated that it is *important* or *very important* to develop better decision support on a national/ regional level in order to make it easier to implement improved cycle facilities in their local authority (see Figure 2.15).

In addition to the issues above, the survey provided evidence that change is needed within local transport planning itself in order to make things happen, i.e. in order to improve cycle facilities. For example, 47% of respondents in authorities without or with partly out of date decision support for cycle planning indicated that the existing professional culture in the local transport department was a *significant* or *very significant* implementation barrier (Figure 2.13). This may indicate that the role decision support plays for the implementation of cycle facilities to some extent needs to be viewed in the light of the local transport planning culture and the extent to which it is permissive or not towards cycling.

## 4. Discussion

### 4.1. Decision support and planning efficiency

#### 4.1.1. Summary of survey results

This section explores survey results related to the potential role of better decision support for the implementation of cycle facilities and planning efficiency, e.g. authorities' ability to fulfil their local planning objectives (such as increased cycle use) in a cost-efficient way.

The study provided evidence that there generally is a strong demand for a more thorough cycle planning process and better decision support in many organisations responsible for transport planning, perhaps especially on the regional and national levels, see e.g. Figures 2.15-2.16. The importance of decision support for successful implementation was underlined by the fact that:

- unsuccessful local authorities saw lack of decision support such as absence of local targets as a bigger difficulty than successful local authorities (Section 2.4, Figure 2.13).
- respondents in organisations with a valid cycle plan indicated that their organisations were more successful in implementing feasible improvements for cycle users than those without such a planning documents (see e.g. Section 2.3, Figure 2.8).
- The study showed that absence of local targets for cycle planning is a bigger problem in Sweden than in the United Kingdom (see Section 2.4, Figure 2.12). This seems to indicate that there is a real scope to improve Swedish planning practice.

The majority of women (54%) indicated that their organisation did not plan for cycling in a *satisfactorily systematic manner*. Only 39% of male respondents stated the same (Section 2.7, Figure 2.24). Women had also experienced more difficult implementation problems than men.

The fact that women experience more and wider gaps in current planning procedures is interesting as the survey indicated that there are almost 40% more men than women working with the design of cycle facilities and promotion of cycling (see Section 1.2.6). One might therefore argue that a more equal gender representation in the transport planning profession could achieve a shift towards a significantly more thorough and perhaps cost-efficient cycle planning process.

Some parts of the data presented above may, at a first glance, be interpreted as respondents thinking that their organisation is successful *because* it has a cycle plan. However, the survey results show that respondents clearly distinguished between having a cycle plan and how successful that plan is, see for example Figure 2.11. Hence the survey results seem to provide a fairly clear-cut and relatively strong relationship between perceived implementation success and having a free-standing cycle plan.

#### **4.1.2. The role of a free-standing cycle plan**

Why is a free-standing cycle plan then seen as more efficient? One perhaps apparent answer to this question is that such a document can bring many disparate issues together, issues that have to be dealt with at different planning levels by a number of different stakeholders, e.g. cycle parking facilities in new developments as well as maintenance of existing cycle routes. It may also be argued that a holistic planning document provides a better opportunity to communicate issues important to cycle users and therefore raises the status of cycle users within publicly governed organisations. A free-standing cycle plan may also make it possible to go into some depth when dealing with specific interests of different cycle user groups, e.g. the needs of commuters as well as young cyclists, explaining for example important variations in user group values, especially where there might be differences between public perceptions of desired improvements and the factors that in reality affect user satisfaction. In addition, a cycle plan might be a useful tool in transferring knowledge between civil servants if for example a key member of staff leaves an organisation, as well as from one political majority to the next.

#### **4.2. Extent to which decision support could be improved**

The majority of respondents 55% of respondents indicated that having a free-standing cycle plan was the most efficient way of dealing with the problems and possible improvements for cycle user (Section 2.3). Despite this only around 20% of respondents' organisations had a valid cycle plan at the time of the survey. The difference between the two figures above seem to indicate that to develop new or improved free-standing cycle planning documents in at least one out of three Swedish local and highway authorities would be resources well spent. There is also, according to planning practitioners, a need to update around 15 of 50 or so valid cycle plans currently in use with a more rigorous analysis of the present situation and users' problems in order to be able to implement the most cost-efficient measures (see Figures 2.3 and 2.11).

The survey was not designed to provide detailed information on how decision support for cycle planning potentially could be improved. However, general ways of how decision support could be improved suggested in the questionnaire were by collecting more comprehensive data on the present situation, users' problems and opportunities. The survey analysis indicate that new problem identification tools and cost-effective (but data-rich) and easily communicative types of decision support are important to overcome planning barriers, rather than tools that can exactly measure the effects of a particular measure or policy (see Section 2.4 and Figure 2.13) .

#### **4.3. Robustness of results**

As mentioned earlier, the survey provided plenty of data supporting the idea that improved decision support would be not just desirable but also cost-efficient, focusing resources to high value investments and taking out objects of relatively low value. But how robust are these results? The study would indeed have gained strength if the survey had included more questions on in what way new data on users' problems etcetera would bring efficiency gains. However, any study has its limitations. It was felt that the general lack of previous studies in the area meant

that that the study had to be broad in its approach. This rather generic approach also helped to mask the study objective and made us more able to relate the potential role of improved decision support to other changes and improvements that can be made to increase planning efficiency. Still, the survey is knowingly the most comprehensive of its kind within the Nordic countries. It should also be mentioned that the study achieved a relatively high response rate which gives confidence in the results.

Another piece of information should also be considered in the light of the survey's robustness. That is the fact that planning practitioners have limited availability of work time (as shown in Figure 2.12, work time availability is already seen as a problem). It may therefore be argued that it is *not* in the interest of planners to demand further data collection and analysis unless necessary, as this probably would add to their already constrained workload

#### **4.4. Other observations**

##### **4.4.1. Are national objectives delivered on the local level?**

An observation one might and perhaps ought to do when interpreting the survey results is ask what these may mean for the deliverability of national transport policy objectives. The survey here indicates that what currently comes out of the planning process (in terms of expenditure, see Section 2.2.1, Figure 2.1) predominately are measures related to traffic safety and child users' problems (the latter is also safety-related to some extent). These measures do not necessarily have a particularly strong correlation with national transport policy objectives, at least not the objective that the share of cycling and walking trips in urban areas should increase, a Swedish parliamentary transport policy objective (Regeringen 2008, p. 147). The abovementioned observation is strengthened by some previous research on measures that can achieve a shift towards increased cycle use. For example, the results of a large Dutch study indicate that reducing the number of stops (i.e. increasing travel speed and reducing effort) along a cycle route is an important way of increasing cycle use (Rietveld et al 2004). This fact may deserve some action from authorities responsible for the monitoring and delivery of national transport policy objectives.

## **5. Conclusions**

### **5.1. The role of better decision support**

The survey has brought new knowledge about barriers to cycle planning and the potential role of better decision support within cycle planning. It has also shed some light on the current deliverability of national transport policy objectives.

The study reveals a strong demand amongst planning practitioners for improving decision support in the field. The results also indicate that improved decision support would improve planning efficiency as well as the quality of the planning process. The findings indicate that there is a need for new or significantly updated free-standing cycle planning documents in at least one out of three Swedish local and highway authorities. In addition, the survey indicates that the national transport policy objective to increase cycling in urban areas has a fairly low priority on local and regional levels in Sweden (where it must be delivered). Improved decision support may therefore have two benefits, increased planning efficiency so that cost-effective measures can be implemented as well as being a catalyst for meeting national transport policy objectives.

### **5.2. Recommendations**

The survey results seem to call for a review of the completeness of existing decision support for cycle planning on a local level as well as on regional/ national levels. Advice on the design of *strategic decision support* for cycle planning as well as advice on *local target setting* (perhaps especially for the regional planning level and development planning) seems to be a good idea if national and regional authorities are to find it important to document and distribute new or improved good examples within the cycle planning field (see Sections 2.5.1 and 2.6).

The results illustrated in Section 2.4, Figures 2.12 - 2.13, seem to indicate that work done to improve decision support for cycle planning to a great extent should be directed at improving the cycling content in strategic planning processes and transport investment plans. Advice on how to design and apply feasible local targets for cycle planning also seems to be a worthy task.

### **5.3. Further research**

The survey does not provide any detailed answer to what new data is the most important to collect and how the new data can best be analysed and communicated. Further research in the field of decision support for cycle planning may therefore be justified. The need for such research may also be argued for from the point of view that relatively little research has been carried out within the cycling field as a whole, as well as the fact that we know relatively little about why cycling is increasing in some places but declining in other areas.

A more detailed analysis of existing written decision support seems to be a worthy addition in the field. A key purpose of such a study could be to identify best practice and how to monitor progress. One objective for such a research theme may be to compare the way cyclists' needs are handled and interpreted into actions in different

types of plans (e.g. free-standing cycle plans vs. local transport plans and master plans). Further research may also involve gathering data on who prepared the cycle elements of plans and monitoring procedures and compare these with implementation success. A loose framework for such an assessment, using binary criteria, crisp as well as fuzzy logic, has been developed within this study but because of resource constraints the framework has yet to be tested and finalised.

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## Sample of questionnaire survey (in Swedish)

### Enkät om cykelplanering i Sverige



Enkäten är indelad i fyra korta sektioner. Den första delen innehåller bakgrundsfrågor om var du arbetar mm. En andra del ställer frågor om cykelplaner och cykelplanering.

En tredje och fjärde del undersöker svårigheter med att genomföra förbättringar respektive vad som kan underlätta genomförandet av förbättringar av cykeltrafikens infrastruktur.

Studiens resultat kommer bl.a. att användas för att ge beslutsfattare bättre information om vilka beslut som behöver fattas för att cykeltrafiken ska kunna öka. Studien görs inom ett projekt kallat IMPACT i samarbete med bl. a. Vägverket och finansieras av Mistra.

Missa inte chansen att bidra med dina erfarenheter. Ditt svar är helt anonymt.

#### **Sektion 1: Bakgrundsfrågor**

##### **1. Är du man eller kvinna?**

- Man       Kvinna

##### **2. Vilken åldersgrupp tillhör du?**

- ≤ 25 år       26-30 år       31-40 år       41-50 år       51-60 år       61- år

##### **3. I vilken organisation arbetar du?**

- Vägverket  
 Kommunalt trafikkontor/ tekn. förvaltning eller motsvarande  
 Kommunalt stadsbyggnadskontor eller motsvarande  
 Kommunalt miljökontor eller motsvarande  
 Annan typ av organisation, v.g. ange .....

##### **4. Vilken är din nuvarande yrkesroll?**

- Chef/ beslutande tjänsteman       Utredande/ handläggande tjänsteman       Assisterande tjänsteman       Annan, v.g. ange .....

### 5. Vilken är din *högsta* avslutade utbildning?

- Civilingenjörsexamen inom trafik (t. ex. Väg och Vatten, Samhällsbyggnad)
- Civilingenjörsexamen, annan än ovan
  - Arkitektexamen inom fysisk planering
  - Arkitektexamen, annan än ovan
  - Annan 2- 4-årig högskoleexamen
  - Grundskola/ gymnasium
  - Annan, v.g. ange .....

### 6. Hur många år har du arbetat med cykeltrafikfrågor?

- ≤ 1 år     1-2 år     3-5 år     6-10 år     11-20 år     21- år

### 7. Ungefär hur stor andel av din arbetstid har *det senaste året* gått till cykelplanering/ berör direkt cykeltrafikfrågor?

- 61- 100% av arbetstiden (>136 heltidsarbetsdagar/ år)
  - 41-60% (91-135 dagar/ år)
  - 21-40% (46-90 dagar/ år)
  - 6- 20% (11-45 dagar/ år)
  - ≤5% (<10 dagar/ år)

### 8. Var, i vilken typ av område/n arbetar du *mest när det gäller cykelplanering*?

- Storstad/ storstadsregion (innerstadsområde)
- Storstad/ storstadsregion (ytterstad/ förort)
- Mellanstor stad (ca 30 000 -100 000 invånare)
- Mindre stad/ städer (ca 6 -29 000 invånare)
- Mindre tätort/er (ca ≤ 5000 invånare)
- Länkar mellan orter
- Glesbygd

Du kan kryssa flera alternativ i fråga 8 ovan.

## Sektion 2: Cykelplanering och cykelplaner

### 9. Anser du att din kommun/ organisation planerar för att förbättra för cykeltrafik på ett *tillräckligt* systematiskt sätt?

- Nej, det finns relativt stora brister     Nej, det finns vissa brister     Ja, men vi kan bli något bättre     Ja, helt tillräckligt     Vet ej

Med planerar på ett tillräckligt systematiskt sätt menar vi: samlar in tillräckliga data om nuläget, problem och förbättringsmöjligheter så att de mest kostnadseffektiva åtgärderna kan vidtas.

**10. I vilken grad anser du att cykelplaneringen i din kommun/ organisation prioriterar\* följande mål?**

	Mycket lågt prioriterat	Lågt prioriterat	Varken lågt eller högt prioriterat	Högt prioriterat	Mycket högt prioriterat	Vet ej
Ökat antal cyklister	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ökad trafiksäkerhet (för cyklister)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ökad framkomlighet (t. ex. färre stopp, genare nät)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ökad trygghet (minskad risk för brott/ överfall)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ökad reskomfort (t. ex. bättre beläggning)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ökad tillgänglighet till rekreationsområden (t. ex. till badplats, natur)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ökad tillgänglighet för barns resor (t. ex. till skola)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Ev. kommentar:

.....  
 .....

\* Med prioriterar menar vi vikt i förhållande till den summa pengar som din organisation lägger ner på olika cykelåtgärder i trafiksystemet. Om t. ex. en stor andel investeringsmedel satsas på åtgärder som leder till ökad trafiksäkerhet för cykeltrafik så kan detta mål anses vara högt prioriterat. Ett mål som man ej planerar för kan sägas vara mycket lågt prioriterat.

**11. Finns det en särskild cykelplan i din kommun/ organisation?**

- Nej, det finns ingen fristående cykelplan (se förklaring nedan)
- Ja, det finns en cykelplan men den följs inte/ är till stora delar inaktuell (*gå till fråga 13*)
- Ja, det finns en cykelplan men den följs delvis ej/ är delvis inaktuell (*gå till fråga 13*)
- Ja, det finns en cykelplan och vi arbetar med att fullfölja den (*gå till fråga 13*)

Med cykelplan menar vi ett fristående dokument med åtgärder för att förbättra för cykeltrafiken (under ett eller flera år). En cykelplan kan även inkludera gångtrafikåtgärder.

**12. Om din organisation inte har en särskild cykelplan, I vilka andra dokument, om några, hanteras cykeltrafikens behov och problem huvudsakligen?**

	Stämmer inte alls	Stämmer inte	Stämmer till viss del	Stämmer till stor grad	Stämmer helt	Vet ej
Det finns f. n. inga aktuella dokument som beskriver cykeltrafikens behov och problem (d.v.s. problem löses när de uppstår)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Behov och problem beskrivs i <i>översiktsplanen/ fördjupade översiktsplaner</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Behov och problem beskrivs i en <i>trafikplan/ trafiknätsanalys/ program för trafikinvesteringar</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Behov och problem beskrivs i en	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Behov och problem beskrivs i särskilda projekt (t. ex. i ett KLIMP-projekt)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Behov och problem beskrivs i andra dokument, v. g. ange: .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**13. Vilken betydelse tror du att en *fristående* cykelplan har för framgångrik cykelplanering?**

**a) Vad är betydelsen av en *fristående* cykelplan jämfört med att integrera planeringen av cykeltrafikens infrastruktur i en färdmedelsövergripande trafikplan/ översiktsplan?**

- generellt *mycket effektivare* med en särskild cykelplan
- generellt *något effektivare* med en särskild cykelplan
- det kan vara lika bra med en särskild cykelplan som med cykelnätsförbättringar integrerade i trafikplan/ översiktsplan
- generellt *något effektivare* med cykelnätsförbättringar i trafikplan/ översiktsplan
- generellt *mycket effektivare* med cykelnätsförbättringar i trafikplan/ översiktsplan
- Vet ej/ ingen åsikt

**b). När anser du att en *fristående* cykelplan har en viktig eller mindre viktig roll?**

.....

.....

.....

### **Sektion 3: Svårigheter i genomförandeskedet**

#### **14. Hur framgångsrik anser du att din kommun/ organisation generellt har varit på att genomföra förbättringar av cykeltrafikens infrastruktur?**

- Ej framgångsrik (har misslyckats)    
  Inte särskilt framgångsrik    
  Ganska framgångsrik    
  Framgångsrik    
  Mycket framgångsrik

#### **15. Vilka svårigheter, om några, har du erfarit vid utarbetande av förslag till och genomförande av förbättringar av cykeltrafikens infrastruktur?**

Vänligen kryssa det alternativ som bäst överensstämmer med situationen i din kommun/ organisation.

	Ett mycket betydande problem	Ett betydande problem	Ett visst problem	Ett marginellt problem	Inte ett problem
Brist på ekonomiska resurser	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brist på arbetstid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brist på personal (t. ex. hög personalomsättning)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brist på expertkompetens inom den egna organisationen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Trafikplaneringskulturen inom den egna organisationen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Planeringskulturen inom andra områden än trafik (inom egna organisationen)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Direkta konflikter mellan cykelplanering och andra lokala målsättningar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brist på intresse för cykelplanering hos valda beslutsfattare	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Brist på intresse för cykelplanering hos tjänstemän	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Otillräcklig prioritet för cykelplanering på strategisk/ övergripande planeringsnivå	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brist på makt att implementera åtgärder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Osäkerhet över åtgärders effekter/ effektivitet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Avsaknad av lokala målsättningar för cykling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Avsaknad av lokala/ nationella målsättningar för minskning av vägtrafikens volym	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Upplevd brist på allmänhetens stöd för cykelnätsförbättringar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lobbyorganisationer (t. ex. bilist-organisationer, detaljhandelsföreningar)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samordningsproblem med angränsande kommuner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Annat väsentligt problem, v. g. ange: .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**16. Hur enkla/ svåra anser du att följande åtgärder generellt har varit att genomföra på ett framgångsrikt sätt i din kommun/ organisation?**

	Mycket svår/ arbets- krävande	Relativt svår/ arbets- krävande	Varken okomplicerad eller svår	Okomp- licerad	Har ej erfarenhet av denna åtgärd
Information och marknadsföring för att öka cykelanvändningen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cykelvägar/ banor i <i>nyplanerade</i> områden	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cykelvägar/ banor inom <i>befintlig</i> bebyggelse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Cykelfält</i> inom befintlig bebyggelse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cykelvägar/ banor mellan tätorter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Acceptabla cykellänkar i samband med utbyggnad av mitträckesvägar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tillräckligt stödsäker cykelparkering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Möjligheter att ta med cykel på tåg/ kollektivtrafik	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cykelboxar vid trafikljus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**17. Om du har erfarenhet av cykelåtgärder eller cykelplaner som ej har genomförts eller som har varit mindre lyckade, vad har gått fel?**

.....

.....

.....

#### **Sektion 4: Sätt att underlätta cykelplaneringen och dess genomförande**

**18. Vilka, om några, förändringar ser du behöver göras för att underlätta för *din* kommun/ organisation att genomföra åtgärder som leder till en förbättrad cykelinfrastruktur?**

**a. Vänligen svara på hur viktiga följande förändringar och åtgärder är inom din organisation/ kommun.**

	Mycket viktigt	Viktigt	Ganska viktigt	Varken eller (neutral)	Oviktigt	Vet ej
Förändringar behöver göras av det sätt på vilket <i>lokal trafikplanering bedrivs</i>	<input type="checkbox"/>					
Bättre <i>beslutsunderlag</i> behöver tas fram (t. ex. som visar cyklisters problem/ förbättringar)	<input type="checkbox"/>					
Befintliga verktyg för cykelplanering behöver användas mer	<input type="checkbox"/>					
Bättre stöd behöver skapas för hur <i>intressekonflikter</i> kan lösas vad gäller cyklisters behov och andra planeringsmål	<input type="checkbox"/>					
Bättre förståelse behöver skapas hos <i>ledande tjänstemän</i> för genomförande av förbättringar i cykelinfrastrukturen	<input type="checkbox"/>					
Bättre förståelse behöver skapas hos <i>valda beslutsfattare</i> för genomförande av förbättringar i cykelinfrastrukturen	<input type="checkbox"/>					
Något annat behöver förändras, v. g. ange: .....	<input type="checkbox"/>					

Ev. kommentar:

.....  
.....

**b. Vänligen svara på vad du anser behöver förändras på nationell/ regional nivå.**

	Mycket viktigt	Viktigt	Ganska viktigt	Varken eller (neutral)	Oviktigt	Vet ej
Förändringar behöver göras i <i>planlagstiftningen</i>	<input type="checkbox"/>					
Förändringar behöver göras i <i>trafiklagstiftningen</i>	<input type="checkbox"/>					
Förändringar behöver göras på nationell/ regional nivå av hur <i>trafikinfrastruktur finansieras</i>	<input type="checkbox"/>					

Bättre *beslutsunderlag* behöver tas fram (t. ex. om effektsamband och cyklisters värderingar)

Bättre *verktyg* behöver skapas för cykelplanering (t. ex. metoder för att identifiera problem och möjligheter, bedöma effekter)

Förändringar behöver göras i *riktlinjer för gatuutformning* (utformningspraxis)

Något annat behöver förändras, v.g. ange:  
.....

Ev. kommentar:

.....  
.....

**19. Hur ser du på din kommuns/ organisations behov av ny kunskap och utbildning inom området cykelplanering?**

Mycket stort  Ganska stort  Varken stort eller litet  Ganska litet  Mycket litet  Vet ej

**20. Om du svarade att behovet av ny kunskap och utbildning är ganska stort eller mycket stort. Vad är det som ni behöver veta mer om?**

.....  
.....  
.....

**21. Anser du att du har tillräckligt bra tillgång till information om goda exempel så att du på bästa sätt kan dra nytta av andra kommuners/ organisationers erfarenheter?**

Ja  Nej  Vet ej/ ingen åsikt

Ev. kommentar

.....  
.....

**22. Slutligen, har du några andra kommentarer på enkäten eller cykelplanering som du vill framföra?**

.....  
.....  
.....

Vi garanterar att alla svar behandlas anonymt vid analys och presentation av vår forskning. Vi uppskattar dock om du anger namn och telefonnummer nedan om du är beredd att prata med oss per telefon (för en kort uppföljningsintervju). Vänligen ange också en epostadress om du önskar ta del av studiens resultat. Om du inte vill att vi ska kontakta dig igen kryssa för nej-rutan nedan.

- Ja, kontakta mig om min organisation blir utvald för en uppföljningsintervju.

Namn .....

Telefon .....

- Ja, jag vill gärna ta del av studiens resultat, v.g. ange epostadress: .....  
Alternativt, skicka ett epost till [p.a.envall@its.leeds.ac.uk](mailto:p.a.envall@its.leeds.ac.uk) med rubriken 'Ta del av cykelenkätens resultat' .
- Nej, jag vill inte att ni kontaktar mig igen.

### **Stort tack för ditt deltagande!**

Om du har frågor om enkäten kontakta Pelle Envall. Pelle nås enklast per epost: [p.a.envall@its.leeds.ac.uk](mailto:p.a.envall@its.leeds.ac.uk) eller telefon 0044 7732 399 467 (engelskt nummer).

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