

# DRAAGVLAK VOOR MULTISECTORALE INDICATOREN

Een onderzoek naar intersectorale kennisdeling met behulp van multisectorale indicatoren tijdens de vorming van het gemeentelijk verkeer- en vervoerbeleid.

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**Research motivation**

Municipal traffic and transport policy can to a large extent be considered as derived policy and the accompanying transport objectives contribute to policy objectives on other policy domains. Relevant policy domains for traffic and transport policy are:

- Spatial policy
- Economic policy
- Ecologic policy
- Social policy

From analysis of several municipal mobility plans it appears that relations between transportation policy and other relevant policy domains are sometimes insufficiently expressed in the objectives of transportation policy. This could cause an unclear connection between these policy objectives and the measures taken. This seems to occur especially in relation to social policy. The literature shows that traffic measures are difficult to translate to direct measurable social effects. The contribution of municipal transportation policy can thus remain unclear. Therefore parts of this policy seem to be irrational.

A more integral approach during the formation of municipal transport policy could partly solve these problems. The generation and exchange of knowledge and information with other policy domains can contribute to this. Hereby the use of multisectoral indicators can be considered for generation of multisectoral knowledge. These indicators are composite indicators in which information of different policy domains is combined.

**Research framework**

The objective of the study is:


To gain insight into if and in what manner sharing knowledge and information with other relevant policy domains by using multisectoral indicators can contribute to a potential improvement of the content of municipal transportation policy during the policy formation process.

The research objective shows the research is constrained to the policy formation process. Besides during policy formation, knowledge and information can play a role in several policy stages. However, during the policy formation this influence on the policy contest is the largest.

In order to achieve the research objective, several research steps are taken:

1. Current state of affairs and “autonomous” developments
2. Needs and availability
3. Institutional barriers
4. Mobility Plan 2.0





ad 1. During the first step the current state of affairs in relation to the use of knowledge and information of the relevant policy domains (including transportation policy) during the development of transportation policy is investigated with a literature review. Besides “autonomous” developments which can contribute to an improvement of knowledge sharing are investigated. Subsequently interviews are executed with persons active in domains which have different points of contact with transportation policy to check the literature findings with the reality and to add their own experiences.

In the second step, the focus was on the surplus value of multisectoral indicators with respect to the content. A special interview-technique, the Policy Delphi method, is used to investigate the potential availability of and the need for multisectoral knowledge and information at policy advisors of the different policy domains (including transportation policy) at the municipality of Enschede.

ad 3. In the third step process-oriented aspects that can hamper knowledge and information sharing were investigated. These impediments are called institutional barriers. A scheme from literature was used to distinguish different social, organizational and technological conditions that can stimulate knowledge sharing. The scheme was used during an interview with a transportation policy advisor at the municipality of Apeldoorn to add new findings to the process-oriented findings from the first and second step. Subsequently, these findings are tested on a quantitative way by questioning municipal policy researchers with an online survey.

ad 4. Ultimately, in the fourth step an own vision on a future municipal mobility plan was formulated using all findings from previous research steps, the Mobility Plan 2.0. In this vision is expressed under which conditions the use of multisectoral indicators can lead to a potential improvement of municipal transportation policy.

### Results

The different research steps have led to the following results:

1. The literature review shows that it differs to what extend multisectoral knowledge and information are used during the development of transportation policy. Besides the direct effects most attention is put on effects on spatial, ecological and to a lesser extent economical domains. Results from traffic models are often used to estimate effects quantitatively. However, traffic models seem to be less suitable to estimate problems and future developments on a local level. Traffic models are detailed and sectoral, through which the consequences on other policy domains become less distinct. Furthermore, municipalities appear to make less use of explicit monitoring and evaluation of transportation policy, consequently valuable knowledge and information about the policy effectiveness will be lost.

The most important “autonomous” development found in the literature review is the increased attention on sustainable development. Besides ecological and economical developments social developments are part of sustainable development. The Raad voor Verkeer en Waterstaat suggests putting more attention on target groups and way of living in transportation policy. In many researches sustainability is called as new starting point at development of transportation policy. This calls for a reconsideration of both the content as well the development-


process of this policy. With regards to the use of knowledge and information many examples of the application of geographic information systems (GIS) can be found.

During the interviews in the first step is found that the use of knowledge and information in practice does not match with the theoretical policy cycle. For example, often implicit knowledge is used during the policy formation and the influence of explicit knowledge is limited. Furthermore political interests seem to play an important role during the accomplishment of policy decisions. Often only knowledge and information that support the policy proposals is used. Transportation policy is approached too sectoral and results from traffic models are assumed to be normative. The opinion of citizens is insufficiently taken into account. Besides ambitious mobility plans are lacking a solid financial foundation.

The respondents were aware of the surplus value of knowledge sharing with multisectoral indicators during policy formation. During the interviews several "autonomous" developments which can contribute to an improvement of knowledge sharing in the future were mentioned. Once more sustainable development came out as the most important development, because of the current economical crisis which causes more attention on sustainable initiatives like the Green Deal. Technological developments like internet and geographical information systems can also have a contribution. "E-participation" can help to collect knowledge from citizens and a few respondents foresee a visual revolution in which images become more important. Ultimately, knowledge and information sharing between different actors involved in the policy process is already improving with the use of planning support systems.

2. During the Policy Delphi process all policy advisors at the municipality of Enschede recognized the surplus value of the use of multisectoral indicators for both the policy-content as well the – process. This corresponds with the findings during the interviews in the previous step. Most policy advisors were well informed about the available knowledge of colleagues on other policy domains. Only between the social and the transportation policy domain was a mutual need for an improvement insight into the relations between those policy domains.

Unless the focus on the policy-content during the interviews, process-oriented factors seem to be important for intersectoral knowledge-sharing. The policy advisors observed a possibility to improve the sharing of multisectoral knowledge and information within the municipal organization. The most attention should go to the accessibility of resources.




3. The need for more multisectoral knowledge and information became also came to the surface during the interview at the municipality of Apeldoorn and the online survey about institutional barriers of knowledge sharing. However, exchange of multisectoral knowledge and information is not natural. Despite the enthusiasm about the surplus value of intersectoral knowledge sharing and the open attitude of policy workers, no one within the municipal organization carries responsibility for knowledge sharing. Furthermore, policy workers have insufficient knowledge of possibilities of geographic information systems. Present knowledge and information is insufficient recorded, accessible and translated into relevant knowledge on other policy domains. The online survey shows that the surplus value of intersectoral knowledge sharing is not obvious for politicians and directors. Several respondents claimed they are still too much led by daily matters.

4. The findings in the previous research steps led to an own vision on the content and the process of future municipal transportation policy, the Mobility Plan 2.0. In this vision multisectoral indicators are important during the exchange of knowledge and information. This is not only expressed in the policy content, but also in the process. The use of the indicators could not only improve knowledge sharing between policy-workers, but also between the municipality and its citizens. The usage can lead to enhanced insight into relations between policy domains and the coherency between policy goals and – measures. This surplus value is probably the largest when the indicators are visualized spatially with maps. The development of the indicators can ask for a knowledge broker, who knows which knowledge is available and which knowledge is needed.

#### ***Conclusions and recommendations***

The research shows a need for more intersectoral knowledge sharing within municipal policy workers and the surplus value of the use of multisectoral indicators during the knowledge sharing process is also recognized. The connections between social and transportation policy can be made visible with multisectoral indicators. Information stored in geographic information systems (GIS) can be used for this opportunity. Because large municipalities in particular make use of GIS, the surplus value is probably the largest at those municipalities.

However, it remains unclear whether the use of multisectoral indicators during the policy formation can lead to an improvement of the content of municipal transportation policy. The influence of knowledge and information on policy decisions can be limited en led by political interests. The chance using multisectoral indicators will lead to an improvement of the content can probably be increased by following the conditions mentioned in the Mobility Plan 2.0.



In the first place this vision advises a different approach of municipal transportation policy. The benefit for the user of infrastructure should be put central and no longer the functioning of the infrastructure. This can be examined with both objective as well subjective information. This way the interest of citizens is better insured during policy formation. Subsequently a municipality should make a person responsible for knowledge sharing between the policy domains in the municipal organization. This person should meet the characteristics of an knowledge broker. Finally, it is advised to stimulate knowledge sharing with the use of multisectoral indicators by starting a pilot during policy formation to make the surplus value visible for politicians and directors. When this pilot seems to be successful, a process can be started to improve the knowledge infrastructure by recording knowledge and information better and making it better accessible. This can enhance the compilation of multisectoral indicators and improve intersectoral knowledge sharing.