Sustainable Urban Mobility and Urban Planning

Lecture 1:
Introduction to the governance of sustainable mobility and urban planning
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3. What is mobility, urban planning and sustainability?
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Course program

- Lecture 1: Introduction into sustainable mobility- and sustainable urban planning
- Lecture 2: Problems and challenges
- Lecture 3: Strategies, policies and solutions
- Lecture 4: Sustainable mobility and –urban planning in Copenhagen, Freiburg and Rotterdam
- Lecture 5: Trends, needs and conclusions
Assignment

➢ What do you consider to be ‘sustainable’?
➢ What is sustainable mobility in your view?
➢ What is sustainable urban planning in your view?
➢ Can we organize/manage sustainable mobility/urban planning in the public domain? How?

Discuss with your neighbor (5 min.)
Mobility

Mobility is concerned with:

- Transport via infrastructures like roads, railways, water and air;
- Actors, social and physical systems with (positive and negative) effects on different spatial scales (Minnesma & Rotmans, 2007);
- Reciprocal effects between mobility and urban planning (Verhetsel, Vanelslander & Sellekaerts, unknown year);
- People, transport, corridors, mobility flows.
Urban Planning

Urban planning is concerned with:

- Physical development of housing, parks, commercial areas, cultural institutions, hotels and many other functions;
- Actors, social and physical systems with (positive and negative) effects on different spatial scales (Minnesma & Rotmans, 2007) but often on a lower scale compared to mobility;
- Reciprocal effects between land use and mobility (Verhetsel, Vanelslander & Sellekaerts, unknown year);
- Projects with time horizons of months or some years;
A New utopia?

Projected Tianjin Eco City, China
Aeon.co (2014)

Garden city.
Merijnoudensampsen.org (2014)
Sustainability is concerned with:

- “Development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (OECD, 1987);
- Balance between people, planet and profit (Van Eijnhoven, 2007:14);
- Balance between ecological, economic and social interests (Kaiser et al., 1995).
- Proportionate positive and negative effects for all involved actors;
- Long-term focus, but also short-term focus (Geerlings, 1997);
- Sustainability affects different spatial scales (Geerlings, 1997).
Sustainable Mobility

Thus, **sustainable mobility** involves:

- Innovative, low-impact, transport means;
- Actors, social and physical systems predominantly experience the positive effects on different spatial scales;
- Integration of transport, land use and environment policies (Stead & Geerlings, 2005);
- Relatively short time horizons in the project management;
- Proportionate positive and negative effects for all actors;
- Financial and societal effects are transparent and computable;
- No environmental-, social- and financial burden put on future generations;
- Economic, social and environmental interests are proportionally met;
- Integration of land use and mobility (Verhetsel et al., unknown year);
- Sustainable mobility could be the result of governance (foll. Grin et al., 2011).
Sustainable Urban Planning

Thus, **sustainable urban planning** involves:

- Physical development of *energy-efficient and low-impact* housing, parks, commercial areas, cultural institutions, hotels and many other functions;
- Actors, social and physical systems having predominantly positive effects on different spatial scales;
- Positive reciprocal effects between land use and mobility;
- Relatively short time horizons in the project management;
- Proportionate positive and negative effects for all actors;
- Financial and societal effects are transparent and computable;
- No environmental-, social- and financial burden put on future generations;
- Economic, social and environmental interests are proportionally met (Kaiser et al, 1995);
- Integration of transport, land use management and environmental policies (Stead & Geerlings, 2005);
- Long term planning horizon, but also allowing flexibility to adapt to changing circumstances;
- Sustainable urban planning could be the result of governance (foll. Grin et al, 2011).
Sustainability?

Source: lokalepolitie.be (2014)

Source: hinnewagenaar.nl (2014)
Social Cost Benefit Analysis (SCBA)

- Focus on the effects over the long term;
- Economic, social and ecological costs and benefits are standardized in financial numbers;
- Different actors (citizens, companies, governments) are able to use SCBA;
- For all types of infrastructures like railroads, highways, waterways;
- Comparison between different mobility scenario’s (partly in financial terms);
- Comparison between 0-scenario and the project-scenario;
- Quantitative and qualitative information;
- All computations are referred to one base year;
- SCBA ‘forces’ different actors to consider long term mobility and urban planning goals;
- SCBA ‘forces’ different actors to look for a shared problem perception, analyze project experiments and support social learning (Loorbach & Rotmans, 2011; Loorbach, 2007).
Conclusion

Though sustainability is a quite abstract thing, the governance of sustainable mobility and urban planning involve:

- Recognition that the analysis of mobility and urban planning requires a socio-physical system perspective;
- Positive reciprocal effects between land use and mobility;
- Relatively short time horizons in the project management but long-term focus;
- Proportionate positive and negative effects for all actors;
- Financial and societal effects are transparant and computable. An effective instrument is SCBA;
- No environmental-, social- and financial burden put on future generations;
- Economic, social and environmental interests are proportionally met;
- Integration of transport, land use management and environmental policies;
- Long-term focus.

In lecture 2 the problems and challenges of sustainable mobility and urban planning will be discussed.
Sources


- Verhetsel et all (unknown year) *The relation between location policy and sustainable mobility: an empirical study for commuting in Flanders*. University of Antwerp.