Contesting sustainability in urban transport – perspectives from a Swedish town

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Paul Fenton, Ph.D. Candidate
Environmental Technology and Management
Linköping University
paul.fenton@liu.se
Sweden - a tradition of active municipalities

- Traditionally strong role
- Independent from central government
- Elected municipal governments including assembly and executive
- Neutral civil service prepare basis for decisions

- Unusual in world perspective
- Significant local powers e.g. monopoly on planning
- High expenditures
- Ownership or stakes in municipal companies
Transport in Swedish municipalities

- Domestic transport = 33% of national GHG emissions (2012); 47% including international maritime and aviation
- 95% of domestic transport emissions due to road transport
- Decrease in road transport emissions offset by increase in travelled km

- Major road and rail infrastructure are subject to national control
- Provision of public transport coordinated on the regional level
- Municipalities shape local transport planning

- Diversity - wide range of pilot projects to encourage modal shift, reduce emissions, introduce new fuel types, congestion charging, etc
Case and Method

Case: Norrköping, population ca. 130,000
- mixed economy - regional hub, port, logistics
- grid street plan (inner city), urban sprawl (outer)
- long history of municipal environmental strategies/actions
- historic tram system

• Document study
• Survey
• Comparative analysis
• Scenarios
Results – document study

• Aim to increase sustainability repeatedly restated/reformulated during past 15-20 years
• Political consensus: “the need for transportation within the municipality should reduce and transportation that occurs should be as sustainable as possible”
• Mix of targets
• Mix of soft and hard measures

• Recurrent problems
• Evidence of inconsistent, incomplete or partial implementation of some policies or measures
• Failure to achieve stated objectives did not result in adoption of substantially new approaches, but rather a reiteration of past objectives and measures
• Targets referred to in general, rather than quantifiable, terms.
Results – document study (cont.)

• Norrköping’s Guidelines for Transport from 2011 describe:
  - “Planning tool 1” is the “four-step principle”, an approach commonly referred to and used in all Swedish transport infrastructure planning. The four-step principle involves prioritising (1) measures to reduce or change the need for transportation; (2) measures to improve efficient use of transportation; (3) limited physical measures; and (4) large-scale investments in physical infrastructure.

  - “Planning tool 2” is the “Order of Priorities” for transportation in the urban area, by which the municipality should – in all planning – aim to prioritise (1) walking and cycling, (2) public transport, and (3) cars for passenger journeys. In other words, cars should be considered only after other modes of transport and only (in line with the four-step principle) if the journeys required are absolutely necessary.

  - “Planning tool 3” is “Sustainable mobility”, an approach aiming to increase use of sustainable forms of transport, e.g. influencing passenger knowledge, attitudes and behaviour; influencing decision-makers knowledge, attitudes and behaviour; using economic incentives and regulations to influence choice of transport; and use of new techniques. Additionally, physical planning and physical measures may be used.
Results - survey

- Survey was distributed to 24 stakeholders invited to a workshop on transport planning (May 2012)
- “Insider” respondents - politicians, civil servants or other “insider” stakeholders such as companies or NGOs operating in the municipality
- Workshop included exercise on the survey results
- Results provide input to scenarios
Q4-5. Which transport modes do you think should be/actually are prioritised in municipal planning processes?

Q6-7. How important do you consider it is to increase/reduce use of these modes of transport in the municipality during the next decade?

Q8-9. How likely do you think it is that use of the following transport modes will increase/decrease in the municipality during the next decade?

Q11-12. In an attractive town ... what should the space between buildings be used for? / How do you think (use of the space between buildings) is actually prioritised?
Results – survey (cont.)

- Walking, cycling and public transport considered desirable objectives
- Recognition of *de facto* dominance of cars and road freight in transport
- Respondents experience differences between the municipality’s words and actions
- Incongruence between individual preferences, behaviour, opinions and experiences, particularly with regard to cars and trams
- Incongruence between municipal policies and implementation
- Unclear to what extent incongruence stems from external factors constraining the municipality’s ability to act in accordance with the stated preferences of its stakeholders, or whether the incongruence is linked to the assumptions, behaviour, decisions and interactions of the municipality and its stakeholders.
Possible explanations

• Availability heuristic - past performance may have affected the levels of trust or confidence among respondents about future (Tversky and Kahneman, 1973)

• Affective forecasting - pessimism over the likelihood of achieving change using existing strategies or policies > respondents selectively imagine hypothetical solutions (e.g. new technologies, fuel types, etc), rather than actively seeking to shape the future (Wilson and Gilbert, 2003)

• Loss aversion - sunken costs (organisational, e.g. infrastructure; or individual; e.g. investments in cars) encourages risk-seeking behaviour (see e.g. Gilbert and Wilson, 2000).

• Obedience and permissive cultures - physical framing effects influence psychology and assumptions about sustainability > non-decisions, indecision or inaction may be interpreted as permission to carry on. In other words, roads are invitations to drive; the same is true of sidewalks or cycle paths.

• Assumptions about public opinion and perceptions
• Assumptions about economic or social impacts, or concerns about the uncertain effects of a transition
Results – comparison and scenarios

• Study of emissions and development of visualisation tool

• Scenario 1: Status 2010

• Scenario 2
  - Current policies > 2020 (lack of specific targets = assumptions r.e. car fleet / air pollution, Covenant of Mayors, etc)
  - Incrementalism = missed opportunities / sustaining current problems in planning
  - Up/downstream rebound effects

*Figure 4. Comparison of the three scenarios.*
Scenario 3

• Future scenario > 2030
• Strong implementation of “Order of priorities
• Use of current “good practice” comparisons

• Municipal consultation document from 2010 proposed 15 specific targets to promote sustainable transportation in the municipality
• Moderate in comparison to baseline (1998) but radical in comparison to passenger behaviour study (2010) and implementation period (2020)
• Targets withdrawn from final policy

• Modal split data from EU database > Basel, Göttingen, Odense
• Swedish branch initiative to double journeys by public transport by 2020
Conclusions

• Municipality justifies its non-specificity by referring to changes in institutional routines (targets removed from long-term strategies and place within annual work plans)
• Departmentalisation of cross-sectoral issues
• Incrementalism
• Policies emphasise aspiration, not a plan for action
• Unclear as to why – assumptions seem to influence but how?
Future studies

• Deeper comparative analysis
• Understand how “good practices” developed
• Examine inconsistencies, trade-offs and inertia in more detail

Thank you!

paul.fenton@liu.se
www.iei.liu.se/envtech/om-oss/paul-fenton?l=en