

# Planning Perspective on Interurban Roads

A long-exposure photograph of a road at night. The road curves from the bottom left towards the center. Light trails from vehicles are visible as bright orange and yellow streaks. On the right side of the road, a line of trees is illuminated with a greenish light, creating a glowing effect against the dark night sky. The sky is a deep blue with some clouds.

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Carreteras Sustentables

PIARC TC 2.2 / AMIVTAC, Monterrey, Mexico 8 y 9 Mayo de 2006



# Sweden

(in the projection of Mercator)

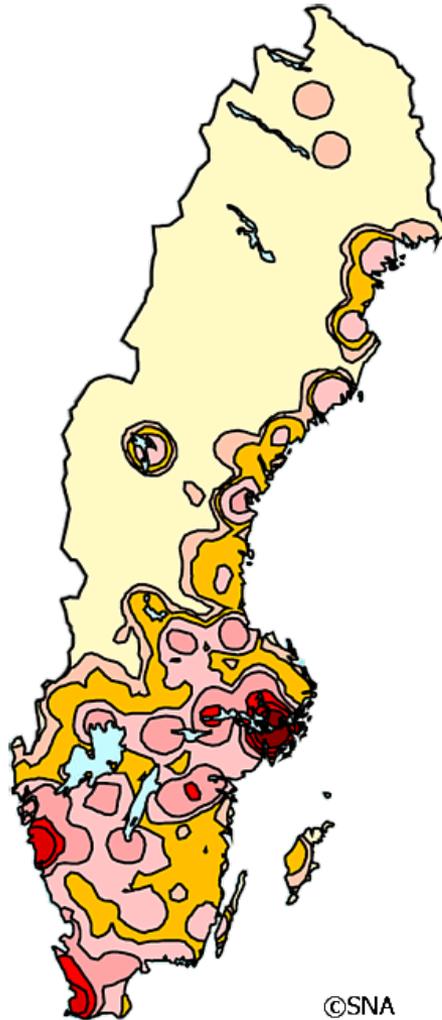




# Geography of Sweden

- From latitude 55°N to 69°N
- Distance from South to North 1 572 km, from East to West 500 km
- Go 1572 km south from Sweden and you'll be in Neaples Italy
- Sweden's area is 449 964 km<sup>2</sup> (1/4 of Mexico). About the same as Spain
- Population 9 miljon (1/10 of Mexico)
- Population density 22 inh/km<sup>2</sup> (Mexico 44 inh/km<sup>2</sup>) Netherlands (372 inh/km<sup>2</sup>).

# Population and roads



# Road planning in Sweden

- National Road Administration (under ministry of industry);
  - responsible for national roads
  - responsible for national contribution to development of the road transport sector (incl public transport, mobility management, regulations, coordination between national, regional och local level etc)
  - 7 regions
- County administrations
  - Responsible for contributions to regional road transport plans
- Municipalities
  - responsible for municipal roads

# Road planning context in Sweden 1

- Lack of money to road investments and maintenance
- Traffic safety (2+1 roads, attitudes, speed, vehicles etc)
- Environmental issues
- In Sweden there might be a need to underline that the transport infrastructure is an investment in well-fare, primarily neither a way to destroy the environment nor a way to kill people  
(Ref. to Anders Jansson, who yesterday spoke about environmental actions as an investment, not a cost.)

# Road planning context in Sweden 2

- Great and well differentiated regions are important for the national economy in the global economy (NEG)
- Future accessibility through smart balance between density (location of buildings and enterprises), and coordinated rail and road carried transport systems (of different modes)
- Need for better coordination across sectors
- Need for better coordination between national, regional and local level as well as between public and private interests

# The Four-stage principle

– a general approach to measures for the road transport system

- Measures which affect the demand for transport and choice of modes of transport
- Measures that give more efficient utilisation of the existing road network
- Improvements and minor rebuilding measures
- New investments and major rebuilding measures



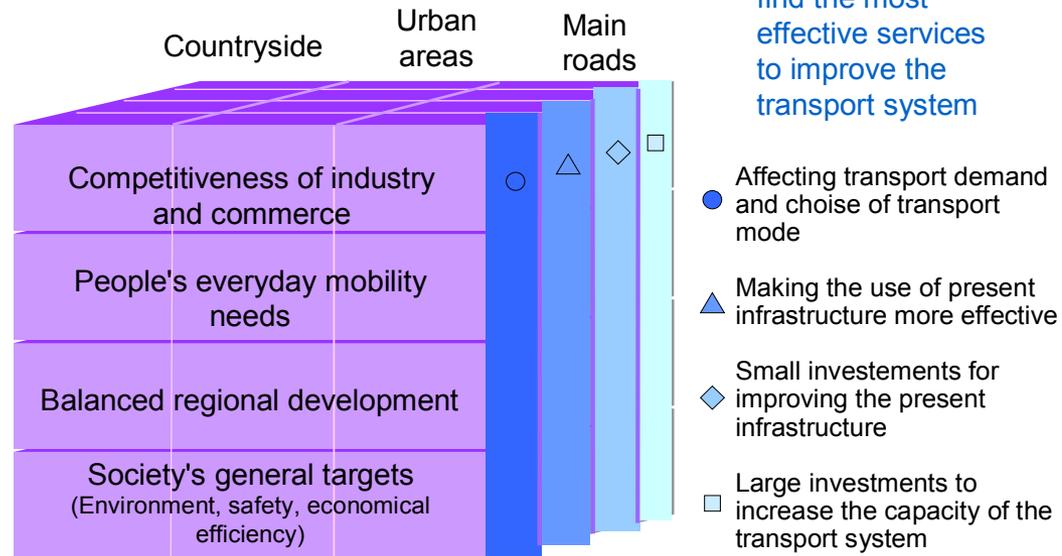
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## Framework for The Planning Process ("The Cube")

... and analysing the challenges on diverse parts of the transport system

... it is possible to find the most effective services to improve the transport system

Knowing the different needs and expectations...



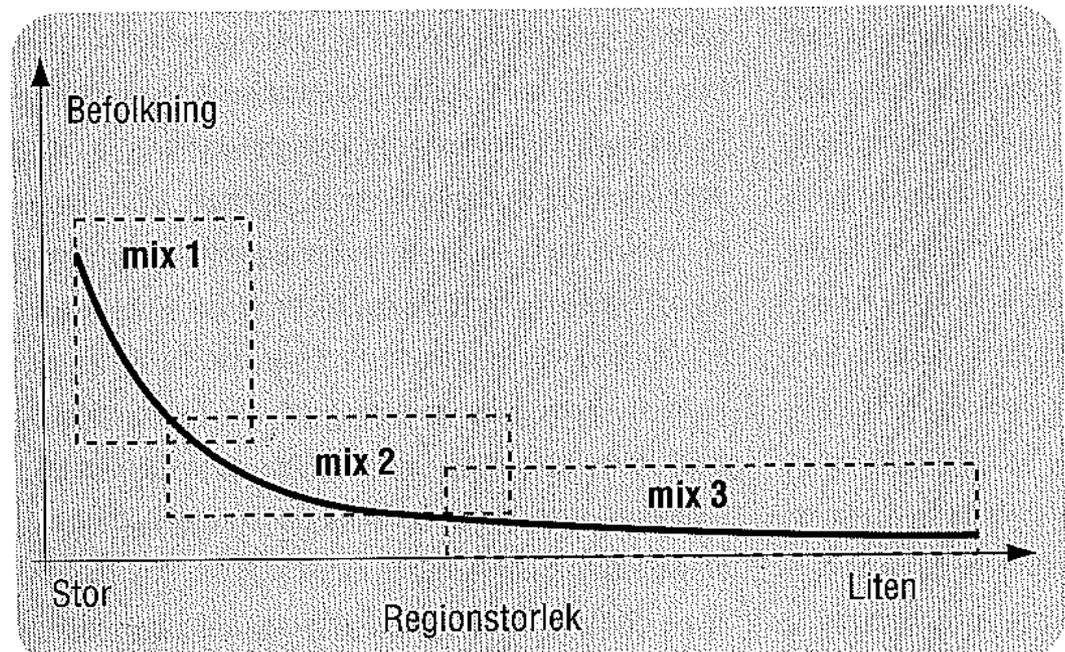
# The Four-stage principle and the Cube

## principle aims

- Secure provision of socio-economic, efficient and long term sustainable transport support for citizens and the business
- Guarantee broad approach in planning of roads
- To turn attention from construction of roads to need of transport in society

# Urban areas and network of roads in a strategical perspective

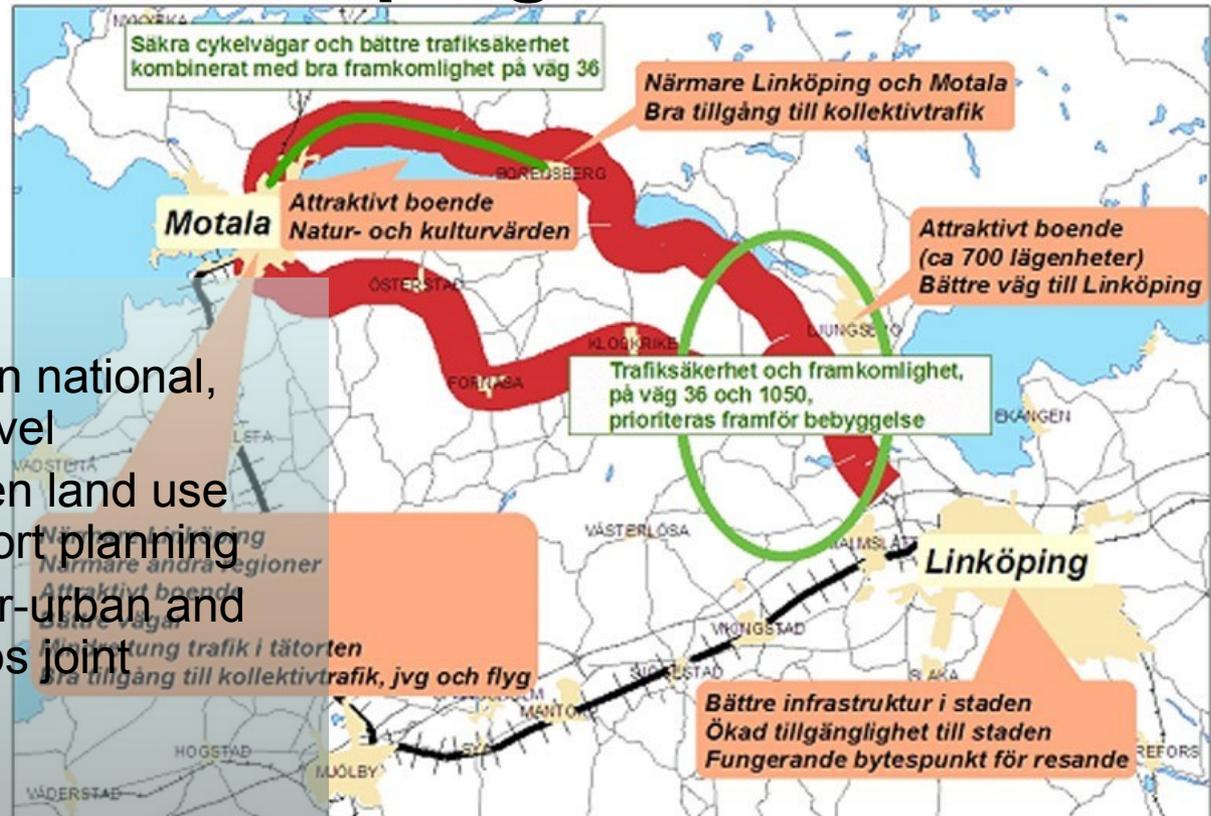
- Identify different types of regions
- Develop type-specific strategies
  - Mix 1; metropolitan areas
  - Mix 2a; middle-size cities in network
  - Mix 2b; middle-size city with densely populated countryside
  - Mix 3a; small cities in thinly populated areas
  - Mix 3b; thinly populated areas
- Develop strategies for each region



# Two cases – examples of cross-sectorial cooperation

- Corridor analysis of road 36 between Motala and Linköping. Demands on a new road to incorporate Motala better in the Linköping work-region.
- Corridor analysis and in-depth design study of the meeting between the E22, Göta Canal and Söderköping

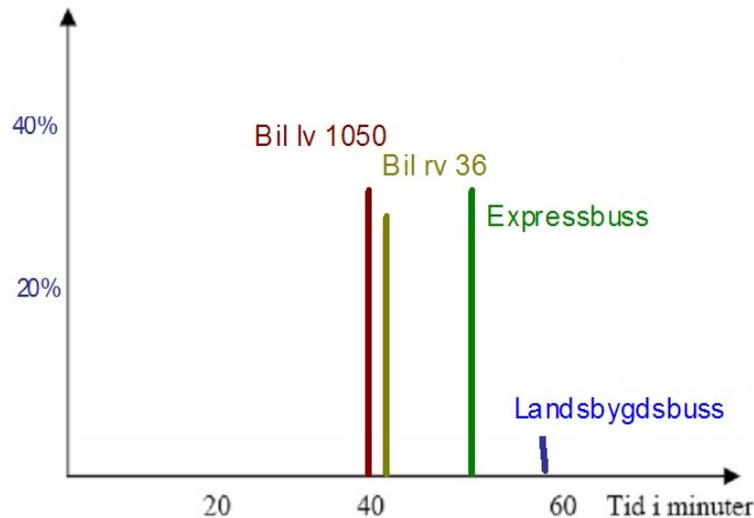
# Corridor analysis road 36 Motala - Linköping



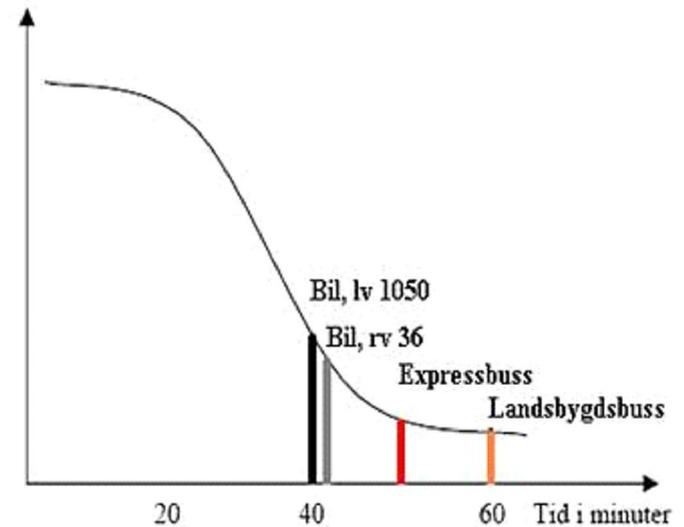
- Enlarge workregion
- Cooperation between national, regional and local level
- Coordination between land use planning and transport planning
- Analysis of both inter-urban and urban areas develops joint understanding
- Gathering vision

# Commuting between Motala and Linköping

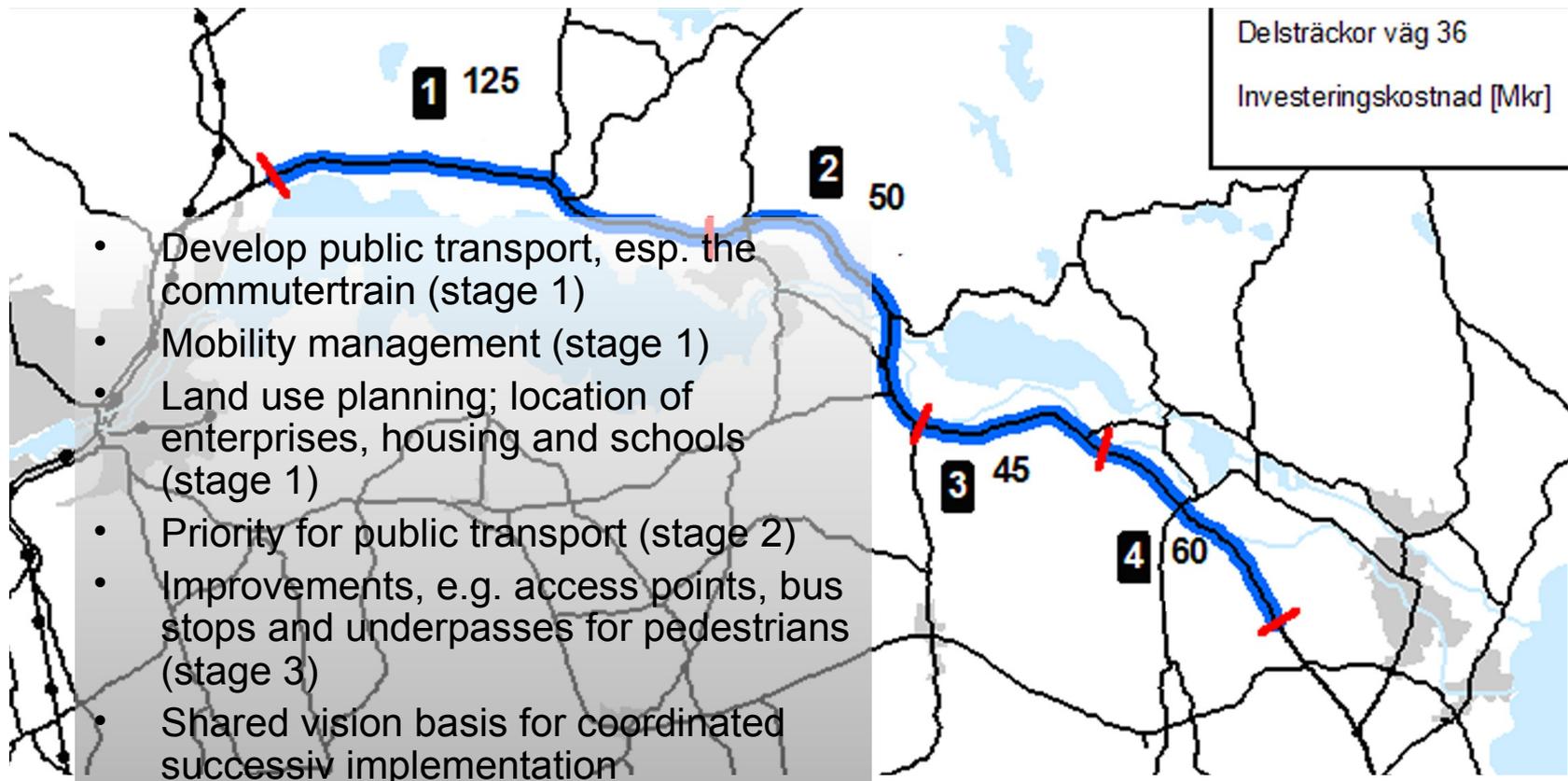
Andel arbetspendlare



Benägenhet att pendla

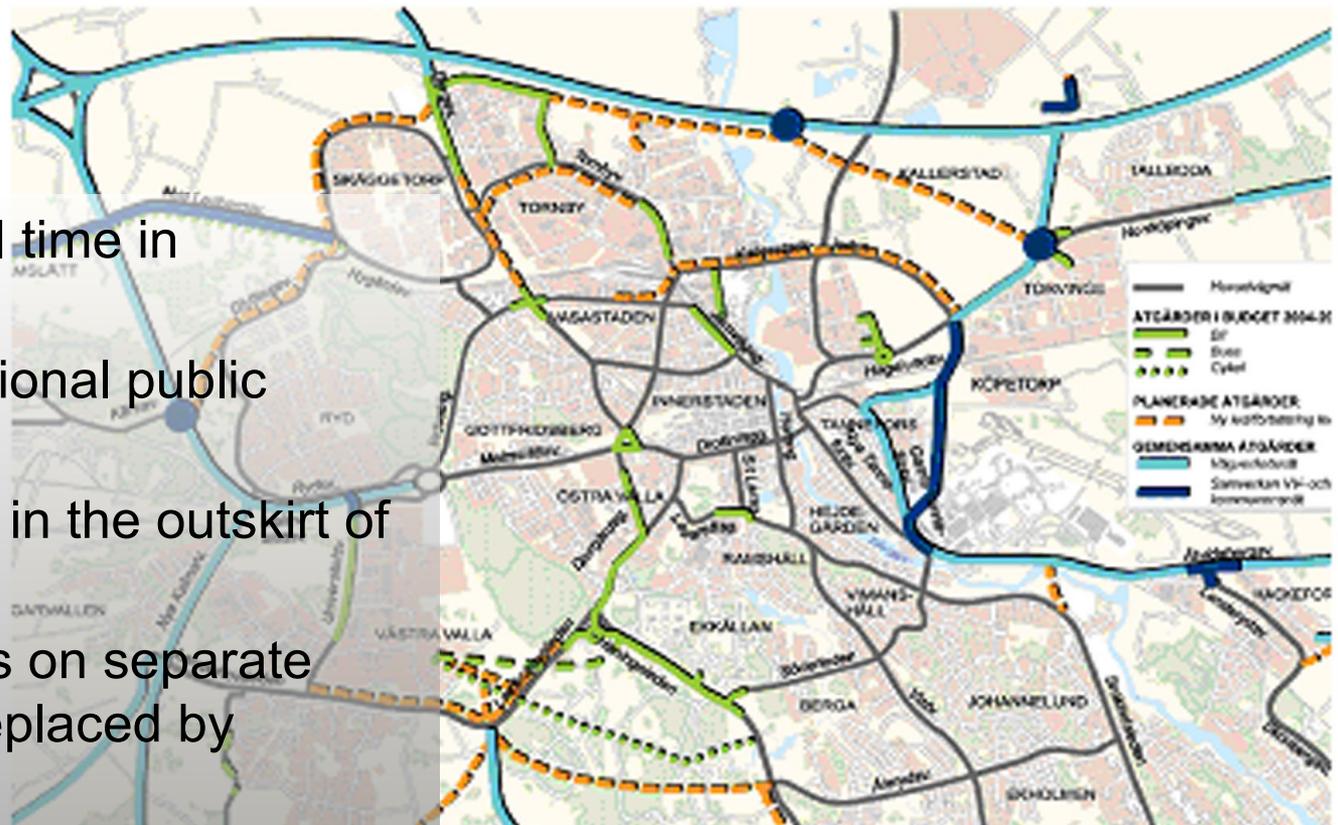


# Flexibel measures to meet different budget levels



# Large potential to improvements in Linköping

- 30 % of travel time in Linköping
- Priority to regional public transport
- Minterminals in the outskirts of Linköping
- Fast bus-lines on separate lanes, later replaced by light-rail



# In-debth design study of the meeting between the E22, Göta Canal and Söderköping

- Cooperation between National Road, Söderköping municipality, the Regional Development Council, the Göta Canal Company and the County
- Public participation

# The improvement of E22 has a long history

- Piece by piece has been improved and rebuilt
- The bridge over Göta canal and the lights in Söderköping creates hours-long queues in the summer
- Dispute on the location of the road in the municipality
- High bridge expensive and resisted by heritage authorities

# Three days intensiv seminar

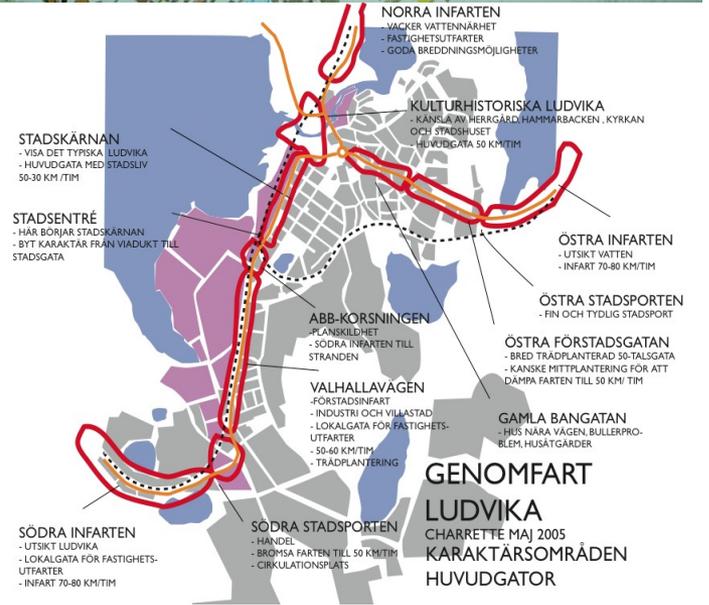
Välkommen till charretten i Söderköping  
14 -16 november på Söderköpings Brunn

Var med och diskutera hur vägen,  
kanalen och staden ska mötas!



Charretten är ett samarbetsprojekt mellan Vägverket, Söderköpings kommun, Göta kanalbolaget, Regionförbundet Östsam och Länsstyrelsen.





# Preparations

- Lot of knowledge through many years of parallel sector planning and sector analysis
- Careful preparations, identification of key actors
- Publicity to get public awareness
- Invitation to key actors and to the public
- Secure attendance of decision-makers
- External independent facilitator
- Teams lead by town and road planning experienced architects/landscape architects and engineers, skilled in design and sketching (a rare competence)

# Method

- Identification of interests rather than positions
- Presentations och debates
- Workshops in two teams of 8-10 participants; sketches and pictures produced in dialogue
  - as a tool for analysis of interests and needs
  - stimulating the creativity
  - develops alternatives which meets own intrests and can be accepted by others in the team
- Hearings, lectures by experts and as inspiration
- Access to basic data and expertis
- Discussions and negotiations

# SÖDERKÖPING – E22 OCH GÖTA KANAL

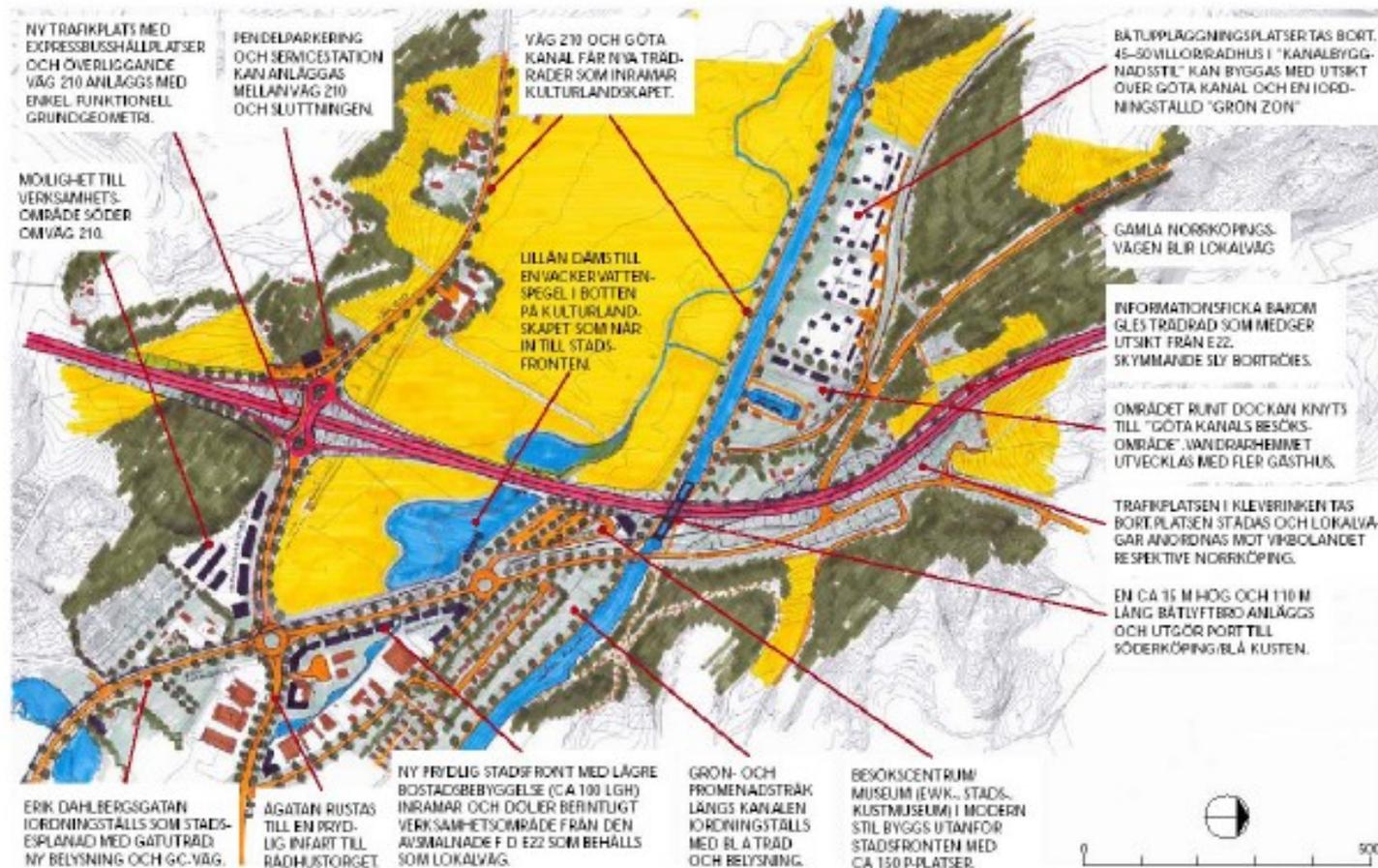
 CHARRETTENS  
TEAM 2:5 FÖRSLAG  
18 NOV 2005


Figure 7: Finished proposal from one of the teams.

Source: Henrik Undeland

# Decision makers at place

- "We have in three days taken a longer step towards a solution than during the last 10 years"
- "For the first time we worked together with urban development and traffic planning, in dialogue with both public and private interests"
- "Without this we wouldn't have manage to start the comprehensive planning for area between the road and the city"



# Discussion

- Process design that enhance early acceptans and mutual understanding through joint learning processes
- The importance of a gathering vision and active management of the vision
- Public participation and confidence
- Private investors interest in a solid framework and regulations as a basis for strategic planning of investments
- Is deeper analysis a way to a solution? Shouldn't we be more designoriented?
- The Engineer and the Mind's Eye – the picture as a tool for understanding, creative development of solutions and as an essential part discussions and negotiations
- Lack of competence in creative management of integrated processes