



INVITATION



FUTURE URBAN TRANSPORT



PROBLEMS &
SOLUTIONS
INTERACTIVE
CONFERENCE

28-31 March 2000
Göteborg, Sweden

International conference for
politicians, planners, engineers and
scientists to identify challenges for the
future of transport, traffic and mobility
in large urban areas.

Organized by:

Volvo Research Foundation
Volvo Educational Foundation

Efficient urban transport – a necessity for mankind

Prosperity and population on earth tend to accumulate in large urban areas. This phenomenon is tending to accelerate. Freedom of movement is regarded by many as a human right and mobility is a high-ranking quality of life utilized by private citizens as soon as it is affordable.

This causes increasing traffic of different kinds.

Urban areas also require the transportation of people, goods and garbage increasing the traffic still further. Growing awareness of the problems of congestion and accidents, as well as environmental and resource restrictions on the local and global level, will inevitably necessitate determined action and close co-operation between politicians, city planners, scientists and industry.

The main focus of this conference will be to see how these players can act together to implement a joint action programme.

An interactive conference at the highest level

Many factors indicate that efficient cities and urban areas will be the only solution to accommodate the ever increasing number of people on earth. The objective of this topical conference is to analyze the potential for different players to implement highly efficient, safe, equitable and environmentally sustainable urban transport and traffic systems. The agenda will analyze experiences and solutions from around the world, report on state of the art technology and focus on global best practice.

The conference will be organized as half-day sessions. These sessions will cover needs, the state of the art and best practice within each topic. The sessions are designed to be highly interactive with short lectures from experts from around the world, followed by debate and discussion. For interactivity, the total number of conference participants is limited to 200. Conference language is English.

Five areas of importance will be focused on in five sessions.

session 1 _____ **History and geography of urban transport; perspectives on human behaviour and the role of infrastructure**

session 2 _____ **Function and efficiency of transport**

session 3 _____ **Energy consumption and environmental aspects**

session 4 _____ **Safety aspects - prevention of traffic accidents and the care of injured persons in large urban areas**

final session **session 5** _____ **Critical issues for the future - needs and actions**

The final session is designed to identify critical issues and opportunities to facilitate a systematic approach to the implementation of solutions in the future.

Attention with focus on the necessity for cross-border collaboration between players and systems to solve the problems of urban transport.

The challenges are formidable and the rewards for success even greater.

Outcome for participants

One important aim of the conference is to give participants the opportunity to extend their network of experts to enable everyone – in particular city planners – to deal more effectively with the challenges of safe, clean and cost effective transport solutions. Participants will acquire a thorough insight into the complex challenge of providing sustainable transport, the driving forces of mobility and learn about successful solutions that work in practice.

For the quality of the conference and a beneficial outcome, all the participants are expected to contribute, on the basis of their experience to the discussion sessions.

Session moderators

Phil Goodwin	Professor, University College London, UK
Helen Petrauskas	Vice President, Ford Motor Co, Dearborn, USA
Barry Sheerman	MP, United Kingdom
Claes Sjöberg	President, <i>Tomorrow Magazine</i>

Session speakers

Professor Bert Bolin	Stockholm University, Sweden
Professor Andrew Burgess	University of Maryland, MD, USA
Professor Jeff R. Crandall	University of Virginia, VA, USA
Professor Phil Goodwin	University College London, United Kingdom
Professor Susan Hanson	Clark University, MA, USA
Professor Thomas P. Hughes	University of Pennsylvania, PA, USA
Dr Ian Johnston	Managing Director, ARRB Transport Research, Australia
Professor Arne Kaijser	The Royal Institute of Technology, Stockholm, Sweden
Professor Tor Kihlman	Chalmers University of Technology, Sweden
Professor Anna-Lisa Lindén	Lund University, Sweden
Professor Murray Mackay	University of Birmingham, United Kingdom
Dr James MacKenzie	Senior Associate, World Resources Institute, WA, USA
Professor William J. Mitchell	Massachusetts Institute of Technology, MA, USA
Professor Dinesh Mohan	Indian Institute of Technology, New Delhi, India
Dr J. Fraser Mustard	The Founders' Network, Toronto, Canada
Dr Brian O'Neill	President, Insurance Institute for Highway Safety (IIHS)
Dr Helen Petrauskas	Vice President, Environmental and Safety Engineering, Ford Motor Co, MI, USA
Professor Elliot D. Sclar	University of Columbia, NY, USA
Dr Geetam Tiwari	Indian Institute of Technology, New Delhi, India
Mr Roger Vahnberg	President, Västtrafik Göteborgsområdet AB, Sweden

tuesday
march
28

wednesday
march
29am

19.00 – 21.00
Reception and conference registration

Opening of the conference Future Urban Transport - Problems and Solutions

Dr hc Arne Wittlöv
Chairman of Volvo Foundations for Research and Education
Executive Vice President, AB Volvo

session 1

History and geography of urban transport; some perspectives on human behaviour and the role of infrastructure

Session moderator: Barry Sheerman, MP, United Kingdom
Chairman of the Parliamentary Advisory Council on Transport Safety

The urban environment is usually associated with a variety of activities for matching the demand for goods, commerce, services, rules and laws, culture and intellectual exchange. Proximity and congregation are essential factors when it comes to the economic efficiency of urban society. However, the attractiveness of urban environments has caused cities to expand without control in many areas, causing congestion, environmental and social problems. Freedom of mobility versus sustainability, environment and urban settlement will have to be examined from new perspectives.

Can lessons be learned from history?
How can human demands for urban living space harmonize with freedom of mobility, prosperity and sustainable development?
Do we need a new set of behavioural patterns?
Which value systems will be necessary?

topics

- **The drive for mobility.**
- **Cities and their infrastructure. An historical perspective.**
- **Planning for transport and traffic in heterogeneous large cities in low-income countries.**
- **Gender-related effects on travel, energy consumption and the environment.**
- **Coping with complexity: the politics, environmental concerns and aesthetics of large infrastructure projects.**

speakers

Professor Susan Hanson, Clark University, MA, USA
Professor Arne Kaijser, The Royal Institute of Technology, Stockholm, Sweden
Dr Geetam Tiwari, Indian Institute of Technology, New Delhi, India
Professor Anna-Lisa Lindén, Lund University, Sweden
Professor Thomas P. Hughes, University of Pennsylvania, PA, USA

buffet lunch at venue

wednesday
march
29pm

session 2

Function and efficiency of transport

Session moderator: Dr Helen Petrauskas,
Vice President, Environmental and Safety Engineering, Ford Motor Co, Dearborn, USA

Congested urban areas lose in terms of efficiency and quality of life values. As global awareness of resource limitations and population prosperity develops, quality of life factors change. This may have many implications for urban organization and the functional demands imposed on future urban transport and traffic systems.

What will information technology offer in terms of enhanced efficiency to fulfil the needs of transport and mobility?

Which means and systems of transport will offer the flexibility and capacity that is necessary for the effective use of population expertise and to support the attraction factors of urban environment?

topics

- **Setting the scene.**
- **Congestion, function and efficiency.**
- **Equity and efficiency considerations in the economics of large city transportation systems.**
- **The Göteborg public transportation system.**
- **City planning for the future.**

speakers

Professor Phil Goodwin, University College London, United Kingdom

Professor Elliot D. Sclar, University of Columbia, NY, USA

Mr Roger Vahnberg, President, Västtrafik Göteborgsområdet AB, Sweden

Professor William J. Mitchell, Massachusetts Institute of Technology, MA, USA

conference evening dinner with round-table discussions



thursday
march
30am

session 3

Energy consumption and environmental aspects

Session moderator: Mr Claes Sjöberg
President, *Tomorrow Magazine*

For reasons of sustainability, world energy consumption per capita will have to decrease and become more evenly distributed globally. Moreover, it must cause less environmental disruption. This calls for vehicles that are safe, quiet and environmentally clean and for an energy-efficient urban organization with energy-efficient and flexible transport and traffic systems. The basic infrastructural transport systems of today are generally adequate in places but in many large cities they are virtually non-existent. However, they often entail large-scale, heavy and long-term investments and lack the flexibility to meet the future need for changes.

How can a limited transportation energy budget be optimized in different transport systems to fulfil mobility needs? How can information technology enhance the matching of transport demands and the need for effective transport system interaction?

Will possible forthcoming energy consumption restrictions make local production necessary?

Will the frequent establishment of new cities optimized for sustainable urban life help?

Which opportunities to fulfil transport and mobility needs will be created?

Will new energy technologies offer better solutions for the future?

topics

- **Global warming warnings call for CO2 emission restrictions.**
- **Political reactions to local demands for meeting global threats.**
- **Noise and the waste of energy and waste of land in urban areas.**
- **Environment and engineering for the future of automobiles.**
- **Energy resources, feasible availability and developments, plus limitations.**
- **Improving fuel cells and new energy systems.**

speakers

Professor Bert Bolin, Stockholm University, Sweden

Professor Tor Kihlman, Chalmers University of Technology, Sweden

Dr Helen Petrauskas, Vice President, Environmental and Safety Engineering, Ford Motor Co, MI, USA

Dr James MacKenzie, Senior Associate, World Resources Institute, WA, USA

Dr J. Fraser Mustard, The Founders' Network, Toronto, Canada

buffet lunch at venue

session 4

Safety aspects - prevention of traffic accidents and the care of injured persons in large urban areas

Session moderator: Professor Phil Goodwin
University College London, UK

For many years, traffic accidents have been a major threat to welfare in urban areas and many different solutions have been developed. One approach has been to make cars heavier, larger with more passive restraint systems which protect the occupants, and to construct barriers to prevent vehicles from coming into contact with pedestrians. However these methods do not necessarily benefit unprotected road users and pedestrians, so other approaches rely on reduced traffic levels, with smaller, lighter and controlled vehicles, operating at lower speeds, in urban areas where pedestrians have priority.

Which measures will be beneficial to unprotected road users and pedestrians?
How can effective accidents countermeasures and the needs relating to mobility for the disabled be co-optimized?
Which speeds can be allowed? Under which conditions?
What about "pedestrians on wheels"?
How can early warning and guidance systems help?
How can efficient emergency aids and proper victim care be secured?

topics

- **Review of urban crashes in USA and potential countermeasures.**
- **Accident epidemiology, automotive safety and developments in products and traffic.**
- **Accident epidemiology and traffic safety in less wealthy cities.**
- **Transport and traffic injuries and cost-benefit methodology for optimizing efforts.**
- **Shock and trauma emergency services and systems for saving lives.**
- **Costs to society as a result of traffic accident injuries.**

speakers

Professor Murray Mackay, University of Birmingham, United Kingdom
Professor Dinesh Mohan, Indian Institute of Technology, New Delhi, India
Professor Jeff R. Crandall, University of Virginia, VA, USA
Professor Andrew Burgess, University of Maryland, MD, USA
Dr Ian Johnston, Managing Director, ARRB Transport Research, Australia
Dr Brian O'Neill, President, Insurance Institute for Highway Safety (IIHS)

evening conference dinner with round-table discussions

session 5

Critical issues for the future - needs and actions

Session moderator: Barry Sheerman, MP, United Kingdom
Chairman of the Parliamentary Advisory Council on Transport Safety

Transport and traffic systems which are environmentally sustainable and give individuals the freedom to move affordably and safely are essential. Combinations of planning measures, restrictions, benefits, technological development, information and education are means of influencing transport and traffic systems. Fresh opportunities arise and new knowledge will help to make innovative solutions possible. Robust strategies and action plans are needed.

This session will focus on the definition of problems and the identification of knowledge essential to successful cross-border collaboration for the development of new transport systems.

topics

- Critical systems and political issues.
- Ethics in development.
- Critical function and efficiency issues.
- Critical energy and environmental issues.
- Vital safety issues.
- Critical issues of systems and players.
- Cross-topic debate - overcoming barriers.

buffet lunch at venue

real-time demonstrations and excursions within conference session topics

speakers

Professor Phil Goodwin, University College London, UK

Dr J. Fraser Mustard, The Founders' Network, Toronto, Canada

Dr Ian Johnston, Managing Director, ARRB Transport Research, Australia

Professor Thomas P. Hughes, University of Pennsylvania, PA, USA

Professor Arne Kaijser, The Royal Institute of Technology, Sweden

evening conference dinner with opportunity for action planning

Volvo Research and Education

The Volvo Research Foundation and the Volvo Educational Foundation are sponsors of research and expertise development within key areas which affect the prosperity of the whole of mankind.

In less than one generation, three-quarters of the world's population will be living in cities and urban areas. This will create challenges within transport and mobility which have to be met.

Key questions relating to transport and mobility go far beyond vehicle design. To create an attractive and sustainable urban living space, transport and traffic systems have to be co-optimized with other urban service and supply systems in order to fulfil transportation and mobility needs. If the prosperity of humanity is to be sustained, it is essential to identify the need for transport and mobility and to create appropriate solutions to fulfil them.

Democracy requires the mobility needs of individuals to be successfully fulfilled – as well as the needs of those who cannot afford extended mobility using private means and the growing number of disabled people. Transport and mobility needs have to be fulfilled with a minimum of environmental impact.

The Volvo Foundation's above-mentioned aim is to support the development of knowledge and expertise within the fields that are needed to improve transport and mobility and enhance sustainable cities and urban life. This conference on future urban transport will benchmark the development level aims of the Volvo Foundations.

Conference Committee

Lars Anell

Senior Vice President, AB Volvo

Bengt Kasemo

Professor, Chalmers University of Technology

Alf Nachemson

Professor, Sahlgrenska University Hospital and Göteborg University

Emin Tengström

Professor, Aalborg University

Arne Wittlöv, Chairman of the Committee, Dr hc

Chairman of the Volvo Research and Educational Foundations,
Executive Vice President, AB Volvo

Conference participation

The conference is open to everyone who is affected by the emerging transport and traffic problems and their consequences; to people who are striving to deal with them and to people who are analysing the problems in order to create efficient and sustainable solutions.

The organizing committee requests active contributions from participating politicians, planners, engineers and scientists!

The total number of participants is limited to 200 and the Conference Committee reserves the right, should it prove necessary, to give priority to participants who create a good balance within many different areas (sessions 1-4), categories (politicians, city planners, scientist and so on) and geographical regions.

Conference location

The conference will be held at the Quality Hotel 11 on the northern side of the Göta Älv river in central Göteborg, the recycled former Eriksberg ship-yard area.

Conference information

For more information please contact the conference co-ordinator...

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...our conference secretariat...

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...or visit our Website

www.future-urban-transport.com

This Website will be regularly updated to keep pace with programme development.

Conference registration

Registration forms should be completed and posted to:

Kikki Hugestrand
Volvo Event Management
Dept 1630, PVH 44
SE-405 08 Göteborg Sweden

or faxed to: +46 31 53 84 31

or e-mailed to: vhk.huge@memo.volvo.se

The number of participants is limited to 200.

Registrations will be confirmed in the order in which they are received.

Registrations will be accepted until 21 January 2000.

Conference fee

The conference participation fee is SEK 6,000 (USD 700). The participation fee will be invoiced upon registration to the name/organization/address given below. Registration is binding. A refund of only 50% will be made for cancellations before 15 February.

Hotel arrangements

Special hotel arrangements will be offered when registration is confirmed.
(Price range SEK 880 - SEK 1,400/pp/day + VAT)

Family name _____

First name _____

Title/profession _____

Organization/company _____

Mailing address _____

Postal code _____

Country _____

Tel country code - area code - number _____

Fax country code - area code - number _____

e-mail _____



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