

# **FUTURE URBAN TRANSPORT – POLICY STATEMENT**

## **VISION**

The Volvo Research and Educational Foundations (VREF) focus their activities on Future Urban Transport (FUT). The vision of the FUT programme is to inspire and support new, equitable solutions for urban transport, which improve accessibility and safety as well as efficiency and environmental sustainability.

## **BACKGROUND**

Today, half of the world's population lives in urban areas and the proportion is constantly increasing. This development generates growing demands on the transportation of people and goods. It also causes intense traffic congestion and a rising frequency of accidents. Furthermore, increasing use of urban transportation worldwide creates environmental problems, at both local and global levels, and intensifies the strain on energy resources.

Employment, services and leisure are widely and unevenly spread in the urban space. The distribution of mobility among the urban population as a whole and its subsequent costs to time, the environment and other amenities, require policies and trade-offs between different interests, which in turn put great onus on governance and leadership. The challenge to promote and sustain an ever-evolving transportation system in large urban areas is a matter of the utmost complexity, which requires innovative research and initiatives.

The FUT programme, which commenced in 2000, is in harmony with the ideas that were broached at the Johannesburg summit of 2002. The final statement of this meeting recommended promoting

*"... an integrated approach to policy-making at the national, regional and local levels for transport services and systems to promote sustainable development, including policies and planning for land use, infrastructure, public transport systems and goods delivery networks, with a view to providing safe, affordable and efficient transportation, increasing energy efficiency, reducing pollution, reducing congestion, reducing adverse health effects and limiting urban sprawl, taking into account national priorities and circumstances."*

## **MISSION**

The main theme of the FUT programme is "how to cope with the complexity of urban transport development". The main mission of the new initiative by VREF is to initiate and financially support:

*New scientific approaches for the understanding of how successful development may be created and implemented in larger urban areas.*

*Constructive processes of change through the combination of new knowledge with co-ordinated actions.*

## PROGRAMME CONTENT

The FUT programme rests on three cornerstones:

- *A number of globally distributed Centres of Excellence (CoE), with the objective of establishing an international network of multidisciplinary and interdisciplinary collaboration through the funding of research projects of the highest international standard.*
- *A somewhat larger number of Smaller Projects (SP), with the objective of supporting research complementing the CoEs, through the funding of smaller international research projects relevant to the main theme of the entire programme, emphasising the role of young scientists in the development of new competence in this field.*
- *Recurring international FUT conferences, to create a meeting place (and thereby increased interaction) for politicians, urban planners, industrialists, and researchers (especially the grant holders of the FUT programme).*

### ***Centres of Excellence:***

The idea behind the interdisciplinary CoEs is to improve the conditions for those researchers who want to co-operate in order to develop new and better knowledge about how to cope with the increasing complexity of the transport systems in larger urban areas.

The financial support given to a CoE will typically stretch over 5 years and amount to a maximum of 25 million SEK (in total). They are expected to organise and carry out interdisciplinary research of the highest quality, stimulate a combination of knowledge and action in real urban contexts, be involved in and develop educational programmes in their area of expertise, attract additional national and international funding. and ultimately, become self-sustaining research centres after the VREF funding period ends.

### ***Smaller Projects:***

The SPs offer an opportunity for researchers to apply for projects related to key aspects of future urban transport. The grants will cover the cost of (typically) one individual researcher (usually a graduate or post-doctoral student) for two years (extension by an additional two-year period is possible). The size of the grants range between SEK 250,000 and 750,000 per year.

### ***Future Urban Transport Conferences:***

The international FUT conferences, organised by the Scientific Council of the VREF, offer the main actors in the transformation process a new opportunity to take part in an interactive process of diverse views all aimed at better understanding the complex problems of FUT and keeping abreast of what is being put into practice in various urban areas in different parts of the world. These conferences will also be meetingplaces for those researchers who receive support from VREF.

Additional information about VREF, the ongoing research projects, the conferences and how to apply for research funding can be found at: [www.volvoresearchfoundations.com](http://www.volvoresearchfoundations.com)

## DEFINITION OF SOME KEY CONCEPTS

In order to further describe the scope and ideas of the FUT programme to researchers interested in applying for financial support, as well as to potential participants in the FUT conferences, certain expressions and concepts used in this text are defined and explained below.

The expression 'the complexity of urban transport development' refers to the various problems of urban transport. These problems include traffic congestion (reducing the efficiency of transport), safety (transport causing injury or death), pollution (the negative impact of transport on the local, regional and global environment), misuse of energy (inefficient use of current limited resources), and misuse of land (city planning not considering all citizens' needs). The term 'complexity' also refers to the challenge for decision-makers to implement solutions, which are reasonably balanced over time and urban space, considering different individual and societal interests. These solutions should address the questions of efficiency, safety, equity and sustainability of urban transport.

In the process of change, examples of 'the main actors' are the representatives and leaders of political bodies and planning authorities, construction, infrastructure, automotive and energy industries, land and property owners, public transportation companies and authorities, trade unions, non-governmental organisations, research institutes and academies, and the media, as well as the public at large, both in its capacity as consumers and as citizens with active interests in the outcome of the policy process. All actors are essential to the successful implementation of solutions and policies.

By the expression 'constructive processes of change' are meant procedures where the key issues of complexity are focussed, discussed and handled by the main actors. Some actors are viewed as *key actors* able not only to initiate the process of change but also to manage it in order to create a local strategic capacity for change. The question of leadership in the transformative process is therefore seen as crucial.

The expression 'diverse views' refers to the important question of how the main actors perceive the complexity of urban transport problems and the complexity of the transformative process. These 'diverse views' can be regarded as 'socially constructed' (e.g., through the selection, interpretation, omission and distortion of data). Scientific views of the same problems are also 'socially constructed', but in a way that can be validated by means of professional critical discourse.

By 'urban transport' is meant land transport of people and goods both private and public within urban areas. 'Larger urban areas' are defined here as cities with more than one million inhabitants (or expected to exceed that number within a few years). The cities in question should not be seen as isolated areas but also as important nodes in regional and global transport networks. Therefore the expression 'urban areas' also includes the transport networks connecting them and their surroundings.

The expression 'transport systems' refers to socio-technological systems for the transportation of people and goods. These systems consist of the vehicles, energy, infrastructure, organisations and people embedded in an urban, social, cultural and geographical context. To elaborate empirical knowledge and theories about how such systems change over time and how they are affected by different factors (e.g. city planning) is regarded as an important issue for future research.

The distinction between 'multidisciplinary' and 'interdisciplinary' refers to different degrees of integration between several disciplines represented in the CoEs, where 'inter-' represents a higher degree. Co-operation between research teams requires a certain ability to analyse and manage intellectual conflicts and "subculture" differences encountered during collaboration between representatives of different disciplines.