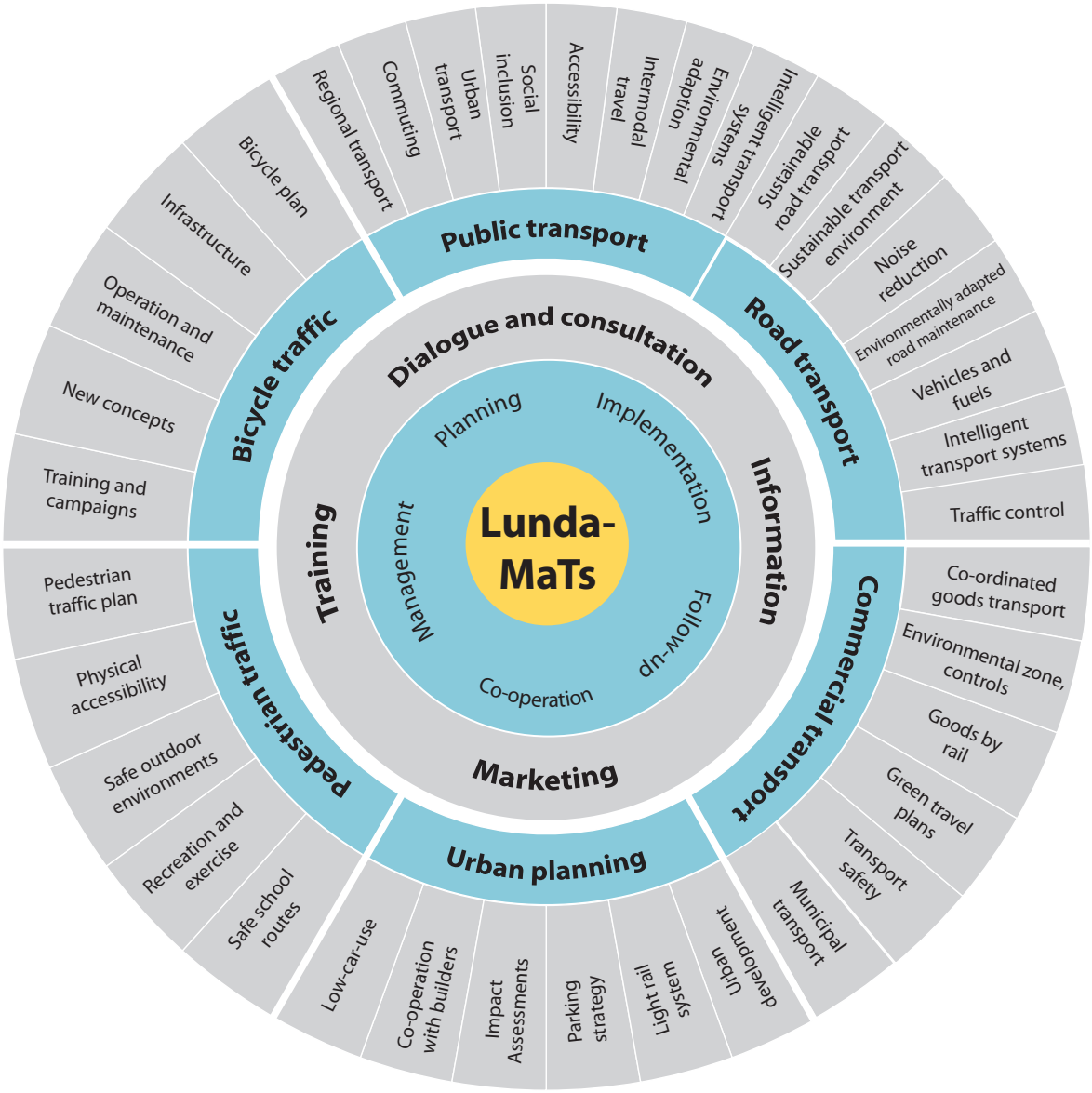
LundaMaTs
A Sustainable Transport System for Lund

Short version

LundaMaTs II

Strategy for a sustainable transport system for Lund 2030



LUND

Trivector TRAFFIC AB

The city and its transport system will be jointly developed to create a sustainable, attractive place that people will want to visit and live in.

Background

In 1996, the Lund Municipal Executive Board decided to draw up an environmentally adapted transport plan. It was created in parallel with the Municipal Agenda 21 work and a new Master plan. The transport plan – abbreviated to LundaMaTs – rapidly gained significance, not least through the government subsidy (LIP) obtained by the Municipality because of the plan. Among the more important activities were the public transport route Lundalänken (LundLink), a large number of bicycle promotion measures, and the activities of the Mobility Office.

Today, LundaMaTs is a well-known trademark for Swedish urban planners, and the work has gained international recognition, though of course its greatest significance has been in Lund. The LundaMaTs plan facilitated a long-term initiative, and evaluations have shown that it has produced results.

Now we have reached the next stage: LundaMaTs II, an update of LundaMaTs.

In LundaMaTs II, the vision has been widened from an environmentally adapted transport system to sustainable development of the transport system covering all three sustainability aspects – environmental, economical, and social. LundaMaTs II accentuates the possibilities of increased regional co-operation. As before, LundaMaTs is characterised by a broad approach.

LundaMaTs II has been created by Lund Municipality and Trivector, in collaboration with many other actors who contributed through work in theme groups and a reference group, and who participated in seminars and several different discussions. The planning process has continuously been discussed with a political steering group with members from the Planning and Building Committee and the Technical Services Committe. The Swedish Association of Local Authorities and Regions has contributed with support for testing and developing the forms of communication during the progress of investigation. The local authorities of Skåne and the Skåne Region have also made contributions to develop project proposals regarding commuting and regional development in Skåne.

The structure of LundaMaTs

With LundaMaTs, Lund Municipality is taking a broad approach to make the transport systems sustainable in the long term. The figure on the front page shows the various levels and components of LundaMaTs and how they interact.

- In the centre is LundaMaTs, the desired result, i.e. the vision and the targets.
- The circle around it contains the conditions that must exist: management, planning, implementation, follow-up and co-operation, which as a whole form the LundaMaTs management system.
- The next circle describes how information and involvement should be distributed, not least with the help of mobility management and various networks.
- Further out still is the circle containing the six reform areas, i.e. areas within which concrete measures are organised: urban planning, pedestrian traffic, bicycle traffic, public transport, road transport and commercial transport.
- The final circle contains all the project proposals that form the actual action plan. Each project proposal may cover several sub-projects and measures. Many of the proposals were also in the original LundaMaTs, but they have all been revised or updated.

Pedestrians – a new reform area in LundaMaTs II.

Vision

Our vision indicates the direction and the desired conditions for 2030. The transport system will develop towards improved sustainability. An important principle is gradual but constant improvement.

Vision for a sustainable transport system for Lund by 2030

Lund is an attractive municipality with sound development – environmentally, economically, and socially. Transport is an essential part of this development and contributes to the quality of human life – but also causes negative effects if it is allowed to grow out of control. For this reason, Lund's transport system is continuously developed in a more sustainable direction.

The multi-centred nature of the region is preserved, and has been developed, each town from its own unique characteristics. The network of streets and open areas that makes up the city and its surrounding towns forms an important part of the cultural inheritance and provides comfort, security, and accessibility.

The community has developed so that accessibility has been improved. Thus, the need for transport and the extent of motor vehicle transport per citizen have been reduced, while walking, cycling and travel by public transport have all increased.

The negative effects of transport on the environment and health – such as climate change, air pollution, and noise – have been reduced significantly.

The number of people killed and injured in road traffic accidents has also decreased considerably. In the long-term, no-one is killed or seriously injured as a consequence of transport accidents. The design and function of the transport system are adapted to the requirements to achieve this.

The city and towns are planned so that everyone, irrespective of age or sex, can feel safe. The environment is thus inviting – the public uses streets, highways, marketplaces and parks. Everyone can take advantage of what is offered by the city, towns and countryside.Trade and industry's accessibility needs are met in a sustainable way.

Walking, cycling, public transport and other environmentally-friendly transport modes have been and are prioritised, which makes it possible to reach a sustainable transport system.

Targets

The vision is complemented with eighteen targets that define its contents and make it possible to measure development. There are also various indicators which continuously measure if the development proceeds in the desired direction.

Target	Target 2013	Target 2030
The proportion of municipal residents who live within residential 'öp-circles' will increase ('öp-circles' = areas within which building and development will initially take place on the basis of the current Master plan).	Increase	Increase
District programmes with development requirements, action proposals and goals will be produced for all urban areas and town districts.	All	–
The transport environment will be designed so that average speed of city buses will increase from 18 km/h to 22 km/h by 2013 and 23 km/h by 2030.	22 km/h	23 km/h
The length of walkways and cycleways will increase 10% by 2013 and 30% by 2030.	+ 10%	+ 30%
The proportion of safe crossings for pedestrians and cyclists will be 30% by 2013 and 100% by 2030.	+ 30%	+ 100%
Walking trips per resident will increase.	Increase	Increase
Cycling trips per resident will increase 5% by 2013 and 10% by 2030.	+ 5%	+ 10%
Travel by public transport per resident will increase continuously.	Increase	Increase
Motor vehicle transport per resident on national and municipal road networks will decrease.	Decrease	Decrease
Motor vehicle transport per resident on the municipal road network will decrease 2% by 2013 and 5% by 2030.	- 2%	- 5%
The bicycle/car travel-time ratio for new developments will be less than 1.5 for travel to city and district centres (covers housing and workplaces).	75% of future building	75% of future building
The public transport/car travel-time ratio for new developments will be less than 2.0 for travel to city and district centres (covers housing and workplaces).	75% of future building	75% of future building
Accessibility for the disabled, children and elderly will increase.	Increase	Increase
The proportion of people who perceive the transport environment as unsafe will decrease.	Decrease	Decrease
The number of people killed or seriously injured in the traffic environment will decrease 25% by 2013 and 50% by 2030 (covers both municipal and national road networks).	- 25%	- 50%
Emissions of CO_2 from transport per resident in the municipality will decrease 10% by 2013 and 40% by 2030.	- 10%	- 40%
By 2013, all properties located along the municipal road network and exposed to noise levels above 61 dBA will have been offered a grant towards noise reduction measures. By 2030 all properties exposed to noise levels above 54 dBA will have been offered grants.	100% with equiv noise level above 61 dBA	100% with equiv noise level above 54 dBA
The proportion of residents in Lund Municipality who state they are influenced by LundaMaTs will increase.	Increase	Increase

Reform areas and project proposals

LundaMaTs II includes six 'intrinsic' reform areas and two additional ones – management system and mobility management. The latter have the task of facilitating and increasing the efficiency of work in other parts of LundaMaTs.

In the various reform areas there are different project proposals, forty-two in all.

Descriptions of all reform areas and examples of associated projects are given below.

Urban planning

The urban planning reform deals with long-term planning and development of transport and land use. It includes measures which in the long term should reduce transport demands and increase accessibility. It is important that urban development takes an overall view of the needs of the city and its districts.

It also includes projects that create the conditions for positive development within the other reform areas, such as actions for a new light rail infrastructure for public transport, and placement of new housing and businesses in areas with a reduced need for car transport.

Project proposals:

- Planning based on the principles of the manual 'Urban Planning for Reduced Car Use'.
- Collaboration with builders to bring about more sustainable transport.
- Carry out impact assessments as a compulsory element in planning.
- Produce parking and charging strategies.
- Implement a long-term effort aimed at high-quality public transport solutions.
- Integrate urban development with transport planning.

Pedestrian traffic

The significance of pedestrian traffic in the transport system is especially high in a city such as Lund. The relatively dense urban structure makes it possible to meet various transport demands by simply walking. Pedestrian traffic, therefore, has become a reform area in its own right.

The project proposals here cover transport safety, security, health, and physical accessibility. Attractive pedestrian environment also contribute to reinforcing the competitiveness of local businesses.

Project proposals:

- Draw up a pedestrian traffic plan.
- Improve accessibility for the disabled.
- Increase the number of safe outdoor environments.
- Improve the possibilities of recreation and exercise.
- Make walking safer for children.

Bicycle traffic

Today, Lund is already one of Sweden's foremost cycling cities. The municipality has worked purposely to improve cycleways and attract more people to cycling.

The proposed projects involve the areas covered in the original LundaMaTs, but they can be developed still further.

Project proposals:

- Update the bicycle plan.
- Improve infrastructure for bicycle traffic.
- Increase quality of operation and maintenance of the bicycle transport system, including various forms of service for cyclists.
- Develop new ways to increase cycling, e.g. by working with other actors – both private and public.
- Carry out training and campaigns for safer bicycle traffic.

Public transport

High-quality public transport is a vital foundation for a sustainable transport system. Well designed public transport is necessary to attract more passengers and reduce car transport. Measures to increase status and an attractive image are essential, but increased co-ordination and co-operation with other means of transport are also needed.

Project proposals:

- Develop infrastructure for sustainable regional public transport.
- Develop public transport for commuting.
- Develop urban transport.
- Use public transport to create a more equitable distribution of transport opportunities.
- Make public transport accessible to all.
- Develop possibilities of combining various modes.
- Make the operation of public transport more environmentally-friendly.
- Use transport informatics and other new technology to make public transport more efficient and attractive.

Road transport

Currently, the car is an essential element in the way our society works, and it gives us immense freedom of choice in where we live, work, and spend our leisure time. At the same time, however, road transport and car use cause major environmental problems in the form of air pollution, climate change, land use, noise and so on. Road transport also has implications for traffic safety and congestion.

The project proposals cover measures to reduce the adverse effects of road transport by changing the inter-

action with other road-users and the environment. Road transport systems in the city and towns need to become more integrated and less dominant in the urban picture. It is especially important to reduce the use of fossil fuels.

Project proposals:

- Develop sustainable and integrated road transport systems.
- Adapt roads and transport to suit the environment.
- Increase noise reduction efforts.
- Develop environmentally adapted/sustainable road maintenance.
- Stimulate use of environmentally-friendly vehicles and fuels.
- Use transport informatics and other new technology to make motorised transport more sustainable.
- Move the use of the transport system in a more sustainable direction.

Commercial transport

A significant part of the total transport is linked to the activities of various companies and organisations, e.g. goods transport and the employees' commuting and work-related trips.

Measures and projects in this area should in various ways stimulate and create conditions for making commercial transport more sustainable.

Project proposals:

- Co-ordinate the transport of goods.
- Carry on with development of environmental zones and other controls.
- Transport more goods by rail.
- Stimulate green travel plans for companies.
- Place stronger focus on transport safety.
- Make transport and travel connected with organisations and businesses more sustainable.

Mobility management

Mobility management involves measures aimed at changing behaviour in order to increase the efficiency of the usage of transport and infrastructure. Lund Municipality's mobility management measures have been very successful thanks to the work of the Mobility Office. Mobility management can facilitate a more efficient implementation of project proposals and therefore achieve better results. Work with mobility management also involves co-ordinating project proposals and transferring experience to others.

Important tasks for the future include being a source of inspiration and acting as internal consultants in mobility management, building networks, influencing the trips that Lund's citizens make outside Lund, and working towards more sustainable goods transports and business travel.

Management system

The proposal for a management system for LundaMaTs shows how work involving the plan can be organised, implemented, and followed up in a co-ordinated manner. The aim is to ensure that project activities and measures move things in the intended direction. The target is efficient use of various resources and actions for continuous improvement.

In addition to the actual management system, this also includes a number of project proposals which in various ways will facilitate and create the conditions for LundaMaTs: a regional network for a sustainable transport system, regional MaTs collaboration (SkåneMaTs), lobbying and influencing, and improved service to citizens (customer service).

Costs, responsibility and implementation

The total costs of running and implementing the project proposals is estimated at SEK 75–80 million, while investment costs are estimated at SEK 1–3 billion. To this must be added increased operational costs of SEK 5–10 million per year as a result of investment or new services.

The work of LundaMaTs is jointly led by the Technical Services Administration and Department of City Planning, in collaboration with other sections of the municipal organisation. Before the respective project proposals are implemented, further detailed planning is required and, in due course, decisions made by the responsible committee.

Lund C – one of many important development areas.

Does LundaMaTs II mean we will reach our targets?

If the project proposals and reforms are implemented, the transport system in Lund Municipality will move in a sustainable direction. The difficulty is to assess whether this development is sufficiently rapid and extensive for us to reach the conditions and levels indicated in our vision and targets.

We can assert that the majority of the project proposals will have positive effects on some of the LundaMaTs targets. At the same time, other parts of the transport system may develop in the wrong direction or be out of balance with its sustainability aspects. To follow-up and try to affect development in the desired direction is thus an important task. In addition to their other aims, the proposals in LundaMaTs are intended to provide the tools for this.

According to the calculations carried out, the project proposals in LundaMaTs II will not quite be sufficient to reach the CO_2 targets that have been set. This requires the involvement of other actors as well. Sustainable decisions are needed at all levels, from individuals and households to regional, national, and international levels.

The CO_2 targets can be reached if the use of alternative fuels and the number of environmentally-friendly vehicles increases more rapidly. More intensive guidance of new development and businesses towards areas with a reduced need for car transport may bring us closer to the target, but may also bring us into conflict with other targets, such as those for noise and air quality.

Also, a sustainable transport system in Lund involves not only decreased climate change. Sustainability also means improved access, security, and traffic safety, better health, more efficient land use, and a developed character in the city, towns, municipality and region.

One of the targets of LundaMaTs II is a sharp reduction in carbon dioxide emissions from vehicles by 2030.

Reform areas	Traffic volumes 2013 (vkm • 10^6)	CO_2 2013 (tonnes)	Traffic volumes 2030 (vkm • 10^6)	CO_2 2030 (tonnes)
Business as usual	*630*	*180,000*	*670*	*194,000*
Urban planning	-8.2	-1,440	-28.7	-4,480
Pedestrian traffic	-0.1	-20	-0.3	-50
Bicycle traffic	-1.5	-340	-3.2	-650
Public transport	-4.1	-2,780	-8.0	-3,340
Road transport	-2.1	-7,100	-5.2	-36,500
Commercial transport	-2.8	-1,000	-3.0	-1,380
Total effect	***-18.8***	***-12,680***	***-48.4***	***-46,400***

Decreased traffic volumes and decreased CO_2 emissions in each reform area for 2013 and 2030. The data refer to estimated effects in Lund Municipality. Traffic volumes and emissions for 2004 are estimated at about 500 million vehicle-kilometres (vkm) and about 155,000 tonnes of CO_2.

LundaMaTs – a well-known trademark

Lund's plan for an environmentally-friendly transport system – LundaMaTs – is now a well-known trademark for Swedish urban planners, and the work has gained international recognition, though of course its greatest significance has been in Lund. The LundaMaTs plan facilitates a long-term initiative, and evaluations have shown that it has produced results.

Now we have reached the next stage: LundaMaTs II, an update of LundaMaTs, and the result of a process in which many people have contributed through work in theme groups, reference groups, seminars, etc.

In LundaMaTs II a vision followed by eighteen targets have been set.

On this basis, an action plan with forty-two concrete project proposals has been created, as well as proposals for implementation in the context of a management system for LundaMaTs.

In LundaMaTs II, the vision has been widened from an environmentally adapted transport system to sustainable development of the transport system covering all three sustainability aspects – environmental, economical, and social.

LundaMaTs II accentuates the possibilities of increased regional co-operation.

As before, LundaMaTs is characterised by a broad approach.

LundaMaTs has been extended and now covers all three aspects of sustainability: environmental, economical, and social.

For further information

This brochure is a summary of the main report LundaMaTs – Strategy for a Sustainable Transport System for Lund 2030. If you want more information, you can download the report (only in Swedish) from the Lund Municipality website, www.lund.se/lundamats. You are also welcome to contact the Technical Services Administration or the Department of City Planning.

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