

# 07 MAKING THE DREAM REAL: CLIMATE FRIENDLY URBAN MOBILITY

## HOW IT IS DONE

Transport infrastructure is an integrated part of designing cities to maximise resilience towards climate change. Consider these points in planning for urban mobility in your resilient city:

- Efficiency, sustainability, and liveability are heavily dependent on basic design principles. Cities should organise communities tightly around mixed-use centres of density to the extent that everyday activities within urban communities are mostly walkable or reachable by bicycle.
- Work towards providing a mix of modal choices at multiple price points, and prioritise the most community-friendly options (walking, bicycling) by implementing carefully managed pricing schemes.
- Combine transport planning skills with technology to make cities' transport systems even greener, safer and more efficient. Today's technology also supports green mobility. Intelligent transport systems (ITS) provide innovative services that give better information for travellers on the traffic conditions and different mobility options and improve traffic safety significantly.
- Ensure a continued and strong focus on the multidisciplinary approach to planning, with equal presence of both social and technical disciplines.

### The city transport conundrum

Many cities are caught in a conundrum wherein development is leading to ever-increasing urban populations while transport infrastructure is quickly reaching or exceeding its design life and, at the same time, budgets are tighter than ever. To be successful, cities can shift policies to focus on liveability priorities that have been proven time and again to support strong economic development.

Urban mobility strategies - or lack thereof - are critically linked to environmental and economic sustainability in cities. Making the wrong choices in terms of urban transport infrastructure can lead to unnecessarily high capital expenditures as well as decade-long commitments to extremely costly maintenance programs. Moreover, poor transport strategies have unanticipated, indirect "knock-on" effects, such as increased obesity and physical isolation of communities from one another.

### Minimising spatial distances

Cities should consider growth strategies that organise smaller communities within the greater urban area around mixed-use centres of density to the extent that everyday activities within each community (groceries, day care, school, pharmacy, shopping, workplaces, etc.) are mostly walkable or reachable by bicycle. This means that before transport infrastructure is even considered, land use and urban planning must define a progressive strategy that minimises spatial distances and travel times for the majority of residents' needs. When densities are optimised and land use mixes are prioritised in this way, public transport infrastructure becomes cost-effective, intuitive to implement, as well as more viable and attractive to residents for longer distance trips.

Cities should also aim to provide a mix of modal choices at multiple price points, prioritising the use of the most community-friendly options by implementing carefully managed pricing schemes. Far too often, legacy policies from the 20th century have led to hidden subsidies for the most inefficient urban transport infrastructure. Providing the flexibility of a balanced multi-modal transport system does not single out any particular mode as inappropriate; rather, it allows residents to choose the most convenient travel option that best suits each individual trip, while still encouraging the use of transport options that result in the highest overall benefit to sustainability and, critically, the lowest cost to taxpayers.

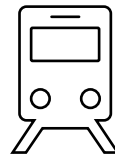
### Empowering all citizens

Together with improved governance, digitalisation and new ITS solutions make mobility increasingly safer and more convenient for users of all transport modes. With today's technology we can inform travellers immediately when disturbances occur and offer new options for their trip. ITS together with mobility management schemes also create totally new transport modes – in Nordic cities, bike and car share schemes and Mobility as a Service (MAAS) concepts are now taking over traditional transport modes.

Cities can greatly improve liveability, reduce or eliminate the significant loss of time and money associated with delays caused by traffic congestion, whilst simultaneously saving money and resources on much lower cost urban transport infrastructure. Moreover, multi-modal transport systems overlaying densely organised cities more fairly empower all residents, resulting in more attractive conditions, stronger social cohesiveness, and increased economic competitiveness.

### The five-minute city principle designed for sustainable mobility:

- Ensure that public transportation is provided
- Allow for direct and high-class bike routes
- Plan for indirect car routes
- Locate all services within five minutes of walking distance



## THE IDEA BROUGHT TO LIFE

### Thoughtful city development in Helsinki, Finland

In Jätkäsaari, a dense, mixed-use redevelopment of a former shipping harbour for 17,000 residents and 6,000 workplaces has been successfully integrated with nearby communities within Helsinki. Critical transport infrastructure included walking streets, excellent bicycle facilities connecting deep into the city centre, as well as direct connections to bus, tram, and metro systems.

Connected to this, the concept for the first Mobility as a Service (MAAS) operator in Finland has been developed. The aim of MAAS operators is to provide new and innovative possibilities to travel in greater Helsinki region. The users will pay a monthly fee to get an exclusive access to public transport, car sharing and taxi rides among other possibilities. The MAAS initiative aims to reduce the number of private cars in the Helsinki region.

### Five-minute City, Copenhagen, Denmark

In Nordhavn, a holistic planning solution for 40,000 residents included the so-called “five-minute principle”, successfully integrating a prioritised walking and bicycling scheme with the new metro line extension to service the community. This is one example of how liveability can be used as a focal point in an urban plan that strives to “create the good life”.

### Plussby 2050, Oslo, Norway

A large part of the inner city fringe in Oslo Norway, now a mix of warehousing, recycling industry and housing, is to be transformed into a dense, urban and progressive part of the city in the coming years.

PLUSSBY2050, the winning strategy, advocates for a strategic and comprehensive approach to secure continuity and interaction between different levels of infrastructure, absent in the existing urban fabric. The concept creates convergence and interconnections between different functions in various aspects of daily life.