IN CONVERSATION WITH
JAN VAPAAVUORI

Helsinki Proves a Smooth, Safe and Low-Emission Transport System is Possible

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Image: Sanna-Mari Jäntti

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Helsinki is widely recognised for its systemic, holistic approach to transport and mobility over decades—and has achieved impressive results. What was your approach as Mayor that contributed to this?

One of my guiding principles was that "you cannot Google a vision". A leader's most important responsibility is to understand where the world is heading and to look at issues broadly.

Mobility is a perfect example. The impact of electrification and zero-emission mobility is relatively easy to understand, even though difficult questions remain, such as how to build sufficiently comprehensive charging infrastructure in an urban environment.

The rise of the sharing economy is equally foreseeable. Cars have remarkably low utilisation rates, estimated at around 5%, on average. This economic irrationality, combined with concern about climate change and sustainability, may lead to fewer people owning cars—however, this does not necessarily mean less driving, only less need for parking.

Services combining different modes of transport will also become increasingly common. As digitalisation makes it possible to reach consumers easily and in real time through different applications, this is only the beginning of what is to come. The future of autonomous vehicles is more uncertain, particularly in terms of timing.



A robot bus combining innovative design and flexible service.
Image: Jussi Hellsten / © Forum Virium

Understanding the requirements of this new world of mobility is extremely challenging. Yet political leaders, urban planners and transport planners designing future cities must understand how these developments—electrification, the sharing economy, new mobility services and autonomous vehicles—transform the world simultaneously.

And the list does not end there. City bikes and electric scooters, e-commerce logistics, changing leisure activities, and evolving mobility needs and preferences are already reshaping cities. At Slush 2019, a technology and start-up event in Helsinki, I discussed flying cars with Tencent—and it was not the only time I encountered the idea that part of urban mobility might move into the air.

You have emphasised that cities have a central role in this transformation. What does that mean in practice?

Autonomous vehicles are a good example. They were already a major topic I discussed with leading technology experts during my term as Mayor.

The message then was that the technology was already relatively mature, while regulatory, cultural and other factors were slowing its introduction.

What stayed with me most, however, was something I was told at Google: ultimately, cities determine where, how and under what conditions autonomous vehicles become part of the transport system.

Once the technological and regulatory challenges are solved, many of the key questions will be logistical: Where can autonomous vehicles pick up passengers? Where can they drop them off? Where do the vehicles go when nobody is inside them?

Only cities can answer these and many similar practical questions. Using technological innovation to transform everyday life at scale requires a systemic approach. And in urban environments—where most of humanity lives—cities bear that responsibility.

Building a sustainable transport system requires long-term commitment. Urban infrastructure changes slowly, and in small increments within a single electoral term. How has Helsinki developed its transport system so consistently over several decades?

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Every generation of political decision-makers—particularly in multiparty democracies—wants to do things differently from its predecessors. That is part of democracy and often a good thing. But with major systemic issues, it can also be a serious challenge.

On issues critical to a nation's survival, such as defence, consensus can survive from one electoral term to the next. Finland is a good example. Transport is not quite as existential, so its direction must be anchored elsewhere.

Geography has been a fundamental driver of Helsinki's transport policy. The city centre sits on a peninsula—with inherently difficult access—so limiting private car traffic became a practical necessity long ago to keep the city moving.

The best way to achieve this was to build a high-quality public transport system. This fitted naturally with the Nordic welfare-state philosophy, which values equal opportunities for people to move around and participate. It leverages strong public support for action on climate change, which favours public transport, walking and cycling.

Helsinki's consistent approach rests on a combination of practical necessity, Nordic welfare values and climate considerations—which enjoy broad public support.

During your term as Mayor, one key theme was concern about increasing physical inactivity. Why did tackling it require a fundamentally new approach—and what did that mean for the city's role?

Physical inactivity is a complex modern problem that no single intervention can solve. In Helsinki, we tackled it through a broad and unique approach.

It required widening our perspective—expertise, attitudes, insight, commitment and new ways of working—and mobilising creativity across different professions, academic disciplines and stakeholder groups.

The city's role also expanded far beyond building sports facilities and supporting sports clubs, to become a developer of the urban environment, a source and shaper of awareness, an adviser and motivator, a supporter of civic organisations, an educator and a promoter of health literacy.

In international discussions, I often emphasised that our surroundings should encourage physical activity in ways people do not consciously notice.

Increasing physical activity should not be left solely to individual choice as our environment influences behaviour more than we realise. If walking and cycling are faster and more pleasant, people become more active. The ideal outcome is people moving more without consciously deciding to exercise.

As Mayor, you also sought to connect the processes of different city departments to a broader strategic vision. Why was this important?

Transport planning has a very long time horizon. Numerous projects are underway simultaneously, all at different stages. As Mayor, I did not consider it realistic—nor desirable—to immerse myself in all of them. Instead, I approached the issue from another direction.



One of the busiest corners in the city centre is the crossing of Mannerheimintie and Kaivokatu streets.
Image: Jussi Hellsten / © City of Helsinki

The key was to connect transport policy to the city's broader vision and strategy. Leadership, even in very large organisations, revolves around fairly basic things. The success of cities rests on pragmatic problem-solving rather than political manoeuvring. Modern political leadership should be about precisely this: less politics in politics.

I concluded that Helsinki needed a different strategy: one with a clear objective or mission, expressed in language people could understand, and capable of inspiring employees and residents. I wanted a genuinely strategic plan.

My starting point was that the strategy should fit in a single sentence—and our ambition should be nothing less than the best in the world. My first thought was the world's most sustainable city, but Copenhagen had claimed that space, and many cities emphasised climate and sustainability. My second thought was the world's leading smart city, but Singapore had claimed that position, and most of the world's leading cities aspire to be both sustainable and smart.

Eventually, I decided our strategy should be built around becoming "the most functional city in the world". I knew it was not a media-friendly slogan, but that did not bother me. What mattered was that it was relevant.



Helsinki 365. Aleksanterinkatu is the main shopping street in Helsinki.
Image: Jussi Hellsten / Helsinki Partners



The new Kruunuvuorensilta bridge, connecting Korkeasaari and Kruunuvuorenranta, is the longest and tallest bridge in Finland. It is also globally exceptional as bridges of this size have not been built for the sole use of public transport, pedestrian traffic and cycling. The bridge is interesting not only due to its size, but also the advanced traffic thinking behind its design.
Image: Nicole / Passenger X / Helsinki Partners

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There was a broader logic too: a city cannot be functional unless it is smart and sustainable. It must also be safe, resilient, and many other things. In that sense, the vision was broader and more ambitious than the alternatives.

The concept also drew on perhaps the greatest strength of the Nordic model: its holistic approach. A functional city has many strengths and few weaknesses. Everything matters: different issues are connected through cause and effect. Problems cannot be addressed in narrow silos. The strategy was therefore to strengthen the city's ability to manage itself as a whole.

Of course, functionality is difficult to define and measure, but that did not trouble us too much. For me, functionality was an attitude and a way of thinking.

I was pleased that we never imposed an official definition. Every city employee could interpret it in their own way. At my farewell reception, I said that I believed the strategy had empowered more city employees than perhaps any other single objective—and that every interpretation of its deeper meaning was valid if it moved the city in the right direction.

Naturally, the functional city also became an overarching principle for transport. In a functional city, people move smoothly using different modes of transport. Public transport timetables are reliable. Even by car, you can reasonably predict how long a journey will take. Once these principles are understood, many practical conclusions follow.

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One lesson I learned as Mayor was that good policies usually have several good arguments behind them—and sometimes one works better than another.

There are important climate reasons for promoting public transport, walking and cycling. But there are equally strong health arguments. A population that walks and cycles a lot is healthier, both physically and mentally. A city that sensibly limits private car traffic is also safer and more pleasant—but none of this works unless public transport is smooth, reliable and efficient.

Although Helsinki remains one of the cities most committed to combating climate change, it would not have been wise to justify transport policy too heavily in terms of climate alone. When climate arguments are combined with health, safety, quality of life and functionality, people understand the rationale more easily—and resistance diminishes.

On the safety of Helsinki's transport system: from as many as 30 traffic deaths in the late 1980s, to a full year without a single traffic fatality by July 2025. What explains this remarkable turnaround?

Helsinki's road-safety record cannot be explained by any single measure. It is the result of decades of mutually-reinforcing policies.

Lower driving speeds are probably the single most important factor, reducing the likelihood and severity of collisions. The physical street environment has also been redesigned to reduce speeds, using raised pedestrian crossings and intersections, traffic islands, narrower street sections, roundabouts and other solutions that encourage—or force—drivers to slow down. Visibility and intersection design have also been improved, with particular attention to pedestrian and cyclist safety.

Helsinki's strong emphasis on public transport means that people drive relatively less compared with other cities. Enforcement has also increased. So, this is not the result of a campaign or exceptionally skilled Helsinki drivers, but of a transport system designed for fewer human mistakes to have fatal consequences.

> **But we cannot be certain that is where development will lead—and even if we could, we cannot sit back and wait. What is essential is to avoid making decisions today that may prove unnecessary or counterproductive in the future.**

This has not always been easy. Lowering speed limits generates opposition. Helsinki has proceeded gradually, avoiding abrupt changes. Many changes have been justified by something difficult to argue with: hard data. When statistics show certain locations are demonstrably more dangerous, the case for change is strong.

Ultimately, Helsinki's experience demonstrates something fundamental: a transport system can be smooth, safe and low-emission at the same time. These objectives need not compete; designed well, they reinforce each other.



Cyclists travel along Helsinki's waterfront, where dedicated cycling infrastructure connects neighbourhoods and recreational destinations.
Image: Sakari Röyskö / Helsinki Partners

Looking back, are there aspects of Helsinki's mobility journey you would approach differently today, or lessons that became clearer only with hindsight?

The greatest challenge in developing a transport system is having to live in the present while looking into the future. We may eventually end up with a system dominated by autonomous electric vehicles. If so, many concerns related to both climate change and road safety will largely disappear, and cars will require considerably less urban space.

But we cannot be certain that is where development will lead—and even if we could, we cannot sit back and wait. What is essential is to avoid making decisions today that may prove unnecessary or counterproductive in the future.

During my own time as Mayor, Helsinki invested heavily in light rail. I still sometimes wonder whether these will prove too heavy and inflexible for a fundamentally different mobility environment in the longer term.