DEMOS HELSINKI

The Zone of Open Optimism

A Scenario of the Tallinn-Helsinki Metropolitan Area in the

2030s

CONTENT

- **INTRODUCTION:** A Metropolis at the Heart of the New World
- **DRIVING FORCES:** 6 Forces Shaping Our Future
- **SCENARIO:** The Tallinn-Helsinki Metropolitan Area: a Major Eurasian Metropolis and a Key Link between Asia and the EU
- **CONCLUSION:** A Bold Way Forward: Bridging the Old and New Worlds
- 30 References

Authors (in alphabetical order)

DEMOS HELSINKI

Otto-Wille Koste Louna Laurila Kaisa Schmidt-Thomé Henrik Suikkanen

FINEST BAY AREA DEVELOPMENT

Atso Andersen Kustaa Valtonen Peter Vesterbacka

LAYOUT Petteri Tuukkanen / Berry Creative FUTURES STUDIES CONCEPTS Image of the future = A description or conception of a particular point in the future Scenario = A credible and wellgrounded account of how to reach or end up at a particular point

PRODUCED IN COOPERATION WITH:



A Metropolis at the Heart of the New World

Finland has a geographically superior location at the intersection of the East and the West, which is why our country has often been given the role of a bridge-builder. The demand for bridge-builders will increase as the industrial era institutions are challenged and the global economic center shifts towards Asia. In 2030, China will be the world's largest economy after the United States and the EU, with fast-growing India and Indonesia following closely behind.

Furthermore, Nordic societies have strengths that can gain us a lot when emphasised: an open and egalitarian society, clean nature, high-quality education, technological know-how and security.

With this scenario, we wish to highlight the potential of the Baltic Sea region in a world marked by a shifting economic and world political centre, global sustainability crisis and rapid technological development. The end result is a description of what life in the Tallinn-Helsinki Metropolitan Area will be like once the area has successfully realised its massive potential, and the path to get there.

The scenario work is linked to Demos Helsinki's (2018) Scenarios of the future of urbanisation in Finland report, which outlined the drivers and developments behind urbanisation in Finland until 2039. Already in 2009, Demos Helsinki produced a book titled Talsinki / Hellinna, which outlined the idea of a Helsinki-Tallinn twin city. The new scenario draws on the background variables familiar from previous works, but we have taken on a more international, Eurasian perspective.

The scenario has been created in cooperation with FinEst Bay Area Development Oy, which is designing the railway tunnel under the Gulf of Finland. We do not take a position on the Tallinn tunnel's builders, building plans or financial base in the scenario. Instead, the scenario describes the significance of the region at the macro level in the midst of global forces of change.

We can see that the importance of rail transport is increasing as climate change and globalisation progress. It is important to connect Finland and the Helsinki Metropolitan Area to the Eurasian railway network so that we can take our place as an important intersection of the East and the West.

A sustainable and prosperous future requires courageous actions. There is no reason why Finland cannot fulfil its potential as a hub between Asia and Europe, as an education superpower and a developer of clean and ethical technology based on transparency, openness and democratic principles.

6 Forces Shaping Our Future

Although the world around us is changing, we can still influence our future. Each nation, municipality and organisation will have to define its position in relation to the six forces of change outlined below.











The World is Entering the Asian Century

The world's economic centre of gravity is rapidly shifting towards Asia. China is estimated to overtake the United States as the world's largest economy by 2030, followed by India and Indonesia which also rank in the top 5 world economies. With its current growth trajectory, the region's per capita income may increase sixfold by 2050.

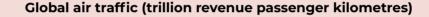
Today, the European Union and China are the world's biggest players in terms of trade. China is the EU's second largest trading partner after the United States. As Asian economies grow, the importance of economic relations between the EU and Asian countries can be expected to increase.

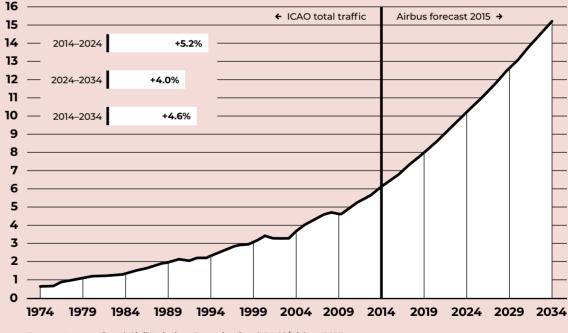


Growing Traffic Requires a Sustainability Transformation

Aviation between Asia and Europe is growing rapidly, but climate change makes it necessary to cut transport emissions. This can mean more expensive flights, new taxes or a shift towards renewable jet fuels. Road transport is also expected to become electrified and new fuel taxes are likely to be introduced.

The importance of rail transport will grow, particularly in intracontinental traffic. The development of rail transport in Finland is supported by arguments relating to both regional policy and the climate. Estonia's most important rail project is Rail Baltica, which is meant to connect Tallinn to Poland's Warsaw and the rest of Europe through the Baltic states from 2026. China is also investing heavily in rail links connecting the Eurasian continent.





Source: International Civil Aviation Organization (ICAO)/Airbus 2015

The Importance of Cities and Metropolitan Areas Is Growing

The world is urbanising at a fast pace. Urbanisation can create challenges, but it also increases prosperity due to the accumulation of economic activity in metropolitan areas. For example, urban studies show that if the population of a city doubles, productivity per capita grows by 3–8 percent.

Many of the challenges faced by humanity, such as climate change and migration, do not adhere to national borders. Managing them requires both strong international cooperation and local action in cities.



DRIVING FORCE

The Welfare Society Needs Newcomers

The population of all Western countries is ageing. The situation in Finland will deteriorate rapidly. In 2035, the number of employed people in at least 129 municipalities will be the same as or even less than the number of dependent people. It is estimated that Finland would need over 1.4 million immigrants by 2050 in order to ensure pensions for the millennial and younger generations.

In order for Finland to be able to care for its ageing citizens humanely and with dignity, we need to attract more employees and students to pay taxes and start companies.

100 80 60 40 40 20 20 20 2020 2030 2040 2050 2060 2070 % of population 15-64 years old % of population over 65 years old

Population projections

Source: Statfin, Population projections, referred 28.3.2019

Climate Change Will Drive People Away from Their Home Regions

Climate change will make living conditions worse in several parts of the world, creating pressure for many people to move towards the north. The need for new, clean inventions and investments will only keep growing. Consumption will have to be cut and modes of transport rethought.

Finns will have to think about how we can ensure sustainable transport and freight connections to mainland Europe and Asia in a situation where flying has to be reduced. And how will our society manage in a situation where the population may even multiply due to climate displacement?

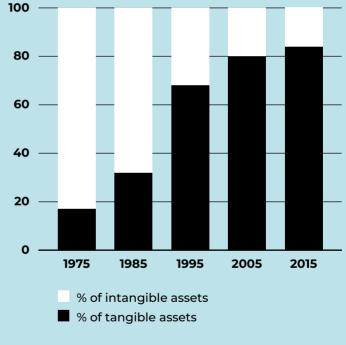


DRIVING FORCE

New Forms of Work and Value Creation

Automation is progressing and will reduce the cost of manufacturing goods. Raw materials will circulate more and more efficiently in a circular economy. Large factories will become smaller, more decentralised and located near consumers. Production cycles will get faster.

Although some of the factories will move back to Europe, industrial jobs will not return. Highly automated factories require few workers. The new jobs will be related to immaterial value and services: brands, networks, digital products, care and customer service.



Components of S&P 500 market value

Source: Ocean Tomo, LLC, 2015

The Tallinn-Helsinki Metropolitan Area:

a Major Eurasian Metropolis and a Key Link between Asia and the EU

Finland Acts as a Bridge-Builder between the East and the West

The Uusimaa Region and Tallinn are one big metropolitan area. The Nordic democratic and equal social model is known throughout the world. International investors are lining up to do business with reliable partners in the middle of Europe and Asia.

Welcome to the Tallinn-Helsinki metropolis in 2034! Our children and grandchildren are now adults, studying and working. What are their lives like?

After the unfortunate phenomena of the 2010s – conspicuous consumption and nationalist populism – inhabitants of the Baltic Sea region have taken great leaps forward.

Uusimaa and Tallinn form a metropolitan area where goods, people, ideas and capital move smoothly, safely and emission free beneath national borders. The metropolitan area welcomes international investments and newcomers. It has a great reputation of openness in comparison to the few countries where nationalist forces still exist. **The Tallinn-Helsinki Metropolitan Area =** We are describing a metropolitan area in the scenario, which is formed by connecting the infrastructure of the wider metropolitan areas of Tallinn and Helsinki.

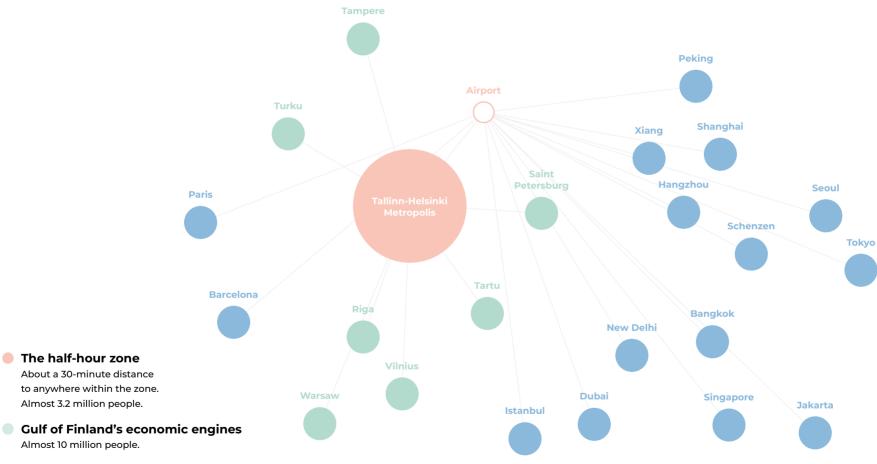
We are also talking about an **extended commuting area** arising from the highspeed train connections between Turku, Tampere, Oulu and Saint Petersburg. A social model of the digital age based on openness, human rights and democracy has arisen from the Nordic countries and other progressive European nations, and is admired around the world. Many open-minded, highly educated people want to move to the North where quality of life, education, working and living conditions are vastly superior to other countries.

Abroad, the Nordic countries are seen as stable societies for individuals, companies and institutions where it is good to live, study, do business and invest. We are trusted in both the East and the West.

A railway tunnel under the Gulf of Finland connects Finland to mainland Europe while the former Helsinki Airport – now called Eurasia Airport – connects Finland to Asia. For Asian companies and investors, the metropolitan area is a gateway to the West. High-speed train connections to Tampere, Turku, Oulu and Saint Petersburg make the expanded Tallinn-Helsinki region the largest pool of diverse skills and social capital in Northern Europe. Population of the Tallinn-Helsinki Metropolitan Area in 2034: 32 2 million

Population of the extended commuting area in 2034:

16



The Tallinn-Helsinki Metropolitan Area is the best gateway from Asia to the EU

Eurasia's economic giants

As much as half of the world's population in the region.

The Tallinn-Helsinki Metropolitan Area Will Grow as a Result of Immigration

The metropolitan area's population will grow strongly. An international mindset is as normal to the metropolitan area's residents as the 20-minute train journey from Tallinn to Helsinki or Vantaa. Language barriers are not a problem, since voice-controlled translation applications keep the conversation flowing.

Life in the Tallinn-Helsinki Metropolitan Area is in many ways the same as today, but much has also changed. First of all, there are far more people than at present.

Already in the late 2010s it was understood in Finland that the birth rate is much too low and the population is ageing too quickly. The welfare state was creaking.

As a result of the demographic sustainability crisis, the Finnish government began to implement a bold, even aggressive immigration policy. This meant that Finnish equality and quality of life were heavily marketed in many of the populous countries of Asia and Africa. One-year-long permits for seeking work began to be issued to all those interested who had their basic education and papers in order. Higher education institutions launched new international programmes for nurses and technology experts that have achieved great success. The Baltic Sea region's growing technology industry striving towards an open digital society and combating climate change constantly needs more newcomers. In 2034, English is an official language of Finland alongside Finnish and Swedish. Due to the changes in mindset, residence procedures and international marketing activities, the Tallinn-Helsinki Metropolitan Area attracts over 30 000 new inhabitants from abroad each year. This eventually puts the region on track to long-term financial sustainability in terms of pensions and public finance, for example.

The metropolitan area's residents still think of themselves as Finns, Estonians, Helsinkians or even Nigerians, but internationalism is as normal to them as the train journey from Vantaa to agility training in Tallinn. People do not need to worry about language barriers in their hobby groups, because translation applications have developed tremendously and make conversation easier.

Residents of the metropolitan area perceive commuting from other side of the bay to another merely as commuting to another neighbourhood of one big urban area, both mentally and temporally. You can get from Helsinki to Tampere or Turku in less than an hour. Saint Petersburg is as close as Tampere currently and as easy to go to, since visas and border formalities have been abandoned. Good rail connections make it easier for people to find jobs and gain employment since they do not have to relocate for the job – or even travel, really. The Tallinn-Helsinki Metropolitan Area attracts over 30 000 new inhabitants from abroad each year, putting Finland back on track to long-term financial sustainability.

The World Economy is More Integrated Than Ever

The Tallinn-Helsinki Metropolitan Area has plenty of foreign visitors from China and India. Finland and Estonia see themselves as part of an even more unified European Union. The Baltic Sea region is a great testing ground for new ideas and innovations, and the region is constantly attracting more capital investment.

The world economy is more networked than ever. Foreign visitors from the world's economic engines, such as China, India and Indonesia, as well as from large companies and exciting startups are seen daily in the Tallinn-Helsinki Metropolitan Area. Finland is a solid part of the European Union and the region's significance as a link between Asia and Europe is important for the whole continent.

Finns are open to the free movement of people, goods, services, ideas and capital, which connects different continents and creates prosperity. Large infrastructure projects typically have a diverse range of funding composed of private and public as well as domestic and international capital.

Finland and the entire Baltic Sea region are interesting market areas for Asian companies and the best place in the EU to start a

company. The region is politically and economically stable and the employees' skills are top class. Finland is particularly known for its skilled coders capable of creative thinking. The Tallinn-Helsinki Metropolitan Area is well equipped for testing new business models and clean technologies, for example.

Improved transport links and telecommuting possibilities reduce labour force mismatching. People no longer have to relocate for work and the traditional concept of a workplace has become blurred. The employer's office can be in Saint Petersburg, for example, while their home is in Pispala, Tampere. Because value in information work comes from encounters between people, coworking and co-creation spaces are concentrated in transport hubs and near residential blocks.



Transport Emissions Are Reduced Even Though the World is Becoming More Networked

Habitation in the Tallinn-Helsinki Metropolitan Area is concentrated near railways that serve as the foundation for both local and European transport. Eurasia Airport in Vantaa is the best route from Asia to Europe. The world's most sustainable long-distance transport is operated from there.

Habitation in the metropolitan area is concentrated along railways. The importance of rail transport in both short and long-distance transport is growing. High-speed trams connect residential areas to transport hubs, such as Pasila station and Espoo's Keilaniemi. In 2034, 37 and 38-minute train journeys from Helsinki to Turku and Tampere are also considered short-distance transport. New connections make Turku and Tampere part of the same pool of social capital as the Tallinn-Helsinki Metropolitan Area. In addition to the Baltic region and Eastern Europe, Saint Petersburg, Oulu and the cities of Eastern Finland can also be reached within a few hours by rail.

Commuting does not take up much time, as work is often done from home or in shared local workspaces. The Tallinn-Helsinki Metropolitan Area is divided into blocks of about 50 000 inhabitants with all necessary services nearby. Children can still go to school independently and play safely on the streets, where there are also less cars than in the 2010s.

Food and clothes are ordered online and delivered directly to people's homes or the local shop. They are often made to order only so that no loss is caused. Automated couriers shuttle between store warehouses and residential areas.

The heart of the metropolitan area is Eurasia Airport in Vantaa, where Europe's busiest Asian traffic is operated from. Short European holiday flights are rarely flown, however.

After the world woke up to the fact that global warming has to be stopped at 1.5 degrees Celsius, air traffic has been heavily regulated. Initially, fossile jet fuels were taxed, particularly on short flights. Eventually, short, less than two-hour flights were ended almost entirely. The most convenient and cheapest way to go on holiday from Helsinki to Berlin is by night train.

Longer flights, on the other hand, increase as the connections between Europe and Asian nations that are now great powers become tighter. For Asian companies and investors, Finland is a gateway to Europe and the growing Baltic Sea market. Long flights are flown with renewable fuel and supported by electric turbines.

The excellent location and well-designed connections of Eurasia Airport allow Helsinki businesswoman Zhang Min to negotiate at the parent office in Shanghai in the morning and be back with her son Leo in Pasila in the evening. A fast rail connection takes her from the airport to her front door in 20 minutes. For Asian companies and investors, Finland is a gateway to Europe and the growing Baltic Sea market.

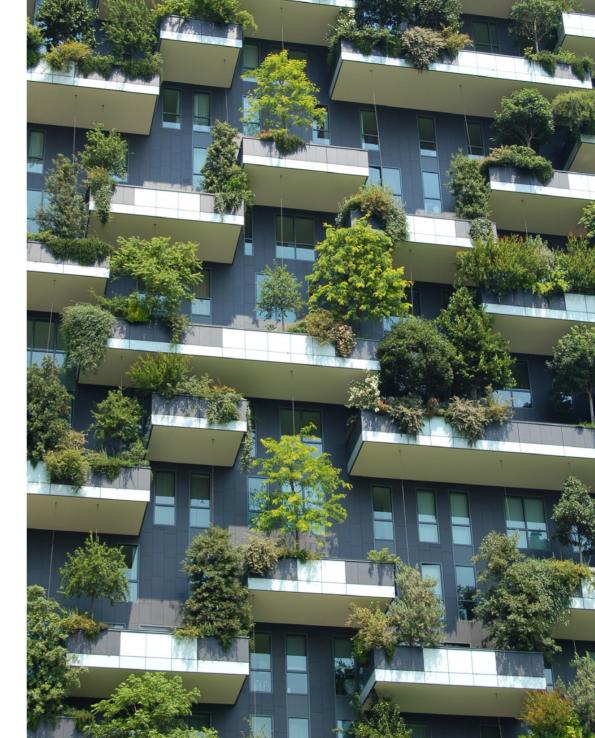
Finland is a Superpower of Education and Combating Climate Change

Finland is known for having the best education in the world and as a pioneer of combating climate change. The country is boldly trialing new technologies that change people's daily lives and society as a whole. A significant proportion of exports is related to clean and ethical technology, as well as education, which is strongly linked to them.

Climate change is present in people's daily lives, particularly in countries near the equator. Extreme weather phenomena also increase in Finland. Countries in the Baltic Sea region have prepared for the growing number of climate refugees. The reception and permit processes of asylum seekers have been finetuned as much as possible.

Political pressure on decision makers grows and voters demand action instead of speeches from their representatives. All the political parties in Finland are committed to fighting climate change. Finland is known in the European Union as a leading country in the fight against climate change, both politically and technologically. The government and metropolitan area municipalities support energy-efficient solutions through both education and licensing policies, and by providing an excellent framework for testing new energy solutions.

At the turn of the 2020s, great concern arose over technological inequality and the monopoly position of a few large global tech giants. The unfair competitive situation of digital platforms was dismantled step by step, paving the way for local champions. In 2034, a significant portion of Finland's exports are related to clean and ethical technology as well as lifelong learning. Products and services designed in the Baltic Sea region utilise data responsibly and their benefits are widely distributed in society. In addition to being a transport and freight route, the Tallinn tunnel is a gigantic energy store where energy generated by wind power is stored with the help of sea water. The new residential areas built near train stations along the Tallinn railway line serve as test laboratories for a sustainable urban lifestyle. Their buildings and green areas bind more carbon dioxide during their life cycle than they emit, meaning the total carbon footprint is negative. The wooden house construction showcased in the area is desired around the world.



2020

Nationalistic populism has reached its height. Nationalist forces begin to dwindle as the new decade arrives. An increasing number of people understand the power of global changes and the threat posed by climate change, whose solutions demand international cooperation.

2024

Climate change affects people's lives much more than was estimated in the 2010s. For example, the number of climate refugees is growing and supranational climate laws are tightened. This accelerates the pressure on the construction and opening of the Tallinn tunnel. Finland's international education system focuses on building expertise to solve global challenges.

2022

A Finnish airliner is the first airline in the world to have emission-free air traffic as its mission. Finland is again number one in the world in PISA results. The construction of the Tallinn tunnel is already in full swing.

2026

The EU has agreed on a common foreign policy and concludes trade agreements with China and India. The agreements ensure an open and fair trading and investment environment between the regions, as well as high standards for things such as data processing, environmental burden and working conditions.

2028

The cities in the Tallinn-Helsinki Metropolitan Area agree on a programme to integrate logistics and everyday services as efficiently as possible. The cities make a plan for how the area's people can live, move, receive care and use services with the same principles and rights throughout the area.

2032

The population of Finland and Estonia is growing strongly. Processes related to work permits and immigration have finally been refined to support nearseamless mobility, working and living in both countries.



China overtakes the United States as the world's largest economy. Like the EU, both superpowers have committed to following common rules in, for example, combating climate change and promoting open world trade. Finland consistently has 150 000 students from abroad.

2034

Tallinn-Helsinki is a major Eurasian metropolis and a key link between Asia and the EU. Finland is a superpower of education and combating climate change. The region attracts experts and investments from around the world.

A Bold Way Forward: Bridging the Old and New Worlds

Northern European societies are facing choices. Do we turn inwards, shrink and yearn for the past? Or do we look forward, get out of silos and take on the role of opinion leader?

The world is changing, whether we want it to or not. We cannot influence all of the changes taking place. Instead, we can choose whether we are involved in creating a sustainable, equal and open society, or whether we only react to the changes under necessity while the rules are created elsewhere.

As we have described in this scenario, with a common direction and ambition the Tallinn-Helsinki region can grow into a major Eurasian metropolis, which acts as a gateway between the East and the West. If we instead turn inwards and close our eyes to new opportunities, the region's future may be very different. We consider the nightmare scenario to be a Finland sidelined from world economic routes, whose welfare state is shrinking and immigration policy becomes hostile. In a dystopian future we would be just a peripheral island within the fading and inwardlooking Europe that becomes irrelevant in global politics.

None of the developments described in this scenario will come true without bold optimism and above all, open cooperation across public, private, municipal and state boundaries. For example, the competition between regions in Finland and even between municipalities in the Helsinki Metropolitan Area can feel frustrating when one views it from a global perspective and understands the change trends shaping the world.

We hope this scenario will help us see that no European company, city or nation is strong enough on its own to achieve a globally significant position. To become great, we have to break down silos and design the future through shared, long-term goals – for the entire Helsinki Metropolitan Area, Finland, the Baltic Sea and Europe. A major Eurasian metropolis and a key link between Asia and the EU. References

DEMOS HELSINKI REPORTS:

Koste, O-W., Neuvonen, A., Schmidt-Thomé, K. (2018): Kaupungistumisen käännekohdat. Skenaarioita Suomen kaupungistumisen tulevaisuudesta 2039. Demos Helsinki (in Finnish).

https://www.demoshelsinki.fi/wp-content/uploads/2018/11/demoshelsinki_kaupungistumisen-kaannekohdat_web_5mb.pdf

Mokka, R., Kröger, A., Ritola, M. & al. (2009): Talsinki-Hellinna. Demos Helsinki (in Finnish). https://www.demoshelsinki.fi/julkaisut/talsinki-hellinna/

PLANS CONCERNING THE TALLINN TUNNEL:

Finest Bay Area Development Oy website: https://finestbayarea.online Cited 22.2.2019.

Website of the FinEstLink project of the Cities of Helsinki and Tallinn, Estonia and Finland's Ministries of Transport, and the Uusimaa Region and Harju County: http://www.finestlink.fi/ Cited 22.2.2019.

OTHER REFERENCES:

European Commission: Policies and Information Services. Countries and Regions. China. http://ec.europa.eu/trade/policy/ countries-and-regions/countries/china/ Cited 27.2.2019.

European Commission: Innovation and Networks Executive Agency. CEF Transport projects by core network corridors. https://ec.europa.eu/inea/connecting-europe-facility/cef-transport/ projects-by-transport-corridor Cited 20.3.2019.

Henry, J.: "The World in 2030". HSBC 28.9.2018. https://www.hsbc. com/news-and-insight/2018/the-world-in-2030 Cited 27.2.2019.

IMF: IMF Datamapper. Real GDP Growth. https://www.imf.org/ external/datamapper/NGDP_RPCH@WEO/OEMDC/ADVEC/ WEOWORLD Cited 27.2.2019.

Kaija Ruotsalainen: Väestö vanhenee – heikkeneekö huoltosuhde? Tilastokeskus (in Finnish). https://www.stat.fi/tup/vl2010/ art_2013-02-21_001.html Cited 22.2.2019. Kunzig, R.: "To build the cities of the future, we must get out of our cars". National Geographic April Issue. https://www. nationalgeographic.com/magazine/2019/04/to-build-cities-of-thefuture-stop-driving-cars/ Cited 24.3.2019

Luukka, T.: "Uusi laskelma: Näin paljon maahanmuuttajien määrän pitäisi kasvaa, ettei eläkemaksuja tarvitsisi korottaa roimasti – 'Aiheuttaisi todennäköisesti poliittista epävarmuutta'". Helsingin Sanomat 22.3.2019 (in Finnish). https://www.hs.fi/politiikka/ art-2000006043490.html cited 25.3.2019.

OECD: OECD Data. GDP long-term forecast. https://data.oecd.org/gdp/gdp-long-term-forecast.htm Cited 27.2.2019.

Raeste: "Ennuste vuodelle 2040: Suomessa on vain kolme kaupunkiseutua, jotka kasvavat – muu maa näivettyy." Helsingin Sanomat 22.2.2019 (in Finnish). https://www.hs.fi/talous/ art-2000006010150.html Cited 22.2.2019.

Rosenthal, S.S. and W.C. Strange, 2004, Evidence on the Nature and Sources of Agglomeration Economies, in: Henderson, V. and J.F. Thisse (Eds.) Handbook of Regional and Urban Economics, Vol. 4, Elsevier, pp. 2243-2291.

"Two giant engineering projects will alter the European landscape". The Economist 22.3.2018. https://www.economist.com/ europe/2018/03/22/two-giant-engineering-projects-will-alter-theeuropean-landscape Cited 20.3.2019.

