Nordic Council of Ministers

STATE OF THE NORDIC REGION 2018

THEME 5: REGIONAL POTENTIAL INDEX

State of the Nordic Region 2018
Theme 5: Regional Potential Index
Julien Grunfelder, Linus Rispling and Gustaf Norlén (eds.)

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COUNTRY CODES FOR FIGURES

AX	Åland
DK	Denmark
FI	Finland
FO	Faroe Islands
GL	Greenland
IS	Iceland
NO	Norway
SE	Sweden

EU	The European Union
EU28	The 28 European Union member states

OTHERS

b	billion
BSR	Baltic Sea Region
EFTA	European Free Trade Agreement
EII	Eco-Innovation Index
Eco-IS	Eco-Innovation Scoreboard
ESPON	European Observation Network for Territorial Development and Cohesion
FDI	Foreign Direct Investments
FTE	Full-time equivalent
GDHI	Gross disposable household income
GDP	Gross Domestic Product
GRP	Gross Regional Product
GWh	Gigawatt hour
ICT	Information and communication technology
ISCED	International Standard Classification of Education
ISO	International Organization for Standardization
ITQ	Individual Transferable Quotas
Ktoe	Kilotonnes of oil equivalent
LAU	Local Administrative Unit
LFS	Labour Force Survey
m	million
NACE	Statistical classification of economic activities in the European Community
NCD	Non-Communicable Diseases
NGA	Next Generation Access
NSI	National Statistical Insitute
NUTS	Nomenclature of Territorial Units for Statistic
OECD	Organisation for Economic Co-operation and Development
PPP	Purchasing Power Parity
R&D	Research & Development
RIS	Regional Innovation Scoreboard
SCB	Statistics Sweden
SDG	Sustainable Development Goals
SPI	Social Progress Index
TWh	Terawatt hour
UN	United Nations
USD	United States dollar
WWF	World Wildlife Fund

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Preface

A LOOK BEHIND THE SCENES OF THE NORDIC MODEL

The Nordic Region as such comprises the 12th largest economy in the world, with a population that is growing faster than the EU average, a labour market that receives global praise and a welfare system that has proved resilient both in times of boom and bust.

But the countries of Denmark, Finland, Iceland, Norway and Sweden along with Greenland, the Faroe Islands and Åland also make out a macro-region of very different internal regions, both geographically and administratively.

It is an area spanning from the endless acres of farmland in Denmark and the vast forests in Sweden, over the thousand lakes of Finland and the mythical fjords of Norway to the Arctic splendour of Iceland and Greenland. Indeed, even the island communities of the Faroe Islands and Åland have their own characteristics, both when it comes to nature and culture, economy and population.

The Nordics often are at the top of the list when the UN or other international bodies rank nations on various parameters. And despite some bumps on the road, we are also rated as some of the most suited to fulfill the aim of the 2030 Agenda to reach the UN Sustainable Development Goals.

In fact, a recent publication from the Nordic Council of Ministers point to the almost unlikely success of the Nordic region in a global perspective. But what is the picture behind the national figures and how do the various regions within the Nordic countries interact, both internally and across borders?

That question is addressed by this publication, the State of the Nordic Region 2018 that gives a unique look behind the scenes of the world's most integrated region.

The Nordic Council of Ministers has contributed with Nordic statistics for more than 50 years through e.g. the Nordic Statistical Yearbook, and Nordregio – our research institution for regional development and planning – has published regional statistics since its establishment in 1997.

Now we are gearing up even more with a newly established Analytical and Statistical Unit at the Nordic Council of Ministers. In the same spirit, two other Nordic actors – the Nordic Welfare Centre and Nordic Agency for Cultural Policy Analysis – have contributed along with Nordregio to the current edition of the State of the Nordic Region, which is now published as a joint venture for the entire Nordic Council of Ministers' network.

By mapping and documenting information about the state of the Nordic region(s), Nordregio provides a very important knowledge base that empowers local, regional and national authorities in the Nordic countries to make informed decisions. Solid documentation of development trends is a necessary starting point for developing good policy.

At the same time, the State of the Nordic Region 2018 is also a treasure trove of information for the Nordic population at large, as well as a must read for international actors who want to learn about the Nordics and maybe even get inspired by the Nordic model, however differently it may be played out in the various regions and areas.

I hope the many interesting facts, figures and stories embodied in this impressive work will find a large audience and reach high and wide, just as the Nordic countries themselves seem to be doing.

Dagfinn Høybråten
The Secretary General,
Nordic Council of Ministers

INTRODUCTION

Chapter 1
INTRODUCTION

Author: Kjell Nilsson
Map and data: Julien Grunfelder

Background

Since 1981, Nordregio and its predecessor organisations have produced the report *State of the Nordic Region*. The report is published every two years, describing ongoing developments over time in the Nordic Region at the municipal and regional levels. This report is the 15th volume in the series "Regional Development in the Nordic countries", which has supplied policymakers and practitioners with comprehensive data and analyses on Nordic regional development for many years.

The report is based on the latest statistics on demographic change, labour markets, education, economic development, etc. The analyses are based on a broad range of indicators covering the above-mentioned areas. Since 2016, *State of the Nordic Region* has also included a Regional Development Potential Index which highlights the strengths and weaknesses of the 74 Nordic regions in relation to one another and identifies the regions with the strongest development potentials. The maps contained within the report can also be accessed through Nordregio's online map gallery, and NordMap, an interactive map tool dealing with demographic, labour market and accessibility issues in the Nordic countries.

From 2018, publication of *State of the Nordic Region* has been directly overseen by the Nordic Council of Ministers centrally. The ambition here is to make the report a flagship project for the Nordic Council of Ministers, enhancing its analytical capacity and its ability to collaborate across sectors and institutions. *State of the Nordic Region* strengthens Nordic identity and community. It is deeply illustrative thanks to its rich map material and is therefore suitable for the international marketing of the Nordic Region. Thanks to the Nordic Region's strong performance in international comparisons it can also contribute to the strengthening of Nordic influence and competitiveness within Europe as well as globally.

Given its focus on scale, *State of the Nordic Region* builds on the collection and use of Nordic statistics at the local and regional levels. The advantage of following an administrative division is that it coincides with political responsibilities and thus becomes more relevant to politicians and other decision-makers for whom access to comparable and reliable statistical information is vital. The report itself should not however be viewed as being politically guided or seen as containing political pointers or recommendations. Maintaining integrity and independence is important for the credibility and, ultimately, for how the *State of the Nordic Region* is received and used. When the inclusion of an international benchmarking approach makes sense, the Nordic-focused material is supplemented with statistics and maps addressing the pan-European level.

The concept of *State of the Nordic Region* can be both scaled up and down. An example of the former is the ESPON BSR-TeMo project (2014) and its follow-up TeMoRi (Rispling & Grunfelder, 2016), con-

The Nordic Region consists of Denmark, Finland, Iceland, Norway and Sweden as well as Faroe Islands and Greenland (both part of the Kingdom of Denmark) and Åland (part of the Republic of Finland)

ducted by Nordregio on behalf of the Swedish Agency for Economic and Regional Growth, with both projects focusing on the development of a territorial monitoring approach for the Baltic Sea Region (ESPON, 2014; Rispling & Grunfelder, 2016). Examples of scaling down include various assignments that Nordregio has implemented for individual regions such as Jämtland, Värmland, and Lappi. The potentials for extending the implementation of *State of the Nordic Region* are therefore immense if awareness increases due to its broader launch profile.

The regional approach

What is the Nordic Region?

The Nordic Region consists of Denmark, Finland, Iceland, Norway and Sweden as well as Faroe Islands and Greenland (both part of the Kingdom of Denmark) and Åland (part of the Republic of Finland). *State of the Nordic Region* is based on a suite of statistics covering all Nordic municipalities and administrative regions. It is however worth noting here that several Nordic territories, e.g. Svalbard (Norway), Christiansø (Denmark) and Northeast Greenland National Park (*Avannaarsuani Tunumilu Nuna Allanngutsaaliugaq*), are not part of the national administrative systems. Nevertheless, though not strictly included in the administrative systems, these territories are included in the report where data is available.

State of the Nordic Region displays data using national, regional and municipal administrative divisions (this edition according to the 2017 boundaries). Large differences exist both in terms of the size and population of the various administrative units at the regional and municipal levels across the Nordic Region. The four largest municipalities are all Greenlandic, with Qaasuitsup being the world's largest municipality with its 660,000 km² (however, split into two municipalities in 2018). Even the smallest Greenlandic municipality, Kujalleq, at 32,000 km² significantly exceeds the largest Nordic municipalities outside Greenland, i.e. Kiruna and Jokkmokk in northern Sweden with approximately 20,000 km² each. Excluding Greenland and the Faroe Islands, the average size of a Nordic municipality is 1,065 km². The smallest are less than 10 km² and are either insular municipalities (e.g. Kvitsøy in Norway or Seltjarnarnes near Reykjavík) or within the greater capital areas (e.g. Sundbyberg near Stockholm, Frederiksberg surrounded by the municipality of Copenhagen, or Kauniainen surrounded by the municipality of Espoo near Helsinki).

The average area of a Nordic region is 17,548 km². The smallest is Oslo (455 km²), followed by two Icelandic regions, Suðurnes (884 km²) and Höfuðborgarsvæði (1,106 km²). The largest region is Norrbotten in Northern Sweden (106,211 km²), followed by Lappi in Northern Finland (just under 100,000 km²). The average population density of a Nordic region is 66 inhabitants per km² with densities ranging from 1 inhab./km² (Austurland, Vestfirðir, Norðurland vestra, and Norðurland eystra – all in Iceland) to 1,469 inhab./km² (Oslo region). Other high-density regions include the Capital region of Denmark Hovedstaden (706 inhab./km²) and Stockholm (335 inhab./km²).

Among the Nordic countries Denmark, Finland (including Åland) and Sweden, are Member States of the European Union (EU), although only Finland is part of the Eurozone. Iceland and Norway are members of EFTA (European Free Trade Association) consisting of four countries, which either through EFTA, or bilaterally, have agreements with the EU to participate in its Internal Market. The Faroe Islands and Greenland are not members of any of these economic cooperation organisations. These differences in supra-national affiliation have an impact on which data that is available for this report. For example, Eurostat, the statistical office of the EU, only provides data for EU, EFTA and EU candidate states, thus excluding the Faroe Islands and Greenland. Whenever possible, data for these regions has been supplemented from other sources.

In the regular register data of Eurostat and the National Statistics Institutes (NSIs), which are the two prime data sources for this report, commuters to neighbouring countries are not included in the Nordic countries. This results in incomplete information (i.e. underestimations) regarding employment, incomes and salaries for regions and municipalities located close to national borders, where a substantial share of the population commutes for work to the neighbouring country. Estimates have been produced in some cases and included in this report. In 2016, the Finnish presidency of the Nordic Council of Ministers launched a project to develop statistics on cross-border movement in the Nordic countries. There is however still no up-to-date and no harmonised Nordic cross-border statistical data available, other than that provided by some regional authorities.

Regional and administrative reforms

Administrative reforms provide a series of seemingly never-ending stories across the Nordic politi-

cal systems. Today, the need for reforms and for the reallocation of tasks between the national, regional and municipal levels can be derived from two major challenges facing the Nordic countries (Harbo, 2015). Firstly, increased pressure on the Nordic welfare system caused by an ageing population which increases demand for public services while simultaneously shrinking the tax base. Secondly, enlargement of the regions due to widening labour markets caused by changing mobility and commuting patterns moves the functional borders of regions beyond their traditional administrative limitations. Finally, there is a common belief among professionals and decision makers that fewer and larger units are more efficient when it comes to service provision and public administration. On the other hand, concerns remain over the merging of administrative units especially at the municipal level due to the increased distance this potentially creates between citizens and the local political authority.

Thus far, the Danish experience provides the best Nordic example of a completed reform process as it is now a decade since the process took place and where the number of municipalities was reduced from 270 to 98. The reform as such was decided by the government, but the practical implementation, i.e. which municipalities should merge, was delegated to the municipalities themselves. At the same time, 1 January 2007, the 13 counties (*amt*) were abolished and replaced by five regions. The reform increased the political weight of the municipalities in society while the importance of the regions decreased. The regions are led by elected politicians, which reinforces their legitimacy, but they lack the power to tax and the freedom to undertake tasks in addition to their statutory responsibilities. In addition to healthcare, which is the region's main area of work, they are participating in regional public transport companies and in the setting up of growth forums (which decide on the allocation of EU Structural Funds). Hence, there are no official regional development plans except for the capital region, the so-called Finger Plan, which is prepared by the state.

After having failed, for the second time since the turn of the millennium, to try to implement a major reform of the Finnish municipalities, the government decided on 19 August 2015 that the municipalities would no longer be required to investigate the possibility of amalgamation (Sandberg, 2015). The government still wants to encourage municipal mergers, but they should be done on an entirely voluntary basis. Since 2000, the number of municipalities has voluntarily decreased from 452 to 311, but the size of Finnish municipalities is still on average below 7,000 inhabitants. After failing with their municipal reform, the government decided instead to turn its attention to the regional level and to plan for a comprehensive expansion of the regions' responsibilities. The plan is for the 18 regions (*maakuntaliitto – landskapsförbund*) to take over the main health care system from the municipalities. They will also assume responsibility for regional development, e.g. business and transport policy. The regions will have a directly elected political leadership, but the right to tax will remain with the municipalities which will, however, lose more than half of their budget (Sandberg, 2017).

Åland is not included in the above-mentioned administrative reform of the Finnish regions. There, responsibility for health care is already centralised to the Government of Åland. Åland has 16 municipalities, some of them with less than 500 inhabitants and one, Sottunga municipality, with even less than 100. At the same time as several investigations into voluntary municipal mergers are in progress, the current government is also preparing a bill to be introduced to the Åland Parliament, the *Lagtinget*, on reducing the number of municipalities to four.

More than 50 years since the last municipal reform, on 8 June 2017, the Norwegian parliament (Stortinget) decided on an administrative reform that reduces the number of regions (*fylkeskommuner*) from 18 to 11 and the number of municipalities from 428 to 354. The basic goal of the reform, which should be fully implemented by 1 January 2020, is to transfer resources and responsibilities to local and regional authorities that are more robust than they are currently (Kaldager, 2015). In Norway, the health care system is organised by the state, while the regions are, among other things, responsi-

Concerns remain over the merging of administrative units especially at the municipal level due to the increased distance this potentially creates between citizens and the local political authority

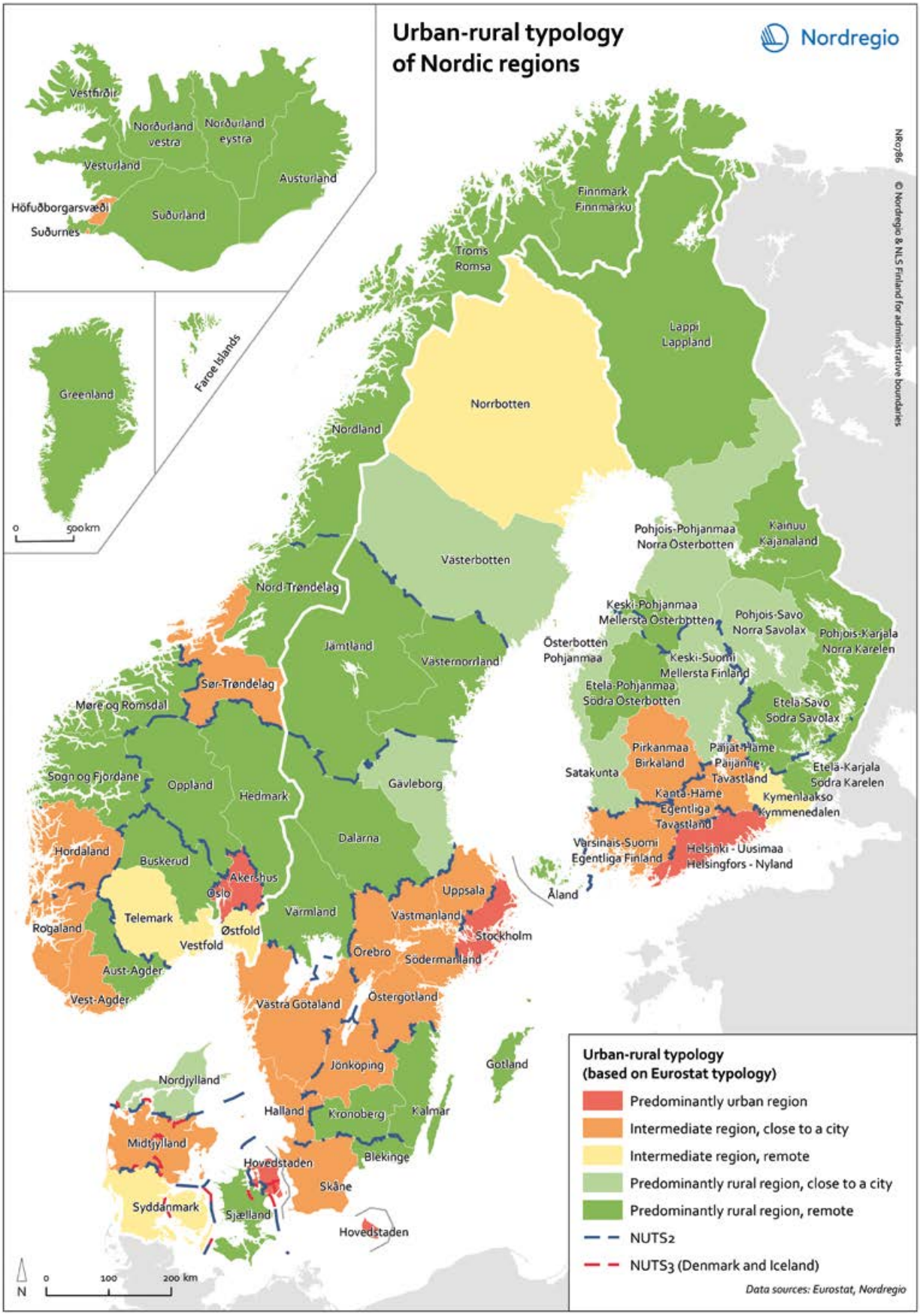

Figure 1.1 Urban rural typology of the Nordic regions.

The combined economy of the Nordic countries is the 12th largest in the world

ble for planning, transportation and regional development. The reform is based on the tasks that the regions currently have, but the government has appointed an expert group to review opportunities to strengthen the regions' role as developer and their capacity to provide better service to the citizens. The regions are led by directly elected politicians, they have a formal – but in practice no – right to tax and they are free to undertake other than statutory tasks.

In Sweden, the last municipal reform took place in 1974 when the number was reduced from slightly more than 1,000 to 278. The latest merger of Swedish municipalities took place in 1977. In the period since, the number has slightly increased to 290 due to the dissipation of existing municipalities. Instead of pushing further municipal mergers, the Swedish government has instead focused on the regions in recent years. In March 2016, a committee presented a new map dividing Sweden into six new major regions. The map raised such strong opposition however that the government chose not to proceed with the proposal. When the map turned out to be a distortion of reality, instead of adjusting the map at regional level, the government decided to change the reality at local level. Thus, a new parliamentary committee was set up to develop a strategy for strengthening the municipalities' capacity, focusing more on cooperation and the allocation and execution of tasks than on administrative boundaries.

In common with the Faroe Islands and Greenland, Iceland has only two administrative levels: national and local. In recent times, Iceland has carried through two large reform processes – in 1993 and again in 2005. On both occasions, consultative referendums were held and on both occasions, a majority voted against the suggested mergers. Despite the outcomes of the referendums the reforms resulted in a reduction in the number of municipalities from 196 in 1993 to 89 in 2006. In recent years, the number of municipalities has been further reduced to 74 on a voluntary basis though the government has, for its part, decided not to push for further aggregations. Instead, the idea of interregional municipal cooperation has been put on the aganda (Traustadóttir, 2015). This idea is aimed at strengthening the local level through the decentralisation of tasks from the government, but without the merging of municipalities.

The Faroe Islands and Greenland both sought to reduce the number of municipalities through administrative reform processes. The Faroese reform process started in 2000 with a new piece of municipal legislation. The government wanted to encourage municipal mergers, but they should be done on an entirely voluntary basis. Since 2000, the number of municipalities has voluntarily decreased from 49 to 29. In a 2012 referendum on municipal mergers, the majority in almost every municipality said no to more mergers.

By far the most radical change took place in Greenland in 2009, where the administrative set up changed from 18 to four municipalities. The idea behind the change which was supported by most of the political parties, was to delegate political decisions and economic resources from the central administration to the municipalities (Hansen, 2015). In reality, only a few administrative areas have at least thus far been transferred, but major areas will be transferred to the municipalities in 2018 and 2019. Widespread dissatisfaction with the new municipal structure especially in Qaasuitsup Kommunia, the largest municipality in the world in terms of square kilometres, led to a political decision to divide Qaasuitsup Kommunia into two municipalities by 1 January 2018.

NUTS classification

Table 1.1 provides an overview of the administrative structure in each country in the Nordic Region. These administrative structures are the basis for the NUTS (Nomenclature of territorial units for statistics) classification, a hierarchical system dividing the states on the European continent into statistical units for research purposes. The NUTS and LAU (Local administrative units) classifications generally follow the existing division but this may differ from country to country. For example, municipalities are classified as LAU 1 in Denmark but as LAU 2 in the other Nordic countries, and regions of primary importance within the national context as NUTS 2 in Denmark but as NUTS 3 in Finland, Norway and Sweden (figure 1.1).

Nomenclature level		NUTS 0	DK	FI	IS	NO	SE	SNUTS	FO	GL
	Regional	NUTS 1		Manner-Suomi/ Fasta Finland; Ahvenanmaa/ Åland 2			Landsdel 3	SNUTS 1		
		NUTS 2	Region 5	Suuralue; Storområde 5		Landsdel 7	Riksområde 8	SNUTS 2		
		NUTS 3	Landsdel 11	Maakunta; Landskap 19	Hagskýrsluvæði 2	Fylke 19 (18)	Län 21	SNUTS 3		
	Local	LAU 1	Kommune 98		Landsvædi 8	Økonomisk region 89		SNUTS 4	Sýsla 6	
		LAU 2	Sogn 2165	Kunta; Kommun 311	Sveitarfélög 74	Kommune 426 (422)	Kommune 290	SNUTS 5	Kommune 30	Kommune 4 (5)

Table 1.1 Administrative structures in the Nordic Region on 1 January 2017 (diverging number on 1 January 2018 in brackets).

[1] Grey frames represent the regional levels presented in most regional maps in this report, comparable from a Nordic perspective, while dark gray frames show the local units represented in the majority of our municipal level maps.

Data sources: NSIs, Eurostat, ESPON.

The Nordics in the world

With its 3,425,804 km^2, the total area of the Nordic Region would form the 7th largest nation in the world. However, uninhabitable icecaps and glaciers comprise about half of this area, mostly in Greenland. In January 2017, the Region had a population of around 27 million people. More relevant is the fact that put together, the Nordic economy is the 12th largest economy in the world (Haagensen et al., 2017).

The power of the Nordic economy was acknowledged in the light of its general handling of the economic crisis of 2007–08 (Wooldridge, 2013). What particularly impressed e.g. the journalists at the magazine*The Economist*, that published a special editoin on the Nordics, was the the ability of the Nordic countries to combine a generous tax-funded welfare system with efficient public administration and a competitive business sector.

As such, the locational aspects of the Nordic Region are noted in this edition of the State of the Nordic Region, where relevant and when reliable data is available. In addition, European developments generally and specifically those pertaining to the EU level are also addressed.

EU 2020 targets

The Europe 2020 strategy was designed in 2010 with the aim of guiding the Member States through the global financial crisis towards recovery. Three drivers of economic growth were identified as crucial: (i) smart growth based on knowledge and innovation, (ii) sustainable growth for a more efficient, greener and competitive economy, and (iii) inclusive growth capable of delivering employment, social and territorial cohesion.

Targets to be achieved include increasing the employment rate of the population aged 20–64 from 69% to 75%, investing at least 3% of the EU's GDP on research and development, reducing greenhouse gas emissions by 20% compared to 1990, increasing the share of renewable energy sources in final energy consumption to 20%, reducing the proportion of early school leavers from 15% to below 10%, ensuring that at least 40% of 30–34 years old

The total area of the Nordic Region would form the 7th largest nation the world

Figure 1.2 Sustainable Development Goals.

should have completed tertiary or equivalent education and, finally, reducing poverty by lifting at least 20 million people out of the risk of poverty or social exclusion.

The European Commission expected that each Member State would translate these targets into national targets and trajectories. According to Eurostat's headline indicators scoreboard only one target, i.e. the reduction of greenhouse gas emissions, has thus far been reached. Two targets, those regarding early school leavers and tertiary educational attainment, are less than one percentage unit from fulfilment. The target on reduced poverty is also close to being attained, in 2015 18.5 million people have been lifted out of poverty since 2012. The employment rate had risen to 71% in 2016, but is still less than half way to the target while the R&D investments are even further away from their specified target.

UN Sustainable Development Goals

On 25 September 2015, the United Nations adopted Resolution A/RES/70/1 which contains 17 Sustainable Development Goals (SDGs) with 169 targets to be achieved over the next 15 years. The 17 goals (figure 1.2) are:

1. End poverty in all its forms everywhere;
2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture;
3. Ensure healthy lives and promote well-being for all at all ages;
4. Ensure inclusive and quality education for all and promote lifelong learning;
5. Achieve gender equality and empower all women and girls;
6. Ensure access to water and sanitation for all;
7. Ensure access to affordable, reliable, sustainable and modern energy for all;
8. Promote inclusive and sustainable economic growth, employment and decent work for all;
9. Build resilient infrastructure, promote sustainable industrialization and foster innovation;
10. Reduce inequality within and among countries;
11. Make cities inclusive, safe, resilient and sustainable;
12. Ensure sustainable consumption and production patterns;
13. Take urgent action to combat climate change and its impacts;
14. Conserve and sustainably use the oceans, seas and marine resources;
15. Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss;
16. Promote just, peaceful and inclusive societies;
17. Revitalize the global partnership for a sustainable developmen.

The Nordic countries are performing well. In an overall assessment of OECD countries, Sweden is given the highest score followed by Denmark, Finland and Norway (Sachs et al., 2017). Nevertheless, the Nordic countries continue to face significant

challenges in terms of reaching all the identified targets by 2030. The Nordic Council of Ministers has chosen goal number 12, to "ensure sustainable consumption and production patterns", as its prioritised action field. But there are additional goals where a certain amount of effort is still required, such as the greening of the region's agricultural systems (SDG 2), reducing the high levels of CO2 emissions per capita (SDG 7 and 13, and improving ecosystem conservation (SDG 14 and 15) (Larsen & Alslund-Lanthén, 2017).

Further reading

The report consists of two parts; the first, consisting of three thematic areas which have remained constant over the years of this publication (demography, labour market and economy) and are summarised in the *Regional Development Potential Index* (chapter 15).

Demography (chapters 2–4): Describes and analyses population development in terms of natural increase or decline, migration, urbanisation and age distribution.

Labour market (chapters 5–7). Describes and analyses employment, unemployment and economically-inactive groups, especially among young people and foreign born, as well as education.

Economy (chapters 8–10): Describes and analyses GDP, income levels, innovation capacity, research and development and foreign direct investment (FDI).

The second part consists of four thematic focus areas. The chosen areas for the 2018 edition are:

Bioeconomy (chapter 11): Focuses on land use and land ownership, forestry, biogas, fisheries and aquaculture.

Digitalisation (chapter 12): Focuses on the broadband coverage and use of Internet to interact with the public sector.

Health and welfare (chapter 13): Focuses on public health issues and the territorial dimensions of life expectancy and accessibility to healthcare.

Culture and arts (chapter 14): Focuses on newly-produced data at municipal and regional levels on cinemas, libraries and museums.

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THEME 5

REGIONAL POTENTIAL INDEX

Local potentials in a diverse Nordic Region

The Nordic Region is often perceived, by outside observers, as being largely undifferentiated socio-economically, with the countries of Denmark, Finland, Iceland, Norway and Sweden along with Greenland, the Faroe Islands and Åland appearing very much alike in many ways.

Contrary to this widely held view, the countries and territories involved in the Nordic Cooperation, divided into 74 administrative regions, are remarkably diverse in many respects. Though significant differences exist at both the national and the regional levels, they are still sufficiently similar for a comparison to be valid.

The Regional Potential Index (RPI) outlined in this publication compares the regions and tries to quantify this variety while also assessing the relative potential of each region in regional development terms. The Index is based on the performance of each of these regions in terms of demography, labour force and the economy.

The results of the Regional Potential Index 2018 show that urban regions continue to occupy the top ranks. There is however a great deal of movement further down the list. Those regions that have improved in rank are primarily located in Iceland, Sweden and the Faroe Islands while those that have reduced in rank are to be found mainly in Norway and Finland, with Denmark occupying something of a status quo position.

The next Regional Potential Index will be published in the 2020 edition of State of the Nordic Region.

Chapter 15

NORDREGIO REGIONAL POTENTIAL INDEX 2017

Measuring regional potential

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The ranking process undertaken here aims to illuminate the socio-economic state of the Nordic regions. This ranking is constructed around several of the socio-economic indicators used in this report (themes 1, 2 and 3). A careful selection of the indicators enables us to generate a broader, more synthesised idea of the socio-economic development of all 74 administrative regions making up the Nordic Region with the resulting ranking enhancing the possibilities for comparison among these regions. This is the second time that Nordregio has produced this ranking for the Nordic Region, making it possible to see the changes that have occurred between 2015 and 2017.

The diverse geography of Nordic regions

The Nordic Region is a diverse geographical unit composed of metropolitan urban regions, intermediate regions and remote rural regions. As such, it is useful to compare the rankings of regions sharing similar geographical characteristics. To make this comparison, three existing typologies have been used spanning different types of geographies: Urban-Rural (Eurostat, 2010); Northern sparsely populated areas (Gløersen et al., 2009); and Nordic Arctic regions (Young, 2004).

Theme	Indicators	Points allocated
Demographic potential	Population density	7.5–75
	Net migration rate	7.5–75
	Demographic dependency rate	7.5–75
	Female ratio	7.5–75
Labour market potential	Employment rate	10–100
	Share of the age group 25–64 with high education degree	10–100
	Youth unemployment rate	10–100
Economic potential	GRP/capita	20–200
	Total R&D investments	10–100

Table 15.1 Indicators included in the index and their respective weights.

Methodological elements of The Regional Potential Index

Nordregio's Regional Potential Index is constructed around a series of key socio-economic indicators with relevance in an analysis of regional development. The data from the nine selected indicators is categorised into three dimensions: demographic, labour force and economic. These dimensions are included in other studies on regional development monitoring and territorial cohesion, e.g. ESPON BSR-TeMo (ESPON, 2014) and ESPON INTERCO (ESPON, 2013), among others. The data, drawn from a solid database that covers a long period of time and many geographical levels, was then harmonised and standardised. The selected indicators do not display high correlations while only a limited number of data sources had gaps. These gaps were found in Icelandic regions and replaced by estimates, e.g. GRP/capita and share of the age group 25–64 with high education degree, among others. The selected indicators also offer strong communicative value allowing the ranking to be easily understood and widely used in the regional development context. The three themes, related indicators and weighting can be seen in table 15.1.

As can be seen from table 15.1, GRP/capita is weighted more heavily than the other indicators. The reason for this is that it has historically been determined as the most relevant measure of both the current performance and future development of a region. The total score for demographic potential has also been modified to reflect a total score of 300, consistent with the other two themes, by allocating between 7.5 and 75 points for each indicator.

Despite the rigorous process through which the ranking was developed, limitations remain. As such, the ranking should be understood from a rather instrumental point of view. Firstly, cross-border flows might be slightly underestimated in the ranking (e.g. survey for youth unemployment rate data). Secondly, due to a lack of good quality recent data for some regions, the ranking does not include indicators of accessibility. Also, the ranking does not account for any qualitative dimensions, such as experienced life quality, or the existence of regional development or smart specialisation strategies. Finally, indicators connected to environmental values are not included in this ranking. This is mainly due to the relatively small differences within the Nordic Region, when compared with other parts of the world (except in relation to soil sealing).

Top ranks for capital city regions

The region occupying the first rank in 2017 is the capital region of Stockholm (table 15.2). Its score increased between 2015 and 2017, rising from 753 to 758, this resulted in the region improving its position by two ranks. It retains its first rank in the economic dimension and its 4th rank in the demographic dimension. The region of Stockholm notably improved its labour force dimension, rising from the 14th to the 8th in this dimension, thanks to a higher employment rate (rising from 76% to 81%; see chapter 5), a higher share of the age-group 25–64 with a higher education degree (from 47% to 51%, see chapter 7) and a lower youth unemployment rate (falling from 20% to 19%, see chapter 6).

Four other capital city regions complete the Top 5 places. Oslo is 2nd (1st in 2015), Hovedstaden is 3rd (2nd in 2015), Höfuðborgarsvæðið, is 4th (10th in 2015), and Helsinki-Uusimaa is 5th (the same as in 2015). Both the Oslo and capital region of Denmark – Hovedstaden retain a very strong economic dimension and have also improved their labour force dimension (higher employment rate and lower youth unemployment rate; see chapters 5 and 6), but their demographic dimensions, while still very strong, have softened (due to lower net-migration over time). The capital region of Iceland, Höfuðborgarsvæðið, has however risen by six places. This is mainly the result of its improved economic dimension, rising from 130 points in 2015 to 205 points in 2017 (higher GRP/capita and higher R&D investments, see chapters 8 and 9).

2017 rank (2015 rank)	**Region Name (country-type(s) of region)**	RPI	Demographic dimension	Labour force dimension	Economic dimension
1 (3)	Stockholm (SE-U)	758	248	210	300
2 (1)	Oslo (NO-U)	750	240	210	300
3 (2)	Hovedstaden (DK-U)	745	255	190	300
4 (10)	Höfuðborgarsvæðið (IS-U, NA)	720	255	260	205
5 (5)	Helsinki-Uusimaa (FI-U)	715	255	160	300
6 (4)	Akershus (NO-U)	690	240	250	200
7 (13)	Västra Götaland (SE-I)	655	195	180	280
8 (7)	Sør-Trøndelag (NO-I)	648	158	220	270
9 (9)	Uppsala (SE-I)	625	225	200	200
10 (6)	Rogaland (NO-I)	623	143	210	270
11 (8)	Hordaland (NO-I)	603	143	200	260
12 (18)	Suðurnes (IS-R, NA)	590	195	190	205
13 (11)	Åland (AX-R)	575	165	220	190
14 (26)	Suðurland (IS-R, NA)	570	165	200	205
15 (29)	Norðurland eystra (IS-R, NA)	540	135	200	205
16 (19)	Skåne (SE-I)	538	218	150	170
16 (35)	Norðurland vestra (IS-R, NA)	538	143	190	205
18 (39)	Vesturland (IS-R, NA)	523	128	190	205
19 (14)	Troms (NO-R, NSPA, NA)	518	128	220	170
19 (16)	Møre og Romsdal (NO-R)	518	98	200	220
21 (11)	Vest-Agder (NO-I)	510	150	170	190
21 (46)	Faroe Islands (FO-R, NA)	510	150	230	130
23 (17)	Midtjylland (DK-I)	505	195	120	190
24 (41)	Vestfirðir (IS-R, NA)	495	90	200	205
25 (22)	Southern Denmark (DK-I)	483	173	100	210
26 (35)	Austurland (IS-R, MA)	480	75	200	205
27 (21)	Sogn og Fjordane (NO-R)	478	98	240	140
28 (15)	Buskerud (NO-R)	470	150	180	140
28 (28)	Östergötland (SE-I)	470	150	130	190
30 (24)	Halland (SE-I)	465	195	190	80
31 (19)	Vestfold (NO-I)	448	218	150	80
32 (30)	Kronoberg (SE-R)	435	135	150	150
33 (23)	Pirkanmaa	433	173	120	140
34 (26)	Varsinais-Suomi - (FI-I)	430	180	120	130
35 (30)	Jönköping (SE-I)	415	135	160	120
35 (33)	Västerbotten (SE-R, NSPA)	415	105	160	150
37 (30)	Örebro (SE-I)	405	165	120	120
37 (45)	Västmanland (SE-I)	405	165	110	130
37 (38)	Norrbotten (SE-I, NSPA, NA)	405	75	120	210
40 (33)	Nordjylland (DK-R)	400	150	100	150
41 (25)	Österbotten (SE-R)	375	75	150	150
42 (58)	Gotland (SE-R)	373	173	130	70
43 (37)	Nordland (NO-R, NSPA, NA)	368	98	140	130
44 (48)	Sjælland (DK-R)	365	195	90	80

45 (40)	Finnmark (NO-R, NSPA, NA)	355	105	140	110
45 (42)	Oppland (NO-R)	355	105	180	70
45 (44)	Aust-Agder (NO-R)	355	135	140	80
45 (55)	Jämtland (SE-R, NSPA)	355	105	160	90
45 (62)	Kalmar (SE-R)	355	135	140	80
50 (49)	Østfold (NO-I)	345	195	100	50
50 (42)	Telemark (NO-I)	345	135	120	90
50 (59)	Blekinge (SE-R)	345	135	120	90
50 (46)	Nord-Trøndelag (NO-R, NSPA)	345	105	180	60
54 (51)	Hedmark (NO-R)	343	143	140	60
54 (53)	Dalarna (SE-R)	343	113	110	120
56 (50)	Västernorrland (SE-R, NSPA)	340	90	120	130
57 (52)	Södermanland (SE-I)	323	173	70	80
58 (68)	Värmland (SE-R)	313	143	100	70
59 (55)	Pohjois-Pohjanmaa (FI-R, NSPA)	293	83	90	120
60 (57)	Gävleborg (SE-R)	280	120	60	100
61 (67)	Greenland (GL-R, NA)	268	98	60	110
62 (63)	Etelä-Karjala (FI-I)	265	75	50	140
63 (53)	Kanta-Häme (FI-I)	263	113	90	60
64 (61)	Keski-Suomi (FI-R)	260	120	70	70
64 (59)	Satakunta (FI-R)	260	90	60	110
66 (64)	Päijät-Häme (FI-I)	250	150	60	40
67 (65)	Pohjois-Savo (FI-R, NSPA)	238	98	80	60
68 (65)	Keski-Pohjanmaa (FI-R, NSPA)	225	75	80	70
69 (73)	Lappi (FI-R, NSPA, NA)	205	75	50	80
70 (69)	Pohjois-Karjala (FI-R, NSPA)	190	90	50	50
71 (72)	Kymenlaakso (FI-I)	180	90	40	50
72 (70)	Etelä-Pohjanmaa (FI-R)	170	60	70	40
73 (71)	Etelä-Savo (FI-R, NSPA)	163	83	40	40
74 (74)	Kainuu (FI-R, NSPA)	115	45	40	30

Table 15.2 Nordregio's Regional Potential Index 2017. Explanation: R: rural; I: intermediate; U: urban; NSPA: Northern Sparsely Populated Areas; NA: Nordic Arctic.

Most intermediate regions (regions including at least one bigger city but not the capital, except for Iceland) are found in the first half of the ranking. Five of them are found in the overall Top 10, e.g. Hövuðborgarsvæði ranked 4th. Some of the more remote intermediate regions are found in the second half of the ranking, e.g. Telemark in Norway which is ranked 51st and Södermanland ranked 57th.

Rural regions are predominantly found in the lower half of the ranking. This type of territory greatly varies however, ranging from the ranked 12th region of Suðurnes in Iceland to the 74th and last ranked Kainuu in Finland. Even though Kainuu saw some positive developments between 2015 and 2017 (e.g. in relation to the employment rate, net-migration and GRP/capita), several negative trends (e.g. youth unemployment, the demographic dependency ratio and R&D investments) however limited the chance for this region to rise in rank within the Nordic Region.

Finally, regions located in the Northern Sparsely Populated Areas are clustered in the bottom half of the ranking except for the Norwegian region of Troms, ranked 19th, whereas Nordic Arctic regions greatly vary in ranking between, for instance, Hövuðborgarsvæði, ranked 4th and Lappi, ranked 69th.

Top 5 Intermediate regions (based on the ESPON CU Urban Rural typology 2011)	**Top 5 Rural regions** (based on the ESPON CU Urban Rural typology 2011)
4. Hövuðborgarsvæði (IS)	12. Suðurnes (IS)
7. Västra Götaland (SE)	13. Åland (AX)
8. Sør-Trøndelag (NO)	14. Suðurland (IS)
9. Uppsala (SE)	15. Norðurland eystra (IS)
10. Rogaland (NO)	16. Norðurland vestra (IS)
Top 5 Northern Sparsely Populated Areas (includes the northern regions of Finland, Norway and Sweden)	**Top 5 Nordic Arctic regions** (as defined in the Arctic Human Development Report)
19. Troms (NO)	4. Hövuðborgarsvæði (IS)
35. Västerbotten (SE)	12. Suðurnes (IS)
37. Norrbotten (SE)	14. Suðurland (IS)
43. Nordland (NO)	15. Norðurland eystra (IS)
45. Finnmark (NO)	16. Norðurland vestra (IS)

Table 15.3 Top 5 excerpt of some of the specific regional typologies derived from the Regional Potential Index.

Top movers 2015–2017

Those regions that have improved their ranking over the last two years are primarily to be found in the Faroe Islands, Iceland and Sweden (table 15.4). Two regions have increased by more than 20 places, namely, the Faroe Islands and Vesturland in Iceland when comparing 2015 rankings with those for 2017. The Faroe Islands improved its rank by climbing 25 places, rising from the 46th to the 21st in rank. The territory retained its good score in the labour force dimension and improved both its demographic and economic dimensions, thanks to higher net-migration rates and GRP/capita between 2015 and 2017 (see chapter 8). Vesturland in Iceland climbed 21 places, rising from the 39th to the 18th in rank. The region increased its score across all three dimensions and was particularly strong in terms of the labour force and economic dimensions, boasting both higher employment rates (see chapter 5) and higher estimated GRP/capita value (see chapter 8).

Those regions that have seen their rankings decline over the last two years are mainly to be found in Finland and Norway (table 15.4). Three regions fell more than 10 places in the rankings, namely Österbotten in Finland and Buskerud and Vestfold, both located in Norway. Österbotten lost 16 ranking places, falling from the 25th to 41st with lower scores in the three dimensions, particularly in its economic dimension even though its GRP/capita and R&D investments slightly increased, but did not do so as fast as in other regions. Buskerud lost thirteen places in the rankings and Vestfold twelve. These two Norwegian regions experienced a similar trend: their score in the demographic dimension remained relatively stable, while their score in the labour dimensions slightly decreased and their score in the economic dimension declined. The latter is explained, primarily, by lower GRP/capita and lower R&D investments (see chapters 8 and 9).

Top 5 climbers	**Top 5 drops**
Faroe Islands (FO), +25	Österbotten (FI), -16
Vesturland (IS), +21	Buskerud (NO), -13
Norðurland vestra (IS), +18	Vestfold (NO), -12
Vestfirðir (IS), +17	Vest-Agder (NO), -10
Kalmar (SE), +17	Pirkanmaa (FI), -10
	Kanta-Häme (FI), -10

Table 15.4 Top movers 2015-2017.

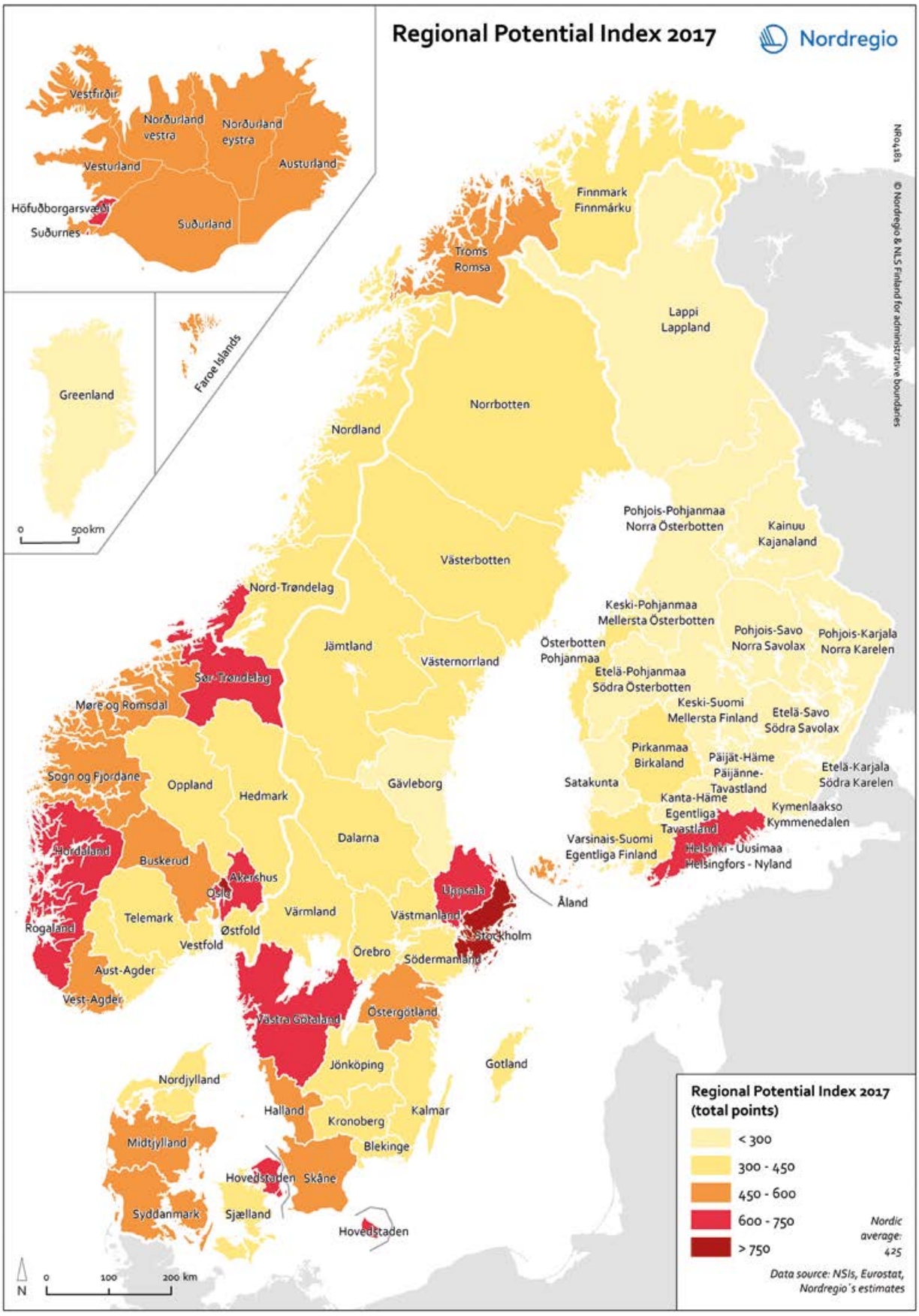

Figure 15.1 Nordregio´s Regional Potential Index 2017.

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