

1 Setting the scene

This chapter sets the scene of this report by assessing the current demographic challenges Estonia is facing and presenting key facts relevant to the spatial interventions needed to address them. Specifically, it gives an overview of policy responses aimed at addressing shrinkage, stressing a generalisation approach that combines growth and shrinkage strategies based on spatial interventions in key policy areas. It then presents data on demographic trends and projections, together with data on digital connectivity. Finally, it concludes with an assessment of the governance structure of Estonia and an overview of the structure of the report.

Introduction

Depopulation is a challenge for many rural areas in OECD countries. The long-term effects are a declining tax base, a higher share of elderly people who are less mobile, a greater per head cost in the provision of public services (OECD, 2021^[1]) as well as vacant homes and deteriorating housing quality, among others. A shrinking population also has considerable negative effects on the provision of local infrastructure. This is especially the case for services such as water supply, sewerage, public transportation, education and healthcare that benefit from economies of scale. As populations shrink, these networks become more expensive to maintain. Adding to the challenge is eroding tax bases, which make it harder for local governments to find resources to maintain these basic infrastructures. As people are increasingly attracted to densely populated areas with better opportunities, the trend of depopulation in rural areas is likely to continue into the future. Indeed, across OECD countries, the share of the national population living in metropolitan regions increased between 2001 to 2018 in all except one (Greece) (OECD, 2020^[2]).

Estonia's total population, which amounted to 1.33 million inhabitants in 2020, shrank by 15% since 1991. This decline has not happened evenly across Estonia. Population growth occurred only in the larger urban areas of Tallinn and Tartu, while rural and remote urban areas have been shrinking rapidly. Ever since Estonia regained its independence in 1991, the population has declined by more than a quarter in more than half of Estonia's counties and some such as Ida-Viru in the northeast have lost more than a third of its population (Statistics Estonia, 2021^[3]).

This context requires policy responses in a number of areas to adapt to the changes in settlement structure. Tackling current gaps in service provision and adapting to demographic change requires mobilising many layers of government. Effective vertical and horizontal co-operation within a multilevel governance framework and more cross-sectoral co-operation at the central government level is needed to improve the efficiency and impact of policy actions. Land use needs to become more efficient and spatial planning frameworks more coherent to tackle depopulation and shrinkage. Most importantly, these responses need to be approached from a spatial framework that aligns policies to jointly address shrinkage issues in a coherent way. This is because the consequences of shrinkage, whether it be declining taxes, greater per capita service or infrastructure costs, or indeed vacant homes, manifest differently across space. The objective of this report is to assess the current situation in Estonia across these policy areas and recommend spatial policy interventions that manage the decline of remote regions in a sustainable way. Accordingly, this chapter sets the scene by assessing the current demographic challenges Estonia is facing and presenting key facts relevant to the spatial interventions needed to address them.

The policy responses to shrinkage: From trivialising to managing strategies

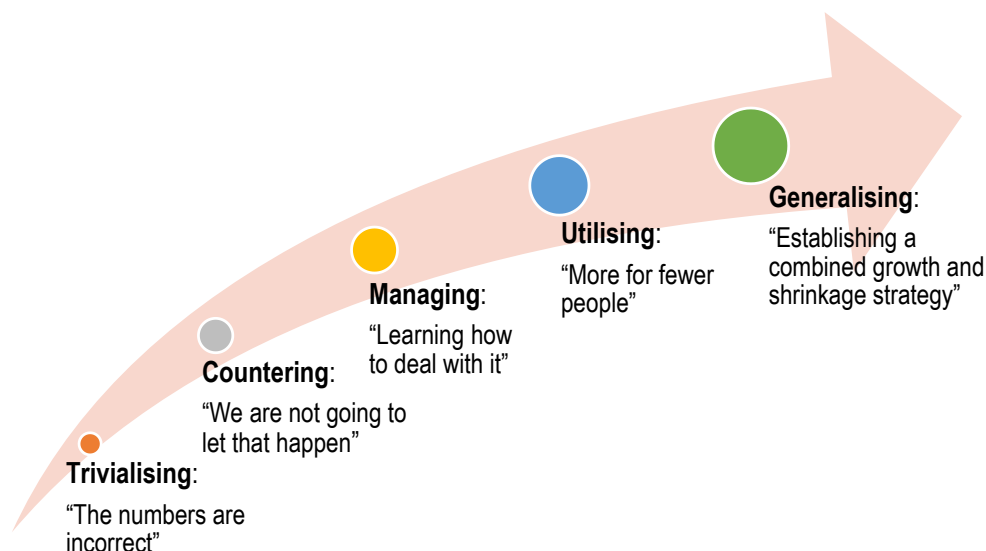
A traditional way to address population shrinkage at the regional and local government levels in OECD countries has been the “going for growth” policy, in other words trying to reverse shrinking trends and stimulate population growth (ESPON, 2017^[4]). However, a completely different approach has recently begun to receive attention. Specifically, it has been argued that a “coping with decline” strategy forms a more realistic way forward for declining population regions and municipalities. This strategy, also called “smart shrinking” or “smart adaptation”, means that shrinkage is accepted and the focus is on measures to adapt to its economic and social consequences (Haase et al., 2012^[5]). For example, remote rural areas in Nordic countries have begun to adapt to shrinkage by aiming to maintain regional attractiveness, through investments in the diverse natural and cultural assets that differentiate them from urban areas (Kull et al., 2020^[6]). These efforts have picked up pace since the outbreak of the COVID-19 pandemic. Importantly, adapting to shrinkage should go hand-in-hand with measures to promote economic development through measures such as smart specialisation, in order to maintain the vitality of shrinking regions.

In practice, four types of practical policy responses at the subnational government level have been identified by researchers: i) trivialising shrinkage; ii) countering shrinkage; iii) managing shrinkage; and iv) utilising shrinkage (Figure 1.1) (Haase et al., 2012^[5]; Hospers and Reverda, 2015^[7]). The “trivialising” approach refers to a situation where local policy makers challenge demographic local shrinkage projection data and offer no response. Under a “countering” approach, policy makers do identify the problem but offer only a counter-strategy focused on attracting new residents and firms to the local jurisdiction. The “managing” approach, in turn, focuses on improving quality of life for the residents that decide to stay, instead of focusing on how to attract people from outside. Finally, under the “utilising” approach, policy makers see shrinking municipalities as societal laboratories to test new methods, under the assumption that a municipality’s quality of life does not necessarily depend on population density.

The “trivialising” approach is problematic because the approach is likely to lead to problems related to vacant housing, lower tax bases, budget deficits and indebtedness, among others. The “countering” strategy, in turn, requires realistic growth prospects to be successful and is likely to need strong financial support from the central government. The “managing” approach is perhaps the most realistic strategy, especially in a situation where the population has already declined for a long time and where there are no prospects for growth policy in the foreseeable future. The “utilising” approach works only if residents are able and willing to pay higher taxes for local public services or if there is enough private service capacity to replace the public service provision.

The recommendations throughout this report aim at a generalisation approach that combines growth and shrinkage strategies based on spatial interventions in key policy areas. A generalisation approach combines the “countering”, “managing” and “utilising” approaches to focus more on current residents than on newcomers (Hospers and Reverda, 2015^[7]). This includes efforts to maintain place attractiveness and quality of life as well as efforts to mitigate the negative impacts of depopulation. This “generalising” policy is however challenging from a governance aspect and requires skilled local government management as well as active and engaged local decision-makers.

Figure 1.1 Five approaches to respond to population shrinkage



Source: Author’s elaboration and modification based on Hospers, G. and N. Reverda (2015^[7]), *Managing Population Decline in Europe’s Urban and Rural Areas*, Springer.

Demographic trends in Estonia

Estonia is located on the eastern shores of the Baltic Sea, bordering the Gulf of Finland in the north, Latvia in the south and Russia in the east. Besides three main cities (Tallinn, Tartu and Narva) concentrating about half a million inhabitants, its relatively small population of about 1.3 million inhabitants is sparsely spread over the territory. Without a significant push in international in-migration, Estonia is projected to lose population in the next decades – especially in low-density rural areas.

In the midst of slow population growth, people in Estonia have favoured moving into urban areas and away from remote areas. In a larger context within Europe, all Estonian regions besides North Estonia (where the capital Tallinn is located) are part of a group that face the largest challenges from depopulation because they are far away from centres of growth, with lower quality services and housing.

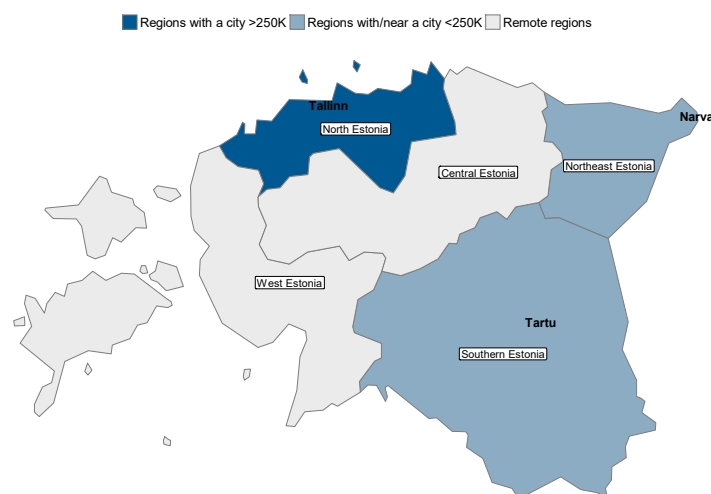
This section first reviews the current settlement patterns and population distribution in Estonia and then continues with an analysis of the past and future main demographic trends shaping the provision of services.

Settlement patterns and population distribution

The 1.3 million inhabitants of Estonia are spread over 45 000 km² of territory and 5 small (TL3) regions classified based on the OECD access to cities regional typology: one region with a city of more than 250 000 inhabitants (North Estonia, where Tallinn is located); two regions with or near a small or medium city (Northeast Estonia, hosting Narva, the third city in terms of population, and Southern Estonia, hosting the second largest city Tartu); and two remote regions, Central and West Estonia (Figure 1.2). The regions of Central and West Estonia are remote and sparsely populated, even though, like the rest of the country, these regions are relatively flat. In this sense, Estonia's depopulation of remote regions is not necessarily linked to difficult access due to topographic conditions as in other remote regions. The maximum elevation in the country (317 metres) is found in the south. All regions in Estonia, except Southern Estonia, are coastal regions and the territory includes about 1 500 islands and islets.

Figure 1.2. TL3 regional classification of Estonia

Classification based on OECD access to cities typology



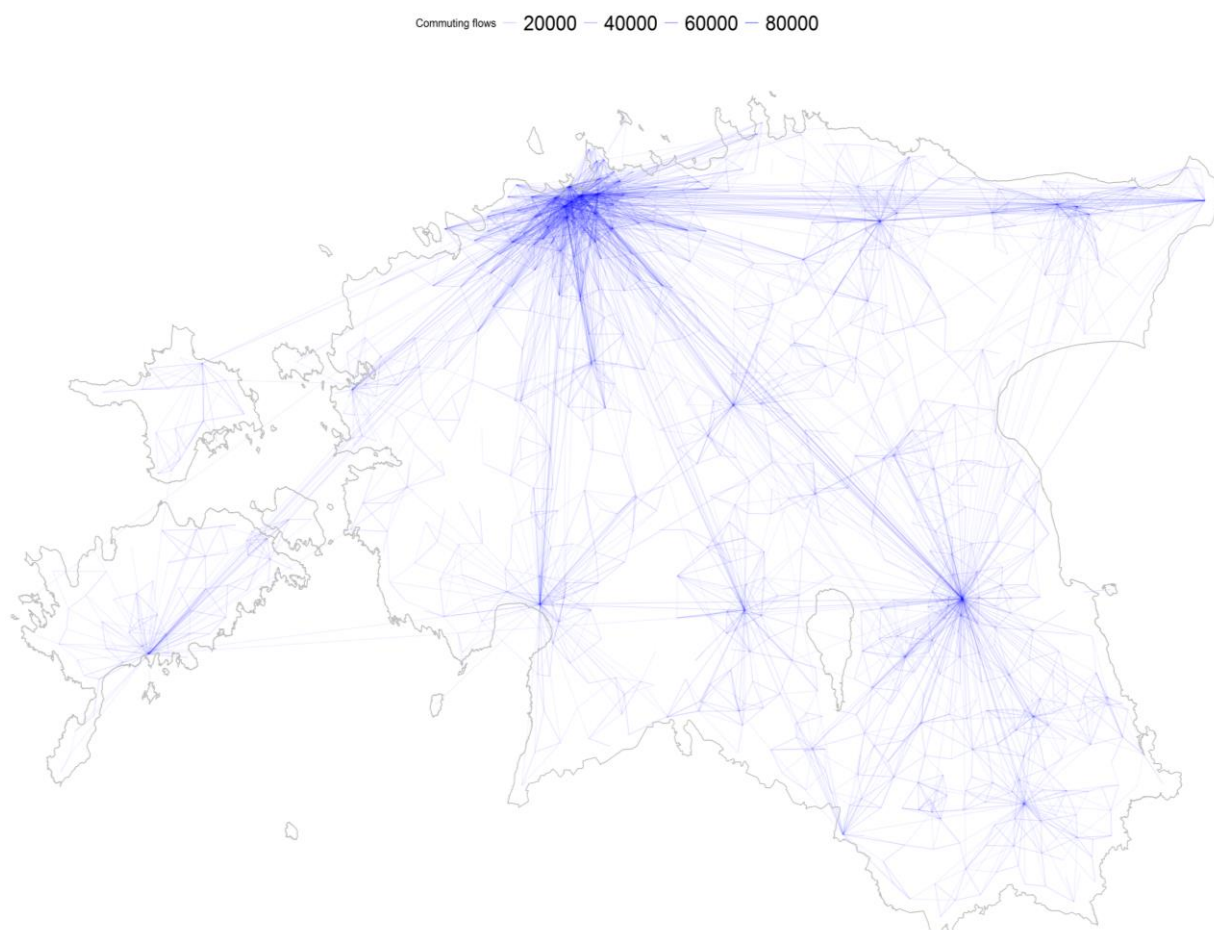
Source: Fadic, M. et al. (2019^[8]), "Classifying small (TL3) regions based on metropolitan population, low density and remoteness", <https://dx.doi.org/10.1787/b902cc00-en>.

For statistical and policy purposes, there are 15 municipalities classified as urban or towns (*linnad*, singular *linn*) and 64 classified as rural or parishes (*vallad*, singular *vald*). The capital area of Tallinn (with a population of 438 341 inhabitants) and the main university city area of Tartu (with a population of 95 430) form about 40% of the total population of Estonia.

Commuting flow data for 2018 shows that Tallinn and Tartu and their areas of influence concentrate the largest share of activity in the country, as measured by flows. There are in fact significant flows between Tallinn and Tartu, as the 2 main cities are about 2 hours away by car. Narva and smaller towns outside these main cities also concentrate small commuting flows around their areas of influence.

Figure 1.3. Commuting flows between territorial communities in Estonia, 2018

Home-work movements between territorial communities based on mobile positioning data



Note: Flow records for 1 March 2018.

Source: Aasa, A. (2019^[9]), *OD-matrices of Daily Regular Movements in Estonia (dataset)*, <https://doi.org/10.23659/UTMOBLAB-1>.

Recent demographic trends

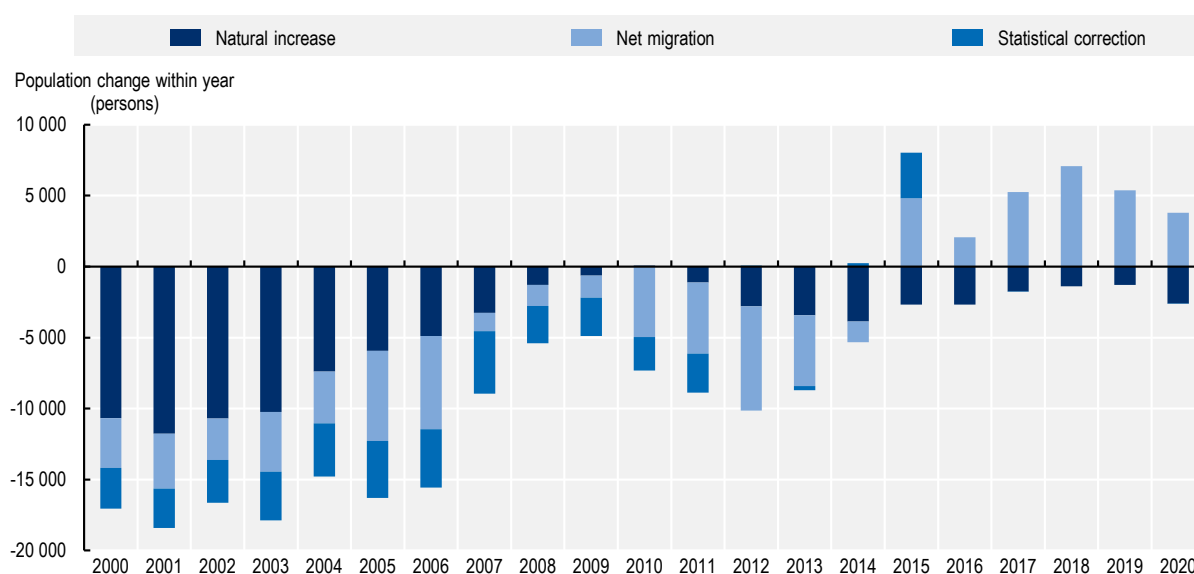
Population declined from 2000 to 2015 and has increased slightly since 2016 thanks to return immigration (Estonian Ministry of Finance, 2019^[10]). At the county level, the population declined in 2000-20 in all counties except for Harju where Tallinn is located. Tartu (in the east), Lääne-Viru and Pärnu (in the west) and Viljandi (in the south) accumulated a combined loss of over 23 000 people in the period. With a

decrease from over 181 000 inhabitants in 2000 to about 132 000 in 2020, Ida-Viru – located on the eastern border with Russia – is the county with the largest population losses.

While birth rates in Estonia are similar to those in Europe, a large portion of population decline was nonetheless attributed to natural decrease between 2000 and 2020, though diminishing in absolute magnitude. Net migration remained negative until 2014 (Figure 1.4). Immigration experienced a jump from 3 904 in 2014 to 18 172 in 2019, overcompensating from a similar jump in emigration from 4 637 in 2014 to 12 801 in 2019. In 2020, Harju County (with net immigration of 3 924) and Ida-Virumaa (with net immigration of -1 012) were respectively the 2 counties with the largest and smallest net migration in 2020.

At the regional level, the only metropolitan region (North Estonia) grew at a similar rate to other metropolitan regions in OECD countries (Table 1.1, see Box 1.1 for an explanation of the typology). This is in stark contrast to the rural regions in Estonia that all experienced population decline and is distinct from the trend across OECD countries that shows a steady (yet slower than the metropolitan regions) increase in population across rural regions (OECD, 2020^[2]).

Figure 1.4. Population change by source, 2000-20



Source: Statistics Estonia (2021^[3]), *Main Demographic Indicators*, <http://andmebaas.stat.ee/> (accessed on 8 February 2021).

Table 1.1. Population change by region type, OECD countries and Estonia, 2001-19

Population change calculated as compound annual growth rate

Region type	Annual population change OECD countries (%)	Annual population change Estonia (%)
Regions with a city >250K	0.70	0.65
Regions near a city >250K	0.30	-0.73
Regions with/near a city <250K	0.28	-1.01
Remote regions	0.45	-0.81

Source: OECD (2021^[11]), "Regional economy", <https://dx.doi.org/10.1787/6b288ab8-en> (accessed on 12 October 2021).

Box 1.1. Classifying TL3 regions by their level of access to cities

The regional classification based on access takes into consideration the presence of and access to functional urban areas (FUAs). Access is defined in terms of the time needed to reach the closest urban area, a measure that takes into account not only geographical features but also the status of physical road infrastructure.

The typology classifies TL3 regions into metropolitan and non-metropolitan according to the following criteria:

- **Metropolitan TL3 region (MR)**, if more than 50% of its population live in an FUA of at least 250 000 inhabitants.
- **Non-metropolitan TL3 region (NMR)**, if less than 50% of its population live in an FUA. NMRs are further classified according to their level of access to FUAs of different sizes into:
 - **Close to metropolitan (NMR-M)**, if more than 50% of its population live within a 45-minute drive from a metropolitan region (an FUA with more than 250 000 people).
 - **Close to small metropolitan (NMR-S)**, if the TL3 region does not have access to a metropolitan region and 50% of its population has access to a small or medium city (an FUA of more than 50 000 and less than 250 000 inhabitants) within a 45-minute drive.
 - **Remote (NMR-R)**, if the TL3 region is not classified as NMR-M or NMR-S, i.e. if 50% of its population does not have access to any FUA within a 45-minute drive.

Driving time by road to the nearest city depends on the definition of the cities, the road network used, the boundaries of the regions and the spatial distribution of the population within the region. In the implementation, cities are represented by their centroid point, defined as the population-weighted average location of the centroids of 1 km² grid cells covering the city. Around these centroid points, service areas of 45 minutes by major and secondary roads are calculated. The generic speed attribute provided with the road network data is used so that it does not take into account possible traffic congestion issues.

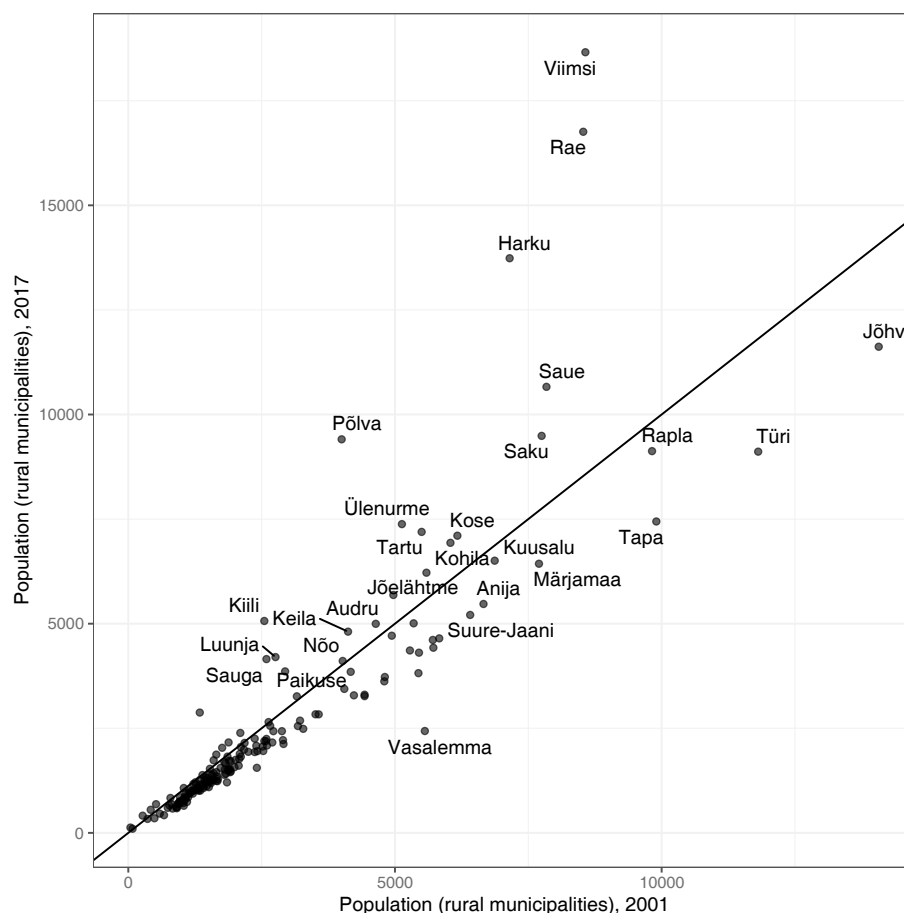
All service areas are merged to create an accessibility surface characterised by its maximum driving time to at least one city. This surface is then overlaid with the centroid points of 1 km² population grid cells. All centroids falling within the accessibility surface are defined as “close to a city”, the other cell centroids as “remote”. From this, it is possible to determine which part of the TL3 population is located in areas close to a city by calculating the share of the regional population living close to a city.

Source: Eurostat (2018^[12]), *Methodological Manual on Territorial Typologies: 2018 Edition*, <https://ec.europa.eu/eurostat/web/products-manuals-and-guidelines/-/KS-GQ-18-008>; Dijkstra, L. and H. Poelman (2008^[13]), “Remote rural regions: How proximity to a city influences the performance of rural regions”, https://ec.europa.eu/regional_policy/en/information/publications/regional-focus/2008/remote-rural-regions-how-proximity-to-a-city-influences-the-performance-of-rural-regions; Fadic, M. et al. (2019^[8]), “Classifying small (TL3) regions based on metropolitan population, low density and remoteness”, <https://doi.org/10.1787/b902cc00-en>; OECD (2020^[2]), *Rural Well-being: Geography of Opportunities*, <https://doi.org/10.1787/d25cef80-en>.

Demographic trends in Estonia are consistent with a pattern of deconcentrated urbanisation, that is, urban growth in the periphery of the largest urban centres. While population growth concentrated in the metropolitan region, the group of all cities lost 63 594 inhabitants between 2001 and 2017, while the group of all rural municipalities lost 14 663 (all municipalities below the 45 degree line in Figure 1.5). Tallinn gained 26 448 inhabitants in the period but other cities including Kohtla-Järve, Narva and Tartu lost over 12 000. On the other hand, some rural municipalities experienced considerable population gains in the period, including Põlva, Harku, Rae and Viimsi. These last three are located in the suburbs of Tallinn.

Estonia is also expected to age quickly in the coming years. In 2021, 19.8% of the population was 65 years old or over, while 2.6% were 85 years old or over. In 2045, the percentage of the population 65 and over is expected to increase to 25.5%, with 4.9% being 85 years old or over. These changes are not expected to occur evenly across regions. Already in 2021, the percentage of population 65 and over in the counties of Harju and Tartu was 17.8% and 18.1% respectively, lower than the percentage in the other counties combined, at 23.8%. This gap is expected to widen in 2045, with the percentages in Harju and Tartu counties expected to increase to 21.7% and 22.8% respectively, compared to 36.7% in the other counties.

Figure 1.5. Evolution of population in rural municipalities in Estonia, 2001-17



Note: Municipalities based on the pre-2018 reform definition.

Source: Statistics Estonia (2021^[3]), *Main Demographic Indicators*, <http://andmebaas.stat.ee/> (accessed on 8 February 2021).

Population projections

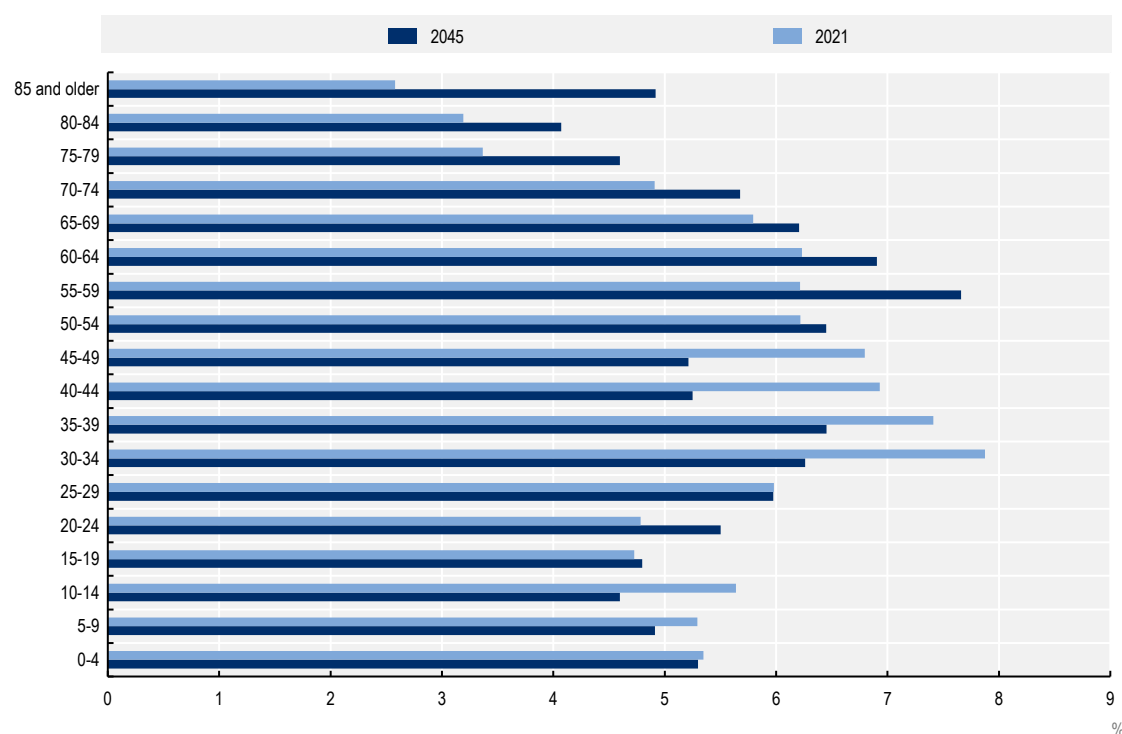
Available population projections for Estonia show that the population of Estonia will shrink from about 1.28 million people in 2011 to about 1.17 million in 2035 – that is, the country is projected to lose about 114 000 people by 2035. Available national population projections for 2080 (Government of Estonia, 2021^[14]) show population decline to below 1 million in the most pessimistic scenario of lower fertility, lower mortality and no migration.

According to internationally comparable projections, the yearly population decline in Estonia (-0.39%) is the 7th largest for European countries with available data, behind other small countries in the vicinity including Bulgaria (-0.68%), Latvia (-1.22%) and Lithuania (-1.6%). At the subnational level, all TL3 regions

except for North Estonia are forecast to shrink by 2035. While Central Estonia (with the lowest population density) and Northeast Estonia (on the border with Russia) will experience the largest rate of decrease, with a projected population change of -1.3% (33 596 people) and -1.2% (38 151) respectively, Southern Estonia will experience the largest absolute decrease (50 740) (Table 1.2). Notably, declining populations in rural and remote regions are not unique to Estonia. Countries such as Germany, Japan, Latvia and Lithuania, as well as certain parts of Portugal and Spain, are experiencing a decline in peripheral regions, although the causes and magnitude of the decline vary across countries.

Figure 1.6. Evolution of age distribution in Estonia, 2021 (actual) and 2045 (projections)

Percentage of population per age category



Source: Statistics Estonia (2021^[3]), *Main Demographic Indicators*, <http://andmebaas.stat.ee/> (accessed on 8 December 2021).

Table 1.2. Projected population change by TL3 region, 2011-35

Population change calculated as compound annual growth rate

Region	2011	2035	Annual population change 2011-35 (%)
Central Estonia	124 918	91 322	-1.31
Northeast Estonia	148 105	109 954	-1.24
West Estonia	144 482	114 813	-0.96
Southern Estonia	317 626	266 887	-0.73
North Estonia	547 659	586 358	0.28

Note: Population change corresponds to annual growth calculated using compound growth rates.

Source: Authors' elaboration based on Goujon, A. et al. (eds.) (2021^[15]), "The demographic landscape of EU territories: Challenges and opportunities in diversely ageing regions", EUR 30498 EN, Publications Office of the European Union, Luxembourg, and Jacobs-Crisioni, C. et al. (2020^[16]), "Development of the LUISA Reference Scenario 2020 and production of fine-resolution population projections by 5 year age group".

Digital connectivity

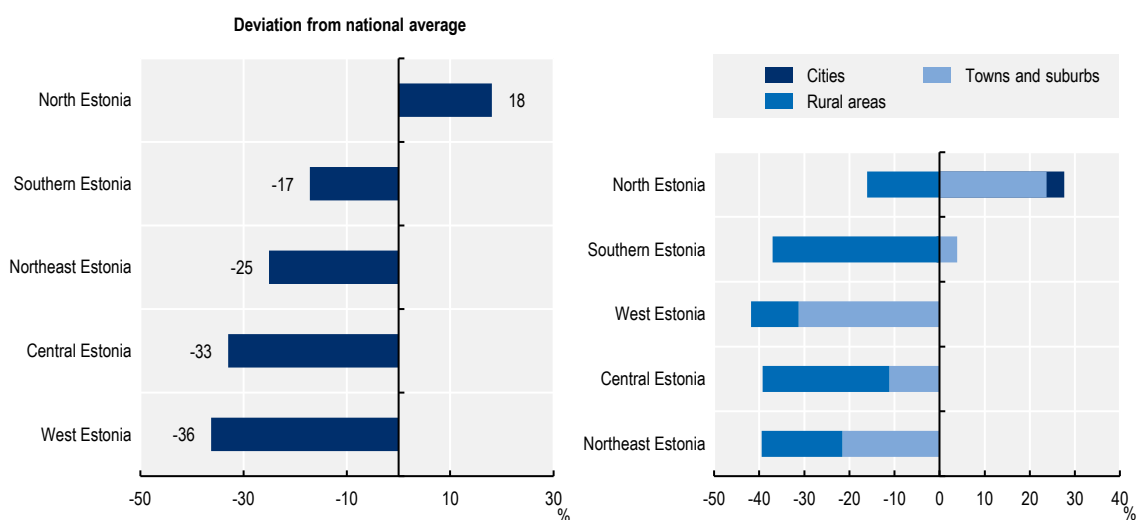
Digital connectivity is crucial for rural areas. It ensures that people and communities living in these areas can participate in day-to-day activities that are taken for granted in more densely populated areas. It is also critical to address the higher unit costs of delivering public services, including in sometimes challenging environments, as well as dealing with longer distances to markets. As such, digital connectivity is especially important in declining rural regions that face these challenges.

While Estonia has above average broadband connectivity, actual fixed download speeds in everyday use vary substantially across and within regions (Figure 1.7). In North Estonia, fixed download speeds are on average 18% above the national average but 36% below the national average in West Estonia.

Within TL3 regions, users in cities, towns and suburbs in North Estonia experience better connection speeds and users in rural areas experience worse connection speeds. Users in Tallinn experience connection speeds 28% above the national average and speed for users in Tartu aligns with the national average. Unlike users in towns and suburbs in the vicinity of Tallinn and Tartu, users in these types of areas in other regions experience speeds that are below the national average (Figure 1.7). In West Estonia for instance, speeds in towns and suburbs are 32% below the national average. Rural areas in all regions have lower connection speeds than the national average. The rural connectivity gap is largest in West Estonia, where users experience speeds that are 42% below the national average.

Figure 1.7. Gaps in download speeds, by TL3 region and degree of urbanisation, 2020 Q4

Ookla tests of fixed download speed, gaps estimated as a percentage deviation from national averages



Note Speedtest data corresponds to 2020 Q4. The data for average fixed broadband download Speedtests reported by Ookla measures the sustained peak throughput achieved by users of the network. Measurements are based on self-administered tests by users, carried over iOS and mobile devices. The figure presents average peak speed tests, weighted by the number of tests.

Source: OECD calculations based on Speedtest® by Ookla® Global Fixed and Mobile Network Performance Maps and on analysis by Ookla of Speedtest Intelligence® data for 2020Q4. Provided by Ookla and accessed 2021-01-27. Ookla trademarks are used under license and reprinted with permission.

The governance structure in Estonia

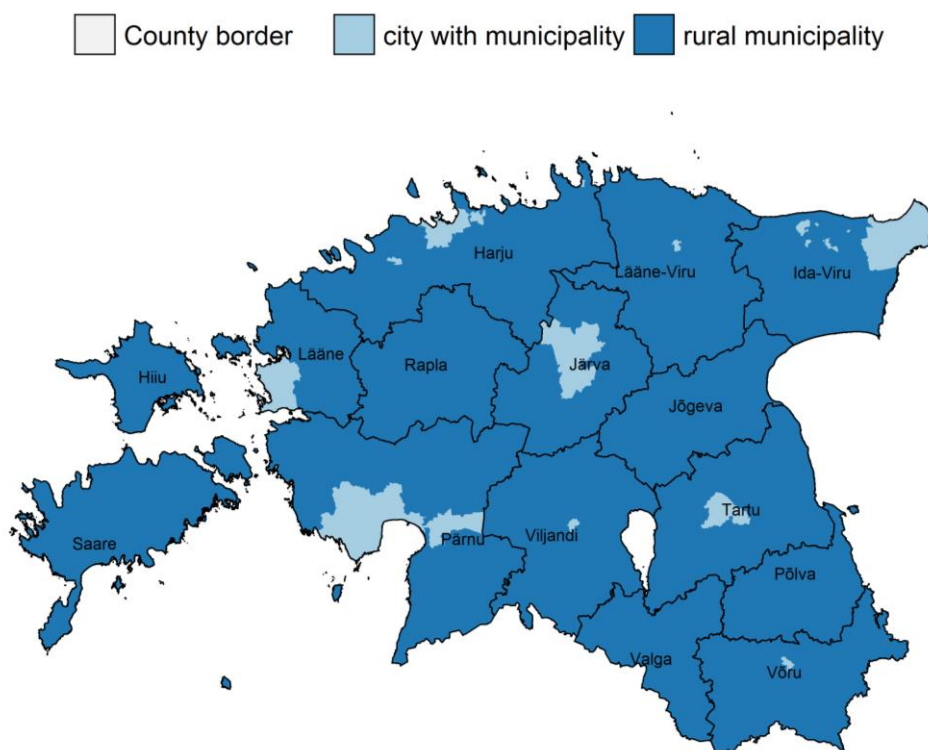
From 1989 until 1993, Estonia had 2 tiers of local self-government: the first comprised the rural municipalities and small towns, and the second was composed of 15 counties and the 6 main cities. In

1994, the model was reformed so that the county administration became part of the central government and the county governor became a representative of the central government. An important landmark in the Estonian local self-government was the establishment of the Association of Estonian Cities and the Association of Rural Municipalities in 1990. At about the same time, the Constitutional Assembly (1991-92) assigned a working group for the preparation of the formal legal foundation for local self-government. That work was completed in 1994 (Mäeltsemees, 2017^[17]; Valner, 2017^[18]).

From the very beginning of Estonia's independence in 1991, there was much political debate about the multilevel governance model. Between 1995 and 2014, there were several attempts by successive governments to reform the Estonian subnational government structure, notably to reduce the number of municipalities by voluntary municipal mergers, but without major success. The sluggish development of the bottom-up initiative increased the political pressure for a state-led reform. In 2015, after many rounds of consultations and discussions, the preparations for a comprehensive reform were started. As a result, the Administrative Reform Act was accepted by the parliament (*Riigikogu*) in June 2016. The act introduced a minimum municipal population size of 5 000 inhabitants and 11 000 as a recommended size. It also set out the different stages and the timetable for implementing the reform.

The reform was finalised in 2017 and the new municipal structure was adopted at the beginning of 2018. The reform significantly changed the structure of the Estonian local government. It stripped from county governments most of their functions and reallocated their tasks to ministries and municipalities. The counties (*maakond*, Figure 1.8) did not cease to exist, however, as they still represent some central government in the regions and county borders are used as statistical units (Mäeltsemees, 2017^[17]; Valner, 2017^[18]).

Figure 1.8. National classification of administrative units



Source: Estonian Land Board (2021^[19]), *Administrative and Settlement Division*, <https://geoportaal.maaamet.ee/eng/Spatial-Data/Administrative-and-Settlement-Division-p312.html> (accessed on 1 February 2021).

Furthermore, co-operation between municipalities continued to be arranged within the county borders. Depending on the task, there are currently between 11 and 15 joint municipal bodies organised at the county level. Currently, co-operation in development planning has been arranged through 15 counties and municipal co-operative associations have been arranged through 13 counties. There are currently 11 co-operative transport centres, of which 9 are county-based and 2 are region-based. The membership of such organisations is voluntary for the municipalities. There is no directly elected body for the co-operative bodies; instead, the member municipalities appoint their representatives to the council. By law, the County Local Government Associations must be involved in the management of public transport in the county where necessary. The county municipality organisations promote municipality co-operation also by fulfilling voluntary tasks. In addition to the county municipal associations, there is a national municipal association, called the Association of Estonian Cities and Rural Municipalities. This association represents the member municipalities in negotiations with the central government.

The municipal reform also reduced the number of municipalities by mergers, from 213 to 79. The size of municipalities in 2019 varied from 141 inhabitants on Ruhnu Island to 434 562 inhabitants in Tallinn. The average municipal population is 16 559 and the median population is 7 372.

The Estonian Constitution provides for autonomous local governments and the Local Government Organisation Act sets the administrative framework for municipalities (Box 1.2). New functions can be assigned to municipalities only by law or mutual agreement. The external monitoring of the municipalities is the responsibility of the government ministries and the State Audit Office. The Ministry of Finance is responsible for the legal framework of local government functions. It develops the financing (including equalisation and support fund division) and financial management principles of local authorities.

Table 1.3. Descriptive data on Estonian municipalities

	2000	2010	2017	2021
Number of municipalities	227	226	213	79
Average population size	6 173	5 900	6 171	16 559
Median population size	1 910	1 755	1 823	7 372
Average area (km ²)	192.1	193.0	202.7	562.7
Average density (inhabitants/km ²)	171.2	157.4	143.8	163.9
Share of municipalities with negative one-year population change (%)	59.5	68.5	67.3	59.5

Note: In 2017, a major administrative reform was carried out.

Source: Author's elaboration based on Statistics Estonia (2021^[3]), *Main Demographic Indicators*, <http://andmebaas.stat.ee/> (accessed on 8 February 2021).

Box 1.2. The administrative framework of local authorities in Estonia

According to the Local Government Organisation Act, each municipality must have a municipal council, a municipal board, an auditing committee and a mayor. A municipal council is elected by the residents in a secret ballot for four-year terms. The number of councillors depends on the population of the municipality with a minimum of 13 members. The council elects the chair of the council. The chair organises the work of the council, represents the council and fulfils other duties imposed by law or municipal statute. Councils can set up committees that handle functions of a permanent character. The chairmen of all committees and all members of the audit committee must be elected from among the

council members. The members of the municipal board are confirmed to the office on the proposal of the municipal mayor (approved by the council). The board may include municipal employees or political appointees. Members of the council cannot be members of the board. The municipal mayor is the head of the municipal administration and municipal staff is employed by the mayor. The main civil servant is called a secretary of the municipal office. The municipality secretary leads the municipal office and is responsible for preparing the materials for the sessions of the board and the council.

Source: Estonian Ministry of Finance (2019^[20]), *Local Governments in Estonia*.

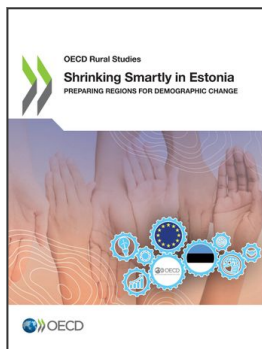
Structure of the report

This report is organised into four chapters. The second chapter, “Adapting land use and spatial planning to shrinkage in Estonia”, presents the recent spatial development patterns of Estonia, along with the spatial planning system. It then outlines the negative consequences these development patterns and planning practices have and presents policy recommendations that aim to tackle depopulation and demographic change from a land use and spatial planning perspective. The third chapter, “Financing local public services and infrastructure in Estonia: Challenges and ways forward”, discusses the Estonian multilevel governance and municipal financing framework, especially from the perspective of depopulation and shrinkage. It makes proposals on how to address the key challenges posed on Estonia’s governance and municipal finance model that are caused by shrinkage. The final chapter, “The present and future provision of education in Estonia”, touches upon the education sector, which is by far the most important municipal task when considering municipal expenditures. It focuses on the question of school network adaptation and presents a series of recommendations to align all actors in Estonia around adapting the school network to demographic change while striving to ensure access to high-quality education for all students.

References

- Aasa, A. (2019), *OD-matrices of Daily Regular Movements in Estonia (dataset)*, Mobility Lab, University of Tartu, <https://doi.org/10.23659/UTMOBLAB-1>. [9]
- Dijkstra, L. and H. Poelman (2008), “Remote rural regions: How proximity to a city influences the performance of rural regions”, https://ec.europa.eu/regional_policy/en/information/publications/regional-focus/2008/remote-rural-regions-how-proximity-to-a-city-influences-the-performance-of-rural-regions. [13]
- ESPON (2017), *Shrinking Rural Regions in Europe*. [4]
- Estonian Land Board (2021), *Administrative and Settlement Division*, Republic of Estonia, <https://geoportaal.maaamet.ee/eng/Spatial-Data/Administrative-and-Settlement-Division-p312.html> (accessed on 1 February 2021). [19]
- Estonian Ministry of Finance (2019), *Local Governments in Estonia*. [20]
- Estonian Ministry of Finance (2019), *Small Survey of Regions*. [10]
- Eurostat (2018), *Methodological Manual on Territorial Typologies: 2018 Edition*, <https://ec.europa.eu/eurostat/documents/3859598/9507230/KS-GQ-18-008-EN-N.pdf/a275fd66-b56b-4ace-8666-f39754ede66b?t=1573550953000>. [12]

- Fadic, M. et al. (2019), "Classifying small (TL3) regions based on metropolitan population, low density and remoteness", *OECD Regional Development Working Papers*, No. 2019/06, OECD Publishing, Paris, <https://dx.doi.org/10.1787/b902cc00-en>. [8]
- Goujon, A. et al. (eds.) (2021), "The demographic landscape of EU territories: Challenges and opportunities in diversely ageing regions", EUR 30498 EN, Publications Office of the European Union, Luxembourg. [15]
- Government of Estonia (2021), *Population Projections*, <https://www.stat.ee/en/find-statistics/statistics-theme/population/population-projection> (accessed on 10 October 2021). [14]
- Haase, A. et al. (2012), *Shrinking Areas: Front-runners in Innovative Citizen Participation*, European Urban Knowledge Network. [5]
- Hospers, G. and N. Reverda (2015), *Managing Population Decline in Europe's Urban and Rural Areas*, Springer. [7]
- Jacobs-Crisioni, C. et al. (2020), "Development of the LUISA Reference Scenario 2020 and production of fine-resolution population projections by 5 year age group". [16]
- Kull, M. et al. (2020), *Attractive Rural Municipalities in the Nordic Countries: Jobs, People and Reasons for Success from 14 Case Studies*, <https://doi.org/10.6027/R2020.1.1403-2503>. [6]
- Mäeltsemees, S. (2017), "In what way should the preparations for the 2017 administrative reform have been different and why?", *Collection of Articles: Administrative Reform 2017 in Estonia - Decisions, Background, Implementation*. [17]
- OECD (2021), *Delivering Quality Education and Health Care to All: Preparing Regions for Demographic Change*, OECD Rural Studies, OECD Publishing, Paris, <https://dx.doi.org/10.1787/83025c02-en>. [1]
- OECD (2021), "Regional economy", *OECD Regional Statistics (database)*, <https://dx.doi.org/10.1787/6b288ab8-en> (accessed on 12 October 2021). [11]
- OECD (2020), *Rural Well-being: Geography of Opportunities*, OECD Rural Studies, OECD Publishing, Paris, <https://doi.org/10.1787/d25cef80-en>. [2]
- Statistics Estonia (2021), *Main Demographic Indicators*, <http://andmebaas.stat.ee/> (accessed on 8 February 2021). [3]
- Valner, S. (2017), "Fifty-one shades of public engagement", *Collection of Articles: Administrative Reform 2017 in Estonia - Decisions, Background, Implementation*. [18]



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