

# Assessment and recommendations

## Introduction

Estonia's population of 1.33 million inhabitants in 2020 has shrunk by 15% since 1991. Available national and European projections suggest that this trend will continue. Depopulation has not happened evenly. While the larger functional urban areas (FUAs) of Tallinn and Tartu grew, rural and remote urban areas have been rapidly shrinking. Shrinkage results in lower density, which increases per head service and infrastructure provision costs. It also results in housing vacancies and deteriorating built environments, problems that require additional municipal resources in the face of declining tax revenues. Shrinkage also leads to a higher share of the elderly population requiring additional services and care. Adding to difficulties is the fact that Estonia has the most carbon-intensive economy in the OECD, together with heavily utilised forests and steadily increasing built-up areas, indicative of inefficient spatial development.

Tackling such challenges requires spatially oriented policies in a number of areas in order to respond to demographic change in a smart and sustainable manner. This study provides key findings from a variety of policy sectors including land use and spatial planning, services and infrastructure provision, municipal finance and multi-level governance that assess the current state of Estonia in effectively responding to shrinkage and ageing. The following policy recommendations stress the need for governance frameworks that span administrative boundaries and policy sectors to bring about a whole-of-government approach to tackling depopulation, together with spatially oriented strategies that recommend densification and improved efficiency in providing infrastructure and services.

## Key findings

### ***Despite depopulation trends, developed land in Estonia is steadily increasing, leading to inefficient spatial development and poor environmental performance***

According to OECD statistics, over 2000-14, the total built-up area in Estonia increased from 232 km<sup>2</sup> (0.54% of total land area) to 257 km<sup>2</sup> (0.6%). This represents an 11% increase, ranking Estonia 33<sup>rd</sup> out of the 38 OECD countries. However, this masks the fact that, at the same time, Estonia's population decreased by almost 5%, contrary to most other OECD countries where populations grew. Utilising built-up area per capita as a proxy for (lack of) land use efficiency, Estonia saw an increase of 18% over the same period, ranking it 6<sup>th</sup> in terms of growth among OECD countries and well above the OECD average of 6%. This increase was not limited to the Tallinn and Tartu FUAs, with most counties experiencing roughly similar increases over the period. Absolute levels of built-up area per capita in Estonia, on the other hand, are still low relative to other OECD countries. As such, some increase is understandable, especially considering Estonia's strong economic growth and an increasing need for better infrastructure. However, the fact that most of the growth occurs from converted farmland and forests, distant from urban centres, means that most of the land used to build new infrastructure could have been saved if development had been more compact. In the face of shrinkage and declining municipal revenues, maintaining this sprawling network of infrastructure will become more and more difficult in the future.

Data on settlement patterns are also indicative of a strong trend towards spread-out development. Using Eurostat data for the period 2006-18, the number of 1 km<sup>2</sup> grids inhabited by at least 1 person increased by 30%. Only about 24 000 people (1.8% of Estonia's population) moved to these new settlement areas during this time. Many of these new settlements were in rural and remote areas converted from farmland and forests. Ninety-one percent of these new grids were populated by less than five people.

Such an inefficient pattern of spatial development is problematic for a number of reasons. Most obviously, it increases the per capita costs of providing services, infrastructure and amenities across a broader area, which leads to fiscal strain for central and local governments. Importantly, however, such patterns also have significant adverse effects on the environment. Extensive artificial surface cover diminishes biodiversity and deteriorates soil quality, both key worldwide environmental challenges. Already, Estonia is the most carbon-intensive economy in the OECD with 533 kg of CO<sub>2</sub> emissions per USD 1 000 of gross domestic product (GDP), well above second-place Canada at 370 kg. It is also sixth among OECD countries in greenhouse gas (GHG) emissions per capita. In addition, forests, which cover half of Estonia's territory, are heavily utilised despite sustainable forestry efforts, with Estonia ranking second among OECD countries in fellings relative to annual production capacity. Finally, Estonia ranks first among OECD countries in the residential sector's share of total final consumption of energy, which is due to sparse land use and old and energy-inefficient building stock. Inefficient spatial development and land use contribute to Estonia's poor environmental performance through land degradation, increased car usage and energy demand, greater air pollution and carbon emissions, and lower quality of the natural environment.

### ***Depopulation widens and reinforces regional disparities, disproportionately affecting rural and remote areas***

#### *Estonia's population is increasingly concentrating near the main urban centres*

The two main urban centres of Tallinn and Tartu have been experiencing an increase in population of 6% and 3% respectively from 2015 to 2020. This is in contrast to the rest of the country where the population decreased by 5%. Close to 60% of the population now lives in these 2 areas. In addition, these urban centres are experiencing urban sprawl, with populations escalating in their peripheral areas while inner areas are not being densified significantly.

#### *Regional disparities in income and housing prices are widening*

Income disparities between regions in Estonia are relatively high compared to other European Union (EU) countries. In 2019, GDP per capita in Tallinn was EUR 36 000, compared to only EUR 9 000 in the rural county of Põlva. In addition, these gaps are growing. Income in the 1<sup>st</sup> quintile of regions was 2.5 times that of the 5<sup>th</sup> quintile in 2018, compared to 2.2 in 2008. These economic disparities are also mirrored in the labour market. The unemployment rate in Harju and Tartu Counties was 4.6% and 4.7% respectively but 10.7% in Ida-Viru and 7.9% in Põlva. The average monthly gross wage in Harju County (EUR 1 588 in 2020) was 24-49% higher than other counties excluding Tartu. Such gaps in economic conditions accelerate migration to more prosperous regions, resulting in severe polarisation in house prices. In 2021, the price of an apartment in Tallinn (EUR 2 159 per m<sup>2</sup>) was almost 10 times higher than in the southern region of Valga (EUR 212 per m<sup>2</sup>). In many rural and remote regions, the price of a house is lower than the initial costs of construction. Consequently, it is getting harder to obtain financial support through mortgages or loans from the private banking system for purchases and renovations, as houses are unable to act as collateral. This results in new construction and renovation activities being concentrated in urban centres and their periphery, while rural and remote areas attract the construction of second homes that are only inhabited during certain periods. This in turn widens the regional disparities in the housing market and makes it difficult for people to move between regions, which reinforces regional disparities and labour shortages in the non-metropolitan regions.

*Providing quality education and public transport is a challenge for rural and remote regions*

The number of students served by the school network in Estonia declined by over 50 000 between 2000 and 2020 as a result of demographic change. In the midst of this decline, the process of school consolidation has picked up pace in recent years after being stalled by complex decision-making requiring alignment between central and local governments. Already between 2005 and 2013, 9% of schools were closed and, by 2020, there were 173 fewer basic schools (primary and lower secondary) compared to 2000. Projections show that while student numbers will remain steady or even increase in towns, suburbs and cities, sparse rural areas and villages are expected to see student numbers decline substantially. Assuming the school network fully adjusts to future demand, estimates suggest a reduction of 16% (0.3% annually) and 22% (0.4% annually) respectively in the number of primary and secondary schools in those areas up to 2035.

While small and sparsely populated municipalities are indeed consolidating their schools, they also need to retain small schools in remote regions to ensure some access to basic education for all. Thus, while consolidation brings down per capita costs overall, these municipalities still face large unavoidable per capita costs, estimated to be on average over 30% greater compared to cities. The additional cost of not adjusting the school network to future lower demand is highest in the smallest municipalities that also face the highest costs of maintaining old and underutilised facilities. At the same time, these areas are likely to face the challenge of having to attract qualified, high-performing teachers. Access to services or working conditions (e.g. multiple roles of teachers, teaching different age groups) make it difficult to attract and retain qualified teachers, which is why financial and non-financial incentives for teachers are essential.

Similar challenges are present for the provision of public transport. In a recent study, the International Transport Forum (ITF) highlighted four key challenges for Estonia's transportation sector: i) a lack of co-ordination with spatial planning agendas; ii) low public transport quality in peripheral and rural regions; iii) low road pavement ratio; and iv) low investment efficiency. Although Estonia is aiming to introduce demand-responsive transport (DRT) through pilot projects, the pace of adoption is slower compared to other Scandinavian countries such as Denmark, Norway and Sweden. Furthermore, rural areas are more dependent on cars, which not only results in adverse environmental consequences but also high unit costs for public transport as small populations and low density make it increasingly difficult and costly to provide quality transport infrastructure.

*Tax revenues are unevenly distributed between municipalities*

In Estonia, the personal income tax revenue, which is shared between central government and municipalities, is an important source of income for municipalities, making up the majority (56%) of total revenues. However, its distribution is highly uneven across localities. The substantial differences between Estonian municipalities in personal income tax (PIT) revenue can be attributed to, among other reasons, disparities in income levels and poor economic conditions in rural and remote areas. The fact that people can live and work in one municipality and be registered for tax purposes in another, complicates the situation and makes comparisons difficult. Nonetheless, in general, small and sparsely populated municipalities are at a disadvantage compared to more populated areas in terms of municipal per head revenues, which leads to widening gaps in services, infrastructure and the quality of built environments.

## **Regional governance is fragmented, making it difficult to promote inter-municipal co-operation (IMC)**

*Spatial planning, strategic initiatives and development strategies are governed separately at the regional level*

While the aim of the County-wide Spatial Plan (CSP) in Estonia is to define the principles and directions of spatial development at the regional level, in practice, CSPs do not cover important aspects of spatial policy such as health, education or socio-economic development. Instead, these aspects of development are delegated to various sectoral policies in a piecemeal fashion. For one, the Regional Policy Programme governs solely the regional planning activities of the Ministry of Finance, while horizontal sectoral policies are addressed in the newly established Regional Policy Action Plan (RPAP). Furthermore, spatial planning through the CSP and strategic planning through County Development Strategies are carried out separately, with no clear communication mechanism between them. Recent reforms to the *Planning Act* have also weakened the power of CSPs even further by taking away their decision-making capacity on projects that span municipal boundaries, such as network infrastructure.

*This leads to inefficiencies across government agendas and a lack of policy coherence*

This results in a complex and inefficient regional governance structure. The fragmentation of various county development strategies together with a patchwork of various plans makes it difficult to co-ordinate spatial planning at the regional level. CSPs are not substantive enough to be an appropriate tool to guide spatial development and promote local government co-operation. As a result, local plans related to land use or infrastructure and service provision do not span across municipalities and are not well aligned with national objectives. For example, the location of higher education institutions is not considered within a spatial planning framework to capitalise on the role of these institutions in built environment improvement and service provision integration strategies.

A lack of coherence also results in municipal finances and spending that lack co-ordination with regional and national objectives. Adding to the problem is the fact that only about 14% of municipal revenue comes from own revenue sources. This means that fiscal pressure to co-operate is moderate and comes mainly from the transfer system, which adversely affects municipalities' incentives for engaging in voluntary co-operation. The education sector is a key area where these problems play out. While spending-wise the main task of Estonian municipalities is education provision, the central government has taken more responsibility for secondary education and upper secondary education is provided for by both government levels. Such an arrangement results in a limited division of roles between governments and has led to inefficiencies in service delivery. Shrinking and ageing coupled with declining revenues in rural and remote areas may pressure the central government to further intervene in other services, especially if IMC continues to be limited. Without effective multi-level governance frameworks, this could lead to further inefficiencies and misalignment of objectives.

## **Planning and legal frameworks are ill-equipped to tackle depopulation**

*Local Comprehensive Plans (CPs) do not steer spatial development and lack the flexibility to adapt to demographic change*

Land use and spatial planning at the municipal level are still relatively new in Estonia as, during the Soviet occupation, planning processes were centralised with local administrations having little authority over planning processes. After independence, local governments were suddenly given the role of implementing planning policies for which they had little experience and knowledge. This led to a lack of capacity in devising coherent land use and spatial plans, and plans were often influenced by local actors pursuing private interests.

In theory, CPs are the primary instrument for spatial planning at the municipal level, with Detailed Spatial Plans (DSPs) existing at a smaller scale to implement the CP by determining land use functions at the plot level. In practice, however, the development of new settlements is often determined by fragmented, small-scale DSPs prepared and adopted separately and in random chronological order. These DSPs often override the CP and are in most cases initiated by property developers.

As a result, CPs struggle in their function of promoting coherent spatial development within the municipality. They fail to address depopulation through instruments such as settlement boundaries and do not encourage the densification of central areas. Population projections are not integrated into spatial strategies, resulting in land use decisions being made on unrealistic assumptions. CPs are also rigid, mainly setting building regulations, which makes it difficult to adapt to changing demographic trends or economic opportunities. The lack of capacity at the local level has resulted in many municipalities outsourcing planning development to consultants. While not always a bad practice, this has resulted in planning authorities retreating from leading roles and leaving the process of balancing interests, making discretionary decisions and reaching agreements with these hired experts.

*Expropriation in Estonia is limited, time-consuming and legally challenging, exacerbating the problem of vacant housing and spread-out development*

High vacancy rates, low energy efficiency and low quality are major problems in the Estonian housing sector. The overall housing vacancy rate was 24.5% in 2018, significantly higher even compared to Japan (13.6% in 2018) or eastern Germany (10-12% in 2013), countries also experiencing significant decline. In addition, the apartment stock consists of mainly old buildings, with 13.5% of houses still without indoor flushing toilets. In addition, these old apartments suffer from a lack of accessibility, which is problematic as rural and peripheral areas continue to age. Low energy efficiency is another problem that results in high heating costs, with the building sector accounting for 40% of national GHG emissions. As the building stock is rather old, the energy demand for heating per surface area in residential buildings is among the highest in the EU. According to recent Estonian reports, by 2050, there will be an estimated 5 300 apartment buildings needing to be demolished and 14 000 in need of renovation, with total costs estimated to be roughly EUR 22 billion.

Half-empty, old apartments and buildings detract from pleasant living environments and contribute to sprawl and migration. In addition, vacant houses increase the per capita cost of providing essential services such as district heating, water and sewage, aggravating the fiscal burden placed on local governments.

While a limited number of municipalities have been dealing with these issues and the central government is beginning to address these problems through studies and pilot demolition projects, legal barriers regarding expropriation, together with a lack of experience, is hampering efforts. The Acquisition of Immovables in the Public Interest Act allows expropriations only under strict conditions. There is no provision for expropriation for “public interest” or “public use”, as is the case for the majority of OECD countries. Thus, expropriations in Estonia are generally limited to public infrastructure construction, such as ports, utilities or roads, in addition to over half-empty apartment buildings. However, the agreement procedures for the expropriation of apartments have also proven arduous and time-consuming. Furthermore, even today, the expropriation of abandoned detached housing is not allowed.

***The municipal finance system and land taxation schemes weaken municipal decision-making capacity while encouraging the inefficient use of resources***

*Earmarked grants are rigid and disincentivise efficiency gains in service provision*

The central government has the main responsibility of financing municipalities in Estonia. The bulk of municipal revenue is formed by PIT revenue (56% of municipal operating revenue), shared between central

government and municipalities, and state grants (29%). Municipal own revenue, which includes land tax, other small taxes, sales revenue and other operating income, makes up only about 14% of total municipal revenue. The state grant system has been in place for 15 years with only minor changes. It is comprised of block grants (20.9% of municipal operating revenue in 2020), equalisation funds (4.9%) and other transfers (3.6%). The block grant for general education comprises a major share (77%) of total block grants and is mainly targeted to finance teachers and school leaders' salaries (81% of the grant), school lunches (7%) and study support to pupils with special needs (6%).

The fact that the Estonian transfer system consists mostly of earmarked grants (80% of all transfers) weakens the decision-making power of municipalities. For example, education grants must be used within the service they target, disallowing any savings made in one sector to be used in another sector (such as social services). This makes the system rigid and bars municipalities from utilising their revenues in a flexible manner to suit local needs, also discouraging efficiency-improving measures.

The current earmarked grant system also disincentivises municipalities from improving the efficiency of services because any cost savings automatically result in cuts in block grants. In some cases, resources cannot be reallocated even within the same service sector. For example, a rural municipality may save on teacher costs by consolidating classes, yet the saving cannot be used for pupils' transportation without a loss in education transfers. This can, for example, discourage municipalities from merging schools into bigger units. Furthermore, some of the indicators used in the transfer system (equalisation system and earmarked transfers) are based on the degree of population dispersion (e.g. *tagamaalisuse koefitsient*) and the presence of small schools. While well-intended, such calculations nonetheless disincentivise municipalities away from efficient land use.

#### *Land tax legislation and the limited use of land-based financing instruments encourage spread-out development*

By law, the land tax is set by municipalities to be between 0.1% to 2.5% of taxable values. In practice, most municipalities simply opt to tax at the highest rate allowed. The land tax is considered a central government tax but 100% of its receipts go to local government budgets. Land taxes account for just 2.9% of total municipal revenues, amounting to 0.3% of GDP which is well below the OECD average of 1.1%. This results in part from the fact that taxable land values have not been re-evaluated since 2001 and are thus unrealistically low compared to market values. While new legislation to allow new valuations are currently being proposed by the Ministry of Finance, this legislation still provides for a long adjustment period. As higher land taxes generally encourage densification and more efficient use of land, the current regime is in effect incentivising sparsity over sufficiently compact development.

Land tax exemptions are another factor that further encourages sparsity. Exemptions exist for residential land plots where the owner's permanent residence is located. The exemption extends up to 0.15 hectares in cities, towns and areas designated as densely populated areas in a comprehensive plan and up to 2.0 hectares elsewhere. Through larger exemptions in remote areas far away from residential centres, coupled with low land prices compared to dense areas, this incentivises residential land owners to locate in the outskirts of rural and remote regions and promotes sprawl.

The limited implementation of land-based financing instruments also disincentivises sufficiently compact development. For example, while Estonia uses impact fees to levy costs related to upgrading technical infrastructure (based on the Planning Act, paragraph 131), its implementation is limited only to instances where the development falls under a DSP, which are mostly urban areas. Other instruments such as betterment contributions are not used in Estonia. The lack of a scheme to internalise the costs of infrastructure and service provision in remote areas makes living in these areas cheaper, further encouraging spread-out development. As a consequence, many rural homes in Estonia are secondary residences inhabited only during certain months of the year.

## Key policy recommendations

### ***Reduce land consumption sustainably and promote gradual densification of central areas***

Rural and remote regions experiencing population decline and ageing should aim to reduce land consumption and increase current land use efficiency, taking into account infrastructure and service delivery capacities. This benefits local municipalities by not only reducing per capita service delivery and infrastructure costs but also by reducing the environmental impacts of spread-out development. Analyses show, for example, a strong positive correlation between built-up area per capita and both education provision costs and GHG emissions at the TL3 level. Furthermore, denser places are on average more productive than less dense places due to productivity gains obtained through agglomeration economies, with the population density of a region being a strong predictor of economic performance. General densification could also lead to a functioning real-estate market, improvements to the built environment and better connections to services, boosting property values in remote areas.

*CPs should steer spatial development while subordinate plans should adhere to spatial planning objectives*

The DSP, despite being the subordinate plan in the planning hierarchy, has the authority to override the CP. This poses issues in Estonia as DSPs are most often initiated by developers and thus are influenced by private interests. The overriding of the CP in favour of a more detailed plan influenced by private interests carries the danger of detracting from a more coherent spatial development strategy.

Rearranging the hierarchy of local plans is necessary to promote coherent spatial development at the local level. This is especially important because, in addition to DSPs, Local Government Designated Spatial Plans (LGDSPs) and design criteria also exist to set building regulations and land uses, which, without streamlining, can result in confusion regarding planning processes. The CP should confirm its role as the higher-order plan that sets out strategic initiatives for land use and development. The subordinate plans and codes should conform to the CP and complement it by implementing building and land use details based on these agendas.

Alterations to the CP by subordinate plans should be disallowed or at the very least allowed only in exceptional circumstances. In return, CPs should refrain from “over-planning” by moving away from setting detailed building codes and specific uses and rather focusing on planning the strategic location of land use, housing, infrastructure and service networks, while also setting strict development boundaries. This would have the added benefit of easing the requirements of what constitutes a CP and shortening approval processes.

*CPs need to integrate population projections into land use planning and adjust development boundaries accordingly*

Without population projections, land use plans tend to overestimate the future demand for land. This is especially the case when regions are declining, as plans tend to be overly optimistic in estimating land demand compared to population forecasts. In order to prevent a “race to the bottom”, CPs should incorporate the population guidelines set in CSPs and implement them into land use plans and regulations, encouraging densification of core areas. If needed, Statistics Estonia could provide municipal level population projections that CPs could utilise.

A strategy of proposing settlement boundaries and service limits while providing various incentives for investments within those boundaries helps in deterring spread-out development. Instruments such as urban growth boundaries, urban service boundaries and greenbelts could be used to set temporary limits on expansion. Such boundaries should be clearly laid out and enforced in CPs, in harmony with strategic objectives and socio-economic development plans. These boundaries should then be adjusted as needed to better contain development in areas that face population decline. When coupled with fiscal incentives, these boundaries are capable of improving the quality of the built environment within the limits, which can attract residents and businesses.

*Local plans should be more flexible to adapt to demographic trends and economic opportunities*

Zoning should be sufficiently flexible to allow neighbourhoods to change over time according to evolving population patterns and changes in housing demand. Flexible zoning plans allow underused areas to be allocated to new uses, possibly even through temporary uses. This can increase the density of development and improve environmental sustainability while reducing burdens on transport infrastructure. Flexible zoning also ensures efficient patterns of spatial development, especially in low-density areas and along public transport corridors.

Importantly, however, flexibility in land use planning should not lead to uncontrolled land use. Zoning regulations should define maximum nuisance levels, with uses that create fewer nuisances than the maximum level generally being allowed. For example, all types of residential buildings could be allowed in a commercial zone, while warehouses and garages (but not factories) are allowed in commercial areas. Importantly, none of the zones should be strictly single-use in principle, with single-use zoning being reserved mainly for specific purposes such as hazardous industrial areas.

Flexible zoning districts or Special Purpose Bodies (SPBs) could be used to improve the adaptability of land use in instances where new developments need to be implemented quickly. Many OECD countries such as Germany and Poland have adopted extraordinary measures for such cases. However, such zoning districts, if implemented, should only be utilised in cases where a significant investment or opportunity arises for which quick development is necessary. Various incentives for investments within these districts could also be used to spur development and growth.

Density regulations should be upwardly flexible to allow for the gradual densification of central neighbourhoods, in line with infrastructure and service delivery capacity. This is important especially in rural and remote regions where reliance on personal vehicles is high. Thus, when utilising mixed-use and flexible density regulations, the priority should be to establish well-functioning public transport networks including DRT services through transit-oriented development (TOD). Such land use patterns also result in a reduction of service per capita and infrastructure delivery costs. This is critical for rural and remote areas and small towns facing decline, as their fiscal capacity to provide for an extensive infrastructure network that spans thinly developed areas is limited.

### ***Governance spanning sectors and levels of government is needed for coherent spatial planning and IMC***

*Voluntary IMC should be promoted through incentives and legal frameworks*

Promoting IMC has become increasingly important in Estonia since the municipal reform and abolition of county governments. This is because uncoordinated local regulations can be easily sidestepped by simply moving to a nearby, less restrictive jurisdiction. A classic example is the local property tax, where higher tax rates can be avoided by moving to a nearby municipality. The positive effects of providing services and



infrastructure in a municipality are also bound to traverse administrative boundaries through spill-over effects.

Without formal regional governments, Estonia should consider strengthening policies for IMC, especially in the case of services and infrastructure with externalities requiring a larger catchment (e.g. education, water and sewerage). This is important also because municipalities often appear to compete for central government financing and EU funds. Without special arrangements and enabling frameworks, municipalities may not have a strong financial incentive to enter into co-operation.

Policies that clarify the legal base for voluntary IMC are needed to help municipalities to utilise economies of scale and also to reduce confusion and streamline administrative processes. This could possibly be done within the planning framework, by outlining processes for co-operation in important areas such as education and infrastructure within the National and County-wide Spatial Plan (NSP and CSP, which are legally binding). In addition, utilising the transfer system by targeting certain transfers to inter-municipal bodies rather than municipalities could incentivise municipalities to choose voluntary co-operation. This would be particularly effective for rural and remote municipalities, as they often lack the fiscal capacity to undertake large scale projects spanning administrative boundaries. The central government could further encourage municipal co-operation by engaging in capacity-building efforts to support municipalities in improving administrative capacity, as well as funding pilot projects and experiments on voluntary IMC to gain more experience in best practices. A state government-led comprehensive review of municipal service responsibilities is also warranted to help identify services where reassignment of spending and IMC could be viable approaches.

### *CSPs should be the central platform in guiding regional development*

In theory, the aim of a CSP is to define the principles for coherent spatial development within county boundaries. Its primary role is to formally express interests that transcend local municipal boundaries and to balance national and local needs and interests regarding spatial development. In this way, CSPs are the ideal platform to address issues such as land use, territorial development, infrastructure, service delivery and housing, that are closely related to shrinkage, as these issues need to be solved collectively at a higher spatial scale. In practice, however, CSPs are weakly implemented and lack proper details regarding the scope and procedures for IMC.

The recent changes Estonia has undergone in its county governance have brought about fragmentation in county strategies. The Regional Policy Programme and Regional Policy Action Plan should be streamlined to provide one coherent regional policy framework that integrates spatial objectives with strategic objectives. CSPs should be a *de facto* platform for which regional issues relating to spatial development are outlined. CSPs need to outline a clear division of roles between the central government and municipalities for tackling issues that span municipal boundaries. In addition, CSPs should expand the scope of functions to determine the conditions for IMC in other policy areas pertinent for tackling depopulation and ageing, including education, health and other critical services and infrastructure. To this end, the central government and municipalities need to review the appropriateness and feasibility of the current hierarchical service network and outline clear implementation plans with timelines in CSPs. There is also a need to combine strategic planning with spatial planning at the county level, by integrating county development strategies and CSPs, or even by subsuming county development strategies within CSPs.

### *Increase the quality of services through municipal co-operation*

Promoting co-operation among municipalities undergoing shrinkage will be key in the next decades as increasing the quality of services is closely linked to increased scale and resource sharing. Estonia lacks a history of quality-oriented co-operation across rural municipalities. As such, co-operation may require additional policy actions on top of existing financial incentives for consolidation. For education, these could focus for instance on incentives to develop dormitories and transportation solutions in co-operation with

neighbouring municipalities. The network of service centres outlined in CSPs should be utilised to further consolidate services in general and promote IMC.

For education, a modular approach for the integration and combination of school services can aid joint restructuring processes in neighbouring small municipalities. This can work for instance to improve the integration of pre-primary and primary school levels and to separate lower education when there is room for consolidation at that level. The central government could actively promote strategic partnerships among small rural municipalities, for instance through additional financial incentives for joint municipal projects with clear quality-enhancing goals for students. Importantly, with consolidation, distances to schools will increase for students in rural remote areas that already face long travel distances. In this context, there is a need to mitigate the effects of consolidation for rural students that are not limited to physical access but also include an increased mismatch between educational offerings and local market demands, and a reduction in the variety of courses offered. Strategies can include new digitally-based models of provision and opening the option for rural students to virtually attend courses offered outside their catchment area.

The regional education centres that are part of the Estonian Education Strategy 2021-2035 can help aid the transfer of capacity from central to local levels and co-ordinate all stakeholders involved in the strategic provision of vocational training, including local economic actors. Moving beyond political entities such as municipal co-operation organisations at the county level, this co-operation needs to be done at a level that is fully recognised and supported by the municipalities involved, for instance by strategic partnerships formed through bottom-up approaches.

In general, rural school clusters could aid in increasing resource sharing and allocating resources more efficiently and effectively across rural schools. This would increase accountability for school directors and incentives for specialised teachers. If formalised for groups of municipalities, school clusters can have the additional benefit of increasing managerial decision capacities oriented towards development and change management, while improving the connection between school and municipal level decisions.

Strategic and flexible use of digital education provision in combination with school clusters can further reduce the need for staff and student travelling. Such measures mitigate inequities in access to education due to consolidation. Digitally-based models of upper secondary provision could also have the added benefit of leveraging high digital skills in Estonia. Vocational students in rural areas could be given the chance to complement their programmes by virtually attending courses offered outside their catchment area. Rural vocational schools could update their offer to cater to information and communication technology (ICT) professional profiles in sectors such as tourism and agriculture. These efforts will likely require state government support as well as co-operation among rural municipalities as private incentives are low. When properly implemented, such policies could be used as a vehicle to ensure regional development objectives are integrated into decisions on vocational education and training (VET) curricula. This is especially important in shrinking regions where a misalignment of VET offerings and local needs could contribute to further brain drain.

Going beyond education, it is imperative to align the adaptation of services in a coherent manner across sectors. Such integration takes advantage of potential synergies and reduces inefficiencies in the use of fiscal resources. Estonia's existing network of service centres outlined in CSPs should be better utilised to consolidate municipal services while still maintaining quality across all areas, including sparsely populated regions. This requires a coherent regional framework and strong IMC, along with financial support from the central government. The integration of services through the service centre network should also bring cost savings based on economies of scale.

### ***Demolition and renovation projects should take place at a larger scale, through coherent planning, fiscal support and legislative changes***

Current efforts to improve living conditions and residential environments through demolition and renovation projects in Estonia, while ongoing, are still in their infancy. For example, the *Hea avalik ruum* programme in Estonia has been implemented since 2014 and the rejuvenation of ten town centres has been completed. They have been successful in achieving their goal of improving the built environment of central areas yet these projects have been implemented in a piecemeal fashion at the site level. It is necessary to establish a system in which these projects can be implemented at a larger scale through co-operation between government levels, ideally within the spatial planning framework through the CPs and CSPs. Importantly, these programmes should be implemented in a participatory and horizontal manner. This would not only improve their efficiency but also better align regeneration efforts with strategic objectives.

Demolition and renovation projects should be aligned with spatial planning objectives outlined in CSPs and CPs. The CSPs should outline which areas need demolition and renovation based on population projections and spatial development trajectories. The CPs should outline the settlement boundaries and allocate land uses and development densities. The demolition and renovation projects should follow a process of “shrinking from the outside in”, where the building stock in the periphery is reduced and renovation efforts are concentrated in town centres.

The estimated annual investment needed for demolition and renovation is 4.5 times larger than that of current investments. As such, the central government should prepare a sufficient and stable financing mechanism, possibly through the Estonian Credit and Export Guarantee Fund (KredEx) or by establishing a housing investment fund as well as increase annual investment scales. Funding priority should be given to non-metropolitan regions where shrinkage and vacant housing issues are most prevalent. Additional bonuses or higher grant percentages could also be awarded to projects reflected in the CSPs or CPs.

Legislation for expropriation should also be revised to allow for the easier demolition of vacant buildings. Expropriation should be allowed for the demolition of empty detached housing, while the expropriation of apartment buildings should be streamlined. Expropriation initiatives should be integrated with land use plans through the CP and CSP, thus allowing expropriations to be carried out at a larger scale based on demographic projections and settlement boundaries. This would require expropriations to be allowed based on land use decisions, such as in countries including Denmark, Finland, Latvia and Poland.

When expropriation proves difficult, strategies such as land readjustment or land banking could be utilised. Land readjustment strategies could provide residents with an alternative residence in the vicinity of their current plot that is more valuable due to infrastructure and built environment improvements but smaller in area. “Land banking”, the practice of assembling plots of undeveloped or abandoned land for development or sale, could be used in declining areas to help municipalities identify, prepare and redevelop vacant sites.

### ***The municipal financing system and land taxes should be revisited to better prepare for depopulation***

*The municipal transfer system should be reformed to be more transparent and efficient*

The current system of municipal transfers in Estonia is a complex entity and, due to overlapping indicators, the equalisation model and the earmarked grants system do not work well together. Measures are needed to promote transparency and efficiency in spending at the municipal level. Estonia could consider abandoning altogether or at the very least considerably reducing the complex earmarked grants system. The money saved from earmarked grants could instead be used to strengthen the equalisation system. All municipalities, including those with shrinking populations, could benefit from such a reform because they could better allocate the financing according to their local needs and demand.

The transfer system also needs to become more transparent. Specific circumstantial factors such as remoteness and low population density should be taken into account using a maximum of one or two criteria. The current measures used to support remote and low-density regions often inadvertently foster inefficient development patterns. These could be replaced with more neutral indicators, such as population density. The advantage of population density as an indicator for state support is that the recipients (municipalities) cannot directly influence the grants they receive with their own measures. Furthermore, population density as a measure of state aid encourages municipalities to improve the efficiency of their settlement structure. On the contrary, if the municipality managed to obtain cost benefits from a denser settlement structure, it could keep the benefit to itself, as the population density would remain unchanged in this case and the state contribution would not be reduced. Using population density as a need indicator would not change the balance between rich and poor municipalities because revenue capacity is taken into account in the equalisation.

From the perspective of rural and remote regions experiencing depopulation, demographic shifts should be taken into account more explicitly in the equalisation system, with a specific indicator for population change for example. Such an indicator could be used to support not only municipalities with shrinking populations but also those that are growing.

*Land taxes and land-based financing instruments should be revised to deter spread-out development in rural areas*

Land tax rate limits should be relaxed to allow municipalities greater autonomy in collecting revenues and to encourage efficient land use. Land taxes should not incentivise spread-out development and the ownership of single-family homes over multi-family homes. Tax exemption for residential land in remote areas should be abolished, or at least reduced, while exemptions in denser areas within rural municipalities could be relaxed further. The additional revenues collected from land taxes should be reinvested towards improving amenities in shrinking regions.

Importantly, these measures would need to come hand-in-hand with the re-evaluation of taxable land values, as current low valuations make such measures ineffective. Differentiated land tax rates depending on land use could be utilised, as in the case of Germany which differentiates tax rates based on land uses and associated environmental costs. In the Netherlands and the United States, there have been discussions on a tax on the welfare loss associated with the loss of open space due to development.

Alternative fiscal instruments could be used to better align land use with desired spatial outcomes. Importantly, impact fees should be more actively utilised to not only apply to developments in dense areas but also those in remote regions, with the rationale being the internalisation of additional costs related to service and infrastructure delivery. Impact fees have the benefit of not only internalising externalities but also providing local governments with financial resources to improve the quality of the built environment when fees are redirected towards improving public infrastructure and services.

*Fiscal incentives need to be implemented in conjunction with school network reform to address shortages in teachers and other professionals in rural areas*

The issue of shortages of teachers and other professionals (such as healthcare staff) in rural areas will have to be managed with career incentives that go beyond lump-sum financial aid. For this, special emphasis has to be placed on incentives to ensure a better assignment of human resource funds within rural schools and service centres. This could be done, for instance, by assuming more flexibility in roles, outlining clear retirement plans for older staff and providing strong career and training incentives for younger qualified staff, including digital skills and support targeted at the needs of women and their families, as well as additional provisions for flexible work hours, fewer contact hours per week and/or rotation systems. As the responsibility for the strategic planning of human resources in services falls under the responsibilities of municipalities, the state government should keep close track of performance





indicators in small and shrinking municipalities and act to bridge capacity gaps, for instance by actively promoting managerial capacity-sharing across neighbouring municipalities.

***The central government should aid municipalities by providing data and open information systems together with administrative support***





Establishing data and open information systems for vacant houses and buildings, in particular, is necessary to provide information on the spatial distribution and status of depopulation across regions. A database documenting the costs and outcomes of main municipal services should be established to support benchmarking of service provision across municipalities. Relatedly, existing and planned platforms such as “My municipality” (*Minuomavalitsus*) and the e-construction platform could be expanded to include key aspects of spatial planning and the built environment, to regularly evaluate and monitor the quality of life in regions. For example, the United Kingdom’s Ministry of Housing, Communities and Local Government has developed and published online a relative deprivation index based on 39 separate indicators at the municipal level that is used to gauge the living conditions of residents across multiple domains. A dedicated e-platform could also integrate data from various government sources, such as the land portal and the building register.





In light of local governments’ short history of land use planning, the central government could aid in local government capacity-building to effectively design CPs. It could train and maintain a national pool of certified planning and architectural experts that would aid local municipalities in devising CPs as needed and serve as consultants for the planning authority. This would provide local planning officials with the administrative capacity to co-operate on planning efforts, balance the interests of various stakeholders and ensure overall that a comprehensive spatial solution is prepared for the municipality.





## Action plan





	<b>Raise the awareness in municipalities of the cost and service quality effects caused by the shrinking population</b>		
	<b>Main text for recommendation</b>		
	<ul style="list-style-type: none"> <li>The seriousness of the effects of a shrinking population seems not to be widely understood by the municipalities, with some not yet accepting the fact that their population is shrinking. Municipalities' awareness of their shrinking population and related costs and service quality effects needs to improve to align land use strategy and service planning with population forecasts.</li> </ul>		
	<b>Actions</b>		
	<ul style="list-style-type: none"> <li>Establishing an advisory service for municipalities to better identify the additional costs caused by shrinking population, for instance on the mismatch between the population base and current infrastructure and service delivery. Such a service could for example help municipalities to plan and reorganise school networks and local infrastructure. The service could be organised jointly by Statistics Estonia and the Ministry of Finance, and could support the training of municipal officials and municipal council members.</li> <li>Extend the current databases on the costs and outcomes of main municipal services to support benchmarking between municipalities. A database with more detailed information on the inputs and outputs of municipal services (including indicators on service quality) would enable advanced efficiency analyses.</li> </ul>		
	<b>Actors</b>		
	<ul style="list-style-type: none"> <li>The central government in co-operation with the Association of Estonian Cities and Rural Municipalities</li> </ul>		
	<b>Timeline</b>		
	Short-term	Medium-term	Long-term
		✓	





	<b>Better integrate population projections in Comprehensive Plans (CPs) and adjust land use accordingly</b>		
	<b>Main text for recommendation</b>		
	<p>CPs should better integrate population projections into land use plans and regulations, encouraging densification of core areas. Local land use plans should take into account the forecasted demand for housing, infrastructure and other uses, as well as allow for the adjustment of densities and development boundaries.</p>		
	<b>Actions</b>		
	<ul style="list-style-type: none"> <li>Incorporate municipal population projections into CPs.</li> <li>Propose settlement boundaries and service limits to contain sparse development.</li> <li>Provide incentives for investment within settlement boundaries.</li> <li>Create a database of municipal-level population projections managed through Statistics Estonia.</li> </ul>		
	<b>Actors</b>		
	<ul style="list-style-type: none"> <li>Municipalities</li> <li>Central government (Ministry of Finance, Statistics Estonia)</li> </ul>		
	<b>Timeline</b>		
	Short-term	Medium-term	Long-term
	✓	✓	✓





	<b>Make Comprehensive Plans (CPs) steer spatial development and make subordinate plans adhere to spatial planning objectives</b>		
	<b>Main text for recommendation</b>		
	CPs should steer coherent spatial development. The current planning framework should be rearranged so that subordinate plans such as the Detailed Spatial Plan (DSP), Local Government Designated Spatial Plan (LGDSP) and design criteria conform to the CP.		
	<b>Actions</b>		
	<ul style="list-style-type: none"> <li>• CPs should set out strategic initiatives for land use and development and their binding nature should be confirmed.</li> <li>• CPs should focus on planning the strategic location of land use categories, housing, infrastructure and service networks and avoid setting detailed building codes and specific uses.</li> <li>• DSPs should override the CPs only exceptionally.</li> </ul>		
	<b>Actors</b>		
	<ul style="list-style-type: none"> <li>• Central government (Ministry of Finance)</li> <li>• Municipalities</li> </ul>		
	<b>Timeline</b>		
	Short-term	Medium-term	Long-term
		✓	✓





	<b>Make Comprehensive Plans more flexible to adapt to demographic trends and economic opportunities</b>		
	<b>Main text for recommendation</b>		
	Zoning should allow neighbourhoods to change as the population evolves. Importantly, however, flexibility in land use planning should not lead to uncontrolled land use that does not internalise the potentially harmful externalities stemming from developments.		
	<b>Actions</b>		
	<ul style="list-style-type: none"> <li>• Zoning should be based on tolerated nuisance levels for each land use category. Uses that create fewer nuisances than this maximum should be permitted.</li> <li>• Flexible zoning districts or Special Purpose Bodies could be utilised where new developments need to be implemented quickly.</li> <li>• Single-use zoning should be avoided in favour of mixed-use zoning and density regulations should be upward flexible, especially in transport corridors.</li> </ul>		
	<b>Actors</b>		
	<ul style="list-style-type: none"> <li>• Central government</li> <li>• Municipalities</li> </ul>		
	<b>Timeline</b>		
	Short-term	Medium-term	Long-term
		✓	✓





Make County-wide Spatial Plans (CSPs) the central platform in guiding regional development			
	Main text for recommendation		
	CSPs should be a platform outlining regional issues relating to spatial development. They should fulfil the primary role of formally expressing interests that transcend local municipal boundaries and balance national and local needs and interests regarding spatial development.		
	Actions		
	<ul style="list-style-type: none"> <li>• The Regional Policy Programme and Regional Policy Action Plan should be streamlined to provide one coherent regional policy framework that integrates spatial objectives with strategic objectives.</li> <li>• Regional policy frameworks should be well integrated within the National Spatial Plan (NSP) such that it provides a clear framework that can be implemented by individual CSPs.</li> <li>• The Nationally Designated Spatial Plan should be well integrated into the NSP so that CSPs can better take national level construction projects into account when devising regional level spatial planning strategies.</li> <li>• CSPs need to outline a clear division of roles between the central government and municipalities.</li> <li>• CSPs should expand the scope of functions to determine the conditions for inter-municipal co-operation (IMC) in other policy areas pertinent for tackling depopulation and ageing, including education, health and other critical services and infrastructure.</li> <li>• The central government and municipalities need to review the appropriateness and feasibility of the current hierarchical service network in close co-operation with public transport authorities and outline clear implementation plans with timelines in CSPs.</li> <li>• CSPs should better outline areas for IMC with regards to the function of the network of centres and clearly determine principles for municipalities in co-ordinating development patterns.</li> <li>• County development strategies and CSPs should be well integrated, possibly by subsuming county development strategies within CSPs.</li> </ul>		
	Actors		
	<ul style="list-style-type: none"> <li>• Central government</li> <li>• Municipalities</li> </ul>	<ul style="list-style-type: none"> <li>• Public transport authorities</li> <li>• Public companies providing services in CSPs</li> </ul>	
	Timeline		
	Short-term	Medium-term	Long-term
		✓	✓











Promote voluntary inter-municipal co-operation (IMC) through incentives and legal frameworks			
	Main text for recommendation		
	IMC is a viable approach to better utilise economies of scale and scope of public service provision at the municipal level. The central government should step up the voluntary co-operation between municipalities especially in the case of services with externalities and services needing a bigger scale (e.g. education, public transport and some infrastructure such as roads). Enhanced IMC is important also because often the municipalities compete for central government financing and the EU funds, and therefore without special arrangements, the municipalities may not have a strong financial incentive to enter co-operation. A larger share of own revenues of municipal total revenue would incentivise municipalities to co-operate because co-operation would bring cost savings to municipalities.		
	Actions		
	<ul style="list-style-type: none"><li>• Clarify the legal base for voluntary IMC for different types of co-operative arrangements. IMC should be legally and contractually easy to establish and easy to exit for the municipalities.</li><li>• Use the transfer system to encourage voluntary IMC, for example, targeting some transfers to IMC instead of municipalities.</li><li>• Utilising piloting and experiments on voluntary IMC to get more experience on best practices of such arrangements.</li><li>• Central government could support municipalities to build municipal administrative capacity to organise IMC, for example by preparing model contracts for establishing IMC and by establishing advisory services for municipal council members and top civil servants in the municipalities.</li></ul>		
	Actors		
	<ul style="list-style-type: none"><li>• Central government</li><li>• Municipalities</li></ul>	<ul style="list-style-type: none"><li>• Association of Estonian Cities and Rural Municipalities</li></ul>	
	Timeline		
	Short-term	Medium-term	Long-term
		✓	✓





Develop incentives to boost co-operation in education provision across municipalities			
	Main text for recommendation		
	Estonia could benefit from promoting co-operation among municipalities undergoing shrinkage with the aim of increasing the quality of basic education through increased scale and resource sharing. This requires additional policy actions on top of existing financial incentives for school closures.		
	Actions		
	<ul style="list-style-type: none"><li>• Promote new ways of organising school resources – such as school clusters where schools formally co-operate under a single leadership – to increase resource sharing and to allocate resources more efficiently and effectively.</li><li>• Combine a strategic and flexible use of digital education provision with school clusters.</li><li>• Encourage a modular approach for the integration and combination of school services in neighbouring small municipalities.</li><li>• Promote strategic partnerships among urban and suburban municipalities as well as among small rural municipalities, for instance through additional financial incentives for joint municipal projects.</li><li>• Promote effective access to dormitories and transportation solutions for vocational school students in co-operation with neighbouring municipalities.</li></ul>		
	Actors		
	<ul style="list-style-type: none"><li>• Central government</li><li>• Rural municipalities</li></ul>	<ul style="list-style-type: none"><li>• Transport agency</li><li>• Regional development centres</li></ul>	
	Timeline		
	Short-term	Medium-term	Long-term
		✓	✓





	<b>Support demolition and renovation projects through coherent planning, fiscal support and legislative changes</b>		
	<b>Main text for recommendation</b>		
	Current efforts to improve living conditions and residential environments through demolition and renovation projects in Estonia, while ongoing, are still in their infancy. It is necessary to establish a system in which demolition and renovation projects can be implemented at the county and national levels, with regards to demographic trends and spatial planning objectives.		
	<b>Actions</b>		
	<ul style="list-style-type: none"> <li>Demolition and renovation projects should be aligned with spatial planning objectives outlined in CSPs and Comprehensive Plans (CPs). The CSPs should outline which areas are in need of demolition and renovation based on population projections and spatial development trajectories. The CPs should outline the settlement boundaries, the amount of land allocated to each use and development densities, directing demolition and renovation projects according to these plans.</li> <li>The central government should prepare a sufficient and stable financing mechanism, possibly through the Estonian Credit and Export Guarantee Fund (KredEx) or by establishing a housing investment fund, and increase annual investment scales.</li> <li>Mid-to-long-term investment plans including the amount of funds available and deadlines for application rounds should be announced as early as possible so that local governments and the private sector are able to prepare accordingly.</li> <li>Integrate expropriation initiatives into CPs and allow expropriations based on land use decisions made in these local plans.</li> <li>Strategies such as land readjustment or land banking could be utilised in cases where expropriation is difficult.</li> </ul>		
	<b>Actors</b>		
	<ul style="list-style-type: none"> <li>Central government (Ministry of Finance, Ministry of Economy and Communication, Ministry of Culture, Ministry of Education and Research)</li> <li>County development centres</li> </ul>	<ul style="list-style-type: none"> <li>KredEx</li> <li>Municipalities</li> </ul>	
	<b>Timeline</b>		
	Short-term	Medium-term	Long-term
		✓	✓





	<b>Revise taxes and land-based financing instruments to deter spread-out development in rural areas</b>		
	<b>Main text for recommendation</b>		
	Land taxes and land-based financing instruments should not incentivise spread-out development and the ownership of single-family homes over multi-family homes. The additional revenues collected from land taxes should be reinvested towards improving amenities in shrinking regions.		
	<b>Actions</b>		
	<ul style="list-style-type: none"> <li>Tax exemption for residential land in remote areas should be abolished, or at least reduced, while exemptions for core areas within rural municipalities could be relaxed further.</li> <li>Taxable land values should be re-evaluated.</li> <li>Differentiated land tax rates depending on how land is used and associated environmental costs could also be utilised.</li> <li>Impact fees should be more actively utilised to not only apply to developments in dense areas but also those in remote regions, with the rationale being the internalisation of additional costs related to service and infrastructure delivery.</li> </ul>		
	<b>Actors</b>		
	<ul style="list-style-type: none"> <li>Central government</li> <li>Municipalities</li> </ul>		
	<b>Timeline</b>		
	Short-term	Medium-term	Long-term
			✓





Carry out a comprehensive review of municipal service responsibilities			
	Main text for recommendation		
	A periodic review of municipal service responsibilities is usually recommended every 5 to 10 years. Carrying out such a review could help identify services where reassignment of spending assignments between central government and municipalities as well as inter-municipal co-operative units could be a viable approach. The review could be conducted jointly by central and local government representatives, with support from academia and other expert organisations.		
	Actions		
	<ul style="list-style-type: none"> <li>• Establish an independent temporary body (a working group or an ombudsman) for reviewing the spending assignments.</li> <li>• Establish a steering group for the review (central government and municipalities).</li> <li>• Use the review and its recommendations to plan the reorganisation of service assignments.</li> <li>• Plan for the next review in no later than 10 years after the first review.</li> </ul>		
	Actors		
	<ul style="list-style-type: none"> <li>• Central government</li> <li>• Municipalities, Association of Estonian Cities and Rural Municipalities</li> <li>• Academia, other expert organisations</li> </ul>		
	Timeline		
	Short-term	Medium-term	Long-term
	✓	✓	





Reform the municipal transfer system			
	Main text for recommendation		
	The current earmarked grant system disincentivises municipalities from improving the efficiency of services because efficiency-improving changes that lead to costs savings will not allow the use of saved funds in other services. This makes the system rigid and considerably restricts the municipal decision-making power. Overall, the transparency of the current transfer system should be improved and disincentives for improving efficiency should be resolved.		
	Actions		
	<ul style="list-style-type: none"> <li>• Carry out an independent review of the municipal transfer system in Estonia, in order to increase the transparency of the system and to increase municipal decision-making power.</li> <li>• Use the results of the review to reform the transfer system.</li> <li>• In line with the recommendations for the overall reform of the system, consider taking the shrinking population into account more explicitly in the equalisation system, for example with an indicator on population change.</li> </ul>		
	Actors		
	<ul style="list-style-type: none"> <li>• Central government</li> </ul>		
	Timeline		
	Short-term	Medium-term	Long-term
		✓	





	<b>Strengthen the municipal own revenue base</b>		
	<b>Main text for recommendation</b>		
	The fact that the Estonian transfer system consists mostly of earmarked grants (80% of all transfers) and the fact that municipalities have no powers on personal income tax (PIT), weakens the municipal decision-making power. High reliance on transfers and shared taxes may have a negative effect on the efficiency of municipal service delivery. A local income tax could be considered to increase the municipal own revenue-raising power. After the merger reform of 2018, the municipalities should have the adequate administrative capacity to take bigger responsibility not only for their spending but also for their financing.		
	<b>Actions</b>		
	<ul style="list-style-type: none"> <li>• Successfully complete the land tax base re-evaluation.</li> <li>• Ease the land tax rate regulation by increasing the upper band from the current 2.5%.</li> <li>• Explore the possibility of introducing a municipal income tax (a truly local income tax or establishing a “piggyback” tax on the national income tax).</li> </ul>		
	<b>Actors</b>		
	<ul style="list-style-type: none"> <li>• Central government</li> </ul>		
	<b>Timeline</b>		
	Short-term	Medium-term	Long-term
	✓	✓	✓





	<b>Focus on training and career incentives to attract teachers to rural schools</b>		
	<b>Main text for recommendation</b>		
	Rural areas need to ensure clear career incentives for new teachers as well as mechanisms to compensate for the specificities of rural schools, including not only small and multi-grade classroom teaching but also possible isolation and long travel times. These incentives need to go beyond lump-sum financial aid.		
	<b>Actions</b>		
	<ul style="list-style-type: none"> <li>• Assume more flexibility in roles and retirement plans for older staff and strong career and training incentives for newly qualified staff, including on digital skills.</li> <li>• Evaluate the current attractiveness of part-time contracts.</li> <li>• Promote school managerial capacity oriented towards development and change management while pooling resources under school clusters.</li> <li>• Ensure a faster progression at the start of rural teachers' careers and specific measures for itinerant teachers such as flexible work hours, fewer contact hours per week or rotation systems.</li> </ul>		
	<b>Actors</b>		
	<ul style="list-style-type: none"> <li>• Central government (Ministry of Education and Research)</li> <li>• Municipalities</li> </ul>		
	<b>Timeline</b>		
	Short-term	Medium-term	Long-term
		✓	

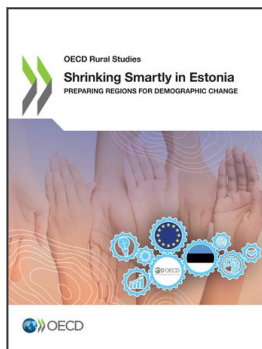
	<b>Use objective measures of unavoidable costs while allowing more flexibility in the use of funding for education</b>		
	<b>Main text for recommendation</b>		
	The inclusion of a fixed coefficient in the education grant system aims at ensuring similar levels of quality across urban and rural schools by aligning the wages of rural and urban teachers. In this context, Estonia could consider moving towards a measure of unavoidable costs based solely on geographic and demographic factors. Furthermore, with more flexibility in the use of funds, municipalities could focus on quality objectives.		
	<b>Actions</b>		
	<ul style="list-style-type: none"> <li>• Avoid factors that are under the direct control of municipalities in the criteria used in the education grant system.</li> <li>• Use unavoidable costs of remoteness and smallness estimations to determine the level of additional funding to rural municipalities.</li> <li>• Increase the flexibility in the use of education funding.</li> <li>• Phase out earmarked block education grants for basic education and redirect funds towards an equalisation fund while keeping in place mechanisms to ensure appropriate conditions for rural teachers.</li> </ul>		
	<b>Actors</b>		
	<ul style="list-style-type: none"> <li>• Central government (Ministry of Education and Research)</li> <li>• Rural municipalities</li> </ul>		
	<b>Timeline</b>		
	Short-term	Medium-term	Long-term
		✓	

	<b>Further develop innovative transport solutions to facilitate access to rural regions</b>		
	<b>Main text for recommendation</b>		
	For shrinking rural regions with low service frequency, relying only on conventional (bus) public transport is unsustainable. Demand-responsive transport (DRT) could allow rural areas to benefit from flexible pre-bookable transport instead of scheduled services. In addition to DRT, it is also necessary to consider ways to provide transport services in connection with other private and public services such as post, retail shops and banking. Digital solutions such as a dedicated application can also aid in the implementation of such solutions by accurately determining demand and analysing accumulated traffic data.		
	<b>Actions</b>		
	<ul style="list-style-type: none"> <li>• Provide rural inhabitants with DRT and promote the progress of ongoing DRT pilots.</li> <li>• Incorporate software (such as applications) for DRT services to allow users and drivers to make last-minute bookings from a mobile phone.</li> <li>• Develop grant programmes to promote local transport innovation.</li> <li>• Promote complementary measures including the provision of electrically assisted bicycle services and subsidies for driving licences for young people in rural communities.</li> </ul>		
	<b>Actors</b>		
	<ul style="list-style-type: none"> <li>• Ministry of Social Affairs</li> <li>• Ministry of Finance</li> <li>• Ministry of Economy and Communication</li> <li>• Public transport authorities</li> <li>• Rural municipalities</li> </ul>		
	<b>Timeline</b>		
	Short-term	Medium-term	Long-term
	✓	✓	✓

Consolidate upper secondary education provision with a functional and strategic view			
	<b>Main text for recommendation</b>		
	Placement based on functional service provision areas that also take into account the future demand for education can optimise access to schools and avoid resource duplication. In particular, the placement upper secondary schools should be more aligned with other spatial planning policies to capitalise on the potential of newly constructed schools in built environment improvement and service provision integration strategies.		
	<b>Actions</b>		
	<ul style="list-style-type: none"> <li>• Encourage placement based on optimal service provision areas.</li> <li>• Align the placement of upper secondary schools with other spatial planning policies.</li> <li>• Co-ordinate all stakeholders involved in the strategic provision of vocational education through regional education centres.</li> <li>• Support students in their transition from basic to higher education through early and high-quality support systems.</li> </ul>		
	<b>Actors</b>		
	<ul style="list-style-type: none"> <li>• Ministry of Education</li> <li>• Schools and regional education centres</li> <li>• Local stakeholders and economic actors</li> <li>• Municipalities</li> </ul>		
	<b>Timeline</b>		
	Short-term	Medium-term	Long-term
		✓	

Digitalise vocational education to broaden opportunities for rural youth			
	<b>Main text for recommendation</b>		
	Estonia can develop specific strategies to better integrate general and vocational upper secondary schools that serve rural students as well as to better connect vocational education and training (VET) with the skills needed in tomorrow's rural labour market. The mechanisms employed should address not only the impact of consolidation on physical access but also the increased mismatch in the educational offer and local market demands and the reduction in the variety of course offers.		
	<b>Actions</b>		
	<ul style="list-style-type: none"> <li>• Offer to VET students in rural areas the opportunity to complement their programmes by virtually attending courses offered outside their catchment area.</li> <li>• Monitor rural labour market needs through the OSKA forecasting system in order to better connect VET with future rural jobs and, in particular, with the digital skills needs of rural employment.</li> <li>• Strengthen training on digital tools in all vocational schools to sustain growth and employment in key sectors for rural areas such as tourism, biotechnology, renewable energies, agri-food or silver economy.</li> <li>• Develop talent meetings between final-year students and small- and medium-sized enterprises (SMEs) in key sectors for rural areas.</li> </ul>		
	<b>Actors</b>		
	<ul style="list-style-type: none"> <li>• Central government (Ministry of Education)</li> <li>• VET schools</li> <li>• Private sector (SMEs and businesses)</li> </ul>		
	<b>Timeline</b>		
	Short-term	Medium-term	Long-term
		✓	

The central government should aid municipalities by providing data and open information systems together with administrative support			
	<b>Main text for recommendation</b>		
	Establishing data and open information systems, for vacant houses and buildings in particular, is necessary to provide information on the spatial distribution and status of depopulation across regions. Such systems together with administrative support and capacity-building efforts by the central government are needed to aid municipalities in adapting to depopulation and shrinkage.		
	<b>Actions</b>		
	<ul style="list-style-type: none"> <li>• A database documenting the costs and outcomes of main municipal services should be established to support benchmarking of service provision across municipalities.</li> <li>• Existing platforms such as “My municipality” (Minuomavalitsus) and the planned e-construction platform could be expanded to include key aspects of spatial planning and the built environment, to regularly evaluate and monitor the quality of life in regions and support place-based policies.</li> <li>• The central government could train and maintain a national pool of certified planning and architectural experts with experience handling shrinkage issues, that would aid local municipalities in devising CPs as needed, and serve as consultants for the planning authority.</li> </ul>		
	<b>Actors</b>		
	<ul style="list-style-type: none"> <li>• Central government (all ministries)</li> </ul>		
	<b>Timeline</b>		
	Short-term	Medium-term	Long-term
	✓	✓	



From:

## Shrinking Smartly in Estonia

### Preparing Regions for Demographic Change

Access the complete publication at:

<https://doi.org/10.1787/77cfe25e-en>

#### Please cite this chapter as:

OECD (2022), "Assessment and recommendations", in *Shrinking Smartly in Estonia: Preparing Regions for Demographic Change*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/fd5b2a2b-en>

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area. Extracts from publications may be subject to additional disclaimers, which are set out in the complete version of the publication, available at the link provided.

The use of this work, whether digital or print, is governed by the Terms and Conditions to be found at <http://www.oecd.org/termsandconditions>.