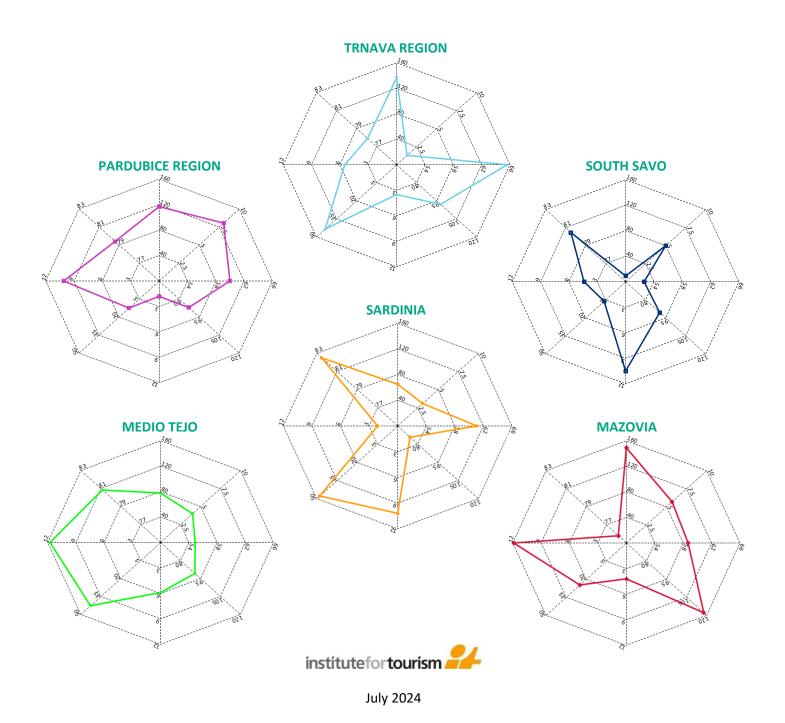


## REWARD PROJECT: REGIONAL PROFILES AND INSIGTHS



#### Editors

Renata Tomljenović, PhD Institute for Tourism

lvo Beroš, PhD Institute for Tourism Zrinka Marušić, mag. math. Institute for Tourism

Ivan Sever, PhD Institute for Tourism

### **REWARD PROJECT:**

### RETAINING AND ATTRACTING KNOWLEDGE WORKERS FOR REGIONAL DEVELOPMENT

### **REGIONAL PROFILES AND INSIGTHS**

Institute for Tourism, Zagreb

July 2024



#### CONTENTS

1	INTRODUCTION	1
2	SOUTH SAVO Jatta Juhola, South Savo Regional Council	3
3	MEDIO TEJO Jorge Salgado Simões, Inter-Municipal Community of Médio Tejo	10
4	SARDINIA Gaia De Donato, Autonomous Region of Sardinia	16
5	TRNAVA REGION Patrik Ondrejech, Trnavský samosprávny kraj	23
6	MAZOVIAN Agnieszka Bech, Marshal's Office of the Mazovian Voivodeship in Warsaw	31
7	PARDUBICE REGION Jan Gregor, Barbora Zakova, Regional Development Agency of the Pardubice Region	38



#### **INTRODUCTION**

This report presents part of the results of the status quo analysis conducted in the first semester of the REWARD project, funded by INTERREG EUROPE. The REWARD project's overarching objective is to enhance regional policies and programs aimed at retaining and attracting knowledge workers and skills crucial for regional development. Implemented by a consortium of eight partners and two associated policy authorities, the project is led by Savonlinna Development Services and runs from April 1, 2024, to March 31, 2028.

The report t features fact sheets of partner regions, consisting of information and data relevant to the project's objective, a brief description of the best practices, and an overall summary of the regional advantages and challenges in attracting and retaining knowledge workers. The primary aim of these fact sheets is to provide contextual information that facilitates policy transfer based on best practices. This is built on the premise that effective policy transfer relies not only on understanding what has been done but also on the broader context that led to policy formulation and implementation. Additionally, these fact sheets overcome the language barriers and time constraints that partners would encounter if independently searching for information.

The fact sheets are an outcome of systematic and structured regional situation analysis facilitated by the Institute for Tourism in its role as an advisory partner. The Institute prepared the status quo questionnaire, enabling the collection of comparative data on regional characteristics vital for policies focused on attracting and retaining knowledge workers. Detailed instructions on the questionnaire's structure, data sources, and completion were provided to partners during an online kick-off meeting in April 2024. Partners had about a month to complete the questionnaire, allowing key findings to be presented at the kick-off meeting organized by the Inter-Municipal Community of Médio Tejo in Tomar from May 13-15, 2024. The fact sheets were developed by the Institute for Tourism based on the analysis of the status quo questionnaire. Upon completion, they were reviewed by partner regions for accuracy, additional information, and final approval.

It was originally intended that these regional analyses would be part of a status quo publication presented to partners at the interregional meeting in Sardinia in November 2024. The publication will include a theoretical framework, a comparative analysis of the partner regions, and the fact sheets. The completed status quo questionnaires will be provided as a supplement.

In hindsight, it was concluded that distributing the fact sheets to partners as early as possible is preferable, giving them more time to familiarize themselves with each region and its best practices ahead of the meeting in Sardinia.

Savonlinna Development Services, as the lead partner, and the Institute for Tourism, as the advisory partner, express their gratitude to all partners for their efforts in completing the questionnaire to a high standard within the project's tight timetable.



#### **REWARD Partners**

- LP01 Savonlinna Development Services Ltd. (FI) Lead Partner
- PP02 South Savo Regional Council (FI)
- PP03 Institute for Tourism (HR) Advisory Partner
- PP04 Inter-Municipal Community of Médio Tejo (PT)
- PP05 Autonomous Region of Sardinia (IT)
- PP06 Western Development Commission (IE)
- PP07 Trnavský samosprávny kraj (SK)
- PP08 Marshal's Office of the Mazovian Voivodeship (PL)
- PP09 Regional Development Agency of the Pardubice Region (CZ)

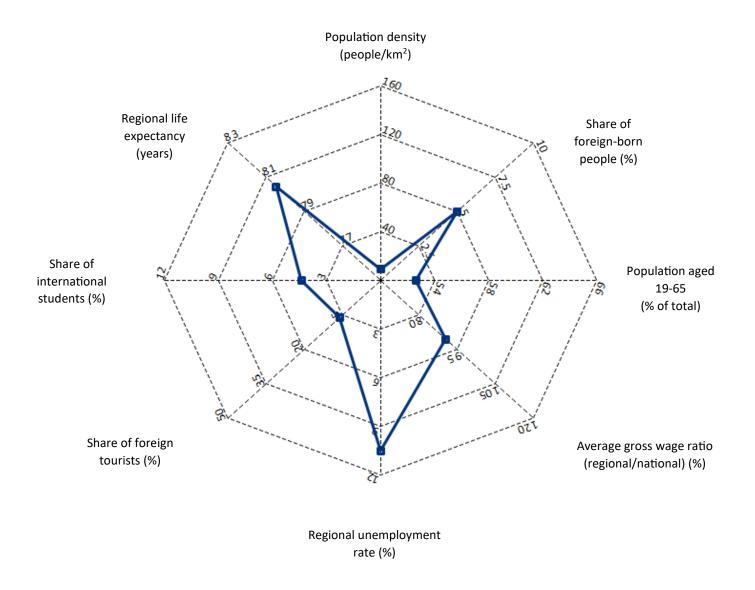
#### **Associated Policy Authorities**

- Regional Authority of the Pardubice Region (CZ)
- Northern and Western Regional Assembly (IE)





# ETELÄ-SAVON MAAKUNTA SOUTH SAVO FACT SHEET









#### SOUTH SAVO FACT SHEET

#### Location

Southeastern Finland, a significant part of the Finnish Lakeland.

Surface:	14 258 km <sup>2</sup> (4.7% of the country surface area)
Population:	130 000 (2.3% of the country population)
Population density:	10 people/km <sup>2</sup> (30 people/km <sup>2</sup> in the country)

Water covers 25% of its territory, including parts of Lake Saimaa, the largest lake in Finland, over 4 700 smaller lakes, long and indented shorelines (32 000 km) and rivers (5 000 km).<sup>1</sup>

Forest occupies 87% of the land, followed by 4% agricultural fields, 5% peatlands, and 4% designated conservation areas.



#### **Population**

South Savo has population of 130 000 people. The main administrative and economic hub is Mikkeli (52 thousand inhabitants, 40% of total regional population). The other two major towns are Savonlinna (32 thousand inhabitants, 25%) and Pieksämäki (17 thousand inhabitants, 13%).

#### Urban – rural divide

The urbanization rate of 72.2% (compared to the national average of 86.9%) is the lowest in mainland Finland.

Nevertheless, the population and services are becoming more concentrated, draining rural areas of population and, subsequently, services. It is not surprising than that there are about 70 thousand permanently inhabited residencies, and 46.5 thousand holiday homes. At the same time, the urban areas of Mikkeli and Savonlinna and their surroundings are becoming denser, but this does not threaten the quality of the cities' green areas or pose infrastructure challenges.

#### Accessibility

Regionally, South Savo relies heavily on private cars, with residents averaging about 10 000 car kilometres per person.

- Road: Highway 5 serves as the main road route to the region, and it is in good condition. It takes
  from 2.5 hours to reach Helsinki from Mikkeli (224 km) to 3.5 hours from Savonlinna (330 km).
  Regional road network, while mostly in good condition, needs improvement for carrying out
  commercial transport (mostly milk, raw wood, and bioenergy) and serving tourism.
- **Air:** The major airport servicing outbound travel is Helsinki-Vantaa. Savonlinna Airport has daily flights to Helsinki during weekday and some seasonal routes.
- **Rail:** Efforts are underway to enhance external accessibility, notably through faster rail connections, reducing travel times to Helsinki.
- Water: Inland waterways, including Lake Saimaa, are also utilized for transportation and tourism. Saimaa Canal is a major water transport route to the Baltic Sea, at the moment adversely affected by the geopolitical situation with Russia, leading to increased reliance on road transport.



<sup>&</sup>lt;sup>1</sup> OECD Regional statistics. OECD (2023). Survey on Policy and multi-level governance in the NSPA (Unpublished questionnaire). OECD (2023). Findings from the OCED study mission to South Savo on May 2023.



 Sustainable transport: The region is working on achieving climate goals for transportation by developing new transport services and investing in alternative fuel distribution networks. Compact urban centres and their rural areas provide good conditions for increasing and experimenting with sustainable mobility modes and services. The latter is facilitated by the digital services and functional telecommunications connections making the physical travel to services unnecessary.

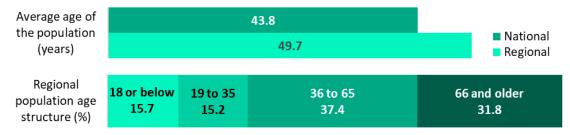
#### **Digital infrastructure**

Fixed high-speed broadband (at least 100 Mbit/s) is available to 59%, while fiber optic to 35% of households. However, not all rural areas have sufficiently fast telecommunication connections. Fixed broadband network construction projects are underway in ten municipalities, to be completed by the summer of 2026.

#### **Population trends**

- Population changes 1990/2023: decrease of 20.5%
- Population changes 2010/2023: decrease of 11.1% (annual rate of change -0.9%)

The population has experienced a consistent decline, mostly due to the negative natural population change (more deaths than births).



#### Source/s: Statistics Finland

The population the South Savo is the oldest in Finland. The decline in population size and average age, due to the record low birth rate, is affecting the South Savo, as well as whole of the country.

#### Migration

Some population gain is due to immigration, although it is at the low level regionally, as well as nationally.

Table: In and	out migration
---------------	---------------

Migration	2023	
Migration	Number	% of the regional population
Out of the region	5 375	4.12
Within the country	5 269	4.04
Outside the country	106	0.08
To the region	6 122	4.69
From other parts of the country	4 732	3.63
From other countries	1 390	1.07

Source: Statistics Finland (preliminary data)

The percentage of foreign-born people in South Savo is only 5% (average in Finland 11%); it grows slowly but steadily. Immigration is concentrated mainly in the Mikkeli and Savonlinna. About 60% of the immigrant population is from Europe. The biggest foreign nationalities living in South Savo are Russian, Estonian, Thailand, Afghanistan and Ukrainian.





The foreign population is much younger than the native population. The working-age population of immigrants (aged 20-64) is notably bigger than in Finland in general. The employment rate of immigrants in South Savo is lower in all age groups compared to the native population.

#### Wellbeing Services County Eloisa in South Savo

It offers integration and immigration services that operate in the entire region for refugees, asylum seekers with a residence permit, asylum seekers who have been placed in the municipality based on temporary protection, and other immigrants depending on their service needs. It purpose is to support the integration of immigrants, achieve equality and inclusion, and increase well-being and health, including tailor-made to promote integration:

- social guidance
- social work
- family work that promotes integration.

Low-threshold services include guidance and advice, group activities and consultation related to promoting integration.

#### Economy and labour market

In comparison to the Finnish regions, the GDP of South Savo is among the lowest. However, the gap to the Finnish average has been diminishing over the years.

Indicator	Value
Regional GDP per capita:	34 808 € (76.9% of the country's GDP per capita)
Regional unemployment rate:	10.5% (0.7 percentage points higher than in the country)
Average regional (gross) monthly salary:	3 403€ (88.4% of the average monthly salary in the country)
Source/s: Statistics Finland	

Source/s: Statistics Finland

**Past**: Forestry, agriculture, and fishing, have, historically, played significant roles.

**Present**: Recent years have seen economic diversification with manufacturing, services, and technology sectors gaining prominence, particularly in wood products and mechanical engineering, presenting opportunities for policies aimed at sustainable growth and enhancing competitiveness, ushering in a transition towards a knowledge-based and green economy. The region's agriculture sector faces profitability issues, exacerbated by increased production costs and inadequate price adjustments.

Tourism also contributes significantly, built on the region's natural beauty and cultural heritage. Tourism statistics is, however, underrepresenting the importance of tourism for the region, given that there is estimated 7 million overnights generated in the holiday homes.

**Future**: South Savo's Smart Specialisation strategy identifies forest, food, water, tourism, and wellbeing sectors as areas of comparative advantage, with clusters forming around these industries. Opportunities for economic growth include green transition, digitalisation, and new partnerships in ecosystems and clusters. However, challenges such as the scarcity of R&D resources, lack of expertise, and financing difficulties hinder growth. External factors such as Russia's military actions are rising.

The social and healthcare sector stands as the region's largest employer, providing over 12 500 jobs out of a total of about 49 500 in 2022. Other significant sectors include retail, agriculture, education, and construction. Unemployment stands at 10.5%, slightly above the national average. The employment rate has increased recently, driven partly by the growing participation of retired individuals in the workforce.

The labour market is adversely affected by demographic challenges, including an aging population, brain drain, and low educational attainment levels. Gender segregation in the labour market remains





an issue. Seasonal labour shortages persist, posing ongoing challenges for key industries like agriculture and food production.

#### **Research and development**

RDI expenses in South Savo are only 0.9% of GDP (Finnish average 2.9%). In Finland there is a goal of 4% by the year 2030.

#### International orientation

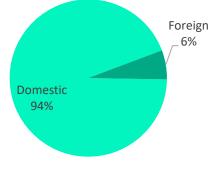
Although the proportion of foreign students, visitors and migrants is relatively low, the regional economy is partly export oriented.

International export is recognised for playing a vital role in driving economic vitality and growth in South Savo, fostering innovation, competitiveness, and job creation. The important export is in forestry and machinery, traditionally exporting goods, services, and expertise.

Key export market are the Nordic countries, Germany, and the USA.

Despite global challenges, export turnover has shown a consistent growth trend from 2015 to 2020.

#### Tourism



- 342 thousand arrivals, 612 thousand overnights (2023).
- Mostly domestic tourists.
- Annually, 7 million overnight stays are generated in non-commercial accommodation across 46.5 thousand holiday homes.
- Problems: increased energy costs, labour shortage, restrictions on Russian tourism.

Source: Statistics Finland

#### Education

Currently, there are about 6.7 thousand students enrolled in tertiary education, including about 300 foreign students. There are two polytechnics (University of Applied Sciences) and three university units in the South Savo region. Both polytechnics, XAMK and DIAK offer tertiary education. Aalto University has a BBA program, running a research centre in the region. In addition, LUT University has launched Master's Programme of Water Technology in Mikkeli in 2023. It is the first master's program organized by the university in Mikkeli.

There are courses and programs in English language available at tertiary and secondary level. At tertiary language courses offered range from business administration, wellbeing management, engineering, environmental engineering, water technology, IT and health care. Two vocational schools run English language programmes in mechanical and production technology, social and health sector, hospitality and tourism, electricity and automation, and real estate services.

Vocational schools in the region match well industry needs, due to the vocational institutions' focus on real workplace training and strong collaboration with local companies to tailor education to market demands. Thus, most graduates find job in the region.





The situation is more challenging for tertiary education. Many higher education graduates leave the region for jobs elsewhere, partly because degrees can now be completed remotely, so they never move to the Savo Region for study. This trend exacerbates the local labour shortage, as students who study outside the region are less likely to return. To address this, more efforts are needed to attract and retain higher-level experts to ensure that local companies have access to the skilled labour they need.

In response to the small youth population, lifelong learning is emphasized in South Savo. Unlike Southern Finland, where there are many young students, institutions like Samiedu Vocational Institute have most adult learners. This highlights the importance of guidance and counselling. Programs such as those at Diaconia University of Applied Sciences provide pathways for further education, helping to upskill the local workforce.

While educational institutions collect data on the job placement of their students, the qualitative data on their satisfaction and future plans is not collected.

#### **Culture and creative industries**

South Savo hosts high-standard cultural festivals, alongside numerous smaller events, which significantly contribute to well-being and tourism.

The creative industries have not yet reached their full potential. Therefore, the South Savo developed a new cultural strategy in 2021/22. Its aims to position culture as a sustainable 'change power' for the region by 2030, by increasing cultural participation, creating employment opportunities for artists and supporting municipal cultural activities.

#### **Quality of life**

Life expectancy is 80.46 years, somewhat lower than the national average (81.6).

Social and health care is satisfactory at the moment, but due to the aging population and the high staff workload the system is under pressure. It is further exacerbated by a high number of seasonal residents in holiday homes not accounted for in government funding. However, unlike in other parts of the country, the region successfully recruits health workers.

There is a sizeable number of cultural institutions and cultural programmes offered, including four major festivals, of which Opera Festival in Savonlinna and Mikkeli Music Festivals attract renowned international performances.

Number
8
2
12
5
4 Finland Festivals

South Savo offers excellent natural surroundings, air quality, and safety, making it an attractive choice for those seeking a serene and secure living environment. However, improvements in public transport, nightlife, and recreational facilities could enhance the overall quality of life and make the region more appealing to a broader demographic. The quality of life and residential well-being is regularly monitored. The latest report shows satisfaction with living conditions, the environment, and safety, and relatively even income distribution. However, especially important for retaining the youth in the region is a noted decline in young people life's satisfaction.

#### **Key challenges**

• The region faces a decrease in the working-age population due to demographic decline and outmigration, combined with low education level.





- There's a continuing challenge of getting skilled labour. Attracting international labour to the region is very important (both work-based and education-based immigration).
- Solutions to support workplaces' readiness of people coming from abroad are needed.
- New solutions are needed to ensure the region's future development as companies struggle to attract high-level experts.
- Increase the amount of RDI funding and participation of companies (from 0.9% of GDP to the national average of 2.9% and national goal of 4% by 2030).
- Support SMSEs to invest, innovate, develop and internationalise.

#### **Good Practice**

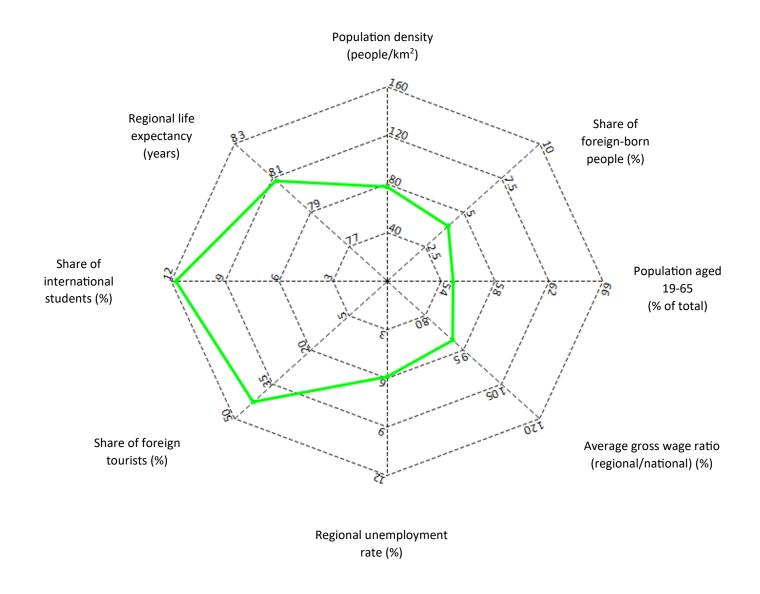
The Regional RDI Roadmap of South Savo, a key initiative under the REWARD project, aims to accelerate research, development, and innovation (RDI) activities to renew industries and companies in the region. This policy primarily focuses on fostering university-industry collaboration and supporting entrepreneurship. It targets local companies, entrepreneurs, higher education graduates, and R&D experts, aiming to enhance business-driven RDI measures, strengthen RDI activity in companies, attract and retain skilled labor, and improve utilization of international funding. Despite challenges in securing long-term commitments from companies, the roadmap has been successful, with extensive cooperation and clearly defined roles for different stakeholders. The policy, coordinated by the Regional Council of South Savo and funded by the Ministry of Labor and Economy, is ongoing and has already initiated several measures.

Contact		
NUTS region:	East and North Finland	
Region website:	www.esavo.fi/en	
Organisation:	South Savo Regional Council	
Contact person:	Jatta Juhola	
Email:	jatta.juhola@esavo.fi	
Phone number:	+358 40 519 8300	





# COMUNIDADE INTERMUNICIPAL DO MÉDIO TEJO MEDIO TEJO FACT SHEET







#### **MEDIO TEJO FACT SHEET**

#### Location

**Central Region of Portugal** 

Surface:	2 706 km <sup>2</sup> (2.9% of the country surface area)
Population:	210 533 (2.1% of the country population)
Population density:	78 people/km <sup>2</sup> (110 people/km <sup>2</sup> in the country)

REWARD

Médio Tejo region is known for its forests and rivers, as well as the Castelo de Bode dam and associated lake. The elevation in the region it's between 0 and 677m.

The region contains the parts of Serras de Aire e Candeeiros Natural Park (PNSAC), which is the most important repository of limestone formations in Portugal with a variety of geological formations associated with karst topography.



#### Population

Médio Tejo has population of 210 533 people gathered in 11 municipalities. These include Ourém (45 thousand inhabitants, 21% of the total regional population), Tomar (36 thousand inhabitants, 17%), Abrantes (34 thousand inhabitants, 16%), Torres Novas (34 thousand inhabitants, 16%), and Entroncamento (20 thousand inhabitants, 10%). The 6 other smaller municipalities concentrate 40 thousand inhabitants and 20% of the total regional population.

#### Urban – rural divide

Given this distribution, the Médio Tejo region does not have a major or reference urban center. Instead, the municipalities consist of those small urban areas with essential facilities (education, health, culture, shops, etc.) and are surrounded by hundreds of small villages.

#### Accessibility

Médio Tejo serves as a pivotal transport hub on the route between Lisbon and Porto, Portugal's two major urban areas. Additionally, it functions as a significant transport junction facilitating access to the interior regions of the country.

- **Road**: Good road connections to the rest of the country and Spain, with the major highways (A1, A23, A13).
- Air: The nearest international airports are in Lisbon (about one to 1.5h travel time) and Porto (about 2h away)
- **Rail:** Good railroad connections to the rest of the country, with the main national rail line, linking Lisbon and Porto.
- Sustainable transport: There are two projects promoting mobility:
  - Link connection service between the towns of the Médio Tejo, introduced in 2020. Nine minibuses are in circulation, with reduced prices and using fast tracks, servicing mostly active population that travel for work.
  - Transport on demand (Transporte a pedido) a network of a personalised transport service operating since 2013, that helps people living in more isolated areas to have a more affordable access to services located in the urban areas (contracted with taxis companies).





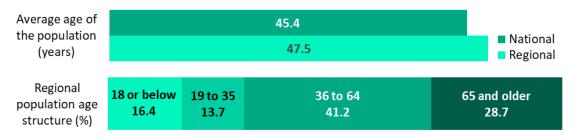
#### **Digital infrastructure**

The entire territory enjoys mobile network coverage, albeit with varying service levels, which tend to be less optimal in rural areas. Urban centres benefit from high-speed internet and standard access service, though the quality diminishes in rural areas.

#### **Population trends**

Population decline has been observed in the region, primarily in rural areas where significant decreases have been recorded. Moreover, there has been a rapid and pronounced aging of the population over the past three decades.

- Population changes 1991/2021: decrease of 9.0%
- Population changes 2011/2021: decrease of 7.7%



Source: Decennial - Statistics Portugal, Population and housing census

#### Migration

While some population growth is attributed to immigration, the overall influx remains modest. The percentage of foreign-born people in Médio Tejo is only 4%; it grows slowly steadily (from 4 691 in 2017 to 7 310 in 2021).

Table: In and out migration			
Migration	2023		
	Number	% of the regional population	
Out of the region	N/A	N/A	
Within the country	13 537	6.4	
Outside the country	N/A	N/A	
To the region	17 553	8.3	
From other parts of the country	15 138	7.2	
From other countries	2 415	1.1	

Source: Decennial - Statistics Portugal, Population and housing census – 2021

#### **Economy and labour market**

Regional GDP per capita (18 324 €) is lower than national GDP per capita (23 203 €).

Indicator	Value
Regional GDP per capita:	18 324 € (79.0% of the country's GDP per capita)
Regional unemployment rate:	5.9% (2.2 percentage points lower than in the country)
Average regional (gross) monthly salary:	1 147 € (88.6% of the average monthly salary in the country)

Source/s: INE, PORDATA and Decennial - Statistics Portugal, Population and housing census – 2021

Forest, agriculture, paper production and metalworks (including car production – Mitsubishi plant) are traditionally this most important economic sectors.





The major growing sectors are transports, logistics and all associated services, owning to the region's location.

Trade and commerce activities, tourism, and renewable energy are also important drivers of economic growth.

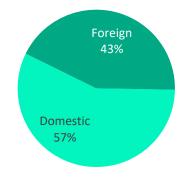
#### **Research and development**

Concerning R&D resources Médio Tejo has three organizations working together in different cooperation projects: the Polytechnic Institute of Tomar, with three research centres in Technology, Restoration and Art Enhancement, Smart Cities, and Geosciences, Quaternary and Human Adaptations; The Tagusvalley science and technology park, with four main areas of intervention: business incubation and entrepreneurship, food sector applied research, scientific and technological skills, industrial processes applied research; and CTIC, a technological centre of leather industries.

#### International orientation

Médio Tejo economy has a good trade balance. In 2023, the region import amounted to 1 065 and export to 1 024 million  $\in$ . In this respect, the region is performing better than the national average and aiming to increase exports further.

#### **Tourism**



- 1 194 908 overnights in 2023.
- Origin of foreign tourists is mainly from Spain.
- Attractions: Sanctuary of Fátima, Convent of Christ, Almourol Castle, Castelo do Bode Lake, and National Railway Museum are the main tourist attractions in the region.

Source: Pordata

#### Education

Currently, there are about 2.8 thousand students enrolled in tertiary education, including about 12% of foreign students.

There is one polytechnic (Polytechnic Institute of Tomar) in the region with several research centres accredited by the National Science and Technology Foundation. It is a member of the consortium KreativEU, comprising of universities across Europe, to foster research in humanities, social, natural and technical sciences.

There is, nevertheless, gap between education and job market. Although some sectors face shortage of qualified workers, there are a sizeable group of unemployed (5 100 in 2023), and most of them belonging to those 35 years old or younger (1 800 persons) or 45 years or younger (2 700 persons).

To enhance alignment between education and the job market, consultations are established between educational institutions and employers. Additionally, vocational education is promoted to students and their families, accompanied by organized company visits and the establishment of a job opportunities sharing portal.





#### **Culture and creative industries**

In the Médio Tejo region, creative industries show promise, yet they currently lack the capacity to act as a catalyst for economic growth.

#### **Quality of life**

Life expectancy is 80.84 years, close to the national average (80.96).

REWARD

Health services are well developed. There are three main hospitals and several medical centres, administered by the Local Health Unit. More recently, availability of this public health services in some parts is jeopardised by the lack of human resources. There is also a network of private health services.

The region has an adequate number of childcare facilities.

Houses in the region are highly affordable – the average housing price in 2023 was 909  $\notin$ /m<sup>2</sup>, a much lower compared to the national average (1 521  $\notin$ /m<sup>2</sup>). The cost of living is also relatively low compared to other parts of country.

The region boasts rich cultural heritage and traditional festivals, including the Sanctuary of Fátima, the most important Catholic pilgrimage site worldwide, and the Templar connection embodied in the Convent of Christ (UNESCO) in Tomar. These landmarks offer significant opportunities for promoting the region and

Amenities	Number
Museums	16
Theatres	5
Cinemas	6
Concert halls	8
Festivals	10

leveraging tourism to benefit cultural, creative, and other sectors of the economy.

Médio Tejo region offers excellent safety, and very good natural surroundings, air quality, and wellness facilities. However, improvements in public transport, recreational facilities, restaurants and nightlife could enhance the overall quality of life and make the region more appealing to a broader demographic.

#### **Key challenges**

Médio Tejo is facing two key challenges: it is losing population and becoming elderly faster than the national level, and its production and income levels are below the national levels (79% of the national GDP per capita). Availability, use and efficiency of the human resources and the labour force is a major challenge for the future.

- Lack of qualified job opportunities; the jobs available are mainly in the sectors such as
  agriculture, manufacturing, construction, retail, commerce and logistics, which are not
  considered attractive to many qualified young people. Besides the good offer from Polytechnic
  Institute, having a university, with more diverse education offers, would help to retain and
  attract talents.
- The region has only few technological companies and is mostly made up of micro and small companies that do not invest in the qualification of their human resources and good salaries.
- The region is not well-known, it has no visibility, and is not thought of as a region to invest in.

#### **Good practice**

The key challenges were addressed through the following policy responses:





- Closer relationship between Polytechnic, CIM Médio Tejo and municipalities; CR INOVE Regional Innovation Catalyser; start up incubators, co-work spaces; major plan to build houses with affordable rental prices.
- Investing in new industrial and enterprise plants; Médio Tejo Just Transition Plan.
- Coordinating new visibility and promotion actions; innovate in public policy, like the experience in the mobility sector, or the education regional plan.

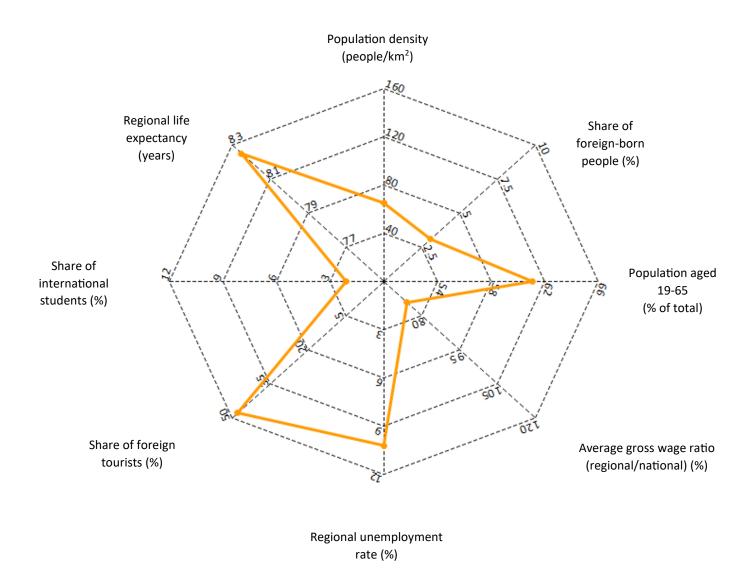
#### Contact

NUTS region:	NUTSIII Médio Tejo	
Region website:	https://mediotejo.pt/	
Organisation:	Inter-Municipal Community of Médio Tejo	
Contact person:	Jorge Salgado Simões	
Email:	jorge.simoes@cimt.pt	
Phone number:	00351 967116686	





## REGIONE AUTONOMA DELLA SARDEGNA SARDINIA FACT SHEET







#### **SARDINIA FACT SHEET**

#### Location

Sardinia is an Italian island in the western Mediterranean Sea. It has a special status as an Autonomous Region.

Surface:	24 100 km <sup>2</sup> (8.0% of the country surface area)
Population:	1 569 832 (2.7% of the country population)
Population density:	65 people/km <sup>2</sup> (196 people/km <sup>2</sup> in the country)

REWARD

Sardinia's geography is characterized by its rugged mountains, diverse coastline, and rich natural landscapes. The Gennargentu mountain range runs centrally through Sardinia, with its peak at 1 834 m above sea level. It has a long and indented coastline, which stretches for approximately 1 850 km, with many bays, coves, and natural harbours.



In addition to its main island, Sardinia is surrounded by several smaller islands and archipelagos.

#### **Population**

Sardinia has a population of about 1.57 million. The central administrative and economic hub is Cagliari (419 thousand inhabitants, 27% of total regional population). The other significant towns are Sassari (121 thousand inhabitants, 8%), Olbia (61 thousand inhabitants, 4%), and Alghero (42 thousand inhabitants, 3%).

#### Urban – rural divide

About 40% of the island's residents live in urban areas. There are notable differences between urban and rural areas. Sardinia's cities and towns generally have higher population density, better infrastructure, and improved access to services such as healthcare, education, and transport. The concentration of economic activities—finance, commerce, manufacturing, and services—offers a broader range of employment opportunities and higher-paying jobs. Urban areas also boast a diversity of cultures, languages, and lifestyles, along with numerous cultural amenities, entertainment options, and social activities. However, they have a larger environmental footprint due to industry, transport, and infrastructure.

In contrast, rural areas are dominated by traditional sectors like agriculture, forestry, and fishing, which provide fewer employment opportunities and lower wages. Rural communities tend to have stronger ties to customs, practices, and local traditions, often prioritizing close-knit social networks, community events, and outdoor recreational activities connected to the natural environment. Rural areas also offer more extensive green spaces, agricultural land, and natural habitats.

#### Accessibility

Sardinia's geographical isolation as an island presents challenges in terms of transportation, connectivity, and access to essential resources such as energy, water, and consumer goods. Dependence on air and sea transport often results in higher transportation costs and logistical difficulties, slowing down commercial exchange and affecting people's mobility, especially in emergencies.

The primary modes of transportation are:





- **Highways:** Sardinia has a network of roads and highways that connect major cities, towns, and rural areas across the island.
- **Railways:** Sardinia's railway network is limited compared to mainland Italy, but it provides important connections between major urban centres and coastal towns.
- Airports: Sardinia is served by three international airports:
  - Cagliari Elmas: Near the capital city of Cagliari, it is the largest airport in Sardinia, offering domestic and international flights.
  - Olbia Costa Smeralda: Near the town of Olbia, it is a major gateway for tourists visiting the northeastern part of the island.
  - Alghero-Fertilia: Located near the city of Alghero, it serves those visiting the northwestern part of Sardinia.
- **Seaports:** Sardinia has several seaports that connect it with mainland Italy, other Mediterranean islands, and international destinations. The main seaports include:
  - Port of Cagliari is the largest port in Sardinia and a major hub for commercial shipping and passenger ferries.
  - Port of Olbia in the northeast for passenger ferries to mainland Italy and other Mediterranean destinations.
  - Port of Porto Torres, in the northwest, is used for freight transport and passenger ferries to mainland Italy.

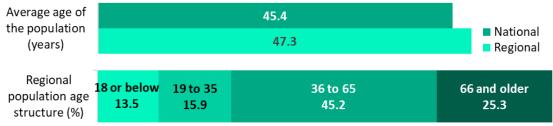
#### **Digital infrastructure**

The availability and reliability of digital infrastructure, including high-speed internet access and mobile network coverage, vary across different parts of the Sardinia region. In urban areas, high-speed internet access is generally widely available and reliable and supported by a solid infrastructure, such as fibre-optic networks and cable connections. Mobile network coverage in urban areas is usually comprehensive and reliable. Multiple mobile network operators provide coverage, offering 4G and, increasingly, 5G services. In rural and remote areas, access to high-speed internet and mobile network coverage may be more limited, with a slower internet connection such as DSL or satellite internet and gaps in coverage or weaker mobile signal strength, depending on geographic location, terrain, and population density.

#### **Population trends**

- Population changes 1991/2024: decrease of 4.8%
- Population changes 2010/2024: decrease of 5.1% (annual rate of change 0.4%)

The population of Sardinia has remained relatively stable over the years, with a slight decrease in 2024 compared to previous years.



Source: ISTAT - National Institute of Statistics





#### Migration

Some population gain is due to immigration, although it is at a low level regionally as well as nationally.

Table: In and out-migration

Migration	2022	
Migration	Number	% of the regional population
Out of the region	10 808	0.68
Within the country	7 534	0.48
Outside the country	3 274	0.21
To the region	12 763	0.81
From other parts of the country	6 794	0.43
From other countries	5 969	0.38

Source: ISTAT - National Institute of Statistics

Although the percentage of foreign-born people in Sardinia was only 3.1% in 2022, it has grown over the last five years.

In terms of educational attainment, foreigners in Sardinia are at least as educated as Italians in some respects and better educated in others. For instance, 32.5% of foreigners hold a high school diploma, compared to 30.5% of Italians. Additionally, 35.5% of Italians and a nearly equivalent share of foreigners have lower secondary school certificates. However, only 10% of foreigners have a university degree, compared to 13% of Italians. Furthermore, 8.8% of foreigners have only an elementary school education, significantly lower than the 16.2% of Italians. The most notable disparity is among those without any educational qualifications: 13.6% of foreigners versus 4.8% of Italians.

#### **Economy and labour market**

Regional GDP per capita (21 746 €) is lower than national (32 990 €). Sardinia has historically grappled with higher unemployment rates compared to the national average.

Indicator	Value
Regional GDP per capita:	21 746 € (65.9% of the country's GDP per capita)
Regional unemployment rate:	10.2% (2.4 percentage points higher than in the country)
Average regional (gross) monthly salary:	1 265 € (73.5% of the monthly average wage in the country)

Source: ISTAT - National Institute of Statistics

**Past**: Sardinia's economic history has been characterized by natural resource extraction, agricultural sector, and industrial development. The island relied heavily on agriculture, mainly sheep farming and wheat production. During the late 19th and early 20th centuries, Sardinia experienced industrialization, with the development of mining, particularly of lead, zinc, and coal. Mining became a significant economic driver, attracting workers from other parts of Italy. However, the decline of mining in the mid-20th century led to economic decline, including high unemployment and emigration. In response, the government invested in diversifying the economy, focusing on tourism, agriculture, and services.

**Present**: The service sector, particularly tourism, dominates the regional economy, comprising 81% of total added value. The knowledge economy lags, with engineers and scientists representing only 4.2% of the active population. Agriculture remains important, with wine production, olive cultivation, and dairy farming contributing to the economy. Other significant economic activities are manufacturing and construction, as well as knowledge-based industries such as information technology, biotechnology, and renewable energy.





**Future**: There have been efforts to promote technological innovation and entrepreneurship, particularly in sectors such as information technology and renewable energy. There is a promising upsurge in technology start-ups, with a growth rate twice that of the rest of Italy (+15%) and involvement in important international scientific projects.

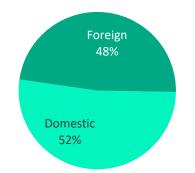
#### **Research and development**

Per capita spending on R&D in Sardinia has slightly increased over the past five years but remains significantly below the European average. In 2020, the island invested about 292 million euros in R&D, a 4% increase compared to the previous five years, but well below the European average growth of 17%. Sardinia hosts significant research infrastructures including the Sardinia Radio Telescope and the Aria project, the Scientific and Technological Park of Sardinia in Pula with advanced facilities for ICT and biomedicine, CRS4's high-performance computing services and sequencing platform, the Einstein Telescope Project for gravitational wave research, and several National Research Council centres (CNR) focused on genetics, neuroscience, and environmental science. The begins - Ecosystem of Innovation for Next generation Sardinia is a global program to strengthen the link between business and science and guide the territory towards a truly knowledge-based economy. Innois is an innovation platform whose aim is to animate Sardinia's innovation ecosystem and connect Sardinia to national and international business communities.

#### International orientation

Sardinia's level of internationalization can be described as moderate, with ongoing efforts to increase global integration in various sectors. The tourism industry has a significant international presence, attracting visitors from around the world. Sardinia engages in international trade, exporting goods such as agricultural products, food and beverages, machinery, and chemicals. Still, the region's export volumes are generally not as substantial as in other Italian regions. Sardinia actively seeks foreign investment, particularly in tourism infrastructure, renewable energy, manufacturing, and technology. Efforts to attract foreign direct investment involve offering incentives, establishing industrial zones, and participating in international trade fairs and investment forums. Collaboration with global partners in education, research, innovation, and technology transfer has been growing.

#### **Tourism**



- 3 411 892 arrivals, 14 700 911 overnights (in 2022).
- Similar share of domestic and foreign tourists, with the proportion of foreign tourists steadily increasing over the last decade.
- The main source markets are Germany (26%), France (17%) and Switzerland (11%).

Sources: Istat - Rilevazione sulla Capacità degli esercizi ricettivi; Istat - Rilevazione sul Movimento dei clienti negli esercizi ricettivi; Sardegna Statistiche

#### Education

Currently, there are about 38 thousand students enrolled in tertiary education, including about 2% international students. There are two universities, the University of Cagliari and the University of Sassari. The student-teacher ratio at the tertiary level is 16.5 students on one teacher. Department of





Electrical and Electronic Engineering (DIEE) and Department of Law of the University of Cagliari stand out for the quality of research and development projects.

Various university courses are taught in English. There is also a Ministerial program "CLIL", Content and Language Integrated Learning, for primary and secondary education in foreign languages.

#### **Culture and creative industries**

Sardinia has a rich cultural heritage, including traditional crafts, music, dance, and festivals. The creative industries play a vital role in preserving and promoting these cultural assets, ensuring their continuity and relevance in contemporary society.

Creative industries such as arts and crafts, music, literature, and culinary arts enhance the tourism experience in Sardinia. They contribute to the region's unique identity, attract visitors seeking authentic cultural experiences, and stimulate tourism-related businesses.

#### Quality of life

Sardinia offers an exceptional quality of life, characterized by its balance between work and leisure, vibrant cultural scene, and commitment to sustainability.

Life expectancy is 82.5 years, similar to the national average of 83.1 years.

The quality and availability of medical care generally meet the standards of the rest of Italy. There are several hospitals located across the island, ranging from small local hospitals to larger regional medical centres. These hospitals provide a wide range of medical services, including emergency care, surgery, specialist consultations, and diagnostic tests. The major hospitals in Sardinia are in the largest cities like Cagliari, Sassari and Olbia. Polyclinics and medical centres are typically found in urban areas and provide a convenient option for non-emergency medical care.

There is a sizeable number of cultural institutions, including approximately 70 museums and 12 theatres. Several important festivals celebrate the culture, traditions, and identity of the island.

Sardinia offers excellent natural surroundings, climate and recreational facilities, and excellent restaurants. However, improvements in nightlife, wellness opportunities, and particularly in public transport, especially in rural areas, could enhance the overall quality of life and make the region more appealing to a broader demographic. Sardinia is generally considered safe for residents and tourists, with low crime rates compared to many other regions in Italy.

#### **Key challenges**

- Brain drain: Sardinia has faced a brain drain, with young talents leaving the island to study or work elsewhere, thereby reducing the pool of qualified human resources available in the region.
- **Demographic decline:** Sardinia has experienced a population decline, with a decrease in population mainly due to the lack of job opportunities and professional development. This has led to the need for measures to reverse this trend and attract new qualified residents.
- Economic underdevelopment: Despite its natural and cultural resources, Sardinia has faced economic challenges related to the lack of economic diversification and insufficient development of innovation and entrepreneurship, in spite of the relevant policies in place. The local economy is highly dependent on tourism, making it less resilient to global crises while also encouraging seasonal employment.





- Skills shortage and mismatch: The lack of advanced and specialized skills in key sectors such as technology, engineering, and sciences has limited the region's ability to compete nationally and internationally and to develop a solid knowledge-based economy. A mismatch between skills and job opportunities is one of the important drivers of unemployment.
- Limited absorption opportunities: Sardinia may struggle to provide sufficient job opportunities for its workforce due to a potentially limited and isolated job market, which could lead to difficulties in retaining talent.
- Accessibility: Sardinia's geographical isolation as an island can present challenges in terms of transportation and connectivity. Within the region, rural and remote areas face connectivity problems and infrastructural deficiencies.

#### **Good practice**

The "Master & Back" initiative prioritizes building human capital through specialized training and enhancing skills and employability for locals. This initiative also encourages Sardinian talents who have been educated abroad to return to the island, offering them job opportunities and fostering their community reintegration. So, the program includes both, building human capital through training and skills enhancement locally and encouraging Sardinian talents educated abroad to return to Sardinia. These components work together to address the challenges of brain drain and demographic decline in Sardinia, and to promote regional development through talent retention and economic growth.

However, to better align returning talents' skills with local industry needs, the program could diversify job opportunities in key sectors. Additionally, offering tailored support services like mentorship, networking, and relocation assistance could ease the reintegration process. Strengthening partnerships with local businesses and research institutions would ensure program alignment with labour market demands and foster collaboration opportunities.

The "Talent up - entrepreneurship and back" program aims to counteract the brain drain phenomenon by supporting an innovative and intelligent economic transformation aligned with the regional Smart Specialization Strategy and the Transition 4.0 program. Furthermore, the 2021-2027 ERDF Regional Operative Program has actions for talent attraction under the smart specialization policy. It is dedicated to promoting the Smart Specialization Strategy as a vehicle to connect innovation and competence, minimizing the mismatch between the supply and demand of professionals and favouring the attraction and retention of talent.

The anti-depopulation measures address the problem of depopulation with financial support for new residents and cultural, tourism, and environmental development.

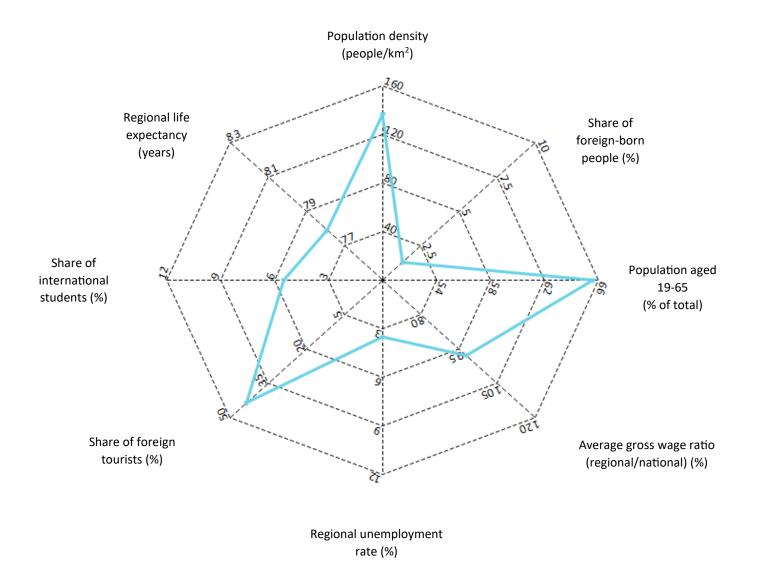
NUTS region:	Isole	
Region website:	https://www.regione.sardegna.it/regione/	
Organization:	Autonomous Region of Sardinia	
Contact person:	Gaia De Donato	
Email:	gdedonato@regione.sardegna.it	
Phone number:	+39 0706062113	

#### Contact





## TRNAVSKÝ KRAJ TRNAVA REGION FACT SHEET









#### **TRNAVA REGION FACT SHEET**

#### Location

Trnava (Trnavský kraj) is in the western part of the Slovak Republic, bordered by the Bratislava Region to the west and the Trenčín and Nitra Regions to the east. Additionally, it shares borders with three EU member states: the Czech Republic to the north, Austria to the west, and Hungary to the south.

Surface:	4 147 km <sup>2</sup>
	(8.5% of the country's surface area)
Population:	566 114
	(10.4% of the country population)
Population density:	136 people/km <sup>2</sup> (110 people/km <sup>2</sup> in
	the country)



The landscape is a mix of hills (Little Carpathians, Myjava Hills, White Carpathians) and plains (Danubian Lowland, home to Žitný Island, the largest river island in Europe, and Záhorie Lowland). Major rivers include the Danube, one of Europe's longest rivers; the Little Danube, a branch of the Danube; the Váh, the longest river in Slovakia; the Dudváh and the Morava, forming a natural border with Austria.

#### **Population**

Trnava region has a population of about 565 thousand inhabitants. The capital city is Trnava (62 509 inhabitants, 11.1% of the total regional population). The other two major cities are Piešťany (26 522 inhabitants, 4.7%) and Dunajská Streda (22 635 inhabitants, 4%).

#### **Urban-rural divide**

Urban areas constitute 17% of the Trnava Region's land and are home to 46% of its population. Cities such as Trnava, Dunajská Streda, and Piešťany serve as industrial hubs, hosting major employers like Schaeffler, Stellantis, and ZF Slovakia. The region features six industrial parks focusing on the automotive, electrical, chemical, and glass industries, as well as metallurgy. In contrast, rural areas cover 83% of the land and accommodate 54% of the population. The rural economy is predominantly agricultural, leveraging the fertile lands of the Danubian Lowland. Agricultural land makes up 69% of the total area, reflecting the region's strong agricultural productivity, including the cultivation of cereals, oilseeds, sugar beet, and perennial fodder, complemented by cattle and pig breeding.

#### Accessibility

The Trnava Region is a key logistical hub in Slovakia. The region's transport infrastructure includes:

- Road: The D1 motorway is a crucial route connecting Bratislava with other major Slovak cities and integrating into the European road network. One significant route runs from Bratislava to Žilina, a key industrial and economic centre in northern Slovakia. Another important route connects Hodonín in the Czech Republic via Trnava to Nitra, a major city in southwestern Slovakia. Out of the region's total 1 964 kilometres of road network, only 5.6% are highways and expressways, highlighting the limited development of high-speed road infrastructure.
- Air: Bratislava's M. R. Štefánik Airport and Vienna International Airport (Schwechat) serve as major international airports, offering extensive flight connections. In contrast, Piešťany Airport in Trnava is a regional airport with fewer international flights.





- **Rail:** The region is well-connected by rail, which facilitates both domestic and international travel and commerce. Important lines are the Bratislava Žilina, Bratislava Galanta Štúrovo, and the electrified monorail lines Trnava Galanta and Trnava Kúty.
- Water: The construction of the Gabčíkovo Waterworks has significantly improved navigation conditions on the Danube River in Slovakia. This enhancement supports the region's transport infrastructure, providing an additional mode of cargo and passenger movement.
- Sustainable transport: The transportation infrastructure in the region needs to be improved, some outdated roads and railways, insufficient bypasses around towns to reduce traffic congestion, and a lack of cycling paths.

#### **Digital infrastructure**

Major urban centres have extensive coverage of high-speed internet and mobile networks, ensuring reliable connectivity. However, connectivity issues might arise in some rural areas, though most of the region remains well-served by the 4G mobile network.

#### **Population trends**

- Population changes 1990/2022: increase of 4.35%
- Population changes 2010/2022: increase of 0.44%

Average age of the population		38.7		
(years)		4	2.0	<ul> <li>National</li> <li>Regional</li> </ul>
Regional population age structure (%)	18 or below 18.2	19 to 35 20.8	36 to 65 44.9	66 and older 16.2

Source: <u>www.scitanie.sk/obyvatelia/rozsirene-vysledky</u>

#### Migration

#### Table: In and out-migration

Migration	2021	
	Number	% of the regional population
Out of the region		
Within the country	10 036	1,77
Outside the country	NA	NA
To the region		
From other parts of the country	11 284	1,99
From other countries	NA	NA

Source: https://www.scitanie.sk/obyvatelia/rozsirene-vysledky

In the Trnava region, only 1.3% of the population are foreign-born individuals, totalling 7 471 people in 2024. This figure has been increasing over the past five years. The City of Trnava runs programs to support immigrants through professional assistance, counselling, and education (ConecTT), while the Human Rights League facilitates social interactions.





### Economy and labour market

Indicator	Value
Regional GDP per capita (2022):	21 209 € (6.2% higher than the country's GDP per capita)
Regional unemployment rate (2024): 3.66% (5.96% at the country level)	
Average regional (gross) monthly salary (2022): 1 428 € (1 500 € at the country level)	
Source: https://www.focus-economics.com/count	ry-indicator/slovakia/gdp-per-capita-eur/
https://datacube.statistics.sk/#!/view/sk/VBD_SK	

The Trnava Region's economic performance is underpinned by its industrial diversity, strong agricultural base, and competitive GDP performance, making it a key contributor to Slovakia's economic landscape. In 2022, the Trnava Region demonstrated robust economic performance driven by diverse sectors and favourable economic indicators. The region's economic activity rate stood at 62.7%, with unemployment at 4.4% (3.66%, 04/2024). The average monthly wage reached 1 421 €, slightly below the national average. The workforce composition included 27.4 thousand employed in legal entities, predominantly in profit-making organizations, and 43.5 thousand self-employed individuals, primarily engaged in sectors like wholesale, retail, and construction. Industry played a pivotal role, contributing one-third of the region's gross added value, with industries like food production, electronics, and automotive manufacturing leading the way. Agriculture also thrived, occupying 69.3% of the region's land and boasting high productivity in crops like cereals, oilseeds, and sugar beet, complemented by robust livestock farming. The region's GDP reached 12.1 billion €, accounting for 11% of the national GDP, and per capita GDP exceeded the national average by 6.2%, totalling 21 209 €. Construction activity, while relatively weaker, saw significant output in residential projects, with 3 294 new apartments completed.

**Past**: The region's economy was predominantly driven by the engineering and food industries. However, the structure of the industry underwent significant changes in the early 21st century with the decline of traditional industries, particularly the textile sector, and the emergence of the automotive industry.

**Present**: Trnava region has a diverse economic structure dominated by the automotive and electrical engineering sectors. Major plants like Stellantis and Samsung are key players in the region's industrial output. Energy for industrial activities is supplied by the nuclear power plant in Jaslovské Bohunice and the hydroelectric power plant in Gabčíkovo. The food industry continues to be significant, with activities in dairy products, meat processing, sugar production, sweets, and sparkling wine. The region also excels in the production of computer and electronic appliances, optical products, chemicals, and pharmaceuticals.

**Future**: Trnava Region aims to build on its current strengths by further developing its industrial capabilities and fostering innovation. The region plans to enhance its infrastructure, promote sustainable practices, and increase investment in research and development.

#### **Research and development**

Regarding the evaluation of innovation potential, the Trnava Self-Governing Region (TTSK) reached fourth place in Slovakia, with the most dominant role in the domain of economic performance and employment in science and research. The Trnava region is demonstrably committed to sustainable and innovative development. Their strategic documents, like the Low Carbon Strategy aiming for a 40% CO2 reduction by 2030 and the Sustainable Mobility Plan prioritizing public transportation and environmental protection, showcase this focus. To achieve these goals, TTSK fosters a collaborative environment. This includes establishing the Innovation and Development Agency (KIRA) to support businesses and partnering with universities like the Slovak University of Technology. Additionally, TTSK



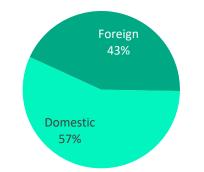


participates in cross-border initiatives like INTERREG and industry alliances like the Automotive Skills Alliance. Public-private partnerships are another key element. Collaboration with companies like Bizzcom (automation and robotics) and SHARK.AERO (ultralight aircraft) fuels regional innovation. Furthermore, TTSK actively promotes green technologies, such as the hydrogen-powered public transport pilot project and the strategy to enhance Piešťany Airport's business potential.

#### International orientation

Notably, TTSK collaborates closely with the South Moravian Region of the Czech Republic through the EGTC Great Moravia (European Grouping of Territorial Cooperation Great Moravia with Limited Liability), focusing on territorial cohesion and celebrating 15 years of robust project cooperation. Additionally, it participates in cross-border initiatives with Lower Austria under the INTERREG SK-AT project, enhancing regional integration and development. Cultural and educational agreements extend to Taiwan's Yilan Region and include exchanges with Crete, promoting cultural understanding through exhibitions and educational connections. In the Middle East, partnerships with UAE, Kuwait, Qatar, and Israel promote spa tourism and leverage the X-BIONIC sports complex, facilitated by new air connections via Piešťany airport. Farther afield, collaborations with South Korea focus on education, science, research, and tourism, while Japan emphasizes industrial cooperation, innovation, and SME development, establishing industrial clusters. While disaggregated export data by Slovakian region is not currently available, the automotive industry, prominently represented by Stellantis, is the leading export sector within the Trnava region.

#### **Tourism**



385 996 tourist arrivals, 1 314 604 overnights (2023).

Slightly more than half are domestic tourists.

Czech Republic is the main generating foreign market (57% of all foreign arrivals) followed by Germany and Poland.

Tourism is still not fully recovered in numbers after the Covid-19 pandemic (89% tourists arrivals and 85% overnights are realized in 2023 in comparison to 2019)

#### Source: <u>https://datacube.statistics.sk/#!/view/sk/VBD\_SK\_WIN/cr3001rr/v\_cr3001rr\_00\_00\_00\_sk,</u> <u>https://slovakiatravel.org/statistiky/</u>

The region's key attractions and amenities are historical, cultural, and architectural sites (Dolná Krupá, Smolenice Castle, Holíč Palace, Holíč Megaliths), the city of Trnava with its historic center, health and wellness facilities (Piešťany Mud and Smrdáky Spa), natural attractions (Driny Cave, castle ruins and natural scenery), wineries and other places of unique experiences as Medolandia in Dolná Krupá.

#### Education

Educational attainment level of the population (2021)	
Primary school or less	27.85
Secondary education	47.02
Higher education (post-secondary/non-tertiary)	5.38
Tertiary education	15.82

Source: https://www.scitanie.sk/obyvatelia/rozsirene-vysledky







Currently, the Trnava Region hosts approximately 13 000 students across four tertiary education institutions. Among these, the University of Ss. Cyril and Methodius in Trnava reports 5 520 students, including 306 international students, constituting 5.5% of its student body. The Faculty of Materials Technology of the Slovak University of Technology emphasizes research on progressive materials, sophisticated production technologies, industrial engineering, automation, robotization, safety, and environmental aspects of industrial production. Trnava University offers mostly social science programs and is among the three top-ranking universities in the country. While the universities offer subjects in English, complete programs in English are not available, presenting a limitation for international students. Finally, the Trnava region boasts a fourth institution of higher learning, Danubius University in Sládkovičovo, which enrols approximately 660 students in law, public administration, and social studies programs. The Faculty of Materials Technology (MTF) at the Slovak University of Technology collaborates closely with the TTSK to align educational programs with regional development priorities. Furthermore, Schaeffler Skalica collaborates with the Mechanical Engineering Secondary School in Skalica to offer diverse mechanic fields of study. Similarly, the Automobile Secondary School of Trnava, supported by Stellantis, ZF, and other SMEs, provides specialized programs in automotive repair and mechatronics, enhancing opportunities for students to gain practical skills directly relevant to local industries.

#### **Culture and creative industries**

The Creative Center Trnava serves as a crucial hub, providing a supportive environment where individuals and businesses in the cultural and creative sectors can hone their skills and undertake innovative projects. Equipped with state-of-the-art facilities, the center promotes collaboration across various artistic disciplines, thereby stimulating creativity and innovation. Additionally, the Malý Berlín cultural hub, part of the Nádvorie project, along with urban cultural centers in Galanta and Hlohovec, play pivotal roles in the region's cultural landscape. T2024 witnessed the inaugural June Film Festival in Trnava, complementing the established annual tradition of the CINEMATIK International Film Festival in Piešťany, further enriching the cultural landscape of the Trnava region.

#### **Quality of life**

Life expectancy is 74.72 years for men and 80.75 years for women, almost at the national average. The average housing price per square meter is 1 986 Euro, 87% of the national average (2 288 Euro/m<sup>2</sup>). Trnava region has a comprehensive healthcare infrastructure network that includes seven well-equipped hospitals, 1 051 ambulatory care centres, and four specialized clinics. The geothermal and healing springs resources are utilized in the renowned natural spas of Piešťany and Smrdáky, contributing to the region's health and wellness tourism sector. The region also demonstrates a strong commitment to education, evidenced by its well-developed network of preschool and school facilities.

The cultural landscape of the Trnava Region is vibrant and diverse, with a strong presence in various forms of art and heritage.

Amenities	Number
Museums	22 (+2 galleries)
Theatres	5
Cinemas	10
Concert halls	10+
Festivals	20+

The city of Trnava stands out as a model urban centre, emphasizing the development of cycling infrastructure and promoting sustainable practices through initiatives focused on the circular and green economy. Safety is rated as excellent in the Trnava region. The region also offers good climate and air quality, natural surroundings, urban parks, and recreational and wellness opportunities.





However, improvements in public transport, restaurants, and nightlife offer could enhance the overall quality of life and make the region more appealing to a broader demographic.

#### **Key challenges**

- Bridging the skills gap to maximize workforce potential
   The region experiences a mismatch between educational programs and industry needs,
   leading to challenges in finding suitable employment for graduates and limiting career growth
   opportunities due to narrow specializations within the workforce.
- Fostering a collaborative innovation ecosystem Trnava region struggles with limited funding for innovation, low investment in research and development, and weak collaboration between regional administration and the private sector.
- Improving workforce mobility and retention There is a lack of workforce mobility, with residents often reluctant to seek jobs outside their immediate area. Difficulty integrating at-risk groups into the workforce further restricts access to a broader talent pool, exacerbating social inequalities and limiting economic growth.

Creating a well-rounded living environment to retain talent
 Infrastructure deficits such as poor road conditions, outdated railways, and an
 underdeveloped cycling network create challenges for commuting and impact the overall
 quality of life. Environmental issues such as polluted waterways and high air pollution also
 contribute to a less desirable living environment for potential talent.

• Accelerate investments in training and education

There is insufficient enrolment in technical fields crucial for the region's economic development, leading to a limited future pool of skilled workers. A lack of investment in educational reforms and lifelong learning opportunities further widens the gap between the skills needed by employers and those provided by the education system.

#### **Good practice**

#### KIRA - Regional Innovation and Development Agency

Trnava region established its own innovation and development agency, the so-called KIRA, the main task of which is to use the potential of regional self-government to support smart specialization, small and medium-sized enterprises, and the overall socio-economic development of the region. Despite the continuing ambition of our region to support innovation, there is a lack of tools at the regional level that would enable effective coordination of the public sector, academies, socio-economic partners, and the business sector. The main motivation of the Trnava region to become one of the pilot regions of this project is to use the possibilities of European cooperation in the field of innovation support and to connect the region with partners at the regional, national, and European levels. KIRA mentoring and KIRA academy are ongoing projects focused on supporting innovative SMEs. KIRA also acts and conducts projects in regional development, public society, and social innovations.

#### **KIRA Academy**

A three-month intensive educational and acceleration program aimed at enhancing the skills of SMEs in the Trnava Region. It targeted SMEs, graduates, women, diaspora, remote workers, and international migrants, focusing on workshops covering business areas such as product management, finances, marketing, and project management. This policy falls under the REWARD-specific objective of entrepreneurship and business support.

#### SME Development Strategy

This strategy aimed to support and motivate entrepreneurs in Trnava by connecting public, private, and academic sectors. It targeted SMEs, which play a crucial role in regional development, along with

institute for tourism 🦰



graduates, women, diaspora, and remote workers/digital nomads. It addresses the REWARD-specific objective of entrepreneurship and business support.

#### **Creative Centre Trnava**

A hub supporting individuals and businesses in the cultural and creative sector, offering access to advanced equipment like 3D printers, scanners, and VR software. The Centre fosters collaboration across various artistic disciplines, providing rehearsal spaces and workshops that facilitate the development of innovative products and services.

### Cycling Infrastructure on the European Green Belt in the border area of Slovakia - Austria & Slovakia - Czech Republic

Part of a cross-border cooperation project with Austrian and Czech regions, this initiative includes building sections of the Moravian Cycle Route and additional cycle infrastructure along EuroVelo 13. Highlights include the Cycle Bridge of Great Moravia, which integrates Great Moravian symbols, enhances cycling connectivity, and promotes tourism in the border area.

#### Other examples of excellent interregional cooperation (V-A SK-HU)

Several projects are working together to revitalize the Danube border region. Project Milling focuses on preserving historical water mills, while Discover the Small & Moson Danube by Bike and Boat creates cycling and boating infrastructure alongside cultural attractions. SacraVelo adds another layer by establishing a network of cycling pilgrim routes that highlight the region's religious heritage. Together, these initiatives leverage the area's unique natural and cultural assets to attract visitors and boost tourism.

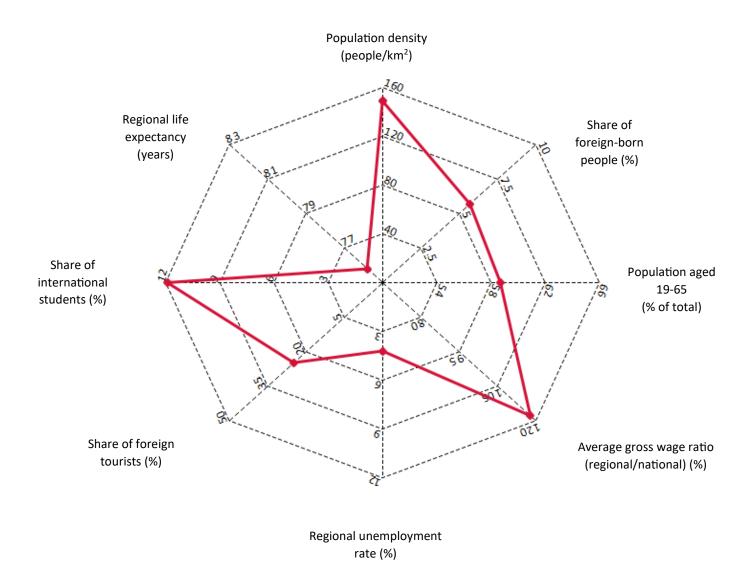
#### Contact

NUTS region:	NUTS 1: Slovensko, NUTS 2: Západné Slovensko, NUTS 3: Trnavský kraj
Region website:	https://trnava-vuc.sk/
Organisation:	Trnavský samosprávny kraj
Contact person	Patrik Ondrejech
Email:	ondrejech.patrik@trnava-vuc.sk
Phone number:	+421 901 755 666
Date of completion:	21.06.2024





## **WOJEWÓDZTWO MAZOWIECKIE** MAZOVIA FACT SHEET







#### **MAZOVIA FACT SHEET**

#### Location

Mazovia (the Mazowieckie Voivodeship) is the biggest region in Poland, located in the central-eastern part of the country.

REWARD

Surface:	35 558 km <sup>2</sup> (11.4% of the country surface area)
Population:	5 510 600 (14.6% of the country population)
Population density:	155 people/km <sup>2</sup> (120 people/km <sup>2</sup> in the country)

Apart from the highly urbanised areas around Warsaw, it is largely lowland. Agricultural land dominates (68% of the region compared to 60% nationally). The Kampinos National Park is a significant natural resource.



#### **Population**

Mazovia has a population of approximately 5.5 million. The primary administrative and economic hub is Warsaw, home to about 1.8 million residents, accounting for 33% of the region's population. Two other cities exceed 100 000 inhabitants: Radom (211 000 residents) and Płock (119 000 residents). Additionally, Radom, Płock, Siedlce, Ostrołęka, Ciechanów, and Żyrardów serve as important subregional centres.

#### Urban – rural divide

The region is unique due to the stark contrast between Warsaw, the national capital and major metropolitan centre, which accounts for 51% of the region's urban population, and the northern and eastern areas, which have some of the lowest levels of urbanisation in the country. The concentration of economic activity and services in Warsaw has traditionally driven regional migration towards the city, leading to depopulation in other parts of Mazovia. This trend poses a threat to building competitive advantages in the rest of the region.

#### Accessibility

The transport network of the Masovian region is centred around the national capital, Warsaw, and follows a radial system.

- **Road**: The road network in Mazovia is extensive. The major A2 highway spans east-west, connecting Warsaw with Germany. Additionally, the region is serviced by several expressways, including the S2, S7, S8, S17, and S79, linking Warsaw to major cities across Poland and beyond.
- Air: Nearly half of Poland's air traffic is handled by two main airports in Masovian: Chopin Airport (18.8 million passengers) and Modlin Airport (3.1 million passengers). A third airport, Radom Airport, opened in 2023. Travel times from major subregional centres across Mazovia to these airports range up to 2 hours.
- **Rail:** The Warsaw Railway Junction is the busiest in the country, serving the largest number of passengers. It features seven main railway lines of international importance.
- Water: There is one water port in Warsaw the Czerniakowski port. It serves tourist and recreational functions.





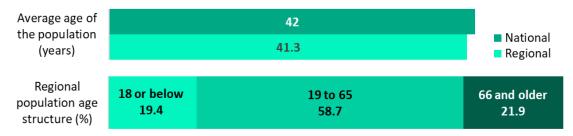
#### **Digital infrastructure**

Internet coverage is strong, with 95.5% of households having access to Internet. The region has the largest number of regular Internet users (88.7%). 95% of public administration has websites customized to be operated by mobile devices and as many as 98.9% of administration public shared services to citizens over the Internet. In recent 12 months in Masovian, 69.3% of residents ordered over the Internet goods or services for use private. All of the above indicators look better in the Warsaw Capital Region. Most indicators for the Mazovia Regional Region remained below the average for Poland.

#### **Population trends**

- Population changes 1990/2022: increase of 10.3%
- Population changes 2010/2022: increase of 4.3%

In Mazovia, despite a systematic increase in the population, unfavourable demographic phenomena are observed related to the depopulation process in the peripheral areas of the voivodeship and the process of aging of the inhabitants. The increase in the total population of the Mazovia Region is primarily the result of favourable trends in migration: Internal migrations of the population and intervoivodeship movements.



Source: GUS, www.stat.gov.pl

In spite of the population growth, there is a noticeable population ageing trend of concern. There is an increasing percentage of residents aged 66 and older, a decrease in the proportion of people aged 0-14, and a rise in the median age of the population.

#### Migration

Population growth in the region, albeit modest, is partly attributed to immigration, which remains relatively low both locally and nationally. The percentage of foreign-born people at the national level is 5.7%, and has been increasing over the last five years.

#### Table: In and out-migration

Migration	2023	
	Number	% of the regional population
Out of the region	57 900	1.05
Within the country	57 000	1.03
Outside the country	900	0.02
To the region	69 100	1.25
From other parts of the country	66 300	1.20
From other countries	2 800	0.05

Source: GUS, www.stat.gov.pl

The data in the table include migration for permanent residence. After the outbreak of the war in Ukraine, most Ukrainian citizens stayed in Poland for a temporary stay.





The employment rate of immigrants in Poland is 6.5%. The foreign-born population is predominantly employed in services, agriculture, and building construction. The regional employment office runs assistance programs (job finding, language training, childcare assistance, educational attainment, recognition funding) for migrants.

#### **Economy and labour market**

While the overall GDP of the Mazovian region is lower, the City of Warsaw's GDP exceeds the national average. This disparity highlights the fact that the GDP of the subregions outside Warsaw is among the lowest in the country, reflecting a significant economic division between Warsaw and the rest of Mazovia.

Indicator	Value (2022)
Regional GDP per capita - Mazovia:	25 900 € (68.7% of the country's GDP per capita)
Regional GDP per capita - Warsaw:	57 200 € (151.7% of the country's GDP per capita)
Regional unemployment rate (December):	4.2% (5.2% at the country level)
Average regional (gross) monthly salary:	1 832 € (1 552 € at the country level)

Source/s: GUS, Eurostat; Comment: The adopted euro exchange rate is EUR 1 = PLN 4.32

**Past**: Mazovia has a rich historical background dating back to the Middle Ages when it thrived as a hub for trade and crafts. By the 19th century, it emerged as a significant industrial centre, specialising in textiles and metal production. Post-World War II, the region underwent extensive industrialisation and infrastructure expansion, focusing on heavy industries like metallurgy and machinery. Subsequently, after 1989, Mazovia experienced profound transformations, including privatisation, industrial restructuring, and a shift towards service industries and information technology.

**Present**: Mazovia boasts a diverse economic history that has transitioned from traditional industries to vibrant modern sectors. Warsaw serves as the nation's primary financial and business hub. The region also holds significant importance in scientific research, cultural activities, and tourism. Key sectors in Mazovia, concentrated in the capital city, include:

- Financial and business services.
- Information technology and services.
- Pharmaceutical and biotechnology industry (drug production and biotechnology research).
- Food production and processing with modern production facilities.

**Future**: Challenges and prospects revolve around enhancing infrastructure, promoting sustainable development, and addressing regional disparities. Despite these challenges, the region holds promising prospects due to Warsaw's robust economic position, increasing innovation, and growing investment attractiveness.

#### **Research and development**

In 2022, R&D entities with headquarters located in Mazovia Region accounted for 23.1% of all entities involved in research and development activities in Poland. Mazovia also has the highest internal expenditure on scientific research and development work - PLN 15.7 billion, which constituted 35.0% of gross domestic expenditure on R&D activities. In 2022, 98.4 thousand people were involved in research and development projects in Mazovia, which constituted 30.6% of the R&D staff in Poland. The vast majority of R&D activities are conducted in Warsaw Capital Region.

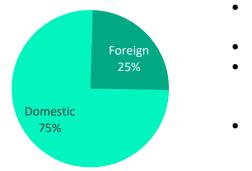




#### International orientation

Mazovia's economic landscape reflects a substantial degree of internationalisation, although the extent varies across the region. The Warsaw Capital Region stands out as a pivotal hub for international investment within the country. It hosts the highest concentration of businesses with foreign capital, accounting for 96.5% of such enterprises in 2018, and nearly half of Poland's foreign direct investments as of 2016. By 2017, foreign capital in Mazovia amounted to PLN 91.4 billion, with 8 092 foreign enterprises operating, comprising 36.6% of all foreign businesses investing in Poland.

#### Tourism



- 5 893 700 tourists arrivals, 10 293 500 overnights (2022).
- Mostly domestic tourists.
- Most foreigners arrived from Ukraine (21% of all foreign arrivals, due to the Russian invasion) followed by USA, Germany, and GB.
- The distribution of tourist accommodation in the Masovian region is uneven, with a concentration in Warsaw

Source: Turystyka w województwie mazowieckim w 2022 roku, GUS, <u>www.stat.gov.pl</u>

#### Education

Educational attainment level of the population (2021)	%
Primary school or less	10.4
Secondary education	46.2
Higher education (post-secondary/non-tertiary)	3.5
Tertiary education	32.4
Source: CLIS www.stat.gov.pl	

Source: GUS, <u>www.stat.gov.pl</u>

There are significant disparities in educational attainment and engagement across the Mazovia region. In the Warsaw Capital Region, half of residents aged 15-64 hold a higher education degree, and a substantial 8.6% of adults aged 25-64 actively pursue further education or training, well above the national average of 3.7%—conversely, other subregions of Mazovia exhibit significantly lower educational indicators.

Currently, Mazovia hosts approximately 265 000 students enrolled in tertiary education, including 31 500 international students. The region boasts 81 tertiary education institutions, with an average student-to-teacher ratio of 16 to 1. Twenty out of 81 universities are located outside Warsaw. The University of Warsaw, Warsaw University of Technology, and Warsaw School of Economics are nationally renowned as leading institutions in their respective fields.

Educational reforms in Poland, initiated in the 1990s and ongoing, have increasingly aligned secondary and tertiary education programs with the demands of the labour market. These reforms aim to enhance graduates' employability, resolve skills mismatches, and improve workforce adaptability to future market shifts. In particular, the vocational education system has undergone a significant overhaul to meet employers needs better, broaden access to higher education, and meet students' needs more effectively.





#### **Culture and creative industries**

The Mazovia region stands out as a premier hub for creative industries in Poland, drawing companies specialising in advertising, architecture, design, and visual and scenic arts. Its allure is enhanced by several factors: a high level of economic development, a robust presence of creative sector entities and business partners, access to a large consumer market, a thriving scientific community, a wealth of talented individuals, a strong technology sector, excellent communication infrastructure, a vibrant cultural scene, appealing public spaces, a well-established brand associated with creative industries, and a culture of openness and tolerance.

#### **Quality of life**

Life expectancy is 71.6 years for men and 79.7 years for women, almost in line with the national average.

The social and health care system is under pressure. The number of hospital beds per person is decreasing. At the same time, there is an insufficient number of medical staff.

The region has enough childcare facilities, and their number has been increasing (in 2021).

The average housing price is about 2 220 Euro/ $m^2$ , 34% higher than the national average (1 661 Euro/ $m^2$ ).

There is a sizeable number of cultural institutions and cultural programmes offered. Mazovia is known for its folklore, festivals (e.g. Warsaw Orange Festival), and cultural events organised for its residents, especially during the spring and summer.

Amenities	Number
Museums	140
Theatres	28
Cinemas	83
Concert halls	5
Festivals	25

Mazovia provides excellent natural surroundings, urban parks, and recreational opportunities. However, challenges such as less-than-satisfactory air quality, climate conditions, and safety levels can detract from its appeal as a healthy and secure living environment. Moreover, enhancing public transport, expanding restaurant options, improving nightlife, and increasing wellness facilities could significantly elevate the overall quality of life in the region and broaden its appeal to a broader demographic.

#### **Key challenges**

The main challenges for Mazovia in attracting and retaining talent include:

- Uneven regional development with high unemployment and lower level of economic development outside the Warsaw Capital Region.
- Building a competitive labour market by creating attractive working and living conditions.
- Developing infrastructure, including communication networks and access to essential services, is crucial for attracting talent, particularly outside Warsaw.
- Investing in education and skills development to maintain local workforce competitiveness and meet modern labour market demands.
- Promoting innovation and supporting high-growth sectors like information technology and biotechnology to attract highly skilled professionals.
- Enhancing quality of life through high standards of living, access to culture, recreation, and education to attract and retain talent.
- Supporting entrepreneurship by fostering favourable conditions for business development, including startups, to attract innovative and highly educated individuals.





- REWARD
- Strengthening international relations and promoting Mazovia as a welcoming destination for international talents.

#### **Good practice**

**Mazovian Startup IV** aims to support innovative and socially responsible startups in Mazovia by assisting them in refining and scaling their business models. This policy is categorised under entrepreneurship and business support, and adaptation. The initiative spans a two-year program featuring two rounds of acceleration, providing startups with essential business development support, opportunities to acquire capital, and connections with potential partners. It forms part of broader efforts to establish a nurturing ecosystem for startups in the region.

**Entrepreneurial Youth** aims to foster business education and entrepreneurial attitudes among secondary school students in Mazovia, specifically targeting them as part of student support policies. The program aims to foster personal and social competencies through experiential learning and virtual company management, encouraging creativity, critical thinking, cooperation, and career planning skills. Implementation is carried out by NGOs selected through a competitive process.

**Supporting Academic Entrepreneurship in Masovian Voivodeship by Co-Financing the Incubation Program** provides support to academic entrepreneurship among students and doctoral candidates in the Masovian Region by co-financing incubation programs. It aims to promote university-industry collaboration and adaptation to new forms of work, targeting students and doctoral candidates (Ph.D. students). The intervention involves providing co-financed incubation programs to support entrepreneurial initiatives, fostering collaboration among regional organisations, and enhancing the entrepreneurial ecosystem in Mazovia. NGOs administer this policy through competitive selection processes.

In addition, there is a **BioTech Leaders Academy** conducted through a series of classes at the Warsaw University Incubator in collaboration with Roche Poland. It offers 20 students the opportunity to develop competencies that prepare them more effectively to enter the biotechnology job market.

**Strategy for Further Development of the Commune of Radom - Radom 2030** is dedicated to enhancing the quality of life for Radom residents while fostering a competitive environment for entrepreneurship and investment. Categorised under quality of life and regional attractiveness policies, as well as university-industry collaboration, it targets graduates, women, and families explicitly. The intervention logic focuses on creating a vibrant, well-connected, and innovative economy. It includes initiatives to improve infrastructure, promote environmental sustainability, and ensure effective public administration.

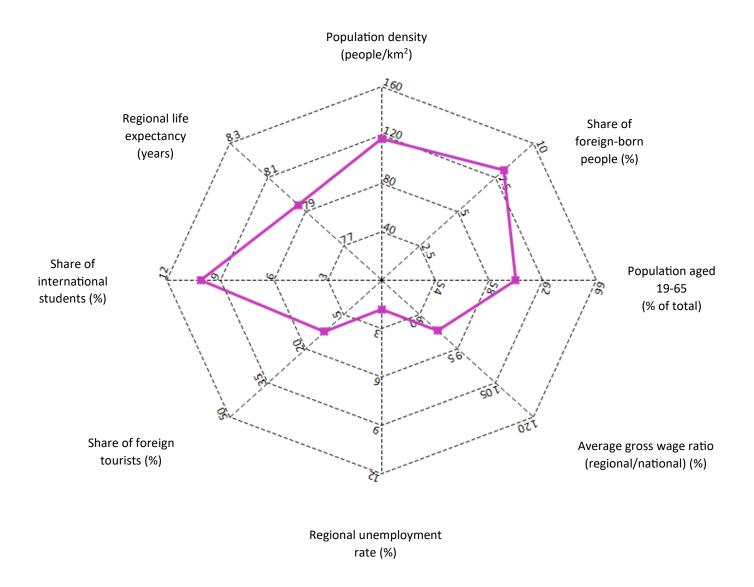
NUTS region:	1. NUTS2 Warsaw Capital Region (WCR) and 2. NUTS2
	Mazovia Regional Region (MRR)
Region website:	www.mazovia.pl
Organisation:	Marshal's Office of the Mazovian Voivodeship in Warsaw
Contact person :	Agnieszka Bech
Email:	Agnieszka.Bech@mazovia.pl
Phone number:	+48 22 5979771
Date of completion:	30 <sup>th</sup> April 2024

#### Contact





## PARDUBICKÝ KRAJ PARDUBICE REGION FACT SHEET









#### PARDUBICE REGION FACT SHEET

#### Location

The Pardubice Region, one of the 14 regions of the Czech Republic and part of the historic Moravia and Bohemia is in the northeast part of the country, with a short border with Poland. Pardubice is its main city.



Surface:4 519 km² (5.7% of the country surface)Population:528 716 (5.0% of the country)Population density:117 people/km² (136 people/km² in the country)

The region's landscape is characterised by the lowland of the Elbe River valley in the west, mountain ranges to the north and east - Žďárské Hills and Železné Mountains in the south, and the Orlické Mountains (all under protection) and Králický Sněžník in the northeast.

Water plays a significant role – the Elber River is the main waterway to Hamburg, one of the most important seaports in Europe. There are also three large water dams - Seč Dam, Bohdanečský Pond, and Pastviny Reservoir.

#### Population

The Pardubice Region has a population of about half a million. The main administrative and economic centre is Pardubice (92 thousand inhabitants, 17% of the regional population). The other two major towns are Chrudim (23 thousand inhabitants, 4%) and Svitavy (16 thousand inhabitants, 3%).

#### Urban – rural divide

The Pardubice Region has a total of 451 towns and villages. In the region, there are seven towns with more than 10 000 inhabitants and a total of 37 municipalities with more than 2 000 inhabitants. These municipalities are home to 61% of the region's total population.

Urban settlements in the Pardubice Region are typically larger and more densely populated than rural settlements. They tend to have richer infrastructure and a wider range of services and facilities, such as healthcare facilities, schools, and cultural institutions, compared to rural areas. Urban settlements also offer more employment opportunities. Rural settlements, on the other hand, are associated with a quieter lifestyle, lower housing costs, and agriculture.

#### Accessibility

The Pardubice Region is highly accessible by all forms of transport.

- **Road**: The D11 highway serves as a vital transport route and a quick connection to Prague. A new highway, as an alternative route to Prague cutting through the periphery of the region, is under construction. Other major roads, especially dense around the town of Chrudim, provide good regional connections.
- **Air:** The main international airport is in Prague, approximately 150 km from Pardubice. A smaller airport is in Pardubice, serving a limited number of routes.





- **Rail:** Pardubice is an important railway hub in the Czech Republic, serving as a significant junction for railway connections within the country and beyond. Two European rail corridors pass through the region: the Baltic-Adriatic and the Orient/East-Med corridor. It has direct train lines to Slovakia, Austria, and Germany, as well as well-developed regional rail networks.
- Water: The Elbe River is a vital transport waterway with a port in Pardubice.

#### **Digital infrastructure**

On average, the region lags behind the national average in high-speed internet coverage. As usual, urban areas are better covered than rural ones in terms of both fixed broadband and mobile signal coverage. The area around Moravská Třebová, at the foothills of the Orlické Mountains to the east, characterised by economic and social vulnerability, has the lowest coverage. In general, there is a lack of data regarding the percentage of the region covered by a mobile signal and the types of mobile networks available (2G, 4G, or 5G).

#### **Population trends**

- Population changes 1990/2023: an increase of 3.6%
- Population changes 2010/2023: an increase of 2.4% (annual rate of change +0.2%)

After experiencing a population decline in the final decade of the previous century, the region witnessed a reversal of this trend starting from the early 2000s.



Source/s: Czech Statistical Office

#### Migration

Both internal migration from other regions and international immigration drive population growth. However, natural population change remains negative. Furthermore, more people are moving out than moving to the region from other parts of the country.

#### Table: In and out-migration

Migration	2023	
	Number	% of the regional population
Out of the region	8 285	1.56%
Within the country	6 421	1.21%
Outside the country	1 900	0.35%
To the region	10 995	2.07%
From other parts of the country	5 381	1.02%
From other countries	5 600	1.05%

Source: Czech Statistical Office

The percentage of foreign-born people in the total population of the region is 8.05%, and it is growing. At the same time, the unemployment rate of the foreign-born population is 25%.





Organisations like Most pro, o. p. s. and the Centre for the Integration of Foreigners in the Pardubice Region have been dedicated to assisting foreigners and their families. Each year, these organisations host various social events and integration activities aimed at assisting foreigners fitting into society, fostering understanding of diverse cultures, and combating xenophobic attitudes within the broader community.

#### Economy and labour market

In comparison to the national average, with about 22 thousand Euros per capita, the Pardubice Region's GDP ranks in the middle. With an increase in GDP over the last few years, the region is getting closer to the national GDP. Its rate of unemployment is lower than the national average, but so is the average monthly salary.

21 044 € (82.5% of the country's GDP per capita)
1.8% (lower than 2.2% national average)
1 508 € (14.7% lower than the national average)
-

Source/s: Czech Statistical Office

**Past**: Historically, the Pardubice Region was an industrial hub. The traditional industries includes electrotechnical, chemical, engineering, food, textile, and transport production. Unlike other regions in the Czech Republic, Pardubice's industrial sector has remained unchanged since the 1990s. However, there were significant shifts in the textile industry, marked by the closure of numerous large factories, resulting in a surge in unemployment. Conversely, the electrotechnical sector witnessed the rise of small and medium-sized enterprises following the decline of larger corporations.

**Present**: In recent years, the importance of the chemical industry has been decreasing while the automotive industry is thriving. The services sector is experiencing notable growth, particularly in the field of information technology.

**Future**: Capitalising on its industry, the Pardubice region is focused mainly on production, development, and research in the fields of electrical engineering, electronics, energy, chemistry, and information technology. The main aim of these initiatives is to ensure its industrial sector stays competitive and expands through export. However, there are significant challenges in fostering industry-university cooperation and providing a workforce with sufficient numbers and the right skills.

The region has a concentration of employment in the industries that face structural changes (i.e. automation, globalisation, consumer preferences), creating potential job losses for highly specialised current workers while facing skill shortages at the same time, especially in technical fields such as engineering, IT, and healthcare. Investment in retraining programs and lifelong learning is, therefore, a priority.

The labour market is adversely affected by demographic shifts, including an ageing population and migration trends, in particular, the brain drain that affects rural communities in the northern and eastern parts of the region. The increase in the older population will put pressure on the labour market and increase the cost of social services.

#### **Research and development**

The University of Pardubice is the only research organisation operating in the region according to the Act on Support for Research, Experimental Development and Innovation. However, there is 177 private enterprises registered for research and development according to the Czech Statistical Office as of 2022. However, one of the structural problems of the region that needs to be addressed is the lack of connection between the academic and business spheres.

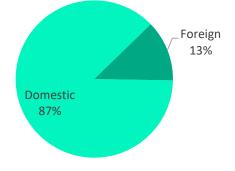




### International orientation

While the number of international students, visitors, and migrants in the region is relatively low, the Pardubice economy is heavily export-oriented. The field of electronics and electrical engineering plays a vital role in the region's export sector. Furthermore, export-oriented bio-chemical industries focused on medical applications, particularly in synthetic chemistry and bioactive materials preparation. Additionally, the University of Pardubice collaborates internationally on various projects related to bio-analytics, medical devices like lab-on-chip technology, and advanced materials for medical applications.

Tourism



- 535 thousand tourists arrivals, 1.4 million overnights (2023).
- Mostly domestic tourists. The majority of international tourists come from Slovakia, Poland, and Germany.
- The attractions with the largest number of visitors are Sky Bridge 721 and trail in the clouds in Dolní Morava.

Source: Czech Statistical Office

#### Education

The University of Pardubice is the only institution in the region offering tertiary education. It has about 6.9 thousand students, of which seven hundred (about 10%) are international. The university is recognised as one of the best in the Czech Republic and is gradually developing its international reputation.

Programs run by the university, as well as vocational schools, are aligned with the regional industrial tradition.

However, only a quarter of all students are enrolled in the natural and technical science programs. Moreover, there is an increased demand for university-educated employees in the chemistry and electrical engineering sectors due to a significant increase in the number of research organisations operating in the area. Therefore, these graduates find employment quickly, especially as there is a tradition of internships in the companies.

The vocational schools lag behind the technological changes and innovations, leaving students short of up-to-date skills and competencies demanded by employers. There is a continuous attempt by the regional public administration to foster dialogue between employers and educators on aligning educational programmes with the needs of the economy.

Tertiary education is conducted only in the Czech language. There is a bilingual (English-Czech) elementary school and a private English grammar school in Pardubice.

#### **Culture and creative industries**

The Pardubice Region is renowned for its vibrant cultural scene, featuring several events held throughout the area. While many events are centred in Pardubice, numerous others take place throughout the region.





The creative industry in the region has not played a significant role in the past. However, recently, the regional self-government has recognised the importance of creativity, both in education and as an accelerator of added value in industry. Consequently, the region has announced creative vouchers to support this sector and is currently developing a strategy to systematically and meaningfully support creative industries in the future.

#### **Quality of life**

The region's life expectancy for men and women is 76.6 and 82.2 years, respectively, slightly lower than the national average of 77 years for men and 83 for women.

The main regional hospital is in Pardubice (operating as a joint-stock company). However, the region faces a shortage of hospital beds as well as a shortage of healthcare professionals, particularly in remote areas.

Childcare facilities are sufficient and varied.

There is a sizeable number of cultural institutions and a variety of cultural programmes offered.

The Pardubice Region offers excellent natural surroundings, a pleasant climate, efficient public transport, recreational opportunities, and safety. With a very low unemployment rate, there are plenty of job opportunities. The region holds an appeal for those preferring peaceful and secure environments.

Number
47 (2022)
14
54 (2018)
6
64 (2023)

#### **Key challenges**

- Demographic issues (ageing population).
- "Brain drain" from the region facilitated by the excellent transport connections to the rest of the country as well as from the rural to urban parts of the region, due to the uneven regional development, especially in the mountainous areas to the east.
- Lack of skilled (university-level) workers in numerous research organisations operating in the region.
- Match between the skills and job market needs of the vocational school graduates.
- Improving employment rates of foreign-born population.

#### **Good practice**

- Methodology for working with gifted students at primary schools in the Pardubice Region.
- Programme for creating and developing pupils' interest in scientific and technical fields in the Pardubice Region (Festival of Science and Technology competition for children and youth).
- Supporting the development of talents.
- Zlatan's Challenge is a web application that checks the aptitude of students, especially those in the last grades of primary school, and provides suitable school and possible future career suggestions based on the results.





#### Contact

NUTS region:	NUTS 3 - CZ053
Region website:	https://www.pardubickykraj.cz/the-pardubice-region
Organisation:	Regional Development Agency of the Pardubice Region
Contact person	Jan Gregor
Email:	jan.gregor@rrapk.cz; barbora.zakova@rrapk.cz
Phone number:	+420 603 235 040
Date of completion:	03.05.2024

