



## **POLICY CONSIDERATIONS FOR MORE POLYCENTRIC DEVELOPMENT OF VISEGRAD COUNTRIES**

Policy-oriented outputs of the project „Changing role of  
SEcondary Cities in the POLYcentric development of  
Visegrad Countries” (SECPOLYC)

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The report is based on the empirical, quantitative analysis of polycentricity of functional urban areas of the Visegrad Countries (absolute and relative hierarchies of cities) and on the following policy and expert consultations, workshops:

- 2024 12<sup>th</sup> December, Wrocław (PL): Urban and regional stakeholder consultation (18 participants)
- 2025 2<sup>nd</sup> April, Brno (CZ): Polycentric Development in Visegrad Countries: Processes, Structures, Spatial Patterns – Seminar, (21 stakeholder participants)
- 2025 13<sup>th</sup> November Košice (SK): Workshop on Secondary Cities and Polycentric Development (38 participants)
- 2026 17<sup>th</sup> March Budapest (HU): Developing Cities Beyond Capitals – International Conference on Polycentric Development in the Visegrad Countries (55 participants)

<https://www.uni-corvinus.hu/ind/secpolyc/?lang=en>

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# 1. The polycentricity challenge in the Visegrad Four region

In the European Union, since the 1990s, the role of polycentric development in the social, economic, and territorial development has gained high recognition. Key spatial development-oriented strategic documents of the European Union, such as the European Spatial Development Perspectives (ESDP, 1999), Territorial Agenda of the European Union (2007, 2011, 2020), defined polycentric development as a common European priority, which is crucial for a more equal, sustainable and just development of the EU. EU territorial policy documents and ESPON research consistently argue that polycentric development can strengthen territorial cohesion, economic resilience, and balanced competitiveness. The ESDP, the Territorial Agenda 2030, and ESPON studies emphasise that balanced urban systems, stronger secondary cities, and improved interregional connectivity are essential for territorial cohesion. ESPON research also highlights that Central and Eastern Europe has significant potential for further polycentric development, driven by relatively dense urban structures and growing metropolitan networks.

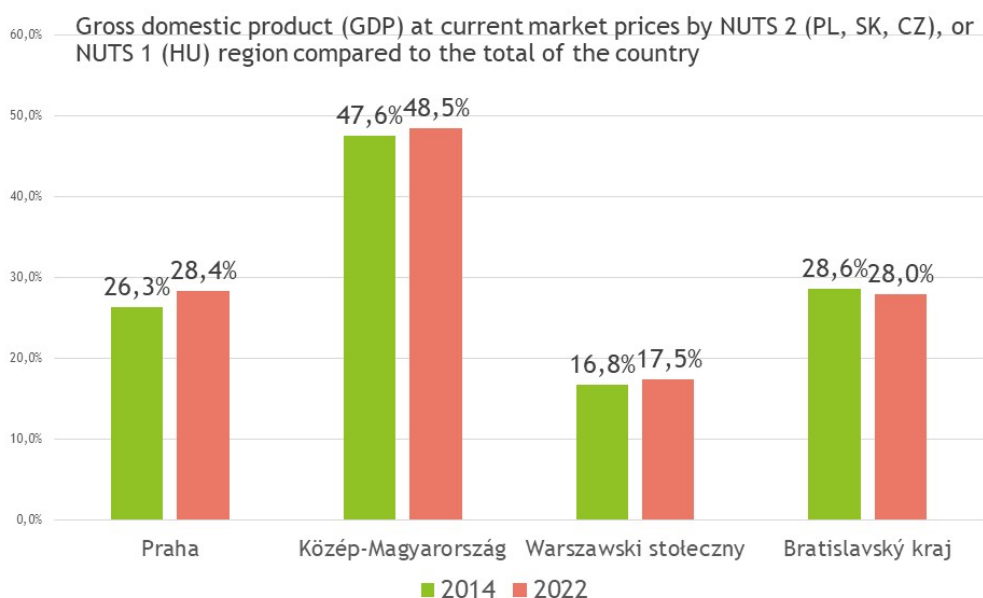
Besides the polycentric development of the EU's territory, the polycentric development within specific member states has also become a focus (See Territorial Agenda 2030). In this approach, urban centres are essential to sustainable, robust regional development. Central and Eastern European (CEE) countries share a regional and urban development heritage, which makes the challenge of polycentric development even more specific and severe for them. The Visegrad Four countries — Poland, Hungary, the Czech Republic, and Slovakia — remain strongly monocentric in spatial and economic terms, with national capitals dominating innovation, investment, higher education, and transport accessibility. The concentration of functions in Warsaw, Budapest, Prague, and Bratislava has contributed to widening territorial disparities and uneven development.

Czechia, Slovakia, and Hungary have highly monocentric urban systems, and in Poland, Warsaw also exhibits strong economic dominance, resulting in a concentrated spatial distribution of resources, wealth, and development. In most former socialist countries, the market economy transition from the early nineties and the EU integration have been accompanied by increasing territorial inequalities due to the location preferences of FDI and human capital (preferring capital regions). The second-tier cities are facing challenges in becoming development centres for their wider regions due to their inadequate size (population, market, production, and R&D) and capacities, receiving less attention and support from policies, and are often dependent on a handful of multinational companies. The lack of spatially balanced development is a crucial development trap for the economies of V4 countries and also threatens their sustainable development. The specific challenges and potential of polycentric development in CEE have not yet been actively introduced into international academic and policy discourses, and limited evidence were available on it.

The issue of polycentric development is broadly studied at the EU level (TSP 2011, several ESPON projects, Rauhut, D., Sielker, F. & Humer, A. 2021; REPUS project (2006-2009),

etc.). In 2012, a common spatial development strategy was elaborated for V4+2 countries in intergovernmental cooperation (with the contribution of the coordinator of the current project proposal), which connected in a visionary map the development poles designated by the national spatial development plans of that time. The specificities of challenges of polycentric development in Central and Eastern Europe have been hardly addressed. Most studies in V4 region focus on regional disparities without addressing the role of urban development in them. Less attention is paid to the second to third-tier cities (e.g. Brno, Ostrava, Krakow, Łódź, Wrocław, Poznan, Kosice, Debrecen, Győr, Szeged, etc.), which, although have the highest potential to counterbalance the few concentrations. Additionally, the functional interconnection between urban planning and the regional development approach is still weak in our countries as they are considered as distinct policy fields, especially in Hungary.

### Share of capital city regions in the Visegrad countries



Data source: EUROSTAT

## 2. SECPOLYC: A project for raising knowledge about polycentric development in Central and Eastern Europe

With the support of the International Visegrad Fund, four universities from the Visegrad Countries with outstanding experience in regional and urban research, specialising in urban systems, joined to contribute to better policies addressing the challenge of polycentric development. A more balanced and sustainable development of the V4 region can be promoted through policies at different levels (Cohesion Policy, spatial planning, transport and urban policies, etc.) that effectively address polycentric development. Although the project had a limited time frame (2024 December - 2026 May) and financial resources from the very beginning, the consortia decided to follow an integrated approach by taking steps in 3 areas: Improving policies through cooperation projects can be enhanced by providing scientific evidence, boosting policy discourse at both domestic and international levels, and raising public awareness. Our project intended to address academics and practitioners of policies and planning in the field of urban and territorial development. The project consisted of empirical quantitative research (A) and efforts to initiate academic and policy discourse (B) to better understand and articulate the potential of cities. Additionally the issue of polycentric development in Visegrad Countries was introduced to university students of related fields in each of the four participating university.

In the project, the polycentricity of the Visegrad Four region has been analyzed: Two academic papers will be submitted to high-quality academic journals:

- Understanding polycentric development via hierarchies: Absolute and Relative Hierarchies of Cities in the Visegrad Countries
- Consequences of polycentricity of urban structures for education systems: Daily mobility patterns and commuting to school: An innovative approach to delimiting education deserts in Visegrad countries<sup>1</sup>

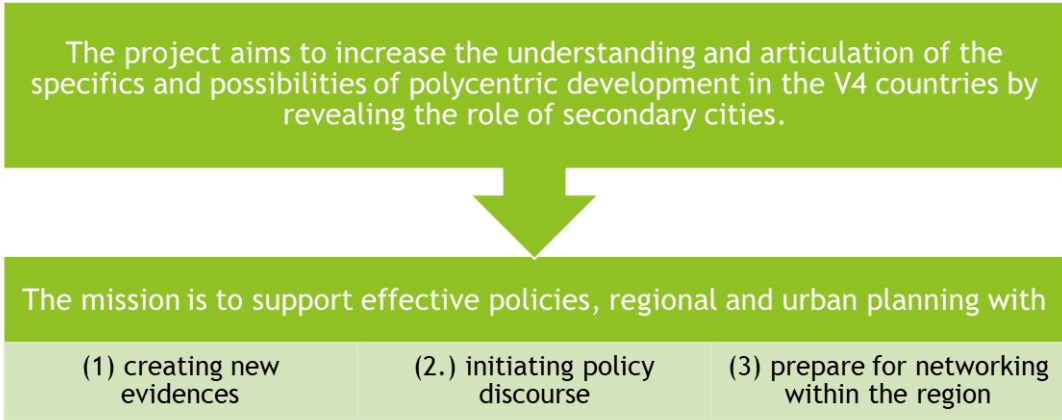
This comparative study among V4 countries revealed commonalities and differences, problems, and policy responses. **A. Research:** (1) Comparative overview of urban systems and spatial policies of the 4 (literature review); (2) A longitudinal empirical analysis of the role of secondary cities in their country (e.g. in population, R+D, FDI, EU funding) since the EU accession; (3) Policy recommendations. **B. Activities to initiate policy and academic discourse:** (1) Engagement of practitioners of policies and planning; (2) Preparing a V4 network of professionals and researchers; (3) Introducing this issue into the education of the future professionals in some selected university courses; (4) Dissemination of the project results.

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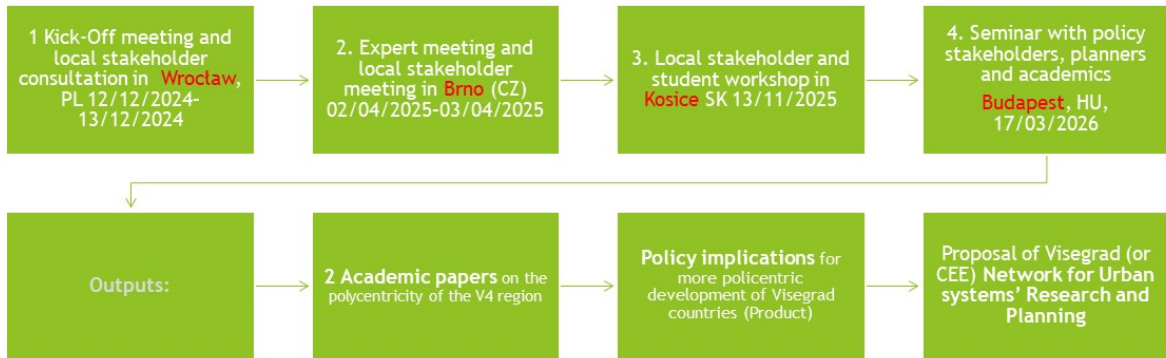
<sup>1</sup> Once these academic papers are published the project website will inform about their availability: <https://www.uni-corvinus.hu/ind/secpolyc/?lang=en>

It is a novelty that, despite limited resources, we intend to keep academic exercise and policies together. The core project team covers expertise in both academic spatial research and regional-urban policy planning. By better understanding the role, changes and potentials of secondary cities in the further development of these four countries, we aimed to provide insights that can inform policy decisions and urban planning strategies.

**The mission of the project SECOLYC**



**The steps and outputs of the project SECOLYC**



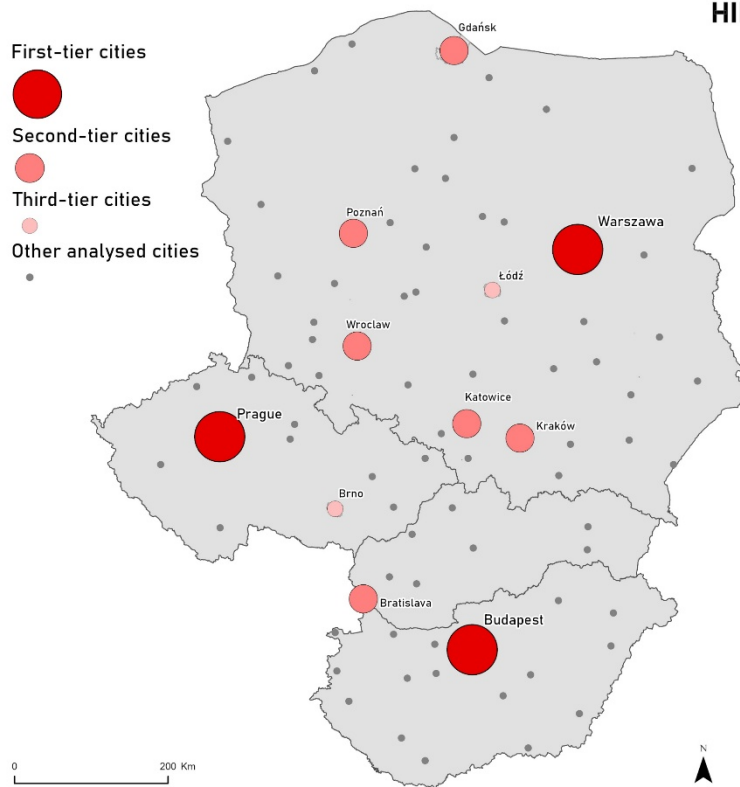
### 3. Differences and similarities of the polycentric development challenge in the Czech Republic, Hungary, Poland and Slovakia

#### Macroregional approach brings added value for achieving more polycentric development

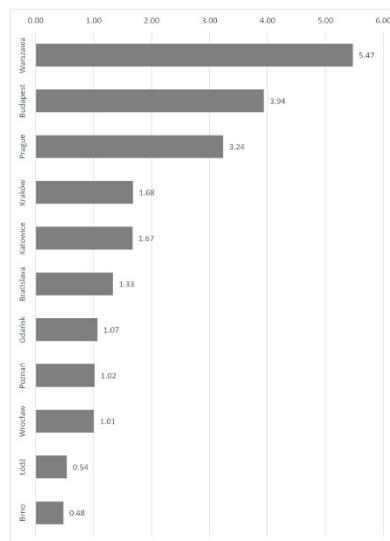
Our empirical analysis created a standardised understanding of the urban systems of the four countries, using a set of eight indicators that capture different dimensions of urban centrality, as defined in the research framework. The indicators were. As a result, we identified a single urban hierarchy system for this region, covering the capital and secondary cities (for further details, see our academic paper to be published in the rest of 2026).

Poland is relatively more polycentric due to the presence of several large metropolitan centres (e.g. Kraków, Wrocław, Poznań, Gdańsk, Katowice, Łódź), whereas Czechia, Slovakia, and Hungary exhibit the most pronounced monocentric patterns dominated by their capital cities (Kramar & Kadi, 2013), while in Slovakia the geographically peripheral colocation of the growing capital brings special challenges. Consequently, at the supranational scale, the V4 urban system can be described as weakly polycentric, with strong functional concentration in capital cities acting as primary nodes in economic, institutional, and transport networks.

### Hierarchy of urban centres in V4



### HIERARCHY OF URBAN CENTRES ACROSS V4 COUNTRIES



Source: SECPOLYC-based academic paper under publication, by Szmytkie, Kraft, Novotny, Salamin 2026)

This sheds light on the fact that the polycentricity of individual countries is a relative notion; their understanding within a macroregional space provides a clearer picture. Poland is bigger than Czechia, Slovakia and Hungary together, while its regions (with a similar size to Slovakia) might be monocentric too. The functional polycentricity can be improved at best through a border-crossing approach that takes into account urban centres beyond political borders.

## Driving factors and policy options in the four countries

Based on the literature and the expert and stakeholder consultations of the SECPOLYC project in Wroclaw, Brno, Kosice and Budapest, we could identify the specific drivers and potential solutions for the four countries, which gave the opportunity to identify the similarities and the specifics of the four countries. These are summarised in the following two tables.



### Policy options for strengthened regional centres (and polycentric system)

FIELDS	POLAND	CZECH REP	HUNGARY	SLOVAKIA
Spatial development	Polycentric dev. (also in regional plans) ✓	Polycentric dev. ✓	Polycentric dev. ✓	Polycentric dev. (also in regional plans) ✓
	Focused development of main regional centres			
	regional universities	regional universities and R+D+I		
Connectivity	Horizontal (transversal) connections	Horizontal (transversal) connections		Horizontal (transversal) connections ETN integration
	Accessibility of urban centres from their region – integrating labour markets			
	Digital connectivity (public services, remote working, etc.)			
Governance	Integrated governance for functional urban areas			
	Integrated territorial and urban planning			
	Integrating city with its territory in case of counties and municipalities (GMINA- s)		Integrating counties and their cities with county rights	
		integration of small local municipalities		
	Decentralised state functions to regions/counties and big cities			
Cross border dimension	Functional integration of urban regions across the borders		Functional integration of urban regions across the borders	
		Territorial integration of the entire V4 region (and beyond)		
Professional	CEE Knowledge network			

## 4. What to do?

Supporting more polycentric regional development in the Visegrad Four countries requires coordinated action across national, European, and local governance levels. Stronger secondary cities, improved regional connectivity, decentralised economic development, and enhanced territorial cooperation are essential for reducing spatial inequalities and strengthening territorial cohesion. Balanced urban systems can improve both competitiveness and social cohesion across Europe.

### A. Recommendations for National Governments

The main responsibility holders in policies that can support more polycentric development are the national governments.

All national (incl. sectoral) policies should be developed and implemented in partnership with the local and regional municipalities of the largest cities. The approach of **multi-level governance** should be applied to join the efforts of the main cities, regions and the national policies in tackling each development challenge.

The role and potential of secondary cities are dependent on the competencies and jurisdictions they have. This is why the **decentralisation** of certain state functions to regions/counties and big cities can be a key driver of strengthening regional centres as well. Decentralisation made significant progress in Poland, contributing to a more decentralised structure, while in Hungary the centralisation of several functions increased the dominance of Budapest and the dependence of the rest of the country.

#### National spatial and urban development policy

- National governments in the V4 countries should strengthen **integrated national spatial planning frameworks** that explicitly promote polycentric urban systems rather than reinforcing capital-city dominance. Spatial plans should identify secondary growth poles and functional urban regions outside capitals, such as regional university cities and medium-sized industrial centres. These cities should receive stronger institutional roles in national development strategies.
- Governments should also encourage inter-municipal cooperation and metropolitan governance structures. Our consultations demonstrated that territorial cooperation between cities is a key condition for successful polycentric development. Functional urban areas should therefore become central units of territorial planning rather than relying solely on administrative boundaries.
- Strengthening the urban-rural connections and cooperation in each region.
- National spatial policies should additionally restrict uncontrolled suburban sprawl around capital cities and promote compact urban development in secondary cities. This would improve land-use efficiency and reduce territorial polarisation.

- Strategies and improvements of public services by the state must be linked to the integrated urban and territorial development policy to optimise their efficiency through urban system development.

## Regional development

- Regional development policy should prioritise lagging and intermediate regions instead of concentrating innovation and public investment overwhelmingly in capital metropolitan areas. National governments should establish targeted regional development funds supporting:
  - regional innovation ecosystems,
  - universities outside capitals,
  - digital infrastructure,
  - research and development centres,
  - and SME networks in secondary cities.
- Medium-sized cities can become important nodes in polycentric development if they possess sufficient institutional capacity, accessibility, and economic specialisation.
- Decentralisation of selected public institutions and government agencies (especially in relation to regional development) from capitals to secondary cities should also be considered. This could strengthen regional labour markets and improve administrative balance within national urban systems.

## Transport policy

- The foundation of polycentric regional development in Europe lies in the most developed cities, which cooperate with one another as part of a polycentric system, thereby promoting the development of both their own cities and their broader regions. When developing elements of the transport network of national and international significance, polycentric development must also be kept in mind, the most important aspect of which is reducing centralisation and strengthening large cities in rural areas.
- It is crucial to integrate the secondary Visegrad Four cities into European and global transport networks by establishing transport links between major European and international cities of domestic and global significance and by improving accessibility.
- Transport policy should shift from highly radial, capital-oriented infrastructure models toward more transversal and regional connectivity. In many V4 countries, transport systems primarily connect peripheral regions to capitals rather than supporting horizontal regional integration.
- National governments should therefore:
  - modernise regional rail systems,

- improve cross-regional rail corridors,
  - strengthen public transport between secondary cities,
  - improve accessibility of main regional urban centres from their wider regions
  - and prioritise sustainable mobility investments.
- ESPON analyses on transport and TEN-T policies stress that transport infrastructure should support territorial cohesion and balanced spatial development rather than reinforcing core-periphery inequalities.
  - Special attention should be given to cross-border connectivity within Central Europe, particularly along V4 urban corridors. Better rail integration between secondary cities across borders could support larger transnational polycentric regions.

### **Economic Policy**

- Economic policy should encourage diversified regional economic development rather than excessive concentration of advanced services and foreign investment in capital regions. Governments should create fiscal incentives for firms investing in secondary cities and peripheral regions, particularly in knowledge-intensive sectors.
- National innovation strategies should support regional specialisation and smart specialisation policies adapted to local territorial assets. Universities and regional innovation hubs outside capitals should receive stronger support to retain skilled labour and reduce brain drain to dominant metropolitan centres.
- Governments should also strengthen local economic resilience through support for green industries, digital transition, and regional entrepreneurship ecosystems.

### **Thinking in macro region:**

- Perhaps the most important insight of the project is that the challenges posed by the monocentric structure of individual countries can be significantly addressed by beginning to plan and develop within the context of the Visegrád macroregion.
- Urban regional connections and cooperation can contribute to the creation and strengthening of cross-border urban regions that offer solutions to peripheral areas, particularly in terms of access to urban centres. This can be strengthened through joint planning, development programs, the creation of opportunities for cross-border commuting, and, in general, the V4-oriented development of public transportation.

## **B. Recommendations for the European Commission and the Visegrad Four Cooperation**

- EU Cohesion Policy should continue emphasising territorial cohesion and polycentric development as core objectives of European territorial governance. The European Commission should increase support for integrated territorial investments (ITI), interregional cooperation, and functional urban area governance within Central and Eastern Europe.

- Future Cohesion Policy frameworks should allocate greater resources toward:
  - secondary city development,
  - sustainable regional mobility,
  - cross-border cooperation,
  - and innovation networks beyond capital regions.
- The Territorial Agenda and ESPON research both underline that polycentricity requires coordinated investment across multiple territorial scales.
- The Commission should also strengthen macro-regional cooperation frameworks in Central Europe and the Danube Region. Existing V4 and Central European urban networks could become stronger platforms for territorial cooperation, knowledge exchange, and integrated spatial development.
- EU transport policy and TEN-T investments should better incorporate territorial cohesion objectives by improving accessibility for intermediate and peripheral regions rather than prioritising only major metropolitan corridors.
- Finally, ESPON programmes should continue providing territorial evidence, monitoring tools, and comparative analyses to support evidence-based policymaking in the V4 countries.
- However, In research projects and cooperation, Central and Eastern European-specific topics and their regions should be consciously supported, so that they are given appropriate weight in European discourse. In the identification of spatial visions, policy solutions, and good practices, it would be beneficial to consider the variety of approaches and solutions instead of identifying the only European “good” way. In addition to common European concepts, more space should be awarded to macro-region-specific goals and characteristics.

### C. Visegrad Four Cooperation

- Deepening cooperation among the Visegrád countries can offer significant opportunities in an increasing number of areas, including the promotion of polycentric development in these countries.
- We strongly recommend that, building on the regional development cooperation launched in 2009, deeper cooperation be initiated to harmonise spatial planning and develop a coordinated network of cities across our countries. Coordinated transportation strategies can also significantly support this endeavour.
- We recommend establishing a permanent intergovernmental working group on regional development issues.
- We also recommend supporting specific urbanisation and regional development projects with the backing of an International Visegrad Fund.

## D. Recommendations for Non-Capital City Governments

- Non-capital cities in the V4 countries should strengthen inter-city cooperation and develop complementary rather than purely competitive development strategies. Networks of cooperating cities are fundamental components of polycentric territorial development.

City governments should:

- build metropolitan partnerships with surrounding municipalities,
  - develop integrated transport systems with their region
  - cooperate on innovation and higher education,
  - and jointly market regional economic strengths.
- Medium-sized cities should also invest in quality-of-life factors that attract skilled workers and innovative firms, including sustainable mobility, affordable housing, cultural infrastructure, and green public spaces.
  - In addition, cities should develop stronger economic specialization strategies linked to local assets and regional economic profiles. Instead of imitating capital-city functions, secondary cities should focus on complementary niches such as advanced manufacturing, logistics, digital industries, university-based innovation, or green economy sectors.
  - Finally, local governments should actively participate in EU territorial cooperation programmes, including INTERREG and ESPON initiatives, in order to improve institutional learning and international cooperation capacities.

## E. Recommendation for professionals and their associations

During the events of the project, we engaged several academics, stakeholders, practitioners for policy making and planning and also university students. We experienced an explicit need for being connected, learning from each other and articulating our common ideas, needs and plans for the future. This is why the creation of a future network is proposed. The future V4 Urban Systems Research and Planning Network could fulfil several complementary functions.

Its overall role would be to create an organised framework for cooperation between researchers, planning professionals, municipal actors and policy-oriented institutions working on urban systems and spatial development in Central and Eastern Europe. The network should not duplicate the work of existing national organisations or European networks. Its specific added value would be to connect these actors regionally, identify common V4/CEE issues and translate fragmented national knowledge into comparative, policy-relevant and internationally visible outputs. As a result of the project we created a conceptual plan of this network available on the project webpage: <https://www.uni-corvinus.hu/ind/secpolyc/?lang=en>