

## **REGENERATION OF POST-SOCIALIST HOUSING STOCK: A METHOD TO MAKE DECISIONS ABOUT THE FUTURE OF HOUSING ESTATES IN OSTRAVA**

Ing. arch. Jitka Molnárová, MSc. – Faculty of architecture, Czech Technical University  
doc. RNDr. Tomáš Hudeček, PhD. – Faculty of civil engineering, Technical university of Ostrava

prof. Ing. arch. Michal Kohout – Faculty of architecture, Czech Technical University  
Ing. arch. Filip Tittl – Faculty of architecture, Czech Technical University  
doc. Ing. arch. David Tichý, PhD. - Faculty of architecture, Czech Technical University  
Mgr. Lucia Dobrucká, PhD. - Faculty of architecture, Czech Technical University

Faculty of architecture, Czech Technical University  
Thákurova 9, Praha 6 – Dejvice, 166 34, Czech Republic

[jitka.molnarova@fa.cvut.cz](mailto:jitka.molnarova@fa.cvut.cz)

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### Abstract:

This article presents a method of comprehensive analysis that was developed to classify a larger number of post-socialist housing-estates within one municipality. It enables to reveal certain patterns and potentials and classify seemingly uniform housing-estates into categories which share similar characteristics and challenges. Such classification helps set a regeneration strategy and further planning actions aimed at starting a longterm sustainable regeneration of housing estates. The method is illustrated on the case of the city of Ostrava where 34 housing-estates were analyzed based on their attractiveness and spatial and socio-economic characteristics. The analysis uncovered four specific groups of housing-estates with similar patterns. The method allows to visualize these conclusions and communicate them easily to the wide public. Hence, the method addresses two key factors when setting the regeneration policies: the ability to take decision and to communicate it.

### **Introduction**

Modernist housing-estates have been criticized since 1960s (Jacobs, 1961; Lynch, 1983; Jacobs and Appleyard, 1987). Since then planners in many Western European countries have looked for approaches to regenerate this particular urban form and turn housing estates into more livable neighborhoods (van Kempen *et al.*, 2005). National governments started the first regeneration projects and programs in the late 1970s and keep implementing them ever since (van Kempen *et al.*, 2005; Kohout *et al.*, 2022).

In Central and Eastern Europe, the challenge of modernist housing-estates, that have been growing older physically as well as morally, was neglected for a long time. Nevertheless, the awareness of inevitable regeneration is increasing in this region, too (Andrews & Sendi, 2001;

Maier, 2003; Lux et al., 2005; Špaček, 2012; Kohout et al., 2016; Gunko et al., 2018; Benkő et al., 2018; Nedučín, Škorić and Krklješ, 2019). Planners and researchers try to learn from the 30-40- year-long experience which Western Europe has had with the physical transformation of housing-estates, adjust it to the conditions of post-socialist countries and come up with new strategies that may be useful for regeneration processes in both post-socialist and Western European countries (Kohout *et al.*, 2022).

While withdrawing knowledge from western experience one has to pay attention to the differences between the condition in Western and post-socialist Europe (van Kempen *et al.*, 2005). In Western European countries, housing-estates usually represent 5-9 % of the overall housing stock, while in the post-socialist countries it is often around 40 % (Dekker *et al.*, 2005). Modernist housing-estates in post-socialist countries thus represent a decisive share of the local housing stock, which makes them one of the greatest challenges of urban-planning in the post-socialist region (Dekker *et al.*, 2005).

Besides the scale, the situation in Western Europe and post-socialist countries differs also in terms of social status of residents living in the housing estates, flat ownership, available financial resources of governmental bodies and their institutional capacity to implement large scale regeneration processes. In Western Europe, the concentration of lower income inhabitants and public ownership of housing estates makes their transformation both politically more acceptable and managerially more feasible. In contrast, housing-estates in post-socialist countries represent, to a large extent, middle-class neighborhoods that have gone through a process of privatization. Thus the majority of flats here is owned by individual private owners (Struyk and Daniell, 1995; Andrews and Sendi, 2001; Lux *et al.*, 2005; Murie *et al.*, 2005; Benkő, Balla and Hory, 2018). This fact can be seen as an advantage because inhabitants possess relevant wealth that they are often willing to invest in their housing. On the other hand, private ownership requires negotiation and cooperation among individual owners, and, therefore, the planning process becomes more challenging since it must be open to a significantly larger number of stakeholders.

Post-socialist and Western European countries also differ in their regeneration policies and the overall future vision of housing estates. In Western Europe most countries take an integrated approach towards housing estates regeneration with the ambition to turn them into sustainable neighborhoods (Nedučín, Škorić and Krklješ, 2019). Successful regeneration projects often encompass public space revitalization, partial demolitions, building renovations, construction of new facilities and buildings with different typologies and functions. Spatial interventions are often accompanied also with social programs. Together they aim at overall upgrading of the neighborhoods (Druot et al., 2007; Wassenberg, 2011; Gomez et al., 2016; Hess et al., 2018; Kohout et al., 2020). Western projects are most often implemented from the top by either a centralized public entity, as is the case of National Agency for Urban Renewal (ANRU) in France (ANRU, 2022), or through a cooperation between public entities and private housing companies with public interest, as is the case of the Netherlands (Wassenberg, 2011; Kohout et al., 2020).

On the contrary, most post-socialist countries don't have a clear vision of how to approach housing estates and their future is thus rarely addressed through governmental or municipal programs (Nedučín, Škorić and Krklješ, 2019). There are some exceptions, however. In countries such as Hungary or Czech Republic there have been several governmental programs dedicated to housing estate upgrading. Nevertheless, these programs usually focus on one specific need; i.e. they don't address the neighborhood in an integrated way. One type of programs focuses on energy efficiency of panel buildings and through governmental funds provides financial support or subsidized loans for homeowners to install thermic insulation on their buildings. In Czech Republic, for instance, the 'Program Panel' was launched in 2003 and with slight changes continues under the State Fund for Housing Development until today (*Program Panel 2013+*, 2023). Thanks to this program the majority of panel buildings in Czech housing estates have been renovated. In Hungary, similar program called the 'Home Warm Program' (Otthon Melege Program – OMP) was launched under the Ministry of Innovation and Technology in 2014 and so far provided HUF 34 billions of non-refundable support (Otthon Melege Program, 2023).

Second type of programs that support interventions in housing estates in post-socialist countries focuses on revitalization of public space and infrastructure. In Czech Republic, for instance, there has been the 'Housing estate regeneration program' since 2003 implemented by the Ministry of local development (MMR, 2022). In Hungary, in 2013 the Municipality of Budapest launched a program called 'Tér-Köz' designed for public space upgrading and market renovation (Tér-Köz, 2023).

Among post-socialist countries, Russia has chosen a more radical approach. In Moscow, for example, since late 1990's the City has decided to demolish mid-rise buildings from the 1950's and use the original sites for new development under the 'Demolition program of five-story buildings' scheme (*Demolition program of five-story buildings in Moscow (1999)*, 2023). The program was relaunched in 2017 as a 'Housing renovation program' and plans to relocate 1 million residents from old buildings to new residential high rises (Fedorova and Demchenko, 2020). Similarly, in Saint Petersburg the municipality has been running a program called, 'Development of built-up areas in St. Petersburg' designed to demolish dilapidated mid-rise buildings in housing estates and replace them with new ones of higher density (*Development of built-up areas in St. Petersburg*, 2023).

Despite the lack of a holistic vision and integrated interventions planned by the government, housing estates in many post-socialist countries are continuously being transformed anyhow by interventions undertaken by their residents (Molnárová, 2021). Bottom-up interventions such as adapting the ground floor flats into commercial parterre, adding different types of extensions to the building in order to enlarge the flat area, undertaking public space upgrading or creating back, front or shared gardens may be found in many estates across the region (Vranic, Vasilevska and Haas, 2014, Vasilevska et al., 2015, Benkő, Balla and Hory, 2018, Molnárová, 2021).

These bottom-up interventions among other show, that integrated regeneration policies in post-socialist region are needed. However, due to the scale and complexity of the problem, planners in post-socialist countries need to find their own way to understand, manage and regenerate this type of urban environment. One of the first steps of this process is the ability to analyze key features of the estates, recognize similarities and differences among them and the different needs which need to be addressed. Only then decisions about the type of necessary interventions can be made.

In consequence, increasing amount of works across Europe looks for ways to analyze housing-estates. Recently published analytical methods concerning housing-estates can be divided into three types: those focusing on i) spatial aspects (Farida, 2013; Vasilevska et al., 2014; Bonenberg, 2015; Monclús & Díez Medina, 2018), ii) social aspects (Karji et al., 2019; Dixon et al., 2019), and iii) morphological aspects of housing-estates (Kohout and Tittl, 2013). Yet, analytical methods that combine wide range of heterogeneous aspects are missing. Moreover, most studies either evaluate individual cases or deal with general policy issues. Only a few authors cross-compare larger number of housing-estates to obtain certain classification which might show transformation potential of diverse types of housing-estates (Maier, 2003; Kohout & Tittl, 2013; Kohout et al., 2016). Arguably, finding a classification based on both spatial and social characteristics is essential to propose focused intervention strategies that would address the specific risks and potentials of each type of housing estates.

This article thus presents an analytical method which addresses the gap identified above and combines spatial and social analysis of housing-estates. The method looks for the *level of adaptability* of a housing-estate at hand, which is understood as the combination of socio-economic status, attractiveness, and spatial characteristics of the particular housing-estate type. It consists of three stages: i) defining a „housing-estate locality“ (HEL) as a basic comparable territorial unit, ii) collecting spatial, socio-economic and housing stock data, and iii) visualizing and analyzing the data and interpreting the results. The presented method aims to provide a tool to help local governments set a long-term strategy for urban regeneration and decide where and how to begin. Further, it also allows to visualize these conclusions and communicate them easily to the wide public. Hence, the method addresses two key factors when setting the regeneration policies: the ability to take decision and to communicate it.

The method was developed and tested during the project called *Long-term sustainable transformation of housing-estates of the statutory city of Ostrava* (conducted in 2019-2021, supported by the Technological Agency of the Czech Republic.). During the project, the method helped to analyze housing-estates throughout Ostrava – regional center in Czechia with approx. 280.000 inhabitants, of whom about 2/3 live on HE. Based on the results, long-term strategy for sustainable housing-estate regeneration in the whole city was prepared. Testing the method in the city of Ostrava showed that it can help decision-makers to set priorities, define strategies for future regeneration, and allocate available resources more effectively.

## **Introducing Ostrava and its housing-estate**

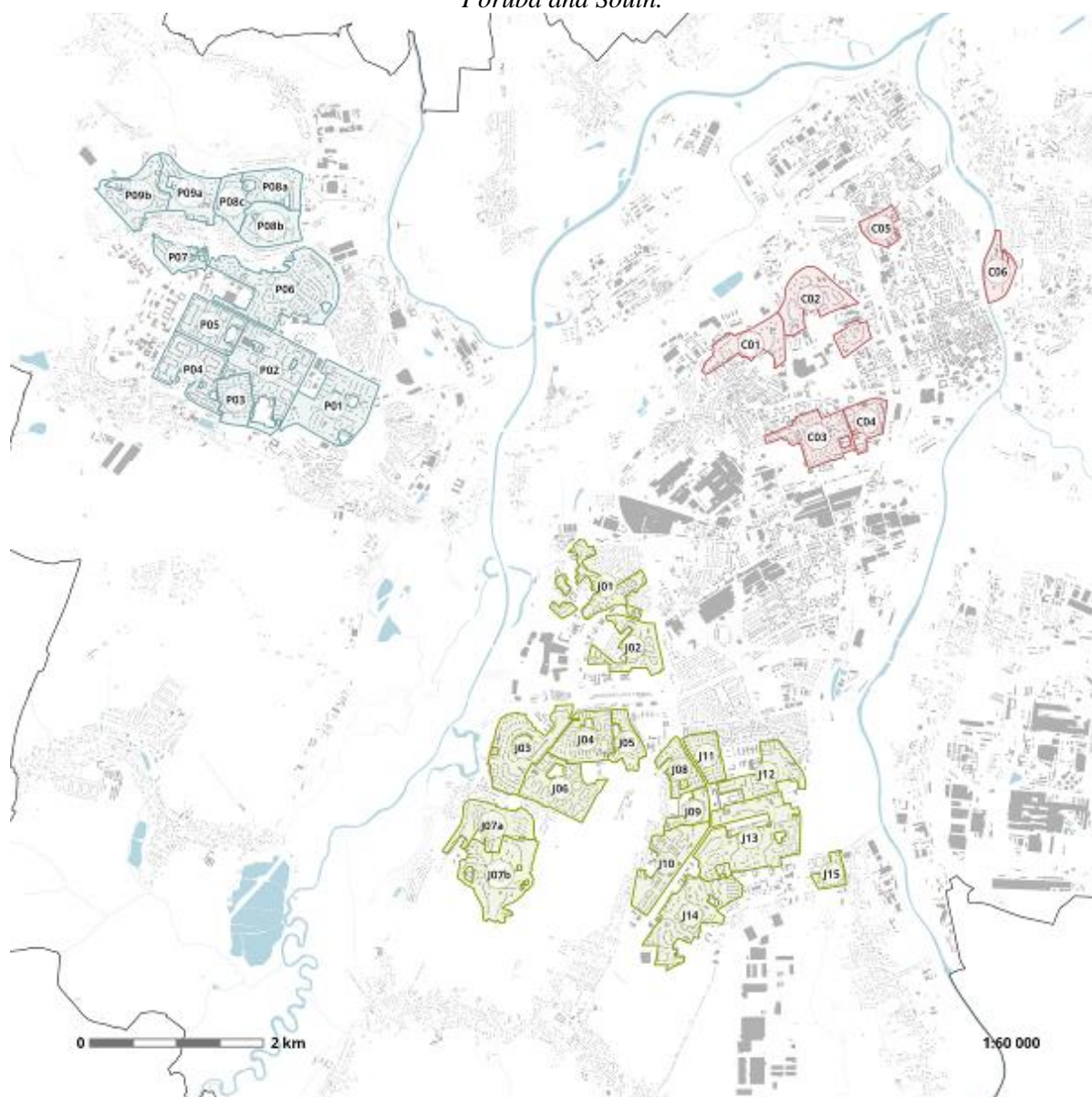
Ostrava is the third biggest city in Czech Republic. It has developed as an important mining and industrial city in the second half of the 19<sup>th</sup> and throughout the 20<sup>th</sup> century. It was one of places where massive investments went to during the socialist era. As a result, most of its housing stock is located on modernist housing estates from that era. Due to the structural economic changes of the Czech industry in the past three decades, the mining industry in Ostrava has been declining and so has the job opportunities in the city. Nowadays, the city is dealing with shrinking partly due to suburbanization and partly as people are leaving the region in search of better employment opportunities. Ostrava is therefore currently at a crossroads, deciding how to stop this process and what to build its future on to boost its competitiveness and attractiveness. As prices of housing in other bigger Czech cities such as Prague, Brno and Pilsen grow rapidly, the affordability of housing in Ostrava may become its main strength. However, it is necessary to adjust its quality to contemporary standards. Transforming housing estates into thriving neighborhoods with wide range of high-quality affordable housing is therefore becoming crucial for Ostrava's long-term prosperity.

For the purpose of the strategy it was necessary to define what localities are understood as housing estates. The criteria were based on Wassenberg's definition of housing estates (2012) and adapted to the specificities of Ostrava. For the purpose of this research a housing-estate locality (HEL) has the following characteristics:

1. Distinguishable urban unit planned and built „at once “
2. Similar character of development based on Modernist planning principles (open urban layout, separation of functions etc.)
3. Built between 1945-1990
4. Concentrated around a significant public space or commercial facility
5. Containing basic public facilities such as kindergarten and/or elementary school
6. Comprising a population between 2 000-13 000 inhabitants.
7. Covering an area between 10-45 ha, exceptionally up to 65 ha

In Ostrava, 34 HELs were found and compared with each other (Image 1).

**Figure 1:** Map of Housing-estate localities (HELs) in Ostrava and its three main parts – Centre, Poruba and South.



*Source: Center of housing quality*

### Sources of data

To apply the analytical method in Ostrava, the research project used map, socio-economical and housing stock data that were collected from several sources. The maps (such as land registry, technical map, Development Plan, traffic and landscape maps) were provided by the Municipality of Ostrava. The socio-economic data (dealing with age, education, the rate of unemployment, etc.) were drawn from the 2011 Census (Czech Statistical Office CSO 2011)<sup>1</sup>. The housing stock data (e.g. number of buildings, flats, floors, tenure, and construction period) and more data concerning population (number of registered inhabitants) were obtained from the 2017 Register of Districts and Buildings (RSO). Furthermore, additional sources

<sup>1</sup> Census in Czech Republic is carried out every ten years. In 2019 - 2020 when the analytical part of the research was conducted, the 2011 Census date were already fairly outdated. The new Census data were however not yet available.

(e.g. research reports) were reviewed to complete information about sensitive or unavailable data, such as data on socially excluded localities (Agency for social inclusion, 2015), unemployment (Foldynová et al., 2015), and the types of original construction technologies (Sedlecký and Endel, 2019).

## **Method of analysis**

### **a) Layers of data**

Data were first divided into four groups of analyzed layers: 1. spatial, 2. typological, 3. socio-economical, and 4. procedural aspects. Other important aspects, such as architectural heritage, urban memory of inhabitants, heritage of social behavior of society or perception of safety, have not been included in the analyses due to lack of available data. Such parameters are however also recommended to be taken in consideration by planners and urban experts when available.

*Spatial parameters and capacities* – Physical characteristics and features of the estates, such as residential density, FAR, built-up area ratio, percentage of paved and unpaved areas, average height and number of dwellings per area.

*Typology of urban structure* - The distribution of buildings in space and their mutual relation which influences the spatial quality of each housing-estate. Based on the morphological analysis presented by Kohout and Tittl (2013), six urban typologies of Ostrava's HELs are distinguished – rows, open blocks, pseudo-blocks, slabs, fields, and large compositions as represented on Image 03 each with different potential for further re-development.

*Socio-economic aspects* - Among the analyzed characteristics in this group are education, social exclusion, unemployment, average age, number of residents per flat and per building, and number of flats per building.

*Procedural and other aspects* – Among procedural aspects are those that influence the feasibility of the implementation process such as flat, building and land tenure. Other analyzed aspects were construction period, construction technology, and the accessibility of public and recreational infrastructure.

**Figure 2:** *Typology of housing-estates' urban structure.*

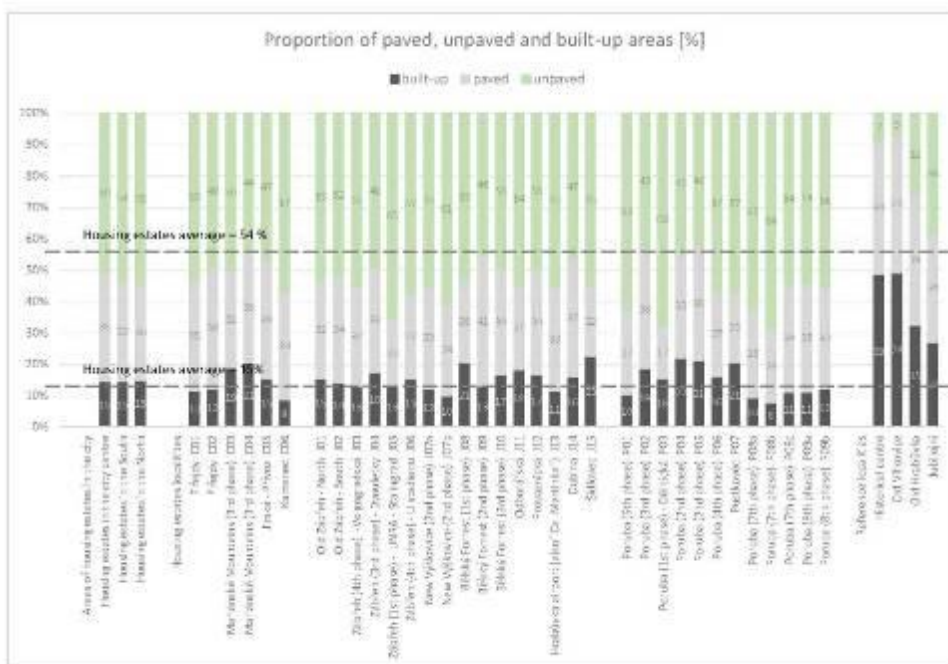


*Source: Center of housing quality*

Each layer was represented as a map (see Image 1) and a chart (see Image 3). Maps enabled to compare individual HELs among each other and identify patterns in which social and spatial potentials or deficiencies are accumulated. Charts showed quantitative indexes, the extremes and averages of analyzed layers in individual HELs (see Image 3).



**Figure 3:** Proportion of paved, unpaved and built-up areas in individual HELs and the city average.



Source: Center of housing quality

## b) Aspects of sustainability

Once all layers were brought to a comparable state, three aspects of long-term sustainability were chosen for evaluating the 34 HELs: (1) site attractiveness, (2) social status, and (3) spatial organization. These aspects represent the three pillars of sustainability – economic, social and environmental, respectively.

### Site Attractiveness

It is generally assumed that higher attractiveness of a site is positively correlated with higher real-estate prices and attracts socio-economically stronger population. Vice-versa, less attractive locations offer lower prices and tend to attract socio-economically weaker population. Since data on the real-estate prices were not available in Ostrava, the attractiveness was evaluated on the basis of assets which individual localities offer to their residents, such as the availability of education, recreation and transportation. The following accessibility of assets was chosen as the most influential (see also Maier et al., 2016):

- 600 m from elementary schools
- 400 m from local parks
- 1200 m from other recreational destinations
- 500 m from tram stops

Each criterion was given a plus or a minus point on the basis of whether the criterion was met or not. Together, the most attractive localities scored 4 points.

### Social Status

To some extent, residents' social status determines their ability to participate effectively on planning processes and ensure the implementation of HEL's transformation (e.g. as partial investors). It can also contribute to inhabitants' ability to cope with temporary discomfort or

long-term effects (gentrification) caused by the transformation. The criteria chosen for evaluating the degree of social status were based on the available data, and the following values were attributed to them:

- socially excluded locality (yes = -1 pt., no = 0)
- unemployment (below city average = +1 pt., average = 0, above city average = -1 pt)
- percentage of university educated population (below city average = -1 pt., average = 0, above city average = +1 pt.)
- percentage of population with elementary or no education (below city average = +1 pt., average = 0, above city average = -1 pt.)
- average age (below 36 and above 51 = -1 pt., average = 0)

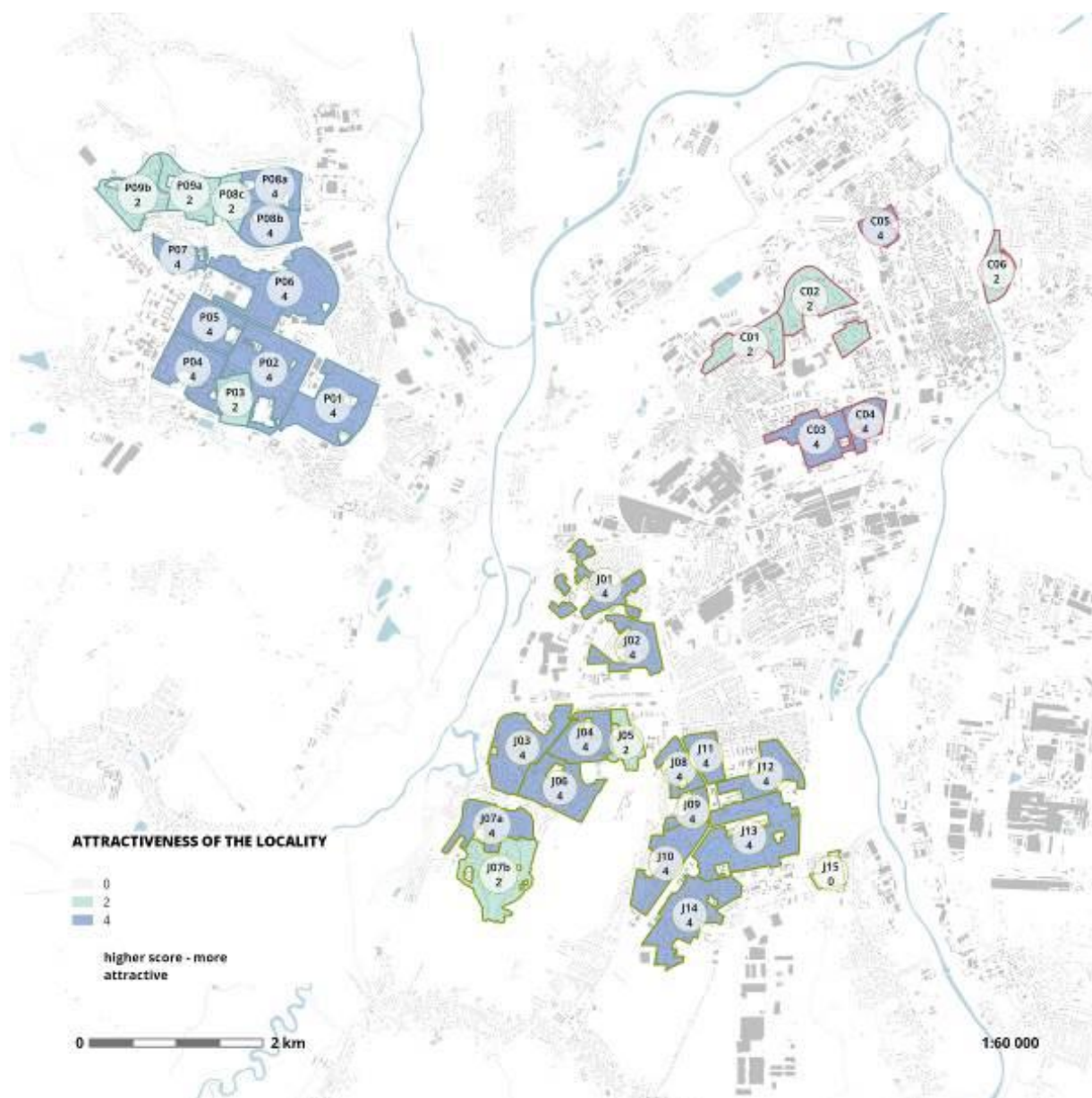
### *Spatial Organization*

Spatial parameters affect potential to improve the living environment in individual localities. It is assumed that the more favorable the initial spatial arrangement is, the greater potential there is for the adaptability of HEL's structure and, consequently, for the more sustainable organization of locality. In this category, three basic parameters were followed: i) typology of urban structure, ii) building height, and iii) residential density. The typology was assessed on the basis set by Kohout & Tittl (2013), i.e., the HELs are classified either as rows, open blocks, pseudo-blocks, slabs, fields or large compositions (see Image 02). Rows are seen as the most adaptable structures and the large compositions, on contrary, the least adaptable. The rest of structures are regarded as neutral. As for height and density, low-rise and higher density are regarded positively. The specific values for each parameter are:

- typology of urban structure (rows = +1 pt., open blocks = 0 pt., pseudo-blocks = 0 pt., slabs = 0 pt., field = 0 pt., superstructures = -1 pt.)
- height (below 4 floors = +1 pt., above 8 floors = -1 pt.)
- residential density (below 110 inhab. /ha = -1 pt., above 220 inhab. /ha = +1)

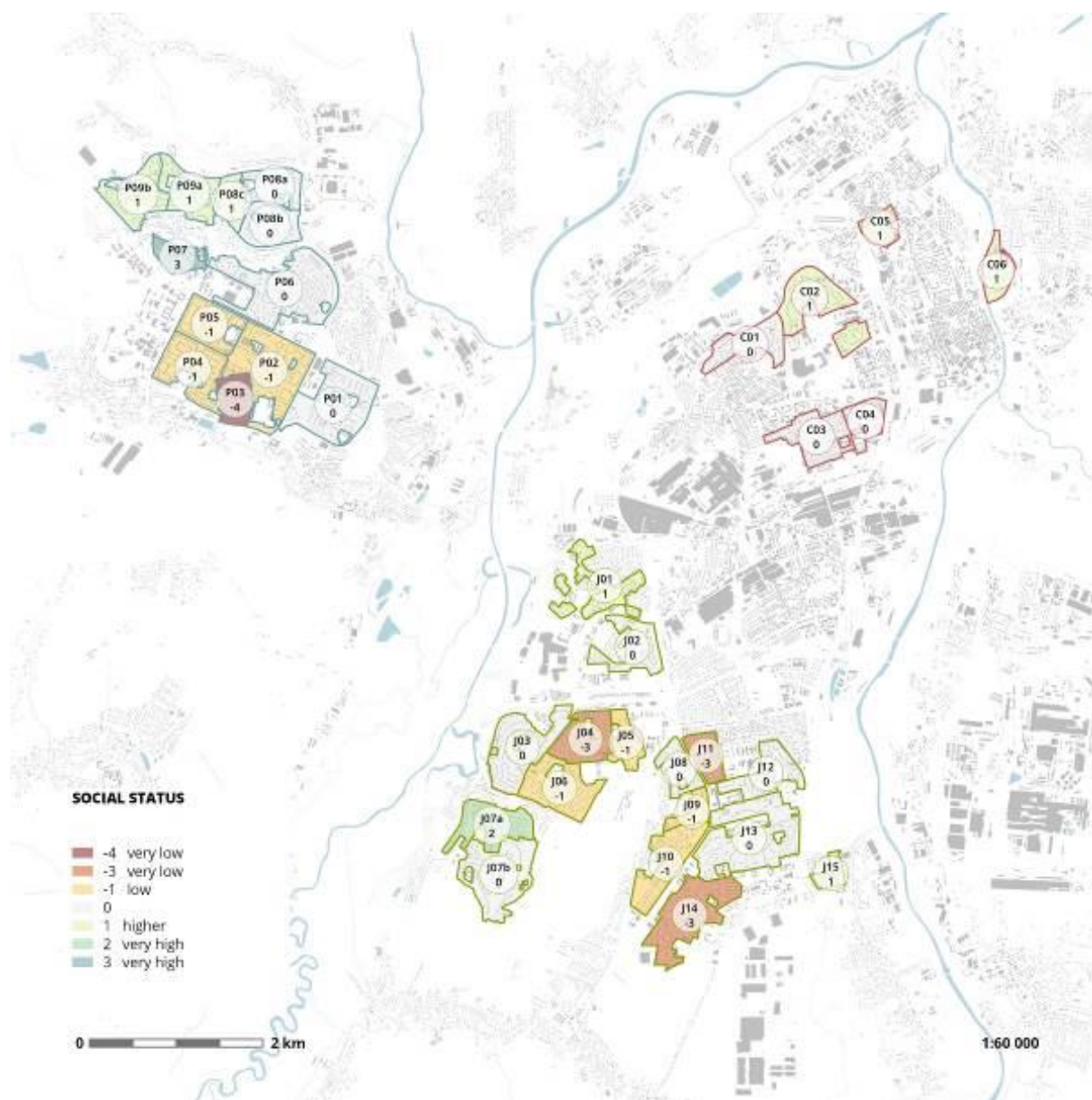
The results of this step are visualized in the following maps (see Images 4, 5, 6).

**Figure 4:** Map of attractiveness.



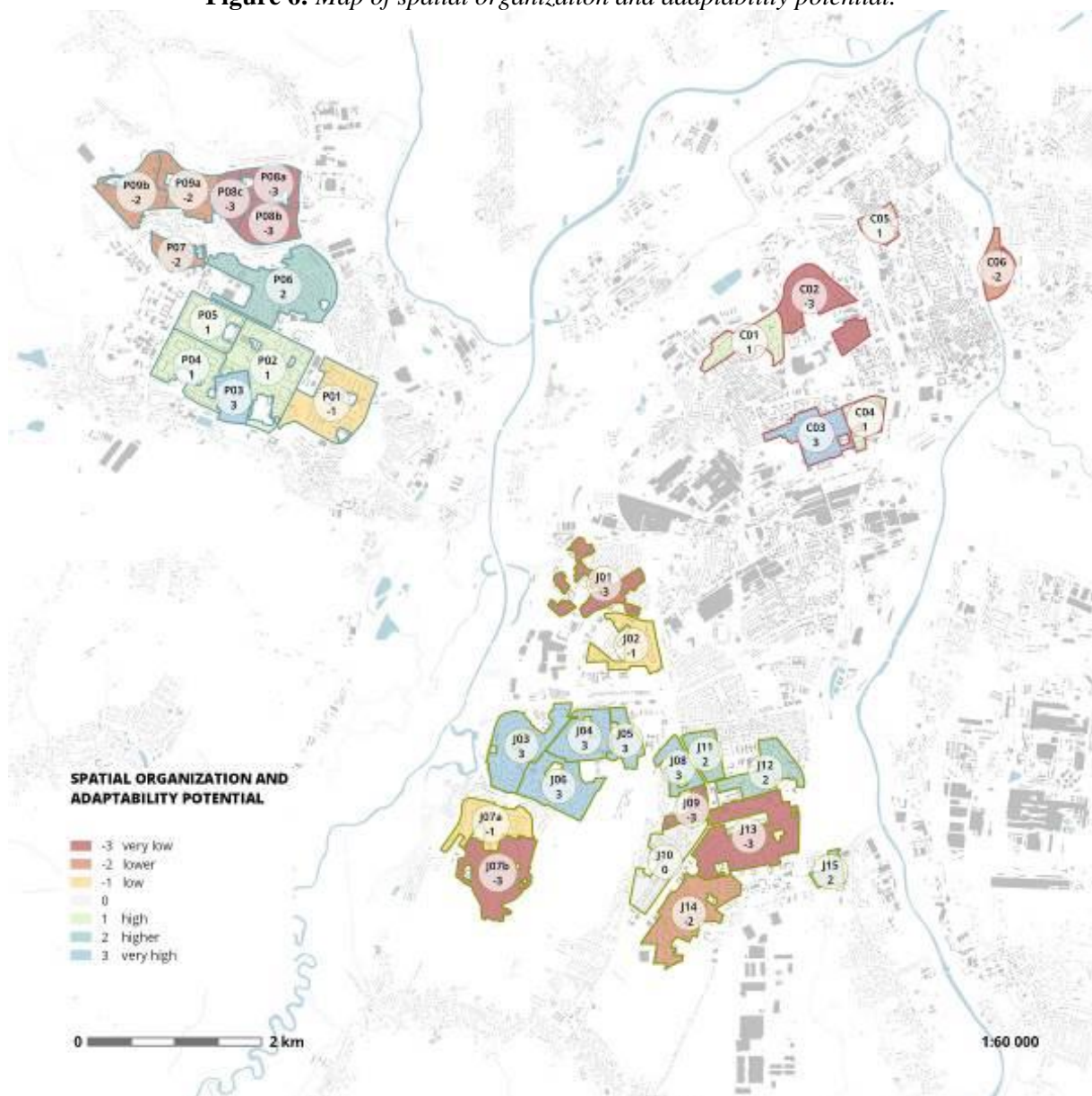
Source: Center of housing quality

**Figure 5: Map of social status.**



Source: Center of housing quality

**Figure 6:** *Map of spatial organization and adaptability potential.*



*Source: Center of housing quality*

### c) Final evaluation of HELs in the city of Ostrava

In the criterion of attractiveness, all HELs in Ostrava scored positively. Therefore, the final evaluation was based only on two aspects – social status and spatial organization. The final evaluation map combined these two aspects and revealed therefore four basic categories of HELs that were somehow out of average and that the research primarily focused on (see Image 07). These are HELs with:

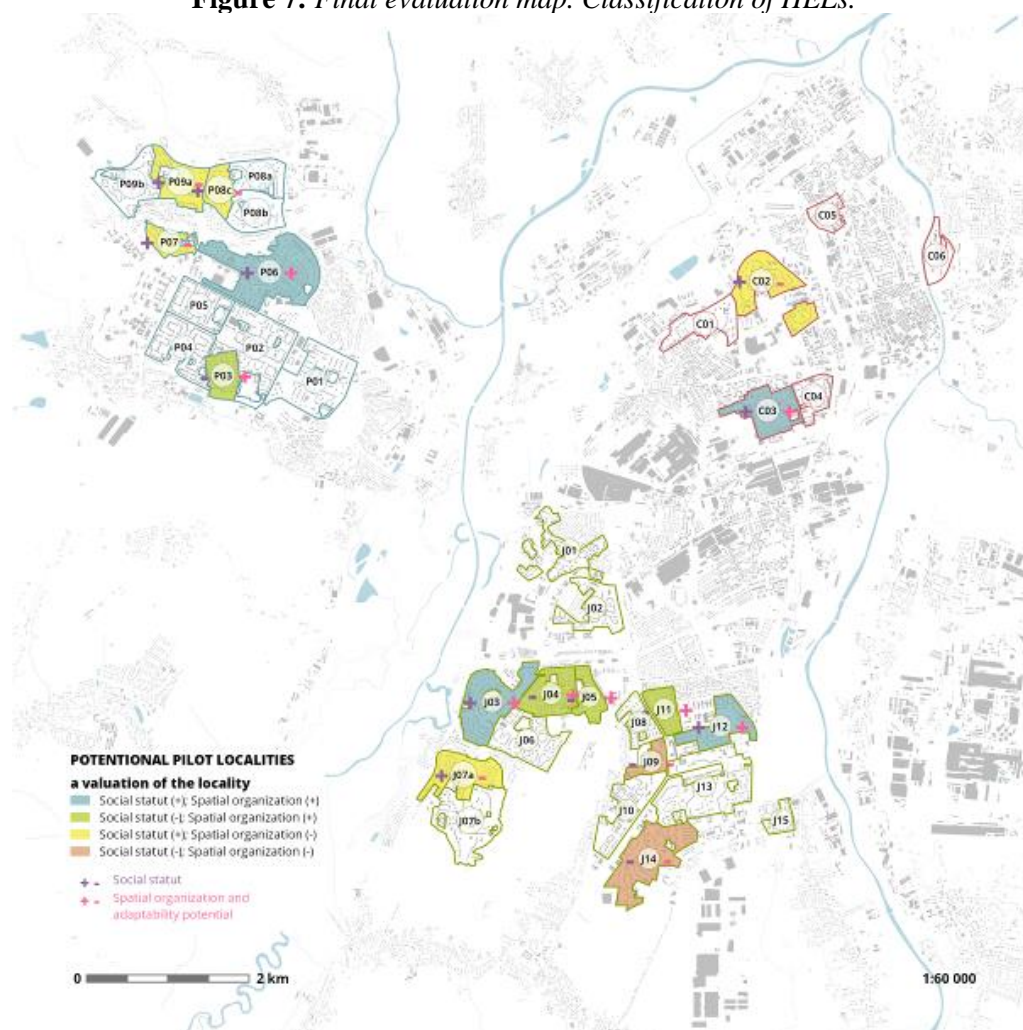
- *Bad social status and good spatial adaptability* – i.e., localities where interventions are socially desirable and have a relatively favorable spatial condition

- *Bad social status and bad spatial adaptability* – i.e., localities where interventions are socially desirable but are potentially spatially complicated, i.e., implying higher technical or financial risk
- *Good social status and good spatial adaptability* – i.e., localities where interventions are not socially pressing, but have a relatively high potential of broader engagement of local actors in combination with favorable spatial conditions
- *Good social and bad spatial adaptability* – i.e., localities where interventions are not socially pressing and where a relatively high positive potential of broader engagement of local actors is combined with relatively complicated spatial conditions

HELs which stand out as neither positive or negative are classified as neutral. Here the strategies of interventions would most likely be mixed.

This classification enables local municipalities not only to understand and communicate the different conditions of individual housing-estates but also to find localities with similar characteristics which could be addressed by similar intervention strategies.

**Figure 7:** Final evaluation map. Classification of HELs.



Source: Center of housing quality

## Results in the city of Ostrava and discussion

HELs with *bad social status and good spatial adaptability* (J04, J05, J11, P03) are (without exemption) middle-rise estates with buildings of three to four floors. They were built in late 40's and 50's and organized in rows. They are specific by high levels of unemployment, high or very high percentage of residents with elementary or no education, and, except for J05, low percentage of residents with university degree. The age structure is average. The number of people per flat is below the city's average in the HELs in the city sector South (J04, J05, J11), which indicates high number of single-person households. The number of flats per building<sup>2</sup> (between 7-16) is very low compared to the rest of HELs. This is regarded as a favorable situation for the possible upgrades of buildings since negotiations and planning is easier with smaller number of actors, however low levels of education can complicate the negotiation process.

HELs with *bad social status and bad spatial adaptability* (J09, J14) are high-rise housing-estates, which were built in the 70's and 80's and designed as abstract urban forms, so called large compositions. These HELs possess high levels of unemployment and low rate of residents with university degree. In both localities the population is younger than is the city average. These localities also have more residents per flat than is the city average. It is likely that younger families with children move here because apartments tend to be cheaper. The number of flats per building is above 20 (higher than average), and, consequently, the number of residents per building is also high (above 50). In both localities, there is higher level of cooperative ownership. In J09, significant amount of flats is owned by one private company which might favor future interventions. In J14, the cooperative and individual ownership is more scattered. In general, these localities are the ones that need most attention and resources to be transformed into thriving neighborhoods. Due to the accumulation of problems, the regeneration processes in these localities will most probably be very complex and challenging.

HELs with *good social status and good spatial adaptability* (C03, P06, J03, J12) are mainly estates built in the 60's and 70's. Typologically, they consist of mid-rise rows or pseudo-blocks with the number of flats per building ranging from 9 to 16 and with significant percentage of flats owned by one private company (C03) and cooperatives (J03, J12 and P06). Residential density is average, ranging from 114 to 150 hab./ha. The number of residents per building (19-32) and the number of people inhabiting one flat (2 inhabitants) are at the city average. The age structure, unemployment rates, and education levels are also average. In general, these localities present rather neutral social status; however, in combination with their favorable typology, they are rated as the most positive ones regarding their overall potential for long-term adaptability.

HELs with *good social and bad spatial adaptability* (C02, P07, P08c, P09a, J07) are all mid- or high-rise large compositions with highly educated population, which correlates with low unemployment rates. Cooperative ownership is significantly represented in these localities. The age structure is average or slightly younger. The occupancy rate per flat is average; however, the number of residents per building is higher (given the fact that most buildings are above six floors). This may cause difficulties when trying to reach an agreement about future

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<sup>2</sup> A section with one entrance and a staircase is statistically considered as a building in this research. One slab-block of flats can often have more such „buildings“.

interventions. However, high social status and better economic background may outweigh this disadvantage and may allow for more costly interventions.

Four categories of HELs correspond with four types of strategic approaches towards their regeneration. HELs with *bad social status and good spatial adaptability* thanks to their clear spatial layout don't require a complex masterplan and complicated interventions. The strategy aims for setting up rules for low-cost interventions that can be implemented by the inhabitants themselves, such as delimiting private and share garden or shared courtyards in between the buildings with vegetable beds, places for relaxation, playgrounds or parking sheds. To certain extend these interventions are spontaneously happening already. The main task is to coordinate them and upgrade their spatial and aesthetic quality by setting some general rules (e.g. height and material of fencing, form of a parking shed, etc.).

HELs with *good social status and good spatial adaptability* are seen as localities where, due to economically stronger population, more complex and costly interventions can be made. These can be more elaborate parking solutions such as underground or semi-recessed garages with residential terraces, new buildings that help to articulate main public spaces with more clarity, and an upgrade of current buildings. A more detailed masterplan is required in order to coordinate and prioritize these interventions.

HELs with *good social and bad spatial adaptability* require a set of larger interventions that reverse their unfavorable spatial layout and to great extent redefine the structure of their public spaces. Such operation may be accompanied by greater densification (new volumes help to redefine the structure of public spaces) or even demolitions. New development should bring in new typologies of housing (e.g. rowhouses, townhouses), offering higher standard to economically stronger residents that wish to stay living in the neighborhood. A detailed masterplan with extensive coordination effort involving not only residents but also private development companies will be most likely a necessity.

For HELs with *bad social status and bad spatial adaptability* it is argued that the strategies will depend greatly on the overall strategy for the whole city. In case of a shrinking city, these localities could be first considered for important structural transformation including demolition. In case of a developing city, investments could be directed into these neighborhoods for major redevelopment. In both cases, these localities will need special attention and effort in order to reverse their adverse situation.

After grouping the HELs in Ostrava into the four categories, three localities were chosen as pilot projects (one from each category except for the one representing HELs with *bad social status and bad spatial adaptability*), and the integrated masterplans of the chosen localities were developed. These masterplans present a set of strategic interventions to be tested. If successful when implemented, these strategies could be reproduced to other estates of the same category and further serve as examples for other cities.

To evaluate the socio-economic situation of each locality, it would have been desirable to use also data on income and real-estate prices. Unfortunately, these data were not available at the given time. This fact together with the outdated census data from 2011 can be considered as the most evident limit of the analysis. Availability of this data would make the conclusions more precise. The method as such is however not affected and may be used in other contexts.



## Conclusions

This article deals with housing estate regeneration in post-socialist countries, where these neighborhoods represent a significant share of the overall housing stock. Being one of the greatest urban challenges in the region, governments and urban planners have not yet come up with a clear vision of their future development. Western examples of regeneration policies and successful projects of housing estates transformations may be inspiring to post-socialist planners, however the context in both regions is different. Housing estates in both regions differ in terms of scale and quantity, ownership structure and social status. At the same time governments in post-socialist countries have less financial and institutional capacity to implement integrated large-scale regeneration projects. That is why it is necessary to define a different approach for post-socialist housing estates specific to the local context.

In order to define such approach, it is first necessary to be able to understand the specificities of housing estates in a given area and the differences among them. Only then it is possible to prioritize and decide what, where and when to intervene.

That is why this article presents a method that was developed to classify and understand a larger number of housing-estates within one municipality. While each housing-estate is different, and the detailed understanding of specific needs of each locality might be a task exceeding the common capacities of local governments, the presented method enables to reveal certain patterns and potentials that simplify such analysis. Using available socio-economic and spatial data enables to classify seemingly uniform housing-estates into categories which share similar characteristics and challenges, and which can therefore be addressed – with all due respect to the creative process which always needs to be applied – in a similar way. The method was created to identify the *level of adaptability* of housing-estates (which is understood as the combination of socio-economic status, attractiveness, and spatial characteristics of the particular housing-estate type) and tested in the city of Ostrava. Here, it helped to find housing-estate localities with similar features and classify them into four basic categories. Once these categories are uncovered, it is possible to set a regeneration strategy for the whole city and start with neighborhoods, where it makes the most sense, i.e. neighborhoods with the highest level of adaptability and thus the highest transformational potential.

The presented method is thus designed as a tool to help local governments to set a long-term strategy for urban regeneration and decide where and how to begin. Further, it also allows to visualize these conclusions and communicate them easily to the wide public. Hence, the method addresses two key factors when setting the regeneration policies: the ability to take decision and to communicate it.

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