



## 3S RECIPE - Smart Shrinkage Solutions Fostering Resilient Cities in Inner Peripheries of Europe

### TIMIȘOARA (RO) POLICY BRIEF #2 • COMPACT CONNECTED CITY

#### EXECUTIVE SUMMARY

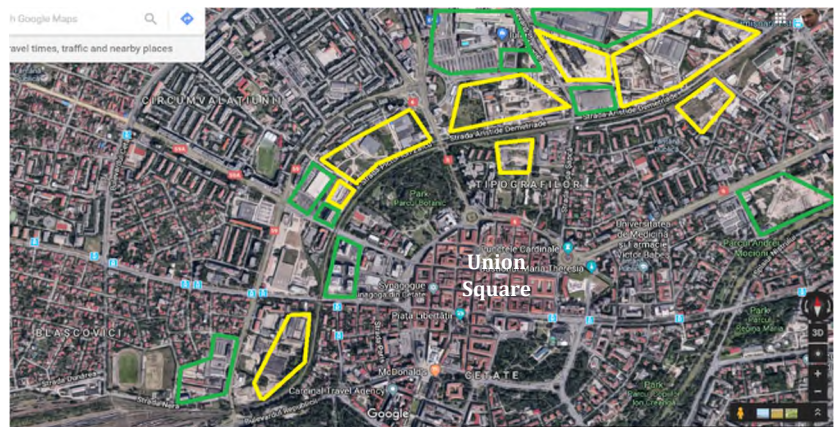
Since 1989, during Romania's post-communist transition, almost all industrial facilities in central areas of the city have either shut down or relocated outside the city boundaries. The closed factories left behind over a dozen large brownfield sites very close to the medieval city centre, with each possessing a real potential for urban regeneration. By offering some fiscal incentives, the local authority has been able to **attract private sector developers to repurpose the city's abandoned land**. This policy brief showcases a successful smart shrinkage solution to make Timișoara more compact and dense by **developing its brownfield sites into brand new large real estate projects** for residential and office use. Even though all of these



interventions have been private sector-run, the municipality has maintained control over densification by functionally integrating new real estate projects into the urban grid and arranging for their access to public services. Vertical development, thus, emerges as a valuable approach to compacting a shrinking city, especially, if the new inner-city housing can offer an adequate alternative to living in sprawling suburbs.

#### INTRODUCTION

Since 1989, during the post-communist economic transition, Timișoara has reconfigured its economic structure by moving away from heavy reliance on state-owned old industrial enterprises towards new private businesses in the service sector, technology, and creative industries. During the 1990s, almost all of the former industrial factories in the city were privatised and gradually closed down. Roughly half of the former industrial production facilities have been left to lie derelict (marked in yellow above), whilst the rest have undergone a very complex process of urban regeneration. Most of the former factories are located along the main railway line, which runs through the Timișoara North Railway Station (Gara Timișoara Nord), west of the city centre, and in the north-easterly direction. The map above demonstrates that these brownfield sites possess a really high potential for urban regeneration, being located next to or within 5-10 minutes walking distance from the city

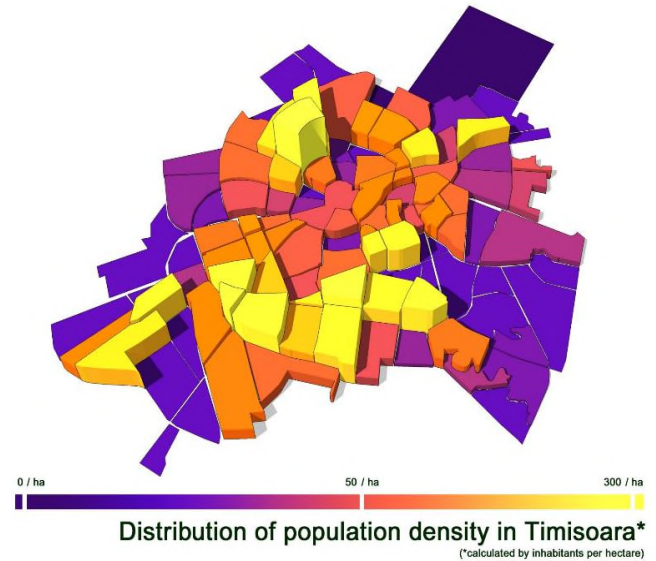




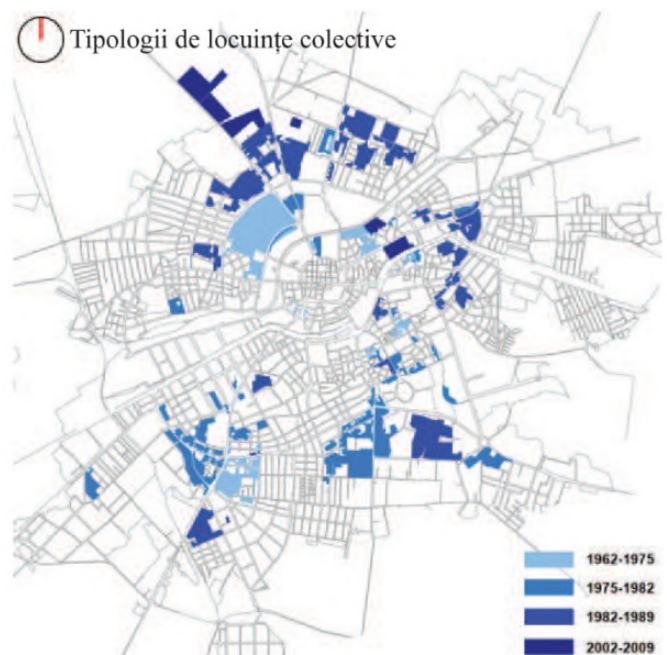
centre (Union Square). Indeed, nine of the brownfield sites (marked in green above) have already been developed into commercial property, including office buildings, shopping centres, and residential projects.

### DEVELOPING BROWNFIELD SITES: A CAPITAL IDEA TO COMPACT A SHRINKING CITY

At least since the early 1970s, the idea of a compact city has been promoted as a comprehensive policy approach to achieving sustainability, especially in rapidly growing and urbanising developing countries across Asia, Africa, and Latin America. Overall, the key characteristics of the compact city include i) **dense and proximate development patterns**; ii) **urban areas linked by public transport systems**; and iii) **accessibility to local services and jobs** (OECD, 2012). In the context of urban shrinkage, especially when caused by deindustrialisation and suburbanisation, compact city policies can address integrated smart shrinkage and urban resilience goals by guiding the ways urban space is reused and repurposed. For instance, urban 'compactness' or densification can be a valuable solution to deal with the lack of available land for fashionable middle-class neighbourhoods, typically composed of owner-occupied single family homes.



Historically, Timișoara has had a fairly limited amount of higher density apartment block housing in collective or condominium ownership (mapped in blue below on the right), with the bulk of the urban land designated for individual, single-household occupied, detached home ownership (mapped in yellow and pink below on the left). In the 1990s and early 2000s, Timișoara suffered from **uncontrolled urban sprawl**, driven by privatisation, a qualitative change in housing demand, and **automobility** (Böhm *et al.*, 2006; Urry, 2004). In particular, since the mid-1990s, with the decline of formerly state-owned industrial firms, company housing has been privatised. The post-war period blocks of flats with small one-bedroom apartments built by various state-owned industrial companies for their employees were sold to tenants at heavy discount process (five to six times lower than the going market price). Consequently, former industrial workers and old-age pensioners sold on their city-centre flats, eventually moving out into the countryside. This significant population shift towards nearby villages, experienced by Timișoara in the 1990s, has followed a well-known **ribbon development** pattern of scattered housing extended along roads out of the city (Berry, 1959). As a result, entire working-class neighbourhoods across Timișoara have been gentrified, with an influx of students and young urban professionals.



The newcomers have had different expectations of acceptable living conditions and the means to realise them, resulting in a wave of renovation and construction activities. Timișoara's urban renewal has led to most of its old neighbourhoods being refurbished and upgraded,

accompanied by the development of commerce, the renovation of historical façades, and the modernisation of infrastructure.



In the late 2000s, with **rising prosperity**, the city has begun to lose affluent middle-class residents through quite a well-organised suburbanisation process, aided by the neighbouring municipalities. Yet living in these so-called **bedroom suburbs** has cut access for the incomers to many public goods previously available to them in the city. Furthermore, a *laissez-faire* approach to town and country planning made the roads approaching Timișoara choked with rush-hour traffic on a daily basis. Facing road congestion and air pollution from traffic fumes, the local authority has begun to exploit the opportunity of transforming many of the city's existing post-industrial brownfield sites into high-density residential areas, keeping local inhabitants inside the city.

### NEW HOUSING PROJECTS FOR THE OLD TOWN

To counteract powerful market forces leading to urban sprawl and suburbanisation, Timișoara has initiated a policy aimed at increasing population density (i.e., **densification**) in the old neighbourhoods, traditionally comprised of large detached but run-down town houses, with spacious private gardens. Many owners were encouraged to sell a part of their garden for infill development. In some cases, entire old houses were sold for demolition, making room for new modern dwellings. Before the global financial crisis of 2007-2008, empty land or dilapidated houses in the neighbourhoods



close to the city centre could easily fetch €1,500 per m<sup>2</sup> (\$191 per ft<sup>2</sup>). Additionally, in 2005-2006, the local authority began to permit the construction of attics on top of the post-war 4-storey blocks of flats, mostly targeted at young families. In many cases, the existing inhabitants would allow such attic extensions in exchange for renovation of the façade and the staircase (see pictures above).

Another compact city initiative successfully implemented in Timișoara during the period 2003-2009 included a programme by the Romanian National Agency for Housing, which built flats for young people. This form of social, government-subsidised housing is initially available for rent to young tenants, followed by an option to buy the accommodation after the initial tenancy. Overall, 280 flats were built in the city under the scheme. Moreover, the city has also participated in complex, multi-level, public-private partnership-funded schemes (see pictures above). For example, during the period 2007-2017, over 100 tower blocks in Timișoara were renovated with modern external wall insulation (or thermal cladding), paid for by the European Regional Development Fund (ERDF), the national government, the City Hall, and local resident (private flat owners have contributed up to 1/3 of the total cost). Finally, since 2015, the city has seen the construction of large private housing projects in the form of building complexes of owner-occupied blocks of flats, especially for younger middle-class families (see an example on the right). These private housing





projects (e.g., Openville Timișoara - Iulius Town; ISHO; City of Mara) were built either at the edge of the city or on redeveloped brownfield sites in central Timișoara, and included various amenities, such as car parking lots, commercial services, retail spaces, parks and gardens, and leisure facilities

To identify the practical mechanisms for developing brownfield sites and promoting new large real estate projects inside a shrinking city, we have applied the in-house **Urban Futures Method**. It is designed to facilitate stakeholders' collective reflection and help retrieve their knowledge about vital aspects of the expected smart shrinkage solution, its outcomes, benefits, and necessary conditions (Lombardi *et al*, 2012). During a special workshop on 26 September 2018, hosted by West University of Timișoara, we gathered a number of local and regional stakeholders involved in urban regeneration, including Timișoara City Hall, Timiș County Council, and local NGOs (*Urban Talk* and *Intercultural Institute of Timișoara*). As a result, the local stakeholders have collectively identified seven benefits related to large real estate projects developed on brownfield sites, including: 1) **reducing traffic** on the roads around the central commercial district, for – in denser residential areas – retail and commercial services can be located in convenient close proximity and walking distance from each other or co-located in the same building; 2) changing the **structure of the local workforce**; 3) uplifting **house prices** in the surrounding areas; 4) increasing the **city attractiveness** to tourists, visitors, and potential new residents (especially, young families); 5) strengthening the **Timișoara brand** and the local identity; 6) **stimulating public investment** by the local authority to upgrade municipal infrastructure and public utilities, necessary for coping with a growing private demand; 7) maintaining the city's ability to **attract large private investment**, including foreign direct investment by multinational enterprises. Following the discovery of these seven benefits, in dialogue with local stakeholders, the project has further identified a host of specific necessary and enabling conditions for achieving them:

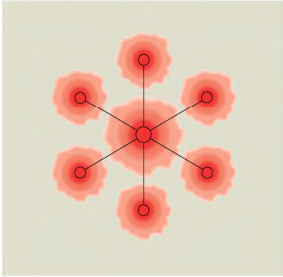

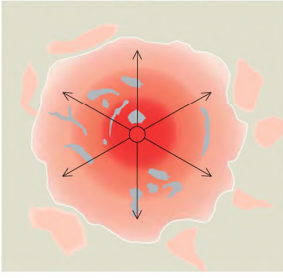
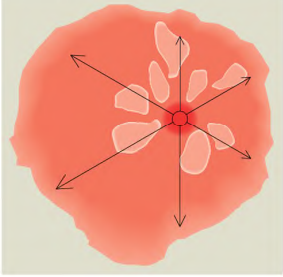
Outcomes	Necessary conditions for large inner-city real estate projects
1. <b>A reduction in car traffic</b>	A heavy concentration of retail functions and commercial services is needed in a new location within the inner city to alleviate traffic congestion in the city centre. Adequate mobility infrastructure that is capable of providing access to a great number of people (parking spaces, access routes, lifts / elevators, etc.).
2. <b>A change in the structure of local workforce</b>	Qualified people looking for a job at firms, renting workplace space in the new office buildings.
3. <b>A rise in local house prices</b>	High demand for new housing, especially, flats (apartments) from middle-class residents.
4. <b>A more attractive city</b>	The availability of attractive retail, leisure, and hospitality offering in the new commercial district.
5. <b>A strong Timișoara brand &amp; local identity</b>	A coherent city brand, communicating an alluring local identity.
6. <b>Public investment in municipal infrastructure</b>	A rise in private demand for a modernised municipal infrastructure and upgraded utilities networks provided by the local authority. Demand for a better functioning public transport system
7. <b>More large private investment and FDI by multinationals</b>	Available land for industrial and commercial use (greenfield and/or brownfield sites). Real estate developers interested in investing in the city. On site provision of mixed use space and multifunctional facilities and neighbourhood amenities, encompassing the entire daily routine, including workplaces, commercial, retail, leisure, entertainment and restaurant facilities, healthcare, pre-school childcare centres, schools, and housing, and creating a captivating, self-contained, integrated settlement, where residents spend their time, without the need to travel to other areas within the city.

## WOULD DEVELOPING LARGE REAL ESTATE PROJECTS DELIVER THE SAME BENEFITS WHATEVER THE FUTURE BRINGS?

A smart shrinkage solution may be strategic (as policy) or detailed (focussed on a specific target). Whatever the short-term effect of a given solution, policy-makers must adopt a longer-term perspective to ensure its **continued performance** throughout its intended lifespan, despite changing conditions. The question to ask is, thus: Will today's the development of large real estate project deliver its intended benefits over a 40-year regeneration cycle, typically used for planning investment and development proposals? During this project, we have tested the likely future performance of each urban regeneration-related smart shrinkage solution-benefit pair – that is, actions taken today



in the name of sustainable urban development – in a series of possible future scenarios for the year 2060. If a proposed solution delivers a positive legacy, regardless of the future against which it is tested, then it can be adopted with confidence. Four **plausible but distinct** future scenarios were included into our analysis (see Lombardi *et. al.*, 2012: Table 2). A summary of these four global urban future scenarios is provided below:

New Sustainability Paradigm (NSP)		Key driver: Equity and sustainability
<b>Settlement pattern</b> 	<b>Description</b> An ethos of 'one planet living' facilitates a shared vision for more sustainable living and a much improved quality of life. New socio-economic arrangements result in changes to the character of urban industrial civilisation. Local is valued but global links also play a role. A sustainable and more equitable future is emerging from new values, a revised model of development and the active engagement of civil society.	<b>Philosophy</b> The worldview of the <i>New Sustainability Paradigm</i> has few historical precedents, although John Stuart Mill, the nineteenth century political economist, was prescient in theorising a post-industrial and post-scarcity social arrangement based on human development rather than material acquisition (Mill, 1848).
Policy Reform (PR)		Key driver: Economic growth with greater equity
<b>Settlement pattern</b> 	<b>Description</b> <i>Policy Reform</i> depends on comprehensive and coordinated government action for poverty reduction and environmental sustainability, negating trends toward high inequity. The values of consumerism and individualism persist, creating a tension with policies that prioritise sustainability.	<b>Philosophy</b> In <i>Policy Reform</i> , the belief is that markets require strong policy guidance to address inherent tendencies toward economic crisis, social conflict and environmental degradation. John Maynard Keynes, influenced by the Great Depression, is an important predecessor of those who hold that it is necessary to manage capitalism in order to temper its crises (Keynes, 1936).
Market Forces (MF)		Key driver: Competitive, open global markets
<b>Settlement pattern</b> 	<b>Description</b> <i>Market Forces</i> relies on the self-correcting logic of competitive markets. Current demographic, economic, environmental, and technological trends unfold without major surprise. Competitive, open and integrated markets drive world development. Social and environmental concerns are secondary.	<b>Philosophy</b> The <i>Market Forces</i> bias is one of market optimism, the faith that the hidden hand of well-functioning markets is the key to resolving social, economic and environmental problems. An important philosophic antecedent is Adam Smith (1776), while contemporary representatives include many neo-classical economists and free market enthusiasts.
Fortress World (FW)		Key driver: Protection and control of resources
<b>Settlement pattern</b> 	<b>Description</b> Powerful individuals, groups and organisations develop an authoritarian response to the threats of resource scarcity and social breakdown by forming alliances to protect their own interests. Security and defensibility of resources are paramount for these privileged rich elites. An impoverished majority exists outside the fortress. Policy and regulation exist but enforcement may be limited. Armed forces act to impose order, protect the environment and prevent a societal collapse.	<b>Philosophy</b> The <i>Fortress World</i> mindset was foreshadowed by the philosophy of Thomas Hobbes (1651), who held a pessimistic view of the nature of man and saw the need for powerful leadership. While it is rare to find modern Hobbesians, many people believe, in their resignation and anguish, that some kind of a <i>Fortress World</i> is the logical outcome of the unattended social polarisation and environmental degradation they observe.

The Urban Future Method does not favour any particular scenario. Indeed, for a solution to be determined to be robust and resilient to future change, the necessary conditions to support intended benefits being achieved over time must exist in all scenarios. Drawing on expertise, experience, and **knowledge of the local context**, we have graded the likely performance of every necessary conditions in the future as follows:

Urban Futures Method applied to new large real-estate developments on brownfield sites				
Necessary Conditions	New Sustainability Paradigm	Policy Reform	Marker Forces	Fortress World
<b>Close proximity of site to a significant number of local services, amenities, and functions</b>	A compact city principle signifies the optimal use and management of urban resources	Good provision of public services in local areas as required by law, but non-public amenities may be lacking	Laissez-faire policy provides no guidance for or against mixed use. Yet market forces favour a shift away from traditional town centres and local provision of services	There is no policy to promote density or mixed use, although security and resource concerns may support it. The poor are constrained to local areas, which necessitates high levels of vertical and horizontal mixing
<b>Adequate mobility infrastructure, providing access to a great number of people</b>	Self-contained, self-sufficient, integrated settlements mean that facilities and amenities change to suit needs of the area	Good provision of transport facilities and amenities at local level as required by policy	Private-led and based on willingness to pay	Strict security priorities ensure that rich areas are inaccessible to outsiders
<b>Qualified people looking for a job at firms, renting office space in the new buildings</b>	Sustainable urban development is grounded in a knowledge-based society. Maintaining a well-qualified workforce is a collective priority	Further and higher education is important for assuring broad social integration and maintaining a productive economy geared towards growth	Limited public funding available for education and upskilling unless there is a direct economic benefit. Limited variety of qualifications, leading to closure of those educational and training programmes not valued by the market	No public funding available for education and upskilling. The rich tend to be well-educated and are willing to move for a job, but only within the safe enclaves. The poor have little choice but to resort to rudimentary home schooling
<b>High demand for new housing (esp., flats) from middle-class residents</b>	Compact city living is promoted for blocks of flats reduce the demand for development land, prevent urban sprawl, and results in a much more efficient use of scarce resources	Strong rent controls, government policies, and schemes legislate for, encourage, and promote social housing. Private housing demand remains low	Private home ownership ethos, materialist and consumerist attitudes push public towards treating housing as an investment, driving house prices up. Yet high density living suffers from poor image, with detached town houses and sub-urban villas retaining higher status and prestige	Only the rich can afford to live within the fortress. Strict control over planning ensures that rich areas are not high-density. Available detached town houses and villas within the fortress are unaffordable for the squeezed middle classes, whereas security and resource concerns in poor areas prevent middle-class residents from moving there
<b>Attractive retail, leisure, and hospitality offer for local residents</b>	A shared vision of more sustainable living leads people to choose local retail and services. Opening hours accommodate local needs and provide local jobs	Consumer values do not support local retail and services, but policy emphasis on providing local services means these may be chosen out of convenience	Market forces favour a shift away from local retail and services towards global brands and out-of-town shopping centres	For the rich, local retail and services meet security and resource constraints; for the poor, it may become a necessity
<b>A coherent city brand &amp; attractive local identity</b>	Integrated settlements combined with a strong sense of community belonging are a priority for sustainable urban development. However, active place promotion and city-branding receive no public funding and are	Place promotion and city branding activities promote an image of exclusivity and can generate social segregation, threatening territorial cohesion	Fragmentation exists, with little or no long-term vision in planning urban (re)growth. Profit-making drives business activities, so only those policies that promise short-term profitability are likely to be supported	Only the rich can afford to live within the fortress. A coherent and attractive citywide identity is unthinkable in this society of extreme polarisation



Urban Futures Method applied to new large real-estate developments on brownfield sites				
Necessary Conditions	New Sustainability Paradigm	Policy Reform	Marker Forces	Fortress World
	considered remainders of bygone materialist, individualist and consumerist attitudes			
<b>Rising private demand for a modernised municipal infrastructure</b> and upgraded city utilities networks	Strong social imperative to maintain sustainable infrastructure and conserve scarce natural resources helps minimise energy, water, and sewage demand, and prevent wasteful upgrading of the existing municipal utilities networks	Policy emphasis on intelligent demand management makes sure energy, water, and sewage supplies are sufficient to cope with rising private needs. Maintaining and upgrading municipal infrastructure is a governmental priority and enforced through policy	Limited public funding is available for infrastructure maintenance unless there is a direct economic benefit, leading to degradation of those municipal utilities networks not valued by the market	Money for maintenance is available in rich enclaves, with the rich having good access to local facilities and amenities. The poor may be lacking the most basic amenities and facilities; none are provided by the state. Maintenance in poor areas is likely to be unfunded
<b>Demand for a better functioning public transport system</b>	Public attitudes shift strongly in favour of public transport and sustainable alternative options, including walking and cycling	Government policies and schemes legislate for, encourage and promote public transport, cycling, and walking, although lack of individual interest in long-range environmental and social well-being may be a limiting factor	Materialist and consumerist attitudes push public towards private vehicles and away from alternative modes of transport	Security concerns lead to a likely increase in private vehicle usage for the rich. Alternative forms of travel are forced on the poor out of necessity. No funding for public transport is available
<b>Available greenfield and/or brownfield land</b> for development	Sustainable urban development is a priority, with communities deciding which areas have higher densities to protect green and open spaces from development	Strong planning controls are applied to increase built density by building on brownfield sites, although personal choice may undermine policies	Brownfield regeneration is prohibitively expensive, whereas market dominance means lowest cost options are chosen. Combined with high deregulation in planning policy, this leads to uncontrolled greenfield development outside the urban core	The rich will protect access to open green spaces, with strict control over planning ensuring low density. No control over planning in poor areas means any available land can be developed
<b>Real estate developers interested in the city</b>	Underlying values of social equity and justice mean living in owner-occupied single family properties in homogenous middle-class communities goes against the acceptable norm. Short-term profit-making incentives may be absent for private sector firms to get involved	Strong rent controls, government policies, and schemes legislate for, encourage, and promote social housing. Private housing demand is too depressed to be profitable	Focus on short-term economic gain. Commercial entities choose location based on image and status, leading to degradation of those cities not valued by the market	Strict control over planning protects open green spaces from development and ensures that rich areas are not high-density. The poor areas are highly unlikely to offer a high financial return on new large real estate investment
<b>On site provision of mixed use and multifunctional services and facilities,</b> encompassing the entire daily life cycle	Self-contained, self-sufficient, integrated settlements, combined with a strong sense of community belonging are a priority for sustainable urban development	Planning policies force the issue of provision, though people will choose whether or not to use them. Only some community needs for facilities and neighbourhood amenities are met	Willingness to live, work and recreate in an area may be low, manifesting in neighbourhood fragmentation. Profit-making drives business activities, so only those facilities that are profitable are likely to survive.	Security concerns support proximity of local services and amenities in rich areas; in poorer areas, local services and amenities are close due to mobility constraints and general scarcity of provision

Key: ■ condition highly unlikely to continue in the future ■ condition is at risk in the future ■ condition highly likely to continue in the future



## POLICY IMPLICATIONS

Large real estate projects, especially when developed on brownfield sites, are capable of bringing along plenty of positive consequences, resulting in high density compact settlements, characterised by close proximity of site to a large amount of local services and amenities. Furthermore, large private sector-led development projects can promote polycentric regeneration of *a shrinking city* by attracting a qualified labour force, and creating new business opportunities inside and around the newly-built self-contained and integrated settlements. To note, *in growing cities*, such projects are quite often associated with gentrification, leading to the spatial and social segregation of marginalised communities, and the *de-valorisation* of old fashioned buildings in neighbouring areas. The project's findings reported in this policy brief clearly indicate that the development of brownfield sites and the construction of large real estate multifunctional settlements must be integrated with the city master plan and a general urban planning framework to ensure an adequate provision of and access to the full range of public services, urban facilities, and amenities. According to the Urban Futures Method results reported above, large private sector-led real estate projects work best as a smart shrinkage solution in the New Sustainability Paradigm scenario, having around a 73% chance of success; in the Policy Reform scenario, this smart shrinkage solution has a 50% chance of success. On the other hand, in the Fortress World and Market Forces scenarios, many of the underlying necessary prerequisites are likely to be exposed to considerable risks in the future, reducing the probability of success to about 41% and 37%, respectively.

## REFERENCES AND FURTHER READING

- Aalbers MB & Bernt M. (2019) The political economy of managing decline and rightsizing, *Urban Geography*. 40:2, 165-173, [DOI: 10.1080/02723638.2018.1524654](https://doi.org/10.1080/02723638.2018.1524654)
- Berry BJL. (1959) Ribbon Developments in the Urban Business Pattern. *Annals of the Association of American Geographers*. 49: 145-155, [DOI:10.1111/j.1467-8306.1959.tb01605.x](https://doi.org/10.1111/j.1467-8306.1959.tb01605.x)
- Böhm S, Jones C, Land C, & Paterson M. (2006) Introduction: Impossibilities of Automobility. *The Sociological Review*. 54(1\_suppl): 3-16, [DOI:10.1111/j.1467-954X.2006.00634.x](https://doi.org/10.1111/j.1467-954X.2006.00634.x)
- Haase A, Bernt M, Grossmann K, Mykhnenko V & Rink D. (2016) Varieties of shrinkage in European cities. *European Urban and Regional Studies*. 23(1): 86-102, [DOI:10.1177/0969776413481985](https://doi.org/10.1177/0969776413481985)
- Lombardi DR, Leach JM, Rogers CDF et. al. (2012) **Designing Resilient Cities: a Guide to Good Practice**. Bracknell: IHS BRE Press.
- OECD. (2012) **Compact City Policies: A Comparative Assessment**. OECD Publishing, [DOI:10.1787/9789264167865-en](https://doi.org/10.1787/9789264167865-en)
- Urry J. (2004) The 'System' of Automobility. *Theory, Culture & Society*, 21(4–5): 25-39, [DOI:10.1177/0263276404046059](https://doi.org/10.1177/0263276404046059)

**CITE AS:** Nadolu, Bogdan, Dincă, Melinda, Luchez Daniel, Raceanu, Corina & Mykhnenko, Vlad (2020). 3S RECIPE – Smart Shrinkage Solutions: Timișoara (RO) Policy Brief #2. Compact Connected City. West University of Timișoara. Zenodo. [DOI: 10.5281/zenodo.4044246](https://doi.org/10.5281/zenodo.4044246).

