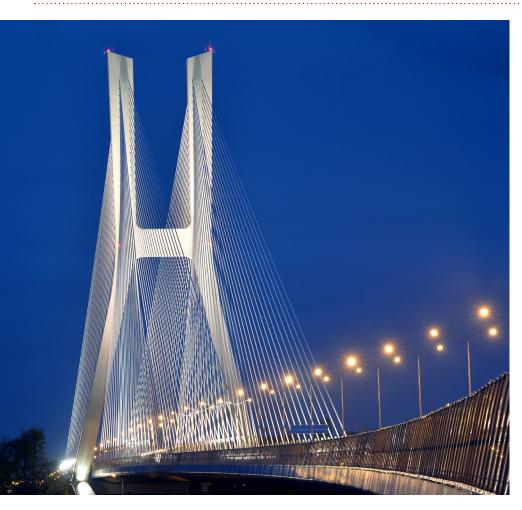


Wrocław

A City With Prospects



October, 2015







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Turin, Marseille, Valencia, Birmingham, Frankfurt and Stuttgart are just a few examples of cities which are situated far away from the political and administrative centre of a given country yet are attractive enough to draw new residents with their potential. Does Wrocław have a chance of joining this group of cities? How can its advantages be made use of, or new ones gained, to increase Wrocław's potential? How can the city be changed to make the quality of life become a calling card promoting Wrocław both in Poland and the international arena?

The aim of the information contained in this report is not to point to Wrocław's major problems. It is rather an attempt to answer questions about the actions which should be taken to enable the city to develop more quickly, in a consistent and sustainable manner.

In seeking answers to questions concerning desirable trends in the city's economic, social and infrastructural development, we did not rely exclusively on published information or statistical data, but we interviewed the residents, representatives of the Municipal Council, entrepreneurs and institutions such as Wrocław Agglomeration Development Agency S.A. and the Society for the Beautification of Wrocław.

In the course of the analysis, the conclusion (common to all the areas covered in the report) was drawn that, in the immediate future, trends in the development of Polish cities will be initiated mainly by demographic challenges and the growing expectations of their present and future residents. These challenges require the local authorities to undertake comprehensive activities combining the city's economic, social and infrastructural potential. At the same time, these activities require enlisting the cooperation of both academic and scientific institutions, social and business partners, as well as the city's inhabitants themselves.

Only together will Wrocław's residents be able to develop an individual, original vision for the city's development which will harmoniously combine all the said potentials and create a desirable trend in change, thus opening up the city to all of its residents.

Mileld M. Moush

prof. Witold Orłowski PwC Chief Economic Advisor

Mariusz Dziurdzia PwC Wrocław office managing Partner



The economy and economics

The claim that there is an inseparable connection between a city's economic potential and its development is virtually impossible to contradict. In the contemporary world, it is difficult to envisage a city which can develop while its business is shrinking and the situation of its residents is deteriorating. One of the most visible, if negative, examples of this connection is the American city of Detroit, which fell into serious decline as a city following the crisis in the automotive industry in the early 21st century. Many of its residents left, and those who remained experienced a deterioration in the standard of living. All this had a negative impact on the city where companies coping with the crisis and economically impaired residents left behind many empty flats and buildings which fell into ruin.

The analyses carried out by PwC have shown that it is mainly historical centres which are the cities with the greatest economic power. In the past, metropolises such as London, Beijing, New York and Paris were the capitals of global empires where political power was followed by economic potential. Although these empires no longer exist in the historical sense, economic power has survived. However, this does not mean that other, smaller cities cannot develop their economic potential. In order to pursue this aim effectively, we should take a look at the key factors which could act as a magnet for attracting capital or as a catalyst for the economic activities of today's city dwellers. Limiting ourselves exclusively to economic issues, which are the preserve of the city administration, we could list, amongst other things: the broadly understood, relatively low cost and ease of carrying out investment projects, and the supply of properly qualified potential employees.

Wrocław is already a bright dot on Poland's economic map, and it is certainly noticeable on the map of Europe. The definitely above-average increase in GDP per inhabitant, very large drop in unemployment, and relatively attractive wages and salaries have brought about an increase in the population of the Wrocław metropolis. But can such a trend continue for a longer period of time? Will the rate of attracting foreign investors continue in the longer run? Will we manage to effectively persuade domestic companies to develop in Wrocław rather than seek less expensive locations in the east of Poland, in other East European countries, or in Asia? To what extent will the quality of investments enable attractive job offers to be created for Wrocław's present and potential residents? Will economic development allow the city's revenues to be increased in the long term?

The city's location at the junction of important transport routes, close to the western areas of Europe, made it possible to locate many investment projects which, in subsequent years of the Polish transformation, gave the city and the region the impetus to undergo further development and economic growth.

Investments

Part of Wrocław's economic potential is a legacy of the past – even the relatively distant past. The city's location at the junction of important transport routes, close to the western areas of Europe, made it possible to locate many investment projects which, in subsequent years of the Polish transformation, gave the city and the region the impetus to undergo further development and economic growth.

There are many factories in Wrocław which manufacture parts for global automotive giants, home appliances, and electronic equipment. Large domestic family businesses dealing in the areas of services, pharmacy, and advanced technologies are also developing. In Wrocław, a cluster of centres for financial, accounting, and IT services has been created. Both university graduates, including those specializing in technology-related subjects, which are so important to development, as well as experienced specialists, can find employment here. There are job opportunities for secondary and vocational school leavers. In 2015, the city's unemployment rate dropped to 3.9%.

As early as in the 1990s, large automotive concerns began investing in the region bringing their collaborators to Wrocław. At the same time, companies representing the home appliance and electromechanical industries developed. Apart from the convenient location and the relatively good knowledge of foreign languages among potential

candidates, companies were also attracted by the availability of well-educated technical staff. Jobs were created for engineers and specialists with secondary technical qualifications. Production companies also needed many people with secondary vocational qualifications. Soon the potential of the Wrocław agglomeration itself was used up, and employees began to be recruited in more distant municipalities.

Wrocław is already a bright dot on Poland's economic map, and it is certainly noticeable on the map of Europe.





The city has also been found to be a convenient place for setting up service centres. The first companies to come to Wrocław offered accounting services and administrative support to global customers. They mainly hired people with economic qualifications and an excellent command of foreign languages – both experienced specialists and many graduates of Wrocław universities who were novices on the labour market. The development of IT companies also proved an important factor - service and research & development centres were established by international players, domestic giants, and local companies. Today, Wrocław is the third business service centre in Poland - after Warsaw and Kraków in terms of the number of employees. Close to 24 thousand people have found jobs here. Moreover, compared with other cities, Wrocław nearly has the largest percentage of centres for

research and development services, i.e. those which are the most advanced technologically – 26% (the first place goes to Rzeszów with 27%).

At the same time, in Wrocław, whose residents are famous for their unusual entrepreneurship, local companies developed which became well-known across Poland and Europe, and some of them even worldwide. The pharmaceutical and chemical sectors, the electronics industry, and the service and commercial sectors grew strong. According to the PwC report Capital for Development, 105 companies listed on the Warsaw Stock Exchange operate in Lower Silesia, which is the second best result in Poland, after the Masovian Voivodeship. The vast majority are private businesses which began operating on a very small scale.

Compared with other cities, Wrocław nearly has the largest percentage of centres for research and development services, i.e. those which are the most advanced technologically. Today, Wrocław is a place where the paths of global investors and domestic entrepreneurs with strong market positions meet. A city of IT specialists and high technologies, production technologies, services for business, and –very important to the city's development – universities and other institutions of higher education. The city's current strategy, which covers the period to 2020, attempts to seek sources for the metropolis's development in its natural advantages. On the one hand, there are factors which may attract foreign investors and facilitate the cooperation of local enterprises with foreign entities, such as: the presence of transport routes and communication infrastructure, the proximity of other Member States of the European Union – including Germany, which is Poland's largest partner in trade – and the qualifications of potential employees. On the other hand, factors affecting the development of domestic companies, such as the

residents' strong inclination to engage in business activities – Wrocław is a city with many small and medium-sized companies – and a relatively high percentage of 20–30-year-olds who are well-educated, resourceful and who have aspirations.

Generally speaking, the strategic vectors of the city's development have remained similar to the current directions. The talk is of industries such as high technologies, financial services, the automotive industry, home appliances, logistics, and transport. However, it seems that in the long run, it will not be possible for the city to develop only by locating more relatively less advanced investment projects here. Some of them are based on the difference in wages and salaries between the home countries and Poland, but we know that this specific competitive edge should disappear in the long-term. In certain industries, wages and salaries are already on a European level.



In the long run, it will not be possible for the city to develop only by locating more relatively less advanced investment projects here.

The people living in Wrocław are bold and outgoing. They are the key factor in the city's development. Thanks to a positive attitude, foreign investments are well received in Wrocław, and people who do business worldwide feel good here. Wrocław is also a place where many private banks and companies have been established, built up from scratch by Wrocław's resourceful residents. For many of them Poland is already too crowded, so they are expanding to European and global markets – and they are successful.

Grzegorz DzikChairman of the Management Board
Impel S.A.



On the one hand, innovations should be the main inducement for attracting new investors, and on the other hand space is needed for the resourceful city dwellers to enable them to put their ideas into practice.

According to the city authorities' plans, the type and quality of investments should be the differentiating factor in the long term. On the one hand, innovations should be the main inducement for attracting new investors, and on the other hand space is needed for resourceful city dwellers to enable them to put their ideas into practice. Business activities based on innovations should foster diversity, which could offset the potential effect of a deterioration in economic activity on the Wrocław's economy.

The city would like to specialize in niche solutions and in customized services and products, i.e. those which carry a lot of added value. Looking at the implementation of this strate-

gy, one cannot help noticing the city authorities' initiative in this regard — there is the Wrocław Research Centre EIT+ and technology parks functioning in the city, and investors representing the high technology sector are also being attracted. It can be said that Wrocław already has a certain quality which, if used properly, could produce some good results.

Knowledge, i.e. the availability of properly educated staff, is one of the pillars of economic development which will become increasingly important. That is why proper cooperation between the city authorities and the universities and employers is so important. By following an appropriate

policy, subjects of study can be promoted in advance, and these graduates will be sought by employers in the future. Examples of the actions taken in this area include, among other things, the programmes The Language of Machines – which supports the learning of logical thinking and programming from early childhood – or Wrocław is Working which is intended for Wrocław residents with non-IT qualifications who would like to work in the IT industry. For entrepreneurs, the ease of setting up and running a business is a crucial differentiating factor.

One of the greatest challenges for the city's further development is to continuously improve the education system to ensure it meets the needs of a modern economy. The key factor which contributes to the development of Polish and foreign companies operating in Wrocław is to provide well-educated people. Wrocław Agglomeration Development Agency, being an institution which operates between state administration offices and businesses, initiates and supports cooperation between these two spheres and plays the role of "interpreter". A few years ago, we launched the project Wrocław Koduje to support (also financially) training courses aimed at retraining people with university degrees to enable them to work in the IT industry. Moreover, we cooperate with special economic zones in promoting and developing vocational and technical education, and we support companies in creating corporate sponsorship classes in vocational schools.

Łukasz Czajkowski

Director of Bussiness Support Centre Wroclaw Agglomeration Development Agency

A friendly business environment could encourage many of the 140 thousand students who study in Wrocław each year to stay here thanks to finding an interesting job or due to the fact that they consider Wrocław a friendly place for doing business on their own.

Looking back at the last two decades. Wrocław is one of the most effective cities at attracting foreign investments. It has a system of organizational support for investors wishing to locate branches of their business here. However, it should be remembered that huge foreign investments are not the only requirement for a city to develop well. We should bear in mind the thousands of small, medium-sized and large local companies, because these are the firms which are the basis for its stable economic existence. The city should be their partner, sometimes advisor, and it should support the building of a freely accessible business infrastructure. In times of a technological revolution, when more and more work is being done on a remote or irregular basis, we should be thinking about places where Wrocław's present and future residents could conduct their activities without excessive fixed costs.

This friendly business environment could encourage many of the 140 thousand students who study in Wrocław each year to stay here thanks to finding an interesting job or due to the fact that they consider Wrocław a friendly place for doing business on their own. Creating highly specialized jobs also provides opportunities for the currently employed – instead of seeking professional challenges further up the career ladder in Poland or Europe, they would be able to develop in Wrocław. However, from today's perspective, there is a lot to make up for in this area - the World Bank's 2015 ranking Doing Business in Poland put Wrocław in 13th place amongst the 18 Polish cities surveyed in terms of ease of doing business, despite the fact that Wrocław outdistanced cities such as Kraków, Warsaw and Gdańsk.

The universities, dynamic residents, and geographical location make Wrocław an excellent place for managing an international company. Wrocław has always had an atmosphere of openness to experimentation and a unique approach to life compared with other Polish cities, which make everything possible. I firmly believe that, in the future, it is investments in the technological sector which will determine urban development.

Henry McGovernChairman
of the Supervisory Board
of AmRest Holdings SE

Each new investor – whether domestic or foreign – would receive support from a city representative who would lead at each stage of its completion. We do understand how important trust and relationships are in business. We stick to the old rule – that agreements should be kept – and we promise our investors what we can actually give them, and we do give it to them. We also try to cooperate closely with entities which have invested here after a given investment project has been completed.

Rafał Dutkiewicz *Mayor of the City of Wrocław*

Wages and salaries

There is an old proverb which claims that money cannot buy happiness. Yet, it is money and, actually, looking for a job that are one of the main motivations behind people migrating. Although, compared with other countries in the developed world, Poland is characterized by the relatively low mobility of its workforce among the regions, it cannot be said that migrations for economic reasons are insignificant. Moreover, given the freedom of movement of the workforce within the European Union, Polish cities and regions are competing not only with one another but also with other urban centres across the continent. Therefore, a city's development is possible when appropriate economic conditions are created for its present residents to live in, and potential future inhabitants are offered wages and salaries which are competitive with those in their current place of residence. The city authorities have no direct impact on the level of pay offered to city dwellers. In the case of Wrocław, the exception is the fact that, through its institutions and, indirectly, through companies cooperating with the local authorities, it is now one of the largest employers in the city. However, outside

this sphere, business entities are fully autonomous in determining pay levels. However, it should be noted that the greater technological advancement of the investment projects carried out by both domestic and foreign entities results in demand for more specialized employees who, in turn, receive higher pay. Therefore, also in this regard, it is worth focusing on investors who wish to carry out advanced projects of this kind.

According to the data of the Central Statistical Office of Poland (GUS), in the first half of 2015 the average gross salary in Wrocław amounted to just under PLN 4,300, which put Wrocław in 6th place among voivodeship capital cities. Among the urban centres which outdistanced Wrocław, similar salaries could have been earned in Kraków and Poznań. Residents of Gdańsk, Katowice, and Warsaw would receive a salary of approximately PLN 5,000. Compared with the remaining part of the Lower Silesian Voivodeship, Wrocław fares better. According to the data, for the residents of Gdańsk, Katowice, and Warsaw, Wrocław is not an attractive city from an income-earning perspective. In this regard, Wrocław can put

up an equal fight with the neighbouring Poznań and Kraków, and it also fares better than the other voivodeship capital cities and suburban areas. Therefore, in promoting the agglomeration, it seems rational to concentrate on smaller cities, because they may well constitute the basis for the development of Wroclaw's community in the future.



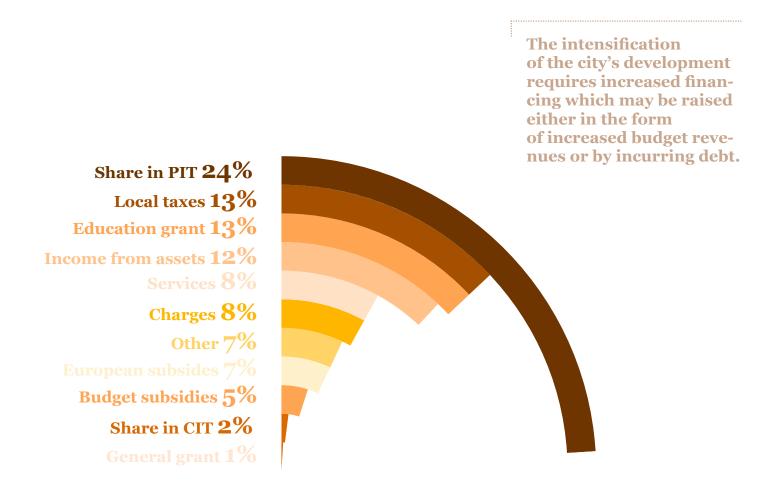
A city's development is possible when appropriate economic conditions are created for its present residents to live in, and potential future dwellers are offered wages and salaries which are competitive with those in their current place of residence.

One cannot help noticing that the average salary earned in Wrocław also differs considerably from what may be offered by the labour market in the western areas of the European Union. If we look only at the figures, we will always be fighting a losing battle. Therefore, in trying to stop the inhabitants migrating abroad or in encouraging those who have left in recent years to return, we should focus on factors other than pay.

At the same time, we should also remember that Poland will become more and more attractive economically to immigrants from the less developed regions of the world. Many companies in Wrocław are already hiring employees from countries closest to Poland, who often have at least a basic command of Polish. This process will progress naturally in step with Wrocław's universities becoming increasingly international. Overseas students from less-developed countries will naturally

want to stay in a place where the economy creates more favourable living conditions, whereas the rise of ethnic communities in the city could act as a magnet for other representatives of these nationalities. It is important to take this trend into account right now when formulating urban policies and to create conditions for the legal inflow of immigrants who will be able to fill the gaps in the labour market and, by doing so, fund the city budget with revenues from taxes.





Percentage shares of the planned city budget revenues in 2015

City budget

The implementation of the city development policy is not dependent solely on the willingness of the city authorities and residents. To make it effective, appropriate financial support is required, which, in turn, is limited by the availability of funds in the city budget.

The total city budget revenues planned for 2015 are PLN 3.9bn, up 6% on the previous year. At the same time, the city is anticipating a budget deficit of approximately PLN 300m.

The city budget revenues comprise local taxes and charges (20%), income from city assets and services represents 20% of total revenues, State Budget subsidies and grants – approximately 18%, whereas the share in personal and corporate income taxes accounts for 27% of the city budget revenues.

Wrocław's financial position, compared with other large Polish cities, is good.

Thanks to the above-average level of GDP per capita (155% of Poland's average GDP per capita), Wrocław has a stable income-earning base.

Wrocław's financial position, compared with other large Polish cities, is good. Thanks to the above-average level of GDP per capita (155% of Poland's average GDP per capita), Wroclaw has a stable income-earning base. The high level of GDP per capita mainly affects the value of income tax receipts. Data shows that such receipts have increased by 9% compared with the previous year, which – with the income tax rates left unchanged - is a positive trend. According to the plan for 2015, income tax receipts represent 27% of the total city budget revenues, the vast majority of which is personal income tax. Due to the share of income tax in the city budget, it is worth focusing on raising the level. This can be achieved in two ways. On the one hand, we should encourage the people who already live or work in Wrocław to pay income tax here. Each year, the city holds a competition and gives big prizes to people who file their tax returns with tax offices in Wrocław. On the other hand, measures should be taken to increase the number of residents by promoting the city properly, and creating favourable conditions for living and working from an economic, social, and infrastructural perspective.

However, when planning a long-term budget, it should be remembered that changes in income taxes at the central level, such as increasing the amount of personal allowance, raising tax thresholds or lowering tax rates, will have a negative impact on the level of the amounts flowing into the city budget. However, at the same time the population's disposable income will increase, which could lead to increased consumption or investments and, consequently, mitigate the negative effect of the regulatory changes on tax revenues. Local taxes and charges, which represent one-fifth of the budget, have increased by nearly 4% compared with the previous year. On the one hand, this is a favourable phenomenon. The city is raising additional funds which it may use for performing its tasks and making investments. From another point of view, an increase in local

taxes and charges means higher costs of business activities which translate into lower income tax receipts and entrepreneurs' decreased willingness to make investment decisions. Therefore, the city should follow a very prudent policy for determining the rates of local taxes and charges, so as to maintain an appropriate balance between the city budget revenues and the severity of the costs incurred by taxpayers.



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The income from assets and services provided by the city represent 20% of the city budget. Such services comprise, among other things, public transport, the supply of utilities, kindergartens, schools, the use of sports and cultural infrastructure. As in the case of local taxes and charges, they contribute to increasing the costs of business activities (amongst others, in the case of utilities). An increase in these also translates into a drop in the residents' disposable income which, in turn, translates into a lower level of income being generated as part of the city's functioning. Income from central budget subsidies and grants represents approximately 18% of Wrocław's budget. In 2015, it has remained at a

level similar to that in the prior year. Such income is largely independent of the city authorities, and therefore there is no possibility of managing the amount in an effective manner.

It is also significant that in 2015 EU funding represents approximately 7% of the city revenues — up 13% on the previous year. Wrocław is one of the most effective Polish cities at obtaining EU funding (amongst the 12 largest cities in Poland, only Rzeszów and the Tri-City have proved better at this). EU funding consists mostly of non-refundable subsidies which finance a substantial part of the investments aimed at regional development and improving the quality of life for the residents.

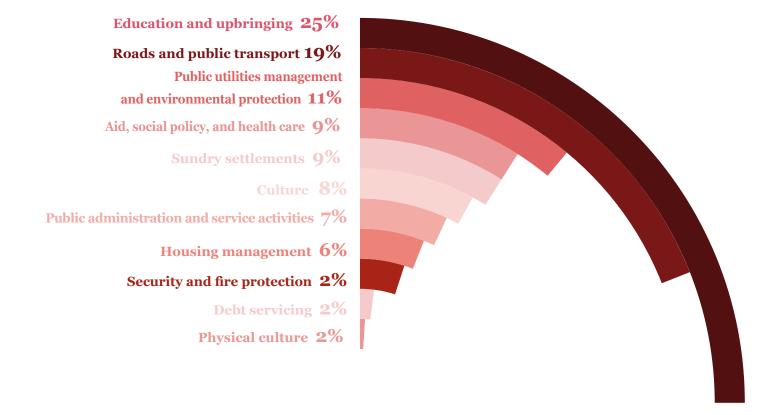
Despite the fact that obtaining such funding and its subsequent servicing are fairly complicated, its utilization is still very fruitful for the city.

Increasing the debt may be good motivation for development if the funds raised are used for making investments which support development and contribute to the implementation of the city's strategy.

According to the plan for 2015, the city budget expenditure will exceed the revenues earned. The budget deficit is expected to be approximately PLN 275m (up 12% on the previous year). The most significant amounts out of the city's finances are consumed by: education and upbringing - 25%; roads and public transport - 19%; public utilities management and environmental protection – 11%; health care, social policy and aid - 9%. Most of these expenses are fairly fixed, and they certainly do not satisfy all of the local community's needs in the individual areas. A good spending policy should reconcile meeting the current needs of the city's residents with the financing of development investment projects such as expanding the broadly understood transport and technical infrastructure, supporting enterprises,

and creating a social infrastructure of an appropriate quality. According to the city authorities' declarations, the budget deficit will be financed with a preferential loan from the European Investment Bank. Obtaining debt financing does not pose a major problem for Wrocław - the city has a fairly high rating of BBB+ (this indebtedness is not a problem from the perspective of the city's ability to meet its liabilities with the possibility of problems arising in the event of a deterioration in economic activity). Increasing the debt may be good motivation for development if the funds raised are used for making investments which support development and contribute to the implementation of the city's strategy.

The overall assessment of Wrocław's financial position is good. A stable income-earning base, the effective utilization of EU funding, a high credit rating, and a relatively well-managed city budget offer the chance of stable development. A good credit rating opens doors to various forms of financing development investment projects. Should the potential of own funds and EU funding be exhausted, the city can use off-balance-sheet forms of financing its development, such as public private partnership which is not currently used on a large scale. Increasing the available funds could allow many investment tasks, which support the city's development, to be carried out at the same time.



Percentage shares of the planned city budget expenditure in 2015





Demographic challenges

Demographic data and numerous forecasts do not suggest a dynamic increase in the number of Wrocław's residents in the longer term. This number, which is currently 634.5 thousand* has increased slightly in recent years. The birth rate in Wrocław in 2014 was just above zero (0.1 per 1,000 people), proving the highest in the Fabryczna district (2.4), whereas a negative birth rate was reported in the Old Town and Śródmieście (City Centre) districts. It is worth noticing that a much higher birth rate can be observed in the municipalities and counties outside Wrocław, especially the most popular so-called "dormitory districts" of Wrocław (e.g. in Siechnice, the birth rate is 7.0).

This same trend also applies to the migration rate which is positive in Wrocław. In 2014, 7.5 thousand residents from other regions registered for permanent residency here, including 3.9 thousand people from other voivodeships and 588 people from abroad. The migration of residents from Wrocław in the same period was 5.7 thousand people, mostly into the Lower Silesian voivodeship (4.3 thousand) and into rural areas (3.8 thousand).

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^{*} data by the Statistical Office in Wrocław as of December 2014

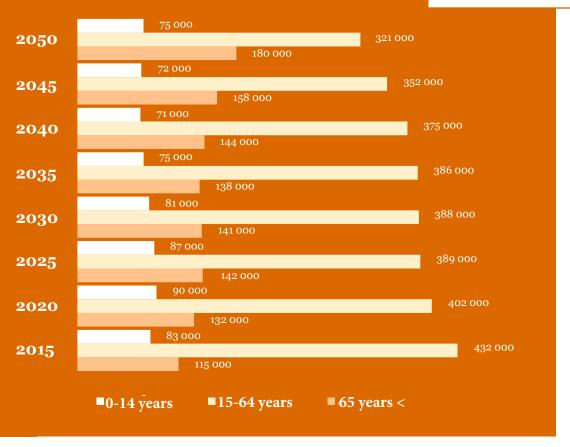
However, according to long-term forecasts the number of residents will decrease – it is expected that by 2040 it will drop to below 600 thousand.* Not only will the number of inhabitants in the city itself go down, but also in the entire metropolitan area. This is largely the result of the negative birth rates across Poland. To face this challenge, the city should, on the one hand, take steps to make it easier for young people to decide to have children and to prevent suburbanization and, on the other hand, effectively seek new residents. However, we should remember that the city authorities have limited possibilities of encouraging people to have more children. Naturally, the proper supply of places in Wrocław's day care centres and kindergartens, programmes offering discounts to large families (amongst others, the Family Plus Card) or providing jobs which offer

stable forms of employment may be significant factors in deciding to have children. The city should undertake such activities. However, we should not assume that they will directly generate a considerable increase in the birth rates in the city. It is worth emphasizing that the activities which may be decisive in contributing to reversing the negative demographic and population trends should not concentrate on multiplying the supply of social services but first and foremost on increasing their quality and specialization. Residents from other regions can also be encouraged to settle in Wrocław, which the city is doing effectively.

In 2014, 7.5 thousand residents from other regions registered for permanent residency in Wrocław, including 3.9 thousand people from other voivodeships and 588 people from abroad.

It is expected that by 2040 the number of inhabitants in Wrocław will drop to below 600 thousand.





^{*} source: Population, natural movement and migrations in the Lower Silesian voivodeship in 2014, the Tax Office in Wrocław **source: Population growth forecast by sex and age in the territory of the city of Wrocław, GUS, March 2014

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The activities which may be decisive in contributing to reversing the negative demographic and population trends should not concentrate on multiplying the supply of social services but first and foremost on increasing their quality and specialization.

The group which Wrocław is actively trying to attract is the students, which is why the city authorities attach a great deal of importance to activities promoting the city as a major academic centre. For years, the concept of "a city with 100 thousand students", i.e. activities aimed at maintaining at least 100 thousand students present in Wrocław at all times, has been implemented effectively. At present, this number is more than 120 thousand. This is possible thanks to five universities and more than 20 institutions of higher education functioning in Wrocław. A significant element which attracts new students from outside the region each year is the high level of education and the renown of the local universities – the Wrocław University of Technology and the University of Wrocław came in fourth and seventh respectively in the University Ranking - Perspektywy 2015. Newcomers also

appreciate the city's atmosphere and openness to people from other regions. The number of foreigners studying in Wrocław is also growing steadily, and due to the relatively large number of jobs in which a knowledge of Polish is not necessary – mainly shared service centres – these people often stay in Wrocław after graduating.

The city's policy supports the creation of study programmes which correspond to the labour market's needs. Owing to the large number of employers seeking IT employees, thanks to the city authorities' cooperation with Wrocław's universities, the number of IT students has doubled over the past few years. The above measures, implemented along with attracting new investors, has resulted in one of the lowest unemployment rates among young people in Poland.

However, the problem which the new arrivals have to face is the relatively high cost of renting a flat which is now higher only in Warsaw. This factor may be to Wrocław's detriment when choosing a university. Prices often force students to live on the outskirts of the city, which may lower the standard of living and discourage them from settling down for a longer period of time. After graduating, purchasing a flat – the price of which is relatively high compared with average salaries – rather than finding a job, is one of the greatest challenges in Wrocław.

Rafał Dutkiewicz Mayor of the City of Wrocław

Wrocław is the first city in Poland in which the municipality has launched a special department for cooperating with universities despite the fact that, under Polish conditions, universities do not come under municipal jurisdiction. With regard to the demographic conditions in Poland and Wrocław, as a society, we are not growing. Therefore, we need to invite new residents to come to Wrocław. The best way is by inviting young people to study in our city. For this reason, it is of the utmost importance to make Wrocław an academic city. We are great supporters of this process.



The second, very important challenge faced by the city is to create attractive jobs for creative and ambitious residents above the age of 30. In Wrocław, we cannot complain about the number of job offers. However, due to the specific nature of the largest investors who hire Wrocław's graduates, i.e. shared service centres and production companies, it would be advisable to consider taking measures to support the creation of jobs which promote the development of experienced employees. The city should continue taking actions aimed at encouraging companies to locate, in Wrocław or nearby, investments in the form of research and development centres and to create highly innovative jobs. These activities are to be backed by a programme conducted by WADA, Driven by knowledge, thanks to which Wrocław is eliciting more and more

interest among investors offering attractive jobs, by setting up e.g. software house type entities which employ IT specialists. Also, large financial centres which initially only offered simple processing positions, are currently creating so-called Centres of Excellence, providing job offers for people with higher qualifications. Establishing the Wrocław Research Centre EIT+ has made it possible to bring many outstanding scientists to the city who not only conduct research but also work on its commercialization. Wrocław should continue supporting the creation of highly specialist jobs, which would enable retaining the most valuable experts, thereby preventing them from migrating to Warsaw or abroad.

Speaking of demography, we cannot leave out the question of immigration since it could have a significant impact on the number and cultural diversity of the residents of Polish metropolises in the near future. When designing new strategies, Wrocław's authorities should already be thinking about how to make immigration a positive phenomenon. Despite the fact that preparations for receiving immigrants from Syria and Ukraine are still in the early stages, the city should be thinking about preparing society and cultural and social aid institutions for the arrival of immigrants.

Bearing in mind the need to strengthen the human capital of the Wrocław agglomeration, we have begun working on the concept of promoting Wrocław on a large scale as an academic centre in Poland and abroad. In the first stage, we took over the managing of the office of the Teraz Wrocław project which promotes the city and its universities and supports the recruitment of students mainly from East European countries. Moreover, in cooperation with Wrocław's public universities, we are preparing a programme to promote the city's academic potential in Poland and abroad.

We want to diagnose the needs of the universities and, in the longer term, of the employers, as well as identify the most effective channels for reaching potential candidates. We plan to target our activities at young people not only from Europe, including e.g. Spain and Italy, but we will also try and reach the young generation of Poles living in the US who may find Wrocław's schools attractive for economic reasons. We want to promote Wrocław as a place not only for studying but also for living and developing a career.

Tomasz Śpiewak Director of the Centre for Promotion & Services at Wrocław Agglomeration Development Agency

In the city budget for 2015, the expenditure on education and upbringing was estimated at more than PLN 920m.

Social infrastructure

The standard and availability of social infrastructure have a significant impact on the residents' quality of life and their satisfaction with day-today functioning in the city. Access to day care centres, kindergartens, and schools as well as well-equipped health care centres increases life satisfaction in a given city. In Wrocław. the number of places in kindergartens and schools appears to be sufficient at present, with repairs to and the building of primary and lower secondary schools being the city's key investments in the social infrastructure budget. More than PLN 430m has been allocated for this purpose as part of the city's investment tasks for the years 2015-2019. The construction of the School and Kindergarten Group No. 12, which was possible thanks to co-financing with EU funds, is an example of a well-planned investment in the school infrastructure, making use of modern technologies and renewable energy sources. As part of this project, modern buildings housing a primary school, kindergarten, and library were erected, which meet the needs of the housing estate of Maślice which is undergoing intensive

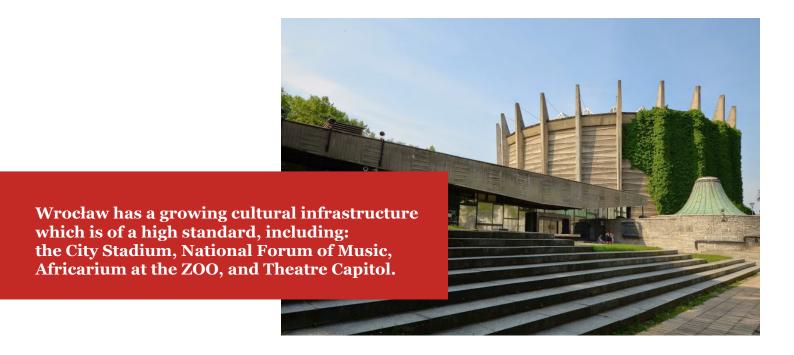
development. Activities of this type, tailored to the needs of residents in districts on the city's outskirts, are undoubtedly an effort to meet the inhabitants' expectations. On the other hand, however they encourage making the decision to move to the suburbs which could result in the further depopulation of the city centre. Looking at the bigger picture, primary and lower secondary education has become one of the more significant areas in Wrocław's development. This can be seen in the transformation of the Department of Education at the Municipal Office into a department which now has far more responsibilities; performing tasks in this area takes up a large part of Wrocław's funds. In the city budget for 2015, expenditure on education and upbringing was estimated at more than PLN 920m. The infrastructure in the area of health care is also changing – among the investments made in recent years, we should mention the New Voivodeship Hospital, the Academic Research Hospital in ul. Borowskiej, as well as the renovation of the Voivodeship Specialist Hospital in ul. Kamieńskiego.



Speaking of creating social infrastructure which could be of key importance to the city's further development, we should mention the plans to create local activity centres in various parts of Wrocław, which will be formatted in a multifunctional manner. Places for integrating local communities will be established above all on the outskirts of

the city. These will be spaces in which the residents are able to satisfy a wide variety of their social needs – among other things, there will be a club for senior citizens, a theatre, a space for small concerts. We want them to be places where people can connect and bond, and we are counting on such spaces to see an increase in the residents' activity.

Jacek Sutryk Director of the Department of Social Affairs Municipal Office of Wrocław



The broadly understood social infrastructure also includes leisure and meeting places for residents. Wrocław boasts a large number of old parks which, thanks to investments to renovate and promote them (the Wrocławianie na polanie programme), have become, in particular at the weekends, places for family outings and sports activities. At present, after the absence for many years of new green places on the map of Wrocław, investments in three new parks are under way: Ślężański Mamut in Oporów, Słoneczny Park in Ołtaszyn, and Park Jedności in Zakrzów – all of them put forward as part of the Wrocław Civic Budget. Among the new investment projects, the actions taken by the Wrocław University of Technology are also worth mentioning. The University has begun converting the boulevard at Wybrzeże Wyspiańskiego into an area for water sports enthusiasts.

This is a step towards developing areas on the River Oder, whose recreational potential is still not fully used due to the insufficient infrastructure for leisure activities on the river. By contrast, Wrocław has few swimming pools; the number (per resident) is relatively small. In response to this lack, there are plans to build a modern swimming pool, which is to be one of the investment projects prepared as part of the World Games 2017.

Apart from the basic elements of social infrastructure listed above, we should not forget about places which give residents space for integrating and for undertaking joint activities. It is in such meeting places that social capital is built, amongst others, in low-threshold places for young people, in which diversity is accepted, and which may even be created by young people to a certain extent. Such activities

support integration, prevent the social exclusion of young people who come from poor backgrounds, and teach taking responsibility for common spaces.

Wrocław has a growing cultural infrastructure which is of a high standard. High expenditure has been incurred or budgeted in connection with the construction of the City Stadium, the National Forum of Music, Africarium at the Wrocław ZOO, the renovation of Theatre Capitol and the preparation of the infrastructure for the World Games 2017. It will be a challenge to use these spaces in a manner which ensures they serve the residents, are profitable and that their maintenance is not too costly for the city budget.

In 2014, 86.6 thousand films were screened and 1,714 theatre plays were staged in Wrocław. The city's museums and exhibitions were visited by 1.2m people, and, once again, the most frequently viewed painting was the Racławice Panorama.

Quality of life

A significant element which affects the decision about choosing a place to live is the quality of life. According to the Wrocław Social Diagnosis of 2014, life satisfaction in Wroclaw is very high and is growing. We could list many factors which have an impact on the residents' comfort, starting from a broad range of job opportunities and attractive pay levels, through access to a diversified mix of services for the day to day care of children and elderly people, to the standard and availability of health care and cultural & entertainment activities. When considering the factors which affect the standard of living, we should not forget about the state of the natural environment, green spaces, noise levels or satisfaction with one's job or hobby.

The quality of life has the greatest effect on migration because a low standard of living makes the decision to move far easier. To prevent the city's inhabitants from emigrating, both abroad and also to other voivodeships or villages outside Wrocław, activities should be undertaken to improve their comfort. Access to a broad range of cultural events has a positive effect on the residents' quality of life. In order to inform Wrocław's residents about cultural events in an effective manner, the city has created a portal www. gowroclaw.pl which is used for placing information about all such events taking place in Wrocław. A Cultural Information Point has also been established. At present, it seems the problem is not about initiating new cultural activities but about informing the residents effectively about those already in progress. According to the

findings of the Wrocław Social Diagnosis of 2014, 9 to 14% of city dwellers make use of paid-for forms of culture on a regular basis, whereas the most popular spaces for spending free time are in the vicinity of the Market Square and in green areas. The most frequent forms of participating in culture include mass events and festivities and going to the cinema. In 2014, 86.6 thousand film were screened and 1,714 theatre plays were staged in Wrocław. Wrocław's museums and exhibitions were visited by 1.2m people, and the most frequently viewed painting was the Racławice Panorama.* A huge challenge faced by Wrocław is 2016, when the city will become a European Capital of Culture and when it will be clear which cultural projects evince the most interest among the residents.

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Reducing noise levels, increasing the level of security and making the road traffic less onerous still remain a challenge.

Senior citizens also deserve special attention. Due to changes in the age structure of the residents, the number of activities addressed to this group has been increasing for several years. We have seen a considerable increase in the number of non-governmental organizations offering preventive health care services, interesting forms of spending free time and education for groups of senior citizens. This shows the scale of the challenge which looking after elderly people will become, as well as the great potential of that social group. The Strategy of Support for Senior Citizens in the Nadodrze District is an example of including the elderly in the social life of the neighbourhood.

Reducing noise levels, increasing the level of security and making the road traffic less onerous still remain

a challenge. At present, the travelling time from the city centre to residential districts during the rush hour has increased by more than 40%, thus illustrating the gravity of the problem of traffic jams.

The above mentioned issues are currently being debated, with the participation of the residents. On 6 September 2015, a referendum was held in Wrocław. One of the questions concerned, among other things, reducing motor traffic in the centre of Wrocław, within the area of the so-called Cultural Park "The Old Town". The majority of people voted in favour of this solution (67.5%). It should, however, be emphasized that this result cannot be considered to be the vote of the entire community because there was only a 10.5% turnout at the polls.

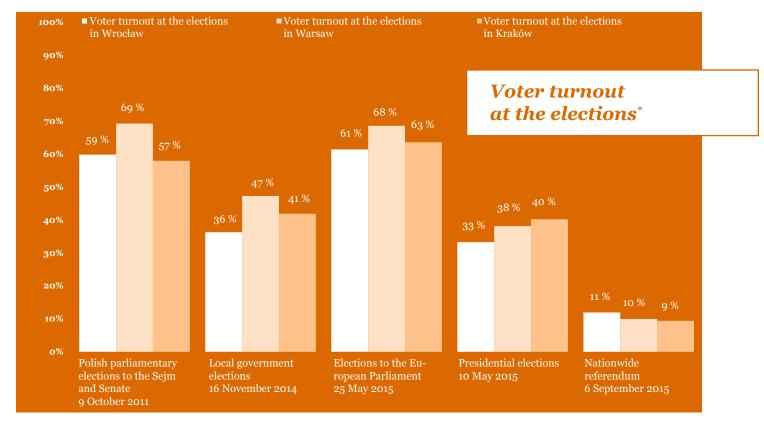
The city's image and forging the residents' identity

Wrocław is very effective at investing in building the image of an open, innovative, and dynamic city. Good positioning on the Internet and the implementation of a tourism development strategy for Wrocław for the years 2008-2013 have led to an increase in the number of both domestic and foreign tourists. However, the city must also remember to direct such promotion inwards, to its own residents. Such activities make people proud of the place they live in, encourage the residents to identify more closely with Wrocław, and increase the citizens' sense of responsibility for their city. Forging an identity seems to be a very important element of the city's policy, which is aimed at retaining the residents. A key project enabling the residents to participate in the city's management is the Wrocław Civic Budget. In 2014, over 150 thousand residents (i.e. one citizen

in four) decided about the allocation of PLN 20m. At present, a debate is being held about the Wrocław Civic Budget 2015 and another step to make it more participative. Wrocław may be the very first city in Poland to decide to extend to non-governmental organizations rights to carry out projects selected as part of the WCB. This would be an innovative step which would shape the residents' identity even more profoundly and which would integrate them by encouraging them to take joint action.

The further shaping of a civic society may pose a major challenge. The referendum held in Wrocław in September drew only 10.5% of those eligible to vote to the polls. The voter turnout at the nationwide elections in recent years has also been below the average in large cities.

A key project enabling the residents to participate in city management is the Wrocław Civic Budget. In 2014, over 150 thousand residents (i.e. one citizen in four) decided about the allocation of PLN 20m.



The lack of motivation among the younger generation to participate in projects for the good of the local community is worrying.



"The transformation of the masses into citizens and giving pupils an opportunity to have direct contact with the mechanisms of self-government, politics, culture, and the market" are referred to in the strategy Wrocław beyond 2020. However, the greatest challenge is indeed encouraging Wrocław's youngest residents to become involved. In the Wrocław Social Diagnosis 2014, the motives behind the residents' involvement in local activities were analysed. The lack of motivation among the younger generation to participate in any project for the good of the local community proved worrying – as many as 25% of the people aged 15-24 declared that nothing would motivate them to engage in such activities. That is why

the city is taking steps to encourage young people to express their opinions about trends in Wrocław's development. While working on another development strategy, the Municipal Office will ask lower secondary school students what the most important thing is for them and what, from their point of view, should be included in the strategy. Non-governmental organizations and the Wrocław Centre for Social Development are also working on getting young people involved in social activities. The numerous projects promoting voluntary work and showing opportunities for engaging in activities for the good of the city are producing measurable results.

Wrocław, which is very active and which demonstrates an ability to build broad partnerships, has great potential for creating innovative solutions to problems in the social sphere. All we need to do is create space for this and support the residents in developing new solutions, which will make Wrocław a more competitive place in which to live. At present, a place is being created which will be a centre for students' and citizens' activities; a meeting place for the local community, students, business representatives, and representatives of non-governmental organizations, in which innovative social projects affecting the city's development might be initiated and carried out.

Jacek Sutryk Director of the Department of Social Affairs Municipal Office of Wrocław It is important that the city cooperate with non-governmental organizations in creating social infrastructure. There is a lot going on in this area – a programme of cooperation with non-governmental organizations, adopted by resolution of the City Council, is a good example. Almost PLN 100m has been allocated for this programme. The city

is handing over the existing social infrastructure to non-governmental organizations, and they are revitalizing these spaces and then conducting social activities in them. We also have a programme which puts schools equipped with sports infrastructure under the obligation to make it available to non-governmental organizations after classes.

Infrastructure

Wrocław stands out among other metropolises in terms of infrastructural projects. However, can the pace of change match not only the growing needs of its residents but also encourage other people to settle in the metropolis? What steps should be taken to make Wrocław an attractive city not only because of its economic and market conditions but also due to its above-average quality of life?

In the course of our consultations, it was mainly the question of the so-called "hard" infrastructure merging with the city's social sphere that came to the forefront. Speaking of infrastructure, we should not confine ourselves exclusively to basic elements such as transport, public utilities or access to housing, but we should also take into account investments associated

with the natural environment, access to leisure as well as the city's cultural facilities. Wrocław's development strategy should take account of the changes which allow the offer addressed to potential residents to be made more appealing and the development of own creative solutions to the current challenges faced by the city.

Wrocław must not forget that each and every community is an individual case – instead of copying ready-made solutions, the city should create innovative "tailor-made" ideas which best suit the realities and specific nature of Wrocław's community. The most difficult task for Wrocław is to work out a further path for its development which would be attractive to both present and future residents and which would take into account the city's individuality.



Infrastructural challenges

The main infrastructural challenges faced by most Polish cities are issues related to ensuring order within their space, stopping the process of uncontrolled suburbanization, revitalizing urban space, and the efficient correlation of new residential projects with the transport infrastructure.

Wrocław is a city which allocates substantial funds to improving its infrastructure and puts into practice ambitious investment ideas, thereby making it stand out among other cities in Poland but, at the same time, it seems to always be a step behind the growing needs and requirements of its residents.

In Wrocław, there are 72 bike stations where 720 bikes await the residents.

> In 2015, there were more than 1m hires.



Wrocław residents have 220 km of cycle paths at their disposal.

Wrocław is fighting against traffic intensity

Improving public transport and making traffic less onerous are issues which most frequently come up in public discussions about the state of Wrocław's infrastructure.

Wrocław is listed as one of the most clogged up cities in Poland, and the reasons for this include: the uncontrolled expansion of the suburbs, the low competitiveness of collective public transport with individual motor transport, and the lack of coordination of planned investment projects with infrastructural expansion in individual parts of the city.

Wrocław is trying to meet these challenges – it has one of the most expansive systems of cycle paths in Poland stretching over approximately 220 km.

The current transport infrastructure development strategy is also trying to respond to the present difficulties by covering not only the expansion of tram connections (which includes extending a tram line to the housing estate

of Nowy Dwór) but also by creating ambitious solutions consisting of constructing an agglomeration railway connected with a "park and ride" system. Over the next few years, the residents of areas adjacent to Wrocław will be able to leave their cars near the city boundaries and get to the city centre by train within a few minutes. Another interesting solution which could be used due to Wrocław's location, including its two natural sailing routes, would be the return to water taxis or trams operating on the Odra River.

Improving the quality of public transport is not limited to making investments in infrastructure. Another necessary element is to promote means of transportation within the city limits other than cars. A good example of this type of activity is the leaflets prepared by city institutions for the employees of the largest companies in Wrocław, containing information about public transport and the connections available near a given location.

City's such as Vienna could provide inspirations for the development of alternative forms of public transport. The city of "short distances" is consistently promoting the idea of sustainable development in transportation, e.g. by facilitating pedestrian traffic, ensuring high quality travel by public transport to elderly people, the disabled or parents with children, by promoting bicycle transportation and by "making it hard" for motor traffic (e.g. by eliminating parking spaces at street level and providing more expensive underground car parks).



Wrocław as a properly planned city

Based on the interviews we have conducted, one of the key requirements for reducing traffic congestion in the city is proper land use planning in Wrocław.

According to the people we interviewed, new housing estates should not only have a residential function but they should also guarantee easy access to services, education and entertainment. When locating sites for them, the possibility of using means of transport other than cars should also be taken into account, such as railways, trams or a city bike system.

To achieve this, the city would to open up to a new public management model based on cooperation with nongovernmental organizations, private investors as well as Wrocław's residents. At present, private investors' decisions are often concentrated on areas other than local government's planned activities aimed at expanding or improving the quality of the city's

infrastructure. Coordinating these activities and drawing up plans based on transparent communication would make it possible to create places of sustainable development for Wrocław's residents and also reduce the cost of investment activities.

Examples of the activities which are already being undertaken to meet these challenges include the housing programme which has been adopted which anticipates putting up attractive areas for development in various regions of the city for approximately 120,000 residents and which, from the very outset, has covered issues related to tailoring the infrastructure with regards to sewage disposal, water supply or access to public transport. At the same time, the city is beginning to open up, more and more frequently, to talks with companies which are already operating or potential investors to adapt the transport infrastructure to the volume of commuters. By transferring such activities to the sphere of residential projects, Wrocław

has the chance of going down in the ranking of cities coping with problems with the transport infrastructure.

Wrocław's residents also seem to think highly of the civic budget programme thanks to which they have the chance of tailoring the infrastructure to their basic needs, demanding the implementation of ideas such as lit jogging paths, outdoor gyms and the expansion of green areas.

Dorota Jarodzka-Śródka

Chair of the Management Board Archicom Group

In view of the dynamic development of the housing market in Wrocław and the scale of developers' operations, it is worth thinking about coordinating their activities with the city development policy. Pre-selecting the areas in which new housing could be concentrated would contribute to a reduction in the costs incurred by the city and investors, which would, in turn, translate into benefits for the residents (including the availability of housing and full technical and social infrastructure). A well-designed Local Land Use Plan could become the foundation for cooperation between the developers and local authorities.

Basing the city's activities on social dialogue, and coordination with private investments, could effectively counteract the uncontrolled expansion of the city. Suburbanization and, more precisely, the accompanying spatial chaos, is a phenomenon which could prove to be one of the main hindrances to Wrocław's harmonious development.

Uncontrolled expansion of city areas

Basing the city's activities on social dialogue, and coordination with private investments, could effectively counteract the uncontrolled expansion of the city. Suburbanization and, more precisely, the accompanying spatial chaos, is a phenomenon which could prove to be one of the main hindrances to Wrocław's harmonious development.

The lack of transparent rules for expanding the suburbs contributes to, among other things, the degradation of the natural environment, the inefficiency of transport systems, an increase in the costs of services provided by the city (new areas which need to be provided

with the basic utilities, and low-density housing makes the costs of building and maintaining the infrastructure higher). Reallocating residents to areas adjacent to Wrocław also contributes to a reduction in the city's funds due to the loss of income tax revenues – a decrease in these revenues often makes it impossible to carry out many investment projects, including those relating to the revitalization of urban areas, which might encourage residents to settle in the centre of Wrocław.



Activities which consist of enhancing the residential, economic, and cultural functions as well as improving security (which will lead to improvement in the quality of life in the city centre over the next few years) may ease urban pressure in the suburbs and lower the costs of building Wrocław's infrastructure.

Revitalization of the city centre as a solution to processes of uncoordinated suburbanization

Restoring the city's ability to develop by revitalizing socially and economically degraded districts is one of the primary objectives of the city development policy.

Making the centre of Wrocław more attractive could effectively mitigate the phenomenon of uncontrolled suburbanization. However, it should be remembered that revitalization is not only an infrastructural but also a social process intended to improve the living conditions for residents. In practice, what are often considered revitalization activities (in practice, the modernization of the facades of tenement houses) do not, in fact, have much in common with such efforts. Limited understanding of this concept is the most frequent obstacle to the accomplishment of the planned results. Revitalization must be preceded by an in-depth diagnosis of the problems which occur in a given area and, subsequently, consist of taking integrated remedial measures both in the sphere of infrastructure and in the social sphere. In West European countries, revitalization ceased to be regarded as a method of renovating damaged tenement houses or repairing an insufficient transport system a long time ago. It is a tool for resolving social problems and comprises both hard and soft activities addressed to the local community. Spatially and socially degraded areas are those most frequently coping not only with the poverty of its residents and social pathologies; the low levels of social activity and involvement on the part of the residents, lower levels of education and more severe difficulties with public health care also cause problems. This is the reason why revitalization is also treated as a tool for improving security and public order.

Przemysław Filar

Chairman of the Society for the Beautification of Wrocław

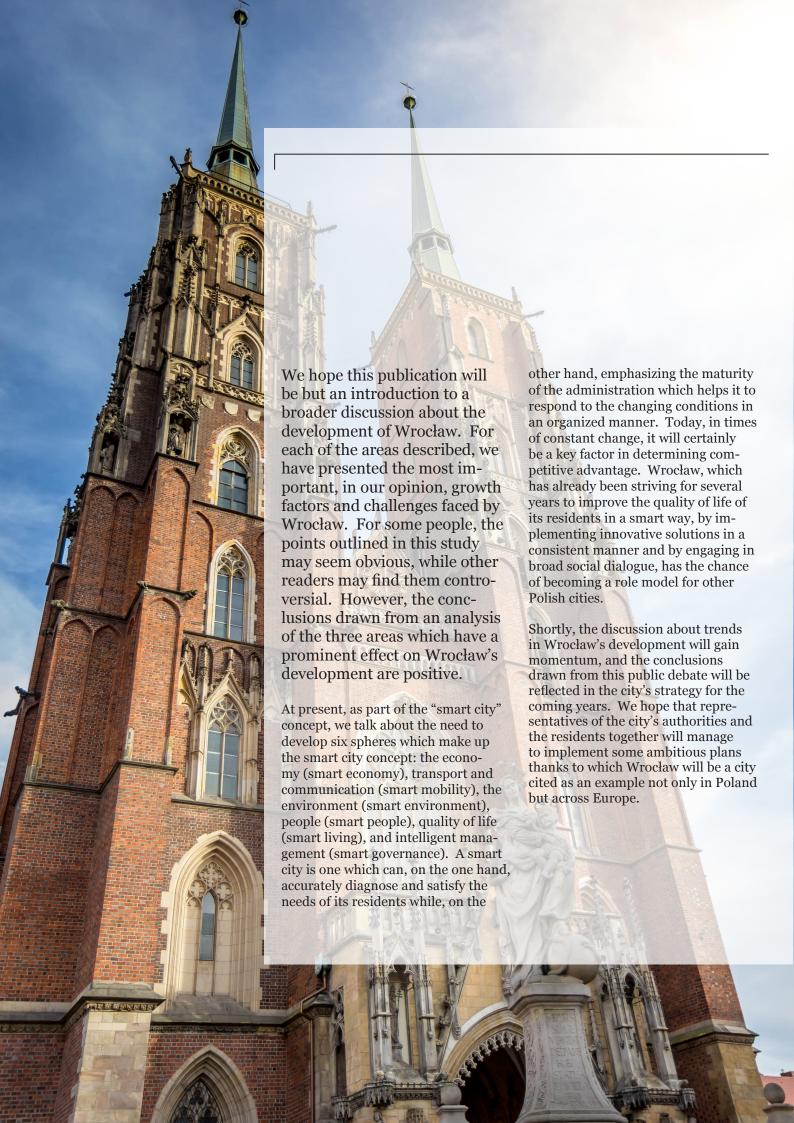
The main task of the public utilities infrastructure is to connect Wrocław's residents to the heat distribution network. Funds for these investments can also be raised under environmental protection programmes.

Examples of European cities which are good at undertaking revitalization activities which address both infrastructural and social problems include Leipzig and Bilbao. Bold ideas which consist of using free space in the city centre for building detached houses, designating buildings for non-commercial use by members of cooperatives and placing idle post-industrial facilities which are unsuitable for living in in the custody of so-called house guardians, contribute to improving the residents' quality of life and promoting cities in the international arena. In the case of these cities, the revitalization activities are based on a broad, long-term strategy, dialogue between public-private entities, and getting the architects, urban planners, developers and city dwellers themselves involved in the revitalization process.

Activities which consist of enhancing the residential, economic, and cultural functions as well as improving security (which will lead to improvement in the quality of life in the city centre over the next few years) may ease urban pressure in the suburbs and lower the cost of building Wrocław's infrastructure. It seems, however, that Wrocław is still faced with a challenge in the form of devising a comprehensive revitalization programme such as the one adopted in Łódź, or the one currently being discussed in Wałbrzych ("Communal Programme for the Revitalization of the City Centre for the years 2015-2025"). With considerable support from EU funding (approximately PLN 25bn will be available under operational programmes) and the relatively small share of own funds over the next few years, Wrocław has the chance of revitalizing most of the areas

Improving the quality of transport, curbing the urbanization chaos, and revitalizing urban areas are the key areas, from Wrocław's perspective, which require decisive and bold action to be taken by the city. In spite of these challenges, Wrocław has the potential to become a city which is selected not only because of the employment opportunities but also an above-average quality of life. Effective infrastructure management combined with economic development could turn Wrocław into an innovative location which, in particular attracts young people. Over the next few years, Wroclaw should take the most comprehensive actions possible to make use of its potential and lay out a coherent, harmonious vision of its development so as to become not just a temporary stopover for its residents but a place in which to live.

Improving the quality of transport, curbing the urbanization chaos, and revitalizing urban areas are the key areas, from Wrocław's perspective, which require decisive and bold action to be taken by the city.



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