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PUBLIC TRANSPORT IN EU PROJECTS ON THE EXAMPLE OF THE CITY OF BIAŁYSTOK

Abstract

Raising the level of mobility for urban populations is of interest to the authorities of practically all major governments. Projects of European Union funding (2007–2013 and earlier) enabled the process of reclamation and regeneration of public transport as well as the necessary infrastructure to accelerate. Larger urban units such as provincial capitals faced even more difficult task – the integration of public transport in the metropolitan area.

The paper aims to present three integrated projects implemented by the City of Białystok, in collaboration with its communication companies on public transport. The projects and their strategic relationships may be an example of long-term planning by financial means of different programming periods.

Key words: bus lanes, mobility, long-term planning

Introduction

Raising the level of mobility for urban populations is of interest to the authorities of practically all major governments. Projects of European Union funding have made it possible to accelerate the processes of reclamation and regeneration of public transport and the necessary infrastructure. Larger urban units such as provincial capitals were faced with even more difficult task – the integration of public transport in the metropolitan area.

Public transport is a problem in almost every major urban center, being a sphere of activity involving the performance of transport services in the city and suburban areas. The issue of urban transport affects mainly passenger transport, so the term is sometimes used interchangeably with the term public transport [Rydzkowski, 2008: 213–214]. The use of specific transport solutions mainly depends on local conditions: ability to implement them as well as particular problems and needs. The cost of a project is also of a great importance.

Since 2004, under the Integrated Regional Operational Programme and especially since the start of the financial perspective 2007–2013, Białystok carried

out works to improve the quality of the public transport system. Both the scale of the projects and their relationships are examples of strategic thinking within local government.

The paper aims to present three integrated projects implemented by the City of Białystok, in cooperation with its transport companies. Furthermore, it emphasizes formal and legal complexity of the project implemented by several communication companies, in collaboration with several departments of the Municipal Office, for a period of almost a decade, of EU funding under different programming periods and a number of programs. The case of Białystok is a lesson for other governments comparable in terms of population and urban spatial structure, indicating that only the consistent implementation of the assumptions, based on statistical data and prognosis of future needs can cause the desired effect. The projects and their strategic relationship may be an example of long-term planning by means of different programming periods.

Białystok and his functional area – why a new public transport system?

For almost a decade Białystok city has been leading strenuous work to improve the quality of road infrastructure and better matching the needs of the urban agglomeration of nearly half a million inhabitants. A large area (Białystok – 102 km²; Białystok Funcjonal Area (BFA)¹ – about 1729 km²) with very different density of population (e.g. Białystok – 2891 people per km², about 295000 population, BFA including Białystok – 238 people per km², about 411 500 population) [*Strategia Zintegrowanych Inwestycji Terytorialnych*, 2014: 9–11] forced to seek flexible transport solutions. Due to the great diversity of the area two options were considered: the creation of combined transport (the solution financially difficult to introduce, forcing passengers to change the means of transport during the move, requiring a permanent and sustainable numerically passenger flows, of lower technical mobility, but theoretically more economical in the long run) or the use of universal solutions (one means of transport of high mobility, relatively inexpensive to implement, not necessarily the cheapest in the long term). Additional parameters that were taken into consideration were the vastness of the area and its considerable diversity of demand for public transport, as well as the technical issues and spatial planning of the implementation of individual ideas. In Białystok, as a result of analyses, the second option has been chosen [*Szybka kolej w przewozach pasażerskich w Białymstoku*, 2007: 96–105].

¹ Ten neighboring municipalities of Białystok: Choroszcz, Czarna Białostocka, Dobrzyniewo Duże, Juchnowiec Kościelny, Łapy, Supraśl, Turośń Kościelna, Wasilków, Zabłudów, along with Białystok create the Białystok Functional Area (BFA); more at: official website of the Białystok Functional Area, <http://www.bof.org.pl/> [access: 1.09.2014].

The issue of public transportation and passageways quality was recognized in the Strategy for the City in 1996 [*Białystok Development Strategy for 1996–2010*, 1996]. However, a slight pressure put on the matter in the jungle of other targets contributed to the fact that projects in this area were carried out rather ad hoc and in a situation of absolute needs than at the level of prevention and forward planning. It was not until the launch of the EU funds for such investments in the Municipal Office in Białystok that a long-term plan (constantly improved) has been constructed to improve the quality of the public transport system.

The aim of the paper is to present the experiences that stem from the integrated and long-term projects (from 2005 to 2015 – the period of the three stages of “Improving the quality of the public transport system in the city of Białystok”) for public transport. The case of Białystok can determine a certain fictional level of profitability for the implementation of other forms of transport – dependent on the number of inhabitants and interest in public transport. Much depends on the construction and population density, demographic situation and prospects and the future of transport and traffic trends. Such a case could be used by local governments in a similar situation.

Białystok is an important transport channel in EU [*Transport Development Strategy to 2020*, 2013: 51–55]. Regional, national and international routes intersect within the city; additionally, there is a natural movement of agglomeration. Such high intensity strengthens communication problems, making them the issue that needs a solution.

Interference with public transport – local government and communication problems

Under the Act of 16 December 2010 [Dz.U., 2011] on the public transport, local government is required to ensure proper transport. In this way, local governments were given a tool to carry out tasks in the field of transport. Article 4 of the aforementioned Act in the fourth section defines public transport as municipal passenger transport carried out within the administrative boundaries of the city, either:

- a) the cities and villages;
- b) the towns; or
- c) neighboring municipalities;

if the agreement was made or an association was created for the joint implementation of public transport.

In further articles, you can also read that the Budget Bets are to meet the challenges of transport on the lines indicated by the municipality as a service provider. The town is operated by Białystok City Transport (formerly the Department of Roads and Transportation) and transportation is implemented by three municipal companies: Komunalne Przedsiębiorstwo Komunikacyjne – KPK, Komunalne Przedsiębiorstwo Komunikacji Miejskiej – KPKM and Komunalny Zakład

Komunikacyjny – KZK. The competition between these entities has led to the improvement of the quality of public transport.

There are at least a couple of reasons, in addition to already identified availability of EU funds, which contributed to the activation of local governments in this area. First of all, attention has been paid to the problems of larger agglomerations and time as a value [Chen, Liu, Du, 2011]. Large cities such as Białystok are a kind of work centers where workplaces use the labor force both from native metropolis and neighboring areas. This means that passenger flows are constant – to the centre in the morning and centrifugal in the afternoon, simultaneously increasing the heavy traffic in the given hours [Redmond, Mokhtarian, 2001: 179–205]. Often, neighboring municipalities are referred to as “metropolis bedrooms.” As a result of these passenger movements, time (speed of transport) plays a key role.²

The proper measurements of the size of passenger flows with the use of a number of methods allow to identify key directions of the daily migration. In this way, the channels (their width, bandwidth) may be better adapted to traffic needs and the transport itself can be redirected to other more relevant routes with extra low-impact on the city traffic [Daamen, 2004]. Another very beneficial solution is also the implementation of bus lanes, which accelerates the movement of passenger transport. Of course, the problem of bandwidth is virtually impossible to fully resolve [Daamen, 2004: 174–177], but proper planning can predict in which parts of the thoroughfares further congestion might appear and allows to expand these accordingly, including bus lanes when advisable [Qiu, 2014: 54–55].

Analysis of urban traffic is essential to provide adequate living conditions for urban residents. Heavy transit traffic is particularly burdensome for urban communities. Reducing its course through space with very high population density reduces noise and environmental changes. By implementation of appropriate transport policy, even in the centres of large cities there may be created quiet and touristically interesting places. Blocking the main streets and changing their purpose (e.g. traffic-free) can also increase the attractiveness of such sites [Antso, Antov, Mäe, 2013: 4–5].

In the City of Białystok replacement of the bus fleet was almost indispensable. Most of the machinery were vehicles reaching or exceeding twenty years of age. On the roads there were e.g. Ikarus buses, whose specification could by no means meet current standards. The use of newer fleet made it possible to improve the safety of passengers.

Another element that supports the interference with transport and is related to replacement of the fleet is the environment. The use of electrified connections such as trams or trolley allows a significant improvement of the environment. Yet, it should be noted that not every situation enables the introduction of this kind of

² According to R. Antczak of Deloitte Poland, there is about 3.7 billion PLN year losses for the national economy as a result of insufficient capacity and lengthen travel time; an electronic document, the title of access: <http://serwisy.gazetaprawna.pl/transport/artykuly/784405,kierowcy-tracami-liardy-stojac-w-korkach.html> (as at: July 19, 2013).

technology. Therefore, the use of buses powered by oil, CNG and hybrid engines also allows to improve the quality of the environment. The very movement of the stream of passengers from cars to public transport reduces the contamination of the environment [Bartocha, 2008: 16–21]. Large urban agglomerations of significant population density usually face the problem of air pollution, so every solution that could improve its condition is worth implementing [Schmidt, Glasson, Emmelin, Helbron, 2008: 221–222].

Another issue is to provide the travelers with satisfactory level of comfort. Here a significant role is played by both the road infrastructure and the bus fleet. The use of transport solutions enhancing well-being of passengers (adequate heating, convenient transportation, air conditioning, tinted windows, etc.) are as important as the creation of good quality road connections. It is worth mentioning that, on average, one bus ride replaces about 50 cars, which clearly affects the urban traffic.

Relief system encourages inhabitants to use public transport too. Groups particularly dependent on public transport such as students and young learners, as well as the elderly and decrepit by gaining access to public transportation are not excluded from the life of cities [www.komunikacja.bialystok.pl/?page=cennik-2014].

These are only some arguments proving the profitability of investments in public transport and daily migration channels. The cost of road infrastructure, permanent financial problems of urban transport companies³ are the main obstacles preventing changes. EU funding enabled the start of work on changing the image of public transport. It was no different in Białystok, where a plan was launched to improve the quality of the integrated public transport system based on the strategy prepared many years before.

Public transport in the strategy of Białystok

In internal documents as well as in sectoral, medium- and long-term plans of Białystok City Hall public transport plays a major role. Due to the leading role of the City of Białystok in Podlaskie Voivodship (capital, the center of the development of the region) with its polycentric nature in relation to neighboring municipalities, implemented strategies must be meticulously prepared and take into account all these elements.

While creating a long-term strategy for more than 10 years, public transport issues have been moved to a prominent place. They have become one of the main elements of government policy. The purpose of “Białystok City Development

³ Public transportation has always been subsidized, because for the fare to be financially encouraging, it must be much lower than the cost of maintaining the private car. In this way, governments must make a contribution to transport on average of about 50% of the total cost. In Białystok the contribution is about 1/3 of the ticket price.

Strategy for 2011–2020 plus” was to define the main directions of action for the next decade [*Białystok Development Strategy for 2011–2020 Plus*, 2010].

A noteworthy task of the City is to stimulate socio-economic development. The importance of this sphere in the context of the activities of the authorities is particularly significant. The quality of space, land use, condition and level of technical infrastructure, efficient transportation system largely influences the quality of life in the city and how it operates [*Białystok Development Strategy for 2011–2020 Plus*, 2010: 1]. Availability of the road network is essential for companies operating in the area. For employees also public transport plays a significant role – it should allow fast travelling from the place of residence to the city center, as close to the workplace as possible.

The basis for the investment in the development of public transport of the city of Białystok was Białystok City Council’s Resolution No. XXXVIII/466/09 of 23 February 2009 [*Integrated Development Plan of the City of Białystok Public Transport by 2015*, 2009]. An annex to this resolution contained integrated plan for public transport. It includes specific objectives for the program, which were to: contribute to reducing the problem, to improve the safety, quality of both transport and environment and to reduce the time of transit within cities. In addition to the modernization of the main roads, other elements innovative in the region such as “high quality bus corridors” were included. That was supposed to solve the problem of insufficient public transport punctuality and to encourage the use of public buses [*Białystok Development Strategy for 2011–2020 Plus*, 2010]. Public transport – at least in the city center, where bus lanes were planned to be introduced – would get a significant time advantage over the private means of transport.

In the course of preparatory studies different solutions were tested, which at that time could be deployed in Białystok transport. Unfortunately, urban changes that took place in Białystok have made it virtually impossible to implement tram and unprofitable to invest in trolleybus transport. Due to the required considerable mobility of vehicles the government decided to maintain the conventions based on buses [*Szybka kolej...*, 2007]. It was the only means of transportation allowing to create any route and to constantly adjust them with practically no interference with the landscape.

In order to ensure the safety of public transport users and to improve the quality and speed of traffic, the actions have to be taken in many aspects. City Office in Białystok, implementing a project titled “Improving the quality of the public transport system of the city of Białystok” chose not to use EU funds only to replace the bus fleet, but to implement the previously prepared strategy – to make a reform of Białystok communication.

Well-prepared strategic documents supported by a thorough analysis of the situation in Białystok and neighboring municipalities have set the direction of implementation for individual entities. The realization of EU projects with such great importance and scale required the use of a very diverse staff potential. The project began with the EU funding for local governments and is estimated to last approximately 10 years. Each element of the program has found its place not

only in the individual annual budgets of the city, but also in perennial financial projections. The financial security of the project was a basic prerequisite for its implementation. City, due to its importance in the region, has also received additional assurance that the project will be continued by putting subsequent stages on the list of indicative projects.

Three stages – improving the quality of the public transport system in Białystok

The major and multi-stage project carried out in the second financial perspective (the first stage in 2004–2006, the second and third in 2007–2015) is “Improving the quality of the public transport system in the city of Białystok.” The main reasons that contributed to the implementation of the program includes things like [*Improving the Quality of the Public Transport System of the City of Białystok*, 2004]:

- worsening traffic in the city centre;
- decrease in demand for the use of public transport – more people had their own car;
- inadequate quality of public transport services caused by worn-out fleet and transport not prepared for the disabled or the elderly, strollers, bicycles, etc.;
- insufficient level of safety and comfort, resulting, among others, from the poor condition of the road surface, bus bays and fleet;
- exploited infrastructure in the form of bus stops and bus bays;
- nuisance of urban transport for residents and the environment visible for example in high levels of noise produced by the old bus fleet and unsecured urban thoroughfares, as well as in high level of pollutant emissions from outdated vehicles.

The first phase was carried out using funding from the European Regional Development Fund (ERDF) under the Integrated Regional Operational Programme. After passing a multi-stage evaluation of the project financing, agreement was signed on September 16, 2005; the total value of the project was 66 million PLN (including co-financing from the EU – 36 million PLN) [<http://www.bialystok.pl/347-fundusze-europejskie>].

In the first phase investments were aimed at loosening the crowded streets of the city center and having a positive impact on the quality of transport services, their safety and the environment. There has been modernization of a communication route including streets: Kapernika, Zwierzyńska, 11 Listopada, Curie, Liniarskiego until the street Kalinowskiego, where hospitals, the court and universities are located – points of strategic importance to the residents of the city and the province. With the changes the capacity of roads increased to 115 kN/axle. Besides, the city purchased 43 buses that meet the highest standards for emissions and ensure greater availability of transport for disadvantaged groups

(e.g. disabled, elderly) [*Improving the Quality of the Public Transport System of the City of Białystok*, 2004].

City of Białystok in this project was not the only beneficiary. Above all, it played the role of the partner leading and accounting the project. The activities included, however, all transport companies (KPK, KPKM and KZK) which allowed to a large extent to use the practical experience of people employed in urban transport system and match solutions to meet the needs of users. Companies participated mainly in the purchase of new fleet. Buses were purchased for 41 million PLN (of which more than 64% of the cost was financed by the ERDF). The remaining part was paid by Białystok transport companies [<http://www.bialystok.pl/347-fundusze-europejskie>].

Implementation period from signing the contract to finishing the modernization of the last communication route (October 2007 – St. Kopernika) was 25 months. For such a large and complex project it was a relatively short time. The project has helped to increase the comfort of travel, and the modernization of the street surface not only improved the conditions and safety, but also contributed to reducing the noise in the centre of Białystok.

The second and the third stage were developed technically in transition between programming periods. This way the City of Białystok at the time of mobilization of the Polish Operational Programme Development of Eastern Europe 2007–2013 was ready to apply for funding. On March 26, 2009, the City of Białystok as the first city in the Polish Operational Programme Development of Eastern Europe 2007–2013 (Axis III, Measure 3.1 urban public transport systems) signed with the Polish Agency for Enterprise Development an agreement awarding a II phase contract for more than 117 million PLN (the total value of the project – 157 million PLN). Once again, Białystok has excelled in size of the obtained funding – this time it was the leader of Eastern Poland [<http://www.bialystok.pl/347-fundusze-europejskie>].

A key target adopted in the second phase of the project was to “increase the mobility of the inhabitants of Białystok metropolitan area and to improve the functionality and economic efficiency of urban transport.” The plan was aimed at encouraging residents to use public bus transport and prevent passenger cars from travelling around the city centre. In this way, the city also was supposed to meet one of the priorities of metropolitan functions that Białystok performs in the region.

The second stage includes the modernization of Produkcyjna street, rebuilding Antoniukowska and Knyszyńska streets and constructing a ring road (from Zwierzyniecka to Mickiewicza street). In this way traffic on the main thoroughfares of the city was lightened by re-directing it into a larger ring. Besides, the city purchased 24 articulated and 24 standard buses. This division was to ensure better alignment of the fleet to the needs of individual lines. New machines meet even higher standards for the amount of fuel consumed and emissions [<http://www.bialystok.pl/347-fundusze-europejskie>].

The last but not least important element was the start of construction of the Dynamic Passenger Information System. Its main task is to provide cur-

rent information about bus movements in a visual form. This is achieved by installing electronic information panels at bus stops. Another part of this system was Białystok City Card, which thanks to its functionality can be used in many places as well as developed in the future with further functions. The Card has become a part of the Municipal Integrated Management System, which is necessary to improve the economic efficiency of companies. Furthermore, the system will eventually consist of a central system located in the Control Centre at the Municipal Office of Białystok and specialized subsystems working in the city: on-board systems on vehicles, places of sales and personalized card. The electronic card itself may be considered one of the subsystems.

The third stage (2011–2014) complements the previous two, and it is connected with the largest bus purchase realized by municipal companies. There were 70 vehicles (equipped with air conditioning) bought. However, the main part of the third stage is to build an interchange centre in a place where more than 30% of bus lines cross and taxi stations are located. Furthermore, the place will also have a managerial centre for collective transport.

The third stage is the biggest financial element within the project. Its value exceeds 195 million PLN, with funding exceeding 138 million PLN [<http://www.bialystok.pl/347-fundusze-europejskie>] It should be noted that this stage was included in the list of key projects, thus ensuring the City of Białystok as soon as during the second phase, that it can count on the completion of ongoing investments.

All three stages of quality improvement form the program for Białystok public transport, taking into account changes in traffic. Efficiency, transport safety, as well as the quality and speed played a crucial role in the project. And although the plan is still being implemented, it can be said that at present there are already visible positive effects of the work.

“Improving the quality...” – conclusions

The first stage of “Improving the quality of the public transport system of the city of Białystok” was a kind of early experience for Białystok City Hall in the implementation of such projects. During the first EU programming period in which Poland participated, despite a considerable amount of EU funds and the availability of funding, the interest was rather negligible. Białystok was one of the exceptions. It could be considered a public pioneer of large and integrated infrastructure investments in Poland (the project received the greatest funding from the Integrated Regional Operational Programme in the Podlaskie Voivodeship).

The first project included primarily the city centre and the smallest of three ring roads. The next steps were carried out with a much larger scale and included critical highways (and their intersection) of the whole city.

In order to adapt to the requirements of public transport users with disabilities, low-floor buses have been equipped with a system of voice announcements. Besides, most vehicles have retractable ramps, making it easy to navigate for peo-

ple in wheelchairs. Moreover, all vehicles installed digital surveillance system consisting of cameras, recording device and monitors. Each bus also has a GPS system with the recorder drive and a device for controlling the traffic lights in the “corridors of high quality,” which greatly reduces the travel time.

The introduction of an electronic card payment for public transport was a very interesting solution. It is a system based on the smart card, which allows for greater freedom in creating extensions. In this way in the future it may become a universal solution to pay for many public goods.

In addition to season tickets, city card also has the ability to function as pre-paid. It is worth noting that there is a possibility of charging via the Internet without leaving home. This allows anyone to purchase any ticket with any relief on any route without the need for multiple paper counterparts. This clearly increased the convenience of public transport.

The introduction of the card system in Białystok made it possible to replace the traditional paper tickets with new carrier of information, and as a result of using the card in buses, transport organizer collects information on actual passenger flows and demand for services. The system was also supposed to identify the load on the various sections of the route. The third step is to employ an electronic solution so that it would count the number of comings and leavings. Thus, in the future it will be possible to effectively adjust the number and size of vehicles to daily changes in passenger movements, which will reduce overloading of vehicles as well as contribute to the elimination of unused connections – economic efficiency of traffic will be improved. Based on the findings obtained, database will be created to modify the bus fees and ensure growing attractiveness of public transport.

Equipping the buses with visual and auditory systems (bus stop name can be heard inside and outside the vehicle) facilitates the use of public transport for disabled people. The driveways, curbs reduction, special facilities in the middle of the vehicle allowing e.g. stable position of strollers certainly contribute to benefit of passengers with motor problems or traveling with a pram.

New bus fleet meeting the latest standards, with air conditioning and heating systems also improves the quality and safety of travelling. Buses have an automatic transmission, which further influences the comfort of the passengers.

Moreover, the upgrading road network and the creation of more bus lanes contribute to the safety, quality of transport, and to improving the punctuality, which in turn increases interest in the use of public transport.

Both competitive ticket price (single – 2.7 PLN) and speed compared to travelling by car makes public transport a more favorable alternative. Taking into account costs of private vehicle with problems and parking charges in cities such as Białystok, using buses seems much more convenient.

The reorganization of transport enabled the city to improve its performing the metropolitan functions. Unifying the transport and charges in the neighboring communities of agglomeration facilitated the movement of people to and from places of work, study or entertainment without the use of private means of transport.

An example of an alternative approach to public transport is Olsztyn (176,000 inhabitants), where since 2006 a plan for the establishment of three tram lines

has been implemented. The basis for action were proposals made by the inhabitants of the city. Trams would complement the already existing communication network of CNG-fueled buses. “Modernization and development of an integrated public transport system in Olsztyn” is a project of approx. 364 million PLN, implemented with the support of OP DEP [http://www.polskawschodnia.gov.pl/projekty/strony/modernizacja_i_rozwoj_zintegrowanego_systemu_transportu_zbiorowego_w_olsztynie.aspx]. In mid-2014, the progress of this project was about 10% when the corresponding project in Białystok was approx. 70% complete. Both projects must be completed by 31 December 2015 so that the beneficiaries do not have to return the financing [*Program Operacyjny Rozwój Polski Wschodniej 2007–2013*, 2013: 3].

Białystok is the first city in Poland, which purchased the buses meeting the emission standards EURO 4 [<http://www.bialystok.pl/745-poprawa-jakosci-funkcjonowania-systemu-transportu-publicznego-miasta-bialehostoku---etap-i/default.aspx?media=print?media=print>] (and in subsequent auctions, also EURO 5 and in 2014 EURO 6) [<http://infobus.pl/text.php?id=55892>]. In each of the auctions there were requirements set for the highest European standards of exhaust purity, fleet fully accessible for people with disabilities and a significant proportion of low floor in the total area of the passenger compartment. The second and third stage contains passages tightening CO₂ emission standards, as well as the elements included in the vehicle equipment were broadened to include air conditioning and electronic information systems for travelers and comfortable, individualized system of seats.

At the time of the preparation of urban transport investment plans (2007–2008) an analysis of the bus fleet has been made. The average age of the vehicle was then more than 11.5 years, and the low-floor buses constituted a little more than 20% of the total fleet (Table 1). Besides, they were highly unreliable, with high mileage and their use was associated with a relatively high cost [*Integrated Development Plan of the city of Białystok public transport by 2015*, 2009].

Table 1

Number, average age of the vehicles and the percentage of low-floor units by the company (as of May 1, 2013)

Number of vehicles (in units)	Average age of vehicles (years)	Number of low-floor vehicles in relation to the whole bus fleet (in %)	Abbreviation for bus transportation company serving in Białystok
65	6,1	83,1	KZK
98	6,8	91,8	KPKM
99	6,3	98,0	KPK

Source: own study based on: Aleksiejuk, 2013.

As a result of project activities, the city has achieved very positive results in terms of the age of the vehicles and their adaptation to the diverse needs of customers. Two indicators are worth mentioning: the average vehicle age of 6.4 year and the number of low-floor vehicles oscillating in the range of 92% (Table 1).

Current transport fleet carries out tasks on 39 bus lines and three night lines. [www.komunikacja.bialystok.pl] Currently, public consultations regarding the creation of three additional night lines are being conducted [<http://www.bialystok.pl/154-szczegoly-aktualnosci/newsid/5161/default.aspx>]. This created the availability of public transport in accordance with the needs of passengers.

Connections to the city from suburban communities (as well as a replacement for their own connections within communities) are carried out directly by 5 lines operated by the companies reporting to the BKM, and not directly by increasing the city's 13 lines.

Indirectly, the integrated project aimed at rebuilding the road network to offset the heavy traffic of the city centre to the ring roads and bypasses. In this way, there has been improvement in the quality of life of residents (both in terms of pollution and noise), acceleration of urban traffic and increased security.

In the summer of 2014, a Białystok Cycling Communication System called BiKeR was implemented [http://bikerbialystok.pl/news/biker_jedziemy]. Currently, the system has more than 30 stations with 300 bicycles [http://bikerbialystok.pl/news/biker_jedziemy]. Because of the large (8th city in Poland in terms of length of bicycle paths in 2014) [<http://wrower.pl/miasto/dlugosci-sciezek-rowerowych-w-polskich-miastach,2044.html>] and the ever-growing number of bike paths, the system is a form of diversification of public transport, which can restrict the movement of private cars.

Not cure, but prevent – such an advice might be given after analyzing the state of public transport throughout the country. Most cities have not yet developed the appropriate thought patterns allowing long-term planning. And now when determining the future use of the individual areas, during the construction of road infrastructure, it is important to create appropriate transport facilities. Consequently, cities will develop properly prepared for the increasing demand for transport services in new residential areas. A great example of the relevant policy is Białystok, which in Transportowa street few years ago (with the renovation of the road infrastructure) has prepared space and bays for future bus stops adapted to the needs of a much larger passenger flows. The plan was that blocks of flats would be built in the area by several developers. As a result of thrift, now the city does not have a problem with the demarcation of bus routes so as to include the area of public transport.

Summation

The realization of such large road projects, interfering with infrastructure and public transport, affecting different parts of the urban fabric and with a great

financial commitment (total cost of Phases I, II and III is 418 million PLN) [<http://www.mapadotacji.gov.pl>] requires EU support. Isolated, even the largest metropolitan areas in Poland would have a problem with carrying so many upgrades.

Raising the level of urban population's mobility is of interest to authorities of practically all major governments. Projects of European Union funding enabled them to accelerate the processes of reclamation and regeneration of public transport as well as the necessary infrastructure. Due to its urban organization, Białystok urban fabric has limited capacity in the area of transport tasks virtually to one means of transport – the bus. Yet, this decision should not be judged negatively. Polycentric character and spatial specificity makes other means (trolleybuses and trams) – apart from the cost of building infrastructure (estimated expenditure up to 2 billion PLN) [Szybka kolej..., 2007], thus more than annual city's budget [<http://www.bip.bialystok.pl/680-budzet-2014/lang/pl-PL/default.aspx>] – not really profitable and efficient in the continuously developing metropolis.

Improving the quality of the public transport system in the City of Białystok is an example of the strategy in an integrated manner, using EU funds in various programming periods. In this situation, Białystok appears as a place where the government meets the needs of local communities and realizes the ideas in line with the residents' expectations for current and future road infrastructure and public transport [Truskolaski, 2013: 21–23]. The implementation of this integrated program is an example for other local governments on how to plan and implement investments with EU funding.

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