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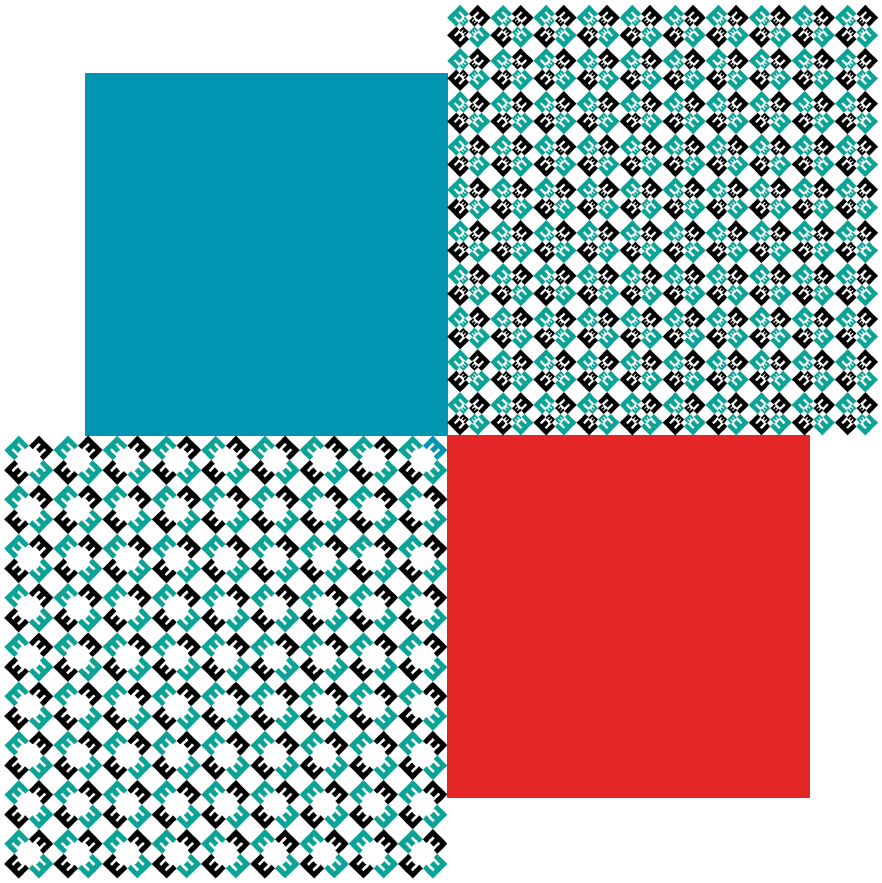
ENERGY EFFICIENCY ANALYSIS OF THE TRANSPORTATION SYSTEM OF BIALYSTOK

A case study in the frame of the international project "Cooperation for sustainable transport in the V4 region"



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SUSTAINABLE AND ENERGY EFFICIENT URBAN TRANSPORT IN POLAND

Energy efficiency analysis of the transportation system of Bialystok

A joint report in the frame of the international project
"Cooperation for sustainable transport in the V4 region"

Supported by the International Visegrad Fund

April 2014

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CONTENT

General Information:

City: Białystok

Location: North-east part of Poland, Podlaskie region

Population: 395000

Density: 2882inh/km2

Size: 102 km2

GDP: 8100USD/inh (2010, region)

Regional role: regional industry and administrational centre.

Primary function of city: industrial, residential, educational, administrational, cultural

Main Transport role: target settlement, regional transport hub,

Motorisation: 347vehicles/1000inh (2011)

Geographical features

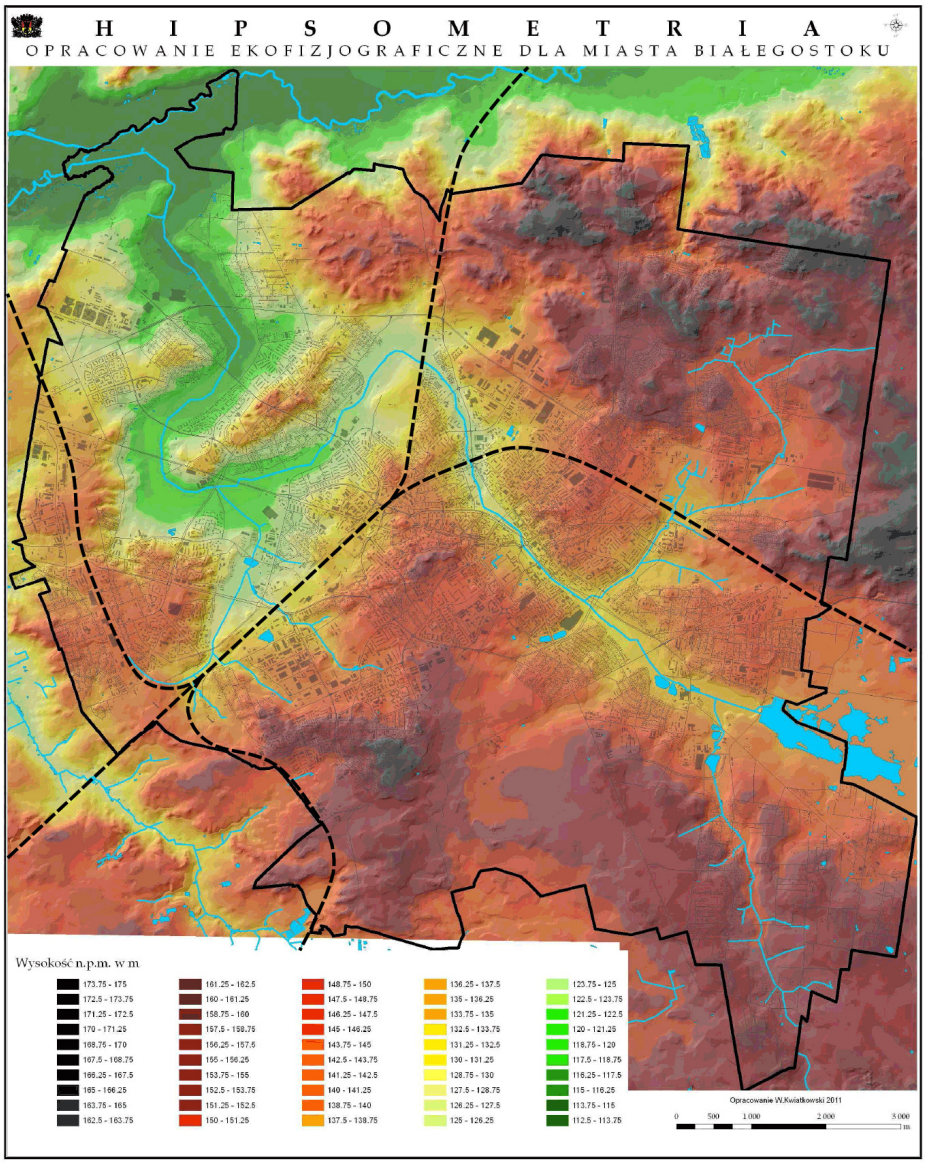
Białystok is situated on the Białystok Upland ("Wysoczyzna Białostocka"), being a part of the Podlasie Lowland. The city is located at an altitude of 120 – 160 meters above sea level. It has a typical post-glacial landscape with moraine hills with a low relative height (up to 30 m) and gentle slopes. Surface waters cover only 85ha of the city, that is 0.83 % of its entire area. The largest watercourse within the city limits – the Biała river – is 27 km long. Its narrow width (1-6) does not constitute a significant barrier. The northern limit of the city is marked by a much larger river – Supraśl, which, together with surrounding wetlands, restricts access to the adjacent Knyszyńska Forest, one of largest forest complexes in Poland. The Knyszyńska Forest Landscape Park, surrounding the city from the north and east, to a large extent limits the settlement possibilities in those areas. To the south and west of Bialystok, one can find mainly cultivated lands. Some of them adhere to the city, becoming a settlement destination for the habitants of Bialystok, and a place of construction of numerous one-family dwellings.
Białystok is perceived as a city of green spaces - within its borders, there are two large and many smaller forest complexes. Green areas represent about 32% of the city, of which approximately 19% are forested areas. The city has eight major urban parks (some of them are historical) and 24 green squares. Another 283ha (2.7% of the city surface) are covered with allotment gardens, situated both close to the city centre and on the outskirts.

In Bialystok, the problem of air pollution is associated with individual heating systems, rather than with transportation. Each year, about 40 days of PM10 exceedance are recorded. The city is not surrounded by hills, there is no heavy industry and most of the year the winds are weak and moderate – the phenomenon of wind silence rarely appears.

The biggest obstacle for the city traffic is railway tracks that divide the city into three similar-sized areas. Due to the hilly character of the landscape, the railway tracks are usually situated on embankments and cuttings, that is why in the majority

of cases they can by crossed only by means of tunnels and overpasses. The 16-kilometer railway line can be crossed in eight places.

[Map: HIPSOMETRY, Ecophysiographic study for the City of Białystok] [height above sea level in meters]



History

The first mention of Białystok comes from 1426r. In 1692 the town received municipal rights. In 1692 the construction of the railway line between Warsaw and Petersburg allowed Białystok to transform from a provincial town (3,500 inhabitants at the end of the eighteenth century) into an important textile industry centre. In 1837, the railway line connecting Białystok with Ełk (to the north-west of Bialystok) was completed, in 1874 the city gained a railway connection with Czeremcha (south-east) and in 1886 – with Zubki (east). At the end of the 19th century, the city gained three lines of horse-drawn trams, which were later destroyed during the First World War. The biggest impact on the currently existing road network had World War II, during which almost all factory facilities and the majority of residential buildings were destroyed. In place of the burned houses, formerly belonging mainly to the Jewish population (that accounted for about 50% of the city inhabitants), wide centre-crossing roads were constructed.

After WWII, the city experienced an important influx of rural population. The communist authorities placed in Białystok a large number of industrial centres (belonging mainly to the textile and food industry). Also in that period, the majority of the so-called large-panel blocks of flats were erected, which constitute the basic type of housing to this day. The lack of terrain obstacles and important post-war losses, made it possible to maintain a very compact structure of the city. The farthest high-density housing estates are located about 4 km from the strict city centre and Białystok has one of the highest population densities in Poland (2nd place among cities with more than 200,000 inhabitants).

By the end of the 1980s, Białystok was one of the region's major railway hubs. Currently, owing to the development of private car transport, the majority of railway connections have been closed. After the fall of communism, the sub-urbanisation process began, mainly in the west and in the south, nevertheless there are still a lot of land reserves for future construction within the city limits.

The city of Białystok is crossed by three national roads, the two of which are to be given the status of expressways by 2030. In the years 2004-2012, with the use of EU subsidies, the city was able to construct a transit bypass of the city centre within the city limits and over the next several years, the General Directorate for National Roads and Motorways intends to build fast highways which will bypass the entire city.

Modal split of the city

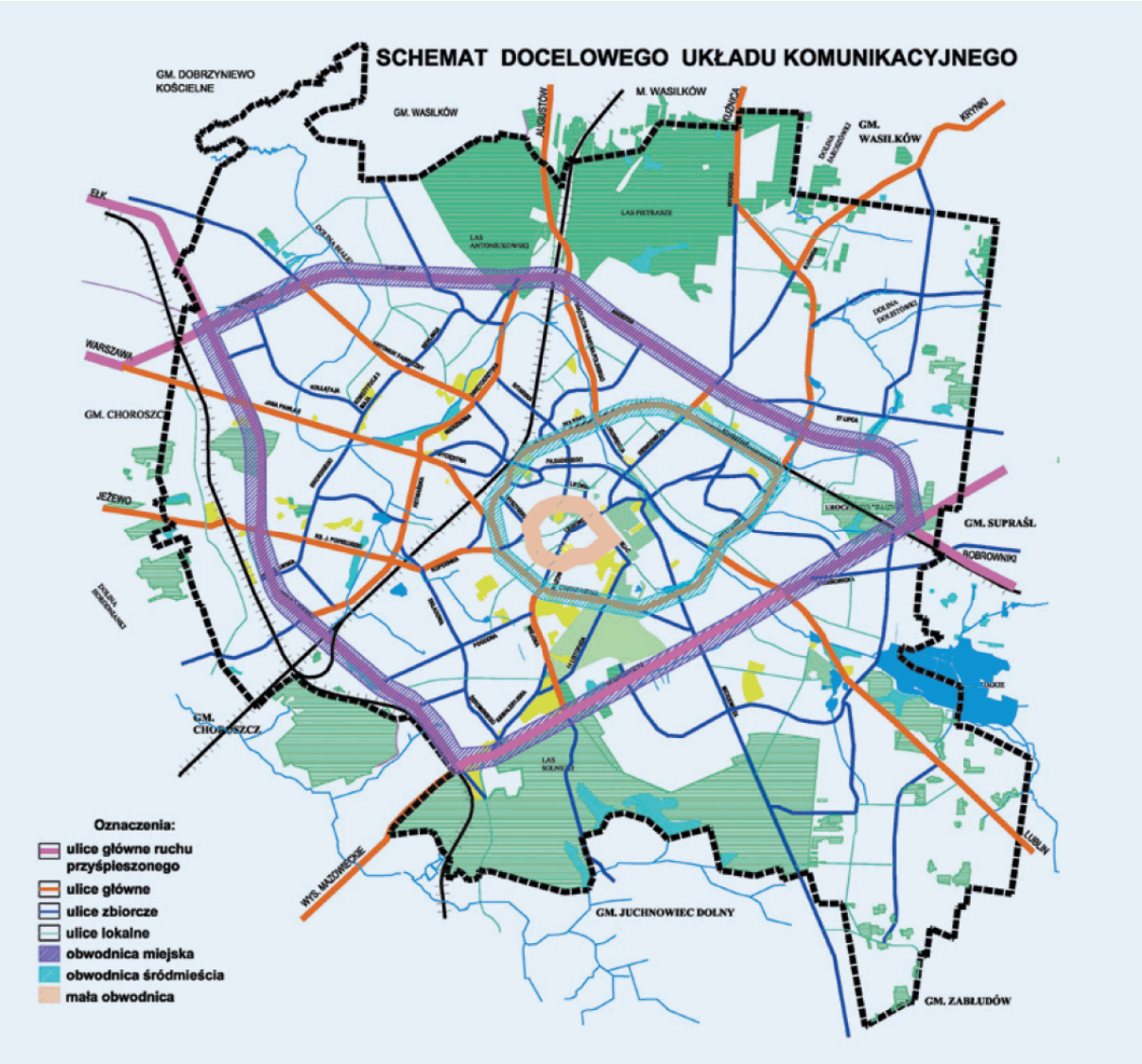
According to the Transport Study, in 2007, the participation of pedestrians in Białystok's modal split amounted to 28%, public transport accounted for 31% and individual car transport – for 41%. The forecasts included in the same study imply that the share of motorised transport is likely to increase: in 2013, 46% of transit is to rely on passenger cars (27% afoot and 27% on public transport respectively). The fact that the study does not take into consideration bicycle transportation and given the forecast decline in the participation of public transport indicate that awareness of the need to implement the concept of sustainable transport in the city is very low. In the years 2004 - 2012 the number of passenger cars registered in Bialystok increased by about 40%, while the number of passengers of public transport decreased by about 20% and this trend is likely to continue.

The research on transport preferences of the city's inhabitants has not been conducted. The data collected among the residents of the largest Polish cities (over 150,000 inhabitants) indicate that most Poles would like to travel by their own cars (2002).

What manner of transport would you choose to get to work/school?

	Percent
By car	67.2
By bike	12,9
On foot	11.3
Using public transport	8.0
Other	0.7

Road transport infrastructure system



[Map: the scheme of the target communication system]

-fast traffic trunk roads

-main roads

-collector streets

-local streets

-the city by-pass

- the centre by-pass

- the small by-pass]

In Białystok, there are about 390 km of roads (2008), of which about 201 km have paved surface. The basis of the road system of the city is two urban rings (the external one is still under construction) and several traffic arteries axially extending

from the centre. With the use of UE funds, in the last decade the majority of main roads have been reconstructed – currently, over 60km of the city's main roads are dual carriageways. The entire city is accessible by passenger cars and the trip from one end to another takes usually several minutes, except rush hours.

Despite the fact that Bialystok is crossed by three national ways, all the streets in the city are managed by the City Hall (Road and Urban Investment Office). Owing to the recent investments, the majority of roads are in a very good condition. The north part of the external urban ring is being currently rebuilt in order to make them collision-free.

The city does not apply any methods of traffic calming, apart from introducing speed bumps on estate roads and placing a number of speed cameras in fixed and well-identified places along the main roads. The city does not conduct linear speed control and there are no traffic calming zones (30 km/h). Elevated pedestrian crossings appear only on estate roads. There are no priority-to-the-right intersections and the roads are not narrowed in places particularly dangerous for pedestrians (most lanes of the new streets are 3.5 m wide).

Traffic jams are rather small and appear only during rush hours. Nevertheless, in the recent years, owing to the increasing number of cars and the development of the road network, they become more common.

Other transport infrastructure

The railway lines crossing Białystok are not significant for the city's public transport and the tram lines were destroyed during World War II and have not been rebuilt. The Biała river is far too small to enable any kind of inland shipping.

Number of registered vehicles, fuel consumption, CO2 emission

Vehicles registered in Białystok (2010):

Passenger cars	96169
Buses	745
Heavy good vehicles and truck tractors	20619
Farm tractors	1710
Motorcycles	4082

The Polish Central Statistics Office does not provide separate statistics for private and business cars.

The Voivodeship Environmental Protection Inspectorate publishes data only on industrial emissions. There are no estimates of CO2 emissions and the amount of transport-consumed fuel in the city.

Moreover, in Bialystok, regular and comprehensive traffic measurements are not carried out. The only data on the subject can be provided by research clubs of the Białystok University of Technology and they come only from a limited number of intersections. The figures below represent the traffic structure on one of the inlets of the Św Ojca Pio Street /Zwierzyniecka Street intersection, located on the bypass of the city centre (as on May 25, 2012).

Rys. 12 Rozkład natężenia ruchu w godzinach pomiarów 6:00 – 22:00 na wlocie nr 3

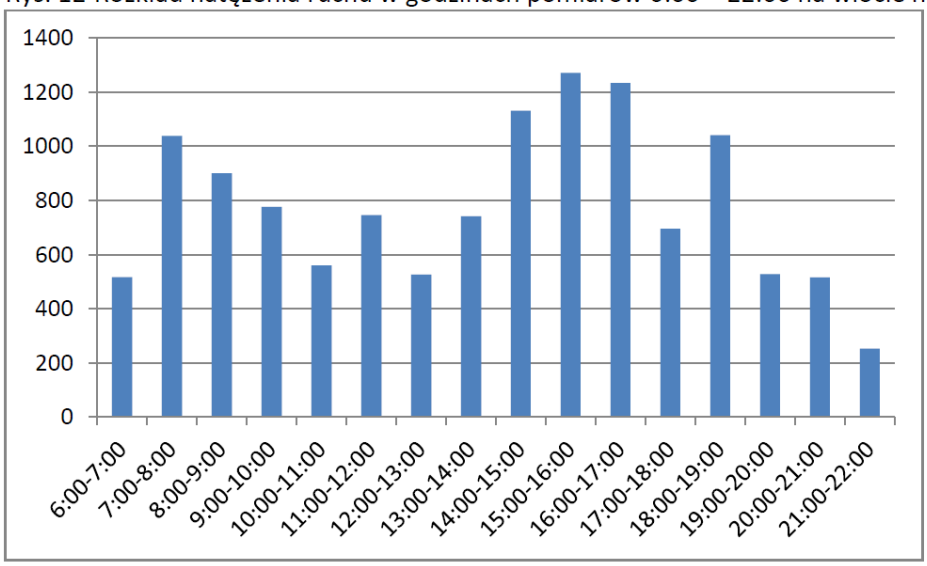


Fig 12

[Distribution of traffic in the hours 6:00 AM – 10:00 PM at the inlet no. 3]

Rys. 11 Wykres struktury rodzajowej na wlocie nr 3

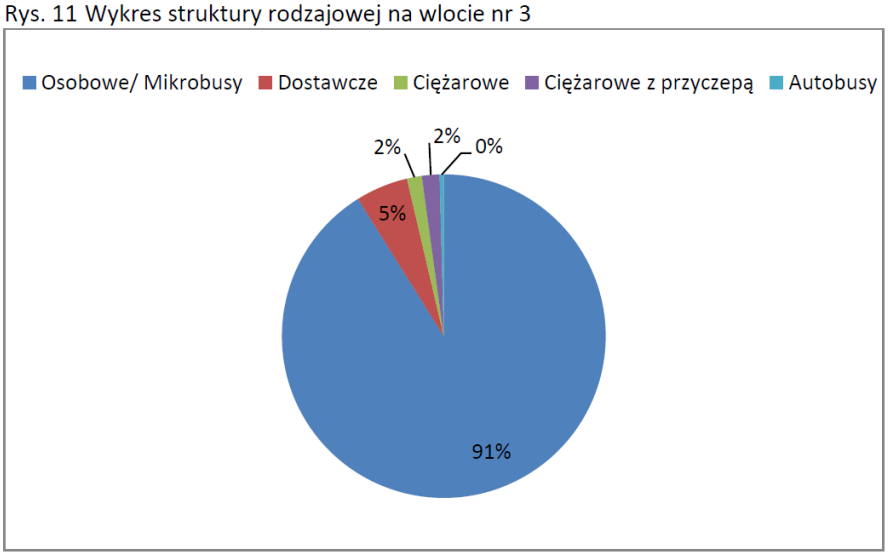


Fig 11

[Generic structure chart, inlet no. 3]

[passenger cars/minibuses

Goods vehicles

Heavy goods vehicles

Heavy goods vehicles with trailers

Buses]

Public transport

Białystok is the largest Polish city in which the public transport is based solely on bus services. The management of bus lines is carried out by Białostocka Komunikacja Miejska ("Białystok Public Transportation Company"), which outsources transportation to three transport companies.

Railway transport has no importance for both city and agglomeration (up to 15km from the border of Białystok) transport. In the city, there are no railway stations and the existing ones are away from major traffic generators (excluding Bialystok central station).

The railway is used in regional transport. Passenger rail services are provided by the Przewozy Regionalne company ("Regional Transport Services"), selected in a tender procedure, organised by the Marshal's Office of Podlasie Voivodeship. The bus transportation is far more developed. The transport services are provided by both the PKS company and private entities.

The average age of buses used by the Białystok Public Transport is about 6 years (2012), and the majority of vehicles are low-floor. The bus stock of the city is powered with diesel fuel, the projects to switch to CNG or hybrid engines has not been implemented. Currently, in Bialystok there are about 260 public buses and the number is gradually decreasing (350 buses in 1985, 300 in 2000).

Rail transport in the region is based on 22 EN 57 electric multiple units, manufactured in the years 1966-1983, the three of which have been thoroughly modernised. The rest of the units are highly energy-sensitive, for they are equipped with rheostatic starters, already obsolete at the time the first vehicles of this type were introduced. On the non-electrified lines, the Przewozy Regionalne company employs 11 railbuses powered with diesel fuel, manufactured in the years 2006-2011. It should be noted that due to low transport activity, the majority of vehicles (railbuses) purchased with EU funds are not currently used.

Currently, in Białystok there are 41 bus lines, including 28 urban day lines, three night lines (weekends only) and 10 suburban lines (up to 10km from the city limits). In the area of the city and neighbouring communes, there are a total of 970 bus stops, serviced by Białystok bus operators. The bus lines are about 486 km long and lead through 192 km of roads (2006). All settlements within the city area, including the single-family dwellings, are supported by public transport.

Rail transport between Bialystok and the rest of the region takes place on the following routes:
Bialystok - Łapy (16153 inhabitants, 25km from Białystok) - Szepietowo (2337, 50km): 8 pairs
Białystok - Grajewo (22413, 75km): 3 pairs
Białystok - Augustów (30800, 100km) - Suwałki (69331, 130 km): 3 pairs
Białystok – Czarna Białostocka (9751, 20km) - Sokółka (19000, 40km) – Kuźnica Białostocka (1740, 53km): 4 pairs
Białystok - Bielsk Podlaski (26545, 40km) - Czeremcha (2640, 70km): 1 pair

Every year, the number of train connections gradually decreases. The train transportation does not fulfil the needs of inhabitants and tourists, especially during the holiday season. The rail connection between Białystok and Łomża (63000 inhabitants, 75 km) has been suspended.

In 2012, Białystok City Transport transported 102 590 000 people. Unfortunately, no information is available on the number of passengers serviced by the Przewozy Regionalne Company, it is known however, that the annual performance of the company amounts to 1450 thousand train-km (2008).

A single bus ticket costs PLN 2.80, a monthly ticket – PLN 80. The cost of the latter constitutes 2.7% of the average salary in Białystok (PLN 3018 in 2011) and is comparable to ticket prices in other Polish cities.

The ticket offer includes both single tickets and commutation tickets (1 day - three months). In 2010, a personalised Municipal Card was introduced, designed to become

in the future a part of a larger municipal service system. Since, in practice, the city has only one public transport operator, the problem of other carriers not accepting the municipal tickets is not particularly pronounced. It may appear, however, in the case of passengers coming from other parts of the region. Railway, regional bus and city transport carriers use different tickets and there is no "regional card" that would allow to use all the modes of transport available in the region for a given period.
The prices of train tickets are set by the Przewozy Regionalne Company, which is a nationwide operator. For example, a regular fare for a 100 km travel amounts to PLN 19,80 (€,4,6 0.65% of an average monthly salary). In comparison, a monthly ticket allowing a similar travel costs PLN 314 (€73, 10.4% of the average monthly salary). wing to low line speeds, low frequency of trains and low car maintenance costs in Poland, the railway cannot be perceived as a significant competition for the road transport in the region.

In the Podlasie voivodeship, networks of regional buses, municipal buses and trains are not present. For instance, the request to introduce additional courses of some buses, in order to enable the passengers of the last fast train from Warsaw (11:50 PM) to reach the city, made by PKP Intercity, has never been accepted by the President of Białystok. Consequently, the fast train "Żubr", arriving to Białystok at about 11:50 PM, was partially cancelled (currently, it runs only on Fridays and Sundays). Moreover, it is very difficult, and in some cases even impossible, to reach the first train to Warsaw, leaving at about 4:30 AM and other regional trains, leaving at about 5 AM, by means of public transport.

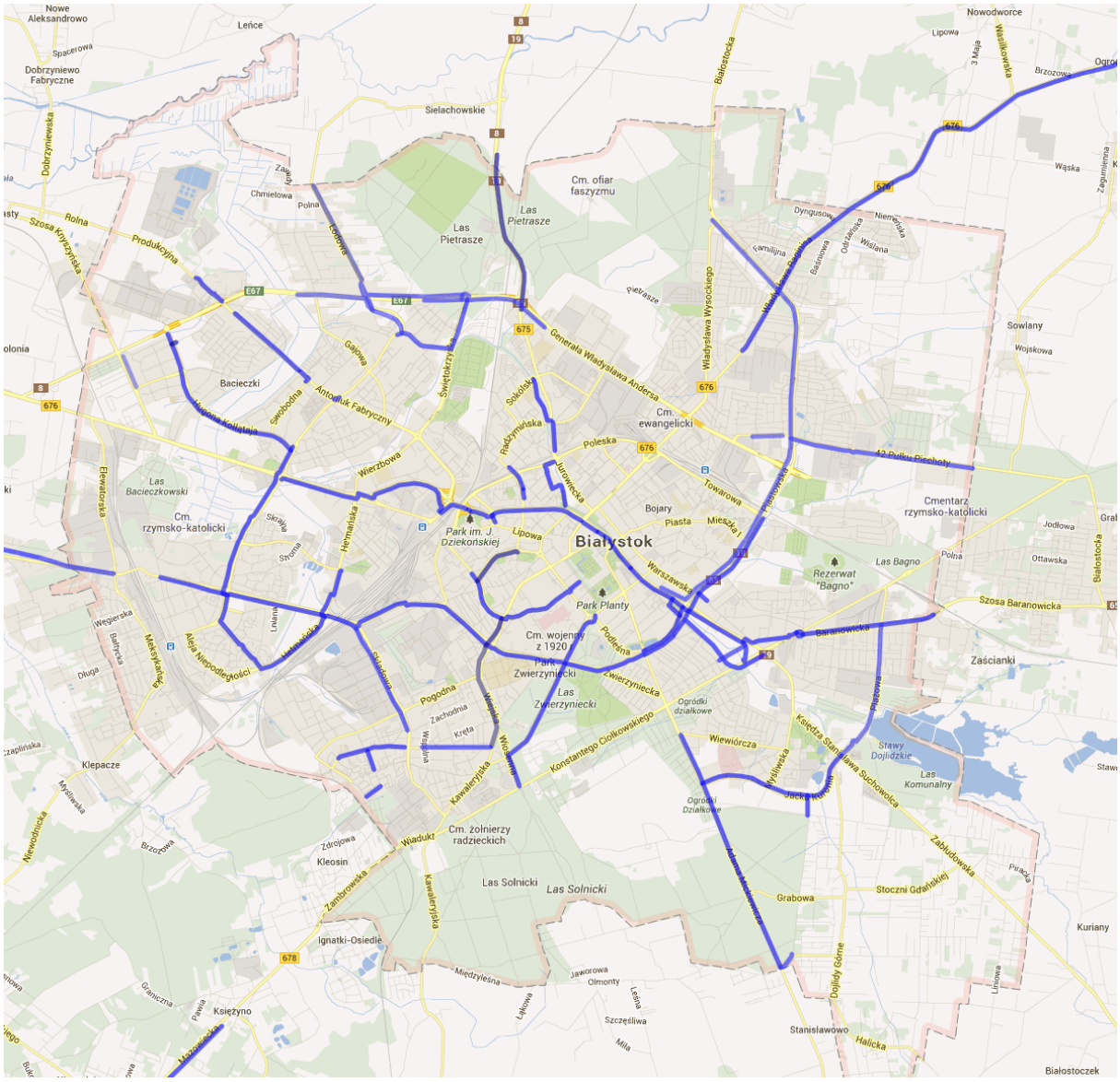
The city does not conduct surveys among the users of public transport. The sole data we were able to acquire come from a study conducted by the students of the Białystok University of Technology on a sample of 60 randomly selected people inquired at bus stops (see below).

Parameter	Very good	Good	Average	Bad	Very bad
Bus frequency	20%	26%	24%	14%	16%
Direct connections	21%	29%	21%	19%	10%
Travel comfort	18%	13%	38%	16%	15%
Facilities for people with disabilities, the elderly and pregnant women	21%	39%	28%	9%	3%
Travel safety	24%	19%	24%	16%	17%
Attitude of drivers towards passengers	8%	26%	24%	25%	17%
Availability of ticket sell points	11%	19%	28%	19%	23%
Cleanliness of bus stops	27%	19%	23%	16%	15%
External identification of buses	35%	18%	20%	16%	11%

Similarly, the information on the opinions of train passengers is unavailable. Yet, one can observe that there are numerous protests from the part of the residents and organisations of railway enthusiasts against the voivodeship government transport policy, usually associated with the liquidation of railway lines.

Cycling infrastructure

The cycling infrastructure of Białystok relies on separated cycling paths that altogether are about 70 km long. Almost all of the paths were created on the occasion of the reconstruction of parallel streets, so there are no bicycle paths independent of the vehicle road system. Moreover, there are no separate cycle lanes, cyclists are not permitted to enter one-way streets from the opposite direction and the "invisible cycling infrastructure" through traffic calming is also absent.



The bicycle paths do not form a coherent network and do not provide convenient access to the city centre, which is the main destination for the majority of the city's inhabitants. A great part of the paths is located on the outskirts of the city and only in

places where terrain conditions allow their creation: in places where traffic lanes are narrow, bicycle paths are not built.

The natural topography of the city does not prevent the development of bicycle traffic – the terrain is rather hilly, but it has small relative heights and relatively gentle slopes. It is new road investments and railway lines often crossing the residential areas and not allowing to pass from one side of the road to the other over a distance of 1 - 2 km that should be perceived as a more serious problem.

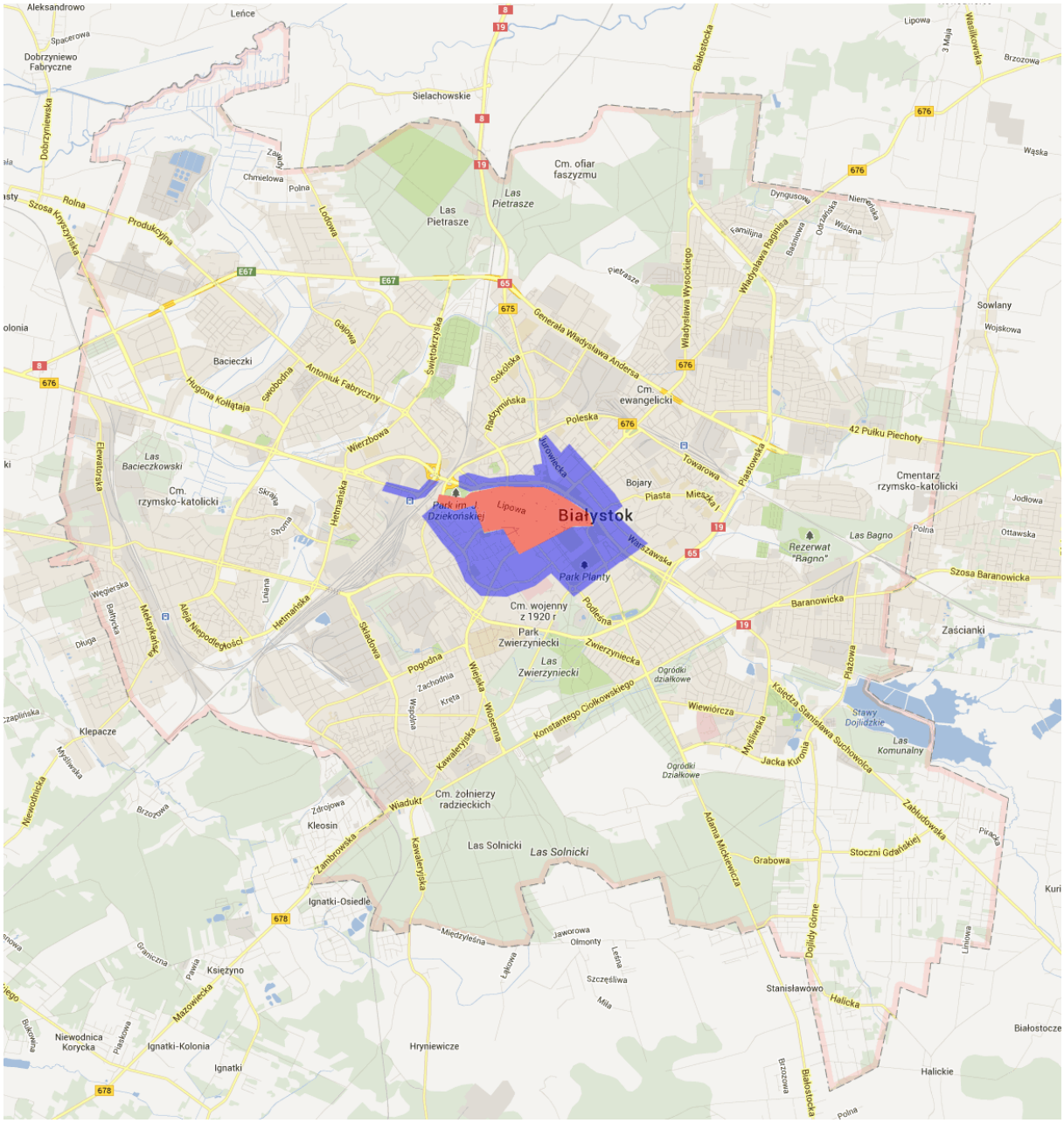
The cycle paths are very popular among the cyclists. In the summer, obstructions at signalised intersections are formed. Moreover, statistics show that the number of accidents between cyclists continually grows, which may indicate that the existing cycling infrastructure is no longer sufficient.

Investments in cycle paths are publicly accepted. People perceive them as an opportunity to relieve public transport and decrease the number of traffic jams.
In the recent years, the attitude of the Bialystok residents towards bicycles has radically changed – the bicycle ceased to be perceived as a means of recreation and is more often viewed as a means of transportation. Nevertheless, cycling is characterised by high seasonality. Based on the number of collisions and accidents with the participation of cyclists (in Bialystok, regular measurements of the traffic are not carried out) the number of cyclists in the summer season is about five times higher than in winter.

Bicycle racks provided by the city are usually placed in front of public utility facilities, such as public administration offices, schools, as well as in the places indicated by cyclists in motions and surveys. Their number, however, is very limited compared to the city scale and amounts to about 200. Nevertheless, the presence of signs and fences to which a bike can be attached, compensates for this inconvenience. In Białystok, there are several service centres run by local bike shops, but they are mainly focused on MTB cycling and during the high season a bike repair scan last even a few days.

The city does not conduct any informational/educational campaigns for cyclists. Moreover, there is no sign-post system for the bike users. The city projects to introduce an urban bicycle rental system, but because of its small scale (about 8 stations), it is unlikely to change the transport habits of the inhabitants. In some public buses (low-floor and articulated buses) it is allowed to transport a bicycle for free. There is no park-and-ride system dedicated mainly to cyclists.

Parking conditions



In Białystok, the paid parking zone is divided into two areas – the red one (A) and the blue one (B). In totality there are 3650 (2013) paid parking spaces, 1398 of which are located in the sub-zone A and 2252 in the sub-zone B. Fees are collected from Monday to Friday between 10:00 AM and 6:00 PM and in the red zone are twice as high as in the blue zone, PLN 2.4 and PLN 1.2 PLN per hour, respectively. The fees are lower than the cost of a single full-fare public transport ticket; hence it rather does not discourage form travelling by car. Moreover, the fines for not paying for parking

are rather symbolic and amount to PLN 50, i.e. they are four times less than the fine for the lack of a ticket on public transport. The reduced fee for the zone inhabitants amounts to PLN 10 per month.

Parking fees in Białysok are comparable to those in other Polish cities. In Poland, the prices for parking are limited by law and have not been revised for the last several years.

In Białystok, there are about 19,060 designated parking spaces, 6430 (2006) of which are publicly available. It should be noted that the Polish law allows parking on pavements and the figures above represent only a small part of the actual parking capacity of the streets of Białystok. An important number of vehicles are parked incorrectly, because of general acceptance and lack of intervention from the part of the municipal police.

The city authorities continue to increase the number of parking spaces on the streets - there are no problems with parking in and outside the paid parking zones. The side effects of such a policy include an important limitation of the urban space: green areas are constantly being reduced and the sidewalks are getting narrowed in order to introduce new parking spaces, which arouses strong public opposition.

In Białystok, the publicly available parking spaces appear mainly on the streets. The only multi-storey car-parks belong to shopping centres and the construction of the underground car park in the area of the town square was moved in time due to the high investment cost and the protests of local residents.

In the city of Białystok there are no park-and-drive lots.

Sustainable transport campaigns and actions

The city of Białystok does not lead any actions or campaigns for sustainable transport.

Utilisation of EU funding

According to the information available on the city's website, in the years 2004-2013, 14 projects aimed at improving the quality of the main road network were carried out. As part of these activities, PLN 1,1 billion were spent (including PLN 802 million obtained through EU funding), 48 km of roads in the city were reconstructed and 118 new buses were purchased. The buses replaced the vehicles withdrawn from use (it should be noted, however, that despite such purchases, the number of vehicles belonging to the carriers operating in Białystok has decreased).

Even though most of the projects are aimed exclusively at increasing the capacity of the streets for private car transport, the majority of funds for public transport (the project „Improvement of quality of public transportation system in the City Bialystok ") are allocated for street widening.

Within the frames of EU projects, a number of bus lanes were created, of the total length of about 2 km. Unfortunately, they were not created in the places where traffic jams appear and after the construction of new, much wider intersections with longer traffic light phases, the speed of public transit in those places has decreased.
The only project that involved the introduction of new cycle paths without rebuilding the neighbouring streets was the creation of a bicycle path to Supraśl, a tourist and health resort about 10km northeast of Bialystok. Approximately 15 km of bike paths were constructed (including 6 km within the city limits).

The project budget was under PLN 8 million, but a large part of it was used to finance the parking lot for 100 cars between the two cities and to construct granite parkways in Bialystok. In addition, five years after finishing the construction works, a two-kilometre segment of the path was stripped down in order to build a new dual carriageway.

City structure

The city has a rather compact structure. The traffic generators are located in the centre (trade and services) and in the western part of the city, dominated by multi-family buildings (single-family dwellings are located mainly in eastern part of the city). There are no large industrial centres on the outskirts of the city that is why most of the traffic takes place between housing estates and the city centre. Moreover, the number of major recreational activities in the city is rather limited.
It does not come as a surprise that the majority of service providers and government entities, including schools, public administration offices and office buildings are located in the city centre. Moreover, it is also the place, where the two biggest shopping centres are located. Due to the multi-storey car-parks they are equipped with, the shopping centres are one of the major generators of traffic in the downtown. The campus of the biggest university in Podlasie – the Białystok University of Technology – is located in the southern part of the city, in the vicinity of the city centre bypass and can be reached by public transport. The biggest factories (manufacturing carpets and electronics) employing a total of about 1,500 people are located about 2 km north of the centre and are also accessible by public transport. A number of supermarkets (grocery and DYI) are located on the western outskirts of the city and the majority of their customers reach them by passenger cars due to low frequency of the bus lines in the vicinity as well as the volume of purchases.

Between the western part of the city where lives the majority of the city's inhabitants, and the city centre, where the majority of jobs is concentrated, there is a railway line which can be crossed in three places only. These crossing places are affected by a growing number of traffic jams at rush hours, despite the fact that during the last decade the capacity of the crossing has doubled (22 lanes in total, including tunnels and overpasses).

The agriculture areas along the north-eastern border of the city are currently used for the construction of single-family dwellings. The construction of multi-family buildings (designed mainly for social housing) takes place mostly in the western part

of the town, about 4km from the city centre. In the south-eastern part of the city a Special Economic Zone was established in view of future company investments. So far, however, it has not been any success.

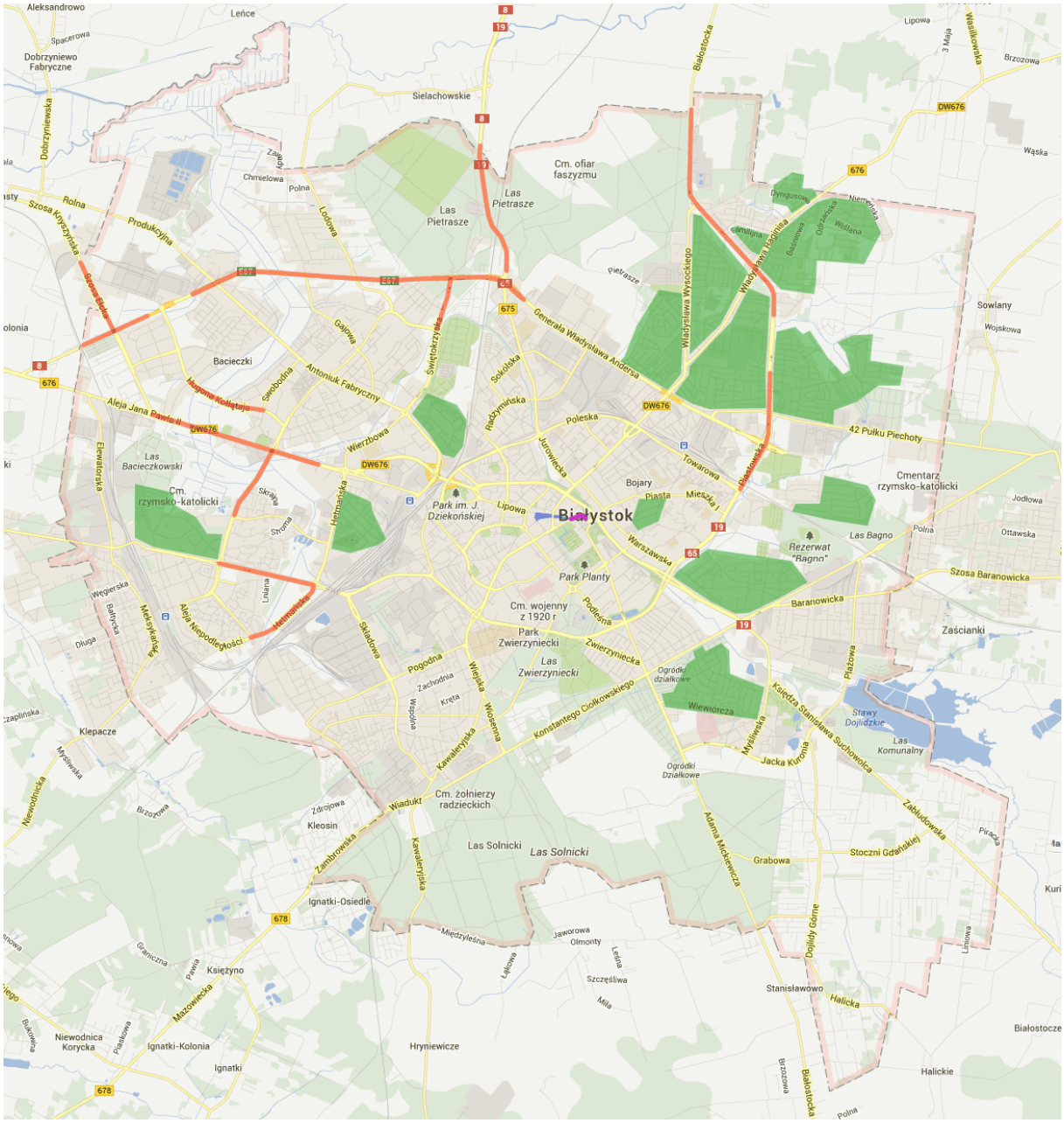
Although agricultural areas cover over 30% of the city and could be used for housing development, many inhabitants of the city choose to move to the neighbouring communes, especially to the west and to the south from the city.

Movement between the major traffic generators (gray dots) and the movement-related traffic (black lines).

Traffic management, ITS, transport hubs etc.

The Traffic Management System is to be introduced in 2015. The project involves management by traffic lights (at 120 intersections), public transport priority, variable-message signs, car accident detection, identification of vehicles entering the intersection after the signal turned red, and information display systems. In principle, the system should reduce the time lost at intersections by 10%. According to the contract signed at the beginning of June 2013, the implementation of the project will cost PLN 26.5 million.

Legal tools, restrictions, etc.



In Białystok, the majority of the streets is subject to the speed limits for built-up areas set by the Polish law, that is 50km/h during the day and 60 km/h during the night (between 11 PM and 6 AM). In some residential areas, zone speed limits of 40km / h (green areas) were introduced. Housing areas with a speed limit of 20km/h and the priority to pedestrians (except one-way, 200 meter-long, section of the Kilińskiego street, marked with a purple line on the map) are not very numerous. The only street

turned into a pedestrian zone is located in the city's market square (Kościuszko Square and Suraska Street, blue area on the map).

In Białystok, zones closed for vehicles that do not meet specific emission and noise requirements are not present. The only fees charged by the city are associated with the paid parking zones described in the previous chapters.

Administrative and professional apparatus and strategic documents of the local government

At the city hall, the responsibility for transport and infrastructure is vested in the Deputy Mayor of Białystok, Mr. Adam Poliński. He is responsible for the management of the Road and Urban Investment Office, the Białystok Public Transport Office and the Paid Parking Zone Office.

Białystok is one of the few major cities in Poland, where all roads (including the national and provincial ones) are managed by one organisational unit - the Road and Urban Investment Office. The Office is responsible for the development of long-term investment plans, conceptual works issuing tenders for road plans and construction, as well as for the further maintenance of the road system.

The duties of the Białystok Public Transport Office include development of new communication lines and schedules drawing of contracts with carriers, ticket sales organisation and maintenance of bus stops.

According to the applicable law, the city is obliged to gradually introduce the Spatial Development Plans covering single housing estates, in which the issues associated with area functioning and transport have been described in detail. When it comes to the projects concerning the entire city, the following documents are of the greatest importance:

Białystok City Development Strategy for 2011-2020+- the creation of an effective communication system with a large share of city public transport and cycling was set out as a priority in the development of transport infrastructure. Unfortunately, further provisions included in the Strategy seem to be contradictory – it is assumed to increase the capacity of streets, create new parking spaces and increase the availability of transport outside of Białystok which obviously gives a boost to the sub-urbanisation process.

Study of conditions and directions of spatial development – the study includes general recommendations, such as construction of urban ring roads, development of bicycle paths along water courses and conducting researches on the possible use of railway lines for the needs of urban transport.

Transport Study (unpublished)
Public Transport Study (unpublished)

List of local transport stakeholders

- Tadeusz Truskolaski – Mayor of Białystok
- Adam Poliński – Deputy Mayor, responsible for transport and infrastructure
- Janusz Ostrowski – Bialystok Road and Urban Investment Office Manager
- Bogusław Prokop – Białystok Public Transport Office Manager

Local transport offices, agencies, company managing controlled parking spaces

- Joanna Czaczkowska – Białystok Paid Parking Zone Office Manager
- local and regional public transport operator (road and rail as well)
- Przewozy Regionalne [regional transport services]
- Komunalne Przedsiębiorstwo Komunikacji Miejskiej [Municipal Transport Company]
- Komunalne Przedsiębiorstwo Komunikacyjne [Municipal Transportation Company]
- Komunalny Zakład Komunikacyjny [Municipal Department of Communication]
- Przedsiębiorstwo Komunikacji Samochodowej w Białymstoku [Białystok Car Transport Company]

Local transport science institutes

- "Drogowiec" research club of the Białystok University of Technology
- local urban design or urban transport system design companies
- Office of Public Housing Projects
- Biuro Projektowe Arteria ["Arteria" Project Office]

- Przestrzeń Publiczna ["Public Space" company]
- local NGOs involved in transport issues
- Association of Friends of the Public Transport
- Association of Friends of the Railway "Kolejowe Podlasie"
- infrastructure maintenance company
- city logistics
- freight, cycling, bus driver associations
- Rowerowy Białystok ["Bicycle Białystok"]
- local companies involved in researching/producing eco-friendly transport vehicles, etc.
- local companies (logistic centres, factories, shopping malls) that attract a significant number of people (either workers or visitors)

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