

ANNUAL REPORT 2017



PUBLIC ROADS AUTHORITY



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Dear Readers,

Time flies, another year has passed. For us, it was an extremely successful year, with a record number of investments and the biggest number of renovations in the last few years. Being aware of how many challenges are still ahead of us, we do not rest on our laurels, but we are planning the next years.

I am particularly proud of the projects implemented under the Integrated Territorial Investments. Thanks to the support of EU funds our capital city becomes a European metropolis with bikeways, intelligent traffic lights, level sidewalks and beautiful greenery along the streets.

We are constantly trying to change for you to keep up with expectations regarding our availability, but also the pace and quality of renovation and investment works. Therefore, last year's record results will probably be beaten in the coming year.

One thing has remained unchanged for many years – our concern for your safety. The absolute priority in our activities is road safety, especially the safety of the vulnerable users of the traffic. That is why the unsignalised pedestrian crosswalks audits and the implementation of audit recommendations are continued. Additional lighting at a few hundred of zebra crosswalks, active crosswalks, refuge islands, and physical traffic calming measures for many peo-

ple are only words and statistics, but the effect of these actions is something more – it is human life. In 2017, 13 people fewer were killed on the streets of Warsaw than in 2016. The pace of the decline was the fastest in recent years and much higher than rates across the country. However, still a lot of tragedies happen on roads, so we need to take strong actions. I can guarantee that we will not lack determination until the most important rate – fatality rate – reaches zero. What can be more important than our and our loved ones' lives?

Finally, I would like to express my gratitude towards all the employees of the Public Roads Authority for their work; the city authorities, especially Mayor Hanna Gronkiewicz-Waltz and Deputy Mayor Renata Kaznowska, for their support; members of the Warsaw City Council for good cooperation. I would also like to thank all the individual residents and non-governmental organizations who actively participate in various consultations and take part in (sometimes very heated) discussions at different meetings or internet forums. You, who are not indifferent, are the fuel of changes in our department and in the city we share.

Yours sincerely,

Eulos Public Luci

Did you know that the Public Roads Authority is...

800 km	5.5 million sq m		763	
of roads we manage Note: these are not all the roads in the city. A large part of them are commu- nal streets, which are the responsibility	of sidewalks and bikeways		intersections and crosswalks with traffic lights	
of district offices, and expressways are managed by the General Directorate of National Roads and Motorways.	4,5 million	30	000	498
112 000 lighting fixtures	energy-saving eco-LED diodes in the winter illumination	in the	ing spaces Unguarded arking Zone	bridge structures
installed on 98,000 lighting poles and on traction poles.	01 500			500 km
501	91 500		over:	500 km
employees	plates, signposts, and maps of the City Information System		of bikeways and 5,000 Veturilo city bikes	
half of whom work in the field, patrolling the streets and keeping the road area clean.				

2017 in numbers

9	new traffic lights
20	active crosswalks
21 km	of constructed and repaired bikeways
25 km	of repaired sidewalks
34 km	of repaired roads
46	renovated bus stops
90	architectural barriers removed
337	additional lighting pedestrian crosswalks
1069	crosswalks checked for safety
1177	new streetlights
14 001	inspections of road areas and 1224 illegal advertising removed
21 000	alerts received through the 19115 Warsaw Contact Center
5 mln	Veturilo city bikes rented





Road infrastructure renovation

The primary task of the Public Roads Administration is to maintain an appropriate standard of road infrastructure. Many streets have undergone rapid repairs, and a dozen or so have been subjected to much deeper changes: replacement of road and sidewalk surfaces, construction of bikeways, remodeling lighting and traffic lights, and changes in traffic organization. Thanks to these comprehensive works not only did the technical condition of the road improve but above all the comfort and safety of the road users increased.



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Renovated Namysłowska St.

The new surface on the roadway, sidewalk, and bus stops as well as the replacement of lighting: these are the changes we have introduced on Namysłowska St. in Praga-Północ.

The roadway was completely demolished and built from scratch – aggregate base has been placed, glass grid reinforcement and new curbstones have been installed. New curbs and a shoulder along the road have been constructed.

The comfort of pedestrians and passengers of the public transport has improved significantly. New concrete slabs have been laid on the sidewalk. To make moving around the city easier for the visually impaired, directional tactile paving in the sidewalks and detectable warnings at the bus stops have been installed. The curbs at the crosswalks have been lowered. The extensive renovation also included bus stops, where we have installed transit curbs. The rounded shape and increased height (16 cm) allow the buses to pull as close as possible to the edge of the platform. Thanks to that it is much easier for all the passengers to get on or off a lowfloor vehicle.

Parking spaces, exits, traffic islands, and refuge islands have been covered with paving stones. In order to improve visibility and safety, the street lighting has been replaced. Modern streetlights have been installed: a total of 40 poles and 66 light fixtures. All crosswalks on the renovated section of the road have been additionally lighted.

Calmer Potocka St.

Potocka Street is one of the main roads of Żoliborz district. It connects Słowackiego St. and Mickiewicza St. What is more, there are numerous residential buildings along Potocka St. For this reason, it performs several functions (inter-city traffic and local traffic).

We took into account all these factors when introducing the changes. The first stage was road surface repair on the section from Kuronia Sq. to Mickiewicza St. To extend the durability of the new asphalt, subsequent layers have been reinforced with a special grid. The next stage was the introduction of the new traffic organization that changed the street's character. Fragments of space along the road have been covered with paving stones (parallelly and transversally to the axis of the roadway), which calmed the traffic. Refuge islands have been built on three existing crosswalks, thanks to which pedestrians gained safe space.

In order to prevent illegal parking, areas excluded from traffic have been blocked. In return, we have demarcated parking lanes and bays. Thanks to this, the number of legal parking spaces has increased. At the junction with Bieniewicka St. a missing sidewalk has been constructed and a new crosswalk has been added. Moreover, a parking bay for 8 cars has been arranged. New curbs have been installed along the roadway. Sidewalks have been repaired. The changes have improved the safety and comfort of all road users.













Safer and more tasteful Krasnobrodzka St.

Krasnobrodzka St. in Bródno district has also undergone an extensive renovation. The changes covered the section managed by the ZDM (from the intersection with Chodecka St. to Toruńska Freeway). The results are clearly visible. This is the new sidewalk on both sides of the street where concrete slabs have been laid. The curbs are also new. They have been lowered in the area of crosswalks. There are also special detectable warnings for the visually impaired. To organize the parking, comfortable bays with dozens of parking spaces have been built. Refuge islands with complete signage have been created at the crosswalks (a total of five, including three at the intersection with Chodecka St.); thanks to them it is safer.

The road surface has also been repaired. A new and even asphalt surface has been laid and traffic marking has been recreated.

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Miodowa St. and Krasińskich Sq.

In 2017 we began a complete reconstruction of Miodowa St. and Krasińskich Sq. The changes include the section from Senatorska St. to Świętojerska St.

Granite paving slabs are being installed on the sidewalk, along with facilities for persons with disabilities. Granite paving slabs will also be laid at the bus stops and transit curbs will be installed on each platform to facilitate pulling the bus up. The surface of the roadway will be made of granite paving blocks - the same type we know from Krakowskie Przedmieście. However, the technology will be different: the stone will be laid on a concrete base and the blocks will be fixed with a special binder based on epoxy resin. Thanks to this the surface will be stronger, less susceptible to damage, and additionally easy to dismantle. The same type of surface will be used for bike patches. Speed humps will be constructed on

the roadway to calm the traffic. There will be parking bays at the edge of the road and new crosswalks: on Krasińskich Sq. and at L. Schillera St.

A reconstruction of intersections with traffic lights is planned. Traffic lights at the intersection of Miodowa St. and Kapitulna St. will be removed; traffic lights at the intersections of Krasińskich Sq. and Świętojerska St., Miodowa St. and Długa St., and Miodowa St. and Senatorska St. will be remodeled. Along the Miodowa St. new stylized streetlights have been installed.

Part of the work was done in 2017. The entire investment will be finished in mid-2018.



Powsińska St. has changed

We implemented major street redevelopments under the Integrated Territorial Investments instrument. An example of a comprehensive approach are the changes introduced on Czerniakowska St. and Powsińska St.

The works covered a 2.5-kilometer section from Siekierkowska Freeway to Nałęczowska St. New sidewalks laid with concrete slabs have been constructed along the road. Bus stops have been renovated and special directional tactile paving has been installed with the blind and visually impaired in mind. Four traffic lights have been remodeled (on Idzikowskiego St., św. Bonifacego St., Morszyńska St. and Nałęczowska St.) and one new traffic light has been built (at the intersection with Okreżna St.). We have demarcated a total of three new crosswalks (at intersections with św. Bonifacego St. and Okrężna St.). The intersection with św. Bonifacego St. has become safer thanks to altering its geometric design: the angles of the turns enforce slower and more careful driving. Traffic light programs are synchronized in order to achieve the "green wave" effect for the drivers.

The existing section of the bikeway has been repaired, and a new infrastructure for cyclists has been built on the next section. An interconnected cycling corridor has been built along the west side of the roadway, and between Siekierkowska Freeway and Gołkowska St. the bikeway can also be found on the east side.

On selected sections of the road, the bicycle traffic has been directed to service roads on Powsińska St. The surface has been repaired, speed bumps have been used to calm the traffic, and parking spaces have been moved to parking bays. We have mounted several dozen new bicycle racks and special footrests for cyclists waiting for the green light. Nearly 70 trees and over a thousand shrubs have been planted along the road.



Safer Jerozolimskie Avenue

Jerozolimskie Av. from Zawiszy Sq. to Sokołowskiego "Grzymały" St. has changed beyond all recognition.

A bikeway has been created there, thanks to which it is possible to cycle on both sides of the street without interference. At the same time, we have built 1.5 km of new sidewalks laid with concrete slabs. Bus stops have been renovated. New greenery was planted (73 trees and nearly 8 thousand shrubs). We have renovated the traffic lights at Szczęśliwicka St. and built new traffic lights at crosswalks on Białobrzeska St. and Niemcewicza St.

The crosswalk on Jerozolimskie Av. near Białobrzeska St. was one of the "black spots" on the road safety map. Pedestrians had to cross two roadways with 3 and 4 lanes. A nearby crosswalk on Niemcewicza St. was also dangerous because pedestrians had to cross 2 lanes behind the bend of a busy road. Both locations were covered by the pedestrian crosswalks safety audit and obtained very low ratings (2 points on a 5-point scale). The main recommendation by the auditors was the installation of traffic lights. New lights fully adapt to the traffic demand. Their functioning is coordinated with neighboring intersections. We equipped the traffic lights with pedestrian and vehicle detection devices and the intersection with video surveillance system and audible traffic signals.



Żwirki i Wigury

Żwirki i Wigury St. is being rebuilt in several stages. In 2017 works covered the section from 17 Stycznia St. (now Komitetu Obrony Robotników St.) to Wawelska St. Infrastructure for pedestrians and cyclists has been built on both sides of the street. Traffic lights at 9 intersections have been remodeled. The lights have been synchronized to achieve the "green wave" effect. The intersection with Racławicka St. underwent major changes.

An additional left turn lane with a separate light phase was added and it improved the traffic. All works will end in 2018.



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We are working on Jagiellońska St., Radzymińska St., Kasprzaka St. and Okopowa St.

Further constructions under the Integrated Territorial Investments are in progress. Their completion is scheduled for 2018.

This is Jagiellońska St. where a bikeway on the section from Toruńska Freeway to Starzyńskiego Roundabout is being built. The project also includes demarcation of bicycle crossings, adjustment of service roads to bicycle traffic, demarcation of parking spaces, renovation of sidewalks, remodeling some bus stops and remodeling lighting (on the east side). In addition to the above-mentioned works, we plan to remodel the lighting on the west side of the street as well.

Work in progress on Radzymińska St. In the spring and summer of 2017 a new road surface was laid and bus stops were constructed on Radzymińska St. The next stage is the reconstruction of the remaining infrastructure: construction of a bikeway, renovation of sidewalks, service roads and remodeling lighting on the section from Karkonoszy St. to Bystra St. and construction of a bridge for pedestrians and bicycles on the Zaciszański Canal. At the same time, a bikeway and a sidewalk along Bystra St. to the border with Ząbki will be built. The end of the works is scheduled for mid-2018.

In 2017 works on Kasprzaka St. has started. As part of the investment, on the south side of Kasprzaka St, Wolska St. and Połczyńska St. a 2.5-kilometer section of bikeway will be built. Sidewalks will be renovated and raised pedestrian crosswalks and bicycle crossings will be constructed wherever possible. The reconstruction will also include traffic lights at the intersections. The second stage of the investment will start in 2018.

Construction work has also started on Okopowa St. New bikeway will be built and sidewalks will be completely renovated there as well.

Road surface repairs

For many years weekend repairs of road surface have remained the flagship of the Public Roads Authority. Typically, all the works take 54 hours, owing to which disturbances to residents are kept to a minimum. During this time, the old and cracked surface is replaced with a new layer of asphalt.

In the last season, we carried out over 40 repairs. New asphalt has been laid and traffic marking has been placed on 38 streets – a total of 34 kilometers of a new road surface covering the area of nearly 400,000 sq m.

Important streets such as Przyczółkowa St., Ł. Drewny St., Radzymińska St., Jerozolimskie Av. or Niepodległości Av. have been renovated. Streets that are less busy, but important for the residents of the districts located further from the city center have also undergone repairs: Zawodzie St. in Siekierki, Walcownicza St. in Falenica, Cieślewskich St. in Białołęka, Gniewkowska St. in Odolany, Janowiecka St. in Elsnerów, and Estrady St. in Radiowo. The scope of renovation works was greater than in the previous years - in addition to replacing the asphalt, new curbs and shoulders were also laid along the roadways. We also renovated bus stops, pedestrian crosswalks, and sidewalks. During the "milling" operations traffic organization has been changed on many streets so that it is safer: refuge islands, traffic calming devices, and new parking spaces have been built on Gwiaździsta St., Potocka St., and Krasnobrodzka St. We have marked a parking lane on Wiatraczna St. and active crosswalks have been constructed on Ł. Drewna St. and Przyczółkowa St. In 2017 the Public Roads Authority spent PLN 68 million on roadway repairs. This is the highest amount in the last 7 years.

Preparations for resurfacing begin a few months before the machines head to the streets. Traffic analysis is carried out in the area of the planned work and, if necessary, a project of changes in traffic organization is developed. We prepare the work area a few weeks before milling. We carry out the necessary paving works, replace the curbs, and remove architectural barriers. One of the key stages, before the work begins, is to inform the residents about the planned works and detours. Thanks to that, everyone can prepare for changes in traffic organization.

The main renovation of the street takes 54 hours and starts on Friday at 10:00 p.m. Then we close the renovated street and establish detours. At night from Friday to Saturday, the old binder course and the wearing course are milled. If the surface's condition requires so, we also mill the layers of the bituminous roadbase and we adjust the subbase. In the following days, all the layers are laid and traffic marking is painted. Works end on Monday at 4:00 a.m. and the street is opened for traffic. Then we have to remove the detours signs so that they do not mislead the drivers in the morning rush hours.



Comparison of millings between 2011 and 2017

Road surface repair step-by-step

A FEW MONTHS BEFORE

Analysis of traffic within the area of future works and – when necessary development of proposals of changes in traffic organization.

A FEW WEEKS BEFORE

Preparatory works: necessary paving works, including replace- ment and adjustment of curbs and removal of architectural barriers; on-site inspections with utility companies.

A FEW DAYS BEFORE

Information for residents about planned works and traffic diversions.

FRIDAY AT 10:00 P.M.

Road closure and introduction of traffic diversions.

FRIDAY/SATURDAY NIGHT

Milling of the old binder course and the wearing course. If the surface's condition so requires, milling of the bituminous road- base and correction of the subbase.

SATURDAY MORNING

If the overnight works included milling of the bituminous road- base and correction of the subbase, it is necessary to re-lay the subbase and roadbase. The next step includes cleaning of a sur- face and application of asphalt emulsion, ensuring proper con- nection between individual courses.

Further works include laying of a new binder course, which cools down until Sunday (time depends on the scope of works and the ambient temperature).

SUNDAY

/;i

Application of asphalt emulsion on a binder course laid on Saturday and laying of a new wearing course. Cooling time of a new course depends on the scope of works and the ambient temperature.

The next step, taking place on the same day, assumes the installation of traffic markings.

MONDAY UNTIL 4:00 A.M.

Further works associated with the installation of traffic markings.

MONDAY 4:00 A.M.

Opening of a street for traffic. Removal of diversion signs.

Road surface repairs



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Renovated road surfaces:

- Drewny St. Przyczółkowa St. from Marcepanowa St. to city borders;
- Radzymińska St. both ways from Łodygowa St. to city borders and eastern roadway from Bukowiecka St. to Łodygowa St. (without the intersection);
- Roentgena St. both ways from Płaskowickiej St. to Pileckiego St.;
- Zabraniecka St. from Zabraniecka St. number 73 to Naczelnikowska St. number 50;
- 5. Człuchowska St. both ways from Powstańców Śląskich St. to Karabeli St.;
- Jerozolimskie Av. southern roadway from E. Plater St. to Poznańska St. including the intersection with E. Plater St.; southern roadway from Zawiszy Sq. to Lindleya St. (including the intersection with Lindleya St.);
- 7. Gwiaździsta St. from Potocka St. to Krasińskiego St.;
- 8. Bartycka St. from Czerniakowska St. to Gościniec St.;
- Komitetu Obrony Robotników St. (previously 17 Stycznia St.) – both ways from Krakowska Av. to Żwirki i Wigury St.;
- 10. Białołęcka St. from Cieślewskich St. to Ketlinga St.;
- Grójecka St. eastern roadway from Korotyńskiego St. to Banacha St.;
- Estrady St. from Arkuszowa St. to Kampinoska St.;
- Zawodzie St. from Kobylańska St. to Augustówka St.;
- 14. Krasnobrodzka St. from Chodecka St. to Toruńska Freeway;
- 15. Elekcyjna St. from Wolska St. to Górczewska St.;
- Deseniowa St. from Parcelacyjna St. to Czystej Wody St.;
- Kościuszkowców St. from Bychowska St. to number 85;
- Wojska Polskiego Av. from Popiełuszki St. to Inwalidów Sq.;
- Namysłowska St. from Starzyńskiego St. toRatuszowa St.;
- Walcownicza St. Petunii St.- Hiacyntowa St. - Techniczna St. - from Narcyzowa St. to Złotej Jesieni St.;

- 21. Walcownicza St. from Patriotów St. to Bystrzycka St.;
- 22. Nałęczowska St. from Sobieskiego St. to Powsińska St.;
- Janowiecka St. from Swojska St. to city borders, Swojska Str - from Janowiecka St. to Jesiotrowa St.;
- 24. Wiatraczna St. from Grochowska St. to Szaserów St.;
- 25. Rodziewiczówny St. from Jubilerska St. to Łukowska St.;
- 26. **1 Sierpnia St.** from Krakowska Av. to Żwirki i Wigury St.;
- Niepodległości Av. western roadway from Lecha Kaczyńskiego st. (previously Armii Ludowej Av.) to Batorego St.;
- 28. Bysławska St. from Włókiennicza St. to Patriotów St.;
- 29. Cieślewskich St. from Zegarynki St. to Płochocińska St.;
- Gniewkowska St. Potrzebna St. between two grade crossings (within Włochy district) and from Mszczonowska St. to Ordona St.;
- 31. Wałuszewska St. from Bohaterów St. to Żyrardowska St.;
- 32. Zatorze St. from Wyczółki St. to Otomańska St.;
- 33. Potocka St. from Kuronia Sq. to Mickiewicza St.;
- 34. Obozowa St. southern roadway from Deotymy St. to Prymasa Tysiąclecia Av.



Sidewalk repairs

We ensure comfortable and safe infrastructure for pedestrians. 2017 was a record year for sidewalk renovations. The pavers laid new slabs on 32 streets. It amounts to the area of 83,000 sq m and 25 km of sidewalks – almost three times more than in 2016. The total cost of these works is PLN 13 million.

Concrete paving slabs (50 x 50 cm) are being laid on the sidewalks. Our standard is to repair sidewalks and resurface the roadways or build bikeways at the same time. After such a renovation, pedestrians can walk on a comfortable and aesthetic sidewalk, cyclists can ride an asphalt bikeway, and drivers can enjoy an even road with new traffic markings. Therefore, each road user benefits from the results of the renovation. A new surface has been laid on the sidewalks including the following streets: Korotyńskiego, Roentgena, Ciszewskiego, Solec, Obrzeżna, Namysłowska, Pożaryskiego, Krasnobrodzka, Jerozolimskie Av., Szaserów, Batorego, Czerniakowska, Powsińska, Gwiaździsta, Nałęczowska, and Potockiej. When repairing sidewalks, we remove architectural barriers - we lower the curbs and install detectable warnings and directional paving.

ZDM staff have also renovated 46 bus stops and bays on the following streets: Roentgena, Czerniakowska, Człuchowska, Rodziewiczówny, Walcownicza, Techniczna, Bysławska, Szaserów, Łukowska, Estrady, Solec, Krakowskie Przedmieście, Przyczółkowa, Drewny, św. Bonifacego, Radzymińska, Namysłowska, Zabraniecka, Zawodzie, and Bartycka. As far as bus facilities are concerned, we also hold ourselves to a high standard – concrete slabs on the platforms, detectable warnings and directional paving at the edge of the platform and transit curbs thanks to which low-floor buses can pull up close to the platform edge.









New bikeways

The development of bicycle traffic is one of the priorities for the City of Warsaw. Thanks to the EU funds, several dozen kilometers of new bikeways are being built. The network already has over 500 km.

The cycling infrastructure in Warsaw is growing rapidly. Every year, since 2012, approximately 50 km of new bikeways are built. In 2017, the total length of the network exceeded 500 km – at the end of the year, it amounted to 532 km, including 400 km of separated bike patch. However, we focus primarily on the quality of the routes: already 2/3 of them have an asphalt surface. New sections join the already existing fragments and create an interconnected network. More and more districts and estates are easily accessible by bicycle.

The implementation of the largest cycling investments was possible owing to the EU funds under the Integrated Territorial Investments (ITI). The co-financing agreement for approx. PLN 70 million provides for the construction of over 70 km of new routes by mid-2018. In 2017 bikeways have been built at Pole Mokotowskie, along Żwirki i Wigury St., Jerozolimskie Av. and Powsińska St. Also thanks to the ITI, it was possible to build a pedestrian and bicycle bridge under the Łazienkowski bridge, as well as a bikeway on Marsa St. As a result, a corridor of nearly 9 km was built, connecting Rembertów and Praga-Południe with Śródmieście and Mokotów.

In 2017 the first interconnected cycling corridors across Śródmieście have been created. Opening the Vistula boulevards made it possible to cycle from north to south and thanks to marking bike patches on Tamka cyclists can ride from Praga through the city center to Wola. Currently, the route is being extended across Wola and Bemowo all the way to the border of Warsaw (a total of about 13 km). We also ensure the quality of the existing routes. 10 km of several busy bikeways have been renovated on Roentgena St., Ciszewskiego St., Czerniakowska St., Szaserów St., Modlińska St., and Puławska St. Contraflow bike patches have been introduced on oneway streets. They are used on 90 streets and have a length of 20 km.

The effects are tangible. In the last 2 years, bicycle traffic has increased by as much as 40%. Daily 75,000 cyclists move around Warsaw, which means that 5.5% travels in the city are done by bicycle.

In 2018 another several dozen kilometers of cycling infrastructure will be built, including important streets such as: Kasprzaka St. and Połczyńska St. (connecting Bemowo with the city center), Okopowa St. and Towarowa St. (bypassing the city center), Wiertnicza St. (route from Wilanów), Puławska St. (connecting Piaseczno and Ursynów with Mokotów and the city center), Radzymińska St. (connecting Ząbki and Targówek with Praga).





that 5.5% travels in the city are done by bicycle.



532 km of bikeways including:



400 km of separated bike patches



62 km of contraflow bike lanes



68 km of walking and cycling routes



2/3 bikeways with asphalt surface



Improving the accessibility of urban space

We would like to make urban space accessible to all its users. 2017 was another year when we continued the removal of architectural barriers.

The 2017 budget for

removal of architectural

barriers was

PLN 1,9 million

which is twice as much

as we spent in 2016.

Even though the investments are not large – rebuilding a sidewalk at a crosswalk, lowering a curb, installing detectable warnings at the edge of the road or a bus stop, installing tactile paving – they make moving through the city easier for persons with disabilities, the elderly or parents with strollers. Every year dozens of such barriers are removed from the streets – in 2017 we worked in 90 locations in five districts. We spent PLN 1.9 million on these improvements, this is twice as much as in 2016.

More extensive works – including the repairs of sidewalks – were carried out at 10 intersections on Śródziemnomorska St. Architectural barriers are no longer a problem at 46 stops we renovated. We also remove the barriers when major projects are carried out: thanks to the reconstruction of intersections, ground pedestrian crosswalks at the intersection of Jerozolimskie Av. and E. Plater St., on

Czerniakowska St. near Chełmska St., on Jagiellońska St. near Kotsisa St., or on Powsińska St. near Okrężna and św. Bonifacego St. have been created. We also eliminate barriers for cyclists – in a dozen or so locations we have installed bicycle stairways, which facilitate walking a bicycle up or down the stairs.

We have started work on improving the accessibility of Łazienkowska Freeway. Firstly, changes will be introduced at the transport interchange on Na Rozdrożu Sq. This is the first stage of the "Accessible Łaziencity councilors and the Śródmieście, Ochota, and Praga-Południe districts. The reconstruction of the square will include the construction of elevators linking the bus stops on Łazienkowska Freeway and reconstruction of stairs and the bus stops. The platforms will be widened, equipped with more seats and higher transit curbs which facilitate getting on the bus. The bus

kowska" program which provides for the improvement

of the accessibility of all the 11 transport interchanges

on Łazienkowska Freeway. The program was devel-

oped thanks to joint efforts of the Warsaw authorities,

stops will be equipped with the Passenger Information System displays. The upper level of the interchange will also be altered. We will add a missing crosswalks on the west side of Ujazdowskie Av., near Koszykowa St. We will also make more space for pedestrians by removing surfaces excluded from traffic and we will organize bicycle traffic on the square.

In 2017 "Accessibility Standards" were introduced in Warsaw. They indicate how to design and build, among other things, sidewalks, pedestrian crosswalks, stops, parking spaces, city information systems (voice or touch). The guidelines are meant to make the urban space as accessible as possible for all the residents of the city, taking into account various needs and opportunities resulting from age and abilities. The implementation of the standards will ensure better conditions for the elderly, parents with children or persons with disabilities.







Road traffic safety

2017 saw a record number of investments aimed at improving road safety. They involve new pedestrian crosswalks, changes in traffic organization and new street lighting, renovation of sidewalks and roadways. It is reflected in the statistics. The number of accident victims in the last year has dropped by over 20% and is much below the average for the European Union.

Warsaw continues working towards "Vision Zero". The conducted road safety audit and a series of infrastructure activities have contributed to improving the safety of pedestrians, especially at crosswalks. In 2017 we spent approx. PLN 100 million on all the mentioned actions.



Pedestrian crosswalks safety audit

To improve safety in a comprehensive way, especially in the area of pedestrian crosswalks, it is necessary to know the problems that have to be faced. Each introduced traffic organization is analyzed for safety.

For two years we have been conducting a pedestrian crosswalks safety audit, which so far covered 1999 zebra crosswalks in 7 districts - Śródmieście, Ochota, Praga-Południe, Targówek, Mokotów, Ursynów, and Bielany. In 2018 the audit will cover the next 5 districts and 1126 crosswalks.

The auditors assess the crosswalks taking into consideration 30 different criteria and put forward recommendations that are the basis for corrective actions carried out by the Public Roads Authority. The audit was based on on-site inspections con-



ducted by the auditor in the field, on each crosswalk. They were carried out from Monday to Saturday, except during precipitation. The scope of actions included collecting data on, among others, the traffic organization and geometric design. Distance meters and measuring wheels were used during inspections. The collected data was entered into a form which takes into account the characteristics of the crosswalk (including location, road surface, lighting), traffic organization, signage, the presence of bus stops, parking, visibility, etc. Illuminance measurements at crosswalks were also performed. Crosswalks were closely monitored by a set of illuminance meters. Measurement points were set in a way that allowed for testing each crosswalk in a similar manner and comparing the results.

Among the observed issues, the main problem is parked cars which reduce visibility – such a problem affects as much as 40% of the crosswalks. That is why every year we install several thousand parking posts and thus prevent such dangerous behavior of drivers. Thanks to that pedestrians can notice the approaching car with an advance and drivers are not surprised by pedestrians walking from behind parked vehicles. We also focus on providing additional lighting in the crosswalk area, adding refuge islands, speed bumps, traffic lights, and raising dangerous zebra crossings.



Changes in road traffic organization

Changes in the road traffic organization make comprehensive safety improvements possible. We add new, ground pedestrian crosswalks, build refuge islands, speed bumps and active crosswalks. Changes in the geometric design of intersections also contribute to the overall safety improvement.

We add new, ground pedestrian crosswalks. They become an alternative to neighboring footbridges or underpasses. Examples of such changes are the intersection of Czerniakowska St. and Chełmska St. and Jagiellońska St. near A. Kotsisa St. New crosswalks were also marked on Powsińska St. (near św. Bonifacego St. and Okrężna St.), Kłobucka St., Conrada St., Estrady St., Zamieniecka St., Grenadierów St., Cyrulików St., 1. Praskiego Pułku St., Przewodowa St., Lubelska St., Paderewskiego St., Międzyborska St., Madalińskiego St., and Łysakowskiej St.

In 2017 we built 20 active pedestrian crosswalks. The crosswalks warn drivers about a pedestrian approaching the crossing. This is possible thanks to the use of a special detection system consisting of several synchronized elements – motion sensors, point reflective elements, red and white stripes, D-6 road signs with LED lamps and non-slip surface. This system makes the elements of safe crosswalk ("cat's eyes" in the roadway and LED lamps) activate only when there is "something going on" at the crosswalk, that is when a pedestrian is approaching. It is a clear sign for the driver who should take his or her foot off the gas pedal at that moment.

The effectiveness of active crosswalks has been analyzed. At the studied crosswalks, the drivers stopped twice more often to let an approaching or waiting pedestrian cross the street. The pedestrians who waited to cross the street spent 40% less time waiting. The number of conflict situations (e.g. failure to yield the right of way) has dropped by 10%, and drivers reduced the speed when passing through active crossings by 4 km/h. In 2018 we would like to install similar devices on another dozen or so zebra crosswalks.

We adopt various measures to improve pedestrian safety. We build refuge islands between lanes (on Śródziemnomorska St., Szaserów St., Gwiaździsta St., Lotników Av., Solec St., Dąbrowszczaków St., Mehoffera St., Bazyliańska St., Zamieniecka St., Wileńska St., Browarna St., Topiel St., Madalińskiego St., Łysakowska St., Potocka St., Łukowska St., and Nałęczowska St.) and raised pedestrian crosswalks (on Śródziemnomorska St., Półksiężyca St., Szaserów St., Roentgena St., Powsińska St., Jagiellońska St., Jerozolimskie Av.). The changes in the geometric design of intersections also improve the situation. Examples of such changes can be observed at the intersection of Powsińska St. and św. Bonifacego St. or Czerniakowska St. and Chełmska St., where the bends of the intersections have been significantly reduced to calm traffic and improve visibility. Visibility improved thanks to preventing illegal parking at pedestrian crosswalks (we have installed over 4,000 posts). What is more, speed bumps have been built on Białobrzeska St., Elbląska St., Wałuszewska St., Dzieci Polskich Av., Graniczna St., and Bora-Komorowskiego St.









Changes in the geometric design of intersections



Traffic lights

We build traffic lights on the busiest and the most dangerous crosswalks and intersections. Traffic lights control the flow of vehicles and significantly improve safety.

We build traffic lights on the busiest and the most dangerous crosswalks and intersections. Traffic lights control the flow of vehicles and significantly improve safety. In 2017, 11 new traffic lights were installed – at the intersections of Reymonta Av. with Andresena St. and Schroegera St., Trakt Brzeski with Jeździecka St., Rzeczypospolitej Av. with Branickiego St., Radzymińska St. and Grodzieńska St., Głębocka St. with Magiczna St., Jagiellońska St. with Kotsisa St., Jerozolimskie Av. with Białobrzeska St. and Niemcewicza St., Powsińska St. with Okrężna St. and near the school on Paderewskiego St.

At the intersection of Czerniakowska St. and Chełmska St. major changes have been introduced. A new ground pedestrian crosswalk across Czerniakowska St. have been constructed. We equipped it with modern signaling devices. Signaling devices at the intersections of Żwirki i Wigury St. with Hynka St. and on Modlińska St. near Kowalczyka St. have been renovated. Additional phases for vehicles turning left have been added, thanks to which it became possible to avoid collisions.

We introduced the "green wave" on Żwirki i Wigury St. The works covered 9 traffic lights (at the intersections with 17. Stycznia St., near Leżajska stop, 1. Sierpnia St., Wyględowska St., Racławicka St., Pruszkowska St., księcia Trojdena St., Banacha St., and Wawelska St.) which have been coordinated to ensure smooth traffic flow (smoother driving at the speed limit). Worn out traffic control and signaling devices have been replaced and at the intersection with Racławicka St. an additional left turn lane from Racławicka towards the airport has been added. The "green wave" has also been implemented as part of the work carried out on Powsińska St. and Jerozolimskie Av. These are not all the alterations we have made in the existing traffic lights. An additional phase for turning left has also been added at two intersections on Marszałkowska St. The Integrated Traffic Management System (ZSZR) also contributes to the improvement of traffic flow and safety.

The system consists of dozens of surveillance cameras, measuring stations and variable message signs. The system, based on a network of cameras and sensors, detects the intensity of traffic and adjusts the traffic light programs to it. It also coordinates the traffic arteries. The traffic management system is not only aimed at improving the flow of traffic, but also at improving safety. The traffic lights "reward" drivers who obey the traffic rules: the coordination of lights is set to ensure a continuous flow of vehicles traveling at the speed limit, i.e. in most cases 50 km/h. Those who break the rules and go faster will probably see a red light.

In 2017 Siemens was contracted as the operator of ZSZR for the next 8 years. Under the provisions of a long-term contract, the system will grow significantly, but it will also become more functional and innovative. 40 new intersections will be incorporated. Modernization of the system will include the replacement of wiring, street lamps, mast arms, poles, and controllers. New variable message signs will be mounted, thanks to which a wider range of information for drivers will be displayed. The system will be supplemented with additional cameras and converted to full automatic detection. We will also carry out tests of the system informing cyclists of the recommended cycling speed allowing to encounter green light at the nearest intersection. The Traffic Management Center will be modernized.
The Integrated Traffic Management System

The Integrated Traffic Management System (ZSZR) also contributes to the improvement of traffic flow and safety. The system was originated in Warsaw in 2008 and back then it covered 37 intersections. Today, it encompasses a total of 268 intersections. 97 of them is controlled by

the system operator, whereas the rest is connected to the surveillance system with the possibility of changing controlling programs. The system includes traffic lights on Wisłostrada, Jerozolimskie Av., Świętokrzyska St., in Powiśle neighborhood, Targowa St., or Światowida St.; new ones are still being added.



Intersections covered by the system

Intersections to be covered by the system in 2017

Intersections in preparation

Development of the Integrated Traffic Management System

Street lighting

Good visibility and increase in safety go hand in hand. That's why we continue to renovate and reconstruct the lighting on the streets.

Repairs are comprehensive: we replace the wiring and control devices, we install new poles and modern fixtures. The new lighting is installed not only along the roadways but also along the sidewalks. When renovating lighting we provide additional lighting at pedestrian crosswalks.

In 2017 we maintained a fast pace of lighting modernization. We replaced nearly 1,300 poles, that is as much as in 2016. By contrast, in 2015 we replaced 500 poles.

New lighting of roadways, sidewalks, and lighting at pedestrian crosswalks have been added on Zjednoczenia Av., Lotników Av., Świętojerska St., and Namysłowska St. On the streets in the historical district (Moliera St., Krzywickiego St., and Wojska Polskiego Av.) stylized "pastorał" [crosier] lamp posts with LED fixtures have been installed. Modern lighting of the roadway and additional lighting at the pedestrian crosswalks have been constructed on the following streets: Browarna, Łojewskiej, Smocza, Nowolipie, and Grenadierów. On Grójecka St. new lighting has been installed along the bikeway and the sidewalk.









Reconstructions of street lighting

- **1. Zjednoczenia Av.** (along the entire avenue) installation of 106 poles and 125 LED fixtures
- **2. Lotników Av.** (along the entire avenue) installation of 90 poles and 93 LED fixtures
- **3. Krzywickiego St.** (along the entire street) installation of 27 poles and 34 "Varsovie" stylized LED fixtures
- **4. Grójecka St.** (from Opaczewska St. to Dickensa St.) installation of 19 poles and 19 LED fixtures
- **5. Grenadierów St.** (along the entire street) installation of 64 poles and 75 LED fixtures
- 6. Namysłowska St. (along the entire street) installation of 40 poles and 66 LED fixtures
- **7. Moliera St.** (along the entire street) installation of 8 poles and 29 stylized LED fixtures
- 8. Świętojerska St. (from Andersa St. to Bonifraterska St.) installation of 28 poles and 28 LED fixtures
- **9. Browarna St.** (along the entire street) installation of 20 poles and 21 LED fixtures
- **10. Łojewska St.** (along the entire street) installation of 62 posts and 62 fixtures
- **11. Smocza St. and Nowolipie St.** (along the entire street) installation of 90 poles and 97 LED fixtures
- **12. Wojska Polskiego Av.** (along the entire street) installation of 58 poles and 58 LED fixtures

In 2017 we installed almost



lighting poles





Additional lighting at pedestrian crosswalks

Crosswalk safety depends greatly on proper lighting.

Some of the audit recommendations suggest that additional lighting is one of the essential steps towards safety improvement. 2017 saw a record number of such enhancements. Additional lighting has been installed at 337 crosswalks throughout the city. Having selected the winning tender at the beginning of the year, we have added more lighting at dozens of zebra crosswalks. In the middle of the year, the pace of work was even faster. By contrast, in 2016 installed additional lighting at 78 crosswalks.

New lighting poles with fixtures have been placed near zebra crosswalks; at locations where there were already streetlights near the crosswalk, better lighting has been provided by installing a new light source on a double arm. In both cases LED fixtures creating bright, contrasting light have been mounted above the crosswalks. They improve the visibility of pedestrians not only on the zebra crosswalks, but also in the area where pedestrians approach it.









Routine road maintenance

One of our basic tasks is the routine maintenance of road infrastructure. Our employees check the condition of roadways and sidewalks on an ongoing basis. We repair damaged road surface and carry out routine renovations. The Emergency Road Maintenance Service supervises the safety of road infrastructure 24 hours a day, seven days a week, whereas the emergency traffic lights and lighting maintenance service removes current failures.

We also maintain and renovate road drainage system, adjust sunken drains and sewage inlets, and reconstruct traffic markings especially on crosswalks and intersections. We maintain bridge structures throughout the city. We take care of road areas, for example by checking them for illegal advertising, and our employees check the legality of objects on the road on an ongoing basis. We manage the Unguarded Paid Parking Zone.

Emergency Breakdown Service

The employees of the Emergency Breakdown Service patrol the streets 24 hours a day, seven days a week and supervise the condition of the road infrastructure. Street lighting, traffic lights, emergency road and sidewalk damages, road signs – these are the most frequent problems brought up in alerts.

In 2017 we intervened 1226 times by securing road failures. We submitted reports regarding road surface damage to the Road Repairs and Maintenance Unit (approx. 10,000 alerts), we commissioned lighting repairs to lighting emergency maintenance service (nearly 14,000 alerts) and we passed approx. 6,000 alerts to traffic lights emergency maintenance service.

We used 15,870 kg of cold asphalt to secure damaged road surface. It is the easiest and the fastest (but temporary) way of repairing road surface defects endangering the safety of vehicular traffic. In a situation where a failure occurs on a road that is not under our management, the Emergency Breakdown Service immediately secure the area and pass the information on to the appropriate unit. If the road is our responsibility, we commission its repair with the use of mastic asphalt to our contractor.

We are in constant contact with the residents. In 2017 we received 39,000 alerts (both from the residents and from other city units) – most of them through the 19115 Warsaw Contact Center. The residents most often reported roadway, sidewalk, or bikeway damages, lighting or traffic lights failure, and missing elements of traffic organization affecting traffic safety (e.g. parking posts). Last year the employees of the Emergency Breakdown Service handling correspondence regarding alerts, interventions and securing damages received approx. 190,000 emails. Calls and emails from the residents allow us to operate more efficiently and to secure damages even faster.









Bridge structures

The Public Roads Authority maintains and modernizes nearly five hundred civil engineering facilities: bridges, viaducts, footbridges, underpasses, and tunnels.

We also supervise elevators and lifts at these facilities as well as noise barriers along the roads. One of the major investments was reinforcing the soil slope located along Mehoffera St. Due to its construction and location (near a busy street), the slope has been exposed to landslides. The main part of the works was the construction of two revetments of 14 m and over 90 m in length. The construction was based on reinforced concrete foundations. It consists of reinforcing piles and



gabions – steel cages filled with aggregate. In addition, two existing concrete walls have been heightened.

We built a ramp on Na Rozdrożu Sq.; it connects Ujazdowskie Av. with the area around the fountain. Before the construction of the ramp persons with disabilities, parents with children in strollers, and the elderly had trouble getting from the level of Na Rozdrożu Sq. to the level of the sidewalk around the fountain. There were only stairs leading from two sides. The ramp significantly facilitated moving around in this area. The new construction was created under the framework of the participatory budget. Almost 1,200 residents of Śródmieście district voted for the project.

As part of ongoing works the culvert under Estrady St., the equipment of the underpass at Dolinka Służewiecka St. near Koncertowa St. and the bridge over Potok Służewiecki at the Wyścigi junction have been renovated. We also fixed the drainage of the ks. J. Poniatowski viaduct.

We have carried out a number of maintenance works, including reparation of guardrail, application of anti-corrosion layer, and maintenance of expansion joints. We washed over 800,000 sq m of noise barriers, 53,000 sq m of cornices and 60,000 sq m of railings.

We ensure not only the technical condition but also about the aesthetics of the objects. During the year we removed over 30,000 sq m of graffiti from noise barriers and other bridge structures. We have secured 28 sq m of the surface with an anti-graffiti coating, thanks to which it is easier to clean them.

498 bridge structures149 viaducts44 trestle bridges117 elevators and platforms

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63 bridges 29 tunnels 45 underpasses 66 footbridges 105 culverts 57 km of noise barriers

Road area

Commercial kiosks, pavilions, advertisements, stands – a permission to place such an object in the road area is necessary. The rules for issuing the permits are clear and the same for everyone. As the manager of the roads, we care for urban space. This is a common space, so we try to balance the needs of all its users.

A road area is a place where the facilities related to the functioning of the road take priority. Our main task is to ensure good technical condition, safety and comfort of the road infrastructure. It is only when these conditions are met that we may consider giving permission to locate a facility, whose function is not related to the purpose of the road: for example, a kiosk, a sales stand or a seasonal outdoor bar. When issuing a decision, we seek the opinion of other departments that are co-hosts of public space. We apply uniform rules. The issued permit is temporary and after its expiration, each subsequent application is considered from scratch.

In 2017 we issued positive decisions on locating 742 kiosks, 964 sales stands, 510 outdoor bars, 45 marketplaces, and 741 advertising media.

INCOME FROM ROAD LANE OCCUPANCY





BEFORE

AFTER

We remove illegal advertising

We control the road lane in terms of its use for activities not related to the road function. It is primarily advertising, but also various types of sales stands, old kiosks or containers. In 2017 we carried out a total of 14,001 controls. We checked 8,476 advertisements of which 1,224 were removed (including 75 advertisements on car trailers and 82 on cars). Additionally, thanks to our activities, we managed to remove 980 other objects from the road lane (including sales stands, kiosks, and containers).

In relation to entities occupying the road area without our permission, 1,682 administrative proceedings were initiated and 1,554 decisions imposing administrative fines were issued. The total amount of imposed fines is PLN 8.4 million.





Truck inspections

We control trucks which use the roads of Warsaw. Overloaded trucks destroy our roads – one vehicle can damage the road surface more than all passenger

vehicles driving the street during a week. In an overloaded truck more fuel is consumed, the braking system and tires wear out faster, which causes more air pollution.

During an inspection, we control mass, axle loads, and dimensions of the vehicle. Our employees can verify the vehicle and cargo documents, as well as weigh the vehicle using specialized equipment. Each inspection takes place in the presence of a police officer who has The most important result of these activities is a noticeably smaller number of trucks exceeding the limits of mass, axle load, and dimensions of the vehicle.

tant result of these activities is a noticeably smaller number of trucks exceeding the limits of mass, axle load, and dimensions of the vehicle. Depending on

how much the limits have been exceeded, the penalty is of PLN 500, PLN 2,000 or even PLN 15,000. Carriers are also punished for the lack of appropriate permits. The penalties are of PLN 1,500 or PLN 5,000 (depending on the permit category).

In 2017 we carried out 932 inspections. During this time we issued 246 administrative decisions imposing financial penalties amount-

the authority to give the driver a ticket for any misdemeanors.

We started the inspections at the end of 2016. The first full year of work has finished. The most impor-

ing to a total of PLN 1.6 million. Despite the complex administrative procedure, income from penalties at the end of 2017 amounted to over PLN 650,000. The money is spent on, for example, repairs of roads damaged by overloaded vehicles.



Development and projects

Our work is not only limited to routine road maintenance - we also conduct large-scale projects which truly change the urban space. We conduct research, inspections and analyses which help us redesign and build the road infrastructure even better.



Veturilo. Public bikesharing

Veturilo city bikes have been riding around Warsaw for 6 seasons now. In 2017 the system has been considerably expanded – users had 355 new stations and over 5,000 bicycles, including 100 electric bicycles, 60 children's bikes, and 45 tandems at their disposal.

From March to the end of November, bikes were rented 5,136,138 times and 164,000 people joined Veturilo. In total, since the start of the system in August 2012, city bikes have been rented 13,055,944 times, and the system already has 610,000 users.

The best month in the history of Veturilo was June 2017, when bicycles were rented as much as 868,350 times – an average of 28,945 a day, 1,206 an hour and more than 20 per minute. The record

number of bikes was rented on Saturday, May 20. On that day, Veturilo was used 42,288 times, which means that on average every 2 seconds a Veturilo bike was rented.

The average time of one rental was 21 minutes and 12 seconds. The most popular bicycle was rented as many as 2,131 times. Tandems (32,000 rentals) and children's bicycles (12,000 rentals) were also very popular.



WSKI ROWER PUBLICZNY



Number of bikes and number of stations in the annual comparison



Pedestrian and bicycle bridge

It was one of the largest ZDM projects in 2017. Opened on August 9, 2017, the pedestrian and bicycle bridge suspended under the Łazienkowski bridge quickly became the flagship of Warsaw and one of its tourist attractions.

The construction took 8 months. Two bridges were built – on the northern and southern sides of the Łazienkowski Bridge. The northern bridge is for pedestrians and cyclists, whereas the southern is only for cyclists. On the left bank of the Vistula, the bridges are connected with bikeways at Cypel Czerniakowski and on the right bank – with the bicycle route along Wał Miedzeszyński. An additional bridge over Wał Miedzeszyński was also built (on the north side of the Łazienkowska Freeway junction); it connects with a bikeway and a sidewalk along Stanów Zjednoczonych Av. There is also a ramp leading to the beach and a recreational path on the right bank of the Vistula.



Lighting has been installed along the entire route. In order not to let people get lost, appropriate direction signs have been set on both banks.

The Łazienkowski Bridge is the sixth bridge over the Vistula River with cycling infrastructure. The pedestrian and bicycle bridge is part of one of the longest bikeways in Warsaw. Thanks to the construction of the bicycle route on Marsa St. it is already 9 km long. Residents of Rembertów and Praga-Południe are now connected with Śródmieście and Mokotów. The construction of more sections has already been planned – as part of the renovation of the Łazienkowska Freeway trestle bridges over Agrykola, bikeways leading to Na Rozdrożu Sq. will be built.

The construction of the pedestrian and bicycle bridge under the Łazienkowski Bridge (as well as bikeways on Stanów Zjednoczonych Av., Ostrobramska St., and Marsa St.) was completed with the support of EU funds under the Integrated Territorial Investments. The investment cost is PLN 13.5 million.



56

The whole structure is several hundred meters long and consists of **104 steel elements** suspended under the bridge.

1500 cubic meters of concrete
were used for its construction,
250 tons of steel
was used for reinforcement.

All steel components of the pedestrian and bicycle bridge weight 500 tons.

Winter illumination

Christmas illumination has been lighting up Warsaw for several years, but thanks to the contract signed in 2016, it was significantly expanded and covered 20 kilometers of streets in the most representative places of the capital city.

This is the largest decoration of this type in Poland and one of the most impressive in Europe. If it was a single chain, it would be 680 km long. The decorations consist of nearly 4.5 million energy-efficient LED lights and almost 1,300 decorative elements – lantern illuminations, hangings, garlands, light curtains, icicles and free-standing decorations.

This season's novelty was the decorative "postcard" frames installed at the most popular places in the city center. Souvenir photos in such a frame could be taken in the Fountain Park, on Zamkowy Sq., in front of the Staszic Palace, at de Gaulle'a Roundabout, on Na Rozdrożu Sq., Marszałkowska St., Ząbkowska St., at Szembek Sq., or in front of the Palace of Culture. There was a 27-meter Christmas tree on Zamkowy Sq. and a smaller tree on Powstańców Warszawy Sq. What is more, 13 illuminated colorful stations with accents of the capital were set. At Krakowskie Przedmieście, the Snow Planetarium and the Album of Winter Warsaw were placed. Hoover Sq. was lit up by Visiting Santa and Enchanted Choo-Choo Train stations. On Świętokrzyska St. lighted gates could be found. More decorations adorned Wileński Sq., Grzybowski Sq., Old Town Square and New Town Square. The Red Bus waited for residents and tourists at Na Rozdrożu Sq. and the Royal Peacock on Ujazdowskie Av.

Christmas illumination is not just a decoration. Additional lighting also improves safety. In the shortest days of the year, when the visibility is reduced, the main streets of the city are additionally lighted. Decorations also add a unique charm to the city, encouraging locals and tourists to take a walk, even despite the unfavorable weather.













Green Świętokrzyska St. and Powstańców Warszawy Sq.

Tree lanes, elegant hedges, flower beds, benches, green seating areas – now it all can be found on Świętokrzyska St. The project of "green" changes that were implemented on the street was inspired by the residents.

The idea of planting more trees, shrubs and flower beds put forward in the participatory budget was supported by over 2,200 residents. The preparation of the project included arrangements with the owners of numerous buried networks and public consultations. In the end, the project from the participatory budget was enlarged tenfold - as many as 191 trees (plane trees) have been planted along the street. The result is outstanding - the street has changed beyond recognition. The height of the plane trees planted along the entire Świętokrzyska St. equals the height of the trees that grew there before – the seedlings were 8-9 meters high and the circumference of the trunks was 30-35 cm. Additionally, 17 branchy spring cherry trees, which were 2.5-3 m high have been planted. Low cotoneaster hedges have been created along the entire street (40,000 seedlings) and flower beds have been planted with a few thousand perennials and flowers. Tree root barriers and casing pipes were used to protect underground installations. Due to the application of



the innovative technology, as well as the need to minimize the impact on the street area the works took several months.

In several places parklets, i.e. green seating areas have been installed. There are several dozen additional benches, some of them are equipped with comfortable armrests and backrests. There is also more garbage cans and bicycle racks. Commemorative plaques near the planted trees have been installed as a surprise for the residents who participated in the creation of the project and took part in public consultations.

Powstańców Warszawy Square

Major changes can also be observed in Powstańców Warszawy Sq. Over 1,000 sq m of surface has been transformed into a green flower bed planted with thousands of flowers and perennials. More than a thousand shrubs (purple willow and "rokita" creeping willow) have been planted on the square. We planted 25 silver lindens, each 6.5-7 m high.

The trees were planted in steel planters, thanks to which in the future they can be transplanted during the planned construction of an underground garage under the square. What is more, new attractions have been added to the square: street musical instruments (drums, bells, pipes) and two trampolines. A mist cooling system used during heat waves has been installed.

The cost of all works on Świętokrzyska St. and the square - is PLN 6.2 million.









Modernization of the Unguarded Paid Parking Zone

We are working on the development and modernization of the Unguarded Paid Parking Zone (SPPN). We would like to make parking in the Zone as efficient as possible and ensure the residents' comfort as well. In 2017 we continued to prepare for the implementation of two modern tools – e-parking and e-control.

E-parking is a system that controls the number of occupied parking spaces with cameras or sensors and transmits the information to drivers. In 2017 we held a technical dialogue with suppliers offering such solutions. We are preparing to put out a request for tender for this service. The system was tested in 2016. Two solutions have been checked. The first solution was applied on Konstytucji Sq.; it uses wireless sensors placed in the surface of parking spaces. The second solution was adopted on the parking lot in front of the Central Station; the occupancy of the spaces is checked with cameras. As part of the tests, a website and a mobile application were launched.

E-control is a solution that allows to remotely check (using cameras on vehicles) whether the driver has paid for parking. The cameras scan the registration numbers of vehicles parked in the SPPN and send data to the system, which verifies the payment. The primary purpose of e-control is to increase the effectiveness of control activities (complementing the work of pedestrian patrols). Thanks to that, the vehicles will be moved to a different parking spot more often, and thus it will be much easier to find an unoccupied parking space. Environmental protection will be an additional benefit – the faster a driver finds a place to park, the less pollution his or her car emits. Another advantage of the automatic control is the improvement of the service provided to the residents. The results of the system test are promising and in December 2017 the Warsaw City Council gave the green light to its implementation. We would like to enter into a technical dialogue with potential contractors before putting out a request for tender for the e-control system.

The Unguarded Paid Parking Zone today comprises nearly 30,000 parking spaces. Our tasks include not only the development and modernization of the SPPN but above all the collection and control of fees. Every day 49 employees control the Zone. In 2017 there were 247 days of paid parking. We streamline the process of parking fees collection. The total income from parking amounted to PLN 95.9 million and was more than 4% higher than in 2016. Payments by payment cards and mobile payments are growing in popularity. The income from this type of payments has increased by over 20% in comparison to 2016. If the fee was not paid, we issue the so-called Additional Charge Document (over 351,000 fines in 2017). The income from the fines amounted to nearly PLN 14 million.

We support municipal police in its task of towing away badly parked and abandoned vehicles. We remove vehicles indicated by the city guards. During the year we towed away 21,413 vehicles, including 1,483 car wrecks abandoned by the owners. In 2017 the income from these activities amounted to almost PLN 9 million.



Cash payments in parking machines: PLN 32.6 million

Card payments: PLN 32.4 million

Mobile payments: PLN 14.2 million

Residential subscriptions: PLN 0.9 million

Underground car parks: PLN 1 million

Reserved parking spaces: PLN 0.9 million

Additional charges for parking fee avoidance: **PLN 13.9 million**

PLN 95.9 million

Total income from parking



City Information System

It would be difficult to imagine a big modern city without a coherent city information system. In Warsaw, such an original, proprietary system was introduced in 1996. The City Information System (MSI) is a set of distinctive signs visible on every street and building in the city. The MSI also includes plates informing about the street patrons or the history of the area, as well as advertising signposts.

The system has gained recognition among Warsaw residents and outside the city as well. We continue to develop the system.

Now MSI comprises 91,500 elements. It consists of address signs, street signs, information posts, SPPN signs, pictograms, direction signs to districts, stations, etc., double-sided information boards, wall-mounted information plates and Paid Information Points.

In 2017 we carried out repairs, maintenance works, replacement and updating of approximately 5,000 elements of the MSI. We have marked 36 underpasses where we have mounted 214 modern advertising light boards. They have been installed in all the underpasses, including the largest and most complex ones – Dmowskiego Roundabout and Czterdziestolatka Roundabout. The boards are 18 cm high and 1-3 m long. They indicate the route to public transport stops, metro stations, SKM and WKD, including information on the direction. The means of transport are marked with the same pictograms that can be seen on, for example, bus shelter.

Arrows indicate to which street each exit from the underpasses leads and they point the way to important places (e.g. to the Palace of Culture or the city beach). Information about the location of toilets, elevators, or wheelchair ramps can also be found on the boards.









RESOLVE. Commercial streets

Another year of our participation in the RESOLVE project has passed. The main objective of the program is promoting sustainable retail related mobility. This is the first project of this type implemented by ZDM.

Warsaw, like other European cities and regions, faces a difficult choice between the need to reduce emissions and noise and the need to revitalize the retail sector. The European project "RE-SOLVE - Sustainable mobility and the transition to a low-carbon economy retailing" aims to exchange best practices on policies and actions to reduce carbon emissions and other pollutants generated by the retail.

In April 2017 the City of Warsaw hosted a meeting devoted to strengthening the potential of commercial streets in the city center through activities related to sustainable mobility. Representatives of Warsaw and experts from the Netherlands, Italy, and Portugal gathered to participate in the meeting. The subjects for discussion included transport in the center of Śródmieście district, logistics of deliveries to stores located in this area and the problem of a limited number of parking spaces. Foreign guests highlighted the necessity of opening and maintaining a dialogue with the residents, entrepreneurs and other users of the space where activities under the RESOLVE project are planned. Representatives of Warsaw also participated in the expert meetings and study visits at RESOLVE partners in Sweden, Great Britain, Italy, and Portugal.

In the spring of 2017, a pilot study on traffic was conducted and passersby were surveyed on Senatorska St. The results suggest that, as far as traffic is concerned, it is a transit street, especially in the direction from Bankowy Sq. to the Old Town. Pedestrian traffic study shows that most people walking down Senatorska St. traveled there by public transport (44%); the majority (66%) planned to do shopping or visit a cafe or restaurant and chose Senatorska St. for the atmosphere and the surroundings (42%).

Another pilot project carried out as one of the RESOLVE activities was setting the boundaries of seasonal outdoor restaurants and cafés on Francuska St. Boundaries were marked on the basis of decisions issued and handed to the restaurants and cafés owners by ZDM. The initiative was enthusiastically received by the residents, restaurateurs, the media, as well as the Warsaw's Conservator of Monuments who supervises Francuska St. We are considering doing the same in selected locations in 2018. In 2018 the RESOLVE project will enter a key phase of preparations that will result in the creation of a "local action plan".





We compared Świętokrzyska Street and Jerozolimskie Avenue

Both streets are used not only for transport purposes. To examine the impact of street management on the quality of life, we made a comparative analysis of Jerozolimskie Av. and Świętokrzyska St. on the section between Jana Pawła II Av. and Nowy Świat St. This is second that extensive comparative research conducted in Poland, with Grodzka St. in Cracow study holding the first position. Similar studies have so far been made in other countries, mainly in Western Europe. The research does not only focused on creating an inventory of public space and checking the actual use of it, but also on presenting the assessment and perception of the quality of life by the residents, entrepreneurs, and users of the examined streets. The aim was to check the impact of changes on Świętokrzyska St. and Jerozolimskie Av. on the quality of life on the street in the short term. The analysis was carried out on the basis of data collected prior to the implementation of the "Green Świętokrzyska St." project and prior to adding ground crosswalk at the intersection of Jerozolimskie Av. and E. Plater St.

The authors of the analysis assessed the space of Świętokrzyska Street as more user-friendly. One

of the factors that have contributed to that opinion was very good technical condition of sidewalks and roadways, thanks to which traveling comfort increased. In the report, Jerozolimskie Avenue was given a less positive assessment. According to the auditors, the condition of the infrastructure "is not inviting". The report draws attention to the insufficient number of trees and green areas. Car traffic count conducted along both streets has shown that on Świętokrzyska St. there are half as many cars as on Jerozolimskie Av. What is more, pedestrian traffic is increasing.



Always in touch

ZDM work for the residents. We conduct public consultations and implement projects submitted as part of the participatory budget. Our focus lies on good contact with the residents, not only personal but also via social media and the 19115 Warsaw Contact Center.





We are changing for the residents

Good contact with the residents is our priority. We streamline case handling, adjusting it to both the market needs and the expectations of Warsaw residents. We are constantly improving the quality of services we provide. We adapt our activities to the latest international quality standards, for which we have been granted certification.

For several years we have been pursuing a policy of improving service in our office. We operate in accordance with the law and ethics. We would like every resident to settle his or her case in the office as quickly as possible. We care about raising the qualifications of our employees in order to provide each person with prompt service and to solve and explain every legal complexity as fast as possible. We strive to create a citizen-friendly office where matters are dealt with without any problems, and if problems arise, a resident can count on our help. We improve the system of issuing subscriptions,



identifiers and other decisions. We introduce new solutions to better the service, for example, pay stations. They replaced the traditional counters, which significantly improved the payment process.

ZDM directors meet with interested persons according to a special schedule. 361 such meetings were held in 2017, in which 514 residents participated. A total of 155,423 letters were received by ZDM throughout the year. These are, to a large extent, motions of residents who propose, for example, changes in the traffic organization.

In 2016, we launched a special notification service via SMS. Each resident who files an application for a parking subscription or an identifier (and gives us a phone number) receives a text message with information on the upcoming expiration date or the fact that an identifier is ready for collection. Parking-related issues can be settled at 21 ZTM Passenger Service Points located across the city and open at convenient times.

The quality of our services is controlled by external auditors on a regular basis. It is confirmed by the certification granted to ZDM by the Polish Center for Testing and Certification. It is an objective verification, thanks to which every resident can be sure that the activities of the office are consistent with the law and international standards.



3 12







155,423

letters

19115 Warsaw Contact Center

An average of 58 alerts a day is submitted through the Center. Last year we received 21,200 alerts and 56,000 alerts since the center was launched in 2013. Every year, the number of submitted alerts grows by more than 40%.

The majority of alerts concern lighting, traffic lights and the condition of sidewalk, bikeway, and roadway surfaces. Motions to build new sidewalks, crosswalks, and traffic lights, install bicycle racks, parking posts, or repair a road have also been proposed.

It is thanks to the residents' alerts through 19115 Warsaw Contact Center that a new pedestrian crosswalk has been built on Przewodowa St. and that posts preventing illegal parking have been installed on Krasińskiego St. As a result of an alert submitted to 19115, we improved the visibility of the crosswalk on Marsa St. The architectural barrier on Wrocławska St. (sunken sidewalk) has been removed. In the near future, we will widen the sidewalk by paving the pits where trees used to grow on Waszyngtona Av. At the request of employees of the Academy of Fine Arts, we will mark a pedestrian crosswalk across Hoene-Wrońskiego St. at the junction with Myśliwiecka St., near the premises of the Academy.

From January 1, 2018, a separate telephone number for the ZDM Emergency Road Maintenance Service has been disconnected. So far, to report a failure, residents called one of the two numbers: 19115 and the number of Emergency Road Maintenance Service. The change will simplify and improve the service. Residents' reports are for us one of the sources of information about failures and defects in road infrastructure, and the Emergency Road Maintenance Service can react faster, reducing road traffic hazards. Every day, around the clock, ZDM employees dispatch maintenance man to repair defects as quickly as possible.

We receive more and more alerts via the smartphone application Warsaw 19115. The application for iOS, Android and Windows Phone uses the GPS navigation. The application has maps with marked alerts, so one can check if someone else has previously reported the problem. It is possible to browse the history of submitted alerts and in case of complaints to connect directly with the 19115 number. Alerts can be submitted to the 19115 Warsaw Contact Center not only via the smartphone application but also at the telephone number 19115 (provider rates apply), via the portal warszawa19115.pl, email address kontakt@um.warszawa.pl or chat Warsaw 19115.com/web/portal/chat. Thanks to several channels of communication, the system is available to everyone. The city service is available 24 hours a day, seven days a week.














Social campaigns Cycling May

In 2017 Warsaw held the second edition of the Cycling May social and educational campaign promoting healthy lifestyle, sustainable mobility and cycling as a daily mode of transport to school.

83 schools from all Warsaw districts took part in Cycling May. 1890 classes, which translates into over 43,000 pupils, participated in the event. In March and April, the pupils attended educational workshops preceding the campaign, which encouraged them to join the event and prepared for safe participation. Fun and healthy competition went on during May. Pupils received stickers for each active travel – the more stickers, the better the individual prizes. The results were collected by a teacher designated by each school as a coordinator of the Cycling May.

Winning depended on the bicycle usage, i.e. the number of active travels made by pupils in relation to all the trips to school. Bicycle usage amounted to nearly 37%, which means that over 1/3 of all the travels to school was made in an active and ecological way. 34,744 pupils came to school at least once by bike, scooter or rollerblades, which accounts for



more than 78% of all pupils from the schools that participated in the campaign. Nearly 2,489 pupils (7% of all) traveled by bicycle to school every day.

The winning school in Warsaw was Szkoła Podstawowa [Primary School] nr 352 from Bielany district, where as much as 95% of pupils were active. The usage, which was key for classification, totaled over 70%. Szkoła Podstawowa nr 209 im. Hanki Ordonówny, also form Bielany district was placed second, whereas Szkoła Podstawowa nr 66 im. ks. Juliana Chrościckiego form Włochy district was placed third. The winners received prizes that will help them to maintain the pupils' cycling enthusiasm. Two schools can now boast a mobile traffic park and one school a new bicycle shelter. The most active classes received prizes in the form of trips organized by our partners. The prizes were founded and provided by Legia Warszawa, Decathlon, Hulakula, LANG Team, Warszawski Klub Kolarski, Teatr Guliwer, Fundacja Cinemania, Polskie Radio, Fun Climb, Gazeta Wyborcza, Nasze Miasto, Niewidzialna Wystawa, Sante, Kino Atlantic, Aktywny Smyk, Fundacja WOŚP, and Ratownicza Grupa Rowerowa. Embassy of the Kingdom of the Netherlands took Honorary Patronage over the campaign.

The Bicycle May campaign was originated by the City of Gdańsk, where pupils travel to schools by bike from 2014. At present Cycling May is a nationwide campaign and is becoming more and more popular every year. In 2018 Warsaw will participate in the campaign once again.









European Cycling Challenge

Over 1,500 Warsaw cyclists participated in the European Cycling Challenge 2017.

In May they traveled over 320,000 km, thanks to which Warsaw was placed fourth among several dozens participating cities. This is a distance comparable to going around the globe eight times. However, Warsaw did not make the podium with such a result, but it shows how big is the interest in cycling mobility among the residents of the capital city. Bicycle events, meetings at universities, and breakfasts for cyclists took place during the challenge. We managed to engage employers, high schools, and district offices.

Cyclists who traveled more than 200 km in May received prizes funded by the partners of the challenge and ZDM.



Kindness on the road

We also invite residents to contribute to the educational campaigns. In this way ideas for the "3S - Spójrz, Sygnalizuj, Skręć" [Look, Signal, Turn] and "Zapałka" [Match] campaigns were developed during the workshops organized jointly with the Otwarta Warszawa platform.

The "35" campaign was aimed at encouraging cyclist to signal their intentions to other traffic participants. We distributed leaflets, reflective wristbands and bicycle mirrors to cyclists. The streets were patrolled by the Super "5" superhero, who educated cyclists on how to use the road properly. We also prepared a special traffic park, where cyclists could practice riding in safe conditions. During workshops, instructors showed how to make a turn on a bicycle.

The "Zapałka" campaign is addressed to drivers and raises the subject of overtaking to close to cyclists. The name of the campaign refers to a Polish expression which compares the distance between an overtaking vehicle and a bicycle to the width of a match. When overtaking bicycles, cars should allow space of at least 1 meter. Unfortunately, many drivers ignore this rule and overtake at a distance comparable to the width of a match. Graphics addressed to the drivers have been placed on the back of the buses and on Veturilo bikes.

These activities are a part of the "Kindness on the Road" campaign. As a result of the campaign, a "Dobre maniery" [Good manners] brochure has been published. It features advice on cycling in the city, basic traffic rules for cyclists and rules for obtaining a "bicycle license". The guide is addressed to people who are considering changing their usual means of transport to a bike or are just starting traveling around the city on a bicycle. In 2017 we distributed over 50,000 brochures.

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Participatory budget

In 2017 the Public Roads Authority carried out 80 participatory budget projects selected by residents in a vote. The total budget for the projects was PLN 12.2 million.

We also verified projects submitted by residents for the next edition. The residents proposed mainly improving bicycle infrastructure, marking new pedestrian crosswalks, constructing parking spaces, installing lighting at pedestrian crossings, constructing and repairing sidewalks, as well as providing facilities for motorcycles and scooters. During the verification, together with the authors, we established the scope of necessary changes.

Often the proposed solutions were too expensive or impossible to implement for other reasons – then we tried to propose cheaper or more down-to-earth solutions. Finally, in 2018 ZDM will found 64 residents' projects chosen in a vote. Warsaw residents rated highly projects improving pedestrian safety: additional lighting at crosswalks, construction and renovation of pavements, construction of sidewalks in the place of shortcut footpaths, as well as the installation of refuge islands and speed bumps. We will also build parking bays or reconstruct traffic lights.

The most interesting projects of 2017:

- Safe crosswalk across Białołęcka St. pedestrian crosswalk lighting with an additional lighting near the estate at 269 Białołęcka St.
- Additional sidewalk and bikeway lighting on Grójecka St. (on the section from Opaczewska St. to Dickensa St.)
- Information boards about historical monuments in Praga district – installation of 20 City Information System panels presenting information and

iconographies about the buildings (in Polish and English). The text and illustration are printed on a transparent polycarbonate panel mounted on the wall of a building.

- **Praska Galeria Sław** (*Praga Walk of Fame*) designing and laying granite commemorative plaques to honor people who contributed to the development of the right-bank Warsaw and Praga-Północ in particular.
- **Pedestrian-friendly Krucza St.** parking has been moved to the roadway. Thanks to that pedestrians can enjoy a wider sidewalk.
- **Connecting bikeways** on Tamka St. with the Świętokrzyski bridge an interconnected bicycle route across the center of Warsaw was created.
- **KOŁO naprawię sam** (I WHEEL fix it myself) purchase and installation of three self-service bike repair stations.
- **Safe crosswalk** across Chrościckiego St. near the intersection with Rybnicka St. installation of additional white light streetlights illuminating the pedestrian crosswalk.



In 2018 **64 ideas** selected by residents

will be carried out.







Examples of projects completed in 2017:



Connecting bikeways on Tamka St. with the Świętokrzyski bridge



Additional sidewalk and bikeway lighting on Grójecka St.



Information boards about historical monuments in Praga district



(Praga Walk of Fame (Praska Galeria Sław)

Public consultations

We make sure to meet with the Warsaw residents personally during public consultations. Consultations are a form of a dialogue with the residents. We discuss planned investments and renovations, we inform about the details of the works, but we also ask about the expectations of the residents.

Sometimes consultations also take the form of discussion meetings or workshops, during which residents can voice their opinions, learn about what are the needs of others and ask questions to officials and experts. Another form of consultations is thematic walks, during which it is shown how a given road or sidewalk looks like in reality and what could be changed in the area. Each consultation ends with a report in which we summarize the course of the meetings, comments and ideas submitted, and final arrangements.

Last year, we met with the residents during consultations:



What Wojska Polskiego Avenue from Cytadela to Boguckiego Street will be like?

March 11, 2017 – May 31, 2017

During the consultations, two workshop meetings took place, including one combined with a walk with a guide. Then, basing on the submitted comments, a project was prepared and presented to the residents.

Nearly 60 people attended the first two meetings. A few hundred comments were presented and divided thematically: the character of the place, greenery, paths, new equipment and infrastructure, Local Development Plan.

Comfortable and safe Targówek Mieszkaniowy area

March 24, 2017 - April 10, 2017

During the consultations, we held a meeting at which the project was presented and the adopted solutions were discussed. 58 comments were submitted during the consultations. 23 people attended the meeting, 30 people visited the place of consultations.





Plans for 2018

Ahead of us is another period of work for the residents and subsequent projects that the Public Roads Authority will be focusing on. In addition to ongoing repairs and maintenance works in 2018, we will be also facing some new challenges.

Plans for 2018

New year comes with subsequent road renovations and construction works. We will repair many sidewalks and continue removing architectural barriers. What lies ahead of us are coming projects focused on improving road safety. We have also planned large-scale investment works and continuing improvements of our services.

In 2018 new road surface will be laid on more streets. We will renovate Trakt Brzeski, Powsińska St., Krasińskiego St., Podleśna St., Dwernickiego St., Jagiellońska St. and Gniewkowska St., and several dozen other streets. The new road base will be laid on the most damaged roads, which will increase its durability. Sidewalks on several dozen streets will also be repaired. We plan to continue the removal of architectural barriers, improvement of road safety, and the audit of pedestrian crosswalks in more districts. More active crosswalks will be constructed and additional lighting will be installed at more than 300 zebra crosswalks. We plan to rebuild the lighting on several streets, including Cyrulików, Jagiellońska, Stawki, Przyczółkowa and Ratuszowa, as well as the construction of over a dozen new traffic lights.

In 2018 a comprehensive reconstruction of Miodowa St. and Krasińskich Sq. will be completed. The next stage of changes introduced in Śródmieście district will be the reconstruction of Senatorska St. as well as the creation of Pięciu Rogów Square. The place where Bracka St., Chmielna St., Zgoda St. and Szpitalna St. meet is one of the most important public spaces in Śródmieście. The square is an intersection dominated by cars and traffic. We want to change it. Changes will also be introduced in the areas covered by the construction of the metro. The reconstruction will also begin on the so-called bypass of Targówek Mieszkaniowy (a string of streets: Ossowskiego, Handlowa, and Myszkowska) and the intersection of Solidarności Av. with Szwedzka St. We also plan a thorough reconstruction of Kondratowicza St. Once the metro construction is completed, a green city avenue, new sidewalks and bikeways will be built in the area. The target project of the changes is to be ready by mid-2019.

In 2018, a large availability improvement program will be launched on all 11 transport interchanges of Łazienkowska Freeway. The first stage is the reconstruction of Na Rozdrożu Sq. – elevators near the bus stops and new pedestrian crosswalks on the square will be added.

We also work on improving our services. During the modernization of the Unguarded Paid Parking Zone, we plan to implement an e-control and e-parking system. Both systems will help the drivers to use the zone and improve its efficiency. We would also like to launch an urban carsharing system - cars rented for short periods, which are an alternative to private introducing. The service should start in the second half of 2018.

The most important expenditures planned for 2018

Investment expenditures – PLN 172 million

Including:







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