





2015 ANNUAL REPORT

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MUNICIPAL ROADS AUTHORITY [ZDM]





Dear Readers,

2015 was a very important and active year. When in February the structure of Łazienkowski Bridge was destroyed by fire, its reconstruction became our first priority. Although many people had their doubts, the reconstructed bridge was reopened after 199 days of works. Without the enormous engagement of ZDM employees and the contractor, the investment would not be viable. Today, in retrospect, what seemed to be a disaster can be viewed as a challenge we managed to meet.

Nevertheless, besides large investments, the Municipal Roads Authority is mainly engaged in maintaining the road infrastructure in good condition. The goal of this publication is to show the variety of tasks under the responsibility of the Municipal Roads Authority and how they are fulfilled. We are mostly preoccupied with such activities as road resurfacing, retrofitting of lighting and traffic signalization, enhanced illumination of crossings, traffic calming or organization of parking. I would like every change to make everyday city life easier, improve our safety and comfort.

The summary of our undertakings last year is also the introduction to further challenges faced by the Municipal Roads Authority. The road infrastructure of the two-million city we live in calls for ongoing development. It is not easy to reconcile the interests of all road users; this attempt teaches us that life in such a metropolis as Warsaw is the art of compromise. Our activities often entail difficult decisions. When assessing them we should think not only about our own interests but also about the city we will leave for generations to come.

I would like the works of the Municipal Roads Authority to be long-lasting and to change the city in a comprehensive way, reasonably using public space and reducing dangers faced by modern metropolises – air pollution, heavy traffic volume, and architectural barriers. Our objective for 2016 and the succeeding years is a safe and widely available infrastructure.

I cannot imagine managing Warsaw roads without the participation of city residents. Therefore, I would like to invite you to take part in Internet-based discussions or duty hours and consultation meetings. Let us change Warsaw together.

Yours sincerely



MUNICIPAL ROADS AUTHORITY [ZDM]



Core activities and organizational structure

The Municipal Roads Authority is an organizational structure of the Capital City of Warsaw whose main task is the management of district, voivodeship and national roads, except for expressways. ZDM was established in April 1993 under a resolution of the Council of the Capital City of Warsaw. Operations of the Municipal Roads Authority are managed by its Director, his Deputies and Chief Accountant, whereas individual tasks within ZDM are performed by respective technical divisions.

Management of ZDM

Łukasz Puchalski - Director of the Municipal Roads Authority

Michał Trzciński – Deputy Director (Technical Division)

Artur Rejzner – acting Deputy Director (Maintenance Division)

Wojciech Partyka - Deputy Director (Management Division)

Edyta Samociuk - Chief Accountant

Municipal Roads Authority in numbers

ZDM manages nearly 800 km of roads, 5,290,000 square meters of sidewalks and bicycle paths, 108,000 light fittings, 711 traffic lights and 487 bridge structures. We also maintain the Unguarded Paid Parking Zone, Municipal Information System and Integrated Traffic Management System.

ZDM employs 446 people with almost half of them working in the field: inspectors of the Unguarded Paid Parking Zone, emergency breakdown service, and inspectors of bridge structures, roads, rights-of-way, lighting, traffic lights and signs.

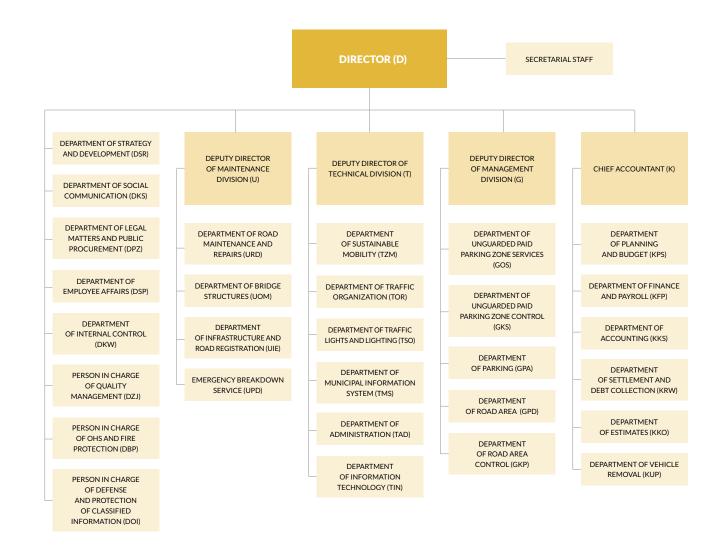
In 2015 we spent PLN 341,700,000 on repairs and maintenance (including the reconstruction of Łazienkowski Bridge), whereas the investment expenditure amounted to PLN 20,800,000. Total income of ZDM in 2015 amounted to PLN 148,200,000.

PLN 116,086,925	repairs and maintenance of roads
PLN 134,038,585	maintenance and repairs of bridge structures (including the reconstruction of Łazienkowski Bridge)
PLN 31,577,460	maintenance of traffic lights
PLN 59,952,835	maintenance and repairs of lighting



Organizational Structure of the Municipal Roads Authority

(as at 01.01.2016)





ROADWAYS

Maintenance of a road surface is one of the most important tasks performed by ZDM. Weekend milling has been our flagship for a few years now. Some of the milling operations entailed considerable changes within the road areas.



Roads after milling

To maintain a road surface in good condition, we carry out quick weekend repairs on an annual basis. They consist in milling of the upper layer of the surface and laying the new asphalt. The works are completed in only 54 hours. This way, in 2015 over twenty streets were resurfaced, including such major ones as Towarowa, Okopowa, Bitwy Warszawskiej 1920 r. or Pułkowa Streets (the largest milled in the history of ZDM). In total, we replaced 36 km of surface covering the area of 360,000 square meters, thus generating costs of over PLN 52,000,000.

Comprehensive repairs

Some roads required a wider scope of works than weekend millings. Św. Wincentego St. underwent a more comprehensive repair. Besides resurfacing, we also retrofitted the sidewalks by building missing sections. The process of resurfacing covered bus bays as well. The works involved the reorganization of traffic – we built pedestrian refuge islands and parking lanes for cars.

Similar repairs, including the improvement of traffic conditions for all involved covered Odlewnicza and Ordona Streets. We changed the surface of both roads and their sidewalks, removed architectural barriers and demarcated bicycle lanes.

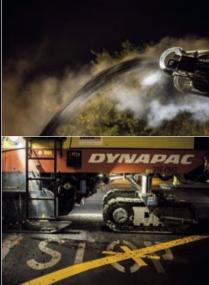
The resurfacing was performed at more than a dozen bus stops, whereas the concrete surface of over ten bays, e.g. by the Central Railway Station, at Sobieskiego St., Ostrobramska St., Lotników Av. and Chodecka St., underwent the repair worth nearly one million Polish zlotys.





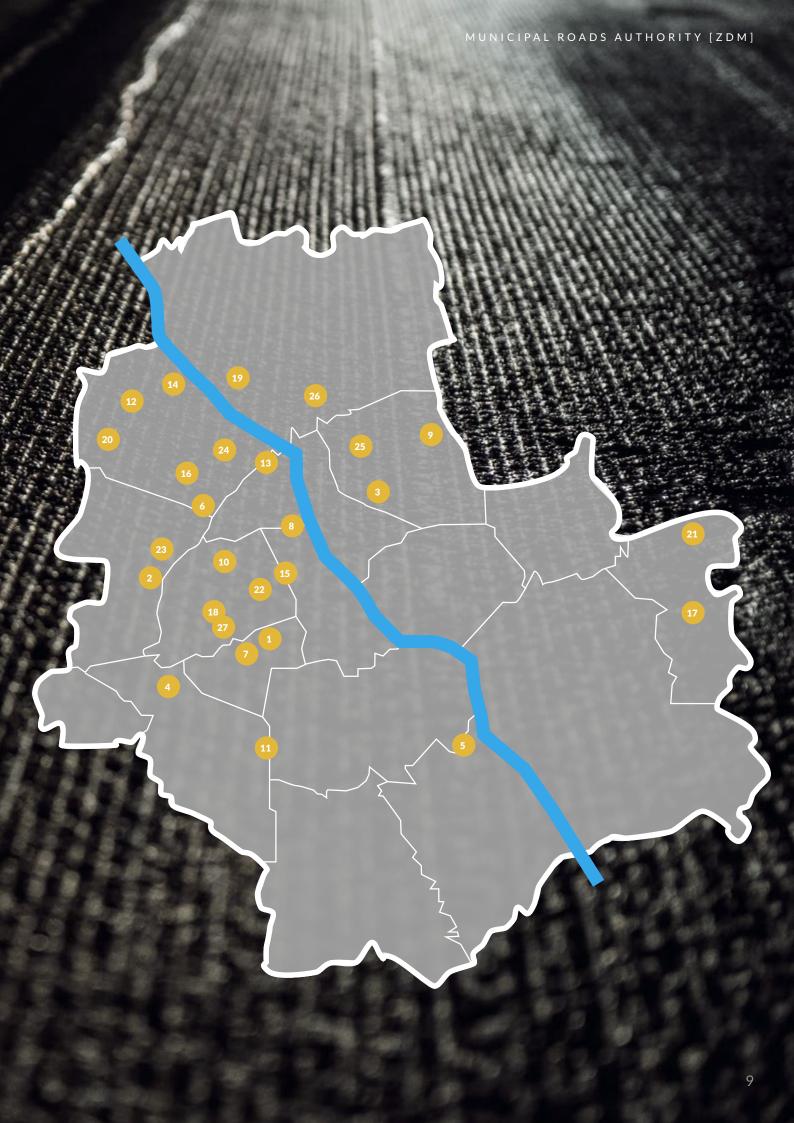
THE REPAIRED SECTIONS







- **1** Niemcewicza
- Powstańców Śląskich
- 3 Handlowa-Ossowskiego
- 4 Popularna
- 5 Syta-Tuzinowa
- 6 Maczka
- Ditwy Warszawskiej 1920 r.
- 8 Krajewskiego
- 9 Bystra
- **10** Ostroroga
- 11 Sasanki
- **Wóycickiego**
- 13 Wybrzeże Gdyńskie
- 14 Pułkowa
- 👊 al. Jana Pawła II
- Reymonta/Żeromskiego
- 17 Trakt Brzeski
- 18 Kasprzaka
- 19 Myśliborska
- 20 Arkuszowa
- **Okuniewska**
- 22 Towarowa-Okopowa
- 23 Wrocławska
- 24 Marymoncka
- 25 św. Wincentego
- **26** Odlewnicza
- 27 Ordona





SIDEWALKS

We ensure comfortable and safe infrastructure for pedestrians by repairing sidewalks, demarcating new crossings, and improving safety through the creation of pedestrian refuge islands.









n 2015 we repaired sidewalks along several dozen of streets: Grójecka, Saska, Sobieskiego, Szosowa, Lotników Av., Bonifraterska, Anielewicza, Wilanowska Av., Domaniewska, Augustówka, Krajewskiego, Gagarina, Wiatraczna, Międzyborska, Jagiellońska, Świderska, Broniewskiego, Żelazna, Dzieci Warszawy, Dwernickiego, św. Wincentego, Odlewnicza, Ordona – with the area of over 34 thousand sq.m. Additionally, the retrofitting of sidewalks took place during the construction of bicycle paths along Marszałkowska, Rzymowskiego and Belwederska Streets and the redevelopment of a few crossroads – covering the additional area of 16,000 square meters.

It has become a standard to lay concrete slabs instead of an impractical and unaesthetic cobblestone used so far. Repairs of sidewalks provide an opportunity to remove architectural barriers and adapt streets to the needs of persons with disabilities (laying tactile slabs, platform curbs, and guide lanes). The above solutions will be applied with respect to all repairs and investments conducted by ZDM.

Other actions of ZDM involve demarcation of new pedestrian crossings – this year, e.g., at the intersection of Grochowska St. and Jubilerska St. Until now, pedestrians had to use a footbridge. The demarcation of a crossing made it faster and more convenient to reach, among others, the tram stop or the mall. The change was not detrimental to drivers – the green light is on for only 1-2 seconds less.

We improve pedestrians' safety by changing traffic organization – for instance through building pedestrian refuge islands on crossings, which make it easier to cross the street. In 2015 we built 16 pedestrian refuge islands and started the construction of the next four.

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BIKEWAYS

Additionally, the scope of the Municipal Roads Authority's operations covers bicycles and bicycle-related infrastructure. In 2015 we took over the duties of the Municipal Transport Authority [ZTM], associated with the development of bicycle traffic in Warsaw. The Capital City is bicycle-friendly, which is being proved by the increasing number of new investments.



bicycle network in Warsaw is 463 km long, with 371 km of bicycle paths, 57 km of passageways for pedestrians and bicycles and 35 km of bicycle lanes and counterflow lanes. 57 % of bikeways are covered with asphalt. Warsaw cyclists can also use approx. 60 km of bikeways unmarked with any signs and approx. 370 km of low traffic roads, ensuring safe cycling.







More kilometers

In 2015, the Warsaw bicycle network gained some extra kilometers of bikeways. Construction works and repairs covered bikeways running along several dozen streets – for example, Powstańców Śląskich, Grójecka, Koszykowa, Wysockiego, Marszałkowska, Rzymowskiego, Nowolazurowa, Belwederska, Wołoska, Pileckiego, Dickensa and Korotyńskiego Streets. As a result, 47 km of new paths, lanes and counterflow lanes were built, 9 km of bikeways were repaired and another 14 km are under construction (e.g. along Stanów Zjednoczonych Av. and Żwirki i Wigury St.).

More comfort

Riding a bike has also become more comfortable. Safety was improved (e.g. on Zawrat St., a popular accident site) and multiple architectural barriers located on crossings (protruding curbs, branches, poles and lamp posts) were removed. The introduction of new legislation governing bicycle traffic gave birth to advanced stop lines at the intersection of Świętokrzyska and Nowy Świat as well as sharrows and counterflow lanes on over a dozen streets.

Ambitious plans

Over the following years, new bicycle roads will emerge – the budget granted for that purpose is PLN 130,000,000. The plans for 2016 assume the construction and repair of 80 km of bikeways, with over 40 km constituting projects covered by the participatory budget. Bicycle paths will be built on such streets as Połczyńska, Wolska and Kasprzaka (5.3 km), Żwirki i Wigury (4.2 km) and Jagiellońska (2.5 km). The repair will cover frequently travelled routes on KEN Av., Słomińskiego and Podzamcze Streets. Additionally, over a dozen kilometers of new bicycle lanes will be created.

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VETURILO

Veturilo bicycles have gained increasing popularity among the city residents. In 2015 the bikes were rented nearly 2 million times, on average every 10 seconds.



n the last season, which has just come to an end, the users were provided with 204 stations and 3039 bikes – including 10 tandem bicycles and 10 little bikes for children aged 4 – 6 years (available for rental at Veturilko – the first in the world, self-service rental station with bikes for children).

Veturilo turned out to be not only the one of the seven largest but also one of the most popular rental systems in Europe. According to statistics, the bikes were rented every 10 seconds, and every 4 minutes a new user registered in the system. The record-breaker rented a bike as many as 1101 times, and a daily record of rentals – 15,955 – was set on 11 April 2015.

The bikes were rented 1,975,083 times (3.7 % increase comparing to the previous season), and the ranks of users were joined by 82,658 people (28.2 % more than last season). Following the launch of the system in 2012, the city bikes were rented 6,069,514 times and the system gathered as many as 374,821 users.

The city will keep on developing the city bike system – next year a new operator will be appointed. In 2015 Veturilo's development concept was created and the system's future was discussed during public consultations.









ŁAZIENKOWSKI BRIDGE

Reconstruction of the steel structure of Łazienkowski Bridge, destroyed as a result of the catwalk fire, which took place in February, was a priority investment supervised by ZDM in 2015. It was important to return one of the most important crossings to the city. The repair started in April. The contractor was the consortium of Bilfinger Infrastructure (currently under the name of Porr Polska Infrastructure) and Przedsiębiorstwo Usług Technicznych INTERCOR Sp. z o.o.









Record-breaking pace

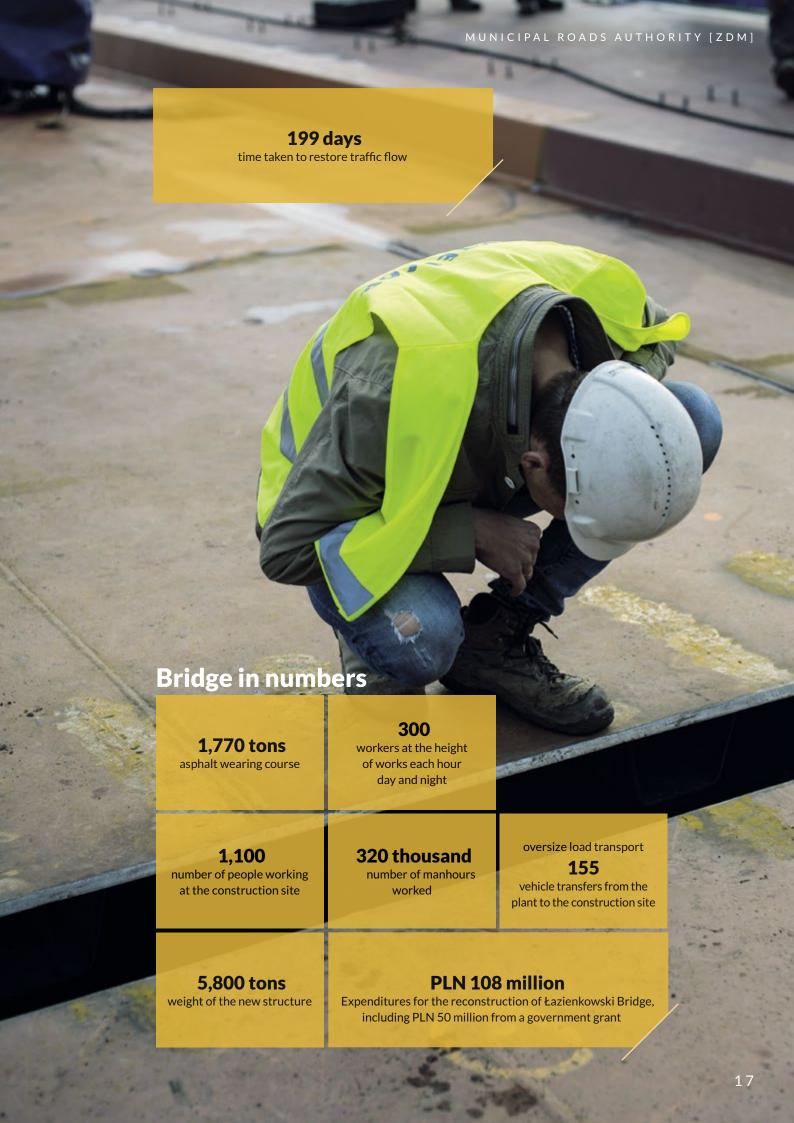
During the disassembly of the old bridge structure, the workers slid over steel elements of the new crossing from both banks of the Vistula River. As a result, the process has been completed at a record-breaking pace – sliding over of steel bridge structure took only two months. Both parts of the structure had to be shoved for a total of 400 m to eventually meet halfway and be welded together. At the same time, the contractor reinforced bridge piers. Following the structure's assembly, the bridge was covered with a two-layer surface.

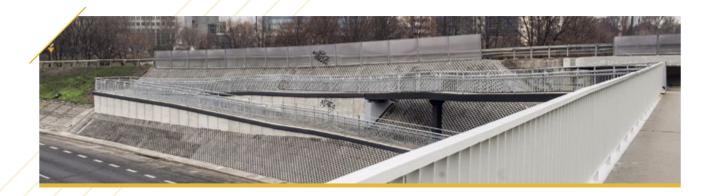
The bridge was reopened for vehicle traffic on 28 October, after 199 days of reconstruction works. The finishing works will take place until 30 September 2016.

The plans for 2016 assume the construction of a footbridge for cyclists under the bridge. The footbridge will be suspended from the steel structure (the new structure is adjusted for that purpose) under sidewalks, on both sides of the bridge. It will connect a bike path on the left bank of the river with a path running along Wał Miedzeszyński. The Warsaw City Council granted 16 million Polish zlotys for the construction of the footbridge in 2016-17.

Traffic is back to normal

Residents of Warsaw have impatiently waited for the reopening of Łazienkowski Bridge. Almost immediately after the reopening, the bridge was revisited by drivers. Over 24 hours it was crossed by more than 101,000 vehicles. The opening was a huge relief for two bridges located in the city center: Świętokrzyski Bridge and Poniatowski Bridge. After the restoration of Łazienkowski Bridge, traffic on both bridges declined by as much as 36 %, i.e. over 42,000 fewer vehicles..





ENGINEERING STRUCTURES

ZDM maintains and redevelops several hundred engineering structures: bridges, viaducts, footbridges, and tunnels. We are also responsible for the maintenance of elevators and lifts adjacent to such objects and noise barriers along the roads.









Besides the reconstruction of Łazienkowski Bridge, in 2015 we executed a complete redevelopment of the bridge at Rosochata St. in Wilanów. The old and damaged road culvert was pulled down and replaced by a completely new structure with increased load-bearing capacity. The works lasted nine weeks and cost nearly PLN 612,000.

The maintenance of the above structures involved the repair of cornice boards and resurfacing of sidewalks on structures along Siekierkowska Route. We also renovated the retaining viaduct walls running along Łopuszańska St. and over the WKD tracks and overpasses at Jerozolimskie Av. and Poleczki St. Over one year, we completed 360 similar works comprising, among others, the repair of traffic barriers, proofing structures against corrosion and maintenance of expansion joints.

It is not only a technical condition that is important but also the aesthetics of structures. Within one year, we removed 6,700 square meters of graffiti from retaining and tunnel walls. Almost 2,000 square meters were protected with anti-graffiti coating, thus making the walls easier to clean in instances of vandalism. At the same time, we decided to legalize painting of the city structures in over a dozen different locations in the city – thanks to that the graffiti painted on the walls is much more interesting. The example of such good cooperation is a mural dedicated to actors from the movie "Rejs" – Z. Maklakiewicz and J. Himilsbach.

This summer, the retaining tunnel walls of W-Z Route regained their former glow. The tunnel's stone walls were meticulously cleaned under the conservator's supervision. This way, the stone

regained its original, bright color. The total cost of the three-year works (2013-2015) amounted to PLN 1,892,653. The walls of Wisłostrada tunnel were also cleaned and painted.

We maintain elevators and platforms for the disabled, thus making it easier for them to cross the street. Repairs covered elevators and platforms at four different footbridges (29 Listopada, Zaruskiego, Olszynki Grochowskiej and Motorowa Streets). The footbridge at Rzymowskiego St. was equipped with a ramp. We also modernized the escalator by Chałubińskiego St. whereas, in the autumn, several dozen elevators and lifts were provided with additional equipment: CCTV, GSM emergency call system, emergency power supply and additional heating device.

Our plans include introducing more pedestrian facilities. Therefore, we analyzed the possibility of building elevators leading to the bridge and viaduct of Poniatowski Bridge and providing access to the bridge for the disabled. A similar analysis was performed for the footbridge at Naczelnikowska St. and viaduct by Płowiecka St. The analyses constitute the basis for the development of documentation on elevator construction.

39 underpasses

39 trestle bridges

147 viaducts

64 bridges

29 tunnels

64 overpasses

105 culverts

112 elevators and lifts

55 km of noise barriers





TRAFFIC LIGHTS

ZDM maintains over 700 traffic lights at intersections and pedestrian crossings.

We are also responsible for the operation of the Integrated Traffic Management System in the city center.



n 2015 we installed traffic lights at three intersections – Saska and Brazylijska, Ciszewskiego and Dereniowa Streets and at the pedestrian crossing by the hospital at Kondratowicza St. Comprehensive repairs covered the signals at Belwederska St. (intersections with Spacerowa/Gagarina, Nabielaka and Dolna/Chełmska



Streets) – i.e. one of the oldest traffic signals in Warsaw. Incidentally, we improved traffic organization, contributing to safety and comfort of drivers, pedestrians and cyclists. The modernization works were also performed at the intersection of Żwirki i Wigury and Banacha Streets, involving demarcation of left turn lanes and bicycle crossings. The cost of the above investments exceeded PLN 6,000,000.

Smaller-scale modernization of traffic signalization was implemented at the intersection of Rzymowskiego-Gotarda (demarcation of bicycle crossings), Grochowska-Jubilerska (new pedestrian crossing), Przyczółkowa-Vogla (easier left-turn maneuver), Marszałkowska-Hoża, Ujazdowskie Av-Bagatela, Wał Miedzeszyński-Fieldorfa, at Żelazna St., Daszyńskiego Traffic circle and Wilsona Sq. (right-of-way for trams and improvement of road geometry). We also performed an emergency repair of traffic lights at Narutowicza Sq. and changed signalization programs at over a dozen intersections located throughout the city to adapt them to traffic conditions.

We also maintain a good standard of traffic signalization and its adjustment to the investment-related needs. ZDM equipped over a dozen intersections with acoustic signalization for the blind (currently, the signalization is in operation at more than 200 intersections), replaced 78 signalization devices with the new ones, equipped with contrast screens, and installed 17 radar detectors for additional detection of two-wheeled vehicles.

The modernization works of traffic signalization are performed by other units as well. Tens of traffic lights were repaired by, among others, Tramwaje Warszawskie [Warsaw Trams] Company as part of the implementation of a right-of-way for trams.





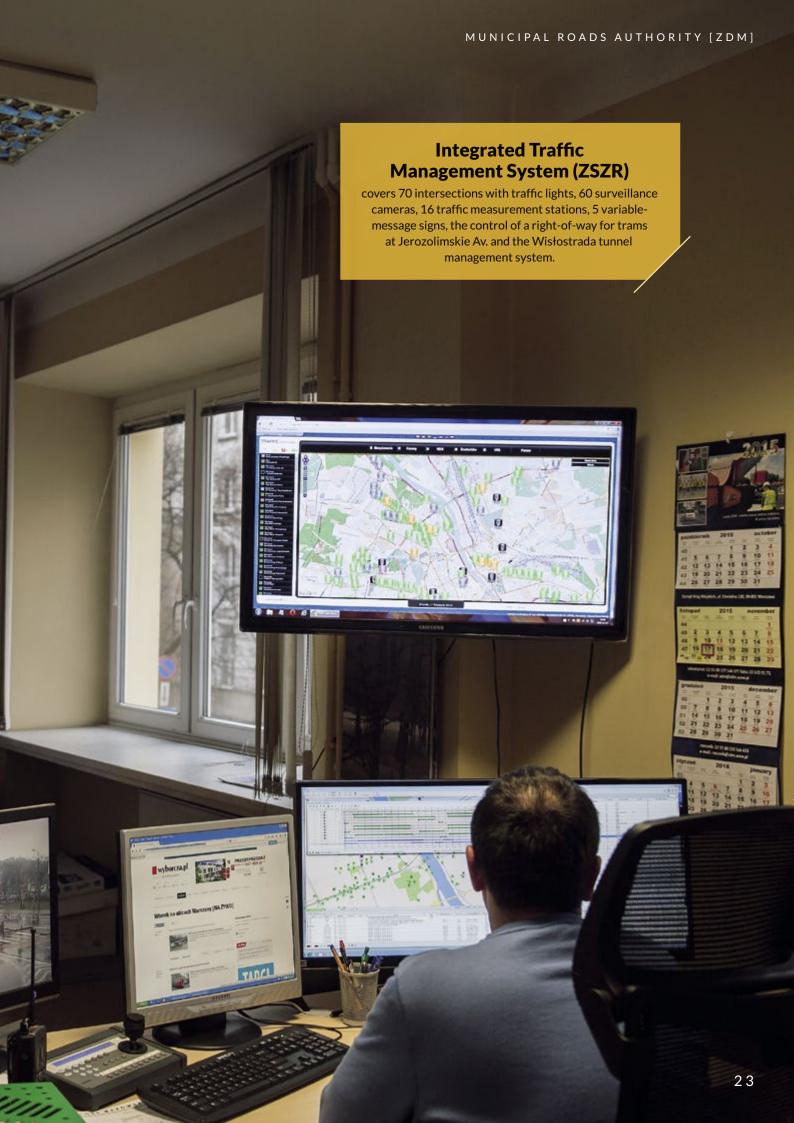
Integrated Traffic Management System (ZSZR)

An important element combining the operation of traffic lights at intersections with control of the city traffic is the so called Integrated Traffic Management System. The system was created in 2008 and today covers 70 intersections with traffic lights, 60 surveillance cameras, 16 traffic measurement stations, 5 variable-message signs, the control of a right-of-way for trams at Jerozolimskie Av. and the Wisłostrada tunnel management system.

The system ensures better traffic flow, improvement of traffic conditions and organization as well as reduction of travel time. The core of the system is the Management Center where large screens display footage from road cameras. Although the system is fully-automated, operators are able to monitor the operation of devices, manage traffic information and, if necessary, change traffic control parameters on an ongoing basis.

The system derives data from multiple sensors, detectors and measurement stations. It also comprises induction loops (detectors installed on the street surface), cameras and Traffic Eye Universal measurement stations using infrared detectors, which are used to detect vehicles approaching intersections. They also provide the control center with data on current traffic volume and vehicle speed, whereas weather stations and air pollution measurement stations constitute the sources of data on surroundings and the state of the environment. The system was incorporated with traffic control infrastructure along Wisłostrada tunnel, enhanced with video detection identifying dangerous incidents inside the tunnel.







LIGHTING

The Municipal Roads Authority maintains over 100,000 lamp posts throughout the city, replaces and retrofits the poles and fittings located in the streets within its scope of management.



s part of its obligations, ZDM maintains 108,671 light fittings and 96,339 lighting poles along the streets managed by ZDM and local roads. There are 421 types of light fittings installed in the streets. For reasons related to the light source, the majority of lamp posts (83.9 %) are sodium lamps. Nearly 7% of fittings provide



white metal-halide light whereas in recent years we saw the introduction of LED lamp posts. However, approx. 8 % of all light fittings are still outdated mercury lamps, now gradually replaced with other sources of light.

In 2015 we installed and retrofitted the lighting on 12 streets, installing as many as approx. 500 lighting poles and light fittings. The streets enhanced with new lighting include such important streets as Popiełuszki St. (over 100 new fittings), Zieleniecka Av. (46 new lamp posts) and Żelazna St. (replacement of 73 poles and fittings). This year the lighting along the historical streets of Karowa and Królewska looks much more beautiful as damaged poles were replaced with replicated vintage "pastorał" [crosier] lamp posts. The "pastorał" lamp posts at Szwoleżerów, Rosoła and Mehoffera Streets were equipped with new LED fittings.

Popiełuszki St.

Disassembly of 53 MDM lighting poles, assembly of 24 aluminum lighting poles with 27 fittings, assembly of 89 fittings on the existing lighting and catenary poles.



Rosoła St.

(section Belgradzka -Jeżewskiego) 28 aluminum poles with LED fittings along the bicycle path.

Żelazna St.

Replacement of 73 poles together with fittings.

Obrzeźna St.

Replacement of 20 poles with fittings and assembly of 46 aluminum poles illuminating sidewalks on both sides of the street.



Karowa St.

Replacement of 41 concrete poles with "Pastorał Warszawski" vintage poles and 16 aluminum poles with Evolo fittings.

Korkowa St.

(section cemetary – Płatnerska) 28 poles with fittings.

Lewandów St.

3 new lamp posts.

Klembowska St.

9 aluminum lamp posts.





Królewska St.

Assembly of 35 "Pastorał Warszawski" poles as per the design from 1923 with Varsovie decorative fittings, assembly of 6 aluminum poles with fittings illuminating the parking in front of the Ministry of Digital Affairs, assembly of 10 poles with Furyo fittings.



Mehoffera St.

(section Modlińska--Polnych Kwiatów) Assembly of 51 aluminum poles with LED fittings.

Szwoleżerów St.

Renovation of 22 existing and assembly of 5 new "Pastorał Warszawski" poles as per the design from 1923, assembly of 27 new, decorative Varsovie-type LED fittings.

Zieleniecka Av.

Replacement of old concrete poles with 46 new, steel poles with Furyo metal--halide fittings.

SAFE PEDESTRIAN CROSSINGS

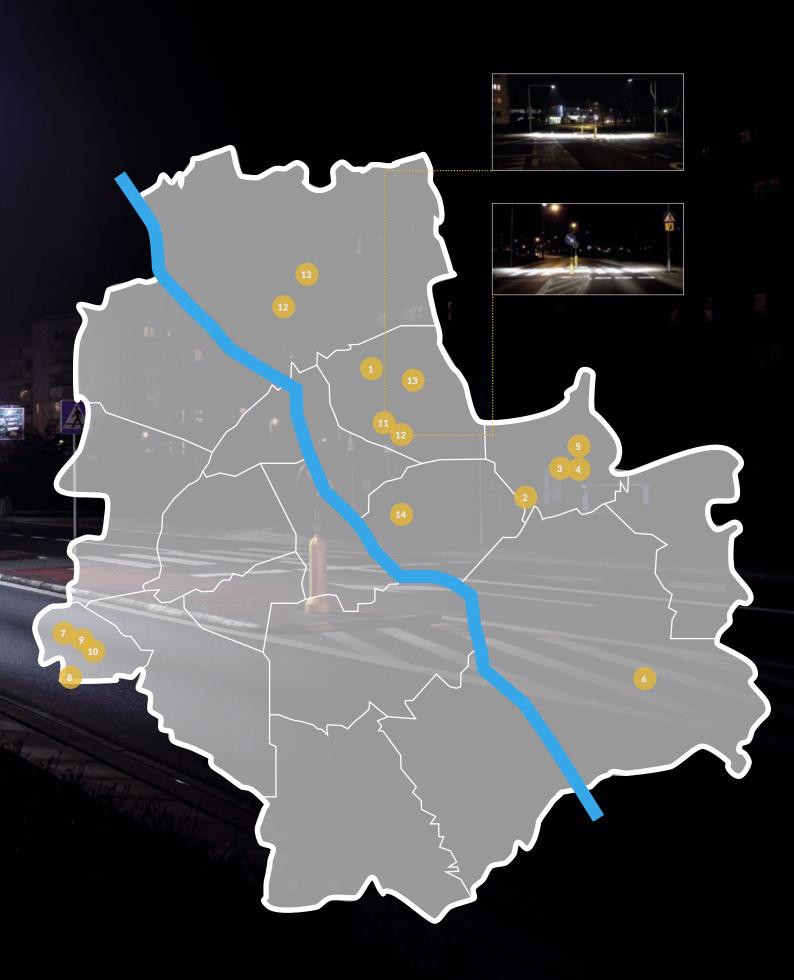
One of the priority activities of the Municipal Roads Authority is the improvement of safety at pedestrian crossings, e.g., through better illumination. In 2015 we continued our activities in this regard. For the crossing illumination we use fittings, which provide a different light color than the posts located along a given street. We usually choose white light, which strongly improves visibility of both the crossing and the access path.

We have already ensured better illumination - for over PLN 300,000 - of the crossings located at:

- Św. Wincentego in the area of Zielone Zacisze [housing development], by PGR Bródno and Cmentarna St.
- Chełmżyńska by Niepołomnickiej St.
- Cyrulików by the building no. 45
- Cyrulików by Przebieg St.
- Sztandarów Av. by Szyszaków St.
- Izbicka by Burzliwa St.
- Orłów Piastowskich by the school
- Regulska by Bodycha St.
- Warszawska by a bus stop at Śmigielska St.
- Mompanii Kordian by Drzymały St.
- Handlowa by Szczepanika St.
- Barkocińska by Ossowskiego St.
- 🟮 Młodzieńcza by Łukasiewicza St.
- Waszyngtona Av. between Saska St. and Międzynarodowa St.

The works do not stop here. Our plans assume the illumination of more crossings - in Rembertów, Włochy and Ursynów. The investments will be carried out within the participatory budget for 2016. In 2016 we will also perform a comprehensive analysis of pedestrian crossings (without traffic lights) with a view on safety improvement. The analysis will indicate crossings requiring safety improvement and measures to be applied.







ILLUMINATION

Each winter we decorate the streets of Warsaw with Christmas illuminations. Lights on lamp posts and free-standing decorations adorn the city from December till February.







T he responsibility for the installation of Christmas illumination lies with the Municipal Roads Authority for a few years now. The current contract for assembly, maintenance, disassembly and storage was concluded with Multidekor Company for 2013-2016. Starting from the next season, a new contract will be in place.

The luminous pathway is over 20 km long. It starts at Nowe Miasto St. and leads through Stare Miasto [Old Town], Krakowskie Przedmieście, Nowy Świat, Trzech Krzyży Sq., Ujazdowskie Av., Na Rozdrożu Sq., Belwederska St., Jana III Sobieskiego St. and ends in Wilanów. Additional illuminations are installed at Świętokrzyska St., Powstańców Warszawy Sq., Wileński Sq., Emilii Plater St. (section of Twarda – Jerozolimskie Av.) and Grzybowski Sq. as well as on sections of: Górczewska, Powstańców Śląskich, Francuska and Ząbkowska Streets.

Illumination of the Capital City was appreciated by a French newspaper "Le Figaro". In its Christmas ranking, the newspaper placed Warsaw among 10 most beautifully decorated cities in the world. The Christmas tree at Zamkowy Sq. is 27-meters high. The city streets are decorated with two million ECO-LED lights of 740 decorative elements, including free-standing ones (e.g. a huge Christmas ornament and colorful gifts), which enjoy great interest of residents and tourists.

Christmas decorations consume 10-times less power than traditional light bulbs, i.e. PLN 70 per one hour. Expenses incurred for the illumination in the season of 2015/2016 totaled approx. PLN 3,000,000. The above cost covers: disassembly and transport of decorations at the end of the last season, post-season maintenance, storage, transport and assembly in the following season, maintenance, inspection, and disassembly of decorations.





PARKING

ZDM manages the Unguarded Paid Parking Zone (SPPN) – its main tasks include the zone development, retrofitting of parking meters, collection of fees and debt recovery.

We also remove improperly parked and abandoned cars.



he Unguarded Paid Parking Zone (SPPN) comprises nearly $30,\!000$ parking spots. We ensure the zone development as well as the improvement of parking-related comfort and safety. In 2015 we equipped SPPN with 1450 technologically advanced parking meters enabling card payments. 150 parking meters were relocated to avoid collisions with pedestrians and cyclists.

We perform an ongoing analysis of parking conditions in the city. Additionally, we carried out 120 traffic organization projects changing the



parking regulations applicable within SPPN – including demarcation of new spots and changing the manner of parking. We have also increased the number of parking spots for people with disabilities (by $7\,\%$), currently amounting to 737.

Additionally, ZDM controls the fees applicable inside the zone. The money collected from drivers is used for, among others, road maintenance. Card payments have gained more and more popularity, today constituting over 20 % of all payments made within SPPN. The possibility to make mobile payments turned out to be successful as well (51% increase comparing to 2014).

The good work of ZDM is reflected by growing SPPN-generated income – 11% increase in comparison to 2014. We started testing of a new payment control system, which will streamline the control process.

ZDM makes sure that parking restrictions applicable in the city are respected. Our goal is to eliminate instances of parking in restricted locations. We are forced to install separation posts in non-parking locations, where cars parked repeatedly by drivers who violate parking regulations, pose a threat to safety or destroy sidewalks. In 2015 we installed a few thousand posts preventing a parking violation.

We also support the Municipal Guard in towing away improperly parked or abandoned vehicles. ZDM removes vehicles on the guards' request – over 19,000 vehicles within one year, out of which 1,070 were abandoned vehicles. Total income for the removal amounted to PLN 7,127,582.





ROAD AREA

A road area gathers elements, which are not directly related to the road function. These are, among other, newsstands, outside food courts or trading posts. We ensure that they do not hinder the use of a road and that their location has been authorized; we also control illegal occupation of a road area.



n 2015 we issued a number of permissions for the use of a traffic area as the location of commercial objects. The objects were: newsstands – 903, outside food courts – 497, trading posts – 1,191, markets – 24 and advertising media – 843.

We are constantly monitoring whether a road area is used for purposes related to the road function – within one year we performed 16,565 inspections. We checked 6,097 and instructed the removal of 3,688 advertisements (including 69 advertisements on vehicle trailers, 22 advertisements on cars and 131 election posters). Our

operations resulted in the removal of 13 booths and newsstands located on the premises without a contract, 14 illegal parking spaces and 36 post-advertisement supporting structures.

Moreover, the operations involved the initiation of 721 administrative proceedings against entities occupying a road area without our consent (including 201 advertising-related proceedings) and issuance of 768 decisions imposing administrative penalties (with 230 advertising-related penalties). A total amount of penalties imposed reached PLN 2,498,513.









MUNICIPAL INFORMATION SYSTEM

The Municipal Information System is a set of characteristic designations placed on every street and building in the city. The MSI comprises such elements as plates informing of street patrons and the history of a given area as well as paid advertisement signs.



The MSI currently comprises **84,000** elements.







1. address plate

Provides information on the number of premises, street name, the MSI area of a given address and the direction in which the numbers increase. As per the colors used for other MSI elements, the plates have blue background and white letters. The red stripe provides the name of the area.

2. wall-mounted street plate

The central part of a street plate provides the street name, the left top corner specifies the road type (street/avenue), and the middle part provides the name of the street patron (if applicable), whereas the right top corner specifies the numbering applicable for the frontage. The bottom red stripe provides the name of the area. The plate is blue.

3. complex post with street plates

The central part of a street plate provides the street name, the left top corner specifies a road type (street/avenue), and the middle part provides the name of the street patron (if applicable), whereas the right top corner specifies the num-

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bering applicable for the frontage. The bottom red stripe provides the name of the area. The plate is blue.

4. SPPN plate

The plates inform drivers that they entered the unguarded paid parking zone and must pay a parking fee. They are usually blue. Brown plates can be found within the area of Stare Miasto and Trakt Królewski [Royal Route]. Their content is the same in both cases.

5. icons

The icons show directions to public phones and toilets, first-aid stations, police stations, post offices, taxi ranks or roads adjusted to the needs of the disabled. They are placed together with arrows on posts with directions for pedestrians as well as street posts.

6. complex post with directions for pedestrians

The post shows directions to all important public institutions, nearby squares, parks, housing developments and important streets, theatres, museums and other cultural venues. The information provided on signposts is supplemented with icons. The posts are blue.

7. plates with directions to districts, stations, areas and venues

8. double-sided information point

Double-sided information point (illuminated) displays the city plan with designated areas, roads and most important venues on one side and a detailed map of the area extending up to 1.4 km and our exact location on the other side

9. wall-mounted information modules

10. Paid Information Points













EMERGENCY BREAKDOWN SERVICE

We patrol the streets and watch the infrastructure's condition 24 hours a day.

The Emergency Breakdown Service intervenes during sudden incidents of damage and breakdowns.



n 2015, emergency breakdown service workers secured 836 breakdowns – on roads managed by ZDM and other roads. In order to secure the breakdowns the service workers used 1,710 kg of cold-laid bituminous mixture, which constitutes a fast method of removing damage before its repair.

We received a total of 35,679 breakdown notices. The majority of notices concerned street lighting (11,601), traffic lights (6,206), road signs (4,027) and road surface damage (3,236). We received over a thousand notices on pavement damage (1,276), emergency occupation of a right-of-way (1,142) and advertisements on a right-of-way (1,034). There were also several hundred notices concerning, e.g., temporary traffic organization (449) and urban greenery (276).

The majority of notices, 9,654, were filed by the city residents. The city emergency number, i.e. 19,115 also proved to be very helpful – it was used in case of 7,964 notices. Many notices were forwarded from the Emergency Management Center (3,655) and municipal units: fire service (1,661), Municipal Department of Sanitation (953), Municipal Water and Sewage Company (769) or Municipal Transport Authority (373).

836 – number of secured road breakdowns **1,710** – kilos of bituminous mixture used to secure the breakdowns









RESEARCH AND ANALYSES

We are responsible for the continuous analysis of road conditions.

The analyses aim at the improvement of traffic-related safety and propose changes of traffic organization.



ngoing research assumes the analysis of the traffic flow in Warsaw. A team appointed especially for that purpose conducts regular traffic measurements and evaluates its conditions. The team's work includes periodic reports and traffic-related databases. The results of our measurements indicate that in 2015 the borders of Warsaw were crossed daily by approx. one million vehicles. We examined traffic on all Warsaw bridges, analyzing, among others, the reaction of residents to suspending and restoring of vehicle traffic on Łazienkowski Bridge. We also perform periodic measurements of traffic volume on the most important streets of the city and traffic simulation in a model of the Capital City of Warsaw as well as for individual crossroads and road sections. These data are available at our Website (maps of traffic volume) and provided to municipal units and external entities.

The research on road safety constitutes another important element. Safety-related analyses, among others, contribute to the improvement of safety of all traffic participants. Data gathered by ZDM comprise information on the number of registered accidents and accident victims, but most of all, data on causes, perpetrators and the exact locations of road incidents. This way we can evaluate to what extent the incidents may be affected by traffic organization or road condition and make decisions concerning the implementation of necessary measures: changes in traffic organization, additional lighting, etc. We pay particular attention to the assessment of pedestrians' safety while in the streets. As part of our annual reports, we release lists of higher-risk locations and accident maps.





1 million vehicles

a day crossed the borders of Warsaw

109 points

in the Automatic Traffic
Measurement system

38,625,914 vehicles Traffic volume on

Traffic volume on
Prymasa Tysiąclecia Av. in 2015

594,196

total number of vehicles crossing Warsaw bridges in November 2015





SOCIAL COMMUNICATION

The Municipal Roads Authority increasingly often consults its activities with residents. This way, our investments meet social needs to a much greater extent. Our operations are regularly communicated to residents.







ast year, we placed special emphasis on creating the best possible information system on ZDM activities for the city residents. It is also important to us to hold face-to-face meetings during public consultations. Such meetings took place, for example, during the consultations on the future of Miodowa St. as well as workshops and consultations on the development of the Veturilo city bike system. We are planning the organization of next public consultations on the most important investments of ZDM.

Additionally, the Municipal Roads Authority joined the participatory budget process, therefore, allowing residents to submit proposals of changes to be implemented in the city and vote for those considered the most necessary. In 2016 ZDM will carry out 57 projects initiated by citizens and amounting to over PLN 10,000,000.

We would like as many Warsaw residents as possible to know about our activities. Therefore, we refreshed our Website – now it allows users to find all important information much faster. It also provides more information concerning the operations of ZDM. We created several new e-mail addresses assigned to specific matters to make it easier for people to contact us. We stay in touch with residents through social media. A Facebook profile of ZDM gained over 3,000 followers within a few months and received hundreds of questions, regularly addressed by our employees.

We completed the "Trzy Kolory" [three colors] educational campaign and plan to carry out next information and promotional campaigns in 2016.

15

consultation meetings with residents

382 remarks

submitted during consultations on Veturilo bikes and Miodowa St.

112 meetings

held by the director with residents during duty hours (from 1.07.2015)

170 people

met with the director during his duty hours

97,158 letters

received by ZDM

57 projects

covered by the participatory budget

PLN 10,763,459

a total value of the projects implemented



PLANS FOR 2016

Another year means new challenges faced by the Municipal Roads Authority. Besides the ongoing repairs, in 2016 we would like to focus on the improvement of road safety.







ne of our priorities for 2016 is the improvement of safety on pedestrian crossings. Illumination will be enhanced on more crossings - e.g. within the framework of the projects funded by the participatory budget. We will also conduct a thorough safety analysis of crossings, which will indicate the solutions contributing to the reduction of the number of accidents. The plans for 2016 comprise further repairs of roads and sidewalks and construction of new bicycle paths. We would also like to engage more in lighting repairs.

We are also expecting some new challenges. As per the new constitution, ZDM activities have been extended with the organization of the so called carsharing, i.e. public car rentals. The solution, already popular in many cities around the world, will constitute an alternative to the possession of a car and reduce problems with parking. ZDM will be also responsible for the inspection and weight checks of trucks entering the city. The inspections will be carried out at special car stations build by ZDM along main roads.

The most important expenditure planned for 2016

PLN 99,609,679	repairs and maintenance of roads
PLN 63,300,700	maintenance and repairs of bridge structures
PLN 38,189,140	maintenance of traffic lights
PLN 65,392,430	maintenance and repairs of lighting
PLN 80,289,197	investment expenditures

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