ANNUAL REPORT
2019



PUBLIC ROAD AUTHORITY

ANNUAL REPORT 2019

3

Dear all,

2019 ZDM Annual Report

2

road safety very much depends on infrastructure. For this reason, we are consistently implementing our plans related to street renovations and modernisations, as well as improving the comfort of all traffic participants.

It was these goals that guided us when we designed Warsaw's New City Centre, which we will be implementing very soon. Major changes await the area of Aleja Jana Pawła II. The downtown artery will get a bicycle path, new pavements and tree lanes. The project that will involve comprehensive modernisation of the street between Rondo ONZ and Nowogrodzka Street will also include the construction of overhead pedestrian crossings at Rondo Czterdziestolatka. We are in the process of choosing a contractor for these works. This year we also would like to renovate the viaduct at the intersection of Aleja Stanów Zjednoczonych with Ostrobramska and Kinowa Streets. This 1970s construction will undergo comprehensive modernisation. Thanks to this. the viaduct and bus stops at this intersection will meet accessibility standards.

As in previous years, there will be weekend milling works, i.e. rapid road repairs lasting 54 hours. Such works are planned, for instance, in the following streets: Kobylańska, Piękna, Potocka, as well as on the following roundabouts: Rondo gen. Ch. de Gaulle'a, and Rondo J. Szczepańskiego "Ziutka". We will also renovate the intersection of Marszałkowska and Królewska Streets.

In addition to road surfaces, we will also renovate pavements, for instance at the following streets: Idzikowskiego, Ludna, Odyńca, Piękna, and Skierniewicka.

In our planning, we have not forgotten about cyclists. This year, Warsaw residents will get more road space for cycling. New paths will be created, among others on Marszakowska



Street, along Powstańców Śląskich Street, as well as along Dolina Służewiecka. We will also build the missing section of the path on Aleja Stanów Zjednoczonych, and renovate the path on Wołoska Street.

In fulfilling our obligations, we will begin to implement our roundabout construction programme. They will be created, among others on Kadetów Street at the intersection with Poprawna and Łasaka Streets. We are also planning to renovate Sokratesa and W.H. Roentgena Streets to make them safer.

We will also continue conducting safety audits at pedestrian crossings. This year, audits will be conducted in the remaining five districts: Białołęka, Wesoła, Rembertów, Wilanów, Ursus and Wola. Based on the results obtained so far, we will start building a dozen or so traffic lights in places identified as potentially dangerous. New traffic lights will appear on Kijowska Street, Aleja Krakowska as well as Kajki and KOR Streets. In nearly 150 locations, the existing pedestrian crossing lighting will be replaced with a new one – equipped with LED luminaires.

We are fulfilling our promises and implementing the slogan "Warsaw for everyone", ensuring that the capital is friendly and safe for everyone: pedestrians, cyclists and drivers.

Rafał Trzaskowski Mayor of the Capital City of Warsaw

Dear all,

every day, millions of people use Warsaw's infrastructure: pedestrians, cyclists, drivers, disabled people, seniors and families with children.

Everyone has the right to feel safe on the road. This topic became particularly important after the tragic October accident on Sokratesa Street, which shook public opinion.

For us, road safety has been a priority for years. This is why in 2016 we decided to perform a comprehensive audit of all pedestrian crossings. For several years now, this decision has been influencing ZDM's priorities.

Thanks to the audit performed by outstanding specialists, we know the threats and we can prevent them. We are rebuilding dangerous intersections, building traffic lights, changing the geometry of the road, creating islands at crossings or installing lighting. Sometimes this requires taking unpopular decisions, but it is the result that counts.

In financial terms, 2019 was not as optimistic as 2018. However, we did not reduce our efforts in improving safety.

The number of fatalities is falling at a record rate – by almost 20% during the year. In 2019, as many as 35 persons were killed on Warsaw roads. This is the lowest number ever – but it is still 35 too many. We will spare no effort to limit such accidents to as few as possible: we strive to ensure that no one is killed on the road.

We would like the urban space to be not only safe, but also comfortable and accessible to everyone. We are introducing facilities for people with reduced mobility, creating new pedestrian crossings, and renovating roads and pavements.



The reconstruction of such thoroughfares as Górczewska Street or Aleja Jana Pawła II are good examples of how major streets in Warsaw should change.

We would like to introduce these changes together with the residents. For this reason, we consult with them on major projects. We are also implementing dozens of projects submitted by Warsaw residents through the civic budget. I would like to thank everyone who is actively involved in the life of the city.

Furthermore, I would like to thank all ZDM employees and contractors who carry out all the work for ZDM, as well as the city council and councillors for their continued support.

In 2019, we managed to accomplish a lot, but we are aware that we are still facing many years of challenges and hard work. Among them, above all, changes to paid parking in the city centre. I believe that they will have a huge impact on the quality of life of Warsaw residents.

I have the honour to present the latest annual report of the Municipal Road Authority. Ecology and the environment are of special importance to us – consequently, this year's report was printed entirely on recycled paper.

Łukasz Puchalski Director of Municipal Road Authority (ZDM)

Introduction

Table of contents

6	Introduction
8	2019 in numbers
11	Priority: Safety
12 13 14 16 18 20 22	Pedestrian crossings safety audit Speed measurements Lighting Additional lighting at crossings Traffic lights Integrated traffic management system Changes in traffic organisation
25	Development and projects
26 28 29 30 34	E-control SPPN development E-parking Veturilo Winter illuminations
37	Renovating and rebuilding road infrastructure
38 40 42 44 46 48 50 52	Aleja Niepodległości and Batorego Street Aleja Solidarności and Szwedzka Street Targówek "bypass" Aleja Zjednoczenia Górczewska Street Słowackiego Street Road and pavement repairs Improving accessibility

57	Ongoing maintenance
58 60 62 64 66 68	Emergency Road Services Bridge structures Road lanes Illegal ads removal Parking Municipal Information System
71	Future plans
72 74 76 78	Improving safety Aleja Jana Pawła II Plac Pięciu Rogów Modernization of lighting
81	We are here for you
82 88 90 94 96	Social campaigns Civic budget Consultations and meetings with residents Efficient handling of notifications from residents ZDM behind the scenes

Table of contents

Did you know that... The Municipal Road Authority manages

over **800**

km of roads. Important: it is not all city roads. Many of them are municipal roads, which are the responsibility of district offices. The motorways are managed by the General Directorate for National Roads and Motorways.



798

intersections and crossings with traffic lights



30,000

spaces in the paid unguarded parking zone



94,000

signposts, boards and maps of the Municipal Information System



113,662

street lamps



119,393

lighting fittings



4.5m

energy-saving eco-LEDs in holiday illuminations



644

km of bicycle routes



625

bridge structures



546

workers



2019 in numbers



16,800 roadway controls



intersections included in the Integrated Traffic Management System



2,450 new lighting fixtures



86,800 sgm of renovated roads



8,500 removed ads



1,085
pedestrian crossings
checked for safety



882new street lamps



km of constructed and renovated cycling routes



14
new or renovated traffic lights



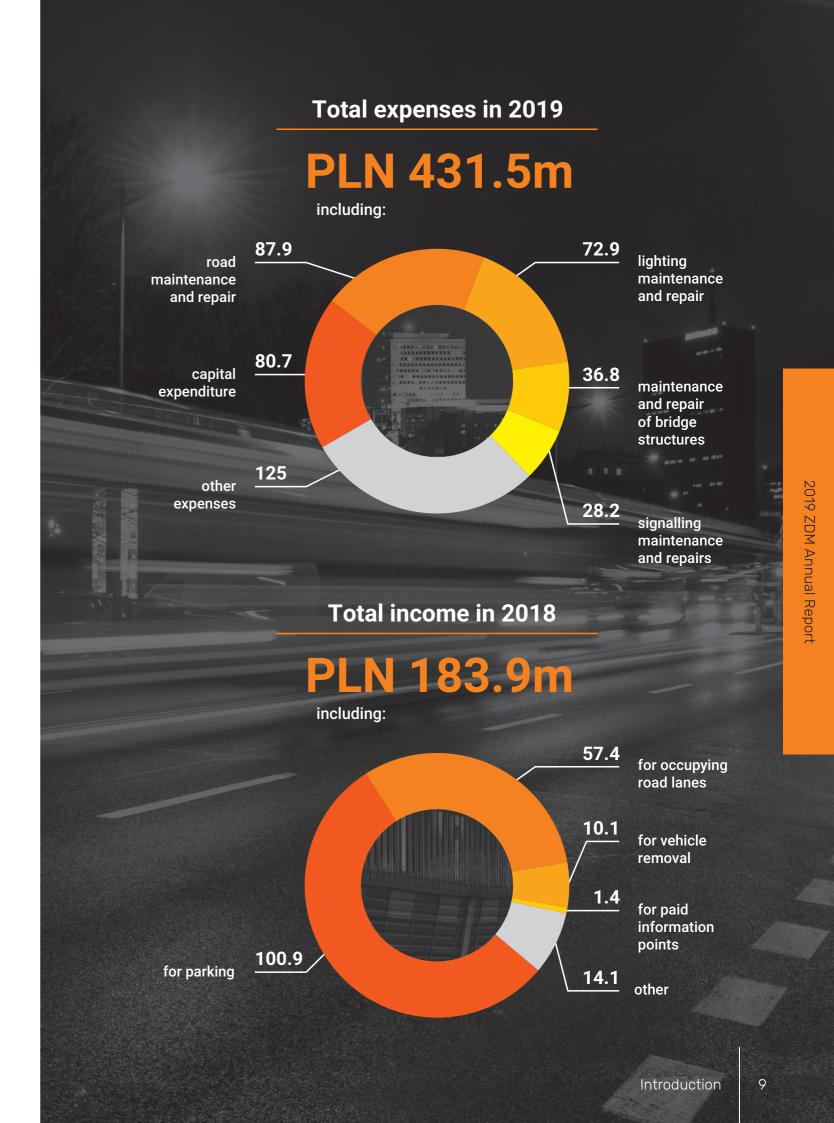
386 crossings with additional lighting

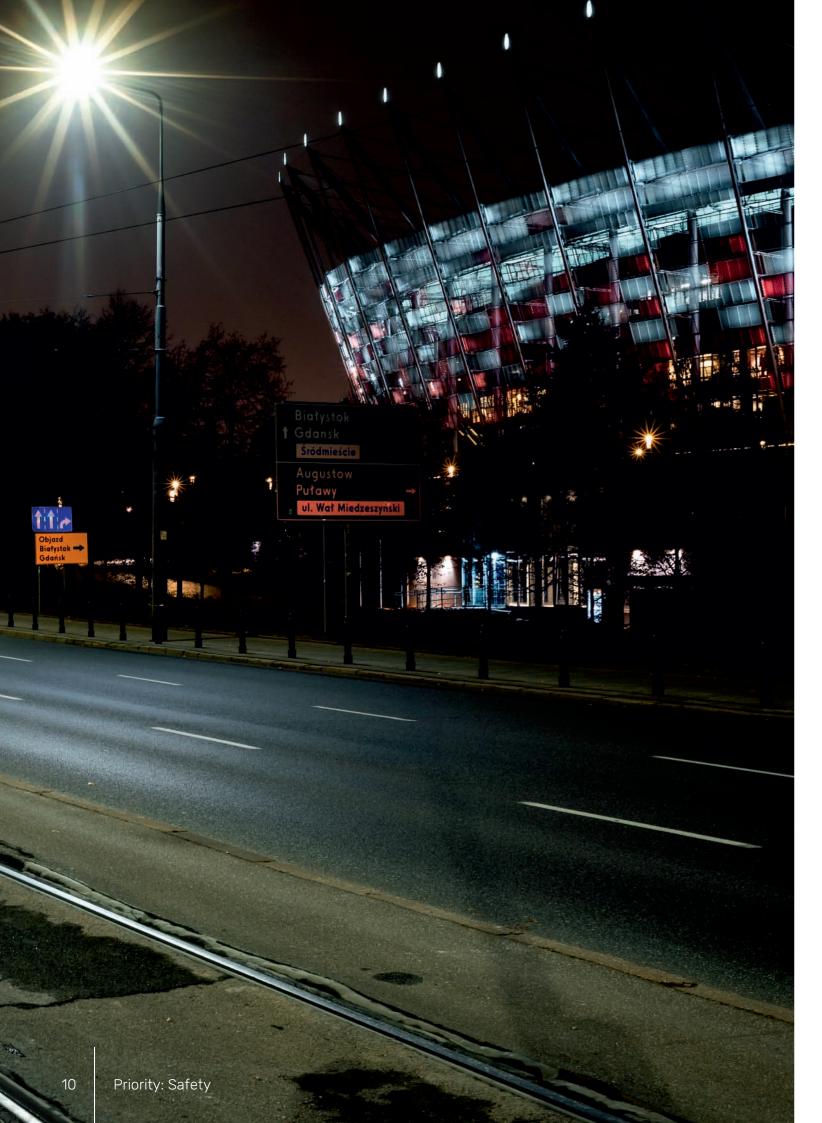


81,900 sgm of renovated pavements



5.9m
Veturilo city bike rentals





Priority: Safety

Our duty and main task is to ensure the safety of all road users.

The changes we introduce are the result of a consistent and implemented policy of improving safety on Warsaw roads.

This is possible thanks to safety audits that allow us to define the most important problems.

Pedestrian crossings safety audit

Speed measurements

Lighting

Additional lighting at crossings

Traffic lights

Integrated Traffic Management System

Changes in traffic organisation



Pedestrian crossing safety audit

Warsaw residents and tourists use different means of transport; they travel by public transport, car, or bicycle. They are all, however, pedestrians. It is our duty to ensure their comfort and safety.

To define threats and problems, we have been conducting a comprehensive safety audit of all pedestrian crossings without traffic lights since 2016.

In 2019, we completed an audit of 1085 crossings in five districts. In Wawer we checked 348 crossings, in Włochy – 229, in Praga Północ - 155, in Bemowo - 171, and 182 crossings in Żoliborz. This comes to 3084 crossings checked since the beginning of 2016. In 2020, the audit will cover six more districts, which will bring the number of inspected crossings to 4179 that includes all the crossings that are the responsibility of ZDM.

This comprehensive and innovative approach to identifying problems at pedestrian crossings is the first such initiative in the world. According to regulations, an audit can be carried out by one person who has the appropriate certificate. However, we decided to create teams of three or four people with different competences and experiences, to look at problems from every possible perspective. At times we even had as many as 50 people on the audit team, which included auditors, their assistants, lighting specialists, office administrators, IT specialists and people measuring pedestrian traffic.

We also asked professors and doctors with academic titles to assess the situation in the field. This is an unprecedented situation, because usually the best specialists contribute their knowledge and prestige to drafting projects. During the audit of the Warsaw crossings, however, everyone (without exception) also worked in the field.

We also reduced the risk of error. After the audit, the auditor gave assessments, identified threats, and then made recommendations. This step was followed by cross checking. The second auditor received detailed results and on this basis assessed the work of the first auditor. In the event of a discrepancy, a third auditor was introduced - the conciliator. This methodology allowed us to develop the best solutions.

Auditors examine the safety of crossings in terms of approximately 30 criteria. These include issues related to road geometry, traffic organisation and street lighting. The following are additionally used for auditing: rangefinders, measuring wheels or special devices testing the light intensity at a pedestrian crossing and in its vicinity. The assessment is not based only on guidelines resulting from legal provisions - we introduced, for example, the concept of "backward" visibility, i.e. when the vehicle turns right from the main road onto a pedestrian crossing. We also assess the visibility of pedestrians at a distance of 1 metre from the edge of the road - so that the driver can see the passer-by intending to cross the road.





Speed measurements

Exceeding the speed limit by drivers is the cause of most dangerous traffic situations. The scale of the problem is shown by our speed tests on Warsaw streets. In 2019, we once again undertook this task. The results were forwarded to the relevant services whose task is to enforce compliance. The data also allows us to identify problems and continue our work on improving security.

The instantaneous speed and traffic intensity tests were carried out between 6 March and 27 November 2019 in 102 locations throughout all Warsaw districts. The survey covered a total of 125 measurement days and involved over 2.4m registered vehicles in 317 analysed traffic lanes.

The street identified as the "fastest" point was Wybrzeże Gdyńskie Street; the average speed of vehicles in this location was 94.8 km/h.

The "slowest" point was Ks. Ziemowita Street - the average instantaneous speed in both directions was 29.9 km/h.

During the survey, we registered over 1,300,000 cases of exceeded speed limit representing over 56% of all registered vehicles, of which nearly 440,000 exceeded

the speed limit above 10 km/h (over 18% of all vehicles). During the survey, we registered 11,500 drivers at risk of losing their driver's license who exceeded the speed limit by more than 50 km/h.

2019 ZDM Annual Report

The results of our measurements were forwarded to the Police and Road Transport Inspection, which have the authority to control offenses and enforce relevant penalties. We are actively cooperating with the authorities in this area.

To meet the residents' expectations, the city is funding additional patrols, including on the Poniatowski Bridge. We also plan to buy speed cameras and set them up at Poniatowski Bridge. This is possible thanks to the consent of GITD (Chief Inspectorate of Road Transport), which will operate the devices.

Priority: Safety Priority: Safety

Lighting

Good visibility has a direct impact on road safety. This has been confirmed by our audits and improving statistics. For many years, we have been systematically modernising old lighting and installing new lighting where it is most lacking.

2019 was a very busy year. We replaced 882 street lights. This mostly involves comprehensive work - installing new cable systems and new control devices, poles and modern, energy-saving LED fittings. This year, we installed 2,450 such fixtures (including 288 in tunnels). This is our best result since using this technology. For comparison - in 2018, we installed as many as 2,400 LED fixtures, which improves visibility, reduces energy consumption and the emission of harmful substances.

Savings can be impressive. In total, replacing old fixtures will reduce the average annual energy consumption from 4024 to 935 MWh, and reduce the cost from PLN 2m to PLN 650,000. This means that the estimated reduction in energy consumption will be around 77%. We allocated nearly PLN 14.5m for modernising lighting. Thanks to improved lighting parameters, fewer fixtures are needed.

New energy-saving LED fixtures were installed, among others, on Modlińska Street (304 instead of 485), on Aleja Waszyngtona (195 instead of 198) and in the tunnel on the W-Z route (56 instead of 202). One of the most important comprehensive modernisation works were those performed on Zatylna Street, where we replaced concrete poles and some of the last mercury fittings, or installing lanterns known as "pastorał warszawski" (Warsaw crosier) at Aleja Szucha and Podczaszyńskiego Street. Decisions on installations involving antique columns and fixtures are taken in cooperation with a monument conservator.

In 2020, we plan to modernise street lighting on 13 streets under the "SOWA" program. The budget of the entire project is PLN 12.m. The majority of this amount (PLN 10.8m) will be covered by a long-term loan from the National Fund for Environmental Protection and Water Management, to which the Council of the Capital City of Warsaw agreed. The loan will be paid out in two instalments in 2020 and 2021, and it will be repaid between 2021 and 2026. Within two years, we want to replace cables, power cabinets, poles and nearly 1000 lighting fixtures on 13 Warsaw streets.

In 2019 we replaced

street lamps



and installed

2,450

new fixtures

This works will generate 77% savings in energy use worth nearly **PLN 1.4m**



Additional lighting at crossings

Providing additional lighting at pedestrian crossings is one of our flagship projects. This way we have been consistently improving safety on pedestrian crossings without traffic lights for several years. This year, we managed to maintain a high pace of work and add lighting to 386 crossings. For comparison, in 2018, as many as 435 crossings received additional lighting, while in 2017 there were 337, and in 2016 – 78.

We provide additional lighting at crossings in two ways. The most effective method is the

so-called dedicated method. This means mounting the lower polls directly at the crossing. We mount asymmetrical lenses on the poles, which light up pedestrians from the side, making it much easier for drivers to see them. In this way, in 2019, we provided additional lighting at 254 crossings. The second, simpler method is to install additional fixtures on an existing pole. We used this type of solution at 132 crossings. It is cheaper and requires no time-consuming project documentation.



Traffic lights

Traffic lights are one way to slow down and organise traffic. Due to high construction costs, their installation is preceded by a thorough analysis, which results in construction at the busiest and most dangerous crossings and intersections.

In 2019, we built or renovated traffic lights at 14 intersections throughout Warsaw.

We have installed new traffic lights in places where it was necessary to slow down traffic and improve safety. This included the intersections of Koszykowa and Raszyńska Streets, Stryjeńskich and Przy Bażantarni Streets, Drewny and Przyczółkowa Streets, and at six crossings along Aleja KEN.

We carried out repairs in places where the traffic lights were old and depleted. This included the intersections of Marynarska, Wołoska and Rzymowskiego Streets, Aleja Niepodległości and Batorego Street, and Aleja "Solidarności" and Szwedzka Street.

Traffic lights are also being installed by other municipal units and private investors – in 2019 Warsaw Trams provided traffic lights at Grochowska Street, while a developer, in line with our requirements, improved safety at the intersection of Aleja Krakowska and Instalatorów Street.

In 2019, reconstruction began of the intersections of Św. Wincentego Street with Borzymowska and Niwa Streets, for which the contractor of nearby housing investments is also responsible.

The total amount we allocated in 2019 for the construction, reconstruction, adaptation to the new traffic organisation and maintenance was over PLN 28m. All changes were aimed at improving the safety and comfort of Warsaw residents.



New and renovation traffic lights

14 on the intersections.

VO7777

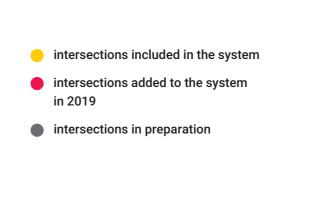




Integrated Traffic Management System

TIt is difficult to imagine traffic in Warsaw today without the Integrated Traffic Management System. Thanks to this advanced technology, it has been possible to improve road traffic and safety since 2008. Over 10 years ago, the system covered only 37 intersections. Today there are 363 in total. In 2019, another 41 intersections were included in the system, including on Grochowska, Łodygowa, and Czerniakowska Streets, as well as at Aleja KEN.

The system is constantly being expanded. We are currently working on drafting traffic organisation, renovation works and adapting to work within accommodating and coordinating traffic lights at 14 intersections along Aleja Niepodległości. These drafts should be ready in the second half of 2020. After this stage, we will start work in the field. Similar modernisation works will be carried out at Modlińska Street. We want other intersections of this important artery to be included in the system.



intersections included in the system

21

Priority: Safety



23

2019 ZDM Annual Report

22

Changes in traffic organisation

The main purpose of making changes to traffic organisation is to improve safety. Some of the projects we implement every year include choosing locations for new overpasses, construction of islands between lanes of traffic, installation of speed bumps, placing blocking posts and changes in the geometry of the road, pavements and bicycle paths.

Ground level crossings improve the comfort and safety of pedestrians. Their availability is especially important for the elderly, those with disabilities and carers with children in prams. Stairs or footbridges are not an alternative for them, but are very often an insurmountable barrier. This is why for years we have been consistently designating locations for new crossings. A total of 24 crossings were created in the last seven years. In 2019, we created new crossings, including at the intersections of Raszyńska and Koszykowa Streets, Aleja "Solidarności" and Szwedzka Street, Aleja Niepodległości and Batorego Street, Drewny and Przyczółkowa Streets, and at Słowackiego Street near the district office.

There are plans to designate locations for more ground crossings. These will include Słowackiego Street, and Rondo Czterdziestolatka.

In places where crossings already exist, we are building islands and elevated crossings. New islands have been created on Szwedzka Street, Myśliwiecka Street by the Radio 3 station lane, as well as Sierakowskiego Street at Weteranów Square and Jasinskiego Street. Eleven cros-



ground pedestrian crossings

sings were rebuilt to elevate them to the level of the pavement (among others on Kaliskiego Street, Powstańców Śląskich Street and the Targówek "bypass"). In order to slow down and manage traffic we also installed speed bumps, including on Sokratesa and Sosnkowskiego Streets. The final decision on installing speed bumps is preceded by a detailed analysis, and the need to slow down traffic is often reported by residents within projects from the civic budget. To protect pavements and pedestrian crossings, blocking posts are often necessary. However, we try to replace them with greenery. In 2019, we implemented this type of project at Aleja Szucha, where we planted 3,000 shrubs instead of installing posts.

new pedestrian crossings in 2019



elevated pedestrian crossings





pedestrian islands



blocking posts



speed bumps



changes in road geometry

Priority: Safety



Development and projects

Our main task is keeping infrastructure maintenance in good condition.

We also implement larger projects, which improves security, convenience and aesthetics of urban space.

E-control

E-parking

PUPZ development

Veturilo

Winter illuminations



E-control

Since the beginning of 2020, cars equipped with cameras and an advanced IT system have been helping to control the Paid Unguarded Parking Zone. The past year was a breakthrough in this respect - the technical details of the system were refined and the tender was decided.



The exact details of the system were specified in technical discussions with potential contractors. Four companies applied for the tender. After initial verification, two of them took part in tests to confirm whether the solutions they offer would meet the high expectations regarding control reliability. Tests involved checking the license plate reading efficiency and GPS accuracy. The tender was resolved in July 2019. The cars arrived in December 2019 and were intensively tested on the streets of Warsaw for several weeks. After the test period, in the beginning of 2020 they began patrolling the areas.

Two electric cars with a special e-control system mounted on the roof are used for this operation. The cars drive through the designated area, while cameras located on the roof take pictures of the license plates of parked cars. The system automatically compares locations of photos taken with a database of paid parking spaces, and then verifies whether the vehicle has paid the

parking fees. Drivers who were on their way to the parking meter do not have to worry about getting a ticket. To avoid mistakes, the journey is carried out twice within a few minutes.

The system is extremely efficient. One car has the effectiveness of 10 foot patrols. Thanks to this, the number of drivers who avoid fees and take up parking spaces in the city centre should drop significantly. In this way, the rotation of places will increase – the purpose of the parking fee is to force the driver to leave the car for as short a time as possible, to allow other drivers to find a parking space.

Another advantage of automatic control is improved customer service. E-control will allow to send a request for payment only to those drivers who have not paid for parking, excluding those who, for example, did not display their parking ticket or mobile payment receipt on the windshield. This will significantly reduce the number of complaints.







E-parking

Smart urban solutions help streamline city transport. This includes our e-parking solution - an application that shows you locations of available parking spaces in the Paid Unguarded Parking Zone (PUPZ).

The system will include a map of available parking spaces in the PUPZ. Special sensors and cameras will check in real time if a given space is occupied. The information will be forwarded to the mobile application, allowing drivers to quickly check the best route to their destination and pay for parking.

The system itself is very simple. However, it will be a challenge to ensure that the data provided to residents is kept up to date. During the year, in the city centre alone traffic organisation changes hundreds of times, either temporarily or permanently, which is why a digital database will be created alongside the system, updated in real time. The application will include renovations and temporarily closed streets.

Information about available parking spaces will save time and fuel, as well as reduce emissions of harmful substances. E-parking is also intended to improve transportation within the city centre. Instead of wasting time driving around the building looking for a parking space, drivers can, for example, drive to an adjacent street. This will allow using the number of spaces in the PUPZ equally and reduce the

number of cars. Today, cars circulating looking for a parking space account for up to 20–30% of traffic in the capital's city centre.

The project is backed by funding from the European Union as part of the Virtual Warsaw Functional Area. Legionowo, Marki, Pruszków, Radzymin and Ząbki will also be included in the system. The capital received a subsidy of PLN 17m from the EU for launching and operating the system in the years 2020–2026.

Although the funding will cover around 10,000 spaces in the system, by the decision of the Warsaw City Council the project is to cover a total of 30,000 parking spaces(the remaining funds are included in the city budget for the next several years).

The first round of technical talks involving 6 contractors ended in 2019, during which the technical aspects were determined. Information we gathered during the talks will allow us to make final changes to our project proposal. The second round of talks dealing with legal issues will begin in 2020.

Discussions on expanding the paid parking zone

The Warsaw paid parking zone has been operating within its current borders since 2013. In connection with the construction of subsequent sections of the second metro line, we are analysing the possibility of extending the zone to include parts of Wola and Praga-Północ. In autumn 2019, we discussed this idea with residents.

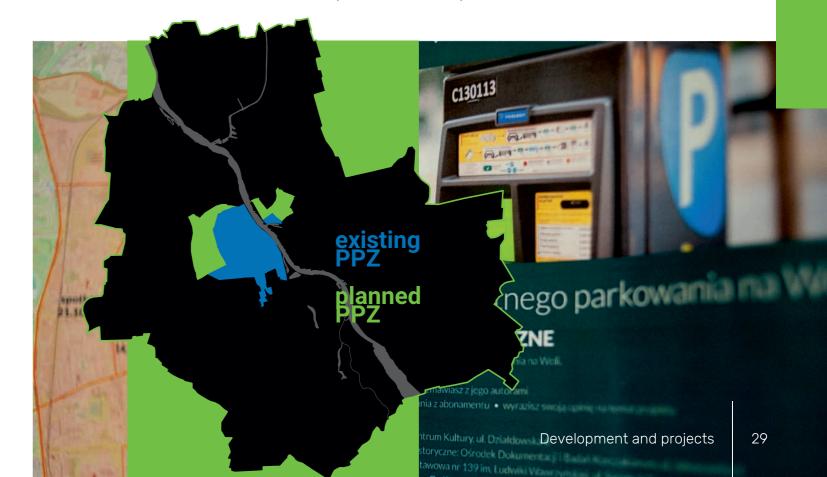
Introducing the paid parking zone can help protect the area adjacent to the second metro line from excessive car parking. Our experience shows that introducing fees discourages some drivers from leaving vehicles in the zone for long periods of time. This translates into increased rotation and thus makes it easier to find available parking spaces. Naturally, those living within the zone can benefit from a subscription that entitles them to park without incurring additional fees.

To prepare for the zone expansion, in 2019 we conducted an analysis of the use of parking spaces and vehicle rotation, measuring, among others, how many cars are parked on individual streets at different times of the day.

It covered the areas of Nowa Praga (between Aleja "Solidarności" and 11 Listopada and Ratuszowa Streets), as well as Stara Praga and Szmulki (from Targowa Street to Aleja Tysiąclecia and Radzymińska Street), as well as the streets in the immediate vicinity of the ZOO and the area between Aleja Prymasa Tysiąclecia and Okopowa and Towarowa Streets in Wola.

We presented the results of the analyses and proposed changes in traffic organisation at the meetings with residents. We discussed what the introduction of fees involves and how it will affect the parking situation. Residents were mostly in favour of zone expansion. The final decision in this matter belongs to the Warsaw City Council.

2019 ZDM Annual Report



Veturilo

The eighth season of Veturilo is behind us. In 2019 the 5,700 City bikes were rented nearly six million times.



In 2019 there were nearly prawie

6m rentals

Warsaw's Veturilo is still developing and remains the largest system of this type in all of Central and Eastern Europe. In 2019, there were 5,485 standard bicycles available to residents and tourists, 110 electric bikes, 60 children's bikes and 45 tandems.

In the eighth season, residents of the capital and tourists rented bicycles exactly 5,953,802 times. The most active times were June and April, when the number of rentals exceeded 900,000, which means that bicycles were used over 30,000 times a day, with 168 and 158 trips per month on each bike. In total, since the inauguration of the Veturilo system, there have been 25.6m rentals, which is 21,700 rentals per day on average.

The average rental time in 2019 was 23 minutes. About 77% of rentals do not exceed the 20-minute free time. 18% of rentals were for between 20 minutes to 1 hour, which costs a symbolic one zloty.

The most active Veturilo user rented bikes 363 times throughout the season. The most popular bike is number 29005. It was rented 2012 times during the year, i.e. over seven times a day on average.

Warsaw residents most often used the system between 4pm and 6pm, which is the time when 20% of daily rentals occurred. Over the course of the week, the distribution is very evenly distributed, however statistically most rentals occurred on Sundays – 15%. The vast majority of rentals, as many as 89%, were made using the mobile application. On average, residents use terminals at every station once every tenth rental.

The advantage of Warsaw's Veturilo is also its full compatibility with systems in Konstancin-Jeziorna, Marki, Michałowice, Piaseczno and Pruszków. This means that bikes rented in these cities can be returned in Warsaw and vice versa.

The Warsaw Public Bicycle will operate in its current form until December 2020. We are already preparing to choose a service provider for the coming years and plans for the Veturilo system after 2020 are already in place. Wide public consultations took place in September and October. Over 5,000 surveys were collected, and over 700 comments were sent by email. In total, we spent 40 hours on meetings with residents.

Most popular routes in 2019



Most popular stations in 2019

Copernicus Science Centre

112,547

49,205 rentals and 63,342 returns

Arkadia Shopping Mall

100,835

49,897 rentals and 50,938 returns al. Niepodległości - Batorego

98,177

49,680 rentals and 48,488 returns

Wileński Square

91,301

45,041 rentals and 46,260 returns rondo ONZ **74,763**

38,944 rentals and 35,819 returns rondo Jazdy Polskiej

72,513

38,188 rentals and 34,323 returns

30

2019 ZDM Annual Report

5,485
Standard



45

110 Electric



Tandem

€**7 6**0

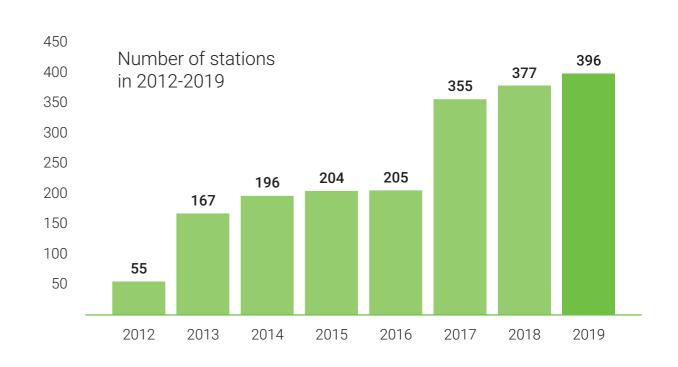
Children's bikes

Number of bikes in 2019:

5,700







A new feature in 2019 was the illumination of the Old Town, for which the Public Areas Board was responsible. A large light canopy with an area of over 1,700 sqm hung above the ice rink in the Market Square. The entrances were marked by gates with the sign "Merry Christmas". Six-metre tall trees stood next to each gate. Their trunks, which were home to forest birds, were insulated with spruce garlands and decorated with colourful baubles.

over 20 kilometres of Warsaw streets. If the

illuminations were arranged in a single light

chain, they would extend from the eastern to

The main route of illuminations is the Royal

Route from Plac Zamkowy, through Krakowskie

Przedmieście, Nowy Świat, Plac Trzech Krzyży

and Aleje Ujazdowskie up to Belweder. Bridges

and other streets and squares on both the left

and right sides of the city were also illuminated. In addition to classic light decorations, we also

installed interactive elements, seats and photo

the western border of Poland.

frames.



690 km

If the illumination were a single chain, it would connect the eastern and western borders of Poland.



The Old Town also featured a carousel decorated with lights, while the Castle Square was traditionally decorated with a 27-metre tall Christmas tree with light decorations.

For years, Warsaw illuminations have been at the forefront of European winter decorations. Light decorations on the Royal Route were ranked first among the most beautifully lit avenues in Europe in the Deutsche Welle ranking. The French daily Le Figaro placed Warsaw among the 10 most beautifully decorated cities in the world.

The Warsaw decorations consist of over 1,300 different elements with over 4.5 million energy-saving eco-LEDs, which consume 10 times less power than traditional lighting and are made of the highest quality materials.

The current illuminations contract ends in 2019. In 2020 year, we intend to announce a new tender, which will decide on the scope and appearance of light decorations for the coming years.



Renovating and rebuilding road infrastructure

Maintenance of road infrastructure is one of the main tasks of the Municipal Road Authority. Weekend milling, minor repairs or changes in traffic organisation improve the comfort and safety of road infrastructure users. In 2019, several major modernisations were also carried out, which changed the face of reconstructed streets and intersections.

Aleja Niepodległości and Batorego

Aleja Solidarności and Szwedzka

Targówek "bypass"

Aleja Zjednoczenia

Górczewska

Słowackiego

Road and pavement repairs

Improving accessibility

New bike paths

Aleja Niepodległości and Batorego Street

The reconstruction of this intersection was one of the most awaited projects in recent years. Thanks to it, this area has become more accessible to the elderly, families with children, pedestrians and cyclists. Drivers also benefited from the renovation.

Thanks to the reconstruction, the intersection changed beyond recognition. It is now safe, comfortable and accessible. On the north side of Batory Street there is a new pedestrian crossing and a bicycle crossing. Pedestrians and cyclists no longer have to circle the entire intersection, waiting three times for a green light. Elderly people, as well as those with disabilities and carers with children gained ground access to the tram stops located above the Pole Mokotowskie metro station. Until now, the stop was only accessible by stairs, which for many people was an insurmountable barrier.

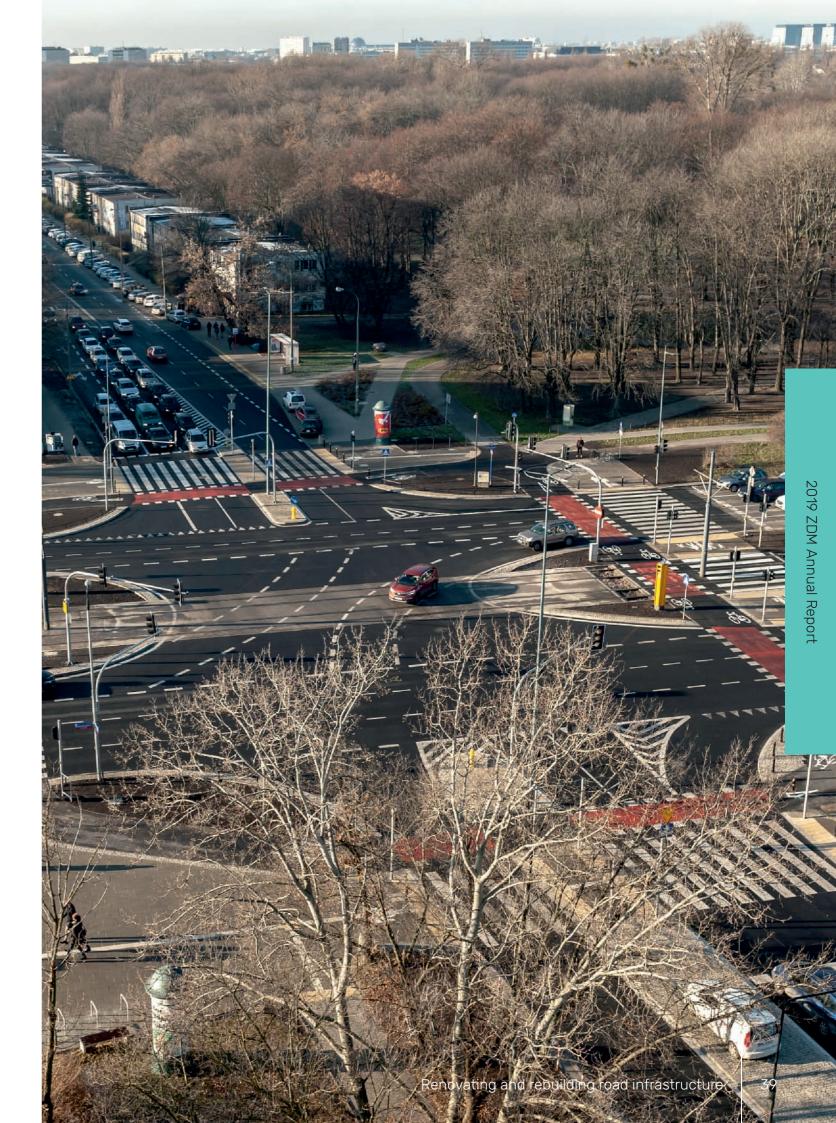
Drivers also benefited from this reconstruction. Creating a separate left turn lane from both directions has allowed drivers to safely and comfortably cross the intersection. The traffic lights were coordinated and equipped with automatic detection, thanks to which the traffic can run smoothly.

But this is not the end of changes at Aleja Niepodległości. The Municipal Road Authority is planning to update up to 14 traffic lights along the avenue, including the entire section from Koszykowa to Domaniewska Streets. The traffic lights will be coordinated with each other in order to achieve the so-called "Green wave" at subsequent intersections.

left turns









Aleja Solidarności and Szwedzka Street

Reconstruction of the intersection at Aleja "Solidarności" and Szwedzka Street is one of the most important projects in Praga-Północ. The reconstruction project involved simplifying the intersection, making it more convenient for pedestrians, cyclists and drivers.

Before the reconstruction, it was a complicated road junction. Thanks to the reconstruction, it was possible to designate a new pedestrian crossing and bicycle crossing. In this way, an important bicycle path leading to Targówek and further up to the border with Ząbki gained continuity. Pedestrians no longer need to make their journey longer by waiting twice for a green light in order to cross straight ahead. In addition, we extended the left turn into Szwedzka Street, and widened the exit.

An important change was creating a dead end on Wileńska Street, which prevented the transit of cars and buses from entering the narrow streets of Praga. This also allowed the green light to be lengthened for others, which made crossing the intersection smoother.

The changes also affected the intersection of Szwedzka and Równa Streets. Two pedestrian crossings were designated at these single-lane streets, which were also given additional lighting and a pedestrian island.

pedestrian crossings







Targówek "bypass"

The design of the reconstruction of the Targówek "bypass", i.e. Gorzykowska, Handlowa and Ossowskiego Streets, is a joint initiative of the Municipal Road Authority and the Targówek district. It was created with the active involvement of residents, as well as district and city councillors.

The project involved comprehensive changes on several streets, nearly 3 kilometres in total. The intersections of Handlowa and Gorzykowska Streets, Pratulińska and Kołowa Streets, and Ossowskiego and Witebska Streets turned into roundabouts, which slowed down the traf-fic and improved safety. In addition, new pavements were created with a total area of over 20,000 sqm, as well as a bicycle path and a running trail on an unpaved surface, the first of this kind on this side of the Vistula River.

Thanks to changes in traffic organisation, 140 parking spaces and new pedestrian crossings have been designated on Handlowa Street (between Lusińska and Kołowa Streets, at Lusińska, Mokra and Szczepanika Streets) and on Myszkowska Street (at Hodowlana Street). All crossings also have a pedestrian island. Street lighting has been modernised, which is now illuminated with over 400

energy-saving LED fixtures. The culmination of the project is new greenery (over 200 new trees and 28,000 shrubs), as well as benches and bicycle stands.













Aleja Zjednoczenia

Modernisation works on Aleja Zjednoczenia began in early September 2019. It was a project long-awaited by the residents of Bielany. The changes will improve aesthetics, as well as comfort and safety.

By the end of 2019, we managed to renovate the pavement, bicycle path and parking spaces on the west side of the avenue from Żeromskiego to Kasprowicza Streets. A new roadway was also built on this section.

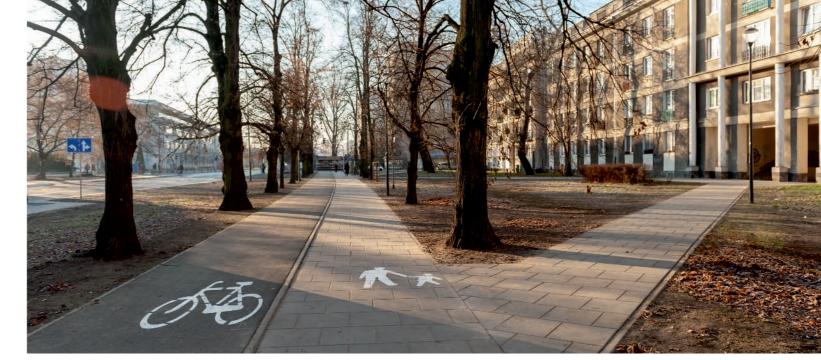
In 2020, we will finish work on the remaining part of Aleja Zjednoczenia. In total, this nearly one-kilometre stretch of the avenue will gain over 9,500 sgm of new road surface with foundation. The pavements will have a new, even surface made of concrete slabs with a total area of over 8,000 sgm, and a new bicycle path will be built. There will also be 32 bike racks for cyclists. After the reconstruction architectural barriers will be removed from Aleja Zjednoczenia and cross streets, which will make the streets easily accessible to the elderly, the disabled and families with children. Leading and warning panels for the visually impaired and the blind will be placed on pavements and at crossings.

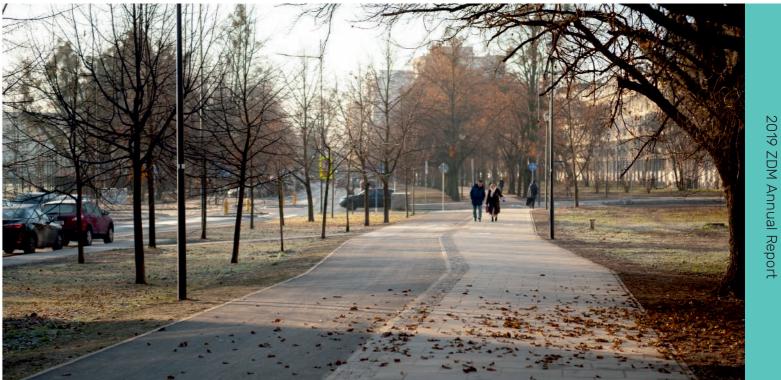
It will also be more convenient for passengers of public transport. Bus stops will be moved to the intersection with Żeromskiego Street. They will have raised curbs to make it easier for passengers to enter the bus.

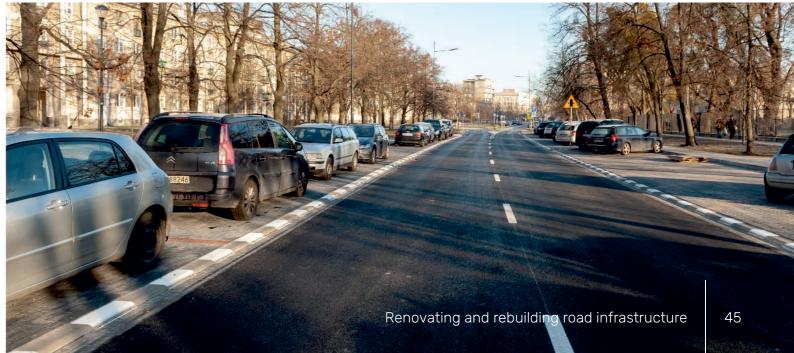
One of our priorities is to improve street visibility, which is why Aleja Zjednoczenia will also gain completely new lighting for the road, pavements and pedestrian crossings.

> 9,500 sqm of new road surface









Górczewska Street

The three metro stations being constructed in the area of Wolska Street are changing transportation in this area. We want Górczewska Street to be safe and convenient for residents, which is why in 2019 we began work on reconstructing the section of the street from Syreny Street to Młynarska Street.

Works on Górczewska Street began at the end of 2019. The changes began with the reconstruction of drainage, during which we worked as deep as six metres underground. The first road works related to curb replacement have also began.

After the reconstruction, which will end in the second half of 2020, Górczewska Street will become an elegant, comfortable and safe urban street. Pedestrians will be able to use new, even pavements that meet all accessibility standards. For the sake of the environment, the pavement will be made of antismog plates. People with disabilities will also be able to use the ramps at parking spaces, as well as ramps leading to public transport stops. It will also be more convenient and safer for cyclists who will gain a wide asphalt road for bicycles on the north side.

As part of the reconstruction, the bus lane will be removed from Górczewska Street (replaced by the much more efficient underground trains), and in its place on both sides we will build parking bays with a granite surface. This solution was postulated by local residents.

At Tyszkiewicza Street there will be an additional bicycle crossing with traffic lights, and the traffic lights at Płocka Street will be rebuilt. The new traffic lights will have automatic detection and will be synchronised with the other intersections, which will make traffic more smooth. New, energy-saving lighting and greenery will appear along the section under renovation.









Słowackiego Street

"Safe and friendly Słowackiego Street" is the title of the project chosen by residents in the civic budget. We decided to expand the scope of work to increase the comfort and safety of residents.

Słowackiego Street is one of the most important areas in Żoliborz. In response to numerous requests from residents, we are adapting this street to the highest standards. The most important change was the designation of a new, pedestrian crossing by the district office. In 2020, we will also designate a new crossing at Szczepanowskiego Street. Both the new crossings and the existing one at Czaki Street will be equipped with a stone island in the middle of the road.

A continuous and comfortable road for bicycles was created along the entire length of the street. Cyclists also gained racks at which they can park.

We strive to make sure all traffic participants benefit from the reconstruction. This is why we have designated around 60 parking spaces along the street, doubling their number. This is possible thanks to giving up one lane between intersections.

Completion of the works at Słowackiego Street is planned for 2020.

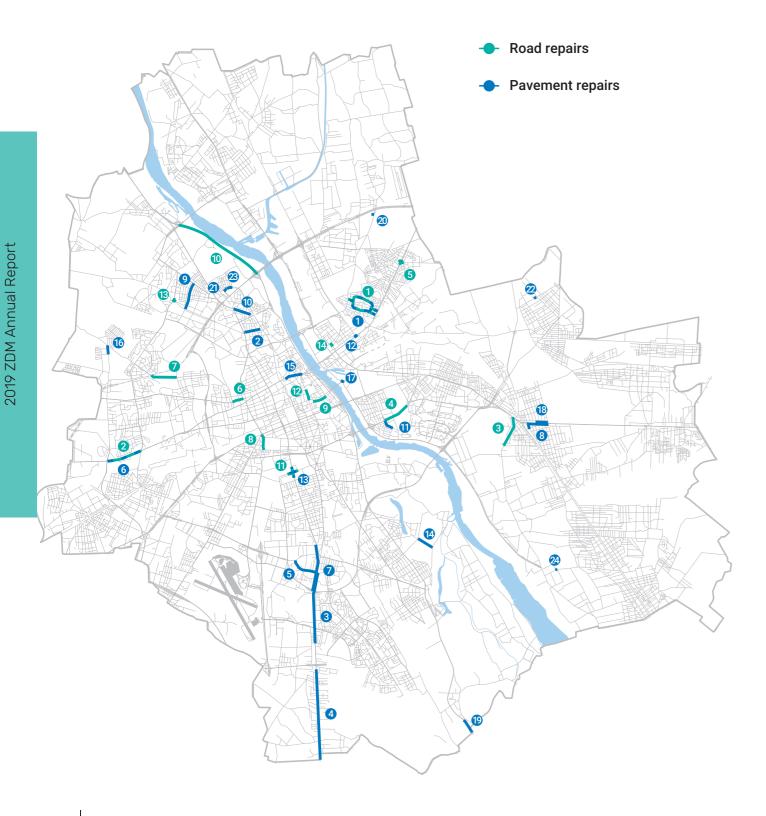






Road and pavement repairs

Maintaining road infrastructure in good condition is one of our main tasks. For this reason, every year we repair thousands of square metres of roads and pavements.



Road repairs:

- 1 Targówek "bypass" (Barkocińska, Gorzykowska, Ossowskiego, Myszkowska Handlowa, Kołowa Streets) 17,229 sgm.
- Połczyńska Street (south road) at the section of Szeligowska and Powstańców Śląskich Streets
 10,602 sgm..
- 3 Trakt Lubelski Street at the Płowiecka Klimontowska section 8,206 sgm.
- Bus lane in Aleja Stanów Zjednoczonych at the Saska Ostrobramska section 7,231 sqm.
- 5 Intersection of Radzymińska, Łodygowa and Młodzieńcza Streets 7,164 sqm.
- 6 Leszno Street at the section of Okopowa and Marynarska streets 6,765 sqm.
- Dywizjonu 303 Street at the section from the viaduct over Aleja Obrońców Grodna (Route S8) to Księcia Janusza Street 6,388 sqm.
- 3 Raszyńska Street (east road) at the section of Filtrowa Street Aleje Jerozolimskie 6,273 sqm.
- 9 Tamka Street at the section of Dobra and Kopernika Streets 5,391 sqm.
- Wybrzeże Gdyńskie Street at the Route S8 Maria Skłodowska-Curie Bridge Route section 4,217 sqm.
- 1 Intersection of Aleja Niepodległości and Batorego Street 3,384 sqm.
- Krakowskie Przedmieście and Nowy Świat Streets at the section of Staszic Palace and Królewska Street
 3.336 sam
- 13 Intersection of Broniewskiego Street and Aleja Reymonta 2,554 sqm.
- Targowa Street at the section of 11 Listopada and Ratuszowa Streets 808 sqm.

Total: 86,818 sqm of new roads.

Pavement repairs:

- 1 Targówek "bypass" (Barkocińska, Gorzykowska, Ossowskiego, Handlowa, Kołowa Streets) 17,865 sqm.
- 2 Aleja Wojska Polskiego at the Popiełuszki Street Plac Inwalidów section 8,741 sqm.
- 3 Puławska Street at the Wałbrzyska Mysikrólika section 8,700 sqm.
- 4 Puławska Street at the Gwota city border (West side) section 7,609 sqm.
- 6 Aleja Lotników at the Aleja Wilanowska Puławska section 7,533 sqm.
- 6 Połczyńska Street at the Dźwigowa Aleja 4 Czerwca section– 7,079 sqm.
- Puławska Street at the Domaniewska Służewiecka section 4,500 sqm.
- 3 Czecha and Sejmikowa Streets at the Kajki Wydawnicza section 2,854 sqm.
- Aleja Zjednoczenia at the Broniewskiego Kasprowicza section 2,330 sqm.
- Słowackiego Street at the Popiełuszki Toeplitza section 2,005 sqm.
- 10 Saska at the Ateńska Aleja Stanów Zjednoczonych section 1,853 sqm.
- Intersection of Aleja "Solidarności" and Szwedzka Street 1,840 sqm.
- Intersection of Aleja Niepodległości and Batorego Street 1,656 sqm.
- Zawodzie Street at the Augustówka Kobylańska section– 1,604 sqm.
- 6 Aleja "Solidarności" at the Bielańska Nowy Zjazd section 1,174 sqm.
- 6 Kaliskiego Street at the Radiowa Archimedesa section 1,011 sqm.
- Descent from the Świętokrzyski Bridge to Wybrzeże Szczecińskie Street 939 sqm.
- © Czecha Street at the Kościuszkowców-Potockich section 718 sqm.
- Drewny Street at the Waflowa city border section 515 sqm.
- Głębocka Street near CH Targówek (Targówek Shopping Mall) 503 sgm.
- 2 Rudzka Street at the Łomiańska Kolektorska section 280 m sgm.
- Czwartaków Street at the Kadrowa Szyszaków section 278 sqm.
- Rudzka Street at the Trasa AK Klaudyny section 170 sqm.
- Przewodowa Street at the section from no. 32 to Mrągowska Street 153 sqm.

Total: **81,910 sqm** of new or repaired pavements.



Improving accessibility

We aim to make urban space available to all its users – for this reason, every year we eliminate architectural barriers. Frequently, good results can be obtained with the help of relatively small investments, but barriers are also removed during comprehensive renovations.

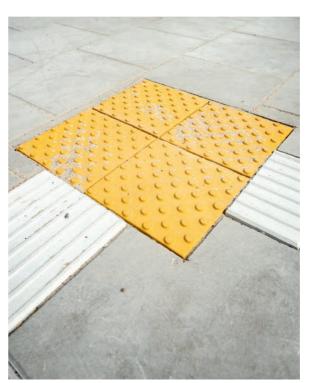
Lowering curbs and installing special leading and warning panels are some of the elements of infrastructure thanks to which disabled people can easily move around the city. In 2019, we allocated PLN 1.8m to remove architectural barriers. Often, these works did not appear spectacular, but they had a huge impact on improving safety and comfort.

We conducted works on Bonifraterska, Krucza, Konwiktorska and Bitwy Warszawskiej 1920 Streets, where we lowered curbs, installed new warning panels for the blind and visually impaired, and replaced damaged road infrastructure. As part of the works on Bitwy Warszawskiej 1920 Street, we also removed the uncomfortable stairs that led to the headquarters of the foundation for the blind and visually impaired. We replaced them with a gently inclined pavement with all amenities.

Architectural barriers are also removed during comprehensive street reconstruction and renovation. A good example is the reconstruction of the intersection of Aleja Niepodległości and Batorego Street, where we designated an additional access to public transport stops so that disabled do not have to use the stairs.













New bicycle paths

Over 60 km of bicycle paths were successfully completed in 2019. They included the longest new route in Warsaw and shorter crossings, but crucial for the coherence of the network, at Aleja Niepodległości, Raszyńska and Szwedzka Streets.

Last year we continued the record pace of bicycle network development in Warsaw. Nearly 400 km of new routes were built or renovated in the last seven years and the length of the network has doubled, reaching over 635 km. Last year, over 60 km of new and refurbished cycling infrastructure, including 38 kilometres of bicycle routes, were put into use. There were more than 12 kilometres of new one-way lanes with counter-lanes, which allows cycling against traffic. Today, there are 200 such paths in the capital, with a total length of nearly 41 kilometres.

We have completed the extensive bicycle route construction programme co-financed by the EU as part of the Integrated Territorial Investments of the Warsaw Functional Area project. The final sections were completed last year along Drewna, Połczyńska and Puławska Streets. The latter is the largest single bicycle project in the history of Warsaw - on the section from Domaniewska Street to the Warsaw border a total of 16 kilometres of bicycle paths were built.

Building bicycle infrastructure as part of large road projects is standard. Usually these are tasks carried out by the Municipal Road Investment Board. In 2019, during the comprehensive reconstruction of streets, bicycle routes were created this way, including along Łodygowa, Głębocka, Żołnierska and Leszno Streets. In addition, cyclists gained a new better layout of paths on the next section of the Vistula boulevards. It is a project run by the Urban Greenery Board, which rebuilt the Kahl Square, i.e. the area at the Świętokrzyski bridge and Centrum

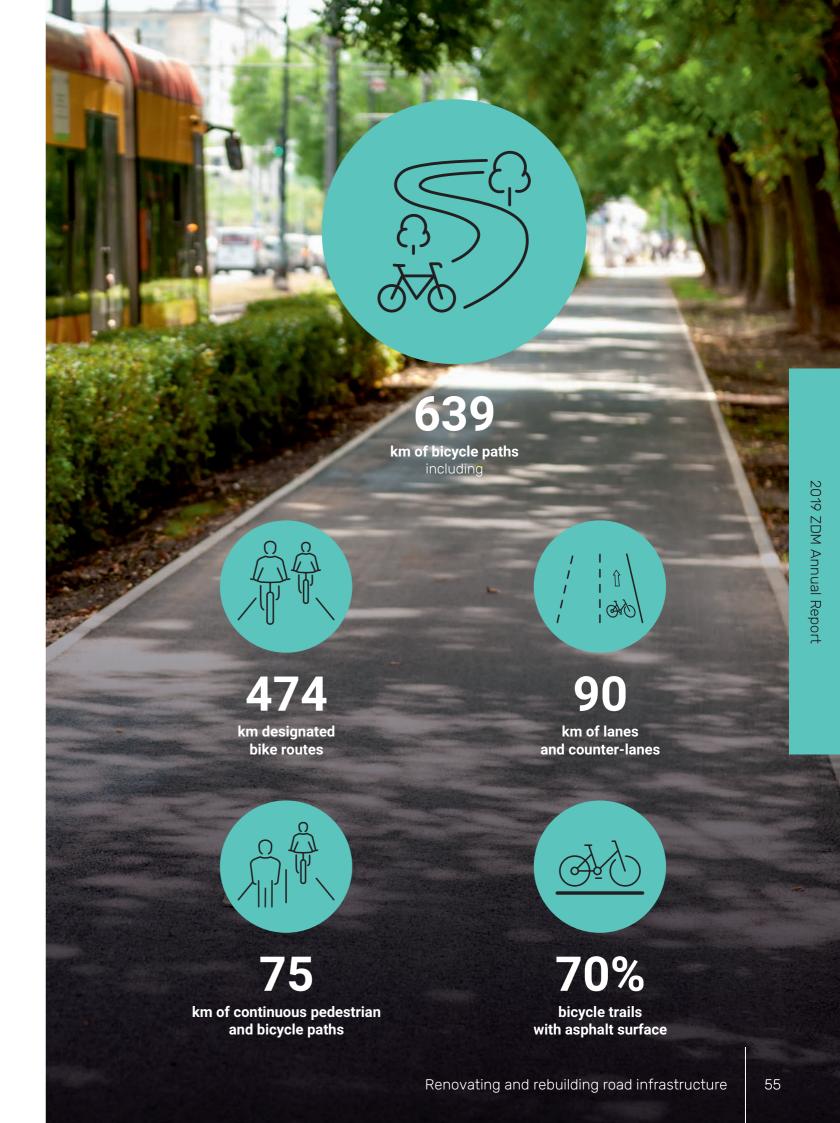
Nauki Kopernik (Copernicus Science Centre) underground station.

We are gradually eliminating "white spots" on the cycling map of Warsaw – that is, spaces where the bicycle path unexpectedly ends or forces cyclers to take a longer route. This year, new bicycle crossings have been built across Aleja Niepodległości (at Batorego Street), Szwedzka Street (at Aleja Solidarności) and Namysłowska Street (next to Starzyńskiego).

We also keep in mind bicycle infrastructure when designing new traffic lights. A good example is the intersection of Drewny and Przyczółkowa Streets in Wilanów. At the previously dangerous intersection we installed traffic lights, as well as created a bicycle crossing, which connected popular paths on both streets.

New crossings are created on the extensions of logical and natural routes. This does not always mean filling the gap along the existing bike path. The reconstruction of the Koszykowa – Raszyńska – Nowogrodzka intersection last year, which included a set of crossings, opened up completely new riding opportunities for cyclists.

This is the next stage of designating a bicycle corridor in the city centre along Nowogrodzka Street, which will ultimately be an attractive alternative to cycling along Aleje Jerozolimskie.





Ongoing maintenance

We manage over 800 km of roads and hundreds of thousands of road infrastructure elements.

We conduct maintenance works on them throughout the year and practically around the clock.

Road Emergency Services

Bridges

Road lanes

Illegal ads removal

Parking

Municipal Information System



Emergency Road Services

It's hard to imagine a well-functioning Warsaw without the Municipal Road Authority's Emergency Road Services. Our employees take care of road infrastructure throughout the year and around the clock. In 2019, we responded to over 900 problems that directly threatened traffic safety.

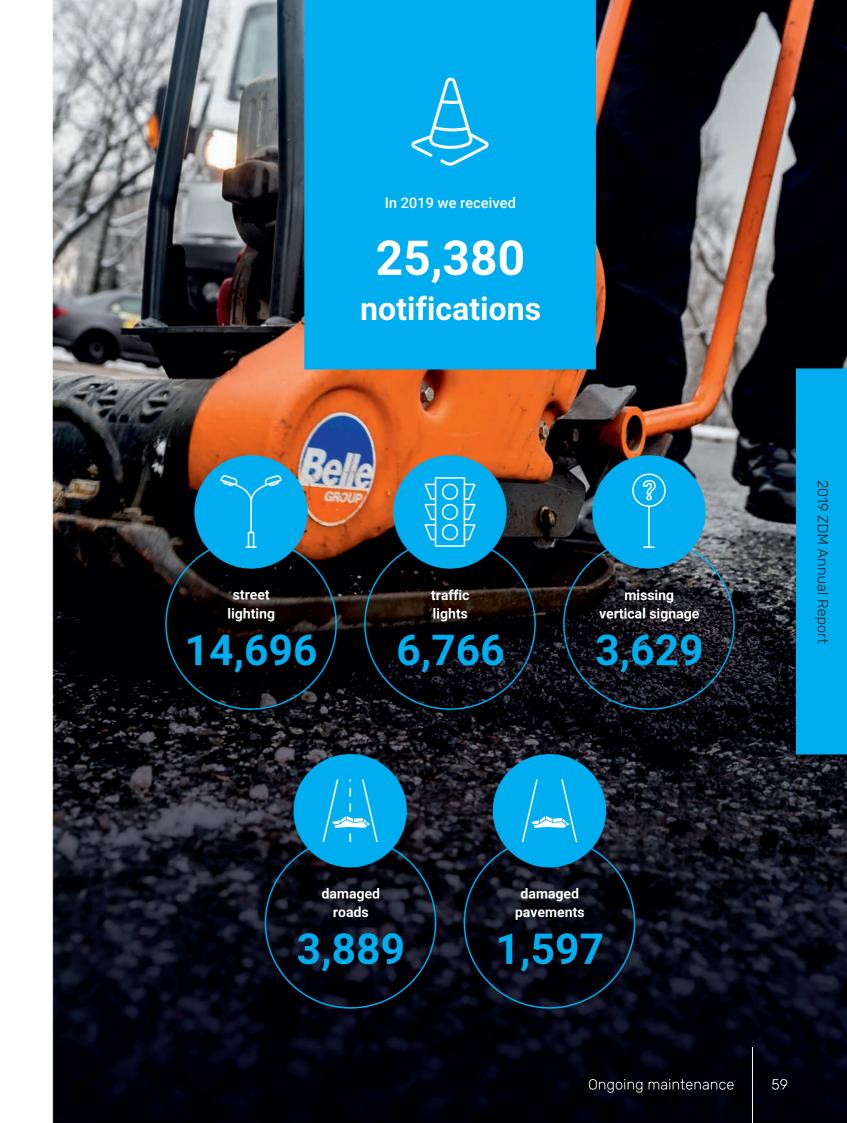


Interventions are the result of daily patrols and notifications, which are submitted by residents and other units. As in previous years, most problems concerned lighting, traffic lights and road surface.

In total, we used 7,813 kg of cold asphalt to fill in damaged areas. This is an ad hoc way to secure infrastructure. Ultimately, we entrust our contractors with permanent repair. In 2019, we undertook 901 interventions that directly threatened traffic safety. Not all reports relate to roads that are under our management - in this case we immediately secure the area where the problem has occurred and forward the information to the appropriate unit.

The most popular method of reporting faults is contacting the Municipal Contact Centre Warsaw 19115. We receive 63% of notifications through this channel. In total, we received as many as 25,380 notifications concerning thousands of different issues.





Bridge structures

Bridge structures include viaducts, footbridges, lifts, underpasses and tunnels. Every day they are used by millions of Warsaw residents and visitors. Our task is to ensure they stay in good technical condition and improve their accessibility.

Over 500 bridge structures are under our constant control. Ongoing monitoring, local repairs and general renovations mean that Warsaw residents can use them safely for many years. Maintenance includes repair of bituminous surfaces, replacement of prefabricated beams, as well as repair of concrete bays or energy-intensive barriers. Corrosion protection is also very important for safety reasons. We also take care of aesthetics by washing thousands of square metres of acoustic screens, cornices, balustrades and bridge facades every year.

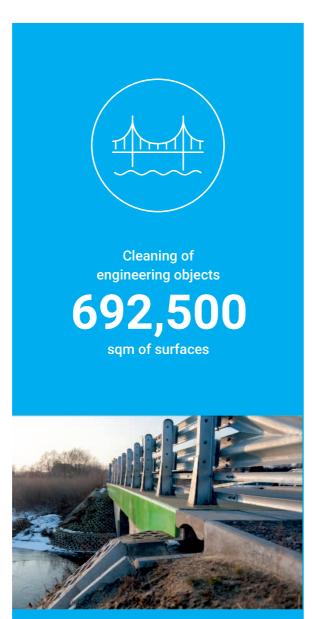
In 2019, we allocated over PLN 8.5m to the maintenance of lifting equipment. This amount includes replacement of worn-out escalator components on the W-Z route, renovation and repair of two crane platforms at the pedestrian bridge over Ostrobramska Street at Motorowa Street, as well as comprehensive maintenance and repair services for other lifting equipment for the disabled.

Acoustic screens that absorb the sounds of the busiest streets ensure resident comfort. In 2019, we renovated the screens along Poleczki Street, which cost over PLN 3.2m.

In 2019, we began comprehensive renovation of the north-west brick viaduct by the Poniatowski Bridge, which will end in 2020. Old, worn joints and stone elements will be removed and replaced with new ones. The viaduct wings will be unearthed and repaired. Damaged balustrade fragments will undergo complete renovation, and the steel elements will receive special corrosion protection. The road surface, which will receive a solid foundation, will also be completely new. We also

plan to build a drainage system, the lack of which causes loosening of the soil and deformations. As part of this, we also plan to replace the lighting and plant new greenery.

Also in 2019, we performed comprehensive renovation works on the bridge along Puławska Street by the Służewiecki Stream. During renovation, the bridge gained a completely new slab together with abutments. A new road surface has also been laid.





Road lanes

NThere are many structures on the roads managed by ZDM that are unrelated to their functions. These include retail stands, kiosks and advertisements. The rules for granting permission to occupy a road lane are clearly defined and the same for everyone. We want the city's urban space to be safe and aesthetic, which is why we strive to ensure order in in road lanes.

We make sure that additional elements of road infrastructure do not threaten safety, comfort and aesthetics. To obtain permission to occupy a road lane, you must meet certain conditions.

In 2019, there were 770 decisions issued permitting the opening of retail stands, 486 for kiosks, 578 for advertising media, 576 for outdoor food courts and 30 for markets.

770

decisions issued permitting the opening of retail stands



Illegal ads removal





















WWe are constantly monitoring road lanes to ensure they are used properly. In 2019, we carried out a total of 16,856 audits.

We audited 8,572 ads, of which 1080 were removed.

In addition, thanks to our activities, we managed to remove 739 other structures from road lanes (including retail stands, kiosks and containers). Occupying road lanes without our consent carries a penalty. During the year, we issued 2,417 administrative decisions charging penalties. Proceeds from the fines amounted to PLN 4.3m.







Proceeds of

PLN 4.3m from penalties for occupying lanes

We removed:



1,080 illegal ads



739 objects in the road lane, e.g. shopping stands, kiosks and containers

Parking

The Paid Unguarded Parking Zone is over 20 years old. Its main purpose is to increase rotation at parking spaces. Each year brings new challenges and an increasing number of users. Our tasks include developing the zone, i.e. implementing modern solutions, inspections, fee collection, but also towing away wrongly parked and abandoned cars.

There are approx. 30,000 parking spaces in the Paid Unquarded Parking Zone. Drivers used them 248 days out of the year. Its main purpose is to discourage some drivers from parking in the city centre and to increase the rotation of spaces so that those who need to park can find an available space. In 2019, we had 49 employees responsible for controlling the zone. In total, proceeds from parking fees in the zone, underground parking lots and commercial envelopes amounted to over PLN 87m, and additional fees for not paying for parking amounted to another PLN 12m. Total proceeds in 2019 amounted to nearly PLN 101m, i.e. PLN 1.5m more than in 2018.

We are very happy that there were 46,000 fewer additional payment documents than in 2018. Drivers are also increasingly willing to use the option of paying for parking via a mobile application. In 2019, the number of proceeds from the mobile application was over PLN 2m higher.

In 2020, the paid parking zone will undergo several significant changes. Pedestrian controllers will be supported by an e-control system in the form of cars equipped with cameras and GPS. For the first time, more than one operator will be responsible for handling mobile payments. We are also preparing to expand the zone to include further districts and change the rules of its functioning.



Payment methods in PUPZ (in PLN m):



Cash



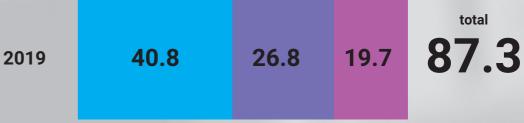
Card



Mobile







2019 ZDM Annual Report





Municipal Information System

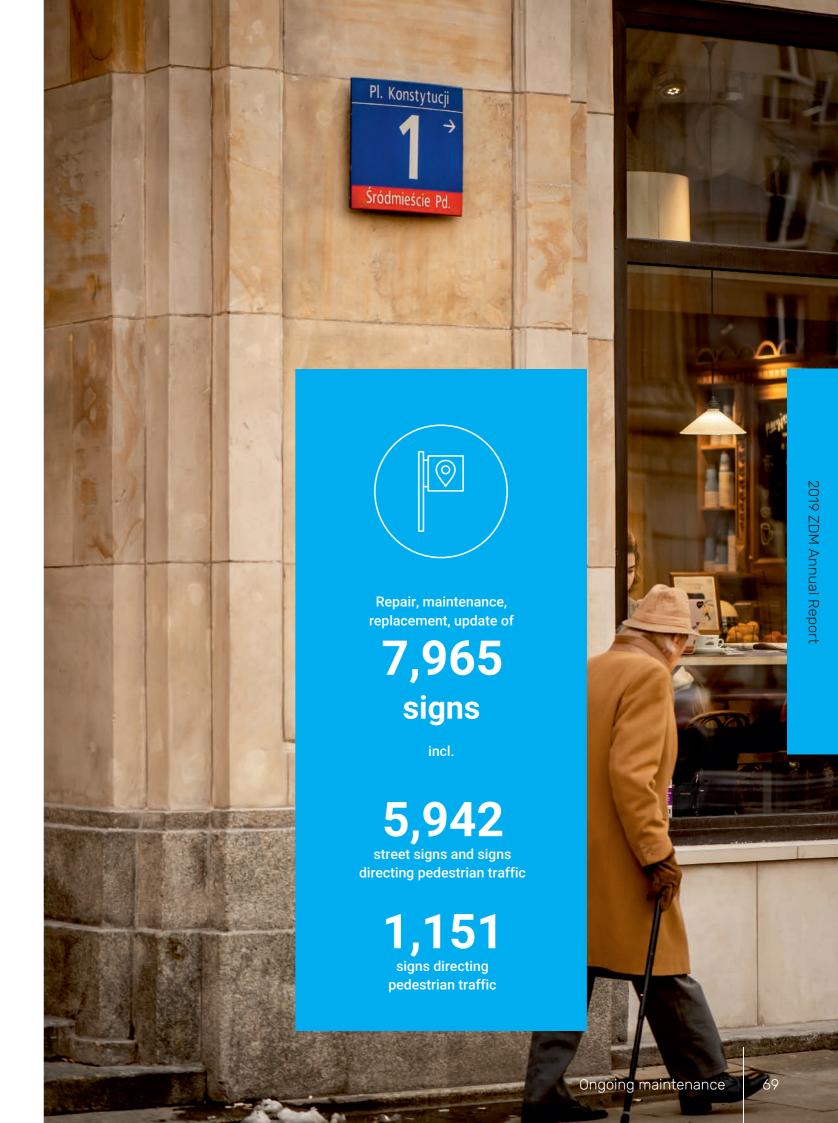
The Municipal Information System consists of nearly 94,000 coherent elements and signs that help residents and tourists move around the city on a daily basis. It includes, among others address boards, maps, signposts and information about important places in Warsaw.

It is difficult to imagine moving around Warsaw without the Municipal Information System. It consists of address boards, street signs, information posts, PUPZ signs, pictograms, signs directing to districts and stations, etc., double-sided information boards, wall information modules and Paid Information Points. In total, there are 93,700

of them. In 2019, we carried out works related to the repair, maintenance, replacement and updating of nearly 8,000 of these elements, voted on 278 traffic organisation projects (in relation to MIS elements), and the total number of cases in the department dealing with MIS exceeded 2,000.









Future plans

It is important that changes proceed consistently and in line with the chosen strategy.

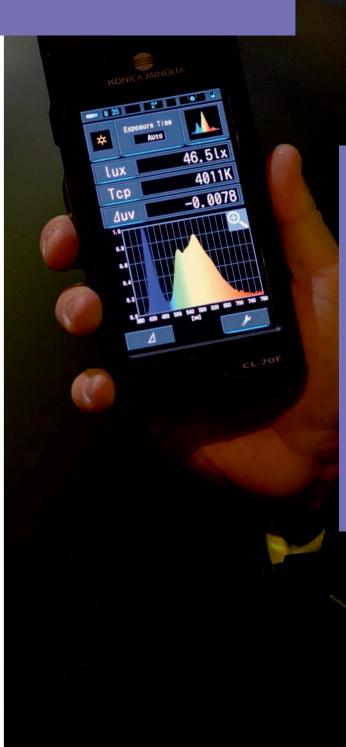
Our priority is to improve road safety, accessibility and the technical condition of road infrastructure.

Improving safety

Aleja Jana Pawła II

Plac Pięciu Rogów

Modernization of lighting



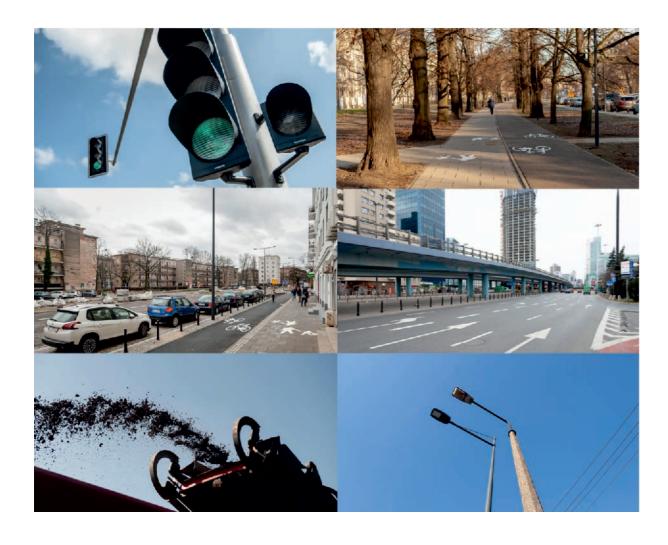
In the coming years we will continue to focus on improving road safety. We have been conducting a safety audit of pedestrian crossings since 2016. Audit results are used to compile a list of the most urgent projects. After four intense years we are nearing the end of the audit. In total, over 4,000 crossings without traffic lights will be checked in all Warsaw districts.

One effective way to improve safety is to install new traffic lights. They will be installed on Kijowska Street, Aleja Krakowska, Kajki Street

2019 ZDM Annual Report

and KOR street. A roundabout construction project will also be implemented. Roundabouts will be built on Kadetów Street at the intersection of Poprawna and Łasaka Streets. We are also working on other changes to help slow down traffic - including on Sokratesa and Roentgena Streets.

We are improving street lighting throughout the city. 13 streets will gain new lanterns under the "OWL - outdoor lighting" programme. We are also planning to install additional lighting at another several hundred pedestrian crossings.







Future plans 73





Aleja Jana Pawła II

The project involves the comprehensive modernisation of Aleja Jana Pawła II, between Rondo ONZ and Nowogrodzka Street, along with Rondo Czterdziestolatka. After its completion, this street will become a representative space whose appearance will fit in with its location in the very centre of the capital. Existing roads will be renovated and rebuilt to maintain a uniform cross-section of the entire traffic. Today, near the Central Station, the road widens to five lanes, while on a further section there are only three lanes available to drivers.

By standardising the width of the road, it will be possible to create space for pedestrians, cyclists, parked cars (including suppliers) and urban greenery. On both sides of the street there will be bicycle paths and pavements, parking bays and rows of trees. The changes will improve the functionality and safety of the street, which is one of the city's main thoroughfares. At the same time, due to the uniformity of the road width, the existing street capacity will be maintained.

New overground pedestrian crossings will be created on the north side of the roundabout (at tram stops) and on the west side (including a bicycle crossing). This will make it easier for pedestrians, including the elderly and those with reduced mobility, as well as travellers with luggage, to conveniently reach the Central Station and tram stops. A pedestrian crossing and a bicycle crossing will also be built on the axis of Nowogrodzka Street. They will connect the two sections of this street previously divided by the busy thoroughfare.

As part of the project, all trees along the avenue have been inventoried in detail - there are currently 42 of them. After the project is completed, there will be nearly twice as many. Trees will be planted along almost the entire section of the project. In addition, there will be over 5,000 new shrubs, hedges and perennials. Nearly 1,300 sqm of new lawns will also be planted. The greenery will make the daily travels of Warsaw residents more pleasant, but also provide a great place to relax. On the east side of the avenue at the intersection with Złota Street a square will be created, and a total of 35 new benches will be set up in this and other locations.





Plac Pięciu Rogów

The area where Bracka, Chmielna, Zgoda and Szpitalna Streets meet is one of the most important public spaces in Śródmieście. The current square does not make full use of its advantages. Roads and undeveloped areas occupy most of the space. The primary function of the square, which is dominated by cars and serves as an intersection is transportation. We would like to change that.

Pl. Pięciu Rogów will become an open and accessible place for all urban space users, and in time it will become a popular meeting point and a place of leisure. We started with the spatial design of the square.

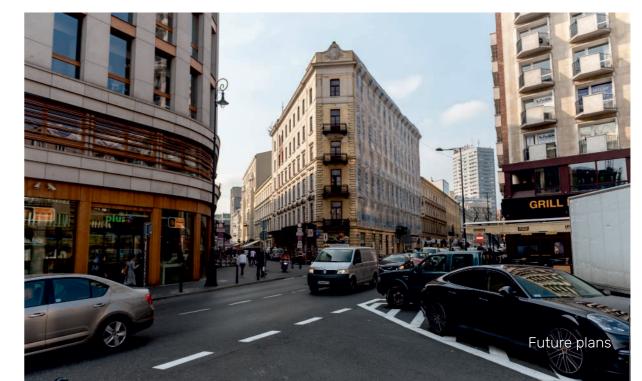
It will be a single space, without separate pavements and roads. Although the passage through the square will be preserved only for buses and bicycles along Krucza and Szpitalna Streets, the focus here will be on pedestrian traffic. We are planning to plant deciduous trees with a designated height and crown in the square.

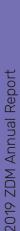
We will also bring in stylistically coherent elements of small architecture and numerous seating areas. Thanks to this, the square will become a greener and friendlier place in which to spend time. A new illumination of the square has been designed to suit the planned character of the prestigious public space.













Modernization of lighting

By the end of 2022, new LED lighting will be installed on all major streets in Warsaw. The streets will be brighter and safer, and the cost of energy and pollution will be reduced threefold.

Many Warsaw streets have lighting that was installed many years ago. Today it is inefficient, energy-consuming and requires frequent repairs. Only 15% of approximately 55,000 fixtures have modern LED lighting installed in recent years. Replacing old lighting fixtures with new LED ones brings numerous benefits. This is why we decided to replace all old lighting fixtures on roads managed by the Public Roads Authority.

The Warsaw Council agreed to allocate PLN 50 million for this purpose. We are planning to replace 43,000 lighting fixtures in street lights in 2021-2022. It will cover all streets managed by ZDM, i.e. about half of Warsaw's street lights.

What are the benefits?

Firstly, electricity consumption reduced threefold. We will save about 38 GWh annually, and this reduces costs by PLN 16m. This means that the energy savings alone will reimburse project costs within three years.

Secondly, replacing old lighting fixtures will significantly reduce the number of broken lights. In 2019, we received as many as 12,000 notifications regarding damaged lighting. Maintenance and repair costs on Warsaw's major streets exceed PLN 4m annually. Replacing lighting fixtures will significantly reduce them.

Thirdly, lower energy consumption also means reduced emissions. Replacing lighting fixtures will reduce 30,000 tonnes of carbon dioxide emissions per year globally, as well as reduce the amount of sulphur and nitrogen oxides and dust emitted. An additional benefit is the possibility of obtaining the so-called "white certificates" issued by the Energy Regulatory Office by the investor who will modernise the installation significantly reducing its energy consumption. The replacement of approx. 43,000 lighting fixtures with new LED technology will mean that the value of "white certificates" on the Polish Power Exchange may amount to several million zlotys.

Fourthly, replacing lighting fixtures will allow us to adjust the lighting parameters so that roads are illuminated in an optimal way. Old lighting fixtures after 30-40 years of use are not able to provide a sufficient beam of light. Replacing them helps improve visibility on the road, and thus safety.

Fifthly, new fixtures will help reduce "light pollution". The lighting will be directed to illuminate the road and pavement. The installation of new lighting fixtures will be preceded by a photometric design determining all parameters of the new lighting, which will be verified by ZDM inspectors using special equipment. Thanks to this, the light intensity and luminance will meet requirements, the streets will not be too brightly lit, and we will minimise the lighting of nearby buildings and trees, as well as reduce glare for traffic participants.

Sixthly, the project will improve lighting aesthetics. The design of the lighting fixtures will be uniform throughout the city, except for historic streets. Lighting colour temperature will also be standardised (3000K, and on lighting masts – 4000K).





We are here for you

We want to be as close to the residents as possible.

Every year we run social campaigns, consultations, meetings and implement projects funded by the civic budget.

Every day, we also receive hundreds of notifications through the Municipal Contact Centre Warsaw 19115, through social media and in person.

Social campaigns

Civic budget

Consultations and meetings with residents

Efficient handling of notifications from residents

ZDM behind the scenes



Social campaigns

Wake up! Warning = life

The social campaign "Wake up! Warning = life" was intended to improve the safety of seniors on Warsaw roads. Statistics have shown that people over 60 are most susceptible to accidents.

>75% of fatalities

among pedestrians in Warsaw

are seniors

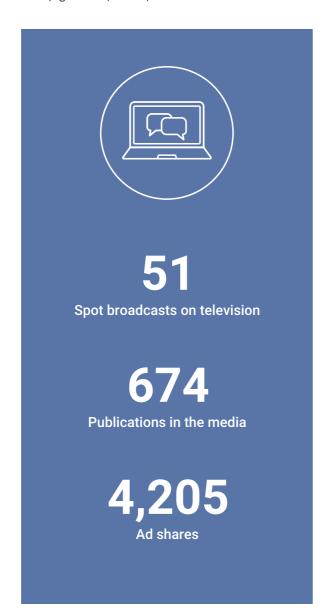
Mindfulness on the road is one of the fundamental factors affecting safety.

The most common causes of road accidents involving senior pedestrians on Warsaw roads are failure to yield at a pedestrian crossing (60.3%) and incorrect reversing of vehicles (16.8%). Seniors most often cause accidents by crossing the road in an unauthorised place (14%).

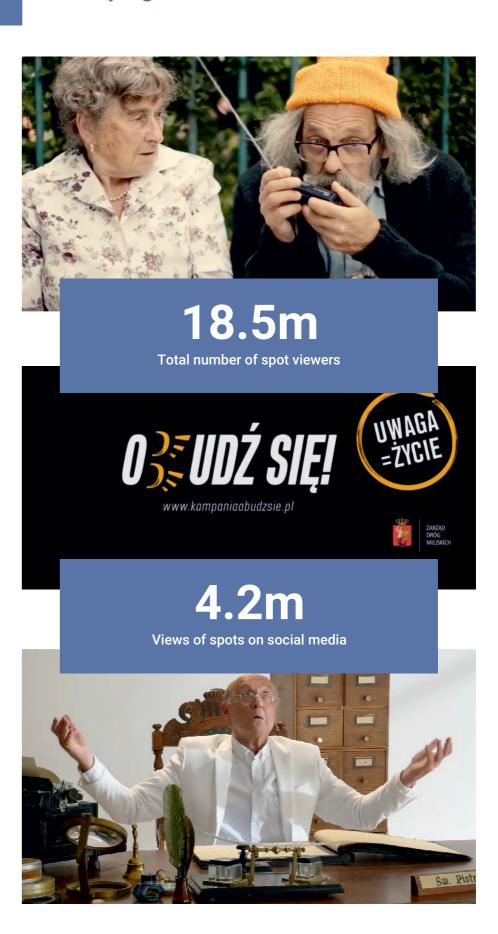
All these offenses and bad habits endanger people's lives. As part of the campaign, we conducted activities targeted at both drivers and seniors that would "wake up" both groups. Mindfulness, mutual understanding and responsibility of all road users are what we strive for, while they are also our greatest communication challenges. As part of the campaign, two promotional spots were created: "Senior Gang" and "Sky", which involved actors like Piotr Fronczewski, Krystyna Tkacz and Kazimierz Mazur. Both spots were broadcast on television (over 18.5m broadcasts in total) and on the Internet (over 4.2m views).

Our campaign did not only involve media activities. We met with seniors at the Universities of the Third Century and in senior clubs. The church also played an important role: we informed seniors about road dangers through Warsaw parishes.

In addition to meetings and media activities, we also placed ads on city buses, Veturilo bikes and on tram screens. We also organised a dance for seniors featuring music by DJ Vika. It was a great opportunity to have fun, but also to talk, present the spots and give away gifts to participants.



Campaign in numbers





Cycling May

The Cycling May campaign has become a permanent spring event in Warsaw. In 2019, for the fourth year in a row we encouraged children to commute actively to educational institutions - by bicycle, scooter or rollerblades.

The campaign promotes a healthy lifestyle and also aims to change transportation habits among children and their parents.

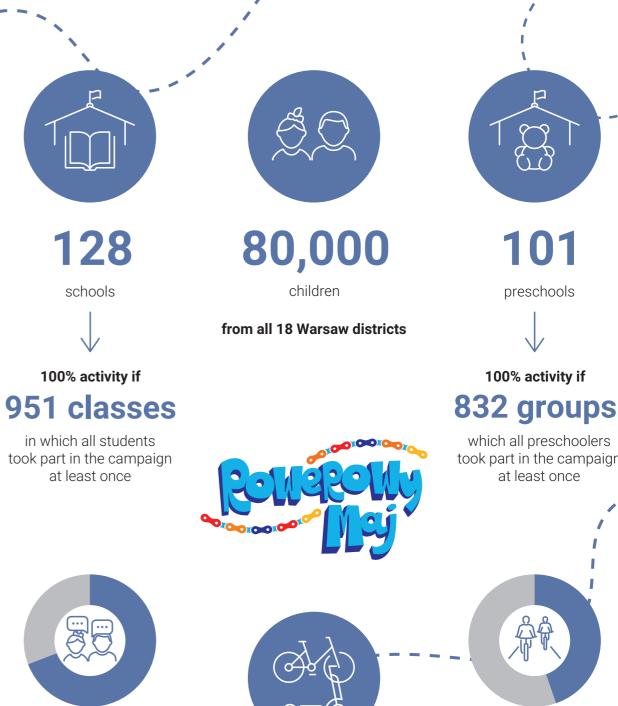
Cycling May also includes educational activities. In 2019, campaign participants could take part in workshops on transportation, in particular active mobility, as well as practical workshops on riding in traffic.

Elementary schools, as always, participated in the campaign in large numbers. For the first time, we also invited Warsaw preschools to take part in the campaign. In total, 229 institutions took part (128 schools and 101 preschools). It was a unique year in terms of the number of new participants, in addition to preschools, there were also 37 primary

schools taking part for the first time. In total, almost 80,000 children participated in the campaign, commuting actively to their school or preschool 1,447,638 times.

In addition to having obvious educational values, Cycling May is also a fun competition. Throughout the entire month, we add up all the active commutes of campaign participants and calculate the bicycle turnout based on them. We count them by institutions, as well as by district and the entire city. Based on these results, we award individual and group prizes. Primary School No. 66 (with a turnout of 91.98 percent) became the undisputed leader in Warsaw, taking first place for the third time. PS No. 356 (with a turnout of 84.69 percent) and Preschool No. 35 (with a turnout of 83.99 percent) also took the podium.

47 cities took part in the campaign, which originated in Gdańsk. Participants from Warsaw make up 35 percent of all participants throughout the country. In 2020, the capital will once again organise Cycling May, focusing this time on its ecological aspect.



preschools

100% activity if

which all preschoolers

took part in the campaign at least once

44.75%

"bicycle" turnout for all of May



69.16%

of active participants, i.e. **63,374** children

100% turnout

of children commuted to school by bicycle every day in May

1,447,638

commutes by bicycle, rollerblades

or scooters to schools and preschools





A bicycle is a vehicle

The educational campaign "A bicycle is a vehicle" was a response to increasing cycling traffic. We decided to tackle six different problematic situations related to cycling around the city. These were: riding on the pavement, not signalling when turning, lack of mandatory lights on the bicycle, illegal and dangerous riding the wrong way on oneway bicycle lanes, and kindness towards pedestrians. The motto linking all topics was "a bicycle is a vehicle", reminding cyclists that they not only have rights but also responsibilities on the road.

The campaign lasted from March through October. As many as 300 Veturilo bicycles went out on the streets of Warsaw, equipped with panels with slogans that promoted the campaign. We also created a series of six short films. Education in the field was an important part of the campaign. In an interesting and appealing way using retro styling, we talked to cyclists about the rules and road savoir-vivre. The city's municipal guards were also involved in the campaign and dedicated patrols were launched. The tasks of the officers were primarily prevention and education.























Civic budget

The civic budget gives residents a chance to really have an impact on their surroundings. Over the past six years, Warsaw residents have submitted thousands of ideas on what they believe funds from the city budget should be used. Many of the projects relate to road infrastructure.

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2019 ZDM Annual Report

88

To date, ZDM has implemented 169 projects with funds from the civic budget. We try to include projects submitted by residents in our plans so as to comprehensively change the face of renovated streets. The residents' ideas often inspire us to take further action. One example is Słowackiego Street, where we started work in 2019. To date, the street has gained a safe pedestrian crossing at Filarecka Street. We repaired the pavement and road for bicycles, which was extended to include the missing section towards Marymont. We will continue work in Żoliborz in 2020 designating a new crossing at Szczepanowskiego Street, and establishing a pedestrian island on the existing crossing on Czaki Street. Drivers will also gain new parking spaces.

The effects of the city's combined activities and residents' initiatives can also be seen on Aleja Wojska Polskiego. On the initiative of the residents who submitted the project to the civic budget, new roads were added. The previously neglected green belt gained a new, convenient central alley with a mineral surface, along with benches and a wastebasket, while pedestrian crossings were created at the intersection with cross streets.

In 2019, ZDM completed 61 projects chosen by residents to be funded from the civic budget. They include both small projects (installation of bicycle racks or road mirrors) and larger projects (construction of roads for bicycles on Rudzka, Głębocka, Drewny, Aleja Reymonta or Kaliskiego Streets, and renovation of pavements on Radiowa, Mehoffera, Przewodowa and Sosnkowski Streets, as well as on Wał Miedzeszyński). Projects are also being implemented to improve road safety - including new pedestrian crossings and additional lighting for existing crossings. The parking space along Powstańców Śląskich Street gained a new surface. We have also created a new pedestrian crossing at Rondo Unii Europejskiej.





32

Number of completed projects from 2019



29

Number of completed projects from previous years



11

Lighting (including illuminations)



12

Pavements



12

Changes to traffic organisation



19

Bicycle infrastructure

We are here for you

Consultations and meetings with residents

We focus on direct meetings with Warsaw residents during social consultations and information meetings. We talk about large projects and introduced changes, such as the reconstruction of Jana Kazimierza Street or the extension of the Paid Unquarded Parking Zone.

Paid parking zone extension

Consultations on the extension of the paid parking zone in Wola and Praga-Północ lasted from 14 October to 9 November, 2019. Meetings with residents were preceded by an analysis of those areas that have the largest deficit of parking spaces.

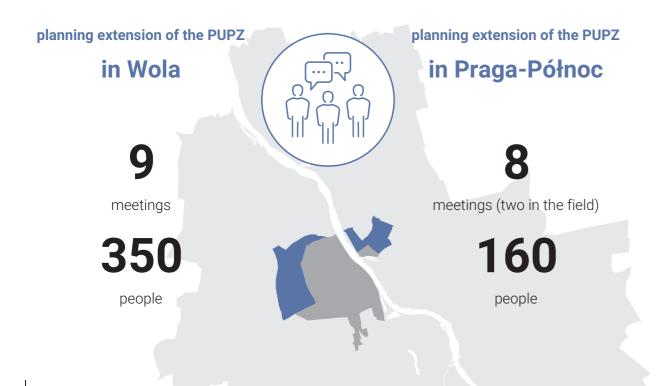
The consultation process was carefully planned.

In Wola, the analysed area was divided into 7 sub-areas due to its size, so that it was possible to discuss each project during one meeting. In total, we held 9 meetings, which were attended by nearly 350 people.

In Praga-Północ we held 6 meetings and 2 walks in the field, and set up two mobile points. In total 160 people took part in them.

The information campaign was conducted using three types of printed information materials: posters, leaflets and notes inserted behind windshield wipers on cars, as well as by posting on the Warsaw Social Consultations Platform and on social media.

Putting up posters and distribution of leaflets took place in stages, before a consultation meeting in a given area. In this way, 300 posters were hung and 9,000 leaflets were distributed evenly between areas.



Public consultations regarding the functioning of Veturilo after 2021 took place between 14 September and 10 October 4,983 people completed emails sent by residents an electronic survey containing over with questions about the system and the ability to indicate the location of the station Dozens of comments were posted by residents on Facebook under posts about consultations

Veturilo after 2021

The Veturilo city bike system will operate under the current rules until the end of the 2020 season. Before preparing the rules and conditions for the tender for Veturilo for the years 2021-2028, we talked with Warsaw residents and people using city bikes about how they want this system to function in the future. We were mainly looking for opinions regarding the system model, fees, method of renting, types of bicycles, model and equipment of the bicycle, station equipment, mobile application and terminal. On a special map you could mark the suggested locations of rental stations.

The electronic survey was completed by nearly 5,000 people. We also received over 200 emails containing over 700 comments. The comments have been largely taken into account in the 'Conceptual Study on the Functioning of the Warsaw Public Bicycle'. This document, together with the results of technical talks with potential contractors, became the basis for determining the future Veturilo system.









From 20 March to 14 April, public consultations were held regarding the reconstruction of Jana Kazimierza Street. They enjoyed great interest of the residents of Odolany. During a consultation meeting in the conference room of the Institute of Computer

Science of the Polish Academy of Sciences at 5 Jana Kazimierza Street and at the consultation point in the "Spotkanie" Cafe we talked with 130 residents. We received various ideas not only during meetings, but also by e-mail. In total, we received nearly 200 comments on the project. Those that were possible to implement will be introduced to the project, which should begin in 2020.





Reconstruction of Kondratowicza Street

Two underground stations are being built on Kondratowicza Street - "Kondratowicza" station at the intersection of Malborska and Kondratowicza Streets and "Rembielińska" station at the intersection of Kondratowicza and Rembielińska Streets.

The construction of the metro in Bródno is also associated with changes above ground. Kondratowicza Street, will undergo a transformation similar to that which took place on Świętokrzyska Street after the construction of the central section of the second metro line. There will be two roads with two lanes in each direction - but they will be much closer together. Thanks to this, it will be possible to create space for additional street greenery (rows of trees on both sides and between the

roads, bushes, etc.). There will be bicycle paths on both sides of the street, as well as wide and comfortable pavements. There will be parking spaces in the bays along the road. All intersections will be rebuilt, as well as lighting along the entire street.

In autumn we met with the residents of Bródno to show them the project regarding these changes. It was developed during social consultations. It primarily involves a significant change in the quality of public space and the implementation of demands regarding the Local Centre at Kondratowicza Street near Bródnowski Park.

Over 50 residents of Targówek took part in the meetings. The participants' questions regarded the extent of interference in the greenery in Bródnowski Park on the side of Kondratowicza Street, number of parking spaces and bicycle infrastructure.

Efficient handling of notifications from residents

For the past six years, the Municipal Contact Centre Warsaw 19115 has been making it easier for residents to report problems or submit ideas. In 2019, even with the growing number of notifications received by the Public Roads Authority, we shortened their handling time. The 33,932 notifications received by us last year were handled on average within 4.2 days.

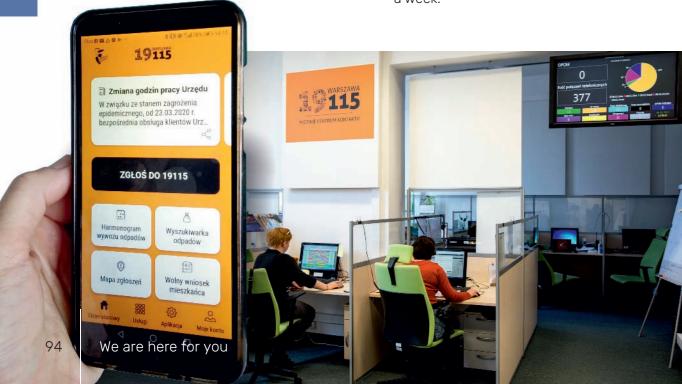
In 2019, ZDM received an average of 91 notifications per day. As in previous years, most concerned lighting, traffic lights and the condition of pavements, bicycle paths and roadways, as well as the use of city bikes. Residents also submitted requests for new pavements, pedestrian crossings, traffic lights, bicycle racks, posts to prevent parking and road repairs.

More often than in previous years, residents requested solutions to improve pedestrian safety (speed bumps, pedestrian islands, and traffic lights), as well as facilities for people with limited mobility - lowered curbs, leading and warning panels, and guide lanes. Such solutions were implemented by the Public Roads Authority in 2019.

Most people still choose to contact 19115 by phone (40% of notifications are received this way). However, more and more notifications (34 percent) are being received nowadays via the Warsaw 19115 mobile application.

Notifications by residents are one way we receive information about problems and faults in road infrastructure, which allows the Emergency Road Services to respond faster, increasing road safety. Every day, 24 hours a day, we send maintenance workers to repair faults.

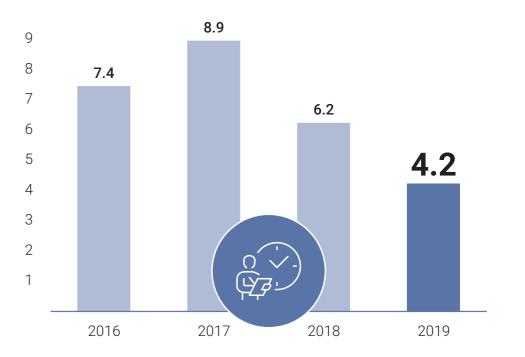
Notifications may be sent to the Municipal Contact Centre Warsaw 19115 not only via the application and by phone, but also via the warszawa19115.pl website, to the email address kontakt@um.warszawa.pl or via chat warszawa19115.pl/web/portal/chat. The city service is available 24 hours a day, seven days a week.



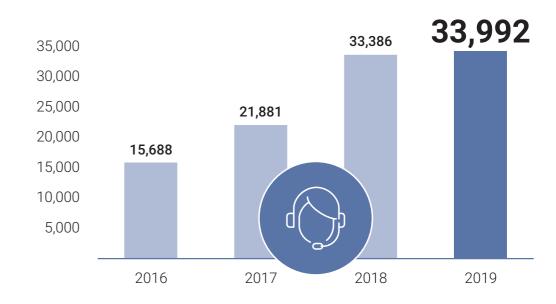




Average processing time notifications at ZDM (in days)



Number of notifications at ZDM



ZDM behind the scenes

Thousands of documents, road projects and social campaigns. Our employees perform many tasks. Some work in the office while others work in the field. Here is a "behind the scenes" peek at our work.





























PUBLIC ROAD AUTHORITY