Smart City Poznan

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POZnan*

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Together
we create
a smart city

Every year we as a local government together with the residents of Poznan, scientists and practitioners discuss the future of our city. From numerous ideas and reflections we choose the ones that can make Poznan our dream city. We select areas which will guarantee development and enhance the quality of life and we improve them.

This is what a smart city is about.

Jacek Jaśkowiak
Mayor of Poznan

Smart City Poznan is a dynamic and future-oriented city deeply rooted in the activities of its conscious and creative residents who can decide for themselves.
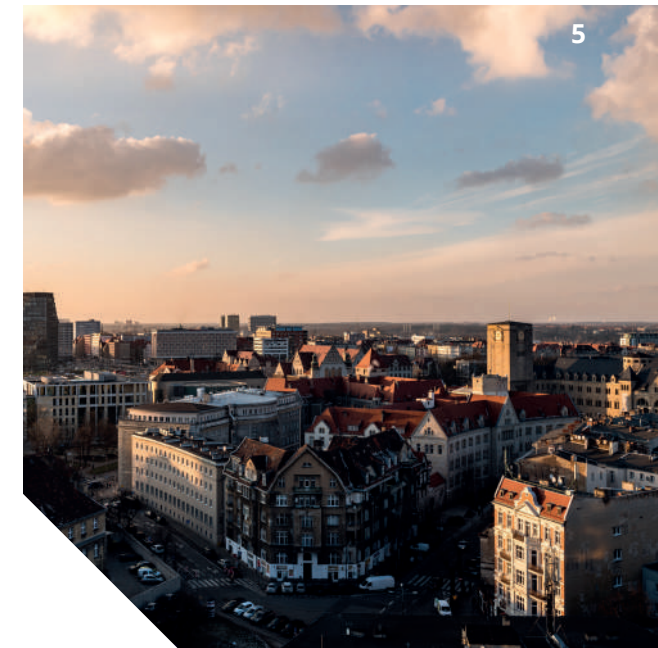
Introduction

What will Poznan of the future be like? How are we going to develop our city? What should be done to make the place we live in even better? We know we need to plan and act wisely. The direction is set by the UN Sustainable Development Goals. Particularly, Goal 11: To make cities and human settlements inclusive, safe, resilient and sustainable. Having examined the world's tendencies and ideas in well-managed and friendly cities, we decided that Poznan would follow the example of continuously expanding smart city models.

The concept of Smart Cities emerged when new technologies allowed maximum optimization and mechanization of a metropolis. However, it was soon discovered that a city is not a mechanism which is more or less efficient. A city equals people. That is why, Smart City Poznan Model focuses on Poznan residents.

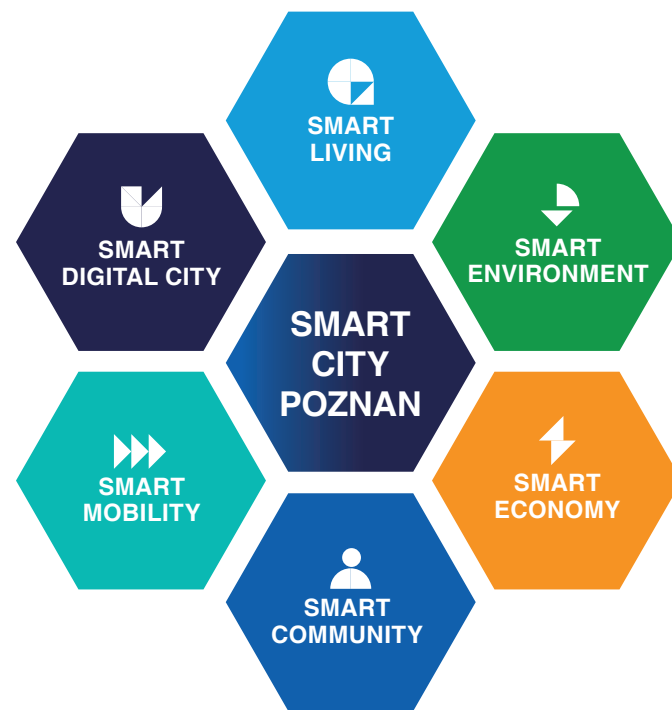It is the old and the young, those who were born here and those who chose to stay here, entrepreneurs, pensioners, those who are here every single day and those who came here for a while - to work, to study or to pursue happiness. All of us are ordinary people of Poznan. We want Poznan to be a safe, friendly, modern, and comfortable place to live. We want Poznan to be the best place for all of us.

SMART CITY AREAS

We worked on Smart City Poznan Model in an interdisciplinary team. We carried out a thorough analysis of the currently implemented projects as well as planned projects in Poznan and we selected those projects that met smart city criteria by being integrating, innovative, inclusive and technologically advanced.

Smart City Poznan Model represents: quality, savings (e.g. of time, energy, space), and pragmatics. We are interested in universal solutions and in ideas which will be beneficial for all social groups. We highly value integration and easy access. We have defined six interrelated areas:

SMART LIVING

SMART DIGITAL CITY

SMART ENVIRONMENT

SMART CITY POZNAN

SMART MOBILITY

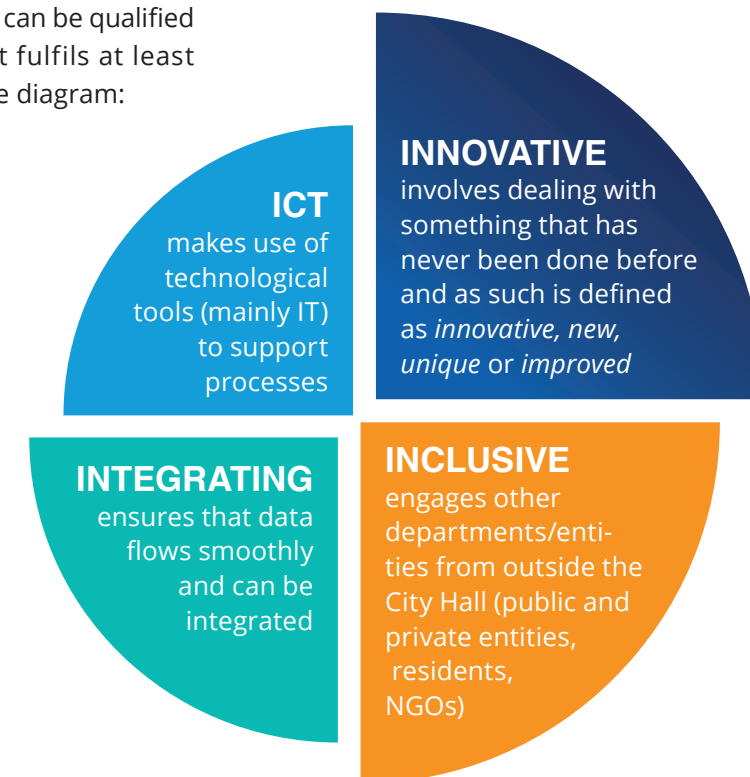SMART ECONOMY

SMART COMMUNITY

We have assigned the scope of activities to each area and defined goals in line with the Development Strategy for the City of Poznan 2020+. The implemented smart city projects are going to be monitored. Thanks to an online data platform, indicators, dynamics and effectiveness of solutions will be continually displayed.

SMART PROJECT CRITERIA

Smart city projects share common goals: making life easier as well as saving time, money, energy, and environment. Smart city aims at integrating the standards which are going to enhance the quality of living in a city.

We agree that a project can be qualified as a smart project if it fulfils at least two criteria listed in the diagram:

ICT makes use of technological tools (mainly IT) to support processes

INNOVATIVE involves dealing with something that has never been done before and as such is defined as *innovative, new, unique* or *improved*

INTEGRATING ensures that data flows smoothly and can be integrated

INCLUSIVE engages other departments/entities from outside the City Hall (public and private entities, residents, NGOs)

AREA GOALS AND INDICATORS

In each of those six areas we have determined the goals which categorize and set the directions for smart projects. By introducing the planned activities, the city is going to develop into a smart city. The planned activities aim at accomplishing the goal of the Strategy 2020+ and a desired status defined in the City vision and descriptions of individual priorities.

Monitoring is a process of collecting and systematically analyzing qualitative and quantitative data that refers to the progress and results of implementing the Smart City Model for the City of Poznan. The process mainly relies on factual monitoring (examining developments in implementing strategy arrangements via project tasks) and statistical monitoring (monitoring tendencies and changes in indicators). By analyzing indicators, the monitoring system informs about the degree of accomplishing the goals set.

The indicators selected by the Smart City Team have been adapted to the goals and assumptions of the project. All indicators of accomplishing goals for the specific smart areas can be found in the Development Strategy for the City of Poznan 2020+ and respective sector programs.
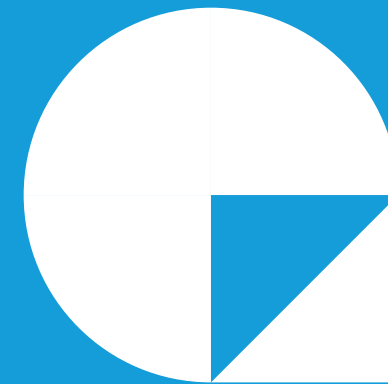
In the future all selected indicators will make use of systems of automatic data storing and processing and information on monitoring indicators will be available on an online platform. This function will allow to easily compare the results with the previous periods and also properly analyze the results of the project and appropriately respond to changes.

DEFINITION OF A SMART CITY INCLUDED IN THE DEVELOPMENT STRATEGY FOR THE CITY OF POZNAN 2020+

Smart City is a concept of the next generation intelligent city which in order to enhance the quality of life makes use of advanced information and communication technologies as well as modern methods of participatory management which is founded on the potential of social capital and which engages residents in the process of creating smart city solutions.

Find out more at: poznan.pl

We easily and swiftly arrange things in the city. We make sure all the residents have equal and safe access to public services.

Smart Living

• We build a feeling of comfort and security by establishing positive relations between the residents and the City, the City Hall and its units.

• We save time – we continually improve the quality of services provided by the City, we introduce special tools to arrange matters without having to visit the City Hall.

• We make contacting easy – we ensure equal access to services and we provide necessary information in a clear and easily accessible manner.

Although we live in the same city, still each of us is different. We have various needs and expectations and we do not act the same. How should an organization like a city function to make us feel important, comfortable and safe? The remedy for improving the quality of life in a city is quite complex. It is based on effective interpersonal communication, understanding other people's needs, and showing respect.

The first association connected with a Smart City is technologies understood as tools, thanks to which we can easily contact one another, arrange matters in offices or seek help. This is precisely how Poznan Contact Office works – a city call center where you can learn about the time, place, application form, required documents, fee to pay if you want to submit an application of a certain kind. The information you obtain in advance will help you save time. As a result, the formalities will take less time and effort. It is important when you worry you may not have enough time or energy.

You can arrange many things thanks to special applications or well organized services like the Books for Seniors initiative, under which librarians visit elderly people who find it difficult to leave home and recommend interesting books, audiobooks and movies to them. This is an example of a smart solution which positively affects the lives of senior residents in the city.

We ensure that all the residents have equal and safe access to public services. We realize the importance of conveying information in a clear way. We try to keep formal and legal terms as simple as possible.

Population projections show that there will be not only changes in the age structure of Poznan residents. We predict a higher number of foreigners, mostly Ukrainians, who want to settle down in Poznan and pay taxes here. Right now there is a communication barrier as they do not speak Polish; moreover, they do not know the city, the city offices or the law. These obstacles can be overcome by technology and smart organization which will be adjusted to the needs of the new residents.

Quality of life depends on the feeling of safety - not only understood as no fear for material goods. It is also moving around the city safely, being sure that the water you drink and the air you breathe meet the norms. It is also being certain that in case of trouble you immediately get help. Poznan Smart City Model emphasizes the significance of creating this feeling of safety among Poznan residents.

Ongoing projects

POMOCNI POZNAN

The platform **pomocni-poznan.pl** is an online forum to exchange information on voluntary work. It is here that non-governmental organizations, various institutions and companies can place their cooperation proposals, and they do not need to worry that their offers will get lost amid the thicket of information, which often happens in social media. In this way, an infrastructure connecting organizers and prospective volunteers is built.

This site also contains articles on voluntary activities in Poznan (e.g. information on various events) and useful legal information.

Find out more at: pomocni-poznan.pl

TELECARE

The objective of the project is to deliver complex and individualized social services to people who are at risk of poverty or social exclusion. We help dependent persons, people with disabilities, their caretakers and also elderly people in life-threatening situations.

The participants of the program are equipped with special mobile phones and medical bands with a life-saving button and devices for medical diagnosis, which can monitor blood pressure, pulse, body temperature, and in the future they will measure blood glucose levels in a non-invasive manner. The Telecare Center works 24/7 and when Telecare employees receive an SOS alert, they react immediately Additionally, as part of the project, every day Telecare workers call single people just to talk to them – for the lonely ones this phone call is often the only opportunity to chat.

Telecare is a system of care and support which makes use of advanced information and communication tools. For the needs of the Poznan project an innovative TCCUD information platform has been created, which is based on two systems: ACD (Automatic Call Distribution) and CRM (Customer Relationship Management).

VIVA SENIOR

Poznan senior residents can call **Poznan Contact Office on 61 646 33 44** and use the whole array of services created to meet special needs of elderly people. They can order a taxi free of charge to get to their doctor's appointment; they can have minor home repairs made or windows cleaned. **VIVA Senior** also offers a mobile library, a mobile pedicure, transport on the grounds of municipal cemeteries, medical equipment rental, and the Poznan Senior Gold Card. When senior residents call Poznan Contact Office, they can ask for a grave clean-up or receive "Life Boxes" in which they can store the key information concerning their medical condition, which will be vital to paramedics/rescue teams in emergencies and life-threatening situations.

VIVA Senior is one of the most innovative social projects in Poland. Several departments of Poznan City Hall, municipal units and entities from outside the City Hall have been involved in this project.

Find out more at: centrumis.pl

8,586 trips were done by Taxis for Seniors in 2018

7,775 Life Boxes were distributed in 2018

Ideas for the future

POZNAN CONTACT OFFICE LIVE CHAT AND IVR

One of the ideas is launching a web chat option as an electronic communication between Poznan residents and the City Hall, apart from contacting the City Hall by phone. The project will be an important step towards automated customer service in the City.

It will be possible thanks to the use of **IVR** (Interactive Voice Response) - a system enabling automated customer service. The system will allow to determine the purpose of the call already in phase one by making use of advanced customer service phone tools. Sorting incoming calls before transferring them will minimize call duration and contribute to efficient customer service.

LAUNCHING CUSTOMER SERVICE IN UKRAINIAN

In the last few years Poznan became a place of work and settlement for tens of thousands of Ukrainians. Their presence, vital on the labor market, could translate into the City income shown on annual tax returns. Poznan Contact Office is willing to meet the needs of this community and launch an information service in Ukrainian. At present, the City Helpline is the quickest and

The data provided by the Honorary Consulate of Ukraine in Poznan shows that in 2018 approximately 100,000 Ukrainian citizens lived in the Poznan agglomeration.

most easily accessible source of information; in 2018 nearly 400,000 people used it. To eliminate the existing language barrier, information brokers fluent in Ukrainian will need to be hired.

VIRTUAL TICKET FOR CUSTOMER SERVICE

At present, in order to be served at the Department of Civil Affairs and Communication Rights, you need to get a ticket at the information point or in a self-service machine in the hallway of the building. So, you actually need to go to the City Hall, then get a ticket there and wait in line. To remedy that situation, a ticket could be downloaded onto your mobile device and instead of spending the time waiting, you could spend that time getting to the City Hall. This solution would shorten the time you would otherwise need to use.

DEVELOPING THE CITY VIDEO SURVEILLANCE SYSTEM

The municipal video surveillance system is an effective tool to deter crime. We can observe a significant reduction in crime in urban spaces thanks to the installation of surveillance cameras and the work of operators continually monitoring the city. According to the police data, in the vicinity of the Kaponiera roundabout the crime rate is nearly zero percent, in the area of the Old Market Square the number of fights and assaults has decreased by 40 percent, whereas drug-related crimes have gone down by nearly 60 percent. In all monitored areas there have been fewer acts of theft and vandalism. The video surveillance system also allows to obtain evidence in case of a crime incidence and prevents fraud concerning automobile insurance. All that makes the residents of Poznan feel much safer.

In the near future it will be necessary to expand the bandwidth of connections and develop new functions of the system like an automatic and intelligent image analysis. CCTV cameras can also be used as sensors to measure environmental factors and collect statistical data - for instance concerning the traffic.

TOTUPOINT

TOTUPOINT is a system which aids spatial orientation and makes people with vision impairments feel safe. The system makes use of TOTUPOINT site markers placed in public spaces which inform users about the location (using text or audio messages). The markers can inform about public spaces, signal dangerous places or new (also temporary) obstacles.

2016:
573,444

2017:
574,703

2018:
586,537

Number of telephone calls received at Poznan Contact Office between 2016 and 2018

We create favorable conditions for the development of entrepreneurship and innovation. We endorse and promote various forms of business and various business areas.

Smart Economy

• **We support the growth of business.**

• **We encourage and facilitate entrepreneurship and professional activity of Poznan residents.**

• **We consolidate the position of Poznan as a powerful economic center in Poland and abroad.**

• **We are open to innovation.**

Being economical is encoded in Poznan's DNA . Here it is entrepreneurial, innovative, daring people who are real heroes. In the Smart City Model we wish to create a positive climate for new business super heroes to emerge. We want investors to feel happy in Poznan. We want to provide proper conditions for multiple ambitious undertakings.

So far, we have managed to introduce several modern organizational solutions: we have started a free public coworking space, we support a dual education system (both secondary and tertiary), and we are proud to say that entrepreneurship incubators

and Science and Technology Parks run smoothly. We are open to cooperation with foreign investors, for who the place to contact is the Investor Relations Department. We hold expert events for specialists in many fields (e.g. advanced services for business or IT). We value education and we hold people with bold ideas in esteem.

Poznan is one of very few cities in Poland that has the Fair Trade certificate, which translates into Fair Trade Friendly City.

Smart city equals creating favorable conditions for business development;

educating in the field of entrepreneurship and finally, opening a unified database of data collected and administered by the City to be accessed by others. Thanks to getting access to that information, the business sector has already started creating applications for everyday life or unusual struggle like Poznan Marathon – an application which tells you how to move around Poznan during the marathon.

We strongly support the field of technically advanced production, research and development, and MICE services (congresses and trade fair events). In these areas we can see tremendous opportunities for our city. These areas are going to be our sources of inspiration for smart activities in Poznan.

It makes us really happy that industrial and production companies based in Poznan have started developing in creative and innovative areas and they keep developing their services. The social responsibility of business is embodied in development strategies of enterprises. In this way, strong relationships and bonds are built, thanks to which the city can grow. You can see more and more

attractive workplaces here, which make people from all over the world to choose Poznan as their home.

Smart City Poznan is a city which cares about entrepreneurs. This is a city that responds to the needs of the economy by creating conditions for development. These are: a friendly urban environment, safety, good public transportation, and places used for recreation and relaxation. This is caring about human capital. Smart City Poznan is a city which is open to people.
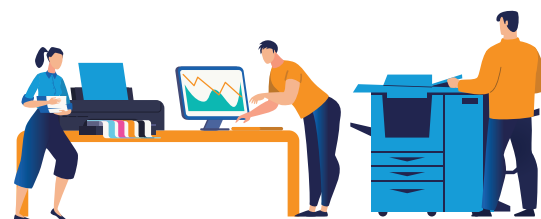
Ongoing projects

LET'S PLAY IN WIELKOPOLSKA

This is a unique initiative with a goal to globally promote game development studios from the Wielkopolska region. The city of Poznan supports video gaming industry, giving creators a chance to establish business relations and find networking opportunities, both in Europe and in the USA. In 2020, with the support of the EU funds, the Let's Play in Wielkopolska project is starting, in which it is expected that ten indie games studios from Wielkopolska will take part in three trade fair events. Let's Play in Wielkopolska also includes: cooperation with the media, training sessions for participants, and additionally a catalog of all the studios from Wielkopolska listed together with the characteristics of the gamedev environment of Poznan. The total value of the initiative, which is coordinated by the Investors Relations Department, amounts to nearly PLN 2 million.

Find out more at: poznan.pl/inwestycje

COWORKING SPACE PLUS ONE

Coworking Space **Plus One** is a place of incubation for young startup companies in the field of ICT, from the creative sector and advertising, for graphic artists and graphic designers, architects and other self-employed creative authors. The place is locat-

4,966 registered users used the city's coworking zone in 2018. In 2018 the Plus One space held 99 events, which were attended by 5,276 people.

ed right in the heart of Poznan where young people may use the office infrastructure free of charge, including a library, conference rooms and workstations. Space Plus One also organizes and provides venue to various

professional training sessions and workshops which can help run a business in creative and advanced technology sectors.

Find out more at: plusjeden.com

POZNAN ENTREPRENEURSHIP DAYS

The **Poznan Entrepreneurship Days** event combines a variety of events that address both macro and micro businesses, is organized under one logo in the same place and at the same time. For renowned entrepreneurs, it is a great opportunity to look for new business contacts, start cooperating with colleges and universities or discuss the development of the local economy. For newcomers, this event is an opportunity to find sources of financing, business partners and get an inspiration boost. The Entrepreneurship Days event is a joint initiative of the City of Poznan, Poznan County and economic and scientific entities represented by Poznan International Fair, institutions from the field of business and Poznan colleges and universities.

In 2018 the Poznan Entrepreneurship Days event was attended by approximately 4,300 participants, who took part in dozens of various meetings, workshops and panel meetings and who got to know the scope of activities of the companies and institutions which provide services for the business sector.

The objective of this event is to create a positive climate for entrepreneurship and economic cooperation and strengthen the image of the Poznan agglomeration as a place that welcomes various forms of economic activities.

Find out more at: poznan.pl/msp

POZNAN TECHNOLOGY AND INDUSTRY PARK

The mission of the Poznan Technology and Industry Park is to reinforce the position of the city and region as a leading innovation center in Poland through the development of innovative branches of economy and by supporting local entrepreneurs. The key task of the Park is to initiate and stimulate cooperation links in Wielkopolskie Province and to increase the competitive edge of Poznan and the region by creating attractive conditions for investors.

Find out more at: pptp.pl

Ideas for the future

CITY INVESTMENTS COORDINATION SYSTEM

The objective of the project is to coordinate city investments via the Spatial Information System and traffic simulation software. This solution will significantly influence the frequency of maintenance works and repairs required at a particular stage of the investment.

A Map of Investments is going to be created for the residents, which will inform them about the scheduled repairs and changes to city services and road closures.
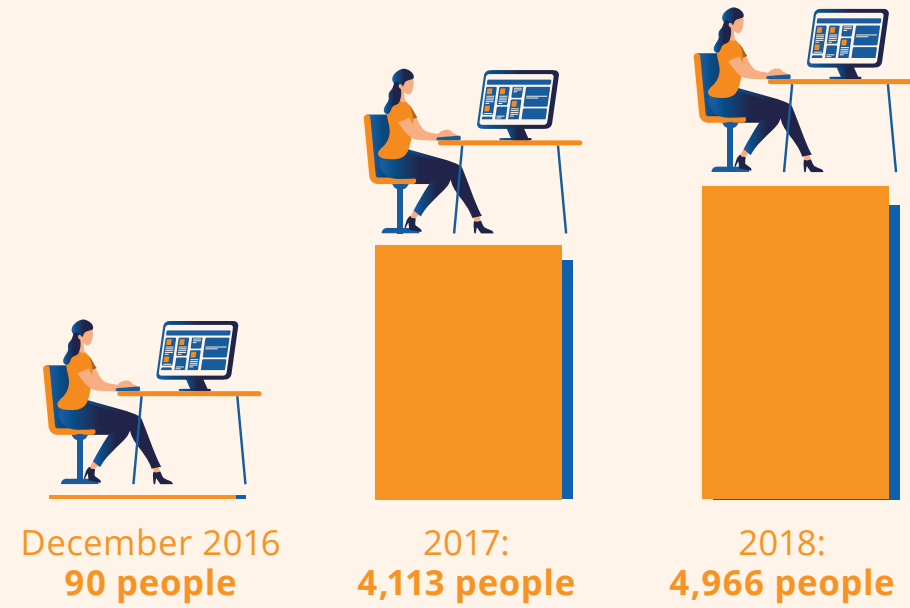
Find out more at: pim.poznan.pl

DEVELOPING POZNAN TECHNOLOGY AND INDUSTRY PARK AND CREATING ENTERPRISE SUPPORT SYSTEM

The objective of the project is to develop another segment of Poznan Technology and Industry Park. The new segment will be a multifunctional office and commercial building with multimedia and office facilities.
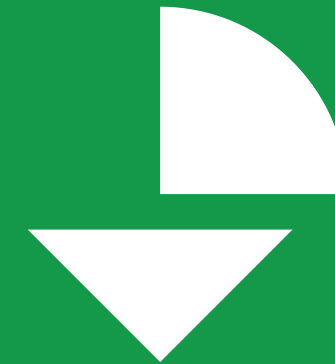
This project will support Business Environment Institutions by offering new office spaces to the incubator and companies with an established position on the market.

Find out more at: wcwi.com.pl

December 2016
90 people

2017:
4,113 people

2018:
4,966 people

**Number of people using Coworking Space
Plus One from December 2016 to October 2018**

We take good care of the green potential of Poznan. While expanding the city we use its natural resources in a sustainable way. We build awareness and understanding of ecology.

Smart Environment

• We care about environment and we fight climate change.

• We develop blue and green infrastructure, we implement projects which will improve the environment of Poznan.

• We build a circular economy – we make optimal use of the resources available in the city.

• We educate.

We all need to take care of our environment. We need to do so since we cannot move Poznan elsewhere. Our city is compact, well-designed, friendly, and green. There are many advantages of living in Poznan. Thinking of ourselves as well as the next generations of Poznan residents, we should think of creating other advantages. Prudence and education are the key words in this field.

Science constantly comes up with new, environment-friendly solutions. In order to use the solutions, we should know how to do that. We should learn about waste management, water retention measures, water management in cities or ideal plants for the garden, we should also learn why we need insects in cities, and that all barren land in cities is not a garbage dump but city's wildflower

meadows, and we should also learn why the air quality is deteriorating.

To improve the air quality, we have been gradually exchanging old furnaces, constructing passive houses and working on introducing systems to recover the heat from places like data centers. In Poznan there is modern and low-emission public transport. We should be more willing to give up driving cars and switch to public transport. Therefore, apart from educational campaigns and financial incentives, we need more modern Park & Ride parking lots and more effective urban traffic solutions.

Just like inhabitants of other cities, we also need to manage waste more efficiently. We should not produce new waste, and the existing waste should be introduced into closed-loop systems. We should sort more waste, process, re-use, and burn less waste. We should set an example for others. Let's learn to do it right, let's educate others!

Every city is a dynamic organism. The urban population is declining, people are moving out to the suburbs.

However, in Poznan we still have a lot of unused spaces like Wolne Tory, the Northern Island of Ostrów Tumski, where we can create attractive, modern and ecological districts. In the existing housing estates we have implemented solutions to improve environmental conditions. This is how we build an attractive, ecological, and modern city - our Smart City Poznan.

Ongoing projects

POZNAN IN ORDER

We introduced a web application and a mobile application for use by the public to report any problems connected with cleanness within the administrative territory of Poznan. Users of this application can report a problem and then see its processing with the record location, category, short description and photo. The reported issues first get to the Communal Management Department at Poznan City Hall, which then trans-

fers them to the units responsible for maintaining cleanliness and order in a given area. The use of the application is free of charge.

Find out more at: porzadek.poznan.pl

STAY WARM

The Stay Warm program offers free-of-charge thermal surveys of buildings combined with educating residents

4,804 one-family houses and 200 tenement houses were surveyed between 2009 and 2019.

on pro-environmental activities and behaviors supporting the "Think globally, act locally" commitment.

Find out more at: trzymajcieplo.pl

ATMOSPHERE FOR POZNAN

The **ATMOSPHERE FOR POZNAN** site was developed by the Environment Protection Department at Poznan City Hall. Thanks to this site, the residents of Poznan can obtain information on

the forecasted and actual air quality in Poznan. They can find there the forecast for concentration of PM10 fine dust and concentration values of all air pollutants assessed at the monitoring stations of the Chief Inspectorate of Environmental Protection for Poznan for the next three days. Apart from the specific, forecasted values of dust concentrations, the site also offers useful tips and advice. In addition, you can find information on free public transport service provided in Zone A when the air quality is very poor. You can also find out about bans or restrictions resulting from the so-called anti-smog resolution and see a map showing how air pollutants like PM10 dust, ozone and Saharan dust spread across Europe.

Find out more at: poznan.pl/powietrze

SAFE POZNAN ECO-DRIVING

Safe Poznan Eco-Driving is a project run by the City of Poznan on the initiative of the Environment Protection Department at Poznan City Hall. Its objective is to change habits and

behaviors of Poznan drivers in order to protect the environment, reduce car maintenance costs, and increase road traffic safety. Drivers following the guidelines of eco-driving will not only contribute to the better condition of the environment in the city, but they will also reduce the road safety risks.

Find out more at: poznan.pl/wos

Ideas for the future

RAINWATER AND MELTWATER MANAGEMENT IN POZNAN

We are planning to take action in order to develop assumptions of an innovative system of managing rainwater and meltwater in Poznan, which would make use of advanced technologies. We are going to create a water management strategy as part of the Municipal Drainage System, work out the concept of managing the system, including its operating, handling and monitoring assumptions.

POZNAN ENERGY CLUSTER

In 2018 an initiative to create the Poznan Energy Cluster was taken. The main goal of developing and running energy clusters is to develop distributed generation. Clusters can improve energy security at the local level, strengthen the budget of a county or commune by balancing energy production and consumption. Furthermore, they improve environmental quality by using renewable energy sources.

Members of energy clusters may include district or county self-government, schools, colleges and universities, research centers, local energy and heating producers and recipients, prosumers (individuals not only producing but, at the same time, consuming energy and heating), local distribution system operators who own distribution networks, local entrepreneurs who wish to get involved in the development of the cluster, etc.

MODERN SPATIAL PARTICIPATION

We are going to launch an advanced online participation portal and news channels available in social media. These tools, thanks to combining a questionnaire and a web forum with an interactive map, will be used, for instance, to run the so-called geo-questionnaires and geo-discussions in planning. It will be possible to see 3D models of districts, which will make the information and consultation on the planned changes easier and also more understandable.

The implementation of this project will also allow the residents, who for various reasons cannot attend traditional consultation processes, to become active and conscious participants of social consultations regarding urban space.

Find out more at: mpu.pl

POZNAN FOR BEES

This initiative aims to create for pollinators a good habitat in Poznan, protect urban bees and produce Poznan honey. There are already six beehives next to Citadel Park. They were painted by students of Elementary School No.83 "Łejery". Soon, bees started living in this colorful apiary.
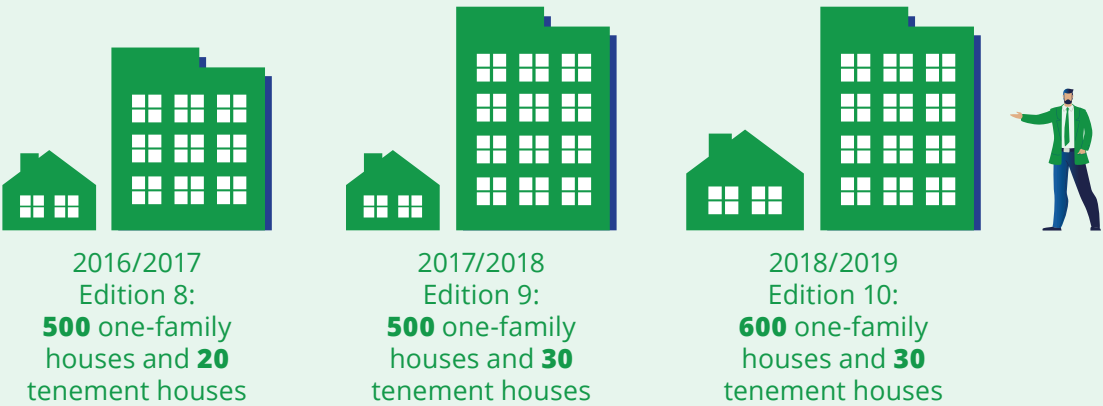
In the area of the summer amphitheater, close to Na Stoku Street, we are going to create a bee-friendly garden with special plants and greenery and a water cascade to help bees live in the urban environment . In return, the bees

Studies show that in Citadel Park there are 93 different bee types, including eight types which are protected by law.

will make all-natural and pure Poznan Honey – it will be honey in 100 percent produced in Poznan, harvested traditionally by correct manual handling of the city service units from the Board for Municipal Green Areas.

Find out more at: zzmpoznan.pl

2016/2017
Edition 8:
500 one-family
houses and **20**
tenement houses

2017/2018
Edition 9:
500 one-family
houses and **30**
tenement houses

2018/2019
Edition 10:
600 one-family
houses and **30**
tenement houses

**Number of buildings participating
in the Stay Warm program
between 2016 and 2019**

Together with the residents we continually develop the city. We make use of the social and intellectual capital and the potential of advanced technologies.

Smart Community

• We use advanced technologies in order to co-decide and implement the principles of sustainable development in a responsible manner.

• We improve the quality of life by creating social and intellectual capital.

• We facilitate communication and social dialog.

• We create the city.

Smart City community is about dialog, sharing knowledge, ideas and reflections. It is active people who take initiative and can cooperate with others. It is people who everyone listens to attentively. In Poznan we know how to encourage other people to take up action. Overcoming the scepticism in the power of collective action is an arduous process that requires consistency. The people of Poznan are famous for their consistent behavior and hard work. Hence the list of our achievements is quite impressive. We have been working on them for years, and now we can call these accomplishments smart. These are, for instance, such activities like the Civic Budget of the

City of Poznan, Local Initiatives Centers and well-functioning municipal auxiliary units.

All these activities have one thing in common – it is people who want to work, who know how to engage others and how to spread ideas. A lot of energy is generated which can change the local environment: neighbors integrate and start acting together: a bench is placed in front of a building, a new pedestrian crossing appears where it was most needed, and in the evening neighbors begin to meet to practise sport with an instructor. All such things can be done and we actually do them. We have a leading position in supporting

the development of labor market in Poznan and the Poznan agglomeration and in improving the quality of education, especially vocational education. For many years we have been successfully promoting the need to understand particular occupations and vocational education and our Respect for Professionals campaign is already well known outside of Poznan.

Municipal auxiliary units have an established position in Poznan. It is a community which is well-grounded in the municipal structure which demonstrates that problems can be best resolved if you deal with them on a daily basis. We move from the "working for people" philosophy to the "working with people" philosophy. Local, grassroots leaders need support. And this is not only financial support. First of all, easy access to information is needed. Second of all, places where people displaying initiative or willing to take action could meet are needed. Finally, friendly and helpful office workers are needed.

We want Poznan to be a city where all residents can have their say. We are positive that technology will make

social dialog and co-management easier. Today we are building good relations and a sense of community, stressing the fact that we are together right here right now and what unites all of us is Poznan. We go to an outdoor concert together, we participate in a running event in Poznan, we watch a football game of a Poznan football team or in a community club, we celebrate Święty Marcin Street's Nameday and we eat delicious St. Martin's croissants with pure joy. The fact that we are active and engaged in various matters will affect not only our future, but also future generations who will come after us. That is why, when someone asks a question "What's Poznan like?" The answer will always be: "It's a city of happy people."

Ongoing projects

BaDaM

BaDaM, which is short for Database of the City of Poznan, is a project to make available the collections of the city data and presenting the data on a dedicated website. The data includes statistical indicators related to many aspects of the development of the city. We have designed this website thinking of residents, entrepreneurs, investors, scientists, representatives of self-governmental authorities, city's activists and other people interested in the data on Poznan for the purposes of their work or to expand their knowledge. The data from the website may be downloaded for future use.

Find out more at: www.badam.poznan.pl

LOCAL INITIATIVES CENTERS

The Local Initiatives Centers program was launched in 2016 and carried out in the form of open tenders for proposals of cooperation between the self-government and non-governmental organizations. It allows residents to incorporate initiatives which directly address needs of local communities.

Responsibilities of Local Initiative Centers:
- stimulating social activity and creating conditions for the development of local communities
- carrying out activities based on the diagnosis of the local environment and the map of resources and needs
- creating a complex offer for the target group defined in terms of a territory
- creating favorable space for self-organizing and integrating

Find out more at: poznan.pl/cil

POZNAN CIVIC BUDGET

Poznan Civic Budget is a platform dedicated to social consultations regarding a certain part of money from the budget of the City of Poznan. One of the vital functions of this platform is a possibility to fill out and electronically submit a project application form. The Civic Budget is an undertaking through which the members of the local

In 2019 voters submitted over 68,000 electronic votes. It was the highest number of all the editions of Poznan Civic Budget.

community can directly decide how to best use the available money. This is possible thanks to the tool that allows to submit, discuss and then implement projects which will serve the residents and the city.

Find out more at: budzet.um.poznan.pl

CYRYL – LOCAL DIGITAL REPOSITORY

Poznan Local Digital Repository – **cyryl.poznan.pl** – was launched in 2013. The online platform is the city's virtual museum. There you can find materials and exhibits gathered in Poznan libraries, museums, theaters, art galleries, cultural centers, and also from the repositories of Poznan International Fair, the Poznan Society for the Advancement of Arts and Sciences, Poznan division of the Polish Academy of Sciences, schools, colleges and universities. Many people have given away their personal or family records to be digitized and published. On the website you can see tens of thousands of photographs, hundreds of postcards and old city maps of Poznan, you can get acquainted with Poznan monuments and institutions, you can listen to recorded sound archives, watch theater performances, movies, and presentations of spatial objects. Many more items are still awaiting digitization and publication.

Find out more at: cyryl.poznan.pl

Ideas
for the future

MAP OF
LOCAL NEEDS

We attach great importance to getting to know, with the help of municipal auxiliary units, the needs and problems of local communities. That is why, we are going to carry out online consultations concerning the whole area of the city. It will be done in a form of a geo-questionnaire. The analysis of the data collected from geo-questionnaires will allow to create a list of necessary projects to be implemented using funds allocated to housing estates. The results of the geo-questionnaire will be presented on the city map.

POZNAN RESIDENTS APP

There are many people who live, go to school, study and work in Poznan, but for various reasons their permanent residency is not Poznan and they do not pay taxes in Poznan. We wish to change that. In order to do so, we need to introduce a rewarding system of incentives and privileges to make Poznan and paying taxes in Poznan attractive to the present and future residents of Poznan.

It is a complex loyalty program for the residents of Poznan with a dedicated application which will give access to information and advanced communication, also in real time.

Apart from the existing discount on public transportation, there will be other benefits in areas like culture, sport, recreation, education, health, and care services. They will allow easier access to preschool programs, kindergartens, schools, youth cultural centers, sports facilities, parking places, and city bikes. All the residents - a variety of different groups like young people, seniors, families, foreigners and many others will benefit from this solution.

External partners will be able to join the Program by signing agreements with the City. The external partners include private entities from the services sector such as restaurants, language schools,

cinemas, and shops. In the future the Poznan Application is going to combine and offer the functionalities based on many smart ideas.

SPORT
IN POZNAN

We are going to create a website and an application which will help you lead an active and healthy lifestyle. Thanks to this application, you will be able to reserve Orlik football pitches or other sports facilities and also check how many people are currently using them. You will be able to buy tickets to go to various sports and recreation facilities in Poznan. Additionally, a search engine will help you find places where you can practice your favorite sport disciplines. If you want to practice a given sport discipline, you just need to find the icon which stands for it on the map; so, for example, if you want to enroll your children in judo class, all you have to do is choose the discipline in the application and all the locations of sport clubs running judo classes will be immediately displayed on the map.
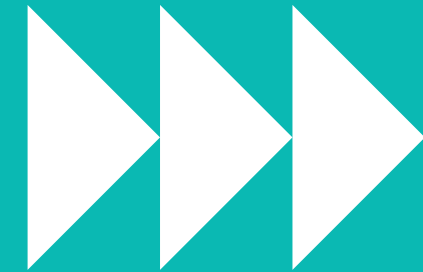
Find out more at: poznan.pl/sport

2016
edition PBO17
234

2017
edition PBO18
325

2018
edition PBO19
425

**Number of projects submitted to Poznan Civic Budget
between 2016 and 2019**

We develop modern, eco-friendly and integrated transport systems to easily move around the city and agglomeration.

Smart Mobility

• We rely on dynamically growing urban transport which integrates various means of transportation.

• We want the data generated by different units to impact the quality of transportation and information services.

• We seek modern and smart transportation that will be engrained in the city structures and the awareness of the residents.

• Smart Mobility is a multi-platform mobility.

Efficient, comfortable, advanced, integrated and continually developing network of transport is the driving force for Poznan Smart City Model. Mobility is motion. Motion is life. A mobile city is teeming with life.

We constantly develop the urban transport. We build new routes and repair the old ones. We invest in public transport fleet. The quiet, green, dedicated tracks, bus lanes, bike lanes, bike stations, two-way trams, hybrid electric buses, car sharing, and city bikes have become our everyday life in Poznan. Thanks to these solutions, we can shorten travel time, enhance travel comfort and reduce the carbon footprint. We improve transportation so that more inhabitants of Poznan would choose public transport.

Mobile applications become more and more popular. Thanks to them, we can buy tickets, check travel time, avoid traffic jams, rent a bike and pay for parking. We expect more applications designed for various groups of users

which will make moving around Poznan easier. The City has shared its open data platform with application creators. The data includes timetables, numbers of parking spaces in Park & Ride lots, and also data on real time locations of public transport vehicles. Since 2019 Poznan has been sharing data on the vehicles running on the lines of Urban Transport Authority. Thanks to that, you can learn the vehicle's individual number, you know whether it is a low-floor or low-entry vehicle, whether there is a ramp, voice announcement system, ticket vending machine, USB charger, air-conditioning, and dedicated space for bikes. The latest data will allow application developers to create, for instance, a tool to see the real-time position of buses and trams.

Smart City, thinking of its residents, gathers, manages and shares data. The data can be used by developers who design websites and applications which will enable the residents to make everyday choices – for example which transport mode to use. Advanced tools like applications or services have become an information link between the city and its residents by providing

easily accessible and useful information concerning the city. Thanks to open data, more and more advanced services emerge.

In Poznan we have been developing a system of passenger information boards. At bus/tram stops we have introduced NFC tags which are a complementary solution to paper timetables. That solution was acknowledged and appreciated by the Cities on the Internet Association committee which honored Poznan with Innovative Discovery of the Year 2019 award. In the near future we are going to stop using printed timetables in vehicles and at bus/tram stops. We will make use of the Internet of Things and passenger information which will be updated online and easily accessible to passengers.

52

53

Technological advancement makes daring ideas come true – for instance, introducing public autonomous vehicles, multi-storey automated buffer parking garages, more advanced applications to improve traffic flow, city taxis available at a price of a bus/tram fare, and monitoring and regulating downtown traffic flow. Since introducing the Poznan Electronic Agglomeration Card (PEKA) system Poznan has become a Smart City pioneer, which empowers us to create and implement effective solutions tailored to the present and future needs of Poznan and its people.

Ongoing projects

GTFS-RT SCHEDULES

The project has been based on data obtained from the tools used by Urban Transport Authority in an everyday management of urban transport in Poznan and the Poznan agglomeration. Urban Transport Authority has made a successful attempt at obtaining data streams on ESB rails, from database schedule systems or from on-board computer units installed in vehicles. On this basis, it is possible to create interactive maps of vehicles in motion, analytical tools used for settlements between operators, and many others. The whole project, i.e. access to data, its format and documentation, is an open data project with its data standardized according to the Google guidelines.

Find out more at: ztm.poznan.pl/pl/dla-deweloperow

PEKA – POZNAN ELECTRONIC AGGLOMERATION CARD

The objective of this project is to unify fares for public transport services provided by different, independent carriers working in the area of Poznan and Poznan County in order to make the use of public transport easier and increase its availability.

The **PEKA** system encompasses a number of different ticket schemes. It enables passengers who use services of many carriers to have personal season tickets and tPurse on one card. tPurse allows to pay for the number of stops actually traveled on a selected route.

Find out more at: peka.poznan.pl

PARK & RIDE STAGE ONE

The location (close to PST Szymanowskiego tram-stop) enables quick and convenient transfer to Poznan Fast Tram (PST). You can drive to a Park & Ride site, leave your car there, and transfer to PST. You will easily get downtown with no need to be stuck in traffic jams or to look for parking spaces.

Once you pay for parking your car, you can use the public transport for free – the Park & Ride receipt is your ticket. If you have a personal season ticket, you can leave your car in the parking lot free of charge.

In the parking lot there is an automated ticket and pay machine; there are license plate recognition cameras, entry and exit terminals, electronic display boards informing about vacancies, and passenger information boards. The area is illuminated and monitored. The parking system is integrated with the Poznan Electronic Agglomeration Card (PEKA).

The objective of this project is to increase the participation of public transport in passenger transport, and in this way to reduce the unfavorable ratio of dividing transport tasks. The project concerns the agglomeration – it targets e.g. the inhabitants of Poznan County who commute to Poznan by car.

Find out more at: ztm.poznan.pl

Ideas for the future

E-INK

We want to use the e-ink technology to display schedules. This innovative device will present real-time passenger information, routes and timetables. Having in mind the constantly developing e-paper technology, the growing interest in this market shown by other entities and its decreasing price, Poznan is considering its implementation. Such a solution will not only promote our city or deliver a new information channel, but it will also significantly influence ecology and possibly reduce costs. In the city and agglomeration bus/ tram schedules change dynamically – sometimes every other day – for example, due to scheduled investment works, but also unexpected breakdowns. In most cases it is necessary to tell operators to place the new updated paper schedules at bus/tram stops in the affected locations. We realize how much it costs, how long it takes to reach passengers to let them know about the changes and the carbon footprint of the service operator's. Therefore, it is highly

recommended to start the process of supplementing or withdrawing the existing information on paper, and start using eco-friendly electronic systems.

Displaying the changes at bus/tram stops equipped with LED, LCD or e-ink information will be cheaper and much faster. Within a fraction of a second, with just one click, an operator will place a new schedule or information concerning the changed route, which will not only reach respective bus/tram stops, but also mobile devices of public transport users.
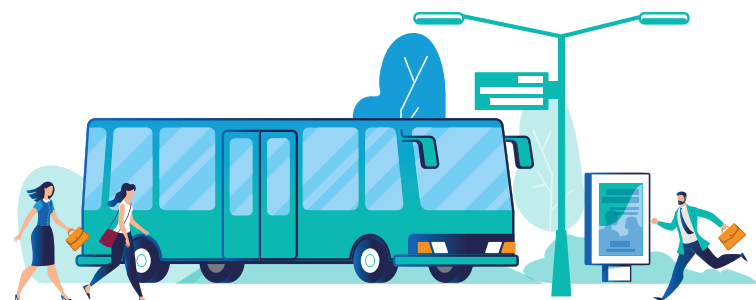
MOBILE PEKA CARD

It is assumed that **PEKA** applet will be transferred onto the phone while maintaining all its functions and protections/encryptions identical to the ones used in the card version. The mobile applet in peripheral devices should not differ significantly differ from the ones which are used for plastic cards, which means there is no need to modify software or structure of these devices.

An analysis will be carried out to check technical conditions for transferring

PEKA applet from the smart card environment (JAVA C) to the Android environments (minimum required version 6.0) which use the Java virtual machine. The analysis will include a possibility of using the NFC protocol – Near Field Communication.

ELECTROMOBILITY STRATEGY

The objective of the electromobility development strategy is to create conditions for the development of electromobility in the city by adapting the existing infrastructure and running other alignments which aim at improving its functioning and the development of low-emission vehicle market

(mainly electric vehicles). The strategic document shall define the electromobility development policy of the City – car sharing, charging stations, vehicles owned by the city and vehicles performing public tasks, making use of alternative energy sources and reusing electric batteries.

PARK&RIDE STAGE TWO

The objective of this project is to build a system of independent **Park & Ride** facilities at the following locations:
- in the area of św. Michała Street, Warszawska Street and Świętojańska Street (parking lot - św. Michała Street)
- in the area of Poznan Strzeszyn train station with Biskupińska Street in the north (parking lot - Strzeszyn)
- in the area of Hetmańska Street, Starołęcka Street and Wagrowska Street (parking bay – further on called parking lot – Starołęka roundabout)

As a result, three Integrated Passenger Transfer Stations are going to be created, which will enable a convenient transfer to public transport. The Transfer Stations will combine train, bus, tram, car, motorcycle,
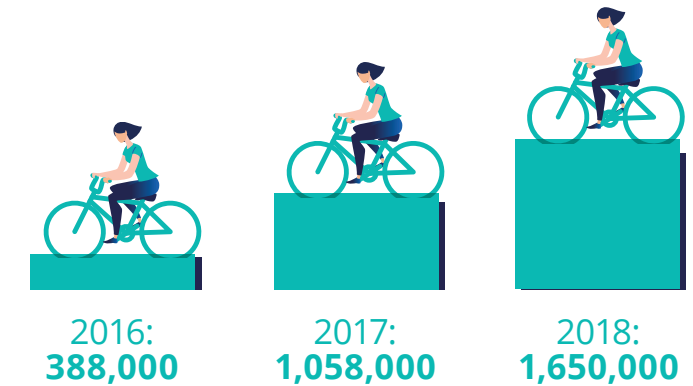
bicycle transport and pedestrian traffic. The project will include building new, paved surfaces of parking lots/parking bays with total parking spaces of 207, including 10 disabled parking spaces.

The implementation of Park & Ride Stage Two shall include completing the following works for each location: demolition works and site preparation works, paving, tele-technical duct system, fencing, making a gantry, lighting, video surveillance, street furniture, information board (passenger information), signposts, bicycle tool kit, bicycle rain roof, greenery, bicycle stands, sanitary sewer connection, water supply connection, rainwater sewer connection, and electrical connection.

TRAFFIC MODEL (BIG DATA) AND DEVELOPING ITS POTENTIAL

Data on vehicle traffic in the city is collected by the intelligent transportation system **(ITS)**. The network of the currently existing vehicle data recorders which permit to detect and identify vehicles should be gradually expanded in order to have a real picture of road traffic intensity in Poznan in the future. The City also has data on public transport vehicles' real-time location. The information coming from these sources should be used to prepare analyses, forecasts and traffic model updates. The processes of doing research, preparing analyses and managing traffic could lead to creating a mobile application to inform the residents about collisions, traffic jams and to recommend different routes to avoid traffic disruptions.

2016:
388,000

2017:
1,058,000

2018:
1,650,000

Number of Poznan City Bikes rented between 2016 and 2018

We manage data in a
cautious and coherent way.
We streamline processes.
We perform city tasks by
making use of the potential
of IT systems.

Smart Digital City

• We process data and facts concerning the city in an ordered manner.

• We share raw and processed data in response to institutional and business needs.

• We continuously improve the online availability of public services.

• We optimize decision-making processes by increasing data usage level, by automation and integration of systems, and by open data policy.

Purchasing school desks, planning rallies, registering a car, organizing sports competitions, maintaining order in the city's streets, and obtaining a construction permit – all of them are administrative matters. Each matter is connected with many procedures and decisions required by the law. In every case time is crucial. Every matter involves producing piles of documents which have to be archived and made available when necessary. In Poznan City Hall there are thousands of such matters. And despite the increasing number of activities, the City Hall can operate smoothly. Thanks to digi-

tization, it manages to operate more and more effectively.

Handling administrative official matters online is fast, convenient and safe. You can do it without having to leave home. And if you encounter a problem - for example, you do not know how to fill

out some forms, you can always call Poznan Contact Office for support.

Digital data allows us to efficiently prepare current analyses. Smart City Poznan enables the flow and integration of data in various fields. A quick summary of information makes it possible to manage practically every field. We can, for instance, effectively coordinate traffic by analyzing pedestrian and vehicle streams. Thanks to updated information boards at bus/tram stops, we immediately know how much we should wait for the next bus/tram. 3D Model of Poznan embodies the concept of Smart City. The 3D and digital mockup of the city is this very place where you can test the planned changes in construction and environment.

In Digital City area the safety of data gathered is of utmost importance. Safe data does not mean that data has to be locked away. In Poznan we share properly prepared data with external companies which create applications, which we or our visitors can use on an everyday basis. Smart City uses digitization to enhance the quality of life of the residents.

Ongoing projects

3D MODEL OF POZNAN

The 3D Model allows to create 3D visualizations of city facilities, city terrain, vegetation and spatial phenomena, it also allows to create 3D multifaceted analyses (used in urban planning, acoustic surveys, outdoor air quality monitoring, etc.). The Model can be regularly updated, in case of construction, reconstruction, and demolition of buildings, etc. In the 3D Model vegetation is also presented (LIDAR point cloud) and ultimately it will also show road structures (bridges, viaducts). At present, the Model contains data referring to 108 thousand buildings and over 3 billion LIDAR points. You can access the 3D Model using a web browser on stationary or mobile devices. Apart from viewing, users can draw objects, filter them on attributes, analyze shading, download the model to PDF file and download building vector images in formats compliant with accepted standards (SHPZ, KMZ, DXF, DWG, CityGml, and SKP).

The objective of the 3D Model is to ensure that residents, investors, architects, urban planners, and office workers have easy access to spatial data and related services; continuously monitor changes in landscape and panorama

The 3D Model covers the whole area of Poznan, i.e. 262 km² of the city's area and nearly 100,000 buildings.

of the city; assist in urban planning; support revitalization processes, social consultations and crisis management.

Find out more at: sip.poznan.pl/model3d

OPEN ACCESS TO CITY INFORMATION AND DATA SYSTEM

The City Information and Data System in the Multimedia City Guide is an information system which permits automatic data downloads in formats available to Internet applications programmers and implementing the data in external information services. An open API (Application Programming Interface) shares the resources of the Multimedia City Guide www.poznan.pl (content and services), the Public Information Bulletin **www.bip.poznan.pl** (content) and the Spatial Information System (spatial data). The data is used in publicly available applications. Some applications were created as a result of the City' s initiative - in hackathons or programming contests organized by the City of Poznan and external companies.

E-ADMINISTRATION

E-administration is a way to arrange official matters online. It allows to arrange online matters connected with issuing a duplicate of the decision to remove a business from the business register, filing tax returns (including tax on means of transport), checking the date of collecting registration certificates and duplicate license plates, checking the status of driver's license replacement applications, issuing a registration certificate, deregistering a vehicle, etc.

The online appointment scheduling system at Poznan City Hall facilitates making appointments and checking the wait time. A confirmation of the appointment date and time is sent to clients via text messages.

In 2018 **ePUAP (Electronic Platform of Public Administration Services)** was integrated with an internal document flow system. The main goal was to streamline the process of handling correspondence received by Poznan City Hall via email. Now both the document and the matter are handled

within one system. Proposals from the residents find their way to the respective office/department much faster and, if necessary, they are transferred, depending on their content, to a municipal organizational unit. Such organization of work is definitely less time-consuming.

In 2018 the total number of users of the City of Poznan e-services was nearly 764,400.

Ideas
for the future

ENVIRONMENT
ANALYSES IN 3D MODEL

The idea behind this project is to create a complete information base in a 3D Model of the City of Poznan which would enable automatic environmental analyses. That would support the process of making decisions about waste management, cutting down trees, granting permits for using water and issuing authorizations.

ELECTRONIC
DOCUMENTATION
MANAGEMENT

The electronic documentation management system allows to perform clerical activities, document the course of handling matters, collect and create documents in an electronic form. Ultimately, a fully electronic document management system is going to be created at Poznan City Hall and in municipal organizational units. The implementation of the system will ensure quick circulation of correspondence in the city and the readiness for

digital services to meet the needs of e-residents.

METROPOLITAN SPATIAL
INFORMATION SYSTEM

Metropolitan SIP stands for data harmonization and integration of database resources of the Poznan metropolis within the Spatial Information System. The system would ensure that citizens, entrepreneurs, public and private units have access to the current and reliable spatial data from the area of the metropolis. The data would be shown in the form of interactive maps. Thanks to the interoperability of the displayed services of spatial data, i.e. the services of searching, viewing and downloading, the system would comply with the requirements of the INSPIRE Directive and, at the same time, would allow for

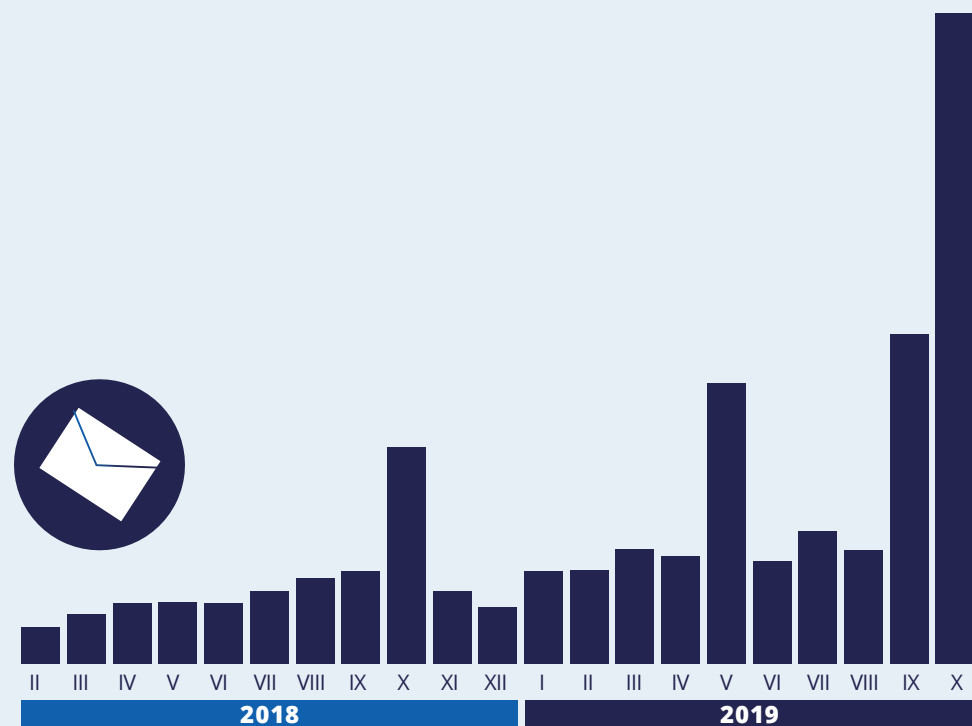the integration of spatial information on the national and European level, and with other systems based on e-services.

DIGITALIZATION OF
INVESTMENT PROCESS

BIM (Building Information Modeling) is a concept which has revolutionized the approach towards design, realization of investment and building management. BIM allows for continuous and immediate access to information on a given project, its cost and deadlines. It makes the design process much simpler due to the possibility of testing various scenarios and schemes in virtual reality. The test results are consistent and reliable thanks to a much better reflection of the reality in one digital model, which can be used to make design decisions, prepare coherent construction documentation, profitability and investment cost estimation analyses and, ultimately, manage the building. Thanks to working on one model, companies involved in designing, constructing and managing a building could significantly increase their efficiency and reduce the number of possible errors occurring in the process of preparing the documentation. The

digital design data combined with the innovative technology of the parametric modeling of information will be more advantageous compared to the traditional methods of designing and constructing.

Number of letters coming via ePUAP
between 2018 and 2019

Implementing
the Smart City Model

Next Steps

We have ambitious, yet realistic plans. We know what we want to do in the near future and we also know how to do it. We base Poznan Smart City Model on people. The outcome will be a combination of our skills, knowledge, and quality of work. The other important issues are: competence development, innovation, creativity, counteracting digital exclusion, adaptation to change, and ongoing evaluation. The key elements on the path to becoming a smart city are: cooperation and integration. Fortunately, here in Poznan we are really good at that.

OFFICE WORKER 2.0

In order to implement the smart city concept in all areas, partners who are open to change and innovation are needed. In Poznan we know how important it is to educate the City employees and support their innovation.

Supporting Employees' Initiatives in Poznan City Hall

The main purpose of the Supporting Employees' Initiatives program is to make use of the creativity and innovation skills exhibited by the employees of Poznan City Hall and municipal organizational units.

Training Programs and Developing Skills for Employees of Poznan City Hall

In 2018 the City Hall employees used a variety of skill development opportunities nearly 3,300 times. In 2018 over 1,600 employees participated in the courses organized by Poznan City Hall on its e-learning platform.

Change Leader in the City

In 2018 at SWPS University in Poznan, the Change Leader in the City program was launched for the City Hall employees and individuals working towards the development of the city. The objective of the program is to empower staff who, thanks to creative tools, will be able to implement the vision and goals of the Development Strategy for the City of Poznan and other sector programs. This program has successfully eliminated the stereotypical division between office workers versus clients; from now on, office workers 2.0 are partners who are open to change and innovation.

OPEN DATA POLICY

The City of Poznan supports sharing public open data and actively participates in creating solutions for the smart management of the urban space. Poznan is a member of an international association of Open & Agile Smart Cities, whose objective is to exchange experiences and good practices with regard to using open data and creating innovative solutions for Smart City, particularly through the participation in the mainstream of technological and civilization changes which shape and define the development of urban environments. The activities undertaken aim at managing the urban organism in a better way and they should bring benefits not only to the municipal units, but also to external entities and the residents.

The guidelines on interoperability and open data standards are specified in the Poznan Mayor's decree on Open Data Policy in the city of Poznan.

COUNTERACTING DIGITAL EXCLUSION

The City of Poznan has been working on the Counteracting Digital Exclusion project to eliminate inequalities in access to information. The objective of this program is to ensure that 3,000 low-income households have access to the Internet. The end-users of the project are individuals and families in Poznan who fulfill the income criteria which entitle them to seek support as part of social assistance or family benefits, people with severe or moderate disabilities, children and young people in education eligible for social scholarships, foster families, foster care facilities and single parents who meet the income criteria which entitle them to use maintenance benefits.

AGILE METHODOLOGY

Agility is a way of thinking about managing complex undertakings - from projects to organizations. This is a close and partnership cooperation between parties, an iterative and incremental manner of delivering results, and openness to change by being flexible and adaptable to the changing circumstances.

In Poznan City Hall the Agile methodology is introduced as a model for implementing IT projects in particular. This methodology, unlike in a traditional model, enables an iterative implementation of projects and an effective implementation of tasks.

SMART CITY TEAM

The team coordinates and supports smart city initiatives in the city. It focuses on dealing with local challenges by means of innovative solutions. It also supports cooperation between entities and units. And it always seeks opportunities to incorporate the smart city concept. The team has access to the ongoing and planned projects and their schedule of works. It continually analyzes the advancements in implementing the smart city idea in a virtual space. The whole team holds regular meetings. The work is supervised and coordinated by the Poznan Mayor's Proxy for Smart City.

Find out more at: poznan.pl/mim/smartcity

STEERING COMMITTEE

The Steering Committee is an interdisciplinary team created as part of the strategic management process and is responsible for coordinating activities connected with implementing the Development Strategy for the City of Poznan and integrating strategic management with long-term budgeting. The composition and detailed competencies of the Steering Committee are defined in the regulation of Mayor of the City of Poznan of 13 September 2010.

The Steering Committee monitors the whole portfolio of projects and recommends project launches to Mayor of Poznan as well as activities and solutions regarding the project portfolio. The Committee takes into account the recommendations of the Smart City Team and considers smart city criteria while verifying Project Initiation Document. The Steering Committee promotes smart projects and encourages to implement pilot projects.

A project idea should always address an identified and yet unfulfilled need to deliver a unique product and produce the result. Any person irrespective of his/her position in the organizational structure of the City Hall or a municipal organizational unit may submit a

project. All documents are prepared by a respective City Hall department or municipal organizational unit.

The Smart City Team is responsible for consulting projects at the stage of creating a project idea considering smart criteria such as integrity, inclusiveness, innovation, and ICT.

POZNAN MAYOR'S PROXY FOR SMART CITY

Poznan Mayor's Proxy for Smart City coordinates the functioning of the smart city model by promoting projects in the implementation of which the Proxy engages city organizational units which are responsible for carrying our specific tasks in the city. The Proxy is also responsible for supporting interoperability and integration of IT systems during the implementation of undertakings connected with public administration in the city of Poznan.

Poznan Mayor's Proxy for Smart City takes action in order to create common structures and regulations concerning information safety, cybersecurity, and also education and promotion of best practices. The Proxy is in charge of the smart city cooperation with other cities and organizations in Poland and other countries. .

WIELKOPOLSKA INVESTMENT SUPPORT CENTER LTD.

Wielkopolska Investment Support Center Ltd. is an entity that supports and participates in implementing smart city projects. Its tasks and responsibilities include participating as an expert in developing city's projects, coordinating selected pilot projects together with external entities and municipal units, and analyzing the rationale for introducing the tested solutions. The company supports and coordinates projects that make use of advanced technologies, provides expertise and gives its opinion on the selected urban projects. It also analyzes the world's trends and searches for best practices to be implemented in Poznan. The company takes part in implementing the Smart City Model and participates in meetings which present urban smart solutions.
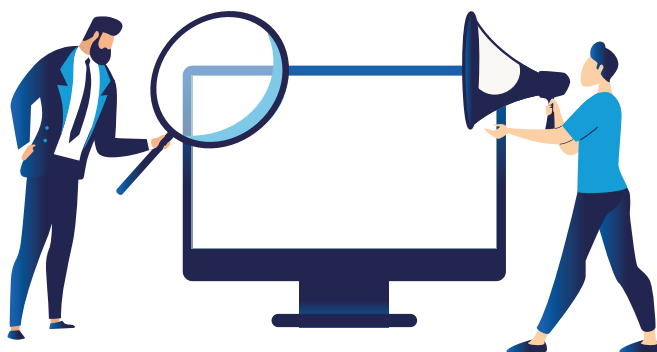
POZNAN SUPERCOMPUTING AND NETWORKING CENTER

Since 1996 Poznan Supercomputing and Networking Center, affiliated to the Institute of Bioorganic Chemistry at the Polish Academy of Sciences, has been cooperating with the City of Poznan in creating an information society. The Multimedia City Guide and the Public Information Bulletin are a joint project of the two entities. The Multimedia City Guide is an online information and services platform, thanks to which, the residents have access to many innovative solutions such as school recruitment support system, grave search engine, the very first in Poland on-line sessions of the Poznan City Council or an online system to check the voters' list. The Multimedia City Guide and the Public Information Bulletin cover a few hundred theme categories and over 7,000 facilities demonstrated on thematic maps. The City of Poznan, thanks to the collaboration with Poznan Supercomputing and Networking Center, can share information in an open-data model.

Since 2018 the City of Poznan and the Poznan Supercomputing and Networking Center have been partners in ensuring public services in order to develop the information society in the city of Poznan.

Poznan Supercomputing and Networking Center as an operator of the municipal POZMAN network also shares the corporate network of the City Hall, which connects many municipal units (including the majority of schools) and a wireless network offering free access to the Internet. It creates a wireless umbrella for the center of the city and selected areas.

DIGITAL TRANSFORMATION PROGRAM

In order to direct the development of the technology which will enable the implementation of the smart city idea, the Digital Transformation Program has been created. It corresponds with the general Development Strategy for the City of Poznan 2020+ as a document that defines the vision, goals and directions in information technology development and also complements the Smart Model. The purpose of this document is to identify processes and technological initiatives. The program points to activities with regard to a wider use of ICT technology within the city and determines the conditions for its implementation. The proposed technological solutions will support the processes of the resident/customer service and functioning of the City Hall. They will be designed so that they could be used on a long-term basis and gradually developed, re-applied or connected.

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We hope that all people who are interested in the smart city development will join us in creating new solutions to make Poznan the city of our dreams.

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