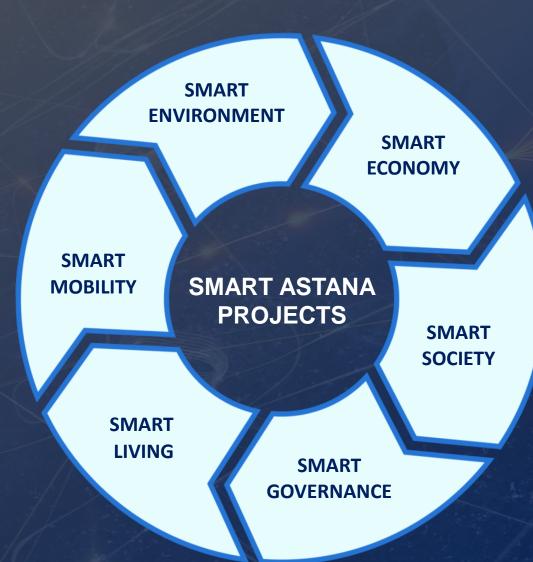


SMART ASTANA CONCEPT

1. Implementation of Internet of Things (IoT)

1. Intellectual transport system based on Big Data

- 1. Intellectual video surveillance system
- 2. Smart Health
- 3. Smart Education



- 1. Innovation development strategy of Astana
- 2. Implementation of blockchain

- 1. «Cisco Academy» in schools and universities
- 2. City innovation center

- 1. Big Data
- 2. Digital services for citizens

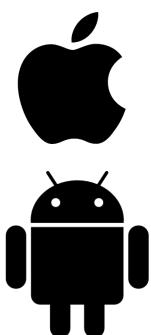
DIGITAL SERVICES FOR RESIDENTS



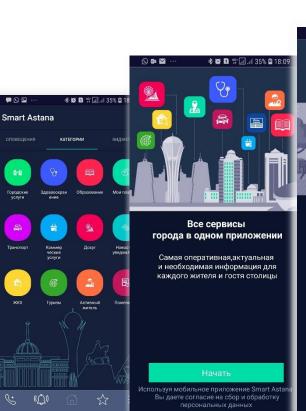
«Smart Astana» mobile application

- More than 167,000 downloads on IOS and Android devices
- Instant push notifications
- More that 70 services for residents and guest of the capital in single application
- 10 city services
- 6 news and informational services
- 5 entertainment services









E-KSK (Cooperative of apartment owners)

- More than 484 KSK from 486 KSK (99,6%)
- More that 8335 downloads
- Private investment project
- 3 local companies attracted



BIG DATA & OPEN DATA

SMART ASTANA

Big Data

Unification of **54 sources** of database

- 15 public authorities
- 21 Mayor's Office Authorities
- 18 corporate bodies



Identification of residents living in the "Rubber" apartments 30,000 residents defined in December 2017



Identification of residents' social status



Uncovers self-employed residents

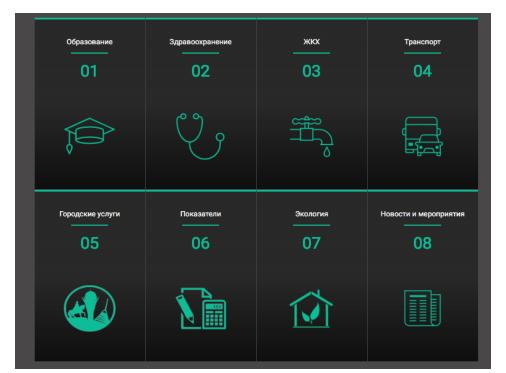


Provides an information on the apartment Database of the residents

Open data (Open Data Portal) – https://api.smart.astana.kz launched and operates in pilot mode.

- There are 11 sets of open data (API) in 8 categories.
- Number of views 3 534
- Number of downloads 129

It is planned to add 10 new data sets based on the needs of domestic developers



UNIFIED GEOGRAPHIC INFORMATION SYSTEM (GIS)



Main criteria:

- Sustainable city development
- Smart, balanced, transparent urbanism
- Developed city economy
- Innovative solutions
- Maximum relationship with the business environment of the city
- Close relationship with the city residents (feedback)
- Taking into account the vital needs of every citizen (Maslow's pyramid)
- Developed social activity of citizens
- Transparent tariffs of consumed resources



SMART EDUCATION





Automated system for distribution of the appointments and admission to pre-school institutions

15 145 applications



Implementation of automated information system "Kundelik" based on "e-akimat" system. The system keeps record on students' performance, exam results, ratings of the teachers and schools



100% of the schools equipped by computers and other facilities



Each class-room equipped by internet connection



A survey of all **84 public schools** was carried out, during which a total need for computers, multimedia equipment was revealed, and a wi-fi network was analyzed by radio monitoring according to the floor plan



Automated process for admission to 1 grade – 14 152 applications



Implementation of pilot project for establishing unified student card to access to the building and pay for the meal.

SMART HEALTH



Goals:

- Alternative ways to medical appointments booking (thru the registry, by the telephone, internet, mobile application)
- To cut the queues for the appointment to doctor
- Time reduction to enter data during the patient admission
- Personification of medicine thru the electronic health passport



100% Medical information system installed

100% Computer equipment

100% Internet access

7000 Trainings for medical personnel

SMART DISTRICT



"Smart district" current status

- Solutions on dispatching of the collection of indications of housing and public utilities with integration into the E-KSK (KSK-Cooperative of apartment complex) company's;
- «Smart» intercorm:
- «Smart» bus stop;
- «Smart» pedestrian lane;
- Automated data collection system, with the ability to control heat consumption
- Intercom systems, video surveillance and automatic barrier;
- Video surveillance cameras:
- The recycle points of secondary raw materials;
- Hardware-software complex for monitoring and automatic shutdown / connection of consumers from power supply networks;
- Trash bins Molok;



Digitalization of cooperative of apartment complex





Urban solutions

Socio-economic transformation of urban environment

Working in partnership with UNECE to create a comfortable urban environment. Program as a model for achieving 17 sustainable development goals (2015-2030)







ИНФРАСТРУКТУРА









13 борьба





















24-25 February

Hackathon Open Data



14-16 July

 Startup weekend "City environment: **Smart district**"



14-15 September

Startup Weekend: Safe city



8-14 October

Startup Week



20 October

STEM Olympiad



13-14 October

Hackathon: Market Tech



28-29 October

Hackathon: Smart service



9-11 November

 Startup Weekend: Sustainable city development



Innovation ecosystem

Astana Innovations Challenge 2018

12 startup events - 4000 Participants

"Astana - city of innovation" Strategy

Stimulating **Demand for** Innovation

Innovation proposal support

Improving the innovation system

2019

Holding of Global Digital Innovation Alliance (GDIA) sessions in Astana

February 2019

20 October 2018

12 October 2018

Opening of innovation center in cooperation with **SEEDSTARS (1106,4 м2)**



(International Business Accelerator)

Held STEM-Olympiad (126Teams) Science-Technology-Engineering-Mathematics







Held "Best Innovation Company of Astana city" Awards Ceremony



