Almaty – On the Way to Resilient and Low-Carbon Cities

ALMATY
development centre

SUSTAINABLE DEVELOPMENT GOALS

June 2024

VISION: A modern, world-renowned city that is comfortable to live and work in, attracting tourists, flows of goods, innovation and capital
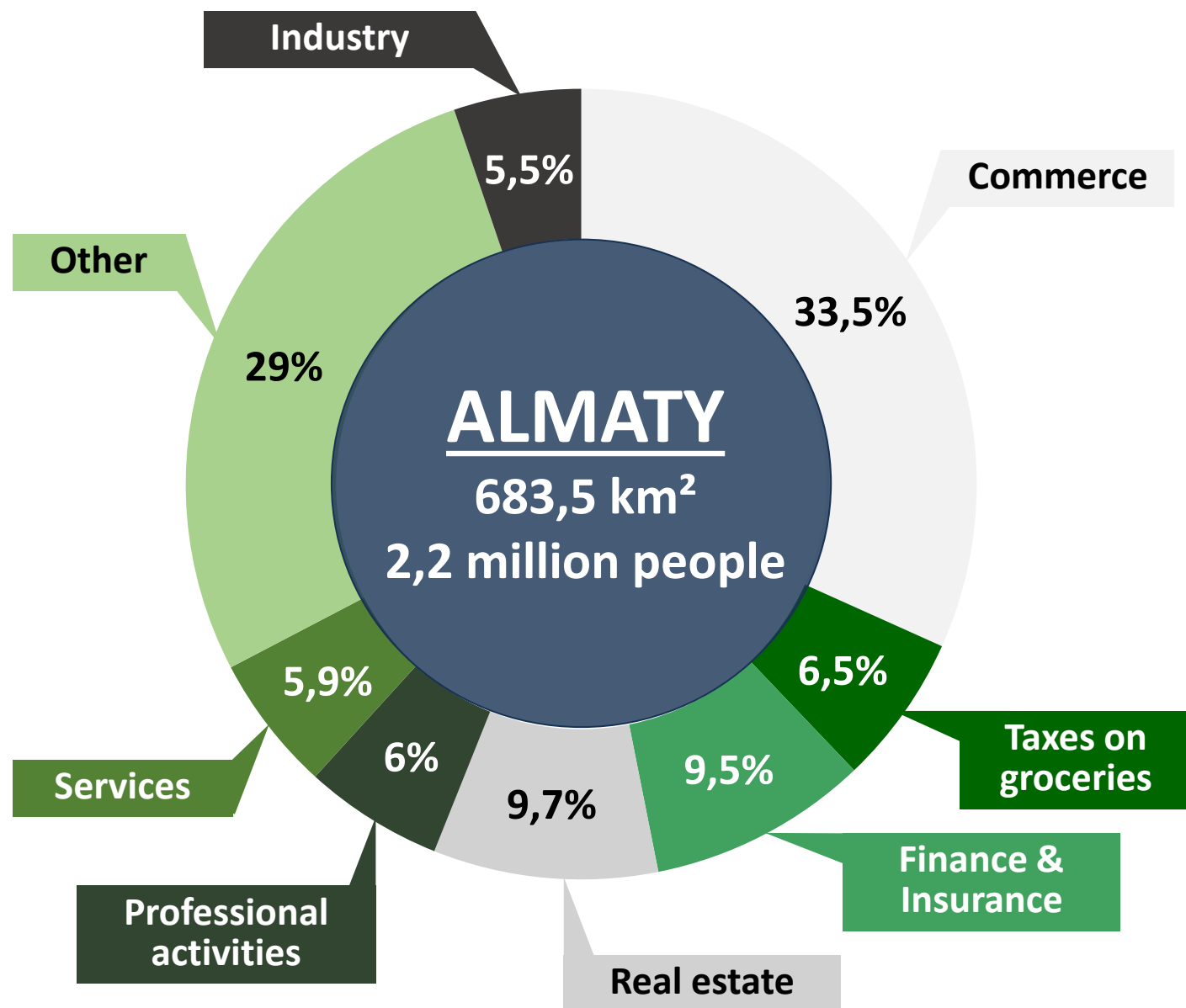
GRP
$ **69** billion USD
(2023)

Share of production goods – **8,1**%, services– **83,3**%

250 cars
per 1000 people

SMES
353,8 thousand

Average per capita nominal cash income
230 thousand KZT
$ 508 USD

ALMATY
683,5 km²
2,2 million people

Industry
5,5%

Other
29%

Commerce
33,5%

Services
5,9%

Professional activities
6%

Real estate
9,7%

Finance & Insurance
9,5%

Taxes on groceries
6,5%

Volume of retail trade
$ **7,5** billion

Average monthly nominal wages
420 thousand

Economically active population
985,5 thousand

29 square kilometers of housing per 1 person

Life expectancy
77,32 years

CURRENT SITUATION

Almaty City Development Program until 2025 and medium-term prospects until 2030	A framework for comprehensive transition of local governments to policies for achieving the UN SDGs
Approach to monitoring the implementation of the SDGs	SDG targets and indicators were identified and compared with the indicators of the Development Program
The process of establishing a monitoring platform for achieving the SDGs based on big data technologies	An electronic platform for monitoring SDG indicators is under development

Each area of the program is linked to one or more of the Sustainable Development Goals.

LINKING THE PROGRAM'S GOALS TO THE UN SDGS

I. Comfortable urban environment

Goal 1.1. Polycentric development of Almaty

Goal 1.2. Developed public transport, transport connectivity of polycenters and the city core

Goal 1.3. Improving the quality of services in the housing and utilities sector

II. Sustainable economic growth

Goal 2.1. Development of high-tech and "clean" production

Goal 2.2. Development of creative industries

Goal 2.3. Export of tourist services

III. Controlled urbanization

Goal 3.1. Integration of public transport within the Almaty agglomeration

Goal 3.2. Unified system for the collection and disposal of solid waste in the agglomeration

IV. Social sustainability and stability

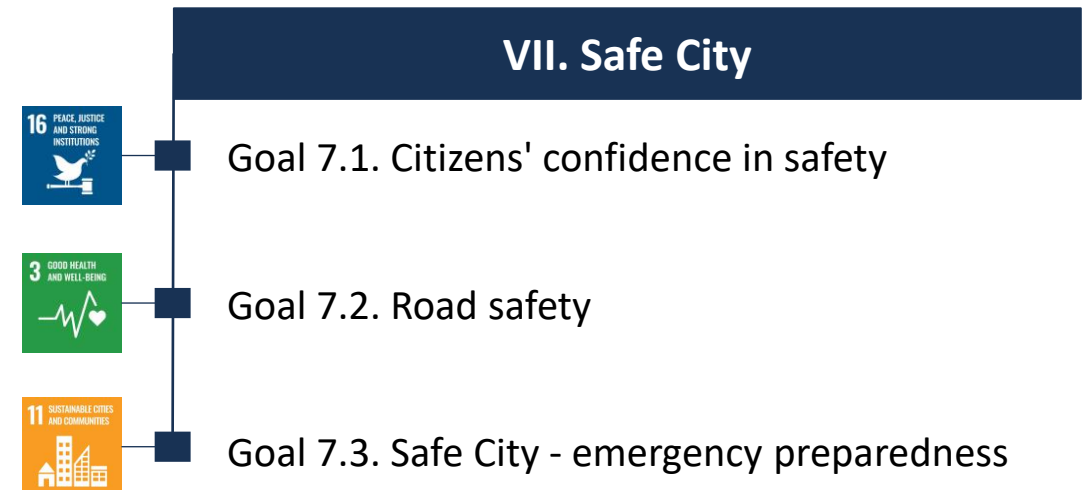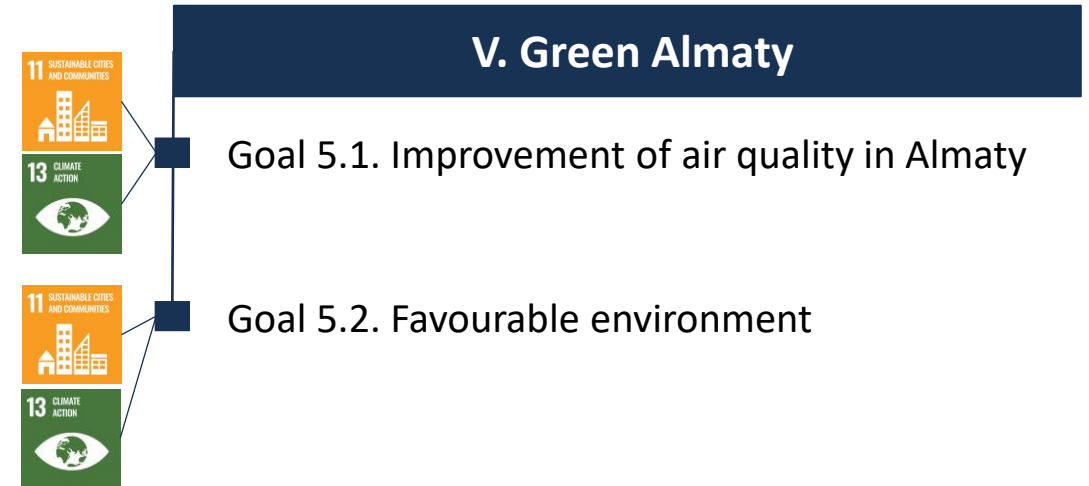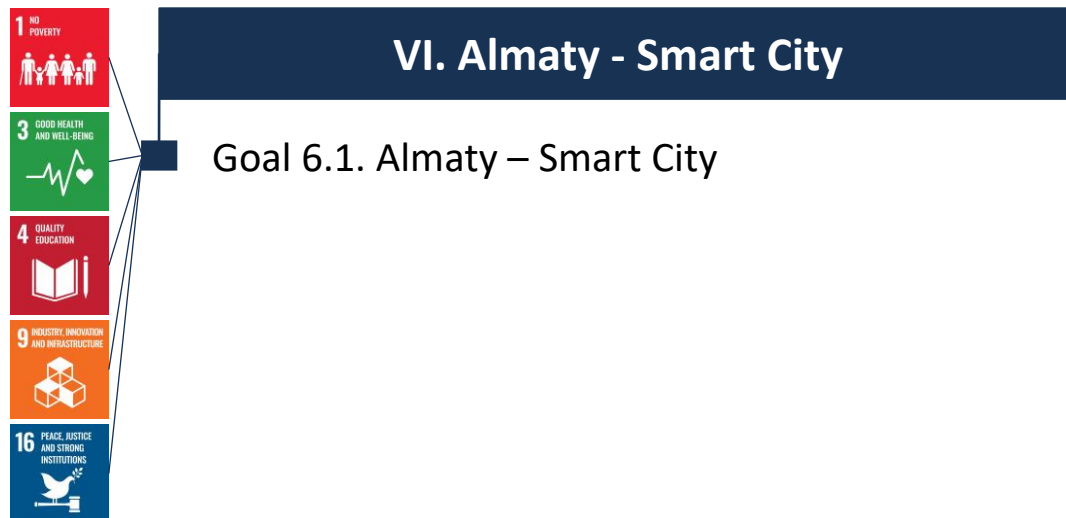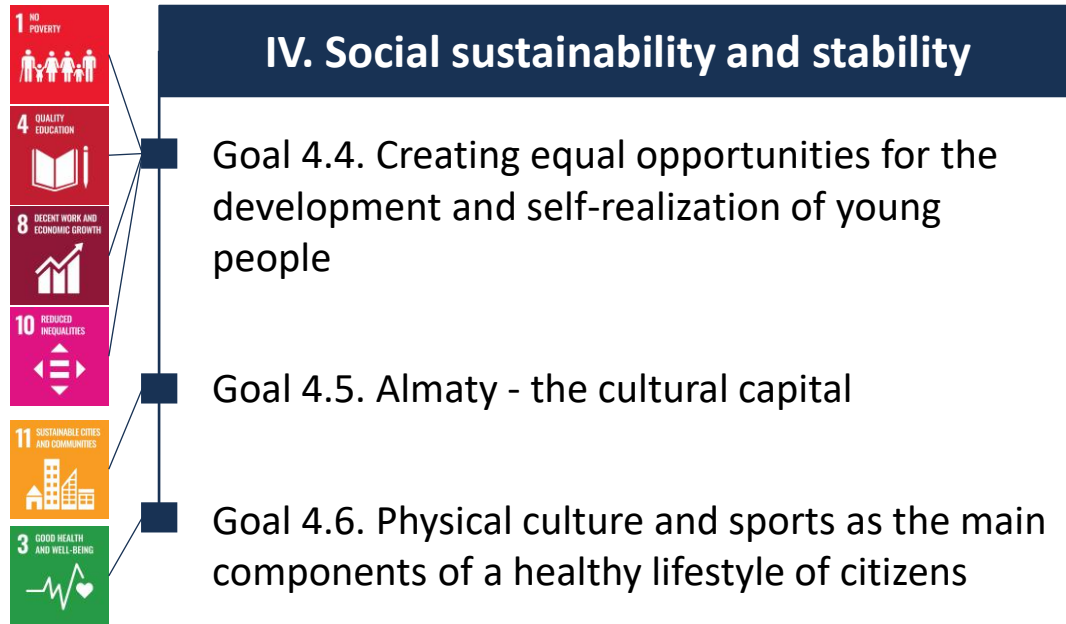Goal 4.1. Creating an inclusive environment in Almaty

Goal 4.2. Quality education

Goal 4.3. Affordable and high-quality medical services for all

4

LINKING THE PROGRAM'S GOALS TO THE UN SDGS

IV. Social sustainability and stability

Goal 4.4. Creating equal opportunities for the development and self-realization of young people

Goal 4.5. Almaty - the cultural capital

Goal 4.6. Physical culture and sports as the main components of a healthy lifestyle of citizens

V. Green Almaty

Goal 5.1. Improvement of air quality in Almaty

Goal 5.2. Favourable environment

VI. Almaty - Smart City

Goal 6.1. Almaty – Smart City

VII. Safe City

Goal 7.1. Citizens' confidence in safety

Goal 7.2. Road safety

Goal 7.3. Safe City - emergency preparedness

THE MOST SIGNIFICANT MEGATRENDS IN URBAN DEVELOPMENT

SUSTAINABLE URBAN DEVELOPMENT

INVOLVEMENT OF CITY RESIDENTS IN THE DECISION-MAKING PROCESS, CO-CREATION

**"SMART CITY", DATA ANALYTICS**

CIRCULAR ECONOMY

INNOVATION IN LOCAL GOVERNANCE

POLYCENTRIC DEVELOPMENT OF ALMATY

Each residential area should provide residents with everything they need within walking distance, making it possible to stimulate cycling and pedestrian traffic. All parts of the city should be connected by accessible public transport

• **"North"** – removal of production facilities and markets with redevelopment of liberated territories, new territories for recreation and landscaping (along the BAK, Baum grove), developed service sector

• **"Eastern Gate"** – logistics hub and exhibition and entertainment center in the airport area, medicine, pharmaceuticals

• **"Historical Center"** – tourism, developed service sector

• **"West"** – large industrial enterprises, transport and logistics hub

• **"Southwest"** – mini-industrial parks, trade, logistics
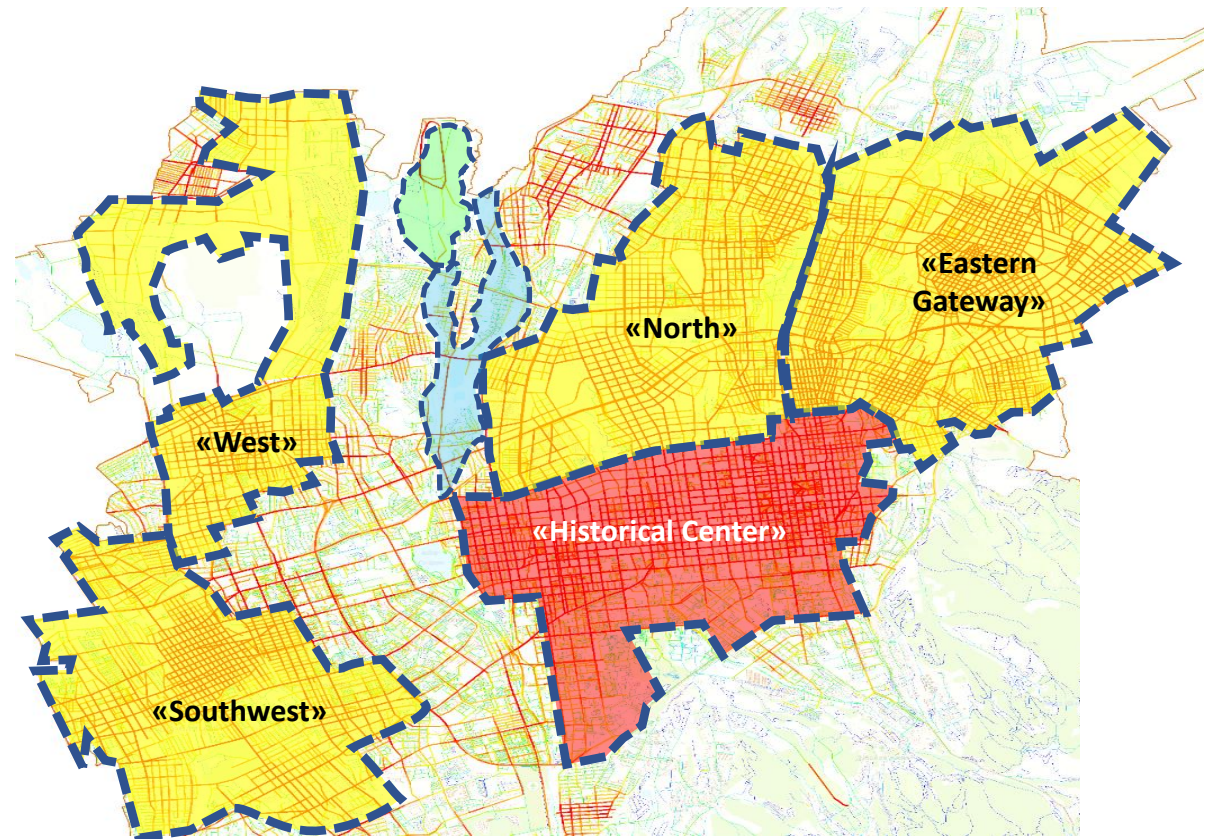
By 2030, it is planned to complete the formation of the structure of polycenters, taking into account economic specialization

DEVELOPMENT OF PUBLIC TRANSPORT

2023

- **1,150 buses** were purchased, including **550 units** private carriers
- For the first time in **11 years**, the **trolleybus fleet** was updated by **100 units**

2024

- It is planned to purchase **1,000 buses**, including **400 units** private carriers, as well as **100 electric buses**
- It is planned to purchase **100 trolleybuses**
- A **ban** on the purchase of **diesel buses** is being introduced

> **Reducing harmful emissions through the development and greening of public transport: carbon dioxide (CO2) – by 32%, nitrogen dioxide (NO2) – by 53%**

DEVELOPMENT OF PUBLIC TRANSPORT

Active work is underway to form the **city's Transport Framework** in order to transition to an effective and sustainable model of urban mobility that meets the requirements of a modern metropolis

- The basis of the **Transport Framework** is **high-speed public transport** (BRT, LRT, Metro)

- Ensuring **transport connectivity** of **5 polycenters** provided for in the General Plan of Almaty until 2040

- Work is underway to ensure **transport connectivity** of the **city** with the **Almaty agglomeration**

- Change in trip ratio:
  - current: **32%** - by PT, **68%** - by personal car
  - by **2030**: **54%** - by PT, **46%** - by personal car

- Increase in the **speed of public transport** in the general flow during peak hours from **15 km/h** to **25 km/h**

Increase in the share of trips by public transport from 32% to 54% - from 1.4 million in 2023 to 3 million trips by 2030

Dynamics of Passenger Traffic Growth
(Buses, Trolleybuses)
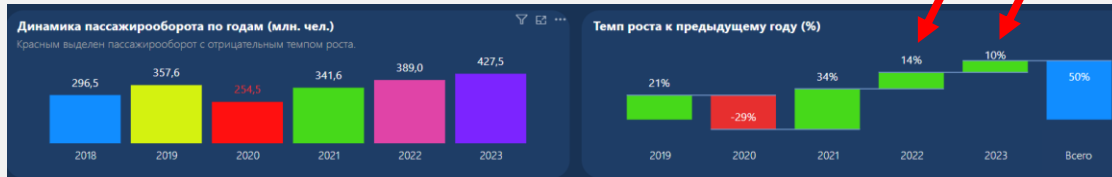
Dynamics of Passenger Traffic Growth
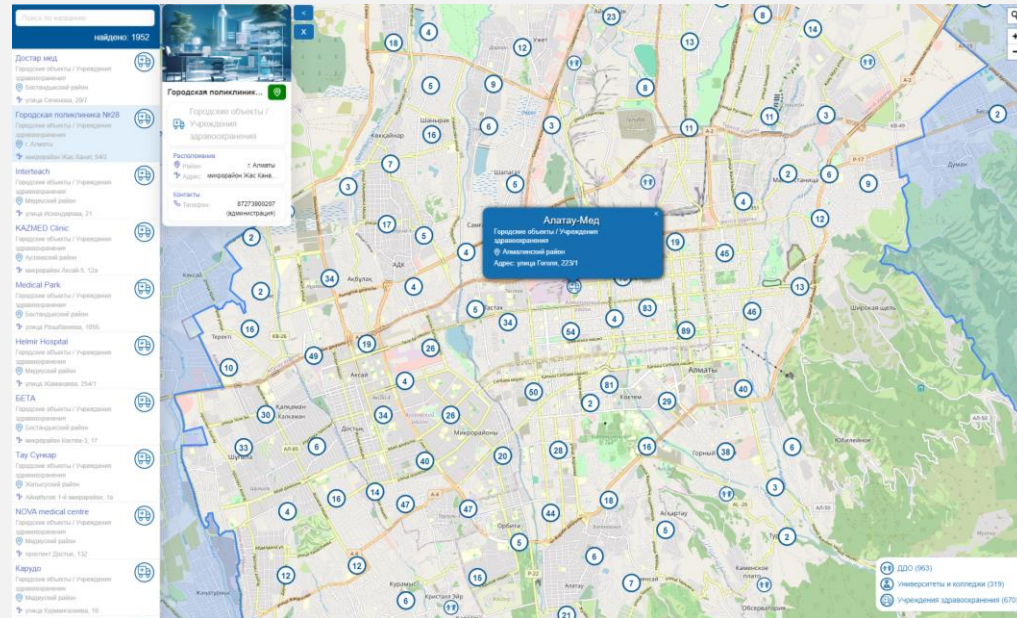(Metro)

Accessibility of Stops
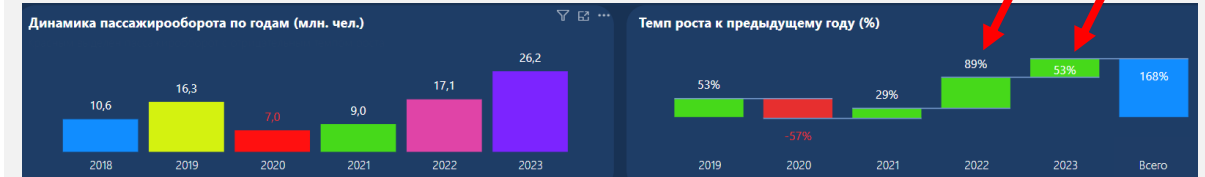
Accessibility of Stations
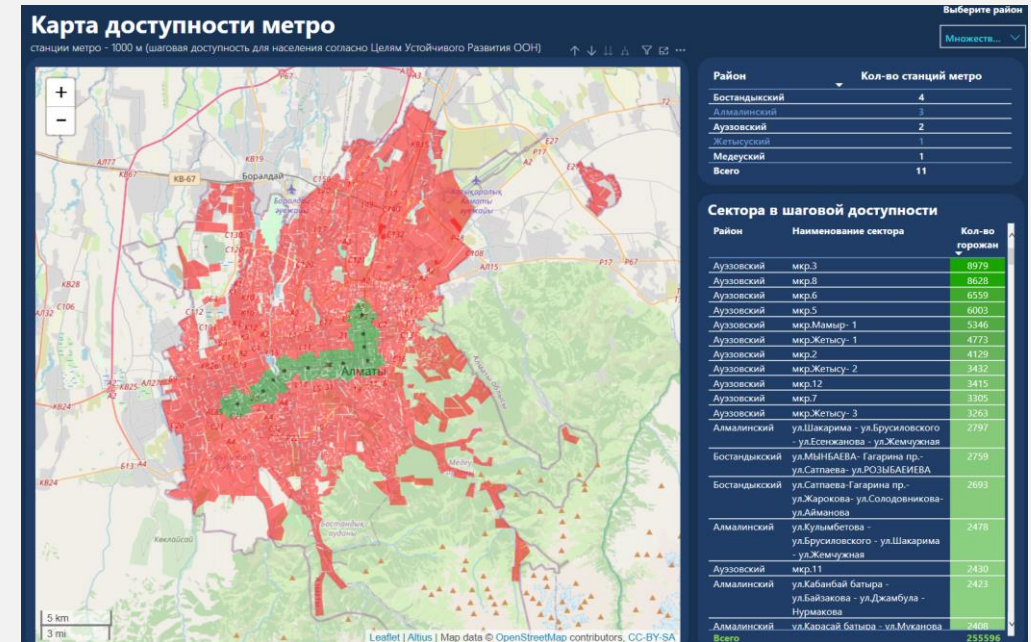
Bus and trolleybus stop coverage is excellent, and future plans include enhancing rapid transport; public transport traffic grew by **50%**, with metro usage up **168%**.
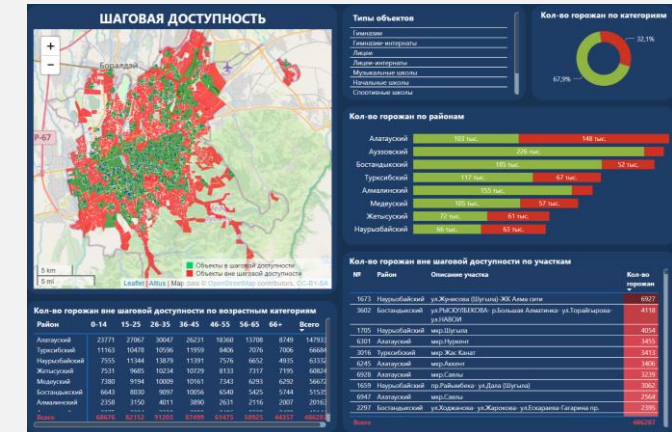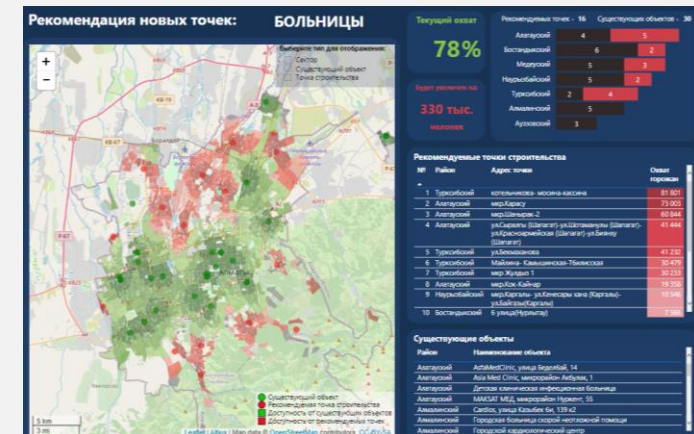
SOCIAL FACILITIES

«Infrastructure» module

The analytics provide city management with:

- Geo-spatial analysis of social objects beyond walking distance
- Evaluation of current social object locations and their provision for the population
- Assessment of population volume and areas lacking accessibility
- Recommendations for new social object placements for informed decision-making
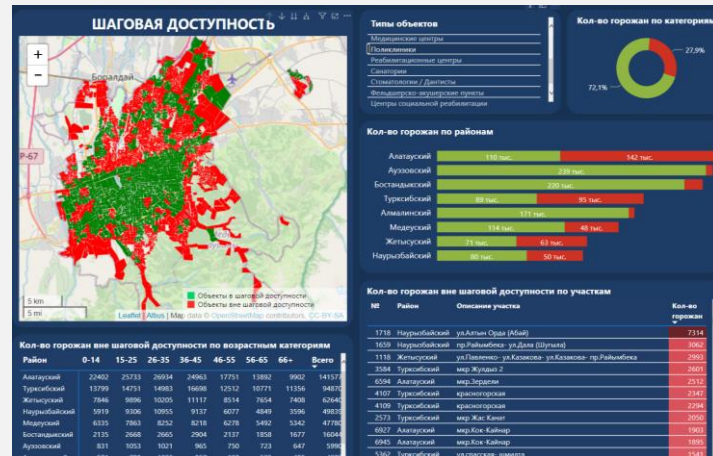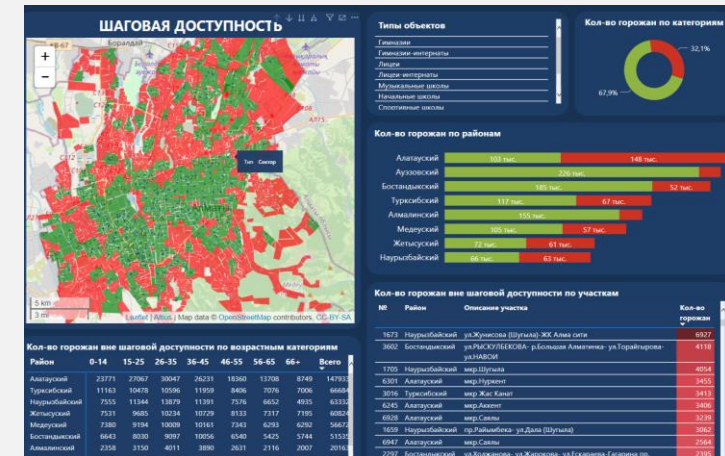
Analytics

Recommendations

With this module, it is possible to analyze any social object and perform comprehensive analytics.
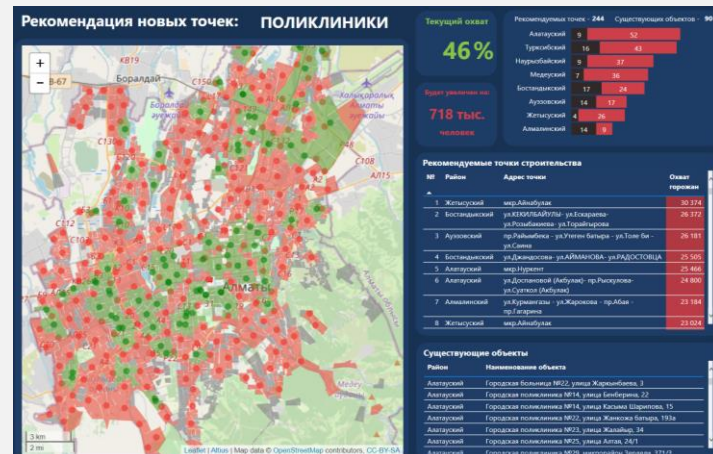
WALKABILITY OF SOCIAL FACILITIES

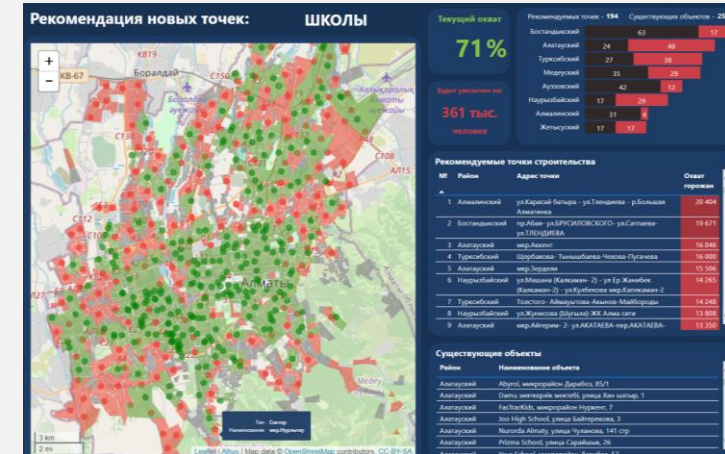**Public Health Clinics.** Current status.

Schools. Current status.

Recommendations for new construction locations.

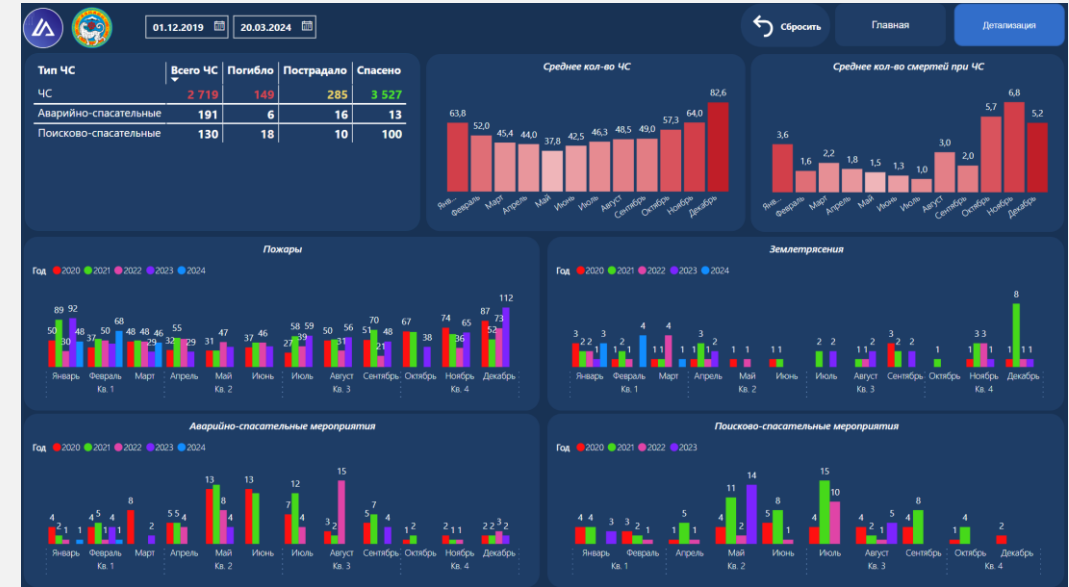**Recommendations for new construction locations.**

The Situation Centre enables continuous monitoring and improvement through data-driven decision-making.

SAFETY : «DEPARTMENT OF EMERGENCY SITUATIONS» MODULE

Online notification of emergency situations
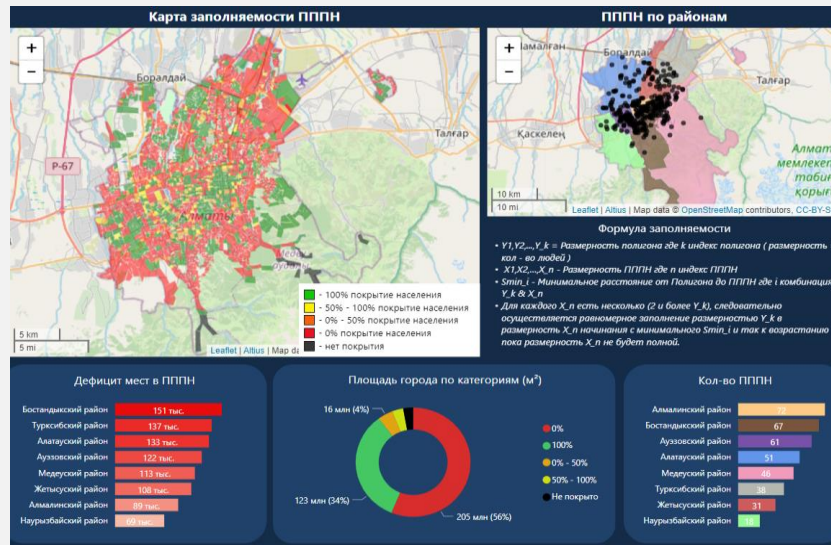
Monitoring of emergency situations

The module displays the following on the map:

- Incidents, including their location and time of occurrence;
- Action Plans for ongoing emergencies with implementation status
- Information on emergencies, including casualties;
- Analysis of emergency and search-and-rescue operations, assessing effectiveness and identifying vulnerabilities;
- Monthly analysis of incidents (fires, earthquakes, and rescue operations) to identify trends and necessary precautions;
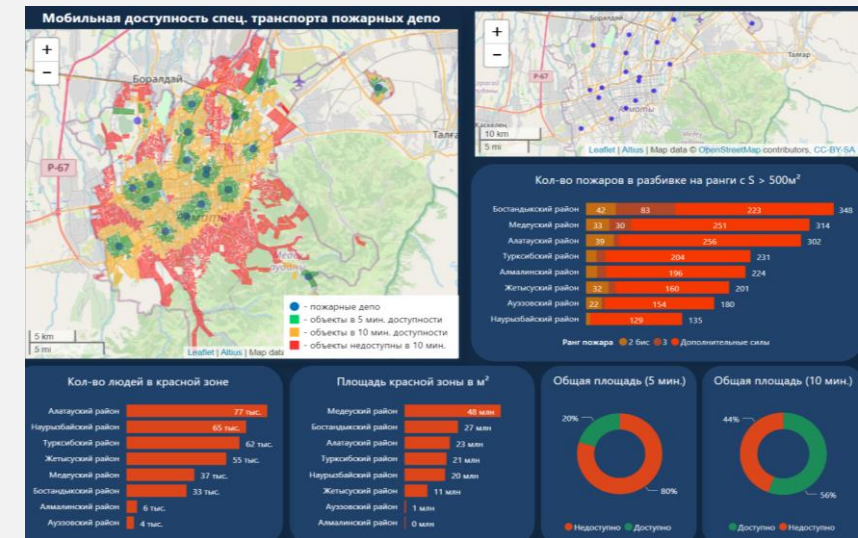
Almaty enhances resilience and optimizations in emergency response and safety through comprehensive monitoring and analysis

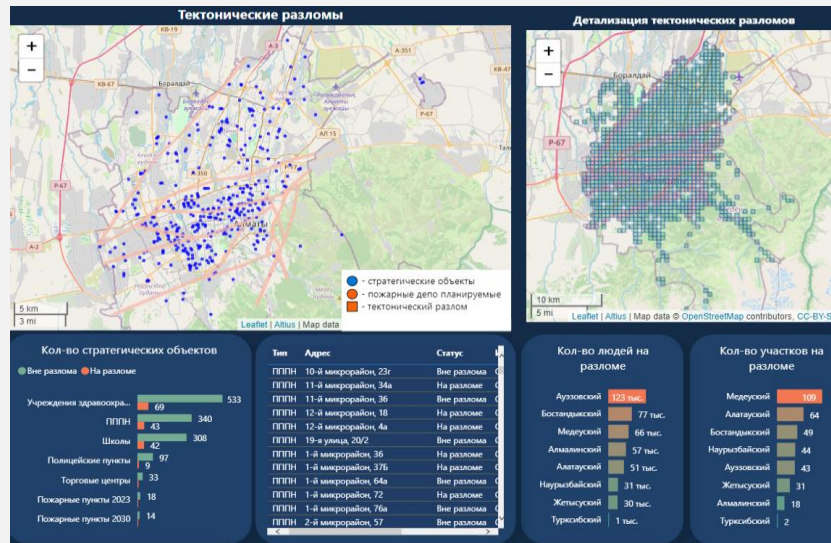# SECURITY: «DEPARTMENT OF EMERGENCY SITUATIONS» ANALYTICS

Map of occupancy rates at gathering points

«Department of Emergency Situations» analytics

Tectonic faults

Analytics displays the following:

- Mobile accessibility of fire brigades during emergencies and fires, including future fire depot plans
- Earthquake statistics and activity analysis
- Accessibility and capacity of population collection points
- Tectonic faults and social facilities within those areas

Thank you for your attention

Himeji, 2024

ALMATY
development centre