

NURAFSHON ECO-SMART CITY

New Administrative City in Tashkent Region

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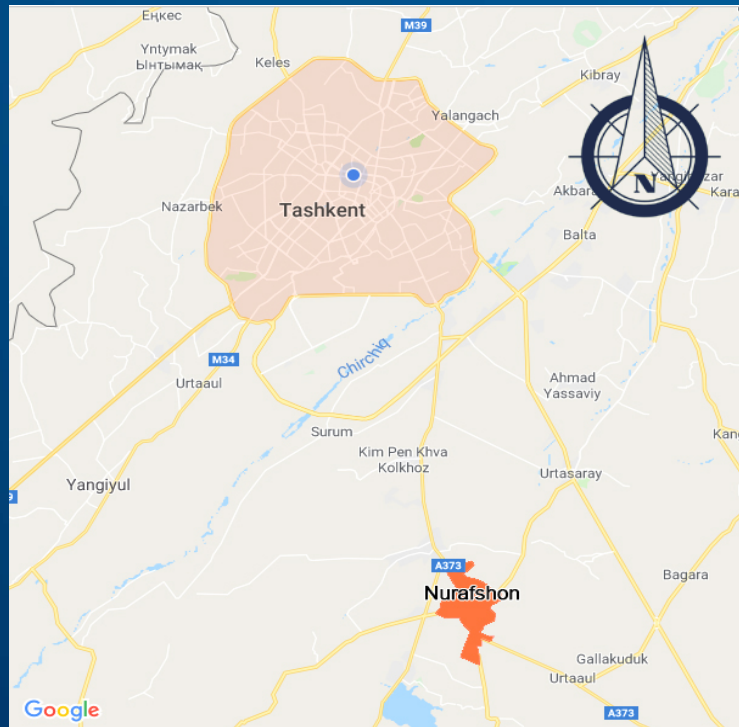
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Project description

Nurafshon is the city of regional submission, administrative center of Tashkent Region, located in Urtachirchik district, 35km far from Tashkent city.



Project description



Total developing area - **246,2 ha**

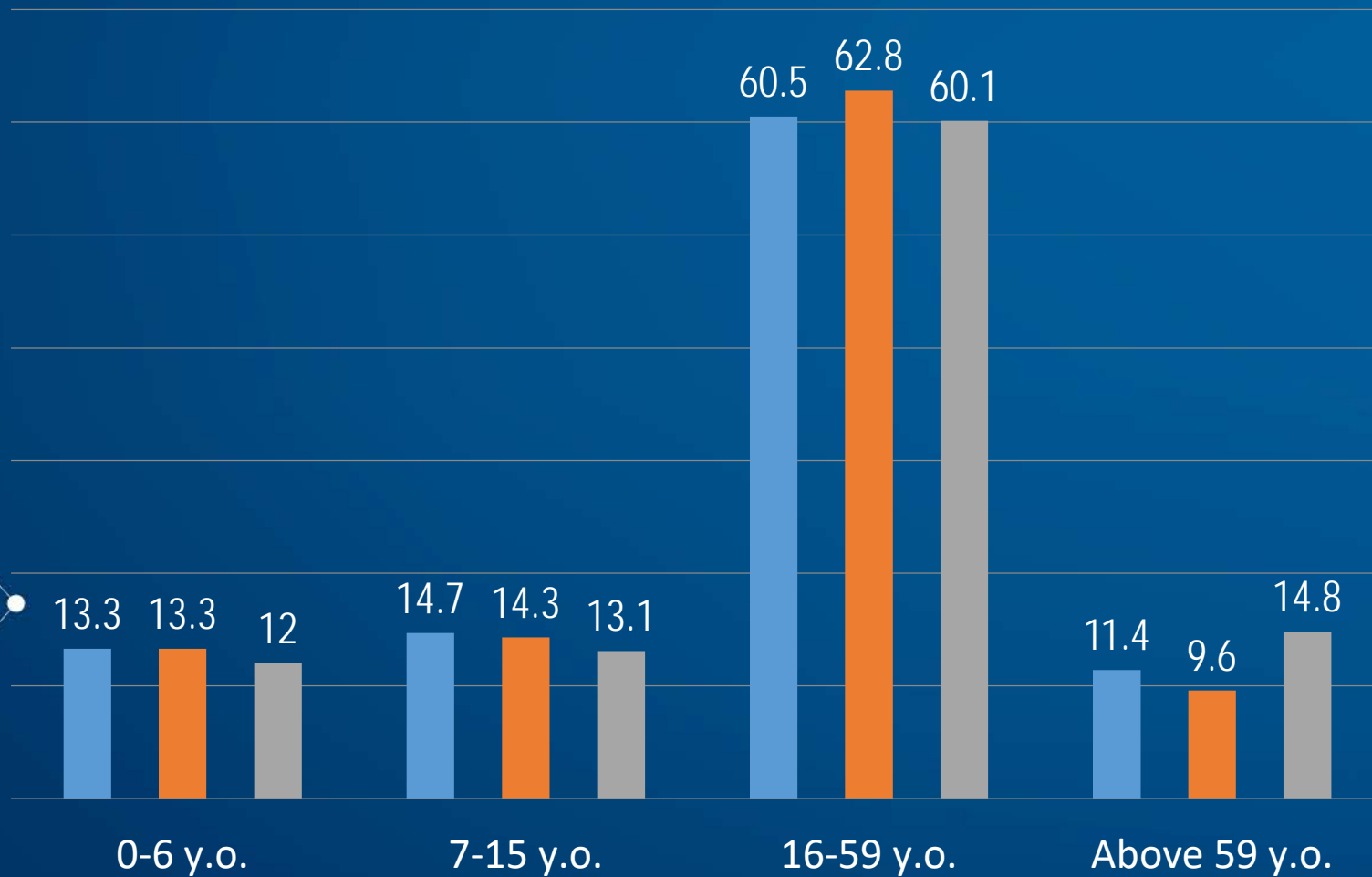
Total build area – **1,27 mln.sq.m.**

Total population – **95,9 thousand p.**

Population in the center – **20 000 p.**

Age structure of the population (%)

■ 2017 ■ 2025 ■ 2035



Project goals and objectives

Goals

- Ensuring the growth of socio-economic potential of the Tashkent region
- Creation of conditions for effective management of economy sectors
- Organization of complex placement of administrative facilities
- Improvement of living conditions

Objectives

- creation of a new administrative city with the most comfortable working and living conditions using SMART technologies

Probable risks from implementing SMART technologies

- Lack of ability to manage emergency situations related to the improper use of SMART technologies by residents and visitors of the city
- A system failure of SMART technologies, which can be caused both by a technological overlay and by external hacking of a system
- The lack of local specialists with experience in servicing and constantly updating smart technologies, especially in emergency situations.

Recommendations aimed at improving the efficiency of implemented smart technologies

- Presentations and training programs for residents on the proper use of smart technologies
- Introduce affordable technologies and proven management
- Prevent duplication of smart technologies functions, their focus and relevance, taking into account the prospects of IT development
- Ensure information security because of the risk presence of information vulnerability

Applying SMART technologies

1. Synergy
2. Energy efficient buildings
3. Roofs with solar panels
4. "Smart lighting" of the streets
5. Green Roofs and Stormwater Management
6. The system of monitoring offenses
7. "Smart roads"
8. Waste Management System
9. Water Management system
10. High-speed bus transport
11. Broadband / High Speed Internet
12. Intelligent traffic management system
13. "Smart Logistics"
14. Bicycle rental
15. E-Government
16. Emergency management and warning system
17. Solar-powered charging stations

Architecture and Urban Planning

The project involves the construction of infrastructure facilities and buildings of volumetric shape with a unique architectural design that have no analogues in the territory of the Republic of Uzbekistan



Architecture and Urban Planning



The project provides for:

- Economy, business and comfort class residential houses with stores on the ground floors - **863.3 thousand sq.m.**
- City hall building, offices - **248.5 thousand sq.m.**
- Commercial real estate - **41.7 thousand sq.m.**
- Sports and entertainment facilities, hotel - **34.4 thousand sq.m.**
- Objects of social infrastructure - **85.5 thousand sq.m.**

Movie



Financial and economic part

Excluding and taking into account the social part

- project payback period - **11 years / 14 years**
- modified internal rate of return - **9.1% / 6.6%**
- internal rate of return - **9.2% / 5.1%**
- discount rate applied at the level of - **9% / 9%**
- discounted cash flow - **9 mln.USD / -177mln.USA**

Mastering capital expenditures:

- The Economy of Uzbekistan - **40%**
- Lender Economy - **60%**

According to the economic efficiency calculations, one unit (USD) of investments is poured into the economy (by the multiplier effect) with two / threefold increased effect.

Social part

- The project carries great social significance for the Tashkent region.
- An estimated 20,000 citizens of the Republic of Uzbekistan are expected to improve living standards.
- During the project implementation period (5 years), it is planned to provide job places for from 4,500 to 6,000 people (builders, engineers, technology specialists, maintenance personnel, and so on).

THANK YOU

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