
YAN POGUTSA

M O S C O W
T R A F F I C
C O N T R O L
C E N T E R
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COMPREHANSIVE PLANNING



As part of my work at the Moscow Traffic Control Center, I provided transport expertise on **more than 200 projects** of territory planning in Moscow to ensure road safety, prioritize public transport and promote sustainable mobility.

With the growth of competencies and the demand for my skills in improving the transport component of infrastructural and territorial projects, **I formed a team** for a more detailed analysis, quality improvement and search for creative solutions.



projects in Moscow with my participation

WEB GIS SOLUTIONS

GIS JS Mapbox Cesium JS Adobe PM

To frame work with a large amount of territorial projects in the metropolis, I have developed several gis web tools based on **mapboxgl**, **deck.gl** and **cesiumjs**.

They made possible visualization of the boundaries of projects, the existing and planned transport framework **from new subway lines, to pedestrian crossings**

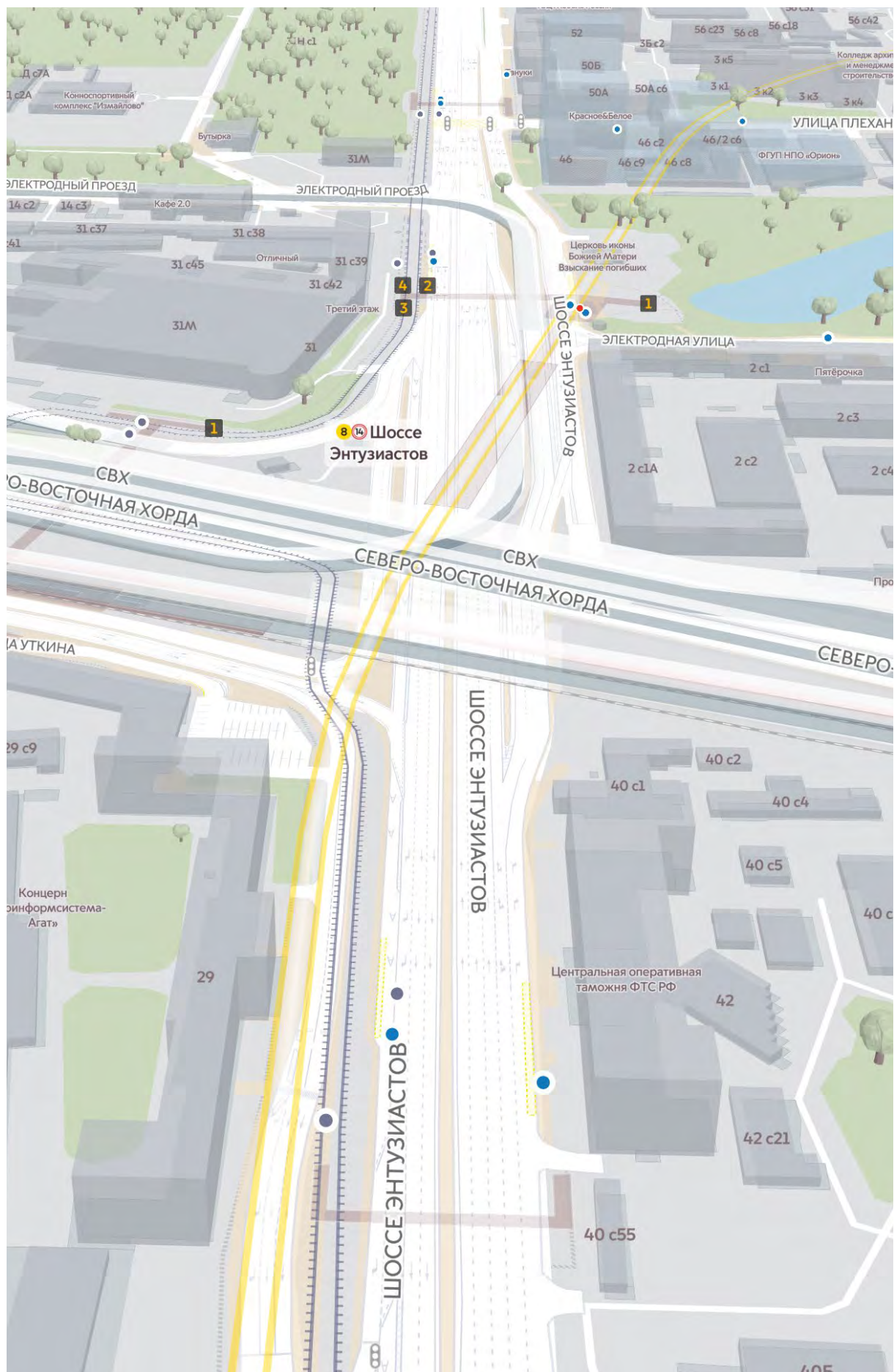
and bus stops with routes displayed.

My product helped to visualize ideas, urban planning and transport context on the fly, improved the quality of transport expertise and teamwork, and served as the **foundation for more than 500 presentations**.

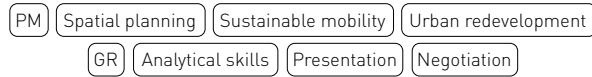


interface of web GIS tool





KEY PROJECT: «THE BIG CITY»



The existing radial-ring structure of Moscow with a high concentration of **business space in the center** and **housing located on the periphery** of the city stimulates «pendulum migration» and high congestion of radial arteries.

This is one of the key urban planning challenges of the city, which it is trying to solve by creating a **polycentric model - new places of urban activity outside the center**.

One of the largest peripheral centers is «The Big City», located in the west of Moscow, where **we predict a rapid growth** in the number of residents (+43%) and jobs (+71%) in the next decade.



development plans in «The Big City»

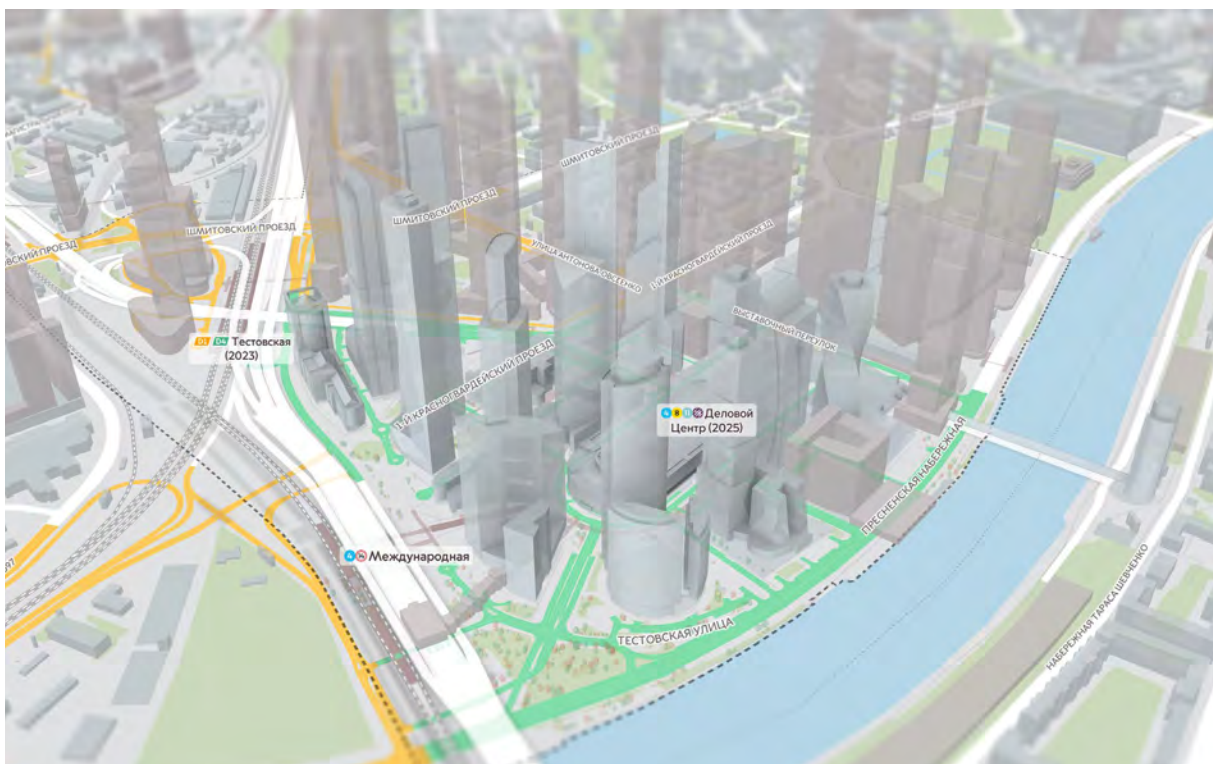
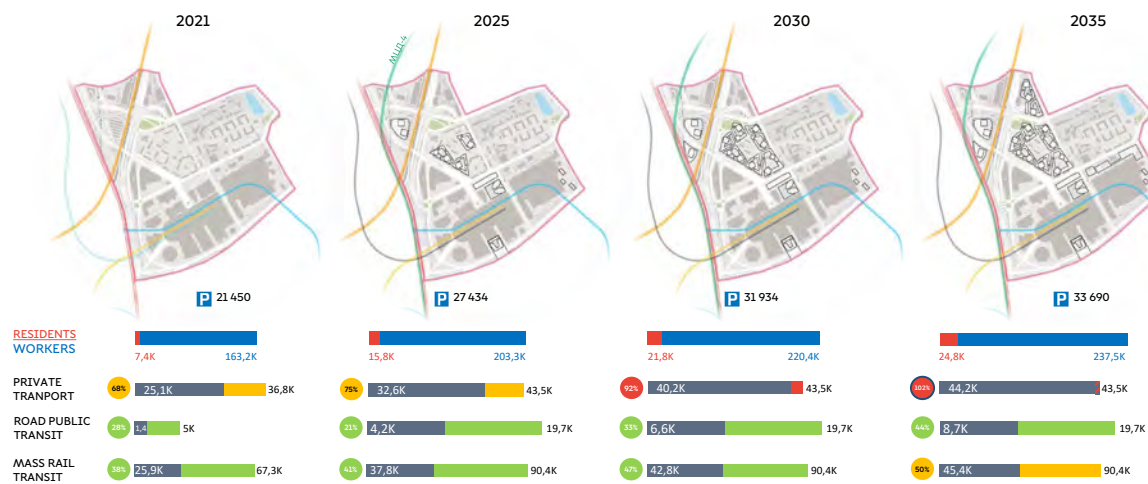
However, the existing plans for **transport infrastructure are not balanced with the development of the urban fabric**, while maintaining the current transport behavior, we predict the **exhaustion of key transport arteries**.

To solve this non-trivial spatial problem, **the city commissioned us to develop a transport master plan** for this territory, with the creation of **sustainable mobility**, increasing the **attractiveness of public transport and stimulating active mobility**.



The key area of this territory is the existing **business center «Moscow International Business Center»** and adjacent neighborhoods, where **the greatest concentration of business activity is predicted.**

For several years, I have been leading the development of the transport concept of this territory using our most advanced practices and approaches: data-driven design, traffic flow simulation, modern urban design solutions, ensuring pedestrian connectivity not only in the plane, but also creating **a barrier-free underground pedestrian space** of the business center. The implementation of our transport master plan will make possible to increase the attractiveness of public transport, pedestrian movements and sustainable mobility, and also reduce the modal share of car commutes.



transport masterplan of Moscow International Business Center

TACTICAL TRANSPORT URBANISM: «MOSCOW-CITY»

PM Spatial planning Sustainable mobility Negotiation
GR Analytical skills Presentation AutoCAD Adobe Microsoft Office



The space of the Moscow City business center **is focused on moving and parked cars**, the adjacent streets are **suffocated by traffic jams** during rush hours, it is impossible to move comfortably and safely on foot or bicycle.



streets of Moscow International Business Center are congested and unsafe



narrow sidewalks with high demand



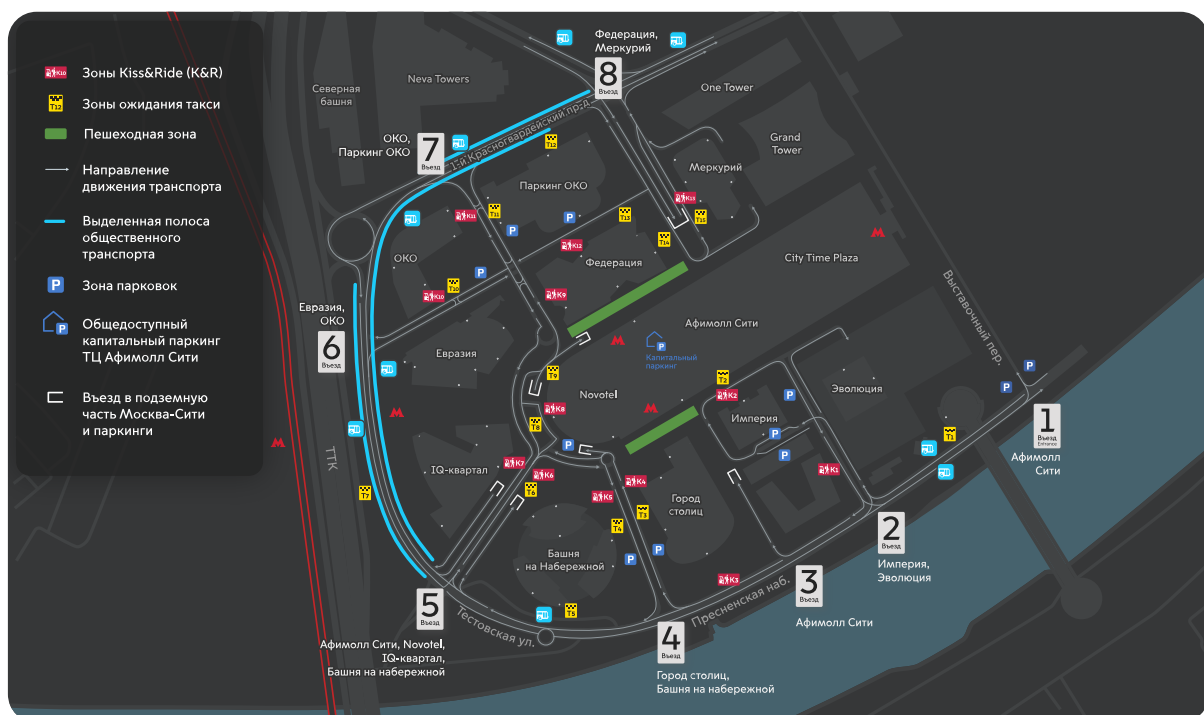
manual traffic control during rush hour



infrastructure is insufficient for pedestrians

As part of the strategic work on «The Big City», in 2021 we implemented part of the **solutions** of the transport masterplan on the territory of the «Moscow International Business Center» in a test mode:

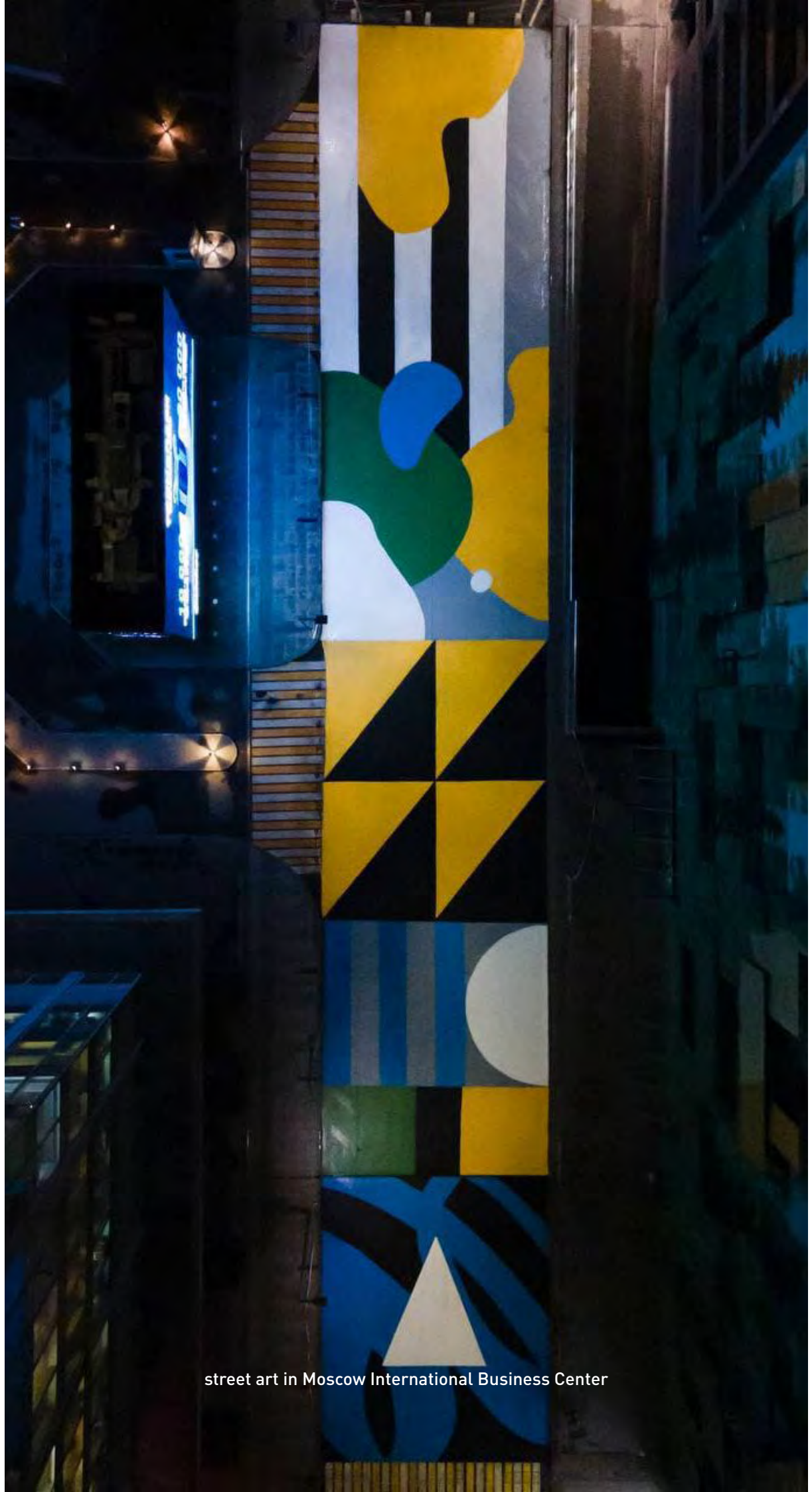
1. **Excluded transit traffic** on the territory;
2. **Dedicated lanes for public transport**;
3. **Reduced** the number of **parking lots**;
4. **Created taxi and kiss&ride zones** at each point of attraction;
5. Organized **pedestrian zones** without cars in the most popular destinations;
6. Introduced a **single wayfinding** system for orientation in the territory.



new traffic organization implemented in 2021



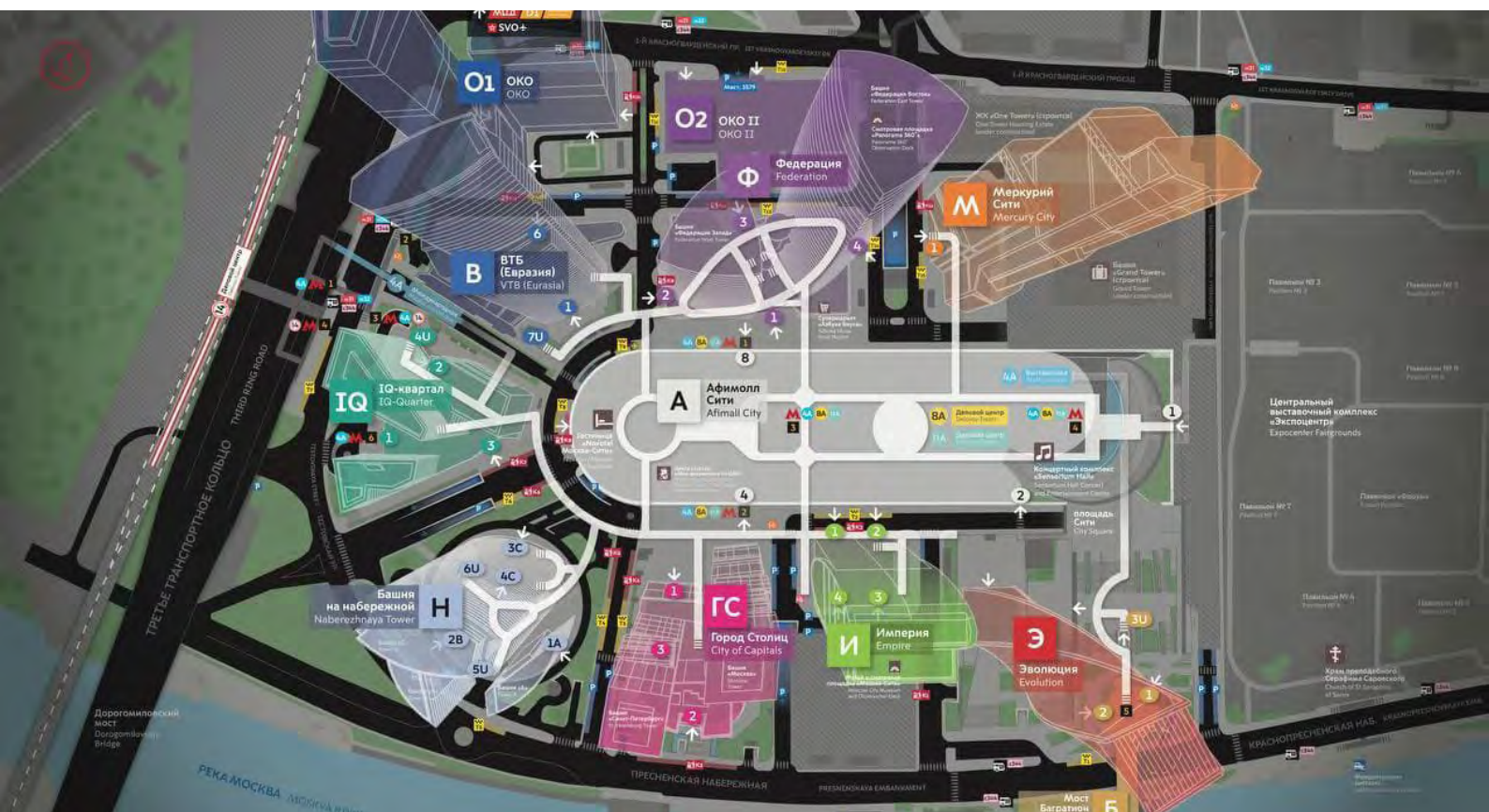
After the launch of the project, **passenger traffic on buses doubled**, **pedestrian spaces filled with activity**: temporary expositions and street art appeared, the attractiveness of the territory improved.



street art in Moscow International Business Center



new taxi and kiss&ride zones near every tower



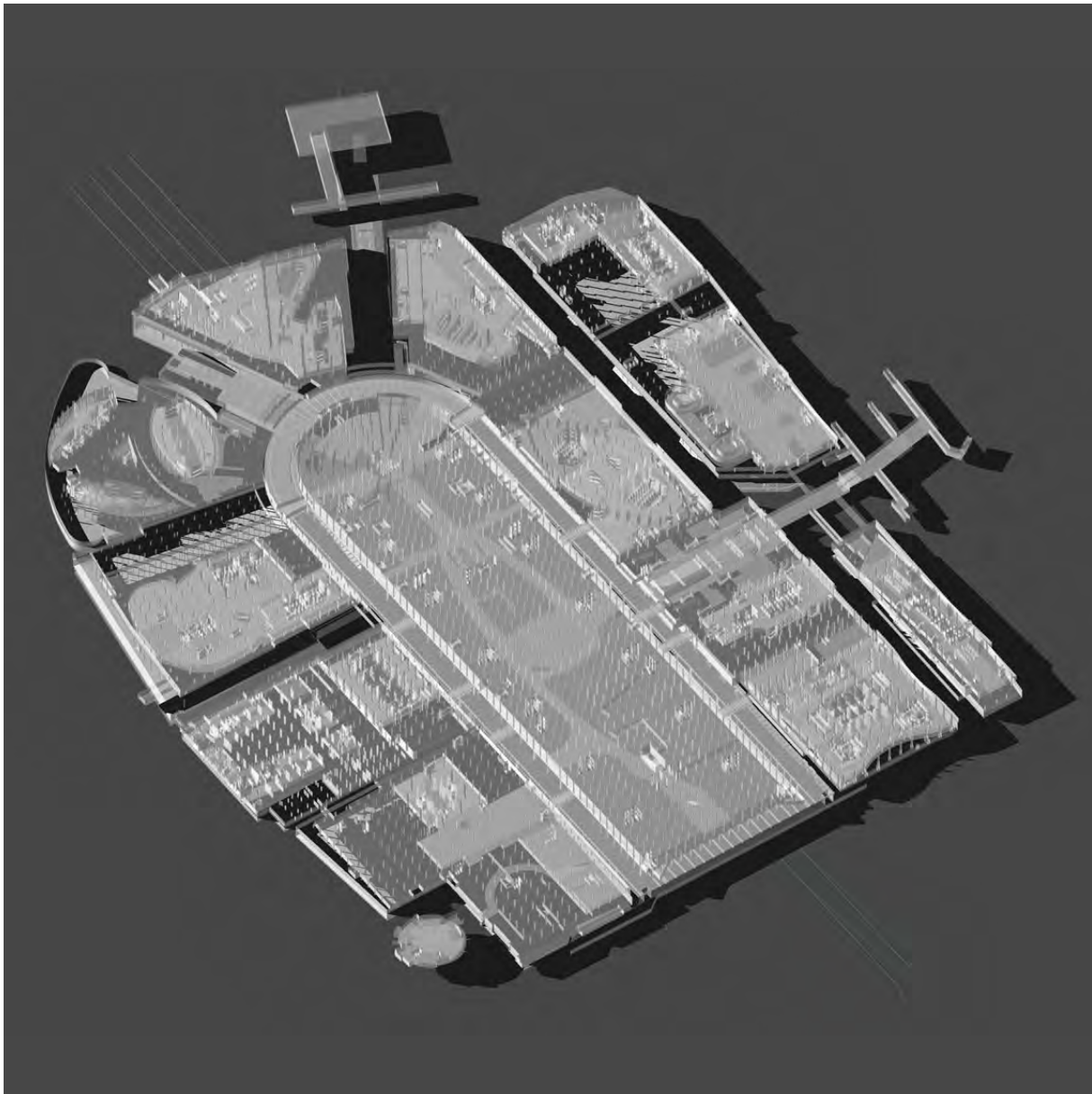
wayfinding concept for Moscow International Business Center

SEAMLESS «MOSCOW-CITY» UNDERGROUND

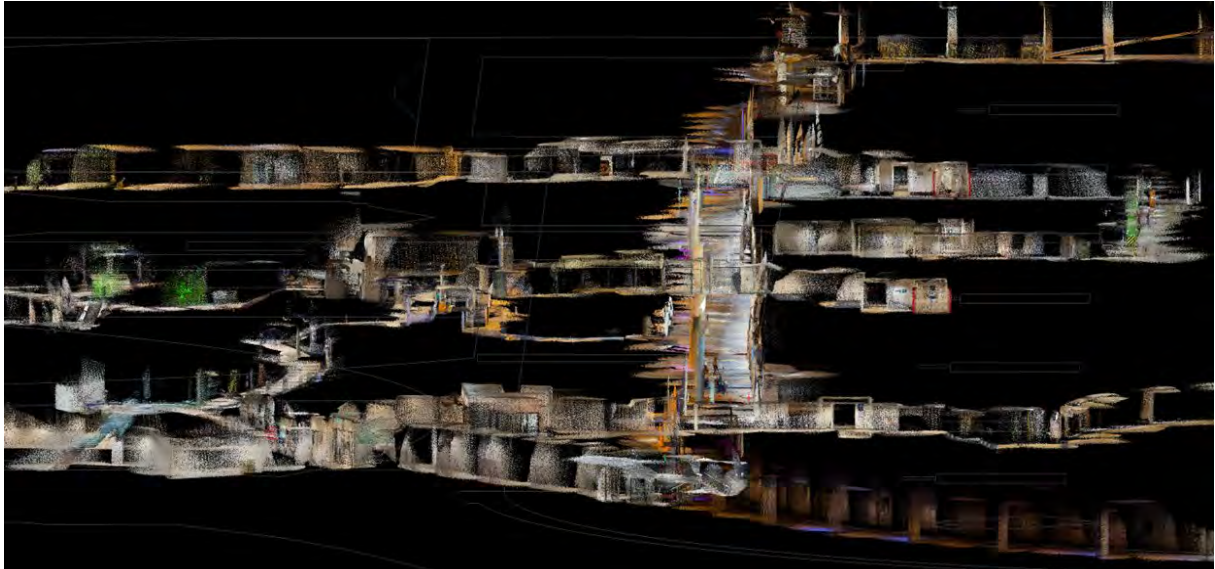
GR PM Negotiation Presentation Spatial planning
Adobe Microsoft Office GIS MapBox SketchUp



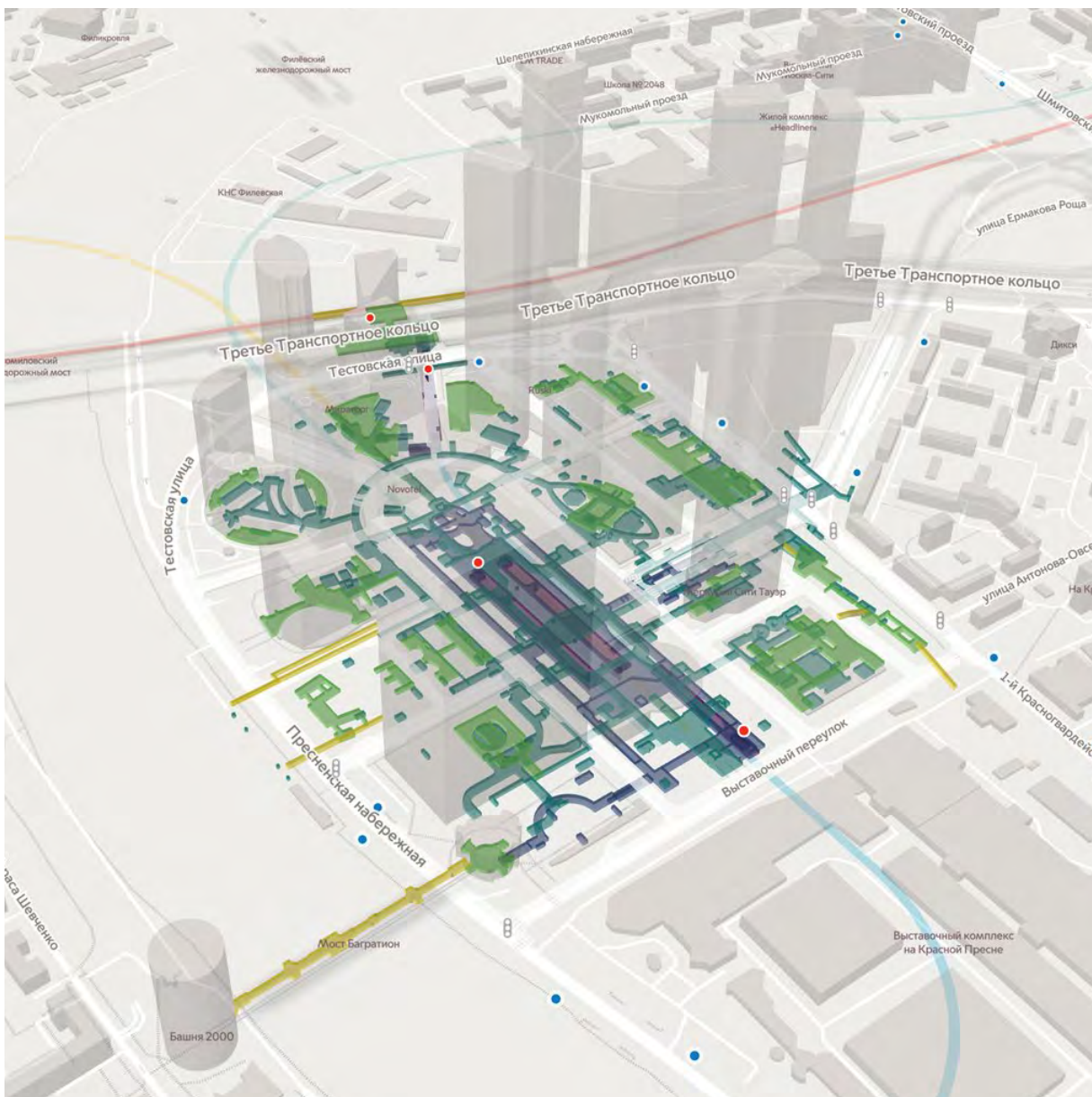
To plan the vertical pedestrian connectivity of Moscow International Business Center, we made a **lidar survey of the underground spaces**, on the basis of which we created a **3D model of the underground part of the business center**, developed a roadmap for launching projects and arranged with the Moscow Government a **barrier-free regime in the underground territory**.



3d model of the Moscow International Business Center underground



lidar survey of the Moscow International Business Center underground



underground pedestrian connections

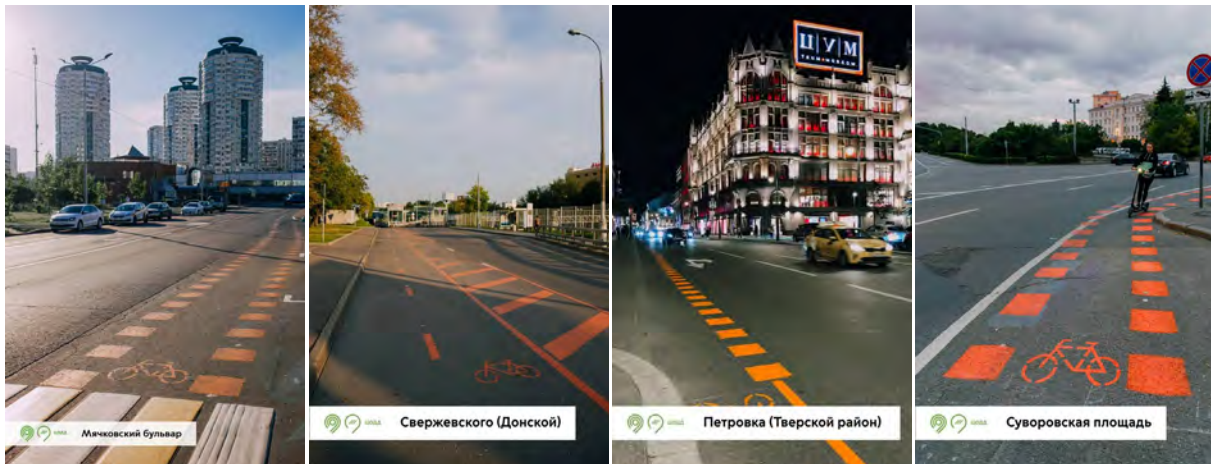
CROWDSOURCING: «THE MARATHON OF IDEAS»

GR PM Negotiation Presentation
Microsoft Office GIS MapBox



In 2020, Moscow faced a **pandemic** of coronavirus infection. In order to encourage the **observance of social distance** for everyone who is on the street, we decided to create **new pedestrian zones** in the city, **expand sidewalks** in the most popular places for pedestrians - near subway stations and the main places of attraction of people. We have created **new pedestrian crossings** and reconfigured traffic lights to prioritize pedestrians.

To increase the demand for active mobility, we introduced a new standard – **pop-up bike lanes**, which we promptly created without changing the geometry of the street, using markings, signs and delineators. Some pop-up bike lanes later became permanent.



pop-up bicycle lanes - 20km created since 2020

In order for our ideas to be in demand and relevant, we conducted a **crowdsourcing campaign «Marathon of Ideas»** in 2020 and 2021, where we collected **more than 4,000** proposals from residents to improve the urban environment and mobility.

I led the **«Marathon of Ideas» project** from creating a platform for collecting opinions of citizens to systematization and processing of received appeals and implementation. To date, **300 events have been executed**, the project has received positive responses and allowed to **quickly respond to the threat to the safety of residents**.

«MTCC builds pedestrian crossings where it is important and convenient! Good job. It's great to see how their inner mood and the attitude of the citizens towards them are changing for the better. We all learn and it's great when Department of Transport does it too.»


<https://t.me/c/1093239221/3691>

Alexey Radchenko, journalist, urbanist

Марафон идей 2.0

жители меняют город

«Каждый день вы выходите из дома и следуете привычным маршрутом. Именно вы лучше знаете, как сделать ваш путь удобнее. Расскажите нам об этом. Присылайте свои идеи — вместе сделаем Москву доступнее для каждого»




Максим Ликсутов
Заместитель Мэра Москвы по вопросам транспорта, руководитель Департамента транспорта и развития дорожно-транспортной инфраструктуры города Москвы

Пожалуйста, выберите тему обращения и укажите детали
Одно обращение — один адрес

Рельсовый транспорт	Наземный транспорт	Дорожное движение	Краткосрочные сервисы аренды
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Пожалуйста, укажите точку на карте, кликнув по ней. Это поможет нам быстрее рассмотреть вашу идею.

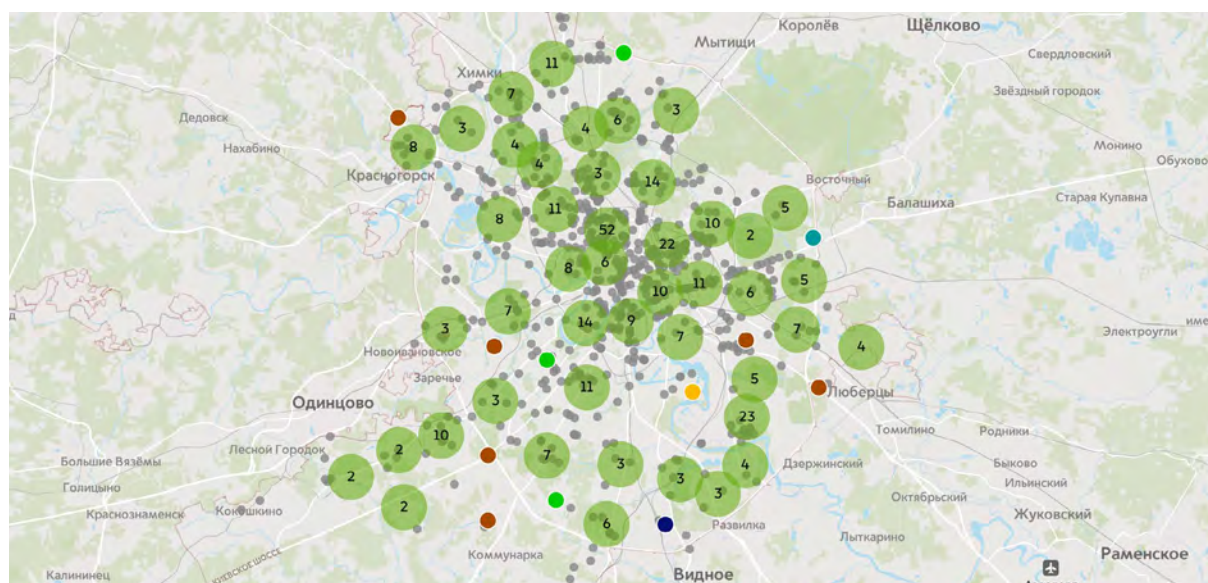


Адрес
Вы можете просто указать точку на карте

Адрес объекта

Уточните проблему
☐ Метрополитен

«Marathon of ideas - citizens change the city» crowdsourcing portal



map of the completed crowdsourcing requests

INFRASTRUCTURE FOR ACTIVE MOBILITY: BICYCLE BRIDGES

GR PM Negotiation Presentation Spatial planning
Adobe Microsoft Office GIS AutoCAD SketchUp

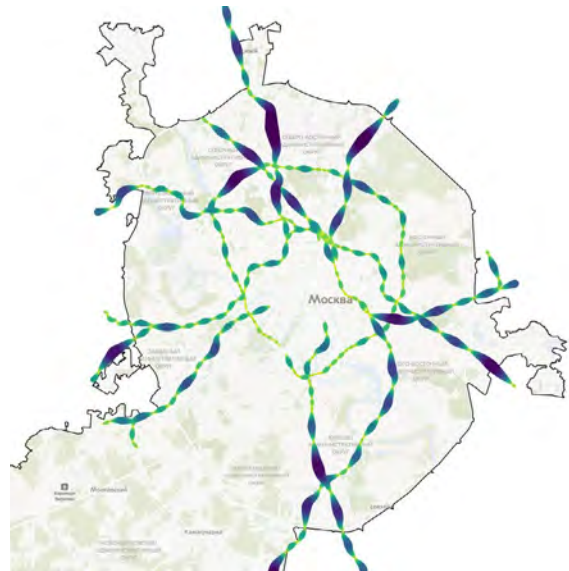
One of the key factors in the development of alternative mobility in Moscow is the **creation of convenient infrastructure**. The urban fabric is cut into sectors by railway lines, which are often **impossible to safely and comfortably cross by bicycle**.

The existing practice of building pedestrian bridges over such seams in the urban fabric **does not allow comfortable cycling**, unreliable elevators are built instead of ramps, covered structures look bulky and spoil the architectural appearance of the city.

The relevance of the bicycle bridges is confirmed by **a petition** launched in 2019 which has gained almost 1,000 signatures (<https://podpishi.org/mcd>).



existing pedestrian bridge on Svobody street, Moscow - bad practice for cyclists



gaps between pedestrian & cycling connections

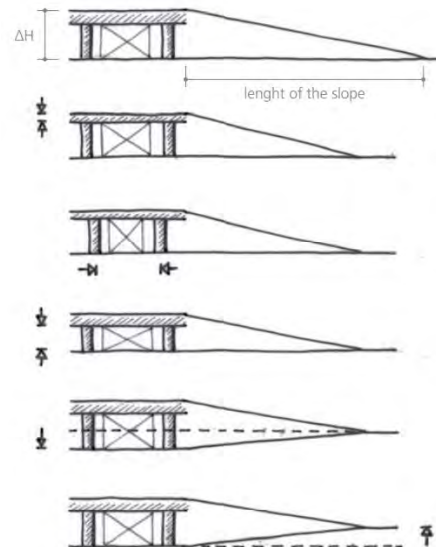
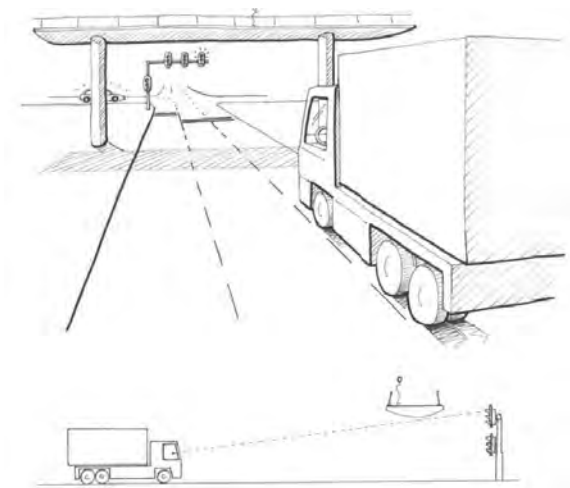
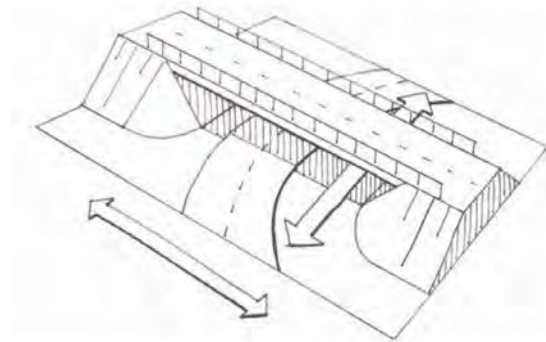
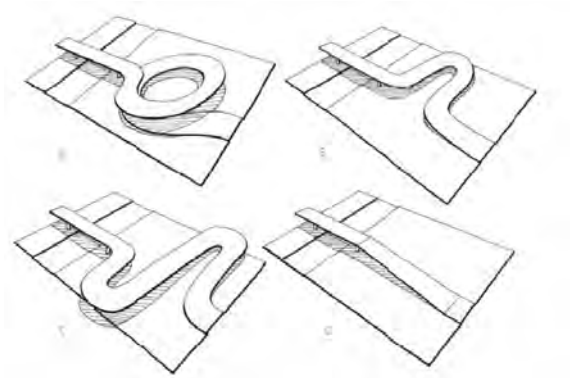


early design of a bridge across a railway



bicycle bridge concept by DoT

Based on world experience, I have developed technical requirements for the barrier-free infrastructure for cyclists, several projects have been developed in the city.



bicycle bridge project: Kolomenskaya str
construction: 2024



bicycle bridge project: Yauza river
construction: 2025



