



ADVANCING
PUBLIC
TRANSPORT

UITP Iran Webinar on Covid-19



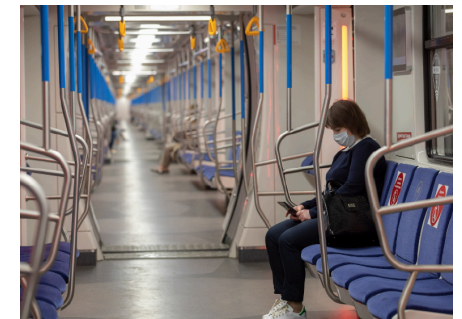
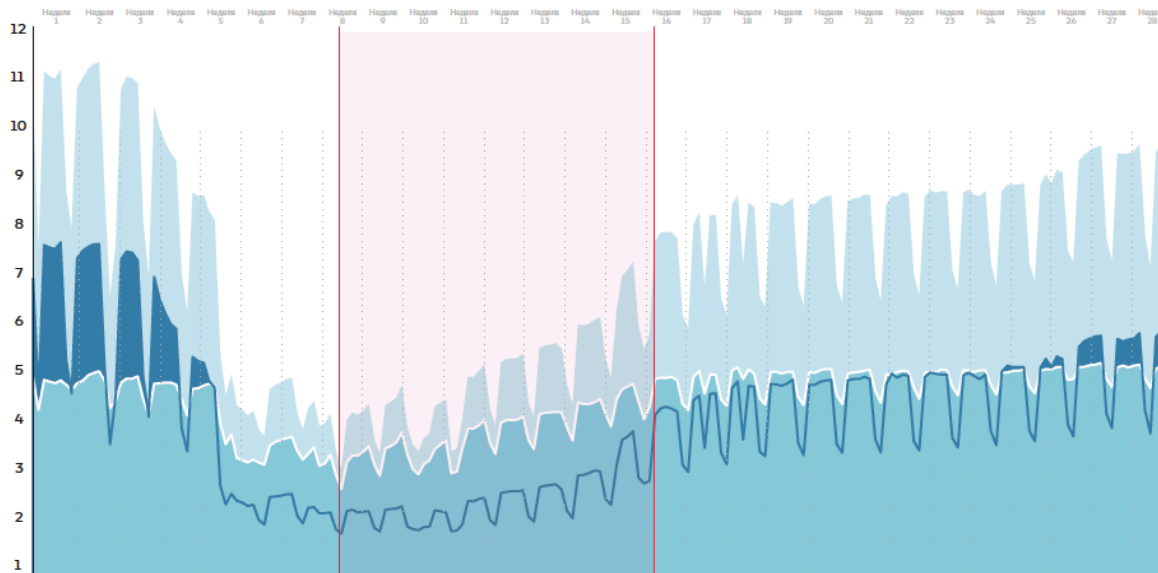
Transport
against virus



Moscow PT – Covid19

The number of passengers taking public transport has significantly dropped since the start of the pandemic

- The number of unique public transport passengers, mln pass.
- Number of unique people travelling by personal vehicles, mln people.
- Total number of unique people travelling by public transport and personal vehicles, mln pass.
- Digital permit control system validity period



Comparison of measures taken in Moscow and other world megapolises

	Moscow	Beijin	Shanghai	Seoul	Tokyo	Berlin	Madrid	Paris	Lisbon	London	Rome	New York	Delhi	Mumbai	Singapore	Kiev
Extensive disinfection of transport, stations and railway vehicles	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓				
Increased headway, transport schedule changes		✓	✓			✓	✓			✓	✓	✓				
Medical examination for staff, provision with antiseptics, gloves and masks	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Temperature measurement of metro passengers with the use of thermal imaging cameras	✓	✓	✓													✓
No ticket sale by drivers	✓					✓	✓	✓								✓
Changes in ticket payment system (validity period, compensation, cancellation)	✓				✓	✓	✓	✓	✓							
Metro closed													✓	✓		✓

Moscow and other megapolicies

Ridership

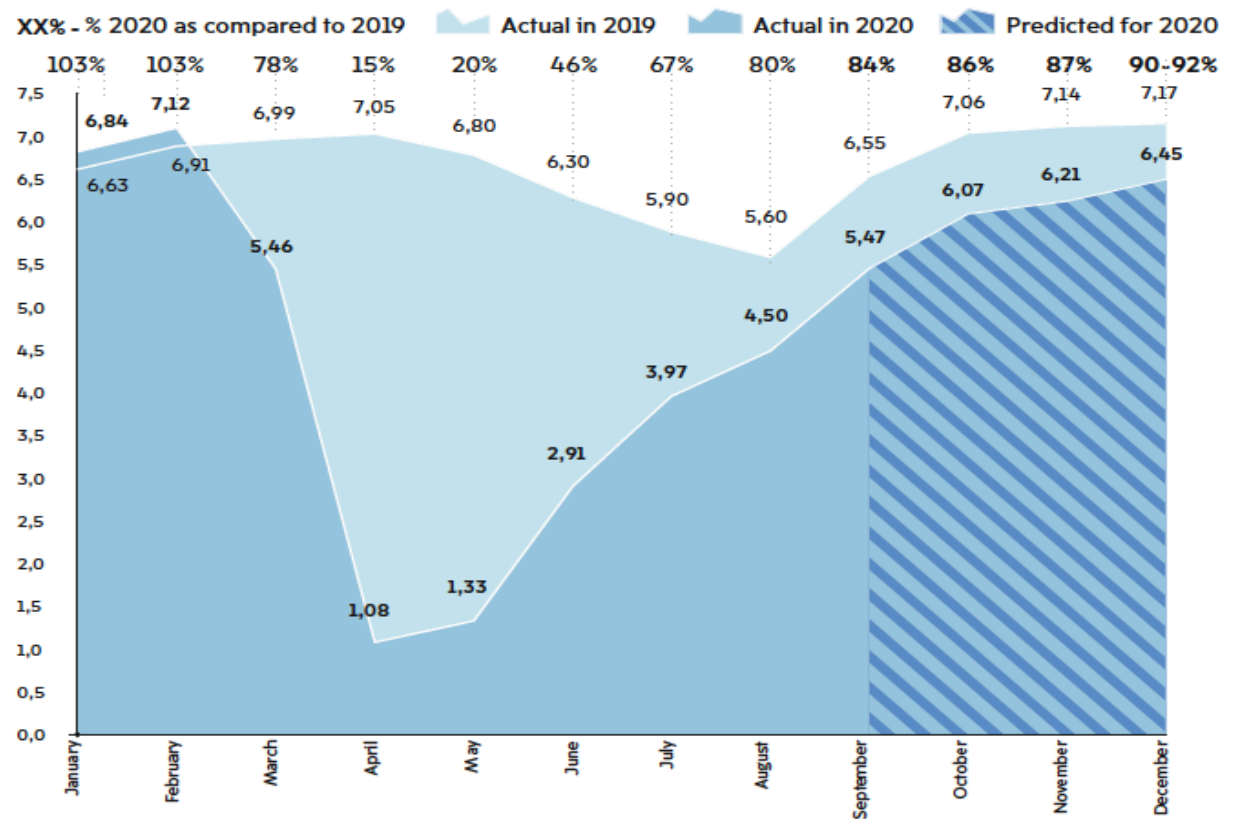
Ridership recovery forecast

Ridership recovery forecast by mode of public transport



Ridership

Actual and predicted number of unique public transport passengers per working day, mln



September 2020 to November 2020

The majority of remote workers are expected to come back to habitual working places.

November 2020 to March 2021

Transit passengers, tourists and workers of related service industries are expected to return to work.

October 2020 to December 2020

Passengers, who switched to private vehicles, are expected to return to public transport.

September 2020 to February 2021

Passengers are expected to make a smooth return to mass cultural events.

Disinfection of Moscow transport



100%
of railway vehicles are
disinfected 2-3 times a day, in
particular, with a cold fog device.

Every 1-2 hours
the infrastructure frequently
touched by passengers is
disinfected.

> 370
ventilation shafts renewed, air
exchange increased by 30%.

> 4 000
employees work daily to
disinfect infrastructure and
trains.

100%
of metro and MCC stations
are equipped with sanitizers.

Masks and gloves are sold
at cash desks and vending
machines.

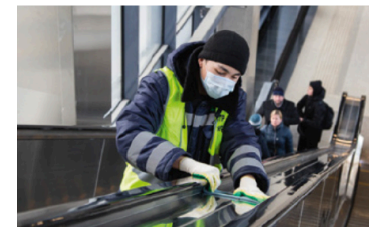
Disinfection of tunnels
Unique solution of Moscow
Metro.

Marking lines
applied in all places for social
distancing.



100%
of railway trains are disinfected 2-
3 times a day.

2 times per day
railway stations and platforms
are disinfected.



Disinfection of Moscow transport



>8 500

of urban surface transport units are sanitized 4-6 times a day.

1 time a day

air conditioning systems in vehicles are cleaned.

Staff

take their temperature every day; all controllers are provided with antiseptics and gloves.

>200 employees

keep public transport stops clean.

3 800

screens broadcast social distancing information in the vehicles.

40 000

distancing warning stickers placed on the backs of the seats of the vehicles.

Contactless payment

Tickets are not available from drivers. Priority is given to contactless payment methods.

Sanitizers

are available at all surface public transport stops.



Carsharing

Carsharing service was suspended for the period of spread of the pandemic.

5 days

was the minimal rent period after carsharing services resumed their operation. After each rent a car is disinfected.

Free access

Free access to rental city bicycles for couriers and volunteers.

Car sharing & Taxi



Car sharing

- 📅 **On April 13, 2020** car-sharing services were temporarily closed to stick to the safety standard
- 📅 **On May 25, 2020** the service restarted its operation, but temporarily a car was available for usage for not less than 5 days and was disinfected after every driver;
- 📅 **On June 9**, all restrictions on car sharing have been lifted, cars are disinfected regularly



Taxi

- ☑ Drivers are equipped with **PPE and sanitizers** and are checked for safety rules' compliance
- ☑ **Cleaning frequency increased** by 1.5 times
- ☑ Cars must be **aired more often**
- ☑ Panels, steering wheels, door handles are disinfected **regularly**

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Staff



Protection



Sanitizers

Automatic hand sanitizers were installed at all metro and MCC stations as well as at public transport stops.



Medical masks and gloves vending machines

Medical masks and gloves vending machines were installed at all metro stations.

From April 13

medical workers and employees of all medical institutions could park their cars for free in city parking lots.

From May 3

free parking has become available to volunteers helping elderly Moscow residents being in self-isolation.



Parking



Digital permit

Troika card

Universal digital permit carrier for using public transport.

Automated digital permit control system

made it possible to identify vehicles without passes in real time and to send information about them to the Traffic Police.

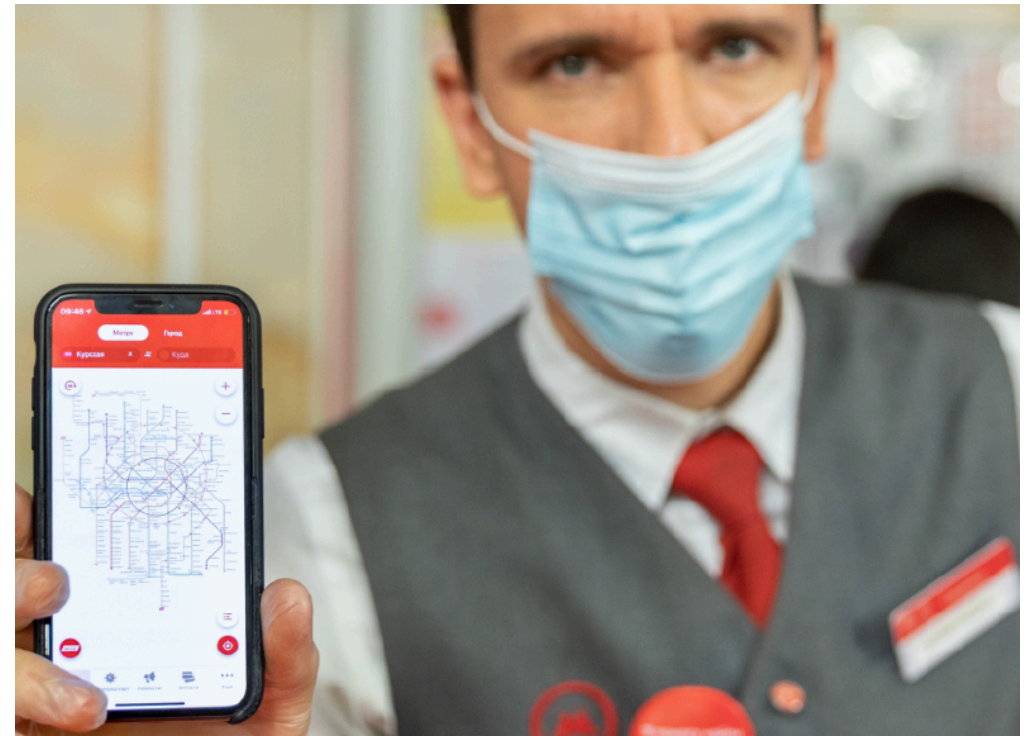
Automated ridership monitoring system

in on-line mode.

Transport load

The Moscow Transport application has a function to determine public transport load.

Moscow Assistant mobile application



Digital permit

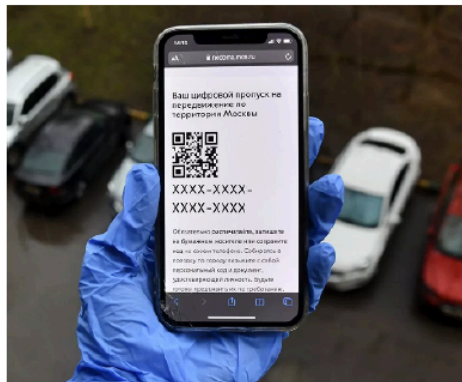
Digital permits for drivers

Any personal vehicle user could link a digital permit to his/her number plate by completing a form on the Unified Transport Portal.

3 700 000

Moscow and Moscow region car-users linked their number plates to digital permits.

Using the Moscow Assistant mobile app, the employees of the Transport Complex, law enforcement agencies and taxi drivers could check for a valid digital permit.



The Troika transport card became the basis for the launch of the automated digital permit control system for traveling by all types of public transport during self-isolation period.

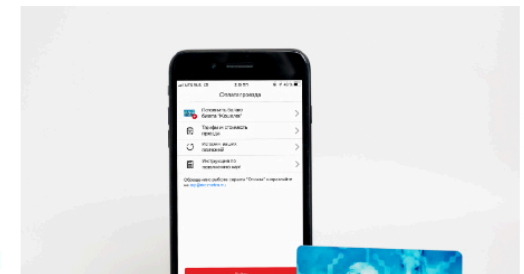
From April 15

Moscow introduced access control. More than 250 inspectors checked the availability of permits using the most modern equipment.



From April 22

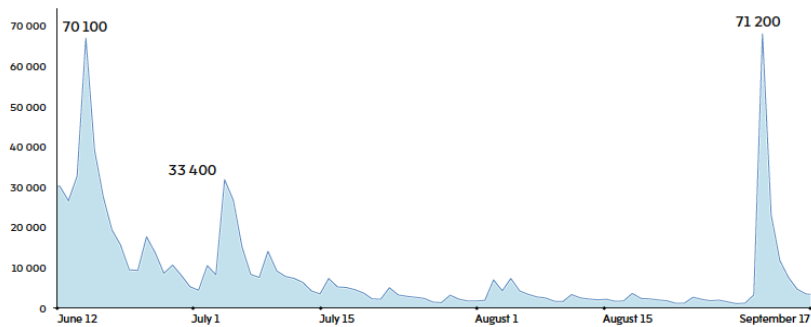
The automated digital permit control system was introduced. Travelling by public transport is possible only with Troika and Strelka smart cards or social



Troika card



Passengers can extend validity of tickets unused during the self-isolation period



839 718
Extensions made from June 12 to September 17, 2020.

1 380
Tickets extended as on September 17, 2020.

552
Passengers extended the validity of their social cards.

19 days
Average ticket extension time.

68 days
Average time for extension of 365-days ticket.



Communication

Dissemination of public transport safety information

>4 000
Information materials in metro concerning linking digital permits to transport cards.

110 000
Information materials about coronavirus infection prevention.

240 000
Social-distancing warning stickers.


175
Road panels with operative messages.


3 800
Media-screens with information on pandemic-related travel rules in the surface transport.

195 000
Leaflets on digital permit issue.



Moscow Transport published information on its official channels every day

 **The Unified Transport Portal**
in Russian and English.

 **Hotline for questions**
on urban transport operation and security measures.

 **Social networks**
of the Transport Complex of Moscow.



Communication

Passengers are constantly reminded of safety measures



Special campaigns for passengers

May 12

A train wearing a face mask was launched on the Line 5 of Moscow Metro.



May 22

Moscow Metro held an action to distribute face masks and limited Troika cards with a thematic design.



Due to restrictions, Moscow Transport held online events. On the Victory Day, singer Lev Leshchenko gave a live online concert in Moscow Metro.



Moscow Metro's 85th anniversary

May 15

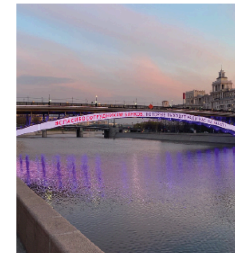
Moscow Metro celebrated its 85th anniversary online.

The events included online parade of trains, flash mob in social media, greetings from famous Russian artists and colleagues from all over the world.

Метро Bridge

Smolensky Metro Bridge is located between stations Smolenskaya and Kievskaya of Line 4.

During the pandemic, the screen on the bridge reminded of safety rules, showed word of gratitude and supported those who performed their professional duties for the sake of Moscow residents.



Moscow Metro Report



CONTENT OF THE REPORT

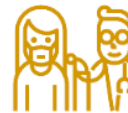
The report is divided into 5 Chapters, which are:



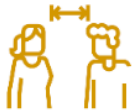
Operational changes and impact on demand



Key disinfection and cleaning measures



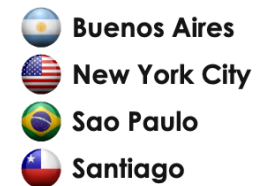
Staff protection actions



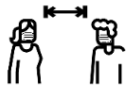
Passengers and customer-related measures



New normal: key challenges and recommendations to enhance metro networks operations



KEY RECOMMENDATIONS



➤ Masks and physical distancing

- raise awareness about physical distancing by placing signage (e.g., stickers) in stations and vehicles and other means of communications;
- Obtain support from authorities to help enforce the respect for mask-wearing by passengers;
- test and implement technologies for crowd management.



➤ Enhanced disinfection

- keep a frequent and thorough disinfection regime that was carried out during the peak;
- meanwhile test means and equipment to reduce time and labor costs for this process.



➤ Increased communication

- conduct surveys and collect passenger feedback;
- choose the most effective means of communication based on this data;
- provide details on measures taken to restore trust and a sense of security of passengers.



➤ Real-time passenger informing on occupancy

- launch a project for providing passengers with information on occupancy of train carriages and stations in different time and analyze the changes in their behavioral model.



➤ Maintaining high-quality disinfection standards

- develop a single quality standard to assess effectiveness and method compliance;
- cooperate with private sector on the development and testing of new equipment.



➤ Modernization of customer services

- transit fully from a traditional ticketing system to contactless technologies;
- a transport operator should offer a user-friendly fare system that is driven by customers' needs in order to cover the maximum of passengers.



Thank you for your attention!
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