

We reflect experience into design

Digital Twin

With this application, a rail system station that has not yet been built or whose construction has been completed and opened for operation;

- We create an exact replica in the digital environment.
- We collect real-time data related to maintenance and operation processes.
- By analyzing the data, we can predict potential scenarios that may occur during the station's operational period based on the resulting analysis results.

Benefits

- Accelerated risk assessment and construction process
- Planned maintenance scheduling
- Real-time remote monitoring
- Improved team and collaboration
- Making accurate financial decisions



We reflect experience into design

Metroİstanbul
design



www.metro.istanbul

Headquarters
Address: Yavuz Selim Mahallesi
Metro Sokak No: 3 Esenler/İstanbul



Design Services

In the scope of rail system design and project works, we conduct corridor and land evaluation analyses within international standards to make decisions on suitable routes.

Feasibility studies, as well as architectural, structural, electrical, and mechanical projects, are prepared based on BIM (Building Information Modeling) in accordance with international standards.

BIM Coordination

- Route-Architectural-Structural-Mechanical-Electrical

Study & Planning and Feasibility

- Route design
- Real estate development
- Feasibility (economic and financial analysis)
- Urban planning and expropriation
- Concept design
- Infrastructure

Architectural and Structural Design Services

- Architectural design
- Structural analysis and design
- Tunnels, bridges, and other structures
- Excavation and shoring designs
- Static analyses
- Geotechnical designs
- Track and superstructure design

EM Systems Design Services

- Electrical and electronic design
- CER and operational simulations
- Mechanical systems
- Sound and CFT analyses

Project Visuals and Animation

- AR (Augmented Reality)
- VR (Virtual Reality)
- XR (Extended Reality)
- Promotional and animation film
- Passenger simulation
- BIM 4D

Design Products

Virtual Reality

We create virtual platforms for the stations in projects. This allows you to freely navigate and explore all the details of the project across different disciplines.



Augmented Reality

The virtual models of the projects can be transferred to tablet and phone screens, allowing you to see the virtual model on any surface you desire.

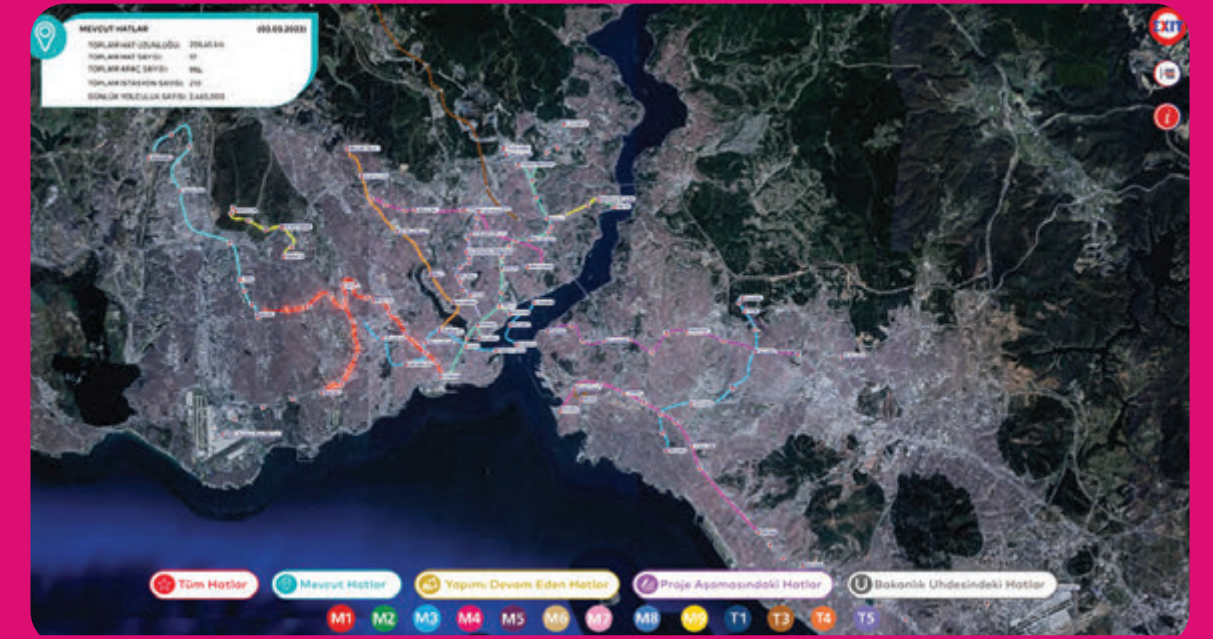


Extended Reality

We provide virtual models of projects on cross-platform without the need for any specific device or tool.

Passenger Simulation

We conduct passenger density analyses of passenger circulation areas during station design and finalize the design taking into account passenger comfort and accessibility. As a result, we create short films in a 3D model environment, illustrating the analyses we have described, so that you can see realistic movement in the actual station.



Smart Network Map

We have developed an interactive İstanbul map for smart boards with the aim of providing visualizations of all existing, ongoing, and planned rail system lines in İstanbul on a line-by-line and overall basis. This interactive map, which includes up-to-date data for lines and stations, allows you to view existing and ongoing lines separately or together.



Hologram

In project works, we present all elements of the stations in a three dimensional format on digital LED screens.

BIM 4D

We incorporate time data into the 3D project model and integrate it with the construction schedule to prepare visual animations of the project's construction stages.



Introduction and Animation Film

We create animations of project designs by placing 3D models into real footage obtained through drone shots. This allows you to envision reality through animations and present them in a digital environment.