

An aerial photograph of a coastal town built on a steep, rocky cliff. The town features numerous multi-story buildings with red-tiled roofs, interspersed with green trees. A winding road runs along the edge of the cliff. In the background, a deep blue sea meets a bright blue sky with scattered white clouds. A small boat is visible on the water to the right. The overall scene is vibrant and scenic.

# tw<sup>in</sup>up

**TwinUp Smart City Management Platform**  
*A Safer, More Efficient & Modern City*





# Inter-Unit Shared Memory

## Enterprise Efficiency with Big Data

**Synchronized operation of all departments on the same digital map.**

- **Eliminated data fragmentation between Science Affairs, Parks & Gardens, and Municipal Police.**
- **An intelligent control system that prevents redundant work.**

## SHARED INTER-DEPARTMENTAL MEMORY



# Inter-Departmental Shared Memory



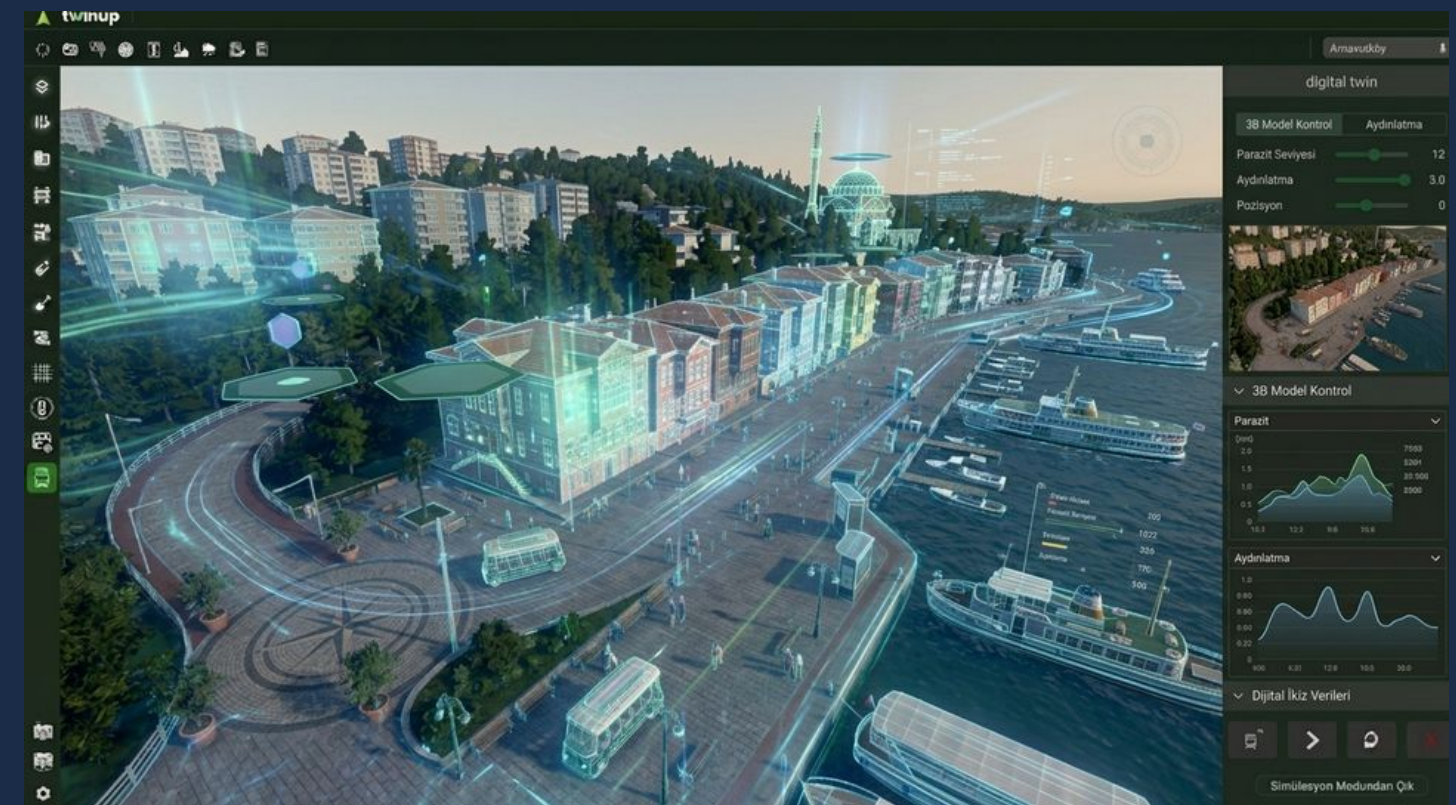




A Living City Laboratory

**Meet the 24/7 breathing digital twin of your city.**

- The era of precise data, not estimation in municipal management.
- The management comfort that comes with gathering total control of the city in a single center.





# Keep the City in the Palm of Your Hand

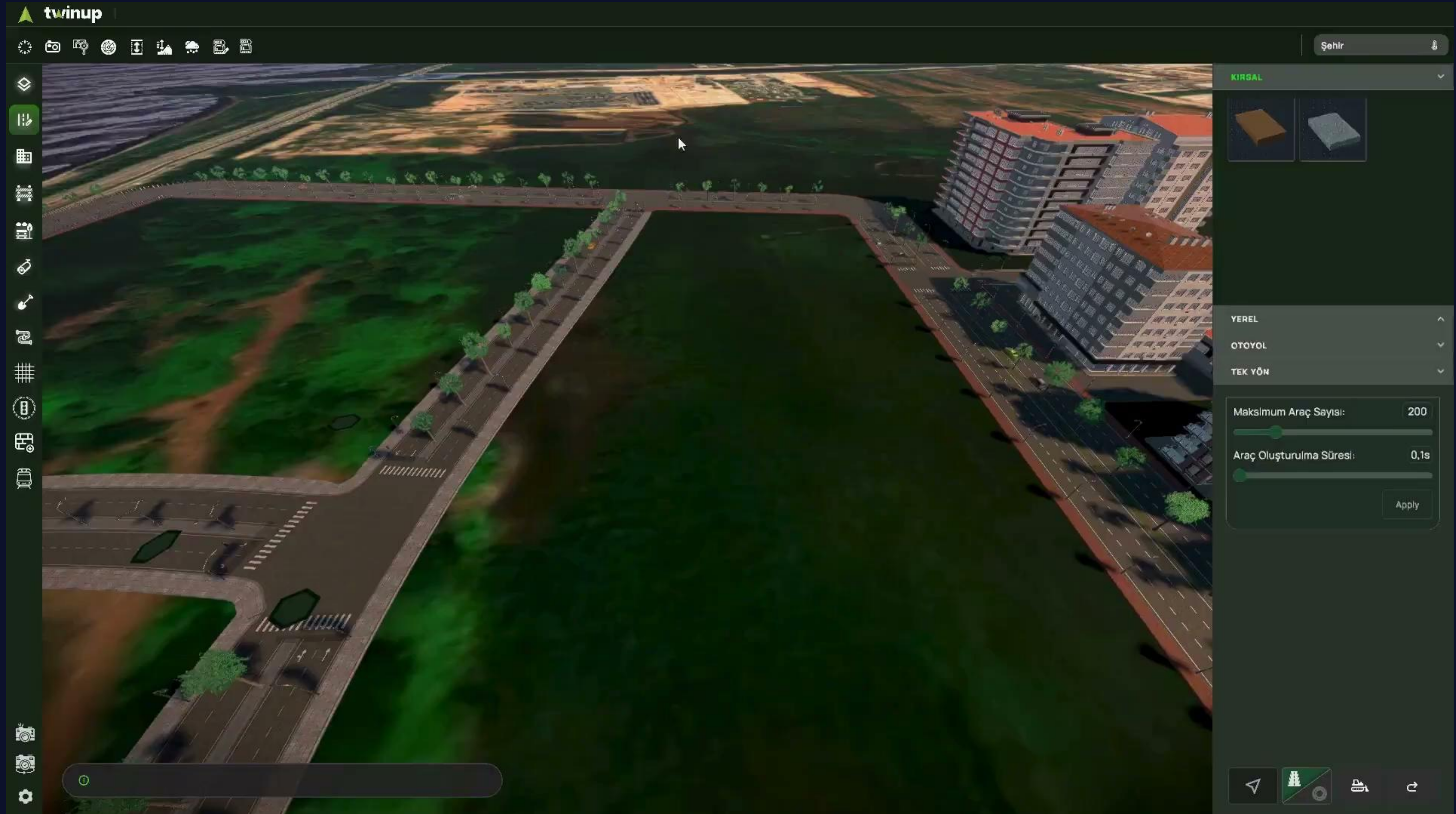
Every building, road, and park in the district has been modeled down to the finest detail (at LOD levels).

- **Virtual Patrol:** Inspect sign and urban furniture without ever stepping onto the street.
- **Zero Waste:** Eliminate on-site inspection costs and time losses.





# Keep the City in the Palm of Your Hand





# Disaster and Environmental Management

## Earthquake and Disaster Management

### The City's Digital Shield

Damage simulation for every single building before a potential Istanbul earthquake.

- **Debris Management:** Directing teams to open routes by identifying blocked roads.
- **Real-Time Data:** Full integration with AFAD and Kandilli Observatory data.





# Disaster and Environmental Management





# Smart Environment

## A Clean and Breathing District

Real-time monitoring of air quality and public health reporting.

- **Heat Maps:** Tracking areas with rising pollution levels through charts and graphs.
- **Intervention:** The power to intervene in environmental issues before they escalate.





# Smart Waste Management

**30% Less Cost, Cleaner Streets**

**Ending the era of "collecting empty bins" through sensor-equipped containers.**

- **Dynamic Routes:** Navigating only to full containers.
- **Low Carbon Footprint:** Achieving a low carbon footprint and high fuel savings.



**A Green City: Reducing Carbon Footprint,  
Protecting Nature**



# Zoning and Urban Development

## "Zero Margin of Error" in Urbanism

See the impact of a new project on the city's skyline before it is even built.

- **Optimal Settlement Decisions:** Making the most accurate placement decisions through sunlight, wind, and shadow analyses.
- **Building a Better City:** Construction of an aesthetic and functional city.





# Field Operations

## Personnel and Equipment Efficiency

**Real-time tracking of the location and task status of construction equipment and field teams.**

- **Instant Dispatch:** Immediate delivery of digital work orders to the field.
- **Measurable Growth:** A measurable increase in personnel performance.





# Revenue-Enhancing Elements

## Fair Auditing, Strong Budget

Detection of undeclared structures and advertisements using 3D models.

- **Immediate Detection:** Instant identification of unlicensed buildings and excess public space occupations.
- **Fair Collection:** Fair and full collection of municipal revenues.





# Citizen Experience

**Transparent and Fast Municipality**  
Increased citizen satisfaction and engagement driven by technology.

- **Instant Visibility:** Citizen complaints flashing instantly on the system dashboard.
- **A Peaceful City Vision:** A vision of a peaceful city brought by accelerated services.





# The Digital Brain

## A New Era Begins for Your City

**This is not just software; it is the "Digital Brain" that will transform your city into the most technologically advanced city in Türkiye.**



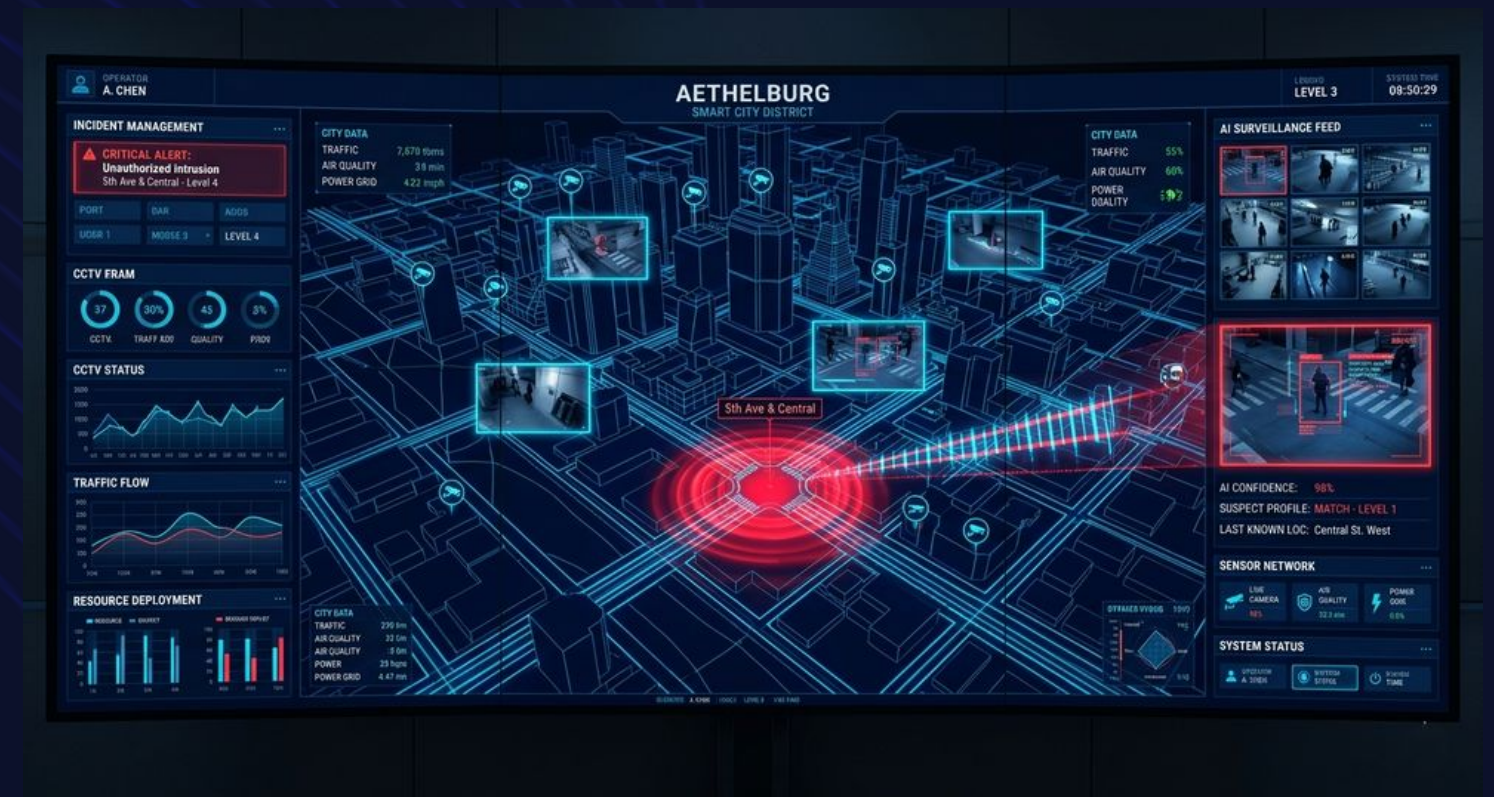


# Smart Security

## Automated Response Power

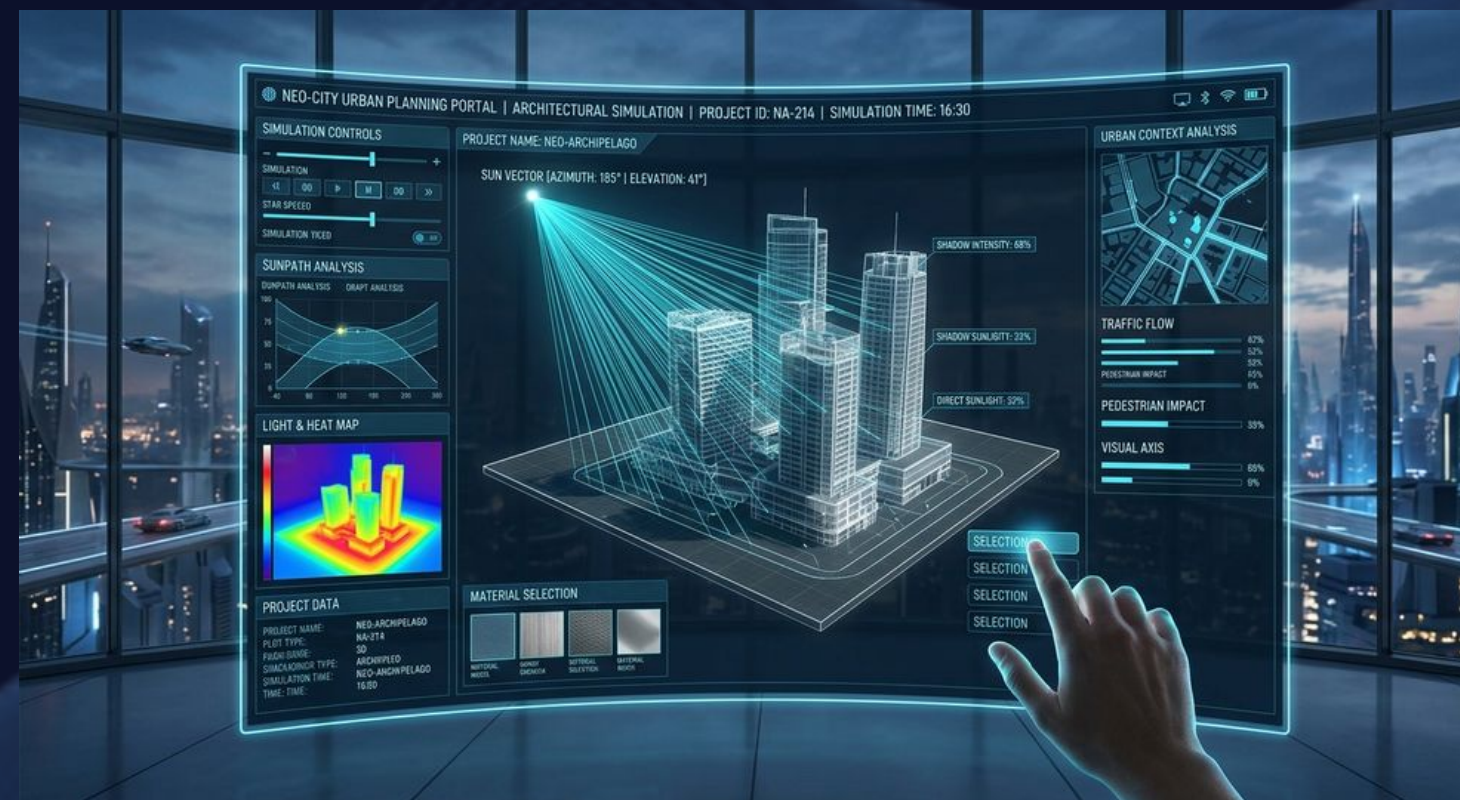
The era of "automated focus" in urban security.

- **Digital Twin Monitoring:** Monitoring live camera streams directly through the digital twin.
- **Instant Activation:** Automatic pop-up of all cameras in the area on the screen during an incident.





# Simulation Capacity



## Experience Before You Build

Shape the destiny of your city with data.

- **Climate-Resilient Testing:** Testing new square or building projects under different weather conditions.
- **Preserving Public Resources:** Preventing faulty projects to safeguard public resources.

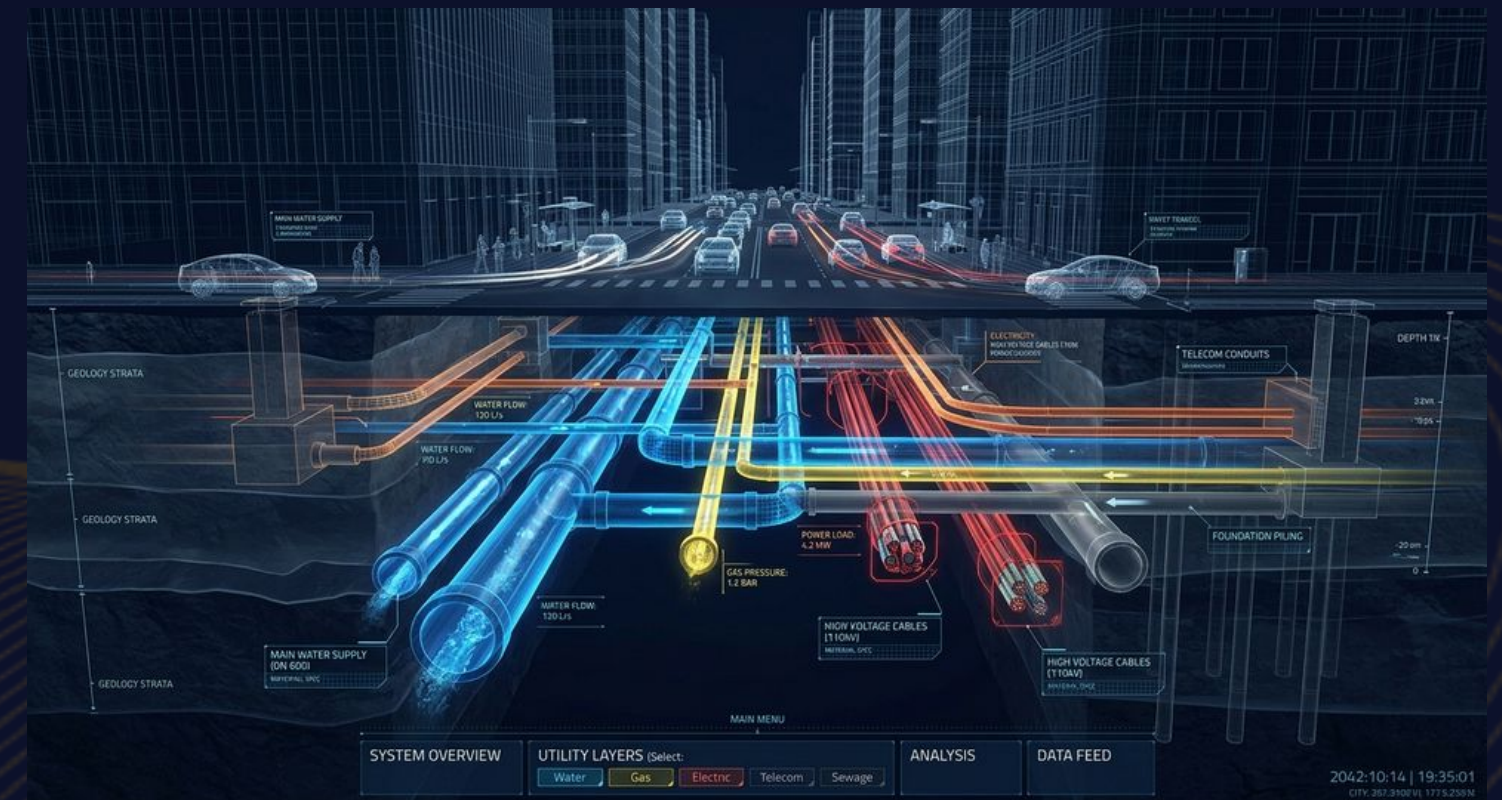


# The Invisible Infrastructure

## Digital X-Ray of the Infrastructure

Lifelines beneath the city are under your control.

- **Utility Integration:** Full integration of drinking water, sewage, electricity, and natural gas lines.
- **Pinpoint Intervention:** Pinpoint accurate intervention during malfunctions and disaster situations.





# Critical Facility Inspection



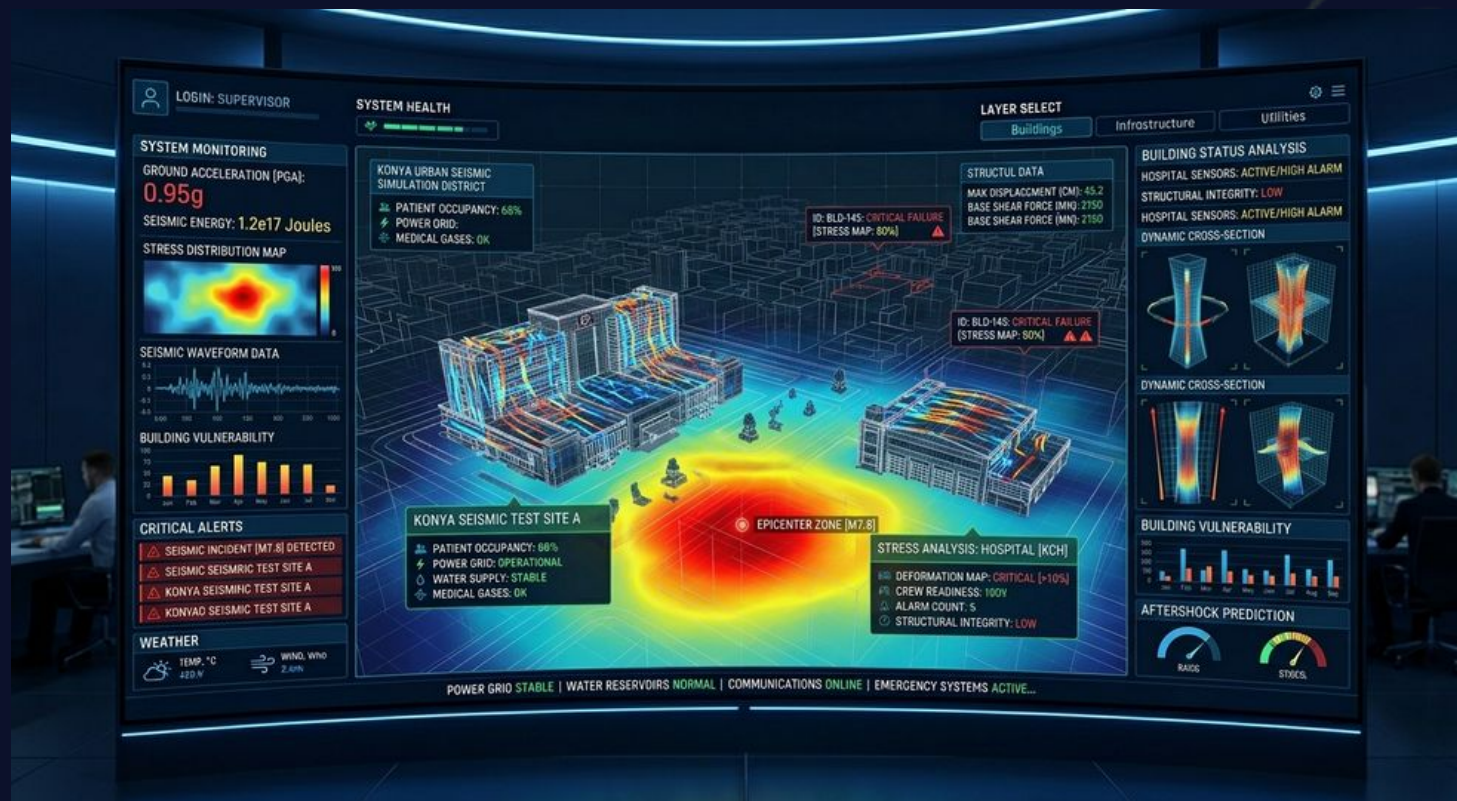
## The Castles of Your City: Uninterrupted Service

Special resilience analysis for hospitals, schools, and public service buildings.

- **Capacity Assessment:** Measuring the capacity to respond to population density in times of disaster.
- **Strategic Prioritization:** Strategic prioritization to ensure critical services never stop.



# Scientific Earthquake Scenarios



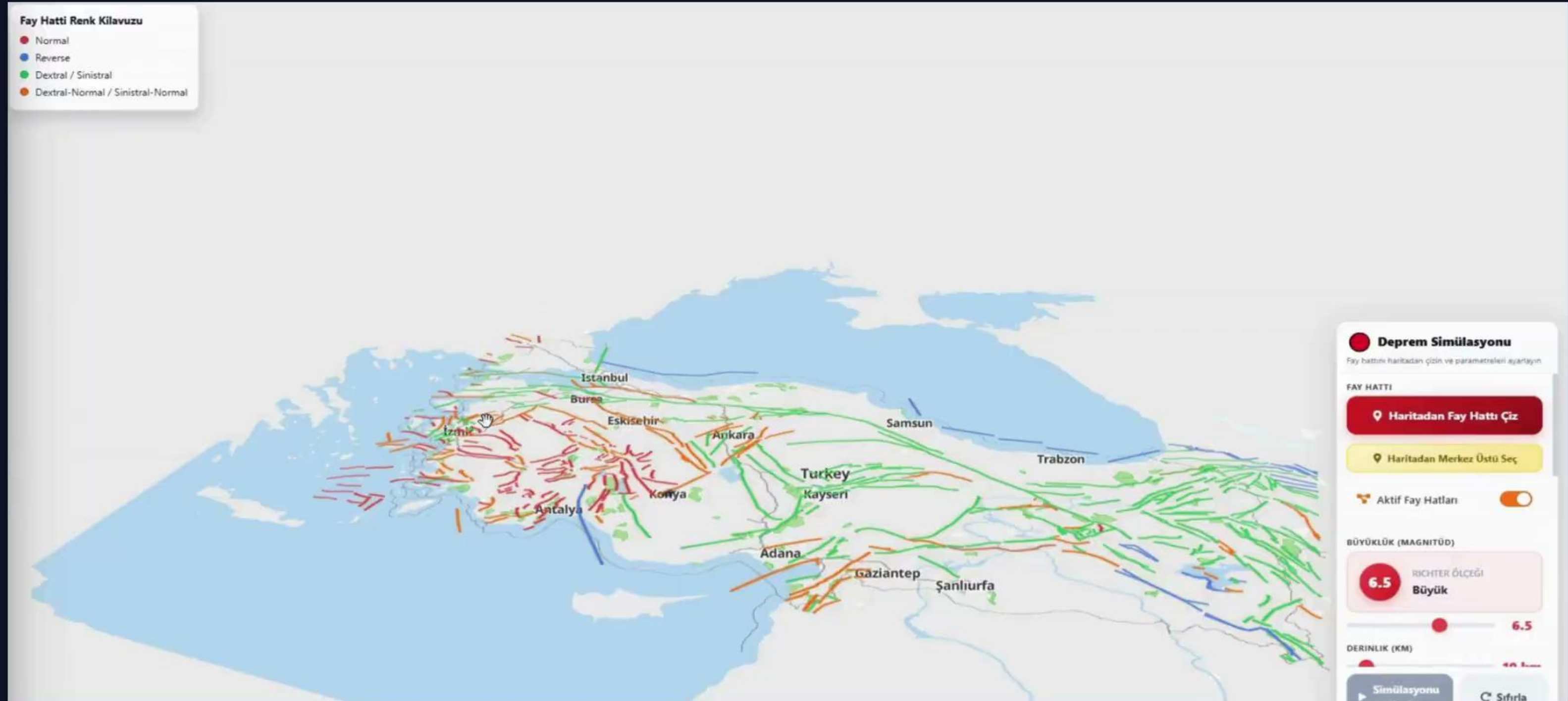
## Resilient City Through Seismic Data

Urban transformation based on scientific data, not assumptions.

- **Ground Amplification Calculations:**  
Ground amplification calculations based on varying earthquake magnitudes.
- **Minimizing Casualty Risk:** Minimizing the risk of casualties through structural reinforcement scenarios.



# Scientific Earthquake Scenarios





# Evacuation and Emergency Transportation

## "The Safest 15 Minutes" for Citizens

Measuring the walking distance from every citizen's home to their designated assembly point.

- **Assembly Point Analysis:** Analyzing per capita space and accessibility for disabled individuals at assembly points.
- **Emergency Route Planning:** Planning dedicated "Emergency Transportation Routes" to be kept open at all times.





# Financial Auditing



## Digital Protection for the Municipal Budget

**Managing resources with maximum efficiency.**

- **Automated Detection:** Automated identification of illegal subscriptions and unlicensed businesses.
- **Centralized Tracking:** Monitoring unit-based budget performances through a single, unified dashboard.



# twinup



# Thank you.

