



**END-TO-END SMART MOBILITY
ECOSYSTEM & MANAGEMENT PLATFORMS**

Integrated Systems & Systems Design

Complete Mobility Provider

ISSD is an end-to-end provider that designs, connects, manages, and optimizes modern city mobility infrastructure through AI-supported big data analytics.



Goal: Sustainable, safe, and efficient city operations.

We Engineer, Analyze, and Optimize Your City



Intersection Analysis

- | Capacity analysis
- | Level of Service (LOS) calculations
- | Delay studies
- | Simulation (PTV Vissim/Visum)



Signal Optimization

- | Signal plan design
- | Green Wave coordination
- | Density-dependent adaptive control



Transport Planning

- | Master plan studies
- | Public transport modeling
- | Micromobility networks
- | Sustainable Urban Mobility Plans (SUMP)



Operational ITS

- | Dynamic intersection control
- | Event management
- | Incident detection

Engineering the Physical Foundation of the City

Intelligent software requires a flawless physical foundation. Our Mobility Team engineers, analyzes, and physically optimizes your city's traffic nodes before a single line of digital code is deployed.

Intersection, Corridor & Regional Analysis:

- Rigorous capacity analysis and Level of Service (LOS) calculations.
- Corridor flow and delay investigations.
- Micro and macro simulations (PTV Vissim / Visum / Vistro / Viswalk).
- Regional traffic impact mapping and network stress testing.

Signalization Design & Optimization:

- Precision signal plan design and green wave coordination.
- Dynamic, density-dependent adaptive control recommendations.



Strategic Urban Mobility and Operational Planning

Beyond single intersections, we develop comprehensive master plans that integrate public transit, micro-mobility, and dynamic traffic scenarios for long-term sustainable operations.

Transportation Planning & Strategy:

- Development of comprehensive Transportation Master Plans.
- Public transit modeling and route optimization.
- Integrated network planning for bicycles, scooters, and pedestrians.
- Sustainable Urban Mobility Plans (SUMP) for future-proof cities.

Operational ITS Solutions:

- Dynamic intersection control strategies and incident management.
- Corridor-based traffic management scenarios.
- Deep integration of parking, ANPR, public transit, and radar data sets.

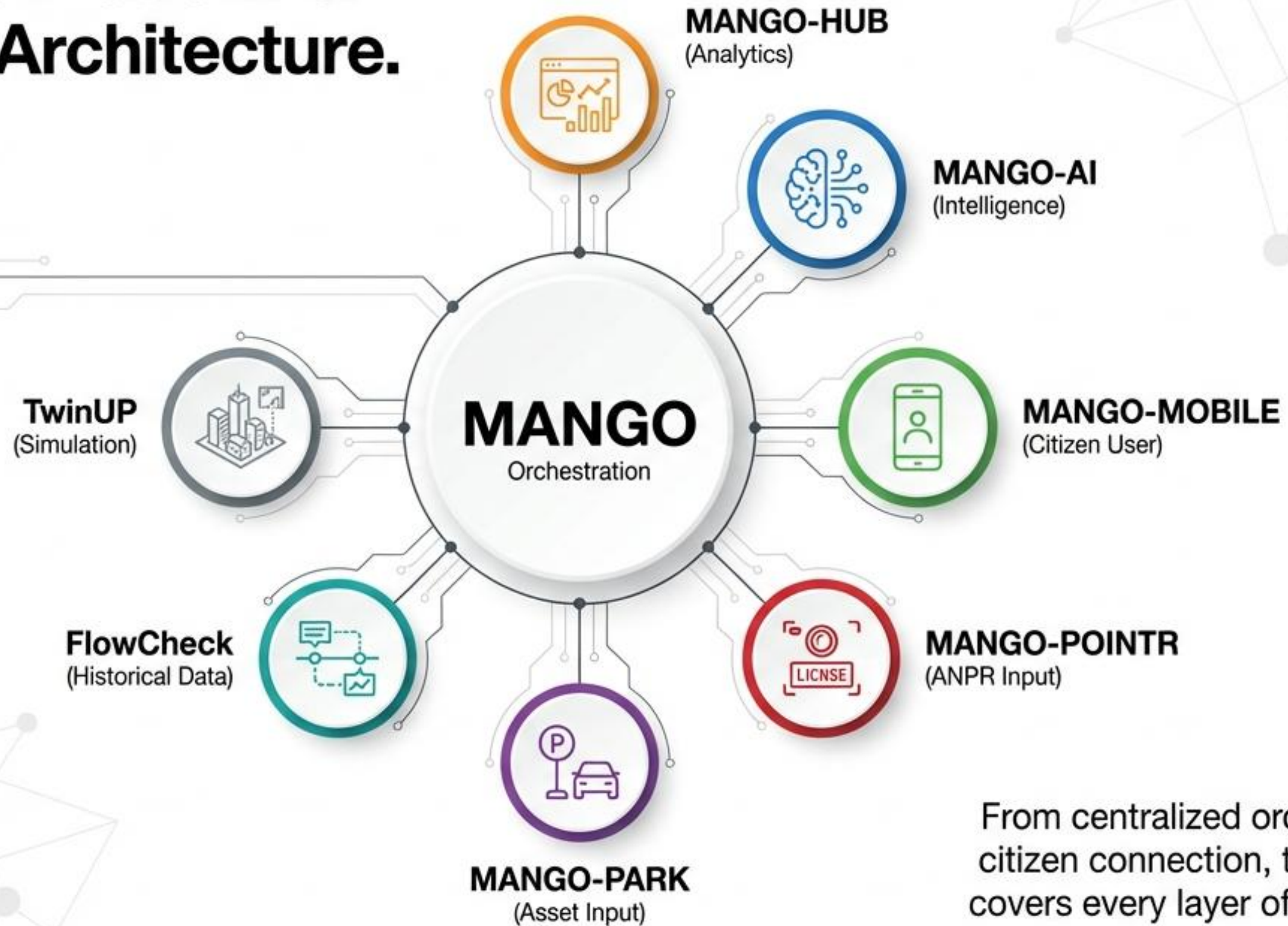


Uygulama Otelii - Toptancılar Sitesi Kavşakları Yeşil Dalga Çalışması İyileştirme Sonuçları

Erciş Yöni Öncesi



8 Integrated Platforms. One Bionic Architecture.



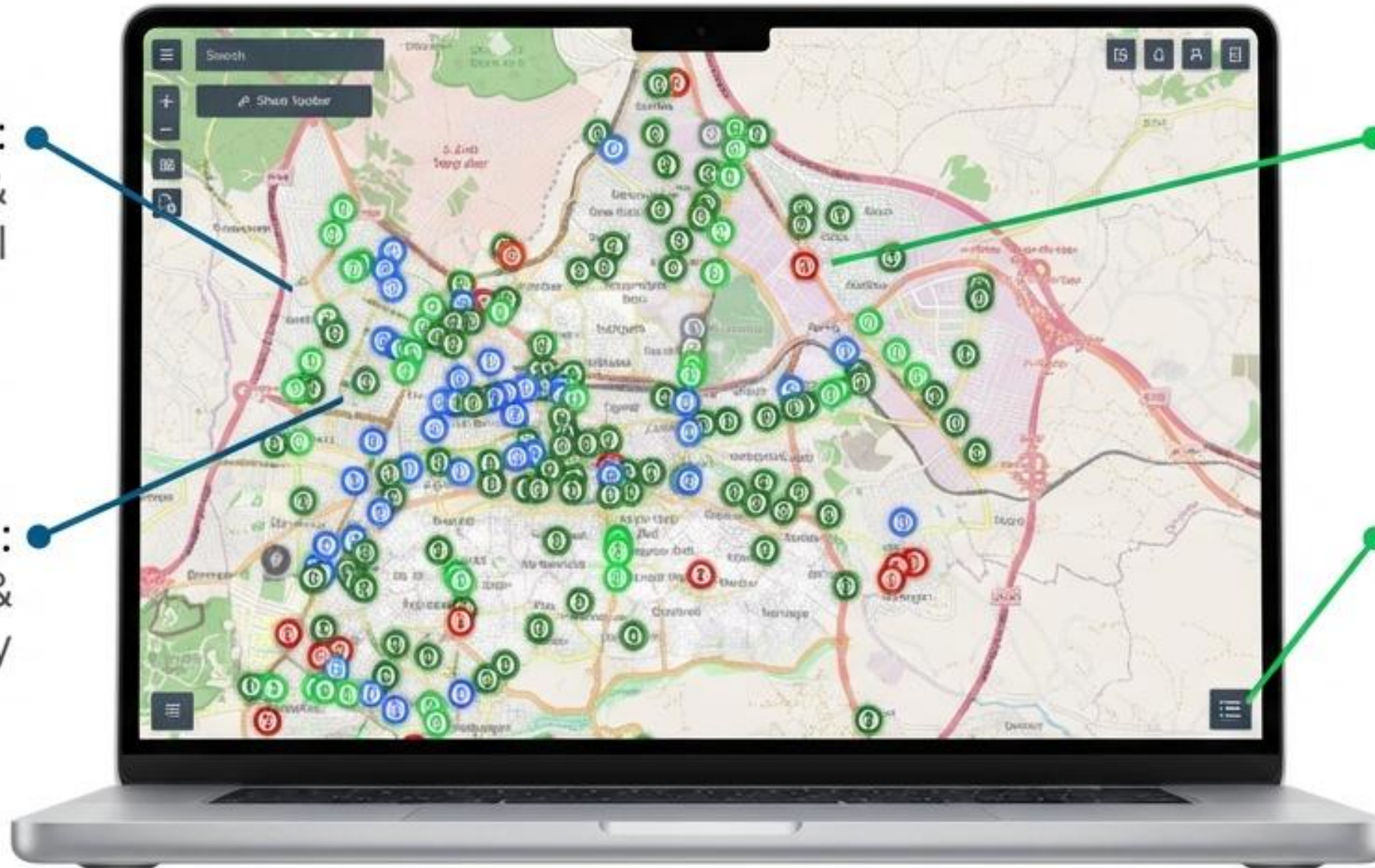
From centralized orchestration to citizen connection, the ecosystem covers every layer of the smart city.



MANGO: The Single Truth for City Operations

Central Orchestration:
Fixed, adaptive, &
dynamic control

Multi-Modal Monitoring:
Public transport &
micromobility



Real-Time Status:
Density, flow, and
delay metrics

Incident Management:
Instant operational
alarms

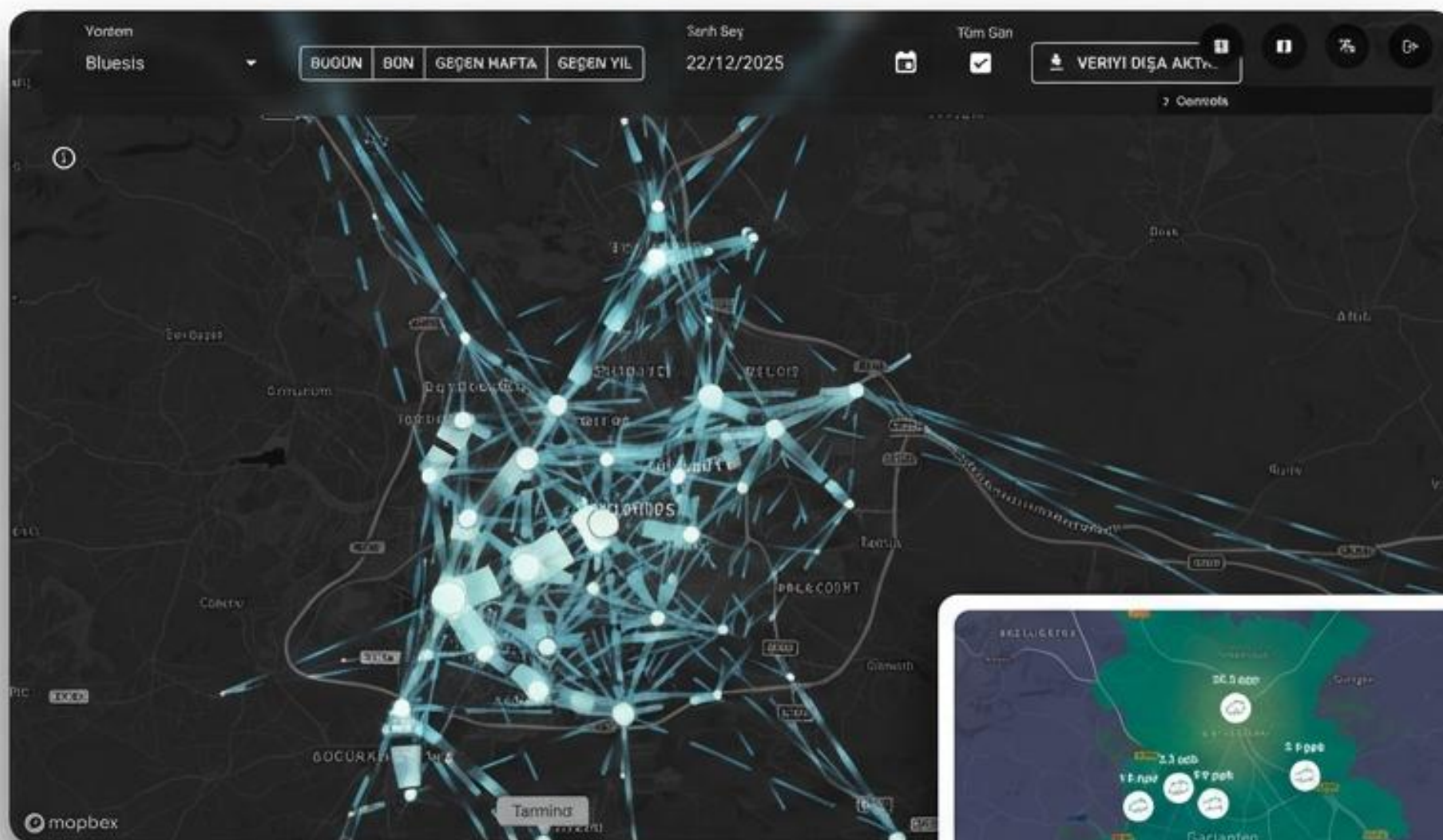
MANGO HUB MANGO-HUB: Big Data Analytics

The Engine: High-performance analytics processing data in seconds.

Inputs: FCD, Bluetooth, ANPR, Radar, Telemetry.

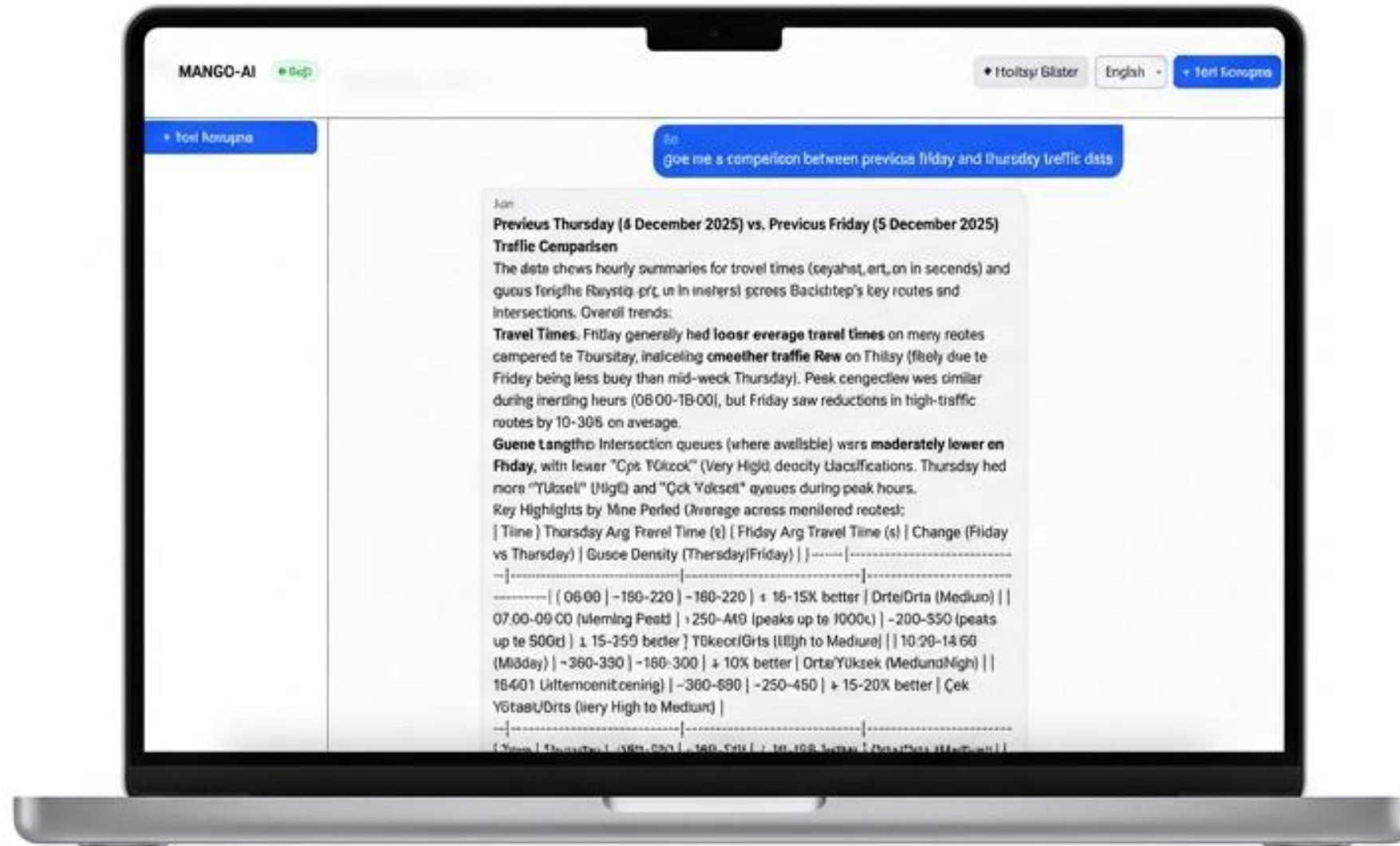
Insights:

- Real-time density heatmaps and speed profiles.
- Predictive modeling and congestion detection.
- Interactive map analytics and data fusion.



The City That Speaks.

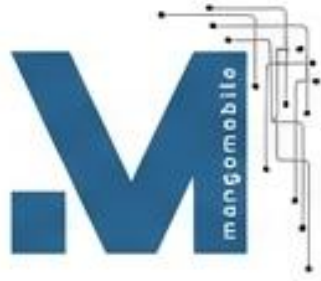
MANGO-AI: Generative AI for Instant Decision Support



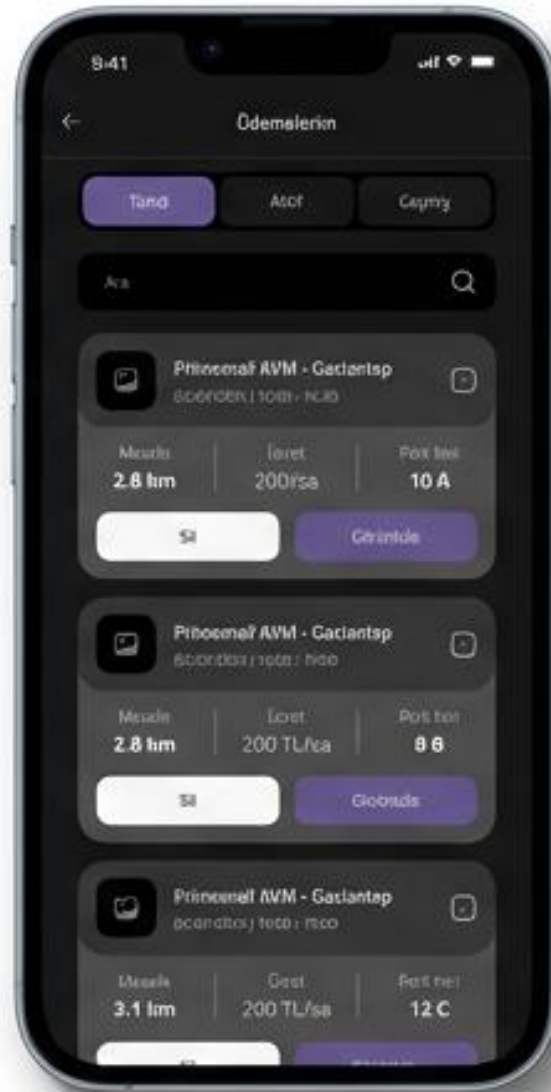
Natural Language Processing (NLP) allows operators to query infrastructure directly.

CAPABILITIES:

- Diagnostic: "Why is congestion higher this morning?"
- Prescriptive: Scenario suggestions for operators.
- Reporting: Automated generation of PDF/Word reports.



MANGO-MOBILE: The Citizen App



- **Live Info:** Real-time traffic, parking availability, and public transport.

- **Micro-Mobility:** Scooter and bike locations.

- **Advanced Tech:** Digital Twin density maps and AI Trip Assistant.

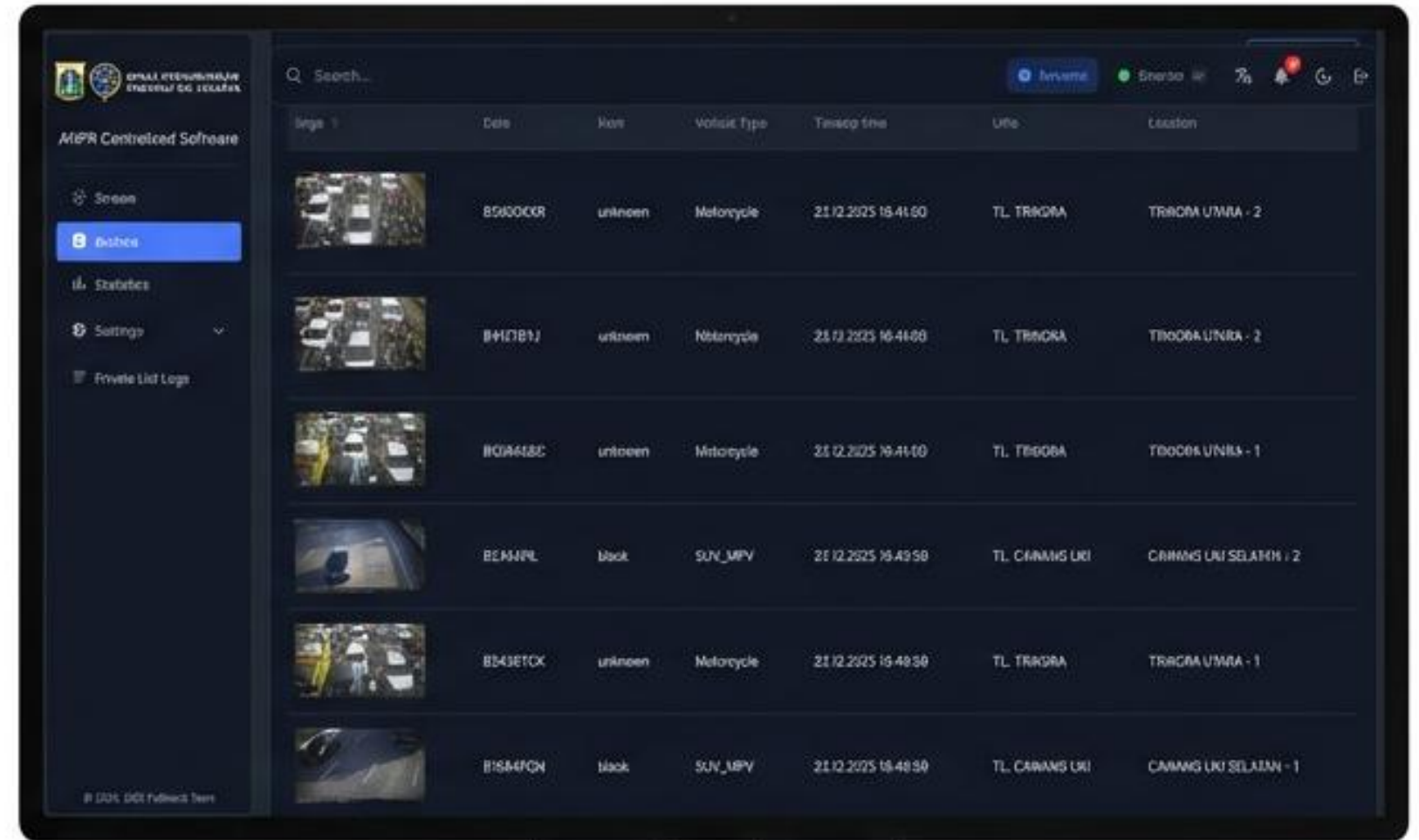
- **Inclusivity:** Services for disadvantaged users.



MANGO-POINTR: Beyond Enforcement

Centralized ANPR Management

- ✓ Real-time plate streaming & Black/White lists
- ✓ Speed and lane violation detection
- ✓ Public transport lane control
- ✓ City security data fusion



MANGO-PARK

Unified Parking Management

Optimizing Static Traffic Assets.

- **Holistic Management:** Manages both on-street and off-street parking assets.
- **Revenue & Access:** Integration with barriers, ANPR, kiosks, and dynamic pricing models.
- **Real-Time Data:** Occupancy analysis fed directly to the mobile app for driver guidance.



TwinUP: Digital Twin Platform



Real-Time 3D Mirror: A live digital copy of the city's mobility infrastructure.

Capabilities:

- 3D rendering of intersections and corridors.
- Real-time traffic flow visualization.
- Scenario simulation and decision support.
- Emission monitoring and KPI tracking.