

ASURA TOLLING SUITE

FIXED ENFORCEMENT

Toll operation performance is elevated by ASURA's proven analytics for fixed enforcement tolling.

BENEFITS

REDUCE CAPEX AND OPEX WITH A CAMERA-ONLY SYSTEM

- Asset-light infrastructure
 - 3 cameras per lane: front plate ANPR, rear plate ANPR, categorization
 - Roadside cabinet with local analytics server and peripherals
- Utilizing existing infrastructure where possible

INCREASED PERFORMANCE WITH MACHINE LEARNING

- Machine Learning ensures steady improvement in system accuracy
- Proprietary AI engines enable deployment within only three weeks and quick adoption of new license plates without external development

LOWER POTENTIAL OPERATIONAL COSTS WITH A ROBUST SOFTWARE SOLUTION

- Video-only data acquisition decreases integration complexity
- AI-driven and Machine Learning-based recognition significantly increases reading accuracy
- Data-driven automated preventive camera maintenance automation and tampering alerts

AI-DRIVEN ACCURACY

- Free-flow, real-time tolling data capture and analytics with zero event loss
- Stable ANPR performance in challenging environments such as poor light quality, heavy traffic, or adverse weather

KEY PROJECT REFERENCE

HUNGARIAN TOLLING MODERNIZATION

Nationwide Toll Network:

7400 km roads; 1300 cameras; 140 gantries; 2M+ daily events

IMPROVED DATA CAPTURE:

- Required License Plate Recognition rate: 98%
- Certified Achieved Recognition Rates (weighted average of 3 different site measurements)
 - 99.76% License Plate Number
 - 99.94% License Plate Country
 - 96.27% Categorization (axle-based)

INCREASED ENFORCEMENT GANTRY AVAILABILITY:

- August 2023: reported 325 cases of gantry component failures
- August 2024: only 57 cases of gantry component failures and steadily improving. 570% improvement within 1 year operation due to less hardware assets and predictive camera maintenance.

ASURA offers fully customizable and scalable AI-powered tolling enforcement software and data services. Our solutions are designed to maximize revenue potential, reduce overhead costs, and ensure comprehensive metadata capture, seamlessly integrating road tolling within the ITS ecosystem of the future.

ASURA



**ACCURACY
ANALYSIS,
ACCOUNTABILITY**

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