

TRANSPARITY® TMS

Traffic Management System



CABINETS

CONTROLLERS

DETECTION

PARKING

SIGNALS

SIGNS

SOFTWARE

SPECIALTY

Overview

Transparency® Traffic Management System (TMS) enables transportation professionals to proactively manage traffic flow and promote mobility through real-time traffic data collection and management tools. Built around user input and decades of industry expertise, the modern architecture of *Transparency* TMS is designed to meet the demands of today's transportation network and adapt with your needs as they evolve. With a simple, yet powerful means of collecting and displaying information, and access to data anytime, anywhere; *Transparency* TMS will take your traffic operations to new heights.

Benefits

- Monitor system-wide traffic conditions and devices
- Command innovative control strategies
- Analyze performance and trends
- Enable proactive management
- Centralize documentation and inventory control
- Ensure system integrity through data validation
- Boost accountability through user security, controller and activity logs
- Connect communities and jurisdictions
- Enable connected vehicle applications

Product Description

Transparency TMS provides dependable monitoring and control of signalized intersections in small and large environments. Intuitive and user-friendly, *Transparency* TMS is easy to learn, use, and customize; allowing it to quickly be implemented and mastered.

The newest release of *Transparency* TMS offers support for connected and autonomous vehicle (CAV) applications and data subscriptions. Additionally, *Transparency* TMS opens the door to cloud-based hosting and integration with other jurisdictions and community outreach programs.

Designed in compliance with NTCIP standards and featuring built-in support for select legacy firmware, *Transparency* TMS offers agencies a viable and cost-effective migration path to modern technology.

Best of all, robust data collection and control strategies help reduce congestion and harmful emissions in accordance with requirements for federal and state funding initiatives.

Transparency® TMS

Transparency TMS is a powerful combination of standard-compliant technology, advanced algorithms, and tried-and-true methodology.

Standard Compliance

Developed based on the latest national protocols to ensure the system will evolve with your needs over time. Adheres to NTCIP 1201, NTCIP 1202, TMDD, and underlying base standards.

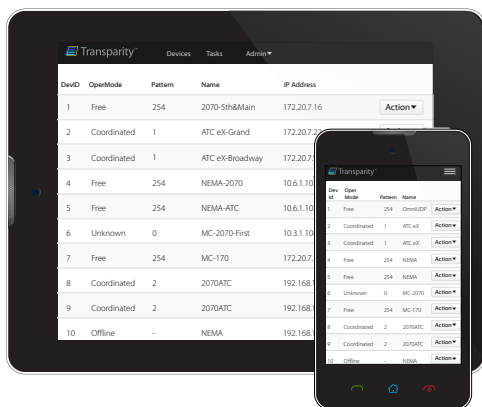
Device Compatibility

Compatible with 170, 2070, NEMA TS 1 and TS 2, and ATC controllers running NTCIP-compliant local control software and select 170 and 2070 traffic controller programs. Permits integration with IP-enabled devices such as CCTV cameras, battery backup systems (BBS), EV preemption devices, and traffic signal monitors (CMU/MMU).

System Architecture

Windows-based application using client-server architecture, .NET framework, and MS SQL Server database.

Using the latest in web services, *Transparency* TMS opens the door for interoperability with web and mobile clients. Providing the foundation for efficient and reliable center-to-center data exchange and secure methods for exposing the operational status of traffic systems to external networks.



System Functionality

Monitor System-Wide Traffic & Devices

- Survey traffic conditions remotely
- Monitor system-wide device status in real-time
- Log detailed intersection operations
- Receive instant notifications of device or traffic performance issues
- Record user activity and controller access

Analyze Traffic Trends

- Measure performance for individual intersections and coordinated systems
- Generate reports on current or historic trends, and performance measures
- Analyze vehicular, pedestrian, EV preemption, and transit signal priority data
- Integrate with FHWA high-resolution event reports

Implement Control Strategies

- Command controller TOD operations
- Modify phase sequence and pattern in response to specific traffic conditions
- Reduce congestion and increase efficiency
- Implement adaptive signal control strategies

Manage Assets, Tasks & Users

- Schedule controller operations, device log retrieval, and event notification from one central scheduler
- Consolidate system-wide information in central database
- Track assets and inventory
- Enforce system security through unique user permissions
- Reduce inefficiencies and issues related to mismanagement of controller timing
- Verify and validate timing parameters

Connect Users, Agencies & Devices

- Support inter-jurisdictional data exchange and control strategies in regional deployments
- Integrate NTCIP-compliant devices
- Enable multiple data subscription services for CAV applications

Customer Support

McCain's ITS Solutions group provides support from system selection through integration, ensuring end-to-end functionality.

Ongoing support is available with online user groups and trainings. Comprehensive software maintenance plans offer feature upgrades, technical support, and quarterly maintenance, including back-ups and updates.