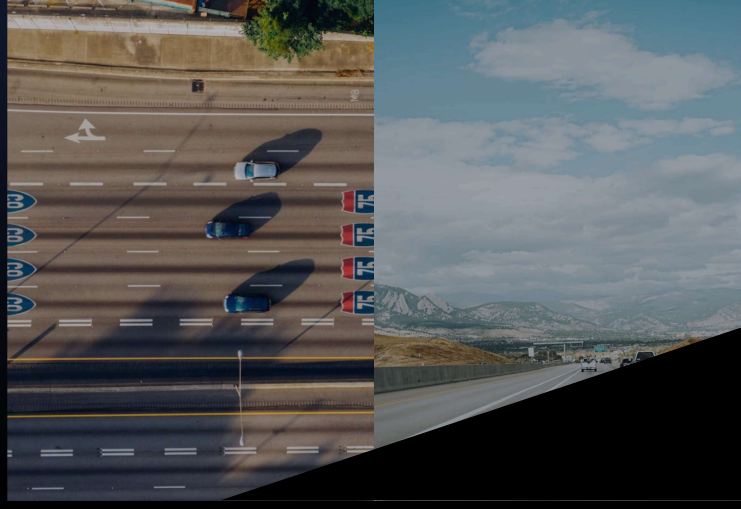
RETHINK ENGINEERING

Traffic Detection & Classification:

GoDetect — See Every Vehicle, Classify Every Lane



GoDetect turns roadside traffic sensors into a continuous, structured stream of intelligence. Every detector is managed as a first-class entity — geolocated on the map, attached to a road and reference point, and configured lane-by-lane with direction and lane type. GoDetect polls each device on a schedule, captures per-lane volume, occupancy, and speed, and keeps a complete historical record of every collection cycle.

Where GoDetect stands apart is vehicle classification. The platform reports traffic on two parallel axes at once: the detector's native classification scheme — including FHWA's 13 classes and other recognized taxonomies — and a universal vehicle-mix view that folds every native class into stable, comparable categories. Because the scheme is set per detector, an agency can run a mixed sensor fleet and still produce one consistent report.

GoDetect speaks the protocols deployed in the field. It reads NTCIP 1203 traffic sensors over SNMP and polls Wavetronix SmartSensor devices (SS105 and SS125), with HiTrac UTC outstations also supported. Polled data is automatically deduplicated and rolled up into hourly, daily, weekly, and monthly summaries with per-class breakdowns, 85th-percentile speeds, and uptime tracking.

On top of that data foundation GoDetect runs traffic analytics that explain themselves. It discovers rush-hour windows directly from observed patterns rather than fixed AM/PM windows, compares volume week-over-week, surfaces the busiest days and hours, and builds detailed baselines that power anomaly and queue-formation alerting.

Traffic Detection & Classification Feature Highlights:

- Vehicle Classification
- Multi-Protocol Polling
- Traffic Analytics

COMMUNICATION PROTOCOLS

SUPPORTED DEVICES	*NTCIP 1203, Wavetronix SS105/SS125, HiTrac UTC*
POLLING	*Per-detector schedule, dedup, uptime tracking*

VEHICLE CLASSIFICATION

SCHEMES	*FHWA 13-class, length-based, regional*
PER-DETECTOR SCHEME	*Per-detector; mixed fleets stay consistent*
UNIVERSAL VEHICLE MIX	*7 stable categories: motorcycle to multi-trailer*

TRAFFIC DATA & ROLLUPS

PER-LANE METRICS	*Volume, occupancy, speed, 85th %, headway, gap*
ROLLUPS	*Hourly, daily, weekly, monthly summaries*

TRAFFIC ANALYTICS

RUSH HOUR	*Peak windows discovered from observed data*

** Rush-hour, week-over-week, and busiest-period analytics activate automatically once a detector has 14 days of collected data.*

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