»» Traction

A Kimley-Horn Software Solution

Improve your traffic operations with Traction ATSPM.
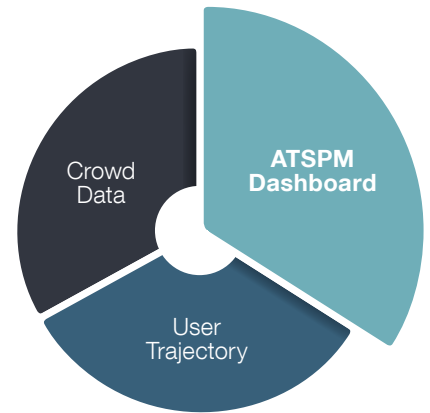
How are your signals performing?

Automated Traffic Signal Performance Measures (ATSPM) can revolutionize the way you detect issues, prioritize resources, and identify areas for improvement within your roadway network.

Traction is designed to maximize your access to:

- ✔ Clear, actionable data
- ✔ Easy-to-use dashboard displays
- ✔ Corridor and system level interactive ATSPM reporting

Powerful Functional Modules

Traction's unique three module approach provides a comprehensive approach to transportation performance monitoring.

Crowd Data

ATSPM Dashboard

User Trajectory

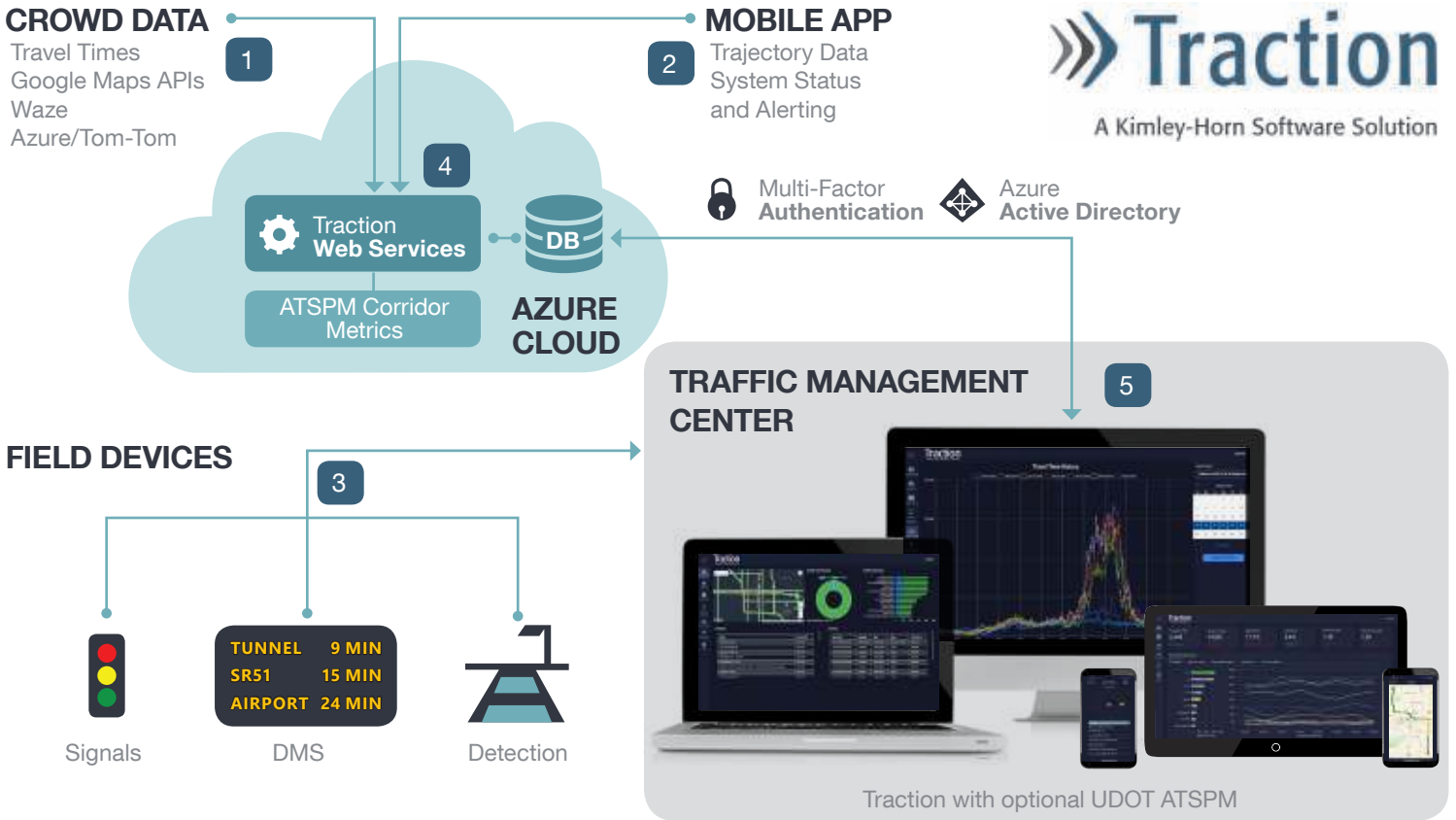## View Parameters in Real-Time and Create Monthly Reports

Arterial Performance Measures

- » Vehicle Throughput
- » Arrivals on Green
- » Queue Spillback
- » Split Failures
- » Travel Time Index
- » Planning Time Index

Volume-Based Measures

- » Traffic Volume
- » AM Peak Volume

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1

MOBILE APP
2
Trajectory Data
System Status
and Alerting

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4

⚙ Traction
Web Services

DB

ATSPM Corridor
Metrics

**AZURE
CLOUD**

🔒 Multi-Factor
Authentication

◆ Azure
Active Directory

TRAFFIC MANAGEMENT
CENTER

5

FIELD DEVICES

3

TUNNEL	9 MIN	
SR51	15 MIN	
AIRPORT	24 MIN	

Signals   DMS   Detection

Traction with optional UDOT ATSPM

1 Google Maps
Directions APIs,
Waze, and Azure/
Tom-Tom supply
real-time travel
time data.

2 User trajectory
data provided by
users with iOS or
Android Traction
mobile app.
ATMS dashboard
metrics availble
on Android and
iOS devices

3 UDOT ATSPM
software polls
high-res data.
Real-time
information can be
pushed to DMS.

4 Web services
and database are
cloud hosted by
Microsoft Azure.

5 Information
displayed to
agency users
through browser
and mobile app-
based views.

What do I need to gather data?

Signal Performance Measure		Setback detection	Stop bar detection (lane by lane)	Traction Crowd Data Module
Arterial Performance	Throughput	✓		
	Arrivals on Green	✓		
	Queue Spillback	✓		
	Split Failures		✓	
	Travel Time Index			✓
	Planning Index			✓
Volume	Traffic Volume	✓		
	AM Peak Volume	✓		
	PM Peak Volume	✓		

Ready For More?

www.kimley-horn.com/traction

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