



Traffic Management Center Optimization Strategic Plan Item





Strategic Plan Item



SAFE & VIBRANT COMMUNITY

RESPONSIBILITY

ENG

TIMEFRAME

FY26

ACTION ITEM

Traffic Management Center Optimization

DESCRIPTION

Integrate optimized traffic signal software to improve timing, synchronization and traffic flow



Agenda

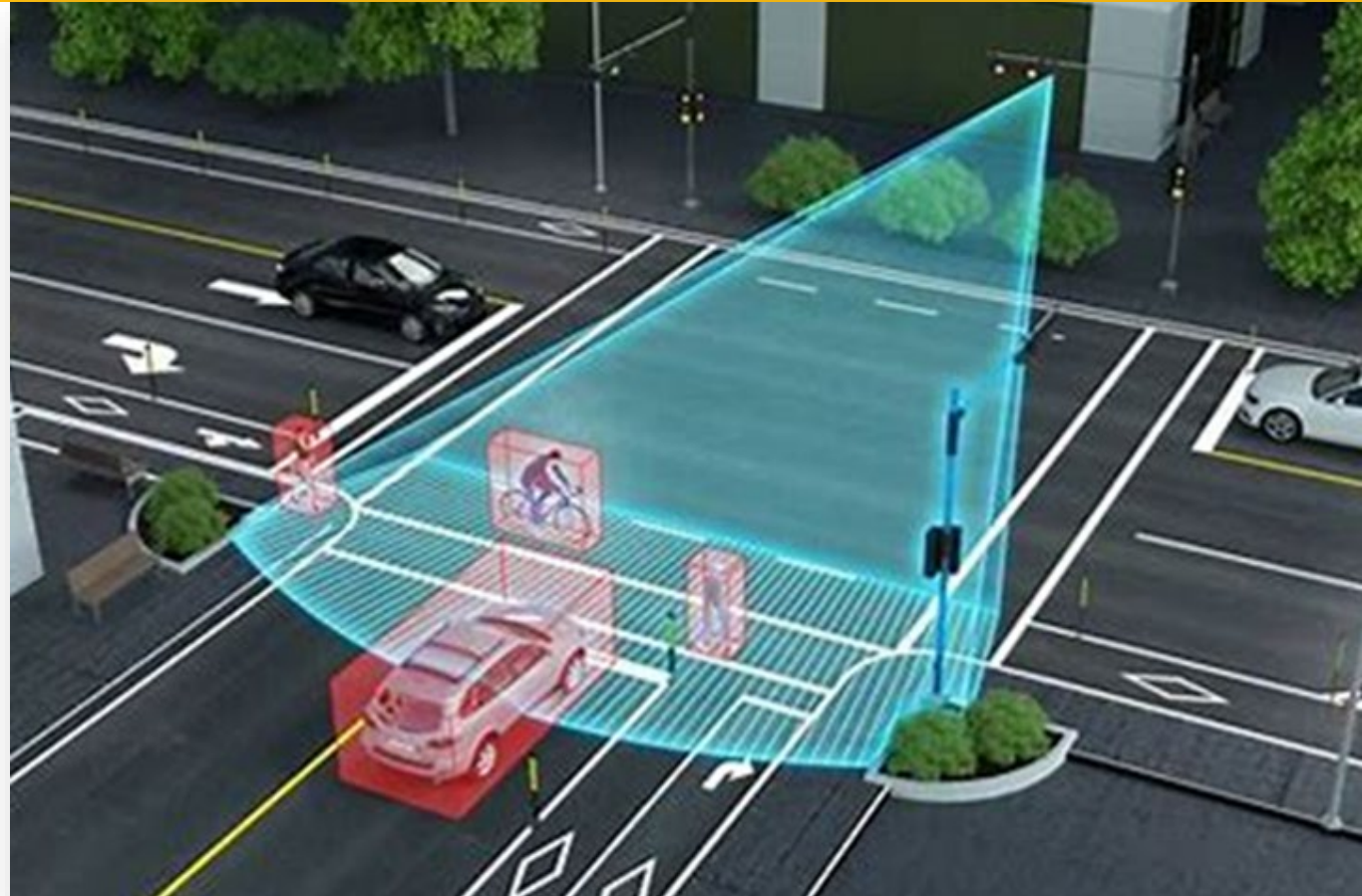
Signal History

Upgrades to Infrastructure & Technology

Adaptive Implementation

General Findings

Path Forward





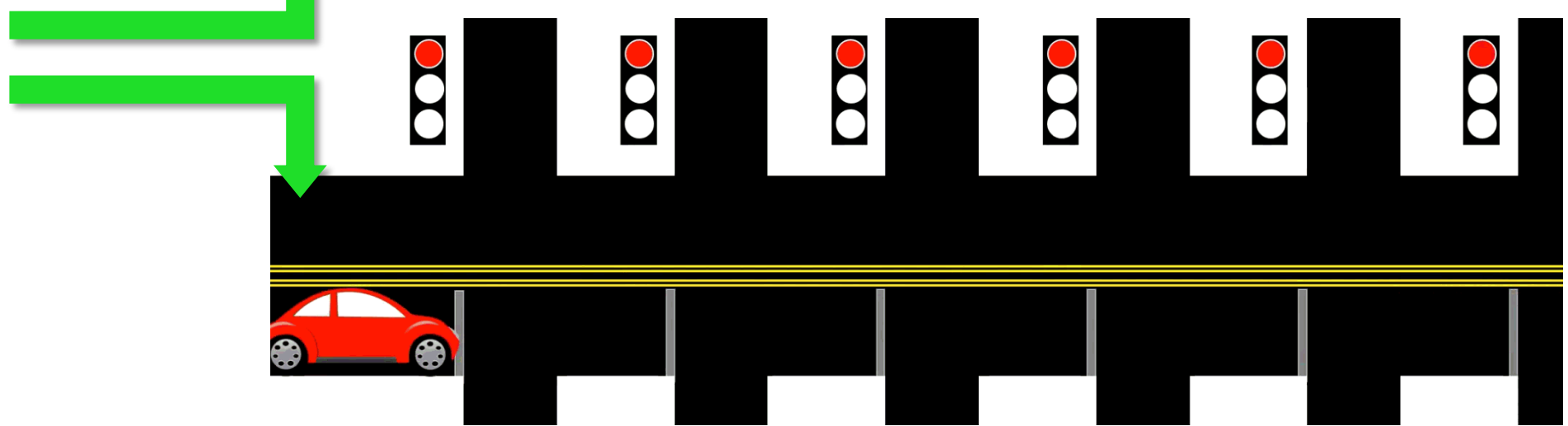
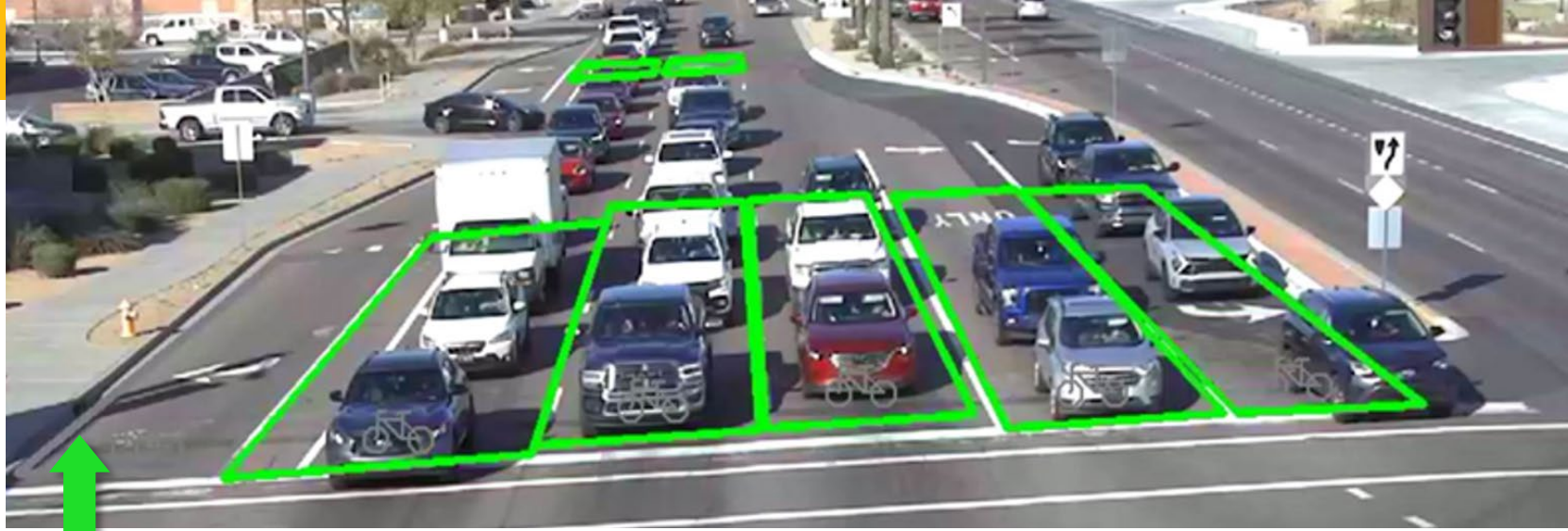
Signal History Terminology

Vehicle Detection

- Video
- Radar

Signal Operation Types

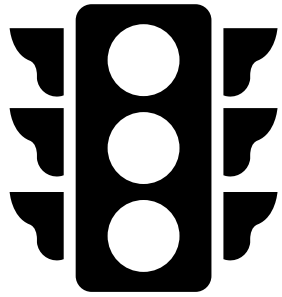
- Fully-Actuated
- Coordinated





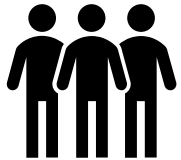
Signal History Goodyear Then VS Now

2008

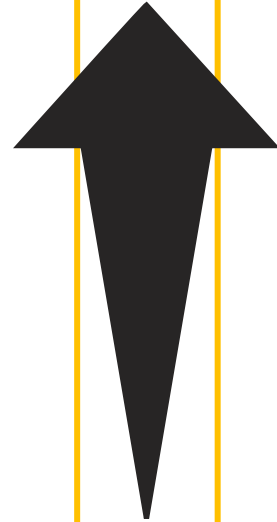


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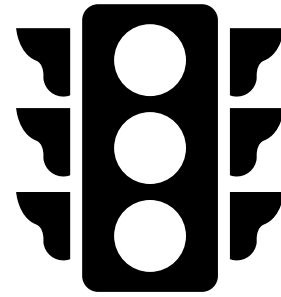
Traffic Signals



Population ~60,000

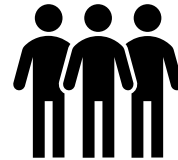


2026



122

Traffic Signals



Population ~125,000

Litchfield Daily Traffic Volume

Van Buren – I10

11,806 in 2008 → 31,204 in 2026

Cotton Lane Daily Traffic Volume

Yuma Rd – I10

7,350 in 2008 → 30,920 in 2026

Estrella Pkwy Daily Traffic Volume

Van Buren – I10

32,762 in 2008 → 47,291 in 2026



Upgrades to Infrastructure & Technology

Technology Enhancements

- Traffic Management Center
- Fiber Network
- Radar Detection
- Adaptive Software Module
- Pilot Program Opportunity

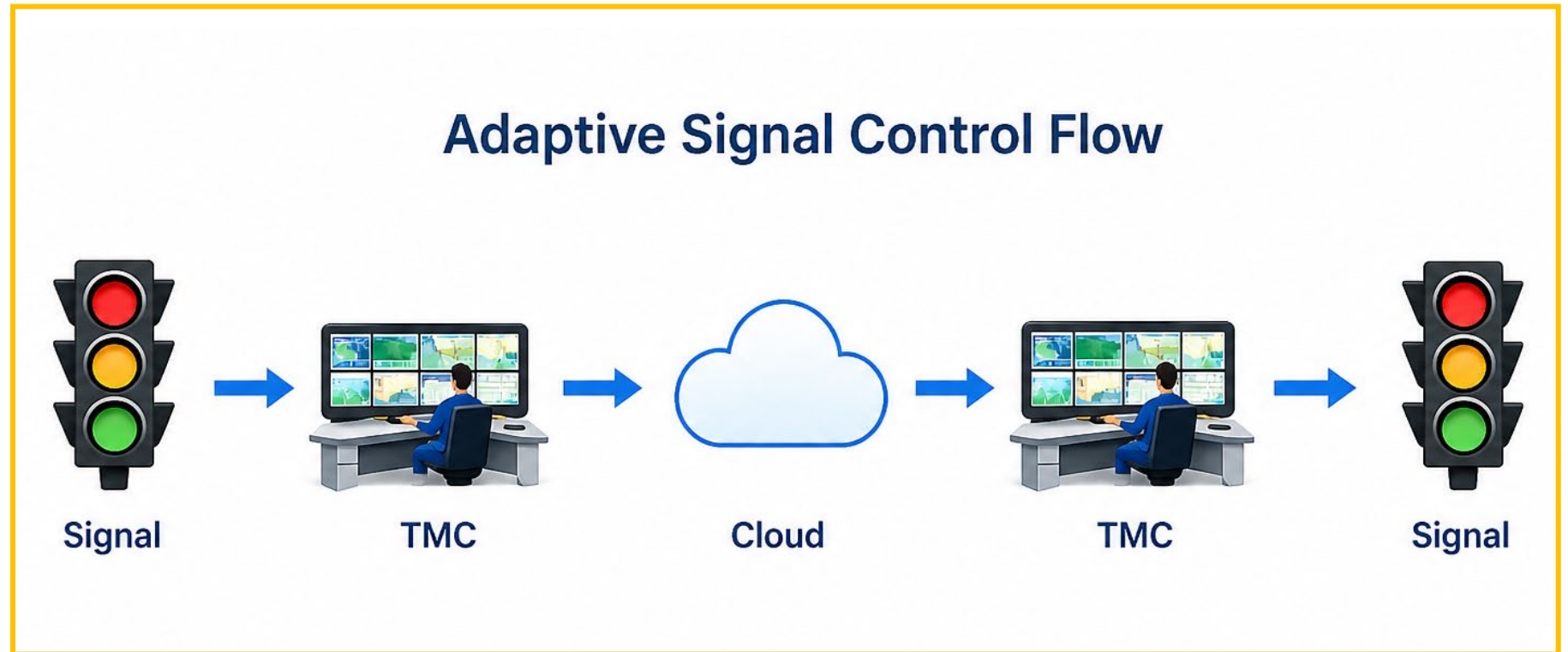




Adaptive Implementation System Overview

Adaptive Traffic Control System

Traffic signal timing adapts based on **actual** traffic demand

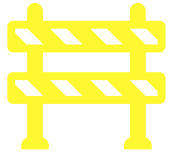




Adaptive Implementation Goals



Daily Commutes: Reduce Congestion Impact



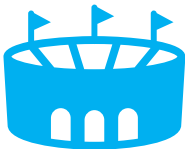
Construction: Mitigate Traffic Delays



Freeway Detours: Faster Recovery



School Peaks: Less Wait Time

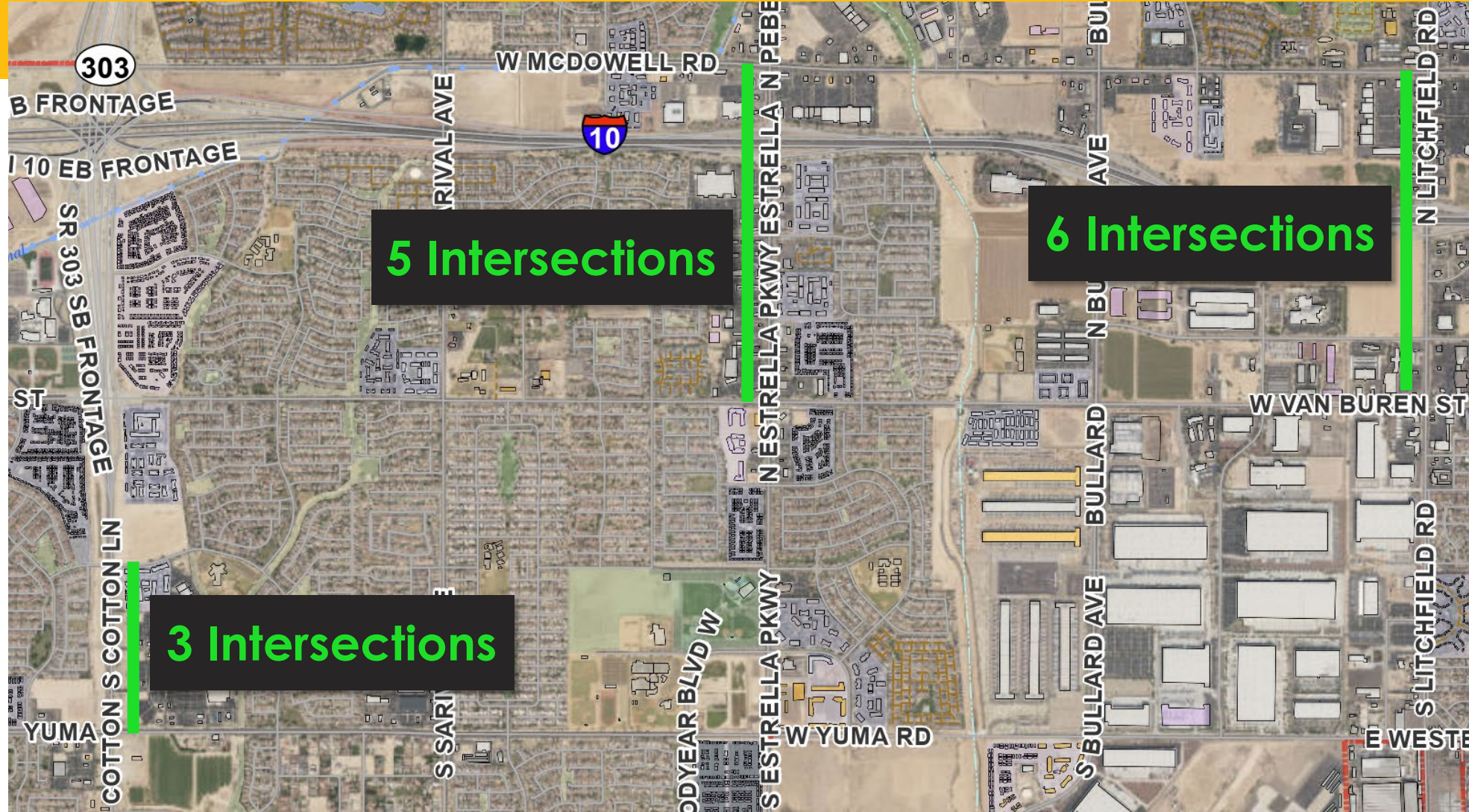


Events: Quicker Clear-Out



Adaptive Implementation

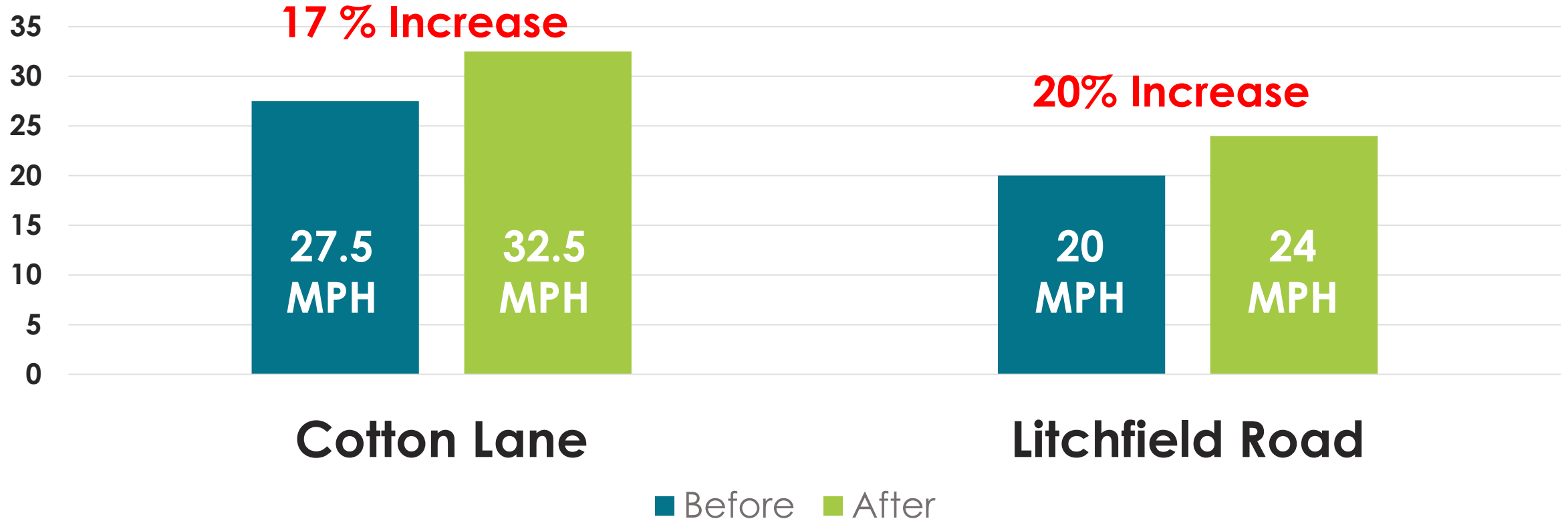
Pilot Project Locations





General Findings

Average Corridor Speeds



General Findings

Additional Benefits

- Cost effective
- Maximize use of existing infrastructure
- Minimal staff support once established
- Ease of future deployment





Path Forward

- Continue Study of Adaptive Corridors
- Possible Expansion to Additional Intersections
- Evaluate Technology Advancements



Questions

