

# California Transportation Commission Traffic Light Synchronization Program (TLSP)

City of Los Angeles Update  
March 2019



# Automated Traffic Surveillance and Control System (ATSAC)

1984 Los Angeles Summer Olympics  
Traffic Management

LADOT ATSAC Coliseum System

128 Signals in the Coliseum area

## 2019 LADOT Factoid:

**Geographic Area:** ..... 465 square miles  
**Population:** ..... 4,030,000  
**Miles of City Streets:** ..... 7,500  
**No. of Parking Meters:** ..... 36,000  
**No. of Traffic Sensors:** ..... 30,000  
**No. of Traffic Signals:** ..... **4,750**  
**No. of Transit Priority Signals:** ..... 1,500  
**No. of Traffic Monitoring Cameras:** ..... 620



# ATSAC System Technology Deployment

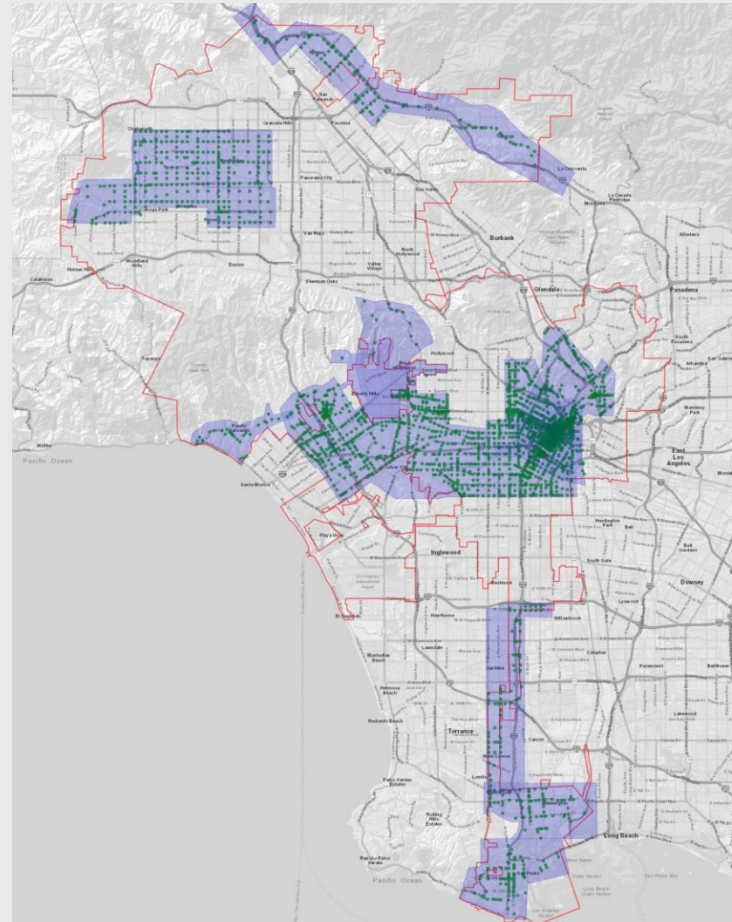
TLSP Project Map (2008)

## Total Traffic Signals in TLSP

- 2,182 out of 4,750 citywide (46%)

## Technology Components

- Traffic Signal Interconnect
- Traffic Responsive Control
- Changeable Message Signs





# Adaptive Traffic Control System (ATCS) Technology Deployment

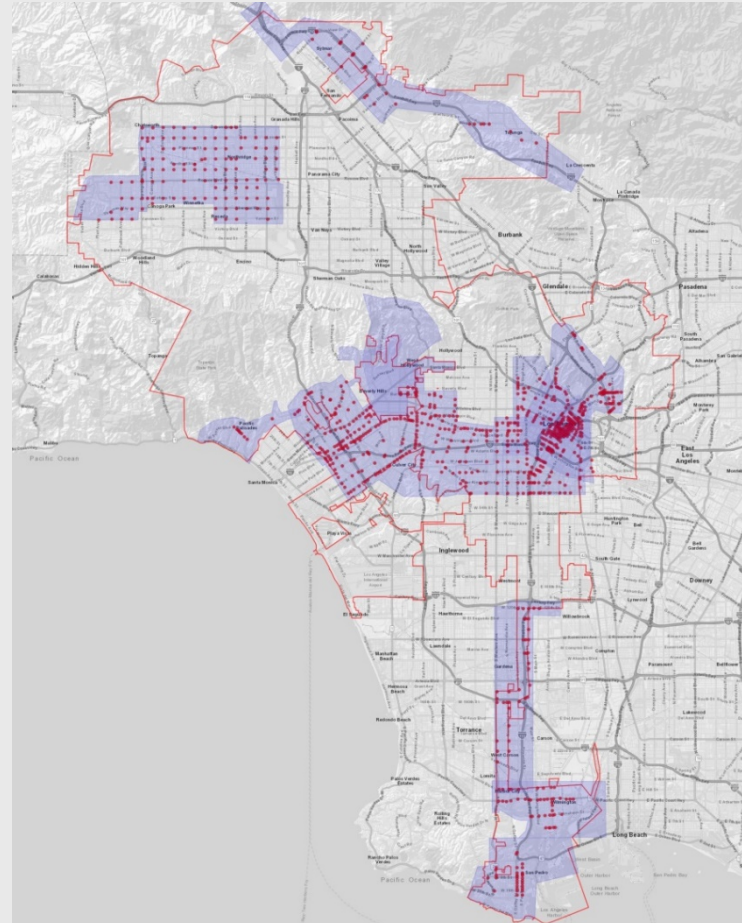
## Total ATCS Traffic Signals in TLSP

- 1,566 out of 4,750 citywide (33%)

## Technology Components

- ITS Architecture Upgrade
- Advanced Technologies
- Adaptive Traffic Control
- Changeable Message Signs
- Traffic Monitoring System

TLSP Project Map (2012)



# Project Benefits – Travel Times and Emissions Reductions

## Project Specific

Project Name	Travel Time	<u>Emissions</u>
Reseda	-4%	-3%
Wilmington	-12%	-15%
Canoga Park	-12%	-4%
San Pedro	-9%	-4%
Harbor Gateway	-4%	-2.7%
Coliseum	-4%	-8.5%
Platt Ranch	-5%	-4%
Echo Park	-2%	-3%
Santa Monica 1	-5%	-4%
Santa Monica 2	-8%	-6%
Wilshire East	-3%	-3%
<b>Overall:</b>	<b>-6.2%</b>	<b>-5.2%</b>

## Overall Program

- Reduced Travel Times:  
-4% to -9%  
(reduction in some areas were as low as -32%)
- Reduced Emissions:  
-3% to -4%

Sources: LADOT ATSAC project studies  
2013 Texas A&M Study

# Proposed New TLSP Project for Digital Infrastructure and Technology Deployment (2019 and beyond)

## New Project Scope

Project will enhance transportation systems, resilient communications network, new software, curb management, and emerging transportation modes.

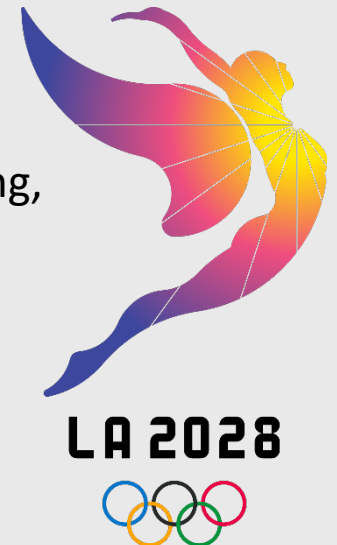
## Technology Components

- Digital Transportation Infrastructure Management System
- Advanced Traffic Signal Equipment
- Advanced Incident Detection and Management System
- Resilient Fiber Optic Communications Network



## Proposed New TLSP Project Benefits

- Synergy with current LADOT ATSAC 3.0 Program
- Automated/connected vehicle-ready technology
- Open-source data definition through LA's new Mobility Data Specification (MDS)
- Digital Services including parking, curbs, sidewalk, and airspace management
- Pedestrian safety traffic signal enhancements
- Mobility improvements for all modes (people walking, biking, driving, taking transit or shared vehicles)
- Emission reductions
- Greater reliability and resiliency in emergencies
- Preparation for the **2028 Olympics**



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