



TOWN OF  
**QUEEN CREEK**  
ARIZONA

# Intelligent Transportation Systems (ITS)

## Transportation Advisory Committee

*August 6, 2009*



# What is ITS?

## ***Intelligent Transportation Systems***

The use of technologies to help monitor and manage traffic flow; reduce congestion; provide alternate routes to travelers; enhance productivity; and save lives, time and money.

*Adapted from the ITS America definition.*





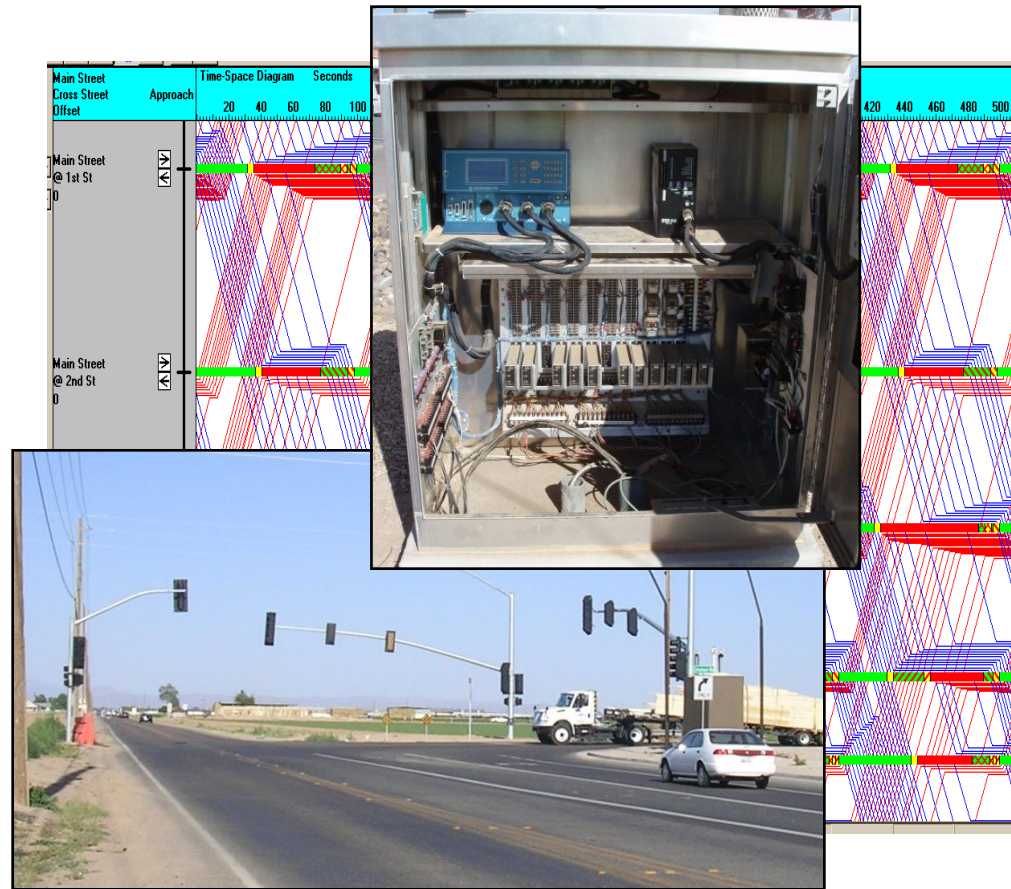
# What can ITS do for QC?

Systems intended to monitor and optimize traffic flow on arterial streets:

- Coordinate traffic signals
- Adapt signal timings to changing conditions
- Improve incident response
- Identify failures / maintenance issues remotely

# Traffic Signal System

Allows central control of all traffic signals connected to the system for coordination, timing changes, remote monitoring, etc.



# CCTV System

Remotely monitor traffic flow, work zones, and incidents.



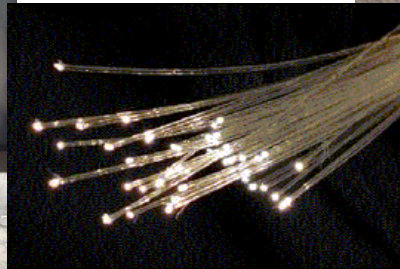
# Dynamic Message Signs

Convey information to motorists about lane restrictions, incidents, special events, etc.



# Communications

Hardwire (fiber optic cable) or wireless (radio) communications to link traffic signal controllers and CCTV cameras to a central Traffic Management Center.



# Federal Funding

Town staff has applied for and received substantial grant funding from the Federal Highway Administration for ITS:

**TOTAL FEDERAL FUNDS to QC:**  
**\$ 1,620,335**

Year	Project	Federal Funds	Local Match
FY08	Town Center ITS / Signal System	\$ 550,221	IN KIND
FY11	Town-wide Hardware & Software	\$ 490,000	\$ 210,000
FY12	Ellsworth Rd ITS – Phase 1	\$ 254,235	IN KIND
FY12	Rittenhouse Rd ITS – Phase 1	\$ 172,047	IN KIND
FY13	Ten Wireless Connections	\$ 105,000	\$ 45,000
FY13	Gilbert-QC Center-to-Center	\$ 137,690 QC share \$ 48,832	\$ 59,010 QC share \$ 20,928



# Town Center ITS

- Establish central traffic signal system
- Install fiber optic communications to 11 signalized intersections in Town Center
- Install CCTV cameras at six key intersections
- Establish Traffic Management Center





Figure 2. Town Center ITS Project Overview



# Current Status

- Town Center ITS Project:
  - Final plans with ADOT
  - Awaiting federal funding obligation
  - Two contracts to be issued using existing ADOT contracts:
    - Traffic signal system
    - Field hardware and communications
- Staff hopes to be able to accelerate:
  - Town-wide Hardware & Software (from FY11)
  - Ellsworth Rd ITS – Phase 1 (from FY12)

# Questions?

