



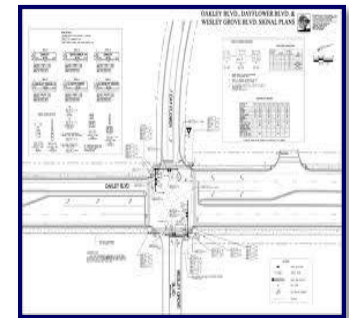
Supporting Economic Development with Effective Traffic Signal Management

Presented by: Steve Bailey, PE – Project Manager; sbailey@teceng.com

Ed Williams, PE, PTOE – Project Manager; ewilliams@teceng.com

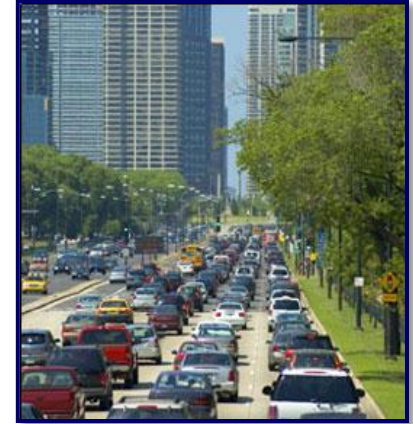
SIGNAL SYSTEM PROCESSES

- Impact Studies, Modeling & Data Collection
- Infrastructure & Urban Design
- Timing and Optimization
- Inventory Systems
- Operation Monitoring & Inspection
- Preventive Maintenance
- Emergency Maintenance



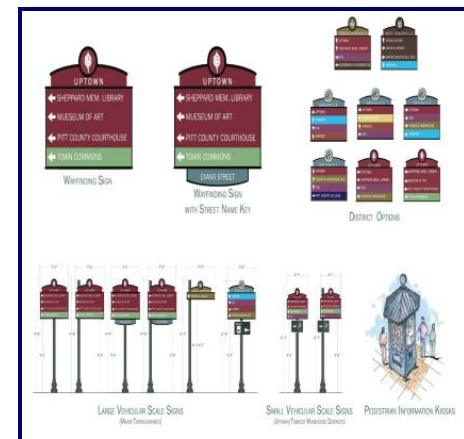
TRAFFIC IMPACT STUDIES & ECONOMIC DEVELOPMENT

- Variance in Local Policies
- Local Knowledge of Traffic Flow
- Public/Private Cooperation
- Job Retention
- Early Participation Before Site Selection
- Consistent Approach to Traffic Generation



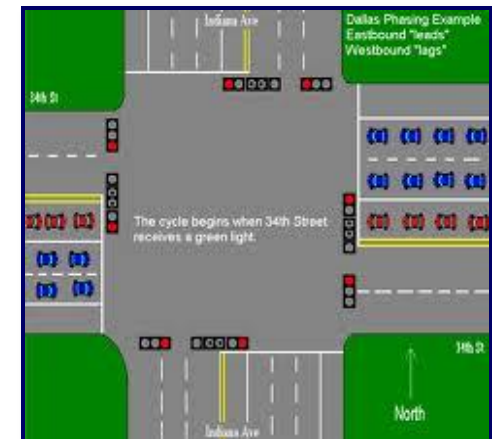
ECONOMIC DEVELOPMENT & URBAN DESIGN

- Appearance & Functionality
- Multi-Modal Considerations/Complete Streets
- Local Identity & Way-finding
- Blending of ROW & Private Property



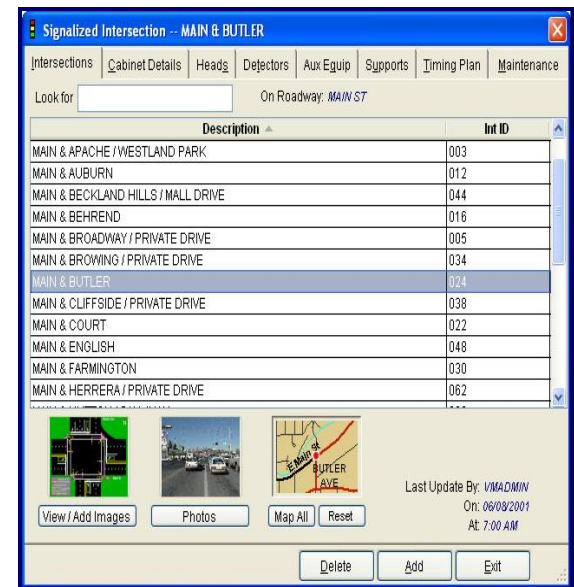
TIMING AND OPTIMIZATION

- Maximize Technology
- Regional Approach
- Standard Methodology
- Field Check & Verify
- Compare Actual Outcomes to Impact Study Estimates
- Revisit as Conditions Dictate



INVENTORY SYSTEMS

- Asset Management Considerations
- Sign Type and Condition
- Traffic Signal Infrastructure
- Timing Plan Management
- Record Retention



OPERATION MONITORING & INSPECTION

- Drive Systems in AM, PM & Off Peak
- Promote Public Notification of Problems
- Routinely Verify Communications & System Time
- Database Management
- Contact Major Employers Proactively



The image shows a report card titled "National Traffic Signal Report Card 2007". It lists several categories with their corresponding grades:

Category	Grade
Management	D-
Signal Operation at Individual Intersections	C
Signal Operation in Coordinated Systems	D
Signal Timing Practices	C-
Traffic Monitoring and Data Collection	F
Maintenance	C-
OVERALL	D

PREVENTIVE MAINTENANCE

- Conflict Monitor Testing
- LED Replacement
- Painting & Rust Prevention
- Detector Inspections
- Condition Check Lists



EMERGENCY MAINTENANCE

- Constructive Notice & Response
- Performance Based Criteria
- Call Prioritization & Responsibility
- Equipment Failure Tracking
- Repeat Call Highlighting
- Intermittent Malfunctions



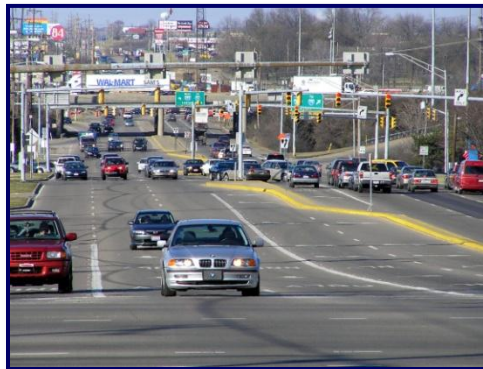
CHALLENGES FOR SMALLER CITIES

- Need for Multidisciplinary Staff
- Decreased Ability to Purchase in Volume
- Intermittent Need for Services
- Keeping Up to Date with Technology
- Awareness of Grant & Funding Opportunities



TEC EXPERIENCE IN SMALLER CITIES

- Springdale
- Mason
- Marietta



CITY OF SPRINGDALE

- Closed Loop Signal System
- Surveillance Cameras
- Multiple Control Points



CITY OF MASON

- Fixed Fee General Operating Agreement
- Project by Project Scoping Mechanism
- Closed Loop System with Video Detection
- Surveillance Cameras
- Multiple Control Points



CITY OF MARIETTA

- Review and Modify Impact Studies
- Traffic Signal Optimization
- Intersection Modification



Questions

