



City of Phoenix Downtown Traffic Management System (DTMS)

Presented by:

Ross Blakley

Street Transportation Director
City of Phoenix



Presentation Agenda

- Downtown Traffic Management System Overview
 - Project Goals
 - System Components
 - Future Expansion Plans

About Phoenix

- Population 1.4 million
- 515 square miles
- 5th largest city
- Tremendous growth rate



History

- Major League announcement, 1996
- Sunburst Traffic Management Plan
- Philosophy & Operation



Downtown Phoenix

7th Street

S.R. 51

I-17

Civic Center

I-10

S.R. 202



I-10

Washington Street

Jefferson St.



Bank One Ballpark

I-17

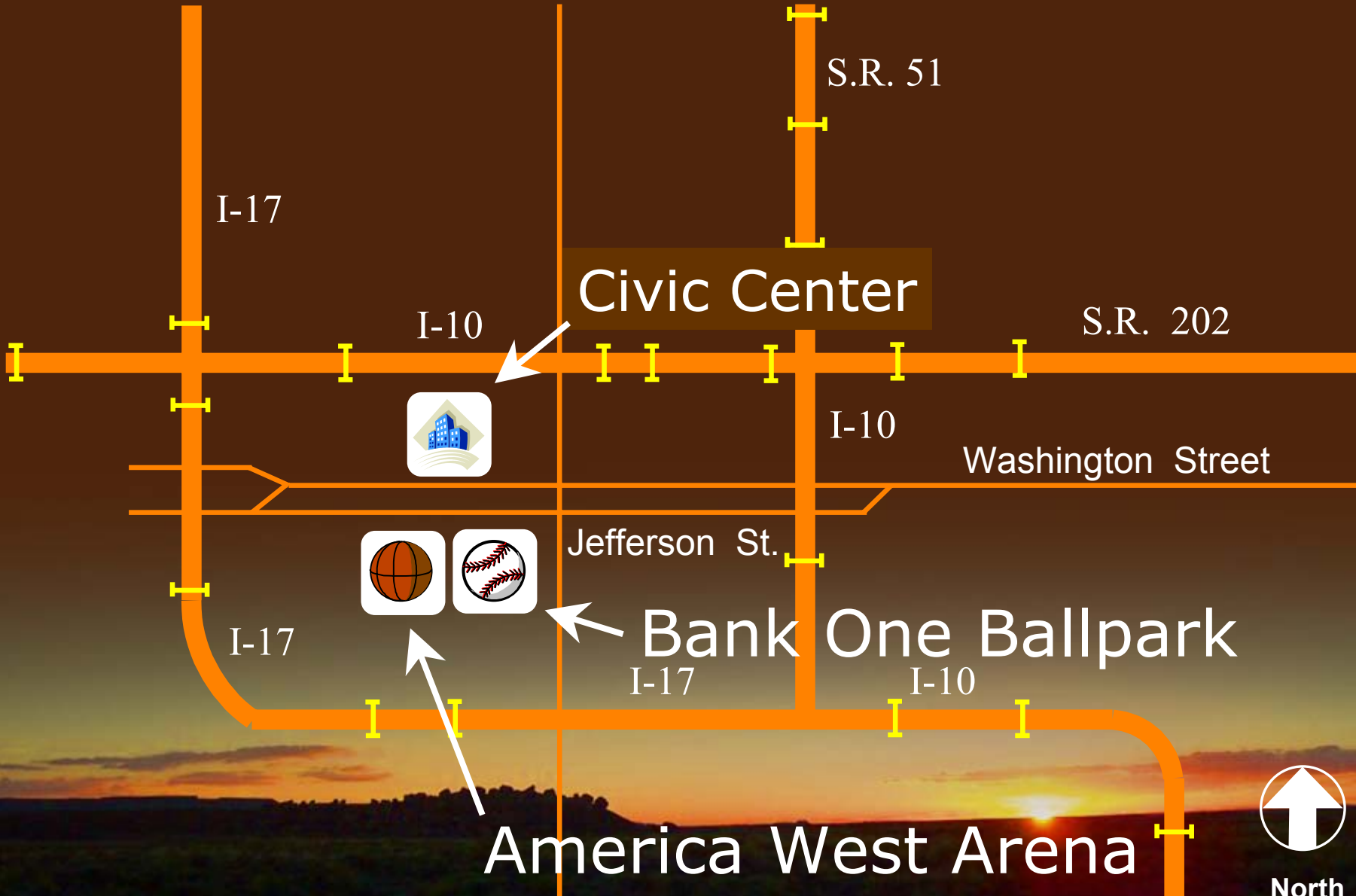
I-17

I-10

America West Arena



North



Why a Downtown Traffic Management System?

- Major event facilities:
 - Bank One Ballpark
 - America West Arena
 - Civic Center
- Cultural venues
- Events generate significant circulation & parking demand
- Traffic & enforcement staff will benefit from enhanced technical tools

What are the goals of the DTMS?

- ✓ Facilitate parking and traffic by equipping police and TMC with ITS tools.
- ✓ Expand event management partnership with police, traffic and stadium/center management



Downtown Phoenix Major Facilities



Bank One Ballpark:
Seating Capacity 53,000



Civic Center:
375,000 sq ft. (undergoing
expansion to 900,000)

America West Arena:
Seating Capacity 19,023

Event Traffic Management & Enforcement Needs

- Enhance event ingress & egress
- Enhance event security
- Enhance interagency coordination



Extensive On Street Enforcement & Traffic Control



From I-17

From I-10

From I-10

From I-17

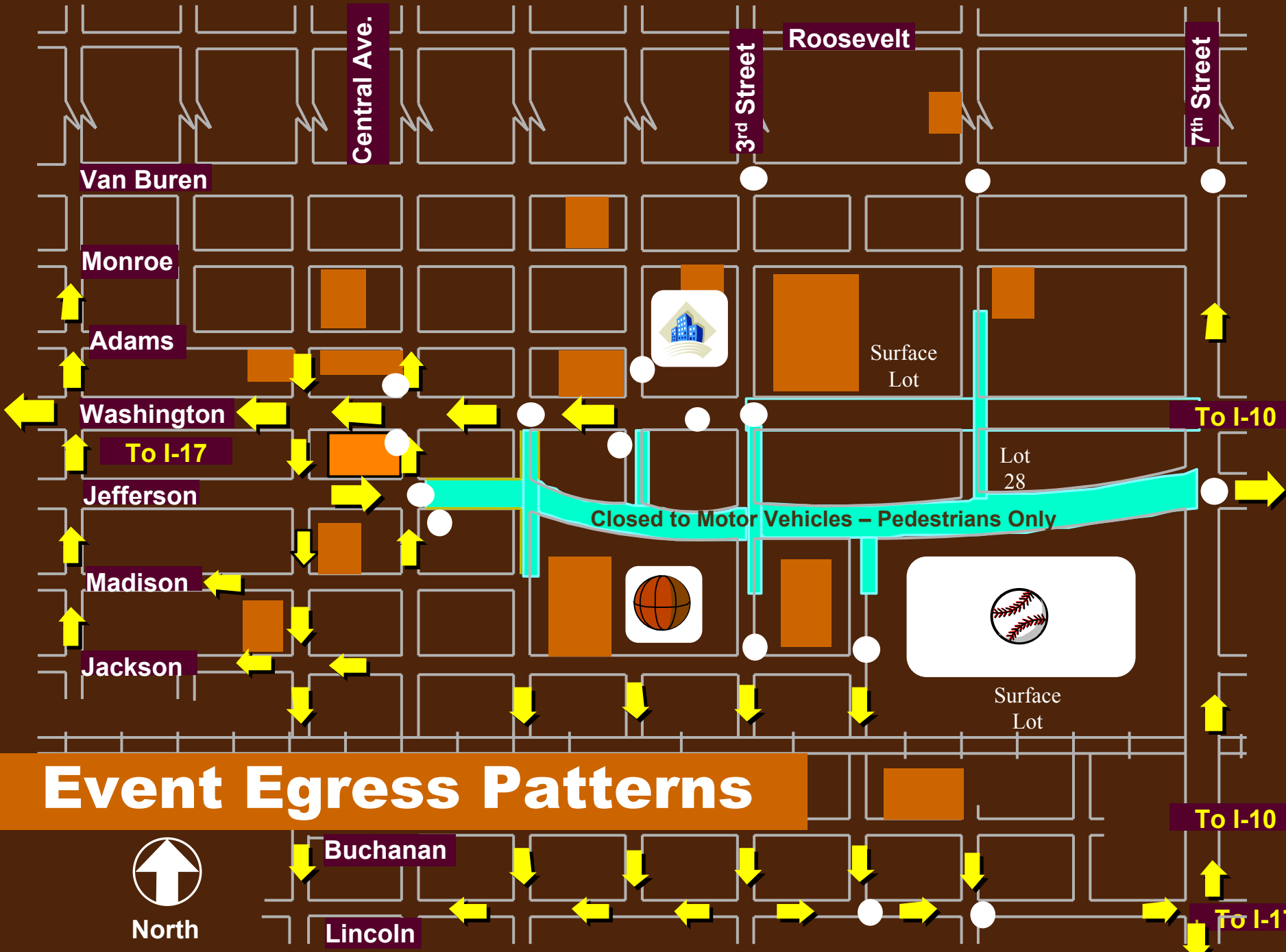
Event Ingress Patterns



North

Buchanan

Lincoln



Event Egress Patterns



North

Buchanan

Lincoln

Roosevelt

3rd Street

7th Street

Van Buren

Monroe

Adams

Washington

To I-17

Jefferson

Madison

Jackson

Surface Lot

Lot 28

Closed to Motor Vehicles - Pedestrians Only

Surface Lot

To I-10

To I-10

To I-17

Design & Implementation Process

- Early planning 1999 – 2000
- Design Concept Report August 2001
- Design Completed August 2001
- CM@R Revised Design Completed March 2003
- Construction & System Acceptance Complete November 2004



What ITS Tools are elements of the DTMS?

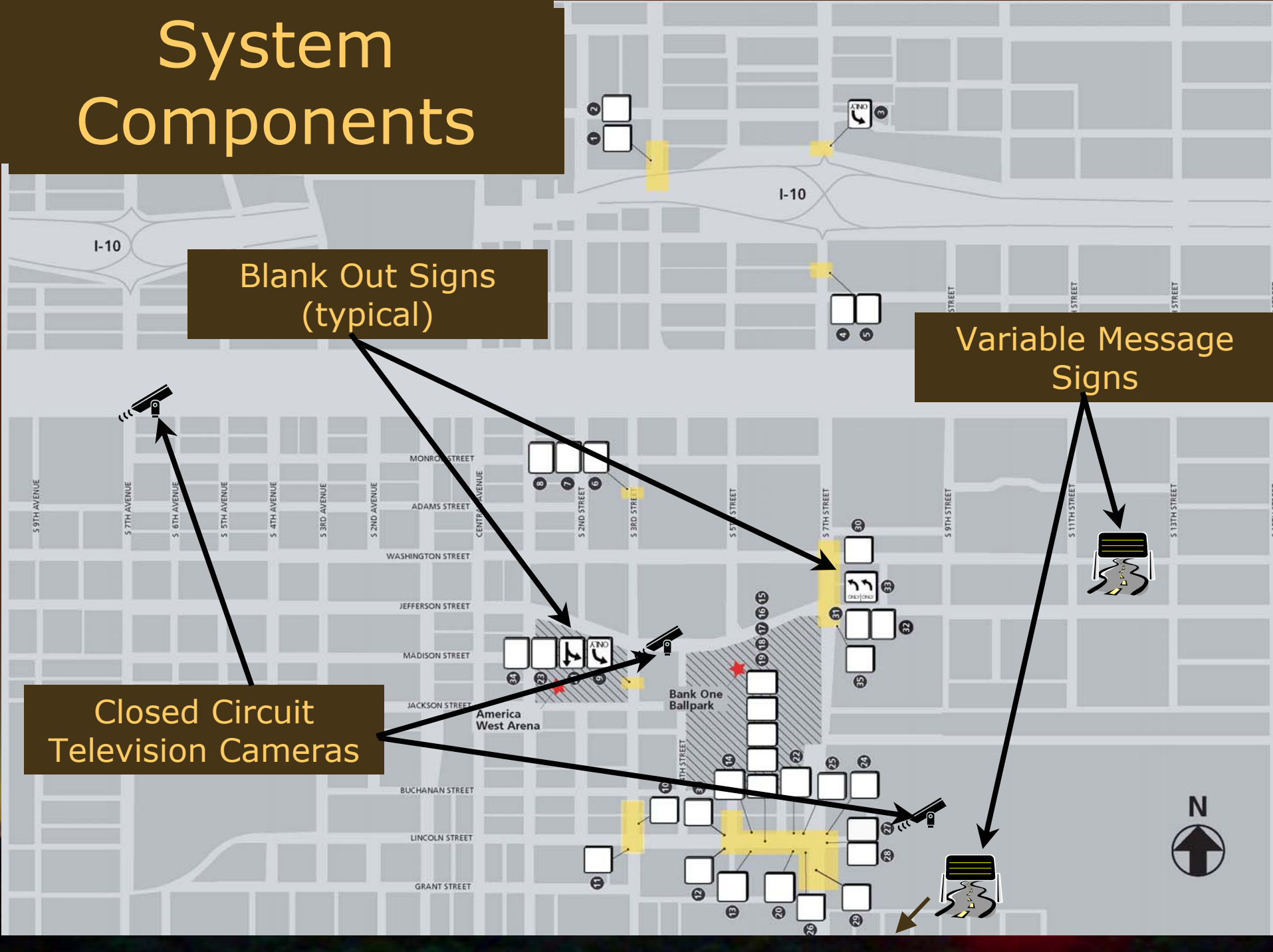
- Surveillance
 - CCTV
- Traveler Information
 - Dynamic Message Signs DMS (Arterial)
- Traffic Management
 - Blank Out Signs
 - Traffic Signals
 - Video Walls
 - Integrated Central Control Software

System Components

Blank Out Signs
(typical)

Variable Message Signs

Closed Circuit Television Cameras



Surveillance

Closed Circuit Television (CCTV) System:

3 additional cameras (integration of 6 existing)

Shared control for police & traffic management staff

Linkage to freeway CCTV system



Traveler Information



Dynamic Message Signs (DMS):

2 arterial DMS

Shared control for
police & traffic
management staff

Ongoing test with
freeway DMS
coordination

Traffic Management



Blank Out Signs:

36 Blank Out Signs

10 Ingress & Egress 'Scenarios'

System tied to traffic signals where turn restrictions apply

Traffic Management



**Management
Center
Enhancements:**

Video Walls at
Police and Traffic
Management
Centers

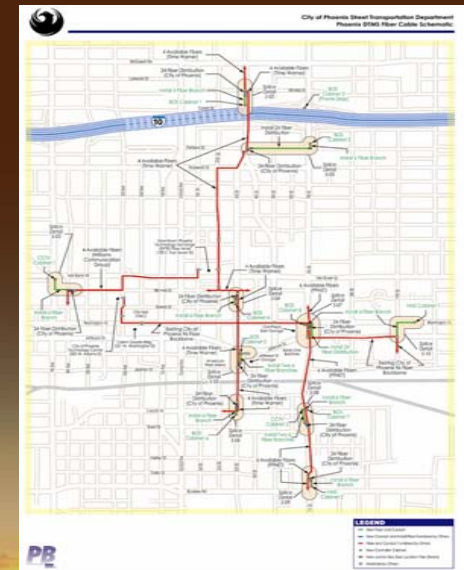
Integrated Control
& Monitoring
Software (with
remote capability)



Communications

Integrated communications mix:

- City owned fiber optic
- City franchised private sector fiber optic
- City owned copper wire
- Leased telephone



What's next

- Operational plan in progress
- Contract maintenance for most field devices (after warranty period)
- Adjust some scenarios & add additional signs
- Tie in to parking garage & signal systems for traffic & parking data
- Coordinate with Light Rail construction & operations
- Evaluate system once ASU Downtown campus opens

Questions





City of Phoenix Downtown Traffic Management System (DTMS)

