

### TexITE 2016 Fall Meeting September 2016



# Downtown Traffic Management System

**TexITE 2016 Fall Meeting** 

September 2016

Mike Frisbie, PE, Director/City Engineer

Transportation & Capital Improvements

### DTMS Overview

- DTMS Goals
  - Reduction of congestion in downtown activity zone
  - Safe and expeditious vehicle and pedestrian movement
  - Promote remote parking facilities
  - Encourage transit and pedestrian movement
- DTMS Components
  - Event Scenarios and Categories
    - Yellow Day
    - Red Day
  - Enhanced Technical Tools
    - Intelligent Transportation Systems (ITS)

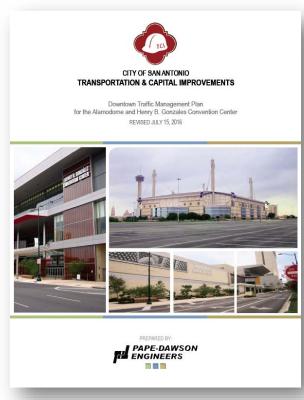






### Preliminary Study

- Initial study completed in FY 2016
- Provided framework for areas in which additional details are needed
  - Parking Plan
  - Pedestrian Plans
  - Mass Transit and Shuttle Transportation
  - Bike Transportation





### Activity Zone

- Alamodome
  - Seating capacity 60,000
  - Over 300 events per year
  - 2018 NCAA Final Four
  - 2,800 parking spaces
  - VIA Thompson Center
- Henry B. Gonzales Convention Center (HBGCC)
  - Over 300 events per year
  - 514,000 sq ft exhibit space
  - 72 meeting rooms





## Why a DTMS?

- Major downtown event facilities and cultural venues
  - Alamodome
  - HBGCC
  - Tobin Center
  - Aztec Theatre
  - Lila Cockrell Theatre
- Coordination of all traffic modes
- Adequate traffic control staffing
- Enhance event ingress/egress
- Enhance technical tools
- Enhance interagency coordination





### Ingress Plans

Plans developed for different event levels

| Event Type | Alamodome Event        | <b>Convention Center Event</b> |
|------------|------------------------|--------------------------------|
|            | NONE                   | MAJOR                          |
| LIGHT RED  | MINOR (<20,000)        | MAJOR                          |
| RED        | MAJOR (>40,000)        | NONE                           |
| DARK RED   | MID to MAJOR (>20,000) | MAJOR                          |



### Sample Ingress Map – Red Event



### San Antonio Red Event Ingress Plan

Major Alamodome event (40K-60k attendees) with conflicting Convention Center event

#### **Recommended Routes**



Northwest Corridor (IH10 Downtown/Cesar Chavez Exit)

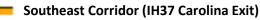




Northeast Corridor (IH35 Austin/Hackberry Exit)



East & West Corridor (IH10/Hwy 90 Hackberry Exit)

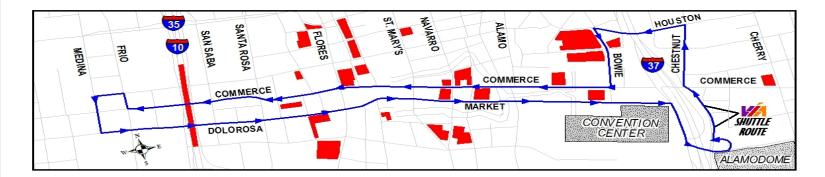


South Corridor (IH35 Cesar Chavez Exit)

### **VIA Shuttle Route**

Promote parking facilities

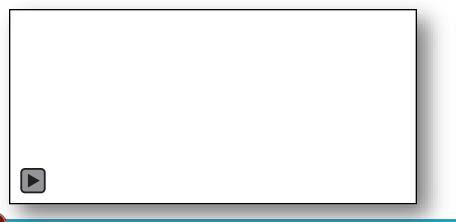
#### PUBLIC PARKING ALONG VIA SPECIAL EVENT SHUTTLE ROUTE



### ITS Tools

- Traffic Management Center Tools
  - Signal Timing Plans
  - Intelligent Transportation System (ITS)
    - Traffic Monitoring Cameras
    - Dynamic Message Signs







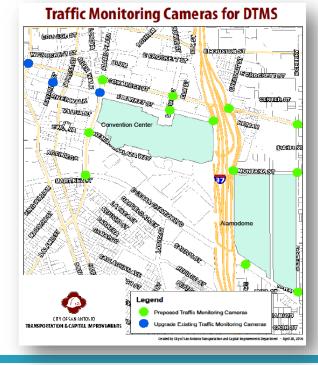
### Traffic Monitoring Cameras

#### **New locations:**

- Alamo St Commerce St
- Bowie St Commerce St
- Bowie St Market St
- Market St Tower of the Americas Way
- Commerce St IH37
- Cherry St Commerce St
- Cherry St Montana St
- Cesar Chavez Blvd Cherry St
- Cesar Chavez Blvd Hoefgen Ave
- Alamo St Cesar Chavez Blvd
- Alamo St Nueva St
- IH 37 NB Montana St

#### **Upgrade locations:**

- Commerce St St Mary's St
- Market St Navarro St
- Alamo St Market St





### Transguide Equipment





### Next Steps

- Conduct detailed studies to refine plans for transit, parking, and pedestrians
- Identify optimal placement of initial arterial Dynamic Message Signs (DMS) based on ingress routes, parking availability, and transit
- Install Traffic Monitoring Cameras at identified intersections
- Install Police Manual Control switches at selected signalized intersections
- Install arterial DMS

### Later Activities

- Online and mobile applications
  - Developing and promoting a website that can help drivers quickly see their travel options to an event can make them aware of other options



### Timeline

- Additional studies and camera installation
  - Early FY 2017
- Police control switches
  - Mid FY 2017
- Arterial DMS installation
  - Late FY 2017, early FY 2018





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