



# FORT WORTH



## Joint Emergency Operations Center

# Joint Emergency Operations Center (JEOC)

The mission of the JEOC is to:

- Establish emergency preparedness for the City of Fort Worth and Tarrant County, and
- Coordinate disaster response activities among city departments and dozens of agencies.

Co-funded by the:

- City of Fort Worth
- Tarrant County
- Tx Dept of Public Safety





# Traffic Management Center (TMC)

The role of our new TMC is to:

1. Manage traffic operations using the traffic signal system, camera systems, and other technologies, and
2. Support the JEOC with real-time traffic condition information and provide video of the roadways and the city.



The City Manager required a new TMC to be constructed and made part of the new JEOC.

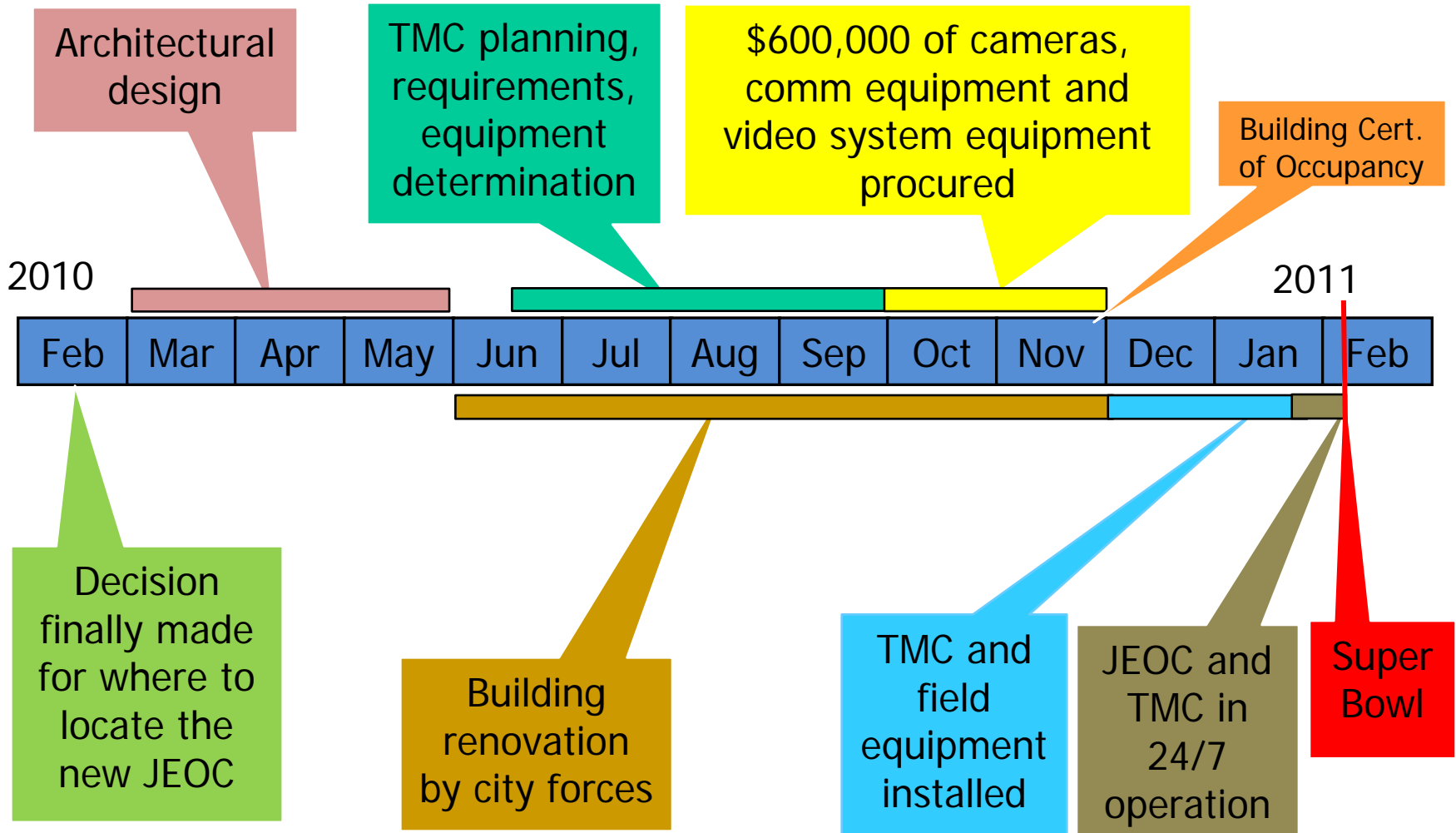
The JEOC is:

An 18,000-square-foot facility and includes new technology such as:

- Videoconferencing systems
- Crisis management systems
- A Web-EOC system to track all emergency events among EOC staff
- A new Radio Over IP system
- New media room with media hookups outside the building
- Monitors in almost all rooms throughout the facility



# Timeline to Create the New JEOC and TMC - 12 months!



# Inside the EOC

## Public Information Room

- Separate space for the media
- Television studio
- A/V connections to broadcast briefings



## Break Room

- Fully equipped kitchen and break room.
- During EOC activations 3 full meals are provided each day.





# Inside the EOC

## Police/Fire Command Room

- Separate space to organize police and fire response
- Police dept's separate camera system brought into this room.



## Backup Power

- Complete backup power generator and UPS
- Sized to support all computers
- There are elaborate fuel arrangements to power the system



# Inside the EOC

## Video Chase



Five 3x2 Wall Displays in the Chase area behind the Video Wall



## IT Room



3 racks just for traffic!

13 video system servers in the JEOC IT Room





# Inside the EOC

## Executive Conference Room

- Command room for upper management
- Fully equipped with monitors
- PC hookups in ALL chairs
- During activation:
  - formal reporting protocols are used
  - with hourly briefings in this room
  - so effective field responses can be coordinated



# EOC Construction – Jun to Nov 2010



The entire floor had been constructed to be an Internet hotel for Verizon. But the space was mostly unused.

Verizon's lease was bought out and demolition began.





# EOC Construction – Jun to Nov 2010



6 months  
for  
renovation



# All Stations Manned – Jan 2011



The Cotton Bowl at  
Cowboy Stadium was used  
as a dry-run to activate  
the JEOC



# TMC Construction – Jun to Nov 2010





# Integration of the TMC – Dec to Jan 24



Video management  
system from boxes to  
integration



Staff video management  
system training  
happened while camera  
integration continued

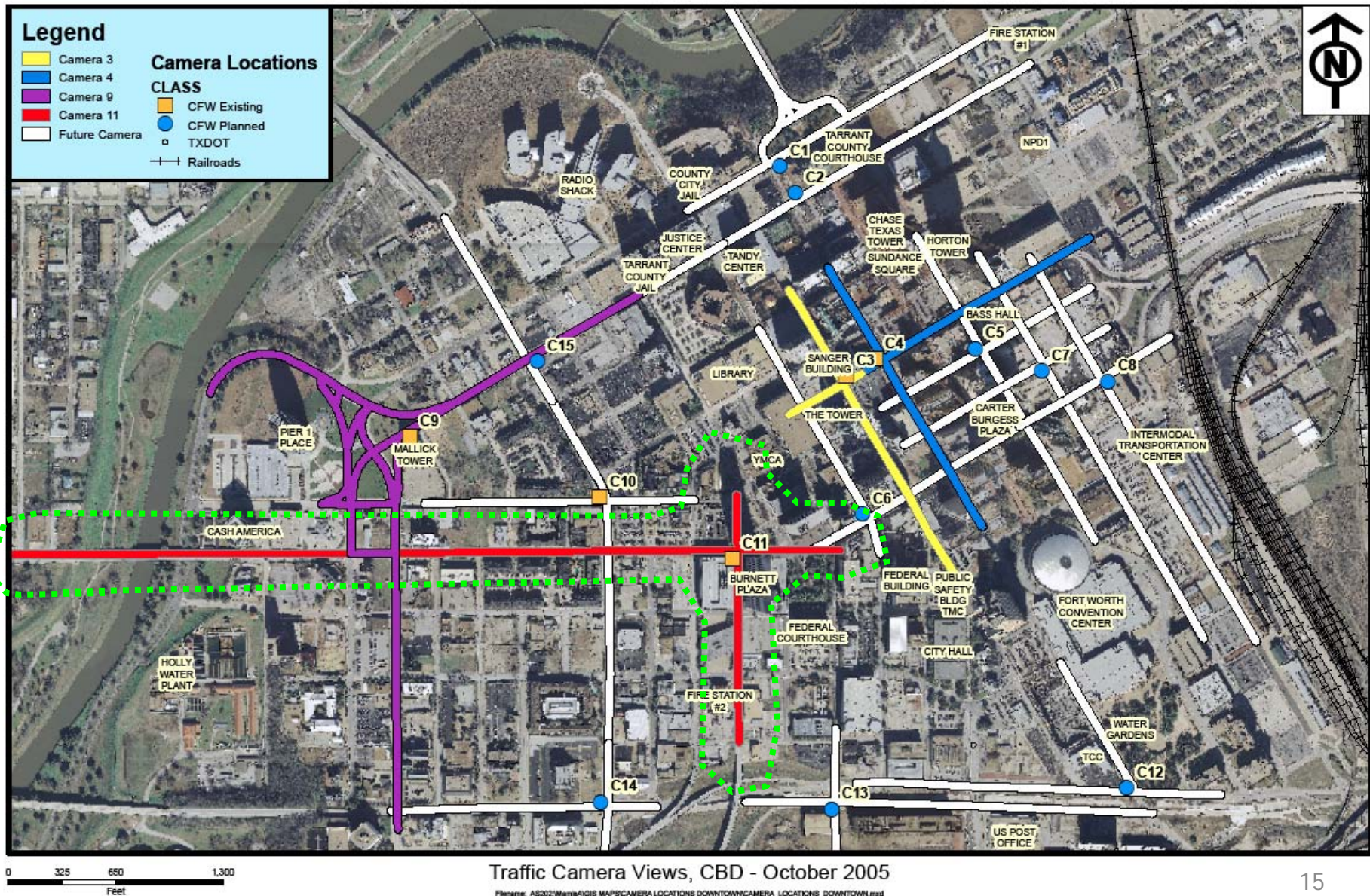
Almost too many staff,  
consultants and vendors  
at one time





# CBD Traffic Camera System

13 new cameras installed





# CBD Traffic Camera System

New cameras installed by city forces

Old 3 foot diameter  
dome cameras  
removed

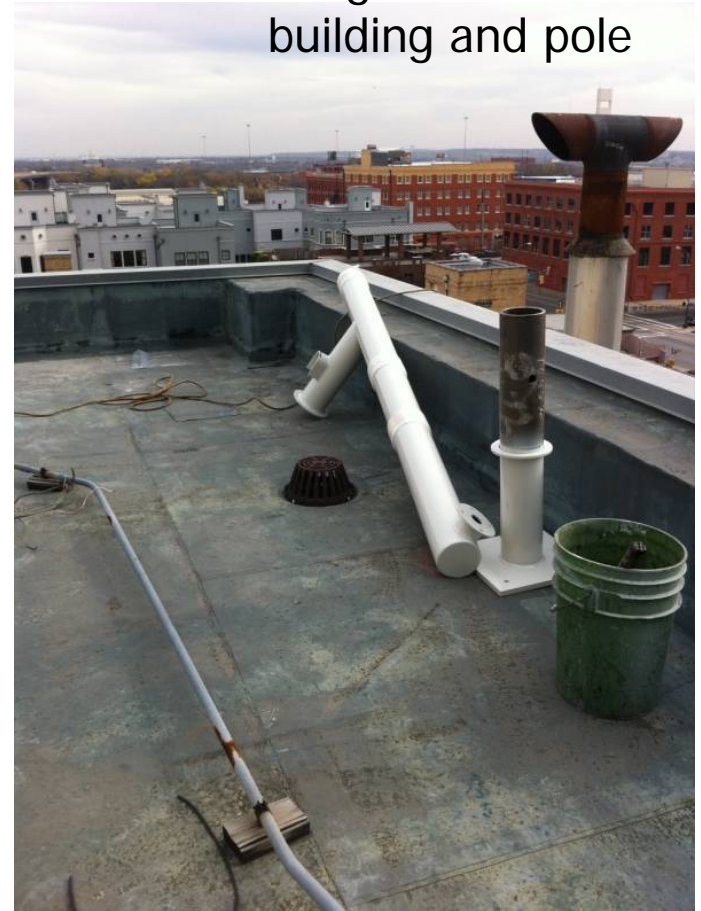


# CBD Traffic Camera System



Camera on  
the Star  
Telegram  
building

New building mounts  
were structurally  
designed for each  
building and pole





# CBD Traffic Camera System

Cameras installed by city forces



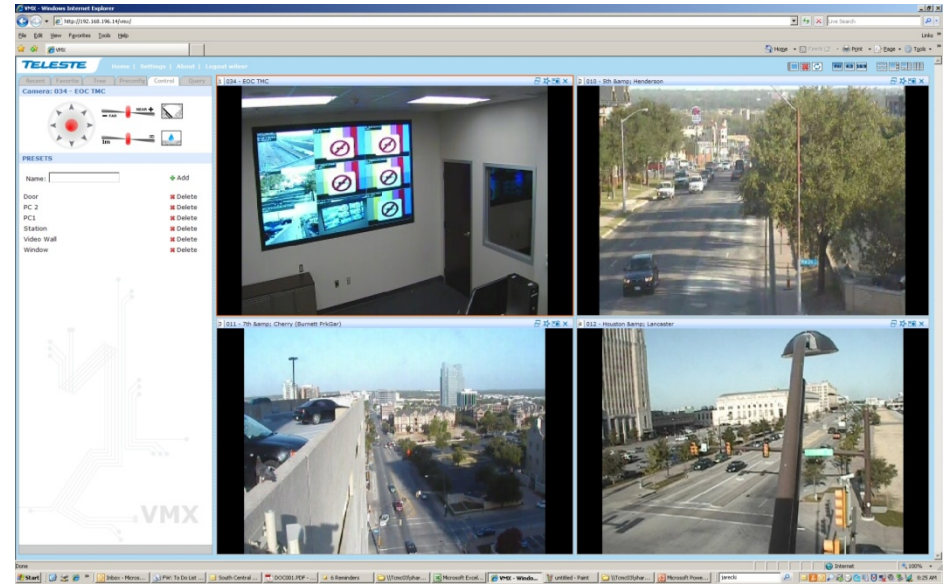
Cameras being set up to work



# Video Management System

Client software for  
JEOC workstations

Web client for  
remote users

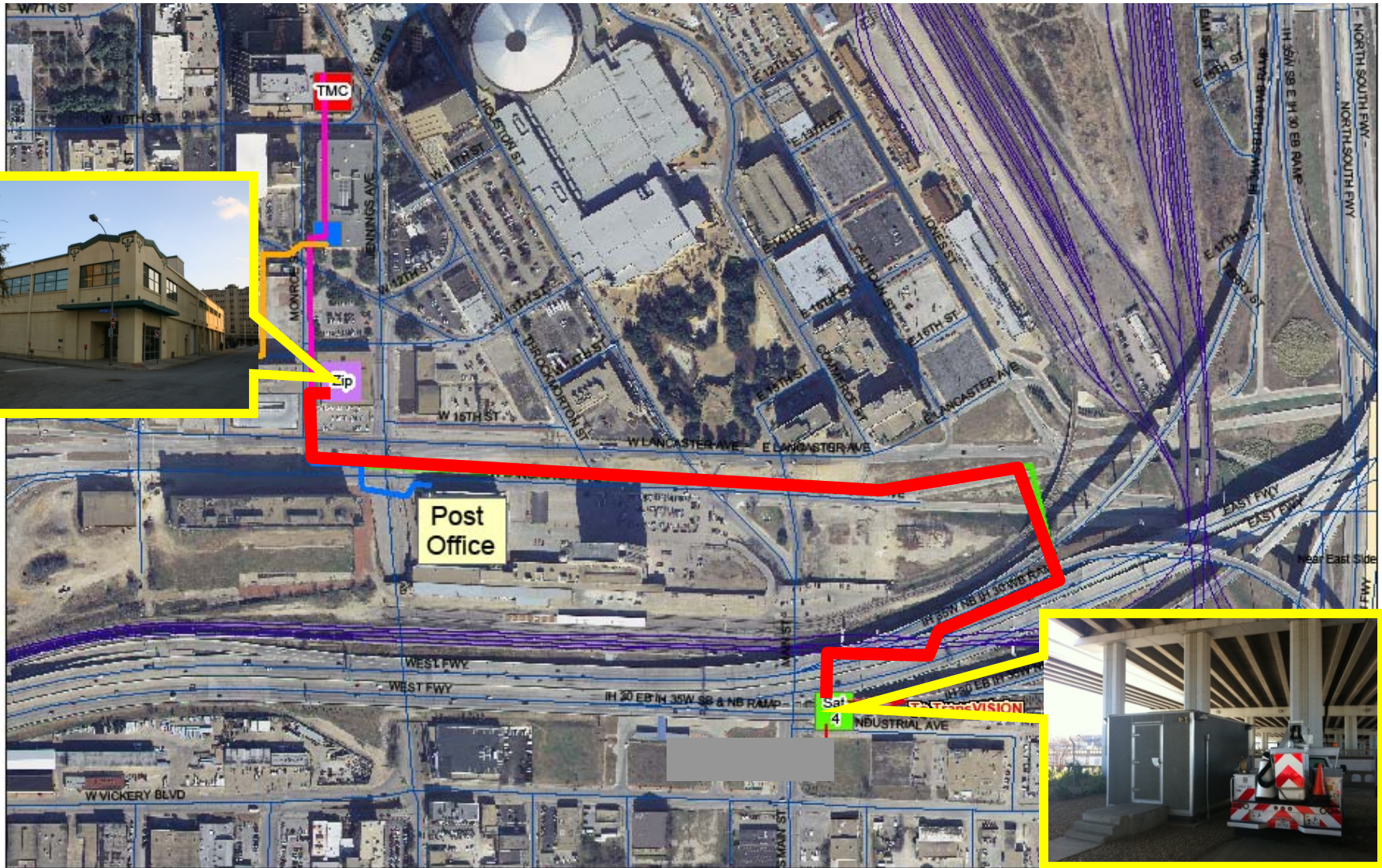


- 3 Client workstations in TMC
- 1 Client workstation on the Coordination floor
- System is unicast from field camera to TMC – multicast within city LAN
- Web clients used for city offices outside of the JEOC space

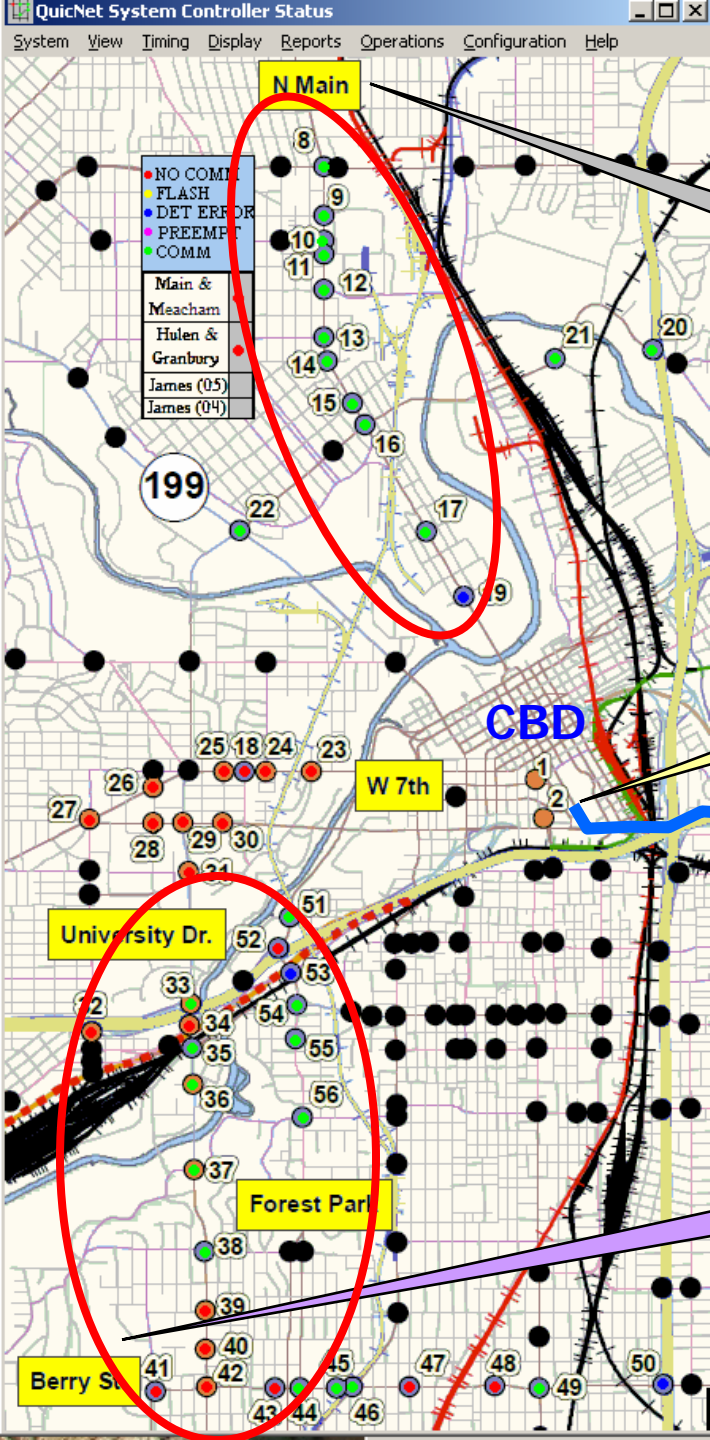


# New TxDOT Fiber Link to get freeway cameras

We used our IT Dept's existing cable installation contract to speed up installation





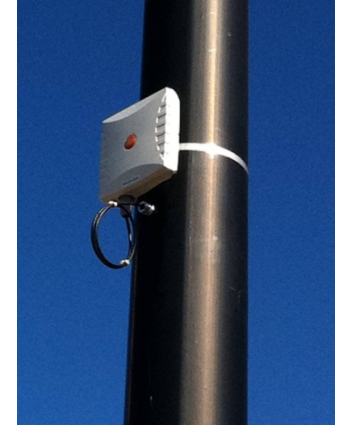


# Citywide Communication Cellular Modems

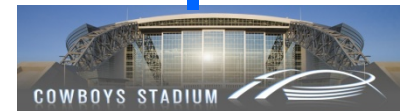
Meacham Field  
Air Transport

Omni Hotel  
Pittsburg Steelers

TCU Indoor  
Practice Field



40 modems up  
and running



# Citywide Communication – Cellular Modems



Modem mounted 15 ft high on pole closest to our cabinet

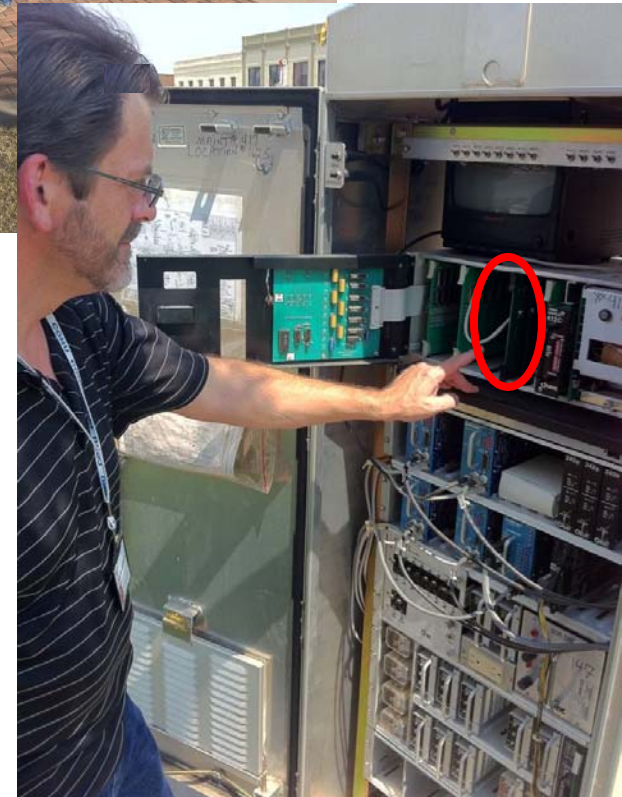


All equipment installed by city crews because of rush



POE unit mounted in traffic cabinet

Terminal server installed inside of Type 170 controller



Communication established



The JEOC "Activated" early  
for Ice and Snow weather,  
then for the Super Bowl



# Traffic Management Experiences



Traffic cameras used to observe traffic events of great interest:

- Freeway accidents – cameras used by PD and FD to access crash magnitude and traffic access
- Water main break in CBD – Water Dept kept a constant watch on the camera feed to monitor repair progress
- Street Division monitored roadway ice and Steelers bus routes...and bus progress until they left FW city limits
- And countless more events



# Traffic Management Experiences

Sundance Square – site of the ESPN booth

Saturday: weather improving, crowds growing



All week before Super Bowl



Saturday night before the Super Bowl





# Traffic Management Experiences

Sundance Square – site of the ESPN booth

Numerous Super Bowl events and parties at several venues in downtown Fort Worth





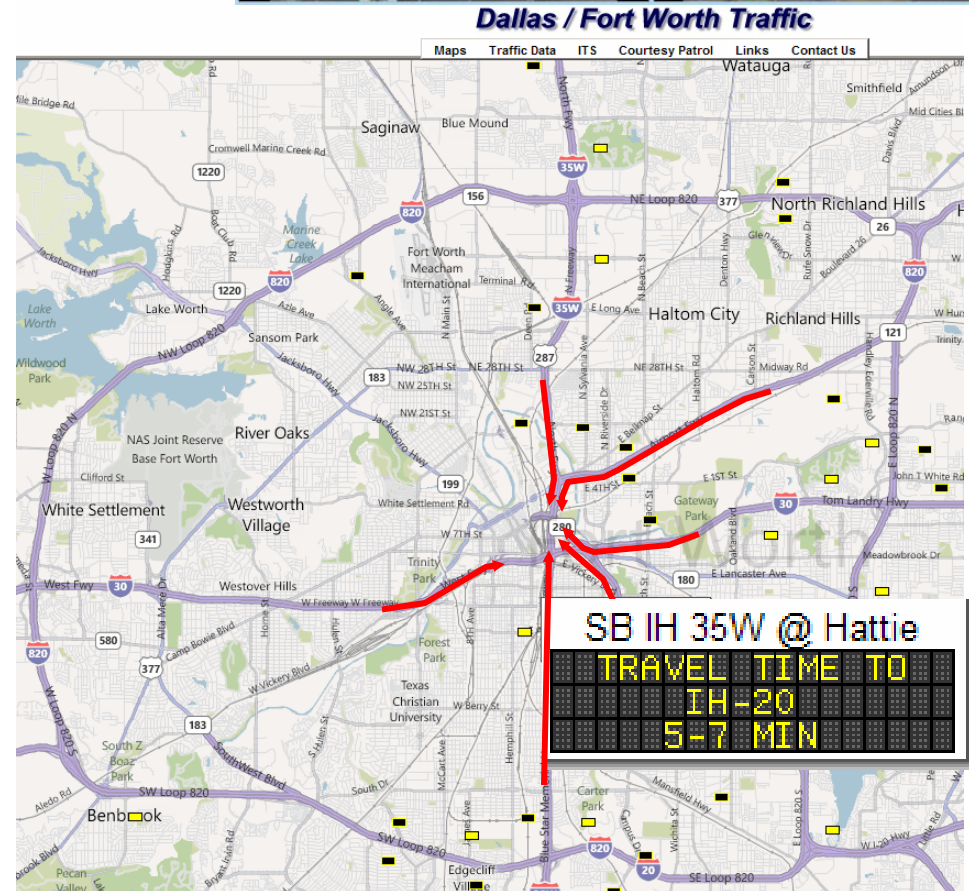
# Traffic Management Experiences

Transvision was running 24/7 too. We talked frequently.

## Saturday night before the SB

- With congestion seen on camera views, we used Transvision's website to read their DMS sign displays
- They were displaying: "Watch for Ice on Roadways"
- Almost all freeway traffic was using the same Spur 280 ramp to downtown
- So...after contacting Transvision, several sign text messages were changed to promote the use of alternate downtown ramps.

Since year 2000, we have exchanged video with TxDOT



# Traffic Management Experiences

Saturday night before the SB

Extreme congestion

- PD put Belknap signals on flash
- EVERYBODY using Spur 280





# Traffic Management Experiences

Life in the JEOC...



8 staff members manned the TMC 24/7 for 10 days



3 meals a day



Comfortable bunk beds



# Joint Emergency Operations Center Traffic Management Center

