

City of Missouri City

A City of Commuters: TMC Working for it's Residents

ITS Texas Annual Meeting

November 8, 2018



History

- ❖ 1998 The City maintained 5 traffic signals
- ❖ 1999 First Traffic Signal Tech was hired
- ❖ 2000 Census showed our pop was <50K
- ❖ 2001 TXDOT handed over 28 traffic signals
- ❖ 2008 5-year ITS Operations Plan was approved
- ❖ 2010 TXDOT let ITS project
- ❖ 2012 ITS I project completed
- ❖ 2018 ITS II project completed

Today

- ❖ 65 traffic signals with UPS back up systems
- ❖ 45 PTZ cameras
- ❖ 300+ video feeds from our detection cameras
- ❖ 6 DMS signs along SH 6, 1 on S. Gessner
- ❖ TMC
- ❖ Traffic Web Page
- ❖ Wireless Network
- ❖ Flashing Yellow Arrow



Traffic Operations

- ❖ 1 Traffic Engineer
- ❖ 1 Traffic Operations Manager
- ❖ 2 Traffic Signal Technicians
- ❖ 2 Sign & Pavement Technicians
- ❖ 3 Bucket Trucks Fully Equipped
- ❖ Sign Maintenance Shop
- ❖ Signal Maintenance Shop
- ❖ Traffic Management Center

Traffic Signals

- ❖ What is the purpose of a traffic signal?
- ❖ Missouri City Is Growing!



Advantages

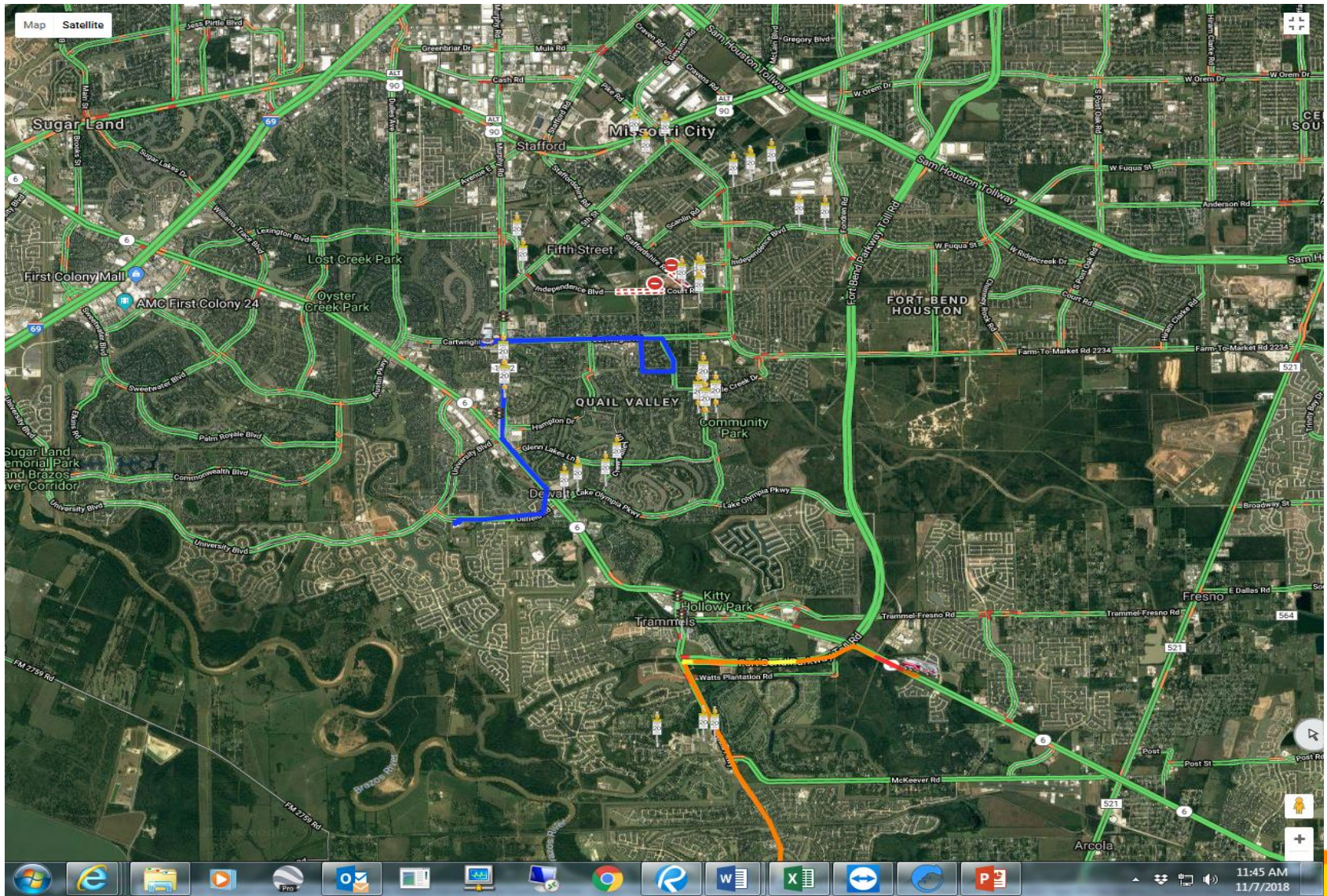
- ❖ Provide for orderly movement of traffic
- ❖ Increase traffic capacity of the intersection
- ❖ Reduce the frequency of certain types of crashes (e.g. right-angle crashes)
- ❖ Provide for continuous or nearly continuous movement of traffic along a given route
- ❖ Interrupt heavy traffic to permit other traffic, vehicular or pedestrian, to cross

Disadvantages

- ❖ Excessive delay
- ❖ Excessive disobedience of the signal indications
- ❖ Increased use of less adequate routes as road users attempt to avoid the traffic control signals
- ❖ Increases in the frequency of crashes (especially rear-end crashes).

Traffic Management Center

- ❖ Designed by Walter P. Moore
- ❖ All data and video is transmitted to our TMC from three other towers.
- ❖ 2 Workstations are broken down to data software(Fourth Dimension) and video software (Chameleon 360 by Flir)
- ❖ Travel Data collected through Blue Tooth readers.



TMC Continued...

- ❖ 2 Five Screen Workstations
- ❖ 35 School Zone Flashers Monitored
- ❖ Applied Information GPS Priority Preemption



TMC Continued...

- ❖ Alpha battery backup on every cabinet.
- ❖ Mid-Block crossings at key points
- ❖ Driver Feedbacks on high risk roads
- ❖ Vivids Detection
- ❖ Radios & Switches



TMC continued:

- ❖ Dynamic Messaging Signs are operated thru the Chameleon video software.
- ❖ We currently have six DMS in operation along SH6 and 1 on South Gessner
- ❖ They allow the public to have instant access to any road or weather conditions, road closures or detours. We also have communication from the state level in reference to Amber/Silver Alerts.

Question?