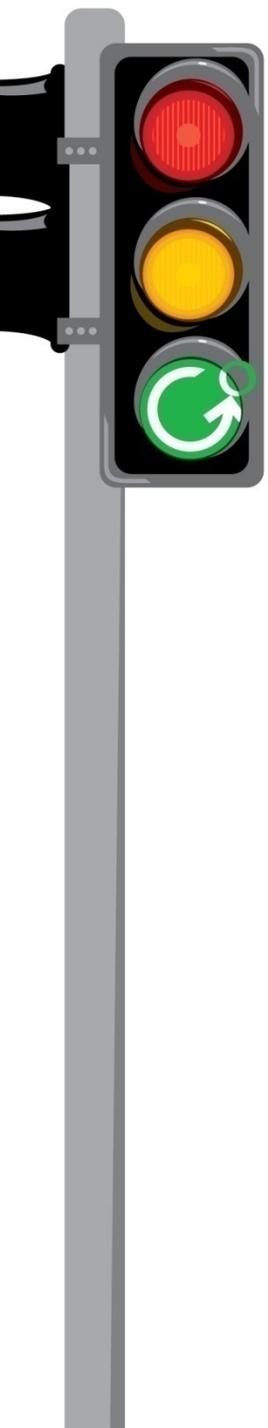


OPERATION  
**GREENLIGHT**

TURNING STOP LIGHTS INTO GO LIGHTS

KC REGIONAL TRAFFIC SIGNAL COORDINATION



# ABOUT MARC

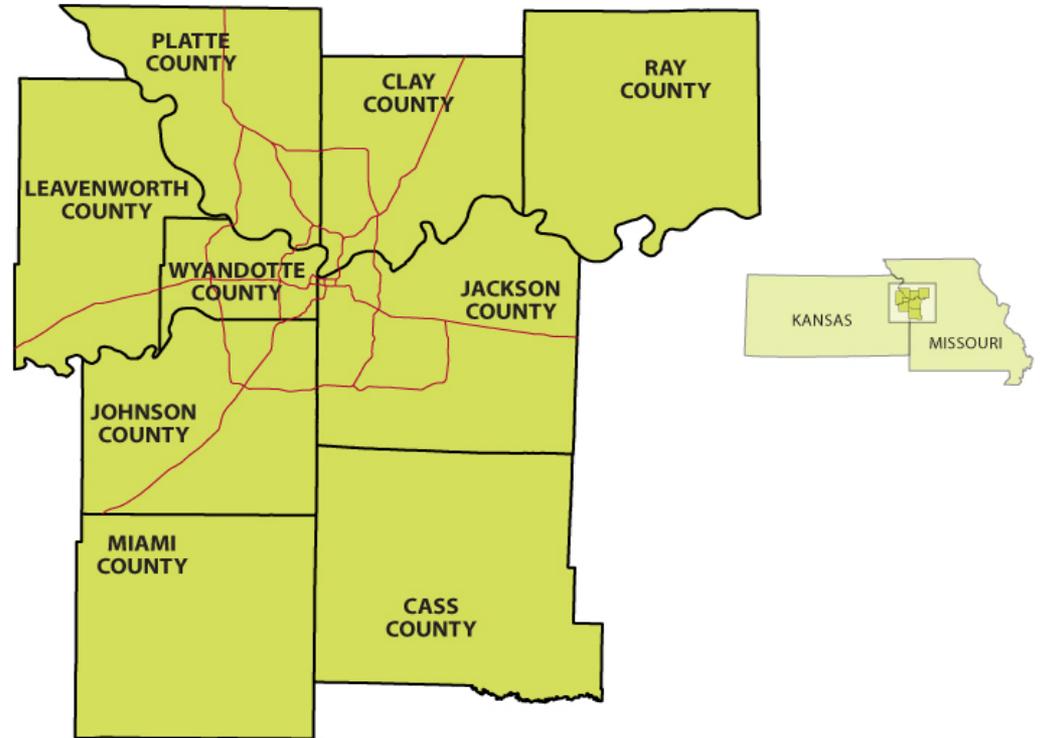


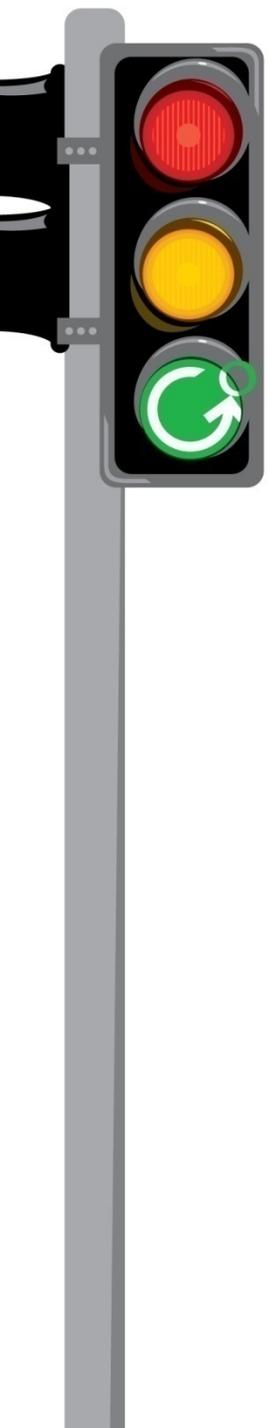
- Council of Governments
- Metropolitan Planning Organization
- Programs
  - Aging Services
  - Early Education
  - Economic & Demographic Research
  - Environmental Management
  - Government Innovation & Training
  - Public Safety
  - Transportation



# KC REGION

- 2 States
- 9 Counties
- 120 Cities
- 1.9 m Population
- 16,000 Lane Miles
- 4,400 Sq Miles

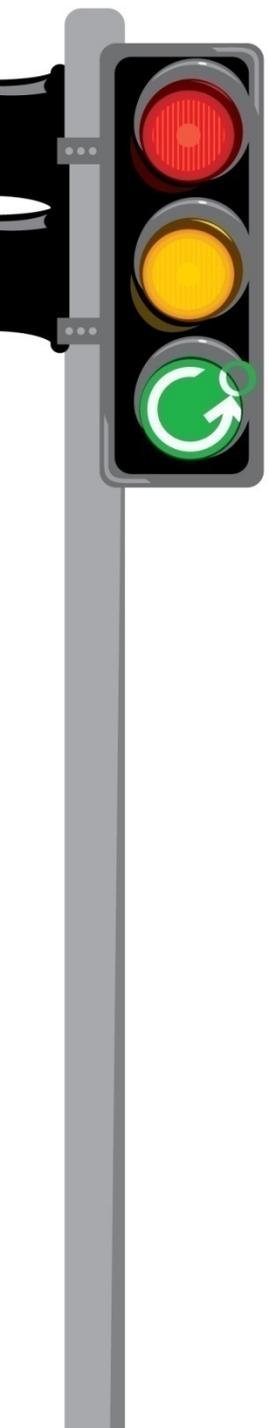




# OPERATION GREEN LIGHT

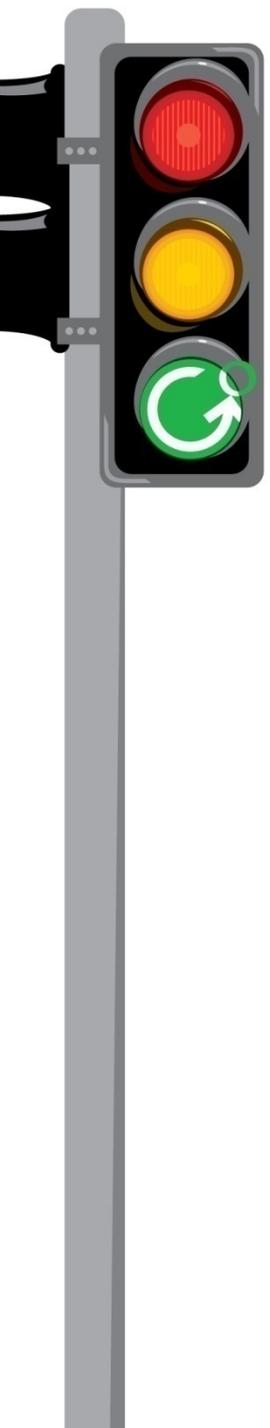
A regional approach to coordinate traffic signals in greater Kansas City





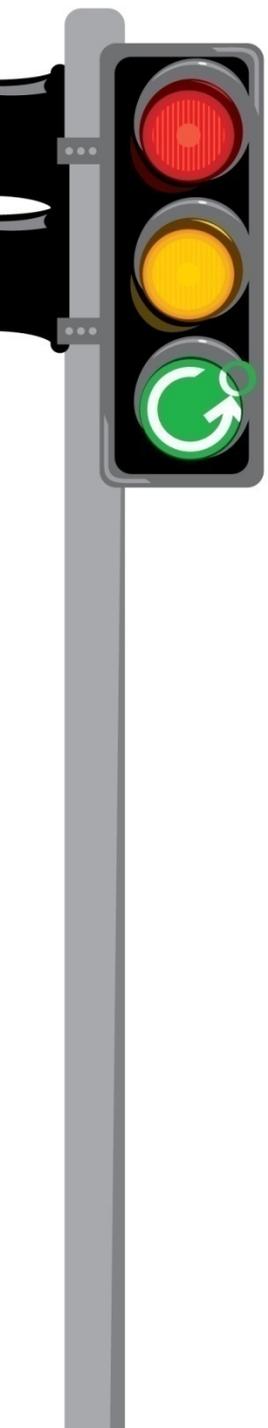
# WHAT IT DOES

Operation Green Light helps **synchronize traffic signals** on major streets throughout the region, especially those that **cross city limits**.



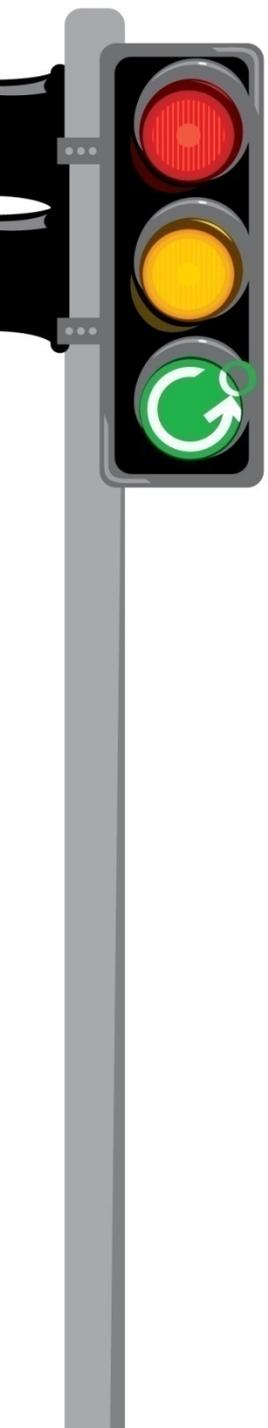
# AT A GLANCE

- **20** partner cities, **2** states,  
Federal Highway Administration
- **634** intersections (PHASE 1)
- **\$13 million** budget



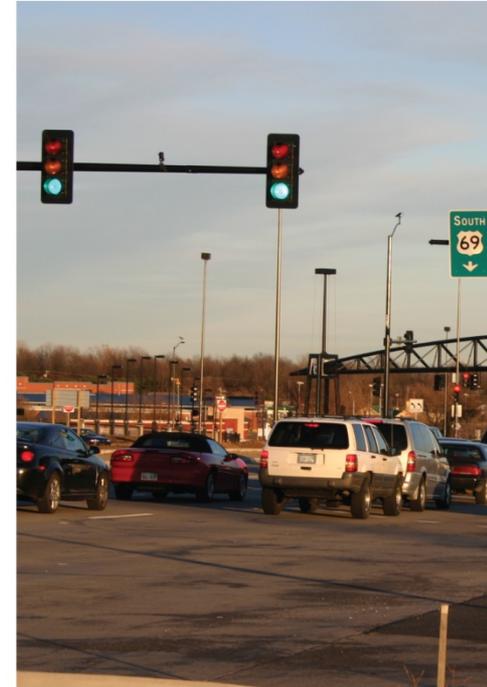
# MAJOR BENEFITS

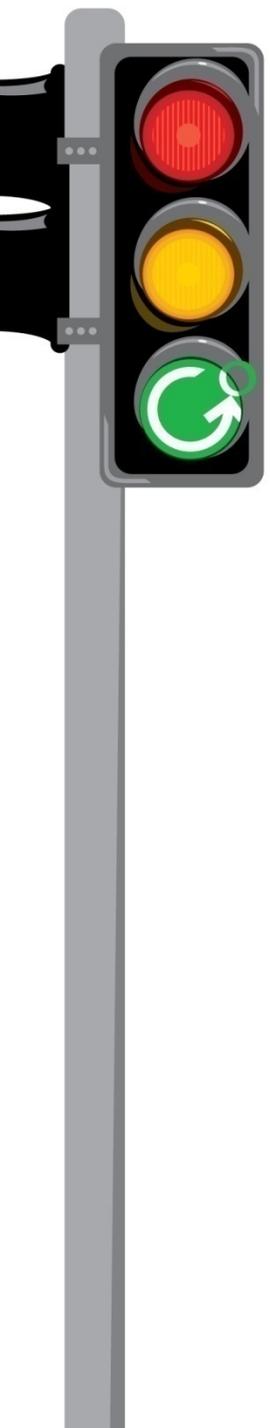
- More efficient traffic flow
- Reduced vehicle emissions
- Reduced fuel consumption
- Improved incident response



# Traffic Flow

- Well-coordinated timing plans save time and **keep traffic moving smoothly**, especially during rush-hour periods

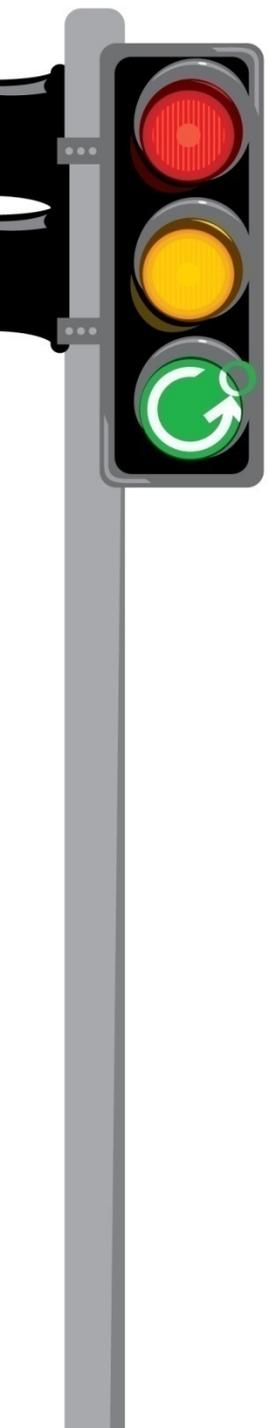




# Air Quality

- Vehicles idle less at intersections, reducing emissions that contribute to **ground-level ozone**, Kansas City's main air pollutant





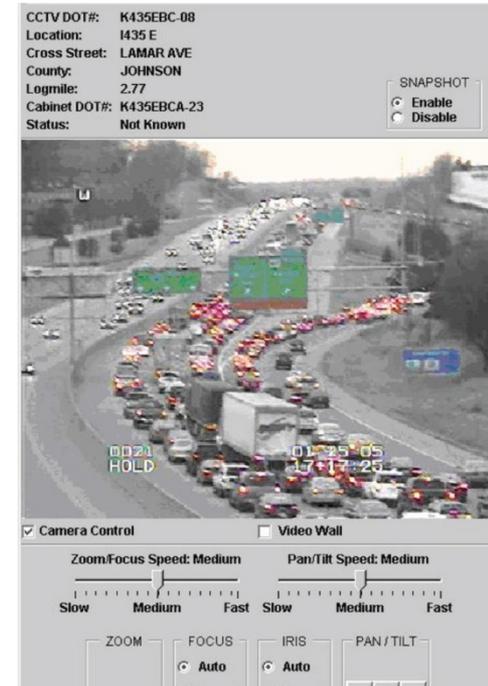
# Fuel Savings

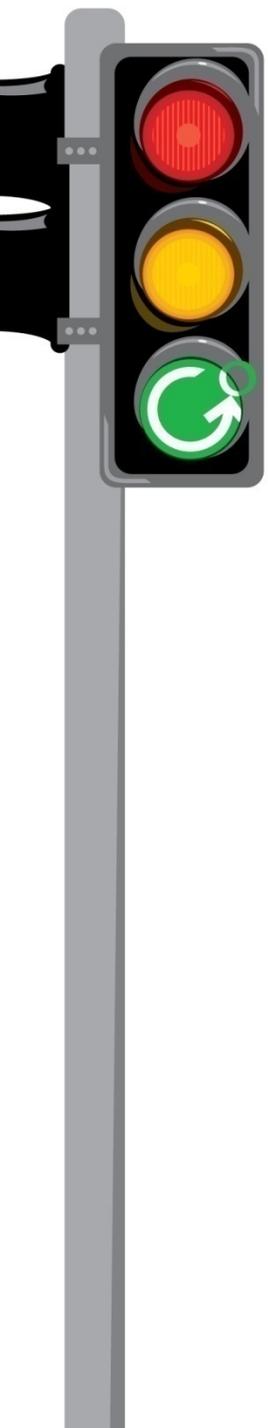
- Fewer unnecessary stops and starts wastes less gas



# Incident Management

- Working with the Scout freeway management system helps better **respond to traffic incidents**
- Wireless technology allows analysts to make **real-time changes to signals**





# PROJECT PARTNERS

## KANSAS

Federal Highway Administration

KDOT

Fairway

Leawood

Lenexa

Merriam

Mission

Mission Woods

Prairie Village

Olathe

Overland Park

Shawnee

Unified Government/KCK

Westwood

Westwood Hills

## MISSOURI

Federal Highway Administration

MoDOT

Gladstone

Independence

Kansas City

Lee's Summit

Liberty

North Kansas City

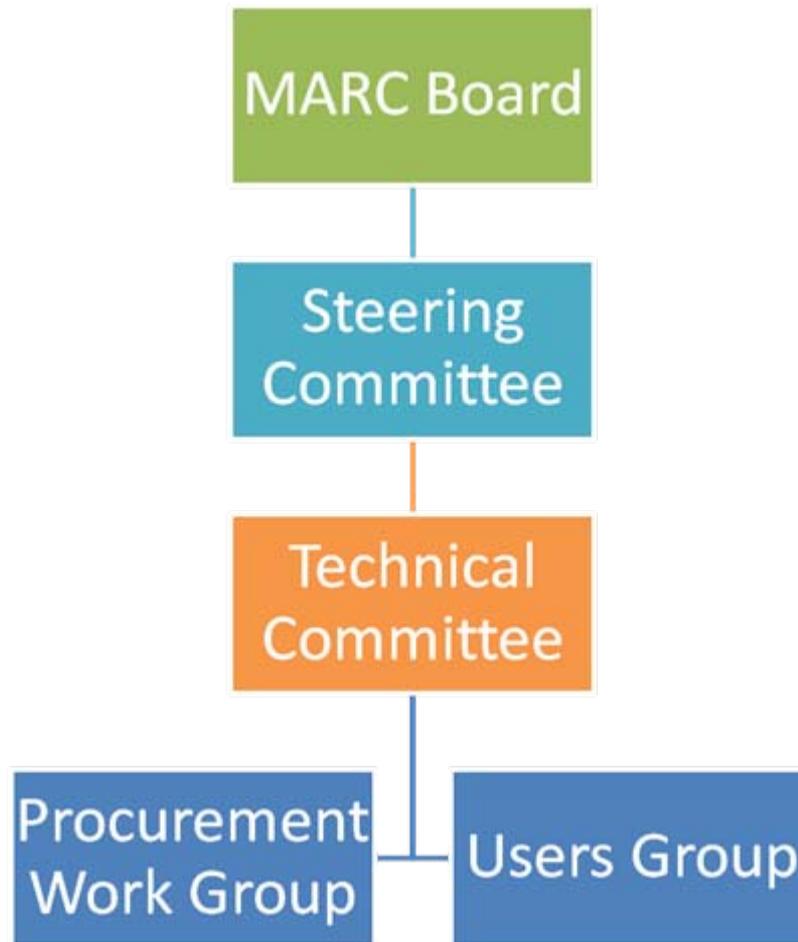
Raytown

KCATA

Kansas City Power & Light

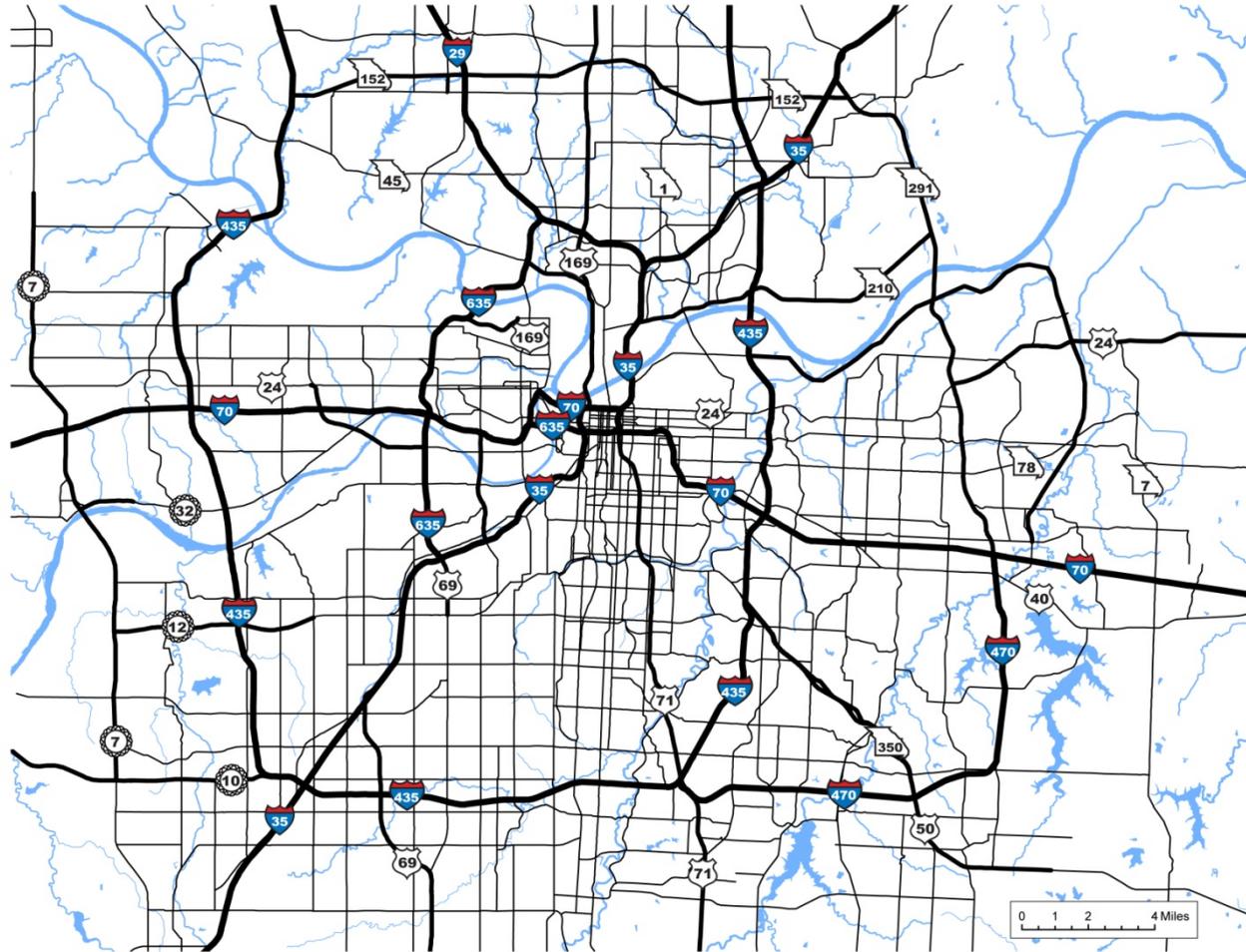


# SYSTEM ORGANIZATION



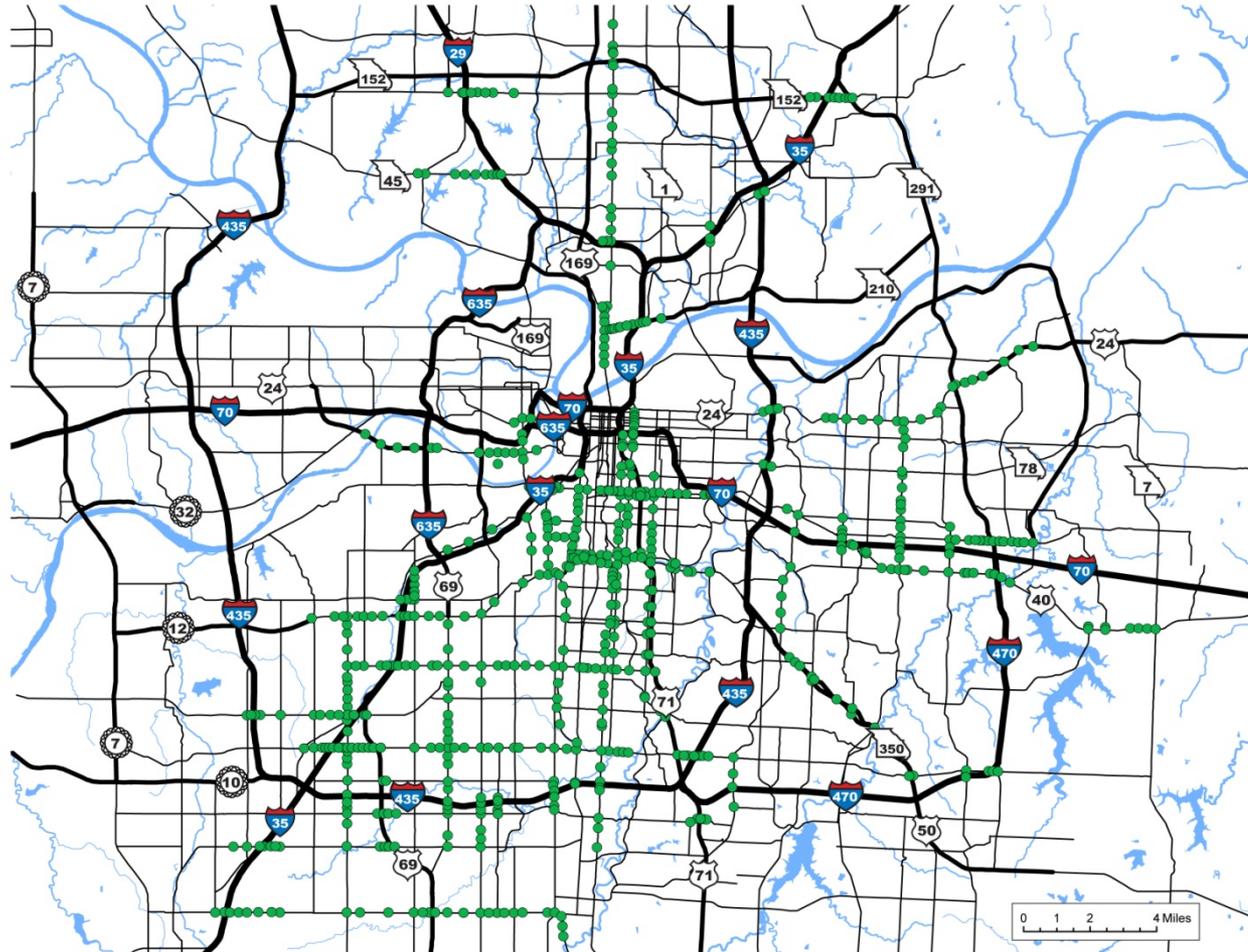


# KANSAS CITY REGION



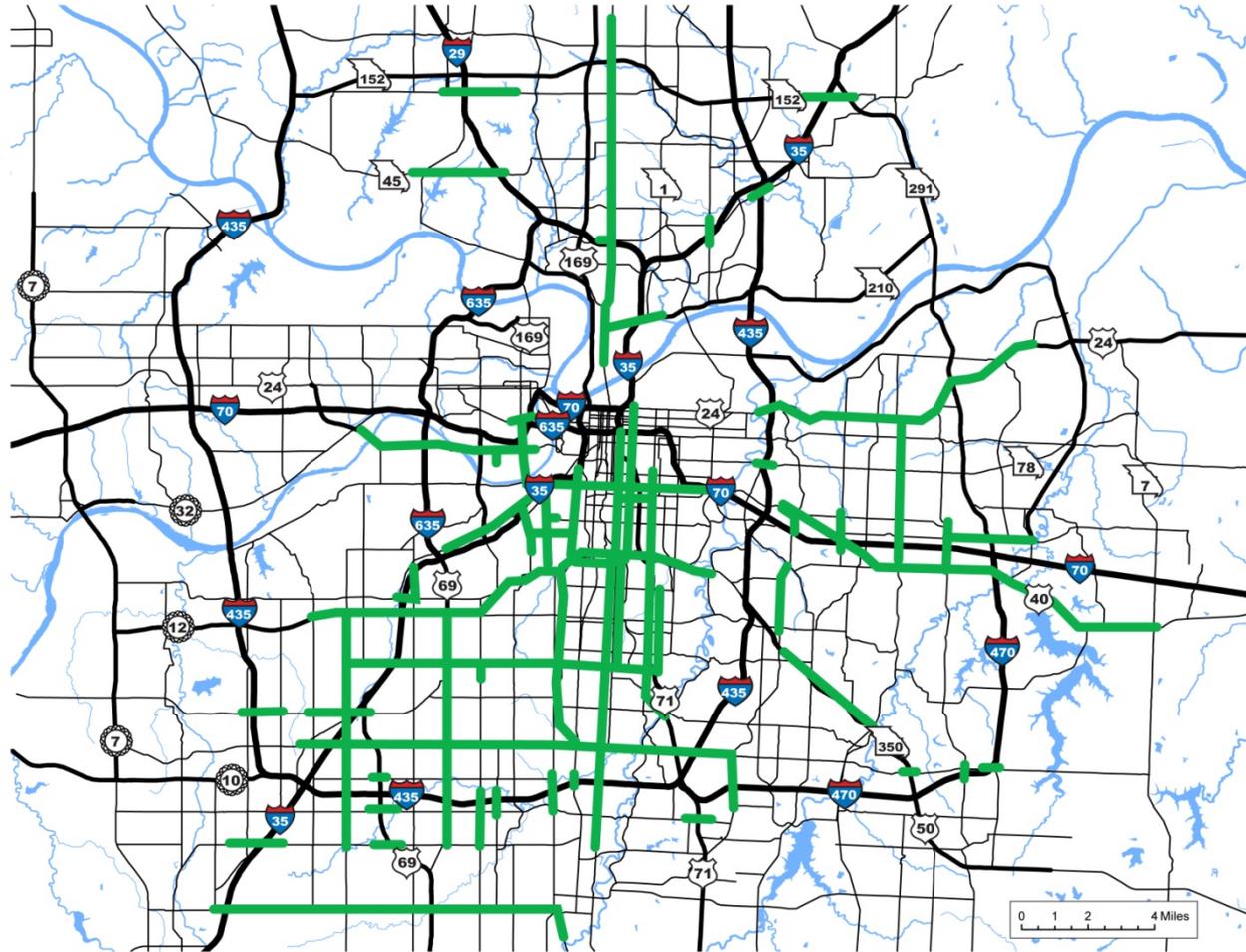


# PRIORITY PHASE SIGNALS





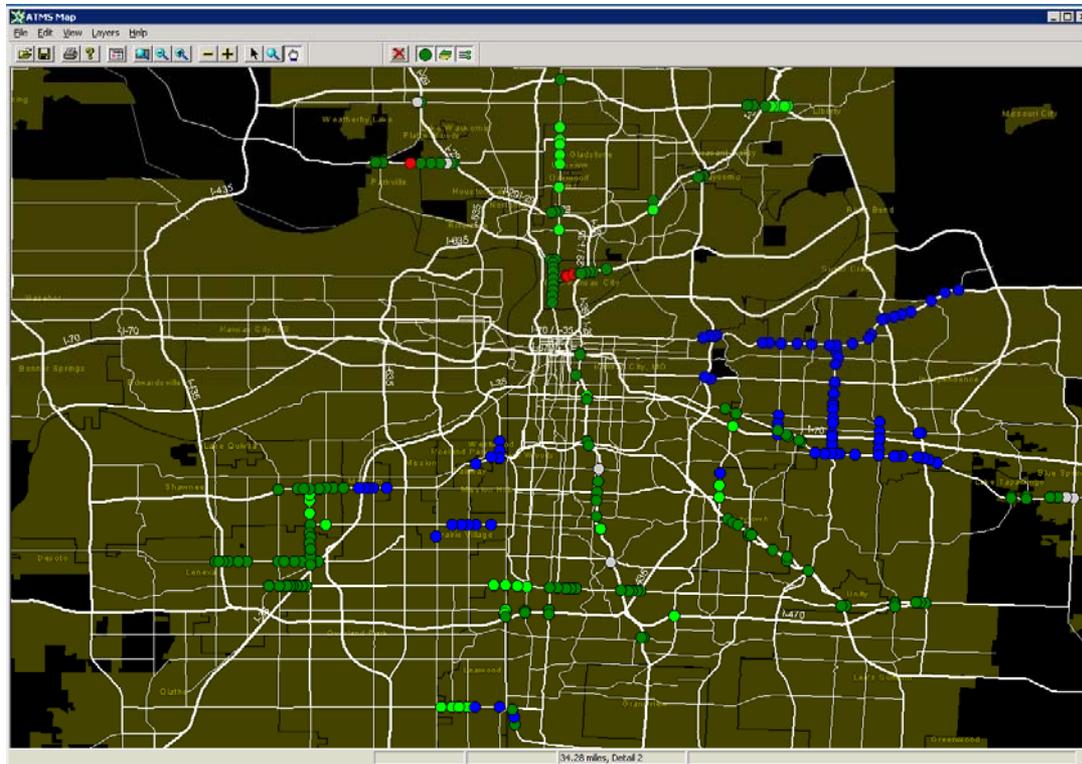
# PRIORITY CORRIDORS





# MAJOR PROJECT ELEMENTS

## System Integration (TransCore)



# MAJOR PROJECT ELEMENTS

**Field communications** (Olsson Associates / ETI)



# MAJOR PROJECT ELEMENTS

## Traffic signal controller upgrade

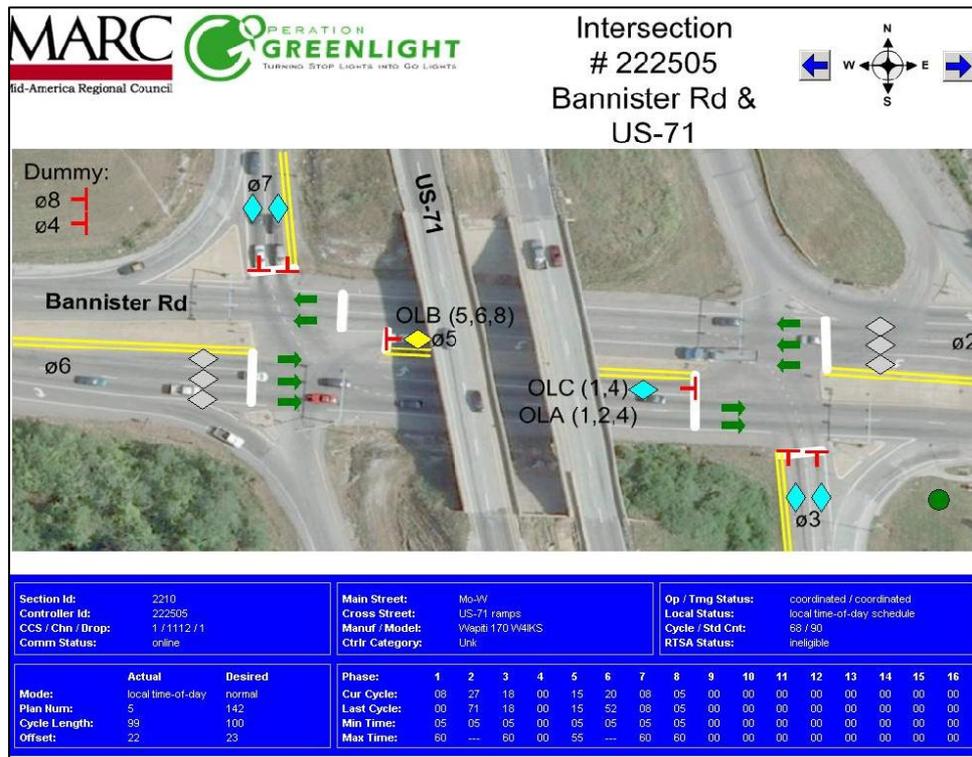
(Kimley Horn / GBA / Capital Electric)





# MAJOR PROJECT ELEMENTS

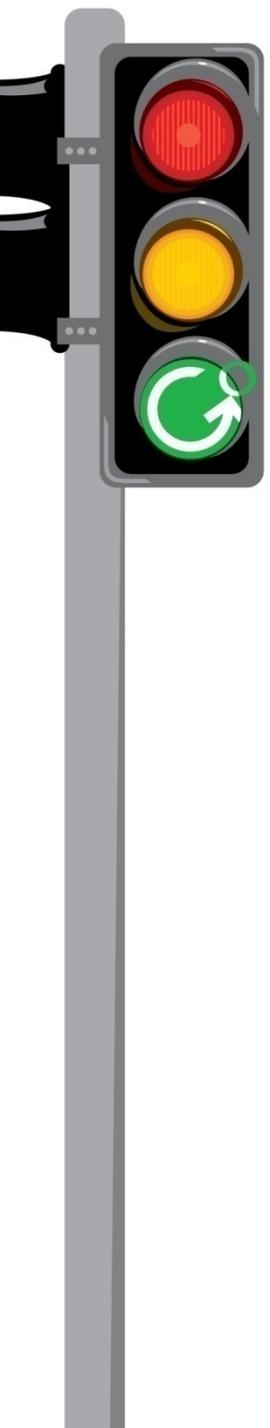
## Operations and signal timing (MARC / Rhythm Engineering / Olsson)





# PROJECT FUNDING

SOURCE	AMOUNT
Congestion Mitigation/Air Quality	\$8.2 M
Surface Transportation Program	\$2.1 M
ITS Integration Program	\$0.4 M
KDOT ITS	\$0.2 M
MoDOT + Local	\$2.2 M
<b>TOTAL</b>	<b>\$13.1 M</b>

A vertical traffic light on a grey pole. The top light is red, the middle is yellow, and the bottom is green with a white arrow pointing right. The green light is illuminated.

# What's Next?

- \$4.7 M ARRA Funds for:
  - Accelerated signal retiming
  - Software & Com. Upgrades
  - Detection
  - Incident management corridors
  - Additional intersections
  - Design and inspection
- Ongoing Operations



# LEARN MORE

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[www.marc.org/transportation/ogl](http://www.marc.org/transportation/ogl)

