

# SAFETY TRENDS AND TARGETS

## OCARTS AREA

**Kathryn Wenger**  
Program Coordinator  
Transportation & Planning Services


JANUARY 2018  
REGIONAL TRANSPORTATION PLANNING

acog

# PERFORMANCE MEASURES

**MAP-21/FAST ACT:** Develop measures to track and maximize the benefits of transportation planning decisions and link infrastructure investments to:

- STBG-UZA project selection
- Metropolitan Planning and ITS
- Transportation Improvement Program (TIP/Short Range Plan)
- Metropolitan Transportation Plan (MTP/Encompass 2040)

GOALS	OBJECTIVES	PERFORMANCE MEASURES	PERFORMANCE TARGETS
<p><b>SAFETY AND SECURITY:</b> Provide a safe and secure transportation system</p>	<ul style="list-style-type: none"> <li>- Improve design, construction, and maintenance of infrastructure to reduce the number and severity of crashes, injuries and fatalities.</li> <li>- Increase awareness of the public on safety issues and skills.</li> <li>- Collaborate on transportation system security strategies.</li> </ul>	<ul style="list-style-type: none"> <li>- Number of Fatalities</li> <li>- Rate of Fatalities</li> <li>- Number of Serious Injuries</li> <li>- Rate of Serious Injuries</li> <li>- Number of Non-Motorize Fatalities and Non-Motorized Serious Injuries</li> </ul>	



## TARGET SETTING

- Establishing a quantifiable value to gauge progress over time
- Current target year - CY2018
- Safety targets are set annually
- Two options:
  - Support the targets set by ODOT  
(Includes all public roads regardless of classification)
  - Set our own targets for all roads in the metropolitan area  
(OCARTS Region)

# ODOT SAFETY TRENDS AND TARGETS: FATALITIES

## TOTAL FATALITIES

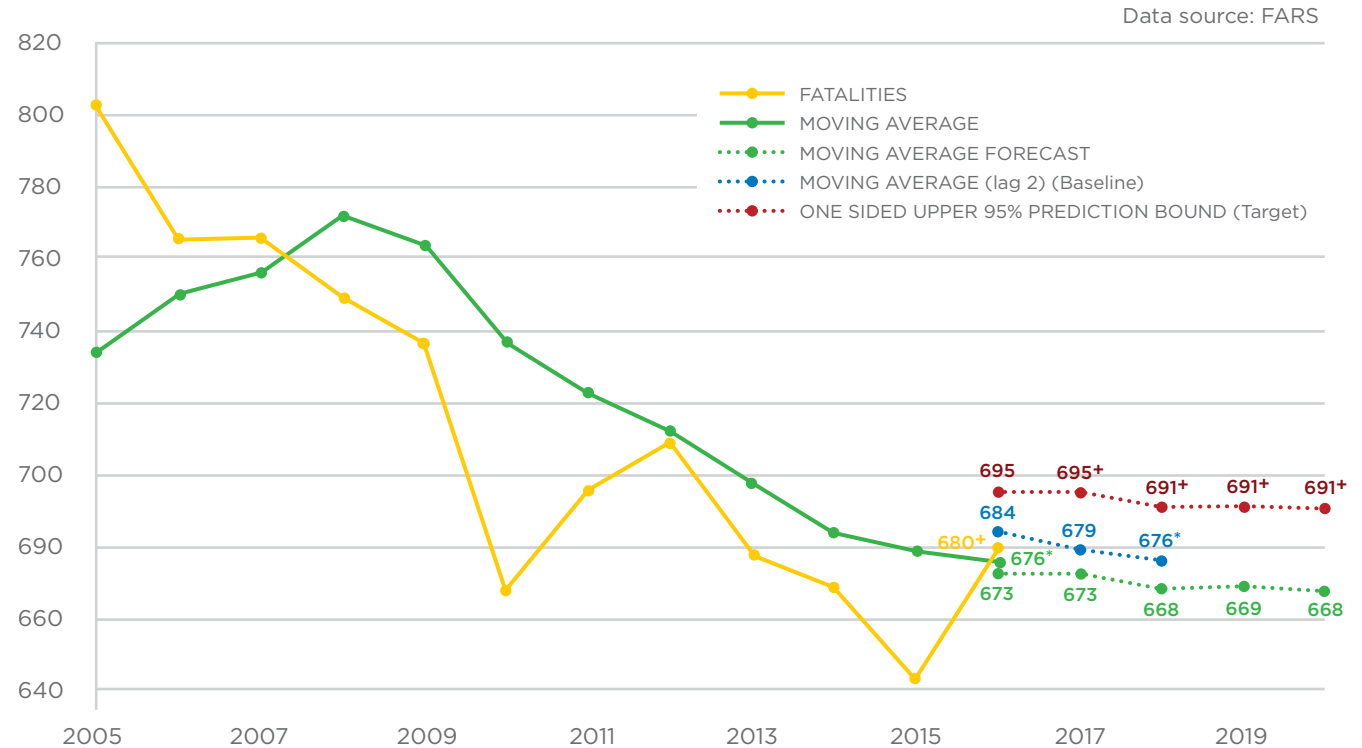
5 Year Rolling Average Target:

**691**

## FATALITY RATE

5 Year Rolling Average Target:

**1.41**  
per 100 million VMT



\* NOT AN OFFICIAL FARS VALUE.

+ DIFFERENCE BETWEEN UPPER PREDICTION BOUND AND ESTIMATE IN 2016 CARRIED FORWARD.

# ODOT SAFETY TRENDS AND TARGETS: SERIOUS INJURIES

## TOTAL SERIOUS INJURIES

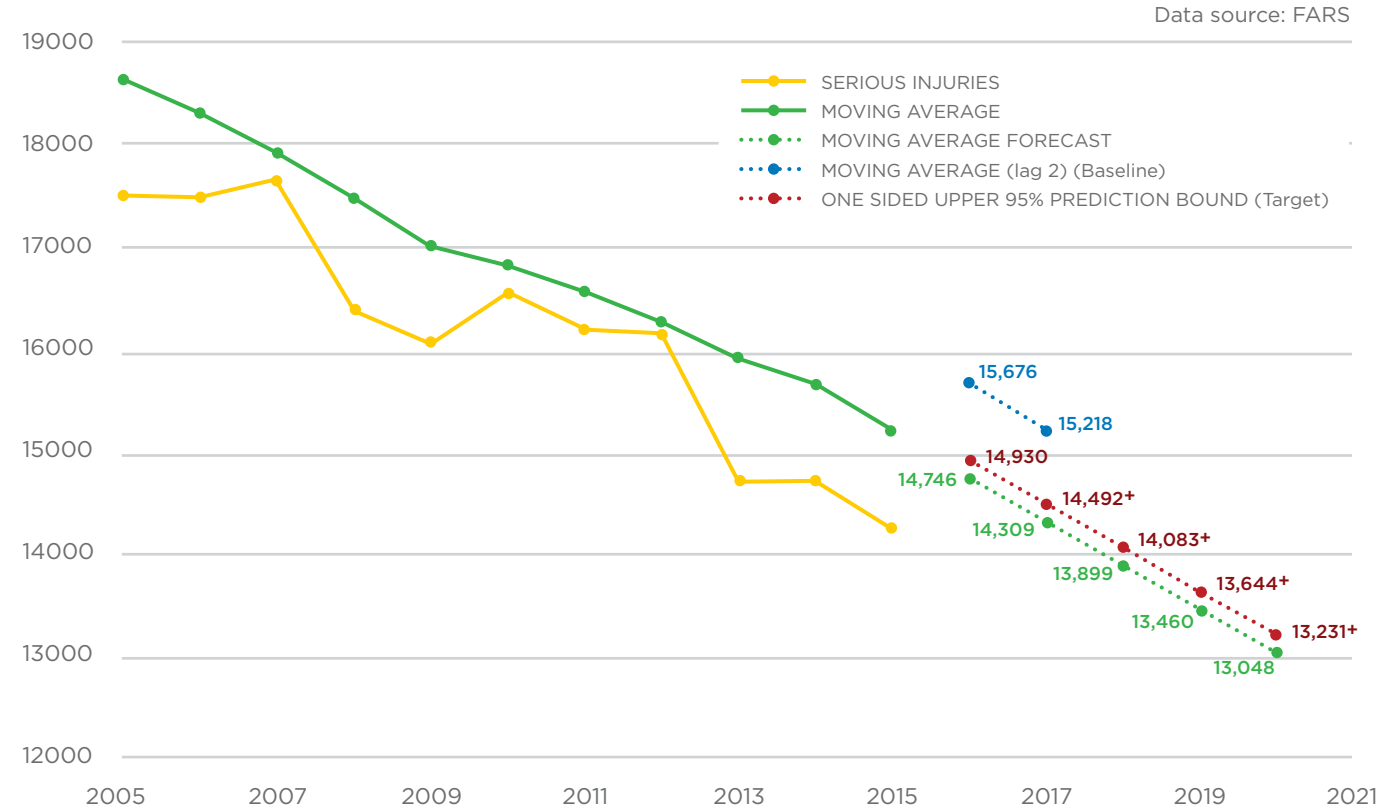
5 Year Rolling Average Target:

**14,083**

## SERIOUS INJURY RATE

5 Year Rolling Average Target:

**28.8**  
per 100 million VMT



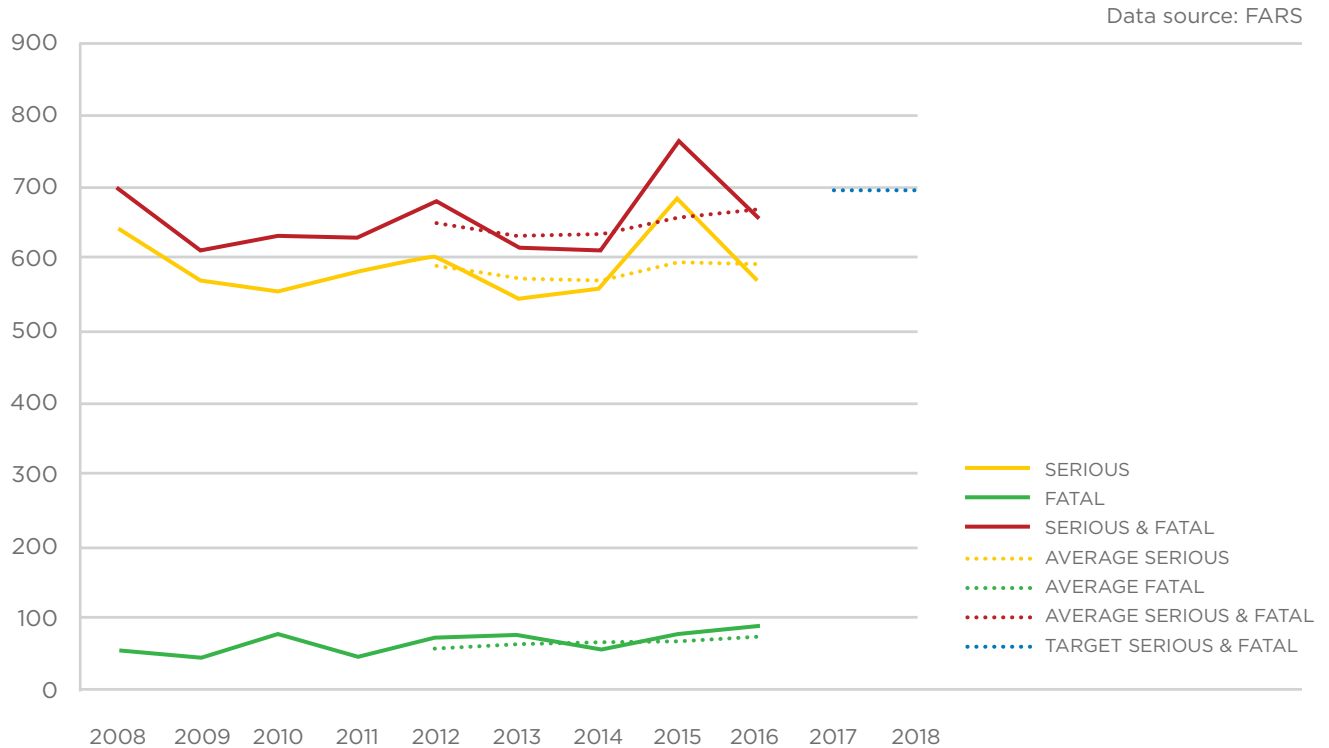
+ DIFFERENCE BETWEEN UPPER PREDICTION BOUND AND ESTIMATE IN 2016 CARRIED FORWARD.

# ODOT SAFETY TRENDS AND TARGETS: NON-MOTORIZED

## TOTAL NON-MOTORIZED FATALITIES AND SERIOUS INJURIES

5 Year Rolling Average Target:

# 698



# OCARTS SAFETY TRENDS: FATALITIES

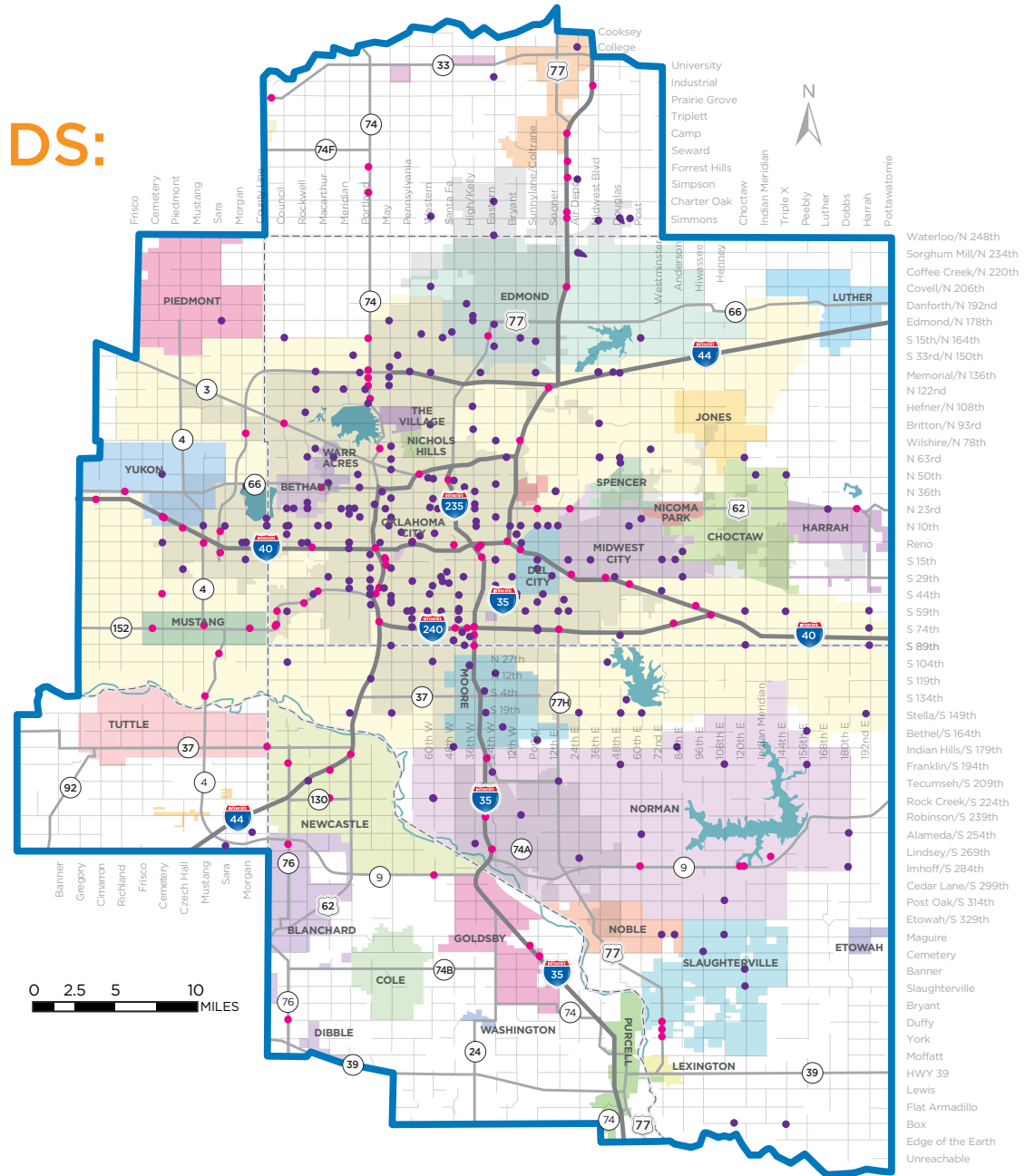
(2011-2015)

- FATAL CRASHES:  
HIGHWAY AND FREEWAY

261

- FATAL CRASHES:  
CITY AND COUNTY STREETS

269





# OCARTS SAFETY TRENDS AND TARGETS: TOTAL FATALITIES

## OPTION 1

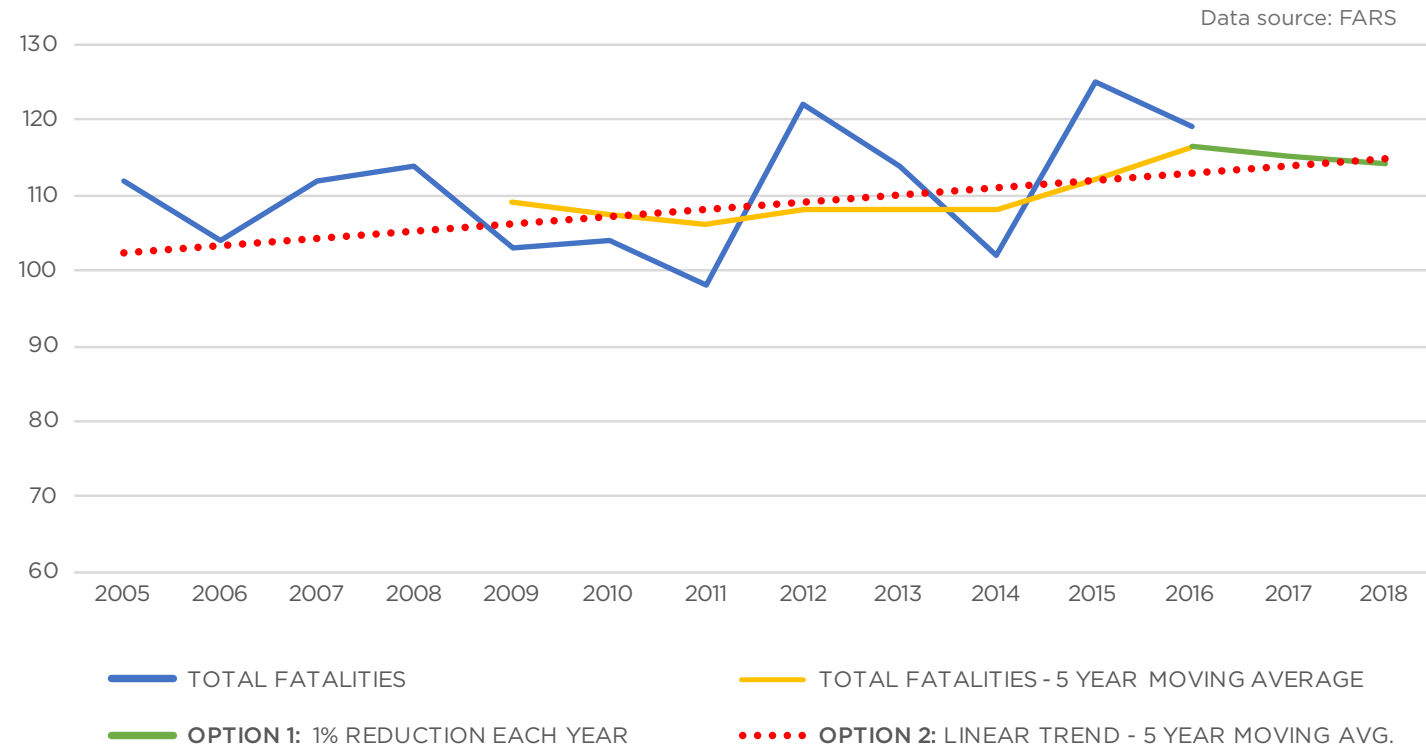
1% Reduction Each Year:

**114**

## OPTION 2

Linear Trend Line:

**115**



# OCARTS SAFETY TARGETS: FATALITY RATE

## OPTION 1

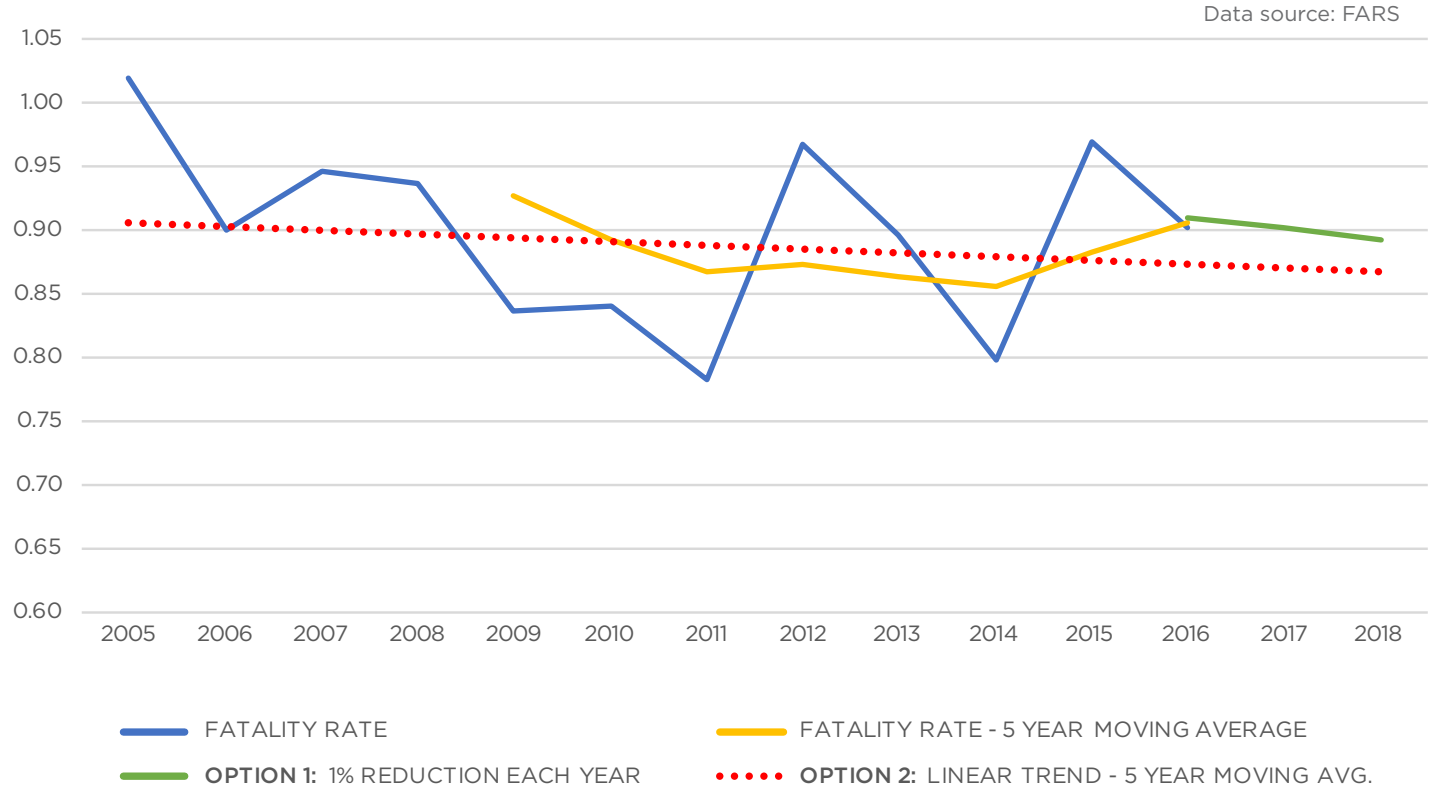
1% Reduction Each Year:

**0.89**  
per 100 million VMT

## OPTION 2

Linear Trend Line:

**0.86**  
per 100 million VMT



# OCARTS SAFETY TRENDS: SERIOUS INJURIES

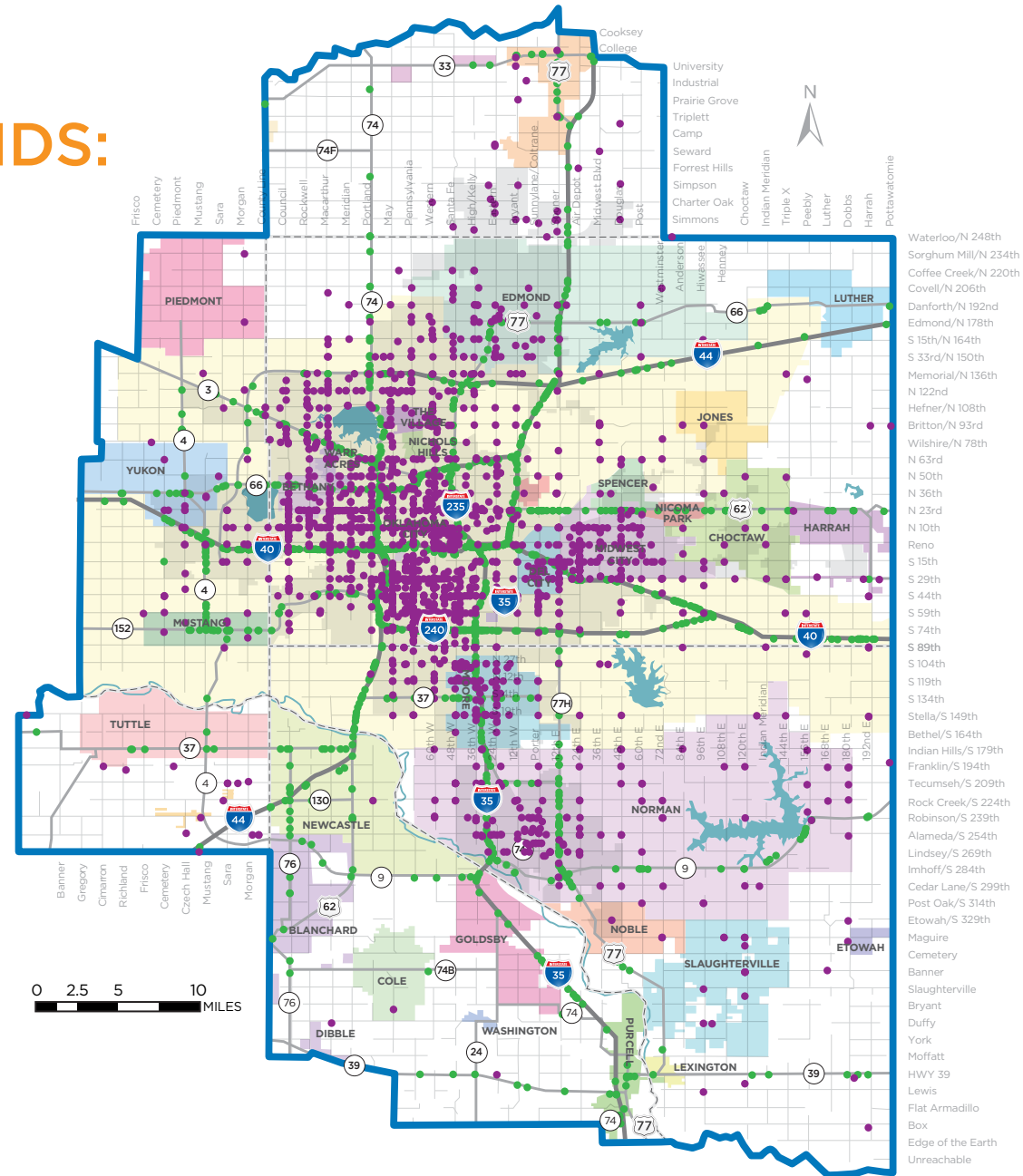
(2011-2015)

- SERIOUS INJURY CRASHES:  
HIGHWAY AND FREEWAY

# 1461

- SERIOUS INJURY CRASHES:  
CITY AND COUNTY STREETS

# 1925



# OCARTS SAFETY TARGETS: TOTAL SERIOUS INJURIES

## OPTION 1

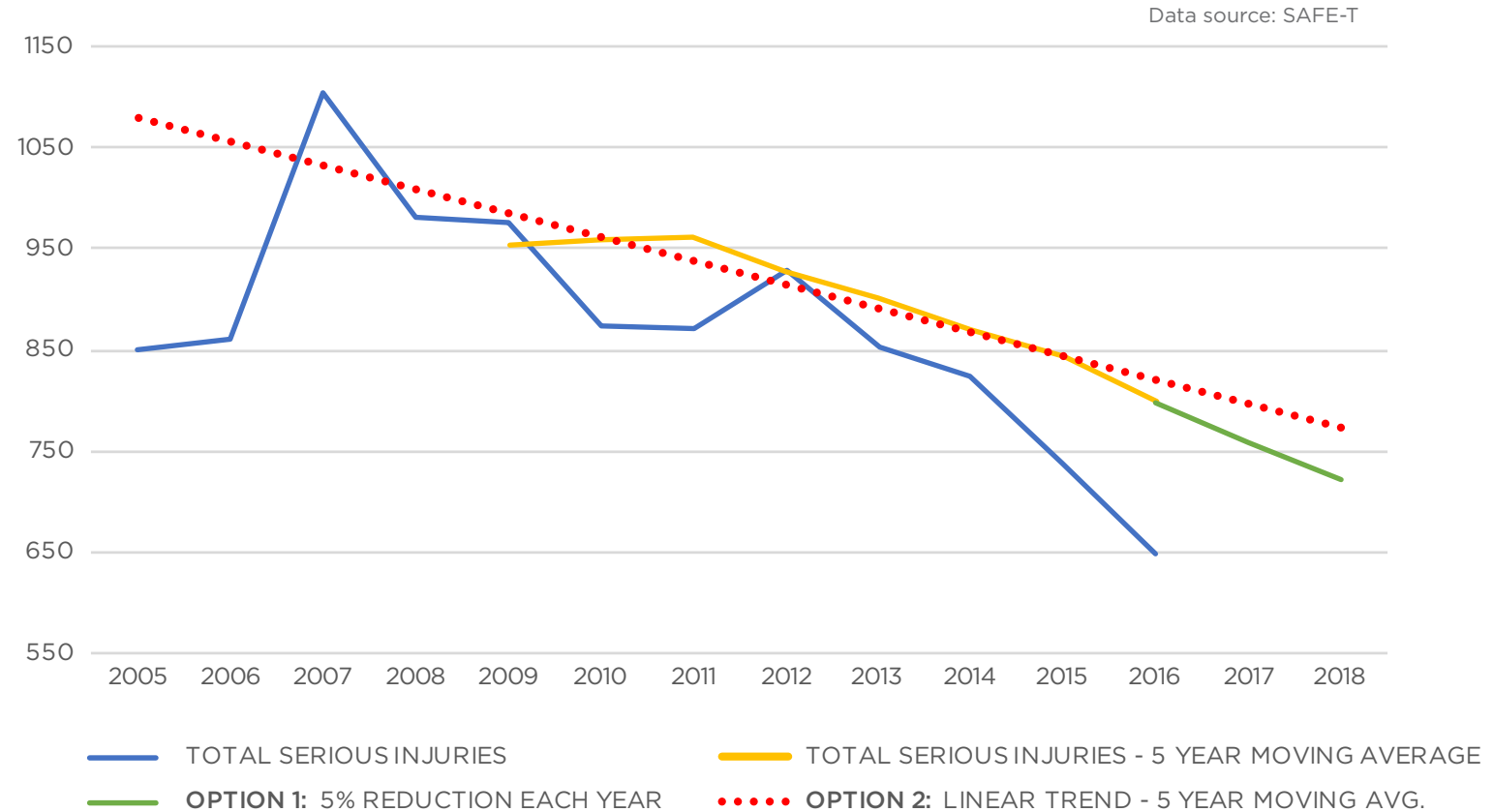
5% Reduction Each Year:

# 720

## OPTION 2

Linear Trend Line:

# 765



# OCARTS SAFETY TARGETS: SERIOUS INJURY RATE

## OPTION 1

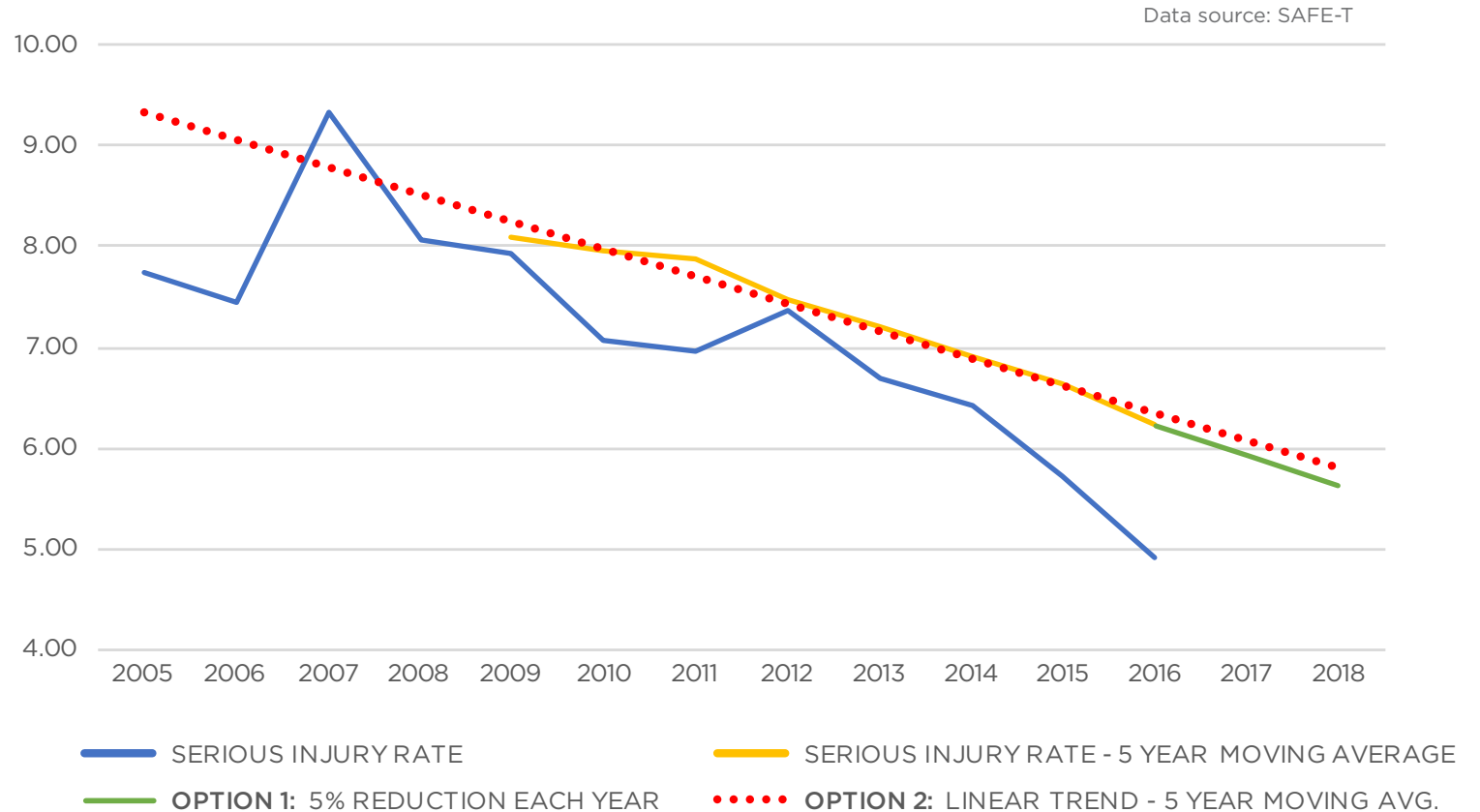
5% Reduction Each Year:

**5.62**  
per 100 million VMT

## OPTION 2

Linear Trend Line:

**5.8**  
per 100 million VMT



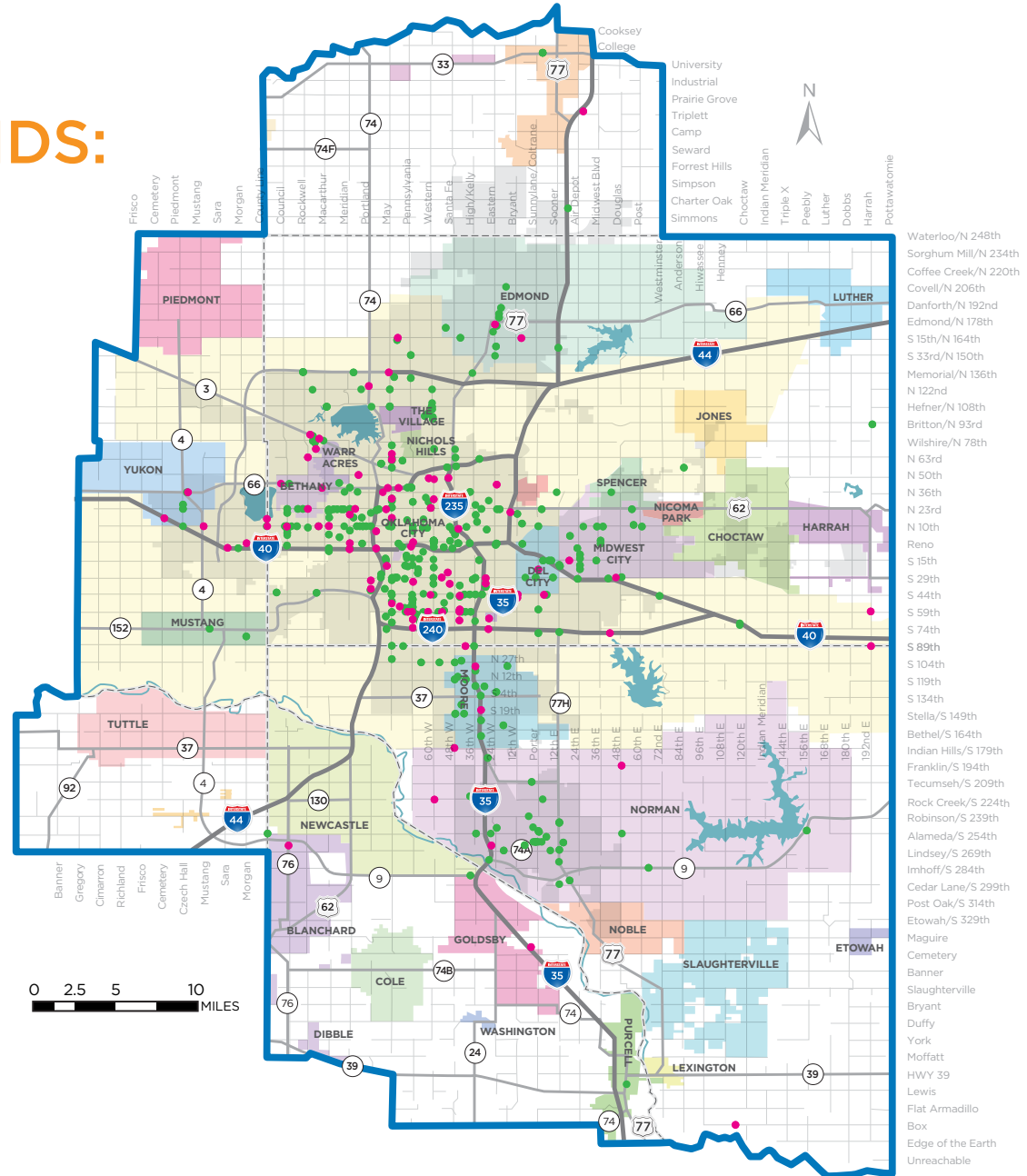
# OCARTS SAFETY TRENDS: NON-MOTORIZED FATALITIES AND SERIOUS INJURIES (2011-2015)

- NON-MOTORIZED FATALITIES:

184

- NON-MOTORIZED SERIOUS INJURIES:

637



Waterloo/N 248th  
Sorghum Mill/N 234th  
Coffee Creek/N 220th  
Covell/N 206th  
Danforth/N 192nd  
Edmond/N 178th  
S 15th/N 164th  
S 33rd/N 150th  
Memorial/N 136th  
N 122nd  
Hefner/N 108th  
Britton/N 93rd  
Wilshire/N 78th  
N 63rd  
N 50th  
N 36th  
N 23rd  
N 10th  
Reno  
S 15th  
S 29th  
S 44th  
S 59th  
S 74th  
S 89th  
S 104th  
S 119th  
S 134th  
Stella/S 149th  
Bethel/S 164th  
Indian Hills/S 179th  
Franklin/S 194th  
Cumseh/S 209th  
Rock Creek/S 224th  
Robinson/S 239th  
Alameda/S 254th  
Lindsey/S 269th  
Imhoff/S 284th  
Cedar Lane/S 299th  
Post Oak/S 314th  
Etowah/S 329th  
Maguire  
Cemetery  
Banner  
Slaughterville  
Bryant  
Duffy  
York  
Moffatt  
HWY 39  
Lewis  
Flat Armadillo  
Box  
Edge of the Earth  
Unreachable

# OCARTS SAFETY TARGETS: TOTAL NON-MOTORIZED FATALITIES AND SERIOUS INJURIES

## OPTION 1

1% Reduction Each Year:

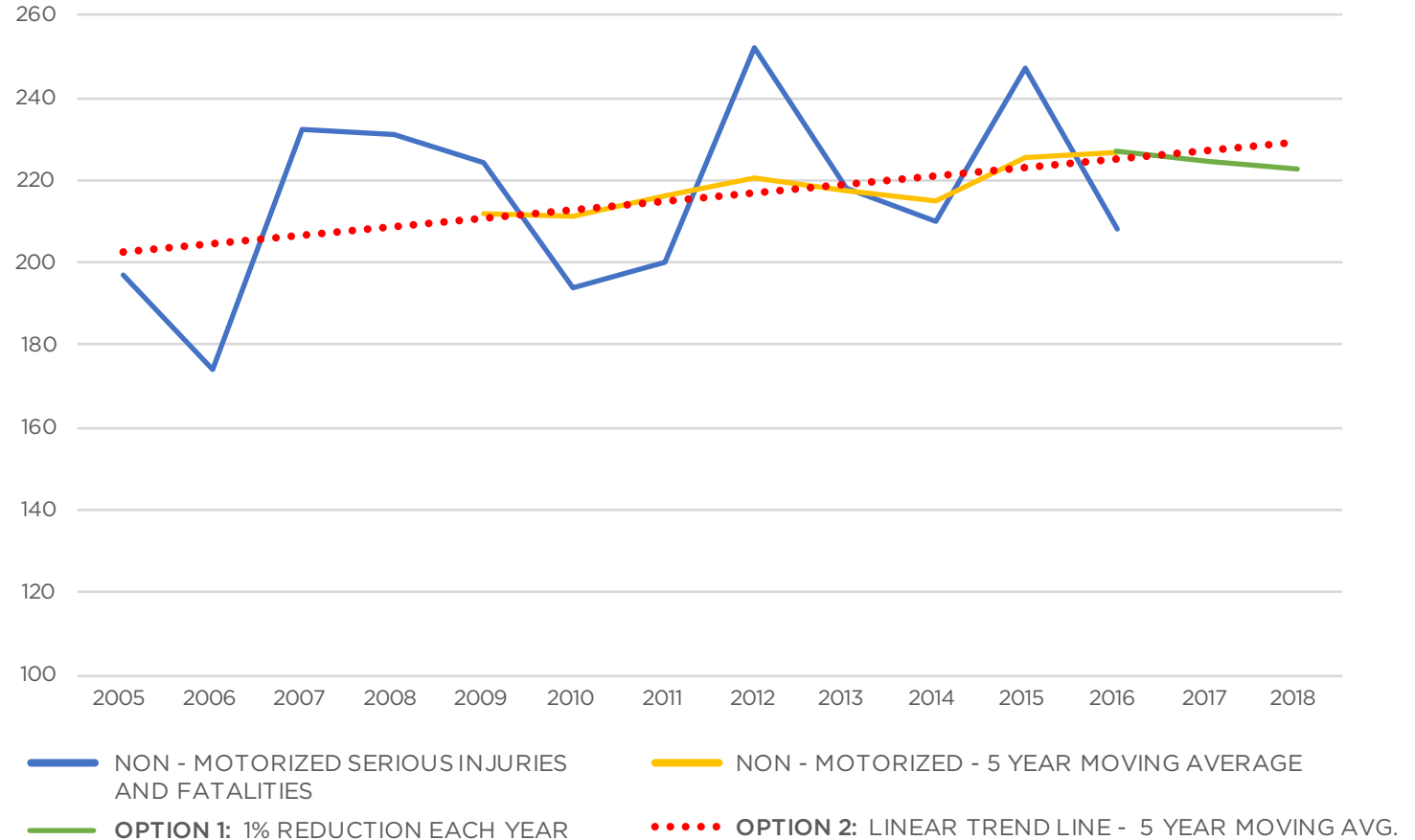
**222**

## OPTION 2

Linear Trend Line:

**230**

Data source: FARS and SAFE-T



## SAFETY TARGETS: IMPORTANT DATES

- Targets Due to ODOT:
  - 180 Days after ODOT sets their targets, or February 27, 2018
- Set annually
- Support ODOT targets or set our own?
  - January: Review and suggestions on OCARTS targets
  - February: Final decision and report to ODOT



# FUTURE PERFORMANCE MEASURES

## REQUIRED BY FHWA:

- Interstate Travel Time Reliability
- Non-Interstate Travel Time Reliability
- Truck Travel Time Reliability

- **TARGETS ARE SET EVERY 4 YEARS**
- **MPO TARGETS DUE:**
  - 180 Days after ODOT or by Nov. 20, 2018

- 
- % of NHS Bridges classified as in **Good** Condition
  - % of NHS Bridges classified as in **Poor** Condition

- 
- % of Interstate Pavements in **Good** Condition
  - % of Non-Interstate Pavements in **Good** Condition
  - % of Interstate Pavements in **Poor** Condition
  - % of Non-Interstate Pavements in **Poor**Condition

## FUTURE PERFORMANCE MEASURES

- **Economic Strength/Performance**
  - Mode share for commuter trips
  - User Cost (as a function of delay)
- **Safety and Security**
  - Existence of Regional Security Strategies
- **Equity and Options/Connectivity**
  - Miles of sidewalk and bicycle paths/lanes added within  $\frac{1}{4}$  mile of transit stop
  - Percent of population and jobs located within  $\frac{1}{4}$  mile of transit stops
- **Healthy Communities/Connectivity**
  - Annual air quality index reading for the region
  - Average trip distance
  - Total miles of sidewalk and bicycle facilities

# QUESTIONS?

**Kathryn Wenger**

**Program Coordinator**  
Transportation & Planning Services

[kwenger@acogok.org](mailto:kwenger@acogok.org)

**John M. Sharp**

**Division Director**  
Transportation & Planning Services

[jmsharp@acogok.org](mailto:jmsharp@acogok.org)

ASSOCIATION OF CENTRAL OKLAHOMA GOVERNMENTS  
[acogok.org](http://acogok.org)

acog