



*Presented by:*

**Beth Doliboa  
and  
William Johnson**

---

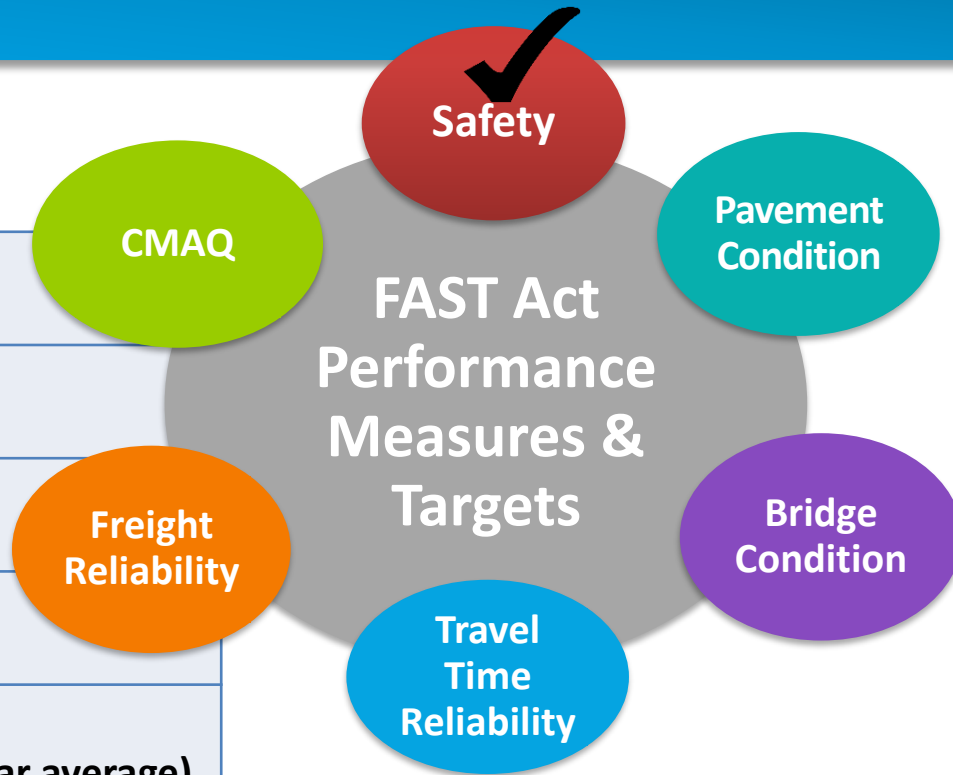
Board-October 17, 2018

# FAST Act Required Targets



# Established targets

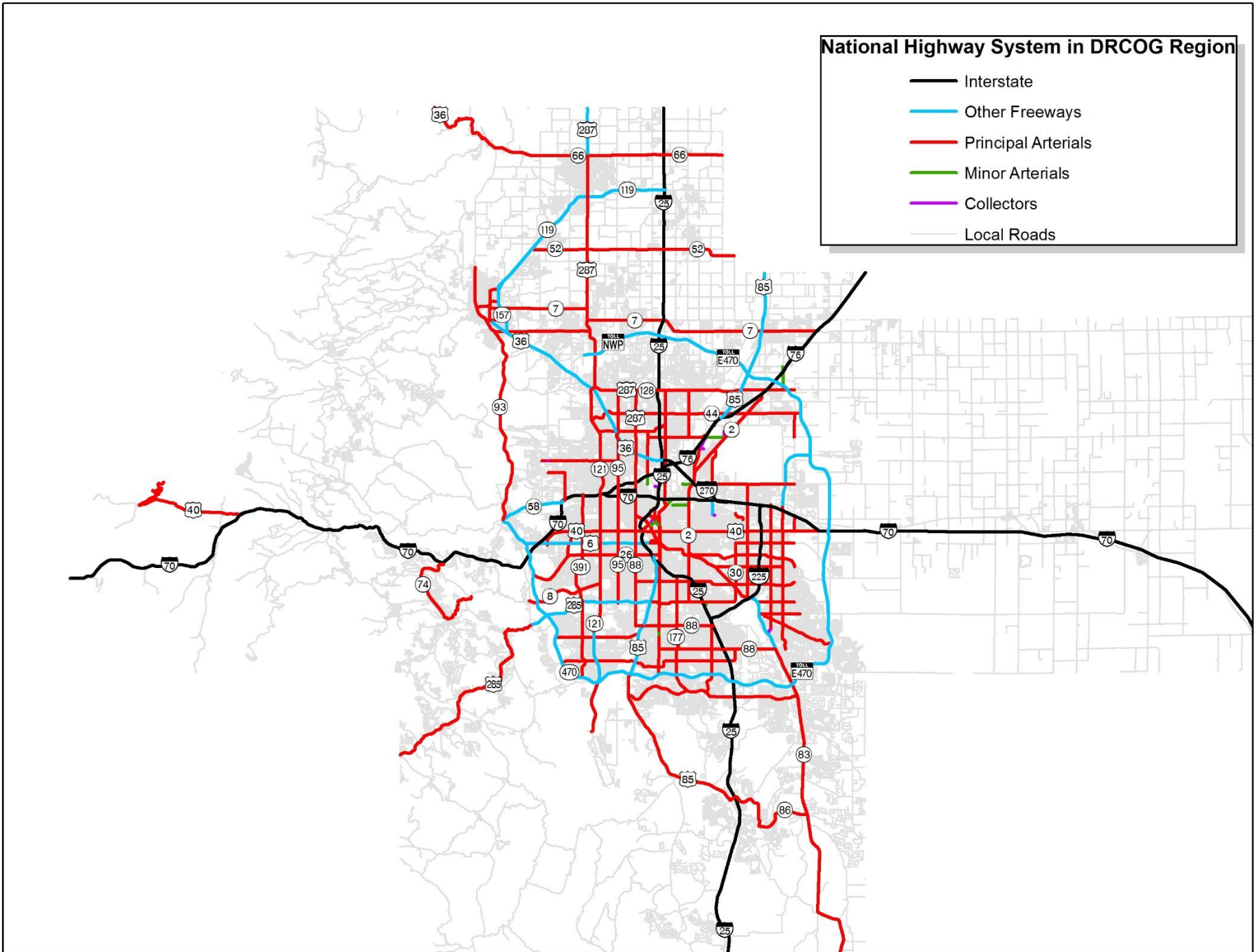
Safety	Number of Traffic Fatalities (5-year average)	
	Traffic Fatalities per 100M VMT (5-year average)	
	Number of Serious Injuries (5-year average)	
	Serious Injuries per 100M VMT (5-year average)	
	Number of Non-Motorized Fatalities and Serious Injuries (5-year average)	
CMAQ	Traffic Congestion	Annual hours of Peak Hour Excessive Delay (PHED) per capita
		Percent of Non-Single Occupancy Vehicle (SOV) Travel





# Remaining performance measure targets

Infrastructure Condition	Bridge	Percentage of NHS Bridges, by deck area, classified in Good Condition
		Percentage of NHS Bridges, by deck area, classified in Poor Condition
	Pavement	Percent of pavements of the Interstate System in Good Condition
		Percent of pavements of the Interstate System in Poor Condition
		Percent of pavements of the Non-Interstate NHS System in Good Condition
		Percent of pavements of the Non-Interstate NHS System in Poor Condition
System Performance	Travel Time Reliability	Interstate Level of Travel Time Reliability (LOTTR)
		Non-Interstate NHS Level of Travel Time Reliability (LOTTR)
	Freight Reliability	Truck Travel Time Reliability (TTTR) Index for the Interstate System
CMAQ	On-Road Emission Reduction Benefits	Volatile Organic Compound (VOC)
		Particulate Matter (PM 10)
		Carbon Monoxide (CO)
		Nitrogen Oxide (NOx)





# Percentage of NHS Bridges, by deck area, classified in **Good** and **Poor** Condition

The percent of deck area in good/fair/poor condition -  
Assessed using the rating of the major structures of the following bridge inventory items:  
Deck, Substructure, Superstructure, and Culverts

CDOT data:

<b>Conditions</b>	<b>2017 Statewide Total Deck Area</b>	<b>2017 Statewide Condition %</b>	<b>2018 Statewide Condition %</b>
<b>All Bridges</b>	<b>30,101,799</b>		
<b>Good Condition</b>	<b>14,691,259</b>	<b>48.81%</b>	<b>47.36%</b>
<b>Fair Condition</b>	<b>14,151,670</b>	<b>47.01%</b>	<b>48.83%</b>
<b>Poor Condition</b>	<b>1,259,870</b>	<b>4.19%</b>	<b>3.81%</b>

<b>Bridge Conditions</b>	<b>State 4-Year Target (2022)</b>
<b>Good Condition</b>	<b>44%</b>
<b>Poor Condition</b>	<b>4%</b>



# Percentage of pavements of the Interstate System in Good or Poor Condition

## Percent of pavements of the Non-Interstate NHS System in Good or Poor Condition

CDOT leveraged their internal Drivability Life (DL) performance metric and the pavement management system (PMS).

Lane Mile Conditions	2017 Statewide Pavement Conditions	2018 Statewide Pavement Conditions
% Pavement on Interstate System in Good Condition	44.88%	43.09%
% Pavement on Interstate System in Poor Condition	0.25%	0.51%
% Pavement on non-Interstate NHS System in Good Condition	49.34%	41.79%
% Pavement on non-Interstate NHS System in Poor Condition	0.96%	0.16%

Lane Mile Conditions	State 4-Year Target (2022)
% Pavement on Interstate System in Good Condition	47%
% Pavement on Interstate System in Poor Condition	1%
% Pavement on non-Interstate NHS System in Good Condition	51%
% Pavement on non-Interstate NHS System in Poor Condition	2%



# Interstate and Non-Interstate NHS Level of Travel Time Reliability

## Truck Travel Time Reliability

System Reliability targets were established by using forecasts from the National Performance Management Research Data Set (NPMRDS) and Highway Performance Monitoring System (HPMS) data from 2013 - 2016

### Statewide Interstate LOTTR

Year	LOTTR
2013	80.30%
2014	81.70%
2015	79.20%
2016	81.70%

State 4-Year Target  
(2022)

81%

### Statewide Non-Interstate NHS LOTTR

Year	LOTTR
2013	67.00%
2014	63.70%
2015	64.00%
2016	63.50%

State 4-Year Target  
(2022)

64%

### Statewide Truck Travel Time

Year	TTTR
2013	1.55
2014	1.51
2015	1.49
2016	1.45

State 4-Year Target  
(2022)

1.5



## Total Emission Reduction Benefits

Emission reduction benefit from the reporting years of 2012 to 2016 - CDOT used the lowest two and four-year totals to set the targets for each emission reduction benefit that needs to be reported.

<b>On-Road Mobile Emissions</b>	<b>Current Condition</b>	<b>State 2-Year Target (2020)</b>	<b>State 4-Year Target (2022)</b>
<b>Volatile Organic Compound (VOC)</b>	<b>101.561</b>	<b>86</b>	<b>105</b>
<b>Particulate Matter (PM 10)</b>	<b>49.639</b>	<b>31</b>	<b>152</b>
<b>Carbon Monoxide (CO)</b>	<b>1,845.826</b>	<b>1,152</b>	<b>1,426</b>
<b>Nitrogen Oxide (NOx)</b>	<b>420.038</b>	<b>86</b>	<b>105</b>





## Next Steps

- 2020 – Mid-year review of the first performance period
  - Adjustments (if necessary) of the four-year targets
  - CDOT submits mid-year performance report
- 2022 – End of first performance period
  - CDOT submit final performance report and significant progress determination performance
  - Target setting for next four-year performance period (2022-2026)



QUESTIONS?