# Federal Performance Measures (PM) **Kansas**

### PM1: Safety Performance Measures

- Fatalities
- Fatality Rate
- Serious Injuries
- Serious Injury Rate
- Non-motorized Fatalities and Serious Injuries

#### Fatalities



#### **Number of Fatalities: 407**

The 2022 five-year moving average projection based upon the trendline indicates 444 fatalities. An eight percent reduction would derive our goal of 407 fatalities in 2022. Based upon recent history, the trendline of the target, the eight percent reduction goal is realistic and attainable.

#### Fatality Rate



Fatality Rate: 1.28 persons per 100 million vehicle miles travelled

The 2022 five-year moving average projection based upon the trendline indicates a fatality rate of 1.38. A seven percent reduction in this projection would derive our goal of 1.28 fatality rate in 2022. Based upon recent history and the trendline of the target, the seven percent reduction goal is realistic and attainable.



#### Suspected Serious Injuries

#### Number of Serious Injuries: 1,164

The 2022 five-year moving average projection based upon the trendline indicates 1,265 serious injuries. An eight percent reduction in this projection would derive our target of 1,164 serious injuries in 2022. With the change in definition to suspected serious injury in 2019, there was a sharp increase in crashes meeting the definition. This is an artificial increase, not an actual degradation of safety. In order to re-establish a trendline for this category, it was determined to "back-cast" how many suspected serious injuries would have occurred in past years with the new definition. We used a conversion factor to inflate previous years' crashes by 1.46 (46% increase). This allows for a steady, downward trend that we predict would have occurred apart from the definition change. 2020 defied that trend with a rise in suspected serious injuries, but we do not expect that to continue, that suspected serious injuries will resume falling. It is this trend upon which we based our suspected serious injury target. Based upon recent history, the trendline of the target, the eight percent reduction goal is realistic and attainable.

#### Suspected Serious Injury Rate



#### Serious Injury Rate:3.576

The 2022 five-year moving average projection based upon the trendline indicates 3.887 serious injury rate per 100 million VMT. An eight percent reduction in this projection would lead to our goal of 3.576 serious injury rate per 100 million VMT in 2022. With the change in definition to suspected serious injury, there was a sharp increase in crashes meeting the definition. This is an artificial increase, not an actual degradation of safety. In order to re-establish a trendline for this category, it was determined to "back-cast" how many suspected serious injuries would have occurred in past years with the new definition. We used a conversion factor to inflate previous years' crashes by 1.46 (46% increase). This allows for a steady, downward trend that we predict would have occurred apart from the definition change. 2020 defied that trend with a rise in suspected serious injuries, but we do not expect that to continue, that suspected serious injuries will resume falling. It is this trend upon which we based our suspected serious injury target. Based upon recent history, the trendline of the target, the eight percent reduction goal is realistic and attainable.



#### Non-Motorized Fatalities and Serious Injuries

#### **Total Number of Non-Motorized Fatalities and Serious Injuries:157**

Back-casting serious injuries for non-motorized leads to a descending trend (as opposed to the ascent in the raw data). From there, and including fatalities, the projected point for 2022 is 171. To be consistent with our target for fatalities and serious injuries, the target was set 8% below projection at 157.

### PM2: System Condition Performance Measures

- Interstate Pavement in Good Condition
- Interstate Pavement in Poor Condition
- Non-Interstate NHS Pavement in Good Condition
- Non-Interstate NHS Pavement in Poor Condition
- NHS Bridges in Good Condition
- NHS Bridges in Poor Condition



#### KS Interstate Pavement in Good Condition

KDOT has long measured pavement condition in order to best manage our pavement resources. In 2018, KDOT converted to the FHWA method of assessing condition and set performance targets using data up to 2017. KDOT chose to maintain the 2021 target of 65% in calendar year 2020. For more info: <u>https://www.fhwa.dot.gov/tpm/faq.cfm#pave</u>

#### KS Interstate Pavement in Poor Condition



KDOT has long measured pavement condition in order to best manage our pavement resources. In 2018, KDOT converted to the FHWA method of assessing condition and set performance targets using data up to 2017. KDOT chose to maintain the 2021 target of 0.5% in calendar year 2020. For more info: <u>https://www.fhwa.dot.gov/tpm/faq.cfm#pave</u>



KDOT has long measured pavement condition in order to best manage our pavement resources. In 2018, KDOT converted to the FHWA method of assessing condition and set performance targets using data up to 2017. KDOT chose to maintain the 2021 target of 55% in calendar year 2020. For more info: <u>https://www.fhwa.dot.gov/tpm/faq.cfm#pave</u>

#### KS Non-Interstate NHS Pavement in Poor Condition



KDOT has long measured pavement condition in order to best manage our pavement resources. In 2018, KDOT converted to the FHWA method of assessing condition and set performance targets using data up to 2017. KDOT chose to maintain the 2021 target of 1.5% in calendar year 2020. For more info: <u>https://www.fhwa.dot.gov/tpm/faq.cfm#pave</u>

#### KS NHS Bridges in Good Condition, by deck area



KDOT has long measured bridge condition in order to best manage our resources. In 2018, KDOT converted to the FHWA method of assessing condition (weighted by bridge deck area) and set performance targets using data up to 2017. KDOT had the opportunity to change the 2021 target in calendar year 2020 but kept it at 70% or higher. For more info: <u>https://www.fhwa.dot.gov/tpm/faq.cfm#brid</u>

#### KS NHS Bridges in Poor Condition, by deck area



KDOT has long measured bridge condition in order to best manage our resources. In 2018, KDOT converted to the FHWA method of assessing condition (weighted by bridge deck area) and set performance targets using data up to 2017. KDOT had the opportunity to change the 2021 target in calendar year 2020 but kept it at 3% or lower. For more info: <u>https://www.fhwa.dot.gov/tpm/faq.cfm#brid</u> PM3: System Reliability Performance Measures

- % of Interstate travel that is reliable
- % of non-Interstate travel that is reliable
- NHS Truck Travel Time Reliability Index



This travel time reliability comes from the National Performance Measure Research Data Set (NPMRDS). An explanation of the measure may be found at <u>https://www.fhwa.dot.gov/tpm/rule/pm3/reliability.pdf</u>. A flat target was chosen because only 2 years were available then. The 2020 value is due to COVID travel restrictions abating congestion. KDOT chose to maintain a target of 95% in 2020.

## Non-Interstate % of person-miles that are reliable (LOTTR>1.5)



This travel time reliability comes from the National Performance Measure Research Data Set (NPMRDS). An explanation of the measure may be found at <u>https://www.fhwa.dot.gov/tpm/rule/pm3/reliability.pdf</u>. A flat target was chosen because only 2 years were available then. The 2020 value is due to COVID travel restrictions abating congestion. KDOT chose to maintain a target of 95% in 2020.



This travel time reliability comes from the National Performance Measure Research Data Set (NPMRDS). An explanation of the measure may be found at <u>https://www.fhwa.dot.gov/tpm/rule/pm3/freight.pdf</u>. A flat target was chosen because only 2 years were available then. The 2020 value is due to COVID travel restrictions abating congestion. KDOT chose to maintain a target of 1.16 in 2020.