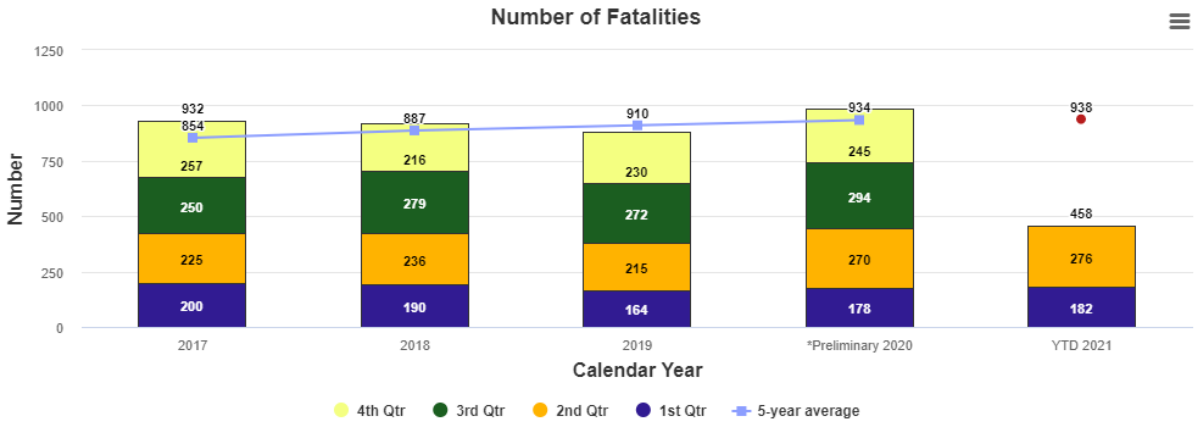
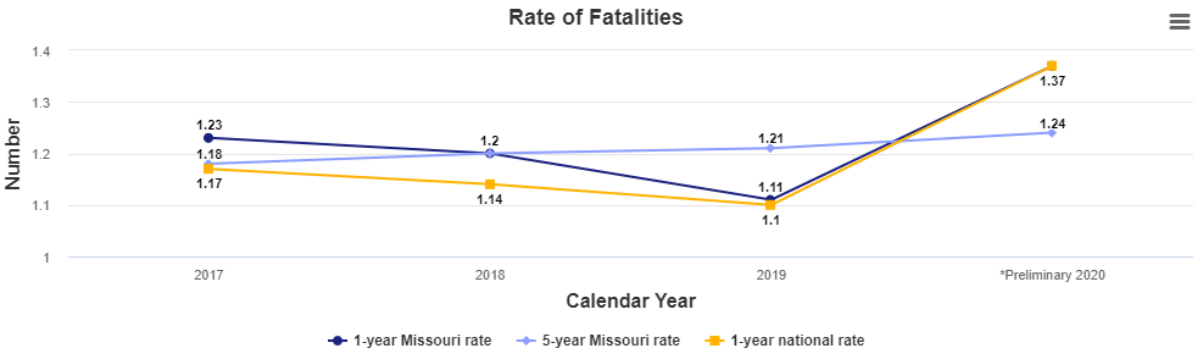
## Number and rate of fatalities – 1a




**Target: 938**




***Preliminary numbers are subject to change**

### Write up:

Safety is MoDOT's number one priority. Whether resident, visitor to the state or highway worker, the ultimate goal is to assure that everyone returns home safely. MoDOT supports Zero Fatalities by 2030 as part of the strategic highway safety plan, Show Me Zero, designed to reduce the number and severity of traffic crashes using the four key disciplines of traffic safety: engineering, enforcement, education, and emergency response.

There were 182 fatalities in the first quarter and 276 fatalities in the second quarter of 2021. This is an increase of 10 fatalities from the first and second quarters of last year. For the year 2020, there have been 987 fatalities compared to 881 for the same time in 2019, an increase of 106 fatalities. The target for 2021 is 938 fatalities or fewer.

Focusing on Show Me Zero, there are currently 24 counties with zero fatalities in the first six months of 2021. There were 24 days with zero fatalities, which included two times when two days occurred sequentially without a fatal crash.

### Purpose:

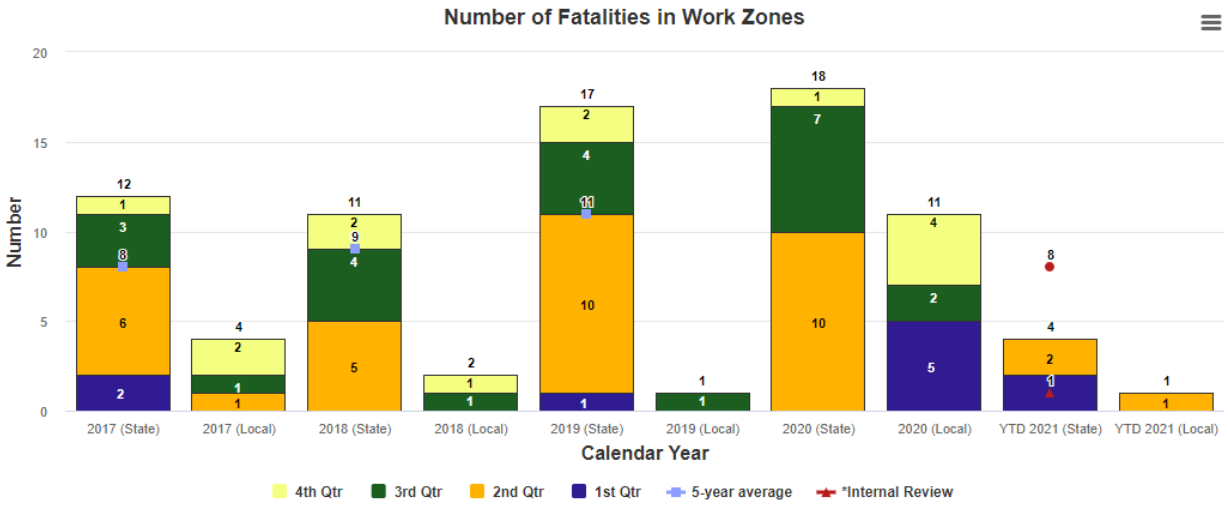
This measure tracks the number of fatalities quarterly, annually, and five-year average trends resulting from traffic crashes on all Missouri roadways.

### Measurement and Data Collection:

Missouri law enforcement agencies submit a vehicle accident report form to the Missouri State Highway Patrol to be entered into a statewide traffic crash database. The database automatically updates MoDOT's crash database system, which is part of the Transportation Management System. The rate of fatal crashes charts display annual and five-year average fatality and injury rates per 100 million vehicle miles traveled for these same crashes. In addition, the fatality rate chart includes the national average.

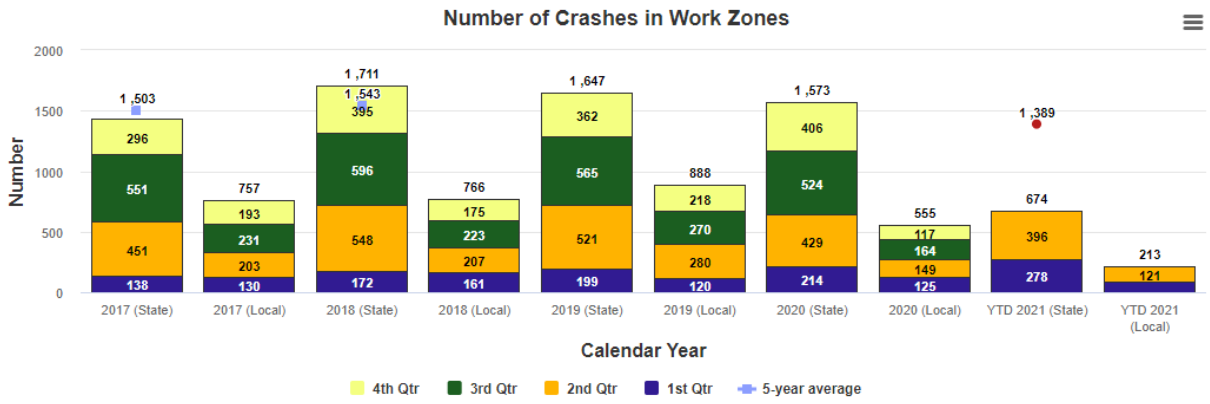
Targets are based on Zero by 2030 fatality reduction, 1% VMT increase and non-motorized reduction based on overall fatality and reductions. An exception is made for instances where the baseline five-year rolling average is less than the calculated target using the parameters previously described. When this occurs, the baseline will be used as the target.

## Number of fatalities in work zones – 1b




Target: Below 8

***Internal Review is MoDOT's investigation into each crash to determine if that crash qualifies as a true work zone fatality**




**Target: Below 1,389**

## Write up:

Safe and efficient travel for the public through work zones is crucial, which is why crews in work zones are expected to conduct operations safely. MoDOT makes every effort to inform the public to pay attention, slow down, move over, buckle up and drive without distractions to increase the safety of workers and travelers. MoDOT's goal is zero fatalities in work zones, and only through continued efforts from MoDOT, the contracting industry and the driving public can that goal be accomplished. Continual improvement in planning, strategies and technologies are employed, and it's up to MoDOT staff to deploy the proper tools in all work zones.

To make progress toward the goal of zero fatalities in work zones, an internal review is conducted on each fatal crash. For this quarter, there were two reported work zone fatalities on the state system. One involved a rear end collision while the other involved a runoff the road crash. No workers were present and neither driver was wearing a seat belt. There was one crash on the local system. The driver was wearing a seatbelt, however excessive speed contributed to the severity of the crash.

Poor driver behavior remains a primary factor in fatal crashes, which proves difficult for MoDOT to control. Community outreach and public awareness campaigns, such as Buckle Up Phone Down, are very helpful, but ultimately MoDOT is dependent upon the driving public to make good choices when driving in work zones. The challenges for MoDOT remain many, with changing driver behaviors at the top.

## Purpose:

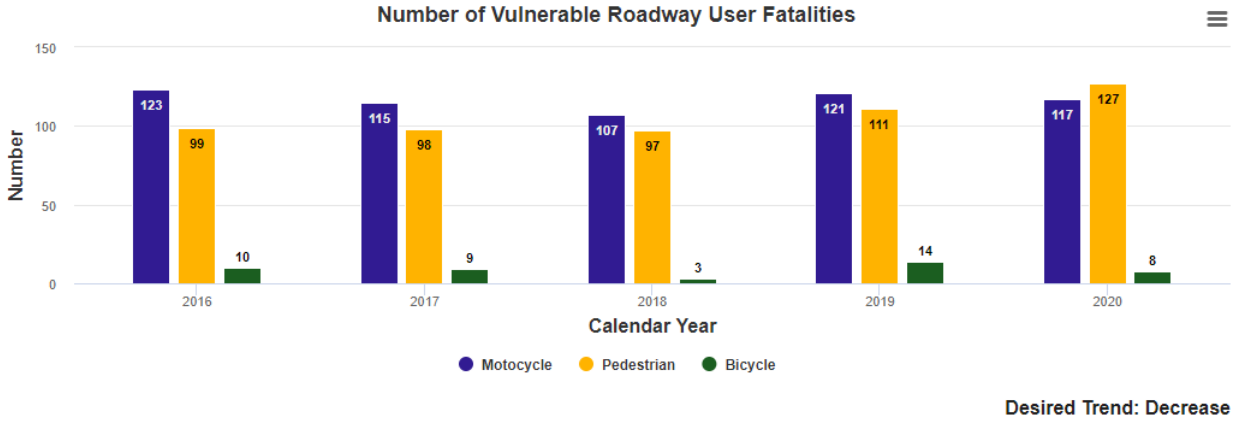
This measure tracks the number of traffic-related and non-traffic-related fatalities, injuries and overall crashes occurring in work zones on state-owned and off-system roadways.

### Measurement and Data Collection:

Missouri law enforcement agencies submit a vehicle accident report form to the Missouri State Highway Patrol to be entered into a statewide traffic crash database. The database automatically updates MoDOT's crash database system, which is part of the Transportation Management System. MoDOT staff query and analyze this data to identify work zone related crash statistics. Missouri State Highway Patrol prioritizes entry of the crash reports by fatality, serious injury and property damage only.

The target for this measure is updated quarterly. This target is established by projecting a 10% improvement over a five-year average.

## Number of vulnerable roadway user fatalities – 1c




**Desired Trend: Decrease**

### Write up:

In 2020, there was an increase in the number of fatalities for vulnerable roadway users. Motorcycle and bicycle fatalities did decrease by 3%, however, pedestrian fatalities increased 14%.

In only two of the motorcycle incidents did both the driver and passenger die, but they were all older drivers. All age groups were represented evenly, from age 15 to 79. Districts were represented as well with rural districts having about a third of the fatalities seen in urban districts. Of the 117 fatalities, 19 were not wearing a helmet and 18 were wearing a non-DOT helmet.

Pedestrian fatalities occurred in every month and on every type of roadway. There were 25 fatalities on the interstate, six of those in October, although the remaining were spread throughout the year. Half of the fatalities on interstates were in the St. Louis district, with the remaining in Northwest, Kansas City, Central District and Southwest District. Pedestrians ranged from a toddler to age 89, but those in their 30's, 40's and 50's represented the highest numbers of fatalities. Of the 127 fatalities, 53 were in St. Louis.

Of the eight cyclists who died on Missouri roadways, five were in the Kansas City District, one in the Southwest District and two in in the Southeast District. Seven of the eight were not wearing helmets and seven were male. Two were teenagers, five were in their 40's and 50's and one was 84. Two fatalities occurred in the months of June, July and December, with one fatality each in April and October.

The only focus area seems to be targeting pedestrians to walk safely in St. Louis and to stay in their vehicles after crashes or breakdowns on the interstate. The remaining target would be to urge cyclists in Kansas City to wear helmets and follow road user rules when biking.

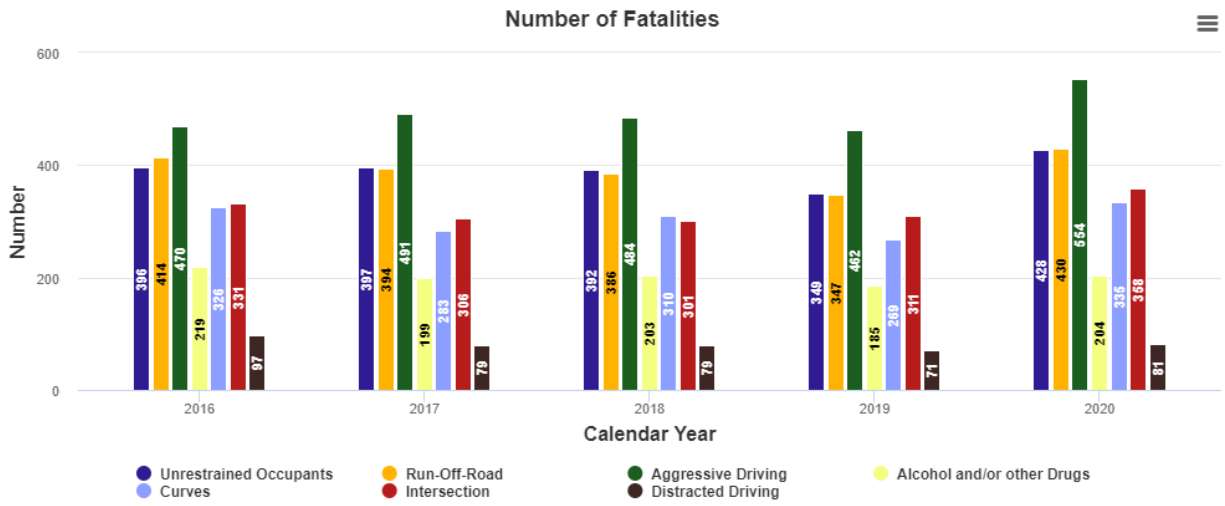
### Purpose:

The vulnerable roadway user measure tracks annual trends in fatalities of motorcyclists, pedestrians and bicyclists. These roadway users are at risk for death when involved in a motor-vehicle-related crash.

### Measurement and Data Collection:

Missouri law enforcement agencies submit a vehicle accident report form to the Missouri State Highway Patrol to be entered into a statewide traffic crash database. The database automatically updates MoDOT's crash database system, which is part of the Transportation Management System.

## Most common characteristics of fatal crashes – 1d




### Write up:

MoDOT's priority is to keep customers and employees safe. The greatest challenge to this is the recurring frequency of fatal and serious injury crashes on Missouri roadways. MoDOT

utilizes crash data to identify the most common contributing circumstances of severe crashes. By identifying behaviors and characteristics most associated with these crashes, MoDOT can make more informed decisions to address the problem. While the most common causes are related to human behavior, MoDOT can help implement solutions through education, enforcement, engineering and emergency response to minimize poor decisions and their potential impact.

In 2020 there were 986 traffic fatalities in Missouri, a 12% increase from 2019. While every category reported in this measure saw an increase, the most notable increases involved vehicles running off the roadway, usually due to aggressive driving and unbelted vehicle occupants. Aggressive driving continues to be the leading cause of fatal crashes in the state. Aggressive driving includes speeding, driving too fast for conditions, following too closely and improper passing. Speed contributed to 40% of the traffic fatalities in 2020. Overall, speed related fatalities were up 25% from 2019. Unbelted occupant fatalities increased 23% in 2020 with 428 individuals not wearing a seat belt. Overall, 67% of the vehicle occupants killed in 2020 were not wearing a seat belt. Distracted driving fatalities were up 13% in 2020, the first recorded increase in this category since 2015. Substance-impaired driving fatalities were up 6% in 2020, but mostly in line with the previous five years.

In conjunction with the Missouri Coalition for Roadway Safety, MoDOT unveiled a new strategic highway safety plan, Show-Me Zero. Show-Me Zero is designed to provide all Missourians a better understanding of the crash problem and how everyone, from individuals to organizations, can play a role in driving Missouri toward safer roads. The plan uses four key messages to promote change:  buckle up, phone down, slow down and drive sober.

MoDOT directly supports implementation of Show-Me Zero through the Statewide Transportation Improvement Program (STIP), where millions of dollars are programmed each year for roadway safety improvements. In addition, MoDOT administers federal safety funds for educational and enforcement programs to reduce poor driving behaviors. These programs allow safety partners throughout the state to get involved in efforts to move Missouri toward zero deaths.

## Purpose:

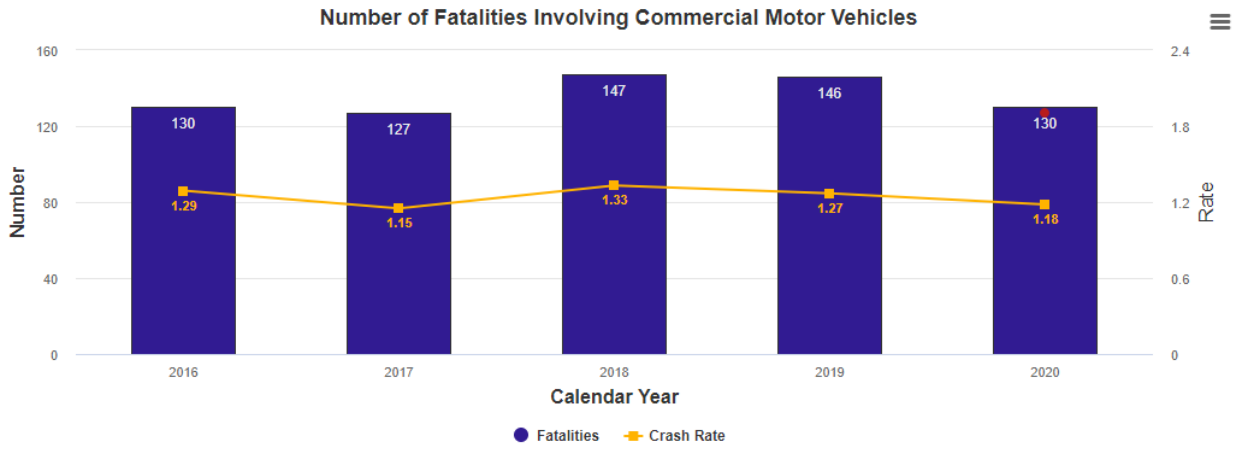
The measure tracks annual trends in motor-vehicle-related fatalities resulting from the most common contributing factors or highway features. This data represents the four focus areas presented in Missouri’s strategic highway safety plan, Show-Me Zero.

## Measurement and Data Collection:

Missouri law enforcement agencies submit a vehicle crash report form to the Missouri State Highway Patrol to be entered into a statewide traffic crash database, which feeds into MoDOT's Transportation Management System. MoDOT staff query and analyze this data to determine the number of unrestrained occupants in crashes, how often aggressive driving, distracted driving, alcohol and other

drugs contribute to crashes, and whether or not the vehicles ran off the road, the crash occurred in a curve or the crash occurred at an intersection.

## Number and rate of fatalities involving commercial motor vehicles – 1e




Target: Below 127

### Write up:

Commercial Motor Vehicles play a vital role in the nation's economy by transporting the products that are needed. By tracking the number of CMV involved fatalities, MoDOT can target educational and enforcement efforts, as well as improve safety features along Missouri roadways. MoDOT partners with the Missouri State Highway Patrol, St. Louis Metropolitan Police Department, Kansas City Police Department and St. Louis County Police Department to keep people safe while traveling in and around CMVs.

While efforts from MoDOT and the partner agencies are effective in improving safety on roadways, Missouri has not experienced a significant decrease in the number and rate of fatalities involving CMVs. Between 2016 and 2020, fatalities involving a CMV had no change and the fatality rate decreased from 1.29 to 1.18 per 100 million CMV vehicle miles traveled. In 2020, Missouri experienced a decrease of 16 fatalities involving a CMV as compared to 2019. This resulted in a 2020 fatality rate of 1.18 compared to 1.27 for 2019. The target for 2020 was 127 fatalities and unfortunately this goal was not met.

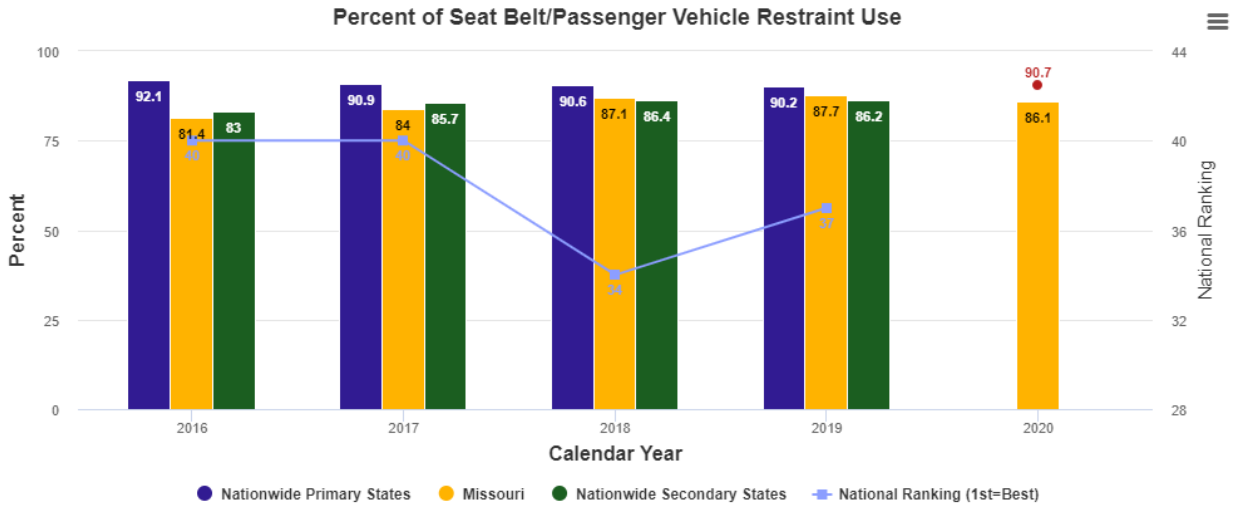
### Purpose:

This measure tracks annual trends in fatalities involving Commercial Motor Vehicles. This data guides the development and focus of the Commercial Vehicle Safety Plan, which is the plan required to receive Motor Carrier Safety Assistance Program funds.

### Measurement and Data Collection:

Missouri law enforcement agencies submit a vehicle accident report form to the Missouri State Highway Patrol to be entered into a statewide traffic crash database. The database automatically updates MoDOT's crash database system, which is a part of the Transportation Management System. The fatal rates on the charts display the annual fatality and injury rates per 100 million vehicle miles traveled for commercial motor vehicles for these same crashes. The targets are based on a 9% improvement rate from the immediate prior year fatalities from the immediate prior year.

## Percent of seat belt/passenger vehicle restraint use – 1f




### Write up:

Seat belts save lives, but getting people to use them – even to protect their own lives – is a challenge. Public education is one way to keep the issue in front of motorists, along with legislation. MoDOT supports each approach, attacking the problem with focused marketing campaigns and reinforcing it with hard facts to back legislative efforts. Several municipalities across the state are taking matters into their own hands, enacting primary ordinances within city limits. Missouri currently has one county and 64 municipalities that have adopted primary seat belt ordinances, representing over 27% of the state's population.

Based on 116,224 observations, seat belt use in Missouri for 2020 was 86.1%, a 1.6% decrease from 2019. Benton County was the lowest at 67.7% and McDonald County was the highest at 96.6% (weighted data). The national average for seat belt use in 2019 was 90.7% (2020 data is not yet available). Missouri's national ranking (including Washington D.C.) in 2019 was 37th overall and seventh of 16 in secondary or no seat belt law states. Due to the COVID-19 pandemic and its effect on traffic, the National Highway Traffic Safety Administration waived the requirement for states to conduct a statewide survey in 2020. MoDOT opted to continue with the survey at the normal June schedule as traffic volume was returning to near normal

and our survey partner had surveyors ready with provisions for social distancing and masks. The 2020 survey was only 3,189 observations less than 2019.

MoDOT is improving its safety culture through statewide strategic initiatives such as Buckle Up Phone Down and by coordinating Click It or Ticket, Youth Seat Belt and Child Passenger Safety Campaigns, as well as providing educational programs such as Teens Taking Action To Prevent Traffic Crashes and ThinkFirst.

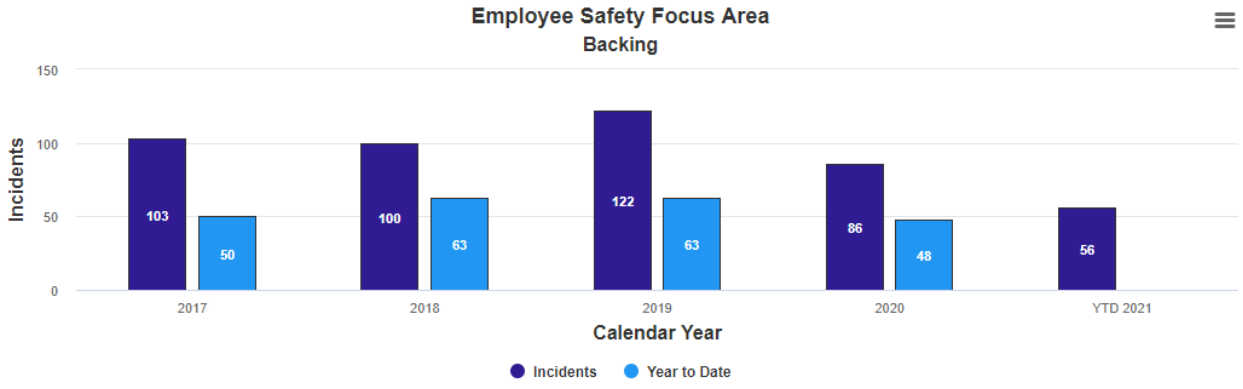
### Purpose:

This measure tracks annual trends in seat belt use in passenger vehicles. This data drives the development and focus of the Missouri Highway Safety Plan and supports Missouri's Blueprint to Save More Lives.

### Measurement and Data Collection:

Each June, a statewide survey is conducted at 560 preselected locations in 28 counties. The data collected is calculated into a seat belt usage rate using a formula approved by the National Highway Traffic Safety Administration. Data collection locations are selected from counties that represent 85% of the state's vehicle occupant fatalities. While the data collection plan is the same each year for consistency, NHTSA guidelines require survey sites to be re-selected every five years based on updated fatality data. The 2018 survey was the first survey using updated survey sites since Missouri's new survey methodology started in 2013. The target for this measure is updated annually in October for the next calendar year. This target is established as the current national average.

## Employee safety focus areas – 1g





**Write up:**

MoDOT's number one value is safety. The purpose of this measure is for everyone to arrive at work safely and return home the same way. This includes all the preparation necessary for a safe day including planning the jobs, Risk Based Assessment review, morning safety briefings and stretching. This measure focuses on improving three high risk areas: backing a motorized vehicle; slips, trips and falls; and sprains and strains.

MoDOT had 56 backing incidents in the first two quarters of 2021. This was a 17% increase in backing incidents from the same time in last year. Backing incidents can cause property damage, injuries and death. Improvement strategies include parking to avoid backing, good planning, always using a spotter, doing a thorough circle check of the area and the implantation of Geotab devices in all snow vehicles to assist with data collection.

There were 53 employees who received medical attention for slips, trips and falls during the first two quarters of 2021, which is a 12% decrease from the first two quarters of 2020. Improvement strategies include being aware of surroundings, keeping work areas organized, looking out for each other by pointing out hazards on the job that may be hidden and wearing the proper personal protective equipment for conditions.

During the first two quarters of 2021, 42 MoDOT employees received medical attention for sprains and strains. This is a 13% decrease from the first two quarters last year. Improvement strategies include implementation of a statewide stretch and flex program, asking for help when lifting and using proper lifting technique like those taught during Gear Up.

It is imperative that employees focus on improvement strategies and put MoDOT's Behavior Based Safety and Actively Caring programs into action. At MoDOT, safety is everyone's responsibility.

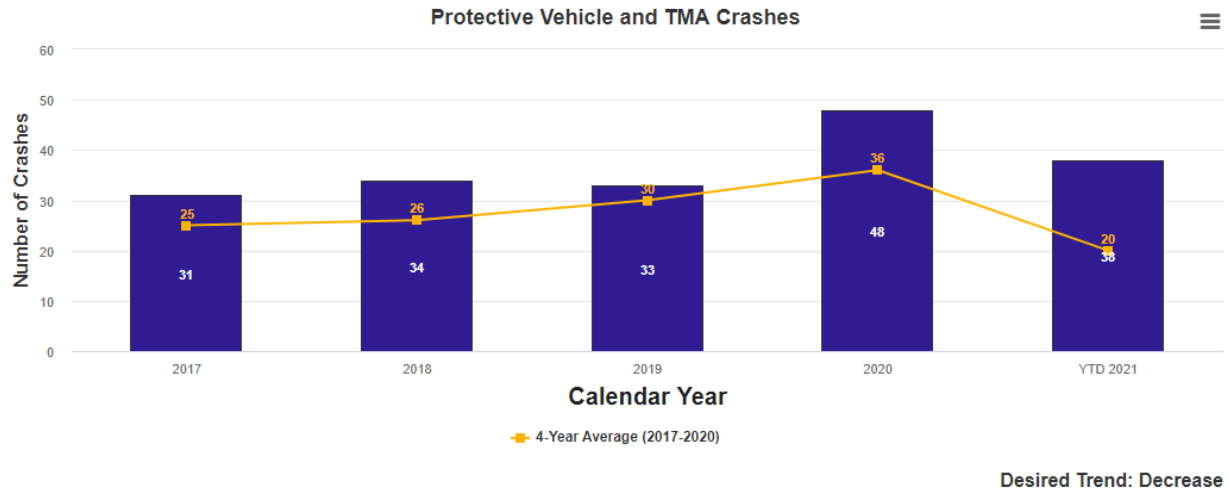
### Purpose:

This measure tracks the department's most frequent incident types and highlights areas to focus on for improvement.

### Measurement and Data Collection:

Data is collected through RiskMaster for each district and Central Office for the prior four years on the number of backing incidents; slips, trips and falls; and strains and pulls. These are the three most common types of injuries at MoDOT.

## TMA crashes and associated employee injuries – 1h




**Desired Trend: Decrease**

### Write up:

While the ultimate goal is to eliminate work zone crashes, the goal for this measure is to reduce the number of protective vehicle/truck-mounted attenuator crashes below the previous 4-year average. In the second quarter of 2021, MoDOT had 21 reported protective vehicle crashes. The number of crashes in this quarter is more than one-and-a-half times higher than the year-to-date average for the previous four years. These crashes can be less than $100 in damage to the TMA, but in most cases a new TMA costing approximately $40,000

is required. This does not include staff time, truck damage, lost wages or medical bills. This quarter, six employees in a TMA crash sought medical attention. Two of the TMA crashes this quarter happened at night, the rest were during the day, predominately in urban areas. Operations in which crashes occurred include five pothole patching, seven striping, one sweeping, one spraying, one-liter pickup, two bridge flushing and four other operations.

### Purpose:

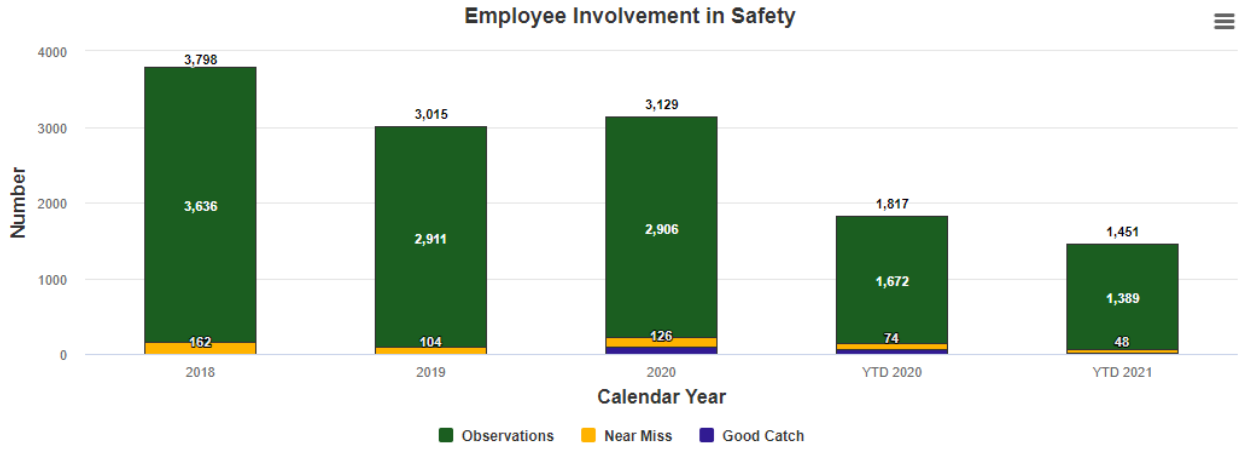
MoDOT owns more than 300 truck- or trailer-mounted attenuators that are used to save lives by absorbing the impact of a crash in a work zone. By measuring the number of TMA/Protective vehicle hits, MoDOT is able to identify higher risk activities that could result in a crash and share this information to develop strategies to eliminate work zone crashes.

### Measurement and Data Collection:

When a TMA incident occurs, a claim report is completed. The claim reports and any associated police reports are collected by Risk Management Technicians for review and interpretation. A statewide work zone incident team reviews TMA incidents and looks for strategies to improve the operations to reduce or eliminate the incidents. Only incidents where the TMA was in an active work zone protecting workers are included in this data. This measure is reported based on quarters of a calendar year.

## Employee perception of safety program (UNDER CONSTRUCTION) – 1i

## Employee involvement in safety - 1j




### Write up:

To be effective, any safety and health program needs the meaningful participation of its employees. They have much to gain from a successful program and the most to lose if the program fails. They also

often know the most about potential hazards associated with their jobs. Additionally, involvement breeds acceptance as people support what they help create. These proactive measures, Behavior Based Safety Observations and Good-Catches are positive things employees can do rather than negative outcomes they should avoid. Safety happens before an incident and this measure gives employees the goal of elimination before mitigation. Conversely, learning from mistakes is vital to a safety program. Near-miss reporting is another piece of the puzzle that allows the department to continue the vision of zero injuries. The department experienced a 20% decrease in employee participation in observations, near-miss and good-catch reporting for first half of 2021 compared to first half of 2020.

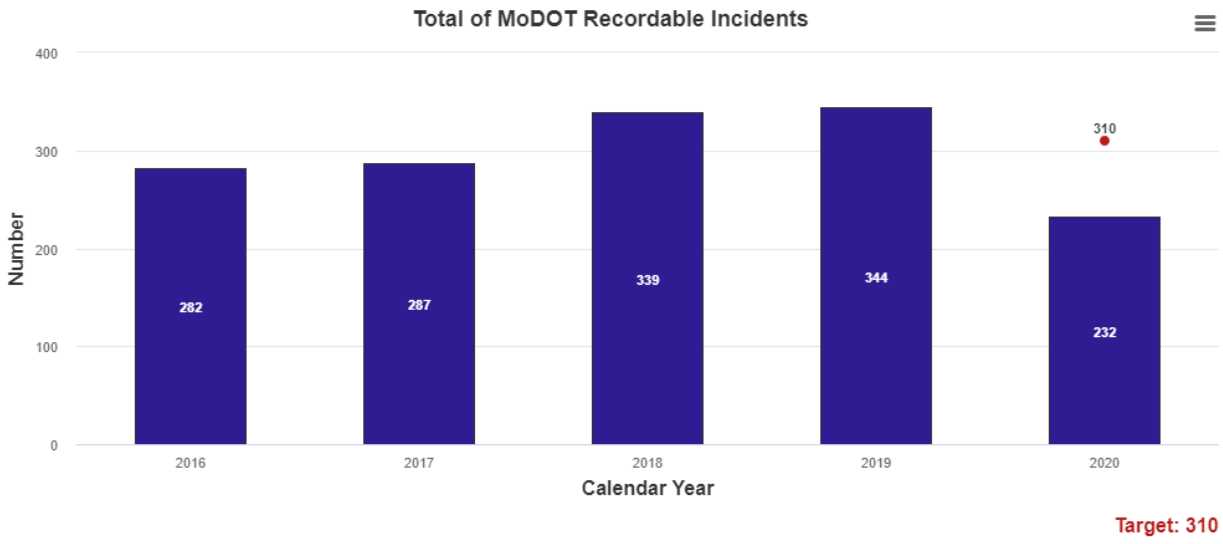
### Purpose:

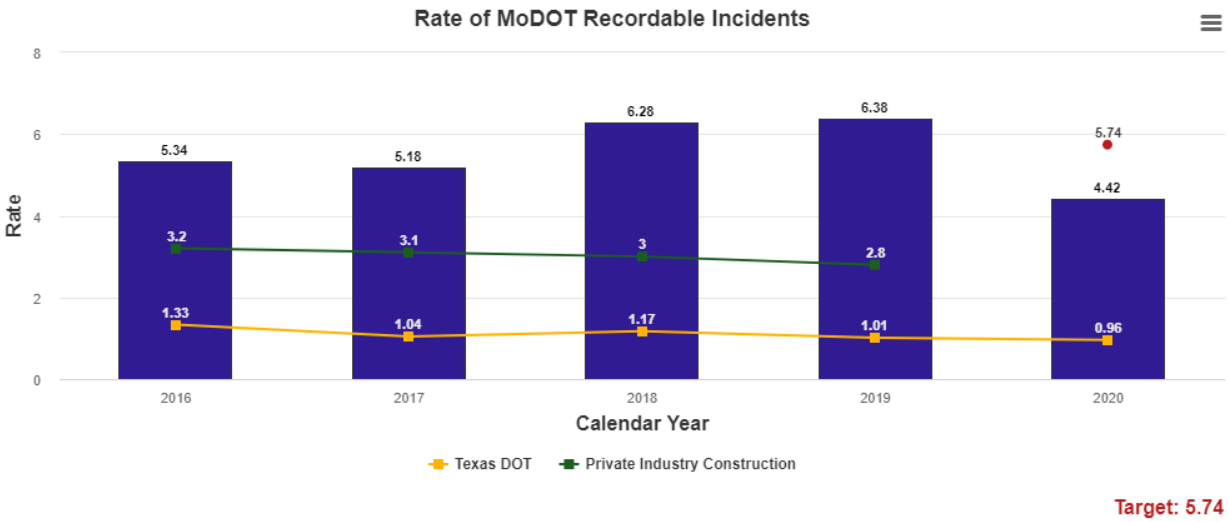
This measure shows how involved MoDOT employees are in the department's safety program by tracking BBS observations, near-misses and good-catches. This leading indicator shows trends and recognizes employees practicing good hazard recognition.

### Measurement and Data Collection:

Employee involvement measure uses observation, near-miss, and good-catch data that is submitted by employee through https://www.modotbbs.com/

## Total and rate of MoDOT recordable incidents – 1k






## Write up:

The total and rate of recordable incidents are tracked to measure the department's goal of fewer injuries. MoDOT's goal is for every employee to go home every night to their families unharmed. Reporting injuries allows the department to arrange for prompt treatment and to learn from mistakes or remediate hazards. The total number of recordables for 2020 has decreased significantly compared to 2019. The rate of incidents has also decreased significantly compared to last year. There was a 33% decrease from 2019 for the number of recordables and a 31% decrease for the rate of incidents.

Leading causes of injuries this year were slips, trips and falls (21%); strains (19%) and vehicle incidents (14%). Based on the work activity being performed at the time of the incident, equipment use accounted for 26% of employee injuries, mowing accounted for 13% and 11% were due to vehicles.

## Purpose:

This measure tracks the number of recordable injuries in total and as a rate of injuries per 100 workers.

## Measurement and Data Collection:

The calculation for incidence rate is the number of recordables times 200,000 divided by the number of hours worked. The 200,000 used in the calculation is the base for 100 full-time workers (working 40 hours per week, 50 weeks per year). MoDOT defines a recordable incident as a work-related injury or illness that results in death, days away from work or medical treatment resulting in cost to the department. The injury data is collected from RiskMaster, the department's risk management claims administration software. The number of hours worked is taken from MoDOT's payroll data.

The target for total recordable incidents is updated quarterly. The target for rate of recordable incidents is updated annually. The target is calculated by subtracting 10% from the year-to-date comparison period.

## General liability claims and costs -1l


Target: Below 858


### Write up:

Keeping employees and the public safe is the department's highest value. Controlling damage to vehicles and reducing personal injury in work zones, on right-of-way and other areas under department control helps MoDOT accomplish this goal. Compared to the first two quarters of 2020, there was a 39% increase in the number of claims. Most of the claims in 2021 were attributed to pavement defects. Also compared to first two quarters of 2020, there was a 7% increase in the amount paid.

This quarter, payments were made on 215 claims against the department, totaling $3,422,974.18. Four claims accounted for 75% of this quarter's payments. The first crash occurred in an intersection. It was alleged the design was dangerous, in that the acceleration lane was too short to gain speeds high enough to safely merge. The claim settled for $200,000. The second crash occurred when the driver was confused by the layout and signage at an intersection. The intersection the highway converts from four lanes to two lanes. This

accident involved a double fatality and several serious injuries. This claim was settled for $1,550,000. In the third accident, the vehicle lost control around a curve causing significant injuries. It was determined the speed on the sign should have been lower. The claim was arbitrated, and the plaintiff was awarded $402,231.43. The last claim involved the plaintiff hitting a hole in the sidewalk with his bicycle causing him to be thrown off causing permanent severe injuries. This claim settled for $275,000.00.

To achieve the general liability number of claims target, the focus needs to be on the department's most common claims. Historically, the top five most frequent claim types during the second and third quarters are pavement defects, chip seal operations, debris on the roadway and mowing and striping operations.

## Purpose:

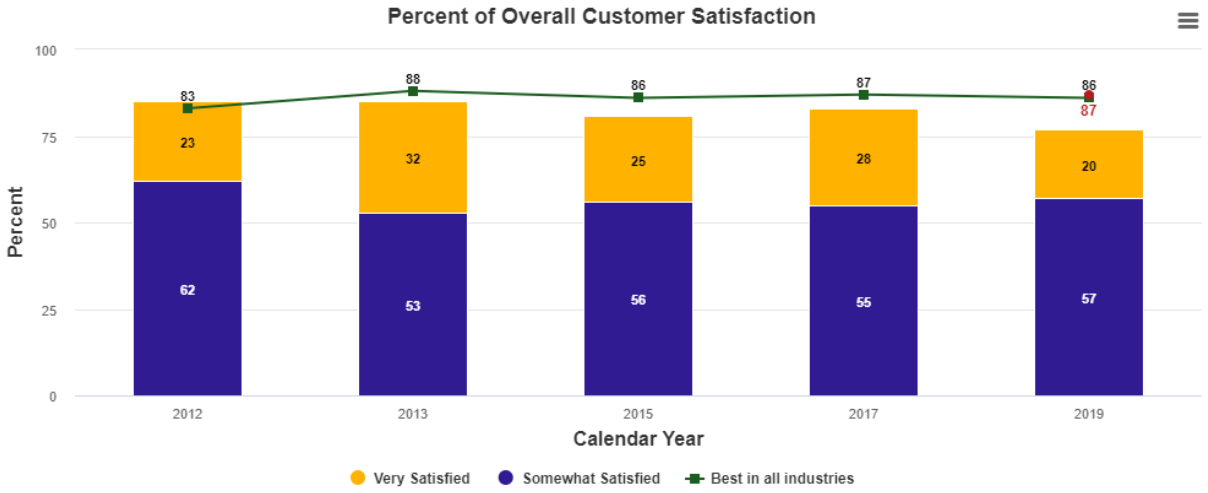
This measure tracks the number of general liability claims and amount paid.

## Measurement and Data Collection:

General liability claims arise from allegations of injuries/damages caused by dangerous conditions on MoDOT property and the injury/damage that directly resulted from the condition. In addition, an employee must be negligent and create the dangerous condition or MoDOT must have actual or constructive notice of the dangerous condition in sufficient time prior to the injury/damage to have taken measures to protect the public. Claims data is collected from Riskmaster, the department's risk management claims administration software.

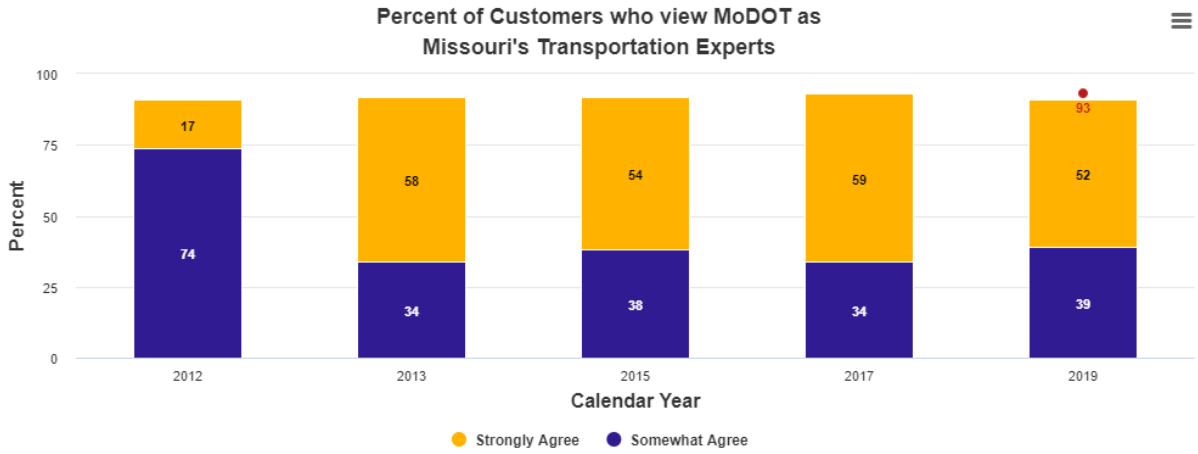
The target for this measure is updated annually. It is calculated by determining a five-year average and subtracting 10%. (Exceptionally high or low years are excluded from the five-year average calculation to determine a practical target).

# Combined Customer Satisfaction Survey – 2a

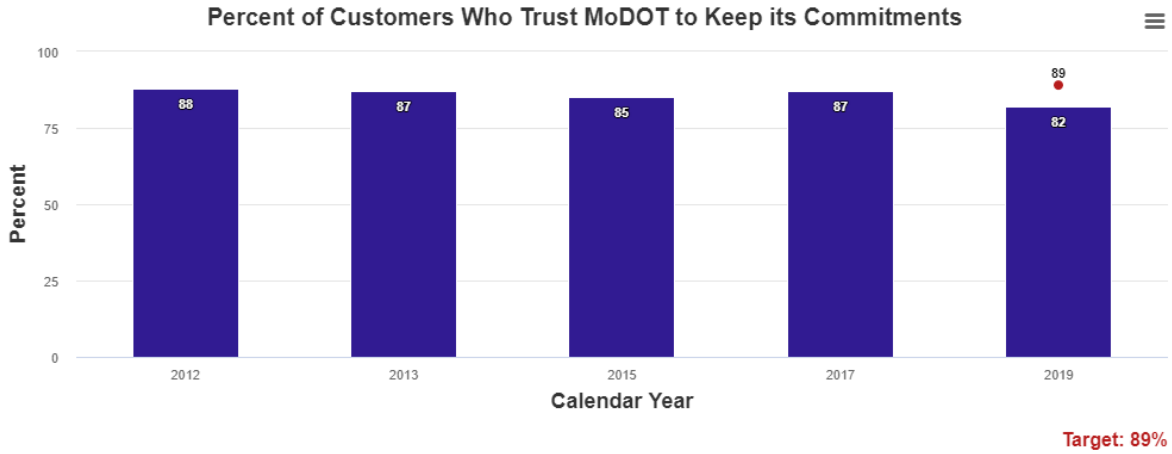



Target: 87%

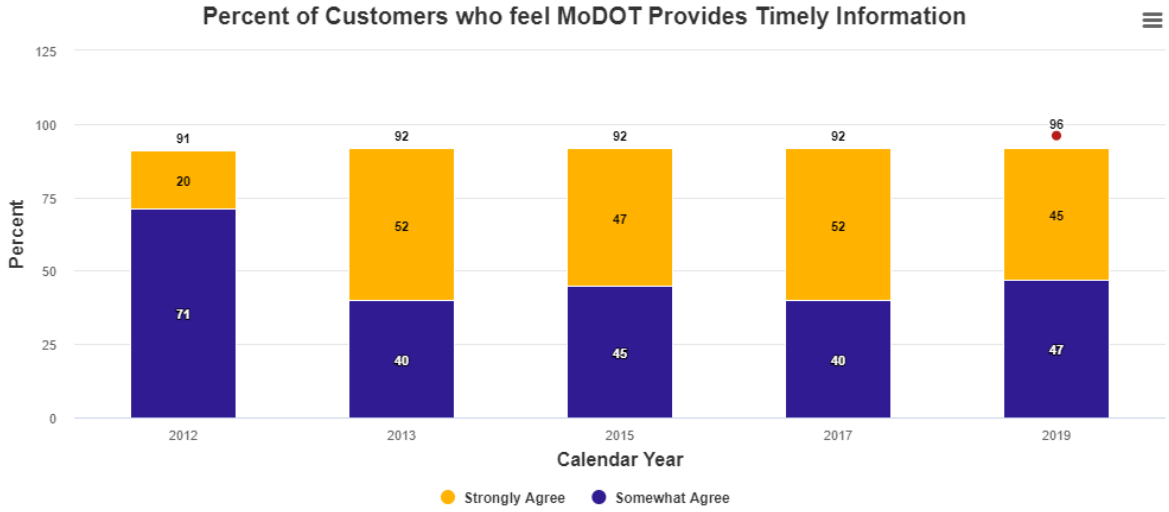
***2010-2011 - Lincoln Mercury, 2012 - Apple, Inc., 2013 - Mercedes Benz, 2015 - Chick-fil-A, 2017 - Chick-fil-A**



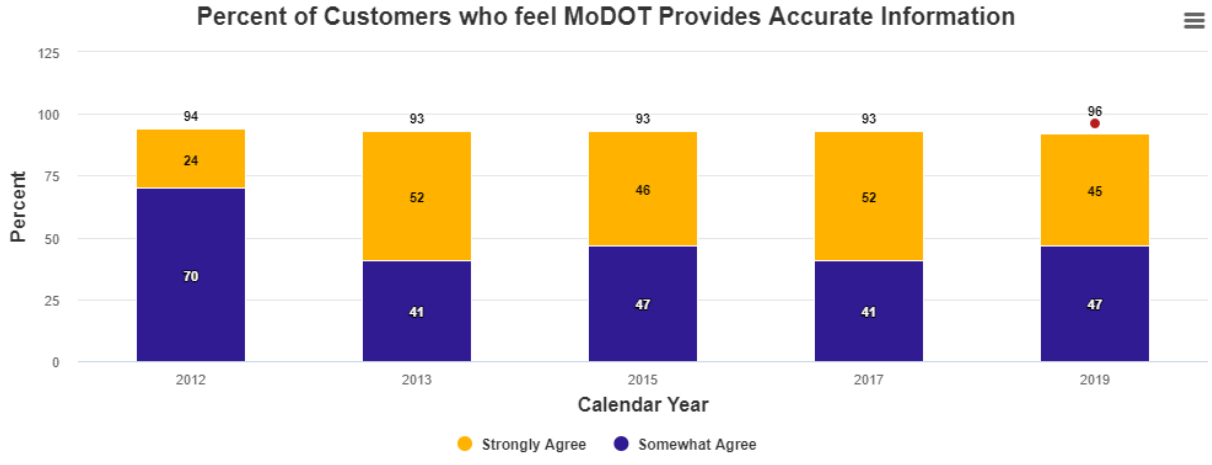

Target: 93%



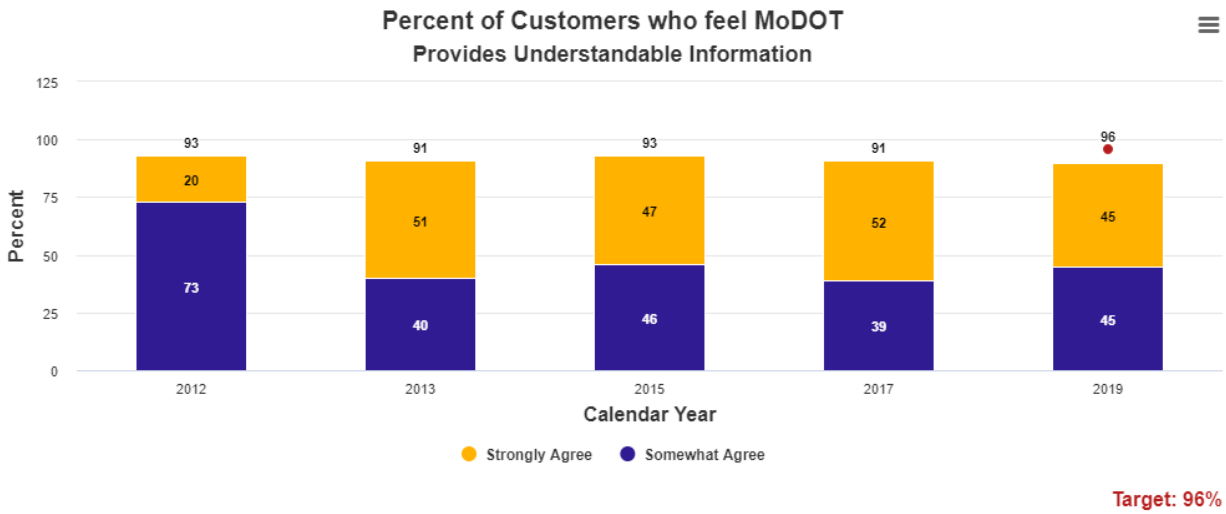

Target: 89%




Target: 96%




Target: 96%




**Write up:**

Just like well-maintained roads and bridges, MoDOT delivers information. The citizens of Missouri expect timely, accurate and understandable information from their department of transportation. Whether it's a news release, social media post, text alert or a notice of a public meeting, MoDOT makes every effort to get the word out as quickly and as clearly as possible. The results of this effort are public trust and respect. With numbers consistently above 90% agreement for the past five surveys, this measure shows the department meets customers' high expectations.

While customer satisfaction with MoDOT remains relatively high, the percent of Missourians surveyed who says they are satisfied with the job MoDOT is doing dropped from 83% in 2017 to 77% in 2019, a 6% decline. In addition, those customers who reported they are very satisfied with MoDOT decreased from 28% to 20%.

Results have remained fairly steady, with some decreases. Possible reasons for the decreases seen in these measures could be related to stagnant funding and system condition, as well as a harsh winter and flooding.

As the agency responsible for transportation in Missouri, MoDOT must hold its lead as an expert in the field. The department continues to work on improving partnerships with all Missourians, including local government, elected officials and transportation-related groups and organizations in order to deliver the very best possible transportation system with the resources available. Gaining and keeping the public's trust is critical to MoDOT's overall success. The best way MoDOT can accomplish this is to deliver on the commitments it makes.

The 2019 survey shows an overwhelming majority of customers perceive the department as Missouri's transportation expert. Ninety-one percent of those surveyed agreed MoDOT serves this role, a percentage the department has consistently maintained for more than 10 years. Of the 91%, 52% of respondents "strongly agreed" and 39% "somewhat agreed" MoDOT serves as the state's primary transportation expert.

The 2019 survey results indicate 82% of Missourians trust MoDOT to keep its commitments to the public, compared to 87% in the previous survey. While 82% is still a high measure of trust in a government agency, it reflects a 5% decrease from 2017, the lowest rating since before 2012.

### Purpose:

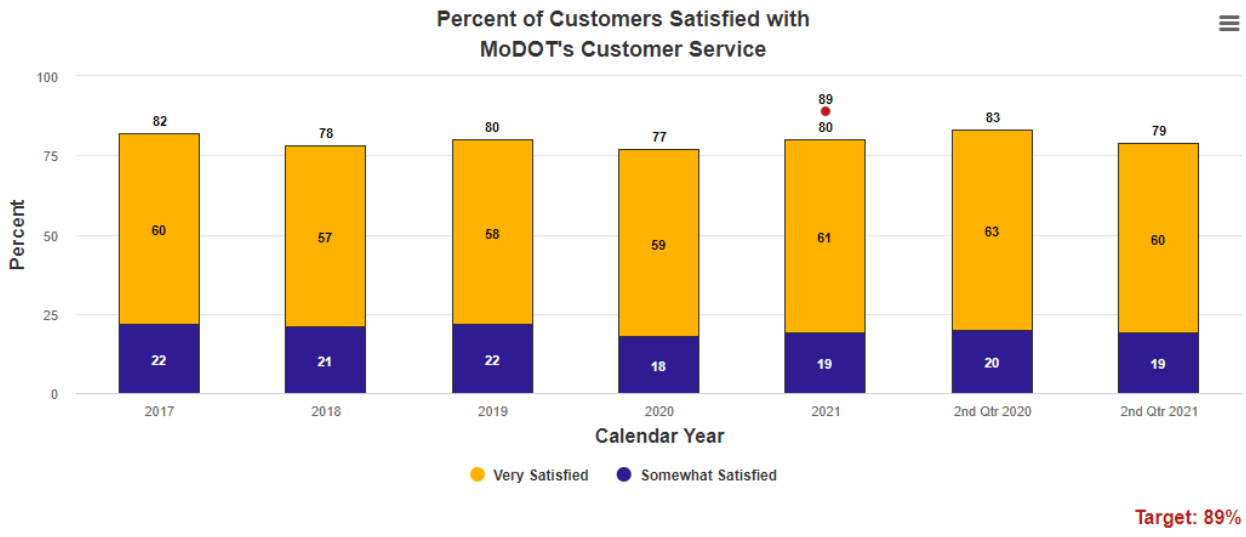
This measure tracks the percent of customers who are satisfied with MoDOT as a leader and expert in transportation issues, how effectively MoDOT conveys its expertise to the traveling public and keeps its commitments, and also tracks whether customers feel MoDOT provides timely, accurate and understandable information about road projects, highway conditions and work zones.

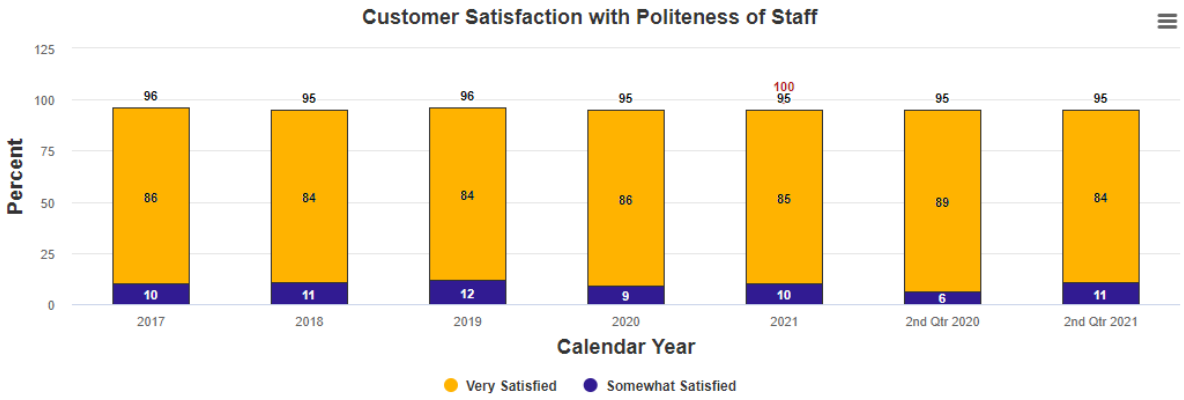
### Measurement and Data Collection:

Data is collected through a biennial, in odd-numbered years, telephone survey of approximately 3,500 randomly selected Missourians.

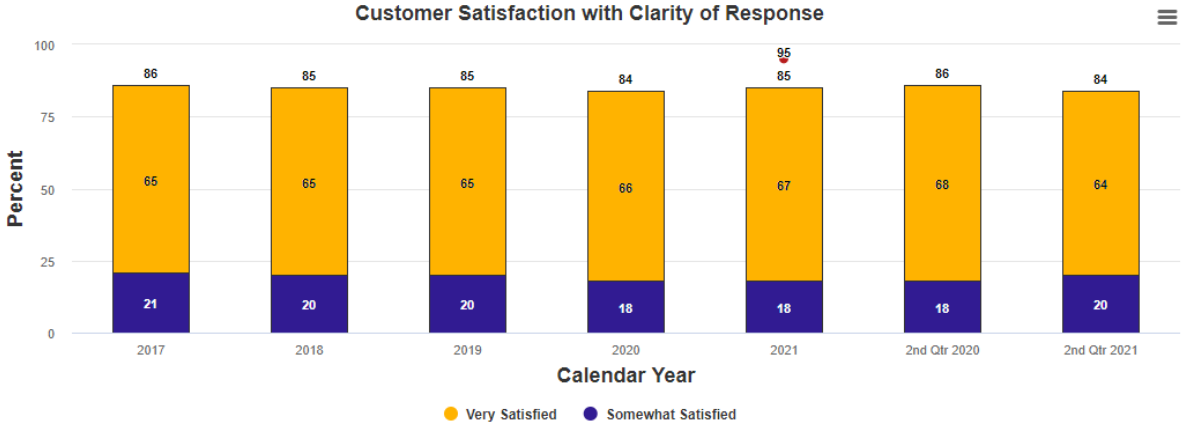
The target for this measure is updated bi-annually in October. MoDOT strives to reach and maintain 100% satisfaction across all aspects of customer satisfaction, based on standards in major global industries.

## Percent of customers satisfied with MoDOT's customer service – 2b

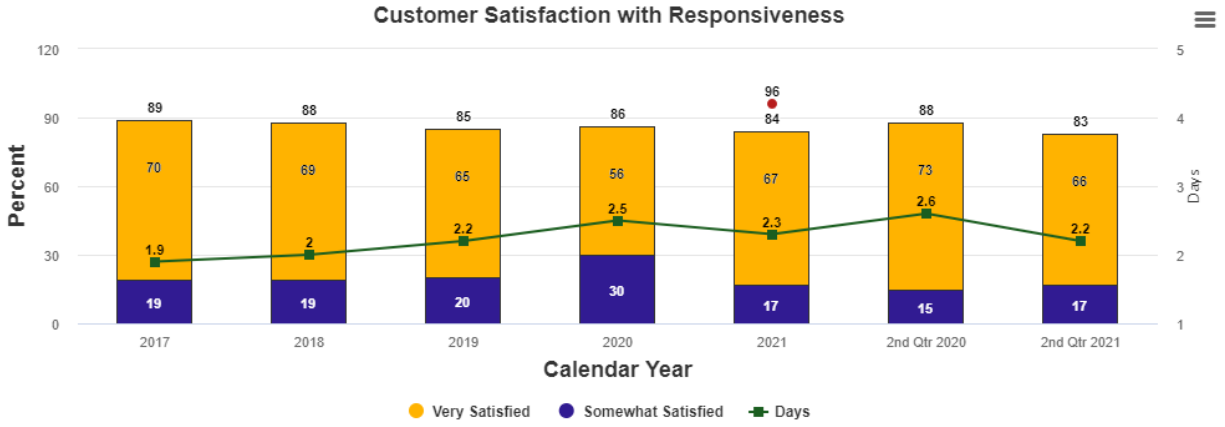





**Target: 100%**




**Target: 95%**




**Target: 96%**

### Write up:

Providing outstanding customer service is one of MoDOT's core values and the responsibility of every employee in the organization. To actively seek feedback from customers, MoDOT uses a statewide call system and an enhanced online call report system that enables customer service representatives to work across seven district boundaries in a one-team approach. The data provided in the graphs reflects how those surveyed customers rated their interaction with MoDOT.

During the second quarter of 2021, compared to the second quarter of 2020, overall customer satisfaction decreased from 83% to 79%. Politeness of response remained steady at 95%. Customers who were satisfied with the clarity of the response decreased slightly from 86% to 84%. Responsiveness was down from 88% to 83%.

The average time to complete customer requests was 2.2 days.

### Purpose:

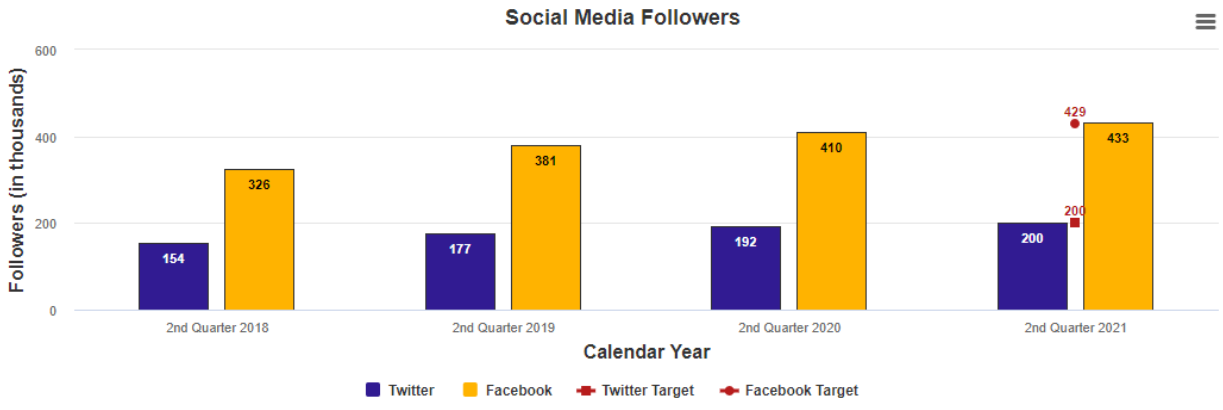
This measure shows how satisfied customers who contacted MoDOT were with the politeness, clarity and responsiveness they received, as well as their overall level of satisfaction.

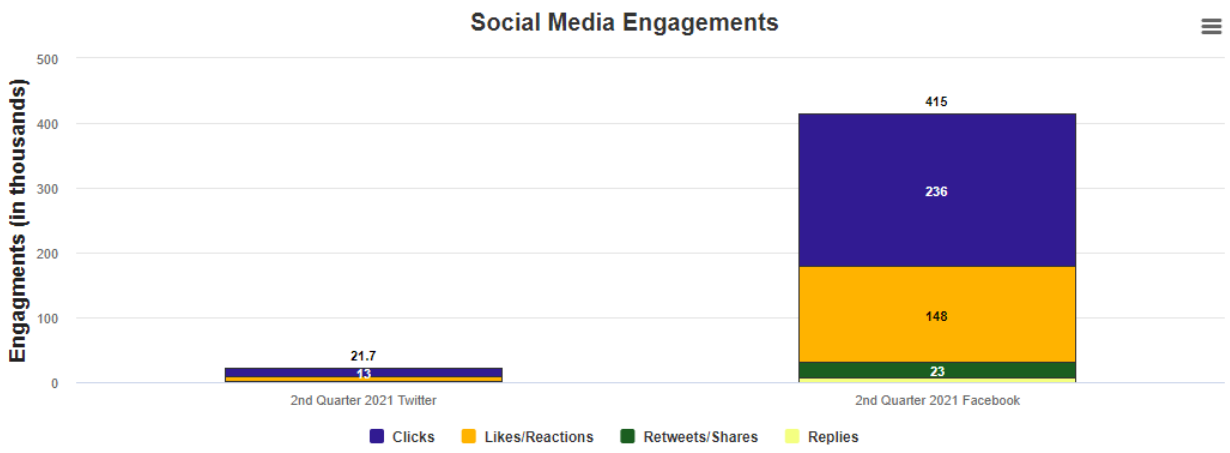
### Measurement and Data Collection:

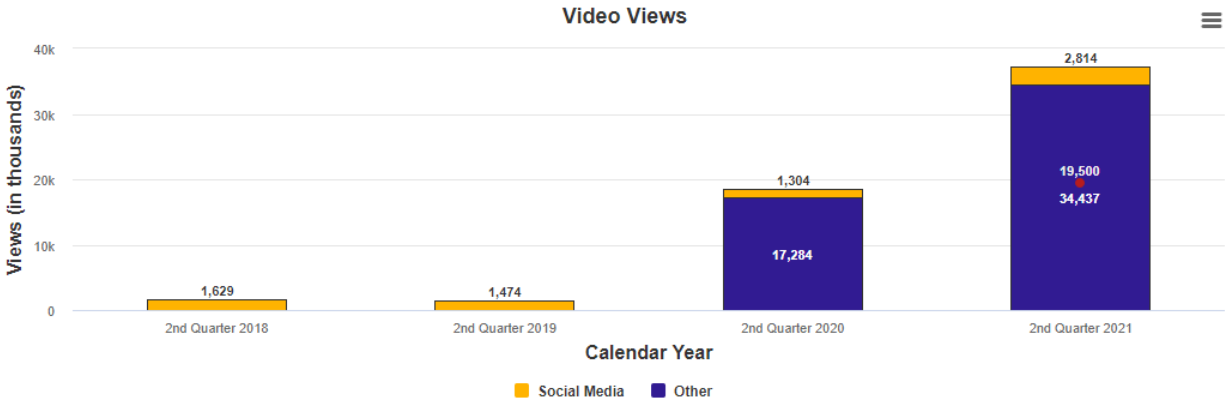
Data for this measure comes from a monthly telephone, email and texting survey of 200 customers who contacted a MoDOT customer service center in the previous month. The customer contacts come from call reports logged into the customer service database. Survey participants are asked to respond on an agreement scale regarding three qualities of their experiences. A fourth question is asked regarding their overall satisfaction. This measure also includes the time to complete requests logged into the customer service database. Requests requiring more than 30 days to complete are removed to prevent skewing the overall results.

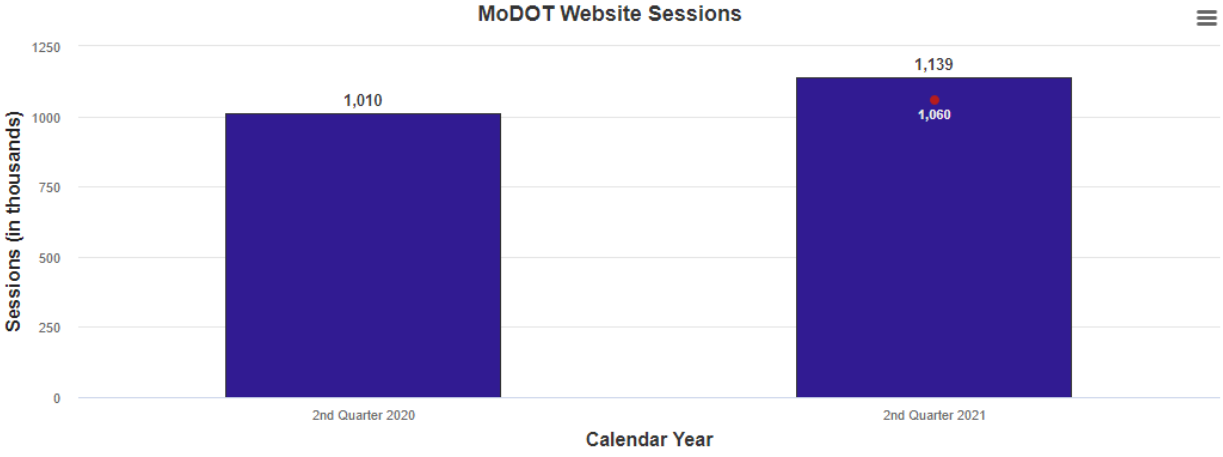
The target for this measure is updated quarterly. This target is established by projecting a 10% improvement over a five-year average.

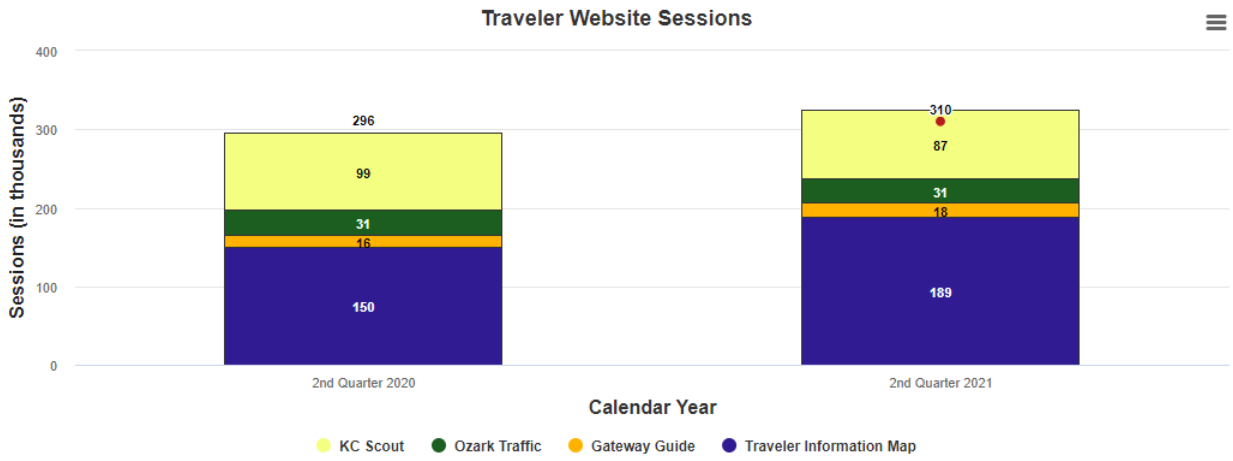
## Customer communication engagement – 2c




Social Media Engagements
Engagments (in thousands)
500
400
300
200
100
0
21.7
13
415
236
148
23
2nd Quarter 2021 Twitter
2nd Quarter 2021 Facebook
Clicks
Likes/Reactions
Retweets/Shares
Replies


Video Views
Views (in thousands)
40k
30k
20k
10k
0
1,629
1,474
1,304
17,284
2,814
19,500
34,437
2nd Quarter 2018
2nd Quarter 2019
2nd Quarter 2020
2nd Quarter 2021
Calendar Year
Social Media
Other


MoDOT Website Sessions
Sessions (in thousands)
1250
1000
750
500
250
0
1,010
1,139
1,060
2nd Quarter 2020
2nd Quarter 2021
Calendar Year




**Write up:**

## SOCIAL MEDIA

Good organizations share information with the people they serve. The best, most-trusted organizations engage customers in conversation. MoDOT interacts with its customers through social media networking websites and applications. MoDOT's social media accounts continue to attract followers. When comparing the second quarters of 2020 and 2021, there was a growth of 23,127 followers on Facebook statewide and 8,277 on Twitter.

During the second quarter of 2021, the most popular Facebook post statewide was a dynamic message sign image urging proper use of the left lane. The post reached more than 66,000 people with 4,180 engagements on Facebook alone.

To better track how customers are interacting with MoDOT on these social media sites, engagements are being measured as well. Engagements are customer interactions with MoDOT's posted content, including likes, shares, retweets, comments and replies. This quarter, MoDOT Facebook pages across the state had 415,667 engagements and Twitter pages had 22,036.

MoDOT websites had 1,138,850 sessions during the second quarter of 2021. This is up compared to the same period last year. Spring and early summer flooding also impacted traffic to the Traveler websites, where web sessions were again up compared to this time last year.
MoDOT videos on YouTube and social media were viewed 2,814,460 times in the second quarter of 2021. Additional advertisement video placements were viewed 34,437,452 times this past quarter.

## WEB PAGE VIEWS

MoDOT Homepage - 145,300

Career Opportunities - 37,714

Careers - 26,405

Online Plans Room - 24,778

Current Flood Information - 21,596

## YOUTUBE VIDEO VIEWS

Click It or Ticket - 500,887

4/20 Impaired Driving - 420,231

Youth Alcohol - 406,098

Motorcycle Awareness - 301,126

July Impaired Driving - 267,074

### Purpose:

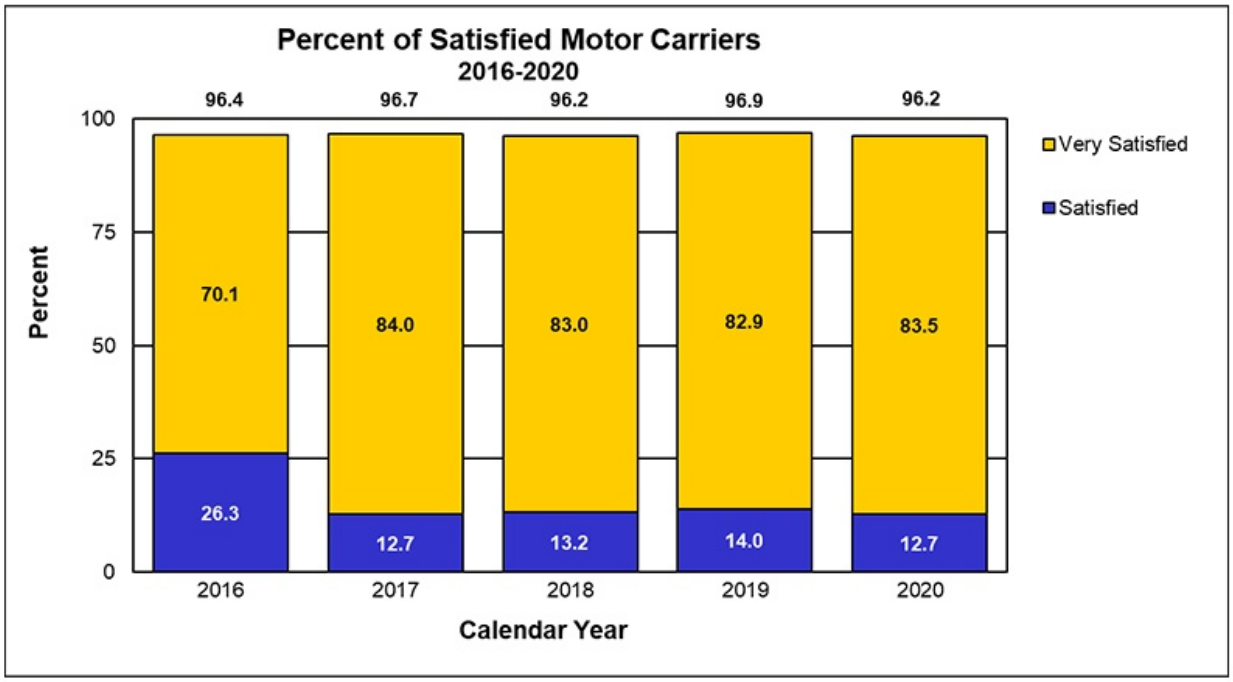
This measure tracks the number of MoDOT customers hitting the department's social media and website information.

### Measurement and Data Collection:

MoDOT gathers information for this measure from a variety of sources, including Google Analytics. Website traffic and YouTube information are cumulative totals based on visits. Facebook and Twitter information is based on account followers. The target for this measure is updated quarterly. This target is established by projecting a 7% improvement over the same quarter in the previous year.

This measure is linked to the Improve Communications strategy included in the Sharpening Our Strategic Vision initiative. The Citizen's Guide to Transportation Funding, the new department website and a better Traveler Information Map have been identified as strategies to improve performance.

## Customer Service Spotlight- 2d




**Write up:**

Every employee at MoDOT plays a role in providing outstanding customer service. Each quarter, this measure showcases an area within the department and its ongoing work and successes in the realm of customer service. This quarter looks at the percent of satisfied motor carriers' customers.

"Every piece of paper, phone call and email we process has a human being and a livelihood attached."

The Motor Carrier Service team motto hangs prominently within Central Office. It reflects the division's consistent effort to make customer care a top priority. The motto focuses on encouraging regulatory and program compliance through service rather than enforcement. Missouri motor carriers respect the approach and report extremely high rates of satisfaction with the service they receive.

In addition to rating satisfaction, MCS customers provide extensive feedback. The satisfaction survey asks what MCS does well and which areas can be improved. This feedback drives decisions to implement daily work adjustments, reshapes communication and informs decision-making.

During the past five years, overall customer satisfaction has sustained a rating of 96%. The percentage of “very satisfied” responses increased in 2017 and remains at 83%.

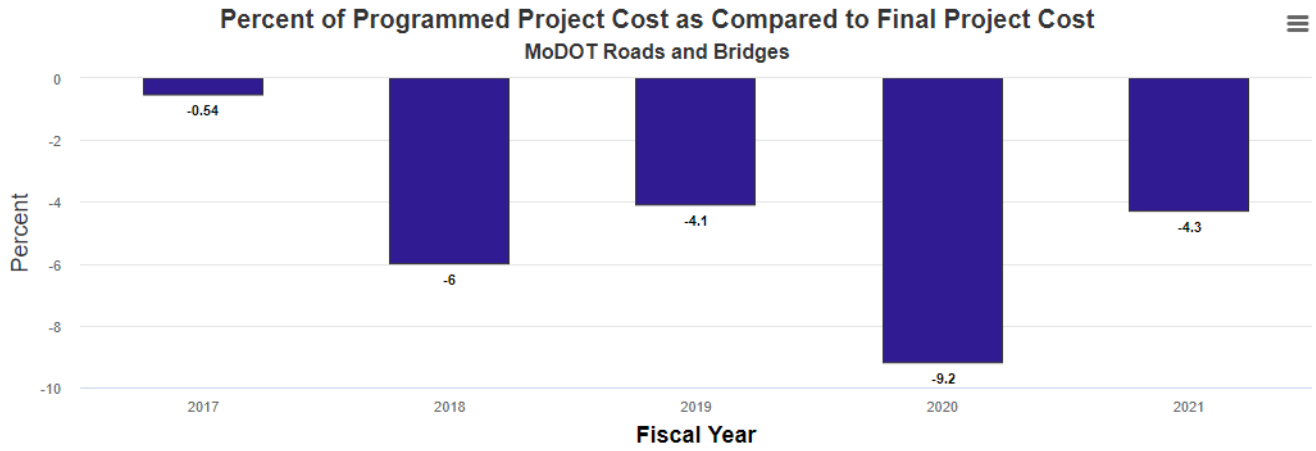
### Purpose:

This measure tracks progress toward the goal of meeting the needs of the motor carrier industry and facilitating freight movement. The MCS team uses the data to identify opportunities to improve customer satisfaction.

### Measurement and Data Collection:

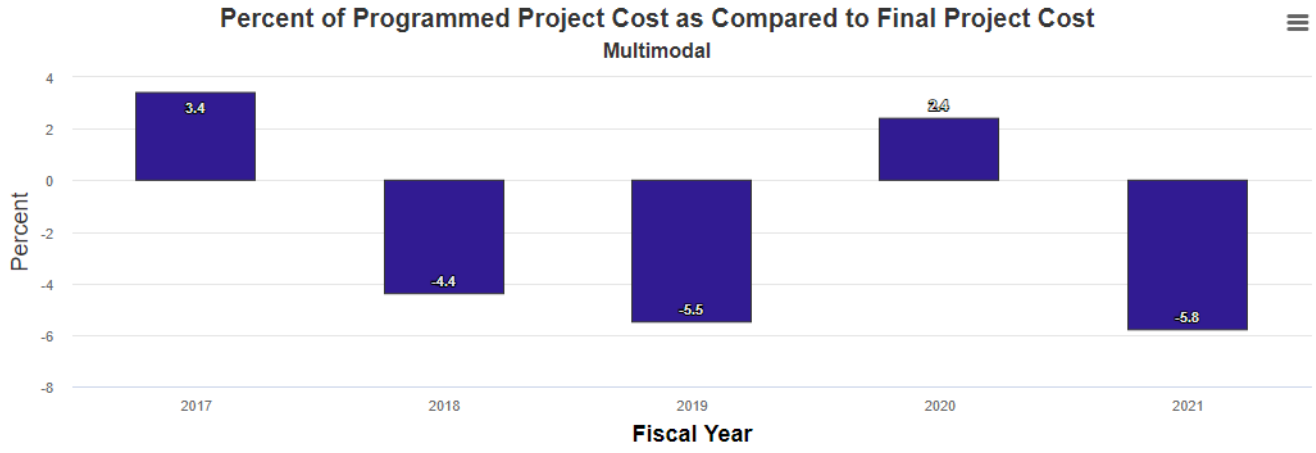
With the help of Human Resource Employee Development, MCS randomly surveys 1,200 customers who worked with the division in a given month. Customers choose one of four levels of satisfaction with the service received from each of MCS' programs and with the division overall. They can also comment on employee and division performance. Customers who wish to discuss their survey answers are asked to provide contact information for follow up. The administrative team reviews the results each month, then discusses quarterly and annual aggregates during MCS Division Tracker meetings.

## Percent of programmed project cost vs award and final – 3a



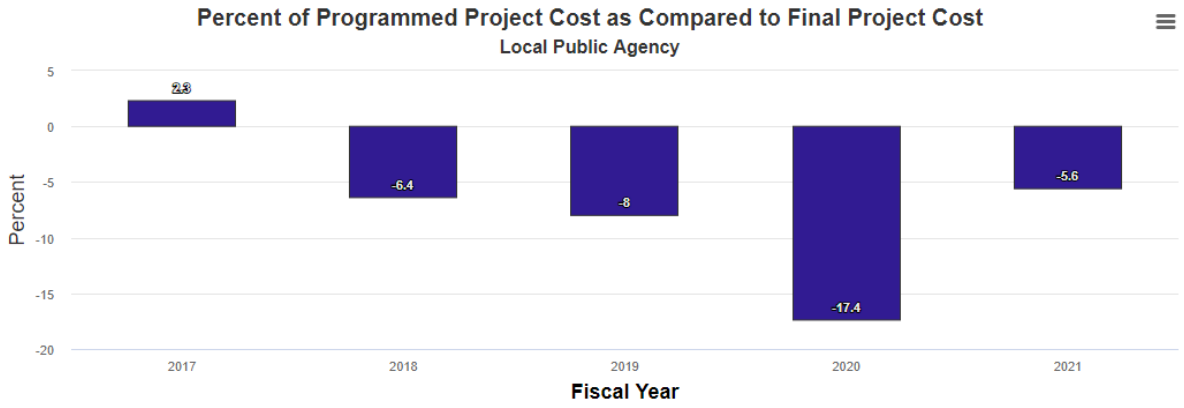

Target: 0%

*Positive numbers indicate the final (completed) cost was higher than the programmed cost



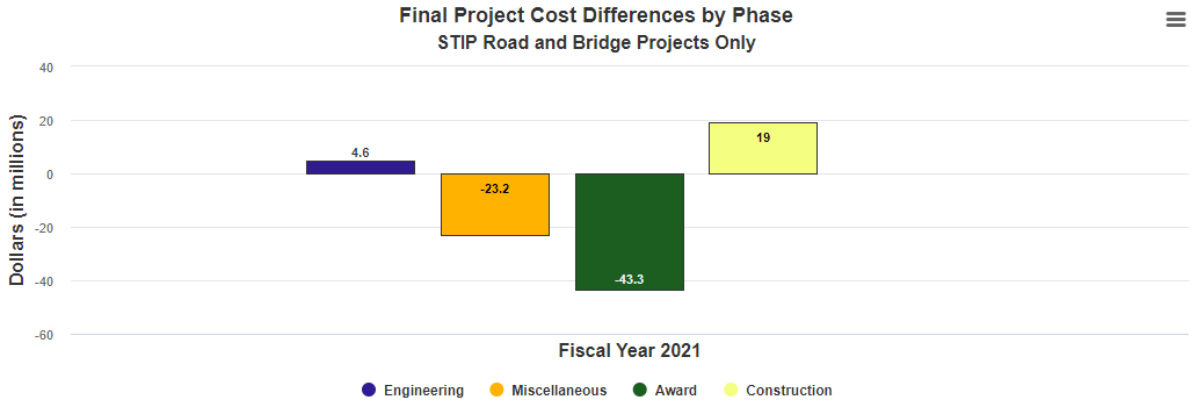

Target: 0%

*Positive numbers indicate the final (completed) cost was higher than the programmed cost

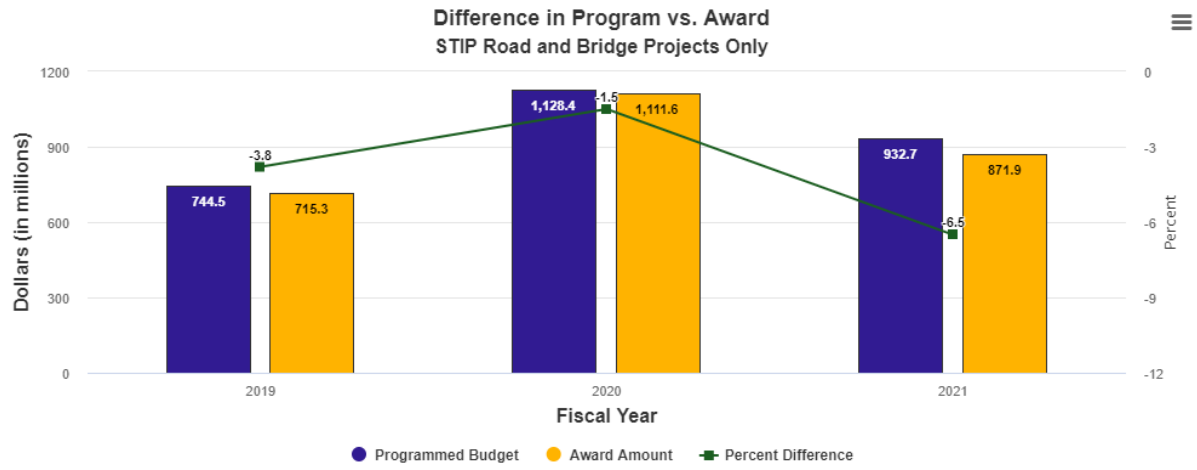



**Target: 0%**

***Positive numbers indicate the final (completed) cost was higher than the programmed cost**




***Negative numbers indicate savings. Miscellaneous includes right-of-way purchases, utilities and other costs**




**Target 0%**

***Amounts include STIP road and bridge projects with 2% construction contingency applied**

## Write up:

Accurate program cost estimates help MoDOT deliver more timely improvements for taxpayers. As of July 1, 2021, 440 road and bridge projects were completed in fiscal year 2021 at a cost of $954.9 million. This represents a deviation of 4.3% (or $42.8 million) less than the programmed cost of $997.7 million. Of the 440 road and bridge projects completed, 61% were completed within or below budget. In comparison, 58% were completed within or below budget as of the same date a year ago. There may be projects that have adjustments pending, which could cause a slight change in the final values.

In addition, 22 multimodal projects were completed at a cost of $17 million, -5.8% (or $1 million) less than the programmed cost of $18 million. A total of 122 local public agency projects were completed at a cost of $92 million, -5.6% (or $5 million) less than the programmed cost of $97 million.

The target is a 0% difference, indicating MoDOT is making timely use of available funds. Road and bridge, multimodal and local public agency projects were within -4.4% of the target in FY 2021. Program versus award numbers for FY 2021 reflect an award amount of -6.5% below the program estimate. MoDOT continues to monitor this throughout the year.

## Purpose:

The measure determines how closely total project costs are compared to the programmed costs. The programmed cost is considered the project budget.

## Measurement and Data Collection:

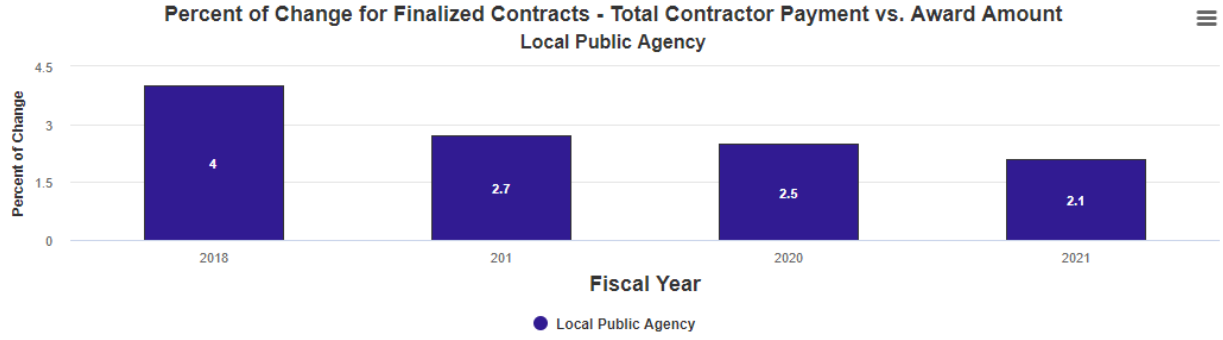
Completed project costs are reported during the fiscal year in which a project is completed. Road and bridge project costs include design, right-of-way purchases, utilities, construction, inspection and other miscellaneous costs. The programmed cost is based on the amount included in the most recently approved Statewide Transportation Improvement Plan. Completed costs include actual expenditures. Multimodal and local public agency project costs typically reflect state and/or federal funds but not local funding contributed toward such projects.

The target for this measure is set by internal policy and will not change unless policy changes.

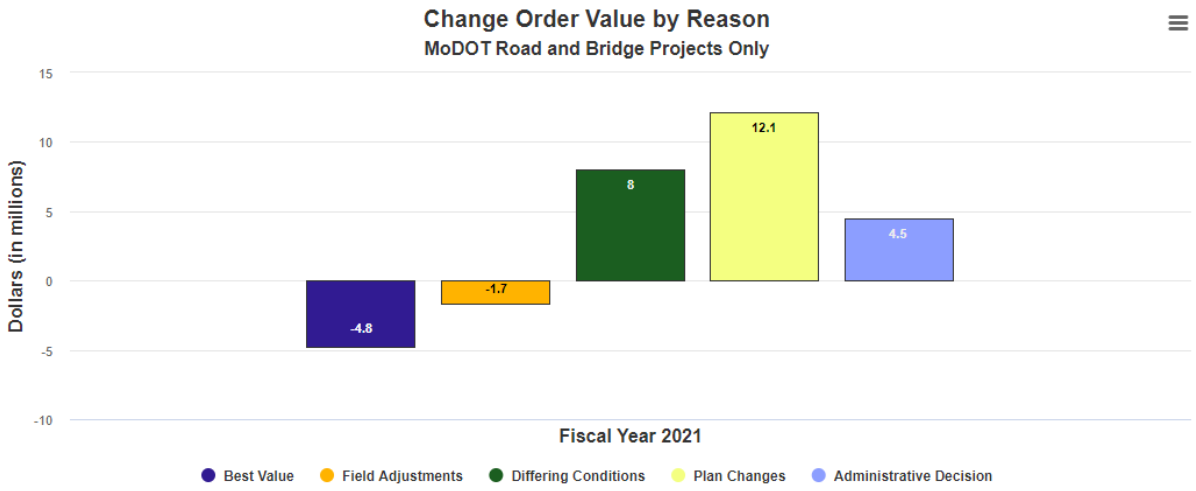
# Change order report – 3b


Target: 2% Change


Target: 2% Change




Target: 2% Change




## Write up:

By limiting overruns on contracts, MoDOT can continue to keep its maintenance and construction commitments. This emphasis, combined with the use of practical design and value engineering, has contributed to limiting overruns on contracts. MoDOT's performance in fiscal year 2021 is 2.2% over the award amount ($19.6 million over the award amount of $903.5 million worth of projects completed) with 55% of the projects being completed below the original award amount.

Many factors can affect the ability to complete a project within the targeted 2% of the award amount. These factors can include design changes, differing conditions, additional work items and administrative decisions.

For the fourth quarter of FY 2021, MoDOT road and bridge projects were completed 2.3% over budget, multimodal projects were completed 1.4% under budget and local public agency projects were completed 2.1% over budget.

## Purpose:

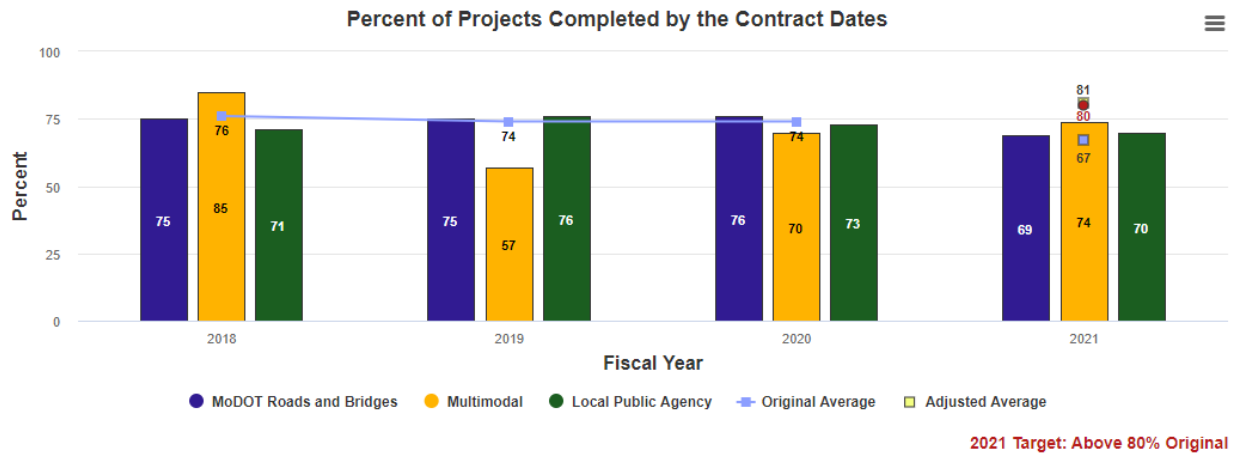
This measure tracks the percentage difference of total construction payouts to the original contract award amounts. This indicates how many changes are made on projects after they are awarded to the contractor for road, bridge, local public agency and multimodal projects – aviation, waterway and transit.

## Measurement and Data Collection:

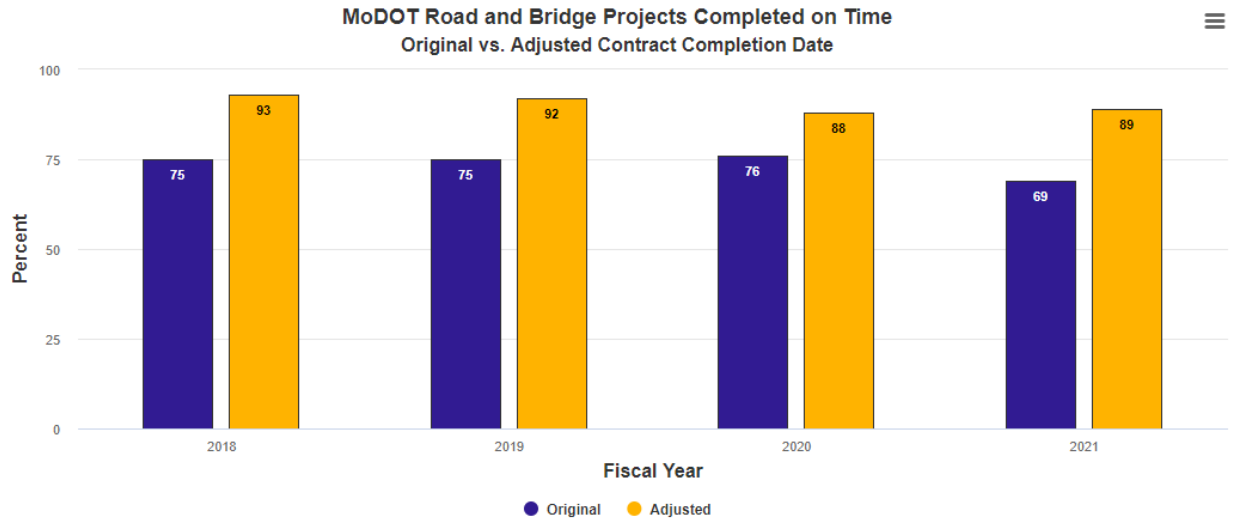
system for payment. Change orders document the underrun/overrun of the original contract cost. Local public agencies and multimodal agencies use staff or consultant resources to set contract completion dates and track performance.

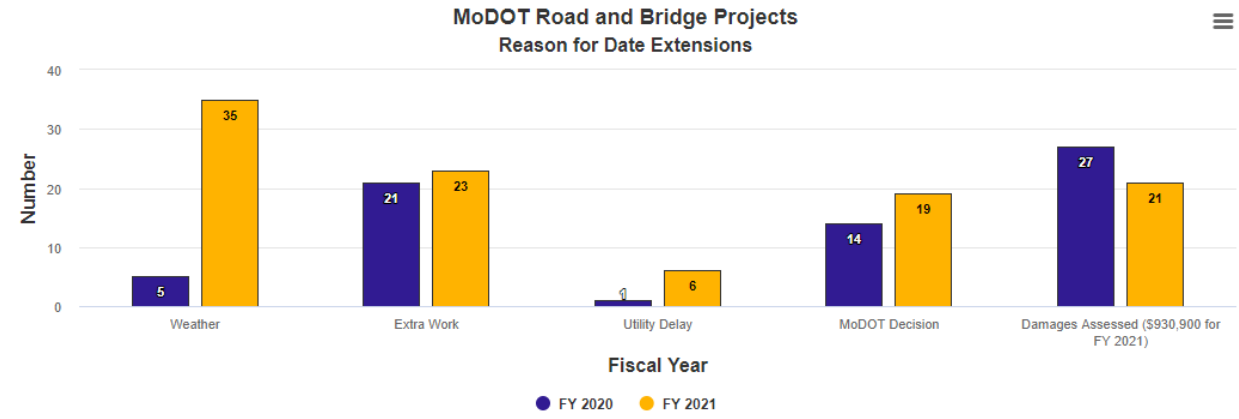
The target for this measure is set by internal policy and will not change unless policy changes.

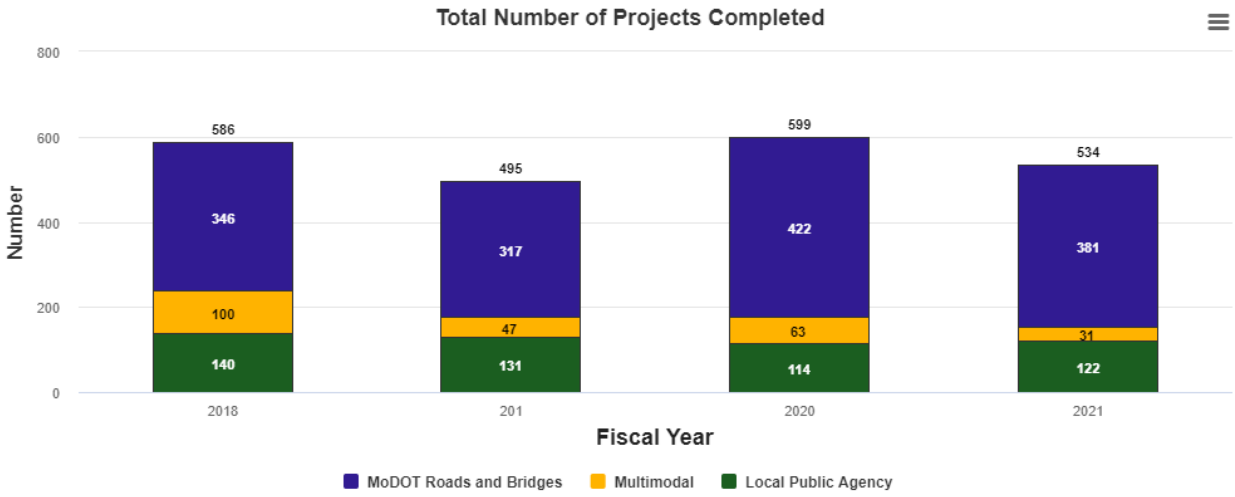
# Projects schedule report – 3c

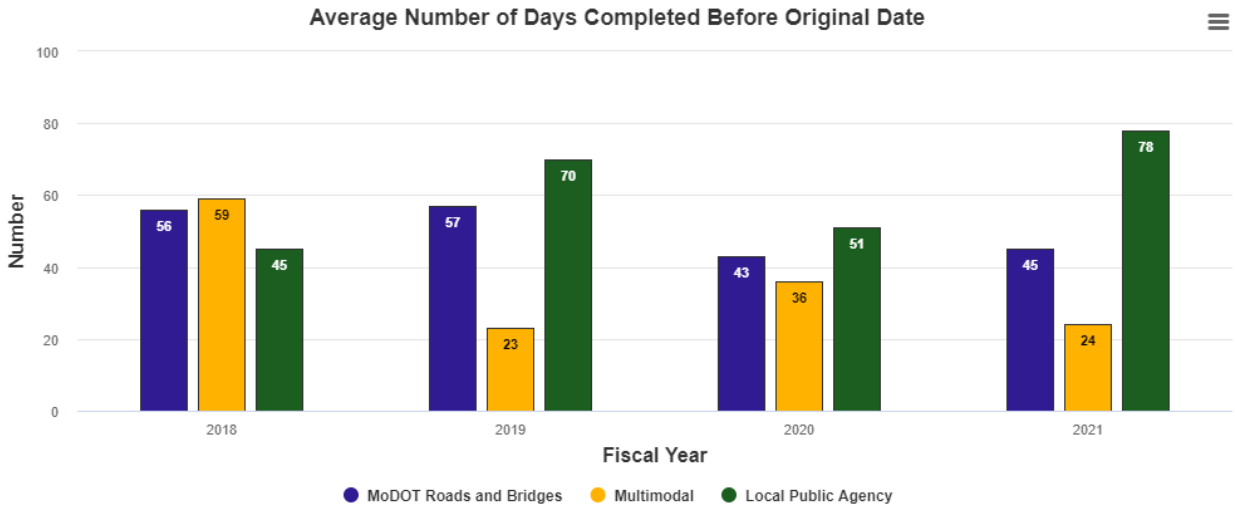


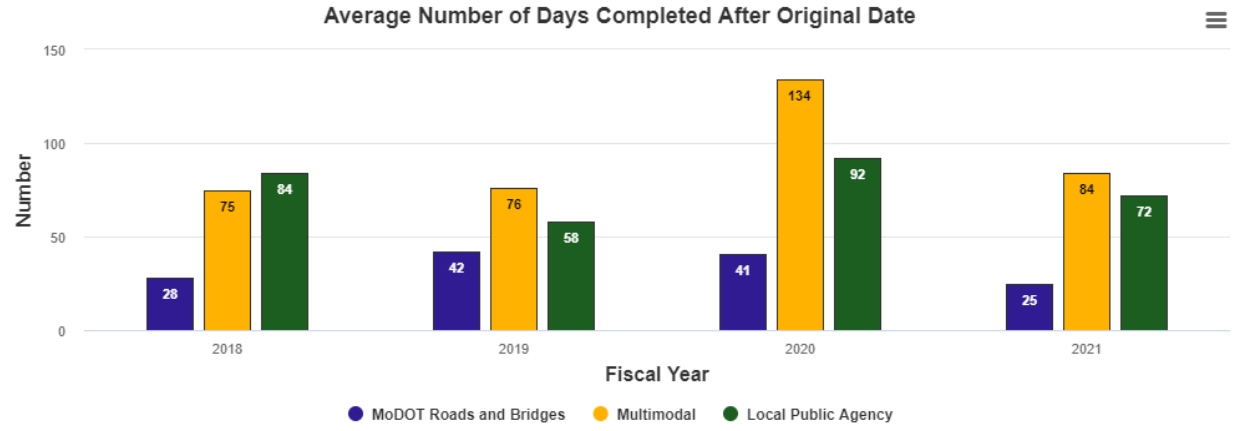

2021 Target: Above 80% Original






**Desired Trend: Decrease**

## Write up:

MoDOT's customers expect transportation improvements to be completed and roadways opened quickly with minimal impact to their lives. Delivering projects by the contract completion date is the target for all projects and is considered a commitment to Missourians and drivers. Completing projects on time helps maintain credibility with Missourians, minimizes drivers' exposure to work zones and provides facilities in good condition that improve safety and reduce vehicle maintenance costs.

MoDOT works to meet the initial contract completion date by preparing accurate plans and quantities, setting aggressive but reasonable completion dates and setting liquidated damages to reinforce completion dates without undue bid risks. In fiscal year 2021, 69% of all closed-out projects were completed by their planned completion dates.

Weather, additional work or a MoDOT directive sometimes necessitates an authorized extension of the completion date without any financial assessment to the contractor. In FY 2021, 84% of the closed-out projects were completed by the adjusted dates.

There are times when a contractor misses the contract completion date and the contractor is assessed damages. Of the road and bridge contracts completed in FY 2021 that did not meet the original contract date, 23 were extended due to extra work, six were extended due to utility delays, 19 were extended by MoDOT, 35 were extended due to weather and 21 missed the completion date with damages assessed totaling $930,900.

The target for this measure is to have at least 80% of projects completed by the original completion date. At the end of FY 2021, the average number of all contracts completed by the original completion date was 69%.

## Purpose:

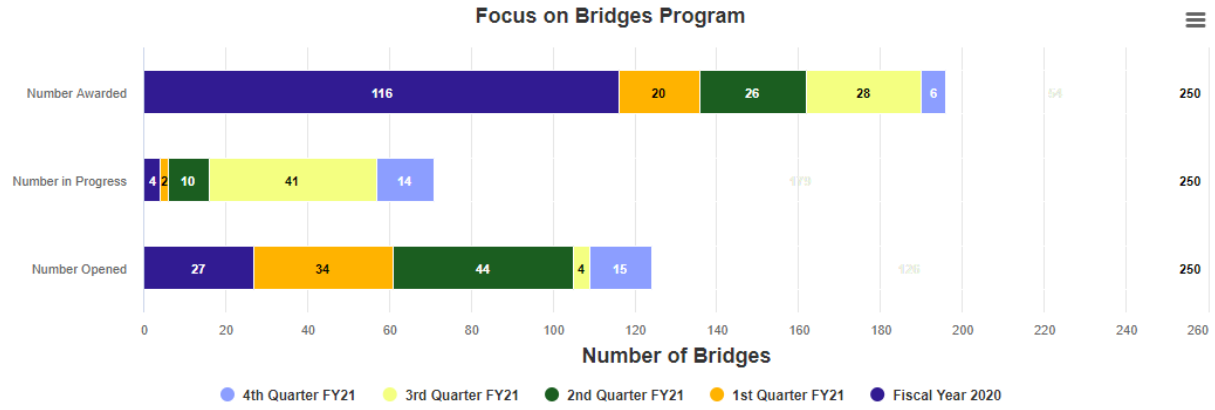
This measure tracks the percentage of road and bridge projects opened by the commitment date established in the contract. This commitment also includes local public agency projects and multimodal projects (rail, aviation, waterway and transit).

## Measurement and Data Collection:

For road and bridge projects, the project manager collaborates with the project team to establish the project completion day which is specific to when the road or bridge project will be opened to the public so to eliminate a financial penalty. The resident engineer uses the SiteManager system to track and document the work. Local public agencies and multimodal agencies use staff or consultant resources to set contract completion dates and track performance.

The target for this measure was set by management directive.

# Focus on bridges program – 3d




Target: 100% by FY23

## Write up:

This measure tracks the progress made on the Governor's Focus on Bridges Program. This program was initiated by Gov. Mike Parson to address 250 bridges in the state. The overall program will repair or replace 250 bridges across the state.

The Focus on Bridges Program began in fiscal year 2020. During this seventh quarter of the program, a total of 196 structures have been awarded for construction and 124 structures have been opened to traffic. The program will be complete when all 250 bridges have been awarded and opened. The number in progress for the early quarters is decreasing as early projects are completed.

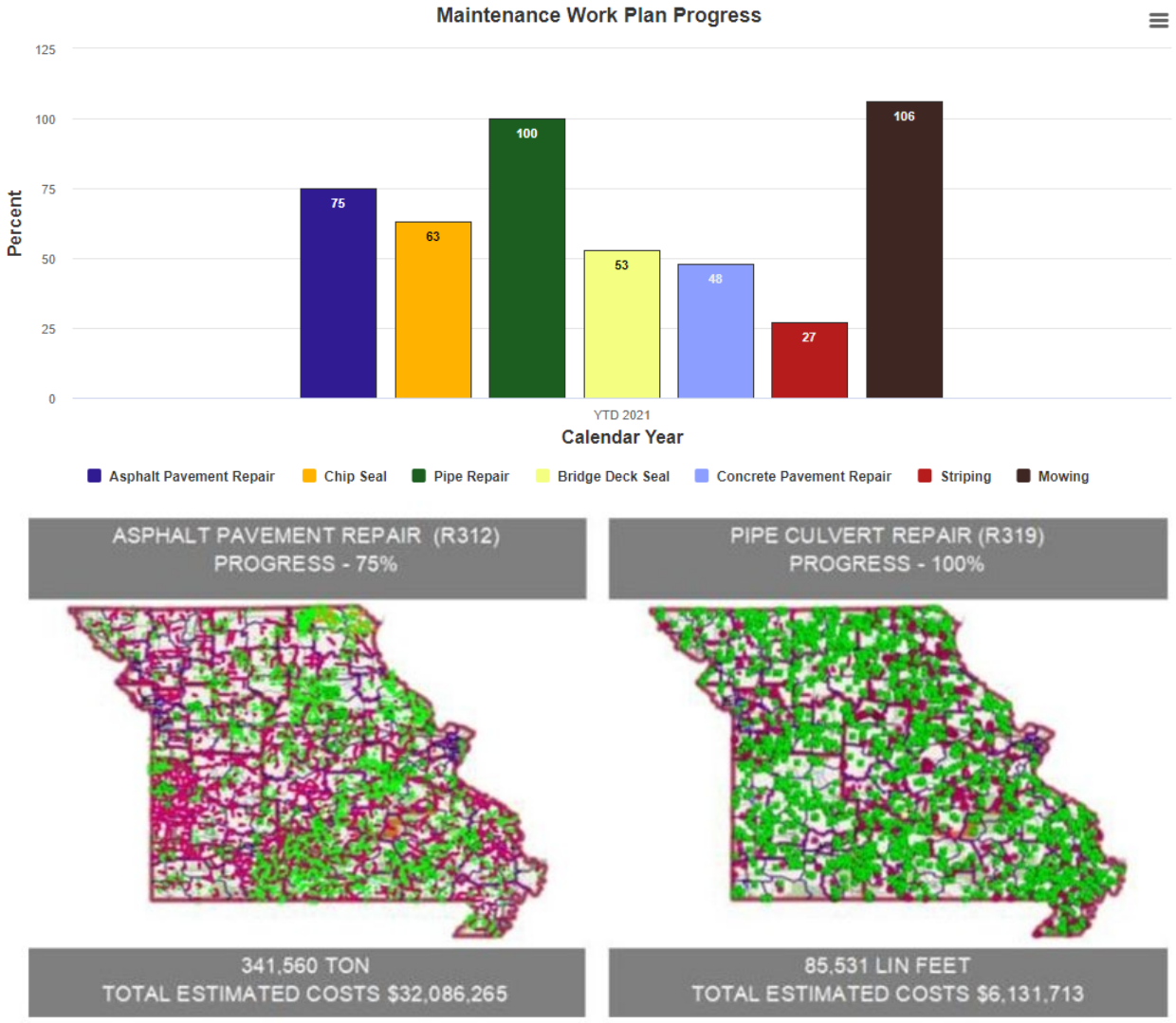
## Purpose:

The purpose of this measure is to track the progress made on the Governor's Focus on Bridges Program. Two hundred fifty bridges will be awarded to be repaired or replaced by the end of fiscal year 2023. The measure will track quarterly progress on the number of bridges awarded, bridges in progress and opened bridges.

## Measurement and Data Collection:

The data for this Tracker measure is collected after each Missouri Highway and Transportation Commission meeting where Statewide Transportation Improvement Program projects are awarded. Award dates and notice to proceed dates are entered in a list that includes all 250 Focus on Bridges structures. The Construction and Materials Division as well as the Communications Division provides the date when each structure is opened to traffic.

## Maintenance work plan progress– 3e




### Write up:

This measure tracks how much of the planned maintenance operation work in the Statewide Transportation Improvement Program and some additional activities, are accomplished each year. The measure includes location-specific work such as bridge deck seals and comprehensive statewide work such as striping. Since 2017, location-specific work in the STIP has been tracked and the percent of locations accomplished recorded. In the past, charges were recorded in Cognos, but as of early 2021 they are now tracked using the Maintenance Management System. Since this is an entirely different approach, the reporting updates will be changed to year to date status through 2021 and will update moving forward.

A status report on mowing has been added, assuming 90% of the lane mileage equates to the number of shoulder miles. This measure will track the quantities of the various planned work

activities, compare them to the estimated quantities and report that progress as well as the location-specific progress. This will address the needs to modify plans due to unavoidable events and will be reported moving forward.

The Work Plan Progress and Budget module in MoDOT's Maintenance Management System was completed in mid-June 2021. This tool will be utilized going forward to report progress for this measure. An example visual is provided from MMS demonstrating work plan progress for Asphalt Pavement Repair and Pipe Culvert Repair for calendar 2021 to date. So far through mid-July all activities are progressing as expected with the exception of striping which is only at 27% statewide. This is due to material shortages. The unprecedented freeze in Texas this winter damaged the main production facilities for the resins used in the paint. This entire season is expected to be impacted by this supply shortage.

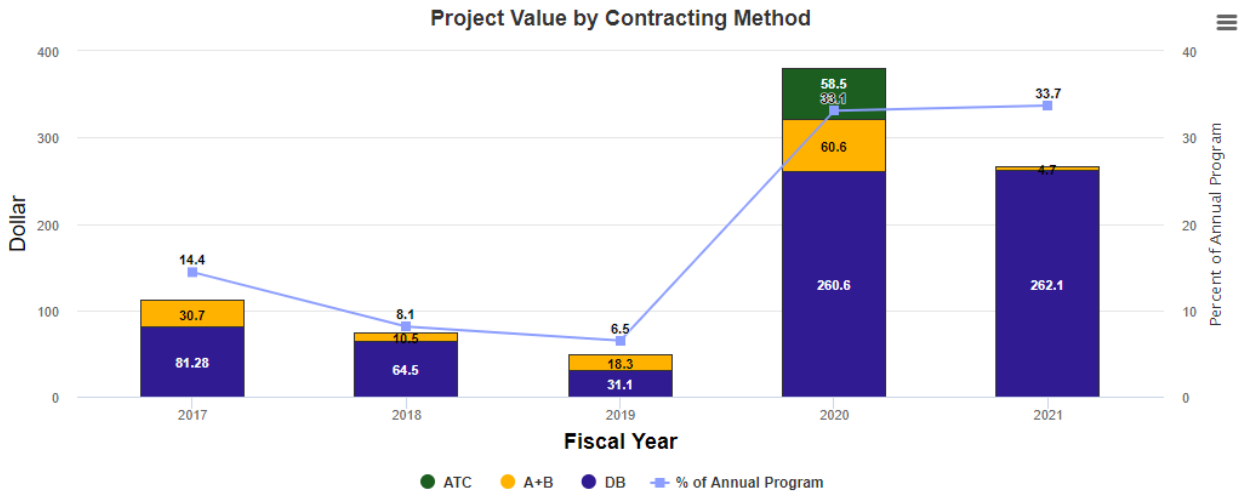
### Purpose:

MoDOT publishes the maintenance and operation work plans every year in the STIP for the first three years. This measure is done to determine how each district adheres to the planned work activities in the STIP from a location specific standpoint and an overall performance level regardless of location.

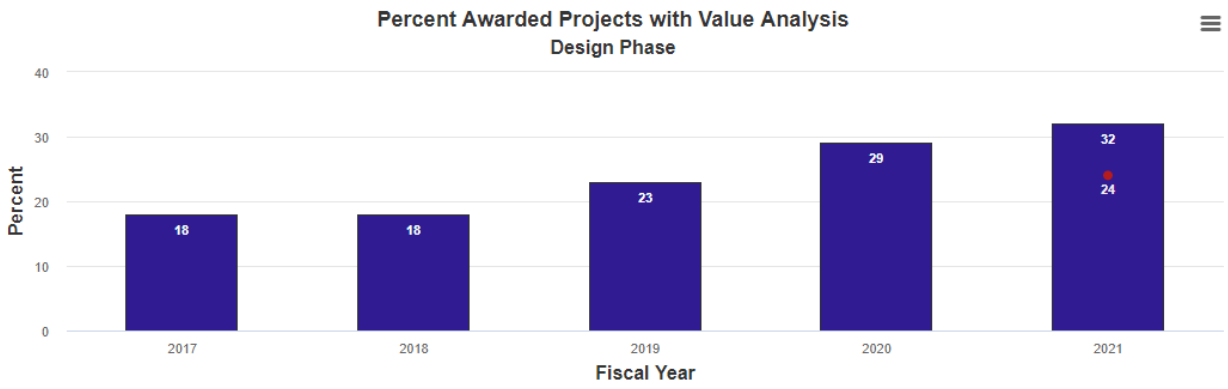
### Measurement and Data Collection:

The location specific activities planned in the STIP and other activities such at striping and mowing are tracked in MMS. Planned amounts are also developed in MMS and are used for determining the percent of work plan progress. One exception is the mowing, total shoulder miles are estimated at 90% of the lane miles for this measure. This measure could approach 300% towards the end of the season as multiple mowing cycles are performed each year.

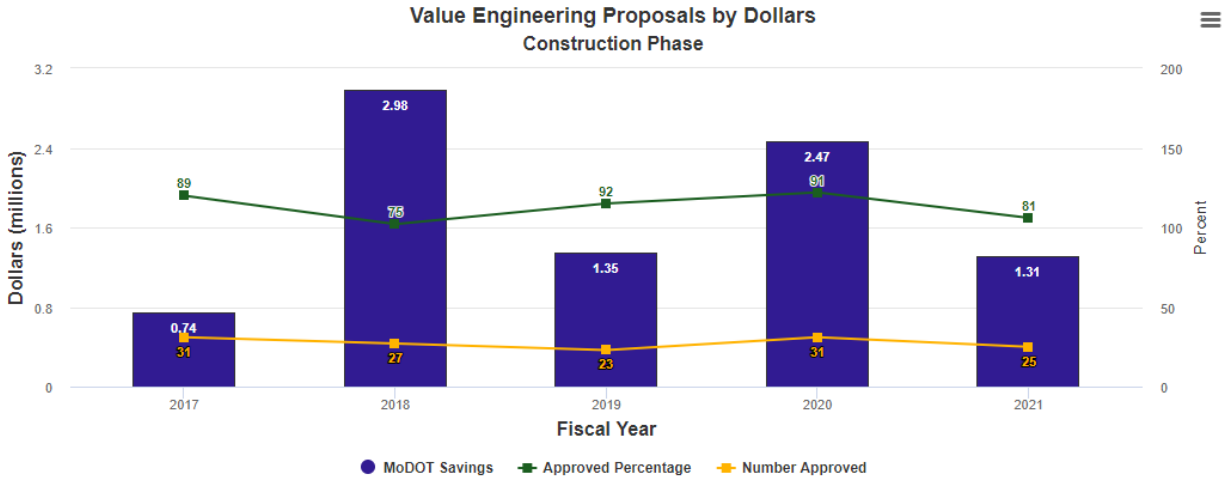
## Innovative contracting and value engineering – 3f




2021 Target: Above 10%




Target: 24%




Desired Trend: Increase

## Write up:

MoDOT has delivered more than $2.4 billion in Design-Build contracts that have saved taxpayers over $314 million and were completed more than 107 months ahead of schedule. MoDOT leads the nation in partnering with the public and private sectors to deliver projects that maximize available resources into collaborative solutions that achieve goals. MoDOT's Innovative Contracting Program includes Design-Build, A + B Contracting, Fixed Price Variable Scope and Design-Bid-Build using Alternate Technical Concepts (ATC). Fixed Price Variable Scope delivery is a new tool for MoDOT that has been added to the innovative contracting opportunities that will be included in this measure moving forward following successful delivery of these streamlined projects.

In fiscal year 2021, three Design-Build projects were awarded in the Southeast, Kansas City, Northeast and Northwest Districts. The Bootheel Bridge Bundle was the first district lead

Design-Build Project in the Southeast District that will efficiently deliver the rehabilitation and replacement of 17 bridges while improving safety. The US 169 John Jordan "Buck" O'Neil Memorial Bridge Project will replace the 60-year-old fracture critical structure with two new, robust bridges that will provide a century of service and improve safety and mobility. The FARM Bridge Bundle will efficiently replace 31 Bridges in the Northeast and Northwest District on critical farm to market roads that are crucial to Missouri's Agriculture Industry. MoDOT used innovative contracting to deliver seven of 423 projects in FY 21 accounting for approximately 29% of the $847.2 million program. The targets for use of innovative contracting of two projects per year and 10% of program value were both achieved.

MoDOT pursues value throughout the life of a project utilizing the Value Engineering Program. MoDOT uses design-phase value analysis to identify opportunities for innovation, reduce project costs and improve project flexibility. MoDOT analyzed 32% of projects during design phase in FY 21. MoDOT also partners with industry to find more cost-effective solutions during the construction phase. MoDOT approved 25 VECPs at an 81% approval rate, resulting in a MoDOT savings of $1.31 million. The target to review 24% of projects in the design-phase was met this period. The target for increasing VECP savings from the previous year was not met this period.

## Purpose:

This measure tracks the use of innovative contracting methods on MoDOT projects including: Design-Build contracts, A+B contracts, Fixed Price Variable Scope contracts, and Alternate Technical Concept contracts. This measure also tracks the use of value engineering during design and construction on traditional MoDOT projects including: value analysis during the design phase and construction value engineering proposals.

## Measurement and Data Collection:

MoDOT projects utilizing innovative contracting methods are reported during the fiscal year in which they are awarded. Contract award values are collected through MoDOT's bid opening summaries and project records.

A target of 10% of the programmed Statewide Transportation Improvement Program, or two projects per year, is an appropriate target for utilizing innovative contracting methods in Missouri.

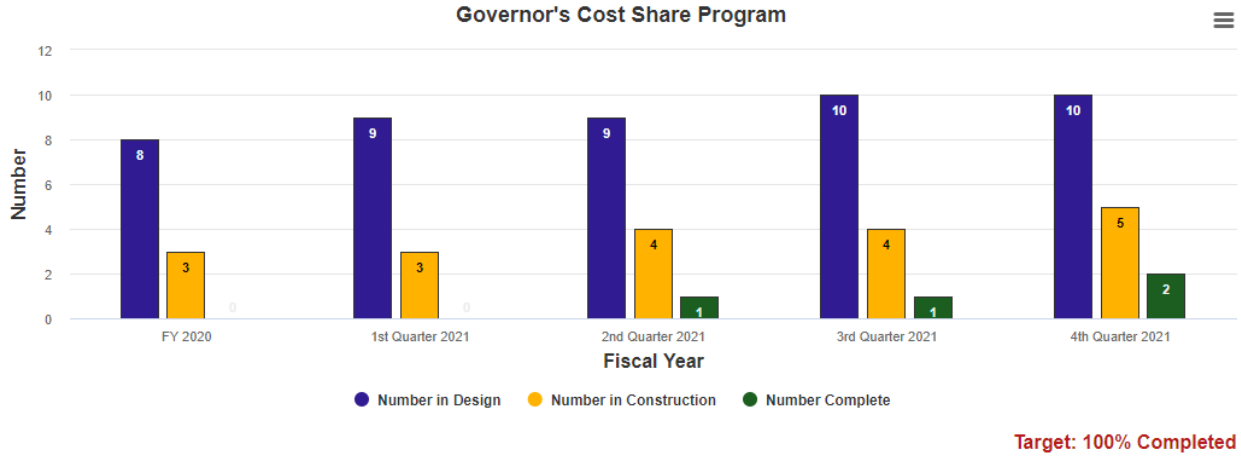
Information on value analysis during design is gathered from MoDOT's Statewide Transportation Improvement Program information management system.

Construction value engineering change proposal information is gathered from Value Engineering data is collected through MoDOT's Value Engineering Proposal database.

https://www.modot.org/design-build-information
http://sp/sites/de/Innovations/default.aspx

http://sp/sites/de/Innovations/Lead/Forms/AllItems.aspx
file://ghdata022/ghq_public/Value%20Engineering/VECP/Value%20Engineering.mdb
http://sp/sites/de/Innovations/Inovations%20Document%20Library/Forms/AllItems.aspx?RootFolder=%2Fsites%2Fde%2FInnovations%2FInovations%20Document%20Library%2FVE%20Documents&FolderCTID=0x012000CD43DF3C2DBA184583A6202132A2CFBD&View=%7B676683F5%2D452B%2D4C50%2DA847%2DF6E578CA91F4%7D

## Governor's Cost Share Program – 3g




Target: 100% Completed

### Write up:

This measure tracks the progress made on the Governor's Transportation Cost Share program. This program was initiated by Gov. Mike Parson to build partnerships with local communities to pool efforts and resources to deliver road and bridge projects. The overall program will deliver 17 projects across the state.

The Governor's Transportation Cost Share Program started in fiscal year 2020. The program will be complete when all 17 projects have been constructed. The number in progress will vary as new projects are started and others are completed. For this reporting period, two projects have been completed, five projects are in construction and 10 have started design work.

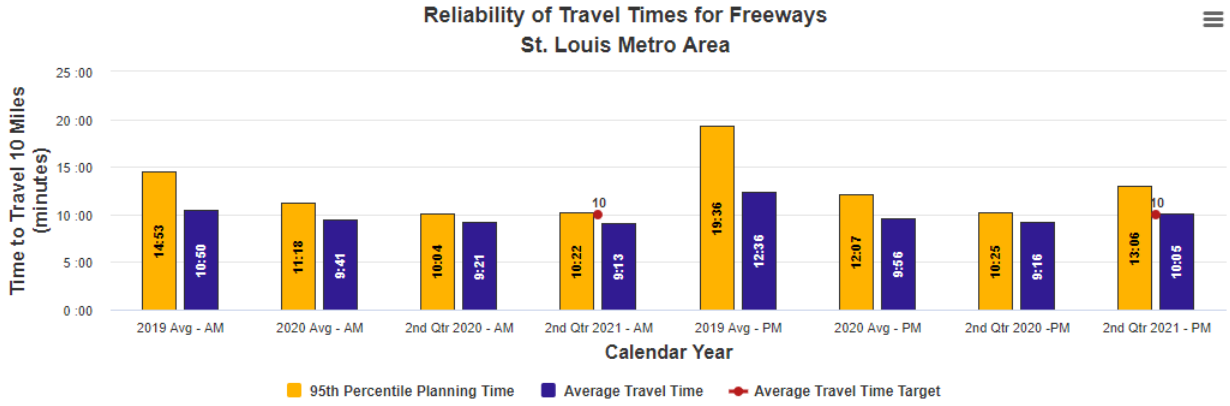
### Purpose:

The purpose of this measure is to track the progress made on the Governor's Transportation Cost Share Program. Seventeen projects will be completed by the end of fiscal year 2023. The measure will track the quarterly progress of projects based on their stage of project delivery: design, construction and completion.

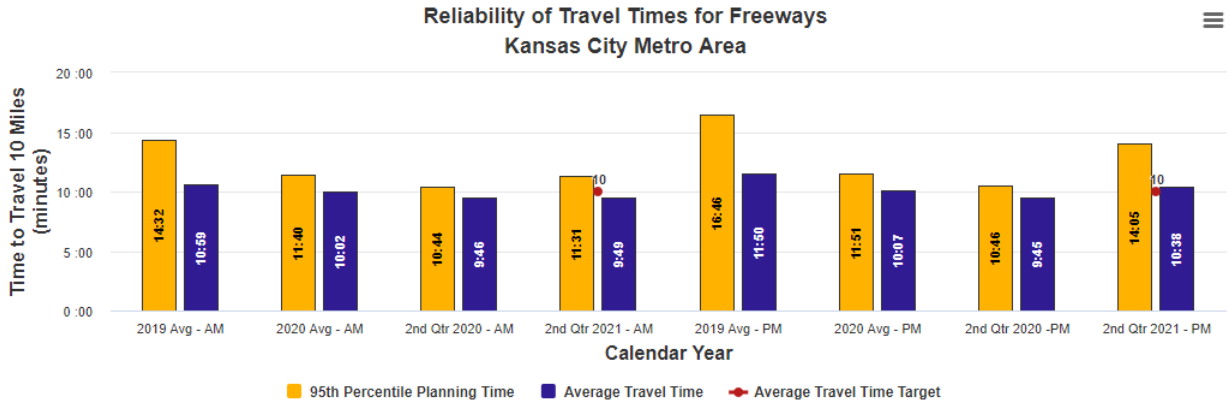
### Measurement and Data Collection:

The data for this Tracker measure is collected from district staff that are responsible for oversight of the projects. Project delivery milestones are entered into a list that tracks the status of all 17 Governor's Transportation Cost Share projects.

## Travel times and reliability on major routes – 4a

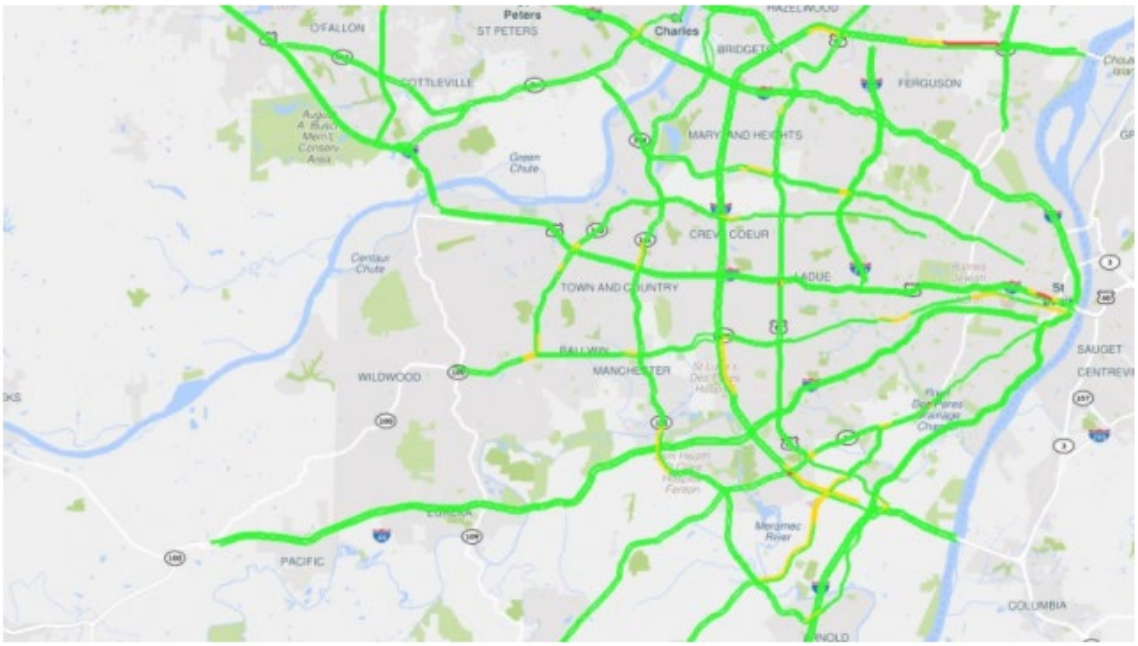



2nd Quarter Target: 10 min. a.m. - 10 min. p.m.

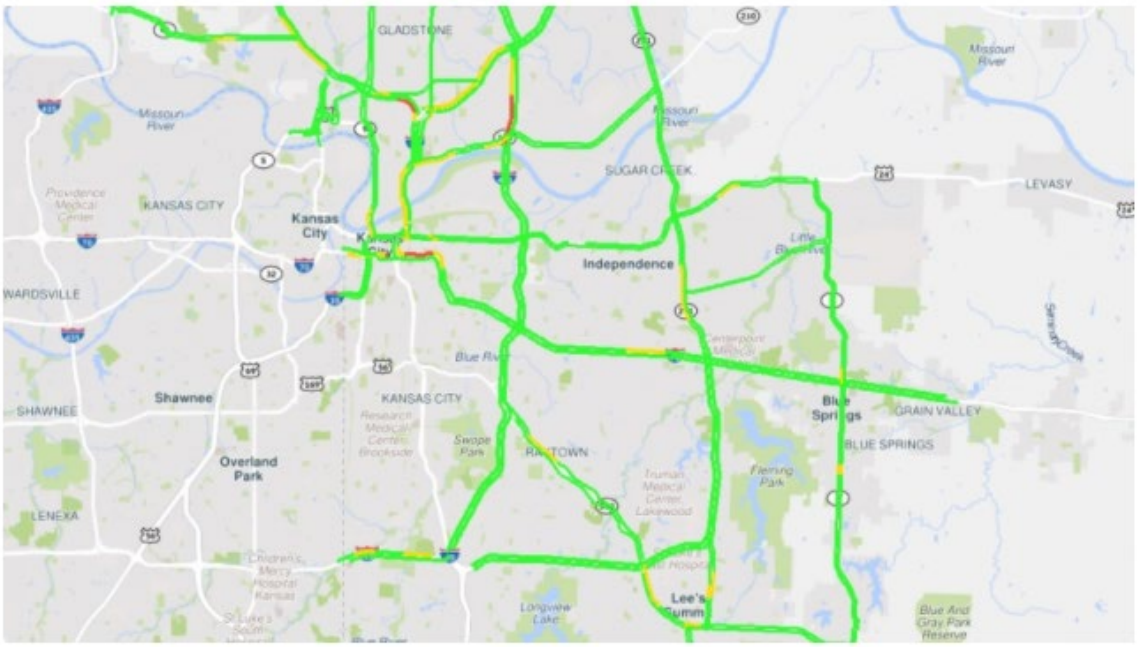



2nd Quarter Target: 10 min. a.m. - 10 min. p.m.

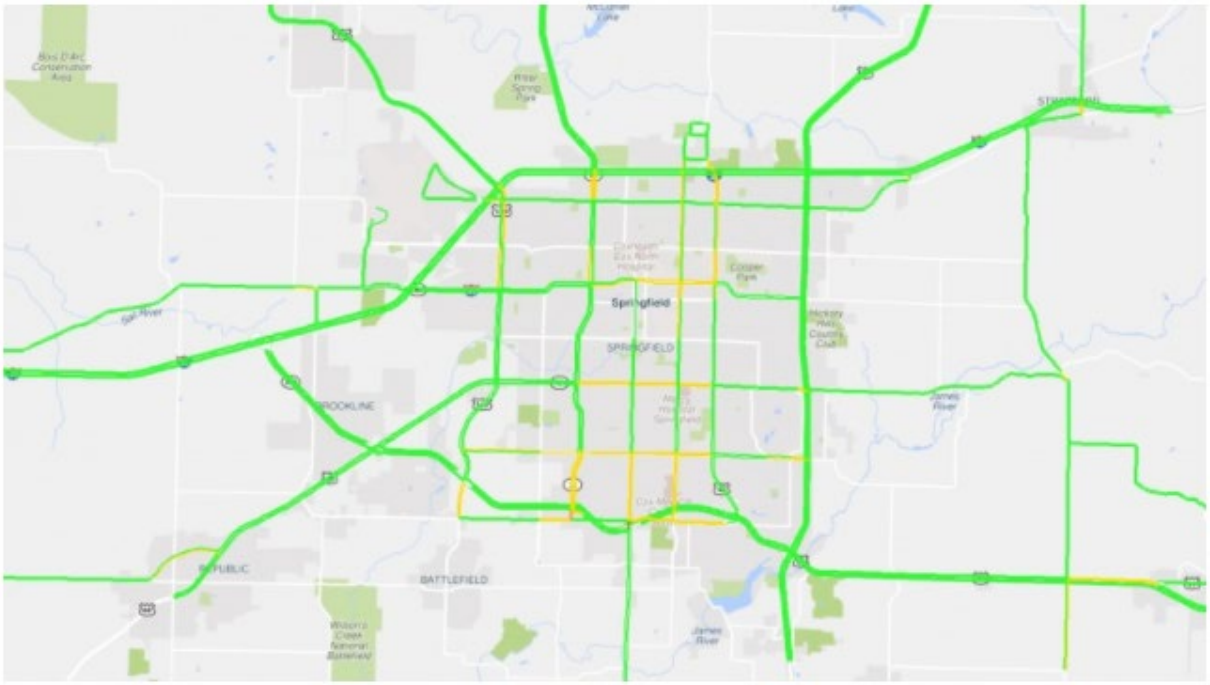
**AM St. Louis**



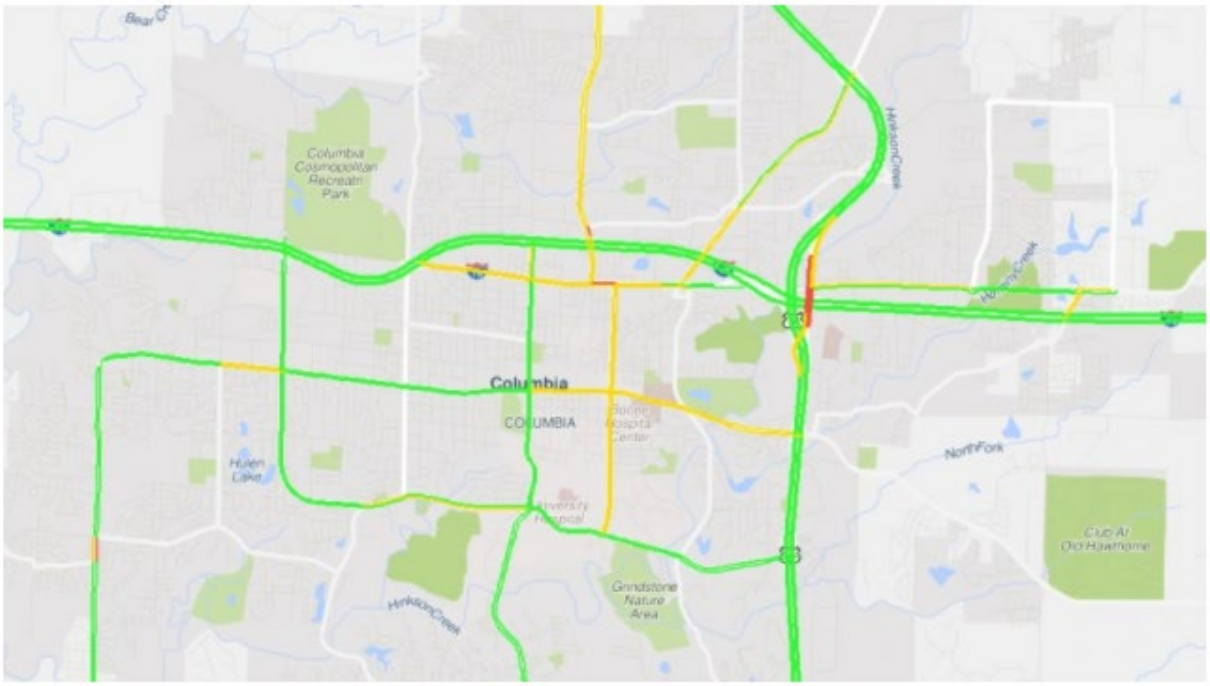

**AM Kansas City**



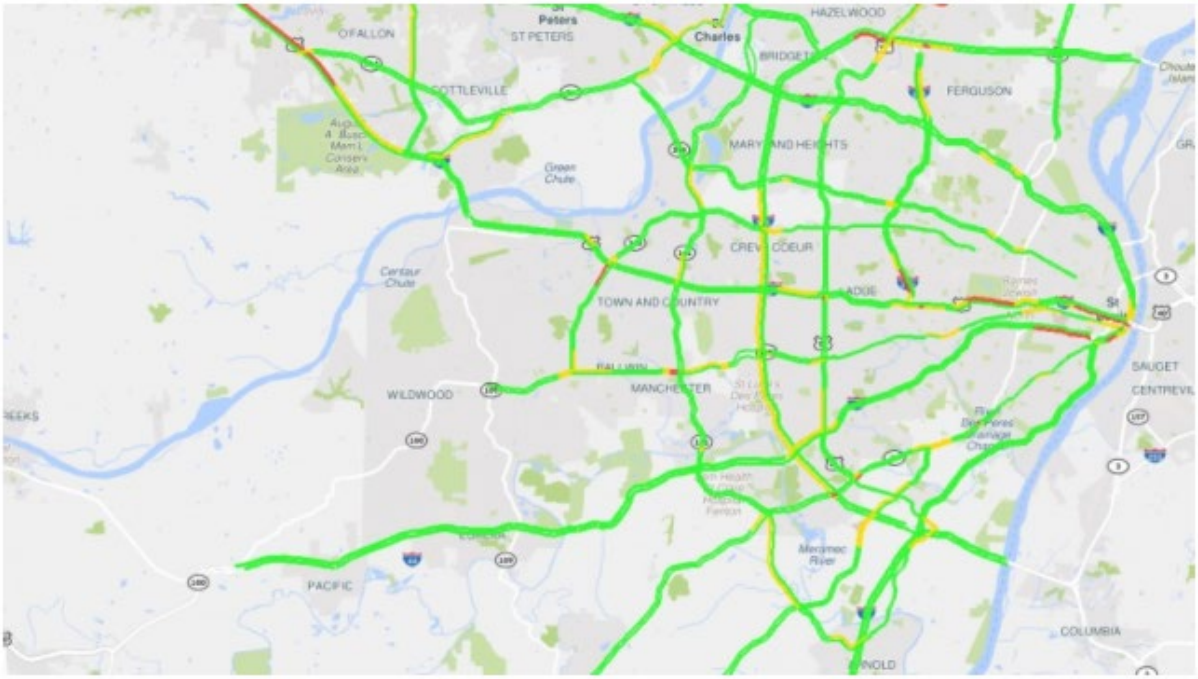
**AM Springfield**



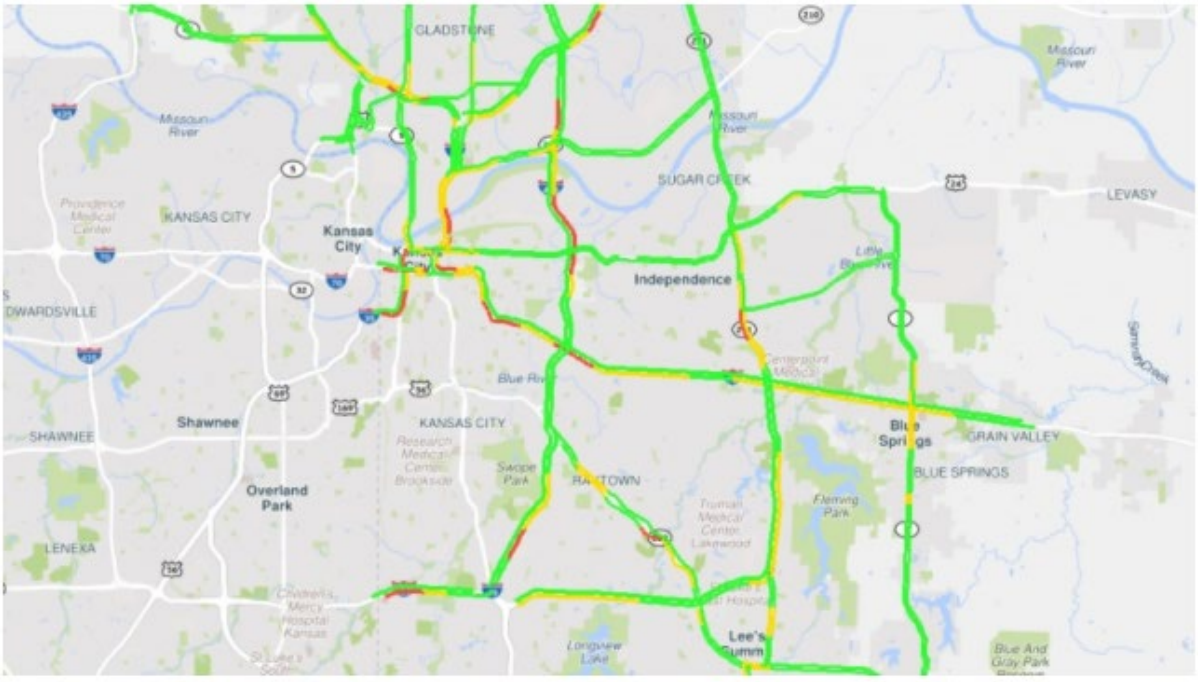

**AM Columbia**



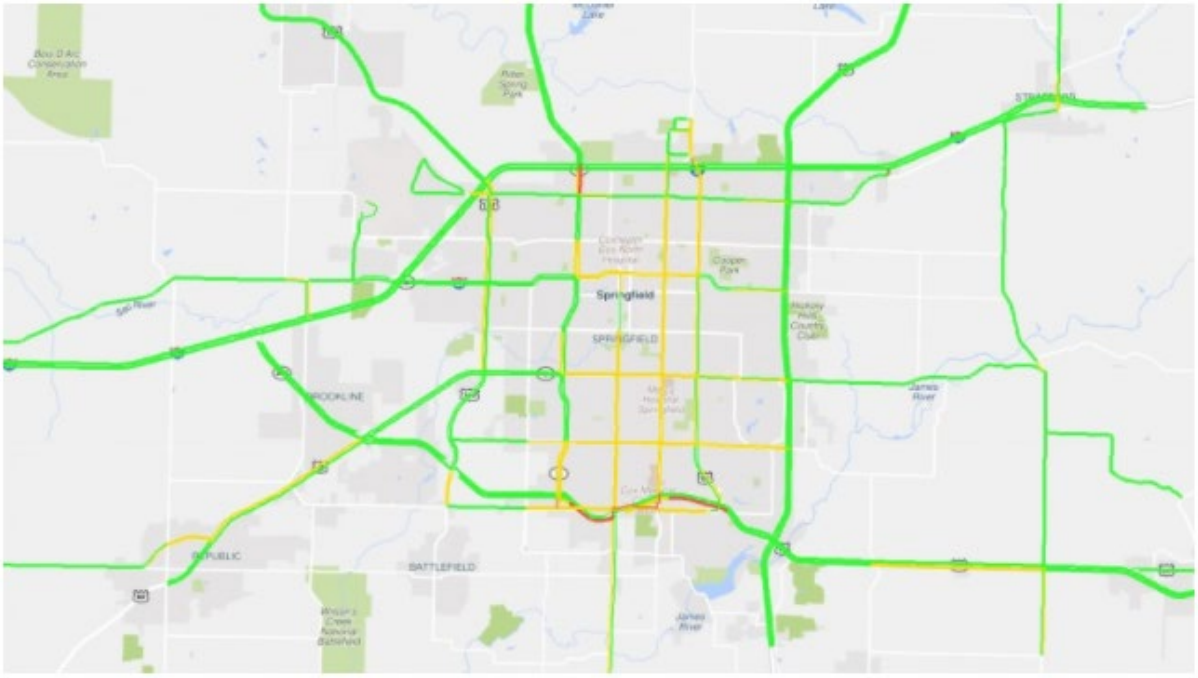
**PM St. Louis**



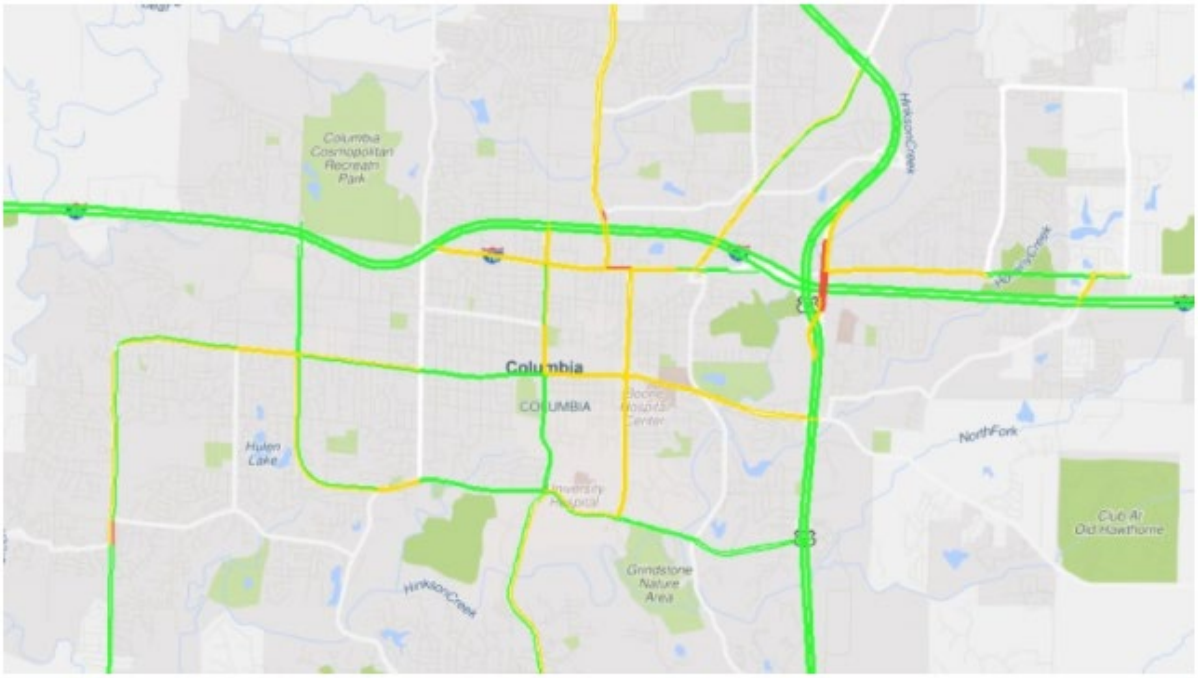

**PM Kansas City**



**PM Springfield**




**PM Columbia**



## Write up:

During the second quarter of 2021, average travel times and planning times were generally higher than 2020, but lower than previous years. Average travel times increased during morning rush and evening rush in Kansas City compared to the second quarter of 2020. Average travel times decreased during morning rush and increased during evening rush in St. Louis. Average speeds across both regions ranged from 56 to 65 mph, which is nearly identical to the 55 to 65 mph range from the second quarter of last year. The morning average travel times in both regions were below their respective targets, while the average travel times in the evening were slightly higher than their targets.

Planning time accounts for unexpected delays and indicates how much time customers need to plan for their trip in order to arrive on time 95% of the time. In St. Louis, motorists traveling during morning rush needed to plan 22 seconds more for a 10-mile trip than they would otherwise need in free-flow conditions. During the evening rush period, customers needed to plan for an additional 3 minutes, 6 seconds for a 10-mile trip. Customers traveling during the Kansas City morning rush needed to plan an additional 1 minute, 31 seconds more for a 10-mile trip than they would need in free-flow conditions. During the evening rush, customers needed to plan for an additional 4 minutes, 5 seconds of travel. The planning times were greater than the second quarter of 2020 in all rush periods. The planning times for both regions represent average rush-hour speeds between 43 and 58 mph.

## Purpose:

This measure tracks the mobility of significant state routes in St. Louis, Kansas City, Springfield, and Columbia.

## Measurement and Data Collection:

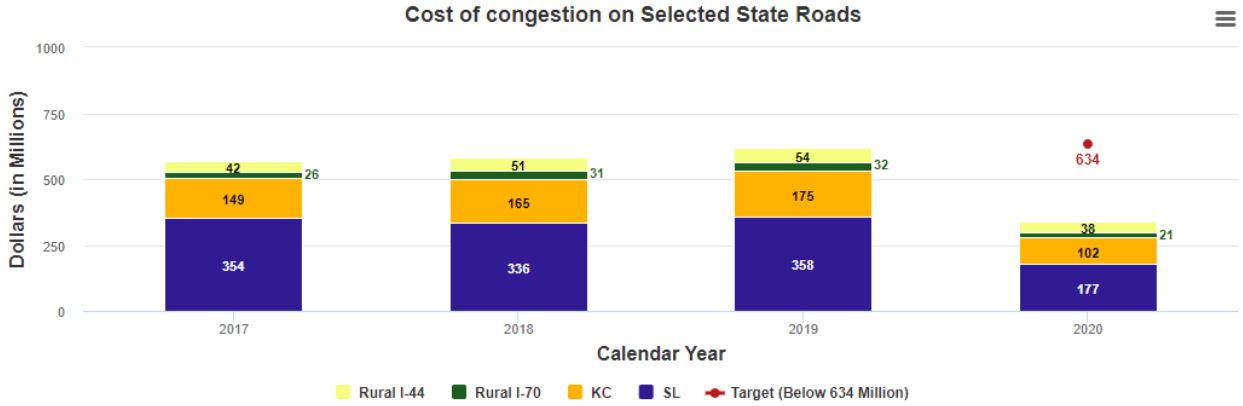
Travel time data is collected continuously via wireless technology. To assess mobility, MoDOT compares travel times during rush hour to free-flow conditions where vehicles can travel at the posted speed limit. This measure also assesses reliability, an indicator of how variable those travel times are on a daily basis.

The charts in this measure show the average travel time and the 95th percentile travel time, which is the time motorists should plan in order to reach their destinations timely 95% of the time.

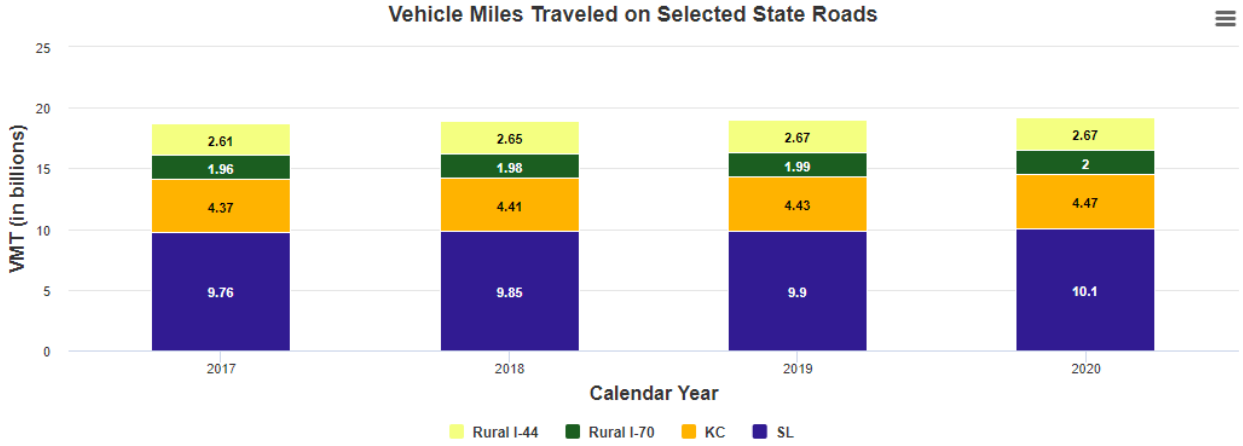
The maps display the reliability of specific sections of roadways during rush hour.

The targets for average travel time are updated quarterly. The targets are established by projecting a 10% improvement over the average of the same quarter over the previous two years. The minimum value for the target time is 10 minutes. This corresponds to the time it takes to travel 10 miles at the posted speed limit of 60 miles per hour.

## Cost & impact of traffic congestion – 4b




Target: Below 634 Million




### Write up:

Recurring congestion comes at regular times, although the traffic jams are not necessarily consistent day-to-day. Nonrecurring congestion is an unexpected traffic crash or natural disaster that affects traffic flow. When either occurs, the time required for a given trip becomes unpredictable. This unreliability is costly for commuters and truck drivers moving goods which results in higher prices to consumers.

While the desired trend for both costs is downward, challenges exist in Missouri's metropolitan regions and major truck freight corridors that continue to threaten this positive outcome. A comprehensive look at congestion that goes beyond typical solutions of adding capacity is needed. Using smarter technology to help guide motorists is a must. Still, the desired outcome is to lower congestion costs and demonstrate that traffic is moving more efficiently.

This report looks at the 2017 to 2020 cost of congestion in the urban areas of Kansas City and St. Louis, as well as rural I-44 and I-70 across the state. The 2020 target for statewide congestion cost was $634 million. The actual calculation from the Regional Integrated Transportation Information System data for 2020 was $338 million.  Reduction in travel due

to the pandemic, changes from typical morning and evening rush hours and reduced user costs were the driving factors in reducing the cost of congestion.

Congestion costs were reduced in the Kansas City and St. Louis Urban areas, which have typically shown to be steady or rising in past reporting periods. The same is true for travel on the rural interstate system. Vehicle miles travelled are shown to have increased 1.3% from 2019 to 2020 according to Regional Integrated Transportation Information System data.

It will be interesting to see the results from 2021 as the state and country return to "normal traffic patterns."

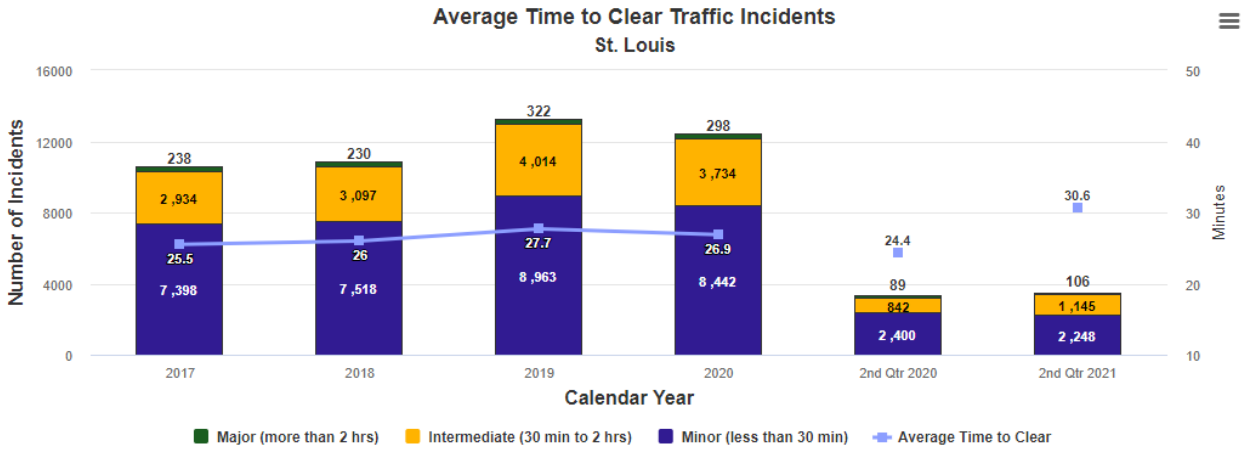
### Purpose:

This measure tracks the annual cost and impact of traffic congestion to motorists for user delays and vehicle miles traveled on select routes in the St. Louis and Kansas City regions as well as rural sections of Interstates 44 & 70.

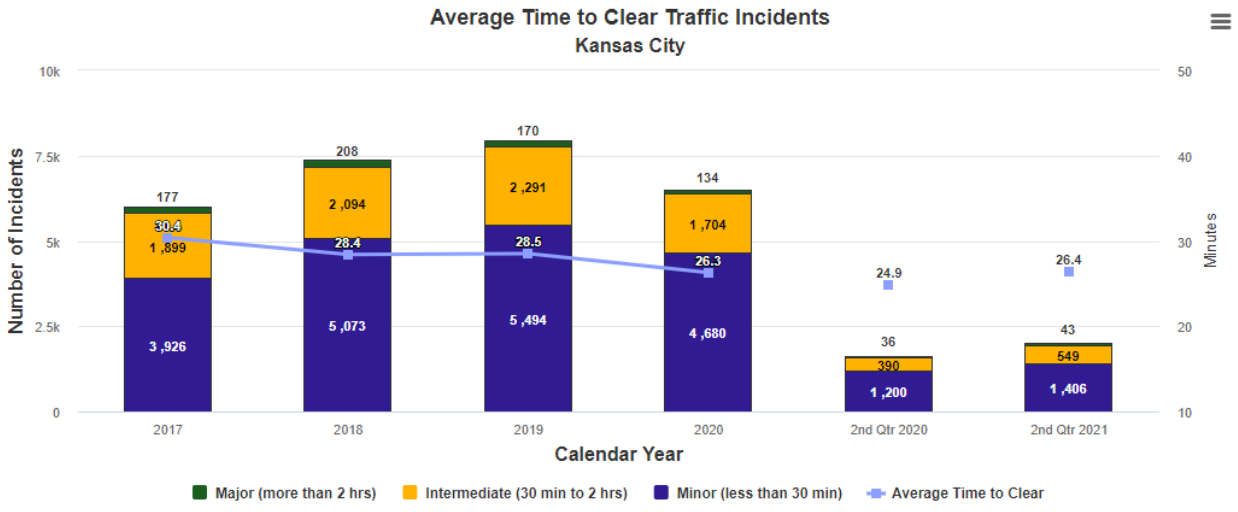
### Measurement and Data Collection:

A reporting tool available in the Regional Integrated Transportation Information System looks at user delay costs. This data, in combination with industry standard costs for passenger cars and trucks, reflects the overall costs of congestion. RITIS also includes historic data so trend lines can be tracked and evaluated. The unit cost per passenger car is $19.14 per hour and is obtained from the US Bureau of Labor Statistics. The unit cost per truck is $71.78 obtained from the American Transportation Research Institute, which specializes in tracking freight mobility and provides the best source of data related to freight costs. For previous reporting, the department used data provided by the TTI, which annually produces the Urban Mobility Report. The target for this measure is updated annually in April and is established by projecting a 10% improvement over a four-year average.

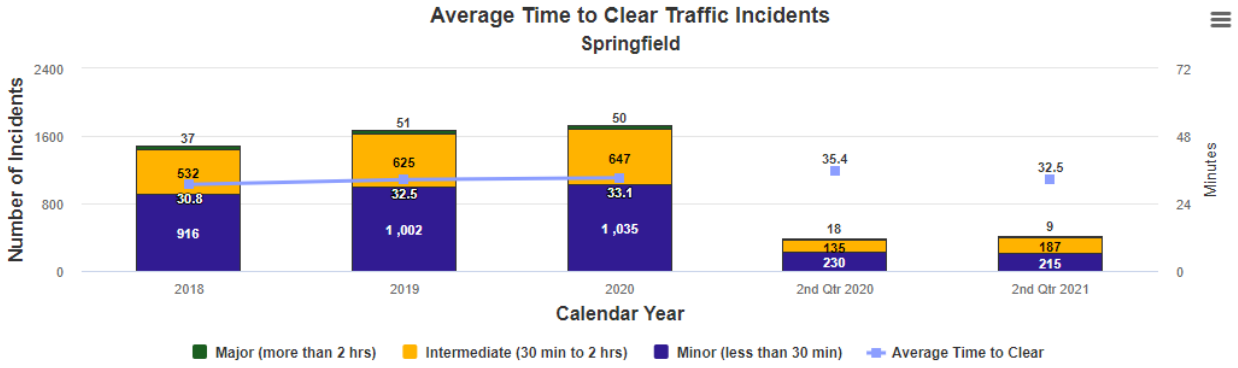
## Average time to clear traffic incident – 4c



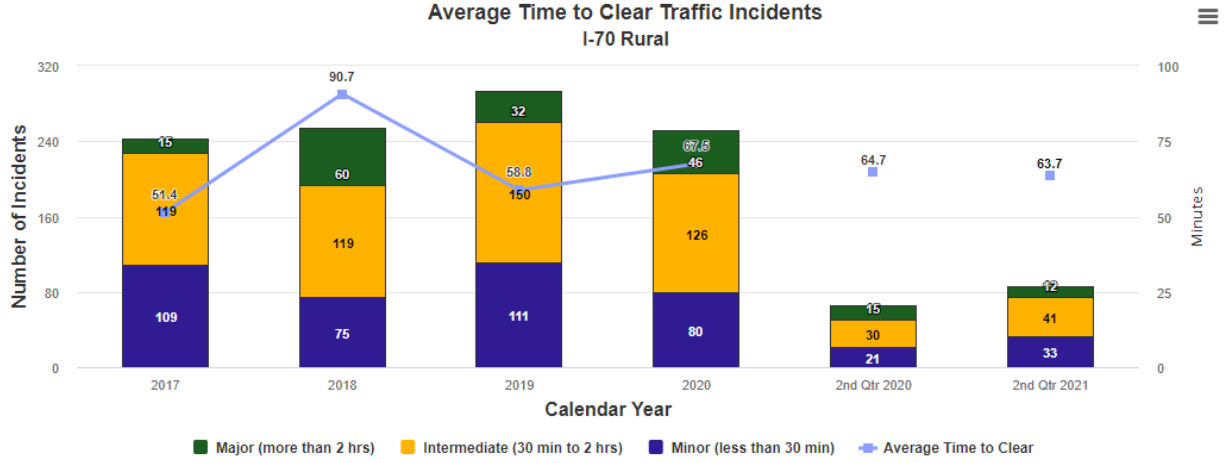

2021 Target: Below 23.7 Minutes to clear



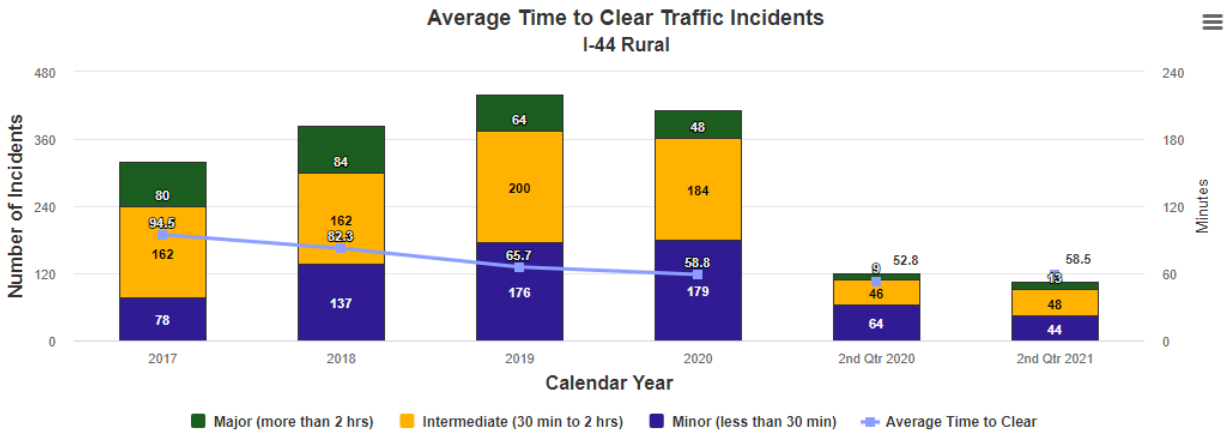

**2021 Target: Below 26.1 Minutes to clear**




**2021 Target: Below 28.9 Minutes to clear**




**2021 Target: Below 60.7 Minutes to clear**




**2021 Target: Below 71.9 Minutes to clear**

## Write up:

A traffic incident is an unplanned event that blocks travel lanes and temporarily reduces the number of vehicles that can travel on the road. The speed of incident clearance is essential to the highway system returning to normal conditions. Responding to and quickly addressing the incident (crashes, debris and stalled vehicles) improves system performance.

St. Louis recorded 3,499 traffic incidents with an average time of 30.6 minutes to clear those incidents in the second quarter of 2021. Compared to the same period in 2020, there was an increase of 5% in the number of incidents and an increase of 25.4% in clearance times.

Kansas City recorded 1,998 traffic incidents with an average time of 26.4 minutes to clear those incidents in the second quarter of 2021. Compared to the same period in 2020, there was an increase of 22.9% in the number of incidents and an increase of 6% in clearance times.

Springfield recorded 411 traffic incidents with an average time of 32.5 minutes to clear those incidents in the second quarter of 2021. Compared to the same period in 2020, there was an increase of 7.3% in the number of incidents and a decrease of 8.2% in clearance times.

Rural counties of I-70 between mile marker 28 (Oak Grove) to MM 203 (Foristell) recorded 86 incidents and an average clearance time of 63.7 minutes in the second quarter of 2021. Compared to the same period in 2020, there was an increase of 30.3% in the number of incidents and a decrease of 1.5% in clearance times.

Rural counties of I-44 between MM 0 (Oklahoma) to MM 69 (Springfield) and MM 91 (Strafford) to MM 224 (Sullivan) recorded 105 incidents and an average clearance time of 58.5 minutes in the second quarter of 2021. Compared to the same period in 2020, there was a decrease of 11.8% in the number of incidents and an increase of 10.8% in clearance times.

There was an error discovered in the KC Urban Data such that incidents with zero-minute duration in the travel lanes were inadvertently included. The data has been corrected, including the establishment of new targets to reflect the changes.

This reporting period saw an increase of 10.4% in traffic related incidents in the combined measured areas. As traffic volumes are recovering to pre-pandemic numbers, this is expected. This spring experienced significant rainfall and flooding events resulting in a negative impact on the number of traffic incidents MoDOT manage and respond to, much like winter weather events. There was a total of 445 tractor-trailer related incidents this quarter with an average clearance time of 59.9 minutes. There were also several fatal crashes resulting in multiple hour lane closures. The EDC-6 Crowdsourcing Team held a kick-off meeting to discuss the various data sources that MoDOT is currently receiving that would be good candidates for validation.

## Purpose:

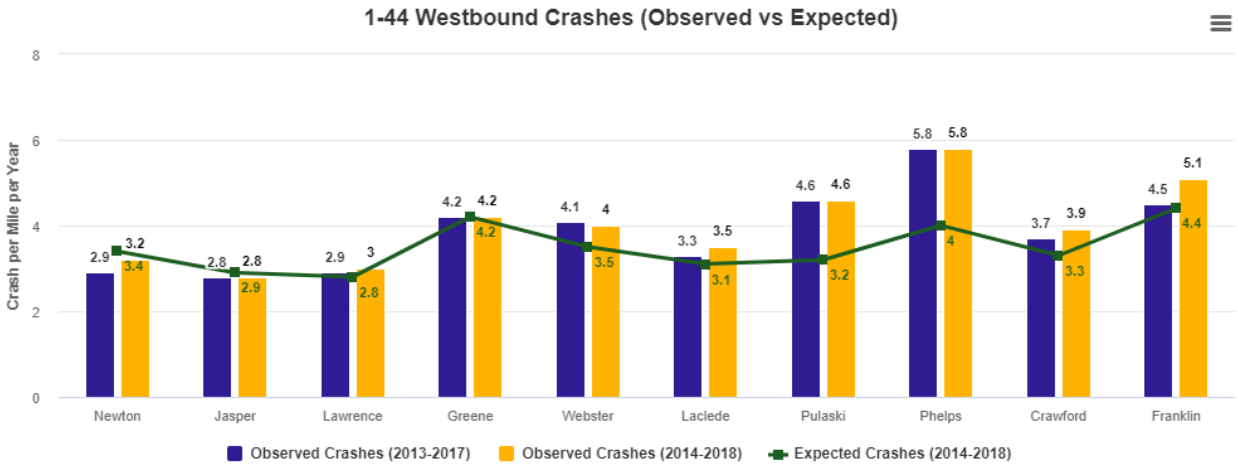
This measure is used to determine the trends in incident clearance on the state highway system.

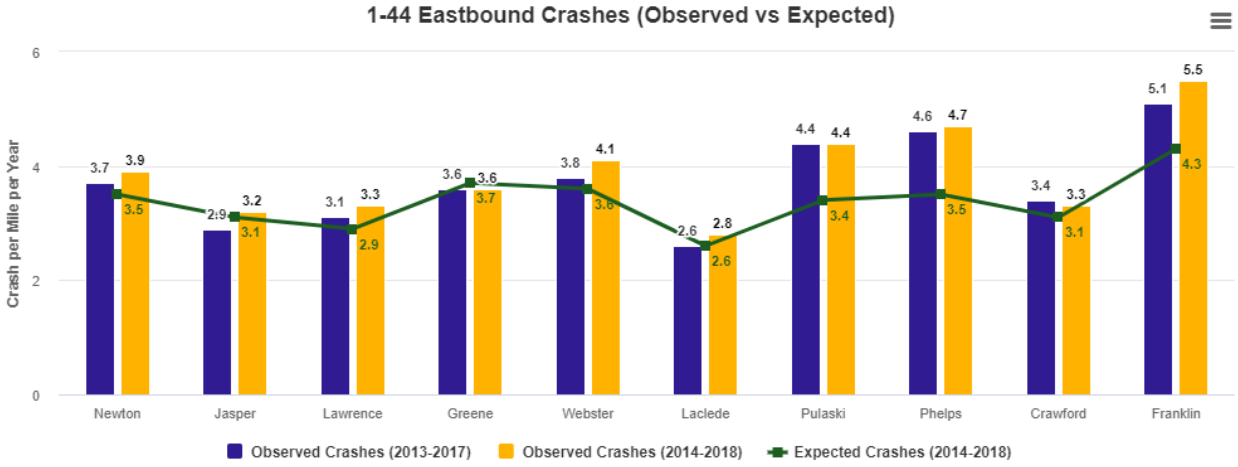
## Measurement and Data Collection:

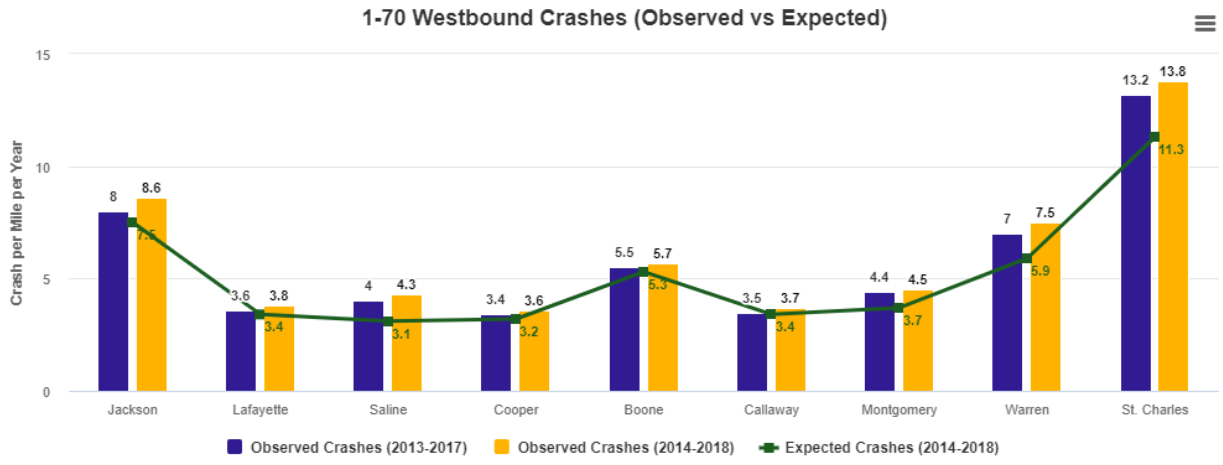
Advanced transportation management systems are used by the St. Louis, Kansas City and Springfield traffic management centers to record incident start time and the time when all lanes are declared cleared. Traffic incidents can be divided into three general classes of duration set forth by the Manual on Uniform Traffic Control Devices that include minor, intermediate and major incidents. Each class has unique traffic control characteristics and needs.

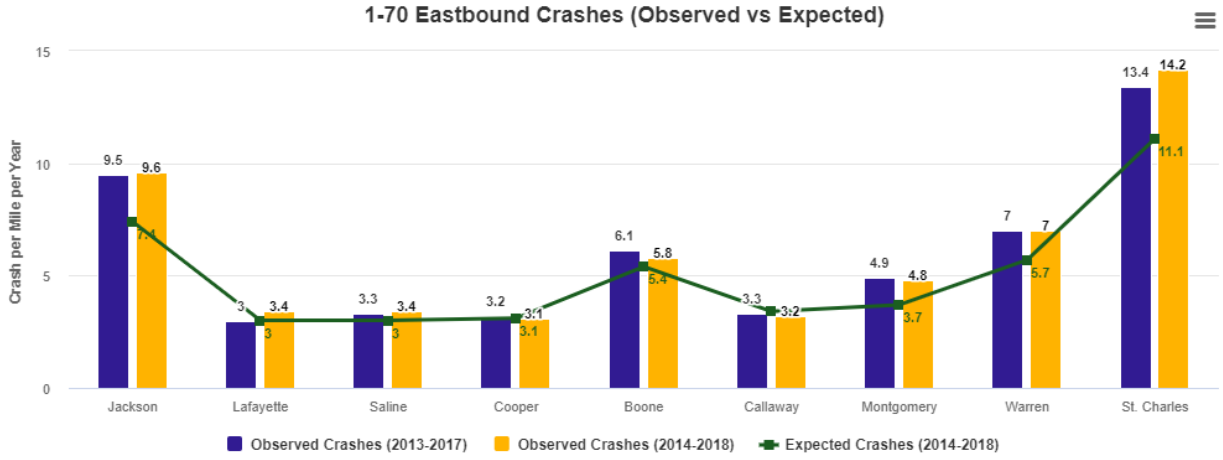
This target is established by projecting a 10% improvement over a five-year average.

# Unplanned incident impacts on major interstate routes - 4d






**Write up:**

Interstates are the arteries that connect the nation and keep people and commerce flowing. When interstates shut down in Missouri, the country is cut in half. Keeping interstates free flowing is a top priority for MoDOT, but sometimes unplanned incidents affect the department's ability to keep the interstates moving. An unplanned incident can be weather related, emergency road and bridge repair, traffic crashes or other incidents.

Of the types of unplanned incidents that can occur, traffic crashes create most of the impacts. Using the nationally adopted Highway Safety Manual, an expected crash number is

established for each direction of IS70 and IS44 per county. The expected crash number is determined by the traffic volume, roadway characteristics (e.g. number of lanes, lane width, shoulder width, horizontal curves, etc.), calibration factors to local conditions and reported crash data over a five-year period. The expected crash number provides a glimpse into the number of crashes one could expect to occur during normal conditions and can help identify opportunities for improvement. When the number of observed crashes is higher than the expected crash number, this could indicate an opportunity for roadway improvements to help reduce the number of crashes. Identifying these locations can help the department prioritize potential improvements.

Across both corridors there was an uptick in observed crashes between the data ending in 2017 and data ending in 2018. This is the first quarter for this measure to be presented and will serve as a baseline to judge success by.

## Purpose:

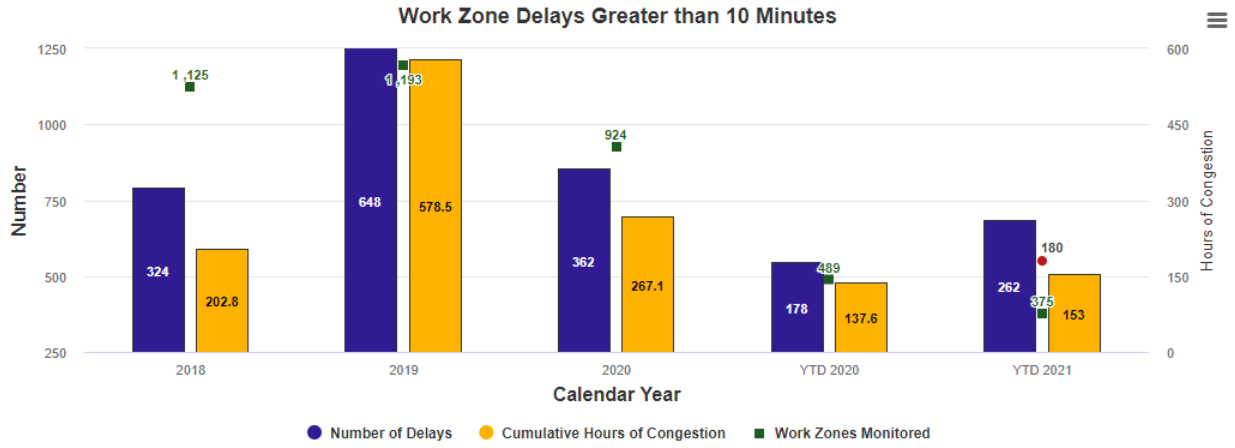
Measure the crash performance of I-44 and I-70 utilizing national analytical standards in order to identify locations which have an opportunity for positive change.

## Measurement and Data Collection:

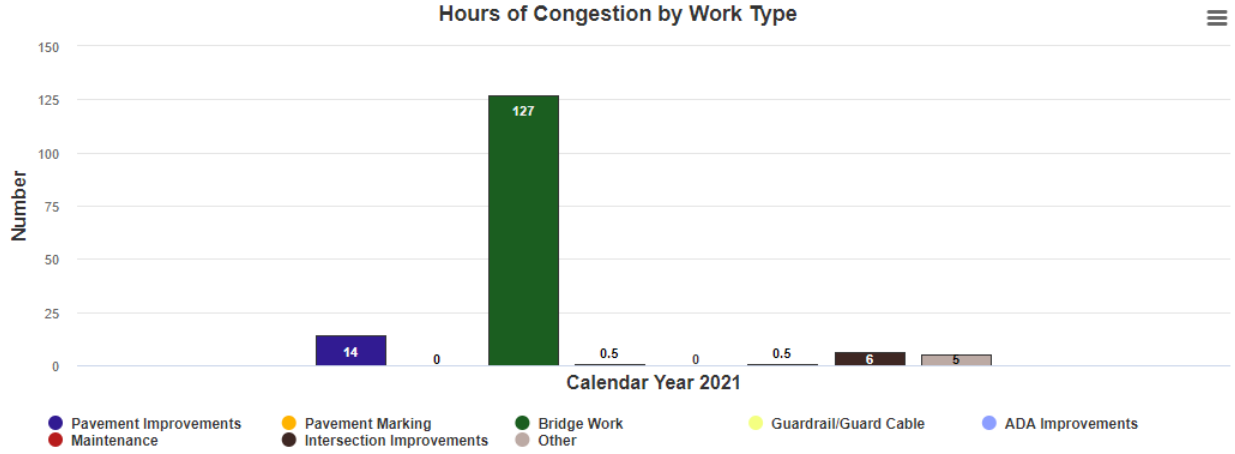
The limits of the interstates analyzed are as follows:
I-44: Oklahoma State Line to Route 100 in Gray Summit
I-70: Route 7 in Blue Springs to Route Z in Wentzville

Observed crashes are pulled from MoDOT's Transportation Management System and represent all reported crashes which occurred between the limits on each interstate. The miles used to determine the crash per mile are also pulled from MoDOT's Transportation Management System. Expected crash per year per mile numbers were calculated using the ISATE spreadsheets developed with the American Association State Highway Transportation Officials Highway Safety Manual.

## Work zone delays to the traveling public – 4e




Target: Below 180 Hours of Congestion per Year




### Write up:

Motorists want to travel through work zones with as little inconvenience as possible. MoDOT tries to minimize travel impacts by shifting work to times when there are fewer impacts to the traveling public. Other strategies include using technology in work zones, providing valuable information to customers and innovative uses of traffic control devices to promote efficient traffic flow. To measure the effectiveness of these strategies, MoDOT monitors the performance of work zones with the greatest potential to impact traffic each quarter. The goal is to minimize the number of times a work zone creates a traffic delay of 10 minutes or more.

MoDOT has monitored 375 work zones in 2021. There have been 262 work zone delays of at least 10 minutes. The total congestion is 153 hours. MoDOT has seen traffic increase after the COVID reduction in 2020. This has led to increased congestion from work zones. In the first and second quarters of each year, delays increased from 178 to 262. Hours of congestion increased from 138 to 153. Delays are still on pace, though, to be reduced from 2019 levels.

This year, the bridge work on US 61 in Northeast, I-44 in Central and I-55 in Southeast caused 37 hours of delay. The design build on I-270 caused 83 hours of congestion due to bridge reconstruction. To date, these projects have contributed a total of 120 hours of the 153 hours (78%) of congestion. Overall, bridge improvement projects continue to be the largest contributor of delay at 83%. While not included in this data, IDOT work on the Poplar Street Bridge has caused 52 hours of delay this past quarter.

The target for the cumulative work zone congestion statewide is 180 hours per year. This target translates to approximately 30 minutes of congestion per day statewide.

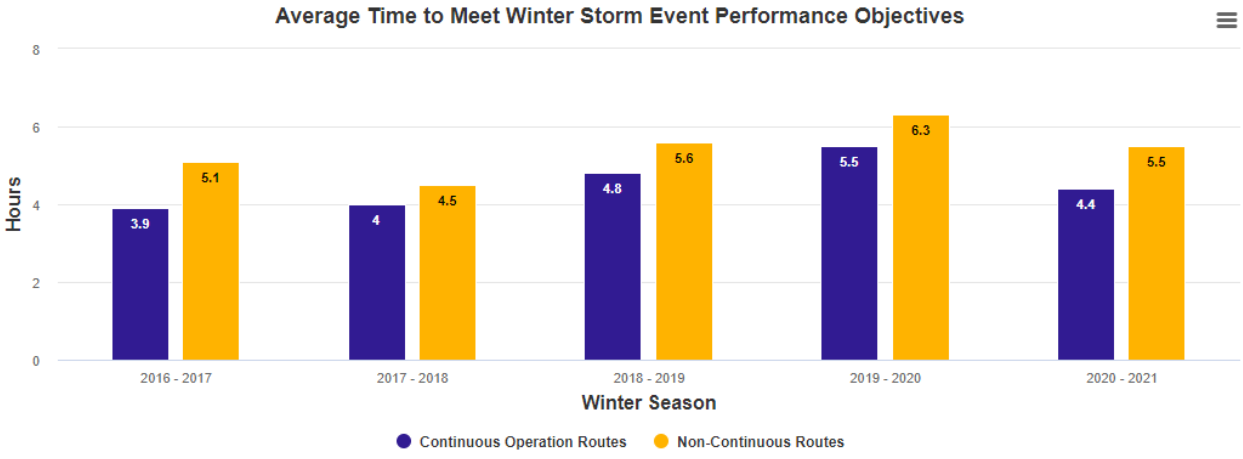
### Purpose:

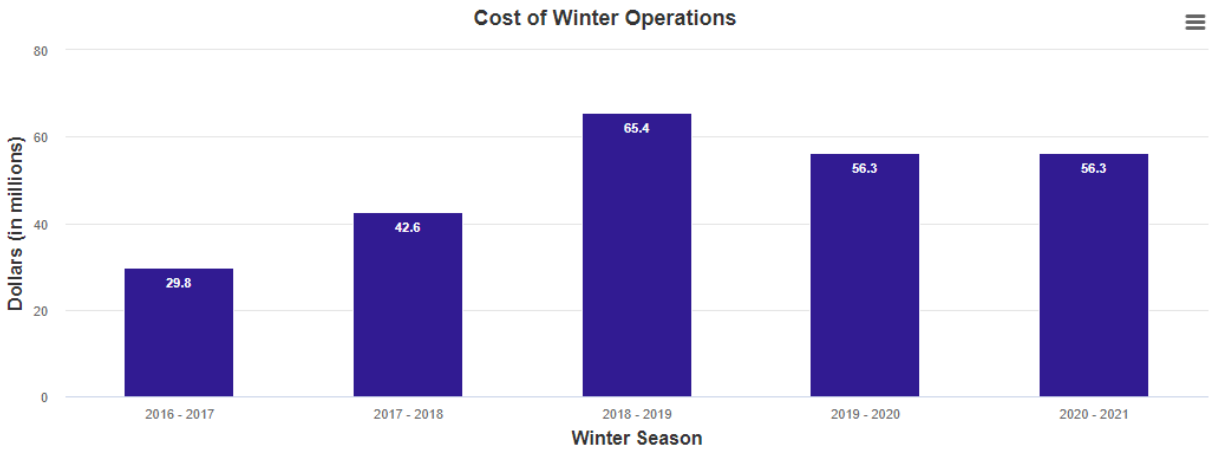
Work Zones are designed to allow the public to travel through safely and with minimal disruptions. This measure indicates how well significant work zones perform.

### Measurement and Data Collection:

Work zone impacts are identified using automated data collection and visual observations. An impact is defined as the additional time a work zone adds to normal travel. Impacts resulting in a delay of at least 10 minutes are included in this report. The targeted hours of work zone congestion are based on previous years' data and an acceptable tolerance of 30 total minutes for work zone congestion statewide. The target for this measure is updated quarterly.

## Winter storm operations – 4f






## Write up:

Knowing the time it takes to clear roads after a winter storm can help the department better analyze the costs associated with that work. MoDOT's response to winter events provides good customer service for the traveling public while keeping costs as low as possible. These efforts result in reduced traffic delays due to winter events and, more importantly, safer travel during these events. In recent years, MoDOT has been more aggressive in messaging the public urging them to travel only if necessary during winter events. This messaging is in the form of social media pushes and media releases. During the ongoing pandemic, millions of people have the ability for working remotely. This, along with MoDOT's response, resulted in no major traffic impacts for the 2020-2021 winter and a substantial amount of positive public feedback.

The 2020-2021 winter season started off very mild through the end of calendar year 2020; however, 2021 proved to be challenging starting on New Year's Eve. February had record low temperatures with multiple extended winter events spanning many operational periods. Several best management practices were developed and implemented to assure that employees were safe from the COVID-19 virus. MoDOT's time for meeting objectives for continuous operation routes was 4.4 hours and 5.5 hours for non-continuous routes.

On average, winter operations cost about $43 million per year. MoDOT expended $56.3 million for the 2020-2021 winter season.

## Purpose:

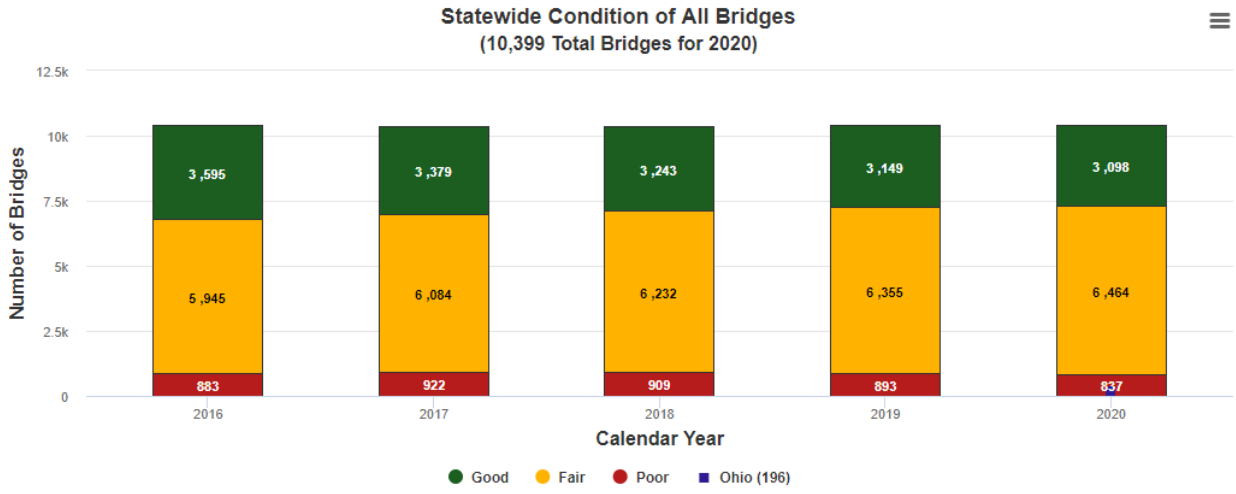
This measure tracks the amount of time needed to perform MoDOT's snow and ice removal efforts. It also reviews the impacts of significant events and the measures taken to minimize these impacts.

## Measurement and Data Collection:

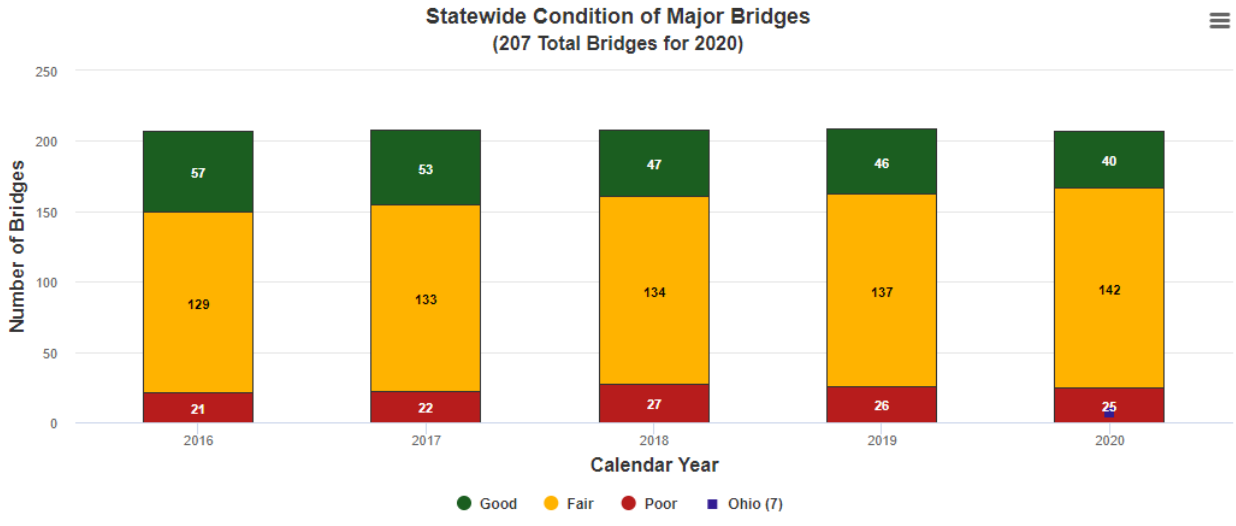
For major highways and regionally significant routes, the objective is to restore them to a mostly clear condition as soon as possible after the storm has ended. MoDOT calls these "continuous operations"

routes. State routes with lower traffic volumes should be opened to two-way traffic and treated with salt or abrasives at critical areas such as intersections, hills and curves. These are called “non-continuous operations” routes. After each winter event, maintenance personnel submit reports indicating how much time it took to meet the objectives for both route classifications. For significant events, the Regional Integrated Transportation Information System is used to determine traveler delays and the associated costs in order to determine the magnitude of the impacts of these significant winter events.

## Condition of state bridges (all and major) – 5a




Target: Below 900 Poor




Target: Below 20 Poor

### Write up:

The public has indicated the condition of Missouri’s existing roadway system should be one of the state’s highest priorities. Currently, 837 (25 major) structures are in poor condition, 6,464

(142 major) structures are in fair condition and 3,098 (40 major) structures are in good condition.

The number of structures in poor condition has fluctuated over the last five years, peaking at 922 in 2017 and trending down over the last three years to 837. The number of structures in good condition has been steadily declining and the number of structures in fair condition has been increasing. The decrease in poor condition bridges is reflective of MoDOT's asset management program, with the recent changes resulting from the Governor's Focus on Bridges program. The decline in good structures, as well as the increase in fair condition structures, is reflective of MoDOT's aging bridge inventory with many structures at the point where they need minor maintenance or rehabilitation.

For major bridges, the number of structures in poor condition peaked in 2018 at 27 and has now dropped to 25 for 2020. Even with the significant investment in the Statewide Transportation Improvement Plan, the number of structures in good condition has been dropping over the last five years while the number in fair condition has been increasing. Work on major bridges is expensive with rehabilitations costing $10 million to $20 million and replacements ranging from $20 million to $200 million. Ohio has been selected for comparison as its total of 10,478 (160 major) state highway bridges is only 79 more than Missouri, as well as having similar demographics, geography and weather conditions.

MoDOT's asset management goal for bridges is to keep the statewide total number of poor bridges at 900 or less and the number of poor major bridges at 20 or less.

## Purpose:

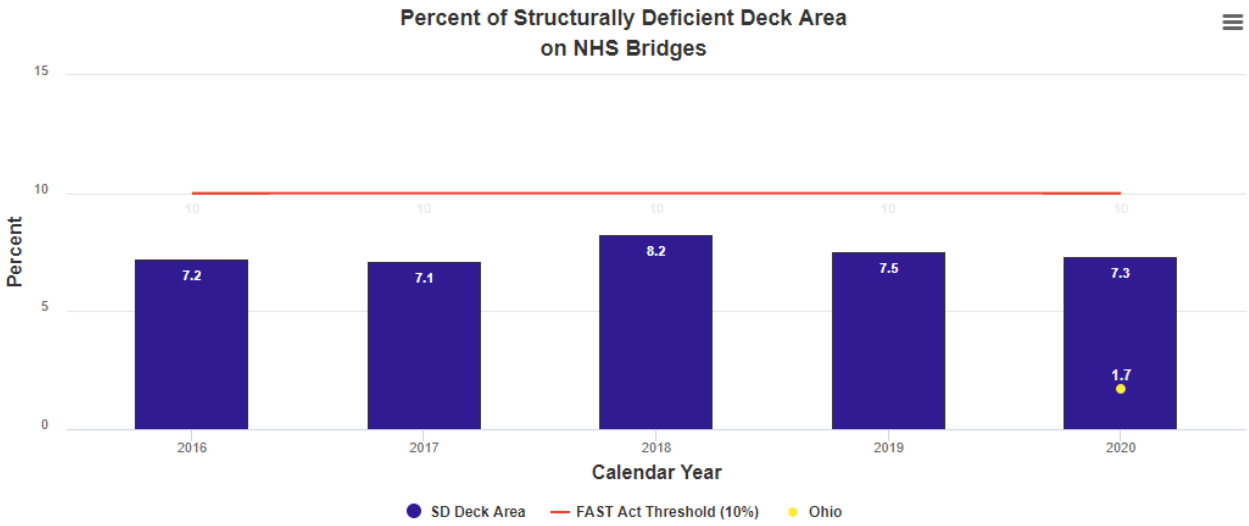
This measure tracks progress toward improving the condition of Missouri's bridges.

## Measurement and Data Collection:

This measure is updated in July based on MoDOT inspections conducted the prior year. Data is presented for all state bridges and major bridges. Major bridges are those that are 1,000 feet long or longer. Of the 10,399 bridges on state highways, 207 are considered major bridges. Bridges are categorized as being in good, fair or poor condition in accordance with criteria established by FHWA. Good means no significant condition-related problems exist. Fair indicates that moderate problems exist that may require minor rehabilitation or maintenance to return the structure to good condition. Poor indicates that more significant problems exist which will require either a major rehabilitation or replacement of the structure.

The target for this measure is set internally and reflects the department's goal of "holding its own" in terms of bridge condition.

## Percent of structurally deficient deck area on National Highway System – 5b




Target: Below 10%

### Write up:

The public has indicated that keeping Missouri's existing roads and bridges in good condition should be one of the state's highest priorities. The Fixing America's Surface Transportation Act established a 10% penalty threshold for states that, when exceeded, requires a state to focus money on bridges until they are back under 10%. The local system has 88 National Highway System structures (four structurally deficient) and the MoDOT system has 3,573 NHS structures (145 structurally deficient). Missouri currently falls below the penalty threshold with the statewide structurally deficient deck area at 7.3%. This is attributable to the continued effort to focus on major bridges when funding is available as well as the increasing focus on poor condition bridges in the Statewide Transportation Improvement Program.

Statewide, this measure is also heavily influenced by major bridges with one structure having the ability to impact this measure +/- 0.5%. From 2019 to 2020, there was a decrease in the statewide percentage of structurally deficient deck area on the NHS. The net improvement was primarily influenced by 18 larger structures, which included six major bridges. The number of bridges on the NHS has stabilized with very small changes from year to year. Ohio has been selected for comparison because it has similar demographics, geography and weather conditions. There are 10,478 total state highway bridges in Ohio with 4,988 structures on the NHS.

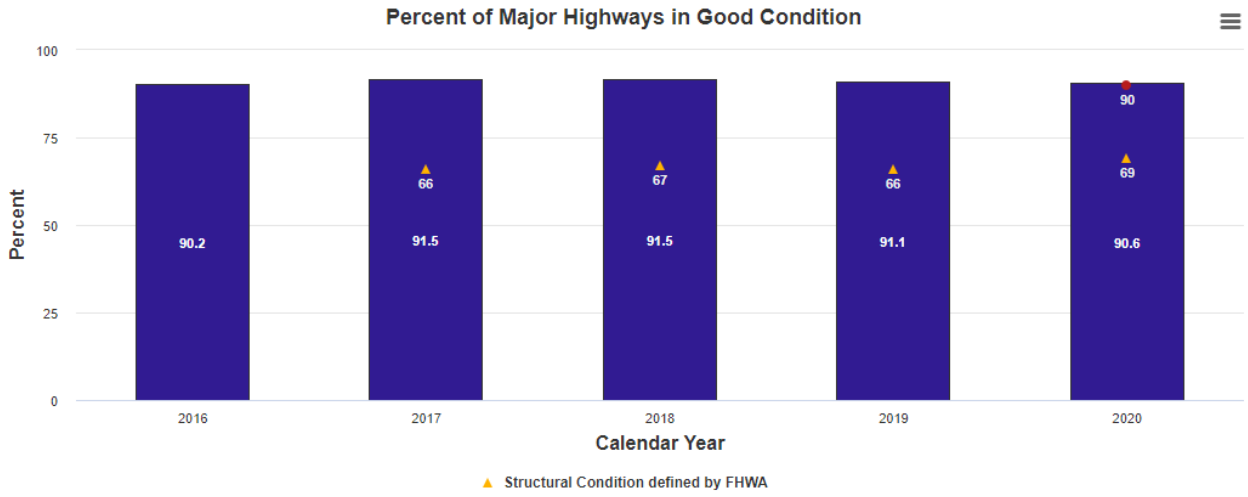
### Purpose:

This measure tracks the percent of structurally deficient deck area for bridges on the NHS.

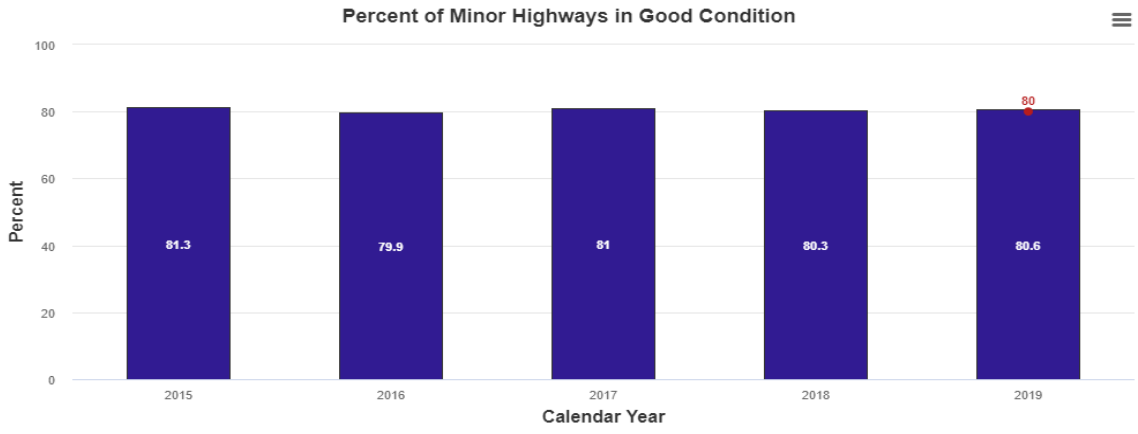
### Measurement and Data Collection:

The NHS is defined by federal law and consists of all roadways functionally classified as principal arterials as well as some routes that serve as major connections to multimodal freight-type facilities and some locally owned roadways. The FAST Act requires states to track the structurally deficient deck area on the NHS. Historically, the term structurally deficient defined a group of bridges that were in bad condition or had insufficient load capacity when compared to modern design standards. With the implementation of the FAST Act, this definition was changed, and this measure reflects that change. The FAST Act has a penalty threshold that requires a state to take certain actions whenever the percentage of structurally deficient deck area within a state exceeds 10%. The chart reflects keeping the percentage below 10% as the target.

## Condition of state highways – 5c

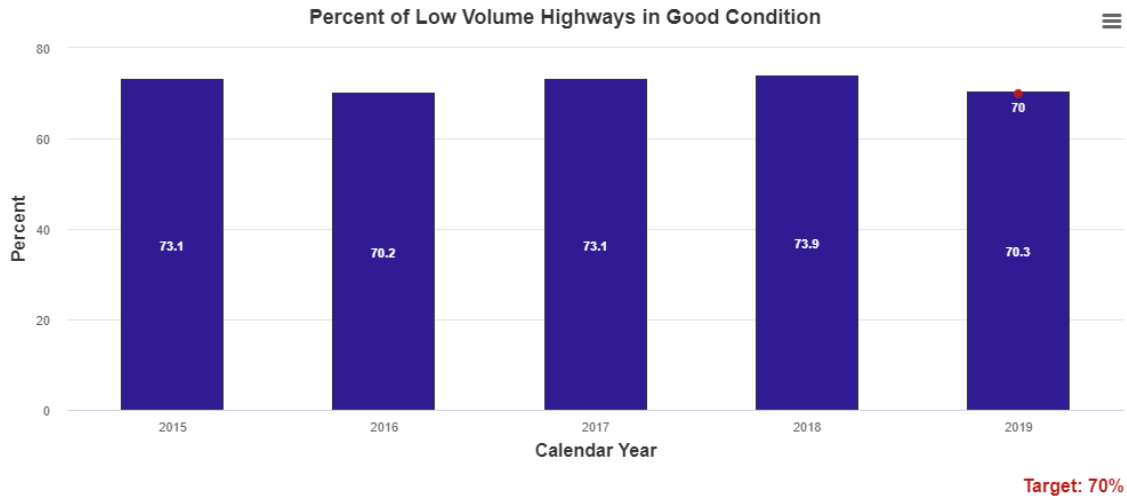



Target: 90%




Target: 80%

*2020 data for Minor Highways is not available




***2020 data for Low Volume Highways is not available**

## Write up:

Missourians have repeatedly told MoDOT that keeping roads smooth is a top priority. Over the years, MoDOT has been able to fund pavement improvement projects on thousands of miles of state highways.

MoDOT maintains 33,832 miles of highway. The percent of Major Highways in good condition is 90%. Due to the pandemic, the condition of the Minor and Low Volume Highways was not measured and is not available for 2020.

As defined by Federal Highway Administration, the target is based on the statewide asset management plan and represents MoDOT's goal of maintaining current condition.

Beginning in 2018, the FHWA required all departments of transportation to report pavement data related to the structural integrity of the pavement, which may not impact current pavement smoothness but may cause future pavement issues. The current percent of major highway pavements in good structural condition is 69%.

MoDOT has implemented asset management practices statewide to invest in transportation projects that will keep good roads in good condition.

## Purpose:

This measure tracks the condition of Missouri's highways.

## Measurement and Data Collection:

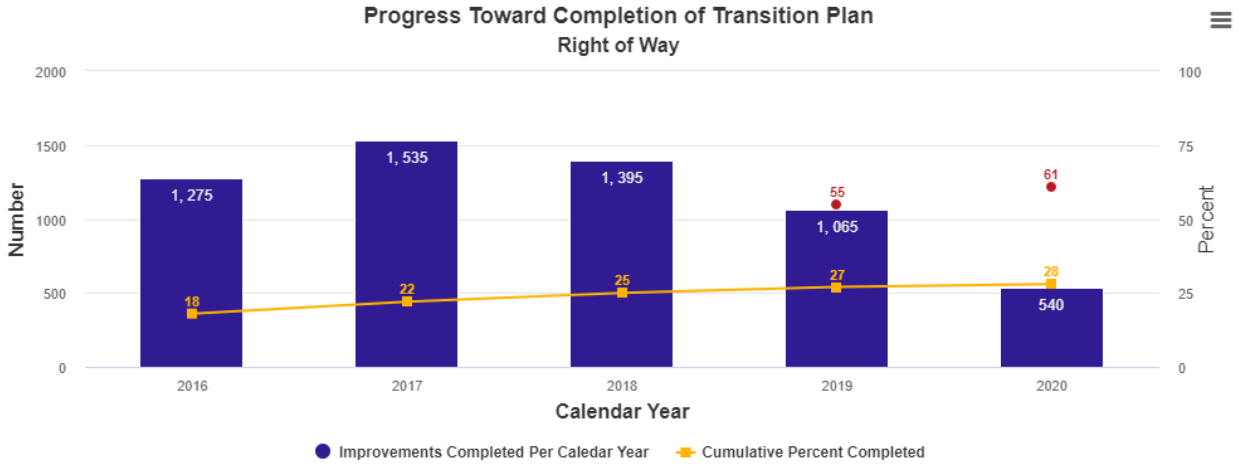
Missouri's major highway system contains the state's busiest highways, including interstates and most U.S. routes. There are 5,542 total miles on the major highway system.

Missouri's minor highway system consists of its less-traveled state highways, including most lettered routes and routes that mainly serve local transportation needs. There are 17,334 miles of minor highways in Missouri.

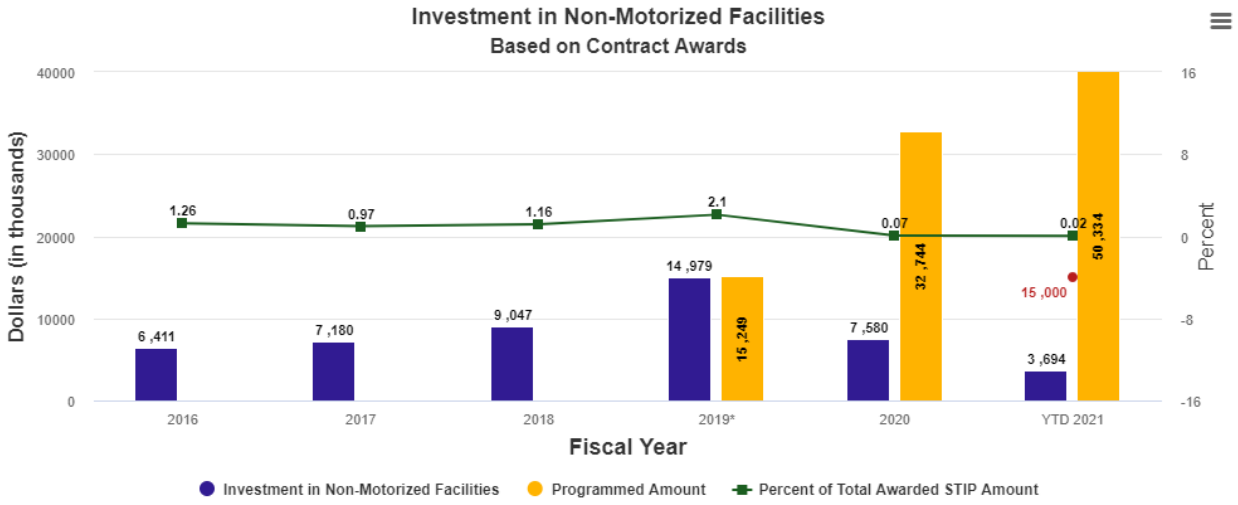
Missouri's low volume highways are those state-owned roads with less than 400 cars traveling on them per day. There are 10,957 miles of low volume roads in Missouri.

Missouri measures the condition of its roadways using smoothness as one factor but also considers physical distresses, such as cracking. The targets for this measure are set by internal policy and will not change unless policy changes, regardless of performance.

## Bike/pedestrian and ADA transition plan improvements – 5d




2020 Target: Above 61%




2020 Target: $15 Million

***Starting with FY19, ADA program data will be included in the measure**

## Write up:

MoDOT has identified 44,611 barriers within its right of way needing repaired or constructed to meet the requirements of the Americans with Disabilities Act. A transition plan was established to correct these barriers by August 2027. To meet the August 2027 transition plan deadline, a target of 61% was established for calendar year 2020. To date, MoDOT has completed 12,652 or 28% of the identified barriers.

In order to complete the transition plan at a steady pace, an annual investment target is approximately $15 million. Since 2009, the Missouri Highways and Transportation Commission has retained half of the Transportation Alternatives Program funding it receives each year. Approximately $9 million is reserved for the completion of the transition plan.

Since 2008, MoDOT has invested nearly $88.2 million towards the completion of the transition plan. The districts have projected to invest over $138 million towards the remainder of the ADA facility improvements over the next five years in the Statewide Transportation Improvement Program. That amount is expected to cover transition plan improvements and other ADA needs across the state.

## Purpose:

This measure tracks MoDOT's investment in non-motorized facilities and progress toward removing barriers. Accessibility needs occur within the right of way, such as sidewalks and traffic signals. Removal of the barriers listed in MoDOT's 2010 ADA Transition Plan is required as part of the department's compliance with the ADA.

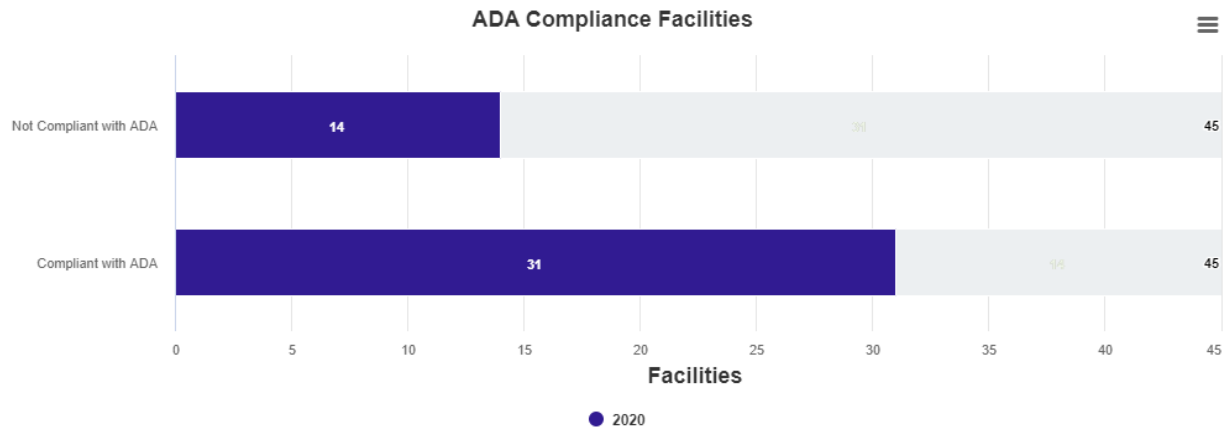
## Measurement and Data Collection:

MoDOT's investment in non-motorized facilities is determined from the awarded contract amounts for the 20 most common construction elements used on projects each year.

ADA Transition Plan progress is based upon completed work to correct deficient barriers identified in the ADA Transition Plan inventory.

A progress target line is included indicating MoDOT's progress towards completing the transition plan by 2027. Annual funding levels necessary to complete the transition plan by 2027 determine the target, which is set in April of each year.

## ADA compliance of facilities – 5e




Target: 100%

### Write up:

MoDOT owns and maintains 45 truck parking, rest area and welcome center facilities. Of those 45 facilities, 22 are rest areas and welcome centers. MoDOT has identified 14 rest areas in need of improvements to be in compliance with the Americans with Disabilities Act. Sidewalk improvements are required for these 14 rest areas to be ADA compliant.

MoDOT's maintenance and office facilities are compliant with ADA. All new facilities are designed and constructed to be compliant with ADA.

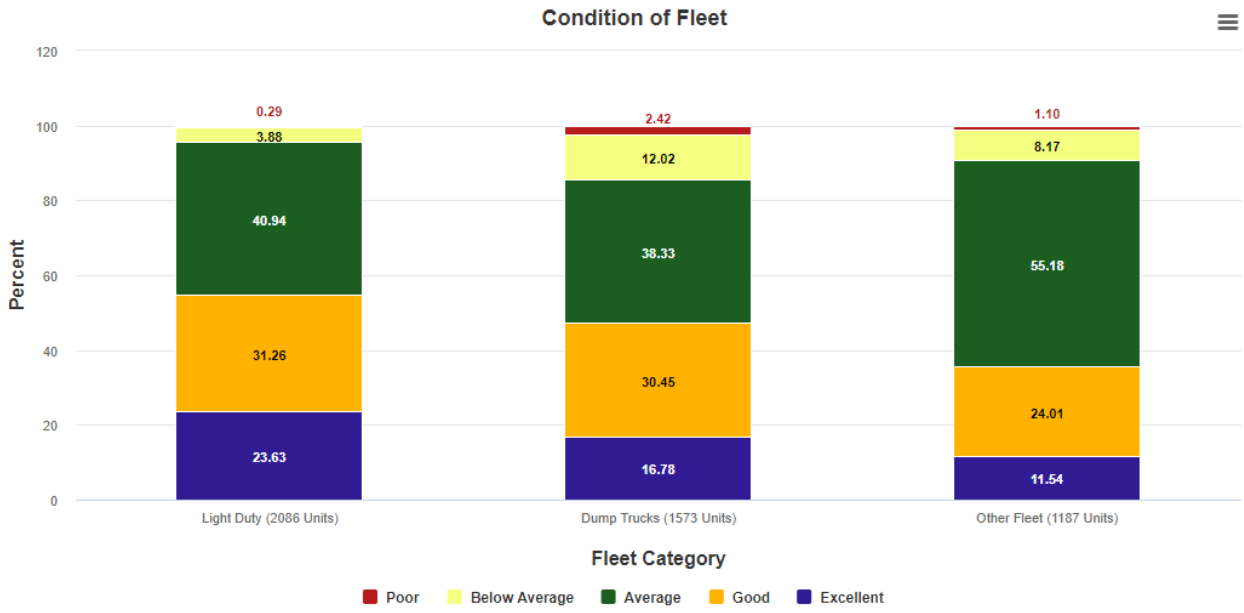
### Purpose:

This measure tracks and identifies how many MoDOT facilities need improvements to be in compliance with the Americans with Disabilities Act.

### Measurement and Data Collection:

Truck parking, rest area and welcome center inspections are performed by MoDOT staff on a quarterly basis at a minimum. Inspections of these facilities provide the compliance data. The target for this measure is for all facilities to be in compliance with ADA.

## Condition of fleet – 5f




### Write up:

MoDOT‘s fleet equipment, with a replacement value of $471 million, is necessary to maintain roads and bridges to meet customers' needs. As the department’s fleet ages due to limited funds for fleet investment, monitoring the condition helps assess resources and guide the department in making good purchasing decisions. Per recommendation of the statewide Comprehensive Fleet and Equipment Team, MoDOT began compiling this information in 2018 and statewide data was first available in 2019. The majority of fleet is rated at or above average. However, 14.44% of MoDOT dump trucks are rated below average or poor which equates to 227 trucks.

### Purpose:

This measure tracks the condition of MoDOT's diverse fleet. This includes all classes of fleet broken down by Light Duty, Dump Trucks and Other Fleet. Light Duty fleet contains cars, pickups, utility trucks, vans and 1-ton trucks. Other Fleet contains heavy equipment such as tractors, loaders, distributors and aerial trucks.

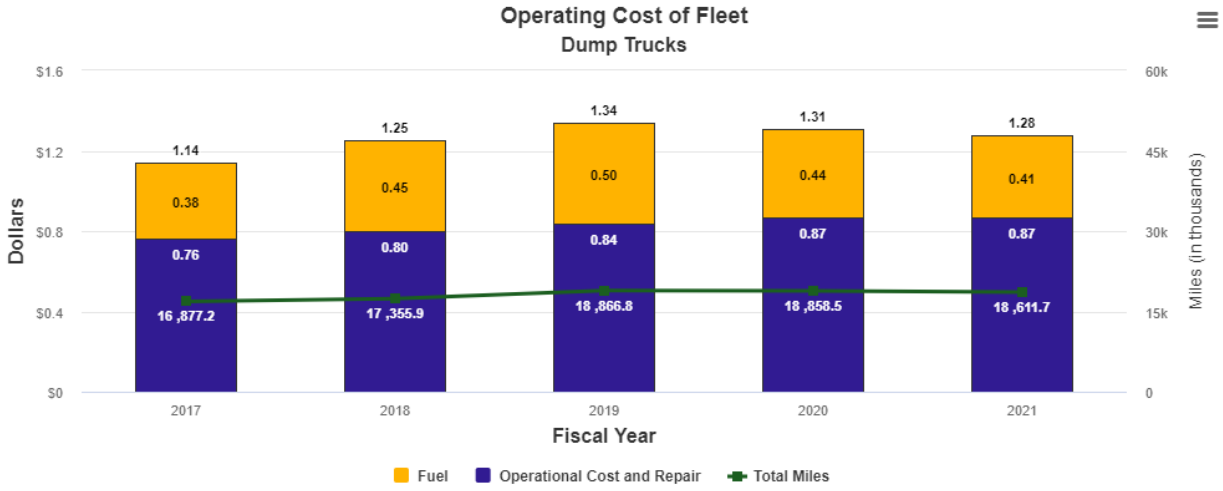
### Measurement and Data Collection:

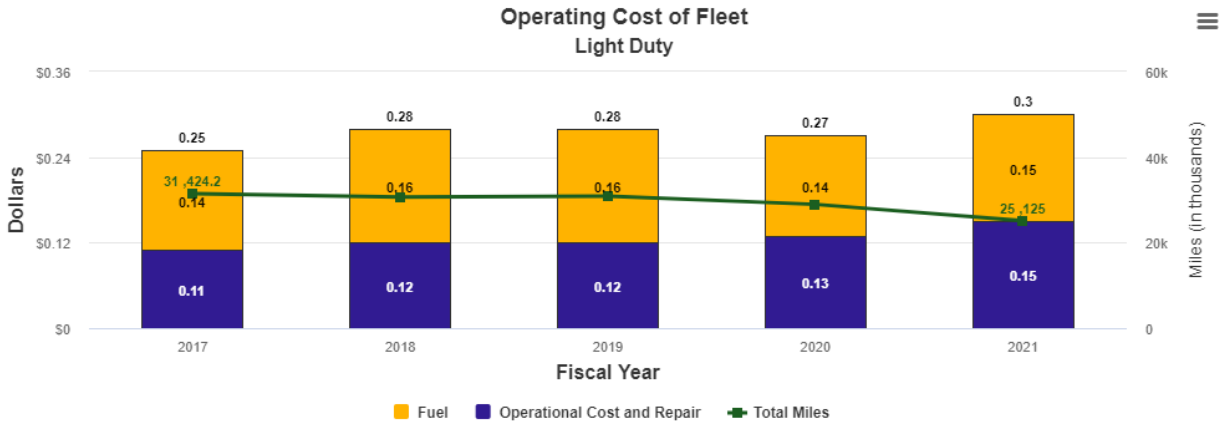
Data is obtained from MoDOT's fleet management system, FASTER and is updated by fleet personnel involved in the inspection process.  Central Office Equipment Technician Support Specialists perform onsite quality assurance reviews on fleet ratings throughout the year. The general guidelines for establishing overall condition are based on the criteria of safety, functionality, repairability and appearance.

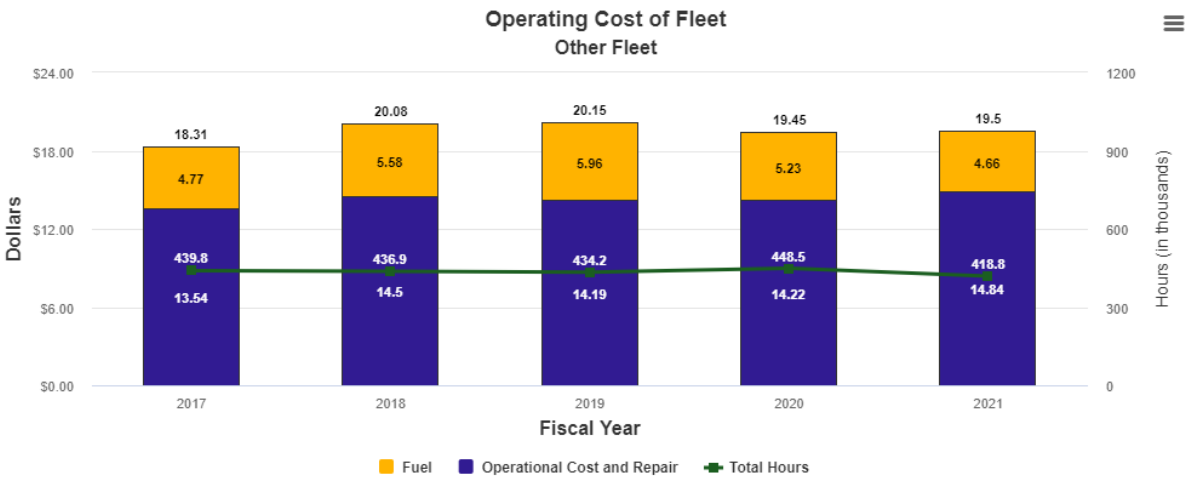
In summary, the ratings are: Excellent – unit is fully operable and capable of full performance functionality; Good – unit is operable and safe with signs of normal use; Average – unit is generally operable but may have minor component failure or damage needing repair; Below average – unit has major component failure or damage preventing performing all functions and  Poor – unit is not safe or inoperable with component failure or damage beyond repair.

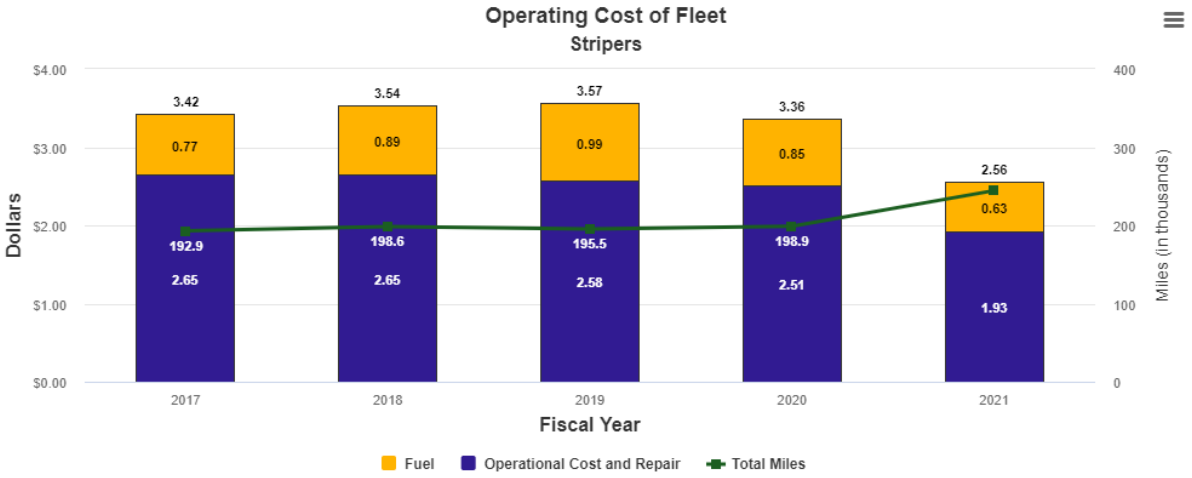
Data is as of December 31st, 2019; however, moving forward this information will be as of October 31st to coincide as the basis for the fleet data used in the fleet asset management model.

## Operating cost of fleet – 5g






## Write up:

MoDOT‘s fleet equipment, with a replacement value of over $469 million, is necessary to maintain roads and bridges in order to meet customers' needs. The total miles/hours decreased from 48.4 million in fiscal year 2020 to 44.4 million in FY 2021. As the department’s fleet ages due to limited funds for fleet investment, monitoring the operational costs ensures the department is making good repair decisions.

Through the fourth quarter of FY 2021, overall costs are down for dump truck and stripers with an increase in light duty and other fleet. From FY 2017 to FY 2021, operational costs, not factoring fuel cost, have increased except for stripers. Dump trucks increased 14%, light duty increased 36% and other equipment increased 9%. During this period, the consumer price index inflation factor increased by 8% according to the Bureau of Labor Statistics.

MoDOT continues to focus on fleet replacements using an asset management approach based on equipment age and miles/hours which began in 2019.

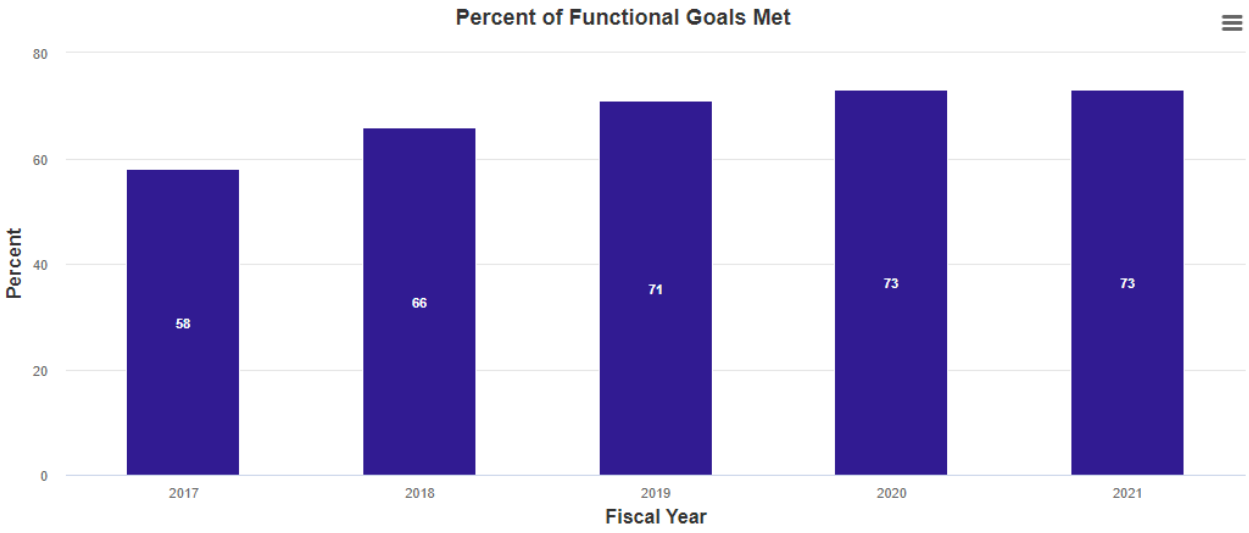
### Purpose:

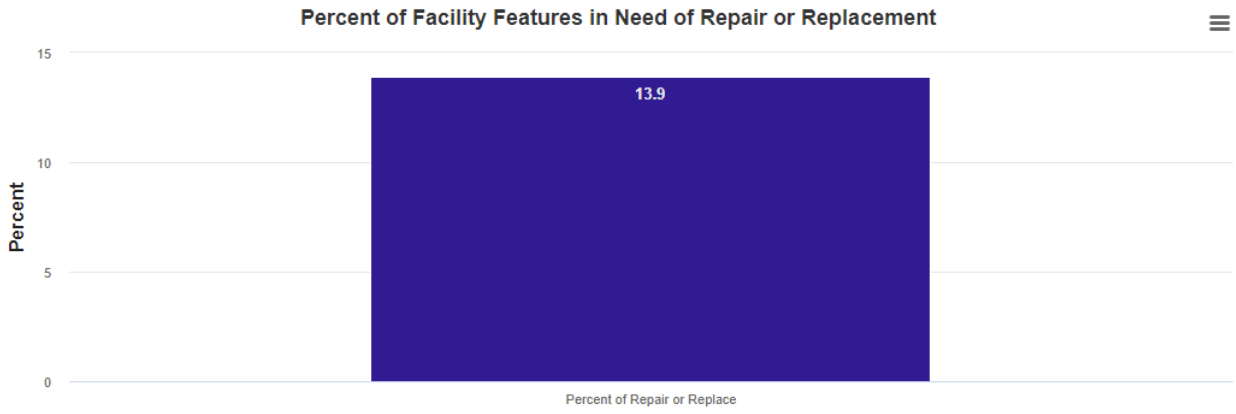
This measure tracks the operating cost of MoDOT's diverse fleet. This includes all classes of fleet broken down by Dump Trucks, Light Duty, Other Fleet and Stripers. Light Duty fleet contains cars, pickups, utility trucks, vans and 1-ton trucks. Other Fleet contains heavy equipment such as tractors, loaders, distributors and excavators.

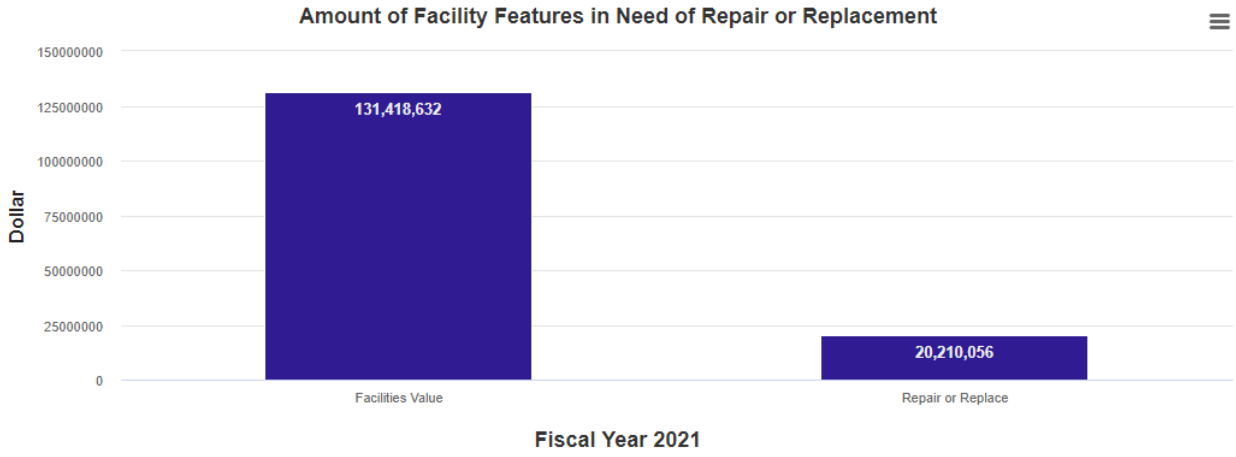
### Measurement and Data Collection:

Data reflects the operating cost of MoDOT units in fuel, repairs, labor, benefits and miscellaneous costs. The cost data is collected in the statewide financial system. Fleet data is collected from MoDOT's fleet management system, FASTER.

## Condition of facilities – 5h






**Write up:**

To carry out its duty to the citizens of Missouri, MoDOT utilizes facilities systems valued at over $131 million. These facility systems are comprised of office buildings, maintenance buildings, cold storage, gasoline/petroleum storage, chemical storage and wash bays. With respect to their functional use, many of these buildings do not have enough storage space, breakrooms, bathrooms or work bays. Inspections are made annually of over 9,100 building features to evaluate their physical condition. Hundreds of these systems are due for renewal each year. To note, the total value of the facilities' systems does not necessarily equate to the total replacement cost of all the facilities.

For financial provision of addressing the functional and physical needs of the facilities, the department has an annual budget of $3 million. For fiscal year 2021, the unfunded needs are $13 million and projected to reach $23.7 million by FY 2025.

Capital Improvement and Capital Asset Preservation are MoDOT's strategies of seeking to address the functional and physical needs of its facilities. They are utilized to seek proper balance of the principles of asset management and functionality in systematically evaluating, planning and dedicating resources to maximize the use and life of its facilities.

Efforts are taken to try to bring all facilities to complete functional suitability. Evaluation of current and projected physical conditions coupled with budget planning is sought to extend the life of facilities fully.

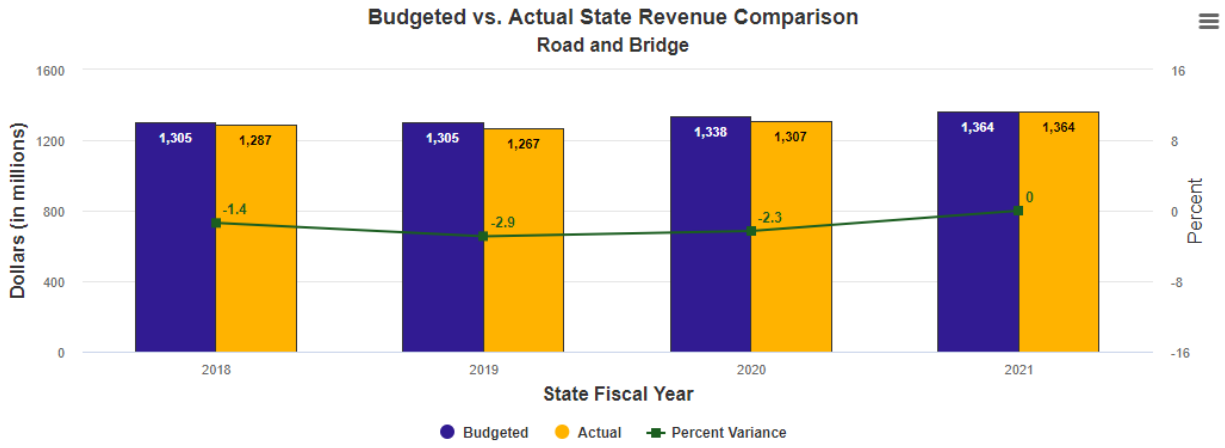
### Purpose:

This measure tracks the functional and physical condition status and trend of MoDOT's facilities. Functional Condition measures the percent of maintenance facilities meeting functional goals including sufficiency of breakrooms, bathrooms, garage bays and cold storage. Physical Condition measures the number and costs of facilities systems due for renewal based on annual facilities inspections.

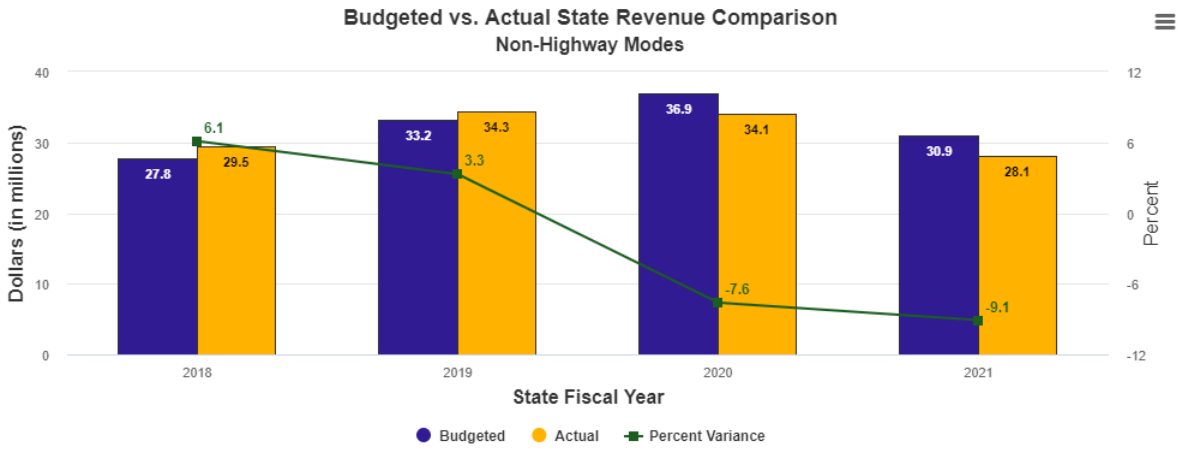
### Measurement and Data Collection:

Data is collected through annual review of the Department's long-term Capital Improvements Program and through annual facilities inspections. Functional needs are tracked and reported annually to legislative oversight committees. The goal for Functional Needs is to bring all facilities to sufficiency. Physical needs are tracked through VFA software. The initial 2020 Tracker measure will be used as a base reference and further evaluated to set future targets. Functional Requirement pertains to sufficient space for breakrooms, bathrooms, open bays and cold storage. Facilities Value is the total estimated cost to replace MoDOT facility features. Repair or Replace is the number of facility features that are listed due in FY 2021 or earlier. Repair or Replace Costs are the estimated costs that are due for renewal in FY 2021 or earlier.

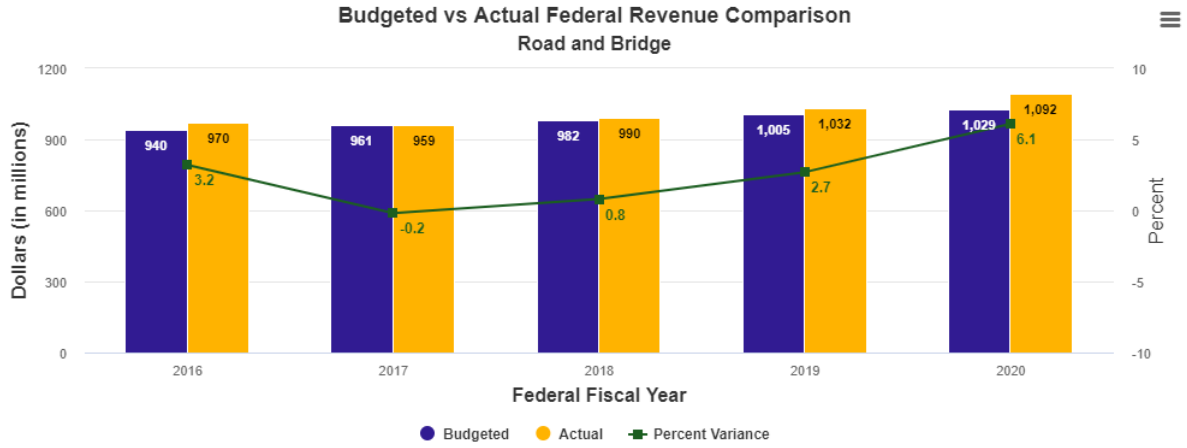
## State and federal revenue budgets – 6a



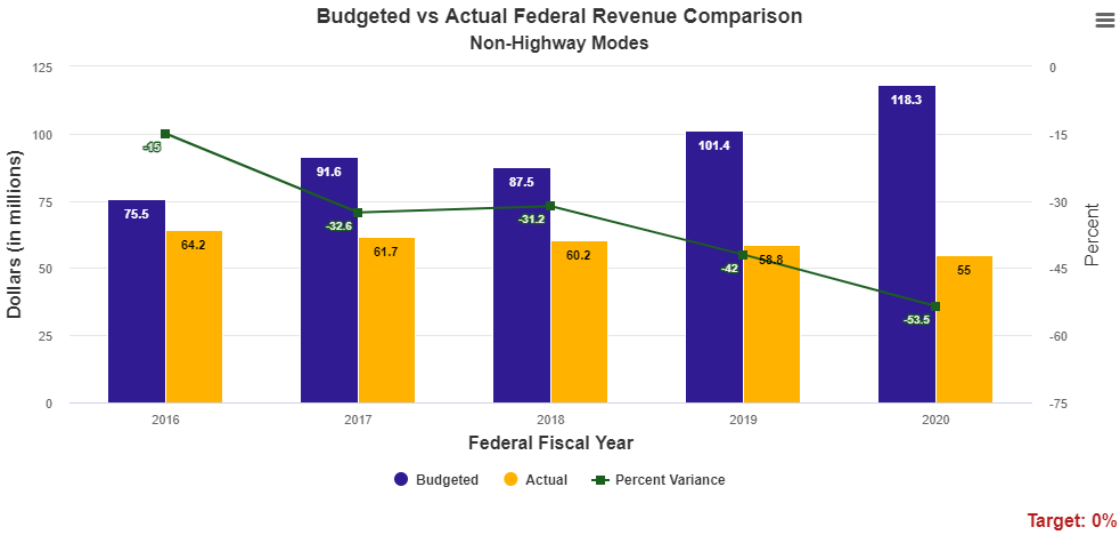

Target: 0%




**Target: 0%**




**Target: 0%**




## Write up:

State and federal revenue budgets help MoDOT staff do a better job of budgeting limited funds for its operations and capital program. The target is for actual revenue to match budgets with no variance.

The actual state revenue for roads and bridges from motor fuel taxes, motor vehicle sales taxes, motor vehicle driver's licensing fees and miscellaneous fees was equal to the 0.0% target variance through the fourth quarter of fiscal year 2021. The negative variance of 9.1% for non-highway modes is attributed to lower-than-projected revenue from jet fuel sales tax.

The actual federal revenue for roads and bridges was 6.1% more than budgeted for federal FY 2020. The negative variance of 53.5% for non-highway modes is attributable to the timing of project expenditures.

The largest source of transportation revenue is from the federal government. Funding is received through various federal transportation agencies including Federal Highway, Transit, Aviation and Railroad Administrations. The current transportation funding act, Fixing America's Surface Transportation Act, was passed by Congress in December 2015 and authorized federal programs for the 5-year period from 2016 through 2020. The FAST Act expired Sept. 30, 2020 but was extended for another year by continuing resolution. Federal revenue for other modes is reliant on the timing of project expenditures.

The primary source of federal and state revenue is motor fuel tax. The motor fuel tax rates have not changed in more than 20 years, while the cost for materials and labor have doubled or even tripled in the same time frame.

## Purpose:

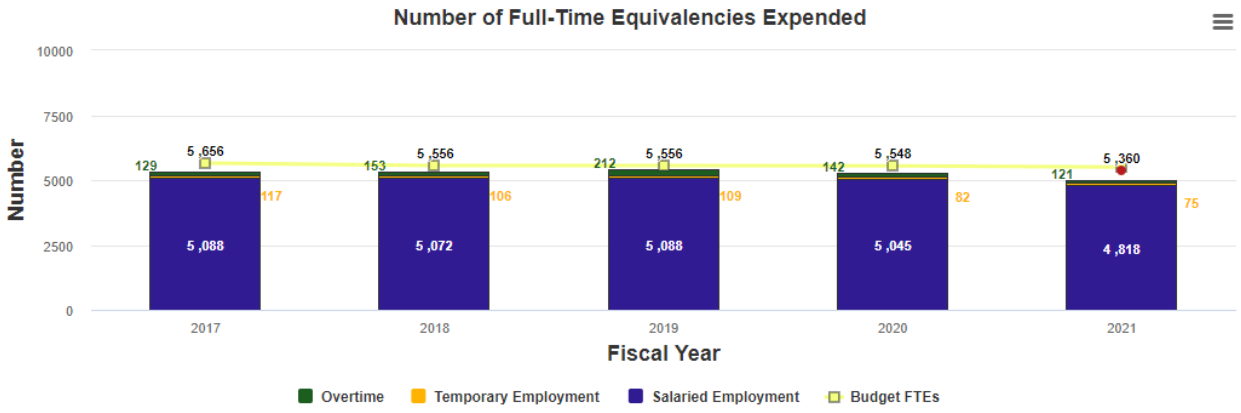
This measure shows the precision of state and federal revenue budgets.

### Measurement and Data Collection:

State revenue for roads and bridges include motor fuel taxes, motor vehicle and driver licensing fees, motor vehicle sales taxes paid by highway users, interest earnings and miscellaneous revenues. State revenue for other modes includes motor vehicle sales taxes, aviation fuel taxes, jet fuel sales taxes, motor vehicle licensing fees, railroad assessments and appropriations from General Revenue and interest earnings. The measure provides the cumulative, year-to-date percent variance of actual state revenue versus budgeted state revenue by state fiscal year. Federal revenue for roads and bridges is the amount of federal funds available to commit in a federal fiscal year. Federal funds are distributed to states in accordance with federal law. Federal revenue for other modes is the amount reimbursed to MoDOT for expenses incurred in a state fiscal year.

The targets set for this measure are set by internal policy and will not change unless policy changes, regardless of performance.

## Number of full-time equivalencies expended – 6b




2021 Target: 5,360

### Write up:

Having the right number of employees to provide outstanding customer service and respond to the state's transportation needs, especially during emergency situations, is an important part of MoDOT's effort to use resources wisely.

At the end of fiscal year 2021, the total number of full-time equivalencies expended decreased by 255, compared to the end of FY 2020. Decreases have been seen in all areas with the largest decrease in salaried employment. This number is significantly lower because of the Shared Work Program. Decreases in overtime, while not as significant, can be linked to the department's efforts to reduce overtime during FY 2021 due to budgetary concerns related to the COVID-19 Pandemic.

A target of 5,360 FTEs was set for FY 2021 to reflect the average number of hours required to provide outstanding customer service, perform work safely and to fully respond to the state's transportation needs.

### Purpose:

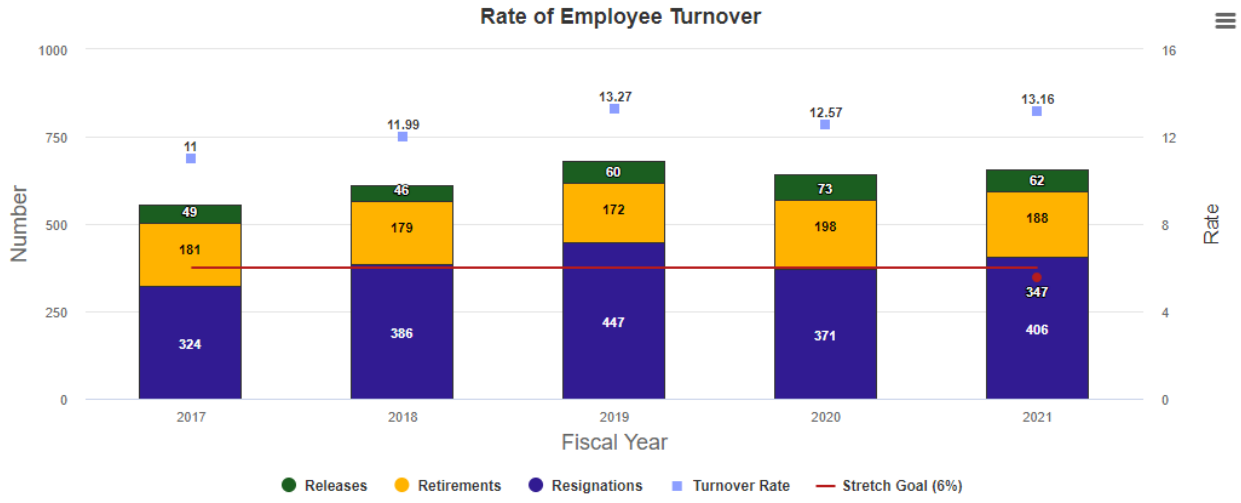
This measure tracks the change in the number of full-time equivalencies (a calculation of hours) expended within the department and compares it to the number of FTEs in the legislative budget.

### Measurement and Data Collection:

This measure converts the regular hours worked or on paid leave of temporary and salaried employees, as well as overtime worked (minus any hours that are flexed during the workweek), to full-time equivalencies. In order to calculate FTEs, the total number of hours worked or on paid leave is divided by 2,080. For comparison purposes, data for salaried employment is annualized, whereas temporary employment and overtime data represent actual year-to-date calculations. This measure does not represent salaried headcount.

The target for this measure was set by management directive.

## Rate of employee turnover – 6c




**Target: Below 347 Resignations**

### Write up:

When employees leave MoDOT, the department loses a large investment in recruiting, hiring and training its workforce. While some turnover is natural, MoDOT's goal is to retain an engaged workforce that has the knowledge and specialized skills to deliver the department's commitments and provide outstanding customer service.

The overall turnover rate has increased from 12.57% in fiscal year 2020 to 13.16% for FY 2021. There were decreases in retirements and releases, with an increase in resignations. While the FY 2021 target was 347 or fewer resignations specifically, there were 406 actual resignations for the fiscal year.

As part of MoDOT's strategic initiatives and pay strategy, the department will continue to look for opportunities to reduce the rate of employee turnover. In addition to the video prepared to educate potential candidates about maintenance workers, MoDOT has also created a video for the engineering field. This is in addition to participating in a variety of different recruiting events in order to attract quality candidates. Retention efforts include the implementation of the ENGAGE 2.0 system, which includes providing employee expectations, evaluations and upward feedback for supervisors. This, combined with the onboarding survey data, will provide valuable information on how MoDOT can develop strategies on improving the organization.

**Purpose:**

This measure tracks the percent of employees who leave MoDOT. Turnover rates as shown in this measure include voluntary and involuntary separations.

**Measurement and Data Collection:**

The data is collected statewide from the SAM II Advantage HR system and includes only salaried employees. Voluntary turnover includes resignations and retirements. Involuntary turnover reflects dismissals. Data is reported quarterly, with current year-to-date data included. Stretch goal is derived from Price Waterhouse Cooper's Saratoga Institute benchmark data.

The target for this measure was set by management directive.

## Level of job satisfaction (UNDER CONSTRUCTION) – 6d

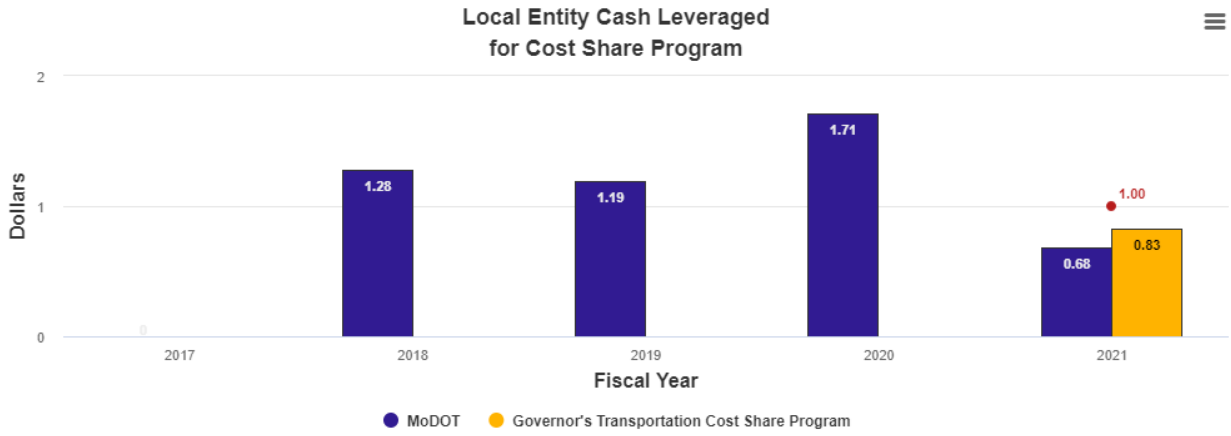
## (UNDER CONSTRUCTION) – 6e

**Write up:**

**Purpose:**

**Measurement and Data Collection:**

## Local entity cash leveraged for cost share program – 6f




2021 Target: $1.00

### Write up:

The Cost Share Program builds partnerships with local entities to pool efforts and resources to deliver state highway and bridge projects. When local entities are willing to partner with MoDOT, MoDOT matches their investment up to 50% of the project cost. MoDOT works in cooperation with the Missouri Department of Economic Development and local entities to determine when targeted investments can be made to generate economic development and may provide up to 100% of the project cost.

On Jan. 8, 2014, the Missouri Highways and Transportation Commission suspended the Cost Share Program due to declining transportation funding. On Jan. 4, 2017, the MHTC reactivated the Cost Share Program for fiscal year 2018.

For FY 2021, Cost Share Program funds of $37.8 million have been committed for 17 projects with local partners committing approximately $25.6 million. For every $1 of Cost Share Program funds awarded, 68 cents of local cash were leveraged. This includes the Route 61 widening and signalization project in the City of Sikeston and the East Locust Creek Reservoir project in Sullivan County. These projects demonstrated economic development and allowed for funding greater than 50% of the project costs from the Cost Share Program, resulting in local cash leveraged below the target of $1.

In addition, the Missouri General Assembly appropriated $50 million of General Revenue funds to MoDOT to work cooperatively with the Missouri Department of Economic Development to create the Governor's Transportation Cost Share Program and build partnerships with local entities to deliver public road and bridge projects. Initially, the Governor's Transportation Cost Share Program funds of $50 million were approved for 20 projects. Due to budget constraints, the General Revenue funding was reduced to $25 million. On July 8, 2020, the MHTC approved nine of the original projects for the reduced funding. On Jan. 8, 2021, the MHTC approved funding the remaining originally awarded projects with $25 million of State Road Fund made available as a result of the Coronavirus Aid, Relief and

Economic Security Act (CARES Act). This included the reinstatement of two previously awarded Governor's Transportation Cost Share Program projects that were subsequently awarded MoDOT Cost Share Program funds when the Governor's Transportation Cost Share Program awards were reduced. The leveraging for both programs was adjusted to reflect the revised awards. For every $1 of Governor's Transportation Cost Share Program funds, 83 cents of local cash were leveraged.

### Purpose:

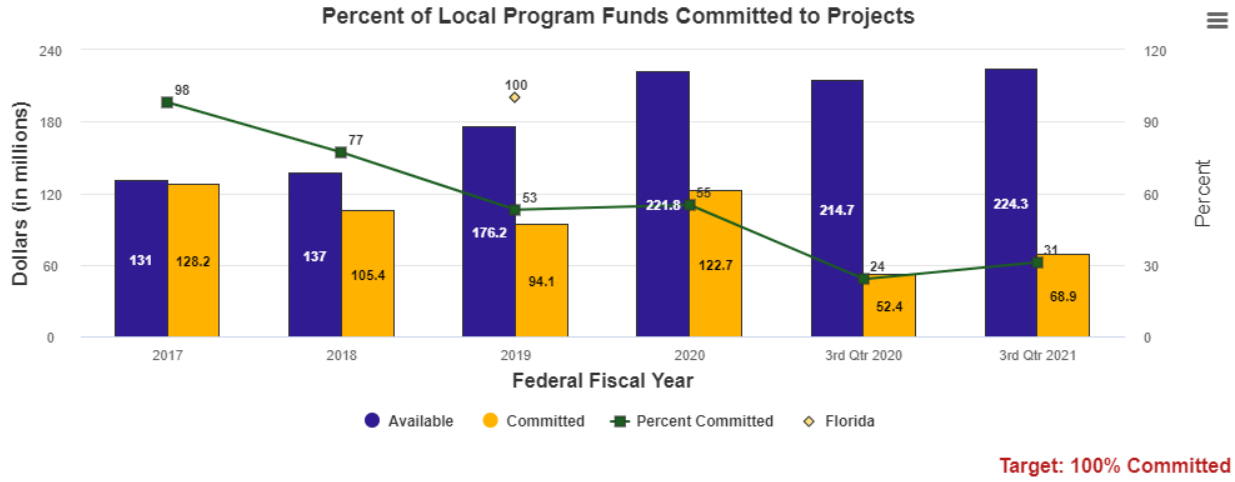
This measure tracks local entity cash leveraged from the Cost Share Program.

### Measurement and Data Collection:

Data for this measure is collected from a partnership database.

The target for this measure was set by management directive.

## Percent of local program funds committed to projects – 6g




Target: 100% Committed

### Write up:

Local agencies receive federal funds to invest in projects that improve local infrastructure and they share the cost of those projects by providing a 20% local match. To keep federal funds coming to Missouri, all federal funds received each year must be committed to projects by the end of the federal fiscal year. If the available funds are not fully committed, then the funds are at risk of being rescinded, which jeopardizes the ability to receive additional federal funds to deliver more projects.

For FFY 2021, local agencies have $224 million to invest in local transportation projects. For third quarter of FFY 2021, 31% ($69 million) of the available funds have been committed to local projects. This is a 7% increase in commitments compared to third quarter FFY 2020.

### Purpose:

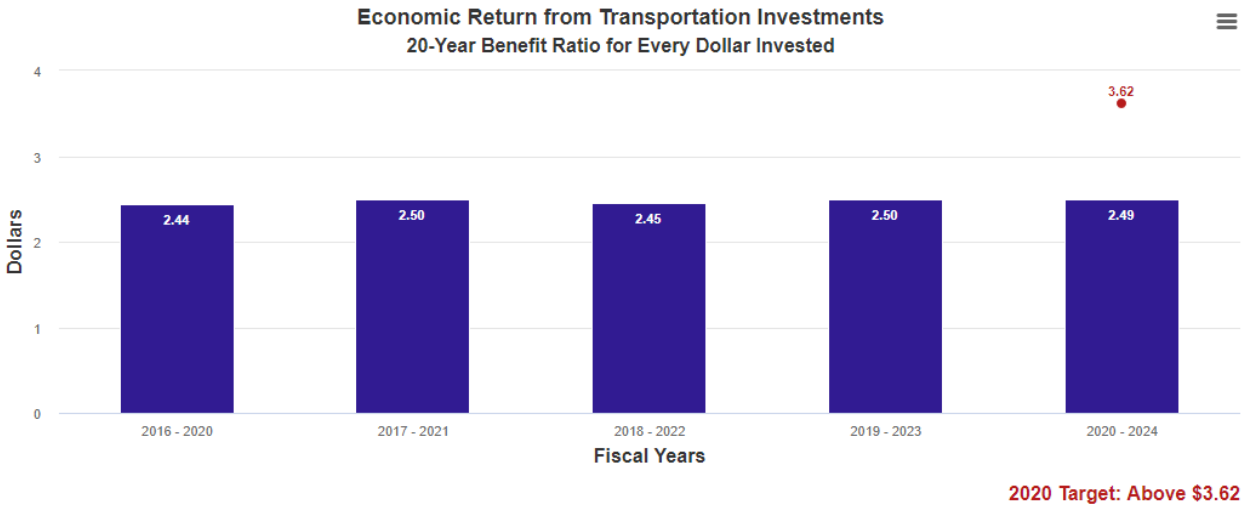
MoDOT is required to share federal funds with local agencies for transportation projects. This measure tracks the percent of available local program funds committed to projects.

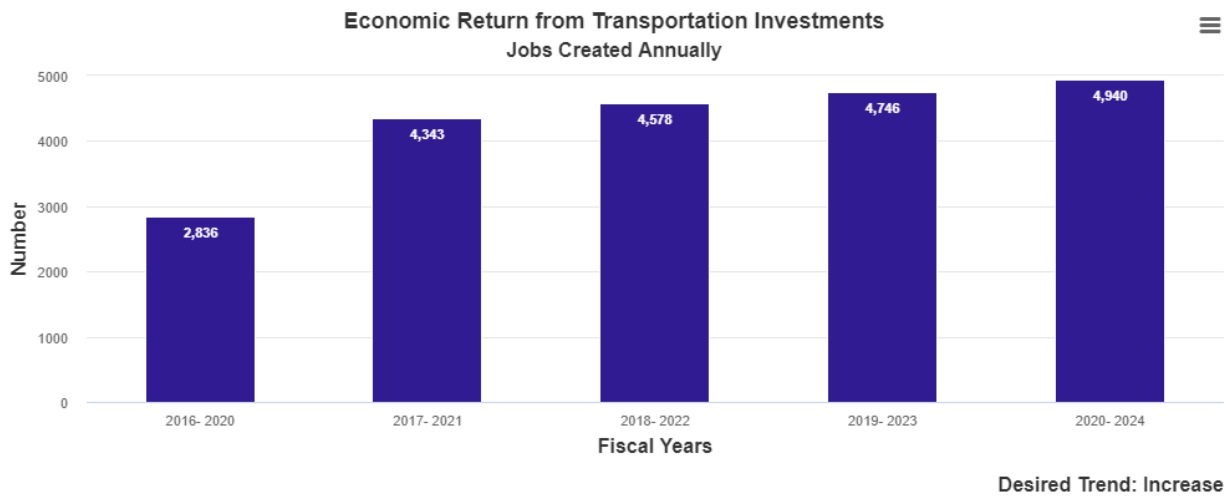
### Measurement and Data Collection:

The data is obtained from the Federal Highway Administration's Fiscal Management Information System and based on the federal fiscal year from Oct. 1 through Sept. 30. The committed amounts represent federal funds obligated for projects. The available amounts represent the federal program funds distributed to local sponsors plus any previous year balance. The desire is to invest all federal funds available to local public projects each year.

The target for this measure is set by internal policy and will not change unless policy changes, regardless of performance.

## Economic return from transportation investment – 7a






## Write up:

Investment in transportation improvements has long been held as a major economic engine that drives growth in job creation, personal income and new value added to Missouri's economy.

Based on MoDOT's 2020-2024 Statewide Transportation Improvement Program investment of $6.2 billion, the program is estimated to create 4,940 jobs – a 4% increase when compared to MoDOT's 2019-2023 STIP. The average number of jobs created increased in line with the increase in expenditures.

Transportation investments are expected to contribute $15 billion of economic output during the next 20 years, resulting in a $2.49 return on every $1 invested in transportation, which is fairly consistent with the last four years of STIP analyses. The slight decrease in economic return is due to the larger percentage of highway and bridge preservation expenditures compared to the previous year. Current funding levels are only sufficient to maintain the current transportation system in its current condition rather than new major projects that offer a larger economic return. Missourians have consistently said they want us to take care of the existing system first, a $55 billion value that carries a $125 billion replacement cost.

## Purpose:

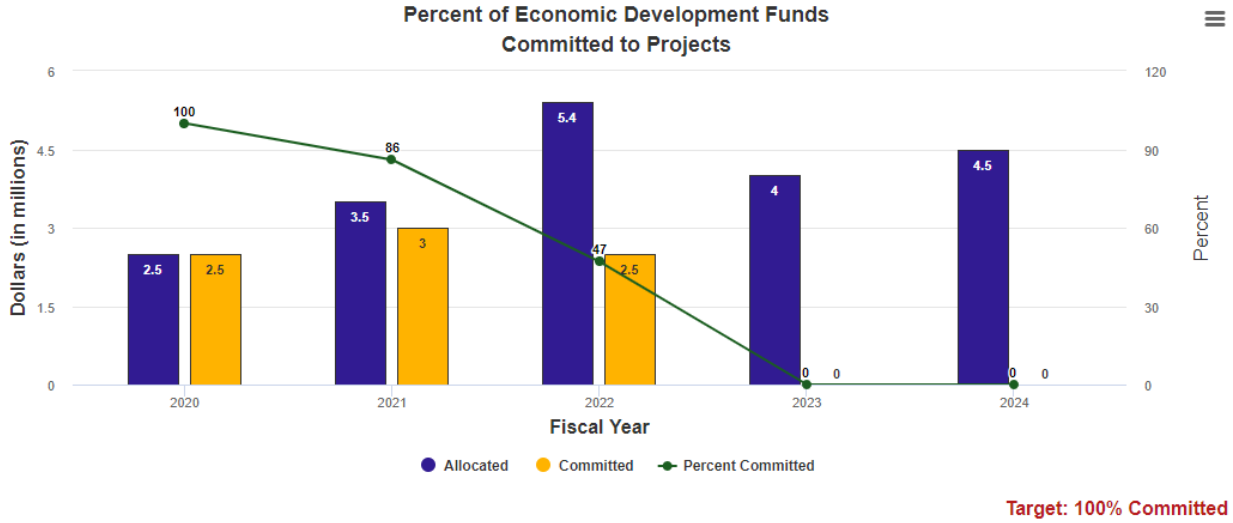
This measure tracks the economic impact resulting from the state's transportation investments.

## Measurement and Data Collection:

MoDOT works with the HDR, Inc. to perform economic impact analyses for the state's transportation investments. The analyses are performed using a model called the Impact Analysis for Planning. The IMPLAN model results demonstrate a strong link between transportation investment and economic development.

This target was set by analyzing historical performance. MoDOT would like to reach the performance level of $3.62 which is consistent with what was achieved in the 2014-2018 Statewide Transportation Improvement Program cycle.

## Percent of economic development funds committed to projects – 7b




Target: 100% Committed

### Write up:

The Cost Share Program builds partnerships with local entities to pool efforts and resources to deliver state highway and bridge projects. Funds are set aside for projects that demonstrate economic development. MoDOT works in cooperation with the Department of Economic Development and local entities to determine when targeted investments can be made on projects that produce the most economic impact for Missouri. Projects selected for the set-aside funds may be funded up to 100% of the project cost. The set-aside funds increase from 10% to 20% starting in 2024. Tracking this data ensures economic development funds are being utilized.

At the end of the fourth quarter of fiscal year 2021, $11,819,788 of economic development funds are available for eligible projects. The FY 2021 and FY 2022 allocations include $2.3 million of project savings from prior years. Currently, only 50% of the FY 2024 allocation is available. During the fourth quarter of FY 2021, no funds were committed to projects. MoDOT continues to work with DED to identify projects that demonstrate economic development.

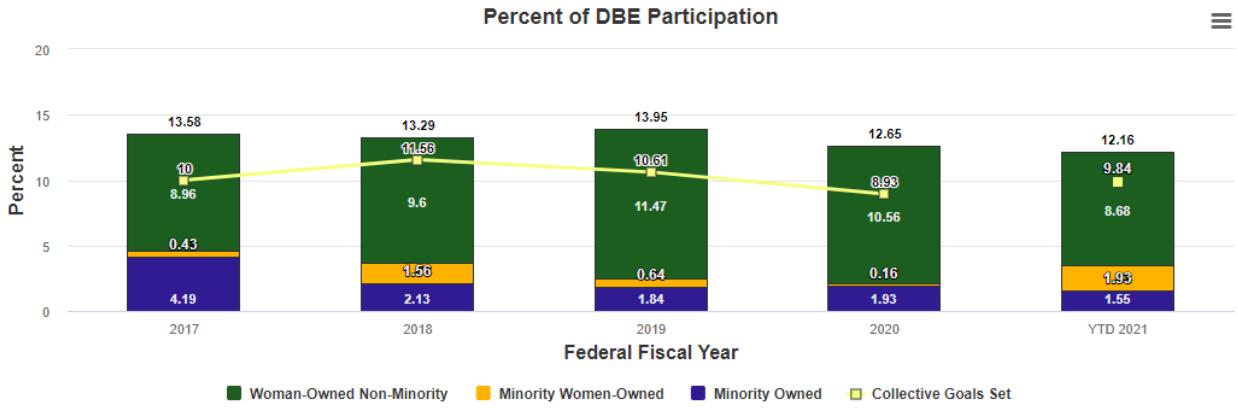
### Purpose:

This measure tracks the percent of economic development funds committed to projects.

### Measurement and Data Collection:

Data for this measure is collected from a partnership database.

# Percent of disadvantaged business enterprise participation on construction and engineering projects – 7c




Target: Above 12.45%

## Write up:

MoDOT supports diversity among its contractors, subcontractors and suppliers. Construction projects that receive federal aid or federal financial participation are required to take reasonable steps to ensure disadvantaged business enterprises have an opportunity to compete and participate in project contracts and subcontracts.

The overall Disadvantaged Business Enterprise target goal is 12.45%. The DBE participation for federal fiscal year 2021 is 12.16%. This is a 0.49% decrease from federal fiscal year 2020. Of the 12.16% utilization, 8.68% was participation from women-owned, non-minority DBE firms, 1.93% was participation from minority women-owned DBE firms and 1.55% was participation from minority-owned DBE firms. The collective goals set for projects closed during this period amounted to 9.84%. The DBE goals set for projects awarded during this period had committed DBE participation of 11%. To narrow the gap between the target and the performance, MoDOT is conducting outreach meetings to encourage new firms to apply for DBE certification and using DBE supportive services funding to expand the capacity of certified DBE firms.

## Purpose:

This measure tracks the percent of DBE used on construction and engineering projects.

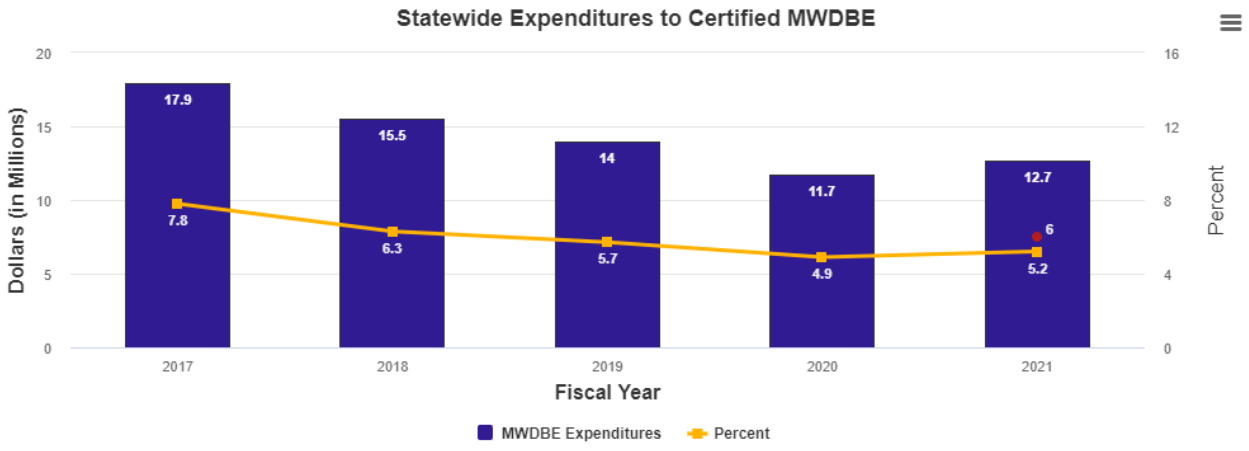
## Measurement and Data Collection:

Data is collected through AASHTOWare Projects for each construction and consultant project. The overall DBE goal is a yearly target established by MoDOT and the Federal Highway Administration regarding the expected total DBE participation on all federally-funded construction and consultant projects. Individual DBE project goals are determined by subcontract opportunity, project location and available DBE firms that can perform the scope of work. DBE utilization is tracked for each project identifying the prime contractor, contract

amount, the established goal and how the prime contractor fulfilled the goal. This measure is based on the federal fiscal year. Collection of all data in this system began in April 2014.

The target for this measure is set by FHWA policy and is updated every three years.

## Expenditures made to certified minority, women and disadvantaged business enterprises – 7d




Target: 6.0%

### Write up:

Ensuring MoDOT spending is reflected in all Missouri communities helps advance economic development for all business enterprises. By reviewing historical data, opportunities for improvement are identified. These improvement efforts include training staff who have procurement authority and reaching out to minority, women and disadvantaged business enterprises to encourage them to become certified as well as focus on inclusion efforts.

Results from fiscal year 2021 show an increase of $1,000,000 in MWDBE expenditures compared to FY 2020. The percentage of MWDBE expenditures to total expenditures also increased 0.3% from 4.9% to 5.2%.

This measure will continue to track the department's efforts to ensure the vendor pool is representative of the business community, including MWDBE firms.

### Purpose:

This measure tracks the department's non-program spending with certified minority, women and disadvantaged business enterprises.

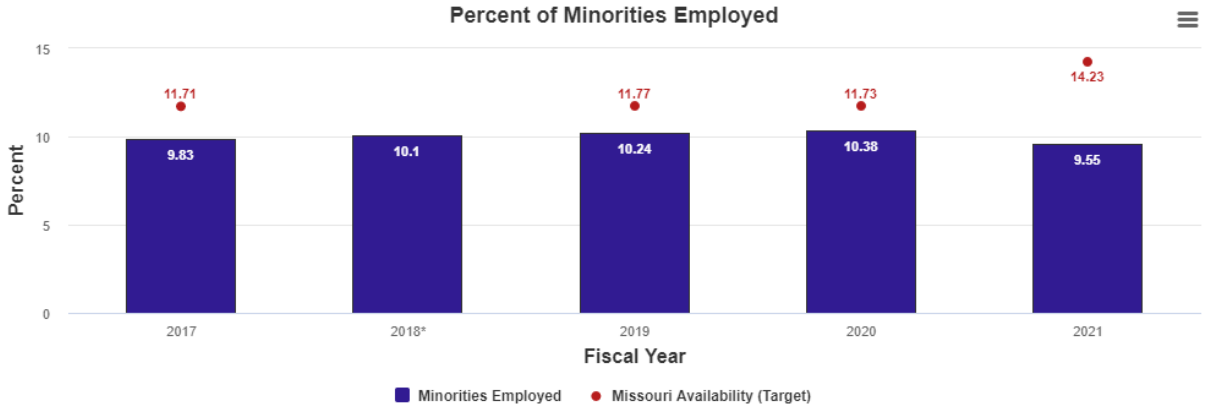
### Measurement and Data Collection:

Data is obtained from the statewide financial accounting system expenditure reports and United Missouri Bank purchasing card reports. Certified vendors are maintained in a

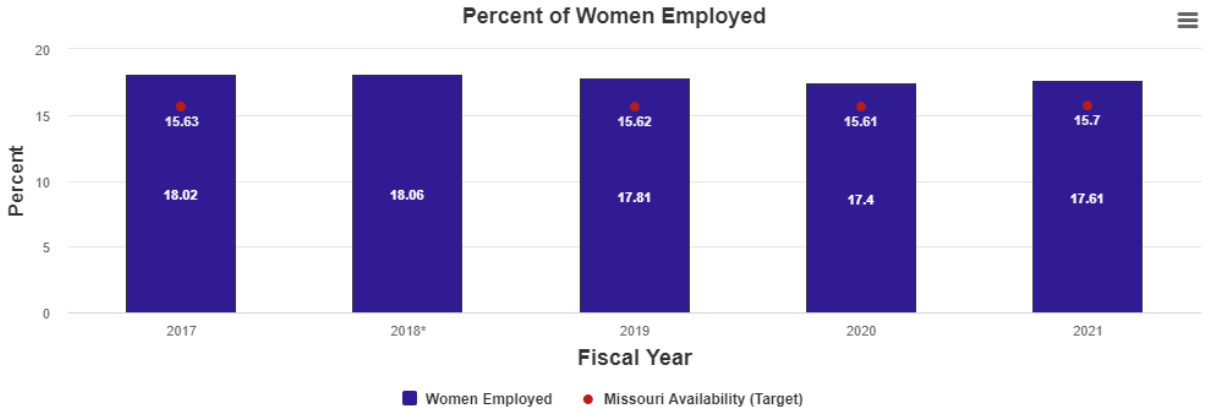
statewide procurement vendor database. Vendors may be certified through the Office of Administration as well as the Missouri Regional Certification Committee. Included in these expenditures are items such as materials, equipment, tools and supplies. Program spending, including construction, design consultants, local agencies, highway safety and multimodal programs and exempted activities such as utilities, postage, organizational memberships, conferences and travel is excluded from total dollars spent.

The target for this measure is an average of the availability percentage of minority-owned and women-owned businesses and MoDOT's most recent five-year average utilization. This target will be updated annually in October.

## Percent of minorities and women employed – 7e




2021 Target: Increase




2021 Target: No Change

***Data for Missouri Availability is not available for fiscal year 2018**

## Write up:

By placing the right people in the right positions, MoDOT can better serve its customers and help fulfill its responsibilities to taxpayers.

The number of minority employees decreased by 10.1%, from 524 employees in the fourth quarter of fiscal year 2020 to 471 in the fourth quarter of FY 2021.

The number of women employees decreased 1.2%, from 878 employees in the fourth quarter of FY 2020 to 868 in the fourth quarter of FY 2021.

Total full-time employment between the fourth quarter of FY 2020 and the fourth quarter of FY 2021 decreased from 5,046 to 4,930 employees.

New retention efforts have been put into place including new employee resource groups and virtual diversity webinars. These good-faith efforts aid in increasing an applicant pool of qualified minorities and women from internal candidates which may ultimately help narrow the gap between actual employment and target employment of minorities and women.

The target for this measure is the Missouri availability, determined by the 2010 census, for both demographics tracked. While MoDOT has surpassed the target for women employed, we are trending down incrementally for minorities as of the fourth quarter for FY 2021.

## Purpose:

This measure tracks minority and women employment in MoDOT's workforce and compares it with availability data from the Missouri 2010 Census report.

## Measurement and Data Collection:

The SAM II database is used to collect data. The Missouri 2010 Census data is used as the benchmark for this measurement. The availability number is derived from two different sets of data; the 2010 census and the current pool of MoDOT employees who are trainable, transferable or promotable. The two statistics are factored together and weighted based on the hiring practices from the previous year. The weighted number allows for a more accurate reflection of the hiring process. This number ultimately conveys the number of minorities and women who currently possess the skills necessary to work for the department.

The target for this measure is based on Missouri's availability and is set each October.