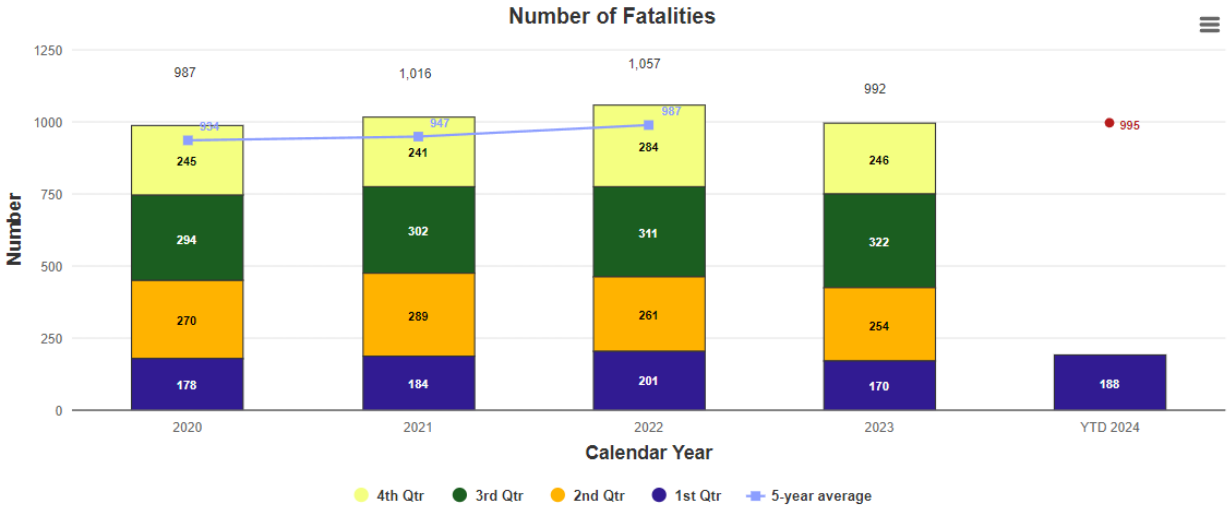
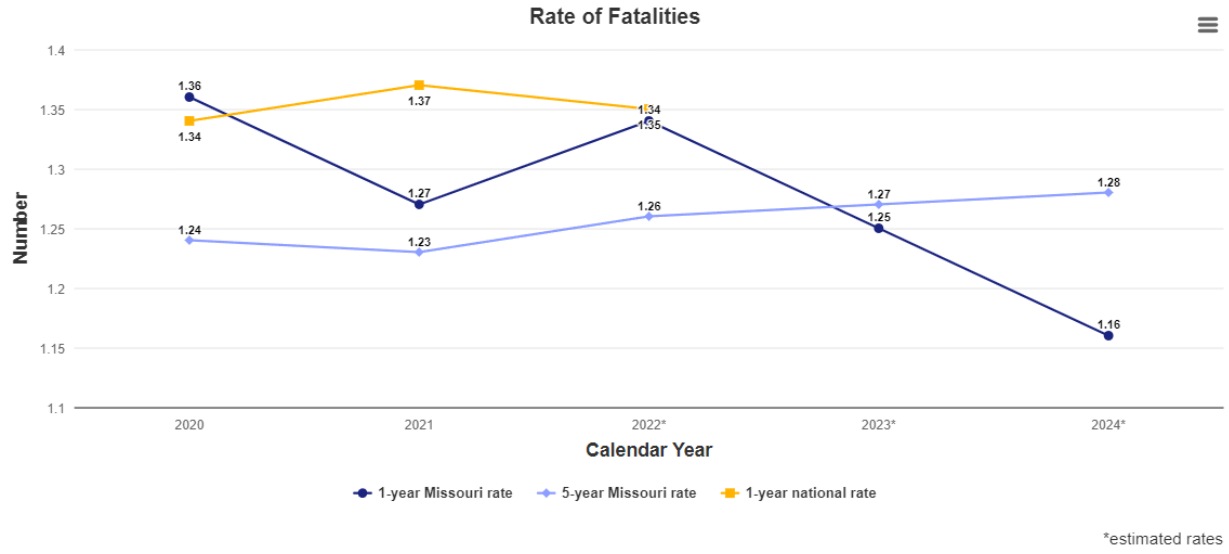
Number and rate of fatalities – 1a

Update Frequency: Quarterly
Color Grade: red



Target: 995

***Preliminary numbers are subject to change**



*estimated rates

Write up:

Safety is MoDOT's number one priority. Whether resident, visitor to the state or highway worker, the ultimate goal is ensuring 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 188 fatalities in the first quarter of 2024, an increase of 18 fatalities for the same quarter in 2023. The preliminary total for 2023 fatalities after four quarters is 992,

which is a decrease from 2022 totals by 65 fatalities. Preliminary data indicates Missouri has seen a 6.14% decrease in traffic fatalities from 2022. The target for 2024 is 995 fatalities or fewer.

Focusing on Show-Me Zero, there are currently 55 counties with zero fatalities in the first three months of 2024. There were 13 days with zero fatalities, including two instances when two sequential days occurred without a fatal crash.

Purpose:

This measure tracks the number of fatalities quarterly, annually and 5-year average trends resulting from traffic crashes on all Missouri roadways.

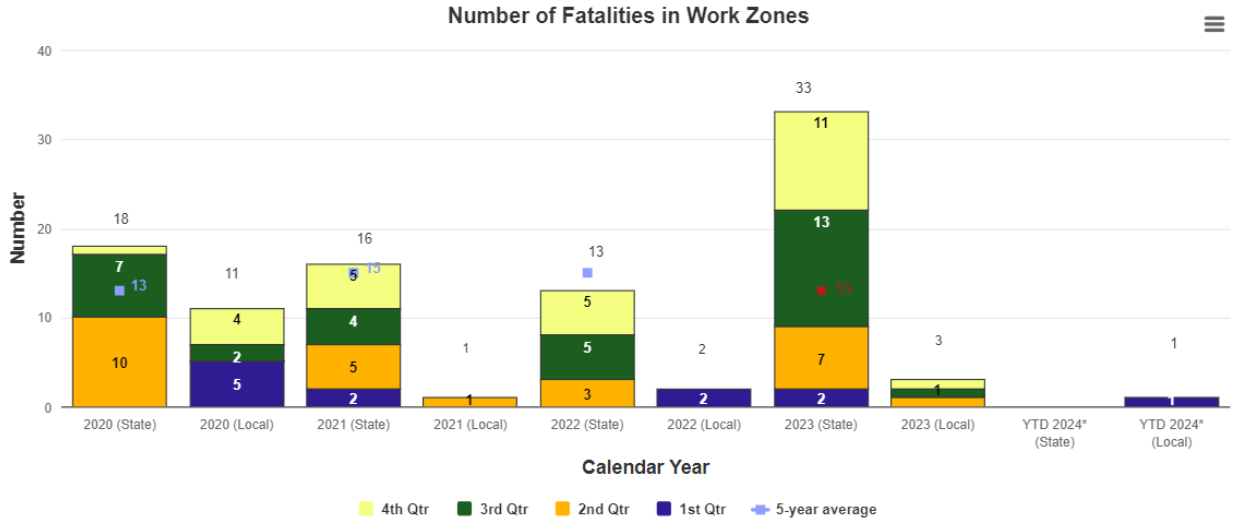
Measurement and Data Collection:

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 5-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 5-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

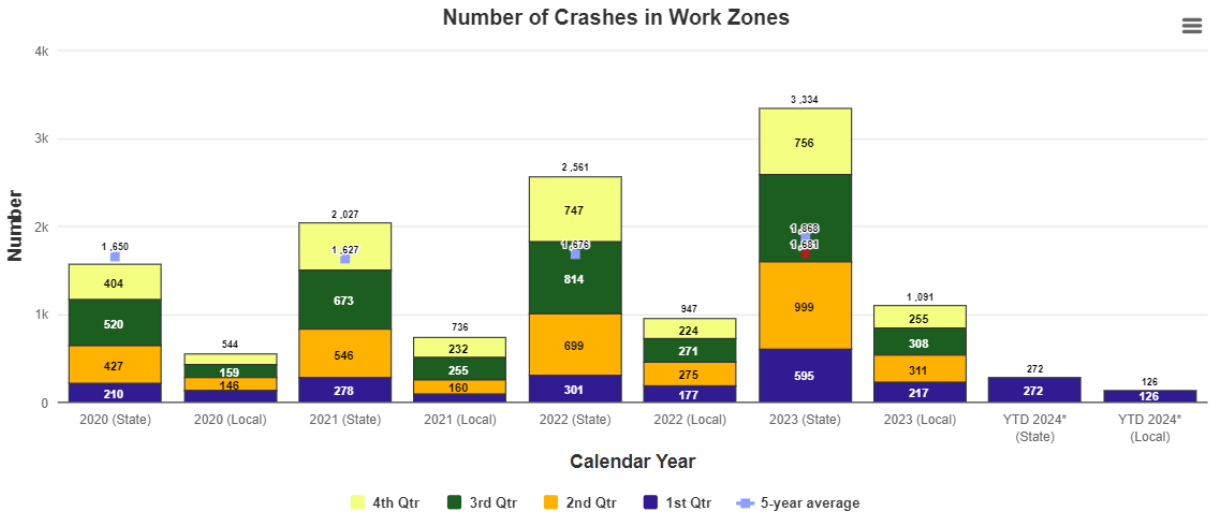
Update Frequency: Quarterly
Color Grade: yellow



Target: Below 13

Internal Review - 2024	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
State	0			
Local	0			

Internal Review is MoDOT's* examination of *each crash to determine if that crash qualifies as a true work zone fatality. These numbers represent fatalities where a work zone was determined to not be a potential factor.



Target: Below 1,681

Write up:

Safe and efficient travel for the public through work zones is crucial and why crews 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. MoDOT's goal is zero fatalities in work zones, and through continued efforts from MoDOT, the contracting industry and the driving public can that goal be accomplished.

For the first quarter of 2024, there were zero on-system work zone fatality crashes. In the same reporting period, there was one off-system work zone crash that resulted in one fatality.

To reach the goal of zero fatalities in work zones, an internal review is conducted on each fatal crash to determine whether the crash qualifies as a true work zone fatality. These numbers are included in the overall totals for each road classification (state and local).

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

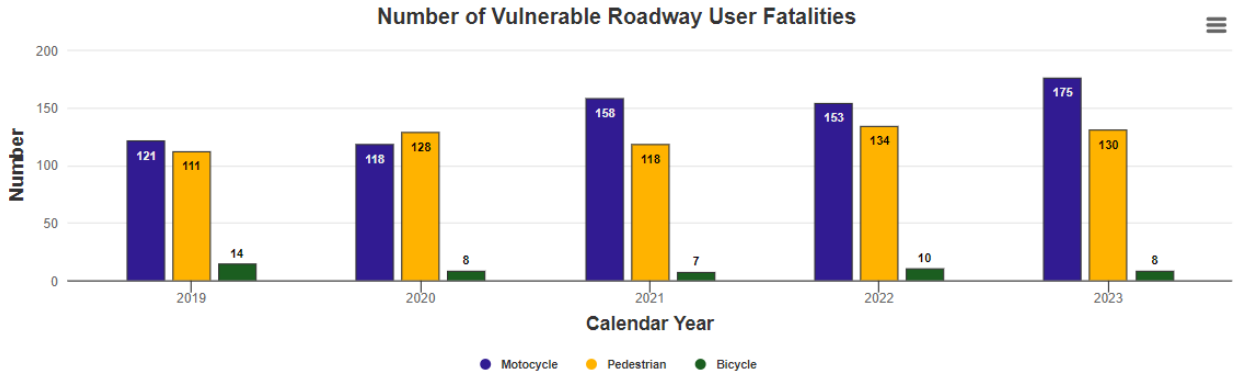
Purpose:
This measure tracks the number of traffic-related and non-traffic-related fatalities, injuries and overall crashes occurring in work zones on state-owned and off-system roadways.

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 5-year average.

Number of vulnerable roadway user fatalities – 1c

Update Frequency: April
Color Grade: red



Desired Trend: Decrease

Write up:
In 2023, the number of fatalities for vulnerable roadway users increased. Motorcycle fatalities increased by 14%, while pedestrian and bicycle fatalities decreased by 3% and 20% respectively.

All age groups were equally represented, ranging from age 17 to 79. All districts were represented, with rural districts accounting for about 60% of the fatalities. Of the 175 motorcycle fatalities, 86 were not wearing a helmet or a non-DOT helmet.

Pedestrian fatalities occurred in every month and on every type of roadway. Among the 30 fatalities on interstate highways, six occurred in October, while the remaining were spread throughout the year. Seventy percent of the fatalities on interstates were in the St. Louis and Kansas City districts, with the remaining in Southeast, Central and Southwest districts. Pedestrians in their 30s, 40s and 50s represented the highest numbers of fatalities. Of the 130 pedestrian fatalities, 46 were in St. Louis.

Of the 10 cyclists who died on Missouri roadways, four were in the Kansas City District and the remaining were in the Southwest, St. Louis, Central and Southeast districts. Six of the eight cyclists were not wearing helmets and six were male. Three fatalities occurred in February, two in April, and one fatality each in July, October and December.

It appears the primary target is on pedestrian safety in St. Louis and Kansas City by encouraging them to walk safely. There is also an emphasis on encouraging drivers to remain in their vehicles after crashes or breakdowns on the interstate. An additional focus area is on motorcyclists and urging them to wear DOT-compliant helmets when riding. The final target would be to urge cyclists in the Kansas City and Central districts to wear helmets and follow road-user rules when biking.

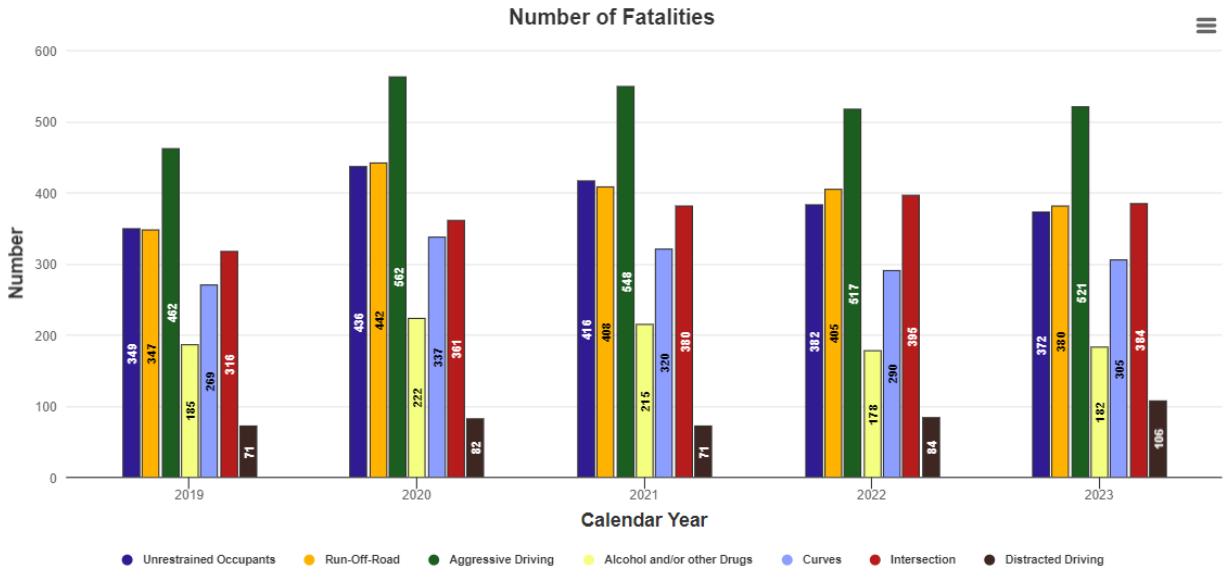
Purpose:
The vulnerable roadway user measure tracks annual trends in fatalities of motorcyclists, pedestrians and bicyclists. These roadway users are at risk for death when involved in a motor-vehicle-related crash.

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

Update Frequency: April
Color Grade: yellow



Write up:

By identifying behaviors and characteristics most associated with severe crashes, MoDOT can make more informed decisions to improve safety. In 2023, there were 992 traffic fatalities in Missouri, a 6% decrease from 2022 and the first decrease since 2019. The most notable decreases occurred in run-off-road fatalities, intersection fatalities and unrestrained occupant fatalities. The run-off-road and unrestrained occupant fatalities represent the second lowest results in the past eight years, second only to 2019.

The most notable increases occurred in curve fatalities and distracted driving fatalities. The reported 106 distracted driving fatalities represent an all-time high in Missouri. However, the actual number is likely significantly higher as distracted driving is difficult to capture in a crash report. The Missouri legislature passed a new hands-free law for all drivers which went into effect in August 2023. However, full implementation of the law will not take effect until Jan. 1, 2025, when drivers can receive a citation for violating the law. Independent research from Cambridge Mobile Telematics indicates that distracted driving in Missouri has decreased by 7.8% since the law went into effect. Aggressive driving continues to be the leading cause of fatal crashes and remains higher than pre-pandemic numbers, even slightly increasing in 2023.

Missouri's strategic highway safety plan, Show-Me Zero, has four emphasis areas: occupant protection, distracted driving, speed and aggressive driving and impaired driving. MoDOT aims to improve safety with every project by utilizing a new Safety Assessment For Every Roadwary (SAFER) approach. For the draft 2025-2029 STIP, the department has programmed 673 projects (50%) with safety improvements totaling approximately $648 million. In addition, MoDOT administers approximately $25 million of federal funds designated for educational, enforcement and outreach programs to improve highway safety.

Purpose:

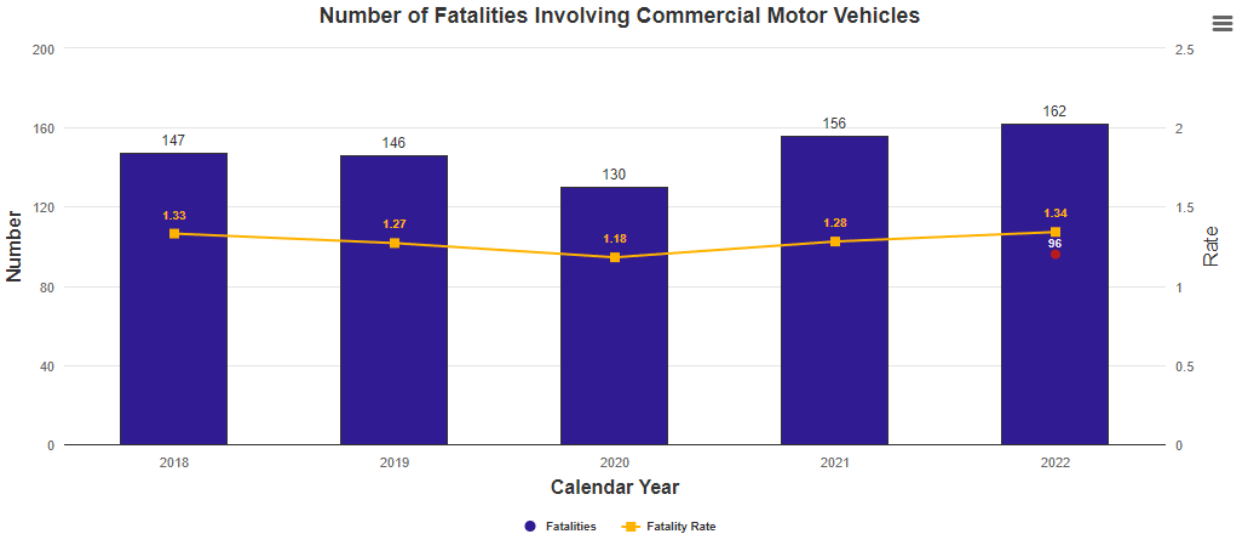
The measure tracks annual trends in motor-vehicle-related fatalities resulting from the most common contributing factors or highway features. This data represents the four focus areas presented in Missouri’s strategic highway safety plan, Show-Me Zero.

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 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

Update Frequency: July
Color Grade: red



Target: Below 96

Write up:

Commercial Motor Vehicles (CMVs) 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 experienced an increase in the number and rate of fatalities involving CMVs in 2021 compared to 2020. Between 2018 and 2022, fatalities involving a CMV have increased from 1.33 to 1.34 per 100 million CMV vehicle miles traveled. In 2022, Missouri experienced an increase of six fatalities involving a CMV as compared to 2021. This resulted in a 2022 fatality rate of 1.34 compared to 1.28 for 2021. The target for 2022 was 96 or fewer 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.

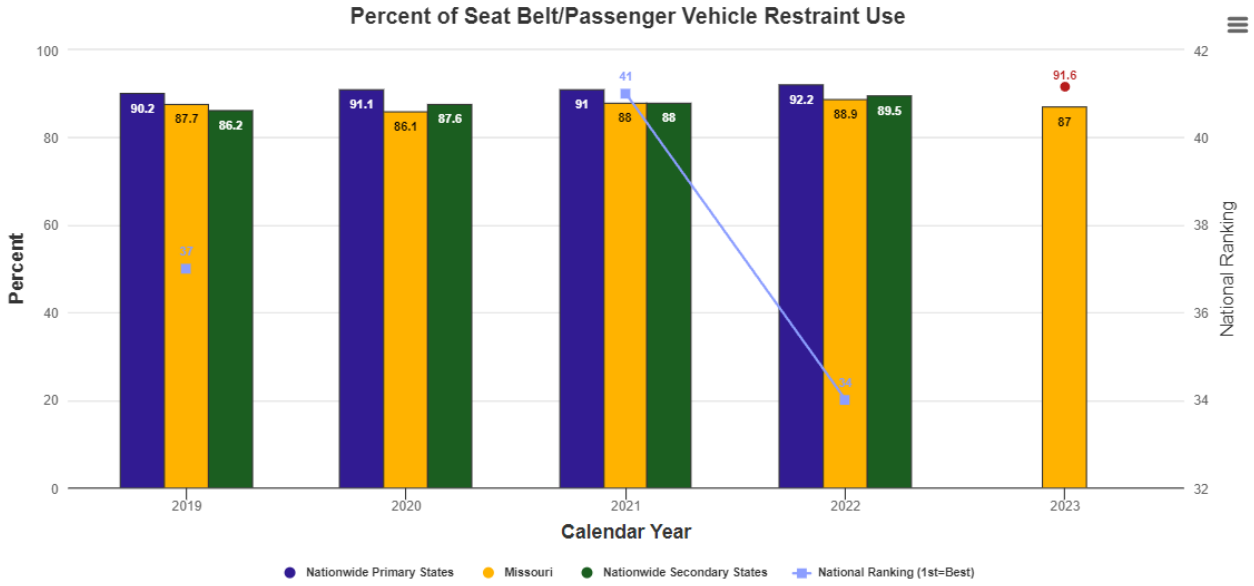
Measurement and Data Collection:

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 rate on the chart displays the annual

fatality rate per 100 million miles traveled for commercial motor vehicles for these same crashes. The targets are based on a 13% improvement rate from the Missouri Commercial Vehicle Safety Plan for 2022.

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

Update Frequency: October
Color Grade: yellow



Write up:

Seat belts are one of the simplest things vehicle occupants can do to protect themselves in the event of a crash, but it is a challenge to ensure everyone is buckled up every trip, every time, day or night. Public education and legislation are two ways to keep the issue in front of motorists. MoDOT supports each approach, attacking the problem with focused marketing campaigns and reinforcing it with hard facts to back legislative efforts and media campaigns. Several municipalities across the state have enacted primary ordinances within city or county limits. Missouri currently has one county and 68 municipalities that have adopted primary seat belt ordinances, representing over 28.1% of the state's population.

Based on 111,101 driver and front seat passenger observations, seat belt use in Missouri for 2023 was 87.0% - a 1.87% decrease from 2022. Douglas County was the lowest at 53.2%, and Montgomery County was the highest at 97.8% based on weighted data. Nationwide numbers always run about one year behind in state numbers - the national average for seat belt use in 2022 was 91.6% (2023 data is not yet available). Overall, in 2022, Missouri ranked 34th among the 56 surveyed states and territories (ranging from 67.0% to 96.5%) and 5th among secondary law states (ranging from 75.6% to 93.1%).

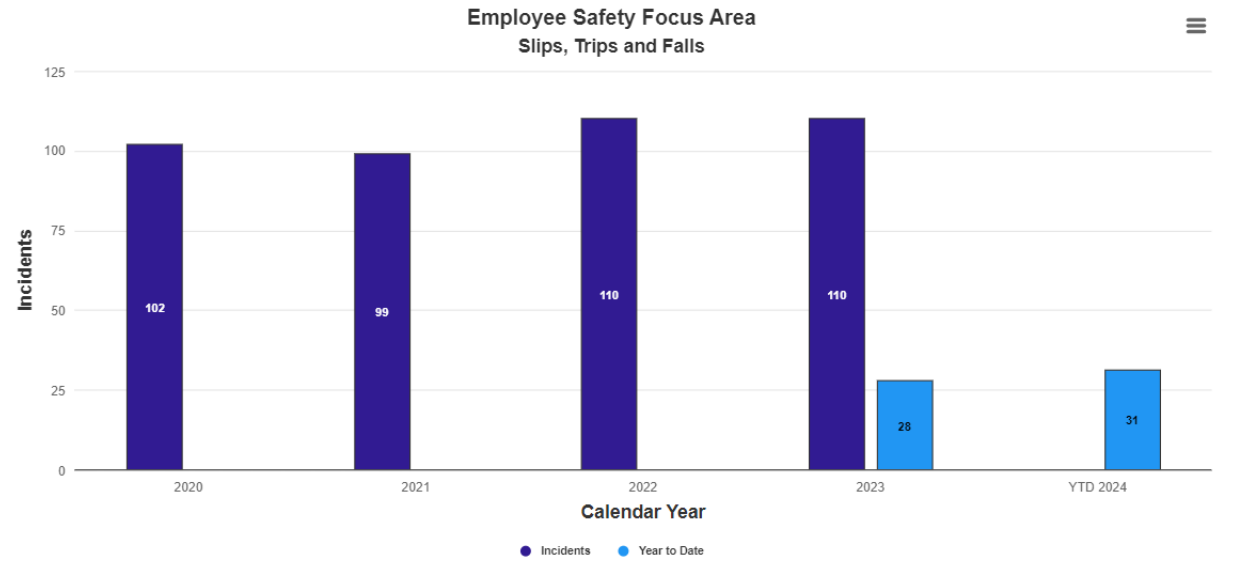
MoDOT continues to work with external partners to improve Missouri's safety culture through statewide strategic initiatives such as Buckle Up Phone Down and by coordinating NHTSA - funded occupant protection enforcement campaigns and providing educational programs such as TRACTION, B.R.A.K.E.S. and ThinkFirst.

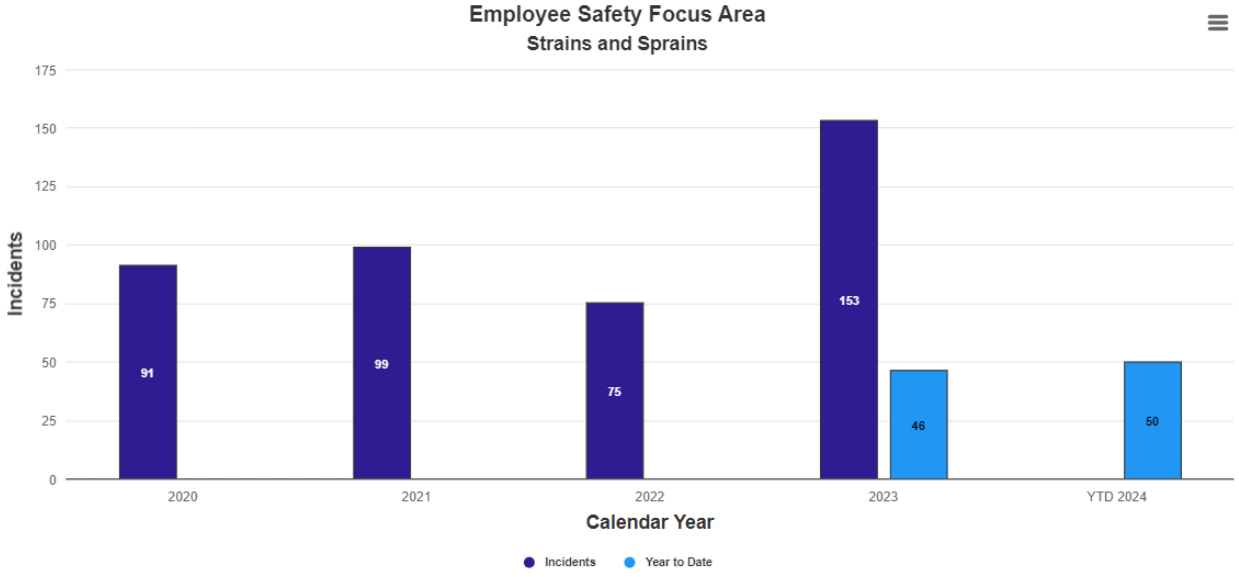
Purpose:
This measure tracks annual trends in seat belt use in passenger vehicles. This data drives the development and focus of the Missouri Triennial Highway Safety Plan and supports Missouri's Show Me Zero Plan, and provides data for highway safety grant project selection.

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 2023 survey was the first survey using updated survey sites and, while 1.9% lower than 2022, does not necessarily mean that fewer people are buckling up; rather, all new sites have been surveyed and data pertaining to those sites for 2023 - 2027 can be compared similar to how 2018 - 2022 data was comparable. The target for this measure is updated annually in October for the next calendar year and is established as the current national average.

Employee safety focus areas – 1g

Update Frequency: Quarterly
Color Grade: red





Write up:

Safety is MoDOT's number one priority. The focus 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 16 backing incidents in the first quarter of calendar year 2024. This was a 16% decrease from backing incident rates from the same quarter in calendar year 2023. Backing incidents can cause property damage, injuries and death. Improvement strategies include parking to avoid backing, good planning, always using a spotter, conducting a thorough circle check of the area and the implantation of Geotab devices in all snow vehicles to assist with data collection.

There were 31 slip, trip and fall incidents reported in the first quarter of calendar year 2024, which is a 10% increase from the same quarter in calendar year 2023.

Improvement strategies include being aware of surroundings, keeping work areas organized, identifying job hazards that may be hidden and wearing the proper PPE for conditions.

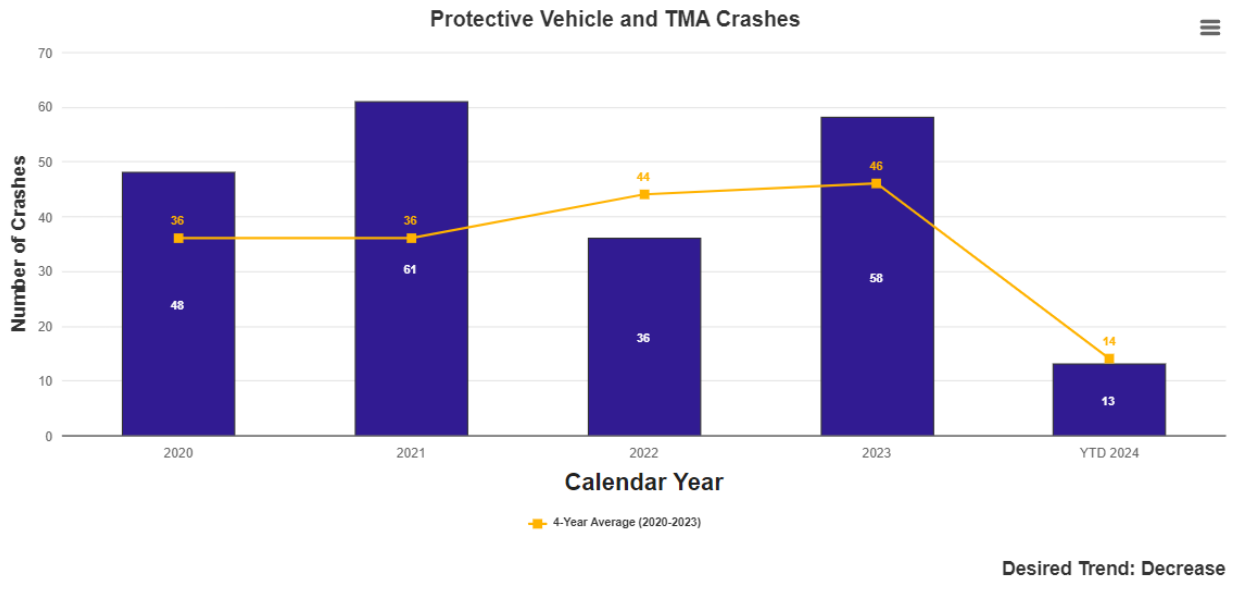
During the first quarter of calendar year 2024, MoDOT had 50 reported incidents for sprains and strains. This is an 8% increase from the same quarter in calendar year 2023. A majority of the change can be attributed to a more accurate data reporting system. Please note there has been a change in data gathering improvement strategies to include implementation of a statewide stretch and flex program. This includes asking for help when lifting and using proper lifting techniques 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 MoDOT Management System BI- Report 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
Update Frequency: Quarterly
Color Grade: yellow



Desired Trend: Decrease

Write up:

While the ultimate goal for this measure is to eliminate work zone crashes, the prime objective is to reduce the number of protective vehicle/truck-mounted attenuator (TMA) crashes below the previous four-year average.

In the first quarter of 2024, MoDOT had 13 reported TMA crashes. The number of crashes through the first quarter of 2024 is just under the year-to-date average for the previous four years. These crashes can cause less than $100 in damage to the TMA, but most require a new protective vehicle costing approximately $50,000. This does not include staff time, truck damage, lost wages, or medical bills. The most significant cost from TMA crashes is the impact on MoDOT employees experiencing severe injuries that will affect them for the rest of their lives. Those costs cannot be quantified with a dollar value.

This quarter, one employee involved in a TMA crash sought medical attention for injuries. All TMA crashes this quarter occurred during the day, predominately in urban areas. Operations in which crashes occurred included 11 pothole patching, one sweeping and one litter pickup.

Purpose:

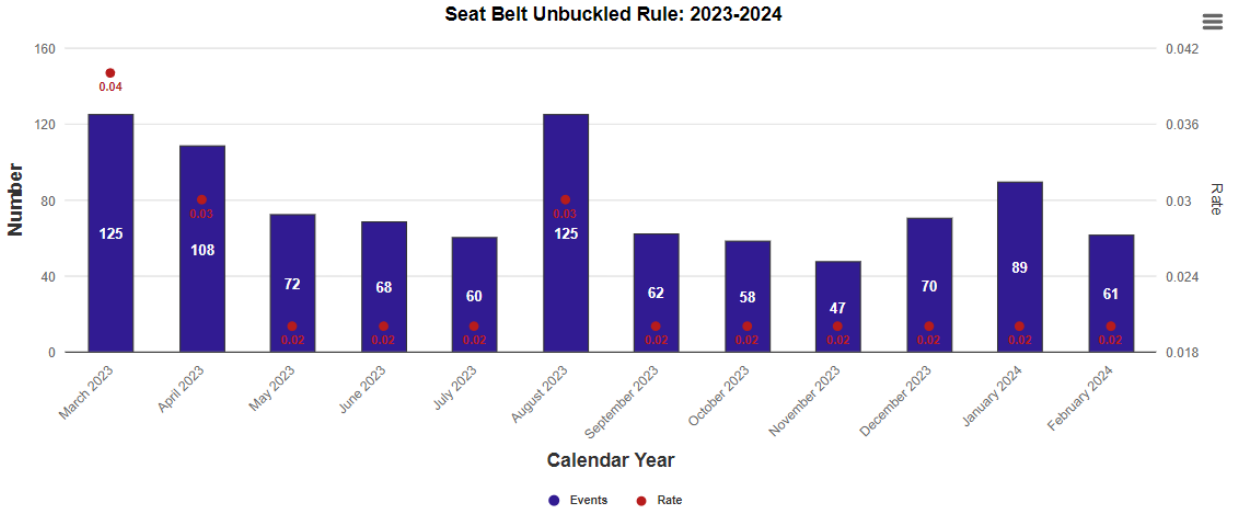
MoDOT owns more than 500 truck- or trailer-mounted attenuators that are used to save lives by absorbing the impact of a crash in a work zone. By measuring the number of TMA/Protective vehicle hits, MoDOT is able to identify higher risk activities that could result in a crash and share this information to develop strategies to eliminate work zone crashes.

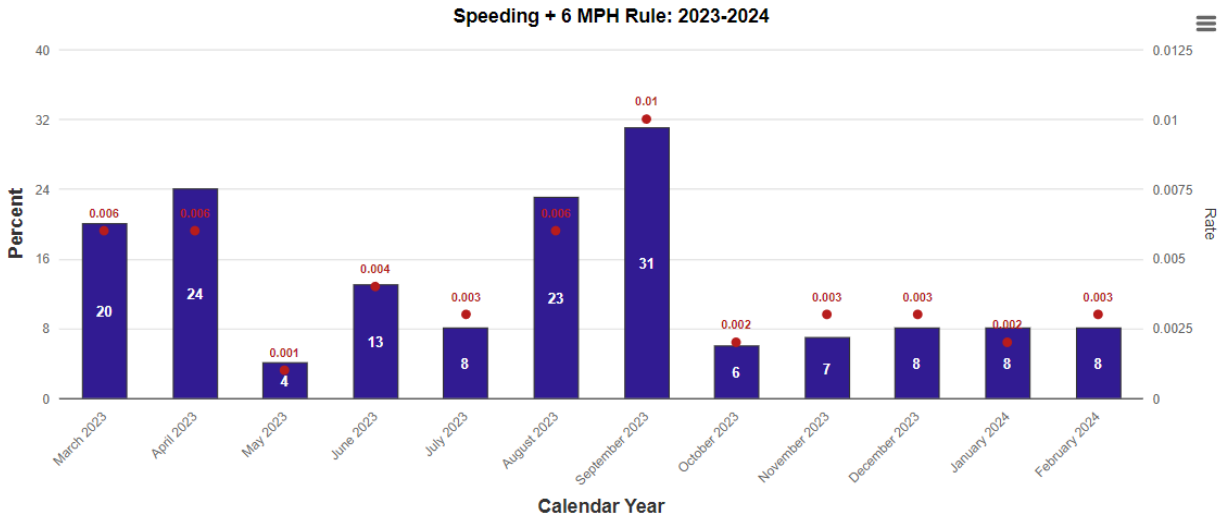
Measurement and Data Collection:

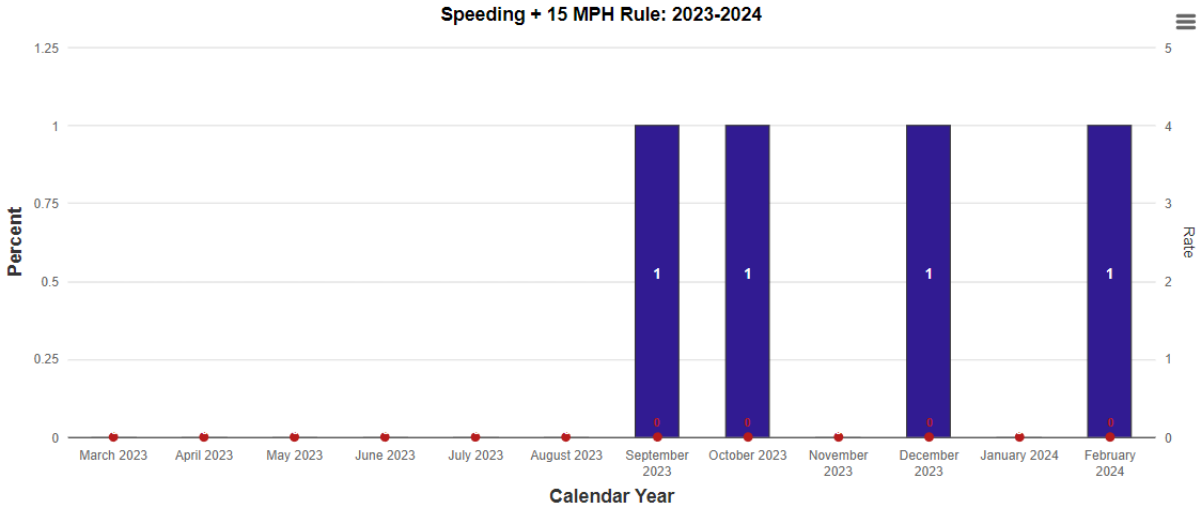
When a TMA incident occurs, a claim report is completed. The claim reports and any associated police reports are collected by Risk Management Technicians for review and interpretation. A statewide work zone incident team reviews TMA incidents and looks for strategies to improve the operations to reduce 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.

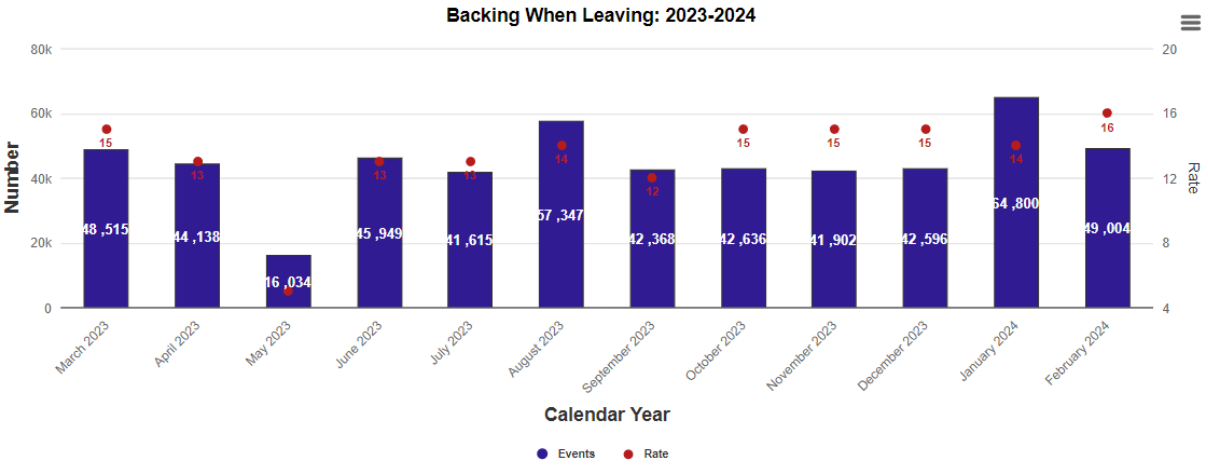
Safety Dashboard – 1i

Update Frequency: Quarterly
Color Grade: yellow









Rate Goal: less than 10

Fleet Safety Scores January 2021

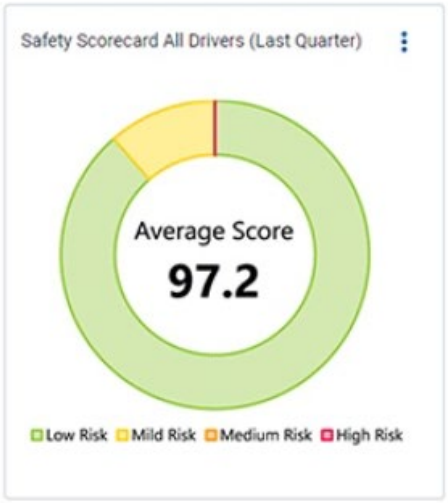
Classifications	Range	Grade
Low Risk	95 - 100	A
Mild Risk	85 - 94	B
Mild Risk	75 - 84	C
Medium Risk	60 - 74	D
High Risk	<60	F

Driver Safety Scores January – March 2024

Driver Safety Scorecard – All Vehicle, All Drivers Statewide Average

Classifications	Range	Grade
Low Risk	95 - 100	A
Mild Risk	85 - 94	B
Mild Risk	75 - 84	C
Medium Risk	60 - 74	D
High Risk	<60	F

Score Range	Drivers
Low Risk	3987
Mild Risk	512
Medium Risk	2
High Risk	0



Write up:

The MoDOT seatbelt rule has stayed consistent at 0.02 events per 1,000 miles driven for the last three months. The total number of seatbelt exceptions was up in January, but the rate stayed the same. For January this was equivalent to one seatbelt exception every 53,000 miles driven. The majority of these were drivers pulling out of a parking space.

For the speeding over six miles per hour, numbers have held steady the last three months with eight exceptions per month. With 4.7 million miles driven in January there were eight exceptions. This is equivalent to one exception per 588,000 miles driven.

MoDOT continues to perform well in the speeding over 15 miles per hour rule. In the last six months there have only been three exceptions. The rate of events is so low for this that it can be listed as a zero. In the last six months this is close to three events with 20 million miles driven.

The rate goal for backing when leaving is 10 rate events per 1,000 miles. Last year there was an average of 15 rate events per 1,000 miles driven.

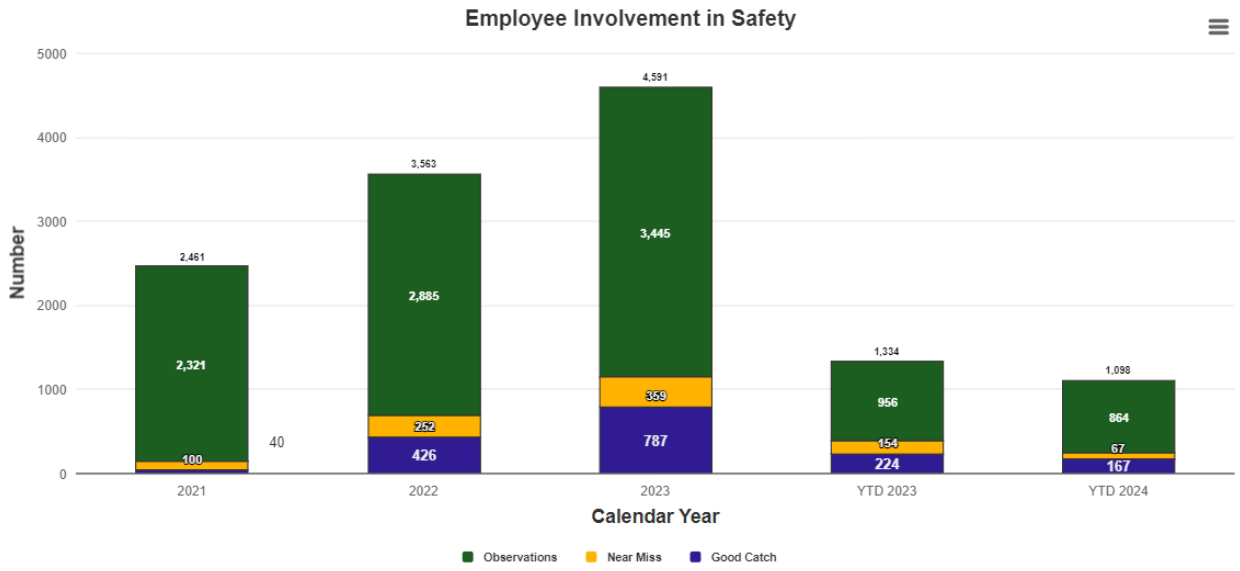
Safety scorecards have been used to show vehicle scores. Now that everyone is using a key fob, safety scorecards have been changed to driver scorecards. Anything above 95% means a driver is at low risk for an accident. MoDOT's driver average is 97.2%. In the score range it breaks it down by driver category. There are currently 3,987 drivers at low risk, 512 drivers at mild risk and two drivers at medium risk.

Purpose:
Wearing seat belts, adhering to posted speed limits, and limiting backing, are the very basics of a safe workplace. Seat belt use and following the posted speed limits are also Missouri State law. This measure will track how MoDOT is performing on the very basics of a safe workplace. This is just one small piece of a much larger effort to ensure every team member goes home safe each and every day.

Measurement and Data Collection:
Using telematics and GPS technology, MoDOT monitors and collects data about seat belt usage and speeding, among other metrics, in MoDOT's fleet ensuring vehicles are being operated in a safe manner. This data is used extensively to answer customer questions regarding snow removal and investigate allegations of damage caused by MoDOT fleet.

Employee involvement in safety - 1j

Update Frequency: Quarterly
Color Grade: yellow



Write up:
To be effective, any safety and health program needs meaningful participation of its employees. There is much to gain from a successful program and much to lose if the program fails.

Employees are usually the most knowledgeable about potential hazards associated with their jobs. Additionally, involvement breeds acceptance because employees support what they help create. Proactive measures such as peer-to-peer safety observations and Good Catches are positive ways employees can help mitigate negative outcomes they should avoid.

Safety is an option before an incident, and this measure gives employees the goal of elimination before mitigation. Conversely, learning from mistakes is vital to a safety

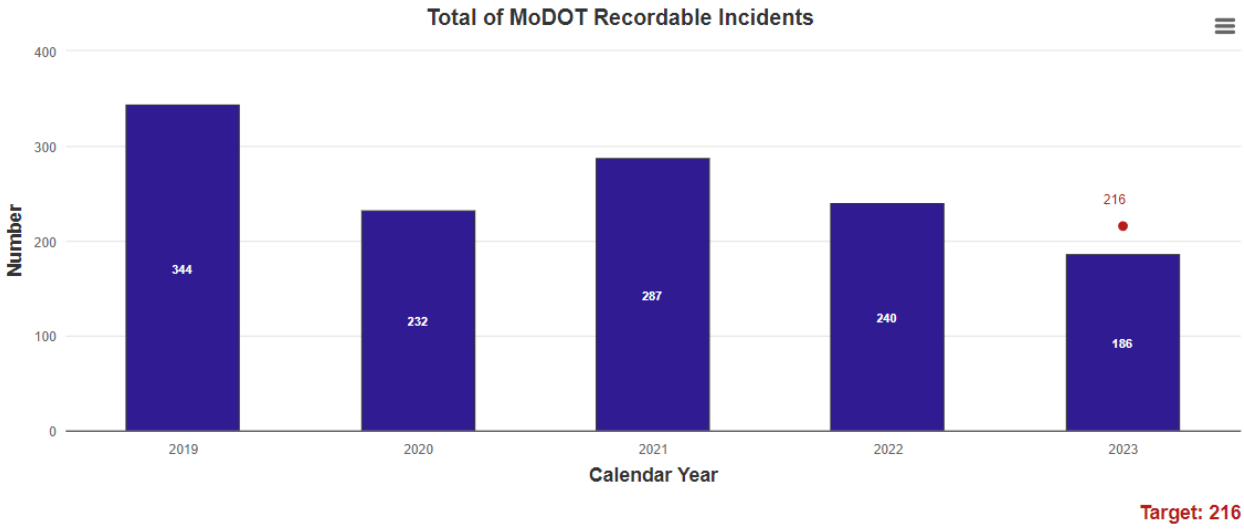
program. Near-miss reporting is another practice that allows the department to continue its vision of zero injuries.

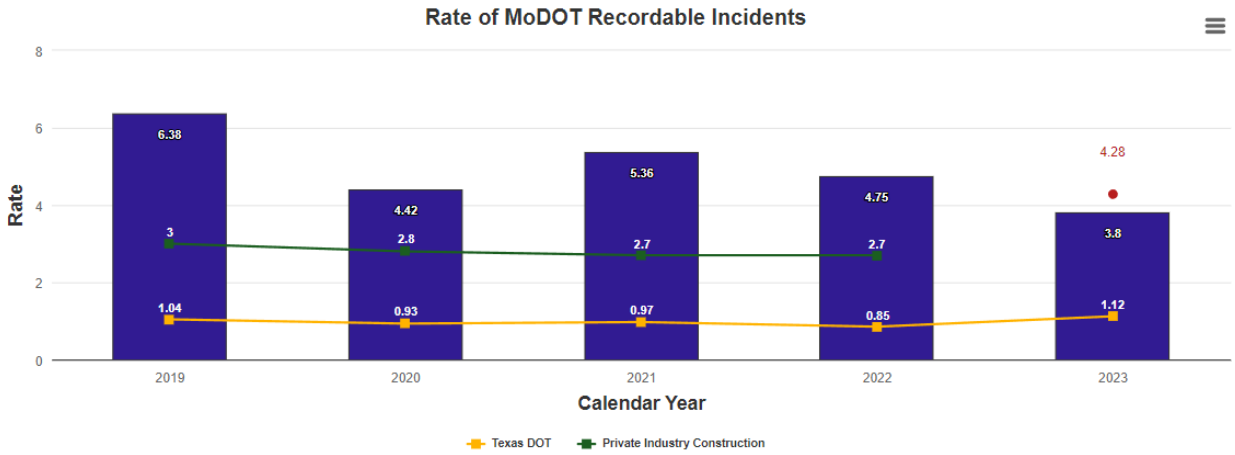
The department experienced an 18% decrease in employee participation in observations, near misses and Good Catch reporting for the first quarter of 2024 compared to 2023.

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 MoDOT employees.

Total and rate of MoDOT recordable incidents – 1k
Update Frequency: January
Color Grade: green





Target: 4.28

***Texas DOT and OSHA private industry data are not yet available for 2022.**

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 2023 has continued to decrease from 2022 and 2021. In 2020, the number of recordables was unusually low compared to historical rates, as such 2019 is included for comparison. There has been a significant decrease when compared to 2019. The number of incidents has also decreased compared to last year. There was a 22.5% decrease from 2022 for the number of recordables and a 20% decrease for the rate of incidents.

Leading causes of injuries this year were slips, trips and falls at 21.4%; strains with 14.6%; and employees being struck or injured by an object at 14.11%.

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. It should be noted this is a more rigorous method than is used by OSHA and the Texas DOT, both of which only count medical treatment if it is beyond first aid or loss of consciousness. 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 targets for total recordable incidents and rate of recordable incidents are updated annually. The target is calculated by subtracting 10% from the year-to-date comparison period.

General liability claims and costs -1l

Update Frequency: Quarterly
Color Grade: red

Target: Below 1,916

Write up:

Keeping employees and the public safe is the department's number one priority. 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 quarter of 2023, there was a 114% increase in general liability claims in the first quarter of 2024 and a 26% decrease in the amount paid. Most claims in the first quarter 2024 were attributed to pavement defects.

This quarter, payments were made on 623 claims against the department, totaling $1,552,738.88. Two claims accounted for 30% of this quarter's payments. Both claims

were initiated from motorcycle crashes that resulted in severe injuries. The first occurred in 2020 when the driver lost control on a mud-covered road. The department was aware of the condition and repairs were made to prevent mud from spilling onto the roadway. However, the repairs were not successful. This litigated claim was settled for $300,000. The second incident occurred in 2018 when the driver could not avoid several potholes on an exit ramp and lost control. The claimant's attorney alleged the department failed to maintain the exit ramp in a reasonably safe condition. This claim settled for $150,000.

To improve results, the department's focus should be concentrated on the most common general liability. Historically, the top five most frequent claim types are pavement defects, debris on the roadway, chip seal, mowing and striping operations.

Purpose:

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

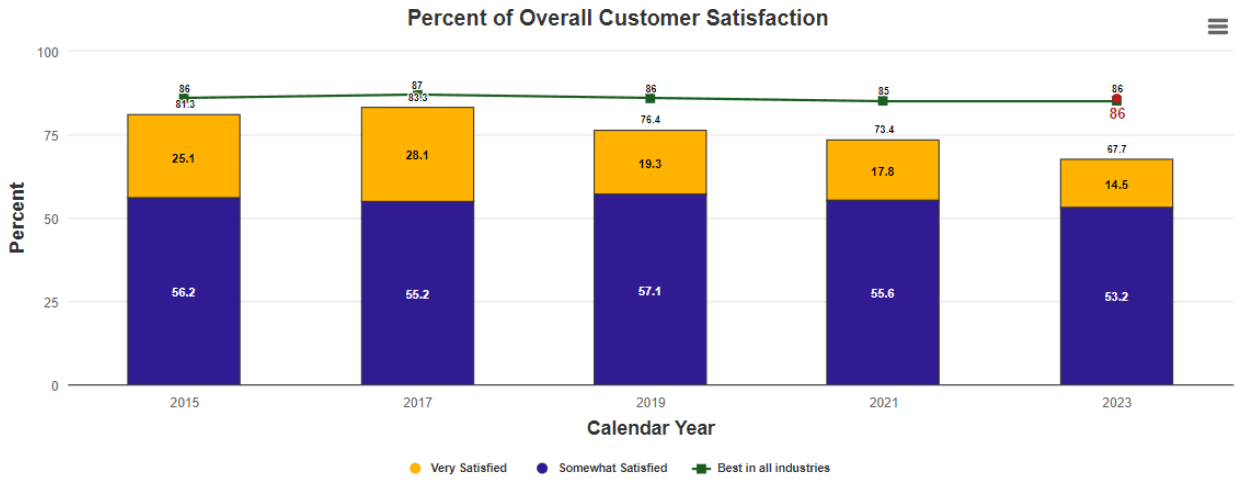
Measurement and Data Collection:

General liability claims arise from allegations of injuries or damages caused by dangerous conditions on MoDOT property and claims 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 before the injury or 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 and is calculated by determining a 5-year average and subtracting 10%. Exceptionally high or low years are excluded from the 5-year average calculation to determine a practical target.

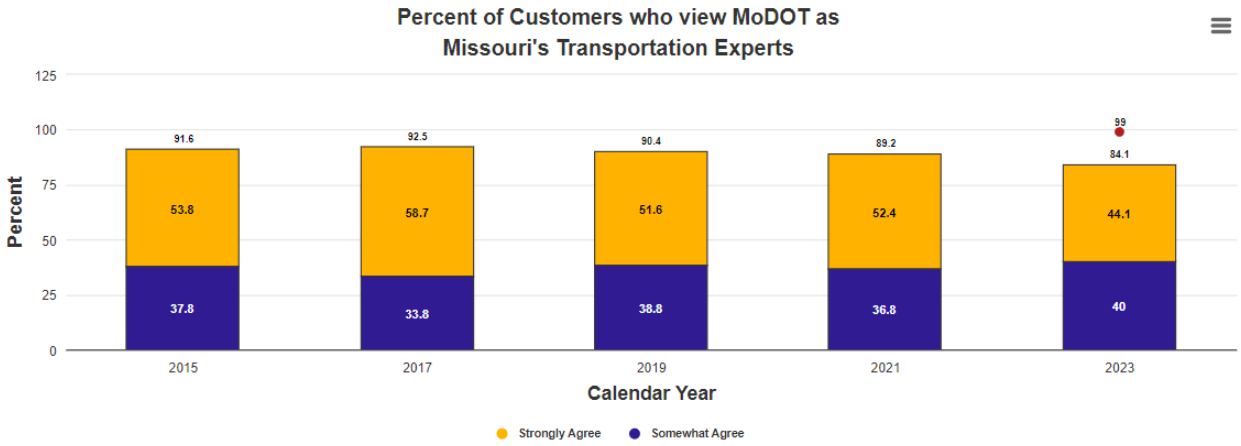
Combined Customer Satisfaction Survey – 2a

Update Frequency: October (biannual)
Color Grade: red

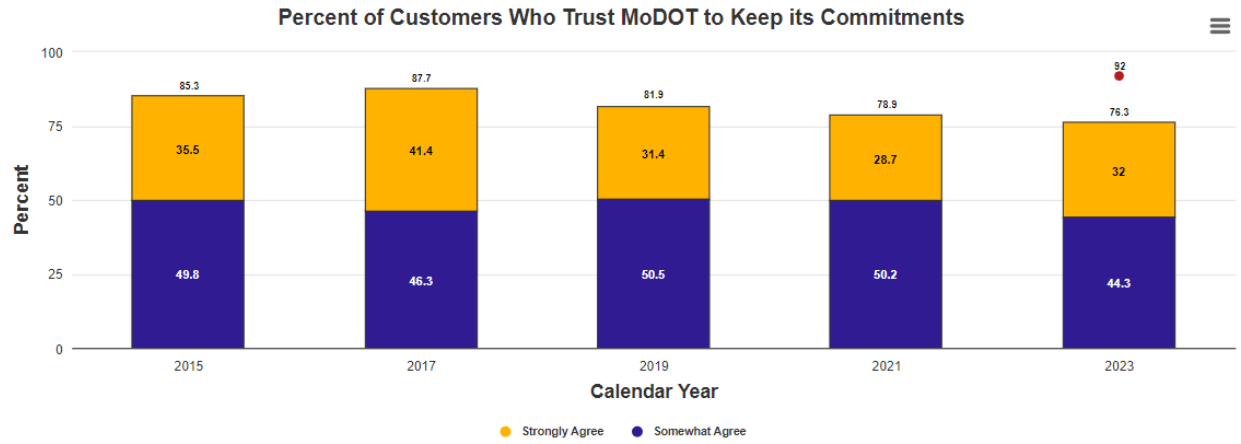


Target: 86%

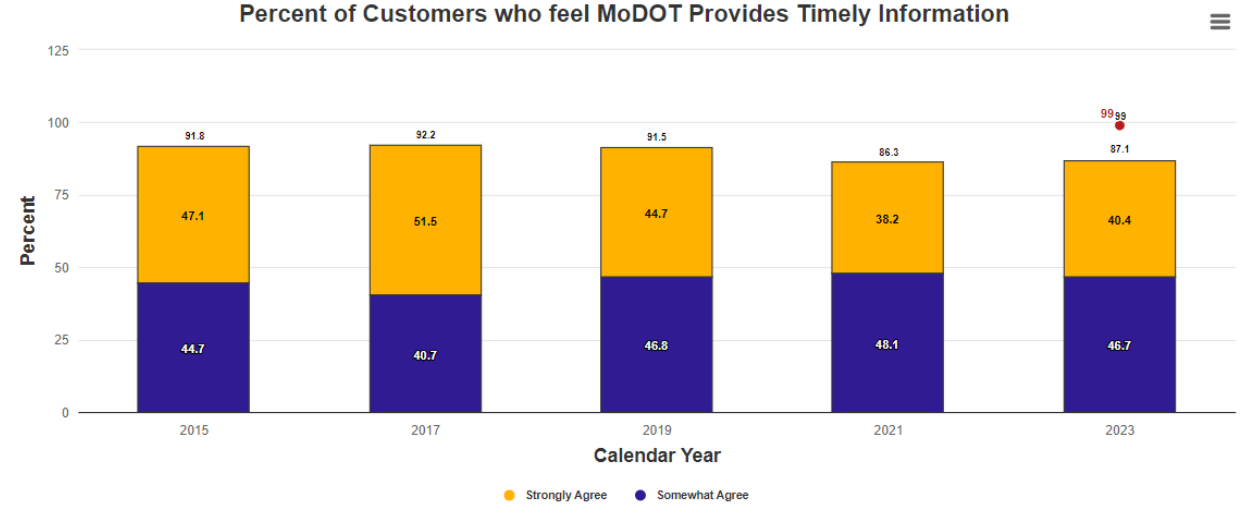
2013 – Mercedes Benz, 2015 – Chick-fil-A, 2017 – Chick-fil-A, 2019 - Chick-fil-A, 2021 - Trader Joe's, 2023 - Chewy



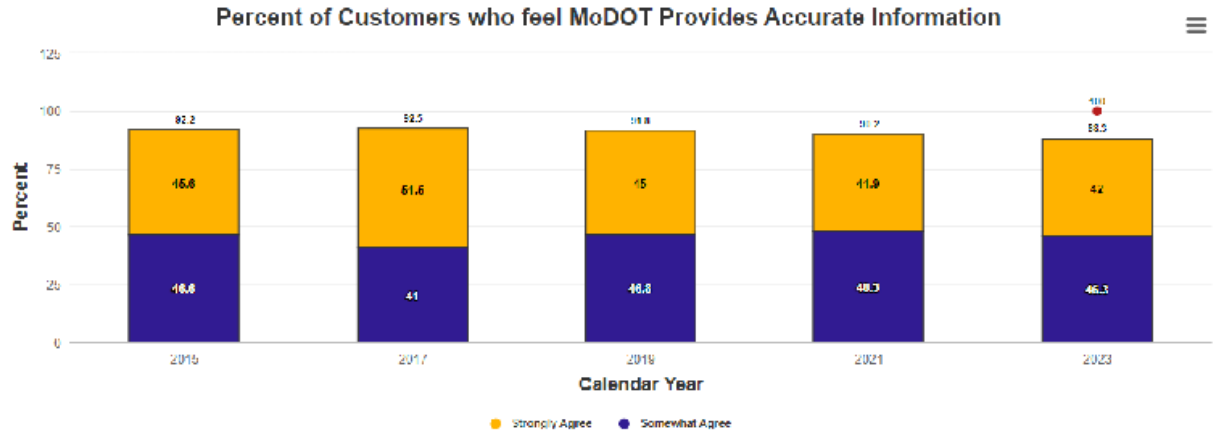
Target: 99%



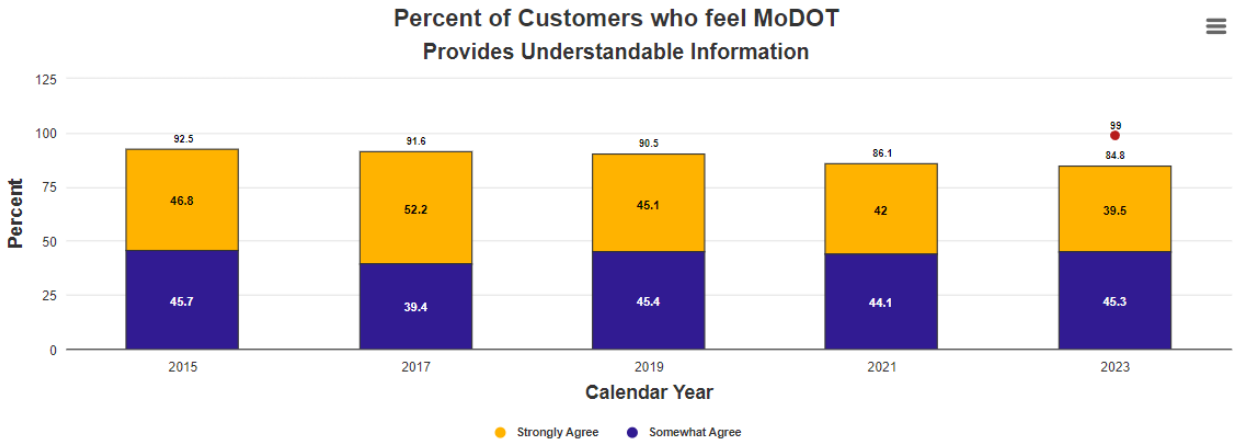
Target: 92%



Target: 99%



Target: 100%



Target: 99%

Write up:

Just like well-maintained roads and bridges, 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 information to the public as quickly and as clearly as possible. The results of this effort are trust and respect. This measure shows just how well the department continues to meet customers' high expectations.

Results have decreased in nearly every metric. Possible reasons for the decreases seen in these specific measures could be related to increased response times from staffing and equipment shortages, specific project desires, system conditions or an increased fuel tax.

Overall customer satisfaction with MoDOT has decreased, with the percent of Missourians surveyed saying they are satisfied with the job MoDOT is doing dropping from 73.4% in 2021 to 67.7% in 2023. In addition, those customers who reported they are very satisfied with MoDOT decreased from 17.8% to 14.5%.

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.

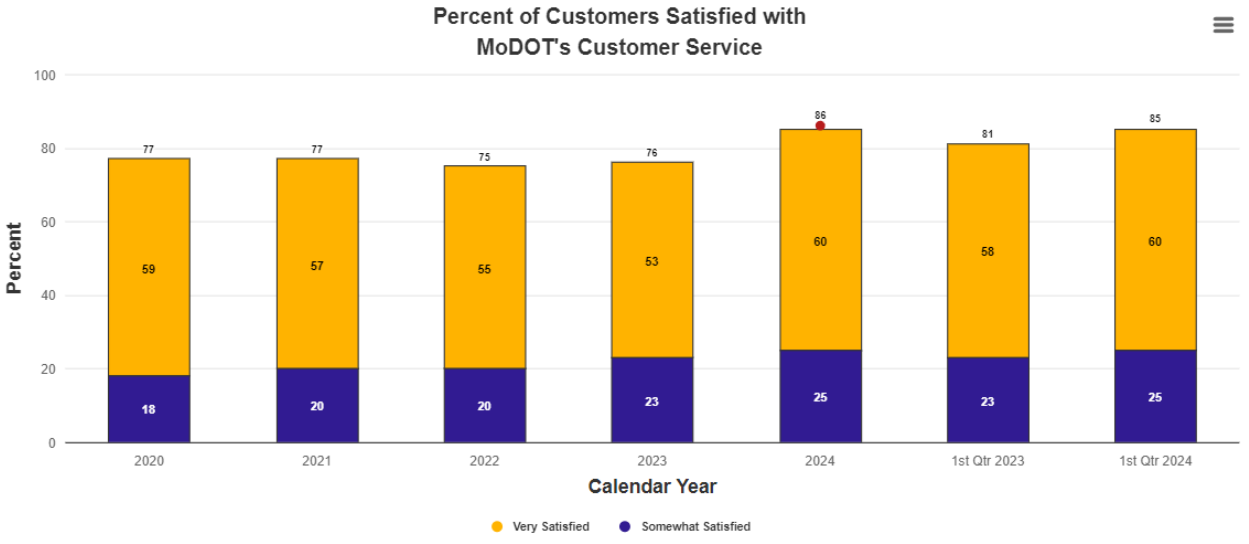
Purpose:
This measure tracks the percent of customers who are satisfied with MoDOT as a leader and expert in transportation issues, how effectively MoDOT conveys its expertise to the traveling public and keeps its commitments, and also tracks whether customers feel MoDOT provides timely, accurate and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

Measurement and Data Collection:
Data is collected through a biennial survey, in odd-numbered years. This has historically been done via a telephone survey of approximately 3,500 randomly selected Missourians. However, new for 2023, the survey was conducted using various methods: text, social media (Facebook and Instagram), and postcard. A total of 5,047 responses were received, with a minimum of 504 responses per District. The 2023 survey was also offered in Spanish for the first time, and 64 respondents completed the survey in Spanish.

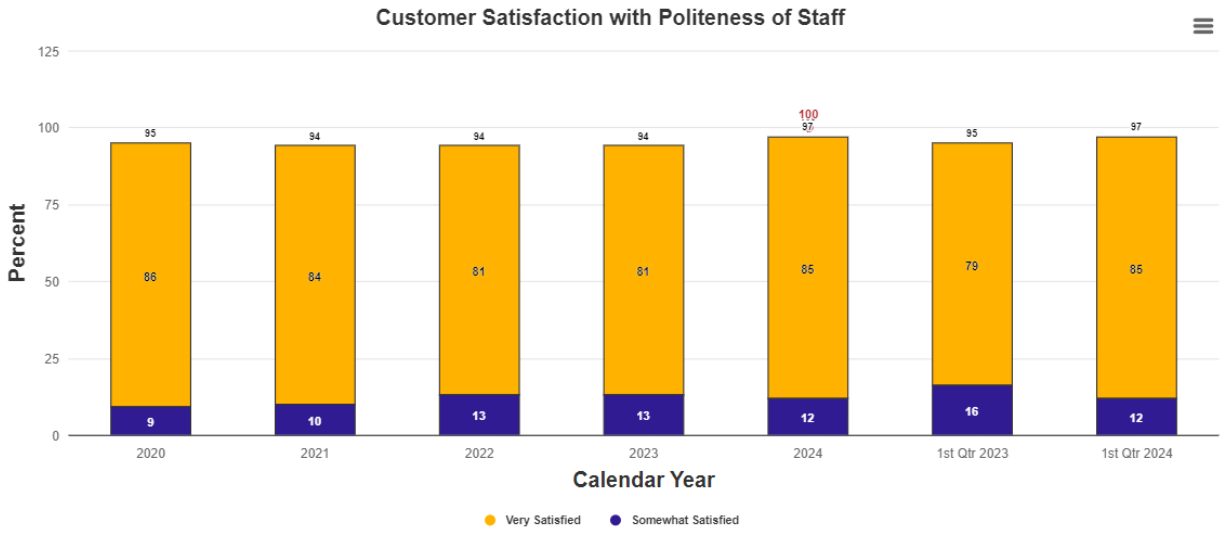
The target for this measure is normally updated bi-annually in October. MoDOT strives to reach and maintain 100% satisfaction across all aspects of customer satisfaction, based on standards in major global industries.

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

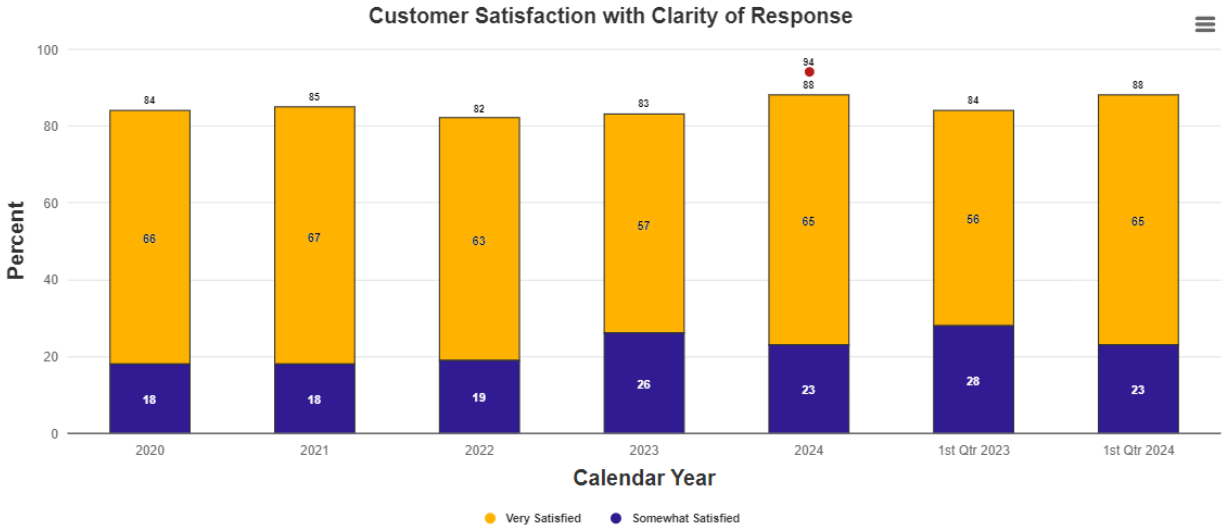
Update Frequency: Quarterly
Color Grade: yellow



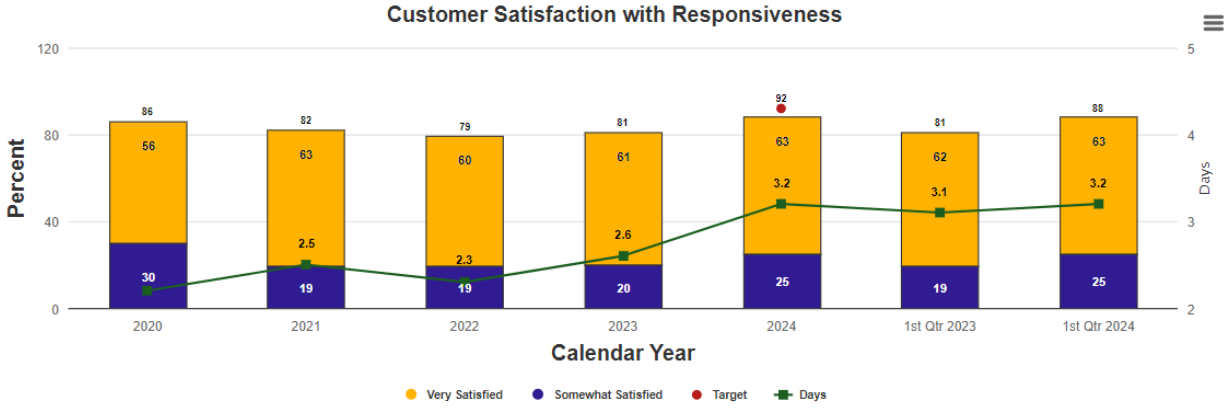
Target: 86%



Target: 100%



Target: 94%



Target: 92%

Write up:
Providing outstanding customer service is one of MoDOT's core values and is 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 first quarter of 2024, compared to the first quarter of 2023, overall customer satisfaction increased to 85%. Politeness of response increased to 97%. Customers who were satisfied with the clarity of the response increased to 88%. Responsiveness was up to 88% compared to 81% in 2023.

The average time to complete customer requests was 3.2 days.

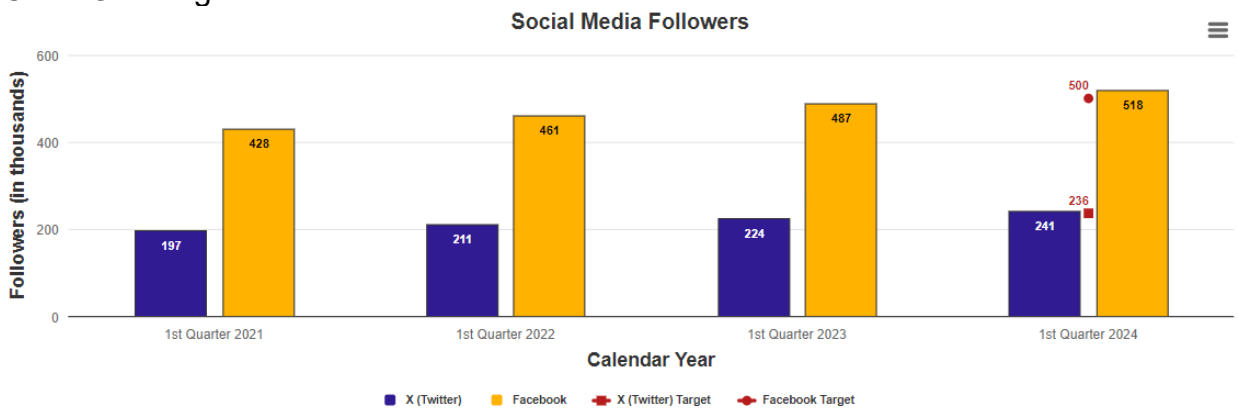
Purpose:
This measure shows how satisfied customers who contacted MoDOT were with the politeness, clarity and responsiveness they received, as well as their overall level of satisfaction.

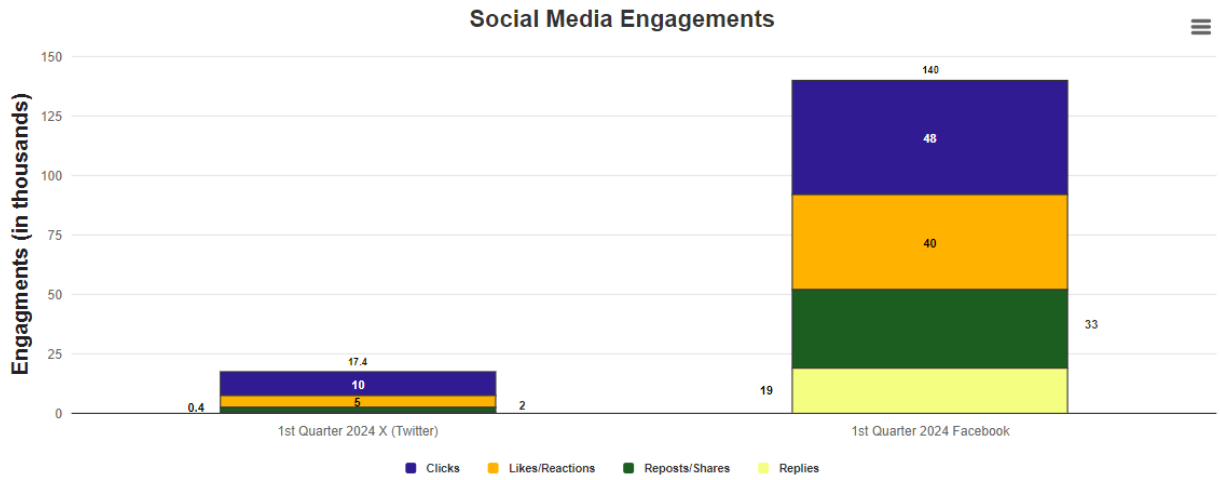
Measurement and Data Collection:
Data for this measure comes from a monthly telephone, email and texting survey of 200 customers who contacted a MoDOT customer service center in the previous month. The customer contacts come from call reports logged into the customer service database. Survey participants 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.

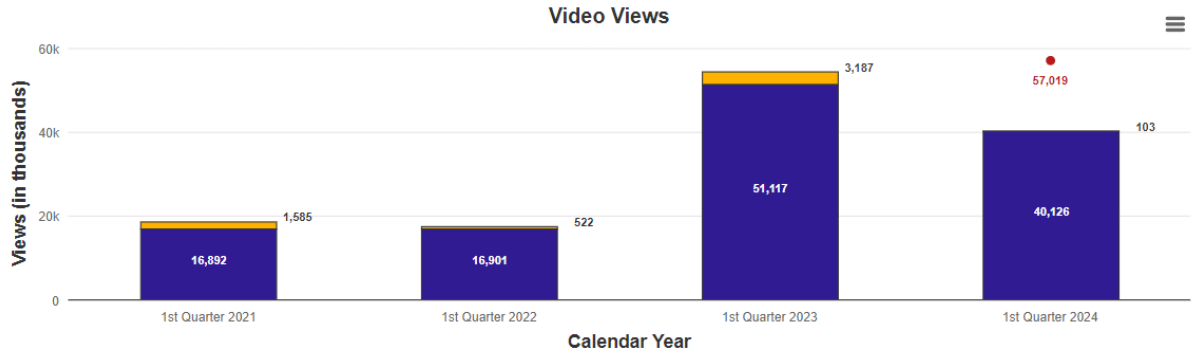
The target for this measure is updated quarterly. This target is established by projecting a 10% improvement over a 5-year average.

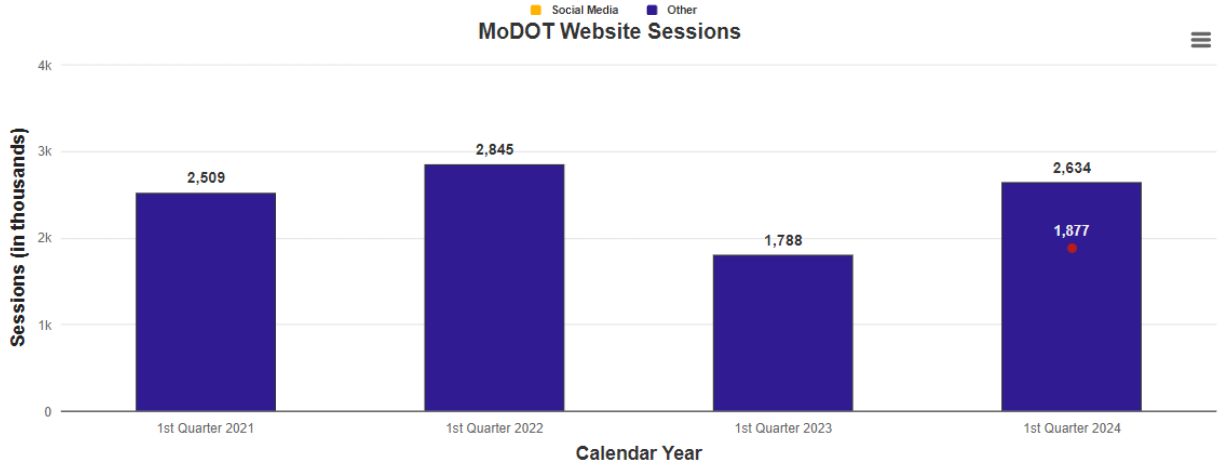
Customer communication engagement – 2c

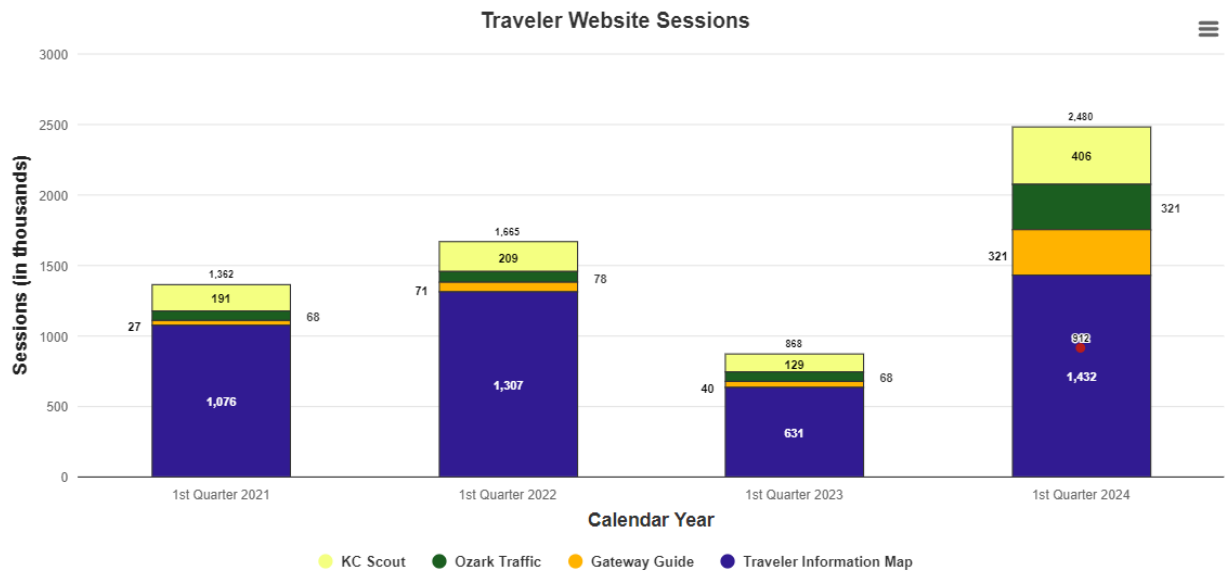
Update Frequency: Quarterly
Color Grade: green




Social Media Engagements
Engagments (in thousands)
150
125
100
75
50
25
0
0.4
17.4
10
5
2
19
140
48
40
33
1st Quarter 2024 X (Twitter)
1st Quarter 2024 Facebook
Clicks
Likes/Reactions
Reposts/Shares
Replies


Video Views
Views (in thousands)
60k
40k
20k
0
16,892
1,585
16,901
522
51,117
3,187
40,126
57,019
103
1st Quarter 2021
1st Quarter 2022
1st Quarter 2023
1st Quarter 2024
Calendar Year


Social Media
Other
MoDOT Website Sessions
Sessions (in thousands)
4k
3k
2k
1k
0
2,509
2,845
1,788
2,634
1,877
1st Quarter 2021
1st Quarter 2022
1st Quarter 2023
1st Quarter 2024
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. In the first quarter of 2024, MoDOT gained 31,306 new Facebook followers statewide and 16,600 on X, when compared to the first quarter of 2023.

During the first quarter of 2024, the most popular Facebook post reminded drivers about the upcoming solar eclipse and to not wear solar eclipse glasses while driving. The post reached over 1,303,000 people with more than 74,000 engagements on Facebook alone.

MoDOT is now measuring customer interactions on these social media sites to better track engagements. Engagements are customer interactions with MoDOT's posted content and include likes, shares, retweets, comments and replies. This quarter, MoDOT's Facebook pages across the state had 140,008 total engagements and X pages had 16,832.

MoDOT websites had 2,633,603 sessions during the first quarter of 2024, which is an increase of 845,000 sessions compared to the same period last year. The traveler map website sessions also showed an increase this quarter with 801,000 more views than last year. It's worth noting that winter weather tends to drive traffic up on the sites during this time of the year.

MoDOT videos on YouTube and social media were viewed 103,346 times in the first quarter of 2024. Additional advertisement video placements were viewed over 40 million times this past quarter.

WEBPAGE VIEWS	
MoDOT Homepage	334,541
Winter Road Conditions	95,350
Projects	54,832
Careers	48,425
Search Results	41,556

YOUTUBE VIDEO VIEWS	
MoDOT Tow Plows In Action	10,632
Tow Plow Action Missouri	10,413
Snow Shoveling Secrets	6,056
Motorgrader Operations pt 2	4,345
Motorgrader Operations pt 1	3,945

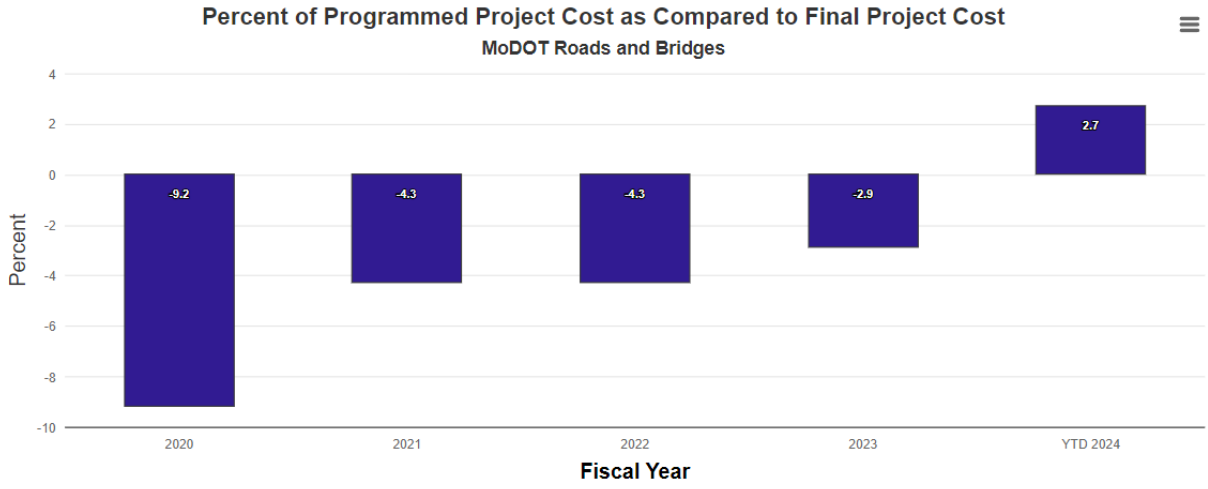
Purpose:
This measure tracks the number of MoDOT customers hitting the department's social media and website information.

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 5% 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.

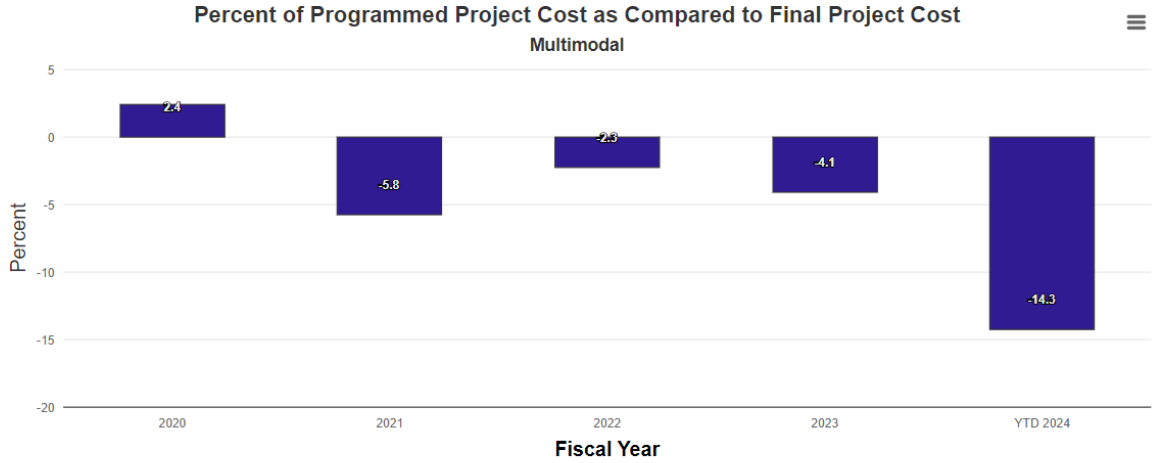
Percent of programmed project cost vs award and final – 3a

Update Frequency: Quarterly
Color Grade: yellow



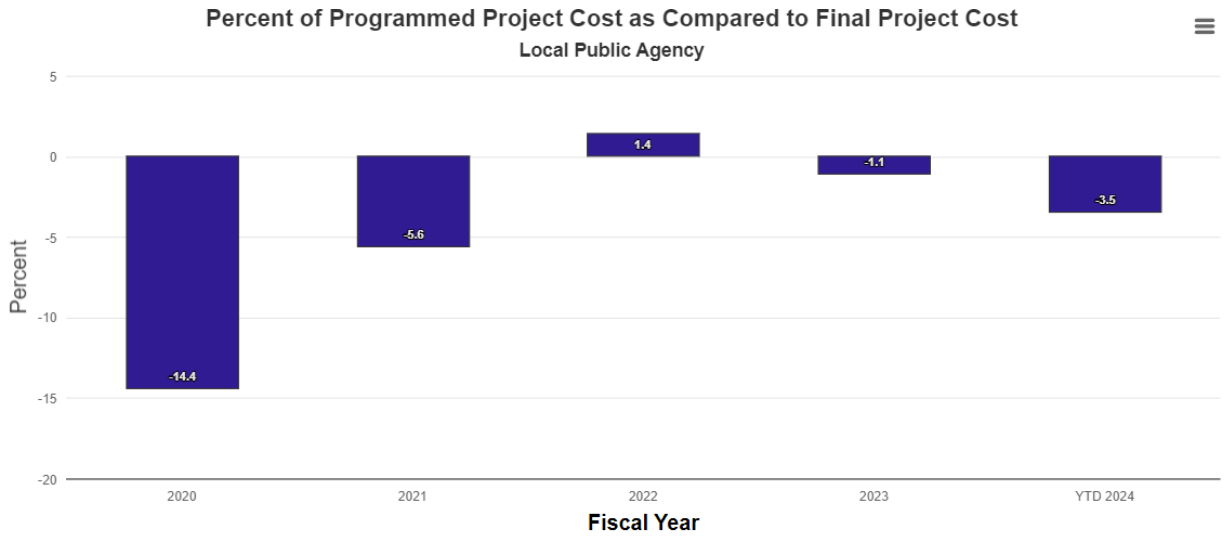
Target: 0%

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



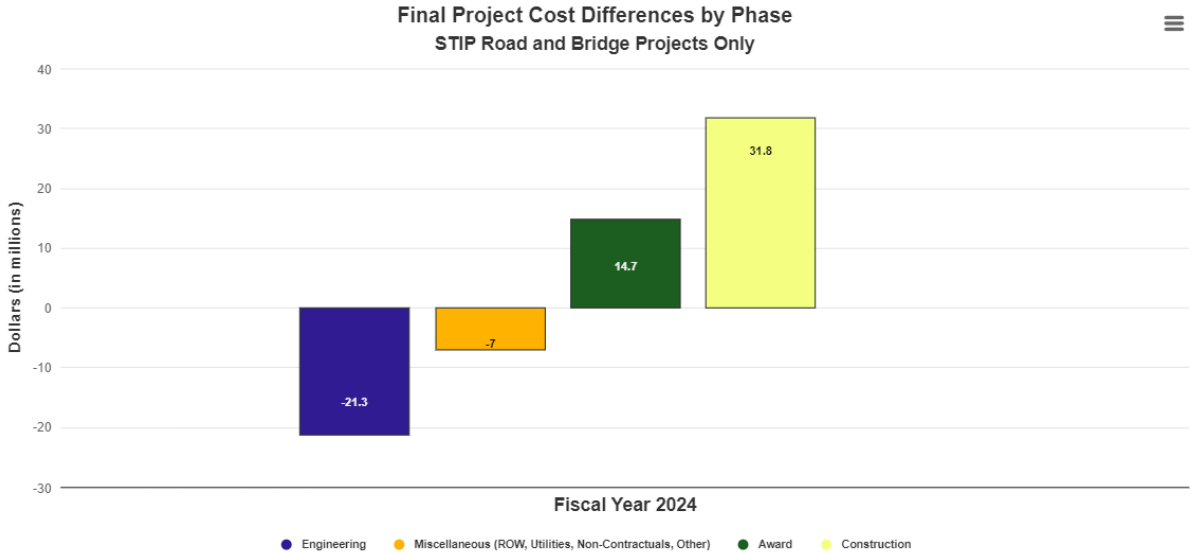
Target: 0%

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

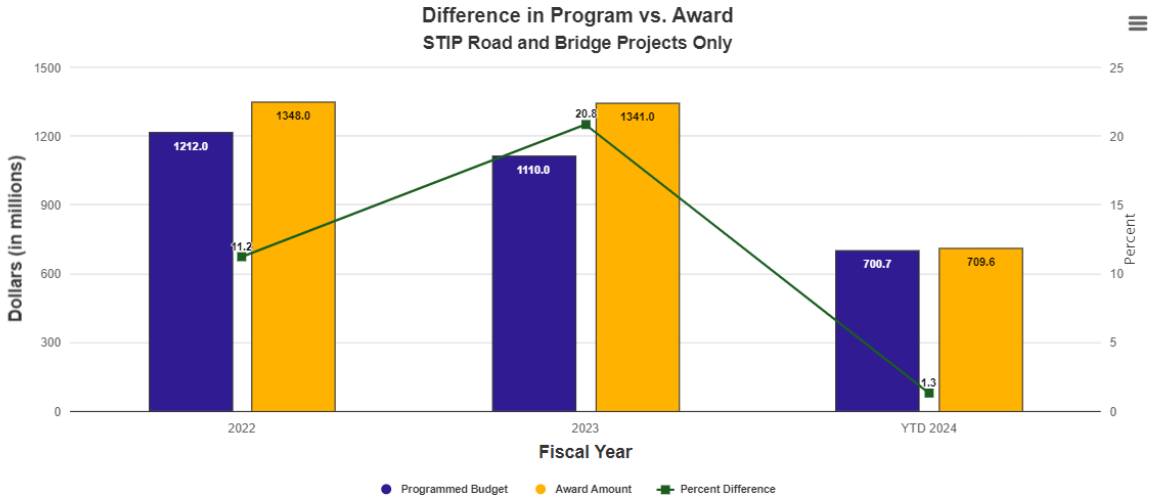


Target: 0%

***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 without 2% construction contingency applied

Write up:

Accurate program cost estimates help MoDOT deliver more timely improvements for taxpayers. As of March 31, 2024, 283 road and bridge projects were completed in fiscal year 2024 for $703.2 million. This represents a deviation of 2.7% ($18.2 million) more than the programmed cost of $685 million. Of the 283 road and bridge projects completed, 46% were finished within or below budget. In comparison, 57% were completed within or below budget as of the same date a year ago. Possible projects with adjustments pending could cause a slight change in the final values. The road and bridge report has been updated to exclude certain payment projects such as Transportation Management Center operations, Motorist Assist funding and work zone enforcement.

In addition, 13 Multimodal projects were completed for $23.8 million, which is 14.3% or $3.9 million less than the planned cost of $27.8 million. A total of 68 projects by local public agencies were completed for $95.8 million, which is 3.5% or $3.5 million less than the projected cost of $99.3 million.

The target is a 0% difference, indicating MoDOT is making timely use of available funds. Year to date in FY 2024, road and bridge, multimodal and local public agency projects were within 1.3% of the target. The program estimate for FY 2024 was lower than the actual award amount by 1.3% or $8.9 million. MoDOT continues to monitor the situation throughout the year.

Purpose:

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

Measurement and Data Collection:

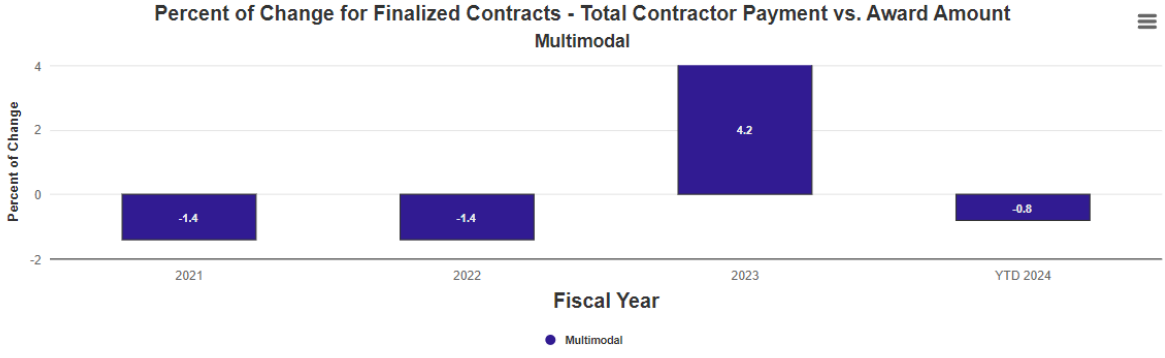
Completed project costs are reported during the fiscal year in which a project is completed. Road and bridge project costs include design, right-of-way purchases, utilities, construction, inspection and other miscellaneous costs. The programmed cost is based on the amount included in the most recently 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

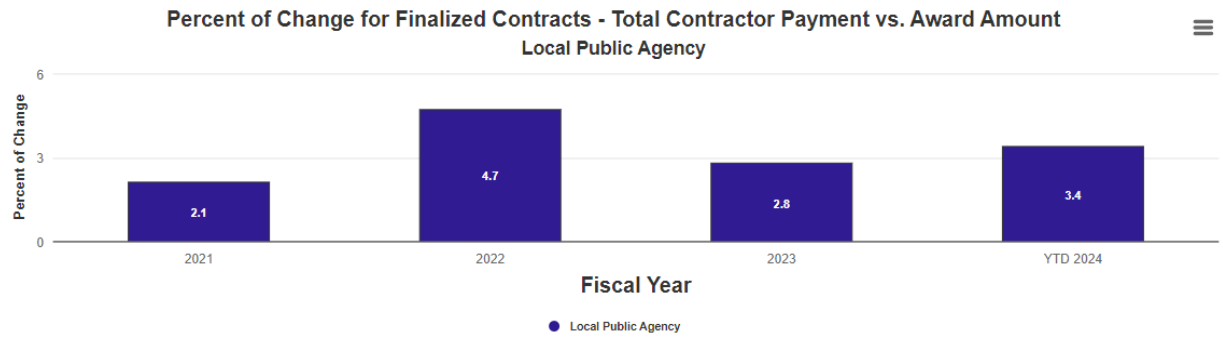
Update Frequency: Quarterly
Color Grade: green

Target: 2% Change

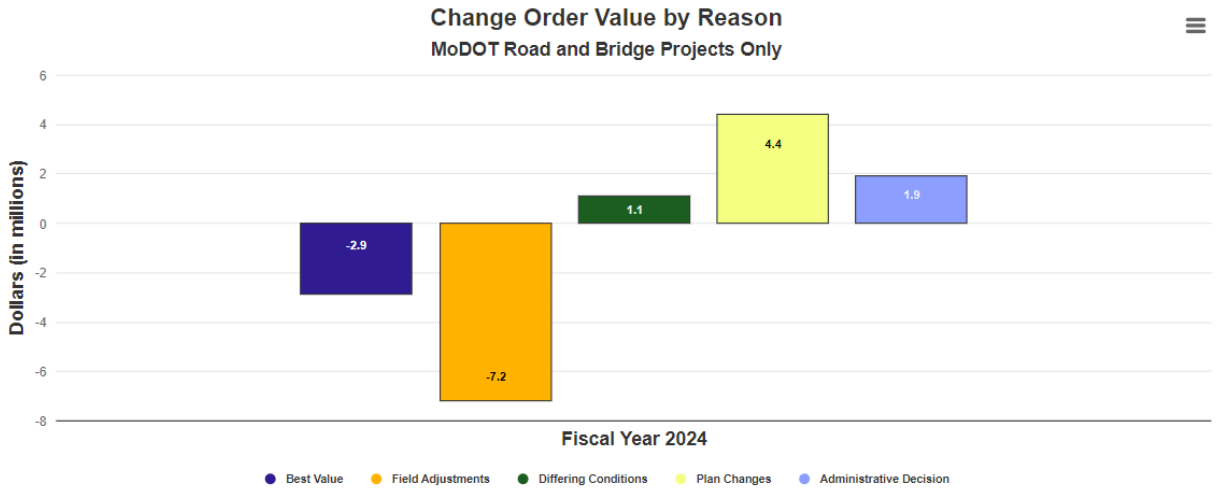


Target: 2% Change

* This chart for Multimodal only includes rail and aviation



Target: 2% Change



Write up:

MoDOT can fulfill its commitments for maintenance and construction by limiting overruns on contracts. This is achieved by focusing on practical design and value engineering. As a result of this approach, MoDOT has been successful in limiting overruns on contracts. In the first three quarters of FY 2024, MoDOT's performance is 0.1% over the award amount ($418,041 over the awarded $702 million worth of projects completed), with 57% 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 FY 2024, MoDOT road and bridge projects were completed 0.5% under budget, multimodal projects were completed 0.8% under budget and local public agency projects were completed 3.4% 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.

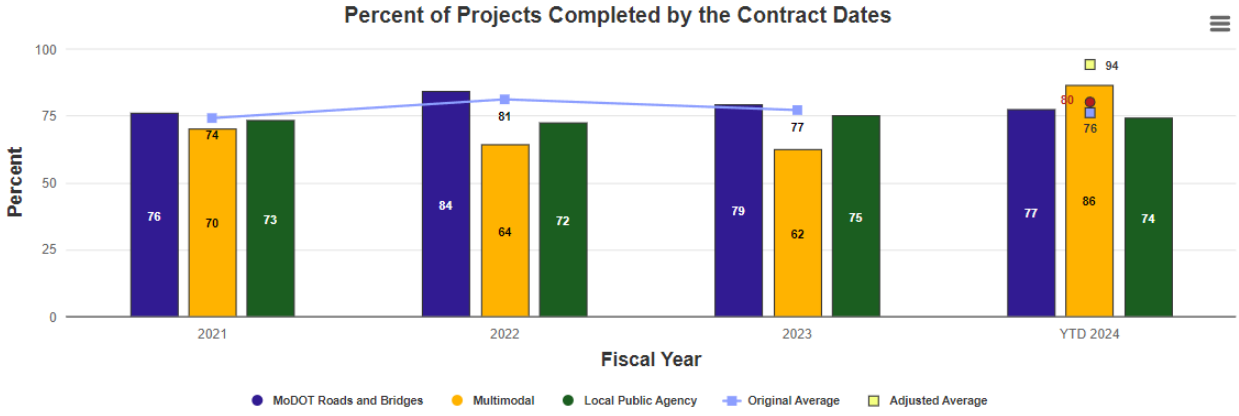
Measurement and Data Collection:

For road and bridge projects, contractor payments are generated through MoDOT's AASHTOWare database and processed in the financial management 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.

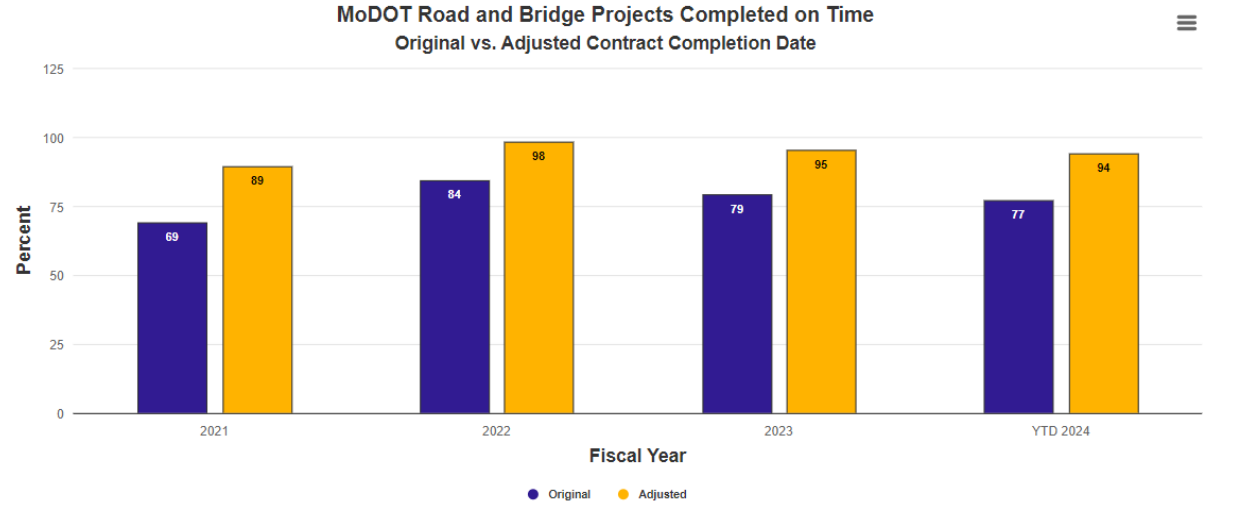
The target for this measure is set by internal policy and will not change unless policy changes.

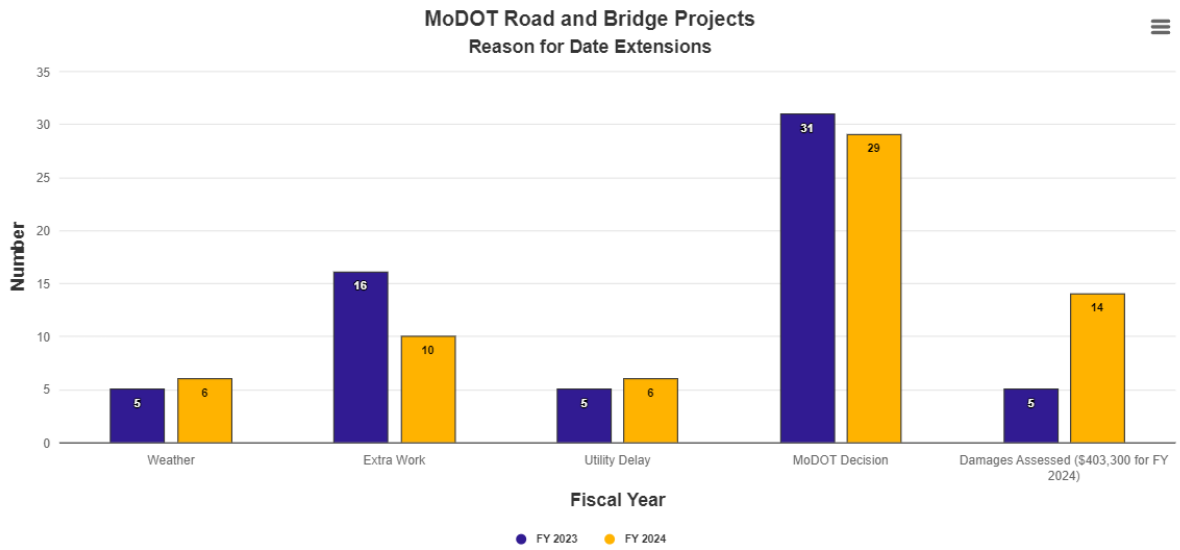
Projects schedule report – 3c

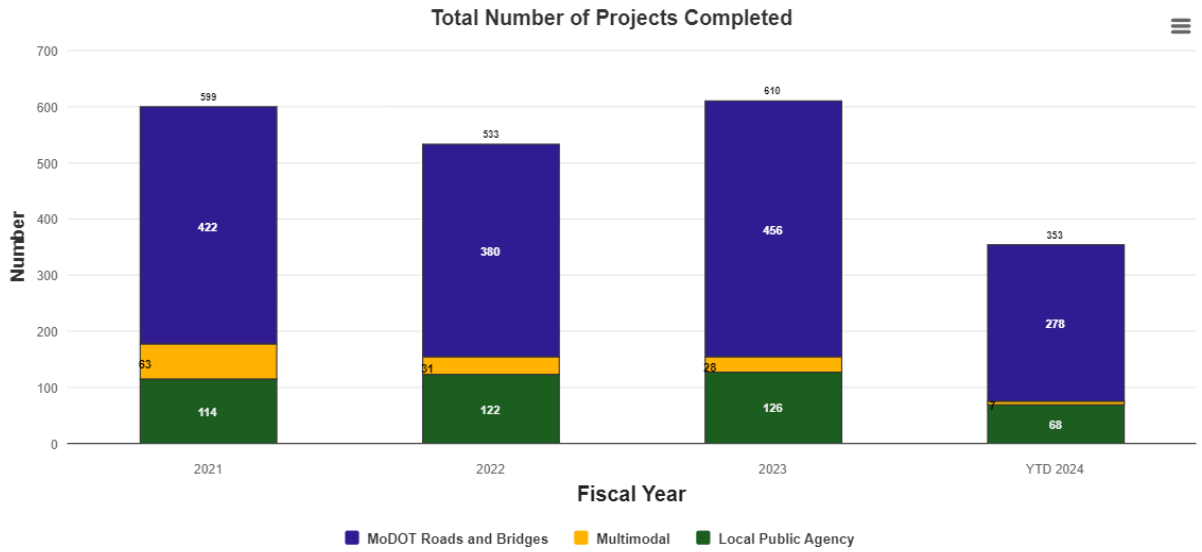
Update Frequency: Quarterly
Color Grade: yellow

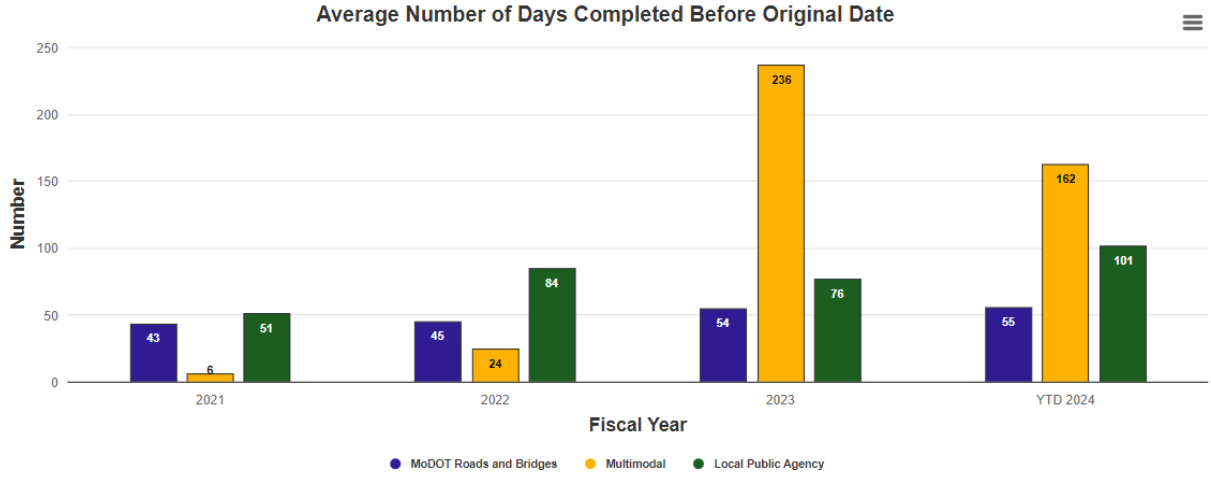


2024 Target: Above 80% Original

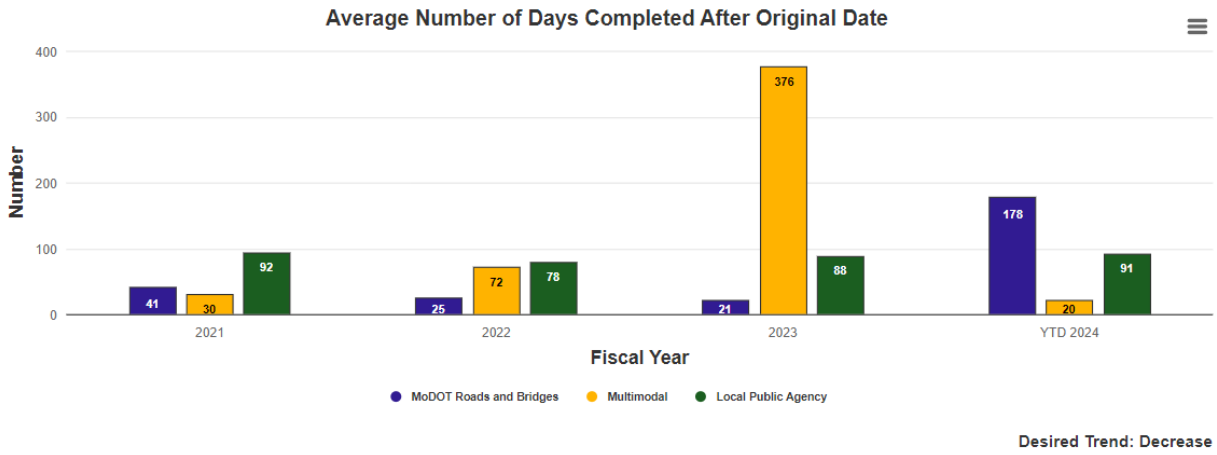








Desired Trend: Increase



Write up:

MoDOT's customers expect transportation improvements to be completed and roadways opened quickly with minimal impact on 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 ambitious but achievable completion dates and setting liquidated damages to reinforce completion dates without undue bid risks. In the first three quarters of fiscal year 2024, 76% 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 the first three quarters of fiscal year 2024, 94% of the closed-out projects were completed by the adjusted dates.

Sometimes a contractor misses the contract completion date and is assessed damages. During the first three quarters of fiscal year 2024, several road and bridge contracts could not be completed within the original contract date. Of these, 10 were extended due to extra work, 29 were extended by MoDOT, six were extended due to weather and 14 missed the deadline with damages assessed totaling $403,300.

The target for this measure is to have at least 80% of projects completed by the original completion date. At the end of FY 2023, the average number of all contracts completed by the original completion date was 70%.

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).

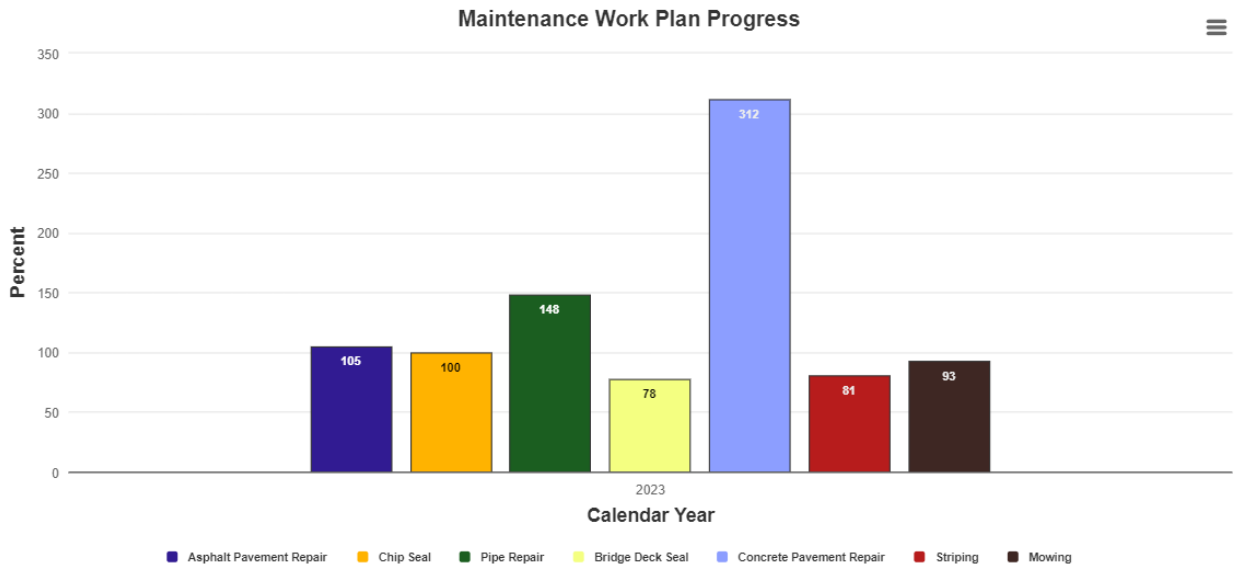
Measurement and Data Collection:

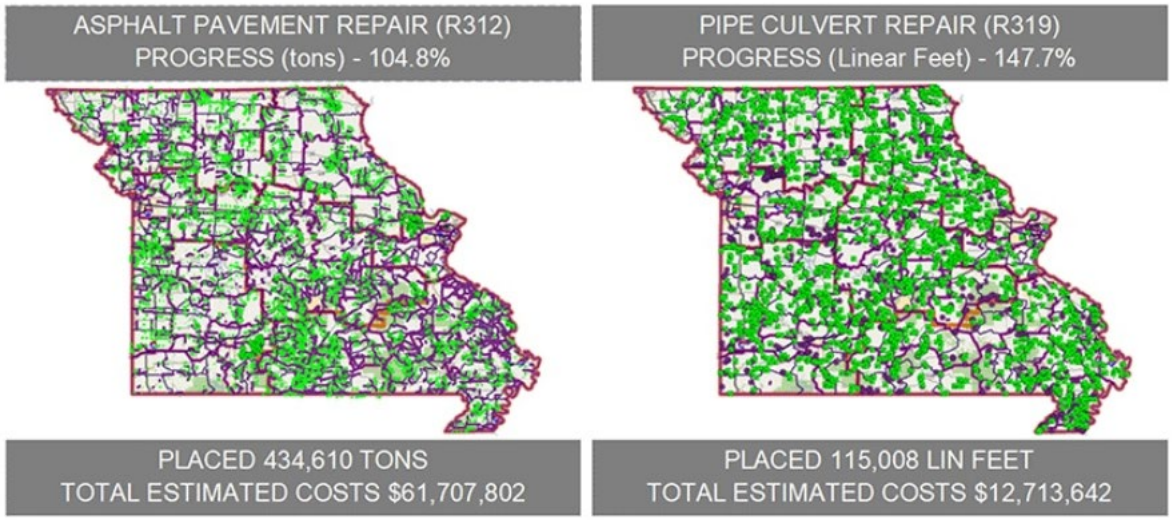
For road and bridge projects, the project manager collaborates with the project team to establish the project completion day which is specific to when the road or bridge project will be opened to the public so to eliminate a financial penalty. The resident engineer uses the SiteManager system to track 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.

Maintenance work plan progress–3d

Update Frequency: July/January
Color Grade: yellow





Write up:
This measure tracks how much of the planned maintenance operation work in the Statewide Transportation Improvement Program, and additional activities, is accomplished each year. The measure includes location-specific work, such as bridge deck seals, and comprehensive statewide work, such as striping. Location-specific work is tracked in the MoDOT Management System and reports updates in year-to-date status.

The MoDOT Management System continues to improve the accuracy of planning and documenting accomplishments at MoDOT. In the spring of this year, some planned work was impacted by numerous unplanned and visual work activities such as litter pick up, sign replacement and other roadside activities. These visual work efforts likely negatively impacted some preventative maintenance activities such as bridge sealing and bridge flushing. Pipe culvert repair exceeded the planned quantities due to low-volume route overlays. Concrete repair significantly exceeded the estimated plan quantities due to preparing routes in advance of future contract work that was not known while creating the work plan. Striping accomplishments were approximately 5,000 line miles more than 2022, even with staffing issues and continued material availability.

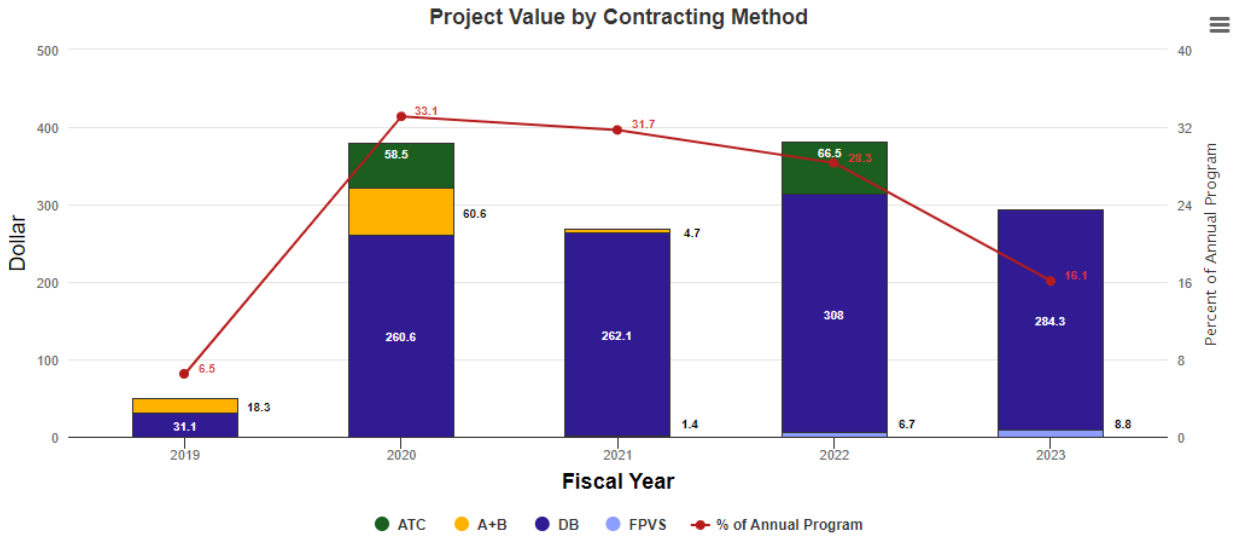
The example visual above from MMS demonstrates work plan progress for asphalt pavement repair and pipe culvert repair for calendar year 2023.

Purpose:
MoDOT publishes the maintenance and operations work plans every year in the STIP for the first three years. This measure is done to determine how each district performs compared to the planned levels in the STIP and the assumed 90% of lane miles as the target for mowing shoulder miles.

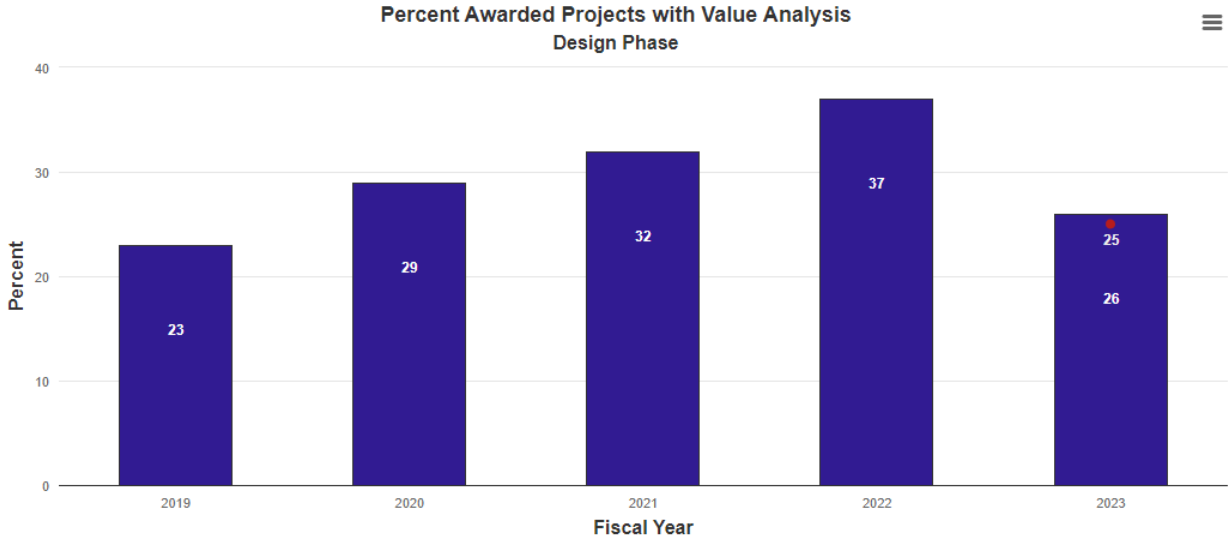
Measurement and Data Collection:
Activities planned in the STIP and other activities such as striping and mowing are tracked in MMS. Planned amounts are also developed in MMS and are used for determining the percent of work plan progress. One exception is the mowing, total shoulder miles are estimated at 90% of the lane miles for this measure.

Innovative contracting and value engineering – 3e

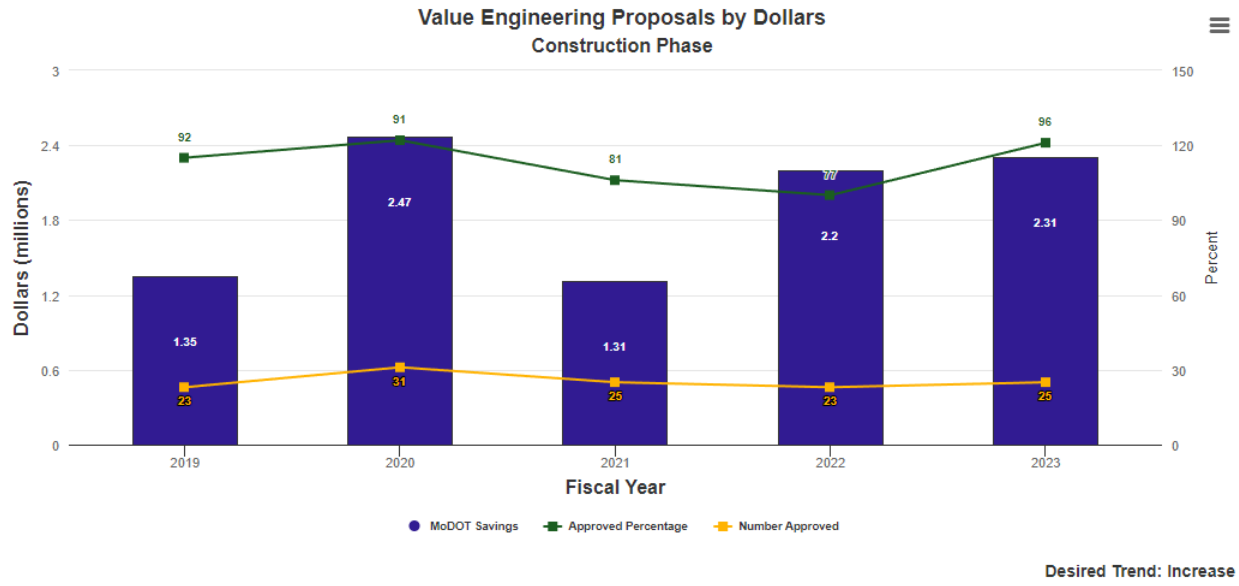
Update Frequency: July
Color Grade: green



2023 Target: Above 10%



Target: 25%



Write up:

MoDOT has delivered more than $3 billion in Design-Build contracts that saved taxpayers over $359 million and were completed more than 111.5 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).

In fiscal year 2023, one Design-Build project was awarded in the Southeast District. The Chester Bridge Design-Build Project includes replacement of the existing 1930's bridge which spans the Mississippi River, connecting the cities of Perryville, Missouri and Chester, Illinois via Missouri Route 51/Illinois Route 150. This major river bridge is vital to agricultural traffic, area industries and travelers. The new Chester Bridge will upgrade this vital connection between Missouri and Illinois, reducing the number of flood-related closures to better serve today's traffic. MoDOT used innovative contracting to deliver six of 457 projects in fiscal year 2023, accounting for approximately 16.1% of the $1.8 billion program. The target of 10% of the annual program for use of innovative contracting was achieved.

MoDOT pursues value throughout the life of a project utilizing the Value Engineering Program and uses design-phase value analysis to identify opportunities for innovation, reduce project costs and improve project flexibility. MoDOT analyzed 26% of projects during design phase in FY 23. MoDOT also partners with industry to find more cost-effective solutions during the construction phase. MoDOT approved 25 Value Engineering Change Proposals at a 96% approval rate, resulting in a savings of $2.31 million. The target to review 25% of projects in the design-phase, and the target for increasing VECP savings from the previous year were both met this reporting 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.

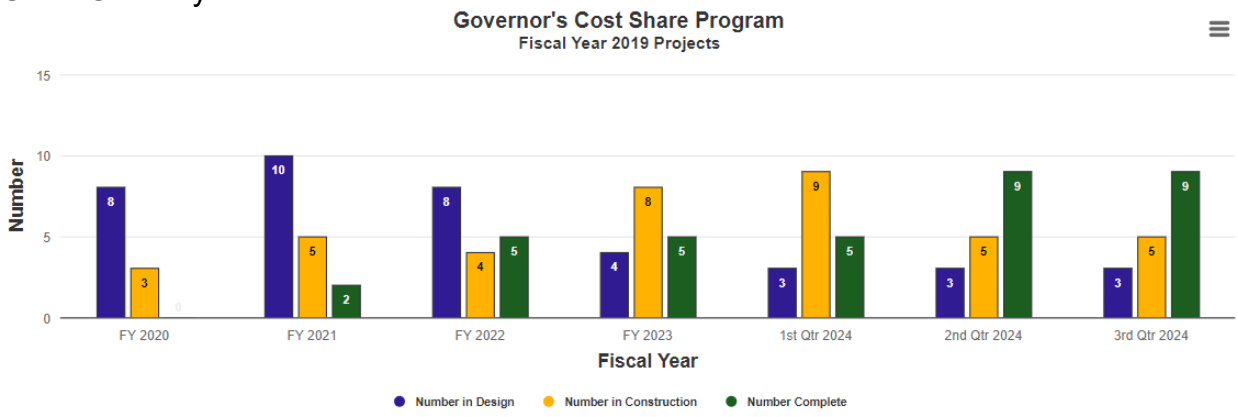
Information on value analysis during design is gathered from MoDOT's Statewide Transportation Improvement Program information management system.

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

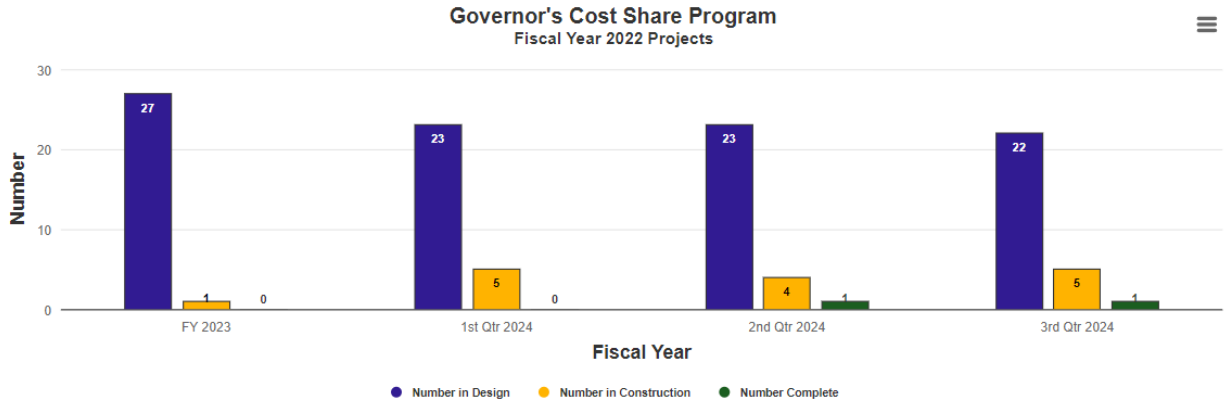
https://www.modot.org/design-build-information

Governor's Cost Share Program – 3f

Update Frequency: Quarterly
Color Grade: yellow



Target: 100% Completed



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 program will deliver 17 projects in FY 2019 and 28 projects in FY 2022.

The Governor's Transportation Cost-Share Program started in FY 2019 and will be complete when all projects have been constructed. The number in progress will vary as new projects are started and others are completed. For the FY 2019 program, nine projects have been completed during this reporting period, five are in construction and three have started design work. For the FY 2022 program, one project has been completed, five are in construction, and 22 have started design during this reporting period.

Purpose:

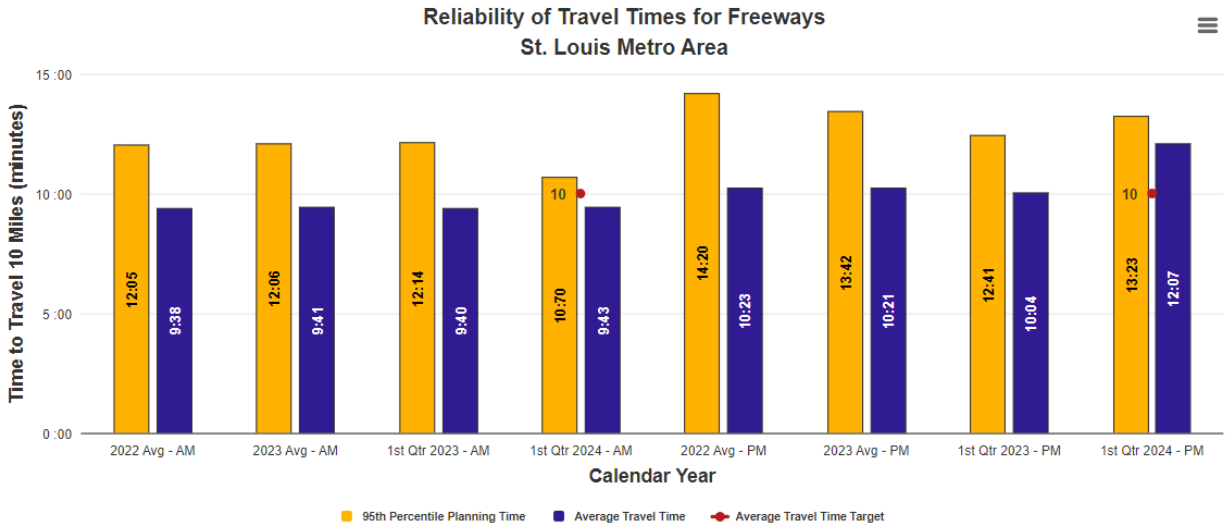
The purpose of this measure is to track the progress made on the Governor's Transportation Cost Share Program. The measure will track the quarterly progress of projects based on their state of project delivery: design, construction and completion.

Measurement and Data Collection:

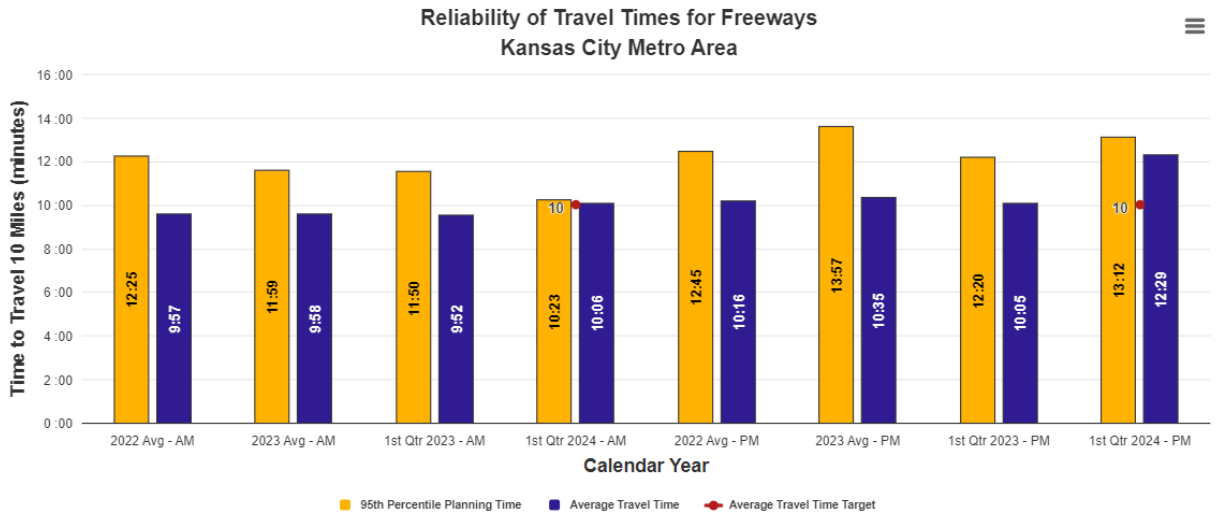
The data for this Tracker measure is collected from district staff that are responsible for oversight of the projects. Projects delivery milestones are entered into a database that tracks the status of all Governor's Transportation Cost Share projects.

Travel times and reliability on major routes – 4a

Update Frequency: Quarterly
Color Grade: yellow

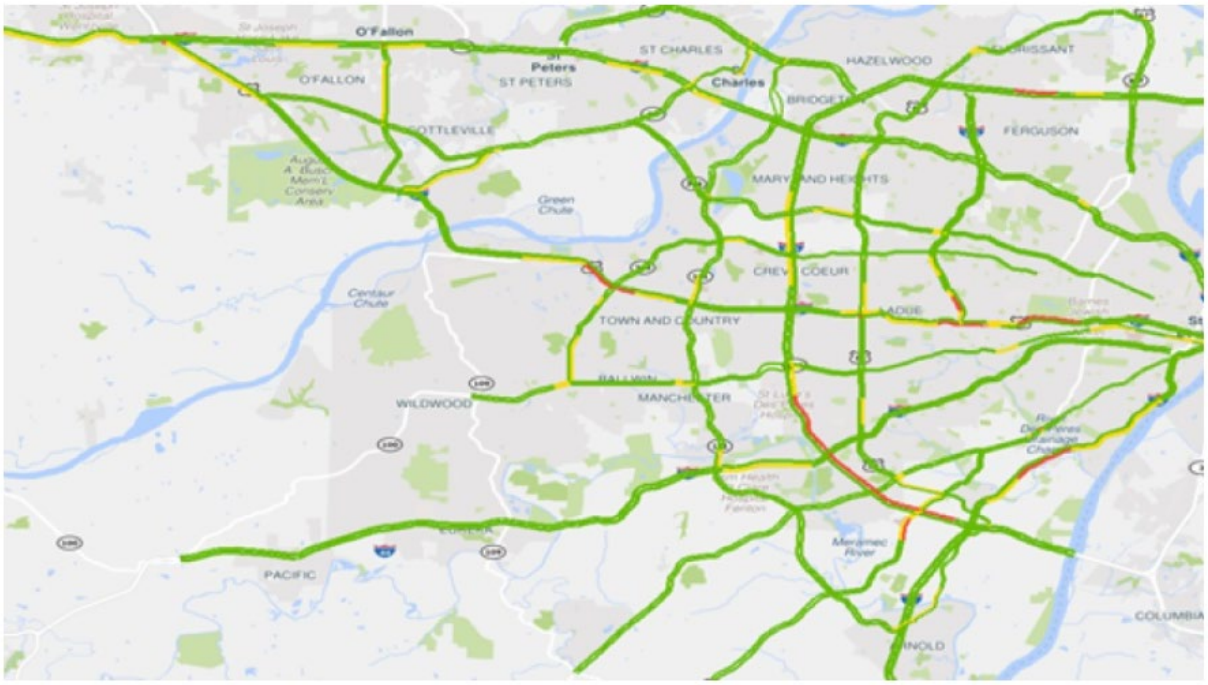


1st Quarter Target: 10 min. a.m. - 10 min. p.m.

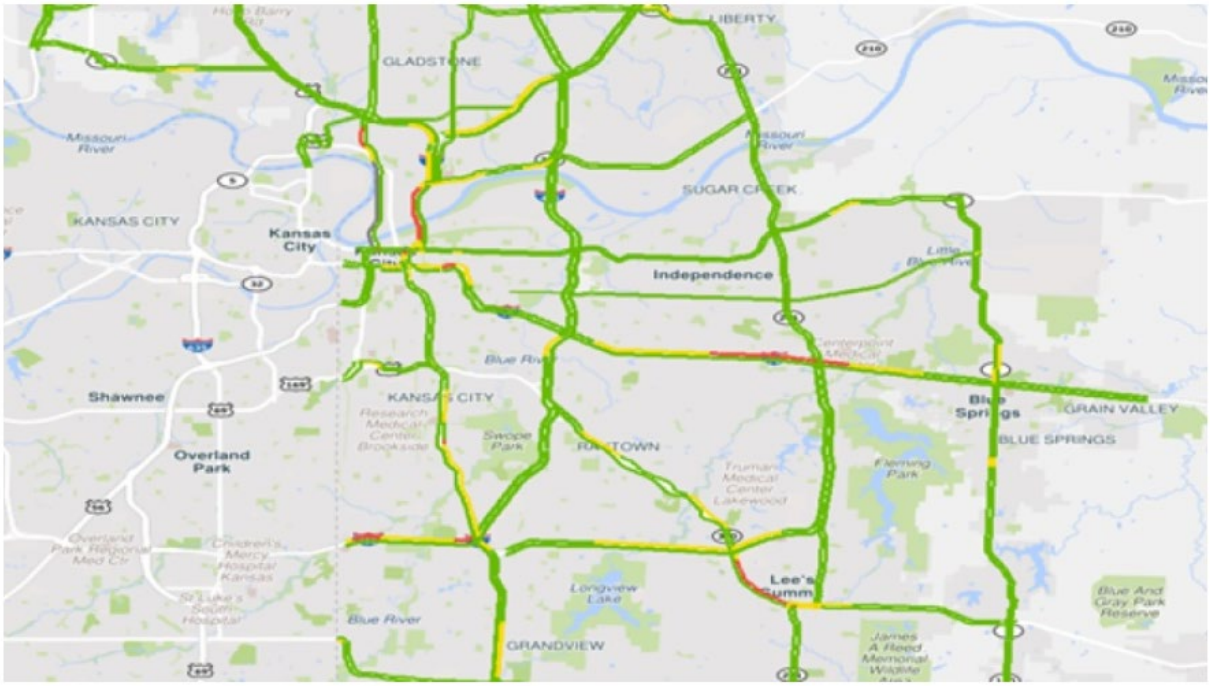


1st Quarter Target: 10 min. a.m. - 10 min. p.m.

AM St. Louis

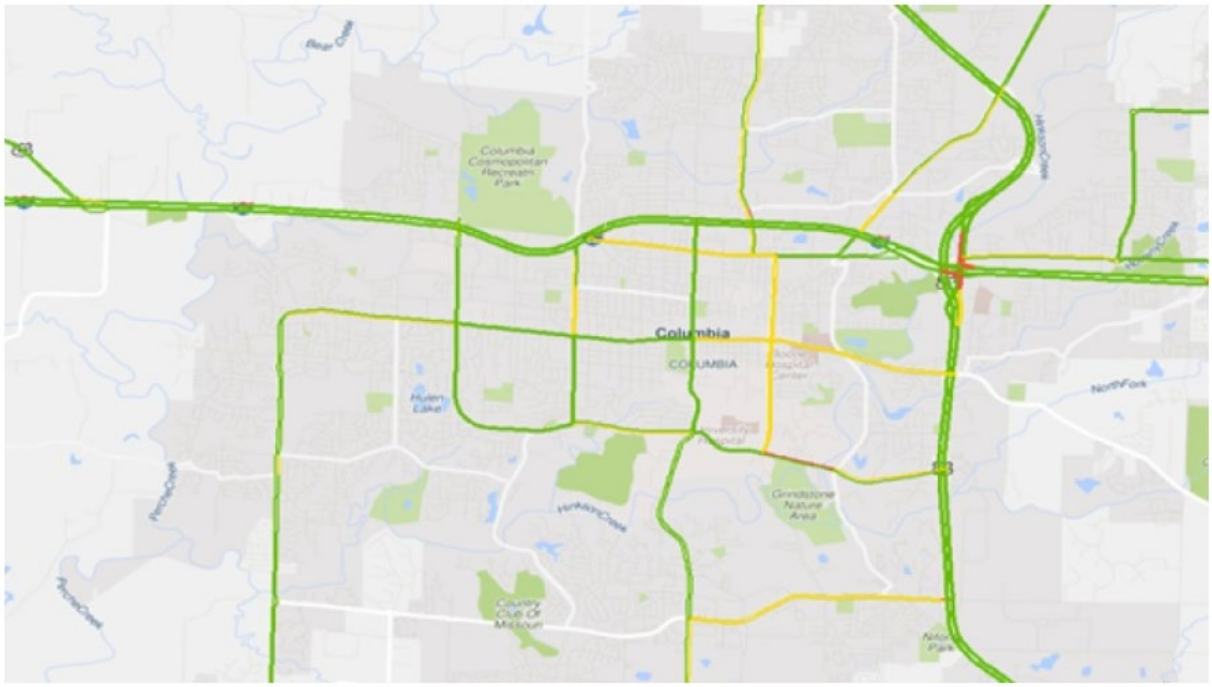


AM Kansas City

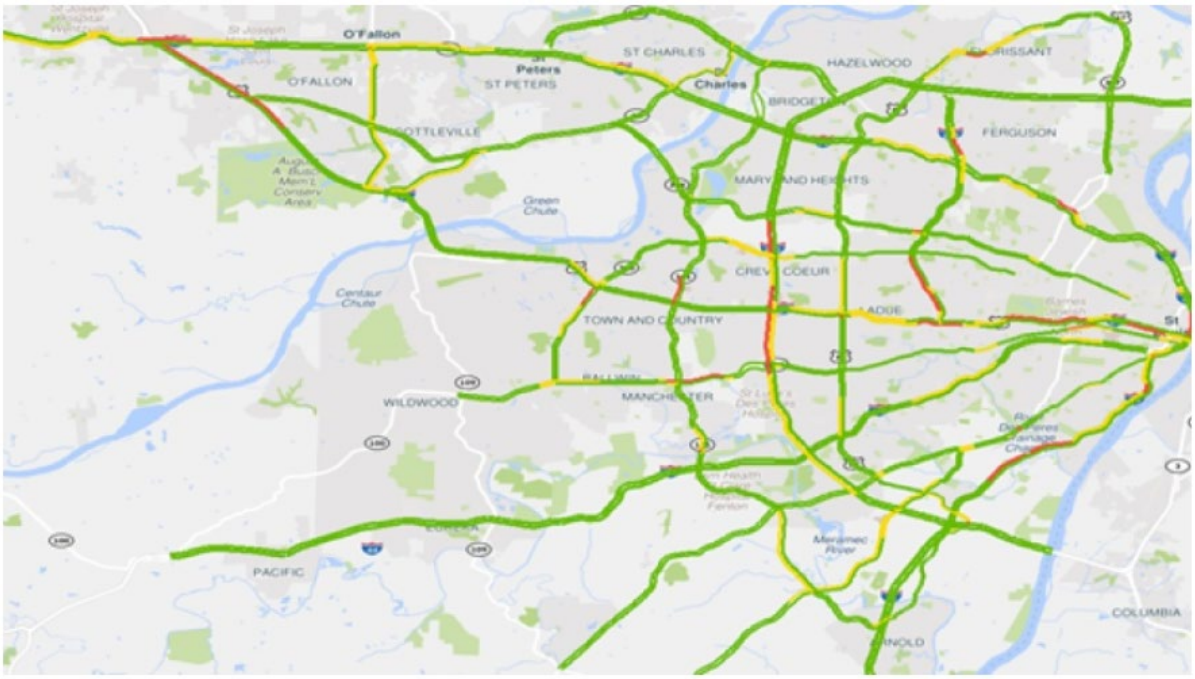


AM Springfield

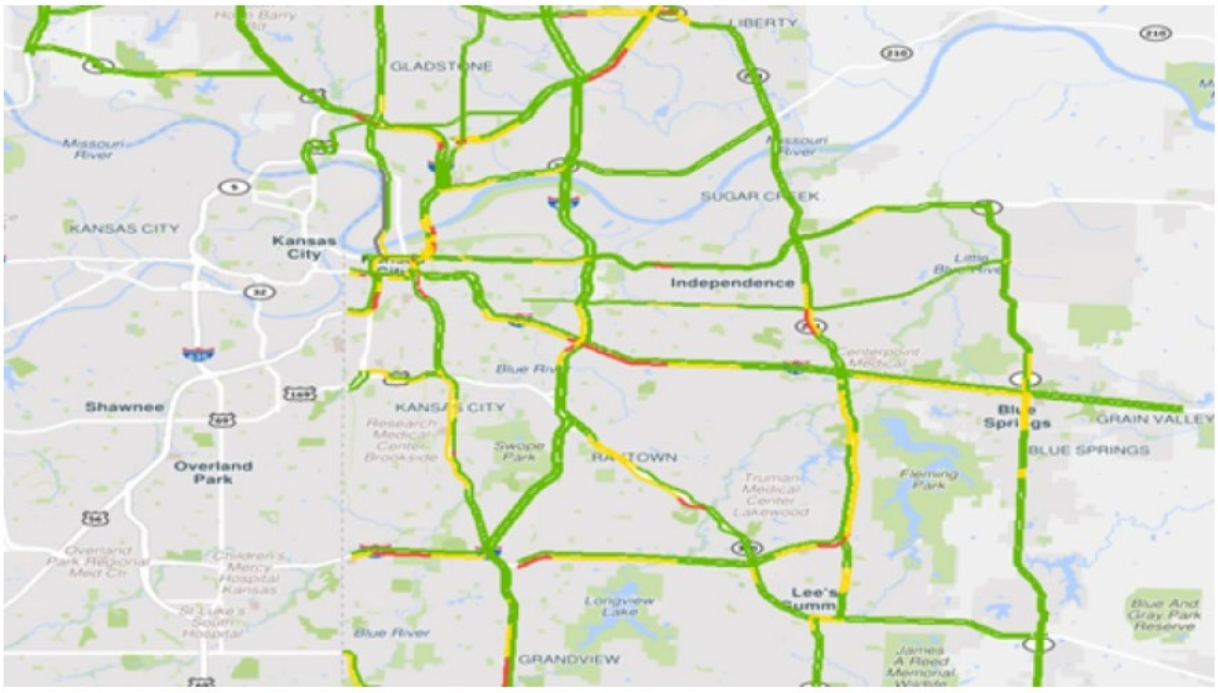
AM Columbia



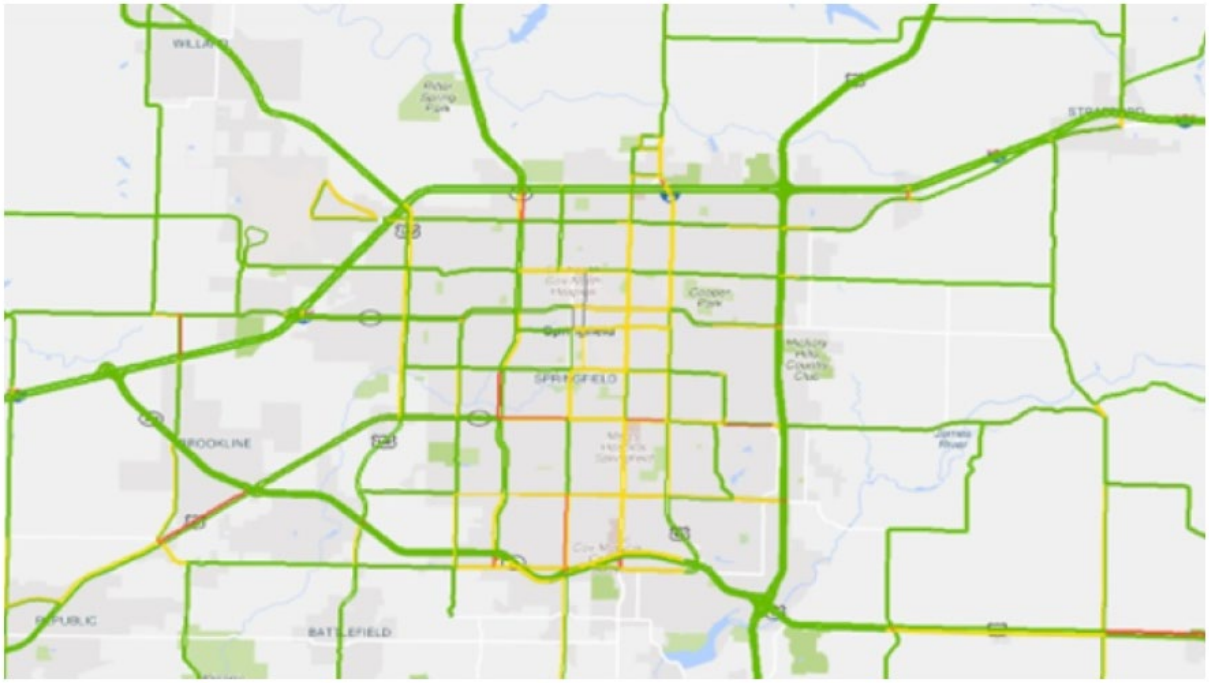
PM St. Louis



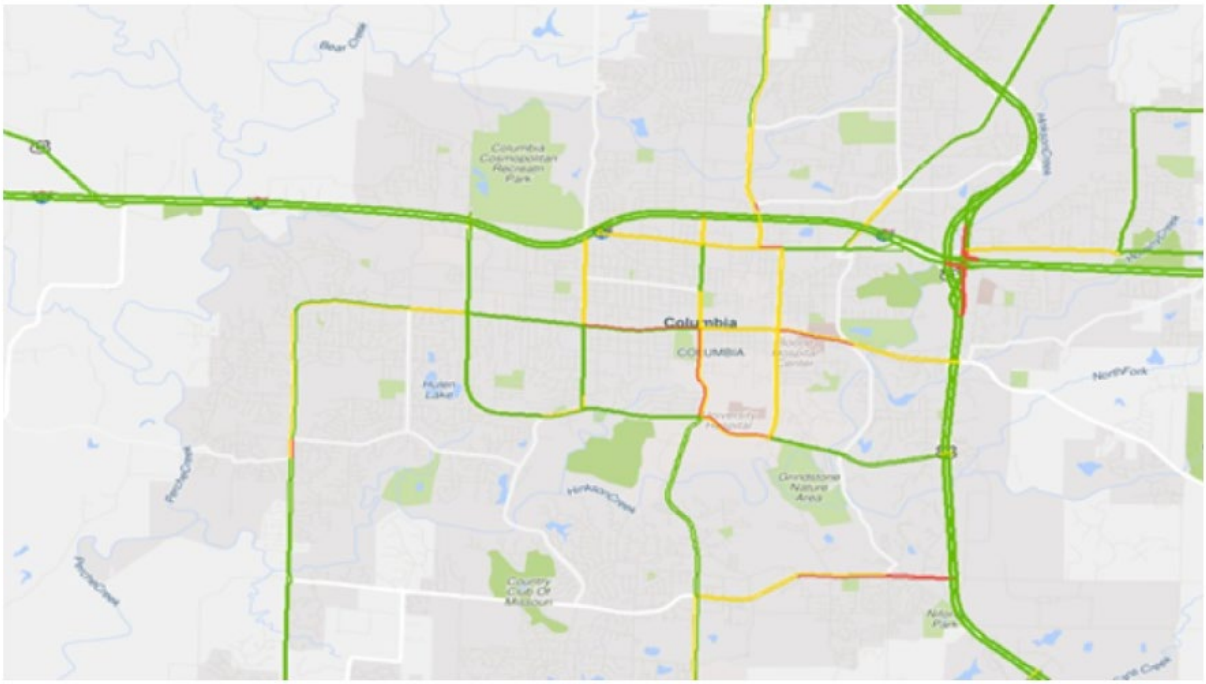
PM Kansas City



PM Springfield



PM Columbia



Write up:
In the first quarter of 2024, the average travel times trended higher in the evenings than in the first quarter of 2023. In the St. Louis region, average travel times increased by three seconds during the morning peak and increased by two minutes and three seconds during the evening peak period. In the Kansas City region, the average travel time increased by 14 seconds during the morning peak and increased by two minutes and 24 seconds in the evening peak. Average speeds across both regions and rush periods ranged from 48 to 62 mph. The morning average travel times were below or just above the targets, and the evening average travel times were above the target times by more than two minutes across both regions.

Planning time accounts for unexpected delays and indicates how much time customers should plan for their trip to arrive on time 95% of the time. In St. Louis, motorists traveling during the morning rush needed to plan just 17 seconds more for a 10-mile trip than they would otherwise need in free-flow conditions. During the evening rush period, however, customers needed to plan for an additional three minutes and 23 seconds for a 10-mile trip. Customers traveling during the Kansas City morning rush should plan on an additional 23 seconds for a 10-mile trip than they would need in free-flow conditions. During the evening rush, customers needed to plan for an additional three minutes and 12 seconds of travel. The planning times in both regions were lower in the morning and higher in the evening than in the first quarter of 2023. The planning times for both regions represent average rush-hour speeds between 45 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.

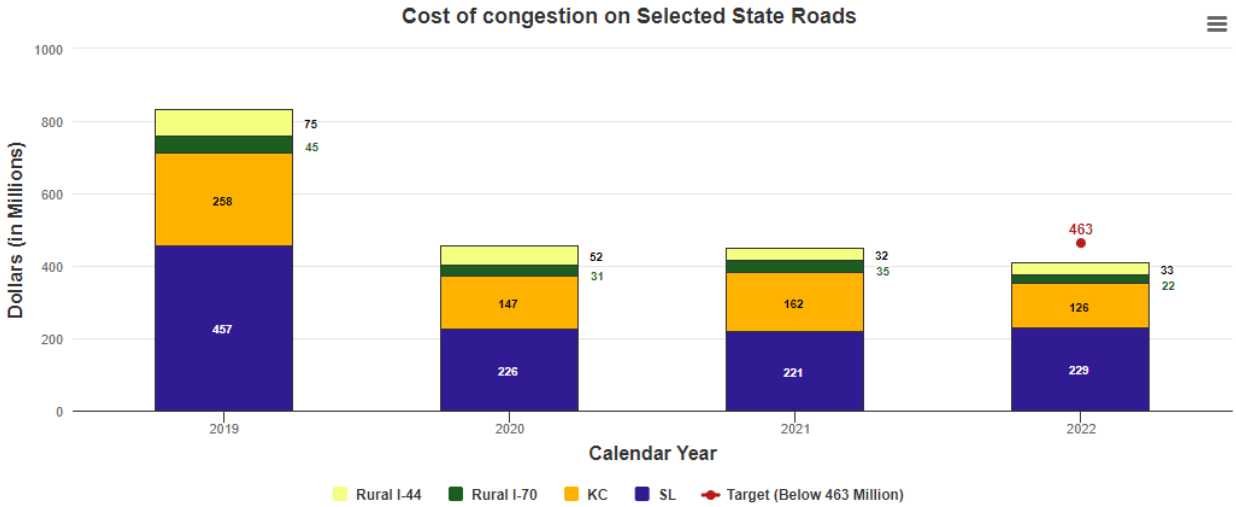
The charts in this measure show the average travel time and the 95th percentile travel time, which is the time motorists should plan in order to reach their destinations timely 95% of the time.

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

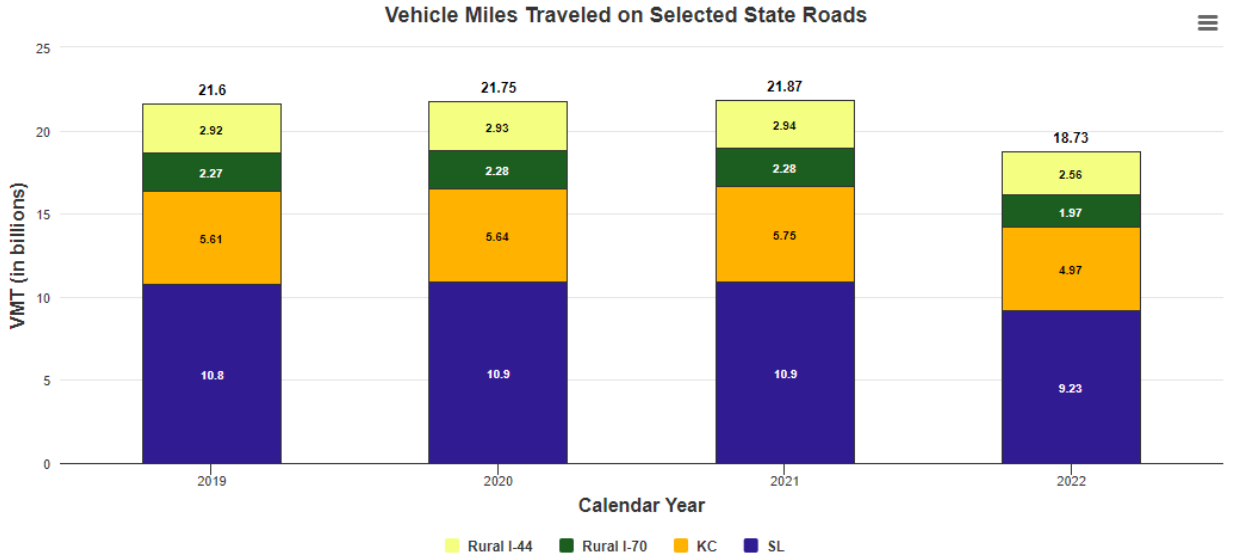
The targets for average travel time are updated quarterly. The targets are established by projecting a 10% improvement over the average of the same quarter over the previous two years. The minimum value for the target time is 10 minutes. This corresponds to the time it takes to travel 10 miles at the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

Cost & impact of traffic congestion – 4b

Update Frequency: July
Color Grade: green



Target: Below 463 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 effects traffic flow. When either form of congestion 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 2019 to 2022 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 2022 target for statewide congestion cost was $463 million. The actual calculation from the Regional Integrated Transportation Information System data for 2022 was $410 million. A significant reduction in travel occurred in 2022 due to record fuel costs. This led to a 14% reduction in vehicle miles traveled and $40 million less in congestion costs when compared to 2021.

Total congestion costs decreased $40 million when all measured areas are considered. Motorists continue to utilize hybrid and remote work arrangements; congestion patterns have not stabilized in the urban centers.

Purpose:

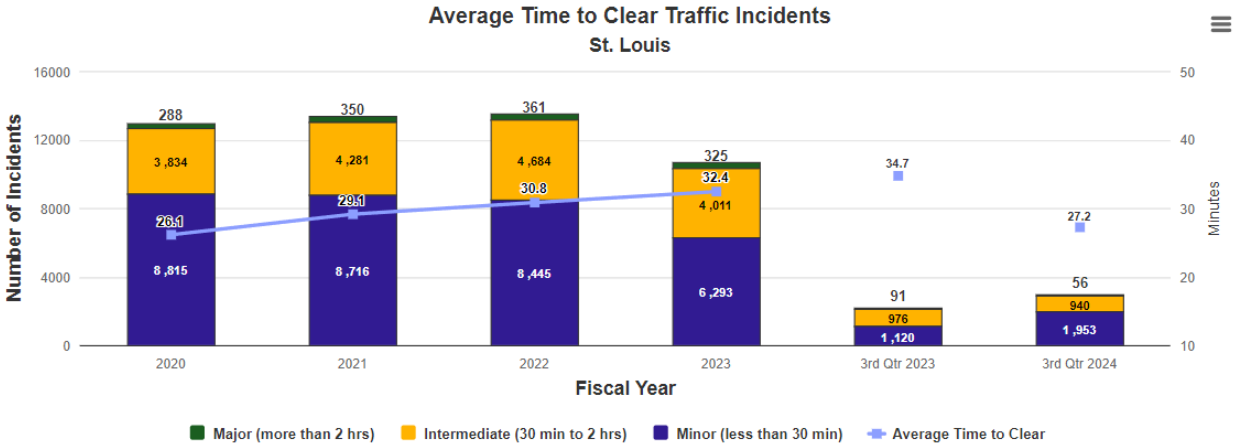
This measure tracks the annual cost and impact of traffic congestion to motorists for user delays and vehicle miles traveled on select routes in the St. Louis and Kansas City regions as well as rural sections of Interstates 44 & 70.

Measurement and Data Collection:

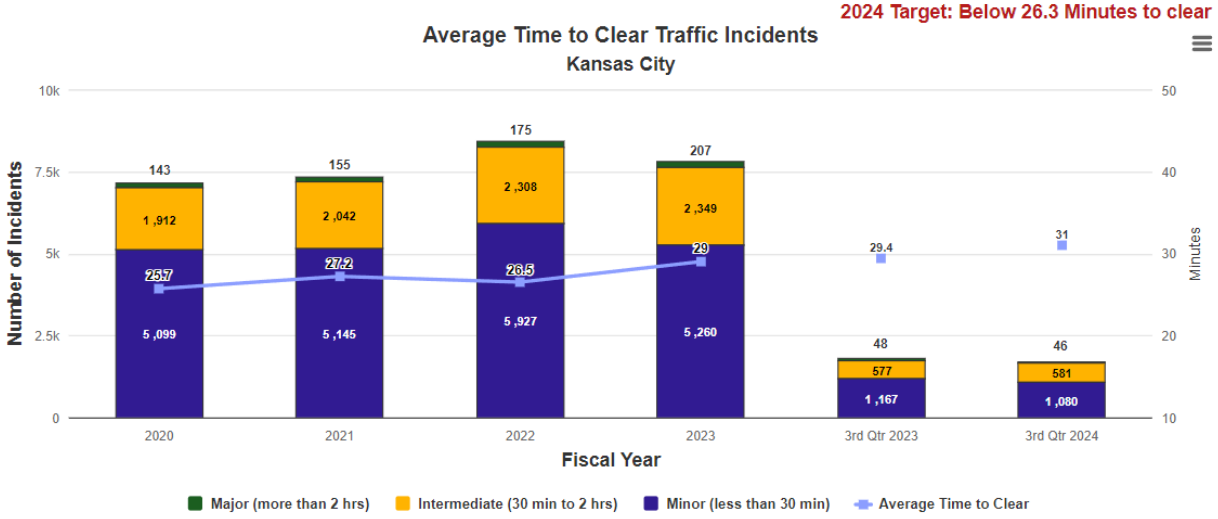
A reporting tool available in the Regional Integrated Transportation Information System looks at user delay costs. This data, in combination with industry standard costs for passenger cars and trucks, reflects the overall costs of congestion. RITIS also includes historic data so trend lines can be tracked and evaluated. The unit cost per passenger car is $19.64 per hour and is obtained from the US Bureau of Labor Statistics. The unit cost per truck is $66.87 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 4-year average.

Average time to clear traffic incident – 4c

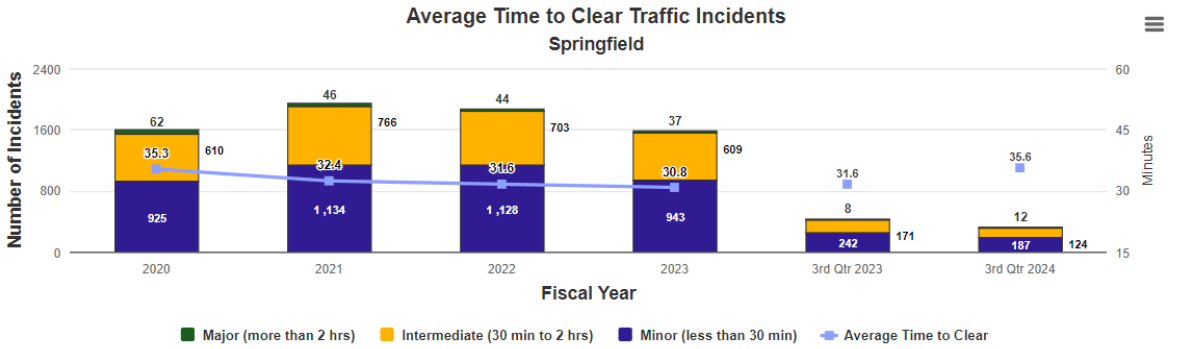
Update Frequency: Quarterly
Color Grade: yellow



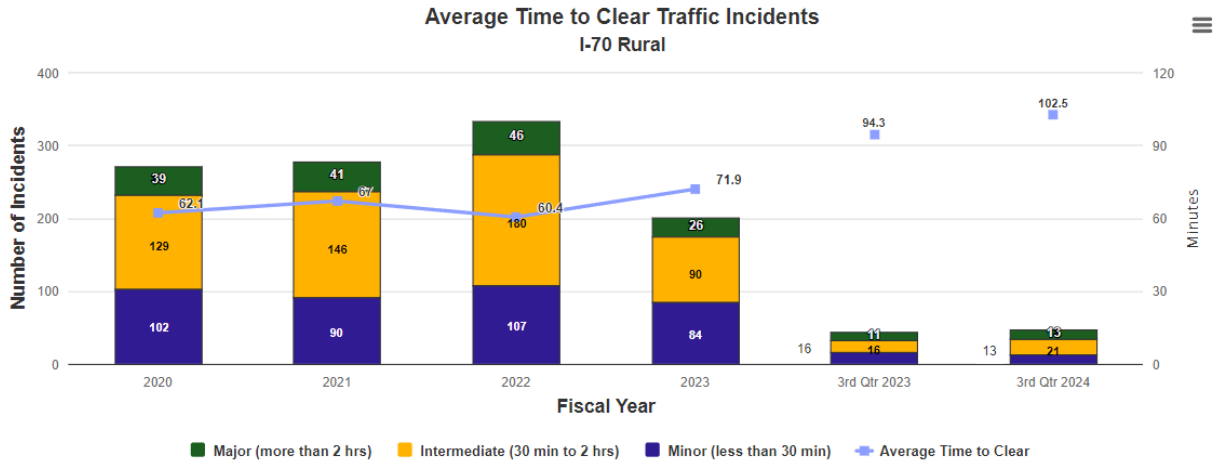
2024 Target: Below 26.3 Minutes to clear



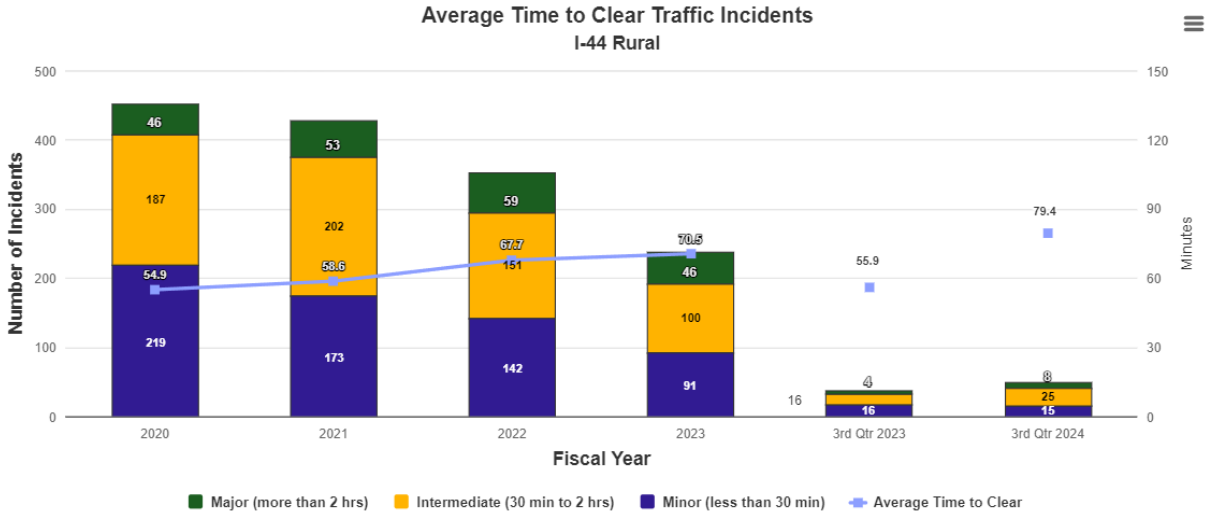
2024 Target: Below 24.9 Minutes to clear



2024 Target: Below 28.7 Minutes to clear



2024 Target: Below 61.0 Minutes to clear



2024 Target: Below 60.0 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 2,949 traffic incidents, with an average time of 27.2 minutes to clear those incidents in the third quarter of FY 2024. Compared to the same period in 2023, there was an increase of 34.8% in the number of incidents and a decrease of 21.6% in clearance times.

Kansas City recorded 1,707 traffic incidents, with an average time of 31.0 minutes to clear those incidents in the third quarter of FY 2024. Compared to the same period in 2023, there was a decrease of 4.7% in the number of incidents and an increase of 5.4% in clearance times.

Springfield recorded 323 traffic incidents, with an average time of 35.6 minutes to clear those incidents in the third quarter of FY 2024. Compared to the same period in 2023, there was a decrease of 23.3% in the number of incidents and an increase of 12.7% in clearance times.

Rural counties of Interstate 70 between MM 28 (Oak Grove) and MM 203 (Foristell) recorded 47 incidents and an average clearance time of 102.5 minutes in the third quarter of FY 2024. Compared to the same period in 2023, there was an increase of 9.3% in the number of incidents and an increase of 8.7% in clearance times.

Rural counties of Interstate 44 between MM 0 (Oklahoma) and MM 69 (Springfield), as well as between MM 91 (Strafford) and MM 224 (Sullivan), recorded 48 incidents and an average clearance time of 79.4 minutes in the third quarter of FY 2024. Compared to the same period in 2023, there was an increase of 33.3% in the number of incidents and an increase of 42.0% in clearance times.

During this reporting period, the combined urban areas where MoDOT has a dedicated Motorist Assist Program witnessed a 13.2% increase in traffic-related incidents, while experiencing a 2.0% decrease in clearance times. On the other hand, the combined rural areas saw a 20.3% increase in traffic-related incidents and a 21.1% increase in clearance times.

Work continues on the Every Day Counts-6 initiative related to Traffic Incident Management and Motorist Assist Program efforts. This includes new Emergency Traffic Control specific to incidents, potential funding from external entities, specialized lighting and consistent decal packages for trucks, and drones for incident scenes and queue management.

Purpose:

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

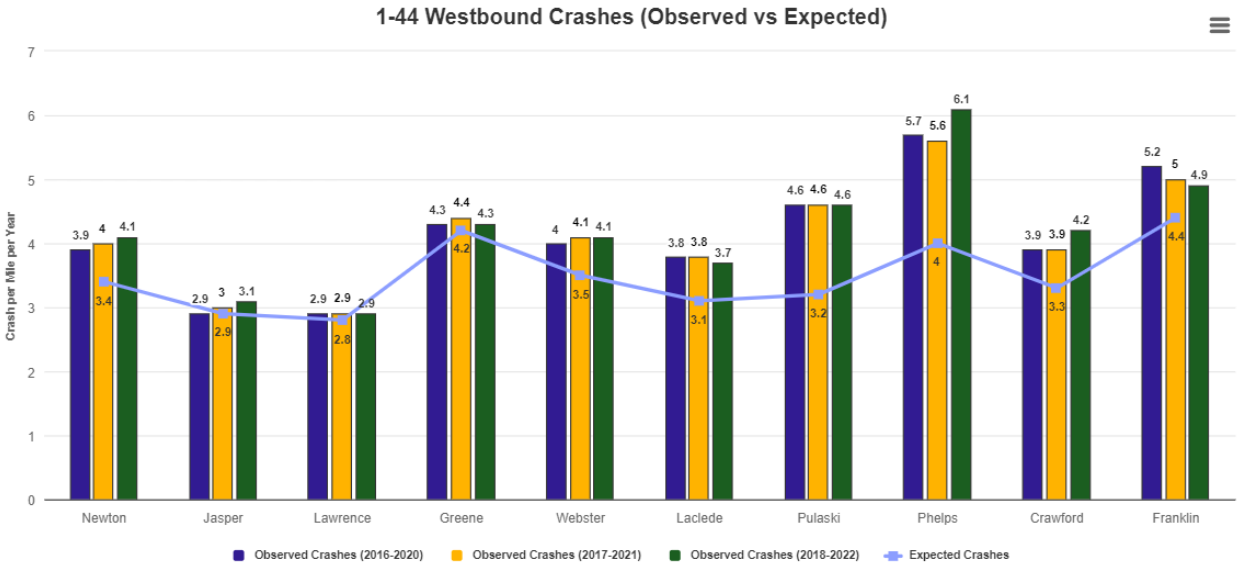
Measurement and Data Collection:

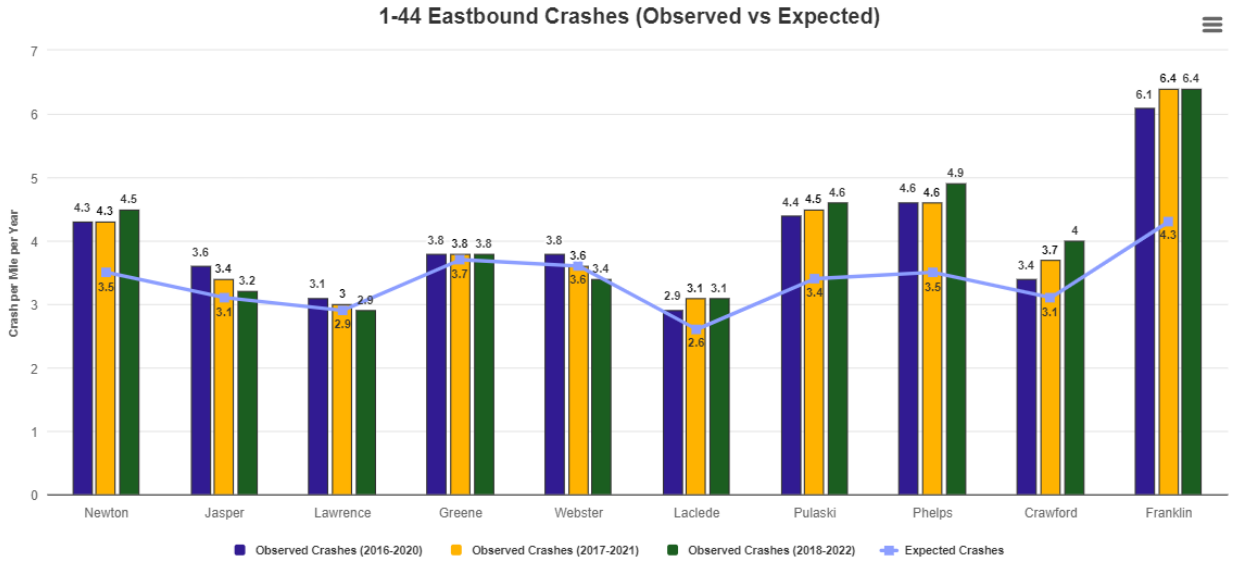
Advanced transportation management systems are used by the St. Louis, Kansas City and Springfield traffic management centers to record incident start time and the time when all lanes are declared cleared. Traffic incidents can be divided into three general classes of duration set forth by the Manual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

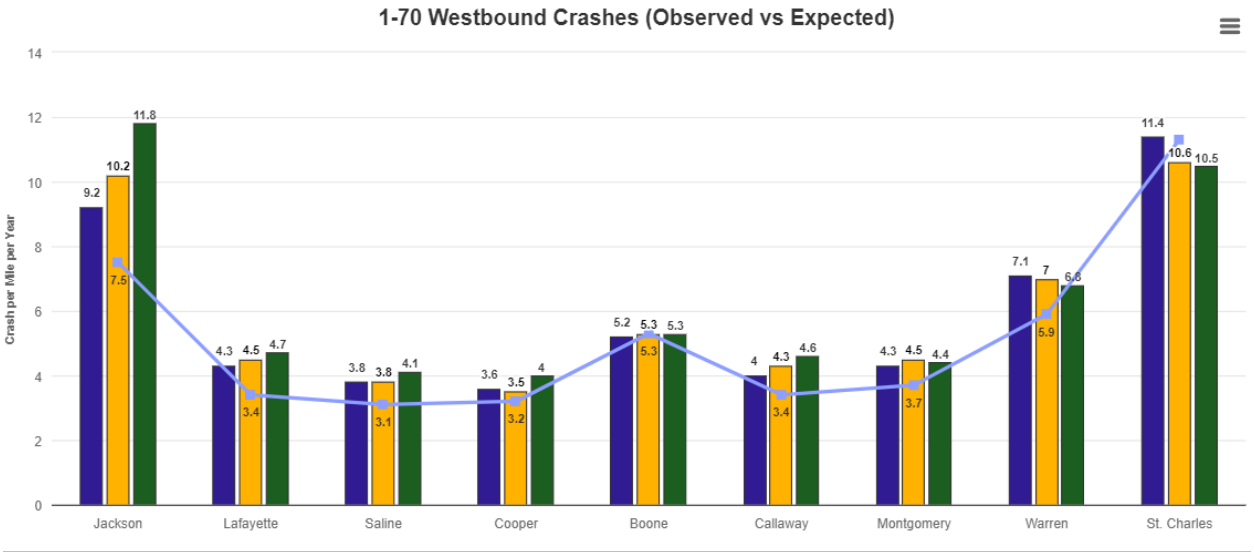
This target is established by projecting a 10% improvement over a 5-year average.

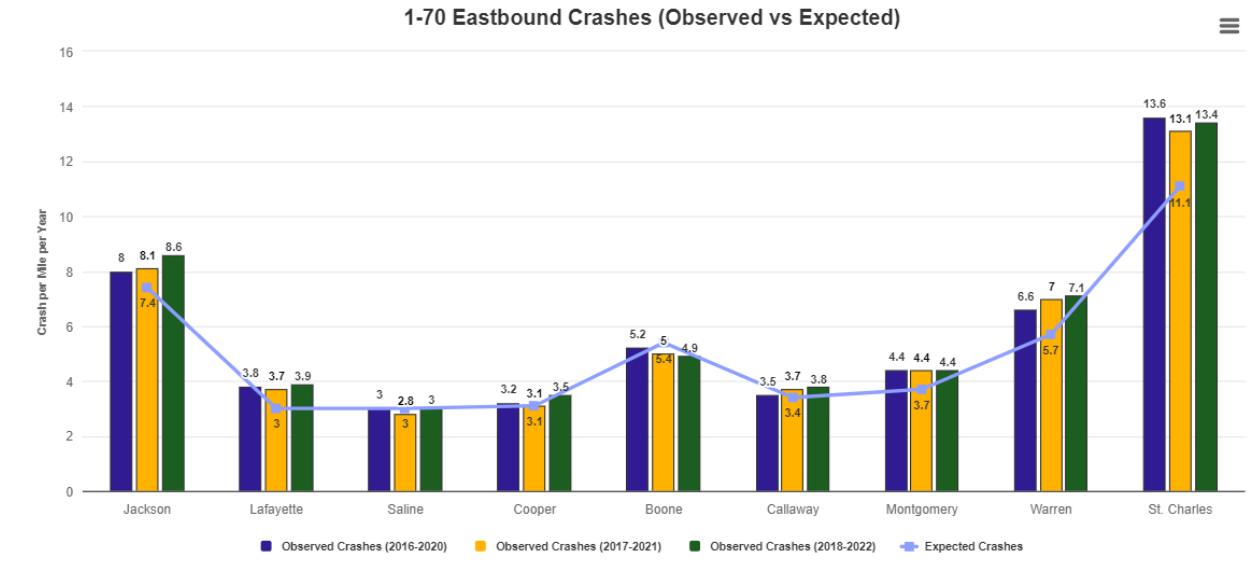
Unplanned incident impacts on major interstate routes - 4d

Update Frequency: October
Color Grade: yellow









Write up:

Interstates connect the nation and keep people and commerce flowing. When interstates shut down in Missouri, the country is cut in half. Keeping interstates 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 related to weather, emergency road repairs, 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 I-70 and I-44 per county. The expected crash number is determined by the traffic volume, roadway characteristics (e.g. number of lanes, lane width, shoulder width, roadway alignment, 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 and help

identify opportunities for improvement. When the number of observed, real-world crashes is higher than the expected crash number, this could indicate an opportunity for enhancements to reduce the frequency of crashes. Identifying these locations can help the department prioritize locations for improvements.

In most counties, the interstates have a safety performance similar to what is expected. However, there are some counties where there may be opportunity to reduce the frequency of crash incidents, such as along I-44 in Pulaski, Phelps and Franklin counties. There have also been instances of success in reducing crash incidents, such as I-70 westbound in St. Charles County.

It should be noted that crashes overall in Missouri were lower in 2020 compared to previous years due to reduced travel associated with the pandemic. However, for this measure, the observed crash data is reported in five-year averages, minimizing the influence of this unique event.

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.

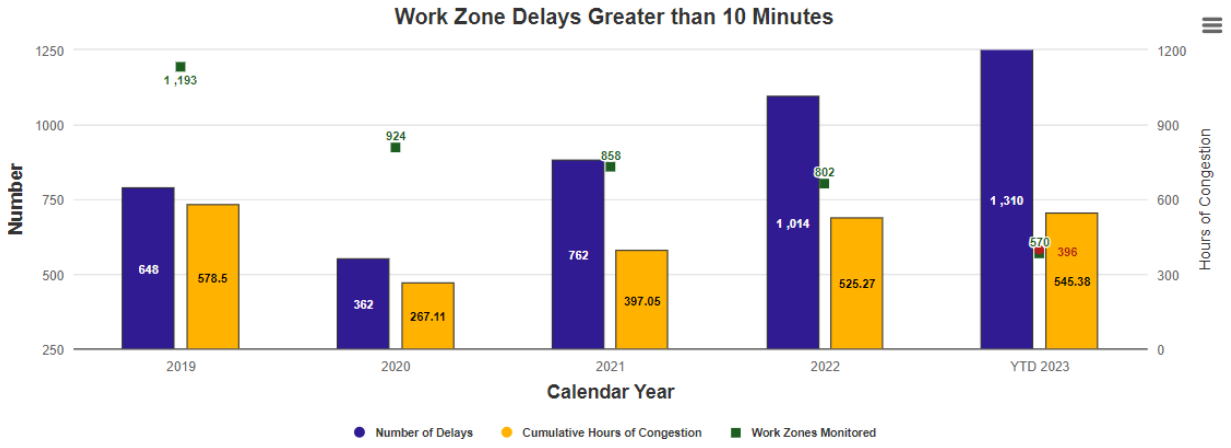
Measurement and Data Collection:

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

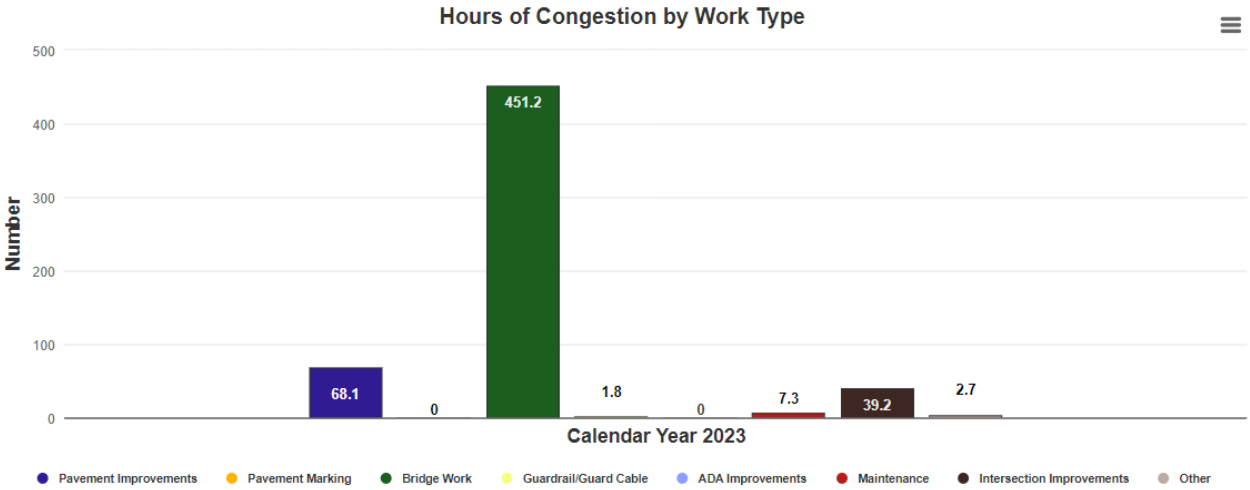
Observed crashes are pulled from MoDOT's Transportation Management System and represent all reported crashes which occurred between the limits on each interstate. The miles used to determine the crash per mile are also pulled from MoDOT's Transportation Management System. Expected crash per year per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

Work zone delays to the traveling public – 4e

Update Frequency: July/October
Color Grade: red



Target: Below 396 Hours of Congestion per Year



Write up:

Motorists want to travel through work zones with as little inconvenience as possible. MoDOT minimizes travel impacts by shifting work times to impact fewer travelers, using technology in work zones to provide valuable information to customers and using innovative 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.

Through the third quarter of 2023, MoDOT has monitored 570 work zones consisting of 1,310 delays of 10 minutes or longer with a total congestion of 545 hours. Increased traffic volumes continue to cause higher delay and congestion trends since 2020. When comparing YTD 2023 with YTD 2022, there is a 48% increase in the number of delays and a 23% overall congestion increase.

This quarter, bridge construction on I-44, intersection work on MO 60/MO 125 and bridge work on I-55 in SL were the largest contributing projects, causing 46 hours, 33 hours and 42 hours of congestion, respectively. These projects have contributed a total of 121 hours, or 61%, of the 200 hours of congestion this quarter. For the year, bridge improvement projects continue to be the largest contributor of delays at 79%.

The cumulative work zone congestion target is 396 hours which is an average of the congestion from 2022-2023. This target will be reevaluated in 2024.

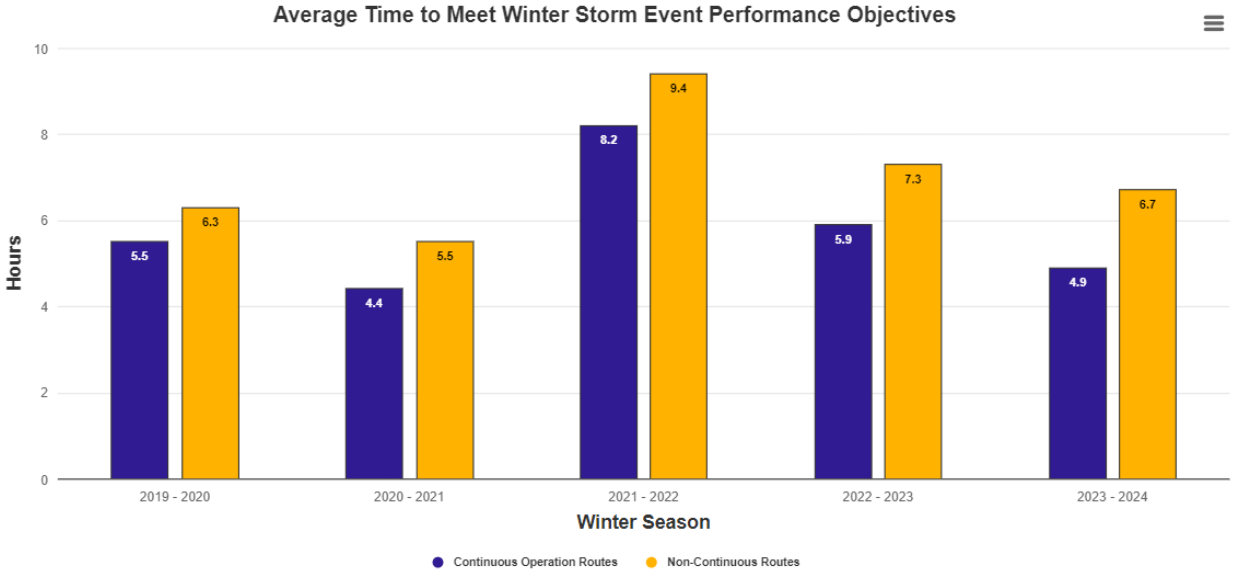
Purpose:

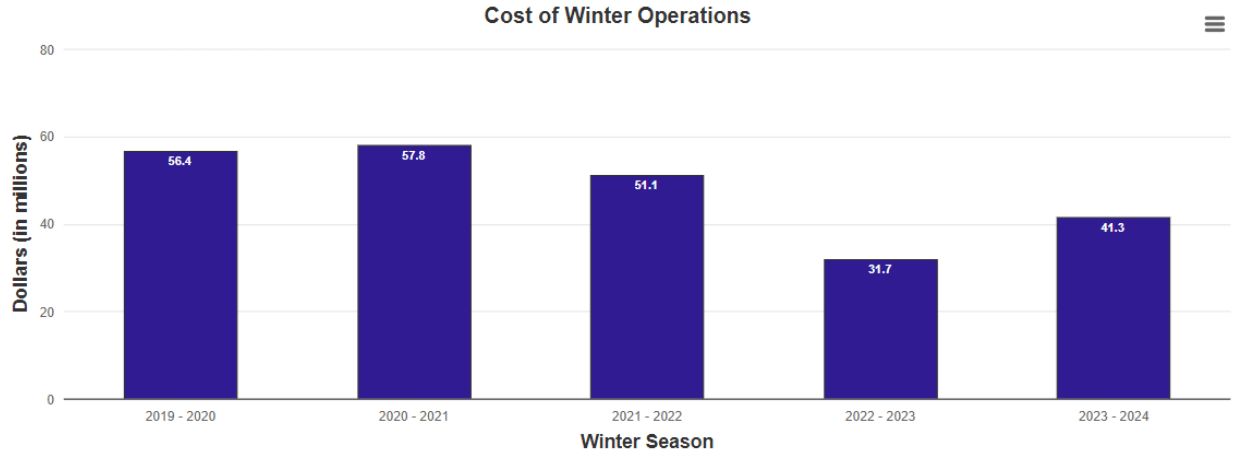
Work zones are designed to allow the public to travel through them safely and with minimal disruptions. This measure tracks the performance of significant work zones.

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

Update Frequency: January/April
Color Grade: green





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 during winter events urging them to travel only if

necessary. This messaging is in the form of social media posts and media releases. The last two seasons have been especially challenging due to MoDOT's maintenance function being understaffed by several hundred employees. For the 2023-2024 season, staffing levels increased incrementally but remained below levels needed to keep all plow trucks moving for consecutive 12-hour shifts. This prolonged shortage in operators along with a mild 2022-2023 winter season left MoDOT with less experienced operators and many drivers needing to complete on-the-job training requirements before being able to drive a plow truck on their own. This information was communicated to the public along with the anticipation that it will take longer to clear the roads following a winter event. The 2023-2024 winter season saw more inclement weather than the 2022-2023 season but was still below average in terms of total winter precipitation. There were a few significant events involving frozen precipitation or extremely low temperatures that extended the time to clear the roads after these storms, but MoDOT's overall time to meet winter objectives decreased from the previous season. Due to significant planning prior to the start of the season and sharing of resources during the season, MoDOT's time for meeting objectives for the 2023-2024 season decreased to 4.9 hours for continuous operations routes and 6.7 hours for non-continuous routes, representing a 17% and 8% improvement from the previous season, respectively.

On average, MoDOT's winter operations have cost about $51 million per year, over the previous five years. As of March 31, 2024, MoDOT's cost for the 2023-2024 winter season was $41.3 million.

Purpose:

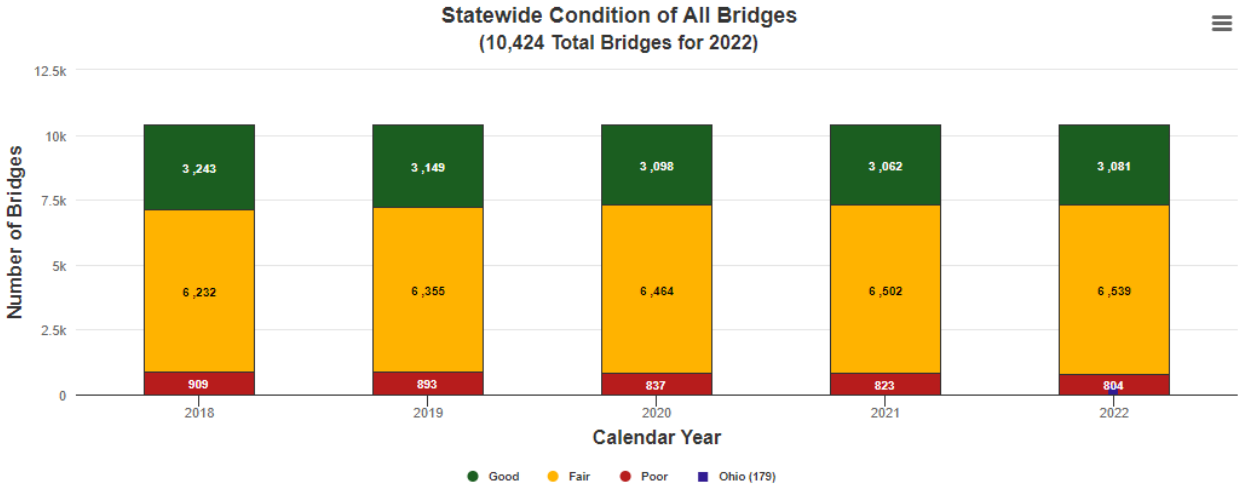
This measure tracks the amount of time needed to perform MoDOT's snow and ice removal efforts. It also reviews the impacts of significant events and the measures taken to minimize these impacts.

Measurement and Data Collection:

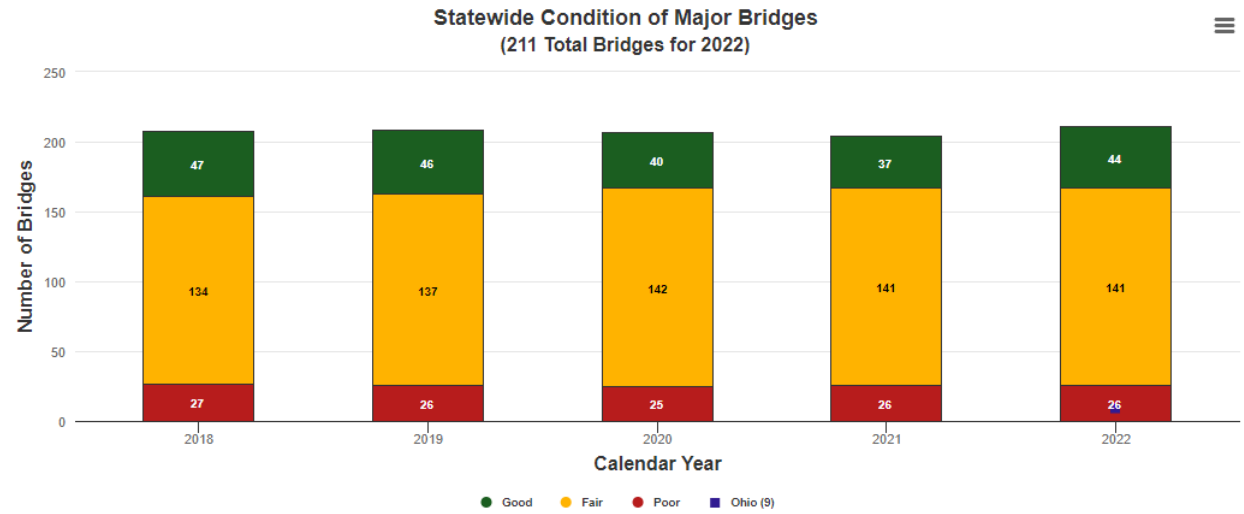
For major highways and regionally significant routes, the objective is to restore them to a mostly clear condition as soon as possible after the storm has ended. MoDOT calls these "continuous operations" routes. State routes with lower traffic volumes should be opened to two-way traffic and treated with 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

Update Frequency: July
Color Grade: yellow



Target: Below 900 Poor



Target: Below 20 Poor

Write up:

The public has indicated that the condition of Missouri's existing roadway system should be one of the state's highest priorities. Currently, 804 (26 major) structures are in poor condition, 6,539 (141 major) structures are in fair condition and 3,081 (44 major) structures are in good condition.

The number of structures in poor condition peaked at 922 in 2017 and is trending downward. The number of good condition structures has a declining trend but did increase in 2022. The number of fair condition structures has been increasing. The decrease in poor condition bridges is reflective of MoDOT's Asset Management Program focus on poor structures through the Governor's Focus on Bridges program as well as design-build projects and other Statewide Transportation Improvement Program

(STIP) programming in various districts. The declining trend in good structures, as well as the increase in fair condition structures, is reflective of MoDOT's aging bridge inventory with many structures needing minor maintenance or rehabilitation.

For major bridges, the number of structures in poor condition peaked in 2018 at 27 and is currently 26. The number of fair structures has remained the same for the last two years at 141. The number of good structures increased, which is reflective of three major STIP project investments that are currently under construction. Work on major bridges is expensive, with rehabilitations costing $15 million to $30 million and replacements ranging from $40 million to $300 million. Ohio has been selected for comparison, as its total of 10,436 (161 major) state highway bridges is only 12 more than Missouri. The two states also have 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.

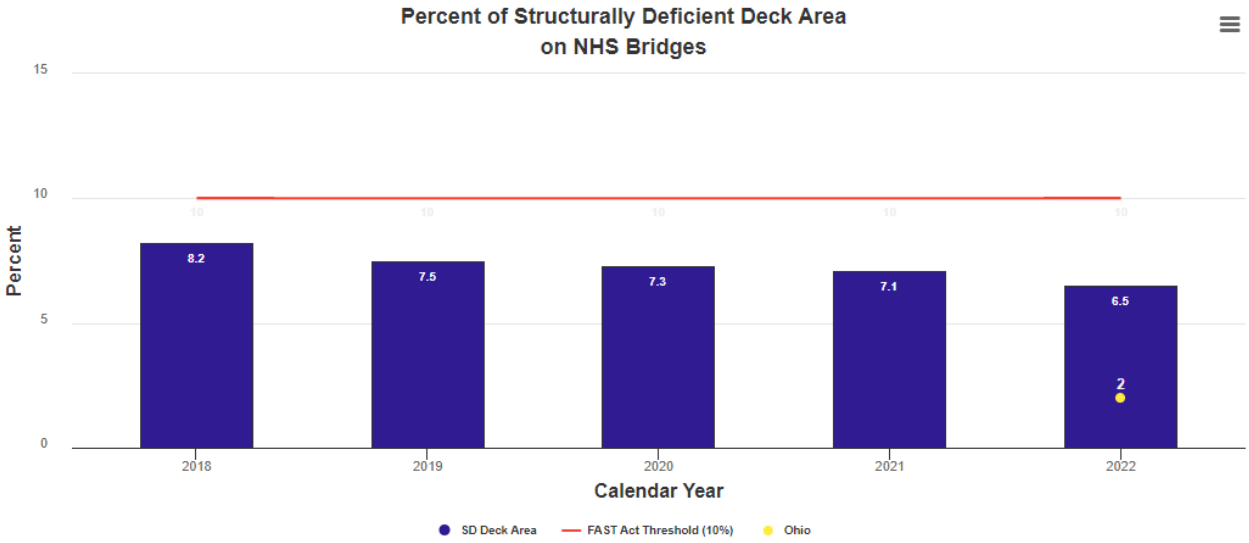
Measurement and Data Collection:

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 10,387 bridges on state highways, 204 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

Update Frequency: July
Color Grade: green



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 91 National Highway System (NHS) structures (five structurally deficient), and the MoDOT system has 3,582 NHS structures (145 structurally deficient). Missouri currently falls below the penalty threshold with the statewide structurally deficient deck area at 6.5%. This is due to the continued focus on major bridges when funding is available, as well as the increasing focus on poor condition bridges in the Statewide Transportation Improvement Program.

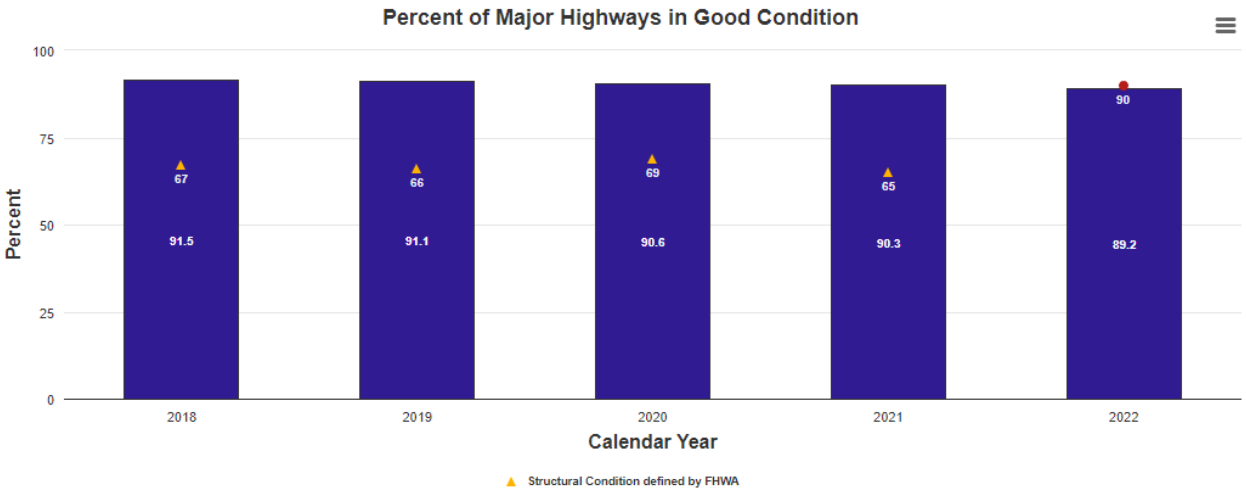
Statewide, this measure is also heavily influenced by major bridges with one structure having the ability to impact this measure +/- 0.5%. From 2021 to 2022, there was a decrease in the statewide percentage of structurally deficient deck area on the NHS. This change was heavily influenced by the Rocheport and Buck O'Neil design-build projects, which added six major-length bridges to the inventory and by a new bridge being built in the Southwest District. In the St. Louis District, the Illinois Department of Transportation completed repairs on the Martin Luther King River Bridge, bringing it out of the poor status and MoDOT completed repairs on one of the double decker bridges in St. Louis, also bringing it out of poor status. 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 10,436 total state highway bridges in Ohio with 4,996 structures on the NHS.

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

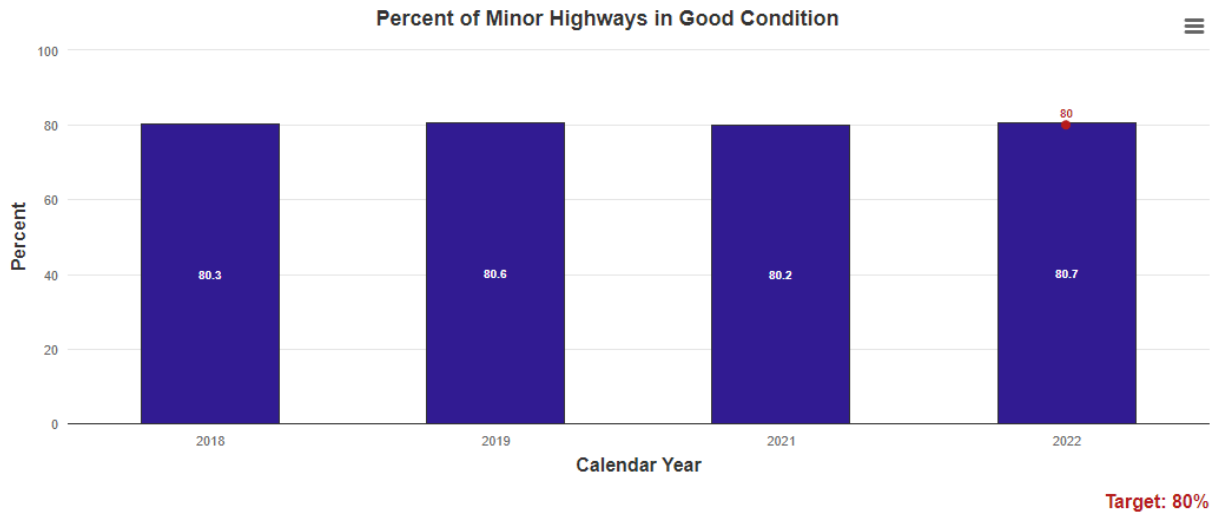
Measurement and Data Collection:
The NHS is defined by federal law and consists of all roadways functionally classified as principal arterials as well as some routes that serve as major connections to multimodal freight-type facilities and some locally owned roadways. The FAST Act requires states to 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

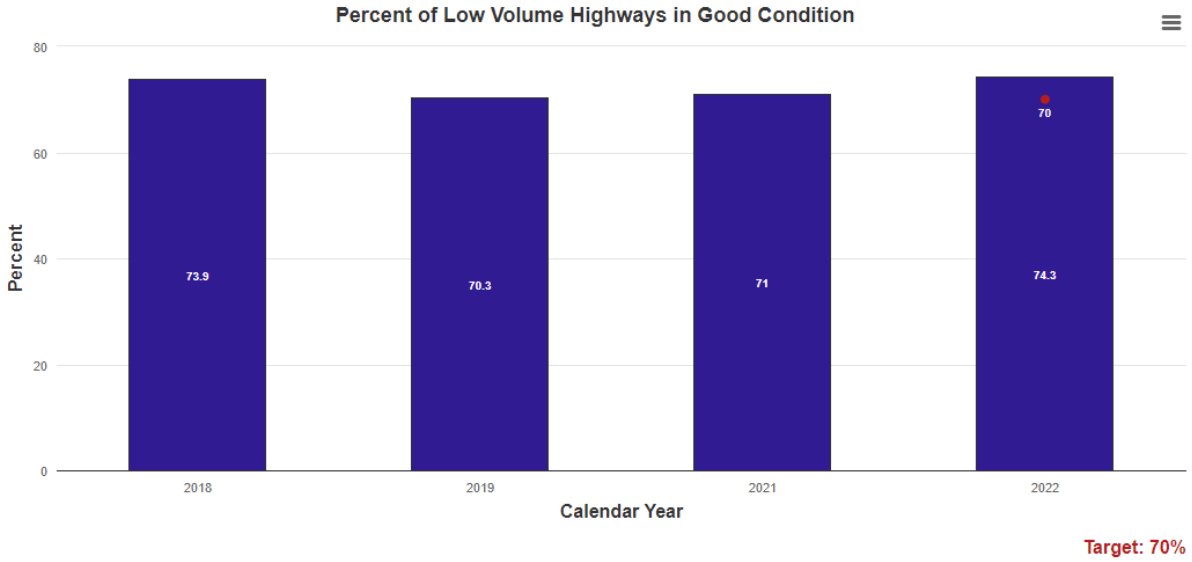
Update Frequency: July
Color Grade: green



Target: 90%



*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. For yearend 2022, the percentage of major highways in good condition is 89.2%, falling just below the target of 90%. The condition of minor and low-volume highways has improved to 80.7% and 74.3% respectively, both meeting the targets of 80% for minor-volume highways and 70% for low-volume highways.

As defined by Federal Highway Administration (FHWA), the target is based on the statewide asset management plan and represents MoDOT's goal of maintaining the current conditions of Missouri's highways.

Beginning in 2018, FHWA requires 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 Federal Highway Administration then provides a report card back to the departments. However, there is no structural condition to report for 2022 as the FHWA software is down.

MoDOT has implemented asset management practices statewide to invest in transportation projects that will keep good roads in good condition. Inflation continues to require MoDOT to push back improvements to major highways, resulting in a downward trend for the past few years. To help reverse this trend, MoDOT has increased the minimum lift thickness of asphalt to four times the nominal aggregate size, improving joint density, a common failure on major highways. MoDOT is also working to implement Balanced Mixed Design with the goal of improving the quality of asphalt on roadways.

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.

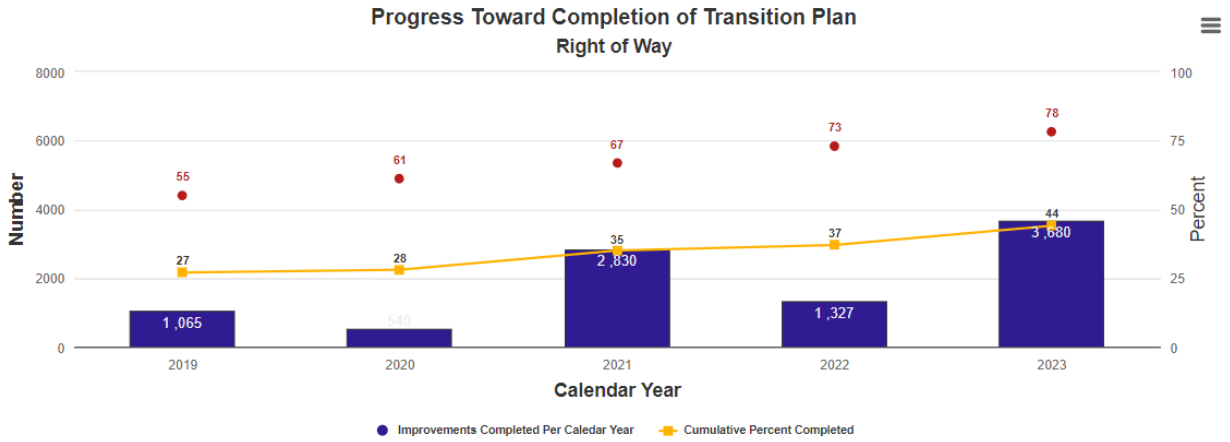
Missouri's minor highway system consists of its less-traveled state highways, including most lettered routes and routes that mainly serve local transportation needs. There are 17,334 miles of minor highways in Missouri.

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.

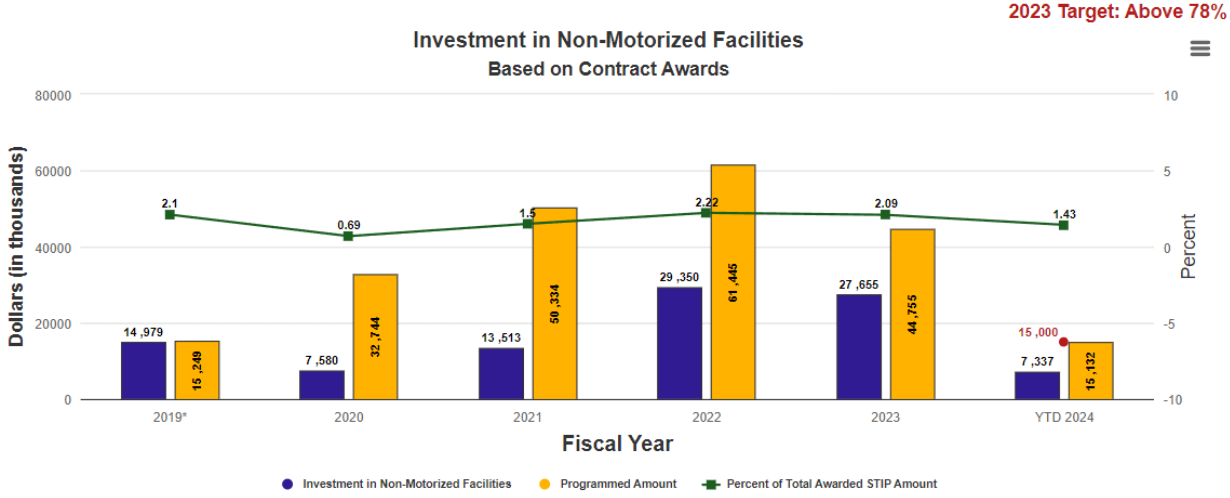
Missouri measures the condition of its roadways using smoothness as one factor but also considers physical distresses, such as cracking. The targets for this measure are set by internal policy and will not change unless policy changes, regardless of performance.

Bike/pedestrian and ADA transition plan improvements – 5d

Update Frequency: January
Color Grade: red



2023 Target: Above 78%



2024 Target: $15 Million

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

Write up:

MoDOT has identified 46,107 barriers within its right of way needing to be 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 78% was established for calendar year 2023. To date, MoDOT has completed 20,489 or 44% of the identified barriers.
Since 2008, MoDOT has invested nearly $162.3 million towards the completion of the transition plan. The districts have projected to invest over $154 million towards the remainder of the ADA Transition Plan improvements in the Statewide Transportation Improvement Program. That amount is expected to cover transition plan improvements and other ADA needs across the state.

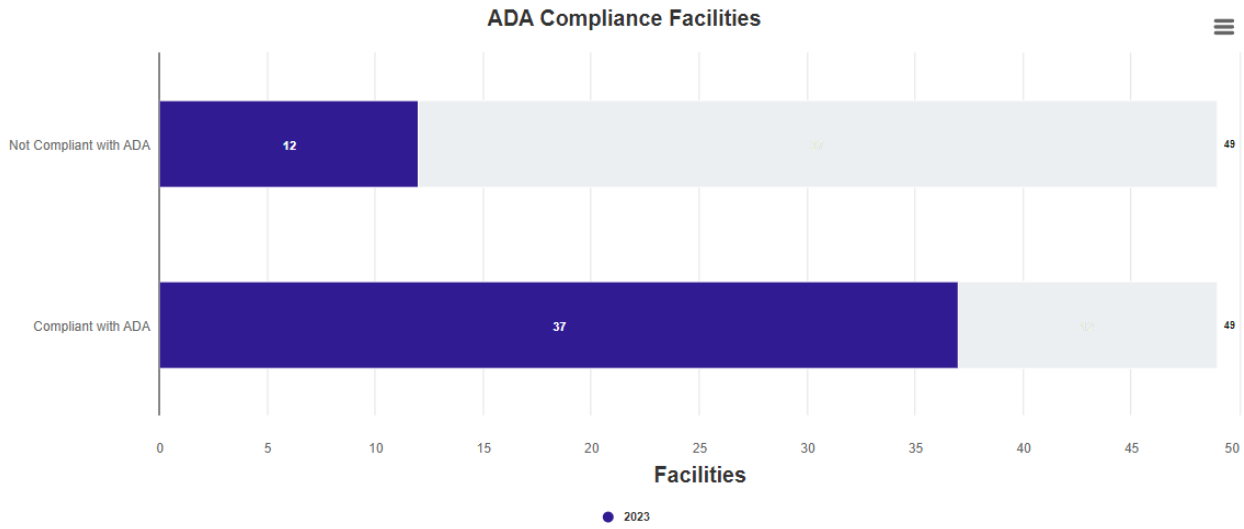
Purpose:
This measure tracks MoDOT's investment in non-motorized facilities and progress toward removing barriers. Accessibility needs occur within the right of way, such as sidewalks and traffic signals. Removal of the barriers listed in MoDOT's 2010 ADA Transition Plan is required as part of the department's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



Target: 100%

Write up:
MoDOT owns and maintains 49 truck parking, rest area and welcome center facilities. Of those 49 facilities, 19 are rest areas and welcome centers. MoDOT has identified 12 rest areas in need of improvements to be in compliance with the Americans with Disabilities Act. Sidewalk improvements are required for these 12 rest areas to be ADA compliant.

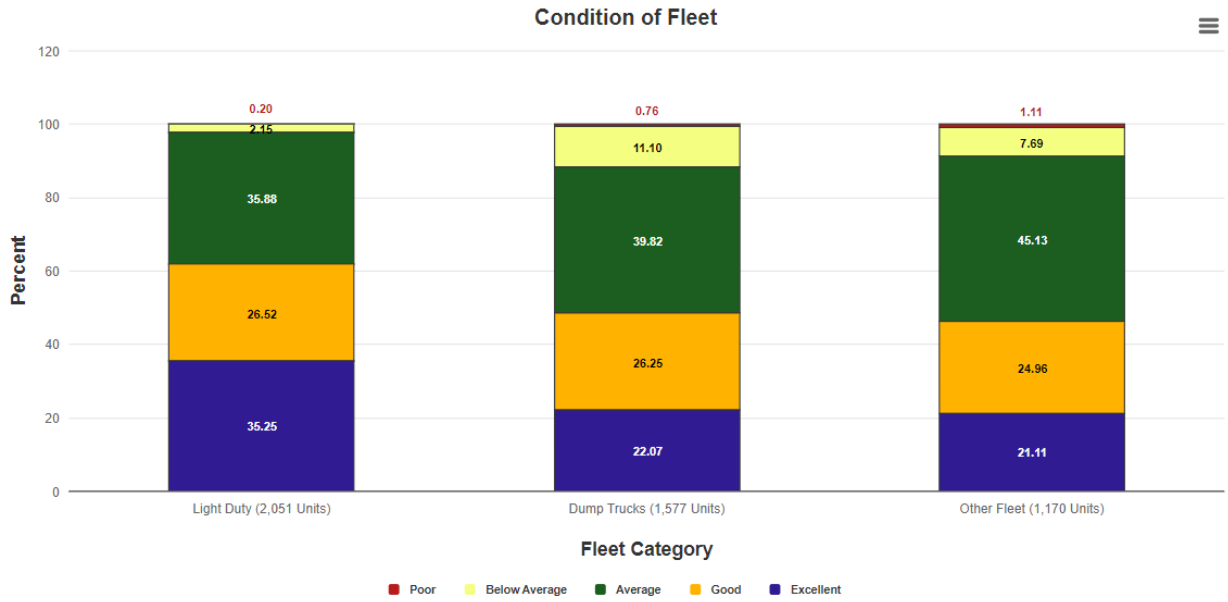
MoDOT's maintenance and office facilities are compliant with ADA. All new facilities are designed and constructed to be compliant with ADA. This year, two rest areas have been converted to truck parking facilities and more parking places have been added.

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

Update Frequency: April
Color Grade: yellow



Write up:
MoDOT has a fleet of equipment that is essential for maintaining the state's roads and bridges to meet customers' needs. The replacement value of this fleet is $578 million. However, as the department's fleet ages due to limited funds for fleet investment, monitoring the condition helps assess resources and make informed purchasing decisions. Per the 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 the fleet is rated at or above average, but 11.86% of MoDOT dump trucks are rated below average or poor, equating to 187 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.

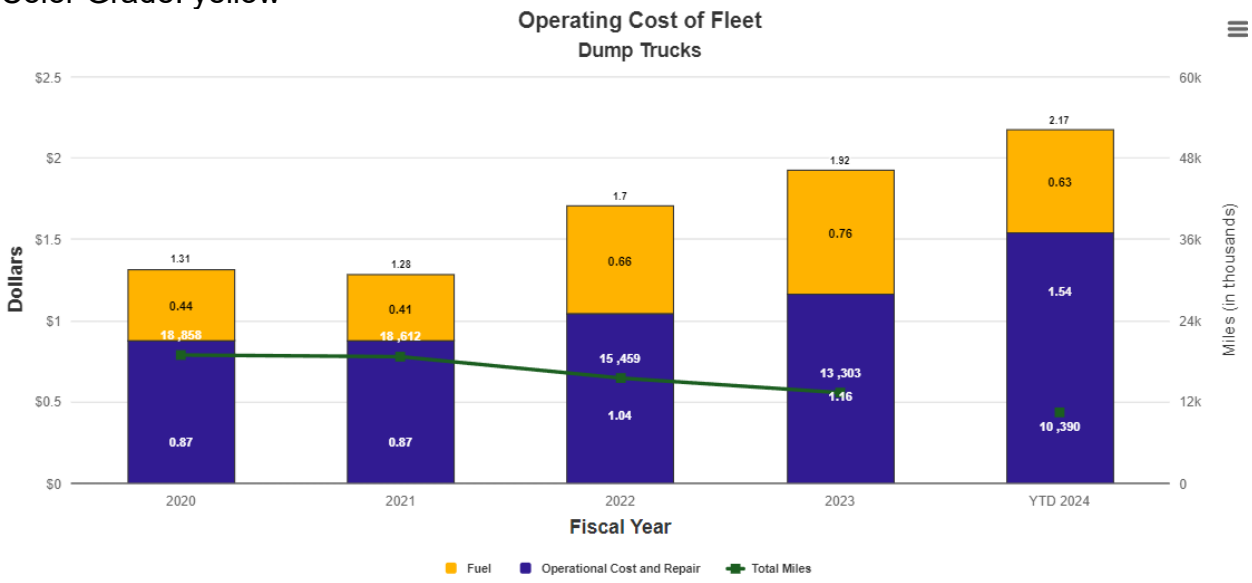
Measurement and Data Collection:
Data is obtained from MoDOT's fleet management system, FASTER, and is updated by fleet personnel involved in the inspection process. Central Office Equipment Technician Support Specialists perform onsite quality assurance reviews on fleet ratings throughout the year.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

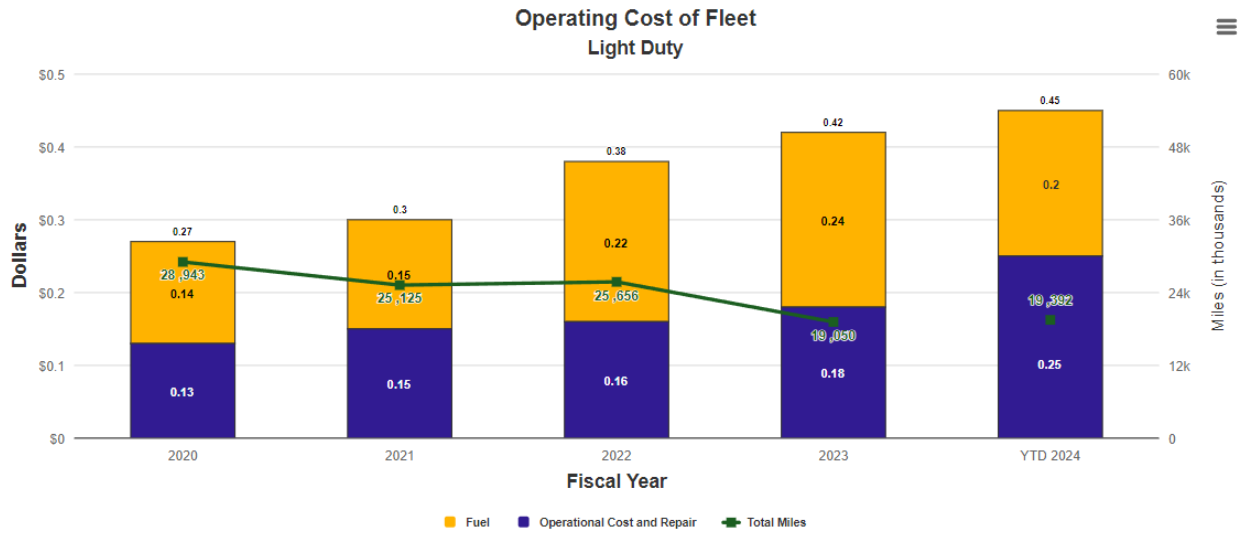
In summary, the ratings are: Excellent – unit is fully operable and capable of full performance functionality; Good – unit is operable and safe with signs of normal use; Average – unit is generally operable but may have minor component failure or damage needing repair; Below average – unit has major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

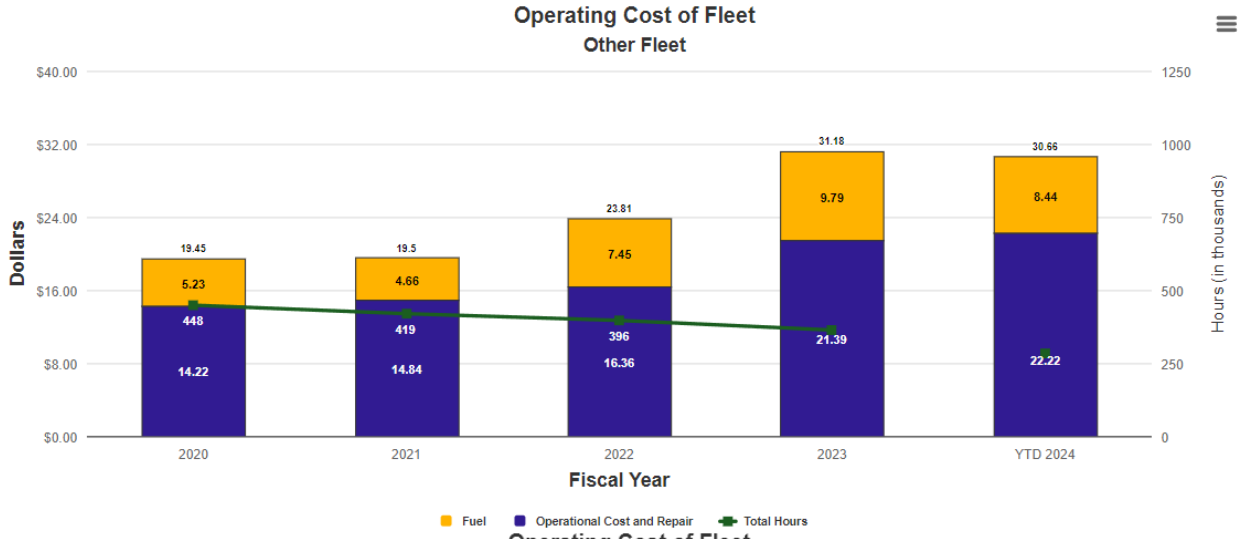
Data is as of Oct. 31st, 2022 and what has been incorporated in the fleet asset management model.

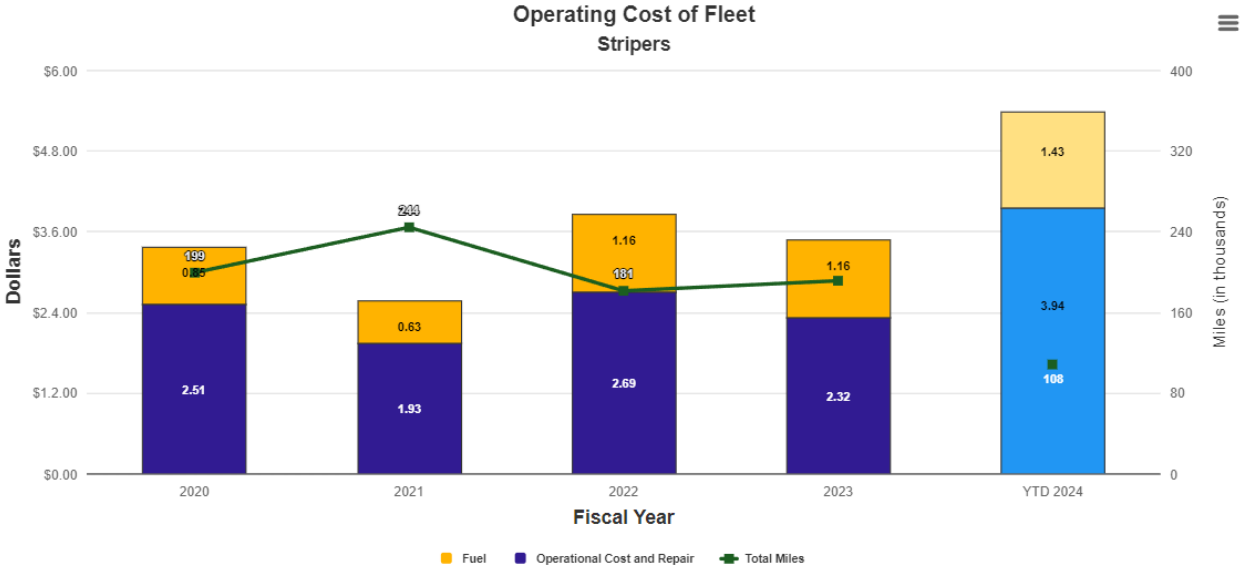
Operating cost of fleet – 5g

Update Frequency: Quarterly
Color Grade: yellow




Operating Cost of Fleet
Light Duty
Dollars
Miles (in thousands)
Fiscal Year
2020
2021
2022
2023
YTD 2024
0.27
0.14
0.13
28 ,943
0.3
0.15
0.15
25 ,125
0.38
0.22
0.16
25 ,656
0.42
0.24
0.18
19 ,050
0.45
0.2
0.25
19 ,382
Fuel
Operational Cost and Repair
Total Miles


Operating Cost of Fleet
Other Fleet
Dollars
Hours (in thousands)
Fiscal Year
2020
2021
2022
2023
YTD 2024
19.45
5.23
14.22
448
19.5
4.66
14.84
419
23.81
7.45
16.36
396
31.18
9.79
21.39
30.66
8.44
22.22
Fuel
Operational Cost and Repair
Total Hours


Operating Cost of Fleet
Stripers
Dollars
Miles (in thousands)
Fiscal Year
2020
2021
2022
2023
YTD 2024
2.51
0.63
1.93
1.16
181
2.69
1.16
2.32
1.43
3.94
108
Fuel
Operational Cost and Repair
Total Miles

Write up:
MoDOT's fleet equipment is necessary for maintaining roads and bridges to meet customers' needs. The department's fleet, with a replacement value of over $578 million, is aging due to limited funds for fleet investment. In FY 2022, the total miles/hours covered by the fleet was 41.6 million, which decreased to 32.9 million in FY 2023. To ensure the department makes good repair decisions, it's necessary to monitor operational costs.

Through the 3rd quarter of FY 2024, fuel costs have decreased from their previous highs in all categories except stripers. However, operational costs increased across all categories. From FY 2020 to FY 2023, the department's total cost per mile/hour has increased annually.

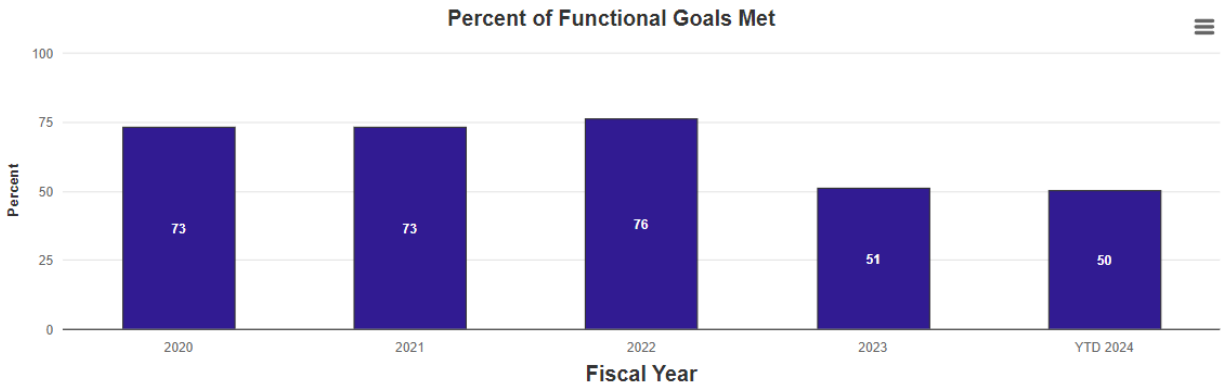
MoDOT continues to focus on fleet replacements using an asset management approach based on equipment age and miles/hours, which began in 2019.

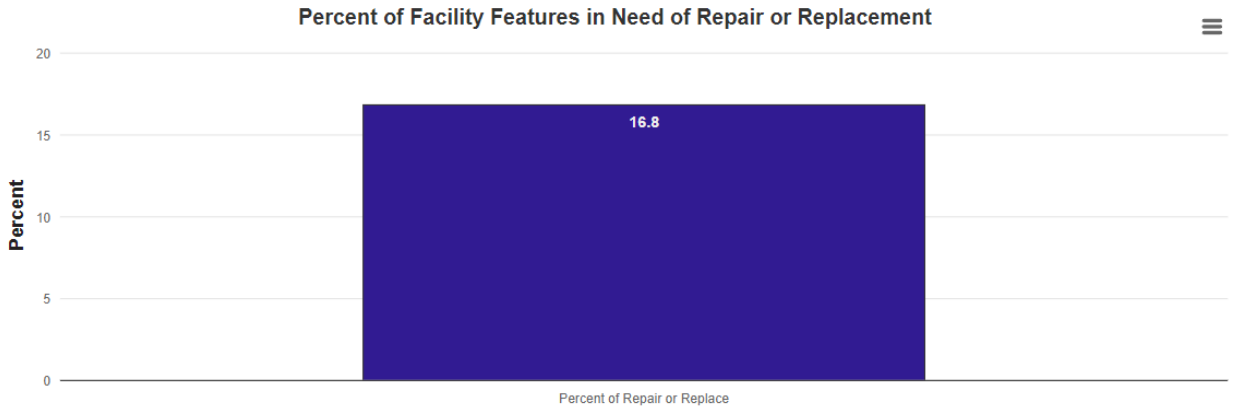
Purpose:
This measure tracks the operating cost of MoDOT's diverse fleet. This includes all classes of fleet broken down by Dump Trucks, Light Duty, Other Fleet and Stripers. Light Duty fleet contains cars, pickups, utility trucks, vans and 1-ton trucks. Other Fleet contains heavy equipment such as tractors,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

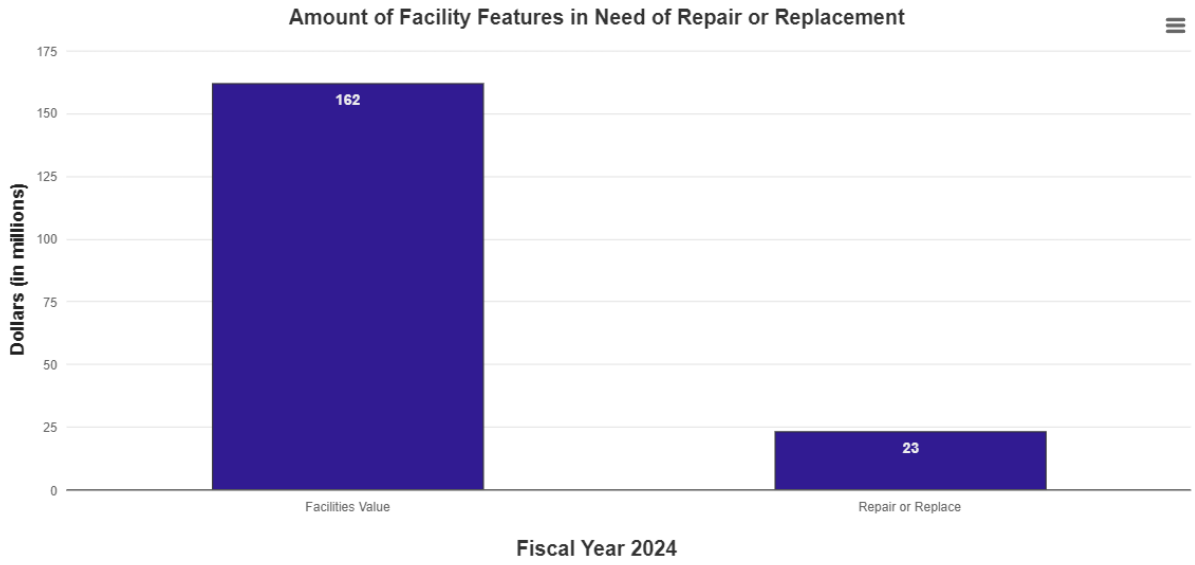
Measurement and Data Collection:
Data reflects the operating cost of MoDOT units in fuel, repairs, labor, benefits and miscellaneous costs. The cost data is collected in the statewide financial system. Fleet data is collected from MoDOT's fleet management system, FASTER.

Condition of facilities – 5h

Update Frequency: April
Color Grade: red







Write up:

To carry out its duty to Missouri citizens, MoDOT utilizes facilities systems valued at over $162 million. These facility systems include office buildings, maintenance buildings, cold storage, gasoline/petroleum storage, chemical storage and wash bays. However, many of these buildings lack sufficient storage space, breakrooms, bathrooms or work bays. Every year, over 9,400 building features are inspected to evaluate their physical condition. Hundreds of these systems require renewal each year. It's important to note that the total value of the facilities' systems does not necessarily equate to the total replacement cost of all the facilities.

For FY 2024, the department has a budget of $12 million for the financial provision of addressing the functional and physical needs of the facilities.

MoDOT uses Capital Improvement and Capital Asset Preservation strategies to meet the functional and physical requirements of its facilities. These strategies help to maintain a balance between asset management and functionality by systematically evaluating planning and allocating resources to maximize the use and lifespan of its facilities.

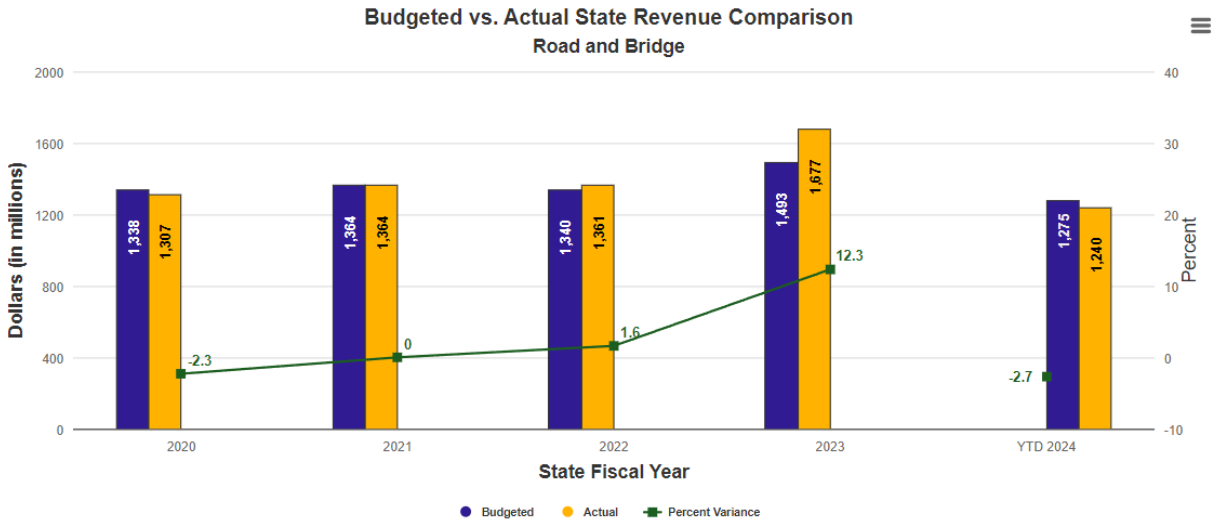
Efforts are being made to ensure that all facilities are fully functional by evaluating current and projected physical conditions and combining them with budget planning to extend the life of these facilities.

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.

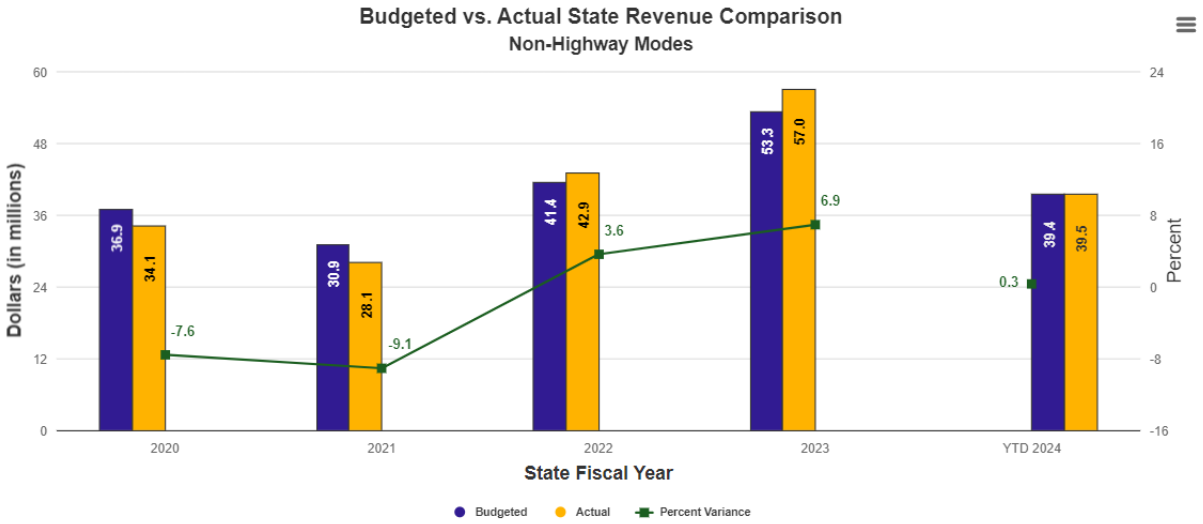
Measurement and Data Collection:
Data is collected annually through a review of the Department's long-term Capital Improvements Program and annual facilities inspections. Functional needs are tracked by General Services each year. The goal for Functional Needs is to bring all facilities to sufficiency. Physical needs are tracked through VFA software. Functional Requirement pertains to needs such as 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 2025 or earlier. Repair or Replace Costs are the estimated costs that are due for renewal in FY 2025 or earlier.

State and federal revenue budgets – 6a

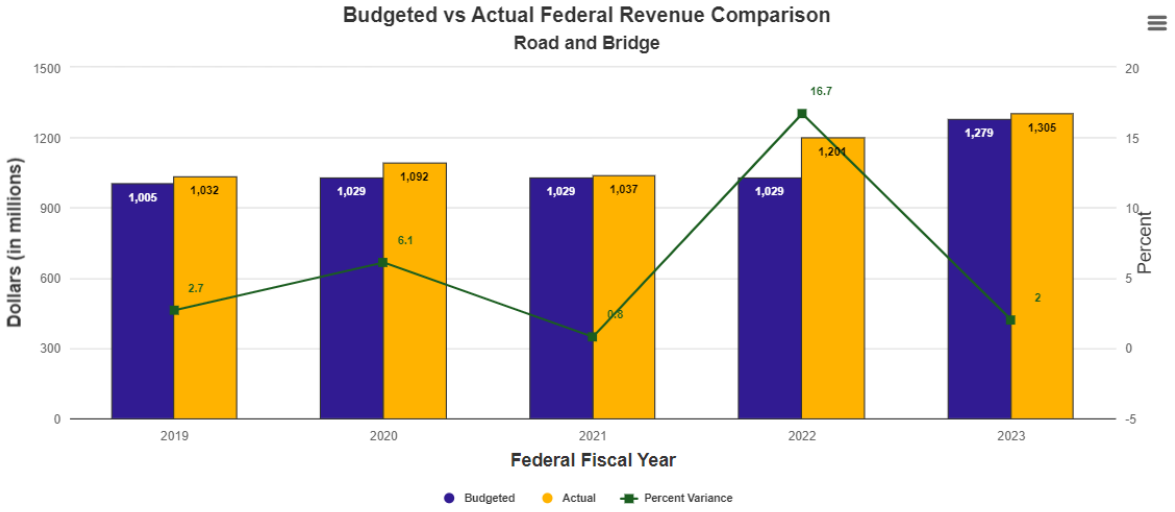
Update Frequency: Quarterly
Color Grade: green



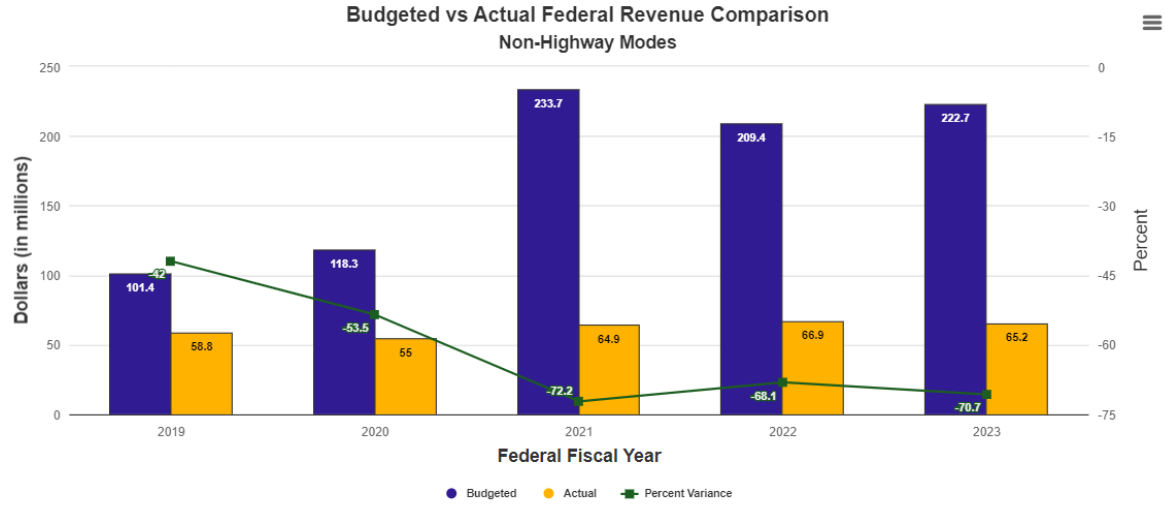
Target: 0%



Target: 0%



Target: 0%



Target: 0%

Write up:
State and federal revenue budgets help MoDOT optimize budgeting operations with limited funds for the department's operations and capital program. The target is for actual revenue to match budgets with no variance.

During the third quarter of FY 2024, 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 2.7% less than the budgeted amount. This was due to lower-than-projected revenue for motor vehicle driver's licensing fees. The positive variance of 0.3% for non-highway modes is attributed to higher-than-projected motor vehicle sales tax revenue in the State Transportation Fund.

The actual federal revenue for roads and bridges was 2% more than budgeted for federal FY 2023. The negative variance of 70.7% 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 previous transportation funding act, Fixing America's Surface Transportation (FAST) Act, authorized federal programs for the five years from 2016 to 2020. It expired Sept. 30, 2020, but was extended for another year by continuing resolution. In November 2021, the federal transportation bill, the Infrastructure Investment and Jobs Act (IIJA), was reauthorized. The new bill is estimated to increase federal funding to Missouri by approximately 25% from 2022 to 2026. Federal revenue for other modes is reliant on the timing of project expenditures.

The primary source of federal and state revenue is the motor fuel tax. Before the passage of Senate Bill 262, the motor fuel tax rates had not changed in over 20 years. During the same time period, the cost of materials and labor doubled or even tripled. The passage of Senate Bill 262 will increase the state's previous rate of 17 cents per gallon by 2.5 cents per gallon annually over the next five years, starting Oct. 1, 2021.

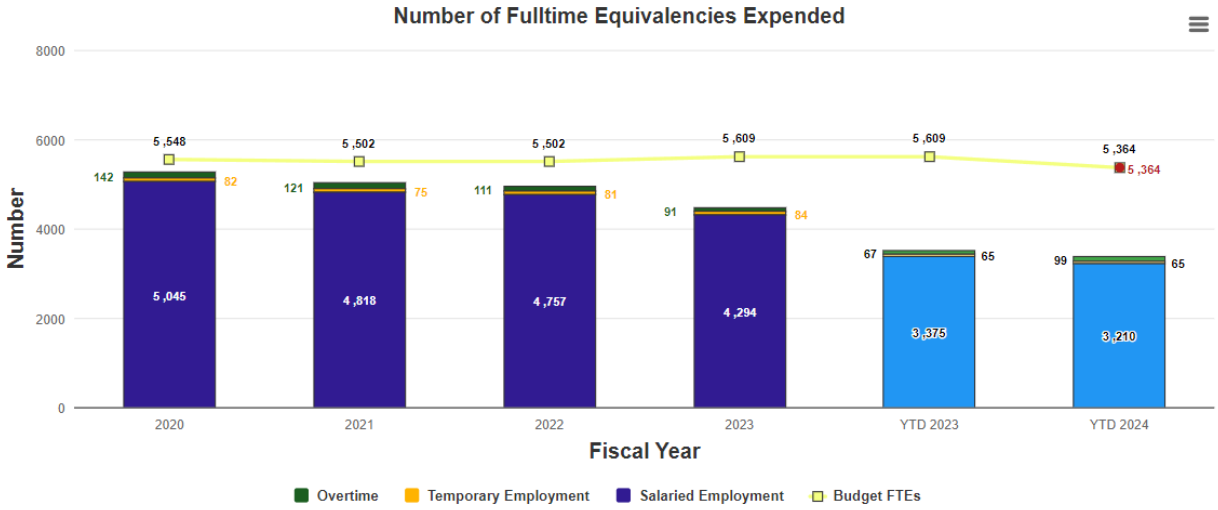
Purpose:
This measure shows the precision of state and federal revenue budgets.

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

Update Frequency: Quarterly
Color Grade: red



2024 Target: 5,364

Write up:

MoDOT aims to ensure adequate employee numbers to provide outstanding customer service and respond to the state's transportation needs, especially during emergency situations. This is an important part of the department's effort to use resources wisely.

During the third quarter of the fiscal year 2024, the total number of fulltime equivalent employees decreased by 133 when compared to the same quarter in the fiscal year 2023. Overtime hours increased, while temporary employment remained the same and salaried employment decreased by 165 when compared to the same quarter of the previous fiscal year.

A target of 5,364 FTEs was set for FY 2024 to reflect the average number of hours required to provide outstanding customer service, perform work safely and 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:

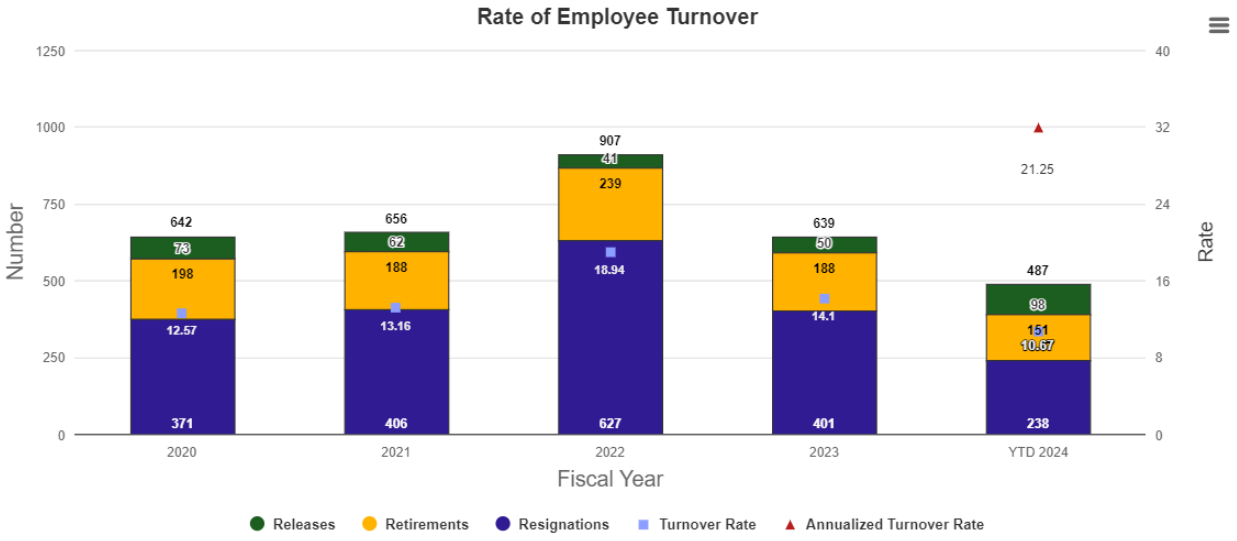
This measure converts the regular hours worked or on paid leave of temporary and salaried employees, as well as overtime worked (minus any hours that are flexed during the workweek), to full-time equivalencies. In order to calculate FTEs, the total number of

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

Update Frequency: Quarterly
Color Grade: yellow



Desired Trend: Decrease

Write up:

When employees leave MoDOT, the department loses a significant investment in recruiting, hiring and training its workforce. Turnover is costly and impacts the performance of work groups and the organization. While some turnover is certain, 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.

During the first three quarters of fiscal year 2024, MoDOT's turnover rate was 10.67%, which is slightly less than the turnover rate of 10.68% for the first three quarters of FY 2023, resulting in a decrease of .01%. For the first three quarters of FY 2024, MoDOT had a total of 487 employee separations from the department compared to 485 separations during the first three quarters of FY 2023, resulting in an increase of two separations.

As part of MoDOT's strategic initiatives and pay strategy, the department will continue to seek opportunities to reduce the rate of employee turnover.

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

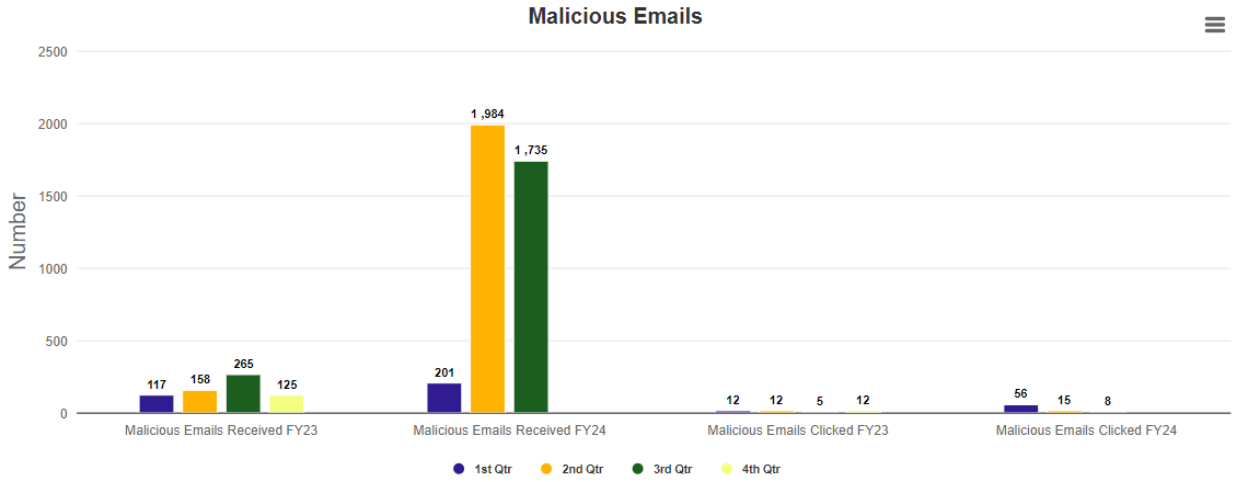
Measurement and Data Collection:
The data is collected statewide from the SAM II Advantage HR system and includes only salaried employees. Turnover for this measure includes voluntary and involuntary separations. Voluntary turnover includes resignations and retirements. Involuntary turnover reflects dismissals. Data is reported quarterly, with current year-to-date data included.

Level of job satisfaction (UNDER CONSTRUCTION) – 6d

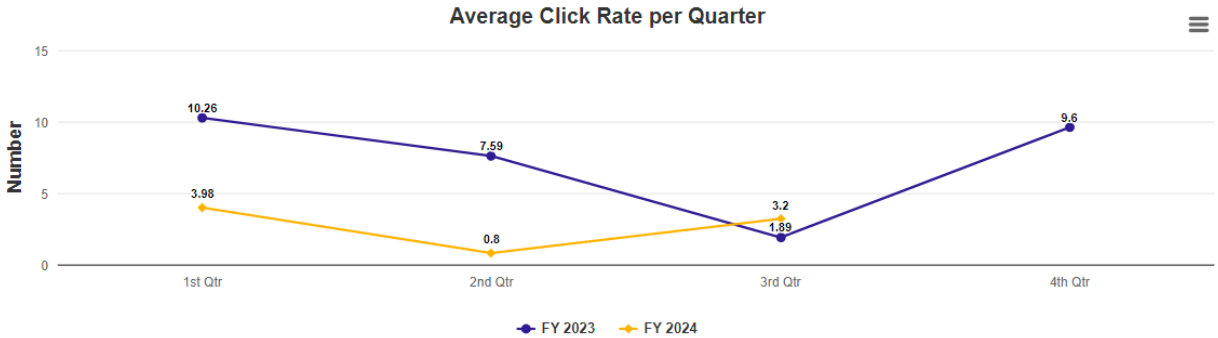
Update Frequency:
Color Grade:

Malicious Email Click Rate – 6e

Update Frequency: Quarterly
Color Grade: yellow



Desired Trend: Decrease



Write up:
Statewide, MoDOT maintains thousands of computer devices. Keeping those computers safe from outside threats is a 24-hour responsibility using the latest security measures.

For the third quarter of fiscal year 2024, MoDOT received a total of 1,735 emails containing malicious content (links and/or attachments) that were delivered to user inboxes. Of those 1,735 delivered emails, 56 recipients clicked on the links or attachments. Among those 56 clicks, 38 were blocked at the time of click while the remaining 18 were permitted. These 18 permitted clicks were later identified as false positives by MoDOT's email security vendor, Proofpoint. The other 10 permitted clicks were a mix of credential phishing and malware delivery threats. The average click rate for the quarter was 3.2%, an increase from 0.8% for the previous quarter.

This quarter saw the third-largest number of malicious emails delivered to user inboxes since this measure was first tracked. The previous high was 1,984 malicious emails delivered in the previous quarter. Out of the 91 days in this quarter, there were only 43 days when MoDOT did not receive a malicious email directly to the user's inbox. All of these emails came from smaller campaigns with the majority consisting of fewer than 10 messages delivered.

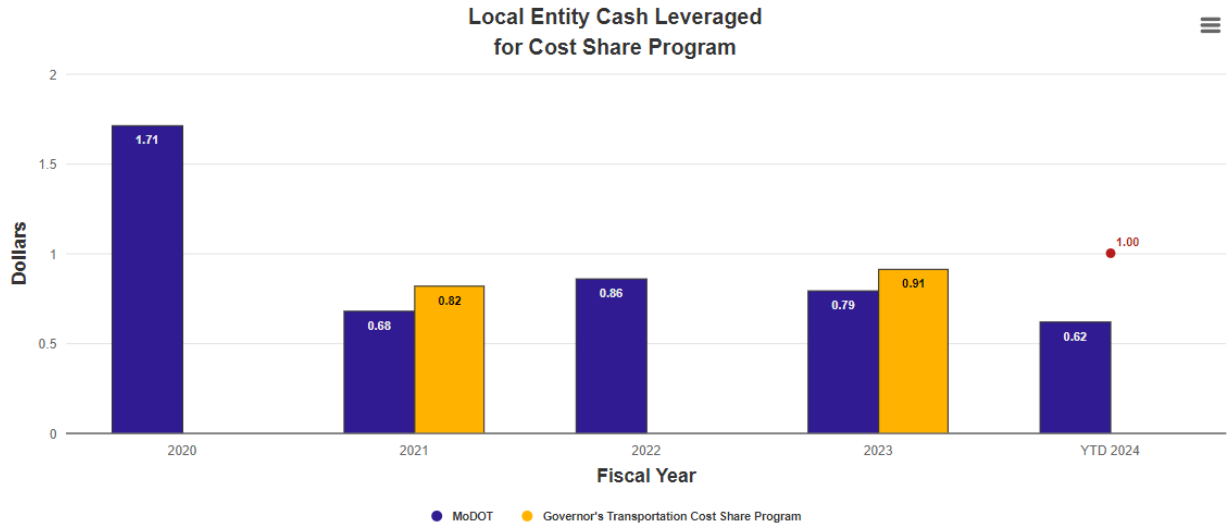
MoDOT continues to emphasize cybersecurity and provide training for all department computer users. The cybersecurity oversight team works to define areas of vulnerability and deploy solutions to address risk. In addition, MoDOT utilizes the Office of Administration's network firewall services, endpoint cybersecurity detection, and remediation services to provide increased cyber protection.

Purpose:
This measure reports MoDOT's average click rate on malicious email links and attachments. Using this measure MoDOT can compare performance to previous quarters and make adjustments in security training program to reflect the observed trend.

Measurement and Data Collection:
The incident data for this measure is captured from MoDOT's e-mail security platform. The target for this measure is zero clicks.

Local entity cash leveraged for cost share program – 6f

Update Frequency: Quarterly
Color Grade: yellow



2024 Target: $1.00

Write up:

The Cost-Share Program builds partnerships with local entities to combine resources and efforts toward delivering state highway and bridge projects. When local entities are willing to partner with MoDOT, the department 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 generate economic development, and in some cases, may provide up to 100% of the project cost.

For FY 2024, Cost-Share Program funds of $2.5 million have been committed to five projects. For every $1 of Cost-Share Program funds awarded, 62 cents of local cash were leveraged. This includes the City of Bowling Green's Route 54 and Industrial Park Intersection project that demonstrated economic development, allowing for funding greater than 50% of the total project costs from the Cost-Share Program. In addition, the City of Liberty's Route 291 Blue Jay Traffic Signal and Sidewalk Improvements project, funded with sub-allocated federal funding, reduced the city's cash contribution. These projects result in local cash leveraged below the target of $1.

The Missouri General Assembly appropriated $50 million for MoDOT to collaborate with the Missouri Department of Economic Development in creating the Governor's Transportation Cost-Share Program and build partnerships with local entities to deliver road and bridge projects. In FY 2021, funding was awarded to 20 projects. For every $1 awarded through the Governor's Transportation Cost-Share Program, 82 cents of local cash were leveraged.

The Missouri General Assembly appropriated an additional $75 million for the Governor's Transportation Cost-Share Program. In FY 2023, funding was awarded to 28

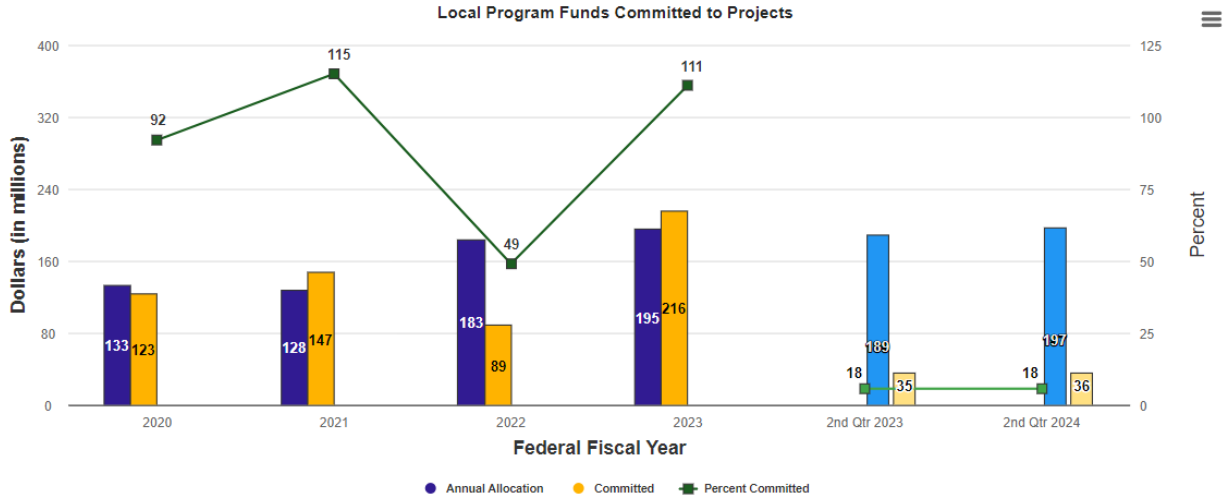
projects. For every $1 awarded through the Governor's Transportation Cost-Share Program, 91 cents of local cash were leveraged.

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

Update Frequency: Quarterly
Color Grade: red



Target: 120% Committed

Write up:

Local agencies receive federal funds to invest in projects that improve local infrastructure. They share the cost of those projects by providing a 20% local match for most programs. To continue receiving federal funds, all received funds each year must be committed to projects by the end of the federal fiscal year. Failure to fully commit the available funds puts them at risk of being rescinded, which jeopardizes the ability to receive additional federal funds for future projects.

For FY 2024, local agencies have an annual allocation of $197 million to invest in local transportation projects. For FY 2024, 18% ($36 million) of annual allocation funds have been committed to local projects, compared to 18% ($35 million) in FY 2023. While this measure compares committed funds to annual allocation, the total available funds for local agencies to commit to projects includes both the annual allocation ($197 million) and the carryover balance ($194 million), for a total of $391 million. Committed funds can include balances left from previous years.

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.

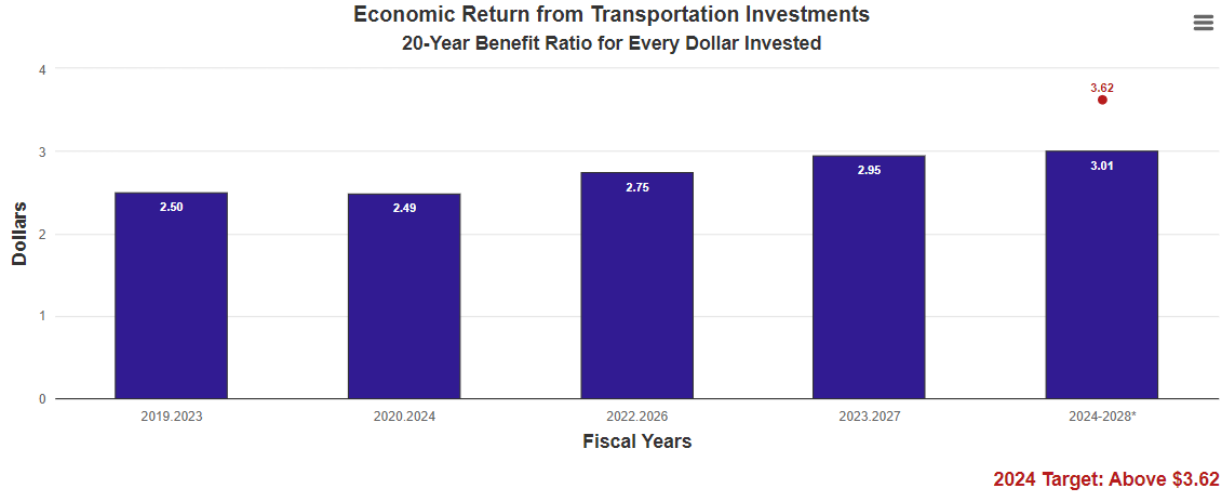
Measurement and Data Collection:

The data is obtained from the Federal Highway Administration's Fiscal Management Information System and based on the federal fiscal year from October 1 through September 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.

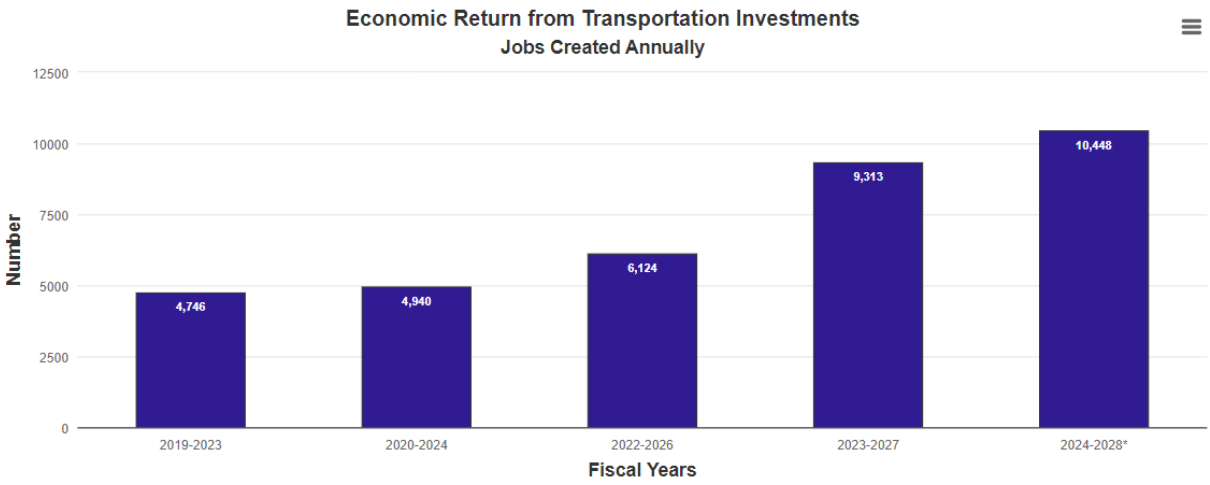
The target for this measure is set by internal policy and will not change unless policy changes, regardless of performance.

Economic return from transportation investment – 7a

Update Frequency: October
Color Grade: yellow



*The methodology for calculating the Cumulative 20-year Output per $ Spent changed with the Economic Impact Analysis of the 2024-2028 STIP. This change focuses on committed funds over the 5-year period of the MoDOT STIP.



***The methodology for calculating the Jobs Created Annually (20-year average) changed with the Economic Impact Analysis of the 2024-2028 STIP. This change focuses on committed funds over the 5-year period of the MoDOT STIP.**

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 2024-2028 Statewide Transportation Improvement Program investment of $10.646 billion, the program is estimated to create 10,448 jobs annually. This represents a 9% and 12% increase respectively when compared to the 2023-2027 STIP. The average number of jobs created increased in line with the increase in expenditures.

Transportation investments are expected to contribute approximately $31.7 billion of economic output during the next 20 years, resulting in a $3.01 return on every $1 invested in transportation. This increase is credited to increased transportation funding in the 2021 Bi-Partisan Infrastructure Law and $3 billion in General Revenue for Legislatively Designated Road and Bridge projects and Multimodal projects. Missourians have consistently said they want MoDOT to take care of the existing system first, a $59 billion value that carries a $160 billion replacement cost.

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

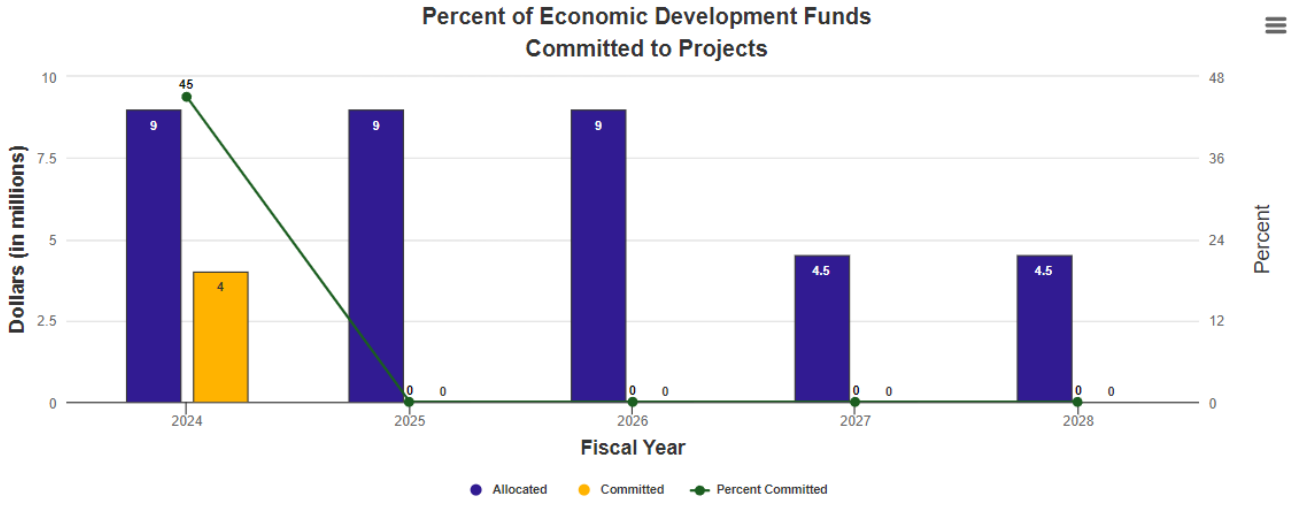
Measurement and Data Collection:
MoDOT works with the HDR, Inc. to perform economic impact analyses for the state's transportation investments. The analyses are performed using a model called the

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

Update Frequency: Quarterly
Color Grade: yellow



Target: 100% Committed

Write up:

The Cost-Share Program is a collaborative effort between MoDOT, the Department of Economic Development (DED) and 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 closely with these partners to identify when targeted investments can produce the most economic impact for Missouri. Projects selected for the set-aside funds may be funded up to 100% of the project cost. Starting in 2024, the set-aside funds increase from 10% to 20%. Tracking this data ensures economic development funds are being utilized.

At the end of the third quarter of fiscal year 2024, $31,992,768 of economic development funds are available for eligible projects. For FY 2027 and FY 2028, only 50% of funding allocations will be available. During the third quarter of FY 2024, no funds were committed to any projects. MoDOT continues to work with DED to identify projects that demonstrate economic development.

Purpose:

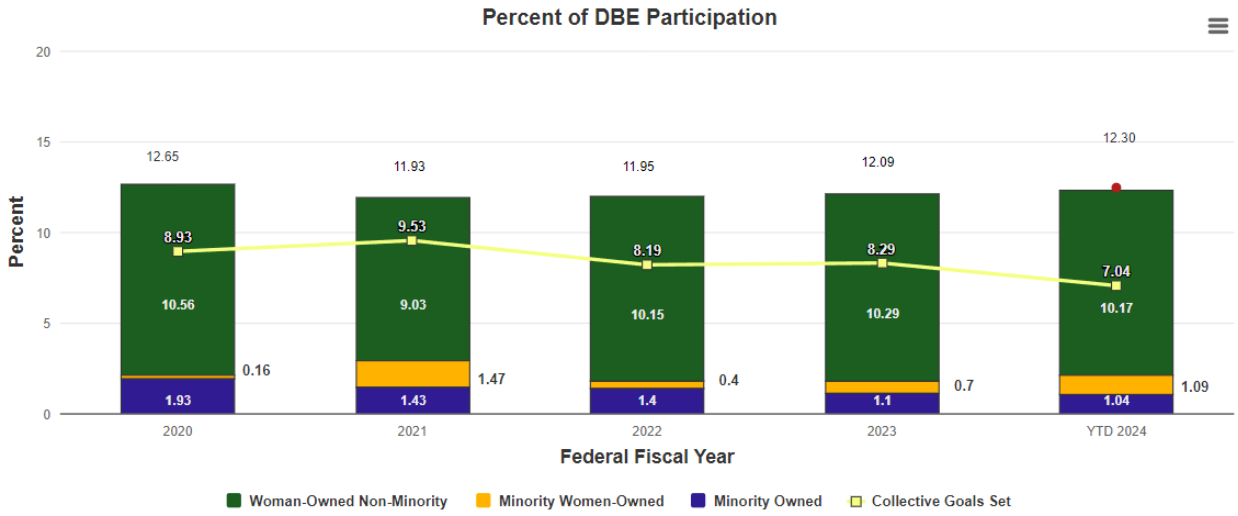
This measure tracks the percent of economic development funds committed to projects.

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

Update Frequency: Quarterly
Color Grade: yellow



Target: Above 12.45%

Federal Fiscal Year - 2024	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Projects Met	59			
Projects Not Met	12			
Total Projects	71			

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 that disadvantaged business enterprises have an opportunity to compete and participate in project contracts and subcontracts.

The overall Disadvantaged Business Enterprise (DBE) target goal is 12.45%. For federal FY 2024, the DBE participation rate is 12.30%, which represents a 0.21% increase from FY 2023. Of the 12.30% utilization, 10.17% comes from women-owned, non-minority DBE firms, 1.09% from minority women-owned DBE firms and 1.04% was participation from minority-owned DBE firms. The collective goals set for projects closed during this period amounted to 7.04%, while the DBE goals set for projects awarded during this period had committed DBE participation of 7.55%. To narrow the gap between the target and actual performance, MoDOT is conducting outreach meetings to encourage new firms to apply for DBE certification and use DBE supportive services funding to expand the capacity of certified DBE firms.

The table above provides a detailed overview of the number of projects closed during the reporting period, indicating the number of projects that have met the DBE goal and those that have not. For the federal FY 2024 1st quarter, 71 projects were closed of

which 83.09% of the closed projects met or exceeded the DBE goal. However, of the 12 projects that did not meet the goal, eight were due to underruns, three were due to a DBE performing as a broker instead of a supplier, and one was due to a DBE requesting removal from a project.

Purpose:

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

Measurement and Data Collection:

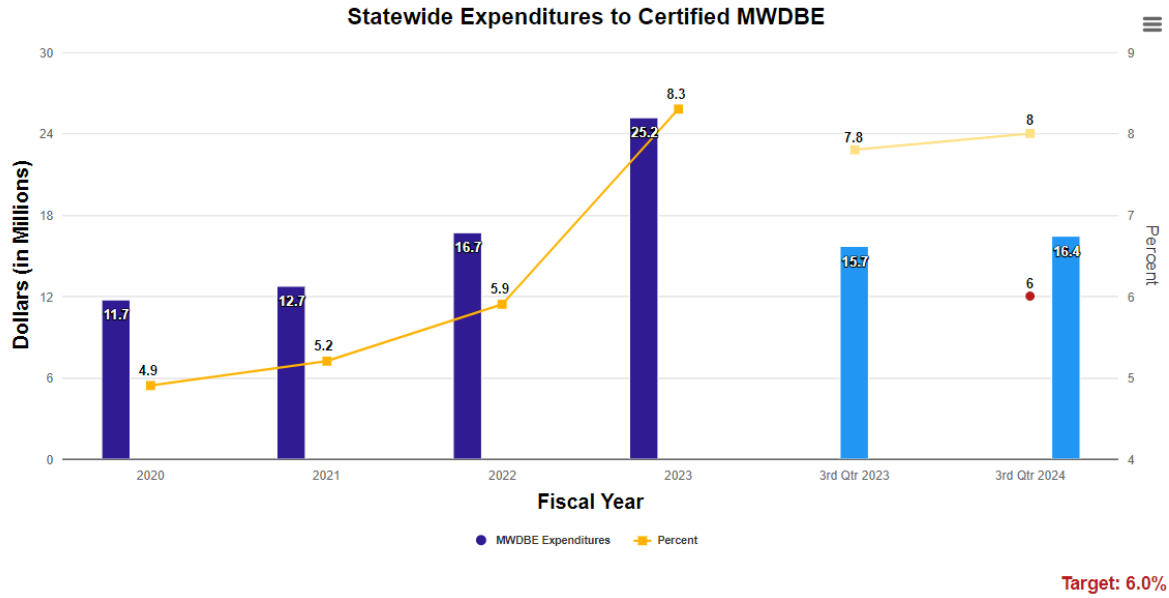
Data is collected through AASHTOWare Projects for each construction and consultant project. The overall DBE goal is a yearly target established by MoDOT and the Federal Highway Administration regarding the expected total DBE participation on all federally-funded construction and consultant projects. 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

Update Frequency: Quarterly

Color Grade: green



Write up:

Ensuring that MoDOT spending is equitable across 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 extending support to minority, women and disadvantaged business enterprises (MWDBE) to encourage them to become certified, along with prioritizing inclusion efforts.

The results from the third quarter FY 2024 show an increase of $700,000 in disbursements to minority, women and disadvantaged business enterprises, in comparison to the third quarter of FY 2023. Additionally, the percentage of MWDBE expenditures to total expenditures increased by 0.2% - from 7.8% to 8.0%.

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

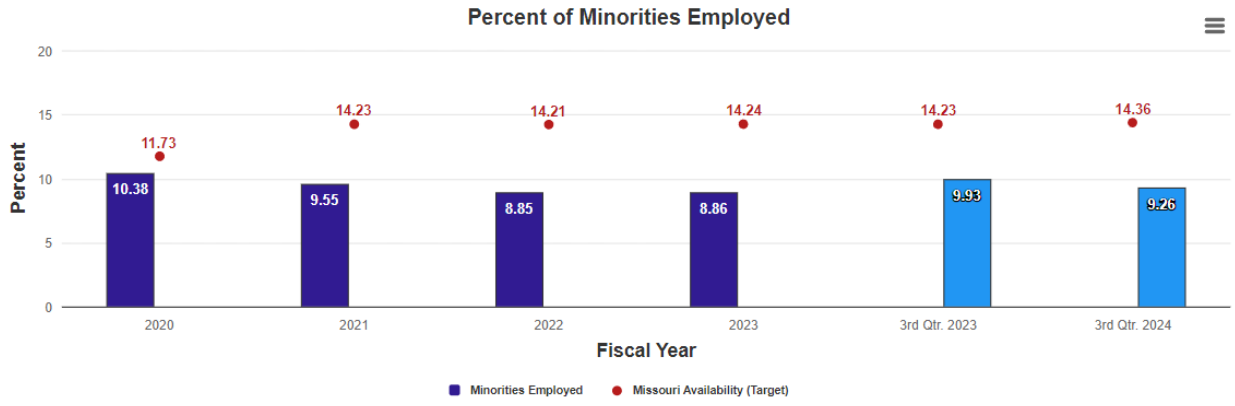
Purpose:
This measure tracks the department's non-program spending with certified minority, women and disadvantaged business enterprises.

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 are excluded from total dollars spent.

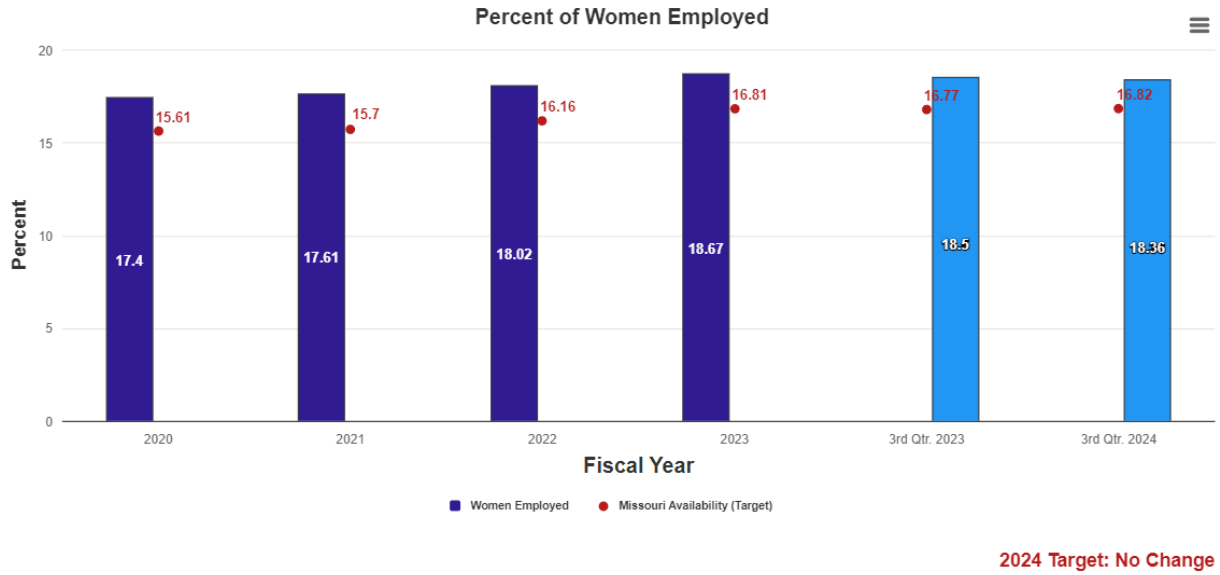
The target for this measure is an average of the availability percentage of minority-owned and women-owned businesses and MoDOT's most recent 5-year average utilization. This target will be updated annually in October.

Percent of minorities and women employed – 7e

Update Frequency: Quarterly
Color Grade: yellow



2024 Target: Increase



2024 Target: No Change

Write up:
MoDOT can better serve its customers and fulfill its responsibilities to taxpayers by placing the right people in the right positions.

The number of minority employees decreased by 2.5%, from 441 employees in the third quarter of FY 2023 to 430 in the third quarter of FY 2024. Similarly, the number of female employees decreased by 3.3%, from 882 employees in the third quarter of FY 2023 to 853 in the third quarter of FY 2024. However, the total full-time employment saw an increase of 4.6% between the third quarter of FY 2023 and the third quarter of FY 2024, increasing from 4,443 to 4,646 employees.

New retention efforts have been implemented to improve workplace diversity. These efforts include new employee resource groups, virtual diversity webinars and new mentoring training initiatives. These good-faith efforts aim to increase the applicant pool of qualified minorities and women from within the department, which may ultimately help narrow the gap between actual employment and the target employment of minorities and women.

The Missouri availability target for both demographics, determined by the 2020 Census, has been exceeded for women, but MoDOT's performance for minorities continues to trend downward.

Purpose:
This measure tracks minority and women employment in MoDOT's workforce and compares it with availability data from the Missouri 2020 Census report.

Measurement and Data Collection:
The SAM II database is used to collect data. The Missouri 2020 Census data is used as the benchmark for this measurement. The availability number is derived from two different sets of data; the 2020 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 three years. 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.