Missouri Statewide Transportation Improvement Program

The citizens of Missouri own a tremendous asset – the state transportation system. A significant component of the state system is the 33,859 miles of roads and 10,385 bridges, both of which rank among the largest for any state in the nation. On average, Missouri drivers pay $30 per month in fuel taxes and fees to fund the maintenance and improvements to this asset. Over the last 10 years, Missourians have invested in 4,405 projects totaling $12.1 billion to maintain and improve the system. Looking forward, $4.6 billion is estimated to be available for projects over the next five years for additional improvements.

Since transportation needs greatly outweigh funding available, the challenge is determining the optimal projects to fund that provide the greatest return on investment to taxpayers. Across every region of the state, feedback from Missourians has consistently prioritized maintaining the existing system as the highest priority. Other priorities include projects that improve safety, spur economic growth and provide more transportation choices.

With the priority of maintaining the existing system, MoDOT has developed asset management plans for each district with the goal to maintain current pavement and bridge conditions. The asset management plans focus on preventive maintenance improvements to keep good roads and bridges in good condition. Research shows preventive maintenance solutions, such as cyclical overlays on roads in good condition, are the most cost-effective approach to taking care of road and bridge assets. If preventive maintenance investments were not made, the cost of improving the asset in poor condition can cost four to ten times more.

The projects in the 2020–2024 Statewide Transportation Improvement Program (STIP) deliver what taxpayers have asked for – take care of the existing system. While $4.6 billion of available funding represents a significant investment, many regions will only have adequate funding to maintain current pavement and bridge conditions. While maintaining the status quo is not what Missourians desire, it is not prudent for the state to expand the transportation system in regions that struggle to take care of the existing system.

The first three years of available STIP funds are programmed to specific projects. The last two years are programmed to at a level less than one-half of available funds. This approach provides MoDOT the ability to deliver programmed projects during the STIP horizon despite future

MoDOT continues to invest taxpayer money wisely. Over the last 10 years, MoDOT has delivered 4,405 projects worth $12.1 billion. These projects were completed 7.1 percent under budget and 94 percent on time.
uncertainty. From 2020 through 2022, the highway and bridge projects identified in Section 4 of this document are projected to provide adequate investments to ensure current conditions are maintained in each district. Specifically, planned projects include work on 3,041 lane miles of interstate pavements, 4,038 miles of major route pavements and 7,956 miles of minor route pavements during this timeframe of the STIP.

Of the 10,385 bridges in the state, 922 are currently in poor condition and an additional 1,194 are weight restricted. As bridges age, approximately 100 enter the poor condition category each year. From 2020-2022, the STIP provides investments in approximately 640 bridges resulting in improvements to over 6.8 million of bridge square footage so the state’s number of poor condition and weight restricted bridges do not increase.
In his State of the State Address, Governor Mike Parson proposed a plan, FOCUS ON BRIDGES-Investing in Missouri Infrastructure, to expedite the repair and replacement of 250 bridges that had already been identified as the state’s top bridge priorities by local planning organizations. To support FOCUS ON BRIDGES, the Missouri General Assembly approved a budget that provides a one-time $50 million injection of general revenues to MoDOT for the rehabilitation and/or reconstruction of a portion of these 250 bridges. In very early discussions, using an average cost per bridge, it was estimated this investment level would address 35 bridges. However, more detailed analysis has indicated this $50 million investment will rehabilitate and/or reconstruct 45 bridges. The 45 bridges are identified in Section 4 with a “FOCUS ON BRIDGES” watermark. The money currently dedicated to these bridge projects would then be freed up for additional improvements to the state system of roads and bridges.

In addition to the STIP investments, MoDOT spends approximately $520 million annually for system operations which includes Maintenance, Fleet, Facilities and Information Systems. The majority of those expenditures, approximately $445 million, are for maintenance services performed by MoDOT employees, like plowing snow and mowing. But it also includes maintaining pavements on the state’s lower-volume routes, many of
which are not eligible for federal reimbursement. Typically around $160 million is spent each year on pavements for various activities such as asphalt pavement repair, chip sealing, pot-hole patching, full-depth concrete pavement replacement and striping (see Section 10).

Each MoDOT district receives funding to invest in Missouri’s transportation system. Since 2003, the Missouri Highways and Transportation Commission has used a formula (see Section 5) to distribute construction program funds for road and bridge improvements to each of its districts. The formula provides funding for safety improvements, asset management needs and system improvements.

MoDOT has adopted a statewide transportation asset management approach to make the best decisions with transportation investments. MoDOT’s Asset Management Plan (AMP) is a crucial element in achieving MoDOT’s strategic goal of keeping roads and bridges in good condition. The following link provides the asset management plan summary [http://epg.modot.org/files/7/7a/121.5.1.1.1_current.pdf](http://epg.modot.org/files/7/7a/121.5.1.1.1_current.pdf). The AMP is a rolling 10-year strategic framework for making cost-effective decisions about allocating resources and managing road and bridge system infrastructure. It is based on a process of monitoring the physical condition of assets and predicting deterioration over time and providing information on how to invest in order to meet asset management goals. The following chart demonstrates the asset management needs over the next ten years:

The AMP objective is keep the state’s transportation assets in good condition over the life cycle of those assets at the most practical cost. Based on current funding constraints, the goal of the AMP is to maintain existing pavement and bridge conditions. In the 2020-2024 STIP, MoDOT has programmed approximately $2.7 billion in the first three years to move MoDOT towards the federal bridge and pavement performance targets.
While maintaining the existing transportation system remains a priority, MoDOT is also committed to making safety improvements to the system in order to reduce the number of fatalities and serious injuries on Missouri roadways. From 2013-2017, Missouri averaged 854 fatalities and 4,760 serious injuries each year from traffic crashes. MoDOT, in conjunction with safety partners across the state, has developed a strategic highway safety plan that identifies emphasis areas and corresponding strategies for reducing fatalities and serious injuries. Missouri’s Blueprint, A Partnership Toward Zero Deaths, takes a holistic approach to address safety by considering efforts across four primary disciplines: education, enforcement, engineering, and emergency services. In addition, the Blueprint establishes Missouri’s ultimate goal of 0 fatalities on Missouri’s transportation system. An interim goal of 700 or fewer fatalities by the end of 2020 has also been established.

Reducing fatalities and serious injuries requires efforts from partners throughout the state across multiple disciplines. MoDOT is committed to improving safety through both transportation projects and outreach efforts alongside our safety partners. In the 2020-2024 STIP, MoDOT has programmed approximately $170.6 million in the first three years to help move MoDOT towards the federal safety performance targets.

Missourians expect to get to their destinations on time, without delay regardless of their choice of travel mode. We coordinate and collaborate with our transportation partners throughout the state to keep people and goods moving freely and efficiently. We also maintain and operate the transportation system in a manner to minimize the impact to our customers and partners.

System performance on the Interstate and non-Interstate National Highway System (NHS) is measured and assessed using a combination of Federal Highway Administration’s (FHWA) National Performance Management Research Data Set (NPMRDS) and other traffic data made available to the department. These data sets allow MoDOT to assess congestion, travel time reliability, and freight movement along the state’s most heavily traveled roadways. Unreliable roadways are generally the result of variable events that adversely impact travel. Specifically, a high frequency of crashes or ongoing construction that block travel lanes can have significant impacts on the reliability of a roadway. Likewise, adverse weather and spikes in traffic volumes and for large events (concerts, sporting events, festivals) can also lead to unreliable conditions.

The majority of STIP projects are designated for preserving the condition of the state’s road and bridge conditions. However, where funding allows, MoDOT programs projects aimed at improving reliability and reducing congestion on the busiest corridors in the state. In some cases, this can mean individual construction projects aimed at improving the safety, capacity, and efficiency of a roadway. In addition, MoDOT funds system management and operations functions to help improve reliability. These functions include services such as Transportation Management Centers in St. Louis, Kansas City, and Springfield, emergency response crews on the state’s major highways, and intelligent transportation systems to provide customers with real-time information to increase the likelihood of a reliable trip. In the 2020-2024 STIP, MoDOT has programmed projects and services to move MoDOT towards the federal system reliability and congestion performance targets.

MoDOT has also developed a statewide freight plan to help the department make smarter decisions and investments to optimize Missouri’s ability to move products throughout the state. The freight plan, updated in 2017, will help the state better prepare for necessary improvements to facilitate a reliable movement of goods well into the future. In the 2020-2024 STIP, MoDOT has programmed projects to move MoDOT towards the federal freight performance target.
MoDOT is committed to improving air quality through modifying its operations, providing information to the public and employees, leading air quality improvements, managing congestion to reduce emissions, providing alternative choices for commuters and promoting the use of environmentally friendly fuels and vehicles. A Congestion Mitigation and Air Quality (CMAQ) Performance Plan, created by the East-West Gateway Council of Governments, helps direct the department and it’s partners to make more informed decisions regarding the use of federal state, and local transportation air quality funding. In the 2020-2024 STIP, MoDOT has programmed approximately $8.9 million in the first three years to move MoDOT towards the CMAQ performance targets.

MoDOT continues to be committed to maximizing available funds for transportation. In January 2017, the Missouri Highways and Transportation Commission reinstated the cost share program. The cost share program provides MoDOT and external partners the ability to pool resources and better leverage investment efforts to deliver transportation improvements. The local funds leveraged for cost share projects increase available funds for transportation. The Commission allocated cost share funds of $10 million for 2018, $15 million for 2019, and $25 million for 2020. Further Commission action in January 2018 increased cost share funding to $30 million for 2021, $35 million for 2022, $40 million for 2023 and $45 million for 2024, and annually thereafter.

For the 2020-2024 period, the forecast relies on deficit spending each year in order to match all available federal funds. The average deficit spending is $71 million per year. As of June 30, 2018, the combined balance of the State Road Fund, State Road Bond Fund and State Highways and Transportation Department Fund was $702 million. Deficit spending will reduce the amount from an estimated $677 million on July 1, 2019 (the beginning of state fiscal year 2020) to $320 million on June 30, 2024 (the end of state fiscal year 2024). Of the $320 million projected to be in the state treasury at that time, $265 million is the projected State Road Fund balance. Debt covenants and the Missouri Constitution require MoDOT to maintain one year of senior lien debt service in the State Road Fund. The debt service requirement for state fiscal year 2023, the final year of the senior lien debt service, is $18.5 million. Additional cash is necessary in the State Road Fund for cash flow purposes.

This STIP was developed assuming federal funding levels consistent with the FAST Act, which expires in September 2020. A forecast assuming a reduced level of federal funding, consistent with Highway Trust Fund revenues, was also prepared. MoDOT and planning partners worked together to identified specific projects that would be delayed, should federal funding be reduced. Those projects are shaded in gray in Section 4.
The following table represents the total value of projects that will be delayed, number of bridges and total lane miles affected if federal funds are reduced:

<table>
<thead>
<tr>
<th>Projects at Risk Due to Reduced Federal Funds</th>
<th>2021</th>
<th>2022</th>
<th>Total</th>
<th>2021</th>
<th>2022</th>
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<tr>
<td>Total Programmed Amount</td>
<td>$13,934</td>
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<td>$19,623</td>
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<td>Number of Bridges</td>
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<td>16</td>
<td>17</td>
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<td>Total Lane Miles</td>
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<td>160.4</td>
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<tr>
<td>Total Programmed Amount</td>
<td>$8,476</td>
<td>$8,156</td>
<td>$16,632</td>
<td>$56,915</td>
<td>$49,454</td>
<td>$106,369</td>
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<tr>
<td>Number of Bridges</td>
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<td>-</td>
<td>-</td>
<td>8</td>
<td>3</td>
<td>11</td>
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<tr>
<td>Total Lane Miles</td>
<td>93.5</td>
<td>90.8</td>
<td>184.3</td>
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<td></td>
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<td>Total Programmed Amount</td>
<td>$8,476</td>
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<td>$49,454</td>
<td>$106,369</td>
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<td>-</td>
<td>8</td>
<td>3</td>
<td>11</td>
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<tr>
<td>Total Lane Miles</td>
<td>93.5</td>
<td>90.8</td>
<td>184.3</td>
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<td>9</td>
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<tr>
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<td>147.3</td>
<td>492.9</td>
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<td>Total Programmed Amount</td>
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<td>5</td>
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</tr>
<tr>
<td>Total Lane Miles</td>
<td>601.0</td>
<td>665.5</td>
<td>1,266.5</td>
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<td></td>
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</tr>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Total Programmed Amount</td>
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<td>$19,623</td>
<td>$34,805</td>
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<td>$12,914</td>
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</tr>
<tr>
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<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Lane Miles</td>
<td>61.0</td>
<td>112.3</td>
<td>173.4</td>
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<td></td>
</tr>
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<td>SE</td>
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<tr>
<td>Number of Bridges</td>
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<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Lane Miles</td>
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<td></td>
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</tr>
<tr>
<td>Number of Bridges</td>
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<td>38</td>
<td>55</td>
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<tr>
<td>Total Lane Miles</td>
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<td>2,582.5</td>
<td>5,423.2</td>
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</table>
The following table demonstrates MoDOT’s anticipated contractor awards at both a constant and reduced federal funding level:

In summary, Missourians enjoy access to a large transportation system that keeps us connected. Maintaining and improving the transportation system is expensive, but a most worthwhile investment. Through accountability, innovation and efficiency, MoDOT will do the best we can with what we have for as long as we can, keeping our commitment to preserve the $55 billion transportation asset.
Introduction

The Missouri Department of Transportation (MoDOT), in accordance with state and federal law, has prepared this Statewide Transportation Improvement Program (STIP), for state fiscal years (SFY) 2020 through 2024 (July 1, 2019, through June 30, 2024). The STIP is prepared annually and includes projects proposed for funding under the Fixing America’s Surface Transportation (FAST) Act of 2015, FAA Modernization and Reform Act of 2012, and state revenue. FAST was signed into law on December 4, 2015. It funds highways, highway safety, transit, and rail improvements for the five-year period from 2016 through 2020. The SFY 2020-2024 STIP meets all state and federal requirements and is fiscally constrained.

The STIP establishes work for a rolling five-year period of time. As each year is completed, the STIP is updated and a new year is added.

Public Involvement

Public involvement in project development and programming activities is a key element in gaining public acceptance critical to the success of any transportation improvement program. The recent multi-year federal transportation bills have emphasized the necessity of public involvement. In Missouri, the approach is primarily to seek involvement from four groups: metropolitan planning organizations, regional planning commissions, local officials and the general public. Through public involvement, all Missourians have a say in how transportation dollars are spent. The following link provides information on the public involvement process [http://epg.modot.org/files/f/fe/121_Planning_Framework_2018.docx](http://epg.modot.org/files/f/fe/121_Planning_Framework_2018.docx).

Metropolitan planning organizations represent urbanized areas with populations over 50,000. They are responsible for transportation planning within their regions. Regional planning commissions represent multi-county rural regions and are charged with coordinating functions of local governments, including transportation planning. The public is involved in the planning process in two ways: 1) through election of the local officials who comprise the regional planning commission and metropolitan planning organization boards of directors; and 2) through direct contact with MoDOT, metropolitan planning organizations, regional planning commissions or local officials. (See Section 1 for contact information regarding metropolitan planning organizations, regional planning commissions and MoDOT district offices.)

Public involvement for development of transportation improvements begins several years before the projects actually appear in the STIP.

Transportation planning consists of a series of decisions that direct the use of current and future available resources to accomplish Missouri’s transportation goals. The current transportation planning process can be summarized in the following steps.

1. Develop Missouri’s long range transportation plan
2. Identify and prioritize needs
3. Develop solutions and design projects
4. Prioritize and select projects for the STIP’s Highway and Construction Schedule

**Develop Missouri’s Long Range Transportation Plan**
MoDOT’s long-range transportation plan identifies the state’s transportation vision for the next 20 years. The plan also identifies what the public expects of the state transportation system.

The Missouri Highways and Transportation Commission approved MoDOT’s long-range transportation plan at the June 2018 Commission Meeting. The federally required plan, called “Missouri’s 2018 Long Range Transportation Plan,” is designed to guide transportation decision-making throughout the state. It was developed after a one month public engagement period that resulted in 7,716 participants and 5,377 comments. The survey was used to gather input about priorities for the future of Missouri’s transportation system.

Based on the input received, the five current goal areas should be a focus in the future: 1) take care of the transportation system and services we enjoy today; 2) keep all travelers safe, no matter the mode of transportation; 3) invest in projects that spur economic growth and create jobs; 4) give Missourians better transportation choices (more viable urban and rural transit, friendlier bike and pedestrian accommodations, improvements in rail, ports and airport operations); 5) improve reliability and reduce congestions on Missouri’s transportation system.

The vision is Missouri’s ideal transportation system, but without additional resources, MoDOT will not be able to deliver this vision.

The plan, including what Missourians said should be priorities over the next 20 years, can be found at [www.modot.org/LRTP](http://www.modot.org/LRTP).

**Identify and Prioritize Needs**
There are many transportation problems, often called needs, on Missouri’s transportation system. Identifying these needs is a continuous process and crucial for successful planning. For example, one need might be redesigning a high-accident location, such as an intersection; another need might be a location improvement that helps a new business move products more efficiently. There are two levels of needs identification, regional and statewide.

Statewide needs are identified formally through the long-range transportation planning process, and public outreach is done in conjunction with the long-range transportation plan development. These needs typically cross several county lines, and involve interstates and major highways.

MoDOT districts work with planning partners – such as local and regional elected and community officials, and representatives of the metropolitan planning organizations and regional planning commissions – throughout the year to identify regional transportation needs.

Prioritizing needs is the process of deciding which problems, from the list of identified needs, should be addressed first. This can be a difficult task given a wide variety of needs. Not only do needs have different subject matter – safety, maintenance or economic development – they have varying
time horizons. A structurally deficient bridge might be a more immediate need than a resurfacing project. However, simply being an immediate need does not guarantee a higher priority. These complicated decisions require a coordinated effort from many groups.

Needs prioritization is based on the goals in Missouri’s long-range transportation plan. MoDOT districts work with planning partners to prioritize regional needs annually. Each region develops a program that first addresses its asset management goals of maintaining the current condition. If a region has funds remaining after programming the work needed to keep its system at its current condition, then other regional needs may be considered and prioritized.

**Develop Solutions and Design Projects**

When the highest priority needs have been identified, they are evaluated to find the best solution to the problem based on engineering expertise, public input and financial considerations. Environmental impact is another factor that influences the development and selection of a solution. There are a variety of environmental reviews that must occur for the proposed solutions. Some solutions may be less desirable or eliminated from consideration due to the extent of the environmental impacts. After a solution is agreed upon, design plans are started.

Determining the cause of a problem is often more complicated than might be expected. For instance, a high incidence of accidents at a given intersection might be due to poor sight distances, weather conditions, signal timing, roadway geometry or even reckless driving. Identifying the primary reason or combination of reasons for the problem is key to developing effective solutions.

When a problem is identified, the natural tendency for any problem-solver is to immediately offer the solution. Effective planning requires developing many possible solutions in order to capture the most efficient and effective solution. MoDOT engineers and planners are experts at generating good solutions to transportation problems. MoDOT staff is even more effective when working with local and regional officials to generate the solutions. This process reveals issues and concerns that may not have previously been evident.

The public’s involvement in defining needs and determining the appropriate solutions will take several forms. The public may actually initiate the investigation of needs by contacting MoDOT or its planning partners. The public, through its local officials, has representation in determining the best solution for the transportation need. As MoDOT develops public involvement plans for specific projects, the public will have further opportunity to review concepts and provide input.

**Prioritize and Select Projects for Construction**

Deciding which projects to do and when to do them is a complicated and often controversial matter. Gathering and discerning public input is crucial to realizing the full benefit of available funds for Missouri’s transportation system. MoDOT relies on local and regional planning agencies for this process. The project prioritization processes are based primarily on data and serve as a starting place for determining the best candidates for funding.
Each region must first develop a program to reach its asset management goals. After a region demonstrates it can reach those goals, it may prioritize and fund other regional needs. The project prioritization processes include the following.

- Safety
- Taking care of the system / Asset Management
- Interstates and major bridges / Major Bridge
- Other regional needs / System Improvement

Projects are typically divided into three categories - high, medium and low - within each funding category. Each time projects are prioritized; existing projects not yet programmed for construction are re-evaluated.

Projects are prioritized against other projects in the same funding category. Smaller projects and those intended to take care of the existing system are compared with one another. And, once a region demonstrates it can meet its asset management goals, similar size regional projects may be prioritized against one another. MoDOT works with local and regional officials to determine the priority of the projects in each funding category. Projects on the high-priority project list are candidates for funding. The projects selected for funding are shown in Section 4.

Additionally, each of Missouri’s nine metropolitan planning organizations (MPO) located in Cape Girardeau (Southeast Metropolitan Planning Organization - SEMPO), Columbia (Columbia Area Transportation Study Organization - CATSO), Fayetteville-Springdale-Rogers AR (and a small part of McDonald County,-MO) (Northwest Arkansas Regional Planning Commission - NWARPC), Jefferson City (Capital Area Metropolitan Planning Organization - CAMPO), Joplin (Joplin Area Transportation Study Organization - JATSO), Kansas City (Mid-America Regional Council - MARC), St. Joseph (St. Joseph Area Transportation Study Organization - SJATSO), St. Louis (East-West Gateway Council of Governments - EWGCOG) and Springfield (Ozarks Transportation Organization - OTO) prepares a Transportation Improvement Program (TIP) and a long-range metropolitan transportation plan (MTP) for its MPO area. These TIPs are the accumulation of federally funded projects proposed by their local governments and MoDOT. These projects are consistent with the MTP’s goals and objectives. MoDOT uses public input received throughout the year to develop its submittal for the MPO’s TIP. Each MPO has an approved public involvement plan for its respective area that allows for review and feedback from individual citizens, organizations, agencies and local area governments. Using public input as one of its decision factors, the MPO determines the projects in its area that will be programmed for construction.

These TIPs are incorporated by reference into the five-year STIP without modification. (See Section 9.)

**Public Review Period**
Comments from the public and the planning partners are considered throughout the year in an effort to maximize Missouri’s resources. Based on public and engineering input, a draft of the STIP is published, followed by a 30-day public review period. During this public review period, the
program is distributed to MoDOT districts for public access, and the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) for review. The STIP is also available on MoDOT’s Web site at https://www.modot.org/statewide-transportation-improvement-program-stip. Citizens have the opportunity to provide comments by mail, e-mail or telephone (by calling 1-888-ASK-MODOT) to district representatives during this time period. MoDOT responds to the comments received through an acknowledgement or by providing additional information, depending on the nature of the comment. Most answers or acknowledgements are sent within five business days of receiving the comment. Some comments require more time for research before an answer can be provided. Changes are made, as appropriate, in response to comments before a final STIP is developed and presented to the Missouri Highways and Transportation Commission (MHTC) for approval. Input from this part of the process will be used to measure the effectiveness of the program and to begin making improvements on next year’s program. The STIP becomes effective when approved by the MHTC as well as the FHWA and FTA.

Program Amendments
After the STIP has been approved, which typically occurs in July, project changes may occur. Projects may need to be added or revised because of unforeseen circumstances. These changes are referred to as amendments. The public involvement process for STIP amendments occurs prior to incorporating the project in the program. Public involvement for projects inside a MPO area will be coordinated by the MPO according to its approved TIP amendment process.

A seven-day public comment period is provided for all proposed amendments and administrative amendments to the STIP. Administrative modifications do not require a seven-day public comment period. All projects follow the public involvement processes and policies defined in MoDOT’s planning framework.

The MHTC-approved STIP, and all STIP changes, are made available for viewing on the MoDOT website at https://www.modot.org/statewide-transportation-improvement-program-stip.
Reference Information

Administrative Amendment – Administrative amendments are project revisions involving the addition of federally-funded scoping projects, state-funded regionally significant scoping projects, hardship right of way purchases, emergency projects, major scope changes without budget changes, the splitting of general location projects into specific locations or the addition of right of way to construction projects already in the Statewide Transportation Improvement Program (STIP) with no net budget change (uninflated). Administrative amendments require Missouri Highways and Transportation Commission and Federal Highway Administration / Federal Transit Administration approval. The Missouri Highways and Transportation Commission has delegated authority to approve administrative amendments to the Chief Engineer. Administrative amendments occur between annual STIP updates.

Administrative Modification – Administrative modifications are project revisions involving the addition of state-funded non-regionally significant scoping projects, fiscally constrained changes to existing projects such as splitting or incorporating projects or changing fiscal years, minor scope changes without budget changes, adding funding sources to projects, advance construction changes and technical corrections. Administrative modifications require Missouri Highways and Transportation Commission approval but not Federal Highway Administration (FHWA) / Federal Transit Administration (FTA) approval. However, administrative modifications are provided to FHWA and FTA for informational purposes. The Missouri Highways and Transportation Commission has delegated authority to approve administrative modifications to the Chief Engineer. Administrative modifications occur between the annual updates of the STIP.

Advance Construction – This is a mechanism that allows a project to be funded with state funds now and preserves a project’s eligibility for federal reimbursement in the future.

Amendment – Amendments are project revisions involving the addition of new projects, deletion of existing projects, or a budget change to an existing project. Amendments require Missouri Highways and Transportation Commission and Federal Highway Administration / Federal Transit Administration approval. Amendments occur between the annual STIP updates.

Amendment 3 – This is a bonding referendum passed by voters in November 2004 that provides additional funds for transportation projects. The funding made available resulted in three initiatives: the Smooth Roads Initiative, the Acceleration of Projects and New Major Projects (original and additional).

Anticipated Fed Cat – Anticipated Federal Funding Categories include CMAQ, Earmark, NHFP, NHPP, STBG, and Safety. An anticipated federal funding category of “State” indicates no federal funds are anticipated to be used on the project. The anticipated federal category identifies the likely type of federal funding that will be used on the project.
**Asset Management** – A rolling 10-year strategic framework for making cost-effective decisions about allocating resources and managing road and bridge system infrastructure. It is based on a process of monitoring the physical condition of assets, predicting deterioration over time and providing information on how to invest in order to meet asset management goals.

**At-Grade Intersection** – This is an intersection of two or more roadways that provides for vehicular and pedestrian traffic movement on the same level of the riding surface.

**Better Utilizing Investments to Leverage Development (BUILD) Grant Program** - The BUILD program provides dedicated, discretionary federal funding to invest in road, rail, transit and port projects that promise to achieve national objectives. Previously known as Transportation Investment Generating Economic Recovery, or TIGER Discretionary Grants, Congress has dedicated nearly $7.1 billion for ten rounds of National Infrastructure Investments to fund projects that have a significant local or regional impact.

**CMAQ** – Congestion Mitigation and Air Quality Improvement Program – Federal funds allocated to state and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act.

**Culvert** – This is a drainage structure constructed beneath the roadway. Box sections, pipes and arches are examples of various culvert shapes.

**Deck** – This is the portion of a bridge that provides the riding surface for vehicular and pedestrian traffic. The deck distributes loads to the superstructure elements.

**Earmark** – Federal funds dedicated to a specific project.

**EDC** – Every Day Counts – A federal program administered by FHWA.

**Emergency Relief** – Emergency Relief Program – This program provides funding to federal, state, and local highway agencies for repairs to damaged federal-aid highways and roads on federal lands resulting from natural disasters or catastrophic failures from an external cause.

**Engineering** – This is the work required to develop a project’s scope and detailed design, as well as the inspection of a construction project.

**Expansion Project** – A transportation improvement that increases the capacity of the transportation system, such as new lanes, interchanges or bridges.

**Expressway** – This is a multilane, divided highway where access is allowed at public roads via at-grade intersections.

**FAST Act** – On December 4, 2015, President Obama signed into law the Fixing America’s Surface Transportation Act, which authorizes the federal surface transportation programs for highways, highway safety, transit and rail for the five-year period from 2016 through 2020.
**Federal-Aid Highways** – Those roads which are eligible for federal funding under Title 23 of the United States Code, except roads classified as local or rural minor collector. Other exceptions apply to this general rule.

**Fiscal Constraint** – This is the demonstration that sufficient funds are reasonably expected to be available to cover the anticipated project costs within the five-year window of the STIP.

**Fiscal Year** – This is the 12-month period to which the annual STIP budget applies. The State of Missouri fiscal year is July 1 through June 30. The STIP fiscal year is July 1 through June 30. The federal fiscal year is October 1 through September 30.

**FFOS** – Funding From Other Sources – These are funds applied to a project that are from sources other than the funding distribution categories available for district use.

**FHWA** – Federal Highway Administration – This is the federal agency that provides financial and technical support for the construction, improvement and preservation of the highway system. FHWA implements a risk-based stewardship and oversight process that includes the identification of specific Projects of Division Interest (PoDI).

**Flexible and Other / System Improvements** – This is a STIP funding category which may be used for any type of system improvement, including safety, condition, or operational improvements. This funding category may also be used for capacity and expansion projects if a district has sufficient other funds to meet their asset management goals.

**Focus on Bridges** - A proposal to repair or replace several of the state’s worst bridges. Projects are noted in Section 4 with a “FOCUS ON BRIDGES” watermark.

**Freeway** – This is a multilane, divided highway where access is provided only at grade-separated interchanges.

**FTA** – Federal Transit Administration – This is the federal agency that provides financial and technical assistance to local public transit systems.

**Geometric Improvement** – This is a roadway improvement other than a surface treatment, such as adding turn lanes or widening an intersection.

**INFRA** – Infrastructure for Rebuilding America Grant Program – This program provides dedicated, discretionary federal funding for projects that address critical issues facing our nation’s highways and bridges.

**Interchange** – This is where two or more roadways meet. An interchange has two or more roadways that provide for the movement of traffic on different levels (grade separated).

**Intersection** – This is where two or more roadways meet. An at-grade intersection has two or more roadways that provide for traffic movement on the same level.

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Lane – This is the travel path of one vehicle on a roadway and usually delineated by a dashed or solid stripe.

Let – This means to advertise projects and take bids from contractors to perform the work.

Long-Range Transportation Plan (LRTP) – This is a multimodal transportation plan covering a period of at least 20 years developed through the statewide transportation planning process.

Major Bridge – A major bridge is any bridge with a total length of at least 1,000 feet. There are about 200 major bridges in Missouri, located mainly over larger lakes, rivers, and interchanges.

Major Bridge Funds – A STIP funding category focused on improving the condition of bridges longer than 1000 feet.

Major Highway System – This system includes all of Missouri’s most traveled roads. It consists of approximately 5,500 miles that carry nearly 80 percent of the state’s traffic. Approximately 95 percent of Missouri residents live within 10 miles of these roads.

MAP-21 – On July 6, 2012, President Obama signed into law the Moving Ahead for Progress in the 21st Century Act of 2012, which authorized the federal surface transportation programs for highways, highway safety, and transit for the two-year period from 2013 through 2014. MAP-21 was extended through most of 2015.

Metropolitan Transportation Plan (MTP) – This is a multimodal transportation plan covering a period of at least 20 years developed through the MPO transportation planning process.

Minor Highway System – This system includes any road that is not on the Major Highway System. This system consists of approximately 28,000 miles, which carry nearly 20 percent of the state’s traffic. These roads are often referred to as farm-to-market roads in the state’s rural areas.

MPO – Metropolitan Planning Organization – This is the entity responsible for transportation planning in urbanized areas with populations greater than 50,000. The nine MPO’s in Missouri serve the Cape Girardeau (Southeast Metropolitan Planning Organization), Columbia (Columbia Area Transportation Study Organization), Fayetteville-Springdale-Rogers AR and a small part of McDonald County, MO (Northwest Arkansas Regional Planning Commission), Jefferson City (Capital Area Metropolitan Planning Organization), Joplin (Joplin Area Transportation Study Organization), Kansas City (Mid-America Regional Council), St. Joseph (St. Joseph Area Transportation Study Organization), St. Louis (East-West Gateway Council of Governments) and Springfield (Ozarks Transportation Organization) metropolitan areas. Also see TMA.

National Highway System (NHS) – This is a system of major highway networks established by the federal government that includes interstate routes, most urban and rural principal arterials, the defense strategic highway network and strategic highway connectors.

NHFP – National Highway Freight Program – This program was created with the FAST Act, and provides funding for projects included in the State Freight Plan.
NHPP – National Highway Performance Program – This is one of several categories of federal transportation funds and can be used for road, bridge, or other improvements. This category was created in MAP-21 and incorporates the former federal categories of National Highway System, Bridge and Interstate Maintenance.

ONEDOT – The Federal Highway Administration and Federal Transit Administration are referred to collectively as ONEDOT.

Passenger Rail Investment and Improvement Act (PRIIA) – On October 16, 2008, President George W. Bush signed the Passenger Rail Investment and Improvement Act. PRIIA reauthorized the National Railroad Passenger Corporation, better known as Amtrak, and strengthened the US passenger rail network by tasking Amtrak, the U.S. Department of Transportation (US DOT), Federal Railroad Administration (FRA), States, and other stakeholders in improving service, operations, and facilities for fiscal years 2009 through 2013. PRIIA was extended through 2015 and is currently included within the FAST Act.

Payment – This means a project will not be let. Projects are noted in Section 4 with a “Payment” watermark.

Performance-Based Planning and Programming (PBPP) - Refers to the application of performance management within the planning and programming processes of transportation agencies to achieve desired performance outcomes for the multimodal transportation system. This includes a range of activities and products undertaken by a transportation agency together with other agencies, stakeholders, and the public as part of a 3C (cooperative, continuing, and comprehensive) process.

Planning Framework – Since 2004, this is MoDOT’s process of involving the general public and planning partners, which represent regions of the state, and local areas, in the identification and prioritization of transportation needs and projects.

Primary Funding Category – Primary Funding Categories include Taking Care of the System, Statewide Interstate & Major Bridge, Safety, Statewide Safety, Flexible & Other, and Amendment 3. These are MoDOT categories, not federal categories, and indicate the type of MoDOT funds that are used for the project.

Programmed – This means a project has right of way and/or construction funds committed for expenditure within the five state fiscal years of the Statewide Transportation Improvement Program.

Projects of Division Interest (PoDI) – Individual projects for which project-specific risks are identified and reviewed as part of FHWA’s stewardship and oversight process. A listing of the programmed PoDI projects can be viewed in the Engineering Policy Guide at http://epg.modot.org/files/4/43/PoDI_Matrix_MoDOT_2019FY.xlsx

Reconstruction – This is a type of improvement designed to replace the existing roadway or bridge when it has reached the end of its useful life. Reconstruction is often accompanied by improvements to the highway’s functional and operational capacity.
**Regionally Significant Project** - This is a transportation project on a facility that serves regional transportation needs (such as access to and from the area outside the region; major activity centers in the region; major planned developments such as new retail malls, sports complexes, or employment centers; or transportation terminals) and would normally be included in the modeling of the metropolitan area's transportation network. At a minimum, this includes all principal arterial highways and all fixed guide way transit facilities that offer a significant alternative to regional highway travel.

**Rehabilitation** – This is a type of improvement designed to preserve and extend the service life and enhance the safety of an existing roadway or bridge when total replacement is not warranted.

**Resurfacing** – This type of improvement installs a new layer of material over an existing pavement.

**Right of Way** – This is land or property used specifically for transportation purposes.

**RPC** – Regional Planning Commission – A local body of governments that provide coordinated planning efforts in developing various regional and local transportation plans.

**Safe & Sound Bridge Improvement Program** – This is an initiative to improve 802 bridges throughout the state by December 31, 2013. A team of contractors and designers was selected to replace more than 550 bridges as part of a single design-build package. The remaining bridges will be rehabilitated using a modified design-bid-build approach.

**SAFETEA-LU** – On August 10, 2005, President George W. Bush signed the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). SAFETEA-LU authorized the federal surface transportation programs for highways, highway safety, and transit for the five-year period from 2005 through 2009. SAFETEA-LU was extended through mid-2012.

**Safety Funds** – A federal and STIP funding category for eligible safety related activities, with a goal of reducing traffic crashes.

**Scoping and Design** – The early stages of a potential construction project. See Section 3 of the STIP for more information, and for scoping and design project lists.

**Secondary Funding Category** – Secondary Funding Categories include Enhancements, Low-Type Resurfacing, ADA Transition Plan, Preventive Maintenance, Regional, Rehabilitation and Reconstruction, Routine Maintenance, Safety, Thin Lift Overlay, and Urban Safety. The Secondary Funding Category indicates the type of work to be accomplished with the project.

**State Funds** – State revenue generated through Missouri taxes, licenses, permits, and fees.
**Statewide Interstate and Major Bridge Funds** – A STIP funding category focused on improving the condition of interstates and bridges longer than 1000 feet.

**STBG** – Surface Transportation Block Grant Program – This is one of several categories of federal transportation funds and can be used for road, bridge or other improvements. Prior to the FAST Act, this program was known as the Surface Transportation Program.

**STIP** – Statewide Transportation Improvement Program – The STIP is MoDOT’s fiscally-constrained short-term capital programming document that is used to implement MoDOT’s statewide transportation plan. It translates the policies, strategies, and directions of the plan into specific decisions on transportation project scoping, preliminary design, construction contract awards and investments in special federal programs during the STIP five-year horizon period. Projects in Section 4 of the STIP are commitments.

**STSFA** – Surface Transportation System Funding Alternatives – A federal program administered by FHWA.

**Substructure** – This is the abutments, piers or other bridge elements built to support the bridge superstructure. The substructure transfers loads from the superstructure to the ground.

**Superstructure** – This is the portion of a bridge that supports the bridge deck and traffic loads. The superstructure transfers these loads to the bridge substructure. Examples of superstructure types include trusses, concrete I-beams and steel I-beams.

**Taking Care of the System / Asset Management** – A STIP funding category focused on maintenance or preservation-type improvements that preserve the existing transportation system.


**TIGER** – Transportation Investment Generating Economic Recovery – A federal discretionary program administered by FHWA.

**TIP** – Transportation Improvement Program – The TIP is the MPO’s fiscally-constrained short-term capital programming document that is used to implement the MPO’s metropolitan transportation plan. It translates the policies, strategies, and directions of the plan for the metropolitan planning area into specific decisions on transportation projects and investments during the TIP four-year horizon period.

**TMA** – Transportation Management Area – This is the entity responsible for transportation planning in urbanized areas with populations greater than 200,000. Missouri’s four TMAs serve the Kansas City (Mid-America Regional Council), St. Louis (East-West Gateway Council of Governments), Springfield (Ozarks Transportation Organization) and Fayetteville-Springdale-Rogers, Arkansas metropolitan areas, which include a small part of McDonald County in southwest Missouri (Northwest Arkansas Regional Planning Commission).

**Work Zone** – This is a designated area where highway construction or maintenance is taking place.