

# APPENDIX

## SUMMARY OF MoDOT RESULTS

Year(s)	Innovation/Efficiency	Total MoDOT Savings	Total Customer Savings	Total Additional Funds	Total Lives Saved	Cost-Benefit Details
2007-2011	Practical Design Emphasis	\$ 1,500,000,000	\$ -	\$ -	0	MoDOT saved millions by replacing standard highway practices with practical design concepts. Building without frills allows us to address more customer needs than previously possible.
2011-2020	MoDOT's Bolder Five-Year Direction	\$ 1,235,000,000	\$ -	\$ -	0	By reexamining everything we do, MoDOT achieved substantial savings through the sale of obsolete facilities and equipment and a significant workforce reduction (1,200 employees). We transferred these savings to meet customers' road and bridge expectations. This effort began in 2010. Savings are reinvested in the Missouri highway system.
2007-2021	Paving With Recycled Materials	\$ 377,194,293	\$ -	\$ -	0	As asphalt costs rose in other states, MoDOT's emphasis on asphalt pavement recycling and use of used roofing shingles in pavement mix helped contractors keep the average bid price per ton of asphalt steady in Missouri. The use of recycled asphalt can reduce material costs by \$5-10 per ton. This effort began in 2004 and savings are ongoing.
2007-2021	Alternating Passing Opportunities with Shared 4-Lane Design	\$ 330,463,000	\$ 412,614,727	\$ -	45	A shared 4-lane can be thought of as a 2-lane road featuring a passing lane that alternates every mile or so between opposing traffic. This provides safe opportunities for drivers in both directions to pass slower vehicles. Four Missouri highways use the 4-lane approach, totaling 117 centerline miles. Savings shown here reflect the difference in cost between building traditional 4-lane highways and the shared 4-lane approach. Traveler savings in time and fuel costs are not shown, but are thought to be significant.

# APPENDIX

## SUMMARY OF MoDOT RESULTS

In the early 2000s, Missouri's legislators authorized MoDOT to use a design-build approach on three projects to demonstrate whether the public sector success of this innovative bid-build approach could be replicated in public works. Since then, MoDOT has delivered 15 Design-Build Projects that were completed 107.5 months ahead of schedule. MoDOT continues to partner with the public and private sectors to deliver projects that maximize available resources into collaborative solutions that achieve goals. This collaborative effort challenges the way projects are delivered. MoDOT pushes the boundaries to execute projects of different size and complexity using innovative data driven processes and a wide range of public and private partnerships. Concentrating on project goals, innovation, schedule and budget, construction is completed more efficiently, with less impact on travelers.

2010-2021	Achieving the Improbable With Design-Build Approach	\$ 315,751,000	\$ -	\$ -	39
-----------	--	----------------	------	------	----

Before design and construction projects can be called complete, consultants or sharp-eyed co-workers review methods and procedures. The ideas they offer often improve project practicality and the bottom line.

2007-2021	Engineering Reviews Enhance Value	\$ 275,178,714	\$ -	\$ -	0
-----------	--------------------------------------	----------------	------	------	---

MoDOT has installed thousands of miles of shoulders and rumble strips on rural highways where there were none. Using a 2-foot standard rather than the 4-foot shoulder required for major roads made this possible. The result - a 30 percent reduction in run-off-road severe crashes. Engineered shoulders helped drivers regain control. The paving cost of a 2-foot versus a 4-foot shoulder saves \$106,000 per mile and reduces the cost to obtain sufficient right-of-way.

2011-2021	Building Slim Shoulders Where None Existed	\$ 261,184,000	\$ 515,086,951	\$ -	49
-----------	---	----------------	----------------	------	----

The Missouri Department of Corrections partners with MoDOT to allow offenders to perform labor-intensive work. This allows MoDOT to focus its resources on more skilled tasks.

2007-2021	Offender Work Crews	\$ 256,777,567	\$ -	\$ -	0
-----------	---------------------	----------------	------	------	---

# APPENDIX

## SUMMARY OF MoDOT RESULTS

2007-2021	At-Grade Crossing Conversion to J-Turn	\$ 228,900,000	\$ 390,807,535	\$ -	38	J-Turns, a cost-effective alternative to an overpass, reduce the number and severity of crashes at at-grade highway intersections. Traditional interchanges cost \$5-10 million to build. J-Turns average cost is \$800,000. At locations where J-Turns were installed, crashes are down 25 percent and those incidents result in 88 percent fewer fatalities. This design innovation allows us to address a minimum of six severe crash sites with the same money it would take to build a single traditional overpass. MoDOT's first J-Turn was built in 2007.
2011-2020	Optimizing Pavement Striping Strategies	\$ 144,000,000	\$ -	\$ -	0	Because we found that stripes on low-volume highways show less wear than those on major roads, we chose to extend the duration of the minor route restriping schedule. As a result, we sold 30 percent of our specialized striping equipment and reassigned employees to other needed work. This approach maintains traveler safety and meets customer expectations.
2009-2021	Nation's First Diverging Diamond Interchange	\$ 126,800,000	\$ -	\$ -	0	Springfield, Mo., is the site of the first-in-the-nation diverging-diamond interchange. Initial estimates for traditional interchange improvements at Interstate 44 and Mo. 13 were estimated at \$10 million with up to 2 years to complete. Changing the design to a DDI reduced project costs to \$3.2 million and it was built in 6 months. This innovative and cost-effective interchange design handles high traffic volumes so efficiently that 25 now exist in Missouri. Nearly all other states have followed suit, with at least one DDI of their own.
2007-2020	Innovative Finance	\$ 107,127,154	\$ -	\$ -	0	MoDOT refinanced and paid off some bond debt years early, allowing millions to be directed to Missouri's roads and bridges.
2007-2018	Alternate Pavements	\$ 44,701,609	\$ -	\$ -	0	Since October 2003, the alternate bidding process in MO has resulted in the average number of bidders per project rising to 5.5. The three-year average asphalt price/ton for alternate paving projects is 5.1% below that for non-alternate projects, and the three-year average concrete price/CY for alternate paving projects is 8.6 percent below that for non-alternate projects. Overall, it shows a decrease in asphalt prices on alternate bid projects.

# APPENDIX

## SUMMARY OF MoDOT RESULTS

	Rethinking Over-Estimate										
2007-2020	Contractor Bids	\$	29,883,302	\$	492,679	\$	-	\$	0		When contractor bids come in above initial estimates, MoDOT takes another look. Often we discuss cost-saving adjustments with industry, such as eliminating unnecessary contractor risk, then release the proposal for new, nearly always lower-cost bids.
	Converting Roadside Assets to										
2009-2021	Truck Parking	\$	17,649,421	\$	2,874,783	\$	-	\$	0		Though other states have shuttered rest areas in an attempt to save money, Missouri converted obsolete and expensive-to-maintain rest areas and weigh stations to basic truck parking areas. The costs of decommissioning these sites is quickly recouped. When converted, there is no need for building cleaning services, site maintenance or water. Electricity costs are slashed. Motor carriers praise Missouri. The conversions increased the number of publicly provided truck parking spaces in the state, making it easier to find a safe place to sleep. Rested drivers are safer drivers.
	Mowing Smart										
2011-2021	Mowing Smart	\$	16,500,000	\$	-	\$	-	\$	0		Starting in 2011, MoDOT adjusted our mowing schedule on low-volume highways to shift more of the budget to Missouri's roads and bridges each year. On odd years, two passes are required to make sure no substantial growth occurs in the clear recovery zone and on even years, only one pass is required on the final mowout to assure there are no sight distance issues.
	Efficient Traffic Signal Design										
2009-2019	Efficient Traffic Signal Design	\$	16,500,000	\$	-	\$	-	\$	0		By scrutinizing every aspect of traffic signal design and operation, we found efficiencies and now save more than \$1.5 million that can be used on road and bridge work each year. We shared our discoveries with Missouri cities, counties and developers. As a result, the savings opportunities stretch beyond MoDOT alone.

# APPENDIX

## SUMMARY OF MoDOT RESULTS

2007-2021	Acceptance of Alternate Technical Concepts	\$ 15,250,000	\$ -	\$ -	0	<p>Bidders sometimes propose an alternative technical concept when presented with a MoDOT-supplied base design configuration, project scope, design criteria or construction criteria. ATCs often provide solutions equal or better to the original bid requirement.</p> <p>ATCs provide flexibility to the bidders in order to enhance innovation and achieve efficiency.</p> <p>ATCs have been used on multiple projects since 2007, including the Stan Musial Veterans Memorial Bridge in St. Louis. ATCs resulted in \$7.5 million in savings on the \$229 million dollar project.</p>
2021	Savings From Shared Work Program	\$ 14,000,000	\$ -	\$ -	0	<p>To stabilize the road fund as a result of the COVID-19 pandemic, MoDOT took aggressive actions to reduce spending, including temporarily reducing employee work hours and/or salaries by twenty percent and participated in the Shared Work Program through the Department of Labor.</p>
2007-2019	Converting Signals to LED Lighting	\$ 12,988,046	\$ -	\$ -	0	<p>Replacing incandescent signal bulbs with LED bulbs results in remarkable energy savings. Also, because LEDs last longer, they are changed less often, resulting in lower labor costs. MoDOT's LED efforts earned an AASHTO Sweet Sixteen award and is emulated by other states.</p>
2007-2021	Fighting Snow with Beet Juice and Salt Brine	\$ 12,791,234	\$ -	\$ -	0	<p>Salt brine, a liquid solution, soaks into pavement. It is used to pretreat roads for expected storms because rock salt is scattered by passing traffic. Beet juice is a waste product of sugar production. The sticky substance helps rock salt adhere to pavement, increasing the effectiveness of MoDOT's winter storm activity. Both innovations reduce MoDOT's salt usage.</p>
2012-2021	Streamlining Survey Costs with Light Detection and Ranging (LiDAR) Technology	\$ 10,737,974	\$ -	\$ -	0	<p>LiDAR instruments measure distance to a target by illuminating it with a laser light. Adopting this technology reduced the cost of survey design. An ACEC Engineering Excellence Grand Award winner two consecutive years.</p>
2015-2020	Building on a Strong Base - Intelligent Compaction	\$ 9,514,050	\$ -	\$ -	0	<p>Improvements to soil and aggregate compaction under the highway increase pavement service life and decrease maintenance costs for MoDOT. The approach also saves considerable time and labor costs for contractors.</p>
2012-2017	Sign and Post Inventory Reduction	\$ 9,003,162	\$ -	\$ -	0	<p>As MoDOT reduced the number of maintenance buildings, we reevaluated the quantity of signs and posts kept in inventory. Materials are drawn from supplies on hand until we reach the new, lower reorder point.</p>

# APPENDIX

## SUMMARY OF MoDOT RESULTS

2011-2019	Achieving Savings Through Research	\$	8,290,000	\$	-	\$	-	0	MoDOT actively pursues academic and other research to discover new methods to drill bridge support shafts. Methods derived from spread footing geotechnical research conducted in 2011, for example, will save \$100,000 in a typical year.
2007-2020	Bridge Redecking Template	\$	7,677,450	\$	-	\$	-	0	When bridge supports are in good shape, MoDOT redecks older bridges rather than replacing the entire structure. MoDOT uses a standard template for the design of bridge redecking projects to save design time and costs. Travelers enjoy the design time savings and Missourians benefit from cost savings.
2011-2021	Sign Design Modifications	\$	5,500,000	\$	-	\$	-	0	MoDOT designs as many signs as possible to fit on existing posts, resulting in significant savings.
2007-2018	TowPlow - Missouri-Made Snow Fighter	\$	5,224,338	\$	-	\$	-	0	The TowPlow was created by a former MoDOT employee. The TowPlow blade swings out to the side of a snow plow-equipped truck to help clear more lane miles with fewer trucks and operators. MoDOT includes 81 TowPlows in its snow-fighting arsenal. Many other four-season states investigated our success and obtained TowPlows for their own fleets.
2007-2018	Durable, Informative Emergency Reference Makers	\$	3,120,000	\$	-	\$	-	0	The federal standard calls for a single mile marker sign with nine reflective delineators spaced evenly between each sign. MoDOT sought and received permission for the variation. The five signs per mile prove much more durable than the nine reflective delineators. MoDOT recouped the cost of the signs realizing savings in materials and maintenance costs. MoDOT enjoys the overwhelming support of EMS personnel and 911 operators for the decision. Interstate travelers can now provide more accurate location information to dispatchers when they call for emergency services, speeding response time.
2014-2019	Modifying Chevron Sign Spacing	\$	2,806,002	\$	-	\$	-	0	MoDOT adopted federal standard spacing for installation of chevron signs in curves, eliminating the need for an engineer's field visit. The change also reduced the need for an average of two signs per curve, a savings of \$720 on each.

# APPENDIX

## SUMMARY OF MoDOT RESULTS

2010-2019	Achieving Efficiency with Bridge Analysis Software	\$	2,756,927	\$	-	\$	-	0	New LARSBridge software helps bridge engineers more quickly and accurately conduct structural analysis for the movement of specially-permitted super-heavy truckloads. The quicker response and more accurate restrictions save motor carriers time and money while reducing the need for staff resources and improving bridge preservation efforts.
2020-2021	Maintenance Management System (MMS)	\$	2,730,000	\$	-	\$	-	0	MMS is a Governor's award winning, web-based software from which Maintenance staff can assign and document work, record and approve fleet usage calculations, look up information on a wide variety of assets, and access data from multiple data tables at MoDOT. MMS consolidates multiple programs into one easy-to-use, tailor made single platform making retrieving data far more efficient, and improving decision-making capabilities. MMS benefits nearly 3,000 Maintenance workers, as well as the state and traveling public because better data translates into better decisions, more efficiency, dollars saved and more work accomplished in shorter time.
2016 - 2021	Choosing the Most Cost-Effective Sign Posts	\$	2,400,000	\$	-	\$	-	0	By changing its one-size-fits-all sign post philosophy, MoDOT saves by choosing the smallest post for the job at hand and avoids costs associated with well-intentioned over-building.
2016-2021	Energy Saving Lighting	\$	1,581,000	\$	-	\$	-	0	When existing bulbs for overhead and task lighting burn out, MoDOT replaces them exclusively with LED lamps. LEDs consume much less energy and last far longer, saving both electricity and labor costs. The effort expands beyond offices and maintenance areas. The Rock Port, Mo., welcome center earned LEED Silver certification in part because of its use of LED lighting. For FY20 and FY21, the amounts include utility savings due to office staff working from home due to COVID from March 2020 through May 2021.
2007-2012	Using Innovation to Mitigate Impacts to Streams- Stream Mitigation Banks	\$	1,342,521	\$	-	\$	-	0	MoDOT replaced several low water crossings with environmentally friendly bridges, earning stream bank mitigation credits to offset impacts to streams elsewhere. MoDOT also uses the Stream Stewardship Trust Fund to mitigate stream impacts to reduce long term maintenance costs.
2016-2021	Reassessing Road Sign Needs	\$	900,000	\$	-	\$	-	0	MoDOT looked at every type of sign and learned some were not essential to safe roadways. These are not replaced when they deteriorate.

# APPENDIX

## SUMMARY OF MoDOT RESULTS

2013-2021	Paperless Contract Storage	\$	645,000	\$	-	\$	-	0	By using electronic storage, MoDOT reduces its long term document storage costs. Contracts and bonds prepared for road and bridge work average well over 100 pages each. Creating, modifying and delivering them electronically for approval cuts processing time from 30 days to 3 days. MoDOT's other agreements, such as reciprocal agreements and memorandums of understanding are stored and often produced paperlessly. This expedites the research, review and handling of such documents, saving staff time and other costs.
2019-2021	Converting Roadway Lighting to LED	\$	471,246	\$	-	\$	-	0	Replacing high pressure sodium highway lights with LED lighting results in remarkable energy savings. Also, because LEDs last longer, they are changed less often, resulting in lower labor costs.
2016-2021	Merging Operations Software	\$	450,000	\$	-	\$	-	0	By merging multiple software contracts into one we found efficiencies for our system.
2012-2021	Remapping Snow Plow Routes	\$	380,000	\$	-	\$	-	0	MoDOT's St. Louis District reexamined the routes its snowplow operators drive, discovering changes that resulted in a savings of 10 minutes per cycle. Pavement is treated faster, saving \$9,400 per storm and making the way safer for the millions of travelers in the region in less time.
2014-2016	Using Research to Challenge Culvert Load Standards Saves Cost and Motorist Inconvenience	\$	100,000	\$	-	\$	-	0	MoDOT took an innovative approach to research the load capacity of concrete box culvert bridges. By proving that soil fill helps distribute the truck traffic weight carried by this type of bridge, we are able to reduce the number of detailed structural analysis studies needed and avoided placing unnecessary weight restrictions on 3,150 culverts statewide. The effort earned an AASHTO Sweet Sixteen award and other states are using our research results to fine tune their approach for structural analysis on box culvert bridges.
2007-2021	Reducing Crossover Crashes with Median Guard Cable	\$	-	\$	5,696,757,938	\$	-	562	Missouri's median guard cable is successful in slowing and guiding wayward vehicles from crossing into opposing lanes. Guard cable is used on portions of all Missouri interstates and other major routes. It drastically reduces the number of median crossover crashes which can be devastating, often fatal.



# APPENDIX

## SUMMARY OF MoDOT RESULTS

2007-2021	Making Highways Smoother and Safer, Sooner	\$	-	\$ 1,542,824,894	\$	-	130	The Smooth Roads Initiative and Better Roads, Brighter Future program were back-to-back efforts that improved 5,600 miles of highways. Completed earlier than scheduled, the efforts delivered smoother pavement, brighter striping, rumble stripes and other safety improvements to the highways that carry 80 percent of Missouri's traffic. These improvements have resulted in over \$1 billion of safety benefits to the customers since 2007.
2007-2021	Electronic Truck Pre-Screening at Weigh Stations	\$	-	\$ 271,560,687	\$	-	0	Electronic pre-screening using weigh-in-motion scales and other technology helps identify the "good players" among commercial truck traffic in Missouri. Transponder-equipped trucks found in good standing are allowed to bypass weigh stations so Missouri State Highway Patrol Commercial Vehicle officers' inspection efforts are more efficient. Motor carriers who participate in the voluntary service save time, fuel and money while Missouri uses the same resources to process an increasing number of trucks.
2013-2021	Keeping Cars on the Road with High Friction Surface Treatment	\$	-	\$ 119,531,208	\$	-	0	MoDOT achieved a 20 percent reduction in run-off-road crashes in areas with high rates of ROR incidents by installing high-grip surface treatments. Ideally, the alignment of those road sections would be corrected, but until that is possible, the pavement helps hold vehicles on the driving lanes, reducing skidding.
2007-2021	Web-Based Motor Carrier Credentialing	\$	-	\$ 115,365,543	\$	-	0	Motor Carrier Express, an online business portal, allows trucking companies to conduct business with MoDOT anytime and drastically reduces the need to speak with an agent. Customers transact more than 125,000 actions each year on their own and receive most required credentials electronically rather than by mail or shipment. Since 2007, Missouri motor carriers realized significant time savings through electronic credential delivery. Trucks get on the road - making money - faster.
2009-2020	Earning Competitive Federal TIGER Grants	\$	-	\$ -	\$	56,703,000	0	The federal TIGER Discretionary Grant program supports innovative projects and collaborative approaches to difficult transportation issues nationwide. This program allows Missouri to address transportation system needs using federal funds.

# APPENDIX

## SUMMARY OF MoDOT RESULTS

2009-2021	Realty to Roads Property Sales Program	\$	-	\$	-	\$	59,713,157	0	MoDOT sells state-owned property no longer needed for the operation of the state's system. The proceeds from this program are reinvested into the road fund. In 2010, MoDOT's Right of Way Division earned the 2010 FHWA Excellence in Right of Way Technical Specialty Award for the team's aggressive approach and rationale in selling excess property.
2013-2021	Realizing Revenue Through Recycling	\$	-	\$	-	\$	2,911,637	0	Recycling paper, plastic, ink cartridges and more is second nature for MoDOT office employees. Field staff routinely collect scrap metal, tires, anti-freeze and the like. All of the items are sold with the revenue invested in Missouri's highway system.
2016-2018	Outsourcing Sign Production	\$	-	\$	-	\$	1,800,000	0	Renegotiating the terms and renewing the contract between MoDOT and the vendor that manages business and tourist directional signs on highway right-of-way guarantees MoDOT an additional \$600,000 in revenue annually. The terms also shifted responsibility for sign production and installation to the vendor, freeing MoDOT employees for other work.
2007-2021	Cost Share and Cost Participation Programs	\$	-	\$	-	\$	1,549,345,000	0	Communities contribute to state highway projects to receive needed upgrades faster. Revenues from local tax initiatives often provide the local portion in Cost Share Program projects.
2007-2021	Encouraging Economic Opportunity and Competition Using Federal Funds	\$	-	\$	-	\$	7,720,580	0	MoDOT uses Federal Highway Administration funds to administer programs that expand business opportunities for historically disadvantaged groups. By educating business owners how to pursue opportunities with the state and by providing real-world experiences through apprenticeships, MoDOT benefits from an expanded pool of competitive vendors and increased numbers of skilled laborers.
2019-2021	Revenue Generated from Leasing Property	\$	-	\$	-	\$	9,059,354	0	MoDOT leases Commission owned property when it does not interfere with the operation of the system and benefits the public. Areas leased are utilized for agriculture purposes, parking facilities, highway patrol regional sites to list a few. The additional revenue is reinvested in Missouri's highways.
2020	5339 Rural Transit Facilities Competitive Grant	\$	-	\$	-	\$	5,120,000	0	MoDOT successfully secured federal funds to construct two storage and maintenance facilities for rural transit providers. These facilities will save operational costs, add efficiencies and help keep transit buses in a state of good repair.

# APPENDIX

## SUMMARY OF MoDOT RESULTS

2020	CARES Act Funding - Transit	\$	-	\$	-	\$	61,770,760	0	Taking advantage of the CARES Act monies offered, MoDOT secured much needed federal funds, with no match requirement, for operating and capital assistance for rural transit providers to continue services during the COVID-19 pandemic.
2020-2021	FAA Airport Improvement Program Competitive Discretionary Grant Awards	\$	-	\$	-	\$	34,974,251	0	Funds intended for high-scoring projects using FAA's project prioritization formula; projects seeking discretionary funding compete against other projects in FAA Central Region.
2020	CARES Act Funding - Aviation	\$	-	\$	-	\$	8,490,464	0	MoDOT successfully secured CARES Act federal funds, which required no matching funds, to help airports cover regular airport operation and maintenance costs during the COVID-19 pandemic.
2020-2021	Grade Crossing Improvements	\$	-	\$	-	\$	1,045,617	0	Highway-railroad at-grade crossings are eligible for state and federal funding for safety improvements. By partnering with railroads, additional private funds are also invested for safety improvements. Highway-railroad at-grade crossings are eligible for state and federal funding for safety improvements. By partnering with railroads, additional private funds are also invested for safety improvements. During FY20 MoDOT invested \$4.6 million of Federal funds, \$1.2 million in State funds and Railroads contributed \$667,000 to these important safety projects.
2021	Coronavirus Response and Relief Supplemental Appropriation Act (CRRSAA) - Aviation	\$	-	\$	-	\$	954,324	0	The Federal government is providing aviation assistance to airports in the State Block Grant Program. These funds are available for costs to prevent, prepare for, and respond to the COVID-19 pandemic, including airport operating costs and debt service payments.
2021	Coronavirus Response and Relief Supplemental Appropriation Act (CRRSAA) - Transit	\$	-	\$	-	\$	851,394	0	This program provides one hundred percent (100%) funding for capital and operating expenses to public transportation providers.
2021	American Rescue Plan Act (ARPA) - Aviation	\$	-	\$	-	\$	2,207,000	0	This additional funding is for construction, capital improvements, operations, or planning of publicly owned airfields by cities or other political subdivisions, including land acquisition.

# APPENDIX

## SUMMARY OF MoDOT RESULTS

2021	American Rescue Plan Act (ARPA) - Enhanced Mobility of Seniors and Individuals with Disabilities	\$	-	\$	-	\$	851,407	0	This program provides one hundred percent (100%) grant funds for capital and operating expenses to entities that provide public transportation to seniors and those with disabilities.
2021	American Rescue Plan Act (ARPA) - Intercity Bus Service	\$	-	\$	-	\$	2,841,247	0	One hundred percent (100%) federal funding is available to provide regularly scheduled bus service for the general public that operates with limited stops over fixed routes connecting two or more areas not in close proximity.
2021	American Rescue Plan Act (ARPA) - Transit Formula Grants for Rural Areas	\$	-	\$	-	\$	9,058,625	0	One hundred percent (100%) federal funding is available for capital, planning, and operating assistance to states to support public transportation in rural areas with populations of less than 50,000.
2021	American Rescue Plan Act (ARPA) - Rural Transit Assistance Program	\$	-	\$	-	\$	152,411	0	The Rural Transit Assistance Program (RTAP) provides resources, training and technical assistance to rural transit providers.
2021	Increased General Revenue funding investment for Waterways Capital Improvements Program	\$	-	\$	-	\$	11,600,000	0	The General Assembly appropriated \$11.6 million in General Revenue (GR) for the Waterways Port Capital Improvement Program (CIP) for Fiscal Year 2022. This is double the previous year's appropriation and the second highest amount appropriated for this program. MoDOT worked with legislators and the Missouri Port Authority Association to identify CIP needs and provide economic impact data to support this appropriation.
2021	Missouri Vanpool COVID-19 Discretionary Grant	\$	-	\$	-	\$	450,000	0	MoDOT received \$450,000 in FTA discretionary grant funding to develop and implement a pilot vanpooling program to get individuals to and from work. MoDOT is partnering with Commute with Enterprise to develop and implement the program. This pilot program will utilize vanpooling to get individuals to and from work, expand job access, and utilize state-of-the-art technology to help riders match and pay in real-time.
2021	Consolidated Rail Infrastructure and Safety Improvements (CRISI) program - Webster County	\$	-	\$	-	\$	10,500,000	0	Safety improvements along the U.S. Highway 60 corridor in southern Webster County, including the construction of an outer road beginning at State Highway Z near Fordland running to a new interchange at State Highway A.

# APPENDIX

## SUMMARY OF MoDOT RESULTS

2019	Consolidated Rail Infrastructure and Safety Improvements (CRISI) program - Lawrence, Christian, Greene County corridor	\$	-	\$	-	\$	2,600,000	0	Safety enhancements at nine additional crossings including improvements to vertical and horizontal geometrics, adjacent roadway intersections, crossing surfaces, pavement marking, signing, lighting, security fencing, drainage and ADA accessibility.
2021	Economic Impact of Amtrak's Missouri River Runner Service	\$	-	\$	-	\$	10,850,000	0	According to the 2021 State Freight and Rail Plan, the total annual economic impact of Amtrak's Missouri River Runner service yields: 1,250 jobs, \$65 million in labor income, \$208 million in economic activity, and more than \$22 million in tax revenue. Passenger rail service provides important economic development benefits to Missouri communities by improving accessibility, connectivity, and travel efficiency for both in-state and out-of-state travelers. The General Assembly appropriated \$10.85 million for passenger rail in Fiscal Year 2022, a record state investment level in Missouri.
<b>TOTAL:</b>		<b>\$</b>	<b>5,414,269,010</b>	<b>\$</b>	<b>9,067,916,945</b>	<b>\$</b>	<b>1,851,570,228</b>	<b>863</b>	