

# I. Introduction: Factors Affecting the 2022 Enacted Highway Plan

The development of the Biennial Highway Plan and the recommended projects for the four years beyond the upcoming biennium constitute Kentucky's six-year highway plan. Highway system asset management and performance measures are used to prioritize projects involving safety improvements, economic growth, traffic congestion, pavement needs, and bridge needs across the Commonwealth. The costs of these priority projects are weighed against the anticipated annual state and federal funding to fiscally balance both the Biennial Highway Plan and the out-four-years of the highway plan. The Governor submits the Recommended Highway Plan to the Kentucky General Assembly in mid-January of each even-numbered year, and as the chart below illustrates, the General Assembly deliberates over, and ultimately enacts, a highway plan on or before April 15 with the final published version of the enacted highway plan made available by KYTC in June of each even-numbered year.



In developing the 2022 Enacted Highway Plan, the Kentucky Transportation Cabinet's (KYTC) vision and mission statements serve to guide the strategies employed to most effectively utilize state and federal revenue streams to deliver needed highway system improvements. With highway users as our primary customers, KYTC's organizational vision and mission are as follows:

## ➤ **KYTC Organizational Vision**

*Striving to be national leaders in transportation who provide transportation infrastructure and services for the 21st century that deliver new economic opportunities for all Kentuckians.*

## ➤ **KYTC Organizational Mission**

*To provide a safe, efficient, environmentally sound and fiscally responsible transportation system that delivers economic opportunity and enhances the quality of life in Kentucky*

As KYTC recommends highway projects and programs that align with its vision and mission, it is critical that KYTC makes every effort to address its existing backlog of pavement and bridge needs while pursuing highway improvement projects that provide enhanced roadway safety, improved regional access, and increased economic opportunity for each geographic region of Kentucky.

The 2022 Enacted Highway Plan as approved by the Kentucky General Assembly and signed into law by the Governor, is divided into three distinct focus areas to stress the commitment toward Asset Management (taking care of the existing roads and bridges), Capacity Improvements (providing new and wider roads to handle future traffic), and a “ZVARIOUS” category of funding necessary to honor past funding commitments and support various on-going program activities. The following sections outline each of these focus areas.

**A. Asset Management and Performance: KYTC’s Investment in Bridges and Pavements**

Kentucky owns and maintains over 9,000 bridges, the seventh largest system in the nation, and over 63,000 lane-miles of pavement, the eighth largest system in the nation. This existing highway infrastructure is valued at about \$53 Billion. Managing and maintaining transportation assets in a state of good repair is pivotal for the health, safety, and economic vitality of the state.

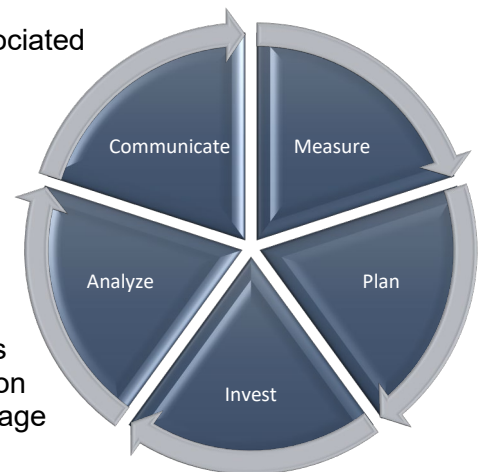
The KYTC selects asset management projects guided by our mission and shaped by the following strategic documents:

--The Department of Highways Operational Plan’s goal and associated strategies to

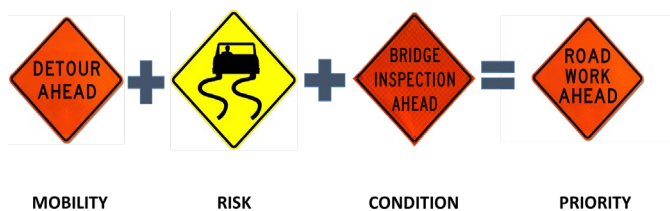
**Optimize Performance through People and Innovation**

- Establish and sustain a performance driven culture
- Ensure resources are invested appropriately
- Apply technology and innovation to improve effectiveness and efficiency

--The KYTC Transportation Asset Management Plan which serves as an accountability and communication tool. It describes the condition of roads and bridges and how fiscally responsible investments manage risk and performance to achieve federal performance targets.



The 2022 Enacted Highway Plan contains over \$1.6 billion in pavement projects and over \$1.8 billion in bridge projects to create the best transportation system possible. Projects in the asset management category provide for the preservation, rehabilitation and replacement of pavements and bridges. Pavement preservation projects include asphalt resurfacing, repairs, and diamond grinding of concrete pavements. Bridge preservation projects include painting, deck overlays, and minor repairs.



KYTC selects asset management projects through a data driven process that considers the overall needs of the bridge and pavement network, the existing condition of each specific asset, estimated project cost and value, and performance goals. Prioritization models include mobility impacts, asset condition, anticipated deterioration, risk, and benefit.

The enhanced bridge prioritization process strengthens KYTC’s commitment to improve structures across Kentucky. The new process considers statewide bridge needs alongside minor and local route structures to provide long lasting safety and reliability benefits for the Commonwealth. The current Kentucky Bridge

Program is building upon program delivery and scoping process improvements gleaned from the recent “Bridging Kentucky” effort and these “lessons learned” will increase the efficiency of individual bridge project delivery. The 2022 Enacted Highway Plan contains \$458 million to continue efforts to address almost 300 deteriorated rural bridges.

**PERFORMANCE**

Asset management projects are the engine that drives infrastructure performance and achieves infrastructure goals. The KYTC develops pavement and bridge performance targets from the full understanding of needs, resources, and strategies. State of good repair performance targets represent both a long-term state vision for maintaining assets and short-term (two and four year) targets for the federally required Transportation Asset Management Plan.

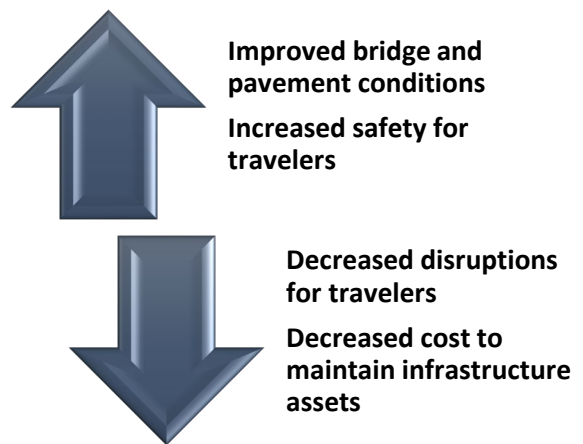
<b>LONG RANGE STATE OF GOOD REPAIR</b>	<b>PERCENT POOR CONDITION</b>
<b>Pavement</b>	No more than 8%
<b>Bridge</b>	No more than 3% by deck area

<b>FEDERAL PERFORMANCE TARGETS</b>	<b>2 YEAR TARGET</b>	<b>4 YEAR TARGET</b>
<b>% Interstate Pavement in Good Condition</b>	50%	50%
<b>% Interstate Pavement in Poor Condition</b>	3%	4%
<b>% Non-Interstate NHS Pavement in Good Condition</b>	35%	35%
<b>% Non-Interstate NHS Pavement in Poor Condition</b>	6%	6%
<b>% NHS Bridges in Good Condition</b>	35%	27%
<b>% NHS Bridges in Poor Condition</b>	3.7%	3.6%

**INVESTMENT STRATEGY**

Formal performance measures for bridges and pavements inform budget requirements and life cycle plans. State owned pavements and bridges show a trend of decreasing good condition and increasing fair condition. This indicates a greater urgency for focused investments to maintain assets in a state of good repair.

The performance investment strategies allow KYTC to seek additional value from each transportation dollar while also meeting program goals and seeking network improvement. Asset projects contained in the 2022 Enacted Highway Plan will (a) improve the overall condition of Kentucky’s pavements and bridges, (b) increase preservation spending to end the cycle of increasing needs, (c) replace poor condition bridges and pavements, (d) mitigate risk to the travelling public by considering safety in project selection, and (e) continue to invest in local needs and honor commitments to maintain structures with bordering states.



## ASSET PROJECT HIGHLIGHTS

Replace concrete pavement on I-65, I-64 and I-24

Rehabilitate failing pavement on I-71 and the Bluegrass Parkway

Repair and grind 200 lane miles of concrete Interstate pavement

Replace the Carrollton Truss Bridge (US 42/KY 36 over the Kentucky River)

Replace four I-65 structures in the Louisville metropolitan corridor

Rehab the Simon Kenton Bridge (US 62 over the Ohio River)

Replace the Cairo Bridge (US 60/US 62 over the Mississippi River)

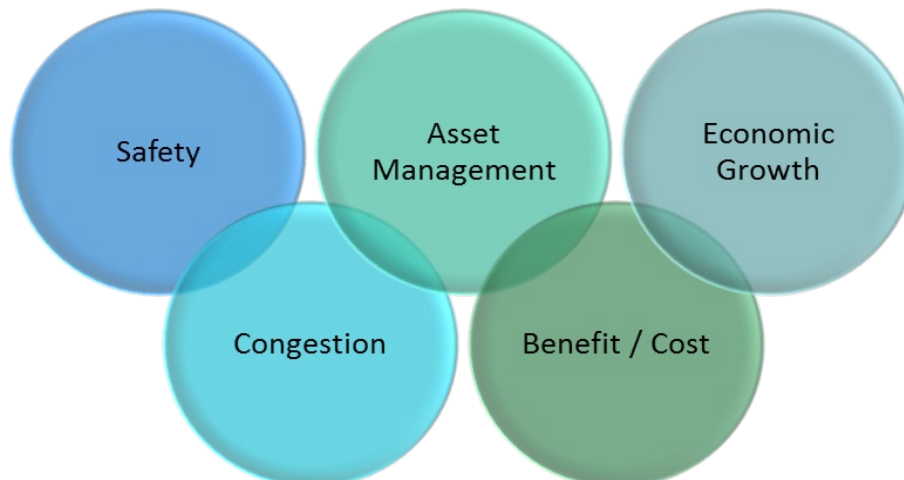
### ***B. Capacity Improvements: KYTC's Investment in Priority System Upgrades***

To assist in the prioritization of highway capacity and improvement needs, KYTC developed a prioritization tool entitled the Strategic Highway Investment Formula for Tomorrow (SHIFT). The SHIFT process is a data-driven, objective, and collaborative approach to developing a geographically sensitive, data-driven highway plan. SHIFT was developed by KYTC through collaborative interaction with KYTC's planning partners. As it evolves, SHIFT will continually seek to improve its processes, always working to ensure that it employs the most current and effective technical methodologies.

Effective performance management requires an understanding of the interconnection between performance areas. For example, an improvement in highway conditions has a positive impact in the other performance areas. However, maximizing asset conditions at the expense of needed investments in the other performance areas would not lead to the best overall system performance. An effective highway program must support all areas of system performance in a balanced way which the SHIFT program is designed to help achieve. SHIFT incorporates benefits in each of the national goal areas into a common, objective project prioritization process. This process is used to rank potential highway improvement projects for inclusion in the Highway Plan. The SHIFT formula is an objective approach that uses data on safety, congestion, asset management, economic growth, and benefit-cost ratios to rank potential projects relative to others.

Potential KYTC Highway Plan projects are scored by SHIFT on the basis of five metrics:

#### *Formula Components*



The SHIFT process evaluates potential project types including safety improvements, road widening, reconstruction, construction of new routes, and interchange improvements. Projects outside the SHIFT process include pavement and bridge asset management processes, rural and secondary road projects, maintenance projects, and a variety of projects scheduled to use federally dedicated funds. Regional scoring and project selection is 70 percent data driven and 30 percent subjective, based on district and local priorities. KYTC districts coordinated with MPOs, ADDs, and state and local officials to ensure their priorities were considered.

Safety scores are calculated using the project locations crash history and current roadway characteristics. Congestion scores are based on vehicle hours of delay. The economic growth score considers accessibility and connectivity needs based on improvement type, county economic indicators, and average daily traffic. The benefit-cost ratio uses benefits derived from anticipated travel-time and crash reduction savings, then divided by the project cost. The asset management component considers bridge and pavement needs within the project limits that could be addressed by the proposed project, as well as how critical a roadway is to the area it serves.

The SHIFT prioritization process acknowledges current highway funding shortfalls, and offers a reliable, balanced approach to project prioritization, selection, and scheduling to use when applying state and federal highway funding across Kentucky's highway system. It is important to acknowledge as KYTC continues to transition to institutionalized data-driven processes, other information is necessary to consider alongside SHIFT scoring to develop a recommended highway plan. These considerations include investments-to-date and associated impacts to communities, fulfillment of previous Highway Plan commitments, the recognition of new transportation priorities designated by Congress through the Bipartisan Infrastructure Law, and completion of significant highway and transportation corridors across Kentucky.

### **C. “ZVARIOUS” Funding: KYTC’s Investment in On-Going Program Activities**

The “ZVARIOUS” section of the Highway Plan is a long-standing element of KYTC’s biennial presentation of highway needs to the Kentucky General Assembly. In the early days of the Highway Plan, technology was more limited and the way to have these various program commitments listed at the end of the alphabetical county-by-county listing of projects was to add a “Z” to the “Various County” identification for these programs. Over time, the “ZVARIOUS” heading has become accepted Highway Plan nomenclature and is carried forward in the 2022 Enacted Highway Plan.

Found under its own tab in this booklet, the ZVARIOUS section of this Highway Plan addresses the following programmatic needs and commitments, all designed to provide essential flexibility in implementing the upcoming biennial highway program:

- Emergency bridge repair and replacement funding
- Anticipated federal funding for Intelligent Transportation Systems (ITS) activities
- Anticipated annual Transportation Alternatives Program (TAP) funding
- Anticipated annual Congestion Mitigation and Air Quality (CM) funding
- Emergency pavement repair and rehabilitation funding
- Statewide federal bridge inspection funding
- Statewide federal Railroad Protective Devices (RRP) funding
- Statewide highway project design funding to support the state and federal highway programs
- Statewide replacement of bridge navigational lighting for safety purposes
- Border State commitments to major river bridge repairs
- Statewide rockfall and landslide mitigation and repair projects
- Statewide federal Highway Safety Improvement Program (HSIP) funding
- Statewide federal and state funding for HSIP projects for highway safety near schools

- Statewide funding for bridge scour mitigation activities
- Statewide funding for the Kentucky-specific Americans with Disabilities Act (ADA) transportation plan implementation activities
- Statewide funding for federal Carbon Reduction Program
- Statewide funding for federal Protect Formula Program
- Statewide funding for Electric Vehicles Charging Infrastructure Program
- Annual federal payback commitments for GARVEE Bonds used to support previously authorized and upcoming Highway Plan projects

Each of the above activities is a critical part of KYTC’s annual highway construction program. The funds represented give KYTC the flexibility to react immediately to unanticipated bridge and pavement needs, as well as be in position to utilize federal and state funding as it becomes available for the indicated actions.

## **II. Environmental Update**

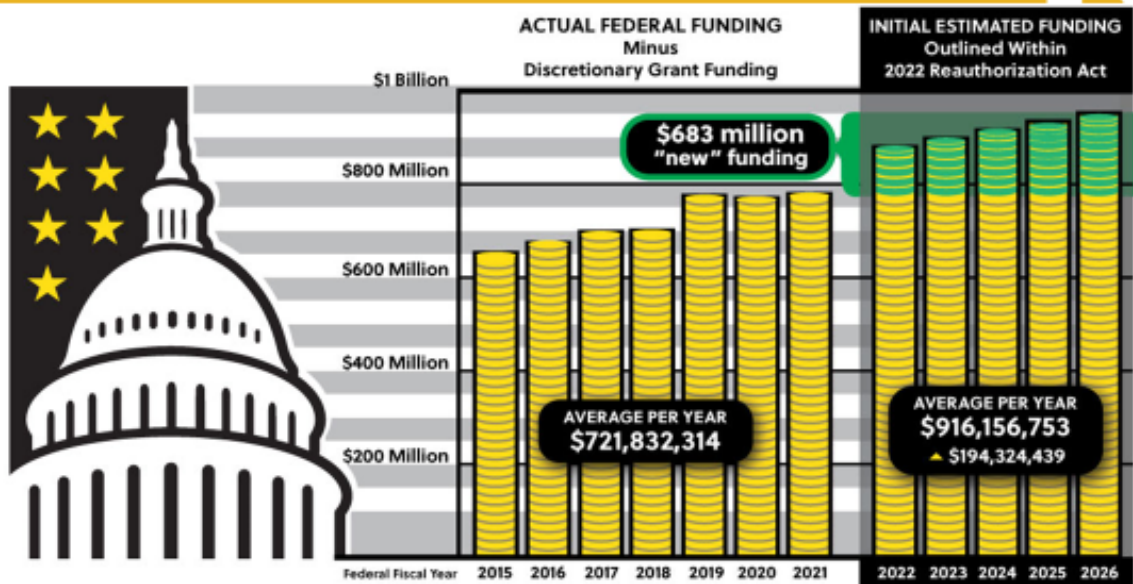
Kentucky’s Anti-degradation Policy Implementation Methodology contained in 401 KAR 10:030 requires that all project development activities address the protection of water resources. The regulation recognizes the Kentucky General Assembly’s authority for approval of projects in the highway plan. Projects are included in the highway plan only after a measured decision that the project enhances the quality of life, vitality of the Commonwealth and promotes the public good. The provisions of the amended regulation specify that inclusion of a project in the highway plan satisfies the requirements for conducting an anti-degradation socioeconomic benefit demonstration. Inclusion of a project is an indication of the General Assembly’s conclusion that the reduction in water quality that may occur as a result of the project is acceptable given the socioeconomic benefits to be derived. Citizens who may be concerned about the potential of a project to affect water quality should provide information to their legislator for consideration when evaluating projects for inclusion in the highway plan.

## **III. Revenue Estimates and Assumptions**

The 2022 Enacted Highway Plan is based on the most recent federal and state revenue estimates. State revenue estimates have been assumed to be “flat-lined through State FY-2028. While state highway funding has remained static since 2015, federal highway programs received a much needed boost through the Congressional passage of a new federal transportation authorization act, the Infrastructure Investment and Jobs Act (IIJA) of 2021, now called the Bipartisan Infrastructure Law (BIL). As the chart below shows, the BIL reauthorized federal formula highway funding at amounts that exceeded the previous authorization act by approximately \$683 million over the five-year life of the new act. These additional funds are spread throughout the formula federal-aid highway programs with dollars escalating each year. The average five-year formula funding to Kentucky under the BIL is \$916.2 million compared to the previous five-year “FAST Act” average formula funding level of \$721.8 million annually. Using the average dollar amounts, the BIL has increased the federal formula program size by \$194.4 million, or about 27%. The BIL also provided a significant infusion of Federal General Fund dollars targeted toward fixing America’s deficient bridges, including about \$88 million annually expected to be allocated to Kentucky.



# Kentucky's Formula Federal-Aid Funding History and Projections



While the increase in formula federal-aid highway funding is certainly welcome, it should be noted that three new formula programs were added by Congress. The first is a carbon reduction program (“CARB”) to provide funding to states for activities that reduce carbon dioxide emissions from on-road highway sources. The second is a Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (“PROTECT”) program to help states improve the resiliency of transportation infrastructure. The third is a formula allocation to assist each state in developing an Electric Vehicle (EV) charging network. The BIL also provided for a bevy of discretionary transportation grant programs to be solely administered by the United States Department of Transportation (USDOT). These grant programs require the states to formally apply for these funds with USDOT engaging in a selection process to determine grant winners. The following are some of the key grant programs through which KYTC will be applying for project assistance:

- The Continuing National Infrastructure Project Assistance (INFRA) Grant Program
- The Continuing Local and Regional Project Assistance (RAISE) Grant Program
- The Bridge Investment Grant Program
- The Congestion Relief Grant Program
- The Electric Vehicle Charging and Fueling Infrastructure Grant Program
- The Rural Surface Transportation Grant Program
- The PROTECT Grant Program (supplements the formula PROTECT Program)
- The Safe Streets and Roads for All Grant Program
- The National Culvert Grant Program
- The Wildlife Crossings Pilot Grant Program
- The Reconnecting Communities Pilot Grant Program

While KYTC cannot predict with certainty that it will receive USDOT federal discretionary grant funding, it will actively seek federal grant funding at every opportunity. Some of the larger projects for which grant funding will play a major role are for the I-71/75 Brent Spence Bridge project in Northern Kentucky, the I-69 Ohio River Crossing at Henderson-Evansville, and the completion of a 4-lane Mountain Parkway Corridor along KY 114 to Prestonsburg.

The 2022 Enacted Highway Plan is based on using the BIL authorized formula federal-aid funding projections for Kentucky as provided by the Federal Highway Administration (FHWA). These authorized funding levels were used to develop the previous funding chart and are subject to the annual federal appropriations process. Congressional appropriators could change these numbers slightly but, at the time of this writing, FHWA’s formula funding calculations represent the best estimate of annual federal funding through Federal FY-2026. For the purposes of this highway plan, the Federal FY-2026 funding levels have been extended through Federal FY-2028 at the Federal FY-2026 level.

In preparing the 2022 Enacted Highway Plan, both federal and state revenue sources have been considered and the projected state and federal-aid highway funds made available to KYTC for major highway projects are displayed in **Figure 1**. Consistent with past trends and current forecasts, this edition of the 2022 Enacted Highway Plan is being developed on the basis of the most recent federal transportation authorization, the BIL, and state revenue estimates consistent with projections made by Kentucky’s Consensus Forecast Group (CFG). The CFG is a committee of specially designated experts whose revenue forecasts are used by the Executive Branch and the General Assembly to craft the biennial state budget.

### FEDERAL AND STATE HIGHWAY FUNDING LEVELS AVAILABLE FOR OBLIGATION FROM 2023 THRU 2028

*(\$8.5 billion estimated by the Kentucky Transportation Cabinet)*

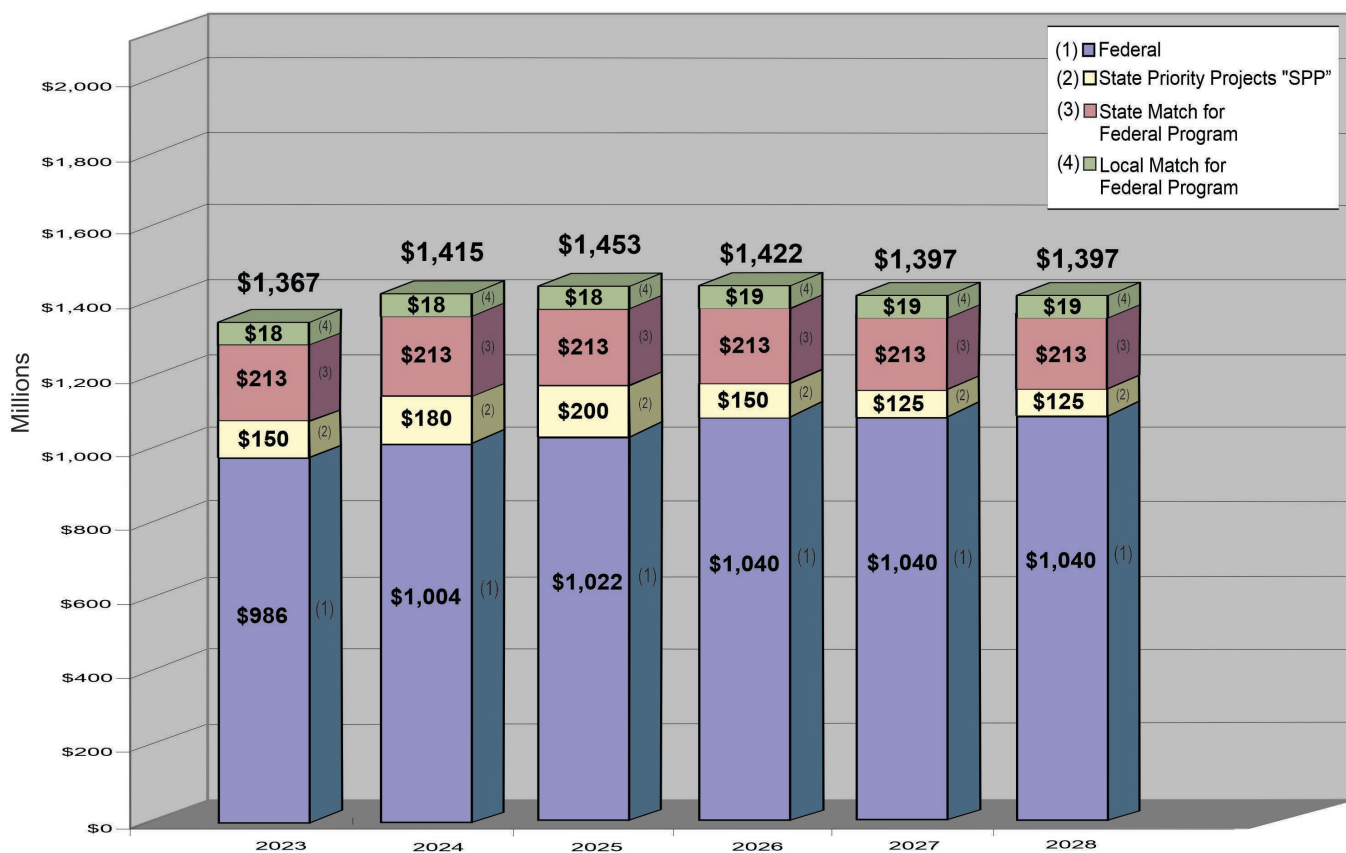


Figure 1

For this edition of the highway plan, FY-2023 through FY-2028 funding estimates total nearly \$8.5 billion, including \$6.1 billion in federal funds, \$1.3 billion in required state matching funds, \$111 million in local matching funds, and \$930 million in state funding expected to be available for state priority “SPP” projects. It is important to note that the ability of KYTC to provide the federally-required state matching funds and to undertake major state-funded projects is a function of available road fund cash and the careful management of road fund expenses. The Cabinet is committed to maintaining cash to a “floor” of \$100 million.



The cash management process (as described in “Section II, Part B) currently yields daily cash balances for internal use and provides information for monthly meetings where estimated future cash outlays, including state matching funds for the federal-aid program, can be updated and project funding decisions can be refreshed. As KYTC has gained experience with this process, our confidence has grown in both the methodology and the resulting cash flow decisions.

### ***A. Federal Revenue Projections***

The FY 2023 - 2028 federal revenue forecasts are based on expected formula federal-aid allocations from the BIL through FY 2026 and straight-line projections for FY 2027 and FY 2028. The straight-line projections for FY 2027 and FY 2028 is an approved methodology by FHWA for estimating revenue years beyond the period covered by the current federal authorization act. Expected state-by-state levels of federal-aid highway funding under the BIL were calculated by FHWA and the resulting category-by-category formula funding amounts were provided through “apportionment tables” for each federal fiscal year.

**Figure 2** shows the anticipated federal funding category target amounts used to fiscally balance the 2022 Enacted Highway Plan. The anticipated total formula federal-aid dollars and matching funds available to fund projects scheduled for FY 2023 through FY 2028 is expected to be about \$8.5 billion.

Name	INFRASTRUCTURE INVESTMENT AND JOBS ACT (IIJA) FEDERAL-AID HIGHWAY TYPE OF FUNDING	PERCENT OF REQUIRED MATCHING FUNDS	FFY 2023	FFY 2024	FFY 2025	FFY 2026	FFY 2027	FFY 2028	COMBINED TOTALS
			TOLL CREDITS						
GAR	GARVEE BOND DEBT SERVICE FD53		80.0	70.0	70.0	70.0	70.0	12.0	372.0
NH	FEDERAL NATIONAL HIGHWAY SYSTEM FUNDS	20%	201.7	231.3	234.5	245.1	253.1	309.4	1,475.1
NHPM	FEDERAL NATIONAL HIGHWAY SYSTEM FUNDS FOR PAVEMENTS	20%	194.3	186.3	194.3	194.3	186.3	187.9	1,143.4
STP1	STP (5-200K Pop)	20%	13.0	13.5	14.0	14.6	14.6	14.6	84.3
STP2	STP (<5K Pop)	20%	29.6	37.6	28.7	29.8	32.2	43.1	201.0
STPF	STP Flex Funding	20%	54.5	49.4	51.3	67.8	67.6	56.7	347.3
STP3	STP (5-200K Pop) for Pavements	20%	6.8	6.8	6.8	6.8	6.8	6.8	40.8
STP4	STP (<5K Pop) for Pavements	20%	10.7	3.8	13.8	13.8	11.4	0.5	54.0
STP5	STP Flex Funding for Pavements	20%	17.7	24.7	24.7	10.3	10.4	21.4	109.2
BRO	BRO (BRIDGES ON SYSTEM)	20%	56.0	56.0	56.0	56.0	56.0	56.0	336.0
BRX	BRX (BRIDGES ON/OFF SYSTEM)	20%	45.3	45.3	45.3	45.3	45.3	45.3	271.8
BRZ	BRZ (BRIDGES OFF SYSTEM)	20%	13.8	13.8	13.8	13.8	13.8	13.8	82.8
FBP	FEDERAL BRIDGE PROGRAM	20%	75.0	75.0	75.0	75.0	75.0	75.0	450.0
FBP	FEDERAL BRIDGE PROGRAM (15% OFF SYSTEM BRIDGES)	0%	13.0	13.0	13.0	13.0	13.0	13.0	78.0
RRP	SAFETY-RAILROAD PROTECTION	10%	1.9	1.9	1.9	1.9	1.9	1.9	11.4
RRS	SAFETY-RAILROAD SEPARATION	10%	1.9	1.9	1.9	1.9	1.9	1.9	11.4
SAH	FEDERAL STP FUNDS DEDICATED TO HUNTINGTON/ASHLAND (20% Local Match Required)	20%	1.7	1.8	1.8	1.8	1.8	1.8	10.7
SHN	FEDERAL STP FUNDS DEDICATED TO HENDERSON (20% Local Match Required)	20%	0.9	0.9	0.8	0.9	0.9	0.9	5.3
SLO	FEDERAL STP FUNDS DEDICATED TO LOUISVILLE (20% Local Match Required)	20%	25.3	25.8	26.3	26.8	26.8	26.8	157.8
SLX	FEDERAL STP FUNDS DEDICATED TO LEXINGTON (20% Local Match Required)	20%	7.4	7.6	7.7	7.8	7.8	7.8	46.1
SNK	FEDERAL STP FUNDS DEDICATED TO NORTHERN KENTUCKY (20% Local Match Required)	20%	8.1	8.2	8.4	8.6	8.6	8.6	50.5
APD	FEDERAL APPALACHIAN DEVELOPEMENT HIGHWAYS	20%	NONE	NONE	NONE	NONE	NONE	NONE	NONE
SAF	FEDERAL HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)	10%	53.4	54.6	55.7	56.9	56.9	56.9	334.4
CM	CONGESTION MITIGATION/AIR QUALITY (20% Local Match Required)	20%	15.2	15.5	15.8	16.2	16.2	16.2	95.1
TAP	FEDERAL TRANSPORTATION ALTERNATIVES PROGRAM (20% Local Match Required)	20%	11.6	11.9	12.1	12.3	12.3	12.3	72.5
CARB	CARBON REDUCTION PROGRAM	20%	21.9	22.4	22.8	23.3	23.3	23.3	137.0
PROT	PROTECT FORMULA PROGRAM	20%	24.9	25.4	25.9	26.5	26.5	26.5	155.7
IF	INNOVATIVE FINANCING	20%	TO BE DETERMINED	TO BE DETERMINED	TO BE DETERMINED	TO BE DETERMINED	TO BE DETERMINED	TO BE DETERMINED	TO BE DETERMINED
<b>COMBINED TOTALS</b>			<b>986</b>	<b>1,004</b>	<b>1,022</b>	<b>1,041</b>	<b>1,040</b>	<b>1,040</b>	<b>6,134</b>

Note:

1. Mandated GARVEE Bond Debt Service Payments for FFY 2023 through FFY 2028.
2. Previously set-aside upfront "Toll Credits" are used as state match on GARVEE Bond Debt Service Payments as outlined within agreement with GARVEE Bond Holders and with FHWA.
3. No remaining "Toll Credits" available for required state match on new federal funding obligations during FFY 2023 through FFY 2028.
4. The FBP and FBP2 "Federal Bridge Program" funding is funding through National General funds, not through Highway Trust Funds.

Figure 2

While KYTC expects to have sufficient state highway funding to match formula federal-aid dollars through FY-2028, there is considerable concern about the availability of sufficient state funding to match the multiple BIL Grant funding opportunities in the years ahead. Many of the grant programs expect that grant applications will routinely “over-match” the required state contribution for those programs. These expectations for over-match are much easier for states that have raised their road user fees in recent years. For Kentucky, significant over-match will be difficult to accommodate, requiring that federal-aid-eligible state-funded SPP projects be moved to an appropriate federal-aid funding categories for completion.

Another concern on the federal program side is the FHWA’s expectation of “fiscal constraint” for the federal-aid highway element of the highway plan. The federal portion of the Plan is required by federal law to be fiscally balanced. Immediately upon completion of the state legislative process, KYTC begins preparing the new Statewide Transportation Improvement Program (STIP). The new STIP will incorporate the federal projects from the 2022 Enacted Highway Plan into the new STIP, which will be submitted to the Federal Highway Administration (FHWA) for approval. Fiscal constraint for federal-aid highway funding is an important consideration for federal agencies, and the STIP is the document through which fiscal constraint is measured. Any state legislative efforts that result in over-programming of the federal element of the highway plan cannot be accommodated by the federal rules governing the STIP process. Failure to gain FHWA approval would result in the suspension of the annual federal-aid program and its approximate \$916 million annual funding for Kentucky.

## ***B. State Project Funding Projections***

A forecast of \$2.2 billion in state road fund cash is expected to be available to support new state-funded highway plan project obligations between FY-2023 and FY-2028. This amount is based on the projected state road fund revenue minus the non-federal state funded fixed budgetary costs and remaining expenditures of currently authorized projects not yet completed. The projected available state road fund cash is based upon a number of assumptions about project cost payouts, revenues accruing to the Road Fund, non-Six-Year Plan costs, state bond debt service payments, unexpected cost increases, and project change orders. Actual decisions about when to obligate state project dollars and how much state project work can be afforded at any point will be made by the Secretary of Transportation and based on monthly cash management evaluations received from KYTC’s Authorization Review Team (ART).

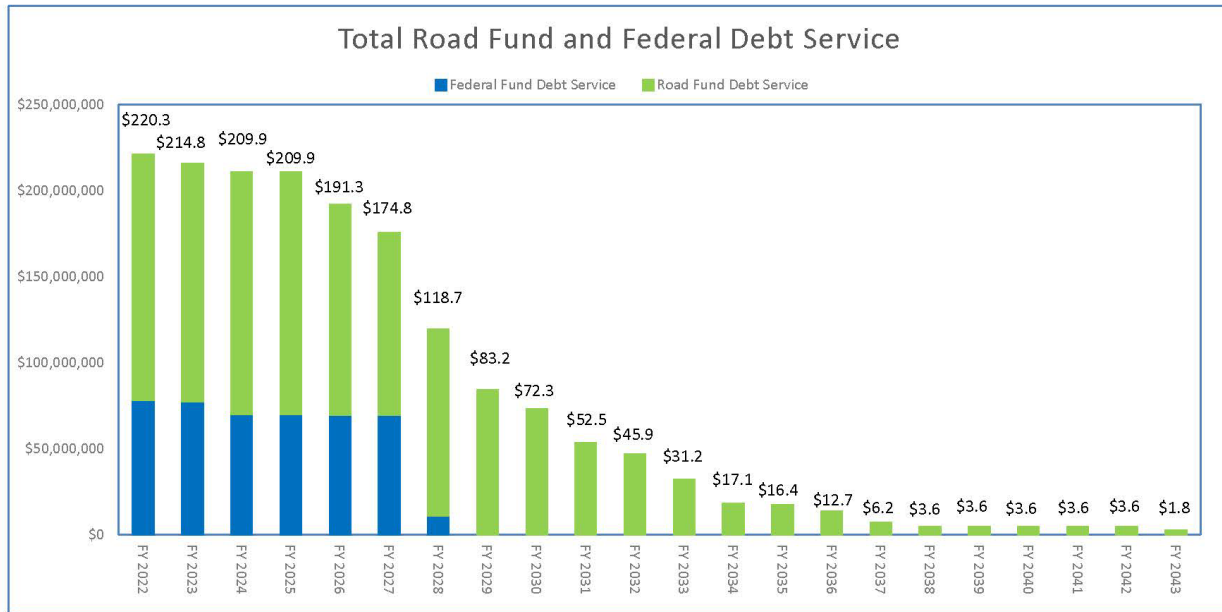
The ART consists of the Cabinet’s Secretary, Deputy Secretary, the State Highway Engineer and deputies, and the KYTC Budget Director. These individuals work closely together to monitor the state funding cash balance, meeting monthly to carefully evaluate actual expenditures for the prior month and planned expenditures for upcoming months relative to future fiscal capacity calculated from ongoing project and program cost projections. Every planned, state-funded project funding decision undergoes a rigorous two-part assessment in which the following questions are asked: (1) Is the project ready to move forward from the project development standpoint? (2) Can KYTC afford to move the project forward considering the cash flow implications of doing so? Only a satisfactory response to both questions permits a project to move forward in the funding process.

The ART provides approval for authorization of state and federal funding for preconstruction phases of projects, for awards of construction phases, system preservation activities, and other highway program activities. The ART is taking the necessary steps to assess all planned program outlays and manage cash flow.

In summary, KYTC’s current projection of state road fund revenues available for state project obligations for the six-year highway Plan “SPP” projects and state matching funds for the federal-aid highway funding program will be as follows:

Fiscal Year	State Match Required	SPP Project Dollars
FY-2023	\$213 million	\$150 million
FY-2024	\$213 million	\$180 million
FY-2025	\$213 million	\$200 million
FY-2026	\$213 million	\$150 million
FY-2027	\$213 million	\$125 million
FY-2028	<u>\$213 million</u>	<u>\$125 million</u>
<b>Total</b>	<b>\$1.278 billion</b>	<b>\$930 million</b>

As shown in **Figure 3**, the current federal and road fund debt service totals approximately \$1.7 billion over the life of the bonds (2022 through 2043). This includes estimated road fund debt service for about \$62.5 million in authorized but unissued debt. While any significant additional bond authorizations could lead to potential bond rating downgrades, there does appear to be significant bonding authority available beyond FY-2027.



**Total Debt Service (principal and interest) totals approximately \$1.7 billion over the life of the Bonds.**

\*Includes estimated Road Fund debt service for about \$62.5 million in authorized but unissued debt.

Figure 3

## **IV. KYTC Mega Projects**

### **I-69 Ohio River Crossing Project**

KYTC is working closely with Indiana to develop an approach to funding the remainder of the new I-69 bridge over the Ohio River between Henderson and Evansville. Each state is currently engaged in building approach work on its respective side of the Ohio River, and it is anticipated that the Ohio River crossing itself will be ready to move to construction around the Year 2027. The 2022 Enacted Highway Plan includes \$320 million as Kentucky's share of the funding necessary to develop the project and begin construction of the project from US 60 north to I-69 in Indiana. KYTC will be working with the Indiana Department of Transportation (INDOT) to complete a financial plan for the remainder of the project from US 60 north to I-69 in Evansville. This section includes a new Ohio River Bridge and is expected to use a combination of tolls, federal grants, and state monies to complete the I-69 Ohio River crossing. The current project estimate for the river crossing is \$750 million with KY's share of those costs being the aforementioned \$320 million. Inflation, financing, and interest could increase these costs. The environmental process was completed in 2021 making the project eligible for federal monies toward design, right of way activities and construction, and the first section of the project from the Henderson Bypass north to US 60 was awarded to construction as a "design-build" project in December 2021.

### **Mountain Parkway Widening**

KYTC initiated work to 4-lane the Mountain Parkway from Campton through Salyersville in 2014. The first projects to be constructed were located west of and through the developed areas in Salyersville. In recent years, the widening work has extended westward to near the KY 205 Interchange, leaving a "gap section" from Campton to KY 205. The 2022 Enacted Highway Plan provides \$55.2 million to be used in conjunction with the \$55.15 million of US DOT INFRA Grant funds to construct the \$110 million "gap section" in Wolfe County. In addition, the 2022 Enacted Highway Plan provides \$1 million to conduct the design phase, \$10.4 million for right-of-way phase, \$4.2 million for utility relocation phase, and \$35 million for the construction phase for extending the 4-lane Mountain Parkway from Salyersville eastward along existing KY 114 to the Floyd County line. Also, the 2022 Enacted Highway Plan includes approximately \$225 million for design, right-of-way, utility relocation, and construction phases to move the project forward from the Magoffin/Floyd County Line to Prestonsburg. The total project cost is currently estimated at approximately \$300 million for the extension of the Mountain Parkway by widening KY 114 between Salyersville to Prestonsburg, and these remaining sections are expected to be completed over the next few years as funding becomes available.

### **Brent Spence Bridge Project**

KYTC has worked alongside the Ohio Department of Transportation (ODOT) for many years to pursue relief from the traffic congestion that has been a major chokepoint for freight movement in the I-71/75 Corridor. With the recent passage of the BIL, the states were elated to see that Congress used the Brent Spence Bridge freight chokepoint as a major infrastructure problem that the nation must solve. Accordingly, KYTC and ODOT are working to prepare applications for federal grant funding under the BIL Act to offset a large portion of the project's cost. The \$2.9 billion project will provide a companion bridge for the Brent Spence Bridge and rework the bridge approaches on both sides of the river to achieve the freight capacity so desperately needed at this location. Kentucky's share of the estimated cost of the Brent Spence Bridge Project is estimated at \$1.3 billion in current year dollars. Applying for \$720 million federal US DOT grants, and scheduling \$180 million regular federal highway funds, \$250 million of state General Fund money, and \$150 million of GARVEE bonds in the 2022 Enacted Highway Plan, KYTC expects to move this project toward construction by the Year 2024 using design-build techniques that have proven successful on other large Kentucky projects.



# V. Historic Construction Awards

Over the past 30 years, KYTC’s ability to deliver needed construction projects for the citizens of Kentucky has ebbed and flowed in accordance with available state and federal funding dedicated to that purpose. As the chart below indicates, recent years have seen the calendar-year construction awards vary from year-to-year with the highest years representative of funding for major projects, most notably the Louisville and Southern Indiana Ohio River Bridges project in 2012. KYTC works to deliver a consistent annual program of lettings, thereby ensuring its appropriate contribution to Kentucky’s economy.

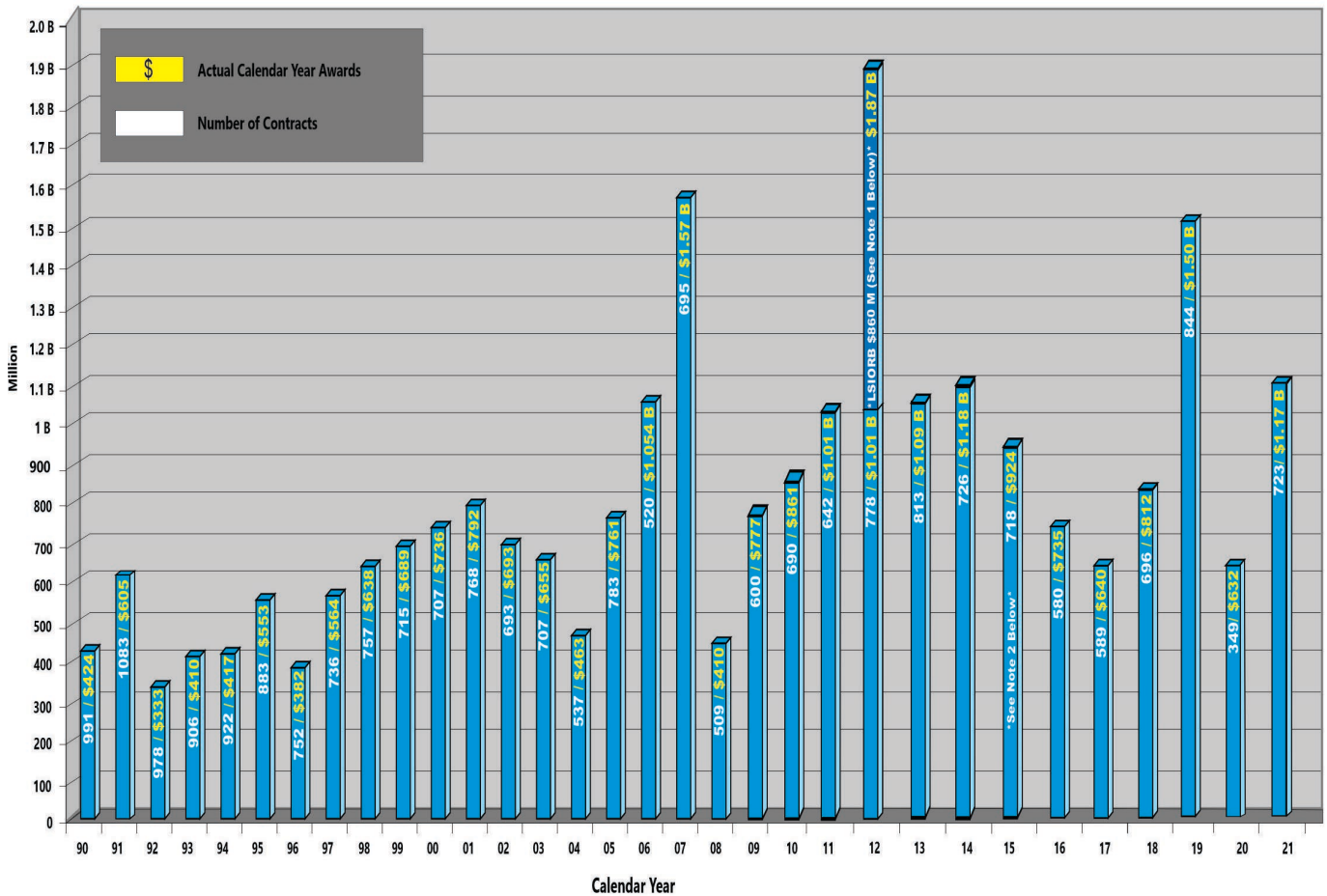


Figure 4

\*Note 1\*THE CALENDAR YEAR 2012 TOTALS INCLUDE THE AWARDED \$860 MILLION DESIGN-BUILD LOUISVILLE OHIO RIVER BRIDGE DOWNTOWN PROJECT\*\*\*\*  
 \*Note 2\*THE 718 PROJECTS AND \$924 MILLION OF CALENDAR YEAR 2015 TOTALS DO NOT INCLUDE \$36 MILLION OF PENDING AWARDS FOR 2 PROJECTS\*\*\*\*

## VI. Program Continuity

The 2022 Enacted Highway Plan represents a major step toward achieving the vision, mission, and goals of the KYTC. As we look ahead to both Congressional and state legislative expectations for our highway program, KYTC must protect past investments in the existing highway system by increasing the total funding made available for roadway pavements and bridges. Using performance and data-driven pavement and bridge prioritization processes, \$3.5 billion of state and federal-aid funding is allocated toward preserving Kentucky's existing road system. This amount represents about 40% of the total funding expected to be available through the Year 2028, a significant and necessary increase from past highway plans.

The remainder of the funds allocated for use in this highway plan upgrade the existing highway system by enhancing roadway safety, relieving traffic congestion, widening existing routes for freight accommodation, or completing roadway connections that will bring economic opportunity to the Commonwealth. In addition to the regular state and federal funding made available through the federal government's recent enactment of the Bipartisan Infrastructure Law (BIL) and the state legislature's enactment of this highway plan, the BIL created many new sources of competitive federal grant funding that Kentucky is prepared to pursue. The 2022 Enacted Highway Plan references pursuing those grant programs for significant funding for the construction of the I-69 Ohio River Crossing (ORX) project, the widening of KY 114 to complete the Mountain Parkway in Eastern Kentucky, and for the Brent Spence Bridge freight capacity improvement. There are many other projects across Kentucky that state and local governments will be coordinating efforts to pursue in the months ahead as we all seek to bring those federal funds to Kentucky's projects.

To quote KYTC's Strategic Plan, "A good plan is like a road map- the journey is the safest when the road map is the clearest." The 2022 Enacted Highway Plan presents a clear path forward that provides both essential highway system investments and enhanced future opportunities for the economy and quality of life for Kentucky's citizens.

