



PENNSYLVANIA

Transportation Revenue Options Commission

**FINAL REPORT
AND
STRATEGIC FUNDING
PROPOSAL**



July 30, 2021

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July 30, 2021



Yassmin Gramian, P.E.

Governor Wolf,

The Transportation Revenue Options Commission (TROC) is pleased to submit its strategic funding proposal, in accordance with Executive Order 2021-02, to address the acute transportation funding challenge facing the Commonwealth now and into the future.

TROC was established with the expectation that now is the time to fundamentally change transportation funding strategies for the Commonwealth—to bring revenue back in sync with the costs of sustaining our essential multimodal transportation system, and to fairly distribute those costs to those who directly and indirectly benefit from the system.

Inaction is not an option. The Commonwealth must modernize and restructure its approach to transportation funding for the long term, while rapidly adopting near- and medium-term changes. Properly addressing the full range of transportation system needs will require unprecedented federal-state-local partnership.

Over the five months in which TROC deliberated, the following became clear:

- While the gas tax that funds Pennsylvania highways and bridges is eroding as a revenue source, the Mileage-Based User Fee (MBUF) approach presents the most promising long-term solution in Pennsylvania and nationally for aligning transportation revenue with the needs of the system.
- However, a full MBUF solution could be far in the future. In the meantime, we need bold action to meet the system's improvement and maintenance needs, and to prepare the way for MBUF.
- Other equally critical challenges include the need for adequate and sustainable funding for public transportation as well as freight and passenger rail, water ports, aviation, and bicycle and pedestrian accommodation.
- Pennsylvania is not alone in having to address these problems. Other states have taken varied and innovative measures to broaden their revenue base. They have done so to ensure the continued integrity of their transportation systems and to provide the mobility and access necessary for individuals and businesses. Pennsylvania's particularly heavy reliance on declining gas tax revenues makes the need for action on this proposal urgent.

The mix of revenue sources in TROC's strategic proposal represents a feasible, phased approach that is designed to address the most critical shortfalls in funding levels in the near-, medium-, and long-term phases. Ultimately, future implementation of MBUF fully aligns revenues with identified needs.

This proposal will position Pennsylvania to benefit from the long-term mobility and access necessary to support economic prosperity, public safety, and a high quality of life for individuals and communities across Pennsylvania. The proposed investments will produce significant benefits across the state.

I thank the Majority and Minority Chairs of the Senate and House Appropriations and Transportation Committees and their staff for their time attending TROC meetings and listening to discussions by TROC work group members on potential revenue options. We commend all the Commission members for their engagement and hard work, which is captured in this report.

On behalf of the entire Commission, I strongly encourage Pennsylvania's policymakers to consider and then act on this proposal as a necessity of bold leadership and responsible stewardship.

Respectfully,

Yassmin Gramian, P.E.

Chair, Transportation Revenue Options Commission
Secretary, Pennsylvania Department of Transportation

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Introduction

The Commission's Assignment and Approach

Modernizing how we pay for Pennsylvania's multimodal transportation system is a complex and urgent imperative. Previous transportation funding studies and initiatives have established the need and addressed significant parts of the problem. Now, those efforts must be extended and expanded with a comprehensive reassessment and updated approaches to securing long-term, sustainable transportation funding.

Pennsylvania Governor Tom Wolf established the Governor's Transportation Revenue Options Commission (TROC, pronounced "TEE-rock") in March 2021 by Executive Order 2021-02. The Governor tasked TROC with developing a comprehensive, strategic proposal for addressing the multimodal transportation funding needs of Pennsylvania. This document presents TROC's proposal.

The TROC members, listed at the end of this report, represent a cross-section of Pennsylvania's geographical areas, transportation modes, local and state governments, and environmental, energy, and industry interests. TROC was chaired by Pennsylvania Secretary of Transportation Yassmin Gramian. None of its other members were PennDOT employees.

Governor Wolf established the Transportation Revenue Options Commission (TROC) to propose a strategic, comprehensive Commonwealth transportation funding scenario.

TROC convened (virtually, due to COVID-19) nine times over the five-month Commission duration to develop these proposed solutions. Members also participated in targeted work groups to examine the transportation funding problem through various lenses. Work group leaders met several additional times to sharpen the proposed strategy. TROC was supported by PennDOT's Bureau of Fiscal Management, which offered expertise in existing and projected revenue streams. Tools included advanced spreadsheets allowing work groups to run if-then scenarios and project the results of diversified funding strategies.

Given its short schedule, TROC largely relied on existing analyses of transportation funding need along with updated cost estimates where possible. The existing estimates were vetted with TROC. Many TROC members deemed the estimates of need to be conservative.

How did a group of more than 40 appointees—with widely ranging points of view on public investment—come to substantial agreement on the strategic funding proposal? Despite a great variety of interests and perspectives, all members recognized the urgent need to update the state's obsolete and declining transportation funding approaches. Members agreed on guiding principles (presented on page 18) and engaged in discussions on which options would produce the best overall results for Pennsylvanians. In short, TROC members generally put the Commonwealth's transportation needs above individual interests.

Pennsylvania's Transportation Funding Needs

The stark reality is that PennDOT's \$8.8 billion annual budget must more than double—to approximately \$18.15 billion—to adequately address transportation system needs.

Figure 1: Pennsylvania's Transportation Funding Gap

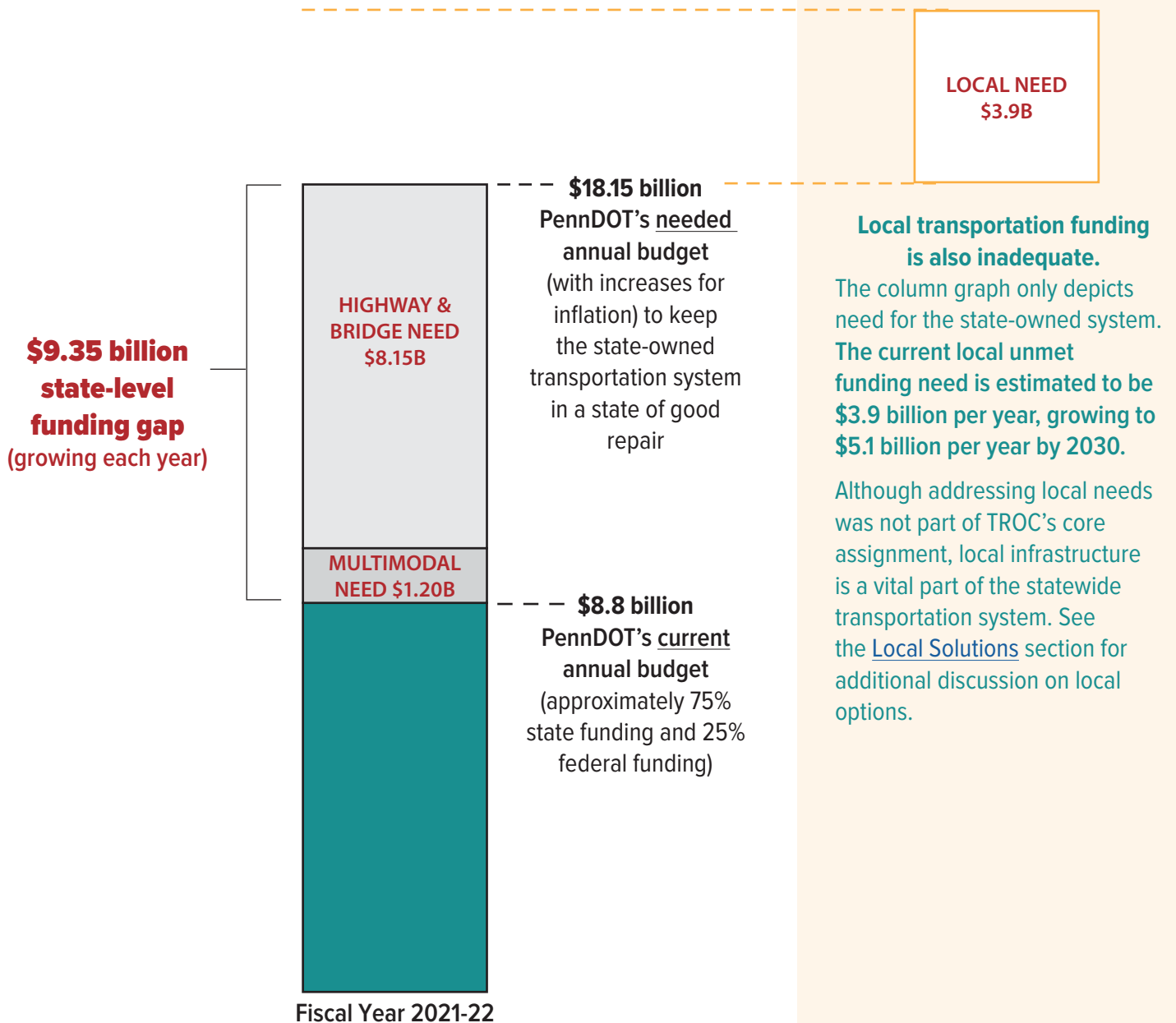
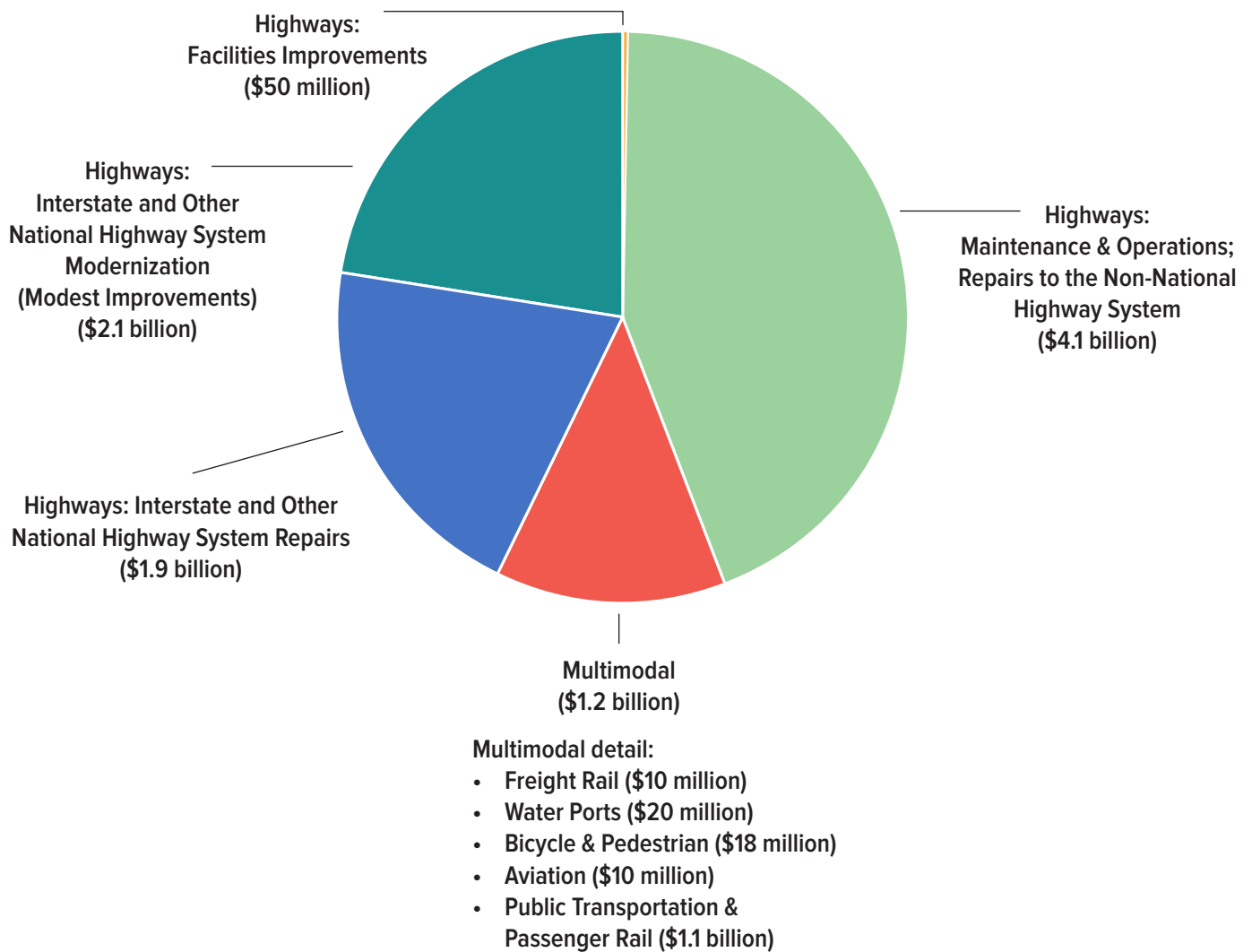


Figure 2: Breakdown of the \$9.35 Billion Annual Unfunded Need



ESTIMATING PUBLIC TRANSPORTATION AND OTHER MULTIMODAL NEEDS

While highway and bridge assets are owned by the Commonwealth, multimodal assets are owned by a range of entities. Estimates are based on PennDOT programming and reflect long-deferred state-of-good-repair capital and maintenance needs.

It is recognized that the estimates in this report may not reflect the full extent of multimodal need. For example, the public transportation stakeholders involved in this effort place the need at closer to \$1.65 billion (vs. the stated \$1.1 billion). In terms of bicycle and pedestrian need (listed at \$18 million in this report), note that the cost to close the top 10 trail gaps is approximately \$45 million. Closing all trail gaps would total more than \$200 million.

As shown in Figure 2, unfunded needs include:

- **\$1.9 billion in unmet needs for the National Highway System (NHS) –**
 - » **\$700 million in unmet basic annual Interstate highway funding needs.** To meet federal asset condition requirements, PennDOT must gradually increase Interstate funding over the next few years. Currently, PennDOT invests between \$450 and \$500 million per year on the Interstate Highway System. The amount needed per year to meet cyclical asset management requirements is \$1.2 billion. PennDOT expects to increase Interstate investment by approximately \$150 million in Federal Fiscal Year (FFY) 2021 and increase the investment by \$50 million per year until it reaches \$1 billion in FFY 2028.
 - » **\$1.2 billion in annual unmet needs for the balance of the NHS (i.e., non-Interstate NHS roadways).** The need for funding on roads that are not part of the Interstate system was a common plea from the members of the General Assembly during 2021 appropriations hearings. The situation will become worse because the previously mentioned increase in funding to the Interstates to meet federal performance measures will divert funding from the non-Interstate system, thus expanding the unmet needs for the remainder of the NHS. This underinvestment is untenable and cannot continue.
- **System Modernization and Upgrades of the NHS (including Interstates) –** There is an unmet annual need of \$2.1–\$3.2 billion for congestion, safety, and modernization projects for the Interstate system and modest upgrades to the remainder of the NHS system. Examples include adding lanes in key locations, improving roadway geometry, constructing more efficient interchanges, upgrading guiderail, expanding Intelligent Transportation System (ITS) capabilities, and making other operational improvements that improve efficiency and safety.
- **Non-National Highway System and Maintenance and Operations –** Although the NHS generally carries higher traffic levels, the non-NHS and “low-traffic” routes comprise more than three-quarters of the state-maintained mileage. Similar to the NHS, funding is needed to meet basic asset cycles. Additionally, standard maintenance, including winter services, crack sealing, line painting, etc., is needed on all networks. In addition to approximately 40,000 miles of highway and 25,400 bridges, PennDOT owns and maintains numerous other assets across Pennsylvania (e.g., buildings and maintenance sheds). Each asset follows a life cycle of build, maintain, preserve, and then reconstruct when the asset reaches the end of its useful life. All of these assets have relatively predictable required maintenance cycles to extend their useful life.
- **Public transportation, aviation, rail freight, ports, and bicycle and pedestrian facilities –** Multimodal annual unmet needs exceed \$1.2 billion. Freight transportation uses all modes of transportation to serve businesses, consumers, and the global marketplace. Pennsylvania is a strategic gateway for goods movement nationally. System investment across the modes is vitally important from this economic perspective, as transportation supports our economy and job formation.

Currently, PennDOT invests between \$450 and \$500 million per year on the Interstate Highway System. The amount needed per year to meet cyclical asset management requirements is \$1.2 billion.

Figure 3: State-Level Transportation Unmet Funding Need Forecast (in millions)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
National Highway System	\$1,900	\$1,995	\$2,095	\$ 2,199	\$2,309	\$2,425	\$2,546	\$2,673	\$2,807	\$2,948
System Modernization and Upgrades	\$2,100	\$2,205	\$2,315	\$2,431	\$2,553	\$2,680	\$2,814	\$2,955	\$3,103	\$3,258
Non-NHS and Maintenance and Operations	\$4,100	\$4,305	\$4,520	\$4,746	\$4,984	\$5,233	\$5,494	\$5,769	\$6,058	\$6,360
Facilities	\$50	\$53	\$55	\$58	\$61	\$64	\$67	\$70	\$74	\$78
Multimodal	\$1,200	\$1,260	\$1,323	\$1,389	\$1,459	\$1,532	\$1,608	\$1,689	\$1,773	\$1,862
Total State-Level Transportation Funding Need	\$9,350	\$9,818	\$10,308	\$10,824	\$11,365	\$11,933	\$12,530	\$13,156	\$13,814	\$14,505

The funding gap increases each year, as costs rise and funding levels remain static. Or, for some revenue sources—such as those derived from the gas tax—funding decreases. Figure 3 presents additional funding needs (amounts needed in addition to PennDOT’s current budget) over the next 10 years.

The state-level funding gap in Year 10 is projected to be \$14.5 billion.

How Did We Get to This Point?

All states struggle with how to pay for transportation infrastructure and services. The problem is particularly pronounced in Pennsylvania, where our transportation system is larger and older than most. The average age of the state's 25,400 bridges, for example, is 55 years—in many cases, nearing or exceeding their design life. Similarly, the Southeastern Pennsylvania Transportation Authority (SEPTA) operates the oldest rail vehicle fleet in the nation, and replacing aging vehicles represents one-half of SEPTA's \$4.6 billion State of Good Repair project backlog. Our state and federal governments made major investments when transportation infrastructure was originally built, but investments have not kept pace with the needs of an aging system.

There are many factors contributing to this problem:

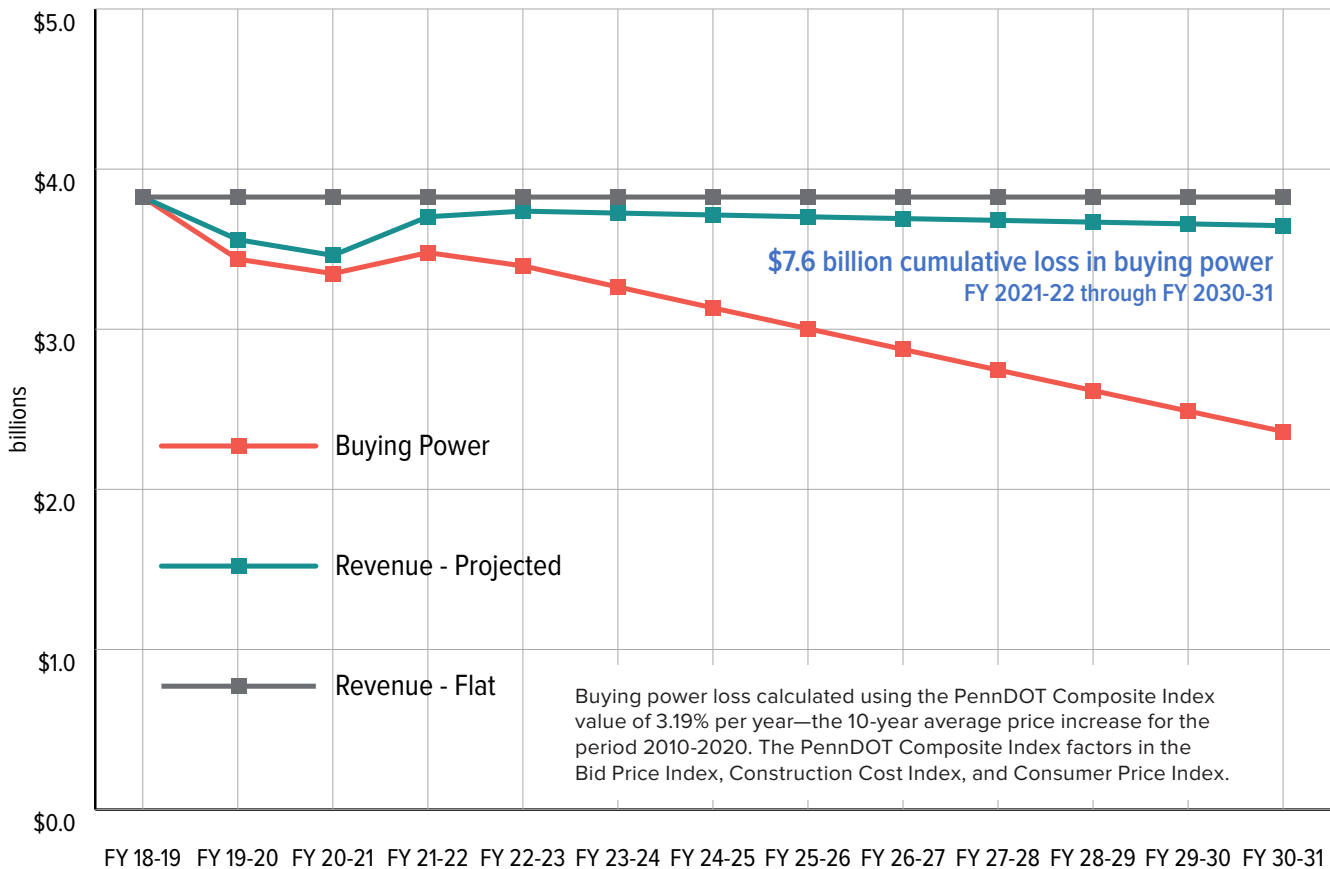
- **Gas tax revenue continues to shrink.** Approximately 75% of PennDOT's highway and bridge funding comes from federal and state gas tax revenue, which continues to decline. Fuel economy improvements and the transition to alternative fuels and electric vehicles—positive trends in themselves—will continue to reduce gasoline and diesel consumption, and, therefore, the revenue from the Liquid Fuels tax. In recent months some major vehicle manufacturers have announced their complete conversion to electric vehicles by the next decade (in fact Pennsylvania is home to some of the leading companies pioneering the transition, including Mack Trucks). The current projected growth in electric-powered vehicles is steep, with corresponding declines in gas tax revenue.
- **Act 44 and Act 89 didn't solve the whole problem.** PA Act 44 of 2007 and PA Act 89 of 2013 provided urgently needed infusions of predictable funding to shore up transportation statewide, particularly our public transportation systems. However, these acts only addressed part of the funding need. In fact, Act 44 and Act 89 created a debt of \$14 billion for the Pennsylvania Turnpike Commission by diverting toll revenue to PennDOT. The Turnpike has consequently been forced to raise tolls every year. In July 2022, the \$450 million annual Turnpike payment to PennDOT drops to \$50 million. To replace that amount, \$450 million per year in vehicle sales tax revenue is to be transferred from the General Fund to PennDOT. The preservation of Act 89 transportation investment levels is crucial in order to meet service demands and address multimodal infrastructure maintenance and rehabilitation issues.
- **Emergency repair needs have increased dramatically.** PennDOT budgets \$30 million per year for emergency repairs, such as landslides and washouts. In Fiscal Year 2018-19 alone, the state experienced severe flooding that caused \$120 million in road and bridge damage. Although PennDOT incorporates practices proven to make infrastructure more resilient to natural disasters, severe weather events combined with aging infrastructure have resulted in emergency repairs becoming more frequent and more costly. These cost pressures require that more resources be used for maintenance, which in turn constrains the ability to make other improvements, including those that add system capacity. Responsible investment levels are necessary to prevent such downward spirals.
- **Federal pavement condition requirements for Interstates are more stringent.** Interstate highways, which carry 26% of all vehicle-miles traveled in Pennsylvania, must meet rigorous pavement standards and be maintained proactively to lower overall costs. Although PennDOT supports this "asset management" approach, keeping our Interstates in compliant condition requires diverting funds from other state and local needs (as noted previously: \$150 million diverted in FFY 2021, increasing \$50 million per year until Interstate investment reaches \$1 billion in FFY 2028). Federal policy, understand-

Our state and federal governments made major investments when transportation infrastructure was originally built, but investments have not kept pace with the needs of an aging system.

ably protective of the Interstate Highway System, underscores the importance of committed investment in transportation assets—including more federal funding (see next item) to align with the policy and regulatory requirements imposed on states.

- **Federal transportation gas tax funding hasn’t increased since 1993.** When federal funding does not keep pace with the nation’s needs, federal mandates, and inflation, state governments must fill the void. However, the Commonwealth does not have the financing tools of the U.S. government. State government, as the responsible operator of the transportation system, has no choice but to continue to provide the most-critical funding while advocating for a fresh federal vision and the investment that goes with that vision.
- **Deferred maintenance costs more in the end.** When there isn’t enough funding to cover needs, PennDOT must delay repairs. When we as Pennsylvanians choose not to invest in preventative maintenance—year after year—small problems escalate into major reconstruction projects. PennDOT’s maintenance program has been constrained to a troubling extent for more than a decade. History teaches us that the “Maintenance First” policy of the late 1970s and 1980s restored Pennsylvania transportation. That difficult lesson need not be repeated.
- **Inflation erodes purchasing power.** As shown in Figure 4, inflation alone costs PennDOT more than \$100 million per year as the costs of construction materials and labor continue to sharply increase. Transportation revenue is not currently indexed to or regularly adjusted for inflation.

Figure 4: PennDOT Loss in Buying Power
Impact of Inflation and Reduced Consumption on Motor Fuels Revenue



PennDOT Efficiencies and Innovation

PennDOT continuously evaluates its operations to find opportunities to enhance efficiency and save money. The Department has saved nearly \$100 million over the past five years and is a leader in Lean organizational efficiency practices. Department staffing levels continue to trend downward. PennDOT is also applying the 2012 law that made public-private partnerships (P3) an option in delivering new or improved transportation services.

PennDOT's 2021 Efficiencies Report provides 90 examples of how the Department uses technology to improve customer service and enhance projects while streamlining costs. The report is available at: https://www.penndot.gov/about-us/funding/Documents/TROC-Meeting_04-15-21/TROC_4-15-21_PennDOT-Efficiencies-Report.pdf.

The Department launched PennDOT Pathways in November 2020 to analyze new future-focused sources of funding for our transportation system that could better serve our communities and all Pennsylvanians for the next generation. Public input was sought and nearly 6,000 people participated online. As part of PennDOT Pathways, PennDOT has undertaken a Planning and Environmental Linkages (PEL) study to identify near- and long-term funding solutions and establish a methodology for their evaluation. PennDOT is advancing the Major Bridge P3 Initiative as part of PennDOT Pathways. See [PennDOT.gov/funding](https://www.penndot.gov/funding) for more on PennDOT Pathways.

PennDOT continuously evaluates its operations to find opportunities to enhance efficiency and save money.

\$38.5 million
saved over three years
by using lower-cost materials
for secondary roads

\$49 million
saved over four years
through the
County Accreditation
Program

\$10 million
saved over five years
by implementing
efficiency improvements
identified by
PennDOT employees
(WorkSmart and Idealink
programs)

P3
A Public-Private
Partnership to replace
558 bridges was part of
PennDOT's reduction in
poor-condition bridges
from more than 6,000 in
2008 to 2,500 today.

Consequences of Insufficient Funding

PennDOT has been forced to steadily reduce the size of its construction program, from \$2.5 billion in 2015 to \$1.6 billion in 2020. The current value of anticipated construction lettings for 2021 is \$1.9 billion. The significant decline in annual lettings directly translates to a serious shortfall in maintaining our roads and bridges and causes real impacts to the thousands of private-sector jobs that are supported by engineering, construction, maintenance, and services performed for PennDOT.

The consequences of insufficient investment in transportation infrastructure are varied and compounding. Among the direct and indirect consequences:

- Greater congestion and the cost associated with travel delay
- Potential closures of bridges and lane reductions
- Potential impacts on the safety and reliability of travel
- Longer-term costs associated with deferred maintenance and other improvements
- Decreased economic competitive position—transportation often ranks high in companies' decisions about facility locations
- Diminished quality of life

Aging transit vehicle fleets threaten the ability to provide reliable service connecting Pennsylvanians to jobs, medical care, and community life.

Inadequate capital investment can have a troubling domino effect. For example, a lack of investment in public transportation can decrease the number of transit vehicles available to provide service. This can result in decreased levels of service, including frequency, service span, and access for riders. Lack of service means diminished access to jobs, education, medical appointments, and other important trips provided by transit. It can also decrease the number of transit jobs.

PennDOT's Current Funding Sources and Restrictions

The Commonwealth provides approximately 75% of PennDOT's annual budget; 25% comes from federal funds. State and federal fuel taxes are the revenue source for three-quarters of PennDOT's highway and bridge funding (via the federal Highway Trust Fund and the PA Motor License

Fund). Fuel tax revenue continues to decline as improved fuel efficiency and alternative fuels (including electric vehicles) reduce demand for gasoline and diesel.

Figure 5: PennDOT's Current Funding by Source

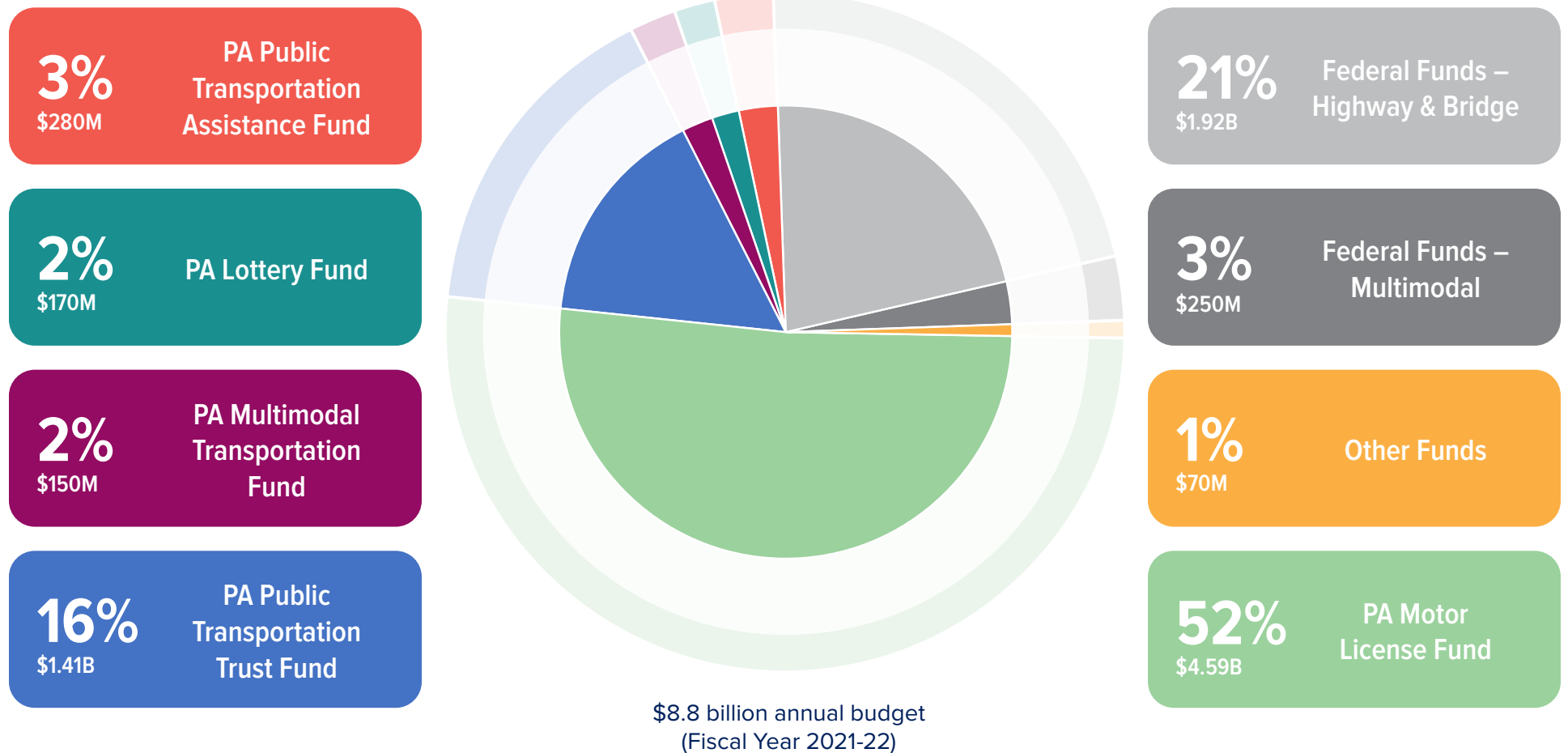
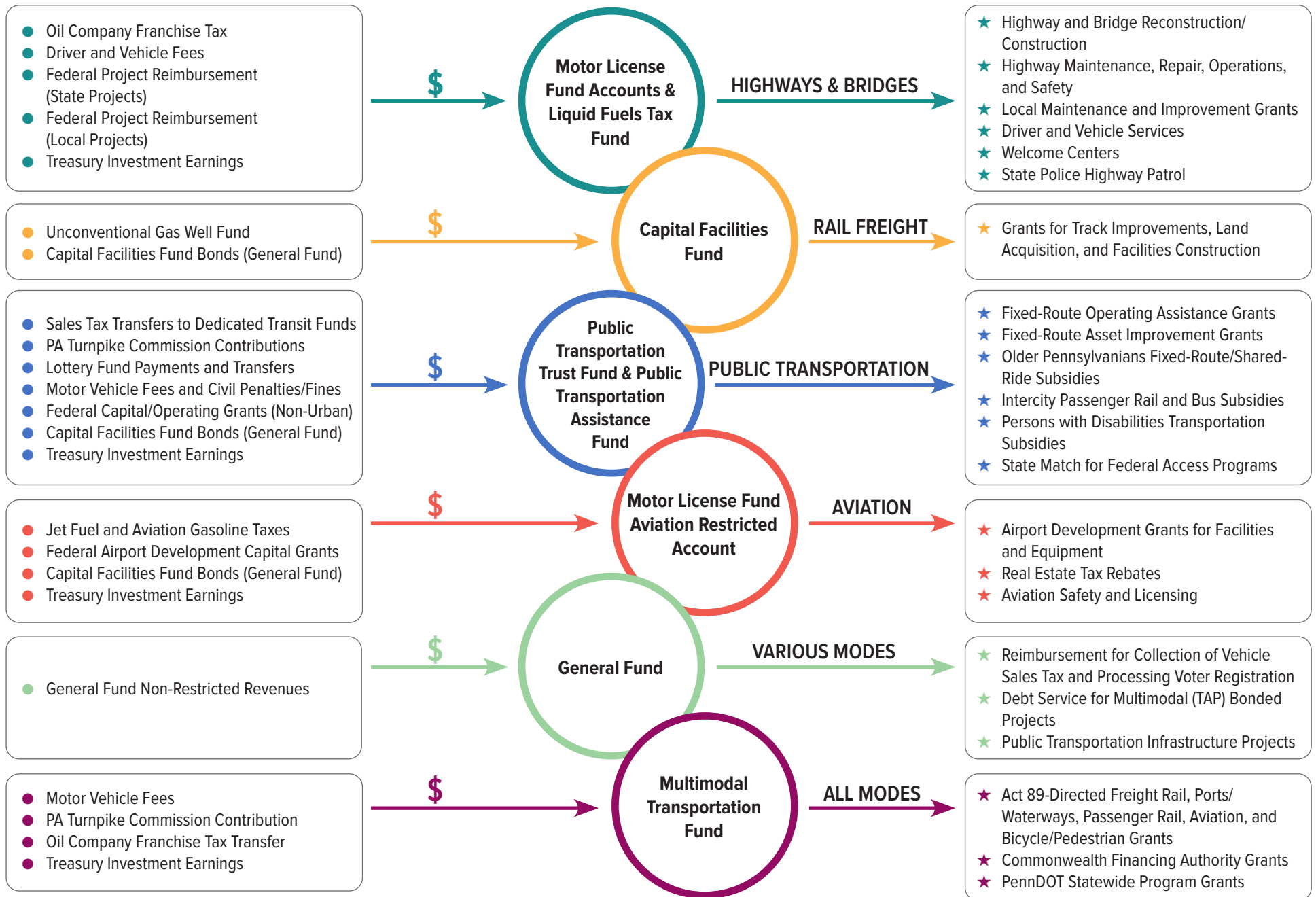


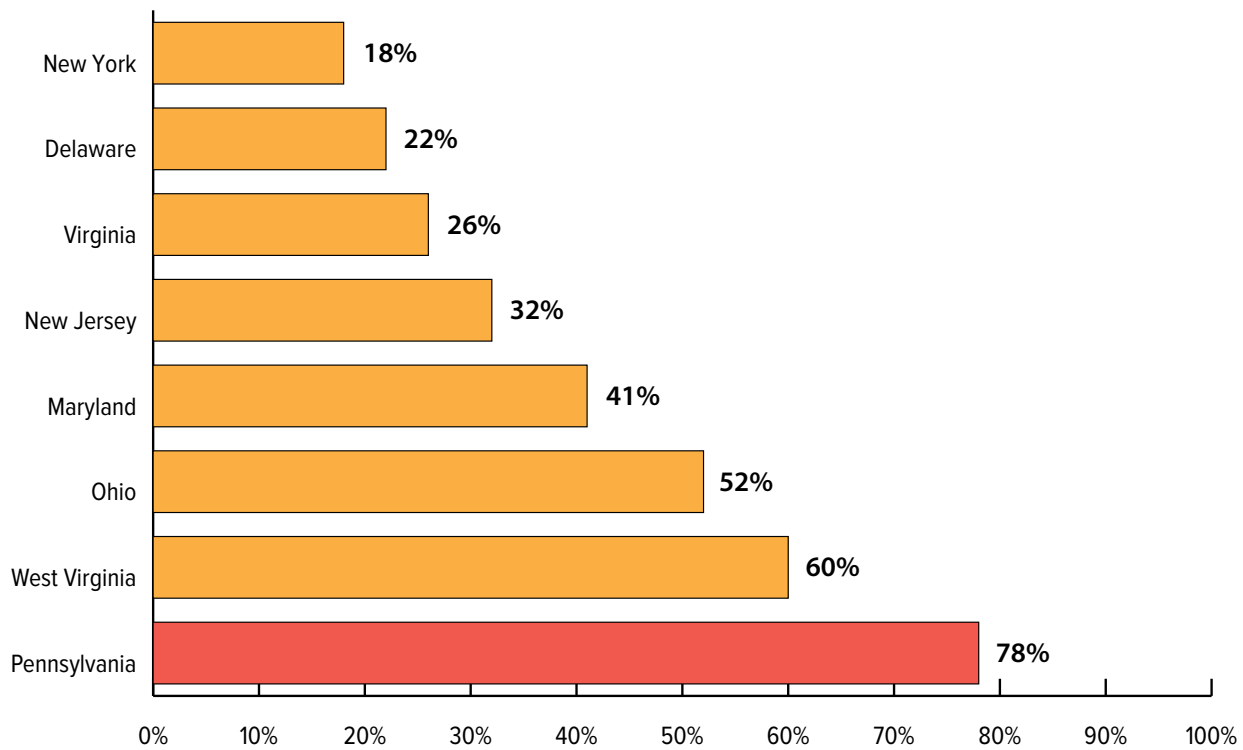
Figure 6: PennDOT Revenue Sources and Uses by Mode



A New Funding Approach is Essential

The gas tax, once a fair and sustainable way to pay for roads and bridges, is antiquated and inadequate. Pennsylvania relies to a much greater extent than other states on this eroding revenue source (Figure 7). Together we need to find fair, feasible, future-oriented solutions to pay for all transportation modes.

Figure 7: Gas Tax as a Percentage of Total Transportation Revenue, by State



See [page 31](#) for more detail on the composition of other states' transportation revenue sources.

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Proposed Commonwealth Transportation Funding Strategy

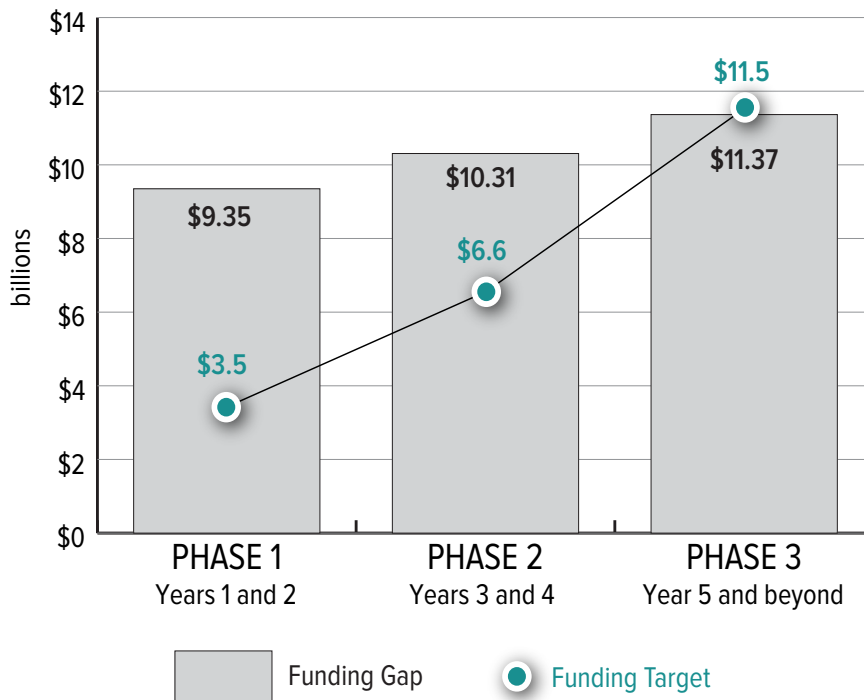
Principles

As part of its evaluation, TROC followed several guiding principles to shape the strategic funding proposal:

- **User Pays** – Direct users of the transportation system should generally bear most of the burden of funding that system. Historically this has been an overarching principle, as reflected in the gas tax.
- **Be Fair** – Equitable solutions aim for a fair balance, considering how each revenue source impacts various segments of the population, specifically around the ability-to-pay concern as well as urban vs. rural issues.
- **Diversify the Revenue Base** – This principle complements the “user pays” concept, recognizing that even those not owning a vehicle or directly traveling on the transportation system benefit from it and should contribute.
- **Build in Predictability and Stability** – Gas tax revenue continues to decline and therefore is not a stable revenue source. The funding proposal must have a reasonable degree of predictability and stability over the long term to allow multi-year planning, design, and construction projects to move forward.
- **Index to Inflation** – The cost of improving and maintaining our multimodal transportation system is impacted by inflation in the same way that price increases affect other industries, products, and services. New revenue sources must keep pace with inflation.
- **Reduce Funding Restrictions** – Many of PennDOT’s current funding sources can only be spent on certain modes or on certain parts of the system (e.g., state vs. local roadways). New sources that offer greater flexibility to meet the various modal and local network needs are more beneficial than earmarked sources.
- **Ensure Near-Term Feasibility** – Pennsylvania’s funding problem is particularly challenging because it cannot wait for a long-term solution. Until a long-term fix such as a Mileage-Based User Fee is feasible nationally (and there is no guarantee of that), Pennsylvania’s funding package must be implemented rapidly to address immediate needs and to sustain the system over the next decade and beyond.
- **Simplify Administration** – Burdensome administrative or enforcement requirements could pose a serious barrier for some potential revenue sources and reduce their net value to the Commonwealth.
- **Learn from Other States** – All states face transportation funding challenges similar to Pennsylvania’s, and most are actively modernizing their funding strategies, providing experience that can inform our efforts.

TROC referred to these principles throughout its analysis of funding options, and the funding proposal meets these principles to the extent practicable.

Figure 8: Funding Targets by Phase



Feasible funding targets by phase aim to close the funding gap over time.

Phases and Funding Targets

The state-level need for additional funding, as described in the previous chapter, is \$9.35 billion, increasing each year. TROC recognizes that fully closing that gap will require several years due to the time needed to implement new revenue sources. However, we must begin to systematically close that gap and generate near-term and medium-term revenue while working toward longer-term solutions.

TROC therefore developed a three-phased approach to its proposal and established target levels for additional funding by phase (Figure 8). The proposed totals by phase are responsible and feasible levels of annual additional revenue for necessary transportation improvements:

- Phase 1 (Years 1 and 2): \$3.5 billion
- Phase 2 (Years 3 and 4): \$6.6 billion
- Phase 3 (Year 5 and beyond): \$11.5 billion

There is a general consensus that although the funding need is not fully met until Phase 3, the funding targets represent substantial, systematic progress, moving Pennsylvania in the right direction. As the TROC proposal is acted upon it is of paramount importance that the revenue targets by phase not become diluted.

As the TROC proposal is acted upon it is of paramount importance that the revenue targets by phase not become diluted.

TROC's deliberations about proposed revenue sources occurred in the context of ensuring that the total funding targets by phase were maintained. Throughout the process the combinations and dollar values of proposed revenue sources were refined numerous times, always with an eye toward preserving the bottom-line revenue total for each phase.

Proposed Revenue Sources Overview

TROC members collaborated in eight work groups followed by subsequent deliberations of the work-group leaders. Work groups followed a systematic process for evaluating the various revenue options using detailed scenario spreadsheets, developing several draft proposals, and refining the proposal to arrive at the recommended set of revenue options. The Strategic Funding Proposal (Figure 10) is the heart of this document. It provides a brief description and rationale for each proposed revenue source, along with assumptions and the basis for the revenue estimate.

This section briefly highlights each of the six proposed revenue categories. The overall mix of revenue sources proposed is:

- A balanced, reasonable, and responsible approach.
- Generally similar to other states that have broadened their transportation revenue bases.
- Largely aligned with the “user-pays” principle rather than calling for corporate, personal, or other general taxation sources.
- Flexible enough to address the needs of all modes of transportation.
- Structured to provide a foundation for more funding for local needs.
- Future-focused, with revenue sources that prepare for long-term solutions while addressing immediate needs.

Road User Charges

The proposed Road User Charges consist of two sources: Mileage-Based User Fees (MBUF) and an Electric Vehicle (EV) MBUF Pilot. MBUF presently appears to be the best long-term funding solution for Pennsylvania, and likely for all or most states. As Figure 10 shows, MBUF is not assumed to yield revenue until Phase 3 (which would not likely be year 5 but possibly year 10 or beyond). The proposed Electric Vehicle MBUF Pilot is a major step toward preparing for MBUF by charging on a per-mile basis for vehicles for which the operator is not paying the gas tax. Overall, road user charges are considered to be both feasible and fair.

Revenue Category: Road User Charges	
Strengths/Benefits	Potential Concerns
<ul style="list-style-type: none"> • MBUF nationally is assumed to be the long-term likely direction for the necessary restructuring of transportation funding. • Provides the ultimate replacement for the phasing-out of the gas tax. • Leverages technology, which is a great driver of change for all of transportation. • Is a revenue mechanism based directly on the use of the transportation system. • Could encourage some carpooling to lower the cost-per-passenger per mile. • Assumed to be flexible across transportation modes. 	<ul style="list-style-type: none"> • MBUF is not yet a certainty, even for Phase 3 (which is why other proposed sources should be implemented and could stay in place if MBUF does not occur). • A perception of public resistance to the tracking associated with MBUF. • Depends extensively on federal leadership and implementation coordinated with neighboring states.

Considering MBUF strategically, TROC proposes a long-term Commonwealth commitment to positioning and preparing for MBUF by vigorously encouraging supportive federal action, raising public awareness and support, and beginning to lay the groundwork for the technological and other implementation components.

Such commitment is essential, but it does not address Pennsylvania’s immediate funding problem. Therefore, it is vital to identify and implement multiple near- and medium-term funding sources, as highlighted on the following pages.

Tolling

The two proposed tolling sources are corridor tolling and managed lanes (limited lane tolling). Corridor tolling of Interstate highways and expressways based on distance traveled is both feasible and fair (especially as the gas tax phases out). Recognizing that the Interstate Highway System is aging and in great need of repair and modernization, some believe that tolling of such higher-volume highways may be inevitable.

A managed lane is a lane on a highway on which the traffic is regulated by charging a toll or by encouraging carpooling. A managed lane can take the form of either an express lane in which all users are charged a toll for use, or a high-occupancy-toll (HOT) lane that allows high-occupancy vehicles (HOV) free passage while single-occupancy vehicles (SOV) are charged a toll. PennDOT has the authority to implement managed lanes, so managed lanes are a near-term solution. More planning and studies are needed to identify candidate roadways where managed lanes would be appropriate.

TROC believes that corridor tolling and some use of managed lanes in high-volume corridors represent a medium-term approach to meeting part of the transportation funding need. No revenues are assumed until Phase 2 (years 3 and 4) based on policy clearances, physical set-up of tolling infrastructure, and other technical considerations.

Revenue Category: Tolling	
Strengths/Benefits	Potential Concerns
<ul style="list-style-type: none">• Provides significant revenue in the medium term.• Based on the “user pays” principle.• Helpful in transitioning to MBUF.• Uses existing technology.	<ul style="list-style-type: none">• Could create diversion to lower-volume routes (this concern was expressed by the PA Motor Truck Association and the PA Bus Association, which also stated that toll and registration fee increases disproportionately impact commercial vehicles).• Raises ability-to-pay issues that are associated with almost any tolling strategy.

Redirection of Funding

This category includes one proposed revenue source: eliminating transfers from the Motor License Fund (MLF) to the Pennsylvania State Police, assuming replacement of that budgetary item from the General Fund. The rationale has been substantially vetted not only by TROC but by the State Transportation Advisory Committee (TAC) and others.

The proposition is that policing, whether state or local, is a general function of government and that the Motor License Fund's revenue sources are more aligned with transportation system use. The PA State Police obviously carry out an essential responsibility and one that is stretched by having to police some communities that do not have municipal police forces. That challenge also necessitates a broader approach to police funding outside of the Motor License Fund. The feasibility of this proposed redirection is high and is deemed to be fair.

Revenue Category: Redirection of Funding	
Strengths/Benefits	Potential Concerns
<ul style="list-style-type: none">• Provides needed funding for transportation in all three phases.• The General Assembly's actions to date begin to move in this direction.	<ul style="list-style-type: none">• Places further pressure on the General Fund.

**View the TAC study on
PA State Police funding sources:**

<https://www.talkpatransportation.com/perch/resources/documents/pspfundingoptionswhitepaper.pdf>

Fees

Various new or increased fees are proposed:

- Vehicle Registration Fee
- Electric Vehicle Fee
- Vehicle Lease Fee
- Vehicle Rental Fee
- Transportation Network Company (rideshare) Fee
- Aircraft Registration Fee
- Goods Delivery Fee

Taken together, these fees represent reasonable pricing in step with transportation system needs. They also yield stable revenue in all three phases. It is possible that the electric vehicle fee might yield more revenue than TROC’s conservative estimate as some forecasters are projecting a sharper increase in the number of electric vehicles within a few years.

Revenue Category: Fees	
Strengths/Benefits	Potential Concerns
<ul style="list-style-type: none"> • Provides needed funding for transportation in all three phases. • Electric vehicles are projected to progressively be a larger percentage of the vehicle fleet. • Provides a means for operators of electric vehicles to pay for their use of the system as they do not pay gas tax. • Aircraft may be the only form of transportation that does not yet have Pennsylvania registrations. This fee would be an important source for airport improvements that would also benefit airplane owners. • The Goods Delivery Fee represents a sensible adjustment to the changing nature of package delivery, especially since the pandemic. Generally this fee is more than offset by cost savings associated with the reduction of travel expense and time to purchase goods. 	<ul style="list-style-type: none"> • The Vehicle Registration Fee adjustment is a large change in terms of percentage, but the dollar amount better aligns the pricing with system needs.

Taxes

Three proposed tax adjustments comprise this revenue source category—increases to the present vehicle sales tax and the jet fuel tax, as well as indexing the gas tax to inflation.

Revenue Category: Taxes	
Strengths/Benefits	Potential Concerns
<ul style="list-style-type: none"> • The proposed increase in the vehicle sales tax provides substantial revenue over each phase—this is especially important as a Phase 1 and Phase 2 revenue source. • Use of the vehicle sales tax is not restricted, allowing use for the various modes. • Corrects a fundamental flaw with the gas tax that it is not fully inflation-adjusted (this will be especially important to the overall revenue picture even as the gas tax is being phased out). • The jet fuel tax proposed increase is modest, particularly in light of being essentially unchanged for several decades. • Jet fuel tax proceeds would be invested in PA airports, providing needed improvements that benefit the industry and the communities they serve. 	<ul style="list-style-type: none"> • Allegheny and Philadelphia counties' vehicle sales tax would be 9% and 10%, respectively, as compared to the 8% level for the rest of the state (all rates would increase by 2% as detailed on Figure 10). • Possible impact on dealers' vehicle sales.

Other

Other proposed revenue sources include an Ad Valorem Vehicle Tax (for passenger vehicles only) based on the value of the vehicle. Also in this category are two revenue offsets, one that reflects the reduction in registration fees associated with those paying the Ad Valorem instead, and the other reflecting the Phase 3 elimination of the gas tax.

Revenue Category: Other	
Strengths/Benefits	Potential Concerns
<ul style="list-style-type: none"> • Ad Valorem provides a progressive revenue element linked to the ability to pay. • The Ad Valorem rate translates to a reasonable dollar amount at the proposed level, and provides a sustained annual revenue source. 	<ul style="list-style-type: none"> • Perception challenge that the value of a vehicle should not bear on the cost of registration. However, progressivity has long been a part of non-transportation taxation structures.

TROC Strategic Funding Proposal

The proposed funding sources are an integrated set of options to address established needs. The dollar targets for each phase are a step toward addressing the most critical needs and establishing stability and predictability for PennDOT’s budget. Therefore, if individual components of the proposal are not implemented, the resulting gaps must be closed with other options.

Figure 9 summarizes proposed sources of additional revenue by phase; the detailed proposal table is presented in Figure 10.

Figure 9: Funding Proposal Summary by Revenue Type

	PHASE 1 (Years 1 and 2)	PHASE 2 (Years 3 and 4)	PHASE 3 (Year 5+)
PROPOSED REVENUE TYPE	ESTIMATED ADDITIONAL REVENUE		
Road User Charges (MBUF)	\$2,000,000	\$2,122,000	\$8,932,316,000
Tolling	\$0	\$2,705,040,000	\$2,543,716,000
Funding Redirection	\$673,000,000	\$609,000,000	\$545,000,000
Fees	\$1,712,420,000	\$1,991,864,000	\$2,072,438,000
Taxes	\$635,167,000	\$786,798,000	\$992,343,000
Other	\$450,000,000	\$468,180,000	\$487,095,000
Eliminate Gas Tax	\$0	\$0	-\$4,088,301,000
TOTAL	\$3,472,587,000	\$6,563,004,000	\$11,484,607,000

The TROC proposal is an integrated package that achieves the funding targets for each phase of implementation.

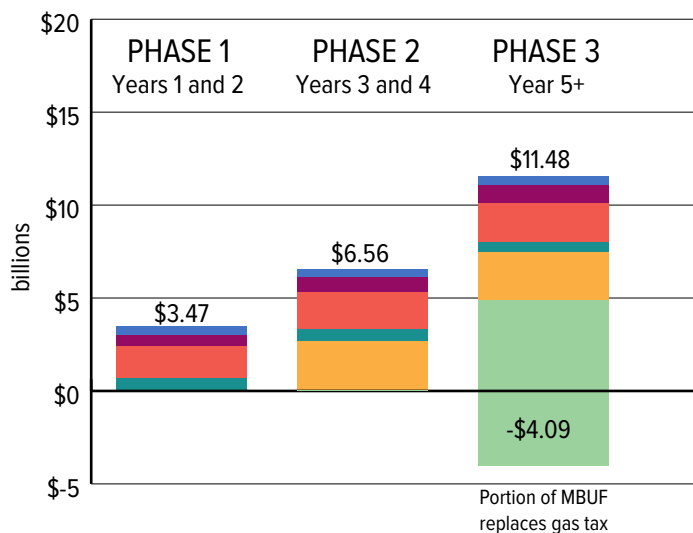


Figure 10. Strategic Transportation Funding Proposal

PROPOSED REVENUE SOURCE	DESCRIPTION	BRIEF RATIONALE	ESTIMATED ADDITIONAL ANNUAL REVENUE			ASSUMPTIONS AND BASIS FOR ESTIMATE	USE RESTRICTIONS
			PHASE 1 (Years 1 and 2)	PHASE 2 (Years 3 and 4)	PHASE 3 (Year 5 and Beyond)		
ROAD USER CHARGES							
Mileage-Based User Fee (MBUF)	Implement an 8.1-cents-per-mile MBUF on all miles traveled in Pennsylvania.	MBUF is the long-range funding solution for gas tax replacement. National implementation is expected; PA has the opportunity to prepare.	\$0	\$0	\$8,930,065,000	8.1 cents per mile would yield the targeted revenue amount (at 102 billion miles traveled multiplied by 8.1 cents).	No restriction on use.
Electric Vehicle (EV) MBUF Pilot	Implement a pilot MBUF for electric vehicles.	The growing prevalence of electric vehicles provides a useful pilot to prepare for MBUF and to capture a fair share of revenue from those using the system but not paying gas tax.	\$2,000,000	\$2,122,000	\$2,251,000	Rate determined by the targeted additional revenue of \$2 million.	No restriction on use.
TOLLING							
Corridor Tolling	Toll Interstates/expressways based on the distance traveled along that highway.	Corridor tolling supports transition to MBUF implementation. Traffic volumes support corridor tolling.	\$0	\$2,444,940,000	\$2,543,716,000	Rate determined by the targeted additional revenue of \$2.4 billion.	No restriction on use.
Managed Lanes (Limited Lane Tolling)	Toll additional lanes on a highway where the traffic is regulated by charging a toll or by encouraging carpooling.	Managed lanes are a revenue-raising mechanism suitable for a limited number of high-volume roads or road segments. Revenues flow to the improvement and maintenance of the facility, not to other purposes.	\$0	\$260,100,000	\$0	Rate determined by the targeted additional revenue of \$260 million.	Restricted to State Highways and Bridges.
REDIRECTION OF FUNDING							
PA State Police Funding	Eliminate transfers from the Motor License Fund (MLF) to the State Police and replace those amounts from the General Fund.	MLF dollars should be used for transportation; other more appropriate funding sources should be used for State Police.	\$673,000,000	\$609,000,000	\$545,000,000	The PSP amount currently to be paid out of the Motor License Fund per the Fiscal Code Reduction.	Restricted to State Highways and Bridges.
FEES							
Vehicle Registration Fee	Increase all vehicle registration fees 100%.	The proposed increase aligns with the "user pays" principle and brings the fee more in line with costs to improve, maintain, and operate the system.	\$800,000,000	\$832,320,000	\$865,946,000	The current Department of Revenue (DOR) estimate is \$799 million for FY 2021-22.	Restricted to State Highways and Bridges.
Electric Vehicle Fee	Introduce a \$275 fee for electric vehicles and eliminate the Alternative Fuels Tax on electric vehicles.	Electric vehicles are a rapidly increasing percentage of the total vehicle fleet, but do not pay taxes that are tied to Liquid Fuels.	\$4,650,000	\$4,939,000	\$5,242,000	Assumes a higher conversion to electric vehicles in Phases 2 and 3.	Restricted to State Highways and Bridges.
Vehicle Lease Fee	Increase current rate from 3% to 5%.	This aligns with the "user pays" principle for drivers who choose to lease a vehicle rather than buy.	\$67,000,000	\$69,707,000	\$72,523,000	Calculated by multiplying 1% of the fee revenue (\$32.883 million) by 5.	Restricted to Multimodal–Mass Transportation.
Aircraft Registration Fee	Introduce a \$50 registration fee for all aircraft in Pennsylvania.	Owners of PA-based aircraft should pay a registration fee as do owners of motor vehicles, motorcycles, etc.	\$320,000	\$333,000	\$346,000	Calculated by multiplying 6,200 aircraft by a \$50 fee.	Restricted to Multimodal–Aviation.

Continued next page

PROPOSED REVENUE SOURCE	DESCRIPTION	BRIEF RATIONALE	ESTIMATED ADDITIONAL ANNUAL REVENUE			ASSUMPTIONS AND BASIS FOR ESTIMATE	USE RESTRICTIONS
			PHASE 1 (Years 1 and 2)	PHASE 2 (Years 3 and 4)	PHASE 3 (Year 5 and Beyond)		
FEES, continued							
Transportation Network Company Fee (Uber, Lyft, taxis, etc.)	Establish a \$1.10 per-trip fee on all TNCs and taxis in Pennsylvania.	TNC use represents a growing portion of passenger transportation that relies on the roadway system.	\$0	\$210,161,000	\$218,651,000	Calculated by an estimated 162.9 million TNC trips and 20.9 million taxi trips at a rate of \$1.10 to reach the targeted revenue amount.	No restriction on use.
Vehicle Rental Fee	Increase current fee per rental from \$2 to \$5.	This updates the amount of an established fee to a reasonable level.	\$60,450,000	\$62,892,000	\$65,433,000	Calculated by multiplying 1% of the fee (\$20.150 million) by 5.	Restricted to Multimodal–Mass Transportation.
Goods Delivery Fee	Establish a \$1 fee on all deliveries to an end point in Pennsylvania.	Significant increases in package delivery volumes impose maintenance and improvement costs on the state and local road network.	\$780,000,000	\$811,512,000	\$844,297,000	Calculated by multiplying 780 million trips by \$1.	No restriction on use.
TAXES							
Vehicle Sales Tax	Increase tax from 6% to 8% (Pittsburgh and Philadelphia rates would increase from 7% to 9% and from 8% to 10%, respectively.)	This increase aligns directly with system use and increased needs.	\$550,000,000	\$572,220,000	\$595,338,000	Estimated vehicle sales for FY 2021-22 of \$1.8 billion, assuming a 33% increase of \$600 million.	No restriction on use.
Gas Tax	Index gas tax to inflation.	Remaining gas tax proceeds must be adjusted to keep pace with inflation.	\$75,000,000	\$204,000,000	\$386,000,000	Calculated as the difference between the PA Department of Revenue (DOR) gas tax revenue estimate and a 2%* increase per year in gas tax revenue.	Restricted to State Highways and Bridges.
Jet Fuel Tax	Increase tax from 1.5 cents to 4 cents per gallon.	This is a modest increase to a tax that has not been adjusted in nearly four decades.	\$10,167,000	\$10,578,000	\$11,005,000	The latest DOR estimate is \$6.1 million at 1.5 cents per gallon. Raising to 4.0 cents would yield the calculated additional amount.	Restricted to Multimodal–Aviation.
OTHER							
Ad Valorem (Value-Based) Vehicle Tax	Tax passenger vehicles annually based on their current value.	Taxing the value of a vehicle better aligns revenue with users' ability to pay versus a flat fee. (See reduction to registration fees in next line item.)	\$800,000,000	\$832,320,000	\$865,946,000	Rate determined by the targeted additional revenue of \$800 million; assumes same rate for all types of vehicles.	No restriction on use.
Reduction to Registration Fees with Ad Valorem	Offset to vehicle registration increases on passenger vehicles with an Ad Valorem tax.	An offset of vehicle registration fees with the associated shift of the passenger vehicle fleet to Ad Valorem.	-\$350,000,000	-\$364,140,000	-\$378,851,000	Offset to vehicle registration increases.	Reduces Highways and Bridges increase but still an overall increase.
Elimination of Gas Tax with full MBUF	Replace most of gas tax proceeds with MBUF in Phase 3.	This long-range cost adjustment would reflect the implementation of MBUF.	\$0	\$0	-\$4,088,301,000	Replacing the gas tax with MBUF. DOR estimate for Year 5 plus the gas tax indexing increase.	Would reduce multiple areas but could be offset in MBUF.
TOTAL			\$3,472,587,000	\$6,563,004,000	\$11,484,607,000		

Notes:

***Inflation Rate** – 2% annual inflation is used in the projections, however the rate should be adjusted at least according to the Consumer Price Index. Given the volatility of construction materials prices, experience suggests that the actual inflation rate could exceed 2% per year.

Transition from the Gas Tax – The Pennsylvania Turnpike Commission has issued bonds secured by its portion of the Oil Company Franchise Tax (OCFT), and that portion of the tax would need to remain in place until the OCFT bonds are retired.

Major Bridge P3 – The major bridge projects presently being evaluated as part of PA Pathways are not included in the Strategic Funding Proposal as revenue sources. These are discrete candidate bridge projects that have already been identified. The revenues would cover the costs of the improvement and maintenance and would not be available for addressing other unmet funding needs. The Managed Lanes revenue option that is being proposed has not identified discrete projects, yet the same principles generally apply.

Revenue Options Considered but Not Included in the TROC Proposal

Some TROC members have suggested broadening the revenue base to include general taxation sources such as corporate income tax. However, TROC overall does not favor this revenue option, preferring to develop a proposed funding package that largely adheres to the “user pays” principle.

Other potential revenue sources as wide-ranging as taxation on marijuana if legalized, sports wagering, and bicycle fees were discussed but deemed to be less promising or less appropriate for transportation funding—including the concern over any revenue sources that may be at odds with public safety.

Funding Solutions Must Effectively Address All Modes

The proposed strategic funding proposal would make a substantial positive impact in addressing present unmet need across the transportation modes. TROC emphasizes to policymakers the importance of the ultimate allocations of expanded revenue being flexible to ensure that each mode is effectively addressed.

Although roads and bridges have traditionally formed the framework of our statewide transportation system, each transportation mode is essential for the efficient movement of people and goods.

Public Transportation

Public transportation—including fixed-route buses and shared-ride service (for seniors and people with disabilities), intercity bus, intercity passenger rail (Amtrak), commuter rail, light rail, etc.—plays a critical role in sustaining our economies, reducing congestion and transportation emissions, and ensuring access to essential goods and services for millions of residents across the state. Non-motorized transportation facilities that allow pedestrians and bicyclists to safely navigate are a vital link in providing first- and last-mile connectivity, offering no-emissions travel alternatives that promote health, and expanding options for populations who cannot or choose not to drive. Pennsylvania's investments in passenger rail, particularly the Harrisburg-Philadelphia Keystone Corridor, have made this travel option extremely popular and growing steadily (before the pandemic). Economic growth around stations has been a result.

Water Ports

Pennsylvania's ocean, river, and Great Lakes ports in Philadelphia, Pittsburgh, and Erie are major economic and transportation assets. The Commonwealth has made significant investments in water ports over the years. TROC emphasizes that water port funding must remain a priority in the implementation of this strategic funding proposal.

Transportation for Seniors and People with Disabilities

The Commonwealth supports transportation for senior citizens and people with disabilities through various statewide programs. Public transportation and paratransit (with lifts) provide the pathway to independent living for people with disabilities and those who support community life (attendants, direct-support professionals, etc.). Amtrak and other passenger rail systems are also important for both regional and statewide travel, and require accessibility upgrades for both vehicles and stations. Further, many people with disabilities travel through the Commonwealth in their own vehicles or are transported by family or support staff who use the roads and bridges being discussed as part of PennDOT's tolling initiative.

Aviation

Pennsylvania's system of commercial and general aviation airports provides an important support for the economy through business and personal travel, and some smaller airports provide traffic relief for larger airports. Pennsylvania has historically delivered a modest (as compared to other modes) airport development program providing grants to airports that provide a matching share on Federal Aviation Administration (FAA) funding. Moreover, PennDOT aviation funding has often been the primary source of funding for many improvements that do not qualify for FAA funds.

Rail Freight

Pennsylvania is among the nation's leaders in advancing public investment in rail freight. This has had economic benefits as well as helping in many cases to reduce the number of trucks on the road and the associated wear-and-tear caused by larger vehicles. The PA Transportation Advisory Committee previously evaluated the economic impacts of freight transportation and found a wide range of benefits (see <https://www.talkpatransportation.com/perch/resources/documents/economic-impact-of-railroads-in-pennsylvania-january-2005-execut.pdf>).

Further Efficiencies

As Pennsylvania modernizes its transportation funding strategy, state agencies and their partners should continue to look for opportunities to reduce costs through partnerships and innovations. Examples suggested by TROC members include:

- Streamlining the Commonwealth's bidding and oversight procedures (as feasible while meeting federal requirements) to reduce a regulatory burden that may add 10% to 20% to project costs.
- Continuing to streamline the design and permitting process for project development to potentially produce substantial time and cost savings. (Most permitting requirements are imposed on PennDOT by other agencies, which highlights the need for inter-agency cooperation and coordination.)
- Expanding agency collaborations, such as between PennDOT and the PA Department of Community and Economic Development for accessible community improvements such as curb ramps, between PennDOT and the PA Department of Human Services for Medical Assistance Transportation Program services, and between PennDOT and the PA Department of Aging for the senior shared-ride program.
- Exploring potential efficiencies or revenue-sharing opportunities where PennDOT provides staffing support to other agencies to leverage funds and improve services.
- Pursuing branding and new advertising of PennDOT products and services, similar to the PA Department of Aging's use of a mascot (Gus the Groundhog).

States Broaden Revenue Base to Fund Transportation

Aging infrastructure, vast multimodal transportation networks, and funding shortfalls, while pronounced in Pennsylvania, are experienced by other states. The mix of revenue sources varies greatly among the states. Many states employ more diversified revenue sources than Pennsylvania does at present. TROC endorses the principle of broadening the revenue base while maintaining the primary focus on transportation users. From the examples below, based on the most recent figures available for each state, some states have embraced a direction relying on revenue sources that are both transportation user- and non-user based, including general taxation. Note: These figures provide a general comparison only. Revenues normally fluctuate somewhat year to year and other states continue to update their funding strategies.

- Pennsylvania relies on gas-tax-related sources for approximately 75% of its transportation revenue, as compared to 26% in Virginia, 41% in Maryland, 32% in New Jersey, 18% in New York State, 60% in West Virginia, 22% in Delaware, and 52% in Ohio. This comparison underscores Pennsylvania's highly challenging situation—being overly reliant on a declining revenue source.
- Pennsylvania's per-gallon gas tax is higher than that of comparable states—57.6 cents per gallon in Pennsylvania, as compared to Delaware (23 cents), Maryland (39.49 cents), Michigan (37.2 cents), Ohio (47 cents), and Virginia (21.2 cents).
- Pennsylvania's diesel tax, at 74.1 cents per gallon, is also higher than those of the aforementioned states. Delaware and Virginia are at the low end with 22 cents per gallon and 20.2 cents per gallon, respectively. The closest state to Pennsylvania in terms of this tax is Ohio, at 47 cents per gallon.
- A motor vehicle sales tax is used by Maryland, Michigan, and Virginia. In Pennsylvania, no sales tax revenue is directed into the Motor Li-

cense Fund to pay for highways and bridges. TROC proposes implementing this revenue option. Note that portions of Pennsylvania's motor vehicle sales tax and non-motor-vehicle sales tax are directed toward multimodal needs (0.947% of total sales tax revenue goes into the Public Transportation Assistance Fund; 4.4% of total sales tax revenue goes into the Public Transportation Trust Fund; and beginning in FY 2022-23, approximately \$450-\$500 million in motor vehicle sales tax revenue will go to the Multimodal Deputate).

- Driver's license fees—on an annualized basis—are higher in Delaware (\$40), Massachusetts (\$15), and Michigan (\$9-\$12.50) than in Pennsylvania (\$7.87).
- Virginia uses general sales taxes to fund transportation. Virginia generates well over \$800 million annually for transportation from retail sales and use taxes.
- Maryland transportation revenue includes about \$202 million a year from corporate income tax and another \$31.6 million from sales taxes on rental vehicles.
- New Jersey transportation funding sources include \$72 million from a cigarette tax, \$338 million from the Casino Revenue Fund, and \$3.7 billion from the Corporation Business Tax.
- New York State's transportation funding sources include a corporate franchise tax that yields \$942 million a year, corporation and utilities tax that produces \$145 million in revenue, \$237 million from the insurance tax, \$22 million from a bank tax, and \$939 million from a sales and use tax.

The experience nationally shows that revenue-base broadening has been necessary, and with it a recognition that transportation provides streams of benefits that extend far beyond the direct users.

Modernizing Federal and Local Transportation Funding

Intergovernmental Partnership is Essential

TROC strongly emphasizes that its strategic funding proposal is a state government proposal, but that it cannot address the funding problem in a vacuum. Federal and local roles must be a part of the solution. Policymakers must recognize that this proposal is based on the essential principle of a federal-state-local transportation partnership that includes the collaborative implementation of this proposal. There is the need for a shift in thinking that emphasizes a renewed and robust federal-state-local partnership with expanded funding from each.

Federalism (i.e., the system of shared responsibilities among federal, state, and local governments), as it relates to transportation, necessitates that all three levels of government function as partners. This is more than an aspiration. Rather, it is a practical necessity that mirrors the transportation system. Policies, programs, and facility operations have various intergovernmental dimensions. The pillars of this partnership include:

- Shared responsibility for funding transportation and doing so at levels to significantly reduce the backlog of improvement needs;
- Collaborating on policy development and execution; and
- Fostering innovation and flexibility.

Federal policy support and funding is essential, starting with the transportation reauthorization as discussed below. The federal government must also advance a workable policy and program for making MBUF a reality as quickly and methodically as possible with state and local government to advance an effective national implementation.

State government and PennDOT in particular must work to make the intergovernmental partnership as effective as it possibly can be through expanded statewide funding that includes modal and local resources. Local government clearly needs greater resources going forward, but also will need to be positioned for and expect that local share, especially on projects of regional significance, will be more the norm than the exception going forward. Local funding partnership will also entail broader efforts for including developers and other private sector sources of funding and in-kind resources as well.

**Federal and local roles
must be a part of the
transportation funding
solution.**

Federal Considerations

TROC is encouraged by the focus of the Biden Administration and the U.S. Congress on infrastructure. The federal government has held a vital funding role for the nation's diverse and multimodal transportation system dating back to the Interstate era and earlier. Even as federal funding strategies are being re-evaluated and modernized, Pennsylvania cannot take a wait-and-see approach and hope that federal investment in transportation will eventually close its funding gap. In fact, TROC proposes that Pennsylvania take a strong leadership role in working with other states and the USDOT modal agencies to advance key changes supportive of this strategic funding proposal, including:

- Reauthorizing federal surface transportation funding levels above the current Fixing America's Surface Transportation Act (FAST Act).
- Establishing a long-term, dedicated, and sustainable source of funding for multimodal transportation.
- Allowing greater flexibility in the use of federal funds.
- Updating and streamlining statutory and regulatory provisions that currently prevent infrastructure owners (i.e., state DOTs) from leveraging and monetizing their Interstate highway assets to generate incremental revenue and advance critical policy goals.
- Allowing greater flexibility in the use of right-of-way to address current and future challenges (such as truck parking, broadband/connectivity, electric vehicle charging, etc.).
- Encouraging federal leadership in partnership with state governments to accelerate MBUF policy, programs, and other pilot programs.

TROC would urge Congress to approve the transportation reauthorization at funding levels that make substantial progress in addressing the great need for transportation system improvements. Further, Congress and the Administration must give priority attention to implementing a federal MBUF, the associated policy framework, and criteria for its implementation.

TROC strongly emphasizes that federal-state collaboration be even more deliberate, bold, and flexible for states to effectively address the increasing challenges with the necessary funding flexibility.

Local Solutions

The Need

Although TROC's funding proposal focuses on the state-level funding gap, the Commission recognizes that Pennsylvania's local governments are responsible for managing an extensive and aging road and bridge network, in addition to multimodal facilities that are typically owned and operated by regional authorities. Some 2,560 municipalities manage an estimated 78,000 linear miles of roadway and more than 6,300 bridges longer than 20 feet. Also, 55 local public transit agencies and providers operate 7,000 buses, rail cars, and para-transit vans across all 67 Pennsylvania counties, making 393 million passenger trips and 39 million senior trips annually.

Local road and bridge network needs were estimated for the 2012 Transportation Funding Advisory Commission (TFAC) report, and the figures have been updated to reflect inflation. The current local unmet funding need is estimated

The current local unmet funding need is estimated at \$3.863 billion per year, growing to \$5.123 billion per year by 2030.

Local governments currently receive:

- March 1st payments to municipalities (13.5% of the total gas and diesel tax):
 - » 20% of 57 mills gas and diesel tax per Act 35 of 1981 and Act 32 of 1983, after \$35 million dedicated to the PA Department of Conservation and Natural Resources and the State Conservation Commission per Act 89 of 2013.
 - » 12% of 55 mills gas and diesel tax per Act 26 of 1991.
 - » 12% of 38.5 mills gas and diesel tax per Act 3 of 1997.
 - » 20% of 39 mills, after 4.17% to counties, of Act 89 of 2013, previously the 12-cent flat tax.
- Paid December and June of each year:
 - » 4.17% of 39 mills of the gas tax per Act 89 of 2013, the equivalent of a half-cent prior to Act 89, dedicated to counties via the Liquid Fuels Tax Fund.
- PennDOT also provides funding to local governments through the Pennsylvania Infrastructure Bank (PIB), 3 mills of the gas tax per the Highway Transfer/Turnback program, dedicated local bridge funding, and other programs.

to be \$3.863 billion per year, growing to \$5.123 billion per year by 2030. This is in addition to the \$530 million in revenue that is dedicated to local funding from PennDOT through previous legislation and gas tax dedications. The \$530 million is 13.5% of all gas tax revenues.

Proposed Strategies

With the TROC recommendation of gradually phasing out the gas tax and replacing it with MBUF, it is essential that modernizing local government transportation funding be a priority. As TROC has proposed a funding package that reduces the backlog of the state's transportation needs, so too should local funding—from the various statewide sources—be structured to help reduce the backlog of need on the local transportation network.

Certain TROC recommendations, such as the Goods Delivery Fee and the Transportation Network Company/Taxi Fee, would be collected on deliveries made and services provided mainly on the locally owned network. Other new non-restricted revenue sources should include provisions to meet local transportation funding needs. At least one TROC member suggested that this be distributed to metropolitan and rural planning organizations (MPOs/RPOs) for regional planning across local government lines to address the multimodal transportation impacts.

Any additional dedication of the recommended revenue sources to local governments would reduce the overall revenue for state modes, which underscores the importance of balancing state, regional, and local priorities in a way that provides opportunity without negatively impacting other sources. For example, if an additional \$100 million is dedicated to local governments from the MBUF revenues above the current gas tax levels, the addressed need from the state perspective would be decreased by \$100 million. Such unintended consequences must be reconciled in the careful calibration of MBUF fees and revenue distribution.

There could also be enhancements to the ability of local governments to collect revenue on their own. For example, Act 89 of 2013 gave counties the authority to collect a \$5 fee on vehicle registrations. As of June 1, 2021, 25 counties take advantage of this funding opportunity. Using the sales tax at the county level (or possibly through regions) to fund transportation is another method that provides local decision-making prerogative. TROC discussion included the suggestion of making this fee flexible to be increased or decreased at the discretion of local governments.

With enabling legislation, local jurisdictions could be authorized to enact fees and taxes to help fund projects of regional significance to strengthen mobility within their communities and compete for new businesses and jobs. This locally driven model has gained support nationwide and has been successfully implemented by competitor regions across the U.S. Such local funding sources should be bondable and must be in addition to current levels of state and federal funding—and targeted specifically toward transportation improvements.

The ultimate policy objective is to fund the local system at levels that take into account gas-tax reductions while addressing the backlog of local improvement needs. Because our transportation network benefits both direct and indirect users, future consideration should include concepts such as a per-capita transportation fee for adult Pennsylvanians.

Expanding Local Revenue Options

The mobility studies listed below identify potential sources of additional transportation revenue for local governments to fund projects of regional significance in the Philadelphia and Pittsburgh metropolitan areas. This revenue would not replace state funding—it would generate additional money to allow regions to undertake priority projects that could not otherwise advance. Certain options could be enacted immediately, while others would require statewide enabling legislation.

Southeast Pennsylvania Partnership for Mobility Final Report (May 2019)
and
Southwest Pennsylvania Partnership for Mobility Final Report (June 2019)
are available from:

https://www.paturnpike.com/yourTurnpike/partnership_for_Mobility.aspx

With enabling legislation, local jurisdictions could be authorized to enact fees and taxes to help fund projects of regional significance to strengthen mobility within their communities and compete for new businesses and jobs.

Proposed Next Steps

Governor Wolf's Executive Order directed TROC to produce a strategic funding proposal to address a serious problem for Pennsylvania. Moving promptly and decisively from proposal to action is essential. The longer the delay in implementing the strategic funding package, the more the unfunded needs will compound, making problem-solving even more difficult and impacting system performance across all modes.

TROC urges PennDOT and other Commonwealth leaders to move forward with the following key implementation steps:

1. Work collaboratively with the Wolf Administration to act on the proposal.
2. Continue to expand and strengthen a broad-based coalition for advancing the proposal. There is a wide range of Pennsylvania organizations and interests that have a major shared stake in transportation funding modernization.
3. Establish leadership and technical teams within the next six months (August 2021 through January 2022) to support the General Assembly and the Administration in proposal implementation. Teams should include TROC members, other stakeholders, PennDOT staff, legislative staff, and others as beneficial. PennDOT and legislative leadership must be directly involved in providing overall direction for this preparation phase.
4. Adhere to a six-month timeline for acting on TROC's proposal. It should commence at the time of the Governor's budget presentation in February 2022 with the goal of acting on it by July 1, 2022. Determine whether the four caucuses will endorse the TROC proposal.
5. Secure sponsor(s) to introduce the TROC proposal as legislation to the General Assembly.
6. Ensure public involvement. The proposed public engagement and the legislative elements would provide forums to ensure that key principles such as fairness are properly considered.

Conclusion

Transportation is not free. Transportation costs are not static. We become accustomed to fees for utilities and other services routinely increasing to keep pace with the cost of delivering those services. Transportation has not had a similar pricing system to keep costs and revenues aligned.

Periodically, Pennsylvania has had to make significant funding adjustments. We are once again at such a crossroads, with a pressing responsibility and opportunity to advance a sound solution for the next decade and beyond. Our overreliance on the declining state and federal gas taxes (comprising three-quarters of transportation funding) makes it essential to modernize our transportation funding structure.

The TROC Executive Order was intended to produce a common-sense solution to our transportation funding gap. Through its work, TROC believes that there is now an opportunity to empower regional, county, and local investment, as well. Stewardship and leadership demand that we preserve and strengthen the vast multimodal transportation system that was developed by generations of taxpayers to meet our daily needs.

Finally, Pennsylvania's economic performance relies on its transportation system. Transportation faces a funding crisis that must not contribute to economic decline. Our economy, technology, and employment are increasingly dynamic and interconnected. The Commonwealth must be positioned to provide mobility and access for businesses and residents to help support a robust economy. States like Florida have analyzed the return on investment (ROI) associated with transportation expenditures and have concluded that the ROI is very high.

It is time to act—wisely, boldly, and fairly—to properly fund the transportation system we need for today and tomorrow.

Commission Members

Governor Wolf appointed the following individuals to TROC. Members served without compensation and were engaged in active analysis and discussion on transportation funding options. Their listing below does not necessarily reflect complete support of every detail of the TROC strategic funding proposal.

- Gene Barr, Pennsylvania Chamber of Business and Industry
- Carl Belke, Keystone State Railroad Association
- Becky Bradley, Lehigh Valley Planning Commission
- Howard A. Cohen, Esq., Temple University, Fox School of Business
- Mark Compton, Pennsylvania Turnpike Commission
- Patricia Cowley, Pennsylvania Bus Association
- Secretary Dennis Davin, Pennsylvania Department of Community and Economic Development
- Jeffrey DiPerna, ATU Local 85
- Ronald Drnevich, State Transportation Commission
- Secretary Cindy Dunn, Pennsylvania Department of Conservation and Natural Resources
- Christina Edgerton, Pennsy Supply
- Colonel Robert Evanchick, Pennsylvania State Police
- Rich Fitzgerald, Allegheny County Executive
- Mike Glezer, Wagman
- James Harper, Jr., Laborers' International Union of North America
- Secretary C. Daniel Hassell, Pennsylvania Department of Revenue
- Jeffrey L. Iseman, Pennsylvania Statewide Independent Living Council
- Katherine Kelleman, Port Authority of Allegheny County
- Amy Kessler, North Central Pennsylvania Regional Planning and Development Commission
- Robert Latham, Associated Pennsylvania Constructors
- Ted Leonard, Pennsylvania AAA Federation
- Secretary Patrick McDonnell, Pennsylvania Department of Environmental Protection
- Thomas Melisko, International Union of Operating Engineers Local 66
- Brock Myers, Alan Myers
- Rebecca Oyler, Pennsylvania Motor Truck Association
- Secretary Russell Redding, Pennsylvania Department of Agriculture
- Leslie Richards, Southeastern Pennsylvania Transportation Authority
- Shawna Russell, Pennsylvania Public Transportation Association
- Dave Sanko, Pennsylvania State Association of Township Supervisors
- Bob Shaffer, Aviation Advisory Committee
- Leeann Sherman, American Council of Engineering Companies of Pennsylvania
- Karl Singleton, Pennsylvania Diversity Coalition
- Matt Smith, Greater Pittsburgh Chamber of Commerce

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- Sarah Clark Stuart, Pennsylvania Pedalcycle and Pedestrian Advisory Committee
- Secretary Jen Swails, Office of Budget
- Andrew Swank, Swank Construction
- Jerry Sweeney, Southeast Partnership for Mobility
- Secretary Robert Torres, Pennsylvania Department of Aging
- Laura Chu Wiens, Pittsburgh for Public Transit
- George Wolff, Keystone Transportation Funding Coalition

Ex Officio Members:

- PA Senator Pat Browne, Chair, Senate Appropriations Committee
- PA Senator Vincent Hughes, Minority Chair, Senate Appropriations Committee
- PA Senator Wayne Langerholc, Jr., Chair, Senate Transportation Committee
- PA Senator John Sabatina, Minority Chair, Senate Transportation Committee
- PA Representative Matthew Bradford, Minority Chair, House Appropriations Committee
- PA Representative Mike Carroll, Minority Chair, House Transportation Committee
- PA Representative Tim Hennessey, Chair, House Transportation Committee
- PA Representative Stan Saylor, Chair, House Appropriations Committee

