

REPORT HIGHLIGHTS

A Report on Pennsylvania State Highway Maintenance Funding

Released: 6/7/2023

Pennsylvania Senate Resolution 2021-53 (SR 2021-53) directed the Legislative Budget and Finance Committee (LBFC) to conduct a study and issue a report analyzing Pennsylvania state highway maintenance funding for the Pennsylvania Department of Transportation (PennDOT) and its 67 county maintenance offices (CMOs). The scope of this study covered the period 1997 through 2021, emphasizing FYs 2015-16, 2016-17, 2017-18, 2018-19, 2019-20, 2020-21, and 2021-22.

PennDOT oversees the Commonwealth's overall transportation system and is statutorily responsible for constructing, reconstructing, maintaining, and repairing all highways in the state highway system. Although PennDOT has a central office in Harrisburg, it is a decentralized organization. The decentralized nature of PennDOT allows each of the agency's Engineering Districts and CMOs to use either internal resources or external contractors to complete maintenance activities.

- **PennDOT's 67 CMOs are divided geographically among 11 Engineering Districts numbered one through 12 (with no number 7).** Each Engineering District is responsible for between three and nine CMOs.
- **PennDOT maintains over 83,000 state 12' equivalent lane miles (fifth largest highway system in the country), approximately 40,000 linear miles, and over 25,000 state bridges (third highest number in the country).** PennDOT's Engineering Districts and CMOs are responsible for the overall maintenance of these state highways and bridges to ensure their safety, quality, and longevity.
- **The maintenance of Pennsylvania state highways and bridges requires a significant monetary commitment and a significant number of staff at both the Engineering District and CMO levels.** PennDOT indicated that over the past five years, the agency lost a great deal of management and supervisory staff, along with approximately 35 percent of its maintenance field staff, representing a significant loss of essential maintenance and institutional knowledge.
- **During FY 2021-22, PennDOT's total state highway maintenance budget was approximately \$1.7 billion, which does not include the estimated overall additional highway maintenance funding needs of \$4.2 billion.** This shortfall in highway maintenance funding is based on the annual requirement to perform cyclical maintenance activities. The annual state highway maintenance budget needs are determined by the PennDOT Engineering Districts and their CMOs based on the Pennsylvania state highway maintenance funding formula (SHMFF).
- **Act 1997-3 established the current Pennsylvania SHMFF that eliminated the utilization of the historical allocation of funds in 1978 and 1979 and incorporated a rolling five-year average of each CMO's expenditures with a revision of the highway and bridge factors considered.** According to PennDOT, these changes were intended to reflect changing state highway maintenance needs to ensure a more equitable distribution of state highway maintenance funds.
- **Act 1997-3 SHMFF provides funding based on two components:** *First component* - An amount equal to the county's base allocation, which is the annual expenditure for routine maintenance operations performed by a CMO. It includes costs incurred for personnel services, operational expenses, and fixed assets, but does not include highway repair and restoration costs, averaged over the immediately preceding five years. *Second component* - An amount based on the Additional State Highway Maintenance Appropriation (ASHMA) formula, in which each county receives a portion of state highway maintenance appropriations and executive authorizations (EAs) in excess of the total of all counties' base allocations expressed in the following manner:
$$\text{ASHMA} = (40\% \text{ RPQc} + 15\% \text{ BMDc} + 30\% \text{ LMc} + 15\% \text{ VMc})$$
- **The Pennsylvania SHMFF yields a gross allocation amount for each CMO.** A portion of the CMOs' funding comes from a portion of the Expanded Highway and Bridge Allocation.
- **PennDOT uses various factors to determine overall maintenance needs and assign dollar values.** These factors include bridge maintenance, drainage, guide rail, and STAMPP needs.
- **Engineering Districts and CMOs spent \$8.5 billion on fixed assets, operational expenses, and personnel services for FY 2015-16 to 2021-22.** This amount consists of \$82 million on fixed assets, \$3.8 billion on operational expenses, and \$4.5 billion on personal services expenditures.
- **Annual Emergency Fund appropriations ranged from \$10 to \$20 million for FY 2015-16 to 2021-22.** CMOs use emergency funding for unanticipated acts of nature, such as flooding, landslides, and other significant events, such as bridge collisions and pipe repair.
- **Winter operations total costs for the past seven fiscal years ranged from \$212.3 million in FY 2019-20 to \$303 million in FY 2017-18.** Costs per snow lane mile ranged from \$2,208 in FY 2017-18 to \$3,263 in FY 2020-21, averaging \$2,780 over the seven fiscal years included in this study.
- **Act 2016-85 created RoadMaP to invest more than \$2 billion in highway maintenance and highway and bridge capital projects from FY 2017-18 to 2027-28 (on December 29, 2021, RoadMaP was halted due to the need for funds for CMOs' core maintenance activities).** During the review period, from FY 2018-19 through FY 2021-22, 605 miles were treated at \$59.6 million, a \$38.7 million savings over traditional methods.
- **The LBFC distributed a questionnaire with assistance from the PennDOT Central Office to the Engineering Districts.** We asked questions regarding the funding formula, maintenance, maintenance funding, expenditures, winter operations, incident management, paving, and cost reduction.

For a full copy of the report, email us at lbfcinfo@palbfc.us or download a copy at <http://lbfc.legis.state.pa.us/>.