Performance-Based Budget

DEPARTMENT OF TRANSPORTATION

Commonwealth of Pennsylvania
Independent Fiscal Office
March 2021

Independent Fiscal Office

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INDEPENDENT FISCAL OFFICE

March 25, 2021

The Honorable Members of the Pennsylvania Performance-Based Budget Board:

Act 48 of 2017 specifies that the Independent Fiscal Office (IFO) shall "review agency performance-based budget information and develop an agency performance-based budget plan for agencies subject to a performance-based budget review." This review "shall be completed in a timely manner and submitted by the IFO to the board for review."

This report contains the review for the Department of Transportation. All performance-based budget (PBB) reviews submitted to the Board contain the following content for each activity or service provided by the agency:

- a brief description of the activity, relevant goals and outcomes;
- a breakdown of agency expenditures;
- the number of full-time equivalent positions dedicated to the activity;
- select currently available metrics and descriptive statistics;
- any proposed metrics that the review recommends; and
- observations that should allow agencies to more effectively attain their stated goals and objectives.

The IFO submits this review for consideration by the PBB Board. The agency received a draft version of this review and was invited to submit a formal response. If submitted, the response appears in the Appendix to this review. The IFO would like to thank the agency staff that provided considerable input to this review.

Sincerely,

Matthew J. Knittel
Director

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Background on Performance-Based Budgeting

Act 48 of 2017 is known as the Performance-Based Budgeting and Tax Credit Efficiency Act. The act requires the Independent Fiscal Office (IFO) to develop performance-based budget (PBB) plans for all agencies under the Governor's jurisdiction once every five years based on a schedule agreed to by the Secretary of the Budget and the Director of the IFO. The act directs the IFO to evaluate and develop performance measures for each agency program or line item appropriation. As determined by the IFO to be applicable, the measures shall include the following: outcome-based measures, efficiency measures, activity cost analysis, ratio measures, measures of status improvement of recipient populations, economic outcomes or performance benchmarks against similar state programs or similar programs of other states or jurisdictions.

The act requires the IFO to submit plans to the PBB Board for review and approval. The PBB Board reviews plans at a public hearing at which agency heads or their representative must attend to offer additional explanations if requested. The PBB Board has 45 days after submission to approve or disapprove plans.

A performance-based budget differs from a traditional budget in several key respects. The main differences are summarized by this table:

Traditional versus Performance-Based Budget

Criteria	Traditional Budget	Performance Budget
Organizational Structure	Line Items or Programs	Agency Activities
Funds Used	Appropriated Amounts	Actual Expenditures
Employees	Authorized Complement	Actual Filled Complement
Needs Assessment	Incremental, Use Prior Year	Prospective, Outcome-Based

The plans track funds based on agency activities because they can be more readily linked to measures that track progress towards goals, objectives and ultimate outcomes. Activities are the specific services an agency provides to a defined service population in order to achieve desired outcomes. Activity measures can take various forms: inputs (funding levels, number of employees), outputs (workloads), efficiency (cost ratios, time to complete tasks), outcomes (effectiveness), benchmark comparisons to other states and descriptive statistics. The final category includes a broad range of metrics that provide insights into the work performed by an agency and the services provided. Those metrics supply background, context and support for other metrics, and they may not be readily linked to efficiency or outcome measures. The inclusion of such measures supports the broader purpose of the PBB plans: to facilitate a more informed discussion regarding agency operations and how they impact state residents.

Note: Unless otherwise noted, performance metrics used in this report were supplied by the agency under review. Those data appear as submitted by the agency and the IFO has not reviewed them for accuracy. For certain years, data are not available (e.g., due to a lag in reporting). In those cases, "--" denotes missing data. All data related to expenditures and employees are from the state accounting system and have been verified by the IFO and confirmed by the agency.

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Department of Transportation Overview

Mission Statement

To provide a sustainable transportation system and quality services that are embraced by our communities and add value for our customers.

Services Provided

For this report, the services provided by PennDOT are classified into 12 general activities.

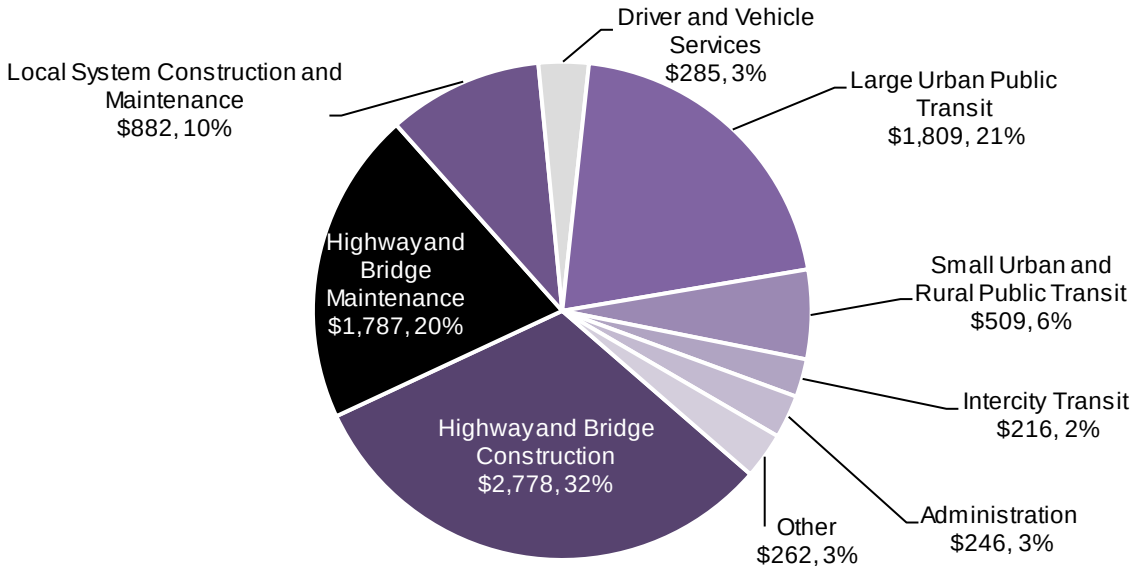
PennDOT: Activities and Primary Services Provided

Activity	Primary Service
1 Highway and Bridge Construction	Reconstruct and add roads and bridges
2 Highway and Bridge Maintenance	Repair and preserve roads and bridges
3 Local System Construction and Maintenance	Disburse funds and provide outreach and training
4 Highway and Safety Operations	Traffic management and safety improvements
5 Driver and Vehicle Services	Administer driver and vehicle services
6 Large Urban Public Transit	Provide oversight and support for large transit agencies
7 Small Urban and Rural Public Transit	Provide oversight and support for smaller transit agencies
8 Intercity Transit	Provide support for passenger rail and bus operations
9 Aviation	Improve aviation services throughout the state
10 Commercial and Other Multimodal	Increase economic use of transportation infrastructure
11 Broadband and Technology Initiatives	Safely implement emerging technologies
12 Administration	Provide organizational leadership and support

Highlights of recent agency activity include:

- Fiscal Year (FY) 2019-20 highway and bridge program expenditures were reduced by roughly $430 million from the prior year due to a sharp decrease in transportation revenue. The decrease was primarily due to the COVID-19 pandemic and continued increases in motor vehicle fuel efficiency. As a result of the reduced revenues, the number of highway miles improved or restored declined by 1,624 (-28.6 percent) from the prior year.
- Highway fatalities on Pennsylvania roads reached a record low 1,059 deaths in 2019. The department implements safety projects that improve overall safety for the traveling public by using risk management and cost-benefit analyses.
- In response to the COVID-19 pandemic, the department submitted a request to the U.S. Department of Homeland Security (USDHS) to delay REAL ID implementation. On March 26, USDHS extended the implementation date to October 1, 2021. Upon reopening driver licensing centers beginning in May 2020, the department suspended the issuance of REAL IDs to limit the number of customers visiting Driver License Centers through September 14, 2020. As of December 17, 2020, approximately 1.0 million (ten percent) current driver license and ID holders have a REAL ID.
- Provided $1.6 billion in operating and capital grant support to transit agencies across the state that provided over 305.1 million individual passenger trips in FY 2019-20, including 27.6 million free rides to senior citizens.

PennDOT FY 2020-21 Budget by Activity



Note: Expenditures in dollar millions. Other includes Highway Safety and Operations, Commercial and Other Multimodal, Aviation and Broadband and Technology Initiatives.

PennDOT Filled Full-Time Equivalent (FTE) Positions

	15-16 Actual	16-17 Actual	17-18 Actual	18-19 Actual	19-20 Actual	20-21 Budget
Average Weekly FTE Positions by Activity						
Highway and Bridge Construction	2,680	2,659	2,671	2,674	2,600	2,646
Highway and Bridge Maintenance	7,608	7,574	7,543	7,467	7,577	7,488
Local System Construction and Maintenance	15	15	14	13	12	11
Highway and Safety Operations	79	81	76	72	75	74
Driver and Vehicle Services	1,061	1,058	1,061	1,147	1,241	1,412
Large Urban Public Transit	4	3	3	3	3	3
Small Urban and Rural Public Transit	21	19	18	16	17	19
Intercity Transit	2	3	3	3	2	3
Aviation	26	19	18	18	18	20
Commercial and Other Multimodal	11	18	18	17	16	20
Broadband and Technology Initiatives	0	0	0	1	2	2
Administration	529	553	306	305	321	318
Total	**12,036**	**12,001**	**11,730**	**11,735**	**11,885**	**12,015**
Personnel Cost/FTE ($ thousands)	**$88.9**	**$93.4**	**$95.7**	**$96.5**	**$93.0**	**$97.8**

Note: IFO estimate for FY 20-21 Highway and Bridge Maintenance includes 427 FTEs for winter operations.

PennDOT Expenditures by Fiscal Year

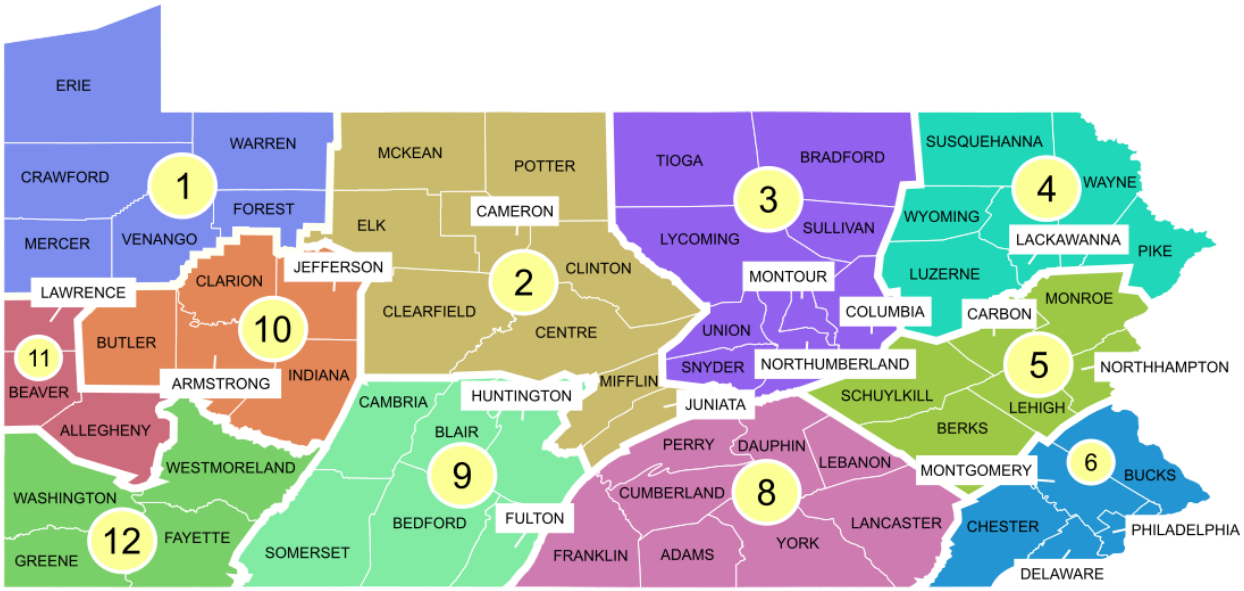
	15-16 Actual	16-17 Actual	17-18 Actual	18-19 Actual	19-20 Actual	20-21 Budget
Expenditure by Activity						
Highway and Bridge Construction	$2,990.2	$2,997.5	$2,913.6	$2,897.3	$2,680.5	$2,777.8
Highway and Bridge Maintenance	1,646.6	1,649.0	1,736.1	1,816.2	1,595.4	1,786.6
Local System Construction and Maintenance	802.4	856.0	835.5	874.2	823.8	882.1
Highway and Safety Operations	43.3	43.0	43.5	37.1	37.5	55.9
Driver and Vehicle Services	182.3	188.5	206.1	237.6	231.7	285.2
Large Urban Public Transit	1,255.9	1,380.6	1,352.7	1,364.2	1,406.9	1,808.5
Small Urban and Rural Public Transit	247.8	261.2	282.8	291.3	292.6	509.1
Intercity Transit	60.5	45.2	43.1	57.1	52.4	216.4
Aviation	20.7	29.1	34.0	32.3	45.7	113.9
Commercial and Other Multimodal	81.8	93.0	93.8	85.2	247.6	72.4
Broadband and Technology Initiatives	0.0	0.0	0.0	0.5	0.9	20.3
Administration	207.7	228.9	241.6	233.5	234.3	245.7
Total	**7,539.1**	**7,772.0**	**7,782.8**	**7,926.4**	**7,649.1**	**8,773.8**
Expenditures by Object						
Personnel Services	$1,069.9	$1,120.5	$1,122.1	$1,132.5	$1,105.3	$1,175.5
Operational Expenses	1,248.0	1,243.2	1,368.2	1,446.8	1,285.1	1,611.7
Grants	2,552.6	2,729.2	2,701.2	2,765.9	2,767.9	3,621.7
Fixed Asset Expenses	2,395.1	2,396.0	2,525.8	2,488.7	2,338.7	2,258.4
Debt Service/Investments	20.5	12.9	7.9	43.6	26.5	42.5
Other	253.1	270.3	57.7	48.9	125.7	64.0
Total	**7,539.1**	**7,772.0**	**7,782.8**	**7,926.4**	**7,649.1**	**8,773.8**
Expenditures by Fund						
General Fund (State)	$1.1	$1.8	$1.6	$1.6	$1.5	$3.1
General Fund (Federal)	67.4	50.4	41.8	63.7	60.1	262.6
General Fund (Restricted)	6.7	7.5	7.7	7.3	6.2	7.3
Motor License Fund (State)	1,812.6	1,803.1	1,956.1	2,040.8	1,828.5	1,882.1
Motor License Fund (Augmentations)[1]	1,894.3	1,895.2	1,758.2	1,739.5	1,658.7	2,098.1
Motor License Fund (Federal)	10.0	16.2	18.0	19.2	24.8	89.0
Motor License Fund (Restricted)[1]	1,916.8	2,008.8	2,216.6	2,239.2	2,060.2	1,976.5
Lottery Fund	76.2	70.0	69.4	66.4	61.6	75.0
Liquid Fuels Tax Fund	29.7	32.8	30.7	30.1	27.9	26.7
Multimodal Transportation Fund	69.1	90.3	95.2	88.1	247.1	87.7
Pennsylvania Infrastructure Bank Fund	20.5	12.9	7.9	38.2	20.9	42.5
Public Transportation Assistance Fund	201.8	214.1	225.9	242.4	248.6	229.2
Public Transportation Trust Fund	1,082.0	1,222.2	1,200.4	1,188.2	1,255.8	1,636.7
Capital Facilities Fund	350.2	346.4	152.8	161.0	142.3	356.7
Other Funds[2]	0.9	0.4	0.3	0.5	4.9	0.5
Total	**7,539.1**	**7,772.0**	**7,782.8**	**7,926.4**	**7,649.1**	**8,773.8**

Note: Expenditures in dollar millions. Actual expenditures are listed in the year the expenditure was recorded.

1 Includes state and federal revenues/reimbursements received by the department.

2 Other Funds include Highway Beautification Fund, Motor Vehicle Transaction Recovery Fund, Governor Casey Organ and Tissue Donation Awareness Fund and Unconventional Gas Well Fund.

PennDOT Engineering Districts



	State System					Local System			
	Linear Miles[1]	Poor IRI[2]	DVMT[1]	Bridges[3]	Poor Bridges[3]	Linear Miles[1]	DVMT[1]	Bridges[4]	Poor Bridges[4]
Statewide	**39,723**	**22%**	**213,735**	**25,417**	**2,583**	**73,037**	**44,466**	**6,633**	**1,781**
District 1	3,687	12%	11,666	2,067	137	5,836	1,867	546	162
District 2	3,478	14%	10,585	2,176	202	4,375	1,187	415	136
District 3	4,239	17%	11,189	2,898	57	6,335	1,630	593	158
District 4	3,615	33%	14,578	2,104	431	4,763	2,558	390	140
District 5	3,286	24%	26,539	2,150	251	7,729	5,550	743	214
District 6	3,552	33%	48,419	2,772	383	11,230	12,829	979	243
District 8	5,228	12%	37,743	3,387	312	10,917	7,138	1,030	190
District 9	3,751	13%	8,865	2,103	162	4,635	1,127	464	159
District 10	3,129	40%	9,750	1,623	214	5,173	1,450	387	78
District 11	2,162	27%	19,788	1,795	154	5,952	6,912	539	114
District 12	3,595	28%	14,613	2,342	280	6,092	2,218	547	187

Notes:

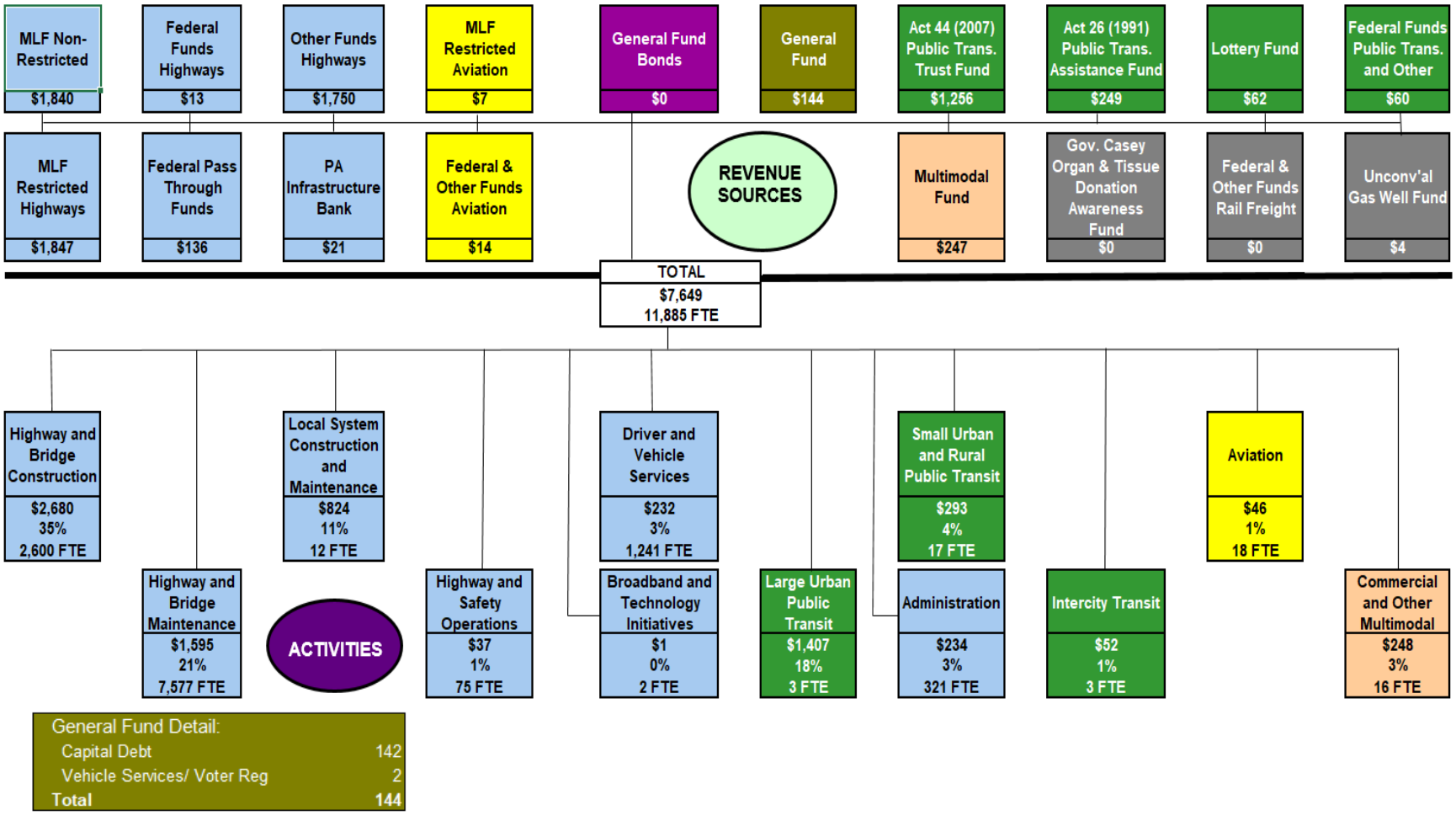
1 Pennsylvania Highway Statistics, 2019 Highway Data. Linear miles measure centerline roadway mileage. Daily Vehicle Miles of Travel (DVMT) measures total travel, by all vehicles.

2 IRI is the International Roughness Index that measures pavement smoothness. Percentages represent miles rated poor for all routes under PennDOT's jurisdiction.

3 Bridges on state system, length 8 feet or greater. The poor rating means that the bridge has deterioration to one or more of its major components (i.e., deck, superstructure, substructure, or culvert). As of 9/30/2020.

4 Bridges on local system, length 20 feet or greater. The poor rating means that the bridge has deterioration to one or more of its major components (i.e., deck, superstructure, substructure, or culvert). As of 6/30/2020.

FY 2019-20 PennDOT Performance-Based Budgeting Block Chart
($ in millions)



General Fund Detail:	
Capital Debt	142
Vehicle Services/ Voter Reg	2
Total	144

Performance-Based Budget Plan: Key Metrics and Observations

This report includes numerous performance metrics, but certain metrics are critical to the overall operation of the agency. Notable metrics that policymakers should monitor closely include the following:

The COVID-19 pandemic likely has significant and long-term implications for agency funding and operations. For its October 2020 revenue update, the Independent Fiscal Office (IFO) estimated that gasoline consumption in Pennsylvania declined by roughly 10 percent due to greater telecommuting, remote meetings, reduced social gatherings and a general reluctance to travel. This outcome reduces motor fuel tax revenues which comprise nearly 80 percent of total state transportation revenues. In CY 2020, the department scaled back construction and reduced project lettings by $300 million due to reduced revenues from COVID-19 and $300 million due to various technical issues. The department also shifted maintenance funding to core maintenance functions. Recent economic forecasts project that the reduction in gasoline consumption will likely continue for several years and would therefore impact short- and long-term agency planning and operations.

The Rapid Bridge Replacement (RBR) program was a major public, private partnership (P3) project that materially reduced the number of state-owned bridges in poor condition. Beginning in 2015, the $899 million RBR P3 program replaced 558 state-owned bridges over a three-year period. The project accelerated numerous bridge projects by leveraging private funds and shifting future maintenance costs (25 years) to private contractors. From 2015 to 2019, Pennsylvania reduced the total number of poor bridges in the state and local system by 1,200 (-25.5 percent), which led the nation during this period. However, as of 2019, Pennsylvania still ranked second in the nation for the total number of bridges rated poor (3,501) and fifth for the share of bridge inventory rated poor (15.3 percent). As of September 2020, the current number of bridges rated poor is 2,583 (10.2 percent). Continued monitoring and assessment of this program will provide insights into whether the contracting of future maintenance over long time horizons is a cost-effective approach for the state.

Since 2017, the agency's internal Bid Price Index (BPI) has increased at an average rate of 8.6 percent per annum. The index represents a weighted average of costs for heavy road and bridge construction based on contractor prices. The index components reflect contractor prices for asphalt, concrete, rebar, excavation and aggregate. By comparison, the industry's general Construction Cost Index (CCI) increased at an average rate of 2.1 percent per annum. Although the two indices include different components, the simple comparison illustrates the significant divergence of these two construction indices since 2017. Prior to that year, multi-year index trends were much closer. For example, from 2010 to 2017, the average rate of growth was 2.4 percent (BPI) and 2.9 percent (CCI) per annum.

The performance of local system construction and maintenance funds is not tracked or measured. For FY 2018-19, the department disbursed $847 million in statutorily mandated funds to municipal and county governments. The department reviews expenditures to ensure they are in accordance with applicable laws, and provides technical assistance so funds are used effectively. While the department inspects more than 6,600 bridges on the local system, it receives no performance data on most of the 78,000 miles of locally-controlled roads. This report recommends that local transportation agencies report select performance metrics to PennDOT on an annual basis.

Agency staff engaged in the Driver and Vehicle Services activity increased by 180 FTE (17.0 percent) between FY 2015-16 and FY 2019-20. The department budgeted an increase of 171 FTE (13.8 percent) in FY 2020-21. Over the last several years, traditional service workloads (i.e., registrations and titling) have not increased, and in some cases declined due to increased use of eGov applications and online registration and messenger programs. However, the department began to issue REAL IDs in FY 2018-19 and added staff and five new driver license centers to address the increased workload. Data reveal that the share of customers served in under 30 minutes declined by 28 percentage points from FY 2016-17 to FY 2019-20. However, it is difficult to assess trends in staff productivity due to changing workloads and a new automated system used to track wait times.

Total ridership at local transit agencies has declined, while state funding and average costs increase. From FY 2015-16 to FY 2018-19 (pre-pandemic), Pennsylvania disbursed $4.6 billion in state grants to support two large public transit agencies and $828 million to support various small urban and rural agencies. State grant funding grew by 7.7 percent, outpacing the Philadelphia CPI-U (3.2 percent). During that time, total ridership trends at local transit agencies were as follows: (1) the Southeastern Pennsylvania Transportation Authority (SEPTA), -13.1 percent, (2) the Port Authority of Allegheny County (PAAC), +0.3 percent, and (3) small urban and rural transit agencies, -9.0 percent. Due to reduced ridership and higher operating costs, the average cost per trip increased at SEPTA (19.2 percent), PAAC (9.3 percent) and other systems (20.7 percent). Local transit agencies receive a larger share of funds from the state compared to similar transit agencies in other states, and those subsidies recognize the positive externalities of public transit from reduced traffic congestion, pollution and higher quality of life for certain residents.

The utilization and reliability of Amtrak's two passenger rail service routes in Pennsylvania differ considerably. For FY 2018-19, Amtrak's Keystone service route (Harrisburg to Philadelphia) provided 1.6 million trips and recorded a 93.2 percent all-station on-time performance. One-third of trips (531,000) were by multi-ride users likely commuting between Harrisburg and Philadelphia. In contrast, the Pennsylvanian service route (Pittsburgh to Philadelphia) provided 214,000 trips and had an on-time performance of 67.4 percent and exceeded the 80 percent target rate only once in the past five years (85 percent in FY 2015-16).

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Activity 1: Highway and Bridge Construction

The department develops its highway and bridge construction program to provide a safer and less congested network while complying with federal and state environmental regulations. To ensure that local and regional transportation needs are addressed, the department partners with local municipalities, counties and other stakeholders.

Project designs are developed both in-house and by consultants and are primarily constructed by contractors through a low-bid process. Projects contain pre-construction phases such as research, planning and programming, environmental activities, design, right-of-way, railroad grade crossing and utility services, contract management and consultant services, systems management and material testing. Post-project activities include construction inspection and quality assurance.

The primary goals and outcomes of the activity are as follows:

- The efficient use of public funds to deliver quality design and construction projects on-time and on-budget in compliance with all state and federal environmental regulations.
- Construct and reconstruct highways and bridges to facilitate commerce and promote development.
- Enhance system capacity to reduce congestion and increase safety.

Resources for Highway and Bridge Construction

	15-16 Actual	16-17 Actual	17-18 Actual	18-19 Actual	19-20 Actual	20-21 Budget
Expenditures by Object						
Personnel Services	$269.9	$278.0	$289.7	$285.5	$276.1	$269.8
Operational Expenses	128.1	135.6	130.0	151.7	135.3	213.6
Grants	1.3	4.0	9.3	4.2	3.1	4.0
Fixed Assets Expense	2,327.1	2,305.2	2,426.0	2,366.8	2,189.8	2,165.5
Other	263.8	274.7	58.5	89.2	76.2	124.9
Total	**2,990.2**	**2,997.5**	**2,913.6**	**2,897.3**	**2,680.5**	**2,777.8**
Expenditures by Fund						
Motor License Fund (State)	432.6	327.5	496.6	506.5	432.0	397.5
Motor License Fund (Augmentations)[1]	1,758.7	1,788.4	1,661.4	1,630.9	1,514.2	1,791.0
Motor License Fund (Restricted)	583.9	663.2	747.8	721.7	718.0	564.3
Pennsylvania Infrastructure Bank Fund	19.9	12.0	7.8	38.2	16.2	25.0
Capital Facilities Fund	195.1	206.5	0.0	0.0	0.0	0.0
Total	**2,990.2**	**2,997.5**	**2,913.6**	**2,897.3**	**2,680.5**	**2,777.8**
Average Weekly FTE Positions	**2,680**	**2,659**	**2,671**	**2,674**	**2,600**	**2,646**
Personnel Cost/FTE ($ thousands)	**$100.7**	**$104.5**	**$108.5**	**$106.8**	**$106.2**	**$102.0**

Note: Expenditures in dollar millions. Actual expenditures are listed in the year the expenditure was recorded.

1 Includes state and federal revenues received by the department.

Performance Measures for Highway and Bridge Construction

	15-16	16-17	17-18	18-19	19-20	20-21
Workload						
Bridges rehabilitated/replaced	415	556	402	171	234	--
New highway construction (miles)	28	26	18	14	12	--
Interstate reconst./restoration (miles)	56	32	101	164	73	--
Non-interstate reconst./restoration (miles)	141	144	83	335	216	--
Inspection hours saved[1,2]	67.9	83.6	92.3	98.9	88.2	--
Activity Cost Analysis						
Bridge replacement cost ($ per square foot)[2]	$298	$313	$273	$357	$342	--
Bid Price Index (calendar year)[2]	247.1	242.2	245.9	267.5	293.3	--
Construction Cost Index[2]	227.7	234.6	243.7	251.1	256.0	--
Statewide const. cost per mile ($ millions)		--Data Requested--				$2.6
Outcome						
% Project cost over budget[2,3]	4.1%	3.4%	4.0%	3.7%	3.8%	3.0%
% On-time project delivery[2,3]						
Original	73.0%	79.0%	77.0%	73.0%	68.0%	85.0%
With time extensions	93.8%	97.4%	97.8%	97.6%	96.1%	92.2%
Interstate travel time reliability[2,3]	--	--	89.7%	89.6%	89.7%	89.8%
% Permits issued within MOU timeframe[2]						
DEP permits	94%	96%	80%	85%	92%	--
All other permits	98%	90%	97%	92%	84%	--
Highway fatalities[3,4]	1,240	1,220	1,186	1,182	1,155	1,172

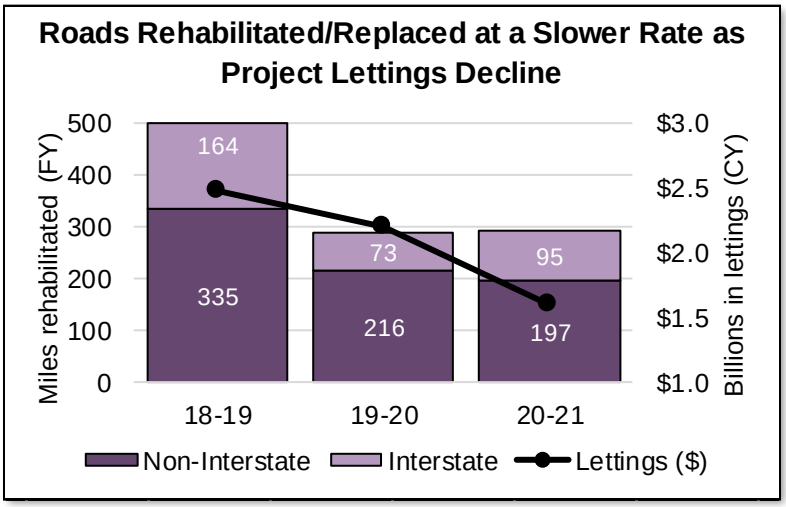
Notes:
1 Amounts in thousands.
2 See notes on measures below.
3 FY 20-21 is a target.
4 Five-year average.

Notes on Measures

- The mobile field application provides inspectors with electronic copies of documents on a mobile device which enhances efficiency and reduces administrative workload, allowing more time to inspect roadway and bridge projects. The inspection hours saved metric reflects the reduction of administrative hours associated with the use of the mobile field application.
- For the bridge replacement cost, the square foot bridge construction cost varies annually based on the number of bridges and associated cost factors such as complexity of the bridge foundations, staged/partial width reconstruction versus full width reconstruction, feature under the bridge (highway/waterway/railroad) and size of the bridge (deck area).
- The Bid Price Index is the department's annual calculation of the increase in the weighted average of prices for hot mix asphalt wearing course (30 percent), reinforcement bars (20 percent), excavation (15 percent), aggregate (15 percent), fabricated steel (10 percent) and structural cement

(10 percent).

- The Construction Cost Index is published by the Engineering News-Record. The index is composed of the 20-city average of labor rates and certain construction material prices (e.g., structural steel, Portland cement, lumber).
- The project cost over budget metric compares the final contract amount to the original contract amount (including contract adjustments). The original on-time project delivery metric reflects the share of projects where the original contract time is within 110 percent of the actual contract time for completed projects. The adjusted on-time project delivery metric incorporates time extensions.
- Interstate travel time reliability reflects the consistency or dependability of travel times from day to day or across different times of day.
- The department implemented memoranda of understanding (MOUs) to expedite permitting with the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and Pennsylvania's Department of Environmental Protection, Fish and Boat Commission, Game Commission, Department of Conservation and Natural Resources and Historical and Museum Commission. The permit metrics report the share of permits that are issued to PennDOT within timeframes established under the MOUs for DEP only (the largest number of permits) and for all other agencies. The MOUs reduced review time by 15 to 51 days.



The **reduction in annual project lettings**, or the dollar value of planned projects that will go out for bid, reduces the miles of roadways rehabilitated or replaced. In response to the effects of the COVID-19 pandemic on transportation revenues, the department has reduced lettings for construction projects by $300 million to $1.6 billion for CY 2020. The department anticipates a continued reduction in miles driven that will reduce motor fuel tax revenues through June 2021.

State and Engineering District Benchmarks

Project costs over budget compares how close the final contract amount is to the original contract amount (including contract adjustments). The department's target is to remain within 3.0% of the project budget. In FY 2019-20, 7 out of the 11 districts were above the 3.0% target. In FY 2019-20, the total dollar amount associated with the 3.8% overage is $66.4 million.

Project Cost Over Budget

	15-16	16-17	17-18	18-19	19-20
Statewide	**4.1%**	**3.4%**	**4.0%**	**3.7%**	**3.8%**
District 1	0.9	3.5	1.7	6.5	3.5
District 2	2.6	2.3	3.1	3.9	0.9
District 3	-1.2	0.9	-0.5	0.1	-1.2
District 4	9.2	4.7	6.3	6.8	2.1
District 5	7.1	9.0	4.5	7.3	3.6
District 6	5.0	3.4	6.8	4.1	6.7
District 8	0.2	0.0	0.1	3.1	3.3
District 9	2.9	1.4	1.9	-2.6	2.8
District 10	0.1	3.3	2.6	1.2	6.6
District 11	6.8	3.9	7.5	5.1	5.9
District 12	9.2	3.1	1.1	0.4	3.4

Bridges in Poor Condition

	Bridges			2015 to 2019		% Poor Bridges	
	2015	2017	2019	Growth	Change	2015	2019
Pennsylvania	4,701	4,147	3,501	-25.5%	-1,200	20.6%	15.3%
Ohio	1,869	1,598	1,457	-22.0	-412	6.9	5.4
New York	1,964	1,771	1,745	-11.2	-219	11.2	9.9
New Jersey	549	556	529	-3.6	-20	8.2	7.8
Maryland	293	288	273	-6.8	-20	5.5	5.1
Delaware	47	39	28	-40.4	-19	5.4	3.2
West Virginia	1,059	1,351	1,531	44.6	472	14.7	21.0
United States	**50,917**	**47,619**	**46,155**	**-9.4**	**-4,762**	**4.7**	**4.0**

Source: American Road & Transportation Builders Association. Data are from the Federal Highway Administration (FHWA) National Bridge Inventory (NBI), released April 2, 2020.

PennDOT has prioritized reducing the inventory of bridges in poor condition on the state and local system. A poor rating does not necessarily mean the bridge is unsafe or in danger of collapse. The poor rating means that the bridge has deterioration to one or more of its major components (i.e., deck, superstructure, substructure, or culvert). Using funding from both its annual construction program and the Rapid Bridge Replacement Project, which utilized a Public Private Partnership agreement to replace 558 bridges, the department replaced and improved more poor bridges than any other state. As of 2019, the share of bridges in Pennsylvania rated poor (15.3 percent) exceeded the U.S. average (4.0 percent). As of September 2020, Pennsylvania's percentage has been reduced to 10.2 percent.

Activity 2: Highway and Bridge Maintenance

PennDOT maintains nearly 40,000 centerline miles of roadway and over 25,000 bridges. The department uses data from their Roadway Management System (RMS) to monitor the state-owned highway network by maintaining an inventory of roadway features, conditions and characteristics. Maintenance activities include routine maintenance, preservation, repair and safety improvements, as well as activities related to drainage, guide rails, shoulders and other roadside structures. This activity also funds winter operations including any temporary equipment operators and overtime used to meet seasonal operating needs.

The primary goal and outcome for this activity is to maintain structurally sound and efficient highway and bridge infrastructure at the lowest life cycle cost.

Resources for Highway and Bridge Maintenance

	15-16 Actual	16-17 Actual	17-18 Actual	18-19 Actual	19-20 Actual	20-21 Budget
Expenditures by Object						
Personnel Services	$654.0	$692.0	$681.4	$700.6	$674.0	$731.0
Operational Expenses	897.4	841.3	933.6	963.4	805.7	920.3
Fixed Assets Expense	52.7	67.8	78.7	98.0	66.5	64.3
Other	42.4	48.0	42.4	54.2	49.3	70.9
Total	**1,646.6**	**1,649.0**	**1,736.1**	**1,816.2**	**1,595.4**	**1,786.6**
Expenditures by Fund						
Motor License Fund (State)	853.2	908.9	884.4	924.8	776.0	845.3
Motor License Fund (Augmentations)[1]	100.1	61.3	50.4	58.1	80.8	237.3
Motor License Fund (Restricted)	692.8	678.5	801.0	832.8	738.2	703.6
Other Funds	0.4	0.4	0.3	0.5	0.4	0.4
Total	**1,646.6**	**1,649.0**	**1,736.1**	**1,816.2**	**1,595.4**	**1,786.6**
Average Weekly FTE Positions	**7,608**	**7,574**	**7,543**	**7,467**	**7,577**	**7,488**
Personnel Cost/FTE ($ thousands)	**$86.0**	**$91.4**	**$90.3**	**$93.8**	**$88.9**	**$97.6**

Note: Expenditures in dollar millions. Actual expenditures are listed in the year the expenditure was recorded.
1 Includes state and federal revenues received by the department.

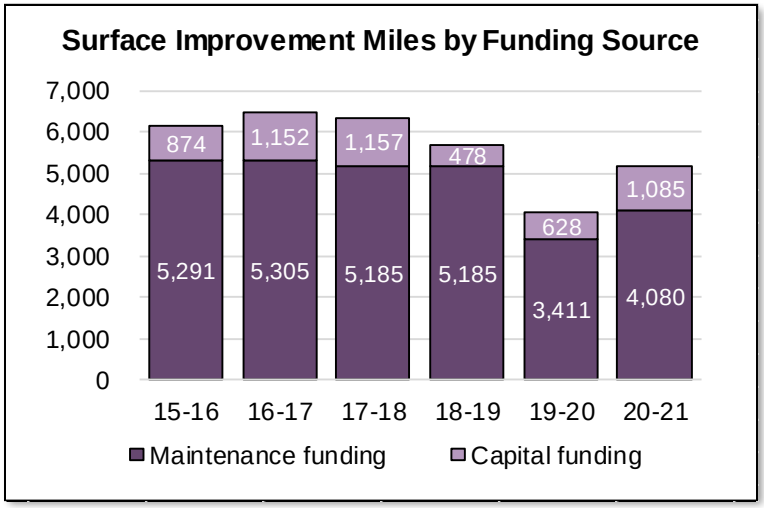
Performance Measures for Highway and Bridge Maintenance

	15-16	16-17	17-18	18-19	19-20	20-21
Activity Cost Analysis						
Bridge maint. deck repair (cost per sq yard)[1]	$302	$399	$397	$656	$423	--
Sealcoat cost per lane mile ($ thousands)[1]	$12.7	$12.4	$13.3	$15.9	$15.4	--
% Highway/bridge expenditures to contractors[1]	73.7%	72.6%	73.4%	73.5%	--	--
Winter events[1]	2,245	2,911	3,453	3,330	2,265	--
Cost per snow lane mile per event	$71	$68	$68	$69	$91	--
Outcome						
Surface improvement miles[2]	6,165	6,457	6,342	5,663	4,039	5,165
% Roadways in poor condition[3]						
NHS interstate highway	3.2%	3.2%	3.7%	3.7%	3.6%	--
NHS non-interstate highway	13.6%	12.4%	12.2%	13.1%	12.4%	--
Non-NHS high-traffic roads	14.1%	13.8%	13.6%	13.5%	13.2%	--
Non-NHS low-traffic roads	34.4%	33.8%	32.3%	32.7%	32.6%	--
Bridges in poor condition	15%	14%	12%	11%	10%	10%
Bridges preserved	216	248	229	181	338	349
Lowest life cycle cost[1]	--Recommended Measures--					
Winter event clearance time	--Recommended Measure--					
Roadway grip (during winter events)[1]	--Recommended Measure--					

Notes:
1 See notes on measures below.
2 This is the summation of miles completed with maintenance and capital funding.
3 Based on the International Roughness Index (IRI), which measures the smoothness of pavement. NHS is the National Highway System. Non-NHS high-traffic roads are roads with at least 2,000 average daily traffic (ADT). Non-NHS low-traffic roads are roads with less than 2,000 ADT. Data by calendar year.

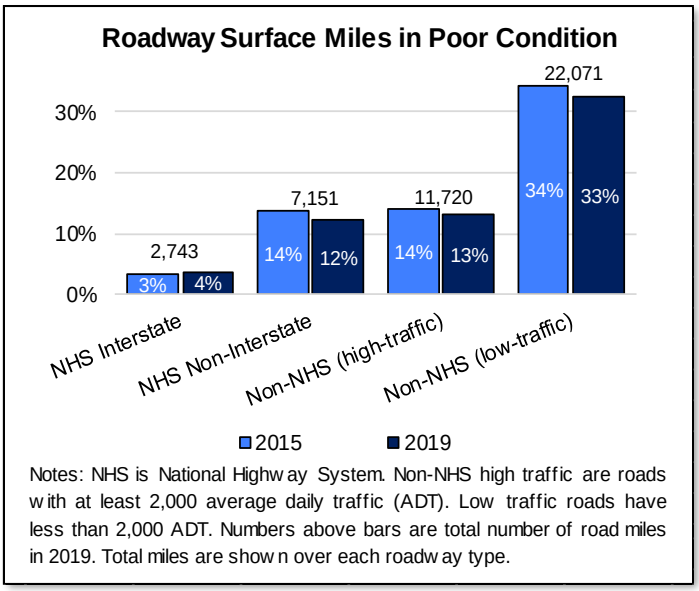
Notes on Measures

- Bridge maintenance deck repair (type 2) and seal coating are common maintenance and repair activities that are largely completed by agency staff.
- A winter event begins when any precipitation is recorded while surface temperatures are ≤ 32ºF. An event ends when surface temperatures rise above 32ºF and the pavement has returned to a dry condition. The department is in the process of developing a winter severity index that will allow for a better year to year evaluation of winter operations. Roadway grip measures the surface friction during an event to give an indicator of the maintenance treatment effectiveness.
- The share of expenditures paid to contractors includes funds for construction and maintenance. All construction projects are outsourced to contractors, while maintenance work is partially outsourced.
- The Federal Highway Administration is working with state transportation departments to develop goals and metrics related to the federal requirement to manage the NHS to the lowest life cycle cost (LLCC). The LLCC process maximizes the life of an asset at the lowest cost through risk-based prioritization of projects.

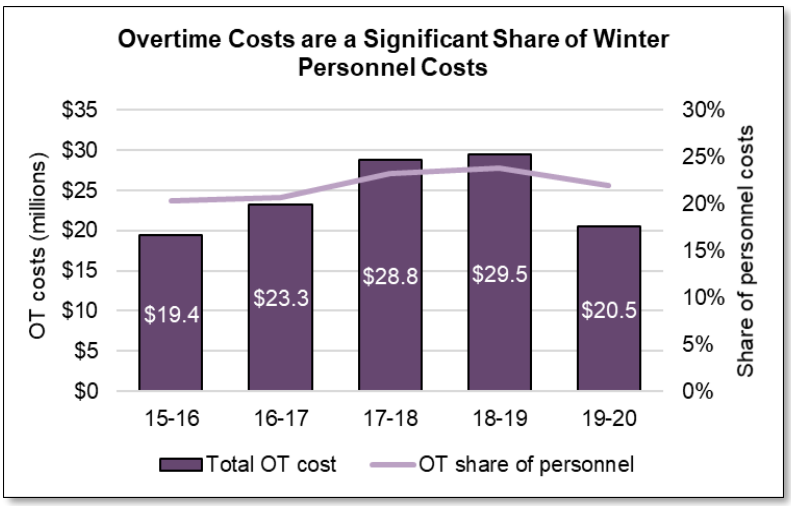


The department uses capital funding to increase **surface improvement miles**. Due to the COVID-19 pandemic, revenue reductions limit funds available for necessary road maintenance operations.

NHS interstates have the lowest **share of roadway surface segment miles rated in poor condition,** while lower-volume roads have a higher share. Non-interstate and non-NHS high- and low-traffic roads have shown improvement in pavement condition between 2015 and 2019. These lower-volume roads comprise over 93% of state maintained roadways.



Notes: NHS is National Highway System. Non-NHS high traffic are roads with at least 2,000 average daily traffic (ADT). Low traffic roads have less than 2,000 ADT. Numbers above bars are total number of road miles in 2019. Total miles are shown over each roadway type.



Winter operations personnel costs vary year to year, depending on the severity of the winter. However, **total overtime (OT) costs** associated with winter events are consistently a significant portion, averaging $24.3 million per year. In each of the past five years, OT costs (includes benefits) comprised 20% to 24% of personnel costs and 9% to 10% of total operations. For FY 2020-21, the department plans to hire 722 temporary staff in addition to the 4,700 department equipment operators.

Engineering District Benchmarks

Highway and Bridge Maintenance Engineering Districts

	State System			Interstate	State Bridges	Expenditures/LM
	LM[1]	DVMT[1]	Bridges[2]	% Poor	% Poor[2]	(FY 2019-20)
Statewide	**39,723**	**213,735**	**25,417**	**3.6%**	**10.2%**	**$40,162**
District 1	3,687	11,666	2,067	0.3	6.6	34,839
District 2	3,478	10,585	2,176	0.8	9.3	34,216
District 3	4,239	11,189	2,898	0.0	2.0	37,114
District 4	3,615	14,578	2,104	11.6	20.5	40,580
District 5	3,286	26,539	2,150	4.9	11.7	41,788
District 6	3,552	48,419	2,772	10.0	13.8	50,685
District 8	5,228	37,743	3,387	2.3	9.2	32,983
District 9	3,751	8,865	2,103	0.0	7.7	31,174
District 10	3,129	9,750	1,623	0.1	13.2	38,742
District 11	2,162	19,788	1,795	2.7	8.6	81,027
District 12	3,595	14,613	2,342	1.6	12.0	39,145

Notes:

1 LM is linear miles and is the length measured along the roadway centerline. DVMT is daily vehicle miles of travel and measures total travel by all vehicles.

2 Bridges on state route system, length 8 feet or greater, as of 9/30/2020.

Activity 3: Local System Construction and Maintenance

The department distributes revenues, vehicle code fines and certain fees to approximately 2,600 municipalities and 67 counties for the maintenance and repair of the locally-owned highway system that includes approximately 78,000 miles and 6,600 bridges. Distribution of funds are primarily based on formulas established in statute, with subsequent enhancements for local highway and bridge funding enacted in 2007 (Act 44), 2012 (Act 13) and 2013 (Act 89). The department provides technical assistance and financial reviews to ensure that expenditures are made in accordance with applicable laws. In addition to funds distributed by formula, local transportation projects are funded through other programs that include: (1) federal reimbursement funds coordinated with Metropolitan and Rural Planning Organizations, (2) optional, county assessments of a $5 fee on vehicle registrations and (3) vehicle code fines issued by the Pennsylvania State Police on non-state roadways. PennDOT administers the Green Light-Go program to upgrade municipal traffic signals to improve mobility and efficiency and the Highway Transfer program to restore a segment of road to acceptable condition in order to transfer ownership to local governments.

The primary goals and outcomes of this activity are as follows:

- Provide financial and technical assistance and funds to aid local governments in the maintenance and construction of locally-owned highways and bridges.
- Ensure proper use and oversight of funds by having agency staff act as liaisons to assist with annual reporting, road bonding and process road additions to the Municipal Liquid Fuel Inventory on which allocations are based.

Resources for Local System Construction and Maintenance

	15-16 Actual	16-17 Actual	17-18 Actual	18-19 Actual	19-20 Actual	20-21 Budget
Expenditures by Object						
Personnel Services	$3.0	$3.5	$2.9	$3.1	$2.6	$3.1
Operational Expenses	8.3	10.1	14.2	19.8	17.8	19.6
Grants	787.1	838.9	814.7	846.9	801.8	858.8
Fixed Assets Expense	-0.1	0.3	0.1	-0.3	0.0	0.5
Other	4.0	3.2	3.5	4.7	1.6	0.0
Total	**802.4**	**856.0**	**835.5**	**874.2**	**823.8**	**882.1**
Expenditures by Fund						
General Fund (Restricted)	6.5	7.3	7.5	7.1	6.2	7.0
Motor License Fund (State)	281.5	295.7	294.7	307.9	318.0	290.9
Motor License Fund (Augmentations)[1]	5.3	11.0	11.5	14.3	16.8	12.8
Motor License Fund (Restricted)[2]	479.5	509.2	491.1	514.9	454.8	544.6
Liquid Fuels Tax Fund	29.7	32.8	30.7	30.1	27.9	26.7
Total	**802.4**	**856.0**	**835.5**	**874.2**	**823.8**	**882.1**
Average Weekly FTE Positions	**15**	**15**	**14**	**13**	**12**	**11**
Personnel Cost/FTE ($ thousands)	**$198.8**	**$238.4**	**$210.2**	**$241.0**	**$217.4**	**$282.6**

Note: Expenditures in dollar millions. Actual expenditures are listed in the year the expenditure was recorded.

1 Includes state and federal revenues received by the department.

2 Includes state and federal revenues/reimbursements received by the department.

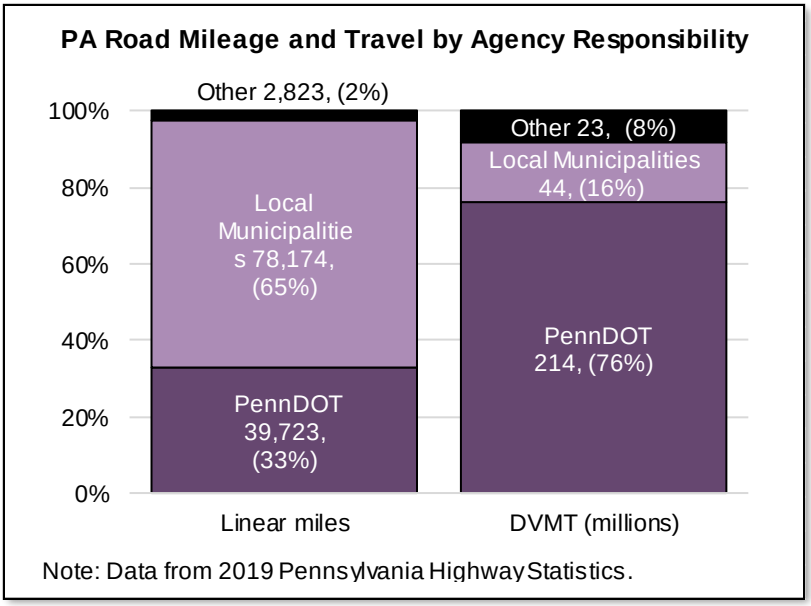
Performance Measures for Local System Construction and Maintenance

	15-16	16-17	17-18	18-19	19-20	20-21
Municipal and County Grant Funding[1,2]						
Total grant funding distributed	$787.1	$838.9	$814.7	$846.9	$801.8	--
Municipal LFT allocation distributed[3]	443.1	469.7	486.8	502.2	483.7	--
Federal reimbursement[4]	209.2	214.4	164.8	189.5	134.9	--
County LFT allocation distributed	29.4	32.4	30.3	29.7	27.4	--
County bridge program[5]	37.1	33.1	33.0	34.9	37.4	--
Local bridge program	22.2	32.1	25.2	23.5	24.0	--
Highway transfer program	27.7	25.7	32.0	27.6	24.6	--
Fee for local use[6]	3.7	21.8	29.2	29.2	35.0	--
Municipal traffic signals (Green Light-Go)[7]	4.1	4.3	6.1	7.2	26.0	--
Other grant funding[8]	14.7	9.7	12.0	9.6	11.1	--
Outcome						
Fatalities (local)	233	180	183	202	186	--
Highway transfer program miles[9]	4,767	4,774	4,798	4,819	4,837	--
Municipal signals upgraded (Green Light-Go)[10]	5	13	258	107	74	--
Municipal bridges in poor condition	34%	33%	31%	30%	28%	--
County bridges in poor condition	32%	30%	28%	27%	25%	--
Municipal bridges preserved	--Recommended Measure--					
County bridges preserved	--Recommended Measure--					
Surface improvement miles	--Recommended Measure--					
% Project costs over budget	--Recommended Measure--					
% On-time project delivery	--Recommended Measure--					

Notes:
1 Dollar millions.
2 See notes on measures.
3 LFT stands for Liquid Fuels Tax.
4 Federal reimbursement for political subdivisions and local bridge projects.
5 Includes funds provided by Act 44 of 2007, Act 89 of 2013 and Act 13 of 2012 (portion of the impact fee).
6 Currently, PennDOT collects this fee on behalf of 24 counties.
7 Includes non-grant (operating funds) for traffic signal upgrades administered by PennDOT on behalf of municipalities (PennDOT Element Green Light-Go projects).
8 Other grant funding includes vehicle codes fines and red light photo enforcement fines.
9 Highway Transfer archive.
10 Based on year of construction which may differ from the year the expenditure was recorded.

Notes on Measures

- The fee for local use is provided by Act 89 of 2013. As of January 1, 2015, a county may pass an ordinance to implement a $5 fee for each vehicle registered in the county. The fee is applied to the number of years a vehicle is registered (i.e., a two-year registration will have a $10 fee). The fee revenue can be used for highway and bridge improvements.



While local **road mileage** is almost double the state total, the average daily vehicle miles of travel (DVMT) on the local system is roughly 16% of the total for Pennsylvania. In FY 2019-20 state funding for state-owned roads and bridges averaged approximately $108,000 per mile and locally-owned roads and bridges averaged approximately $10,500 per mile.

Highway Transfer Program

	15-16	16-17	17-18	18-19	19-20	20-21
Restoration payment ($ millions)[1]	$8.7	$6.8	$15.9	$9.2	$5.5	--
Miles restored	12.5	9.6	21.2	18.8	12.3	--
Cost per mile ($ thousands)	$699.0	$709.8	$749.3	$488.5	$447.0	--
Annual maint. payment ($ millions)	$19.0	$19.0	$19.1	$19.1	$19.1	--
Miles maintained	4,755	4,764	4,777	4,800	4,825	--
Statutory cost per mile ($ thousands)	$4.0	$4.0	$4.0	$4.0	$4.0	--

Notes:
1 Annual budget for all years is $11 million. In FY 2017-18, additional funds requested to cover costs.

The Highway Transfer program allows the department to restore a segment of road to acceptable condition and transfer ownership to a local government that will assume ownership of the segment of road going forward. After the transfer, the department provides an annual maintenance payment to local governments at the statutory rate of $4,000 per mile. The cost to the department to restore a mile of road fluctuates annually based on the number of bridges that are in the restored section of road (e.g., FY 2017-18 had five bridges and FY 2019-20 had no bridges).

$5 Fee for Local Use Allocation

County	Revenue 2018-19	Revenue 2019-20	FY 19-20 Revenue per LM	County	Revenue 2018-19	Revenue 2019-20	FY 19-20 Revenue per LM
Total	**$29,250**	**$37,433**	**$0.9**	Westmoreland	$1,563	$1,884	$0.8
Philadelphia	3,602	4,191	1.9	Beaver	714	857	0.8
Montgomery	3,233	4,112	1.4	Cambria	593	697	0.7
Bucks	2,665	3,319	1.3	Centre	510	625	0.7
Pike	269	323	1.2	Erie	1,024	1,165	0.7
Allegheny	4,207	5,120	1.1	Butler[2]	387	1,104	0.7
Dauphin	1,112	1,335	1.0	Union	175	206	0.6
Cumberland	1,066	1,333	1.0	Mifflin	212	239	0.6
Chester	1,968	2,580	1.0	Schuykill	680	749	0.6
York	1,997	2,489	0.9	Lycoming	528	616	0.5
Berks	1,759	2,134	0.9	Greene	169	197	0.2
Luzerne[1]	282	1,524	0.9	Delaware[3]	0	0	0.0
Blair	533	632	0.8				

Notes: Dollar amounts in thousands.
1 Effective date April 1, 2019.
2 Effective November 1, 2018. Ordinance is set to sunset July 18, 2028.
3 Effective May 24, 2020.

Act 89 of 2013 allows counties to collect a $5 fee for every vehicle registered in the county, effective January 1, 2015. The fee is based on the number of years the vehicle is registered (i.e., a two-year registration would pay a $10 fee). Counties can use the fee to supplement highway and bridge funding.

Activity 4: Highway and Safety Operations

The Highway Safety and Traffic Operations Division (HSTO) is the primary delivery center for this activity and publishes guidance and policies related to PennDOT's Highway Safety Improvement Program. The HSTO oversees (1) work zone traffic control and the Traffic Management Center, (2) the software and performance data used for operations, (3) guidance for traffic signals and intelligent transportation systems, (4) pavement markings and signing, as well as highway occupancy and special hauling permits and (5) crash reports, along with the safety engineering and behavioral program services that are deployed to reduce future crashes. The department also oversees the motor carrier safety program and offers motorcycle safety classes through a third-party vendor.

The primary goals and outcomes of this activity are to facilitate the movement of people and goods, improve safety by moving towards zero traffic-related deaths, and create a less congested and more reliable network.

Resources for Highway and Safety Operations

	15-16 Actual	16-17 Actual	17-18 Actual	18-19 Actual	19-20 Actual	20-21 Budget
Expenditures by Object						
Personnel Services	$8.6	$9.8	$9.3	$9.2	$9.0	$8.2
Operational Expenses	18.6	23.5	23.7	17.3	18.3	21.5
Grants	9.8	9.7	10.5	10.5	10.1	26.2
Fixed Assets Expense	0.2	0.1	0.1	0.1	0.0	0.0
Other	6.1	0.0	0.0	0.0	0.0	0.0
Total	**43.3**	**43.0**	**43.5**	**37.1**	**37.5**	**55.9**
Expenditures by Fund						
General Fund (Restricted)	0.3	0.2	0.2	0.2	0.0	0.3
Motor License Fund (State)	19.8	24.3	23.7	20.0	20.1	12.0
Motor License Fund (Augmentations)[1]	0.3	0.8	0.8	0.4	1.9	8.0
Motor License Fund (Federal)	3.1	3.2	5.4	6.5	12.9	29.6
Motor License Fund (Restricted)	19.7	14.6	13.4	9.9	2.6	6.0
Total	**43.3**	**43.0**	**43.5**	**37.1**	**37.5**	**55.9**
Average Weekly FTE Positions	**79**	**81**	**76**	**72**	**75**	**74**
Personnel Cost/FTE ($ thousands)	**$109.2**	**$121.2**	**$121.8**	**$126.3**	**$120.7**	**$111.2**

Note: Expenditures in dollar millions. Actual expenditures are listed in the year the expenditure was recorded.

1 Includes state and federal revenues received by the department.

Performance Measures for Highway and Safety Operations

	2015	2016	2017	2018	2019	2020
Highway Safety						
# HSIP safety projects[1]	98	153	122	121	120	110
Fatalities[2]	1,240	1,220	1,186	1,182	1,155	1,172
Fatality rate[2,3]	1.24	1.22	1.18	1.17	1.14	1.15
Suspected serious injuries[1,2]	3,235	3,434	3,588	3,840	4,167	4,400
Suspected serious injury rate[1,2,3]	3.24	3.43	3.57	3.80	4.10	4.31
Non-motor. fatalities and serious inj.[2,4]	572	603	630	679	738	782
Motorcycle Safety						
Fatalities	179	192	185	164	174	--
Crashes	3,413	3,454	3,194	2,714	2,968	--
Licensed motorcyclists	860,600	857,478	845,977	835,787	825,898	--
# Receiving safety training[5]	18,230	16,673	13,007	8,696	13,662	--
Cost per trained motorcyclist[6]	$206	$290	$212	$350	$243	--
Traffic Reliability						
Truck travel time index[1]	--	--	1.34	1.39	1.36	1.34
Interstate travel time reliability[1]	--	--	89.7%	89.6%	89.7%	89.8%
Average incident clearing minutes[7]	--	--	77	82	79	--

Notes:

1 See notes on measures.

2 Five-year average.

3 Per 100 million vehicles miles traveled (VMT).

4 A common example would involve a vehicle hitting a pedestrian or bicyclist.

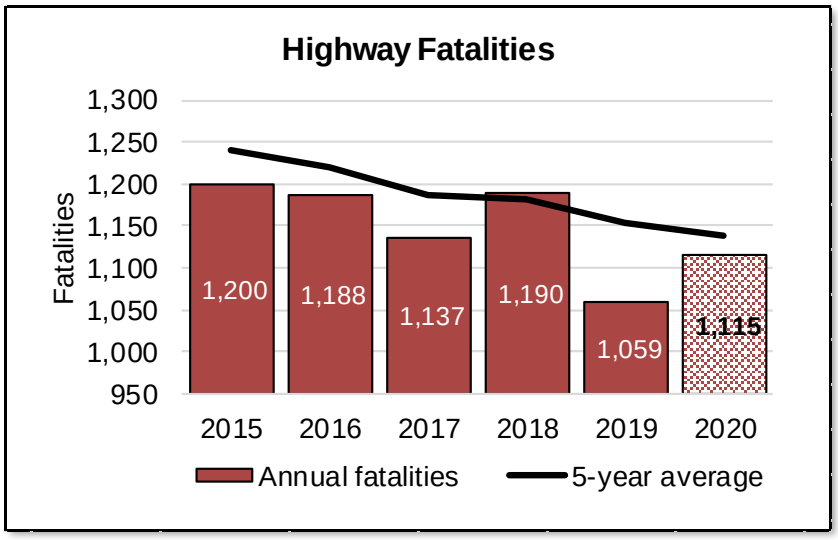
5 A free, hands-on training for residents with a valid Pennsylvania motorcycle license or permit.

6 Motor License Fund expenditure for motorcycle safety education divided by the number of motorcyclists that were trained. Calculations by the IFO.

7 PA Highway Statistics (2019) and PennDOT's Roadway Condition Reporting System data.

Notes on Measures

- The department's Highway Safety Improvement Plan (HSIP) has a biennial set aside program that totals $70 million. This program funds local safety projects based on a benefit-cost analysis relative to reductions in fatalities, injuries and property damage. At the program level, PennDOT estimates that 99 fatalities have been eliminated as a result of HSIP safety projects between 2002 and 2015. PennDOT also estimates the benefit-cost ratio over this time period at 2.55 to 1.
- Pennsylvania's definition for suspected serious injuries was changed in 2016 to align with federal standards. Because this measure is reported as a five-year moving average, 2020 will be the first year the measure is reported without any data from the previous definition. The 2020 measure reflects PennDOT's target.
- Truck travel time reliability index is a ratio that compares the 95th percentile truck travel time to the 50th percentile (median) travel time for the interstate highway system. For example, a value of 1.3 indicates a 20-minute trip during typical conditions requires 26 minutes on a "bad" day, which may be a result of inclement weather, construction work zones, and/or traffic incidents.
- Interstate travel time reliability reflects the consistency or dependability of travel times from day to day or across different times of day.



Statewide **highway motor vehicle crash fatalities** reached a new low in 2019, dropping to 1,059 (-11% decline). The 5-year average motor vehicle fatality rate for 2019 (1.14 per 100 million VMT) is slightly lower than the preliminary national rate (1.15). The 2020 fatality figure is a projection based on preliminary state data from the National Safety Council through December. The data show a significant uptick in fatality rates, and safety experts have noted that more drivers now engage in high-risk behaviors (e.g., excessive speeding, alcohol use) than prior to the pandemic.

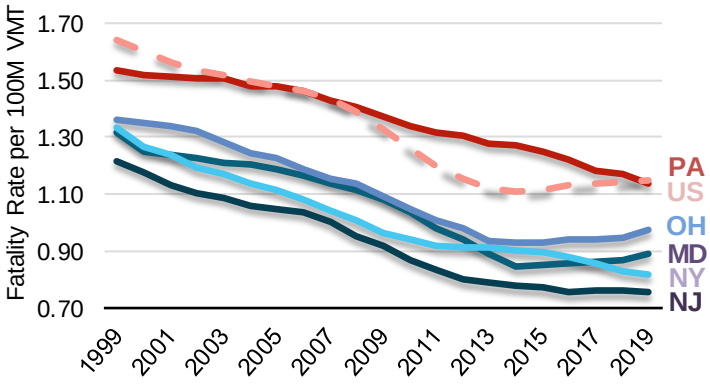
Traffic Incidents and Average Clearance Time by Region and Engineering District

	State and Local Roads		Incidents/100,000 DVMT		Clearance Time	
	DVMT (000s)	Incidents	Rate	Ratio	Avg. Min.	Ratio
Statewide	**281,547**	**12,413**	**4.41**	**1.00**	**79**	**1.00**
Western Region	74,107	2,203	2.97	0.67	77	0.97
District 1	14,010	120	0.86	0.19	139	1.76
District 10	11,801	50	0.42	0.10	198	2.51
District 11	28,760	1,846	6.42	1.46	66	0.84
District 12	19,536	187	0.96	0.22	113	1.43
Central Region	38,444	1,124	2.92	0.66	116	1.47
District 2	12,148	526	4.33	0.98	117	1.48
District 3	13,054	410	3.14	0.71	103	1.30
District 9	13,242	188	1.42	0.32	140	1.77
Eastern Region	100,966	4,538	4.49	1.02	82	1.04
District 4	17,770	331	1.86	0.42	125	1.58
District 5	34,701	1,670	4.81	1.09	75	0.95
District 8	48,495	2,537	5.23	1.19	81	1.03
Southeastern Region	68,030	4,548	6.69	1.52	68	0.86
District 6	68,030	4,548	6.69	1.52	68	0.86

Note: The ratios compare engineering district incidents and clearance times on state roads to the statewide totals. Regions and districts are evaluated versus statewide totals.
Source: PA Highway Statistics (2017, 2018, 2019) and PennDOT's Roadway Condition Reporting System data.

PennDOT engineering districts with the most daily vehicle miles of travel (DVMT) in Philadelphia (District 6) and the Eastern Region (District 8) have higher incident rates compared to the statewide average. Philadelphia and Allegheny (District 11) counties have lower than average incident clearance times while rural areas with low levels of DVMT and incidents have higher incident clearing times.

State and County Benchmarks



Note: Five-year moving average calculated from 1995-2019.

Source: National Highway Traffic Safety Administration, Fatality Analysis Reporting System and State Traffic Safety Information reports (2020).

PennDOT compiles **motor vehicle crash fatality** data from all state and local emergency responders to report to the U.S. DOT's National Highway Traffic Safety Administration. The U.S. DOT reports the data for all states as a five-year moving average and states establish two- and four-year goals. The U.S. DOT has established a nationwide goal of zero deaths by 2050. For 2019, PennDOT reported a motor vehicle crash fatality rate of 1.14 per 100 million VMT presented as a five-year moving average. For 2020, PennDOT has established a target rate of 1.15 per 100 million VMT.

From 2015 to 2019 Pennsylvania recorded a 13% drop in the motor vehicle crash fatality rate. While urban and suburban five-year average rates tracked below the statewide average (e.g., Chester 0.78, Allegheny 0.77, Cumberland 0.75), rural counties tracked above the statewide average.

Annual County Fatality Rates per 100 million VMT

	2015	2017	2019	5-Year Avg.
Statewide	**1.19**	**1.12**	**1.03**	**1.14**
Top Five				
Montgomery	0.54	0.61	0.48	0.57
Delaware	0.65	0.73	0.90	0.74
Cumberland	0.47	0.92	0.59	0.75
Allegheny	0.63	0.81	0.74	0.77
Chester	0.83	0.79	0.66	0.78
Bottom Five				
McKean	1.50	0.96	4.25	2.06
Wayne	1.87	1.44	2.71	2.08
Bradford	2.63	1.58	2.31	2.11
Fayette	2.90	2.25	1.73	2.18
Forest	0.00	3.09	1.71	2.83

Notes: County rates are average daily vehicle miles of travel (DVMT) converted to an annual estimate. Calculations by the IFO.

Activity 5: Driver and Vehicle Services

The driver and vehicle services activity oversees front-line customer service operations that affect the majority of Pennsylvania's residents. The state has approximately 10.4 million driver license and ID card holders and more than 12 million registered vehicles including automobiles, commercial vehicles, trailers and fleet vehicles. The department processes applications and collects fees for all vehicle registrations and titles, driver license and identification (ID) cards. As a part of these duties, the department implemented the federally mandated REAL ID program that is scheduled to be fully implemented by October 2021. The driver and vehicle services program oversees operator and vehicular licensing activities such as testing, inspections and revocations of Pennsylvania driver licenses.

Through their driver service operations, the department coordinates information with other federal, state and local agencies to: (1) collect local use fees for participating counties, (2) maintain the Commonwealth's information with the National Motor Vehicle Titling Information System, (3) assist the Department of Human Services' collection of child support, (4) manage registration and titling for all-terrain vehicles and snow mobiles for the Department of Conservation and Natural Resources and (5) provide eligible customers the opportunity to apply for voter registration.

The primary goal of this activity is to provide motor vehicle products and services to allow Pennsylvania residents to operate safely on state roadways. The expected outcome is the timely and accurate processing of driver and vehicle transactions to ensure mobility, identity security and safety for Pennsylvanians.

Resources for Driver and Vehicle Services

	15-16 Actual	16-17 Actual	17-18 Actual	18-19 Actual	19-20 Actual	20-21 Budget
Expenditures by Object						
Personnel Services	$90.4	$92.1	$93.2	$97.5	$99.8	$113.4
Operational Expenses	73.6	79.5	89.4	110.0	96.9	121.7
Grants[1]	13.7	11.5	13.4	10.8	5.3	15.5
Fixed Assets Expense	0.0	0.1	0.1	0.5	0.0	0.1
Other	4.7	5.4	10.1	18.7	29.7	34.5
Total	**182.3**	**188.5**	**206.1**	**237.6**	**231.7**	**285.2**
Expenditures by Fund						
General Fund (State)	1.1	1.8	1.6	1.6	1.5	1.2
Motor License Fund (State)[2]	139.0	143.1	158.4	191.1	193.3	234.0
Motor License Fund (Augmentations)	28.1	31.8	32.2	33.6	31.2	34.5
Motor License Fund (Restricted)	14.1	11.8	14.0	11.2	5.6	15.5
Total	**182.3**	**188.5**	**206.1**	**237.6**	**231.7**	**285.2**
Average Weekly FTE Positions	**1,061**	**1,058**	**1,061**	**1,147**	**1,241**	**1,412**
Personnel Cost/FTE ($ thousands)	**$85.1**	**$87.0**	**$87.9**	**$85.0**	**$80.4**	**$80.3**

Note: Expenditures in dollar millions. Actual expenditures are listed in the year the expenditure was recorded.

1 As a part of the commercial vehicle apportioned registration program (a part of the International Registration Plan, a federal program), the department collects and distributes funds on a monthly basis for other jurisdictions. Participating jurisdictions do the same for Pennsylvania.

2 FY 2020-21 includes $49.3 million in funding for development of the modernized vehicle driver license services system (an increase of $20.3 million over the prior year).

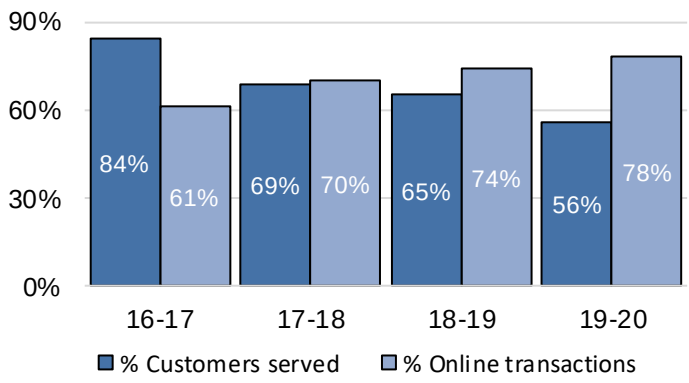
Performance Measures for Driver and Vehicle Services

	15-16	16-17	17-18	18-19	19-20	20-21
Workload (in thousands)						
Driver licenses issued/renewed	2,500	2,522	2,480	2,532	2,503	--
State IDs issued/renewed	369	368	353	342	302	--
Real IDs issued/renewed[1]	--	--	--	219	683	--
Motor vehicles						
Registered or renewed	11,257	11,071	10,148	9,719	9,737	--
Titles issued/renewed/transferred	3,299	3,299	3,103	2,923	2,185	--
Motor voter applications	284	256	247	257	228	--
Outcome[2]						
% DLC customers served in ≤ 30 minutes[3]	83%	84%	69%	65%	56%	--
% Online transactions[4]	58%	61%	70%	74%	78%	--
% Real IDs issued of total DL and IDs	--	--	--	2%	9%	--
Mail service turnaround time (business days)						
DL and VR renewals	8.0	8.0	8.0	8.0	8.0	--
DL applications	9.5	7.9	6.9	6.6	7.3	--
Initial title and registration	12.3	12.0	18.3	15.2	18.4	--
Service quality rates						
Driver license centers[5]	74.8%	81.0%	80.7%	--	--	--
Key suppliers[6]	97.4%	94.4%	89.9%	91.9%	89.6%	--

Notes:
1 REAL ID issuance began in March 2019.
2 DLC stands for driver license center. DL stands for driver license. VR stands for vehicle registration.
3 Due to the COVID-19 pandemic, FY 2019-20 is only through January 2020.
4 Calendar year data. Compared to the total number of VR and DL transactions.
5 A measure of transaction accuracy performed at Driver License Centers.
6 A measure of title and registration transaction accuracy performed by online messengers and dealers.

Notes on Measures

- In response to the COVID-19 pandemic and associated mitigation efforts, the department implemented a variety of operational changes that affect performance measure data.
- The REAL ID enforcement deadline has been delayed until October 1, 2021. As of December 17, 2020, approximately 10 percent of driver license or ID holders have a REAL ID (1.0 million).
- In FY 2020-21, the motor voter program cost estimate is $548,000 and includes facility and labor costs.



Note: Due to the COVID-19 pandemic, FY 19-20 is only through January 2020.

The **share of customers served within 30 minutes** at driver license centers decreased 28 percentage points from FY 2016-17. The increase in wait times is due to the installation of an automated system that tracks wait times more accurately and the provision of new services (e.g., REAL ID issuance, child IDs, CDL requirements and additional verifications and systems checks).

The **regional detail of customers served within 30 minutes** reveals that all three PennDOT regions experienced a decline from FY 2017-18 to 2019-20. The two regions with the largest declines contain the two largest metro areas in the state (i.e., Western region (Pittsburgh area) and Eastern region (Philadelphia area)).

% Customers Served Within 30 Minutes by Region

	2017-18	2019-20	Change
Statewide	**69%**	**56%**	**-19%**
Western	88	70	-20
Central	75	70	-7
Eastern	62	54	-13

Vehicle Registration Renewals

	2015-16	%	2017-18	%	2019-20	%
Total Registrations[1]	**11,975**		**11,832**		**12,008**	
1-year	11,975	100.0%	10,022	84.7%	10,551	87.9%
2-year	--	--	1,741	14.7%	1,326	11.0%
5-year	--	--	68	0.7%	131	1.2%
Registration revenue[2]	$720		$775		$747	
FTEs[3]	--		--		150	
Registration per FTE[1]	--		--		80	

Notes:
1 Amounts in thousands. The option for a biennial registration began January 1, 2017.
2 Amounts in millions.
3 FTE positions have other responsibilities in addition to processing vehicle registration renewals.

Act 89 of 2013 implemented an optional two-year registration renewal. Registrants can choose to pay the two-year fee for certain types of vehicles. The fee is twice the amount of an annual registration. Even though there is no discount for the registrant, a two-year registration is a transaction time and cost savings for the department.

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Activity 6: Large Urban Public Transit

The department provides oversight and financial assistance for public transportation in the two major metro areas of Pennsylvania: (1) Philadelphia which is served by the Southeastern Pennsylvania Transportation Authority (SEPTA) and (2) Pittsburgh which is served by the Port Authority of Allegheny County (PAAC). By providing funds for operational and capital expenditures, the state supports fixed-route and demand-response transit which provides economic and equity benefits including job creation, improved sustainability, reduced congestion and improved air quality. PennDOT also provides safety oversight through the State Safety Oversight and the Electric Mass Transit Vehicle Inspection programs.

Grant funding included in this activity supports free and subsidized transportation services that enable individuals who are transit-dependent to travel to medical appointments, school, work, stores and recreational opportunities. The shared-ride program provides seniors and persons with disabilities access to services while living in the community.

The primary goals and outcomes of this activity are as follows:

- Provide oversight and technical assistance to transit agencies to ensure the provision of effective, equitable and safe public transportation.
- Provide operating and capital financial support so that transportation service continues uninterrupted for residents of the Philadelphia and Pittsburgh metro regions.

Resources for Large Urban Public Transit

	15-16 Actual	16-17 Actual	17-18 Actual	18-19 Actual	19-20 Actual	20-21 Budget
Expenditures by Object						
Personnel Services	$0.4	$0.4	$0.4	$0.4	$0.4	$0.5
Operational Expenses	0.6	1.0	1.1	1.6	1.5	16.6
Grants	1,254.8	1,379.3	1,351.3	1,362.2	1,405.0	1,791.4
Other	0.0	0.0	-0.1	0.1	0.0	0.0
Total	**1,255.9**	**1,380.6**	**1,352.7**	**1,364.2**	**1,406.9**	**1,808.5**
Expenditures by Fund						
General Fund (Federal)	1.3	1.3	1.2	1.6	1.7	2.5
Lottery Fund	30.3	26.1	26.8	23.1	22.7	27.7
Public Transportation Asst. Fund	201.8	214.1	225.9	242.4	248.6	229.2
Public Transportation Trust Fund	899.1	1,016.4	964.0	957.1	1,016.6	1,233.1
Capital Facilities Fund	123.5	122.8	134.8	140.0	117.2	315.9
Total	**1,255.9**	**1,380.6**	**1,352.7**	**1,364.2**	**1,406.9**	**1,808.5**
Average Weekly FTE Positions	**4**	**3**	**3**	**3**	**3**	**3**
Personnel Cost/FTE ($ thousands)	**$108.8**	**$113.4**	**$116.8**	**$124.9**	**$135.7**	**$161.6**

Note: Expenditures in dollar millions. Actual expenditures are listed in the year the expenditure was recorded.

Performance Measures for Large Urban Public Transit

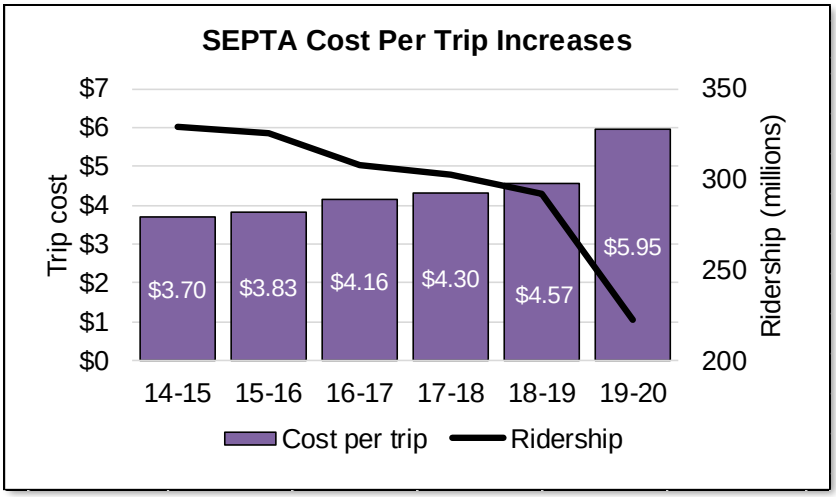
	15-16	16-17	17-18	18-19	19-20	20-21
SEPTA						
State support per trip[1]	$2.65	$3.16	$2.41	$3.08	$4.29	--
Trips per hour[2]	46.8	44.4	42.6	41.0	34.5	--
Operating cost per hour[2]	$179.2	$184.6	$183.2	$187.4	$205.0	--
Operating revenue per hour[2]	$73.4	$69.6	$72.2	$71.0	$61.0	--
Operating cost per trip[2]	$3.8	$4.2	$4.3	$4.6	$5.9	--
Trips per capita[2,3,4]	85.2	80.3	78.8	85.3	65.1	--
Trips per employee (thousands)[2,3]	32.2	30.6	29.8	28.7	--	--
Free senior rides (millions)[2]	26.2	25.1	25.5	25.5	20.5	--
Shared-ride cost per trip	$35.4	$42.2	$43.9	$50.5	$56.1	--
Shared-ride revenue per trip	$25.8	$26.3	$27.0	$27.0	$27.0	--
Vehicles met or past useful life[5]	--	--	9%	8%	--	--
PAAC						
State support per trip[1]	$4.20	$4.46	$4.10	$5.02	$6.36	--
Trips per hour[2]	32.1	31.4	31.0	31.9	27.9	--
Operating cost per hour[2]	$192.2	$191.4	$195.1	$208.4	$229.4	--
Operating revenue per hour[2]	$50.0	$48.2	$48.6	$49.7	$44.8	--
Operating cost per trip[2]	$6.0	$6.1	$6.3	$6.5	$8.2	--
Trips per capita[2,3,4]	44.3	43.9	44.1	44.5	36.0	--
Trips per employee (thousands)[2,3]	21.8	20.5	21.4	22.1	--	--
Free senior rides (millions)[2]	5.0	4.8	4.6	4.7	4.0	--
Shared-ride cost per trip	$24.8	$25.9	$27.9	$29.2	$33.2	--
Shared-ride revenue per trip	$21.5	$22.0	$22.6	$22.5	$22.8	--
Vehicles met or past useful life[5]	--	--	20%	17%	--	--

1 Calculations by the IFO include state grant funding for both operating and capital and both Act 44 and shared-ride trips.
2 Act 44 data only. Operating revenues are fares collected.
3 Calculations by the IFO. Employment and service population data are from PennDOT Annual Performance Reports.
4 Population for FY 19-20 service area was assumed to be equal to FY 18-19 service area.
5 National Transit Database, calculations by the IFO using manufacturing year and useful life benchmarks.

Notes on Measures

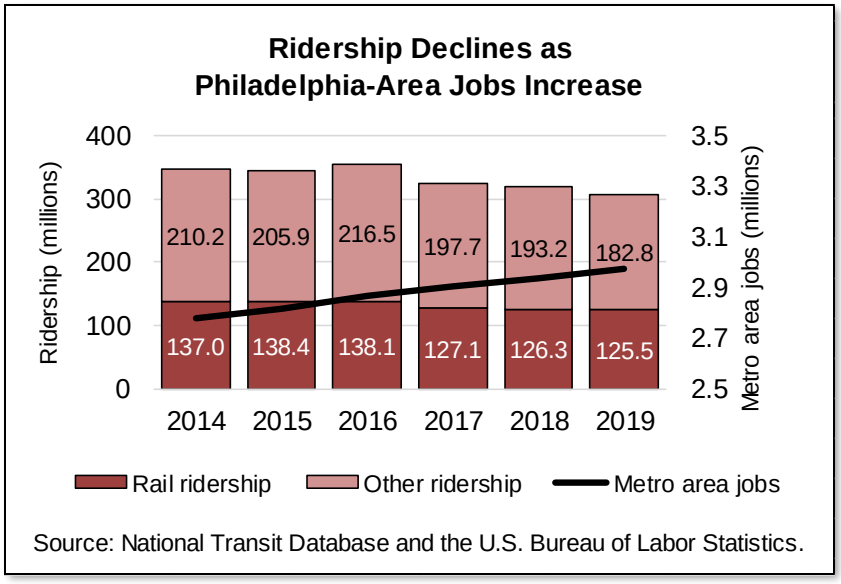
- Hourly metrics reflect hours a transit vehicle is in service and generates revenue. It does not include time when the vehicle is in transit but does not accept passengers.
- PennDOT monitors agency performance as directed by Act 44 of 2007. Every five years, agencies are reviewed based on four key metrics: (1) trips per hour, (2) operating cost per hour, (3) operating revenue per hour and (4) operating cost per trip. Goals for these metrics are established and compared to similar urban transit agencies. Funding can be withheld if progress or a good-faith effort towards these goals is not made.
- Measures that reflect Act 44 data only are based on fixed route and paratransit trips. These services are provided on a routine operating schedule and locations, typically provided by bus and various forms of rail. Performance data for shared-ride programs are not included in these figures.

SEPTA

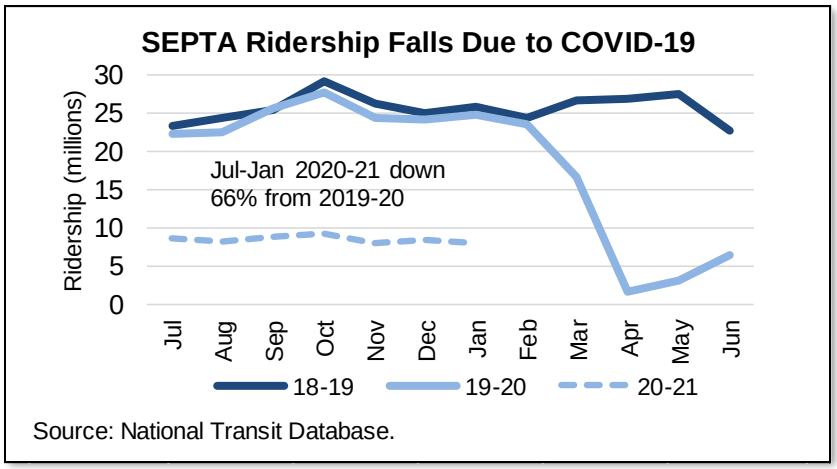


Annual **operating costs per trip** increased as overall ridership steadily declined. Act 44 ridership fell by 11% from FY 2014-15 to FY 2018-19. This follows the national trend for transit ridership, as national ridership for all modes fell by nearly 8% in the same time period. Transit ridership often declines in response to lower gas prices. Increased competition from private shared-ride platforms (i.e., Lyft, Uber) likely also contribute to this downward trend.

From 2014 to 2019, the **total ridership** fell as jobs steadily increased in the Philadelphia Metropolitan Area, including rail trips. In 2019, there were 125.5 million trips on these rail lines, and ridership for these modes declined at a slower rate (-8%) than overall system ridership (-11%). Data from SEPTA show that peak ridership hours (between 6:00-8:59 A.M. and 3:30-6:29 P.M. each weekday) account for 45% of total ridership.



Source: National Transit Database and the U.S. Bureau of Labor Statistics.

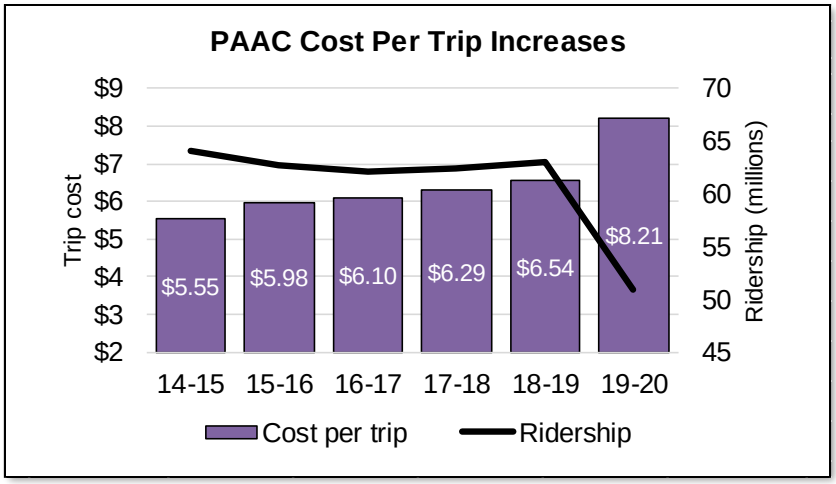


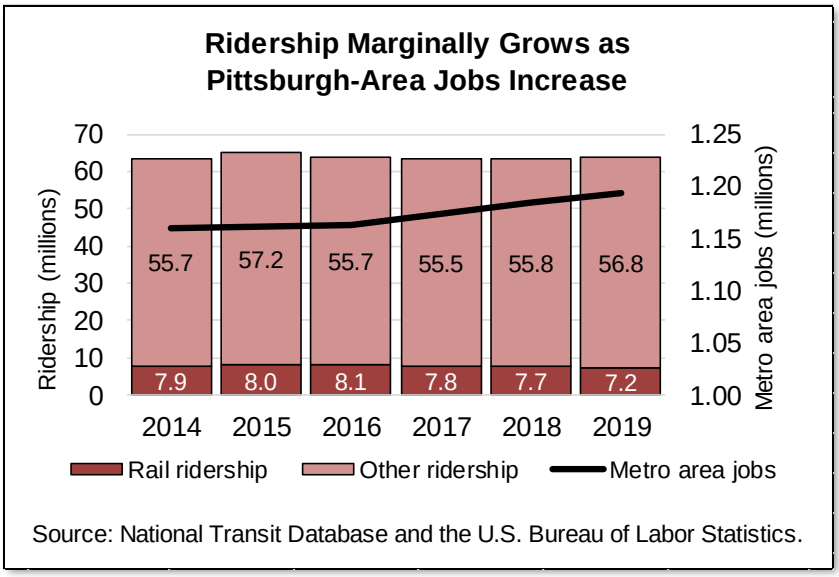
Source: National Transit Database.

SEPTA **total ridership** declined by more than one-quarter for FY 2019-20 due to COVID-19 and related mitigation efforts. Ridership fell to under 224 million for the fiscal year, nearly 85 million less than the prior year. In April, ridership recorded the largest year-over-year drop with 25 million (94%) fewer passengers. SEPTA will use $644 million from the CARES Act to offset impacts related to COVID-19.

PAAC

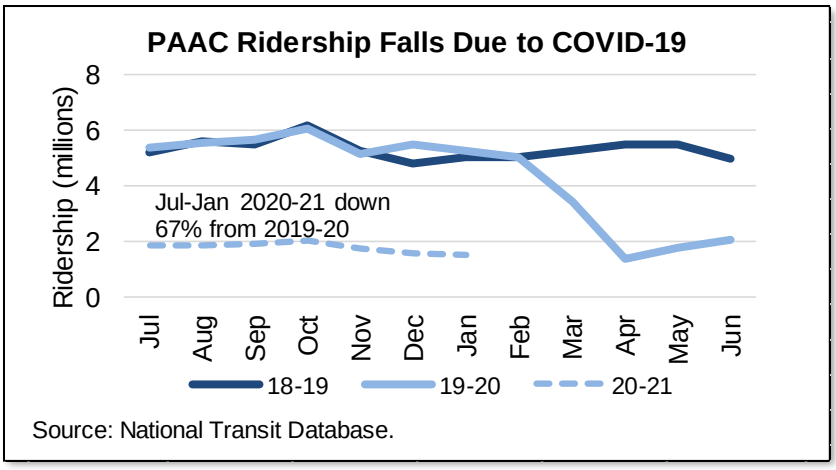
From FY 2014-15 to FY 2018-19, annual **operating cost per trip** increased by 18% and Act 44 trips declined by over 1 million annual trips (-2%). However, since FY 2017-18, total trips increased by 1%. This increase is contrary to national trends in which all mode ridership decreased by 2% from FY 2016-17 to FY 2018-19.



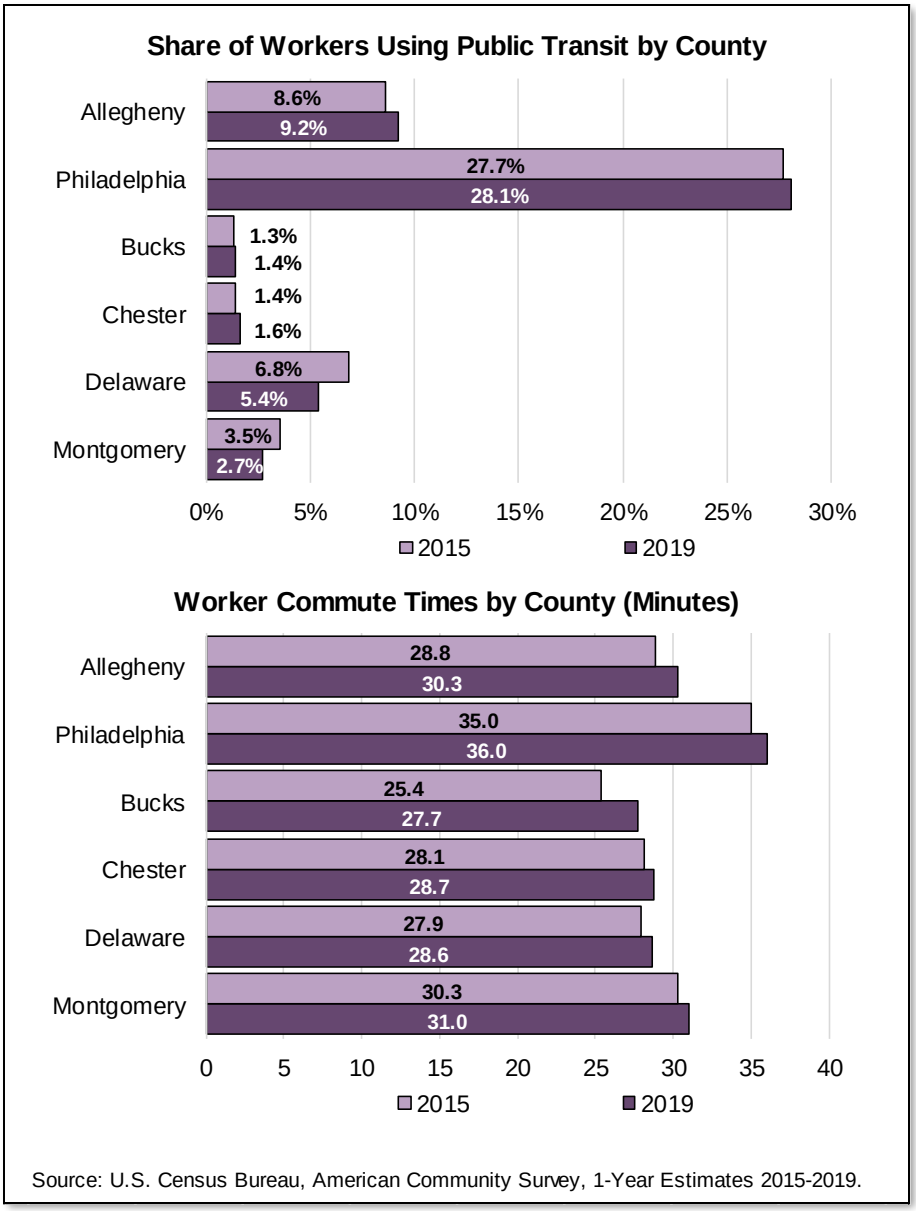


Total ridership for PAAC increased by slightly less than 1% from 2014 to 2019, as the Pittsburgh metro area added approximately 35,000 jobs (3%). Rail ridership fell by 775,000 trips (-10%), totaling nearly 7.2 million in 2019.

PAAC's **total ridership** declined more than 18% in the latest fiscal year as a result of the pandemic and related mitigation efforts. For FY 2019-20, total ridership was roughly 52 million, a decline of nearly 12 million trips from the prior year. Much like SEPTA, the largest reduction occurred in April, with a 4 million (74%) decrease from the prior year. In response to the COVID-19 pandemic, PAAC will receive $142 million in funding from the federal CARES Act.



County Benchmarks



Source: U.S. Census Bureau, American Community Survey, 1-Year Estimates 2015-2019.

For both public transit agencies, ridership stagnated or declined while jobs increased in their metro regions. Data from the U.S. Census Bureau, show a decline of **workers in suburban counties using public transit** and a modest increase in **commute times** for residents in all major counties. While public transit use by workers in Philadelphia and Allegheny County increased from 2015 to 2019, ridership declined for most of the suburbs surrounding Philadelphia. This outcome corresponds with longer commuting times across all counties. While slight, a one-minute increase in commute time equates to approximately nine additional commuting hours per person per year.

Transit Agency Comparisons

In PennDOT's Act 44 performance reviews of Commonwealth transit agencies, the department compares outcomes from agency operations to similar agencies across the country. Key findings include:

SEPTA receives a higher share of state support (50.1 percent) than comparison agencies, with three of the four receiving less than 30 percent of funding from the state. Although SEPTA has the lowest operating cost per hour ($175.5), it also has the lowest revenue generation per hour ($61.5), and therefore its operating deficit per hour (-$114.1) is comparable to other transit agencies.

PAAC has the second highest operating cost per hour ($181.9) and the highest hourly revenue generation ($42.3), which results in an operating deficit similar to other agencies. While PAAC receives more than half (55.3 percent) of its budget from the state, the Minneapolis system (60.4 percent) receives a higher share. Agencies in St. Louis and Cleveland receive no material state support. The transit agency serving Baltimore is excluded from the comparison as it is operated by the State of Maryland.

SEPTA Funding and Metric Comparisons (2019)

	SEPTA	Chicago	Boston	New York City	Washington D.C.
State Funds	50.1%	13.8%	44.2%	27.7%	23.0%
Federal Funds	6.0%	0.6%	0.0%	0.0%	2.6%
Local Funds	7.2%	41.0%	9.1%	19.2%	36.0%
Direct Funds	36.6%	44.7%	46.7%	53.1%	38.5%
Trips per hour	41.0	45.4	48.7	85.3	36.9
Operating cost per trip	$4.3	$4.3	$4.1	$3.3	$5.7
Operating cost per hour	$175.5	$195.8	$200.1	$278.6	$210.2
Operating revenue per hour	$61.5	$83.8	$89.3	$143.1	$69.3
Operating deficit per hour	-$114.1	-$112.0	-$110.9	-$135.5	-$140.8

PAAC Funding and Metric Comparisons (2019)

	PAAC	Minneapolis	St. Louis	Cleveland	Baltimore
State Funds	55.3%	60.4%	0.2%	0.0%	81.4%
Federal Funds	10.1%	4.3%	6.2%	7.7%	2.2%
Local Funds	10.0%	9.3%	76.8%	74.9%	0.0%
Direct Funds	24.7%	25.9%	16.8%	17.4%	16.4%
Trips per hour	26.9	31.9	19.0	19.1	22.0
Operating cost per trip	$6.8	$5.5	$7.7	$9.3	$8.9
Operating cost per hour	$181.9	$174.3	$145.8	$178.1	$195.2
Operating revenue per hour	$42.3	$40.4	$21.0	$26.8	$31.5
Operating deficit per hour	-$139.6	-$133.8	-$124.8	-$151.3	-$163.7

Source: National Transit Database.

Activity 7: Small Urban and Rural Public Transit

The department provides oversight and financial assistance for 51 transit agencies that provide 31 fixed route and 44 shared-ride services to smaller urban and rural areas of the Commonwealth. Public transit agencies in these communities serve individuals who typically require longer-distance trips due to a more dispersed population. By focusing not only on fixed-route, but also demand-response transit, these agencies ensure that individuals (including the elderly and those with disabilities) are provided reliable options to access life sustaining activities (e.g., grocery trips, medical appointments and employment). This includes shared-ride trips for individuals with disabilities and the elderly, and the free senior rides program that uses Lottery Fund revenues.

The primary goals and outcomes of this activity are as follows:

- Provide oversight and technical assistance to transit agencies in order to help provide public transportation effectively, equitably and safely.
- Provide financial support so that transportation service continues uninterrupted for residents in these communities.

Resources for Small Urban and Rural Public Transit

	15-16 Actual	16-17 Actual	17-18 Actual	18-19 Actual	19-20 Actual	20-21 Budget
Expenditures by Object						
Personnel Services	$2.3	$2.1	$2.1	$2.0	$2.2	$2.3
Operational Expenses	11.9	15.4	41.6	35.7	28.0	57.0
Grants	232.1	242.1	239.1	253.5	262.4	448.4
Fixed Assets Expense	1.6	1.5	0.0	0.0	0.0	1.5
Total	**247.8**	**261.2**	**282.8**	**291.3**	**292.6**	**509.1**
Expenditures by Fund						
General Fund (Federal)	27.1	34.3	27.4	42.9	37.1	113.5
Lottery Fund	45.9	43.9	42.6	43.3	38.9	47.3
Public Transportation Trust Fund	168.8	181.5	211.7	204.7	216.6	342.6
Capital Facilities Fund	6.0	1.5	1.0	0.3	0.0	3.8
Total	**247.8**	**261.2**	**282.8**	**291.3**	**292.6**	**509.1**
Average Weekly FTE Positions	**21**	**19**	**18**	**16**	**17**	**19**
Personnel Cost/FTE ($ thousands)	**$108.8**	**$113.2**	**$116.8**	**$124.8**	**$125.1**	**$124.4**

Note: Expenditures in dollar millions. Actual expenditures are listed in the year the expenditure was recorded.

Performance Measures for Small Urban and Rural Public Transit

	15-16	16-17	17-18	18-19	19-20	20-21
Efficiency						
State support per trip[1]	$4.99	$5.40	$5.67	$5.78	$7.53	--
Outcome						
Trips per hour[2]	16.1	15.3	14.9	14.5	12.7	--
Operating cost per hour[2]	$91.2	$92.6	$96.5	$99.3	$106.6	--
Operating revenue per hour[2]	$20.0	$19.3	$19.2	$19.5	$17.6	--
Operating cost per trip[2]	$5.7	$6.1	$6.5	$6.8	$8.4	--
Trips per capita[2,3,4]	6.5	6.1	5.9	5.8	4.8	--
Trips per employee (thousands)[2,3]	9.3	8.9	8.7	8.4	--	--
Free senior rides (millions)[2]	3.55	3.56	3.63	3.64	3.10	--
Shared-ride cost per trip	$23.8	$23.5	$25.6	$25.9	$30.1	--
Shared-ride revenue per trip	$22.0	$21.6	$22.4	$22.5	$23.5	--
Vehicles met or past useful life[5]	--	--	--	36%	--	24%

Notes:

1 Calculations by the IFO include state grant funding for both operating and capital and both Act 44 and shared-ride trips.

2 Act 44 data only. Operating revenues are fares collected.

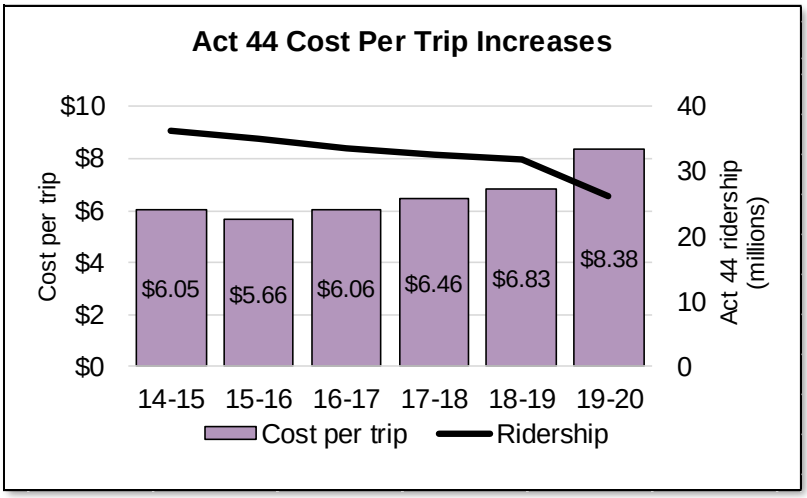
3 Calculations by the IFO. Employment and service population data are from PennDOT Annual Performance Reports.

4 Population for FY 19-20 service area was assumed to be equal to FY 18-19 service area.

5 PennDOT Transit Asset Management Group Plan.

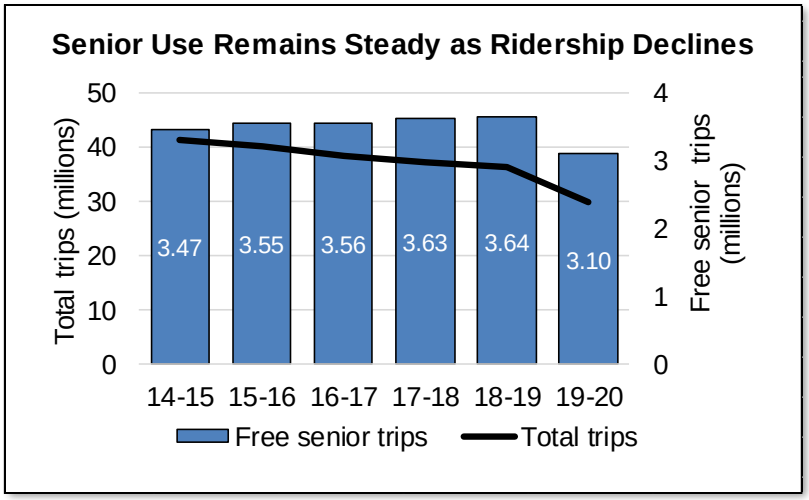
Notes on Measures

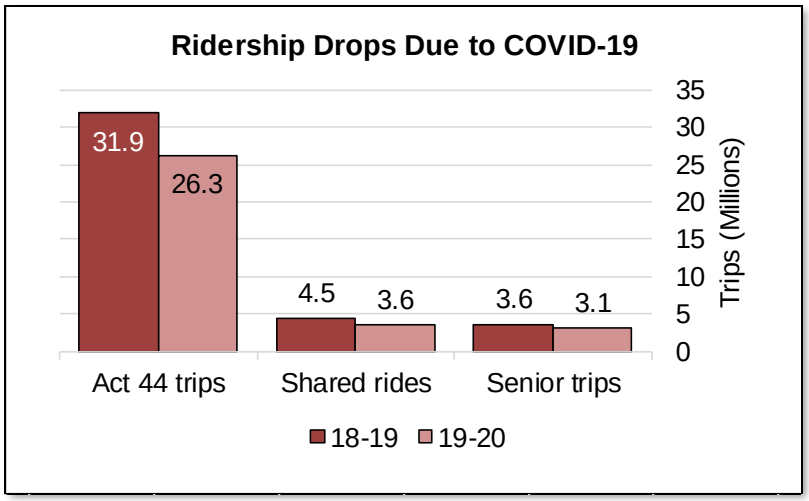
- Hourly metrics reflect hours a transit vehicle is in service and generates revenues. It does not include time when the vehicle is in transit but does not accept passengers.
- PennDOT monitors agency performance as directed by Act 44 of 2007. Every five years, agencies are reviewed based on four key metrics: (1) trips per hour, (2) operating cost per hour, (3) operating revenue per hour and (4) operating cost per trip. Goals for these metrics are established and compared to similar urban and rural transit agencies. Funding can be withheld if progress or a good-faith effort towards these goals is not made.
- Measures that reflect Act 44 data only are based on fixed route and paratransit trips. These services are provided on a routine operating schedule and locations, typically provided by bus. Performance data for shared-ride programs are not included in these figures.



Following national trends, Act 44 ridership fell from FY 2014-15 to FY 2018-19 by 12%, over 4 million trips. Employment at these transit agencies increased by 98 part- and full-time employees and contractors, while the **cost per trip** increased by 13%. The reduction in ridership occurred at the same time as the systems increased their combined service area population by over 300,000 residents.

As overall ridership decreased by 12% from FY 2014-15 to FY 2018-19, senior citizen use of transit services did not. **Free senior trips** increased by 5% from FY 2014-15 to FY 2018-19 and comprised 11% of all Act 44 ridership in FY 2018-19. Shared-ride trips also fell by 9% over this time period, possibly due to competition from less expensive ride sharing alternatives.





Due to the COVID-19 pandemic and related mitigation efforts, **ridership on smaller urban and rural transit districts** declined at a significant rate year-over-year. Act 44 ridership for these systems dropped by 5.7 million (-18%). Shared rides (-21%) and free senior trips (-15%) also recorded significant declines. These systems are allocated approximately $350 million in support from the federal CARES Act.

State and Local System Benchmarks

Small Urban and Rural Transit Comparisons (2019)

Agency Location	State Funding	Per Revenue Vehicle Hour Trips	Cost	Revenue	Cost Per Trip
State Aggregates					
Illinois Aggregate	64.5%	11.8	$86.6	$8.0	$7.3
Pennsylvania Aggregate	56.2	10.1	85.0	20.7	8.5
Ohio Aggregate	4.2	8.7	91.6	9.8	10.5
Select Comparison Agencies					
New Castle, PA (rural)	79.1	10.7	114.6	12.4	10.7
Moline, IL	63.7	18.7	108.3	6.9	5.8
Harrisburg, PA	53.3	11.0	109.0	14.4	9.9
Jackson, MI	34.3	13.0	106.8	13.1	8.2
Hanford, CA (rural)	22.9	13.6	93.3	11.9	6.9
Florence, SC (rural)	12.3	7.4	83.2	8.3	11.3
Youngstown, OH	1.0	11.1	88.5	7.5	7.9

Source: National Transit Database.

- On average, Pennsylvania directly supports its transit agencies at a higher rate than comparable states across the country, trailing only Illinois.
- The operating deficit (hourly revenues minus costs) for the Commonwealth's systems ($64.3 per hour) is smaller than both the Illinois ($78.6 per hour) and Ohio ($81.8 per hour) aggregate.

Small Urban and Rural Transit Agency Cost Per Trip

Agency	City	Trips (thousands)	Cost Per Trip	Per Hour Trips	Cost	Revenue
Top 5						
Centre Area Trans.	State College	6,428.5	$2.8	39.7	$109.8	$43.9
So. Central Trans.	Lancaster	4,450.8	5.0	16.8	84.4	23.0
River Valley	Williamsport	1,314.9	5.9	22.4	132.1	29.0
Lehigh & Northampton	Allentown	4,497.5	6.7	15.1	100.7	17.7
IndiGO	Indiana	406.3	6.8	11.9	80.8	17.7
Bottom 5						
Mid County	Kittaning	43.0	15.0	6.1	90.9	5.6
Washington County	Washington	116.1	16.0	4.5	71.8	8.2
Endless Mountain	Athens	104.0	16.3	5.0	81.0	7.1
Area Trans. of NC PA	Johnsonburg	425.9	20.8	3.6	75.6	10.8
Carbon County	Jim Thorpe	10.5	28.5	3.5	99.9	4.9

Note: Act 44 FY 2018-19 data.

In general, more efficient transit systems, as measured by cost per trip, have a larger ridership base. Centre Area Transit, located in State College, serves the largest university population in the state and benefits from high frequency use. Lancaster and Allentown are also two of the larger population centers for this activity. In the bottom five, Carbon County and Mid County have the lowest hourly revenue collections and also have free senior ridership that comprises at least 30 percent of total ridership.

Activity 8: Intercity Transit

The department provides for the construction, oversight and financial assistance for intercity travel by rail or bus. This includes three sub-activities: (1) oversee passenger rail capital project planning, engineering and delivery, (2) ensure safe operations and management of passenger rail services and (3) provide operating subsidies for intercity bus and rail services. In order to fulfill these duties, the department partners with Amtrak for passenger rail services on the Keystone (Harrisburg to Philadelphia) and Pennsylvanian (Pittsburgh to Philadelphia) service lines, and with two private intercity bus companies that provide 13 bus routes servicing 40 counties throughout the Commonwealth.

The primary goals and outcomes of this activity are as follows:

- Maintain a passenger rail system that is in a good state of repair and provide personal and infrastructure safety and security.
- Assist in planning and constructing a passenger rail system that supports existing and future needs of residents and businesses.
- Provide operating subsidies for the intercity bus routes that allow them to operate and provide mobility for citizens.

Resources for Intercity Transit

	15-16 Actual	16-17 Actual	17-18 Actual	18-19 Actual	19-20 Actual	20-21 Budget
Expenditures by Object						
Personnel Services	$0.3	$0.3	$0.3	$0.3	$0.4	$0.3
Operational Expenses	7.4	3.8	4.9	3.9	3.6	51.2
Grants	51.2	36.6	29.7	39.4	38.6	153.8
Fixed Assets Expense	1.6	4.4	8.2	13.5	9.9	11.0
Total	**60.5**	**45.2**	**43.1**	**57.1**	**52.4**	**216.4**
Expenditures by Fund						
General Fund (Federal)	$39.0	$14.9	$13.2	$19.2	$21.2	$146.6
Multimodal Transportation Fund	8.2	8.2	5.2	11.5	8.5	8.8
Public Transportation Trust Fund	13.3	22.1	24.7	26.4	22.7	61.0
Total	**60.5**	**45.2**	**43.1**	**57.1**	**52.4**	**216.4**
Average Weekly FTE Positions	**2**	**3**	**3**	**3**	**2**	**3**
Personnel Cost/FTE ($ thousands)	**$128.1**	**$113.1**	**$121.1**	**$128.9**	**$141.2**	**$118.8**

Note: Expenditures in dollar millions. Actual expenditures are listed in the year the expenditure was recorded.

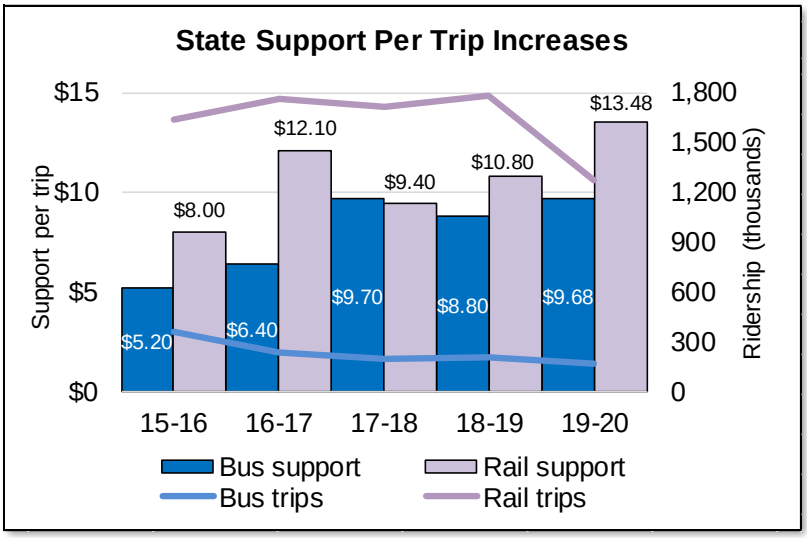
Performance Measures for Intercity Transit

	15-16	16-17	17-18	18-19	19-20	20-21
Intercity Passenger Rail						
State support per trip[1]	$8.04	$12.08	$9.41	$10.84	$13.48	--
Amtrak station improvements completed	0	0	0	1	3	--
Miles of rail rehabbed or replaced	--Recommended Measure--					
Passenger injuries[2]	17	16	13	12	--	--
Keystone Service						--
Trips (thousands)	1,416	1,539	1,498	1,568	1,115	--
Multi-ticket ridership[2]	31.6%	33.4%	33.1%	33.7%	31.6%	--
On-time performance[2]	93.7%	92.6%	87.3%	93.2%	95.1%	--
Pennsylvanian Service						
Trips (thousands)	223	222	217	214	159	--
Multi-ticket ridership[2]	1.3%	1.5%	1.7%	1.7%	1.4%	--
On-time performance[2]	84.8%	78.9%	73.2%	67.4%	74.4%	--
Intercity Passenger Bus						
State support per trip	$5.24	$6.45	$9.74	$8.79	$9.68	--
Trips (thousands)	356	229	198	205	164	--
On-time performance	--Recommended Measure--					
Passenger injuries	--Recommended Measure--					

Notes:
1 Calculations by the IFO include all state grant funding for operating and capital purposes.
2 Amtrak, by federal fiscal year (October-September).

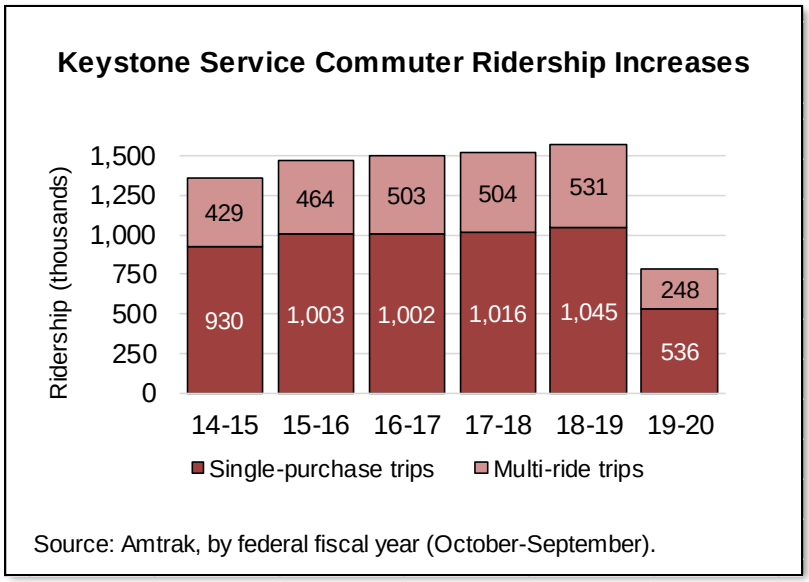
Notes on Measures

- Multi-ticket ridership represents the share of trips on a respective Amtrak service line that are taken by individuals who purchased a multi-ride ticket option. These options are available in 10-trip or unlimited monthly options at a discounted per trip rate and are used by daily commuters and other high-frequency users.
- On-time performance measures for passenger rail services represent the rate at which Amtrak trains arrive within 15 minutes of their officially scheduled arrival time at each station along the route. Intercity passenger bus service providers do not currently report on-time performance.

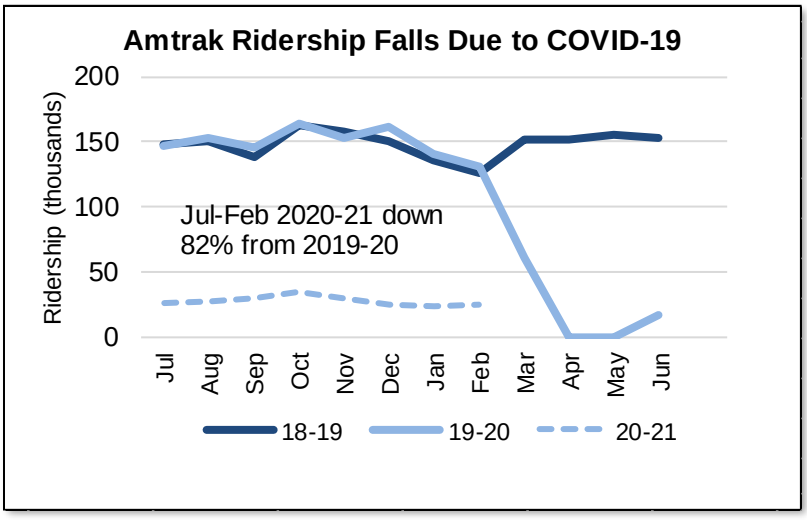


State support per trip for both modes of intercity transit has increased since FY 2015-16. Support for passenger rail services includes state-funded grants for capital improvements to rail and train stations and tend to fluctuate more per annum. State support per trip for intercity bus services has increased as ridership decreased by 43% from FY 2015-16 to FY 2018-19. During that time, the state ended partnerships with three service providers.

The Amtrak Keystone line that operates between Harrisburg and Philadelphia offers up to 13 daily round trips and has a high proportion of **multi-use ridership**. Multi-use tickets can be purchased in 10-trip or monthly allotments and are used by daily commuters and other high-frequency riders. Nearly one-third of annual trips on the Keystone Service are multi-ride trips. Not displayed, the Pennsylvanian Service operating from Pittsburgh to Philadelphia once daily has less than 2% multi-ride ticket usage.



Source: Amtrak, by federal fiscal year (October-September).



Total ridership for Amtrak's passenger rail services declined more than 28% as a result of the pandemic and related mitigation efforts. In FY 2019-20, total ridership was approximately 1.3 million, 500,000 less trips than the prior year. In April and May there was no ridership on these routes as state-supported service was suspended. In response to COVID-19, Amtrak received $1.0 billion for system support nationwide through the CARES Act.

State Benchmarks

Amtrak Route Comparisons

Route	Route Miles	Ridership (thousands)	On-Time Performance	Daily Trips	Host Railroads
Keystone	**195**	**1,576.0**	**93%**	**13**	**Amtrak**
Empire (New York)	460	1,214.2	90	9	Amtrak
Capitol Corridor (California)	172	1,771.1	88	16	U.P.
Northeast Corridor	--	12,525.6	83	--	--
Total State-Supported	**--**	**15,440.7**	**75**	**--**	**--**
Lincoln (Chicago-St. Louis)	284	627.6	71	4	C.N., U.P.
Pennsylvanian	**444**	**215.1**	**67**	**1**	**N.S.**
Carolinian (Charlotte-NYC)	704	244.8	56	1	CSX, N.S.

Source: Amtrak Monthly Performance Report FY 2018-19.

The table above compares selected state-supported routes operated by Amtrak, the overall Northeastern Corridor and the aggregate of all state-supported routes by key metrics for 2019. Performance related to trip frequency, ridership and on-time performance across routes in FY 2019-20 was significantly impacted by the COVID-19 pandemic and those data are not used. For FY 2018-19, the Keystone service line (93 percent) performed well-above the state-supported average (75 percent) in on-time performance, while the Pennsylvanian service line fell below (67 percent). On-time performance is affected by host railroad ownership and Amtrak annually evaluates the on-time performance of each of their host railroads. The 2019 report notes that 19 of Amtrak's 27 state-supported routes do not achieve a passing status (80 percent on-time performance). Of the eight that do achieve a passing grade, five operate on lines that are Amtrak- or publicly-owned, with only three of the passing routes having predominantly private ownership. No Amtrak- or publicly-owned route is below the 80 percent target for on-time performance.

Activity 9: Aviation

The department regulates and provides funding assistance for the state's system of airports and helipads. These activities are carried out by the Bureau of Aviation which (1) licenses and inspects aviation facilities throughout the state, (2) develops annual financial plans with airports applying for federal and state funding assistance and (3) administers the Real Estate Tax Reimbursement Program (RETRP) which allows airport owners to receive rebates on local property taxes for qualified aviation use, funded by aviation fuel revenues. The bureau also oversees the department's unmanned aircraft systems (UAS) and their deployment in support of construction projects.

The primary goals and outcomes of this activity are as follows:

- Provide funding and support so that 90 percent of runways in the state's airport system have an acceptable (fair or better) pavement condition index rating.
- Enroll the state's publicly- and privately-owned airports in the RETRP.
- Ensure the safe deployment of UAS aircraft on 25 percent of state construction projects.
- Identify and mitigate hazards to increase the operational safety at licensed airports and helipads.

Resources for Aviation

	15-16 Actual	16-17 Actual	17-18 Actual	18-19 Actual	19-20 Actual	20-21 Budget
Expenditures by Object						
Personnel Services	$2.2	$2.2	$2.2	$2.3	$2.6	$2.6
Operational Expenses	1.4	0.9	0.7	0.8	0.8	3.7
Grants	16.5	25.3	30.9	29.3	37.8	107.1
Fixed Assets Expense	0.0	0.0	0.0	0.0	0.9	0.4
Other	0.6	0.7	0.1	0.0	3.6	0.0
Total	**20.7**	**29.1**	**34.0**	**32.3**	**45.7**	**113.9**
Expenditures by Fund						
Motor License Fund (Augmentations)	$0.4	$0.5	$0.6	$0.7	$1.6	$0.5
Motor License Fund (Federal)	6.8	13.0	12.7	12.7	11.9	59.4
Motor License Fund (Restricted)	6.9	7.8	7.4	6.9	7.1	10.6
Multimodal Transportation Fund	2.9	2.4	5.0	5.5	7.7	6.5
Pennsylvania Infrastructure Bank Fund	0.6	0.7	0.1	0.0	3.6	0.0
Capital Facilities Fund	3.0	4.7	8.2	6.6	13.7	36.9
Total	**20.7**	**29.1**	**34.0**	**32.3**	**45.7**	**113.9**
Average Weekly FTE Positions	**26**	**19**	**18**	**18**	**18**	**20**
Personnel Cost/FTE ($ thousands)	**$87.4**	**$115.9**	**$123.4**	**$126.4**	**$142.4**	**$130.8**

Note: Expenditures in dollar millions. Actual expenditures are listed in the year the expenditure was recorded.

Performance Measures for Aviation

	15-16	16-17	17-18	18-19	19-20	20-21
Workload						
Inspections conducted	255	267	199	204	221	200
Efficiency						
Activity cost per facility ($ thousands)[1]	$27.8	$24.1	$23.1	$23.8	$26.5	--
Inspections per inspector	64	67	50	51	55	50
Outcome						
Runways with pavement condition fair or better	86%	84%	90%	92%	92%	92%
% Eligible airports enrolled in RETRP	17%	18%	17%	18%	11%	17%
% Construction projects assisted with UAS	--Recommended Measure--					
Air freight tonnage (millions)[2]	242.9	235.5	255.6	249.8	--	--

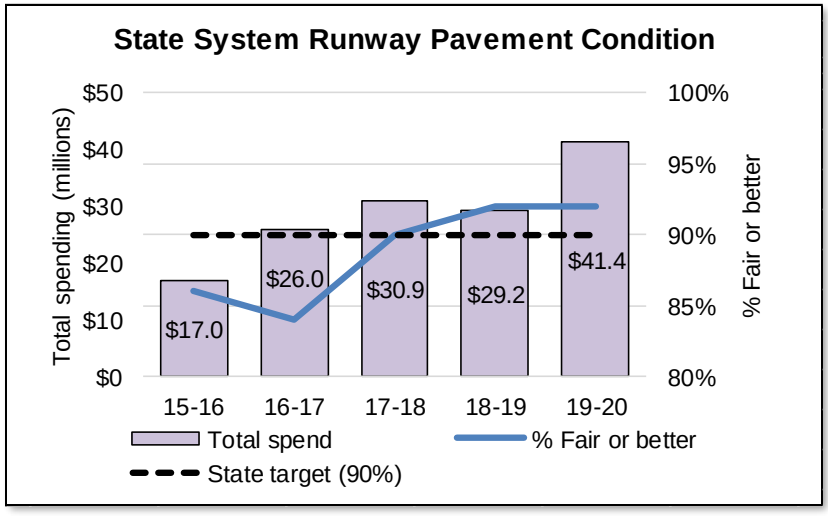
Notes:

1 IFO calculation. Includes activity expenditures for personnel and operations, but not including grants and loan repayments, divided by the number of aviation facilities in the the state system.

2 Freight Analysis Framework V.4 (FAF4), Oak Ridge National Laboratory's Center for Transportation Analysis.

Notes on Measures

- The pavement condition metric reflects the number of paved runways that have a pavement condition index rating of "fair," "good" or "excellent."
- The pavement condition metric includes the inspection results of 51 of the state's aviation facilities (airports, helipads and seaports). These 51 facilities are all classified as commercial, advanced or intermediate service facilities and most are part of the National Plan of Integrated Systems and eligible to receive federal dollars. The department performs a system wide assessment of pavement condition every five to six years, and interpolates data for interim years.



From FY 2016-17 to FY 2019-20, the **state airport system's share of runways in fair or better condition** steadily improved. Concurrently, the state invested nearly $145 million in federal and state funds into airport development and capital assistance. While not all projects were targeted to improve pavement condition, the measure is often used to reflect overall infrastructure conditions at these facilities.

Activity 10: Commercial and Other Multimodal

The department provides operational and financial support for other commercial and modal transportation networks. Grant and incentive programs are available to assist rail freight and port and waterways operations throughout the Commonwealth. These programs help fund infrastructure and economic development opportunities that support Pennsylvania industries which provide employment and other economic impacts. Additionally, the department works with partners to oversee the planning and construction of bicycle and pedestrian infrastructure. The department's focus is to improve the infrastructure for those who use it out of necessity (e.g., for travel to places of employment) and not just for leisure and recreational activities.

Expenditures in this activity include annual transfers made to the Commonwealth Financing Authority's Multimodal Transportation Fund program. These funds support the development and improvement of transportation assets in communities across the state.

The primary goals and outcomes of this activity are as follows:

- Ensure that the physical infrastructure for freight transportation at ports and railroads is available and in a state of good repair.
- Promote the transport of freight cargo and increase direct and indirect economic impacts for the Commonwealth while reducing highway congestion.
- Increase the availability of viable infrastructure and improve conditions for Pennsylvanians who bike and walk.

Resources for Commercial and Other Multimodal

	15-16 Actual	16-17 Actual	17-18 Actual	18-19 Actual	19-20 Actual	20-21 Budget
Expenditures by Object						
Personnel Services	$1.7	$2.0	$2.2	$2.3	$2.5	$2.3
Operational Expenses	5.8	6.4	8.0	7.6	8.4	13.68
Grants	38.4	30.1	32.4	39.4	42.1	56.50
Fixed Assets Expense	0.9	2.8	0.8	0.0	70.0	0.00
Other	35.2	51.6	50.5	36.0	124.6	0.00
Total	**81.8**	**93.0**	**93.8**	**85.2**	**247.6**	**72.4**
Expenditures by Fund						
Multimodal Transportation Fund	$58.0	$79.8	$85.0	$71.2	$230.8	$72.4
Penn. Infrastructure Bank Fund	0.0	0.2	0.0	0.0	1.0	0.0
Public Transportation Trust Fund	0.7	2.1	0.0	0.0	0.0	0.0
Capital Facilities Fund	22.6	10.9	8.8	14.0	11.4	0.0
Other Funds	0.5	0.0	0.0	0.0	4.3	0.00
Total	**81.8**	**93.0**	**93.8**	**85.2**	**247.6**	**72.4**
Average Weekly FTE Positions	**11**	**18**	**18**	**17**	**16**	**20**
Personnel Cost/FTE ($ thousands)	**$151.4**	**$113.3**	**$124.2**	**$131.2**	**$152.3**	**$111.7**

Note: Expenditures in dollar millions. Actual expenditures are listed in the year the expenditure was recorded.

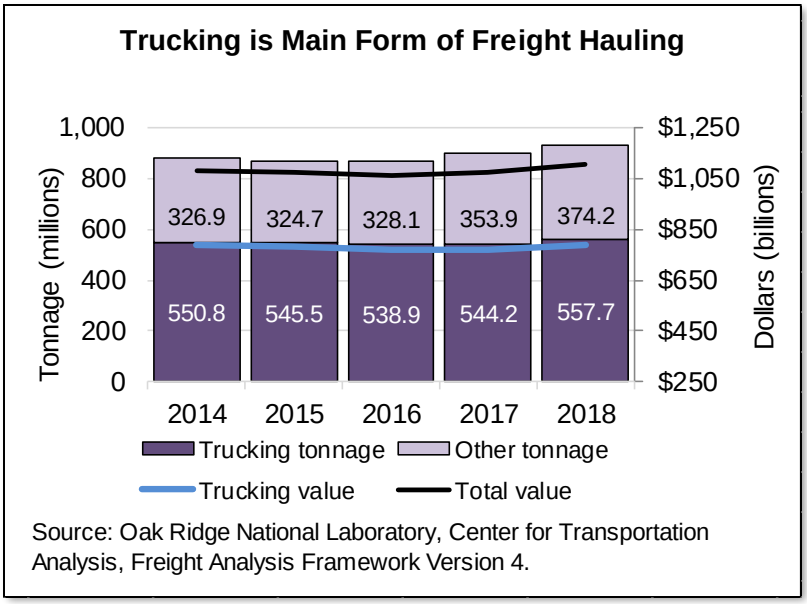
Performance Measures for Commercial and Other Multimodal

	15-16	16-17	17-18	18-19	19-20	20-21
Workload						
Miles of bike or pedestrian trail or lane added	--Recommended Measure--					
Miles of rail rehabbed or replaced	220.3	449.3	76.5	138.9	98.7	--
Outcome						
Pedestrian safety[1,2]						
Crashes	4,001	4,201	4,086	4,129	4,101	3,973
Fatalities	153	172	150	201	154	151
Bicycle safety[1,2]						
Crashes	1,272	1,304	1,141	974	1,020	990
Fatalities	16	16	21	18	16	16
PICGIP container lifts (thousands)	101.3	267.3	320.7	381.1	483.2	--
PICGIP lifts above benchmark (thousands)	33.6	36.8	24.9	32.9	32.5	--
PhilaPort tonnage (millions)[1]	6.1	6.2	6.9	6.8	6.6	--
Truck travel time reliability index[2]	--	--	1.34	1.39	1.36	1.34
Statewide Indicator						
Freight tonnage (millions)[1,3]	870.2	867.0	898.2	931.9	--	--
Truck	545.5	538.9	544.2	557.7	--	--
Rail	84.4	80.7	86.5	87.2	--	--
Water	20.5	21.2	24.2	24.3	--	--
Air	0.2	0.2	0.3	0.2	--	--

Notes:
1 Calendar year.
2 FY 20-21 value is department target. Crash and fatality measures are annual data.
3 Freight Analysis Framework V.4 (FAF4), Oak Ridge National Laboratory's Center for Transportation Analysis.

Notes on Measures

- The Pennsylvania Intermodal Cargo Growth Incentive Program (PICGIP) incentivizes the use of Pennsylvania's ports. PennDOT provides grant funding for ocean carriers to move cargo through a Pennsylvania port at $25 per container lift above an agreed-upon benchmark. The funding is available for carriers that bring new cargo-moving business to the Commonwealth, as well as existing business.
- Measures from the Oak Ridge National Laboratory's Center for Transportation Analysis' Freight Analysis Framework Version 4 (FAF4) are used in this activity, with data available through 2018. The FAF4 project tracks freight movement into, throughout, and out of the state by a number of measures including mode and value. This report considers modes overseen and supported by PennDOT – truck, rail, water and air. Other modes tracked but not detailed in this report include mail, pipeline, non-domestic modes on items imported into the U.S. and some unknown modal movement. In Pennsylvania, pipeline freight comprises a significant portion (24 percent in 2018) of total freight movement.
- Truck travel time reliability index is a ratio that compares the 95th percentile truck travel time to the 50th percentile (median) travel time for the interstate highway system. For example, a value of 1.3 indicates a 20-minute trip during typical conditions requires 26 minutes on a "bad" day, which may be a result of inclement weather, construction work zones, and/or traffic incidents.



Source: Oak Ridge National Laboratory, Center for Transportation Analysis, Freight Analysis Framework Version 4.

Trucking accounted for 60% of all **freight tonnage** moved throughout the Commonwealth in 2018 but has grown by only 1% since 2014. All other modes recorded a combined 14% growth over the same time period. Similarly, the value of trucking freight accounted for 72% of total freight value in 2018, but has grown by only 1% since 2014 compared to 7% growth for total freight value.

Job Growth by Multimodal & Related Industry

Mode	2015	2017	2019	Growth
Warehousing	71,098	85,159	92,146	29.6%
Rail	4,800	5,510	6,030	25.6
Freight Logistics	5,026	5,613	6,131	22.0
Water	2,209	2,398	2,553	15.6
Truck	64,847	65,211	67,961	4.8

Source: BLS Quarterly Census of Employment and Wages and Occupational Employment Statistics (rail only).

The table above displays job growth as it relates to different modes of transportation and the industries that support them using data from the Bureau of Labor Statistics. Jobs at warehousing and freight logistics and assistance firms grew by 22,153 jobs (29.6 percent) from 2015 to 2019. Jobs directly associated with trucking, rail and water transportation grew by a net 4,688 jobs (6.5 percent). The gross employment figures roughly correspond to the size of the most recent modal tonnage across the three modes:

- Trucking tonnage accounts for 83 percent of the tonnage and 89 percent of jobs.
- Rail tonnage accounts for 13 percent of the tonnage and eight percent of jobs. It should be noted that this includes employment data for all rail occupations including passenger rail.
- Water tonnage accounts for four percent of the tonnage and three percent of the jobs.

State Benchmarks

Freight Tonnage by Mode

	Tonnage (2018)				Growth (Since 2014)			
	Total	Truck	Rail	Water	Total	Truck	Rail	Water
MD	271	198	34	7	11%	5%	14%	45%
MI	660	359	112	45	11	7	-5	6
DE	76	58	7	3	10	5	9	28
NJ	534	370	32	15	7	4	11	7
PA	932	558	87	24	6	1	-4	14
OH	895	559	97	30	5	4	-6	-14
VA	425	307	69	7	5	7	-11	-8
NY	673	543	35	10	3	3	-5	-14
IL	1,347	755	226	37	2	2	-10	12
WV	300	86	96	17	1	-4	-8	-14
U.S.	**24,892**	**14,384**	**3,112**	**1,142**	**5%**	**5%**	**-7%**	**9%**

Note: Tonnage is in millions of tons.

Source: Oak Ridge National Laboratory, Center for Transportation Analysis, Freight Analysis Framework V.4 (FAF4).

The table compares Pennsylvania to border and similar states in freight movement between 2014 and 2018. Overall, the Commonwealth's total freight tonnage grew at a slightly faster rate than the U.S. However, trucking freight increased by only one percent, compared to the U.S. growth of five percent. Rail-based freight tonnage declined by four percent compared to a seven percent nationwide decline, and water-based freight movement grew at a rate five percentage points higher than the national average. Pennsylvania's total tonnage is influenced by pipeline activity (not shown), which grew by almost 46 million tons (26 percent) from 2014 to 2018.

Activity 11: Broadband and Technology Initiatives

The department identifies and investigates emerging technologies that could enhance Pennsylvania's transportation network. This could include, but is not limited to automated vehicles, fiber upgrades and smart city applications. PennDOT also supports the Governor's Broadband Initiative by utilizing state and federal funds that assist broadband providers to expand access for residents in underserved areas in exchange for access to networks that will be used at department facilities and roadside infrastructure.

The primary goals and outcomes of this activity are as follows:

- Identify and develop strategies to safely integrate emerging technologies into the state and local transportation systems.
- Provide financial support to broadband providers through the state's broadband initiative. This initial investment will provide connections to over 9,000 businesses and homes in northern counties and provide connectivity and communications upgrades for the department's facilities.

Resources for Broadband and Technology Initiatives

	15-16 Actual	16-17 Actual	17-18 Actual	18-19 Actual	19-20 Actual	20-21 Budget
Expenditures by Object						
Personnel Services	$0.0	$0.0	$0.0	$0.1	$0.2	$0.3
Operational Expenses	0.0	0.0	0.0	0.4	0.7	2.5
Other	0.0	0.0	0.0	0.0	0.0	17.5
Total	**0.0**	**0.0**	**0.0**	**0.5**	**0.9**	**20.3**
Expenditures by Fund						
Motor License Fund (State)	0.0	0.0	0.0	0.5	0.9	2.8
Penn. Infrastructure Bank Fund	0.0	0.0	0.0	0.0	0.0	17.5
Total	**0.0**	**0.0**	**0.0**	**0.5**	**0.9**	**20.3**
Average Weekly FTE Positions	**0**	**0**	**0**	**1**	**2**	**2**
Personnel Cost/FTE ($ thousands)	**n.a.**	**n.a.**	**n.a.**	**$137.8**	**$142.3**	**$145.0**

Note: Expenditures in dollar millions. Actual expenditures are listed in the year the expenditure was recorded.

Performance Measures for Broadband and Technology Initiatives

	15-16	16-17	17-18	18-19	19-20	20-21
Outcome						
Automated vehicle accident rate	--	--	--	--	0%	0%
Local partners engaged on emerging tech.	--	--	--	--	--	16%
Units gaining broadband access[1]	--Recommended Measure--					
PennDOT facilities upgraded	--	--	--	--	0	--
Statewide Indicator						
% Population with fixed broadband access[2]	--	95%	95%	95%	--	--
Urban	--	98%	98%	98%	--	--
Rural	--	83%	84%	85%	--	--

Notes:

1 Units are residential or business buildings. Data will be collected by PA Department of Community and Economic Development as contractors complete infrastructure buildouts.

2 Federal Communication Commission Annual Broadband Deployment Reports (2015-2020). Figures represent December 31 data (i.e., FY 18-19 data is as of December 31, 2018). Coverage is based on the availability of fixed 25/3 Mbps (megabits per second) service.

Notes on Measures

- PennDOT plans to continue to conduct and track outreach with local units of government and planning organizations regarding the deployment and advancement of emerging and transformational technologies.
- Utilizing the Federal Communications Commissions' (FCC) reverse auction in 2018, the department contracted with three companies to increase the accessibility of broadband to Pennsylvania residents across the northern tier of the state, as well as upgrade connectivity and communication systems at PennDOT facilities. This investment includes nearly $17 million in funding from the Pennsylvania Infrastructure Bank and an additional $35 million from the FCC. Contractors have committed to delivering broadband access to over 9,000 households and businesses with all contractors committed to increasing service to 100 Mbps. Facility upgrades are scheduled to begin in late 2020 with projects at over 20 PennDOT facilities scheduled to be completed by mid-2022.
- Pennsylvania plans to utilize two new funding sources to expand broadband expansion throughout the state. Act 132 of 2020 allocated $5 million to the Commonwealth Financing Authority to help expand broadband resources in rural areas of the state. These funds were previously allocated to the Mobile Telecommunications Broadband Investment Tax Credit, which the IFO could not determine had a direct impact on expanding broadband services in a 2019 report. In December 2020, Pennsylvania companies were awarded $368 million in federal funds by the FCC to expand broadband coverage in 66 counties in the Commonwealth. The funding will be used by 13 companies that will expand 100 Mbps service to nearly 327,000 residents in the next six years.

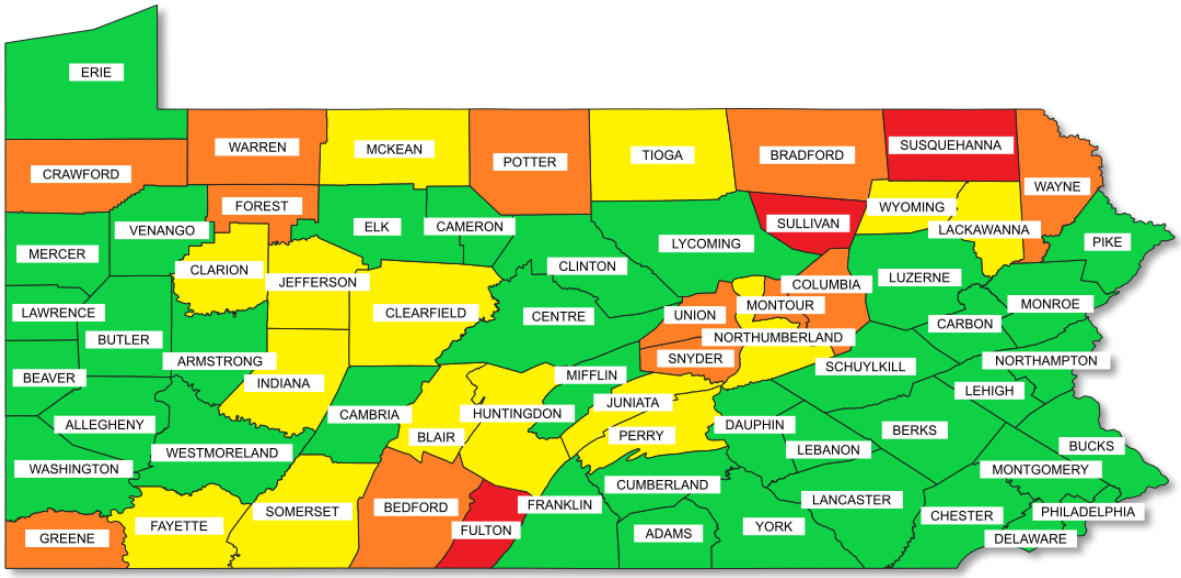
County Benchmarks

County Broadband (Fixed 25/3 Mbps) Availability

Top 10				Bottom 10			
County	2013	2018	Change	County	2013	2018	Change
Northampton	94.1%	100.0%	5.9%	Warren	39.0%	72.1%	43.1%
Lehigh	85.3	99.9	14.6	Montour	4.1	71.9	67.8
Allegheny	99.0	99.3	0.3	Union	3.0	71.6	68.6
Philadelphia	100.0	99.1	-0.9	Snyder	37.6	70.1	32.5
Delaware	100.0	99.0	-1.0	Potter	21.2	69.2	48.0
Monroe	94.1	99.0	4.9	Bradford	46.6	68.2	21.6
Chester	99.4	98.9	-0.5	Wayne	51.0	64.7	13.7
Montgomery	100.0	98.9	-1.1	Susquehanna	20.9	53.2	32.3
Pike	89.9	98.9	9.0	Fulton	28.2	44.3	16.1
Bucks	98.1	98.6	0.5	Sullivan	36.1	33.1	-3.0

Source: Federal Communications Commission Broadband Deployment Reports (2015-2020).

FCC Broadband Deployment Report Data show the change in broadband coverage for individual counties in Pennsylvania from 2013 to 2018. Counties with the broadest coverage are urban and suburban counties that have relatively high per capita income and population density, with the inverse being true for counties having the lowest coverage rates. The map below shows counties color-coded by coverage rate: green (coverage over 90 percent); yellow (80 to 90 percent); orange (60 to 80 percent); and red (less than 60 percent).



Funds provided by PennDOT will be used to expand access to 9,000 residential and business units in Erie (94.4 percent), Potter (69.2 percent), Tioga (85.8 percent), Lycoming (91.3 percent) and Bradford (68.2 percent) Counties. These counties have an estimated total of 55,000 individuals that do not have access to 25/3 Mbps service. If the 9,000 units that were to be provided access were all residential units (excluding business units) with 2.46 individuals per household (U.S. Census Bureau), then 22,000 individuals (40 percent) in these areas would gain access to broadband service through this project. These estimates should be regarded as the upper bound.

State Benchmarks

State Broadband (Fixed 25/3 Mbps) Availability

	Rural (%)			Urban (%)			Statewide (%)		
	2013	2018	Change	2013	2018	Change	2013	2018	Change
Delaware	87.2	98.2	11.0	98.7	95.7	-3.0	98.6	97.8	-0.8
New Jersey	87.2	98.2	11.0	98.7	99.3	0.6	98.1	99.2	1.1
Maryland	73.3	92.9	19.6	95.8	98.1	2.3	92.9	97.4	4.5
New York	78.7	90.7	12.0	99.9	100.0	0.1	97.3	98.8	1.5
Pennsylvania	64.2	84.8	20.6	92.9	98.2	5.3	86.8	95.4	8.6
Michigan	61.5	82.2	20.7	96.2	99.0	2.8	87.3	94.7	7.4
Ohio	51.5	81.2	29.7	92.2	99.4	7.2	83.3	95.3	12.0
Virginia	35.8	75.9	40.1	92.8	97.9	5.1	79.1	92.5	13.4
West Virgnia	25.6	70.3	44.7	63.9	95.1	31.2	44.2	82.4	38.2
Illinois	60.9	67.6	6.7	98.8	98.9	0.1	94.5	95.3	0.8
United States	**47.3**	**77.7**	**30.4**	**91.6**	**98.5**	**6.9**	**83.0**	**94.4**	**11.4**

Source: Federal Communications Commission Broadband Deployment Reports (2015-2020).

Data from the FCC show that Pennsylvania increased its statewide access to broadband by 8.6 percentage points from 2013 to 2018. However, Pennsylvania has a higher coverage ratio (95.4 percent) than the United States as whole (94.4 percent). For rural populations, Pennsylvania increased its coverage by 20.6 percentage points to 84.8 percent. This compares to the national average of 77.7 percent broadband coverage for rural populations.

Activity 12: Administration

Offices under this activity provide direction and oversight for procurement, materials management services, facilities and fiscal management services. They also provide internal and external stakeholders with guidance and technical assistance to ensure compliance with state and federal law, improve performance and maximize the use of available resources. Subactivities undertaken by the department in this activity include: (1) the oversight of the Disadvantaged Business Enterprise (DBE) program which works to provide contracting opportunities for firms owned by traditionally socially- and economically-disadvantaged individuals, (2) the management of Welcome Centers and rest areas throughout the state that help serve as an asset for tourism and provide drivers a safe location while travelling, and (3) coordination of the Agility Program which allows PennDOT, local governments and other partners to exchange services of equal value with no direct monetary exchange.

Grant expenditures in this activity are payments made to the Pennsylvania Turnpike Commission.

The primary goals and outcomes of this activity are as follows:

- Provide cost-effective and timely procurement of materials, goods and services to fulfill the department's missions.
- Develop, implement and maintain policies for disadvantaged businesses to contract with the state for construction and non-construction related projects.
- Work with federal, local and other partners to maximize the use of equipment, staff and resources with no monetary payment through the Agility Program.

Resources for Administration

	15-16 Actual	16-17 Actual	17-18 Actual	18-19 Actual	19-20 Actual	20-21 Budget
Expenditures by Object						
Personnel Services	$37.1	$38.2	$38.3	$29.3	$35.6	$41.6
Operational Expenses	95.0	125.7	121.0	134.7	168.2	170.4
Grants	147.8	151.7	170.0	169.8	161.8	160.0
Fixed Assets Expense	11.1	13.8	11.9	10.0	1.6	15.1
Other[1]	-83.2	-100.5	-99.5	-110.3	-132.9	-141.4
Total	**$207.7**	**$228.9**	**$241.6**	**$233.5**	**$234.3**	**$245.7**
Expenditures by Fund						
Motor License Fund (State)	86.5	103.7	98.3	90.2	88.3	99.6
Motor License Fund (Augmentations)	1.3	1.5	1.3	1.5	12.1	14.0
Motor License Fund (Restricted)	119.8	123.7	142.0	141.8	133.8	132.0
Total	**207.7**	**228.9**	**241.6**	**233.5**	**234.3**	**245.7**
Average Weekly FTE Positions	**529**	**553**	**306**	**305**	**321**	**318**
Personnel Cost/FTE ($ thousands)	**$70.0**	**$69.1**	**$125.0**	**$96.2**	**$111.0**	**$130.9**

Note: Expenditures in dollar millions. Actual expenditures are listed in the year the expenditure was recorded.

1 Other expenditures include shared services (e.g., HR and IT costs) that are transferred to other activities and restricted account expenditures.

Performance Measures for Administration

	15-16	16-17	17-18	18-19	19-20	20-21
Descriptive						
Agency FTE[1]	12,036	12,001	11,730	11,735	11,885	12,015
Overtime costs ($ millions)[2]	$45.7	$51.8	$58.3	$62.6	$45.7	$52.8
HR costs ($ millions)	$11.3	$11.2	$11.6	$13.3	$12.8	$17.0
IT costs ($ millions)	$116.7	$129.6	$132.9	$156.2	$173.5	$180.5
Efficiency						
Overtime cost per agency FTE[1,2]	$3,798	$4,315	$4,970	$5,330	$3,848	$4,396
HR cost per agency FTE[1]	$940	$935	$985	$1,133	$1,076	$1,414
IT cost per agency FTE[1]	$9,698	$10,798	$11,333	$13,314	$14,597	$15,026
Outcome						
Staff turnover rate[3]	7.5%	7.2%	8.4%	9.9%	8.3%	--
DBE Contracting						
FHWA contracts[4]						
Amount ($ millions)	$74.7	$68.8	$157.5	$74.0	$168.1	--
% Contract value	3.0%	2.5%	5.5%	2.5%	5.8%	--
State subcontracting[5]						
Amount ($ millions)	$40.7	$62.3	$48.1	$53.5	--	--
% Contract value			--Recommended Measure--			
Welcome Center customers (millions)[6]	3.39	3.57	3.75	3.45	3.50	--
Rest area satisfaction rating[6,7]	--	--	7.27	7.17	7.67	7.01
New Agility Program agreements	46	28	36	35	29	--
Renewed Agility Program agreements	--	4	5	9	16	--

Note:

1 IFO estimate for FY 20-21 includes 427 FTEs for winter operations.

2 Department does not project overtime costs. IFO estimate for FY 20-21 uses FY 15-16 through FY 19-20 average.

3 Includes only permanent employees, temporary seasonal employees excluded.

4 Federal fiscal year.

5 Includes all state construction contracts and professional and IT services.

6 Calendar year.

7 Rest area ratings are from customer satisfaction survey. Responses can be rated 1-10. FY 20-21 is YTD.

Notes on Measures

- In FY 2017-18, executive agency human resources (HR) and information technology (IT) complement were consolidated under the Office of Administration (OA). During this transitional year, executive agencies continued to pay the personnel costs associated with the HR and IT complement transferred to OA. Beginning in FY 2018-19, agencies are billed for these services as well as for a portion of the HR and IT enterprise budget previously appropriated to the OA.

Activity 12: Administration (Addendum)

The following data shall serve as an addendum to the initial Performance-Based Budget report for PennDOT delivered to the General Assembly on March 25, 2021. This addendum was requested by the Performance Based Budget Board during a hearing on April 27, 2021. The following data and text were provided by PennDOT. The IFO has not reviewed and verified the data and text in this addendum. The data are to be used in conjunction with the initial report and do not serve as a replacement for the original measures provided.

Workforce Diversity at PennDOT

		Non-Minority		Minority		Undisclosed	
Agency	As of	Male	Female	Male	Female	Male	Female
DOT	July 2016	76.7%	13.7%	4.7%	4.2%	0.5%	0.2%
DOT	July 2017	76.6	13.6	4.9	4.3	0.5	0.1
DOT	July 2018	76.0	13.7	5.2	4.5	0.5	0.1
DOT	July 2019	75.2	14.0	5.3	4.9	0.4	0.1
DOT	July 2020	75.9	13.5	5.3	4.8	0.4	0.1
DOT	June 1, 2021	75.6	13.5	5.5	4.8	0.4	0.2
COP	**July 2020**	**52.1**	**31.9**	**6.3**	**9.3**	**0.2**	**0.2**
PA Labor Force	**2019**	**79.0**		**21.0**		**0.0**	**0.0**

Source: Pennsylvania State Government Workforce Statistics (Annual) Reports. Data derived from full-time permanent salaried employees. PA Labor Force based on 2019 estimated data most recent available.

Note: Percentage reductions may be attributable to the movement of HR and IT employees from PennDOT to the Office of Administration. COP stands for Commonwealth of Pennsylvania.

Diversity in Leadership Positions at PennDOT (Pay Group 9 and Above)

		Non-Minority		Minority		Undisclosed	
Agency	As of	Male	Female	Male	Female	Male	Female
DOT	July 2016	76.7%	17.5%	3.4%	1.4%	0.7%	0.1%
DOT	July 2017	76.5	17.2	3.9	1.7	0.7	0.1
DOT	July 2018	76.8	16.7	3.9	1.8	0.7	0.1
DOT	July 2019	74.5	18.9	3.8	2.0	0.7	0.1
DOT	July 2020	76.8	18.3	2.7	1.4	0.8	0.0
DOT	June 1, 2021	76.2	18.6	2.9	1.6	0.8	0.0
COP	**July 2020**	**53.2**	**35.8**	**5.0**	**5.4**	**0.3**	**0.2**

Source: Pennsylvania State Government Workforce Statistics databases. Data derived from full-time permanent salaried employees.

Note: Percentage reductions may be attributable to the movement of HR and IT employees from PennDOT to the Office of Administration. COP stands for Commonwealth of Pennsylvania.

Average Time to Fill Vacant Positions at PennDOT

Agency	Calendar Year	Calendar Days	Notes
DOT	2018	54	Data available for Qtrs 2-4
DOT	2019	66	
DOT	2020	81	*Pandemic hiring freeze implemented in March 2020
DOT	2021	76	

Source: NeoGov.

Adequacy of Staffing for the PennDOT Winter Maintenance Program

Agency	As of	Operator Authorized Complement	Filled Rate	Non-operator Authorized Complement	Filled Rate
DOT	July 2016	874	80%	302	89%
DOT	July 2017	861	80	315	84
DOT	July 2018	803	74	334	80
DOT	July 2019	857	62	324	85
DOT	July 2020	686	59	230	58
DOT	June 1, 2021	663	53	167	59

Source: DOT Internal Tracking System and DOT_SMP-WMP Microsoft BI tool.

Note: Decline in operators may be attributable to unavailability of candidates with a Commercial Driver's License, private sector offering higher wages, sign-on bonuses, and other financial incentives. Decline in non-operators may be attributable to the need for certifications and/or experience, and competition with private sector opportunities and higher wages. For both, COVID-19 lockdown, economic stimulus payments, and generous unemployment compensation are likely contributing factors for the decline.

PennDOT Diverse Workforce Recruiting: Targeted Recruitment

Agency	Fiscal Year	Female	Minority	Veteran
DOT	2018-19	7	9	13
DOT	2019-20	2	1	4
DOT	2020-21	0	1	0

Source: Recruitment Events Calendar.

Note: The Infrastructure and Economic Development HR Delivery Center Recruitment Events Calendar was not established until the start of FY 2018-19. As of March 2020, recruitment events and participation continue to be significantly reduced and limited due to various pandemic restrictions/protocols. Recruitment transitioned to Enterprise OA Bureau of Enterprise Recruitment in spring 2020. Reporting and tracking of

diversity and demographic information is being phased out, per new rules issued by the Office of Administration Equal Employment Opportunity Office (EEOO) in May 2021.

Diverse Employees in PennDOT Career Development and Mentoring Programs

Agency	Calendar Year	Non-Minority				Minority				Undisclosed			
		Male		Female		Male		Female		Male		Female	
		#	%	#	%	#	%	#	%	#	%	#	%
DOT	2016	75	37%	96	48%	10	5%	21	10%	0	0%	0	0%
DOT	2017	97	42	104	45	17	7	11	5	0	0	0	0
DOT	2018	55	37	82	55	2	1	11	7	0	0	0	0
DOT	2019	42	38	62	56	3	3	4	4	0	0	0	0
DOT	2020	0	0	0	0	0	0	0	0	0	0	0	0
DOT	June 1, 2021	0	0	0	0	0	0	0	0	0	0	0	0

Source: DOT internal tracking of registered participants.

Note: Data inclusive of PennDOT Integrated Professional Learning Program, PennDOT Mentoring Program, and LEAD – Leadership, Education, Achievement, and Development – Program. For purposes of interpreting percentages for this table, the percentage associated for each column total is based on the total number of participants in that column divided by the total number of participants in the program. These programs were not offered from 2020-present due to the pandemic. Other years' data based on calendar year.

Career Development Plan (CDP) Completion at PennDOT (Completed in the Online CDP System)

Agency	As of	Non-Minority				Minority				Undisclosed			
		Male		Female		Male		Female		Male		Female	
		#	%	#	%	#	%	#	%	#	%	#	%
DOT	July 2016	2	100%	0	0%	0	0%	0	0%	0	0%	0	0%
DOT	July 2017	1	50	1	50	0	0	0	0	0	0	0	0
DOT	July 2018	1	100	0	0	0	0	0	0	0	0	0	0
DOT	July 2019	4	100	0	0	0	0	0	0	0	0	0	0
DOT	July 2020	0	0	1	100	0	0	0	0	0	0	0	0
DOT	June 1, 2021	0	0	0	0	0	0	0	0	0	0	0	0

Source: DOT Career Development Planning Tool database.

Note: For purposes of interpreting percentages for this table, the percentage associated for each column total is based on the total number of participants in that column divided by the total number of participants. Completion is higher because many employees use a paper version in lieu of the electronic tool; going forward, promoting both Career Development Plans and use of the electronic tool for better tracking will be a priority.

Traditional versus Non-Traditional Workforce Turnover at PennDOT

As of	Complement (filled)	Total Voluntary Turnover #	Total Voluntary Turnover %	Annual Total Separations Rates State and Local Gov'ts
July 2016	11,373	873	7.7%	20.7%
July 2017	11,236	854	7.6	20.6
July 2018	11,265	1,012	9.0	19.6
July 2019	11,224	1,215	10.8	19.6
July 2020	11,178	1,258	11.3	21.2
June 2021	11,109	1,108	10.0	--

	Traditional Voluntary Turnover			
As of	Separations	Transfers Out	Total	Share
July 2016	518	57	575	65.9%
July 2017	396	52	448	52.5
July 2018	480	84	564	55.7
July 2019	574	104	678	55.8
July 2020	463	58	521	41.4
June 2021	488	42	530	47.8

	Non-Traditional Voluntary Turnover			
As of	Separations	Transfers Out	Total	Share
July 2016	252	46	298	34.1%
July 2017	359	47	406	47.5
July 2018	395	53	448	44.3
July 2019	461	76	537	44.2
July 2020	377	360	737	58.6
June 2021	349	229	578	52.2

Reference: Traditional Separation includes Retired and met Sick Leave Payout. Traditional Transfers include Promotions. Non-Traditional Separation includes Resignations and Early Retirements (w/o Sick Leave Payout). Non-Traditional Transfers include Reassignments and Voluntary Demotions.

Note: Increased turnover rates may be attributable to the transfer of HR and IT staff from DOT to Executive Offices. Data derived from full-time permanent salaried employees Access/IRIS/SAP databases. Annual Total Separations for state and local governments are from the U.S. Bureau of Labor Statistics.

Appendix

Performance-Based Budgeting and Tax Credit Review Schedule

Year	Performance-Based Budgets					
1	Corrections	Board of Probation and Parole	PA Commission on Crime & Delinquency	Juvenile Court Judges' Commission	Banking and Securities	General Services
2	Economic & Community Development	Human Services – Part 1	Health	Environmental Protection	PA Emergency Management Agency	State
3	PennDOT	Human Services – Part 2	State Police	Military & Veterans Affairs		
4	Education	Human Services – Part 3	Aging	PA Historical & Museum Commission	Agriculture	Labor and Industry
5	Drug and Alcohol Programs	Insurance	Revenue	Executive Offices	Environmental Hearing Board	Conservation and Natural Resources
Year	**Tax Credits**					
1	Film Production	New Jobs	Historic Preservation Incentive			
2	Research and Development	Keystone Innovation Zones	Mobile Telecom and Broadband	Organ and Bone Marrow		
3	Neighborhood Assistance	Resource Enhancement and Protection (REAP)	Entertainment Economic Enhancement Program	Video Game Production	Keystone Special Development Zones	
4	Educational Tax Credits	Coal Refuse and Reclamation	Mixed Use	Community-Based Services		
5	Resource Manufacturing	Brewers'	Computer Data Center	Manufacturing and Investment	Waterfront Development	Rural Jobs and Investment

IFO Independent Fiscal Office

Agency Response

PS-2C (12-15)

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December 31, 2020

Matthew J. Knittel
Independent Fiscal Office
400 Market Street
Harrisburg, PA 17105

Dear Director Knittel:

Thank you for the opportunity to review and comment on the performance-based budget report and we thank the Independent Fiscal Office (IFO) for conducting its analysis of the Department of Transportation (PennDOT). At PennDOT our mission is to provide a sustainable transportation system and quality services that are embraced by our communities and add value to our customers. PennDOT has over 11,000 employees across the state and has an annual budget of close to $10 billion. Safety is our top priority and we envision a better quality of life built on transportation excellence.

Agency response to the Performance-Based Budget Plan Summary and Observations

Revenue challenges identified in the report accurately reflect part of the pandemic's negative impact on the department. We already lost roughly $400 million in gas tax revenues since the onset of the pandemic and the Department of Revenue forecast indicates that this could grow to $600 million by June 2021. This is the latest example of how our state's reliance on the gas tax hasn't kept up with demands and leaves us particularly susceptible to such changes in driver behavior. We will analyze how recently passed Federal COVID relief legislation may help to address these challenges. The report indicates that project lettings were reduced by $300M in FY19/20, but the construction program is set by calendar year (reference page 9). The construction bidding program, which includes both state and federal funds, was reduced by a total of $600M in 2020, including roughly $300M in planned December projects have been postponed pending resolution of COVID related revenue shortfalls. We feel it is insufficient to simply indicate "*and $300 million due to various technical issues*." The total reduction is a result of revenue shortfalls resulting from COVID-19.

While this is a real and current example, it is not a new or unique one. Despite rising traffic and freight travel in our state, the funds available to maintain our highways and bridges have not kept pace due to increasing vehicle fuel efficiency yielding shrinking state and federal gas tax revenues. Our investment needs are outgrowing our current funding, and this gap gets worse every year. We have already adjusted funding priorities and even prior to the pandemic we adjusted our construction program to the lowest in the past five years. Our longstanding funding challenges are informing the PennDOT Pathways program which was established to identify long-term funding strategies. Through this and various initiatives we are working with multiple partners to move toward the future of Pennsylvania's transportation funding.

In several sections of the report, PennDOT has been asked to estimate numbers for FY 20/21 but is unable to provide forecasts due to uncertainty in IFO's methodology or currently do not track the data in the format requested.

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Activities 1 & 2: Highway and Bridge Construction and Maintenance

There are several references in this section related to construction lettings. It should be noted that lettings are by calendar year (CY) not fiscal year (FY).

As mentioned above regarding the language on page 9, the letting reductions for the total program for CY 2020 were $600M, not the $300M stated on page 14 of the report. This included the planned reductions of $300M due to COVID revenue impacts as well as additional reductions in December as projects were deferred until 2021 with uncertainty regarding a long-term solution for cash flow to defray COVID revenue reductions.

Regarding the on-time project delivery metrics, construction projects are very complex and often multi-year projects which are impacted by delays outside of the control of the department. The on-time project delivery measure has historically included approved time extensions which were granted to the contractor based on justified contract extensions. The original contract time metric does not reflect these adjustments. The report should clearly indicate that these are related to construction contracts, which are influenced by unforeseen and unanticipated impacts.

On page 18, the report has focused on overtime costs as they relate to winter events. It is important to recognize that winter events involve incident/emergency response. Staffing levels are set to generally manage winter events by using only 2 shifts of 12 hours each, which allows for lower complement than would be required if focusing on 3 shifts of staff but does mean higher overtime costs during activation. A 3-shift approach requires more temporary operator complement than is achievable, and few candidates are interested in "on demand" employment. An elevated complement number to support 3 shifts would yield unnecessary costs on non-storm days. Winter storms are also unpredictable with regard to the timing of the event on weekends/holidays, etc. Therefore, although overtime costs are a significant portion of winter expenses, it is a prudent and cost-effective approach to incident management (in conjunction with the use of temporary staffing).

Activity 3: Local System Construction and Maintenance

Measuring the suggested outcomes in Activity 3: Local System Construction and Maintenance would require the revision of not only the annual reports submitted by counties and municipalities, but the MS-329 Project Approval Forms and MS-999 Project Completion Forms that the Municipal Services representatives complete. It is likely that adding these measurements would also mean requiring the use of the electronic dotGrants system by all municipalities, which would be a challenge to many municipalities, since not all have appropriate or compatible computer systems. Otherwise, the compilation of the data would require extensive manual work. Additional reporting requirements for counties and municipalities would not be well received, considering the number of other reports that they are required to file with a limited staff in many cases.

Activity 4: Highway and Safety Operations

Safety is central to PennDOT's mission and the department uses a significant portion of its budget and resources to address it. While the document paints a general picture of PennDOT's performance, it does not address all of the issues that the department faces regarding these matters nor does it consider national practices relative to safety. These omissions will have bearing on the reader's perspective of how safety is performing relative to budget in Pennsylvania.

While the document does reference the five federal performance measures of safety it does not focus on the specific risk management or cost benefit analysis that the department performs to ensure safety as highlighted on page 3. Instead the basis of the safety discussion revolves around rates, which the report concludes that 40 more lives could be saved a year if Pennsylvania's rate mirrored the national rate. This is not how this works in practice and provides a very negative connotation to the department's performance relative to safety for the reader. National models for safety have been moving away from the rate approach for some time because of all the variables that are not evident from purely looking at the numeric rate. Currently, benefit cost analysis approaches are more commonly used today in the safety profession because it not only focuses on the desired reduction but drives where improvements can be made that will achieve that reduction. There is only one bullet on page 25 of the report that acknowledges this concept when it indicates the department has a 2.55 to 1 return on our safety investment.

The report also uses national references from the National Highway Traffic Safety Administration (NHTSA) to further indicate the performance of the department relative to safety. The data from NHTSA again uses rates to compare Pennsylvania's safety to the surrounding states. The makeup of the surrounding states is not comparable to Pennsylvania for a variety of reasons. Of the states listed, Ohio is the only one comparable in terms of size of network, local versus state jurisdiction, and other safety intangibles like safety laws and weather impacts. While their rate is better than ours, their fatalities have also gone up each of the last 6 years while our numbers have been trending downward. This is another example of why rates are misleading.

Improving safety is a primary focus of the department. We just want to ensure that the readers opinions of the department's efforts are not influenced by presenting partial assessments of the factors that go into improving safety since reports like this are often referenced by state and federal decision makers relative to establishing safety funding levels.

Activity 5: Driver and Vehicle Services

On page 10, the increase in staff was for additional positions needed to support the implementation and issuance of REAL IDs, and to enhance the overall customer experience. Since March 2019, Driver and Vehicle Services has issued over 1 million REAL IDs, which is a significant number of new customer transactions that did not exist prior to the growth in complement.

In addition, the department has focused on an initiative to install automated queuing systems at all high-volume centers since 2015. The automated queuing system has been installed at an additional 27 locations, bringing the total to 55 locations out of 75. This system is much more accurate at tracking transaction and wait times. Non-automated queuing locations take a manual sample of wait times throughout the day whereas the automated queuing system provides increased accuracy in tracking wait times, transaction times, and customer counts. While the statement regarding the trend analysis being influenced by the changing data collection tools is accurate, we feel it is prudent to recognize that the automated process increased accuracy will be very helpful in monitoring and improving performance forward.

Since March 2020, the department has implemented protocols to protect staff and our customers that have changed the way business is conducted at a Driver License Center. This has naturally led to increased wait times at Driver License Centers due to limiting the number of customers in facilities at once and a substantial decrease in available counters. We have also encountered staff shortages throughout.

Though complement was added in 2019 as a result of REAL ID and our enhancing the customer experience initiative, those positions are new and, in some cases, still being filled. We have had a high turnover rate due to retirements in some areas and loss of experienced staff increases processing time of complex transactions. Training times for new employees vary but can take anywhere from 6-12 months for an employee to become proficient in all transaction processing.

Additionally, new processes at centers that have been implemented since 2015 in response to new federal requirements, state legislation changes, or our own security initiatives which add to the time certain transactions take to complete. This results in increased customer wait times. Examples include REAL ID issuance, various federally required CDL transactions, electronic identity verifications through federal systems and license restoration changes including more complex Ignition Interlock (II) transactions.

On page 28 the report describes a list of operations in which PennDOT assists other agencies, we note that the department is reimbursed for most of the work we do for other agencies due to motor license fund restrictions.

Activities 6-10: Multimodal Transportation

PennDOT feels that the inclusion of FY 20-21 budget estimates for large urban, small urban and rural, and intercity transit does not fairly represent anticipated costs and revenues and, in some cases, indicated a one-year increase of 50 percent. A footnote should be added indicating that granted funds may be different than budget estimates and that actual expenses are expected to be lower in this fiscal year, but that these funds will be spent in future fiscal years for major transit capital construction projects.

COVID-19, as expressed late in the public transit activities sections, had a profound impact on ridership, revenue, and expenses for the last three months of FY 19-20 as well as the construction activities of major transit facilities. As a result, performance metrics show significant changes from FY 18-19 to FY 19-20 as expenses remained relatively constant while passenger revenue and ridership fell to "near zero" levels for many agencies in the last quarter of the fiscal year. PennDOT believes a more robust discussion of the pandemic and its impact at the beginning of the activity, and/or a footnote on performance metrics tables describing the impact of COVID-19 on metrics, should be included.

PennDOT suggests also including wage growth in addition to CPI since the majority of expenses in public transit fund wage positions.

Under Activity 6: Large Urban Public Transit, PennDOT disagrees with the correlation reached between ridership decline resulting in longer commute times found under County Benchmarks table.

Activity 11: Broadband and Technology Initiatives

As it relates to broadband and broadband access, PennDOT's goals are related to upgrading PennDOT's facilities and the units that gain broadband access (i.e. households and businesses) is a secondary benefit. It should be noted that many laws govern how motor license fund revenues must be spent specific to transportation purposes. While PennDOT supports the Governor's Broadband Initiative by utilizing state and federal funds that assist broadband providers to expand access, it is worth noting that the Federal Communications Commission (FCC) Connect America Fund II (CAF-II) Auction was a one-time event where entities such as cable companies, electric cooperatives, small telecom carriers and other similar entities competed to receive shares of FCC dollars to fund broadband deployment in underserved census block areas.

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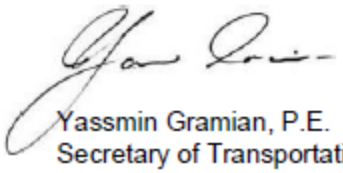
On the performance measure chart on page 53, the statewide indicator is not a measure for PennDOT. We are not in the business of providing broadband to the general public. Improved bandwidth connections to ensure PennDOT facilities have the proper internet services is the appropriate measure and the public units, such as businesses and private homes, that gain access is a secondary benefit. Additionally, the county and state benchmark charts on pages 54 and 55 are not PennDOT measures.

Thank you for the review of our programs and measures. We will utilize the suggested performance goals to improve processes and help guide this review in future years and will continue to do our best to efficiently utilize resources to provide safe mobility options for all Pennsylvanians.

Sincerely,



Yassmin Gramian, P.E.
Secretary of Transportation