MONTHLY TREND eport

AUGUST 2017 - INDEPENDENT FISCAL OFFICE -

The Pennsylvania Opioid Crisis

The origins of the national opioid crisis can be traced to the late 1990s, when patients suffering from chronic pain received opioid prescriptions at a greatly accelerated rate. The misuse of those drugs and, as later discovered, their highly addictive nature, produced the current opioid crisis. For 2015, data from the Centers for Disease Control (CDC) show that Pennsylvania's rate of opioid drug overdose deaths ranked 18th in the nation. In addition to significant personal costs, the crisis also has implications for state and local budgets and economies.

The opioid overdose death rate (rate per 100,000 in population) has increased dramatically. (See table.) In 2015, Pennsylvania's opioid overdose death rate was 11.2, up from 5.1 in 2010, a growth rate of 120 percent. The data imply that 1,433 Pennsylvania residents died from opioid overdoses in 2015, compared to 652 in 2010.

In July, the Drug Enforcement Agency (DEA) released more recent statistics using county-level data that suggest a substantial increase in the Pennsylvania opioid overdose death rate for 2016.¹ The DEA report suggests that the opioid overdose death rate for 2016 will increase to 16.1 (2,060 opioid deaths), a 4.9 percentage point increase over 2015.²

Most states surrounding Pennsylvania are not faring better, and four of those states had higher opioid overdose death rates compared to Pennsylvania. In 2015, surrounding states with higher rates include West Virginia (36.0), Ohio (24.7), Maryland (17.7) and Delaware (14.8). Across the Mid-Atlantic region, all states with the exception of New Jersey (9.8) and Virginia (9.9) recorded a higher death rate than the national average (10.4). For the U.S., the highest rates were recorded by West Virginia (36.0) and New Hampshire (31.3), while the lowest rates were in

OPIO	ID OVERDO	DSE DEATH	RATES ¹
<u>State</u>	<u>2010</u>	<u>2015</u>	<u>Total Number</u>
Delaware	12.0	14.8	140
Maryland	8.7	17.7	1,061
New Jersey	4.2	9.8	876
New York	5.4	10.8	2,133
Ohio	10.0	24.7	2,867
Pennsylvania	5.1	11.2	1,433
Virginia	4.8	9.9	828
West Virginia	25.6	36.0	663
U.S.	6.8	10.4	33,377

¹ Death rates are age-adjusted and per 100,000 population.

Source: Kaiser Family Foundation analysis of data from the Centers for Disease Control and Prevention (CDC), National Center for Health Statistics.

GENERAL FUND SNAPSHOT

	General Fund	Tax Revenue	Non-Tax Revenue					
Aug-17	\$2,129	\$2,086	\$43					
Growth	5.6%	4.5%	119.5%					
FYTD	\$4,214	\$4,149	\$65					
Growth	5.7%	5.6%	12.2%					
Dollar amounts are in millions.								

Nebraska (3.1) and South Dakota (3.5).

The opioid crisis impacts the economy by shrinking the labor force. A recent study by Goldman Sachs finds that the crisis may be connected to declining prime-age labor force participation, especially for men.³ Other research finds that nearly one-half of workers not in the labor force due to reasons other than school, retirement or disability, had taken an opioid the previous day.⁴ Opioid abuse also reduces worker productivity and increases the utilization of medical and sick leave.

Opioid abuse in Pennsylvania was estimated to trigger at least \$874 million in additional health care costs annually.⁵ However, a more recent study by Pew Charitable Trusts notes the positive relation between opioid abuse and hepatitis C infections. The study finds that currently it would cost the U.S. over \$100 billion to treat those that are reportedly infected.⁶ If that study is reasonably accurate, then the actual cost of the opioid crisis could be considerably higher. In the near-term, researchers believe that the budgetary implications of the crisis could intensify as state and local governments continue to devote more resources to education and treatment.

¹ Drug Enforcement Agency (DEA), "Analysis of Overdose Deaths in Pennsylvania, 2016," July 27, 2017.

² IFO calculation based on DEA data.

³ CNN Money, "The Opioid Crisis is Draining America of Workers," July 27, 2017.

⁴ Alan B. Krueger, "Where Have All the Workers Gone?" October 4, 2016.

⁵ Matrix Global Advisors, "Health Care Costs from Opioid Abuse: A State-by-State Analysis," April 2015.

⁶The Pew Charitable Trusts, "With Opioid Crisis, a Surge in Hepatitis C," August 28, 2017.

MONTHLY ECONOMIC INDICATORS

	United States				Pennsylvania			
	May-17	Jun-17	Jul-17	Aug-17	May-17	Jun-17	Jul-17	Aug-17
Unemployment Rate ¹	4.3%	4.4%	4.3%	4.4%	5.0%	5.0%	5.0%	n.a.
Net Job Gains (000s) ²	145.0	210.0	189.0	156.0	55.1	57.2	62.2	n.a.
Average Gasoline Price ³	\$2.39	\$2.35	\$2.30	\$2.38	\$2.46	\$2.41	\$2.37	\$2.45
Consumer Price Index ⁴	1.9%	1.6%	1.7%	n.a.	1.0%	0.7%	n.a.	n.a.
Retail Sales ⁵	4.5%	4.0%	3.9%	n.a.	2.4%	3.7%	4.7%	4.9%
Consumer Sentiment Index ⁶	97.1	95.1	93.4	97.6	n.a.	n.a.	n.a.	n.a.
New Building Permits ⁷	9.3%	7.8%	11.4%	n.a.	9.2%	2.3%	16.6%	n.a.

QUARTERLY ECONOMIC INDICATORS

	United States				Pennsylvania			
	2016.3	2016.4	2017.1	2017.2	2016.3	2016.4	2017.1	2017.2
Gross Domestic Product ⁸	2.8%	1.8%	1.2%	3.0%	6.0%	1.7%	1.2%	n.a.
Personal Income ⁹	2.6%	1.6%	3.1%	2.9%	3.3%	2.5%	3.9%	n.a.
Completed Home Sales ¹⁰	0.8%	5.6%	5.0%	1.6%	2.8%	5.2%	n.a.	n.a.
FHFA House Price Index ¹¹	6.3%	6.3%	6.4%	6.6%	4.3%	4.2%	4.2%	4.4%
Student Loan Debt ¹²	\$4,830	\$4,920	\$5,030	\$5,020	\$5,590	\$5,690	\$5,840	\$5,810
Industrial Electricity Sales ¹³	-4.9%	-4.9%	-0.6%	1.4%	-0.6%	0.8%	-0.5%	2.3%

Notes:

- 1. Source: U.S. Bureau of Labor Statistics–Survey of Households.
- 2. U.S.: Increase in payroll employment compared to the previous month. PA: Average year-over-year increase in payroll employment based on latest three months of data. Source: U.S. Bureau of Labor Statistics–Survey of Establishments.
- 3. Average price for one gallon of regular gasoline. Source: U.S. Energy Information Administration.
- 4. Annual change in average price level for U.S. and PA-NJ-DE-MD. Data for PA-NJ-DE-MD only published on a bi-monthly basis. For non-release months, values are an interpolation. Source: U.S. Bureau of Labor Statistics.
- 5. U.S.: Annual growth rate of advance retail sales based on latest three months of data. Includes purchases of gas and motor vehicles. Excludes services. Source: U.S. Dept. of Commerce. PA: Annual growth rate of sales tax revenues based on latest three months of data. Excludes transfers to or from the Enhanced Revenue Collection Account. Source: PA Dept. of Revenue.
- 6. A diffusion index that reflects consumer optimism. Source: UM–Survey of Consumers.
- 7. Annual growth of new, privately owned single-housing units authorized for construction based on latest three months of data. Source: U.S. Census Bureau.
- 8. The quarterly, annualized real growth rate of the economy. Excludes inflation. Source: U.S. Bureau of Economic Analysis.
- 9. The annual growth rate of personal income. Includes any inflationary gains. Source: U.S. Bureau of Economic Analysis.
- 10. The annual growth rate of sales of existing single-family properties, townhomes and condominiums. (PA data contain some new properties.) Sources: National Association of Realtors and PA Association of Realtors.
- 11. The annual growth rate of an index that measures the average price change of residential homes with mortgages purchased or securitized by Fannie Mae or Freddie Mac. Source: Federal Housing Finance Agency.
- 12. Per capita levels. Levels represent total student loan debt divided by number of consumers with a credit report. For Q4 2016,
- Pennsylvania has 10.9 million consumers (includes children). Source: Federal Reserve Bank of New York.
- 13. The annual growth rate in megawatt-hours of electricity sold to industrial customers. Source: U.S. EIA.

IFO

SELECT GENERAL FUND TAX REVENUES

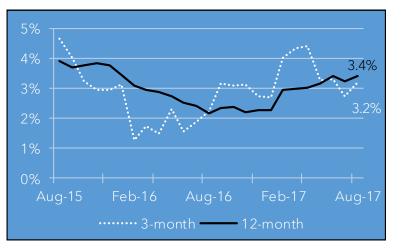
Annual Growth Rates

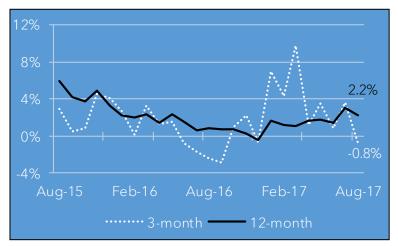
Sales and Use Tax — Non-Motor

Sales and Use Tax — Motor



Personal Income Tax – Withholding





Realty Transfer Tax



Technical Notes

- Transfers from the General Fund to the Enhanced Revenue Collection Account were \$21.3 million including: \$6.3 million from personal income tax; \$7.5 million from sales and use tax; and \$5.0 million from corporate net income tax.
- The personal income tax withholding collections year-over-year growth rate was impacted by a quarterly filer due date that occurred in August last year but in July this year.
- The graphs above correct for these adjustments.

Note: Three- and twelve-month annual growth rates are rolling averages relative to the previous fiscal year.



GENERAL FUND REVENUES SUMMARY

Revenue Source	AUG 2017	AUG 2016	AUG 2015	FYTD 2017-18	FYTD 2016-17	FYTD 2015-16	Monthly Growth	FYTD Growth
Total General Fund	\$2,129	\$2,015	\$1,868	\$4,214	\$3,988	\$4,003	5.6%	5.7%
Total Tax Revenue	2,086	1,996	1,848	4,149	3,930	3,945	4.5	5.6
Total Corporation Taxes	59	36	52	121	97	121	65.9	24.8
Accelerated Deposits	(1)	0	(0)	(0)	0	(0)	(243.5)	(165.3)
Corporate Net Income	47	27	44	107	81	107	76.8	31.6
Gross Receipts	2	5	7	3	8	12	(60.5)	(60.7)
Utility Property	0	1	0	0	1	0	(81.8)	(81.3)
Insurance Premiums	9	2	1	10	2	1	480.0	340.3
Financial Institutions	1	1	1	1	4	1	(3.2)	(75.5)
Total Consumption Taxes	987	920	921	2,021	1,908	1,916	7.3	5.9
Sales and Use - Total	839	791	805	1,751	1,683	1,707	6.1	4.1
Non-Motor	718	664	684	1,515	1,448	1,463	8.1	4.6
Motor Vehicle	121	127	121	236	235	243	(4.8)	0.6
Cigarette	108	100	87	188	164	150	8.2	14.5
Other Tobacco Products	9	0	0	19	0	0	n.a.	n.a.
Malt Beverage	2	2	2	5	4	5	(1.5)	2.7
Liquor	29	27	27	58	56	55	6.3	3.1
Total Other Taxes	1,039	1,040	875	2,007	1,926	1,908	(0.0)	4.3
Personal Income - Total	900	894	743	1,727	1,654	1,620	0.6	4.4
Withholding	852	849	697	1,629	1,567	1,521	0.3	3.9
Quarterly	30	29	29	66	63	67	1.9	5.5
Annual	18	15	16	31	24	32	15.1	29.1
Realty Transfer	50	45	48	90	78	101	10.0	15.9
Inheritance	83	82	72	166	159	156	1.9	4.7
Table Games	10	9	8	19	19	18	14.7	4.7
Minor and Repealed	(3)	11	5	5	16	14	(129.3)	(69.1)
Total Non-Tax Revenue	43	20	20	65	58	57	119.5	12.2
State Store Fund Transfers	0	0	0	0	0	0	n.a.	n.a.
Lic., Fees & Misc.	35	12	12	49	41	42	197.7	18.9
Licenses and Fees	6	6	6	13	13	13	(1.3)	2.9
Miscellaneous	28	5	6	36	28	29	429.9	26.2
Treasury	4	1	0	5	6	1	275.6	(10.6)
Escheats	19	0	(2)	20	(10)	8	n.a.	287.6
Other Miscellaneous	6	4	7	11	33	20	57.6	(66.7)
Fines, Pen. & Int Total	8	8	8	16	17	15	4.6	(4.5)

Note: Dollar amounts in millions. Growth rates computed from same time period in previous year and use the unrounded amounts.