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Institute Insights:

Fiscal Impact of COVID-19 on Municipalities

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Introduction

This research was underwritten by **the Greater Scranton Chamber of Commerce, Sordoni Family Foundation, and UGI Utilities** and with support from **the Luzerne County COVID-19 Emergency Response Fund of The Luzerne Foundation, the Scranton Area Community Foundation COVID 19 Fund and the Wells Fargo Foundation.**

This report was developed to examine fiscal impacts of the COVID-19 pandemic on local government in Northeastern Pennsylvania. The primary focus is on the six second- and third-class cities in Lackawanna and Luzerne Counties, though many of the broad findings are generalizable to other municipalities, as most municipalities in Pennsylvania utilize similar revenue sources, and the impacts of COVID-19 have been felt in virtually every community.

The first portion of this report shows the six cities' tax revenue mix, which will impact their resilience to the economic effects of the pandemic. Those that are more vulnerable are those with a relatively high reliance on elastic revenue sources—taxes and fees that are likely to bring in much less revenue during the pandemic due to increased unemployment and business closures.

Perhaps the most critical form of elastic tax revenue for municipalities in the region is earned income tax (EIT). The second portion of this report examines local employment data to estimate EIT loss during the primary unemployment window of the pandemic under two different unemployment scenarios based on different methodologies. Local service tax impacts are also estimated, though these account for a smaller portion of total tax revenues.

As the situation develops and the economic reopening progresses, it is likely that more will be known about how quickly local government revenues will normalize. Until then, many questions remain, but it is certain that difficult times lie ahead for municipal budgets across the region.

Revenue Mix and Local Government Fiscal Impacts

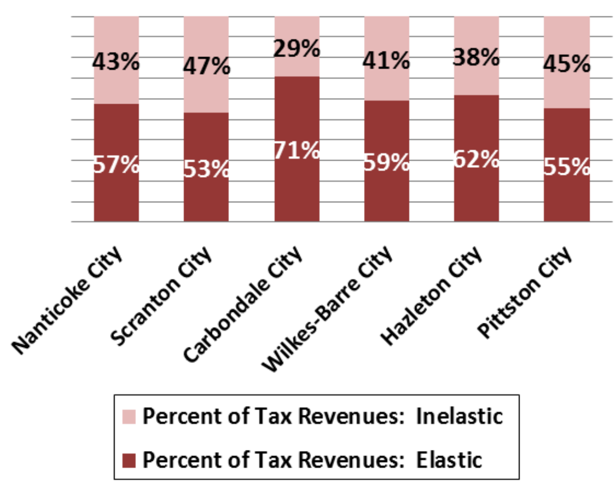
The fiscal impact of the COVID-19 pandemic will vary between local governments based on a number of factors. One important factor for determining a town or city's level of short-term vulnerability is the extent to which the municipality relies on elastic revenue sources—taxes and fees that are likely to bring in much less revenue during the pandemic. These elastic revenue sources include earned income taxes (EITs), local services taxes, amusement taxes, and business gross receipts taxes, among others. These taxes are elastic because they are immediately affected by reduced economic activity and increased unemployment during various levels of shutdown. Sales taxes are highly elastic as well, but are collected at the state level only.

Municipalities that rely heavily on these sources of revenue may be more vulnerable to fiscal difficulties in the short term. For example, a city that relies heavily on EIT compared to other taxes is likely to feel an immediate impact as unemployment rates rise. Meanwhile, towns and cities that rely more on tax revenue from inelastic sources (e.g., real estate taxes) are not as likely to experience a severe immediate fiscal impact in the short-term.

The table below shows the percent of all tax revenues from various revenue sources for the six municipalities analyzed in this report. The percentages shown are the share of tax revenue rather than all revenue, because the nontax revenue share can vary considerably between municipalities and from year to year. In general, taxes made up about 40 to 50 percent of all revenues for most municipalities, though Pittston and Carbondale had far higher shares of nontax revenues.

Percent of Tax Revenues from Selected Sources						
	Nanticoke City	Scranton City	Carbondale City	Wilkes-Barre City	Hazleton City	Pittston City
Budget Year	2018	2017	2018	2018	2016	2018
Percent of All Revenues from Taxes	48.7%	50.4%	19.8%	45.4%	40.5%	19.0%
Tax Revenues: Elastic (Higher Short-Term Disruption)	**57.3%**	**53.0%**	**70.6%**	**58.9%**	**62.0%**	**55.3%**
Real Estate Transfer Tax	2.5%	5.3%	1.7%	4.2%	2.2%	3.5%
Earned Income Tax	49.0%	36.7%	65.5%	45.1%	52.3%	47.9%
Business Gross Receipts Tax	3.8%	4.2%	0.0%	6.2%	4.5%	1.0%
Local Services Tax	1.8%	6.2%	3.4%	3.3%	2.9%	2.8%
Amusement/Admission Taxes	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%
Mechanical Device Taxes	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%
Tax Revenues: Inelastic (Lower Short-Term Disruption)	**42.7%**	**47.0%**	**29.4%**	**41.1%**	**38.0%**	**44.7%**
Property Taxes	41.3%	47.0%	29.4%	41.1%	36.5%	44.7%
Residence Taxes (3rd Class Cities)	0.7%	0.0%	0.0%	0.0%	0.3%	0.0%
Per Capita Taxes	0.7%	0.0%	0.0%	0.0%	1.3%	0.0%
Other Tax Revenues	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

For each municipality, the largest elastic source of tax revenue was EIT, while property taxes were the most significant and in some cases, only, source of inelastic tax revenue. It is important to note that cities with more inelastic or diversified revenue structures may still experience fiscal hardship in the long run; however, they may not feel the effects of the pandemic as immediately as cities that will experience more short-term revenue declines due to their reliance on earned income taxes.



Effects of Industry Mix on Earned Income Tax

Earned Income Tax (EIT) represents one of the most important revenue sources for municipal governments in Pennsylvania. It is also a revenue source that has been heavily impacted on a short-term basis during the COVID-19 emergency due to business closures, temporary and permanent layoffs, and reduced employee hours.

The share of a municipality's EIT revenues that will be affected by the pandemic is substantially affected by the industry mix of workers residing in that municipality. When a relatively larger share of residents work in industries with higher unemployment, the lost EIT revenue will be more significant. Conversely, when a larger share of a city's residents work in less-impacted industries, a less profound decrease would be expected.

In order to estimate the range of lost Earned Income Tax revenue, The Institute built a model using data on employment (by 2-digit NAICS industry group) and countywide average wages by industry. The monthly lost EIT revenues for each of the cities in the two-county region were calculated using employment among city residents for each industry group, average wages for that industry group, expected short-term unemployment in that industry group, and the EIT tax rate. The unemployment for each industry group has perhaps the greatest degree of uncertainty among these variables, as detailed data on local-level unemployment during the pandemic is not available. Two scenarios were developed based on two estimates of unemployment by industry. In Scenario A, the Institute calculated the approximate employment listed as non-life-sustaining under the statewide shutdown order for each industry group, using countywide percentages. In this scenario, the total unemployment was estimated as the share of employment in that industry group in non-life-sustaining industries within the county, deducted by a percentage to account for the share of employees in non-life-sustaining industries who can telecommute, based on an April study from the National Bureau of Economic Research. In Scenario B, the estimated unemployment for each industry group is sourced from estimate ranges developed by Chmura Economics.

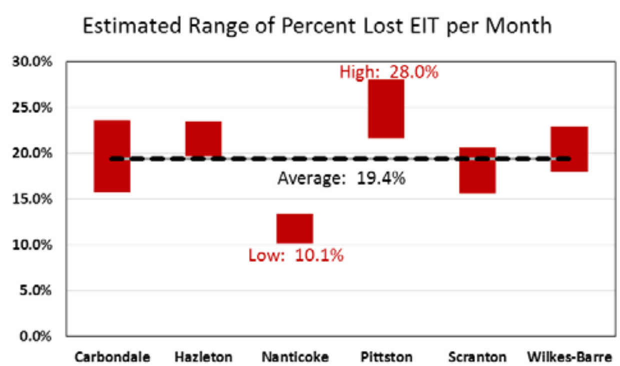
The two scenarios yield two different estimates of monthly lost EIT, providing an approximate range of EIT loss that could be seen in the region's municipalities, shown in the table below.

Estimated Earned Income Tax Impacts for Selected Cities

	Scenario A		Scenario B	
	Monthly Lost EIT	Monthly Percent	Monthly Lost EIT	Monthly Percent
Carbondale City	$50,219	23.6%	$33,486	15.7%
Hazleton City	$125,627	23.5%	$105,229	19.7%
Nanticoke City	$28,176	13.4%	$21,301	10.1%
Pittston City	$39,697	28.0%	$30,629	21.6%
Scranton City	$455,393	20.6%	$345,270	15.6%
Wilkes-Barre City	$263,604	22.9%	$205,632	17.9%

** Calculated from most recently published municipal financial reports from PA DCED*

In the two scenarios, the percentage of EIT revenue (based on the most recently published municipal financial report available through PA DCED) lost per month ranges from 10.1 percent to 28 percent, with an average across both model scenarios for all six cities of 19.4 percent. Estimated impacts most frequently ranged from 15 to 25 percent.



Differences in the estimates in the two scenarios is due to differing breakdown of employment by industry among residents' of the six cities and the different unemployment estimates the two methods used for those industries. Scenario A is based more closely with statewide classifications on life-sustaining businesses, and would align with the expectation that unemployment will likely correlate with those legal classifications. Scenario B is based on national industry data, and would align with the expectation that Northeastern Pennsylvania's economy will mirror expectations for nationwide trends. Both provide a different perspective on how impacts will be felt in different parts of the economy.

The table below shows EIT impacts for the six cities included in this analysis in aggregate, broken down by industry group. Scenario A yields more significant job losses in construction, manufacturing, administrative and support, and educational services, while scenario B yields more significant losses in wholesale trade, transportation and warehousing, and accommodation and food service. In both scenarios, several industries, including manufacturing and retail trade, account for a large share of lost EIT revenue for the cities examined.

EIT Impacts for Combined Six Cities by Industry Group	Scenario A		Scenario B		Average of A & B	
	Monthly Lost EIT	Percent of Total	Monthly Lost EIT	Percent of Total	Monthly Lost EIT	Percent of Total
Agriculture, Forestry, Fishing, Hunting	$0	0%	$232	0%	$116	0%
Mining, Quarrying, and Oil and Gas Extraction	$0	0%	$1,219	0%	$610	0%
Utilities	$0	0%	$2,652	0%	$1,326	0%
Construction	$168,200	17%	$21,641	3%	$94,921	11%
Manufacturing	$161,957	17%	$74,023	10%	$117,990	14%
Wholesale Trade	$14,889	2%	$70,073	9%	$42,481	5%
Retail Trade	$161,790	17%	$109,741	15%	$135,766	16%
Transportation and Warehousing	$1,602	0%	$123,411	17%	$62,507	7%
Information	$1,479	0%	$20,513	3%	$10,996	1%
Finance and Insurance	$3,627	0%	$16,568	2%	$10,097	1%
Real Estate Rental and Leasing	$15,755	2%	$2,443	0%	$9,099	1%
Professional, Scientific, and Technical Services	$31,777	3%	$13,708	2%	$22,743	3%
Management of Companies and Enterprises	$16,891	2%	$5,938	1%	$11,414	1%
Administration & Support, Waste Management, and Remediation	$117,633	12%	$16,084	2%	$66,858	8%
Educational Services	$128,337	13%	$22,434	3%	$75,386	9%
Health Care & Social Assistance	$64,992	7%	$54,228	7%	$59,610	7%
Arts, Entertainment, Recreation	$20,202	2%	$19,057	3%	$19,629	2%
Accomodation and Food Service	$27,953	3%	$126,136	17%	$77,044	9%
Other Services (excluding Public Administration)	$25,633	3%	$28,103	4%	$26,868	3%
Public Administration	$0	0%	$13,342	2%	$6,671	1%
Total	$962,717	100%	$741,547	100%	$852,132	100%

These impacts are calculated on a monthly basis, meaning that a ten week window of persisting unemployment at these levels (approximately mirroring the widest scope of business closures from mid-March through late May 2020) would yield 2.5 times the monthly lost EIT values shown in the tables above. Continued impacts are likely to persist even as businesses reopen, which are not included in the models presented here.

Overall impacts to annual municipal finances are shown below, based on the assumption of these unemployment conditions persisting for ten weeks or 2.5 months. The estimated lost EIT revenue during this period alone amounts to 2.1 to 5.8 percent of all annual EIT revenues, averaging 3.5 percent under scenario B and 4.5 percent under scenario A. Earned Income Tax is a top revenue source for most municipalities, alongside property tax revenues. The losses shown here would account for 1.0 percent to 3.2 of all tax revenues for these cities, averaging 1.4 to 1.9 percent of all tax revenues annually.

Overall Fiscal Impact, Based on 10-Week Unemployment Spike						
	Scenario A			Scenario B		
	10-week Lost EIT	% of Annual EIT	% Annual Tax	10-week Lost EIT	% of Annual EIT Revenue	% Annual Tax Revenue
Carbondale City	$125,548	4.9%	3.2%	$83,715	3.3%	2.1%
Hazleton City	$314,068	4.9%	2.6%	$263,072	4.1%	2.1%
Nanticoke City	$70,440	2.8%	1.4%	$53,253	2.1%	1.0%
Pittston City	$99,244	5.8%	2.8%	$76,572	4.5%	2.2%
Scranton City	$1,138,481	4.3%	1.6%	$863,174	3.2%	1.2%
Wilkes-Barre City	$659,011	4.8%	2.2%	$514,080	3.7%	1.7%
Total for 6 Cities	$2,406,792	4.5%	1.9%	$1,853,866	3.5%	1.4%

** Calculated from most recently published municipal financial reports from PA DCED*

The estimates in the table to the right only account for overall fiscal impact sustained through EIT during the large scale ten week shutdown, but not reduced EIT revenues seen during the gradual reopening and recovery that is expected in summer 2020. Therefore, real impact to EIT revenues and municipal budgets more broadly will likely be higher.

Local Services Tax Impacts

Much of the data used for calculating the above EIT estimates can also be used to calculate impacts on local services taxes (LST). In general, cities rely less on LST than on EIT for their overall tax revenues, but LST revenues are still subject to decline due to unemployment growth, and the LST is collected for employees, like the EIT. One key difference is that the LST is collected for employees working within the collecting municipality as opposed to residents, as with the EIT.

In the two scenarios, the percentage of LST revenue (based on the most recently published municipal financial report available through PA DCED) lost per month ranges from 13.1 percent to 26.9 percent, with an average across both model scenarios for all six cities of 18.4 percent. Estimated impacts most frequently ranged from around 15 to 25 percent.

Local Services Tax Impacts for Selected Cities				
	Scenario A		Scenario B	
	Monthly Lost LST	Monthly Percent Lost LST*	Monthly Lost LST	Monthly Percent Lost LST*
Carbondale City	$2,060	18.8%	$1,456	13.3%
Hazleton City	$7,736	25.7%	$3,964	13.1%
Nanticoke City	$2,095	26.9%	$1,242	16.0%
Pittston City	$1,324	16.0%	$1,440	17.4%
Scranton City	$80,098	21.4%	$68,191	18.2%
Wilkes-Barre City	$16,116	19.1%	$12,158	14.4%

** Calculated from most recently published municipal financial reports from PA DCED*

The estimated lost LST revenue during a ten week unemployment spike event alone amounts to 2.7 to 5.6 percent of all annual LST revenues, averaging 3.6 percent under scenario B and 4.4 percent under scenario A. For each municipality, these revenues account for a much smaller share of all tax revenues compared with EIT. For each city, ten weeks of reduced LST under each scenario represents 0.2 percent of all annual tax revenues, on average. For Scranton, which relies on its Local Services Tax somewhat more heavily, this share is 0.3 percent.

Summary & Conclusions

Each municipality analyzed derives a significant portion of their annual tax revenues from earned income tax (EIT). For each month of the shutdown, the two unemployment scenarios yielded EIT losses ranging from 13 to 32 percent per month, with variation between cities due to differences in industry mix among resident workers. When extrapolated to a 10 week period of the most significant anticipated business closures, the loss during that time period alone accounts for 3.5 to 4.5 percent of annual EIT revenue, on average, and 1.4 to 1.9 percent of total tax revenue on average. These reductions in revenue are significant given the limited avenues for many cities to significantly reduce operating expenditures and continued (and in some cases, possibly increased) demand for public services during the pandemic. Furthermore, total losses in annual EIT revenue will very likely be greater, as reduced revenues are nearly certain to continue after the primary shutdown period. The time it will take for these revenues to fully rebound will be driven by the speed of the overall economic recovery, which is yet to be seen.

Two municipalities, Pittston and Carbondale, would appear to be less at risk because they derived a smaller portion of overall revenues from taxes as of the most recently available financial reports. However, some forms of nontax revenues are not consistent from year to year, such as federal or state grants or proceeds from the sale or lease of land, infrastructure, or equipment.

Other elastic sources of revenues will likely see revenue declines in the near-term as a result of COVID-19. These include real estate transfer taxes, amusement taxes, mechanical device taxes, local services taxes, and business gross receipts taxes, with the latter two being the most significant for the cities examined here.

However, even inelastic revenue sources such as property taxes will not be immune to risk from the current economic situation. For property taxes, this is true for two reasons. First, the current economic downturn could lead to softer real estate markets and a long-term dip in property values. Second, even where assessed values are not impacted, there could be an increase in delinquent property tax bills if a community has a large share of households that have experienced income loss during the pandemic.

Overall, many revenue sources that municipal governments rely upon are subject to varying degrees of risk due to COVID-19 and the associated widespread economic distress. Earned income tax loss appears to be the most significant short-term risk, and when combined with other potential sources of revenue loss from local services taxes, business gross receipts taxes, and others, it appears certain that difficult times lie ahead for municipal budgets. While largely outside the scope of this analysis, nontax forms of revenue will also be subject to impact, such as grant funds from federal, state, or local sources, municipal fees for services, and license and permit fees. While much uncertainty exists around these impacts, the environment for municipal finance could be facing a protracted crisis in many communities around Pennsylvania. ◇

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