# The Fiscal Effects of the Covid-19 Pandemic on Cities: An Initial Assessment

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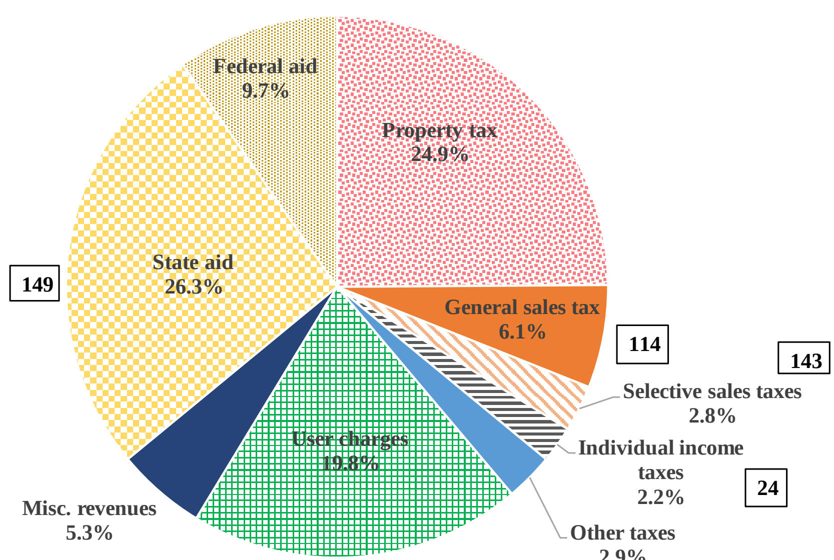
In a paper that will appear in the September issue of the *National Tax Journal*, Howard Chernick, David Copeland, and Andrew Reschovsky evaluate the likely fiscal impacts of the coronavirus pandemic on a sample of 150 major U.S. central cities. Although the paper discusses the additional Covid-19 related costs that cities will face, the focus is on forecasting fiscal year 2021 revenue shortfalls attributable to the coronavirus-induced recession.

The analysis is based on data on *fiscally standardized cities* (FiSCs). The dataset, which can be accessed at https://www.lincolninst.edu/research-data/data-toolkits/fiscally-standardized-cities, combines fiscal data from a central city municipal government with a prorated share of both expenditures and revenues from all overlying school districts, counties, and special districts. FiSCs reflect the total expenditures and revenues raised on behalf of central city residents and businesses.

Based on past trends, we projected FY 2021 revenues in each FiSC under the assumption that there was no pandemic (and hence no recession). For each source of revenue in each city, we then project the percentage change in revenue due to the Covid-19 pandemic under two scenarios—less severe and more severe. Figure 1 illustrates the revenue sources of the average FiSC and indicates the number of cities relying on each revenue source. The mix of revenue sources varies substantially across cities. Property taxes provide less than 35 percent of tax revenue in 8 cities, but over 90 percent of tax revenue in 20 cities. Intergovernmental revenue, from state and federal aid, make up under 20 percent of general revenue in some FiSCs, but over half of general revenue in other FiSCs.

**Figure 1**
**Revenue by Source and Number of Cities Using Each Source, FY 2017**
**150 Fiscally Standardized Cities**




**Note:** Numbers in boxes indicate number of FiSCs using specified revenue source. All 150 FiSCs use revenue source when no number appears.

There is substantial empirical evidence that due to the way property taxes are administered, changes in the market value of real property takes about three years to be reflected in changes in property tax revenues. So, even if reduced demand for dense residential locations and particularly for central city office space declines sharply, the impact on property tax revenues won't be felt for several years. We thus assumed that property tax revenue would either not change or would be reduced by 0.5 percent in fiscal year 2021.

Local sales tax revenues fell sharply during the Spring reflecting both strong supply-side effects caused by widespread economic shutdowns as well as demand-side effects. Our estimates of the percentage shortfalls in sales tax revenues in the FiSCs utilizing local sales taxes depends on our estimates of wage declines in each city and state-specific sales tax elasticity estimates. Under our more severe scenario, the average FiSC will face a FY 2021 sales tax revenue shortfall of 11.7 percent. However, we forecast that 15 FiSCs will experience sales tax reductions in excess of 20 percent.

To forecast reductions in state aid, we relied on estimates of state government revenue shortfalls generated by Moody's Analytics and information on the size of state governments rainy day fund balances. Based on the experience with the Great Recession, we know that state revenue shortfalls translate into widespread cuts in state aid. Though they may do so later, we assume that at least in 2021, states do not address revenue shortfalls by raising tax rates. We project state aid reductions in the average FiSC of 9.6 percent in the less severe case and by 13.8 percent in the more severe case.

Our projected FY2021 revenue shortfalls for each FiSC are calculated by summing up predicted shortfalls for each source of revenue weighted by their share of total general revenues. The results are summarized in Table 1. Under our two scenarios, we predict declines in general revenue in the average FiSC of 5.5 percent and 9 percent, respectively. Under the more severe scenario, 47 FiSCs would experience revenue reductions of 10 percent or more. In dollar terms, these percentages generate revenue shortfalls of $34.2 and $55.3 billion, respectively. Expanding these estimates to all local governments in the U.S. yields aggregate revenue shortfalls of $102.9 and $165.2 billion. These are substantial cuts, which would lead to significant declines in government employment and public service provision.

**Table 1**

**Estimated Shortfalls in General Revenue in Fiscal Year 2021 Due to the Covid-19 Pandemic**
**150 Fiscally Standardized Cities**

| | ***Less Severe Scenario*** | ***More Severe Scenario*** |
|---|---|---|
| **Percentage General Revenue Shortfalls** | | |
| Average | 5.5% | 9.0% |
| Standard deviation | 2.2% | 2.9% |
| Coefficient of variation | 0.394 | 0.319 |
| Minimum | 1.3% | 3.2% |
| 10th percentile | 3.1% | 5.5% |
| 90th percentile | 8.1% | 12.5% |
| Maximum | 13.8% | 19.9% |
| **Dollar Value of Revenue Shortfalls** | | |
| 150 fiscally standardized cities | $34.2 billion | $55.3 billion |
| All U.S. local governments | $102.9 billion | $165.2 billion |

**Source:** Authors' calculations.

The appendix to our *National Tax Journal* article provides a list of projected revenue shortfalls in each FiSC. There are no distinct regional patterns, with large revenue shortfalls anticipated in some cities in each part of the country. Contrary to the claims of some politicians, large revenue shortfalls will occur in cities in both Red and Blue states. For example, large shortfalls are projected for cities in both Florida and New York State. In previous work conducted with Howard Chernick, we developed a measure of the fiscal health of fiscally standardized cities based on the gaps between their expenditure needs and their revenue-raising capacity. Comparing our measure of city fiscal health with our projected revenue shortfalls, we find zero correlation. Thus, among the set of fiscally standardized cities in the weakest fiscal health are cities that we project will face relatively small revenue shortfalls, such as Springfield, MA and El Paso, TX, and cities facing large revenue shortfalls, such as Kansas City and Detroit.

In early September 2020, it is still unclear whether the Congress and the Administration will provide additional federal aid to state and local governments. Given that state and local governments are required to balance their budgets, there is little question that unless the federal government replaces a substantial proportion of the current and forecasted drop in local government revenues, cities will be forced to implement substantial cuts in public services and capital expenditures, including large reductions in public employment. These cuts will occur at the same time that cities must cope with additional costs associated with the pandemic. The consequences of reduced revenues and higher costs will be deleterious for city residents and for the local and national economies.