A RECOVERY LANDSCAPE

FORECASTING FLORIDA MUNICIPAL REVENUE IMPACTS FROM COVID-19

EXECUTIVE SUMMARY

The Florida League of Cities report, *A Recovery* Landscape – Forecasting Florida Municipal Revenue Impacts from COVID-19, forecasts impacts to municipal revenue due to the pandemic through fiscal year 2023 for all 411 Florida municipal governments.

This report can be used as a planning tool to help guide policymakers with municipal finance decisions. Every municipal government's revenues will be affected differently by a host of economic factors. By historically examining the impact of local unemployment on municipal revenues from 2008 to 2018, this analysis offers new insights regarding what revenue streams may look like over the next few years.

KEY FINDINGS

- Reductions in revenues from 2019 pre-pandemic levels for Florida cities in fiscal years 2021 through 2023 are forecast to total \$3.90 billion. The decline each year is forecast to be \$1.72 billion in FY 2021, \$1.29 billion in FY 2022 and \$0.88 billion in FY 2023, as illustrated in the graph below.
- Even with a rebounding economy, municipal government revenues are forecast to be significantly less than pre-pandemic levels for at

TOTAL FORECASTED REVENUE IMPACTS FOR FLORIDA MUNICIPAL GOVERNMENTS (IN BILLIONS)

FY2021 \$(1.72) FY2022 \$(1.29) FY2023 \$(0.88) least the next three fiscal years. For FY 2021, the percentage of revenue decline for Florida municipalities is forecast to be 3.06%. For FY 2022 the decline is forecast to be 2.79%, and for FY 2023 it is forecast to be 1.87%.

- The revenue impacts of the COVID-19 pandemic are predicted to vary by region. Municipalities in the southwest region of the state are expected to experience the greatest revenue declines: 5.62% in FY 2021. Those in the southeast region are expected to experience the greatest declines in FY 2022 and FY 2023: 4.60% and 3.18%, respectively.
- Cities with populations greater than 100,000 are forecast to experience the largest revenue declines: 6.09% in FY 2021, 4.61% in FY 2022 and 3.16% in FY 2023.

PURPOSE

Local officials will have to make consequential policy choices during the recovery. To make the best decisions for their unique communities, they will need access to the best and most comprehensive information, including revenue forecasts.

The purpose of this report is to help cities plan and prepare for the potential impacts of the COVID-19 pandemic on their portfolio of municipal government revenues. While there is no crystal ball to forecast future revenues with certainty, this report uses the most current data available in a manner that can be updated and adjusted to account for evolving circumstances, local conditions and changes in federal and state financial assistance. Forecasts are based on revenue changes from FY 2019, the last year before the pandemic. For municipalities that experienced



increased revenue in FY 2020, the forecasted revenue declines may be understated.

The COVID-19 pandemic has already resulted in major declines in municipal revenues in ways unique to this crisis. The need for social distancing has distinct, imminent effects on the tax base, tax administration and taxpayer compliance. The pandemic and its economic aftereffects may also impact the structure of local economies on a more permanent basis. Although forecasting government revenue changes under these circumstances is challenging, it is also critically important.

METHODOLOGY

Using state-level unemployment forecasts developed by the Office of Economic and Demographic Research (EDR) and Florida's standardized revenue and reporting systems, this report models the relationships between county unemployment rates and municipal revenues over the previous 11 years to construct more realistic estimates of revenue responsiveness to unemployment across 21 categories of revenues for each municipal government.

For each of Florida's 411 municipal governments, county-level unemployment rates were collected from 2008-2018 from the U.S. Bureau of Labor Statistics. Historical revenue and unemployment data were merged as an 11-year panel data set with 4,521 observations. Statistical analysis was then used to construct municipal revenue unemployment responsiveness coefficients (URCs). Regression analysis was applied to estimate the relationships between unemployment and each revenue source.

EDR's forecasts of unemployment rate levels from 2020 to 2022 were used to estimate changes in unemployment rates at the county level since 2019. These unemployment changes were used with the URCs to generate forecasts of revenue changes in each category of revenue.

A separate procedure was used for changes in specific sales-based revenues collected at the state level. For FY 2021, the difference between EDR's forecast for FY 2021 and FY 2020 distributions was used. For 2022, 75% of the 2021 decline was used; for FY 2023, 50% was used. These assumptions offer the best estimates based on the most recent revenues, and the estimates can be adjusted and revised as additional data becomes available. For FY 2021 property tax revenue is assumed to be unchanged since assessments are based on the previous year's valuation. Changes in property tax revenues in FY 2022 and FY 2023 are based on the revenue responsiveness model.

REVENUE FORECAST RESULTS

Forecasts of revenue impacts will vary depending on the severity and duration of the recession. Table 1 reports the revenue impacts for all municipal governments in Florida.

For FY 2021, the mean revenue change from FY 2019 for Florida municipalities is forecast to be a decline of 3.06%. Although the impact is somewhat less the following year, it is still quite substantial. For FY 2022, the average revenue decline will be 2.79%, with half of all municipalities experiencing revenue declines of 2.37% or more. Revenue impacts will continue through FY 2023 with an average decline of 1.87%.

TABLE 1: MUNICIPAL REVENUE IMPACTS DUE TO COVID-19 FY 2021-2023

VARIABLE	MEAN	STANDARD DEVIATION		ΜΑΧ
FY 2021	-3.06%	3.58%	-20.50%	5.95%
FY 2022	-2.79%	2.63%	-16.38%	4.98%
FY 2023	-1.87%	1.84%	-10.17%	2.08%

Note: Changes in revenues are from 2019 pre-pandemic levels.



The graphs in Figure 1 compare revenue impacts due to the COVID-19 pandemic for FY 2021 through FY 2023. The three panels of this figure graph the distribution of the number of municipal governments experiencing different levels of revenue impacts in each of the three fiscal years.

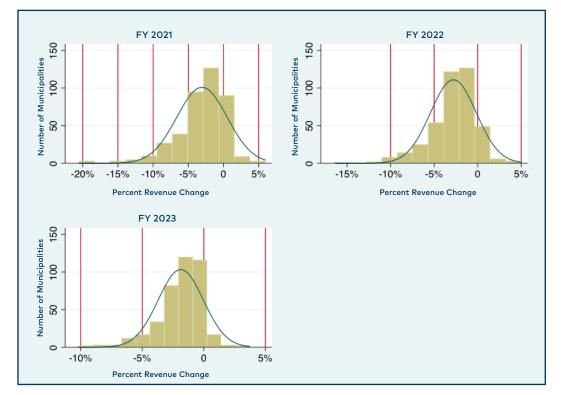


FIGURE 1: FORECAST REVENUE IMPACTS FOR ALL MUNICIPALITIES BY FISCAL YEAR

REVENUE IMPACTS BY REGION

Revenue impacts for the eight geographic regions of Florida are reported in Figure 2.

FIGURE 2: FY 2021 FORECAST REVENUE IMPACTS BY REGION

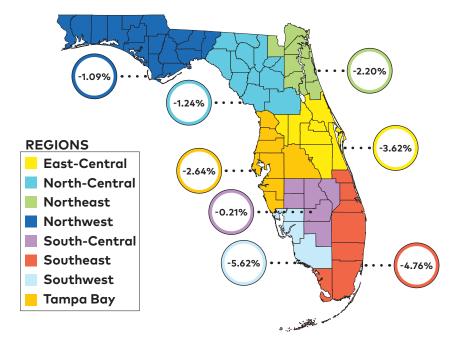
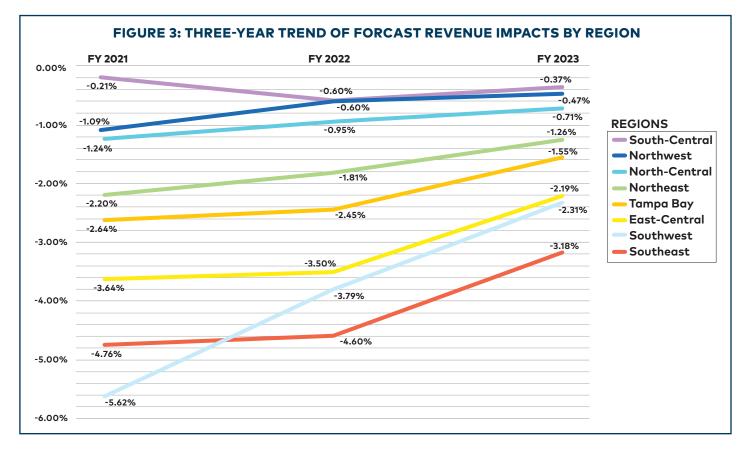




Figure 3 graphically summarizes the regional differences in the three-year trend of impacts of COVID-19 across regions. The south-central region suffers the least impact throughout the economic decline. The south-west region is anticipated to experience the greatest revenue shortfall in FY 2021 with the largest decline from pre-pandemic revenue levels forecast to occur in FY 2021 (5.62%).



REVENUE-IMPACT RESULTS BY POPULATION

Table 2 reports the forecast revenue impacts from COVID-19 for five groupings of population size. The percentage decline in revenues is positively correlated to population, with small cities experiencing the least revenue impacts and larger cities the greatest impacts. Cities with populations of less than 5,000 are anticipated to experience a 2% reduction in revenues, but for cities with populations greater than 100,000, the reduction of revenues is forecast to be 6.1%.

MUNICIPALITY	FY 2021	FY 2022	FY 2023		
<5,000	-2.00%	-2.22%	-1.51%		
5,001-15,000	-3.14%	-2.71%	-1.79%		
15,001-60,000	-3.94%	-3.27%	-2.16%		
60,001-100,000	-4.79%	-3.91%	-2.65%		
>100,000	-6.10%	-4.61%	-3.16%		
Average	-3.06%	-2.79%	-1.87%		

TABLE 2: FORECAST REVENUE IMPACTS BY POPULATION



CONCLUSION

Based on these analyses, the revenue impacts of the COVID-19 pandemic on Florida municipal governments will extend well beyond the current fiscal year, with significant revenue declines likely to continue through at least FY 2023. Total revenue declines for all Florida municipal governments from FY 2021 through FY 2023 are forecast to be \$3.9 billion. The decline each year is forecast to be \$1.72 billion in FY 2021, \$1.29 billion in FY 2022 and \$0.88 billion in FY 2023.

Even with a rebounding economy, municipal government revenues are forecast to be significantly less than their FY 2019 pre-pandemic levels for at least the next three fiscal years. In percentage terms, for FY 2021 the average revenue decline for Florida municipalities is forecast to be 3.06%. For FY 2022, the decline is forecast to be 2.79% and 1.87% in FY 2023. The revenue impacts of the COVID-19 pandemic are predicted to vary by region. Percent revenue declines for governments in the southwest region of the state are expected to be the greatest in FY 2021 with revenues 5.62% less than FY 2019. The anticipated revenue decline in the southeast region surpasses the southwest region in FY 2022 and FY 2023. The pandemic, economic downturn and recovery will affect the revenues of all Florida municipalities regardless of size, but cities with populations greater than 100,000 are forecast to experience the largest revenue declines.

There is no question that challenging budgetary decisions are on the horizon. The key to tackling them is to obtain as much information as possible. Consider every element that affects your local economy and let that information guide the decision-making process about your city's financial future. The hope is that city leaders find this report a useful tool as they work to steer their municipalities into the future.



FLORIDA LEAGUE OF CITIES

This report was written through the Florida League of Cities Center for Municipal Research by Local Governance Research LLC; Dr. David Guo, assistant professor, Florida International University; and Dr. Can Chen, assistant professor Florida International University and FLC university research partner.

The views expressed and the data presented by contributors are not to be construed as having the endorsement of the Florida League of Cities unless so specifically stated.