
Auditor Certifies Revenues for Issuance of Income Tax Secured Revenue Bonds

December 19, 2019

A Report by District Economic Group for the Office of the D.C. Auditor



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Introduction

On November 7, 2019, the Deputy Chief Financial Officer and Treasurer of the District of Columbia requested that the Auditor certify the Office of the Chief Financial Officer (OCFO) Fiscal Year 2020 non-dedicated Local Fund Revenue.¹ The OCFO requested the Auditor's certification in connection with the District's issuance of \$1,004,825,000 in Income Tax Secured Revenue Bonds, Series 2019A, 2019B, and 2019C.

This report sets forth the results of the Auditor's analysis performed by the District Economics Group (DEG) of the OCFO's Fiscal Year 2020 non-dedicated Local Fund Revenue of \$8,237,861,000.

The objectives of the analysis were to:

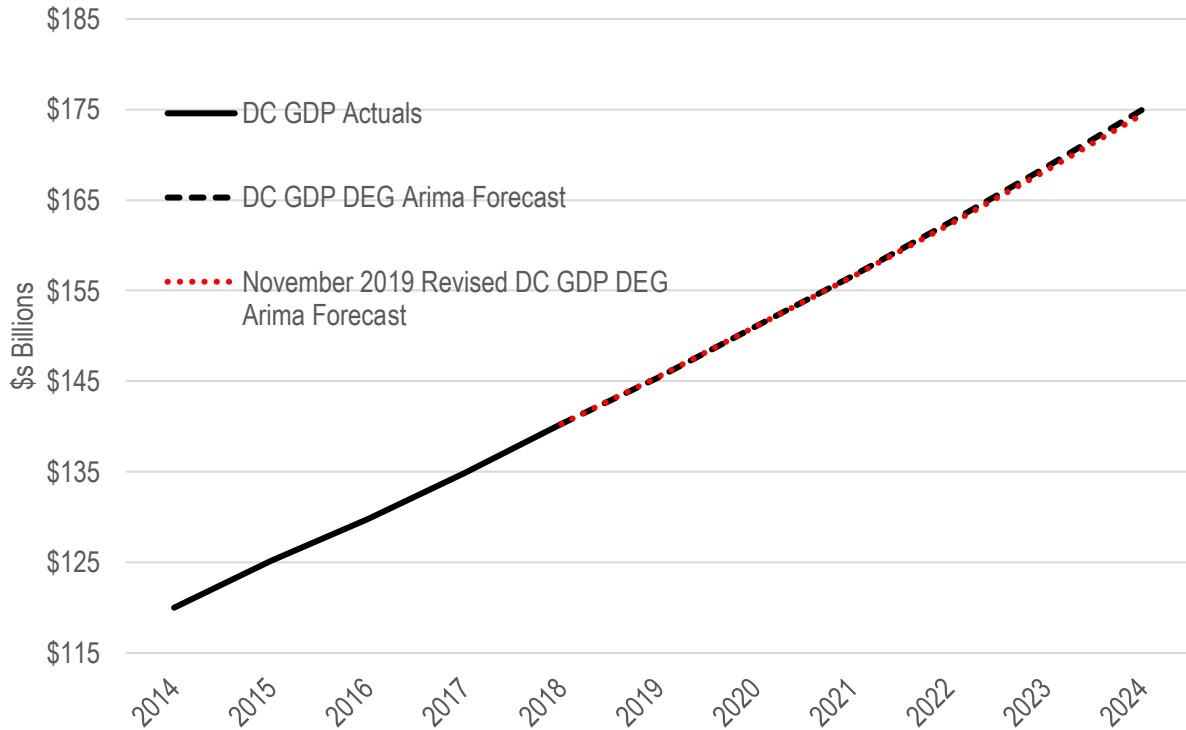
- Assess the reasonableness and attainability of the OCFO's 2020 non-dedicated Local Fund Revenue of \$8,237,861,000.
- Determine if the issuance of the proposed Income Tax Secured Revenue Bonds would cause the District to exceed the 17 percent revenue limitation, as outlined in D.C. Official Code § 1-206.03(b)(1).

Changes to the economic forecast

In September of 2019, DEG constructed a revenue forecasting model for the Office of the District of Columbia Auditor (ODCA). The model forecasted D.C. Gross Domestic Product (GDP) to be \$145.569 billion in calendar year 2019. Currently, the U.S. Bureau of Economic Analysis (BEA) has reported D.C. GDP through calendar year 2019 Quarter 2 (Q2). For calendar year 2019 Q2, the BEA reported an annualized D.C. GDP figure of \$145.476 billion which is slightly below DEG's forecasted D.C. GDP figure of \$145.569 billion but well within the statistical error range of the forecast. The DEG forecast of D.C. GDP uses an auto-regressive moving average model (ARIMA) to forecast future D.C. GDP based upon past values of both U.S. and D.C. GDP. (For a detailed explanation of the DEG forecast see "Modeling the D.C. Economy, Revenues, and Debt Service Obligations: A Methodology Report by District Economics Group", Office of the District of Columbia Auditor, November 13, 2019.) The DEG model used data through calendar year 2018 to forecast D.C. GDP through 2023. DEG updated the forecast of D.C. GDP through 2023 by using BEA's annualized 2019 Q2 figure of D.C. GDP as a data point rather than forecasting 2019. The revised forecast of D.C. GDP is then used to revise forecasts of D.C. revenues. The revised D.C. revenue forecasts are very similar to the original forecasts. Below is a chart showing how similar the revised forecast of D.C. GDP is to the original forecast of D.C. GDP.

¹ Notice sent from OCFO's Office of Finance and Treasury (OFT) to the Office of the D.C. Auditor pursuant to D.C. Official Code, Section 1-206.03(b)(1).

Chart 1: Revised DC GDP Forecast 2019-2024 as of November 18, 2019



Changes to the revenue forecast

The table below shows how similar the revised forecasted revenue streams (pink shaded columns) are to the original forecasted revenue streams (gray shaded columns). One thing to note is that this table shows the forecasted gross revenue streams before the dedicated revenues are netted out. The white columns show the change in revenue forecasts from September 2019 to November 2019. The forecasts for the revenue categories for other taxes and gross receipts revenue do not change because in the DEG model features other than D.C. GDP determine the amounts.

Table 1: Revised Revenue Forecasts as of November 18, 2019 (\$ Thousands)

Fiscal Year	Income tax revenue			Property tax revenue			Sales and excise tax revenue		
	Original	Revised	Difference	Original	Revised	Difference	Original	Revised	Difference
2019	\$2,720,536	\$2,722,548	\$2,012	\$2,765,560	\$2,768,180	\$2,620	\$1,658,478	\$1,659,857	\$1,378
2020	\$2,818,665	\$2,818,761	\$95	\$2,893,381	\$2,893,505	\$124	\$1,725,720	\$1,725,786	\$65
2021	\$2,917,783	\$2,915,832	(\$1,952)	\$3,022,490	\$3,019,947	(\$2,542)	\$1,793,640	\$1,792,303	(\$1,337)
2022	\$3,020,270	\$3,016,122	(\$4,148)	\$3,155,987	\$3,150,583	(\$5,403)	\$1,863,869	\$1,861,026	(\$2,843)
2023	\$3,127,385	\$3,120,874	(\$6,511)	\$3,295,512	\$3,287,032	(\$8,481)	\$1,937,268	\$1,932,807	(\$4,461)
Fiscal Year	Other taxes revenue			Gross receipts revenue			Non-tax, lottery and special purpose revenue		
	Original	Revised	Difference	Original	Revised	Difference	Original	Revised	Difference
2019	\$522,028	\$522,028	\$0	\$366,178	\$366,178	\$0	\$923,645	\$924,433	\$788
2020	\$536,080	\$536,080	\$0	\$368,670	\$368,670	\$0	\$962,105	\$962,142	\$37
2021	\$550,132	\$550,132	\$0	\$370,258	\$370,258	\$0	\$1,000,952	\$1,000,187	(\$765)
2022	\$564,184	\$564,184	\$0	\$372,412	\$372,412	\$0	\$1,041,120	\$1,039,494	(\$1,626)
2023	\$578,236	\$578,236	\$0	\$374,212	\$374,212	\$0	\$1,083,102	\$1,080,550	(\$2,552)

Source: Office of the Chief Financial Officer; DEG estimates based upon Office of the Chief Financial Officer data

Using these revised forecasted revenue streams and netting out any dedicated revenues from the gross revenues, an updated version of the D.C. Auditor Certification Table can be created. The updated version of the D.C. Auditor Certification Table is shown on the next page.

**Figure 1: Fiscal Year (FY) 2020 Total Local Source, General Fund
Revenue Estimate (Net of Dedicated Taxes) by DEG dated**

Revenue Source	DEG 2020 Total Local Source, General Fund Revenue Estimate (Net of Dedicated Taxes)	FY2019 and FY 2020 Tax Changes Full-Year Revenue Effect	Revenue Impact of New Legislation and Revenue above OCFO Forecast	Total
Property Taxes	\$2,834,406	\$39,615	-	\$2,874,021
Sales Taxes	\$1,185,791	\$34,997	-	\$1,220,788
Income Taxes	\$2,818,761	\$14,475	-	\$2,833,236
Gross Receipts Taxes	\$241,367	\$23,018	-	\$264,385
Other Taxes	\$449,209	\$6,460	-	\$455,669
Total Taxes	\$7,529,533	\$118,565	-	\$7,648,098
Total Non-Tax and Lottery Revenues	\$546,338	-	-	\$546,338
Total Local Source, General Fund Revenue Estimate	\$8,075,871	\$118,565	\$148,800	\$8,343,236

Principal and interest from:	2020 Principal and Interest Payments	Principal and Interest Payments as Percent of General Fund Revenue Estimate
General Obligation, ITSB, QZAB, Housing Production Trust and 225 Virginia Ave, LLC	\$842,506	10.10%
+ PILOT	\$880,964	10.56%
+ TIF	\$892,852	10.70%

Source: DEG estimates of revenues and Office of the Chief Financial Officer (OCFO) estimates of principal and interest payments.

Notes: Revenue impact of FY 2020 Budget Support Act of 2019 is \$117.3 million in FY 2020. This FY 2020 Budget Support Act triggered the Short-term Rental Act which reduced sales tax revenue by \$16.3 million in FY 2020. The OCFO revised their local source revenue upward by \$47.8 million based on 2019 year-to-date collections data which shows higher than expected individual and corporate income tax revenue.

Revisions to revenue forecasts

The 17% of revenues certification test statistic increased from the September estimate of 9.39% to 10.10% after revising the revenue forecasts and taking into account new legislation and increases in year-to-date collections data. DEG's revised 2020 Total Local Source, General Fund Revenue Estimate remained largely unchanged from the September 2019 estimate because the BEA 2019 D.C. GDP figure was so close to the DEG forecasted 2019 D.C. GDP figure. The change in D.C. GDP did not change revenues appreciably.

However, increased revenues from new legislation and strong 2019 year-to-date revenue collections increased DEG's estimate of Fiscal Year (FY) 2020 local source, general fund revenue. The FY 2020 Budget Support Act of 2019 increased local source, general fund revenues by \$117.3 million in FY 2020. The FY 2020 Budget Support Act of 2019 triggered the implementation of the Short-term Rental Act² which reduced sales tax revenue from accommodations by \$16.3 million in FY 2020. The OCFO also revised their FY 2020 local source revenue upward by \$47.8 million because year-to-date revenue collections came in higher than expected for individual and corporate income taxes. These changes added \$148.8 million ($\$117.3 \text{ million} - \$16.3 \text{ million} + \$47.8 \text{ million} = \148.8 million) to the DEG estimate of FY 2020 local source, general fund revenue. These two factors, stronger revenues and legislative changes, increased DEG's estimate of FY 2020 local source, general fund revenue.

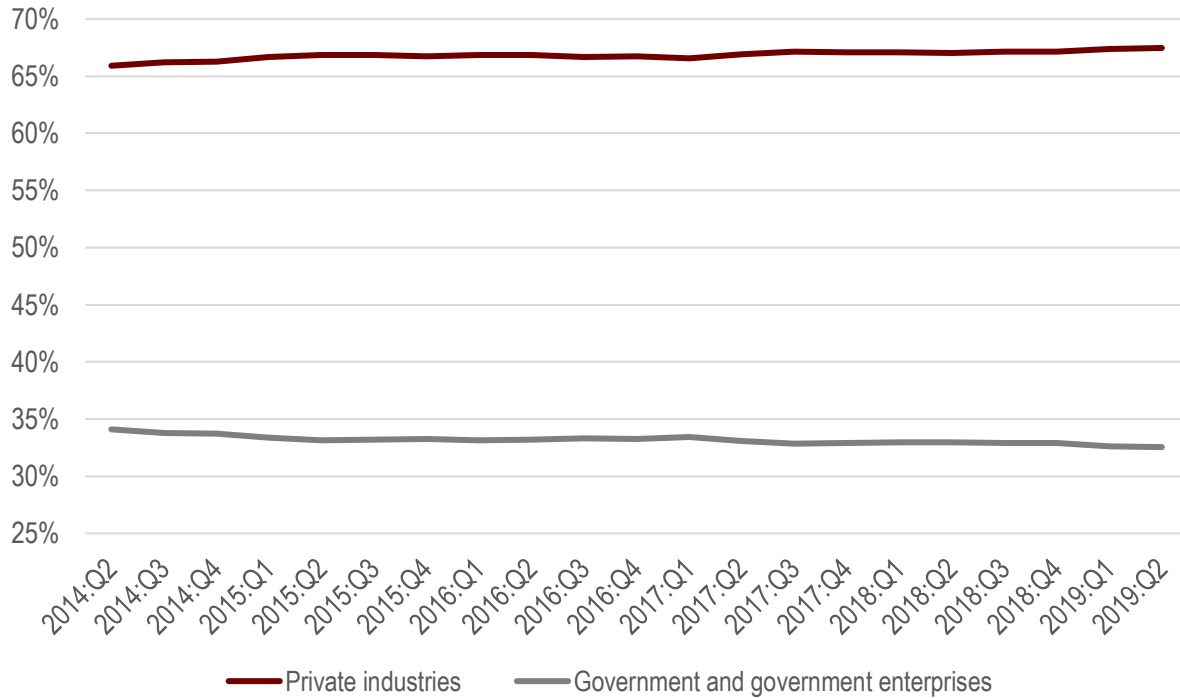
Despite the increase to DEG's estimate of FY 2020 local source, general fund revenue, the 17% of revenues certification test statistic increased because new general obligation and income tax secured revenue bonds were issued. The issuance increased the 2020 debt service of general obligation and income tax secured revenue bonds from \$748 million to \$825 million resulting in an increase in the test statistic from 9.39% to 10.10%.

Changes in the D.C. economy

The D.C. economy continues to outperform most of the east-coast of the United States. According to the Bureau of Economic Analysis, in 2018 only Massachusetts, Virginia, South Carolina, and Florida grew faster and between the first and second quarters of 2019 D.C. grew faster than any eastern seaboard state with real G.D.P. growth of 2.1%. The following two charts provide a high-level view of the composition of economic activity in the D.C. economy. The first chart shows that while the D.C. economy is roughly made up of two-thirds private sector and one-third government sector, that over time these shares have been moving towards an increasing presence of private sector activity.

² D.C. Law 22-307, effective April 25, 2019, 66 DCR 5802.

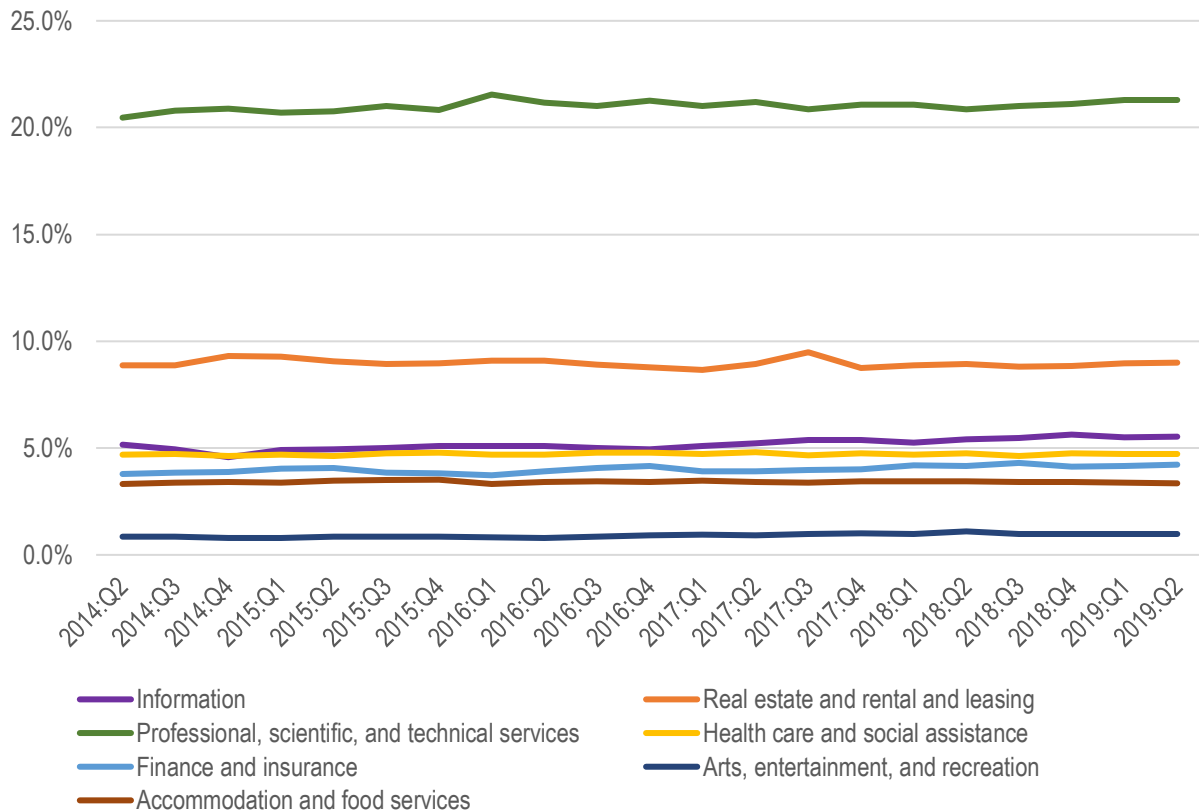
Chart 2: Share of Total D.C. GDP by Industry



Source: Bureau of Economic Analysis Regional Data

Washington D.C. GDP increased by 4.2% in calendar year 2019 Q2 from the same period one year ago. The increase was largely driven by growth in private industry. In calendar year 2019 Q2, gross output from private industry increased by 4.9% from the same period one year ago while gross output from the government and government enterprises increased by 2.8%. In calendar year 2019 Q2, private industry accounted for 67.5% of Washington, D.C.'s gross output while government enterprises accounted for 32.5%. Over time private industry has been growing at a faster rate than government and government enterprises. In calendar year 2014 Q2, private industry accounted for 65.9% of Washington, D.C.'s gross output while government enterprises accounted for 34.1%. (Gross output is a larger measure than GDP because it measures total output of an industry and not only the value added of an industry.)

Chart 3: Share of Total D.C. GDP by Private Industry



Source: Bureau of Economic Analysis Regional Data

A more detailed view of D.C. economic activity by major industry shows that the shares of activity by major industry groups have been stable over time. The largest private industry in D.C. throughout the five-year period from calendar year 2014 Q2 to calendar year 2019 Q2 is the professional, scientific and technical services industry accounting for 31.6% of D.C. gross output. The size and stability of this industry is closely linked to the federal government’s regulatory and rule-making activities, the pace of which is less sensitive to economic cycles than other private industries such as real estate, finance and insurance, and accommodation and food services. This industry’s output grew by 6.4% between calendar year 2018 Q2 and calendar year 2019 Q2. The second largest private industry, real estate, rental, and leasing services, grew by 4.8%; the third largest industry, information, grew by 6.9%, the fourth largest industry, health care and social services, grew by 3.8%; the fifth largest industry, finance and insurance, grew by 5.6%, and the sixth largest industry, accommodation and food services grew by 1.4%. Among the private industries, the arts, entertainment and recreation industry, shown as the dark blue line at the bottom of the chart, saw its output decrease by 8.1% from the same period one year ago.

Conclusion

Based on the analysis performed by DEG, including adjustments for increased revenues from new legislation and strong FY 2019 year-to-date revenue collections, the Auditor can certify that the November 20, 2019 non-dedicated Local Fund Revenue estimate totaling \$8,237,861,000 appears to be both reasonable and attainable. Further, the issuance of new bonds is not likely to exceed the District's 17 percent limitation on debt service payments.

Therefore, the Auditor certified the FY 2020 non-dedicated Local Fund Revenue estimate of \$8,237,861,000 submitted by the OCFO for the issuance of \$1,004,825,000 in Income Tax Secured Revenue Bonds, Series 2019A, 2019B, and 2019C, on December 4, 2019.

The Auditor only certifies that the revenue estimate, at the time of certification, December 4, 2019, appears sufficiently supported and achievable. As the OCFO frequently revises projections throughout the fiscal year after gathering additional information, we stress that our report is based on the information available at the time of our review.

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About ODCA

The mission of the Office of the District of Columbia Auditor (ODCA) is to support the Council of the District of Columbia by making sound recommendations that improve the effectiveness, efficiency, and accountability of the District government.

To fulfill our mission, we conduct performance audits, non-audit reviews, and revenue certifications. The residents of the District of Columbia are one of our primary customers and we strive to keep the residents of the District of Columbia informed on how their government is operating and how their tax money is being spent.

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