

# Appendix 7: FTMS

## Financial Trend Monitoring System Indicators

In light of the COVID-19 crisis' impact on projected FY 2020 and FY 2021 revenues and by virtue of this report's central focus on audited historical data, it is important to note that what follows did not form a primary basis of FY 2021's recommended budget. The financial impact of the COVID-19 crisis, coupled with the need to restore cash and fund balances, resulted in a "crisis budget" as opposed to a budget built heavily upon Metro's past financial position. What follows is a review of recent historical trends.

When managing municipal finances, it is important to understand past financial trends and their effects on the present and future. To accomplish this, Metro has developed a Financial Trend Monitoring System (FTMS). This system is based on the FTMS developed and outlined by the International City/County Management Association (ICMA) in its *Evaluating Financial Condition – A Handbook for Local Governments*, but slightly modified to meet the needs of Metropolitan Nashville and Davidson County.

The trend system consists of measurable factors that reflect and influence Metro's financial condition – its ability to finance current services on a continuing basis. These factors include the national economy, population levels, federal and state mandates, the local business climate, and the internal fiscal policies of the local government.

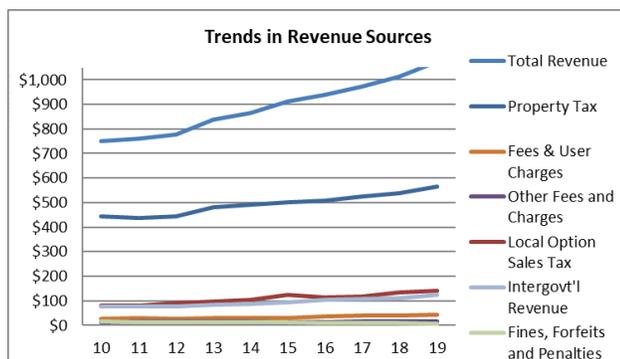
This evaluation reviews financial data from the general funds of the General Services District (GSD) and the Urban Services District (USD) for the ten-year time period extending from FY 2010 to FY 2019.

## Revenue Indicators

The revenue indicators reflect Metro's ability to produce sufficient revenue to support current service levels, meet existing obligations, and plan for future initiatives.

### Trends in Revenue Sources

**Description:** This graph reveals trends for the largest sources of revenue received by Metro, grouped into seven categories: total revenue, property taxes, sales taxes, fees & user charges, revenue from other governments, fines forfeits and penalties, and other fees and charges. The composition of these revenues helps determine the Metropolitan Government's potential dependence on any one specific revenue source in order to respond to changing economic situations and service demands.



**Commentary:** Total revenue grew by approximately 43.0% between FY 2010 to FY 2019, which represents a net increase of 11.8% relative to the previous rolling ten-year period. This increase is attributed to strong growth in property and local option sales tax revenues over the same period, which netted 3.5% and 23.1%, respectively. During this time period, two basic trends are evident. Metro experienced vastly different revenue growth patterns during separate five-year periods ranging from 2010 to 2019. The devastating effects of the financial and liquidity crises, which occurred from 2007 to 2008 and eventually led to the subprime mortgage crisis, sending the country into a period now referred to as The Great Recession, contributed to declining total revenues through 2010. These decreases occurred in nearly all of Metro's major categories and essentially created a floor from which revenues would begin to recover during the first five years of the period. From this trough, revenues gained momentum during the second half of the period, increasing by 17.6% from 2015 to 2019, as the economy recovered on a local, national, and even global scale.

The predominant source of revenue is property taxes, which increased by approximately 27.3% between 2010 and 2019. This upward trend occurred, in-part, following an increase in property tax rates in FY 2013. A reappraisal that same calendar year lowered the rate for the following fiscal year, where it remained, until dropping to a historically low level in FY 2018. Steady growth in property tax revenue despite this precipitous drop in rates demonstrates that Metro is benefitting from economic activity that is, in turn, driving new construction and property value appreciation. Also indicative of this economic uptick, revenue growth over the last five years has comfortably exceeded that of the preceding five years, in spite of the rate drop. Various economic indicators, to include: population growth, job market expansion, and unmet demand due to low supply, suggest a continuation of this trend for the upcoming fiscal year.

Prior to the reappraisal that occurred in calendar year 2017, the tax base had grown moderately but consistently over the period. Bucking this trend, the reappraisal resulted in a 48.9% increase in total assessed values for real property. State law mandates that revenues tied to the reappraisal of existing property remain the same, irrespective of increases in property values. This is achieved by offsetting reductions in the certified tax rates, ensuring that the reappraisal serves its intended purpose, equalization based on current market value. This revenue neutrality requirement creates stability in the source, which is beneficial given its proportion relative to the overall budget. The rate increases are detailed in the property tax discussion in Section A of this book.

Intergovernmental revenues (funds received from other governments) increased by 13.6% from 2010 to 2014, primarily due to a base year that experienced reduced collections (2010). Relative to revenues from all other sources, this category's percentage of overall revenue continued to decline until about 2013, as absolute annual dollar amounts remained flat. Since then, there has been an upsurge of 32% over the last five years, which is a credit to economic recovery as well as increased

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collections of state shared revenues, to include: state sales taxes, increased gas and fuel rates due to the IMPROVE Act in 2017 and revised distribution of telecom revenue that greatly benefitted local governments. Since the recession, Metro has taken steps to ensure that it is not overly dependent on revenues from other governmental entities due to the volatility of available funds. These steps include being judicious in funding programs that align with Metro's organizational priorities and implementing a hiring freeze program that provided greater financial oversight of personnel expenses.

Local option sales tax is the primary source of elastic revenue because it responds to changes in inflation and the economic base. The total sales tax rate in Davidson County is 9.25%. To fund education, in FY 2002 a 1.0% increase to all items except unprepared foods (4% plus local option) put the state portion of the sales tax rate at 7.0%, plus the 2.25% local option rate levied by Davidson County. During the 10-year period being discussed, Davidson County has experienced a robust 78.1% increase in local option sales tax. The impact of the recession is readily identifiable in this considerable expansion, with collections of just \$79.7M in FY 2010, the lowest during the period. By comparison, revenue from this source was roughly \$141.9M in FY 2019.

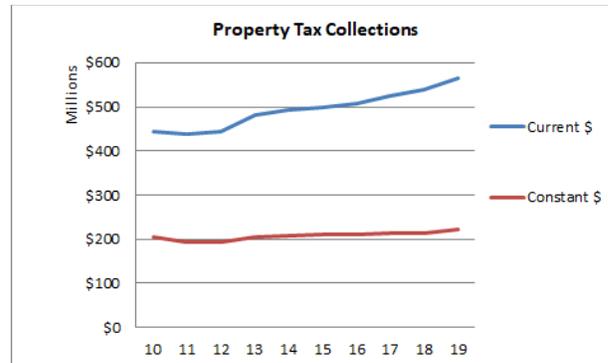
Overall, fees and user charge collections have increased approximately 62.2% between FY 2010 and FY 2019, however, categorically they account for a small portion of total revenue.

**Analysis:** Understanding the various stages, and associated defining characteristics of, the business cycle is beneficial in determining the underlying components of growth in Metro's revenue sources and performance implications going forward. Following the last recession, which immediately preceded the timeframe being examined, the economy has been in a period of expansion for over 10 years. This has been marked by, among other indicators: GDP growth, new housing construction and value appreciation, increased consumer confidence and low unemployment; and can be traced in the prominent upward trend of total revenue. Benefitting from these economic strengths, as well as state level changes in rates and Metro's population growth are intergovernmental revenues, as this growth often determines the basis for allocation among municipalities. Fees and user charges and local option sales tax revenue have also both shown typical post-recession growth, the result of the aforementioned increased consumer confidence and higher discretionary income; with the latter increasing by roughly 6.0% year over year, making it one of the best performers during the year. However, potential threats to the viability of certain revenue sources going forward still remain; the result of inherent ties to the state and national economy in general, policy and administration changes at all three levels, as well as uncertainty with respect to the stability of revenues reliant on the tourism industry in particular. Examining avenues for increased diversification of Metro's revenue streams would help to offset potential sluggish performance in certain revenue categories at some point in the future.

However, since 2010 as economic indicators, including GDP, have reflected stabilization, as well as growth, in the national economy, Nashville too has followed suit.

### Property Tax

**Description:** Metro relies heavily on the property tax as its single largest revenue source. In FY 2019, the property tax constituted approximately 52.6% of all revenue collected by Nashville Metropolitan Government.



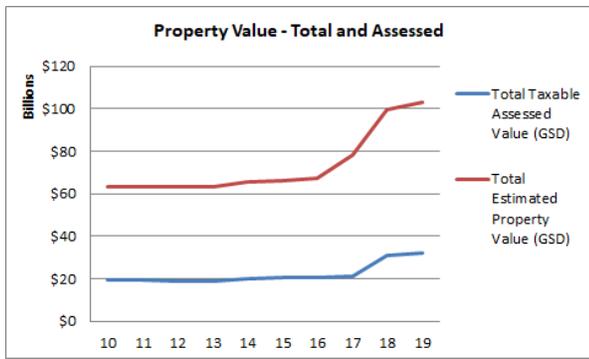
**Commentary:** The property tax, a comparatively stable funding source, should mirror the effects of inflation to ensure that dollars collected have consistent buying power year to year. For the analysis period, the current buying power of the property tax revenue has varied from a low of \$438.4M in FY 2011 to a high of \$565.2M in FY 2019. Since FY 2012, as the total revenue generated has increased by roughly \$121.9M, constant buying power has failed to keep pace, increasing only \$27.5M.

**Analysis:** The graph displays property tax revenue in both current and constant dollars to show the effect of inflation on revenue. The noticeable uptick in FY2013 can be attributed to two things; a rate increase for the first time since FY2006, as well as a reappraisal. Although the latter resulted in a \$0.14 decrease to the adjusted tax rate for the following year, the offset created by both returned the effective rate to prerecession levels. This, in-part, demonstrated economic recovery locally and produced an increase from \$444.1M in FY 2010 to \$565.2M in FY 2019.

### Appraised Property Value

**Description:** Appraised value of property measures the market value of taxable real, personal, and utility property in Metro. Ideally, market and appraised values are the same – indicated by an appraisal ratio of 1.00. When a gap exists between market and appraised values, some property owners are paying less than a fair share of property taxes while others may be overburdened with taxes on properties of declining values. Appraised values and appraisal ratios (the state-estimated ratio between appraised and market values, updated every two years) are presented in Section A of this book.

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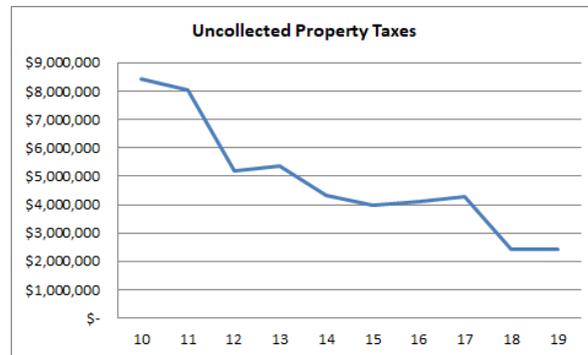


**Commentary:** Regular reappraisals should help keep appraised values balanced with market values. All taxable real property is appraised every four years by Metro’s Assessor of Property, ensuring that there is equitable distribution across the entire tax base.

**Analysis:** The total assessed value of property increased steadily for the majority of the period, before considerable appreciation associated with favorable market conditions and 2017’s reappraisal created a significant upswing. This surge resulted in growth of 67.6% from FY 2010 to FY 2019. Over the same time period, total estimated property value increased 63.0%, representing a slight disparity between the two figures, as opposed to an exact match. In this ideal scenario, the market is being fairly and accurately represented for citizens and they also benefit in increased service offerings, the result of the precise assessment of the tax base. A number of factors, either in isolation or in combination, could be the source of the difference, to include: natural variance as the inherent byproduct of explosive growth in the market, the impact of commercial development and related incentive packages, adjustments to assessed values that are linked to a greater number of appeals or citizens utilizing property tax relief programs at a higher rate. Metro has elected to undertake a four-year reappraisal cycle in an effort to keep property values in line with current market values as well as maintain equalization throughout the county. Appraised values are generally within 90% of market values.

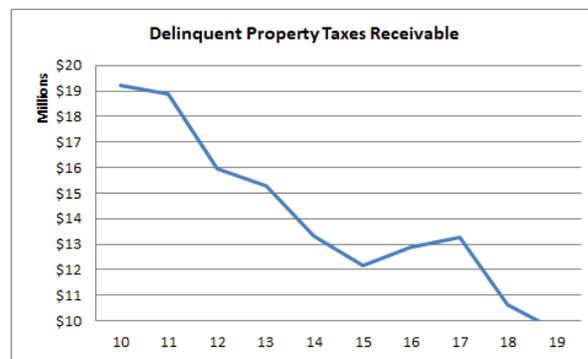
## Uncollected Property Taxes

**Description:** Each year, a portion of assessed property taxes remain uncollected due to a variety of reasons. An increase in this percentage can indicate an overall decline in local government’s economic health. Delinquent and back property tax collections form a significant portion of annual property tax revenue. The largest portion of delinquent taxes consists of the prior year’s assessments.



**Analysis:** With the exception of just a few years over the last ten, uncollected property tax levels have consistently hovered between just over \$4.0M to \$5.5M, most recently at \$2.4M in FY 2019. These relatively low levels can be attributed, in large part, to an annual agreement that began in FY 2006, in which Metro agreed to sell its outstanding property tax receivable to a private sector collector, which at the time stood at approximately \$22.8M.

## Delinquent Property Tax Receivables



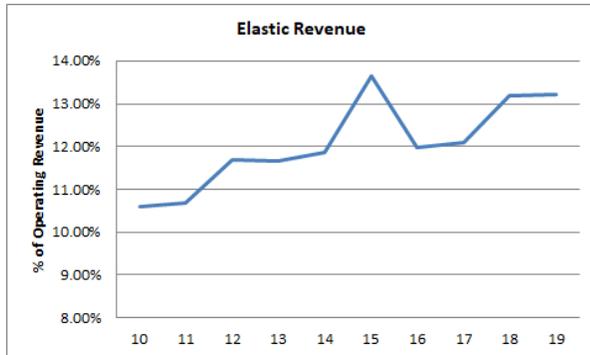
**Commentary:** Delinquent property tax receivables have fluctuated some during the time period of analysis; however, the overall trend exhibits that of a decrease. These fluctuations typically occur during periods of economic stagnation, which are often marked by declining income. This correlation serves as a possible explanation for the notable decrease that has occurred since the country left the trough of its last recession. Despite a couple of years of marginal increases, the overall trend for delinquent property tax receivables has been downward, decreasing by 50.0% from FY 2010 to FY 2019.

**Analysis:** Various factors, such as property tax rate increases or significant market appreciation, changes in the economic landscape, and even variability in the collection process itself have the potential to impact the volume of delinquencies. Conscious effort on the part of Metro to ensure that uncollectable balances have been accounted for has contributed to the significant decline from FY 2010 to FY 2019, with FY 2019’s total of \$9.6M being the lowest during the period.

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## Elastic Revenue

**Description:** Elastic revenue refers to revenue that responds to changes or fluctuations in inflation and the economy. In this study, the elastic revenue analyzed is the local option sales tax.

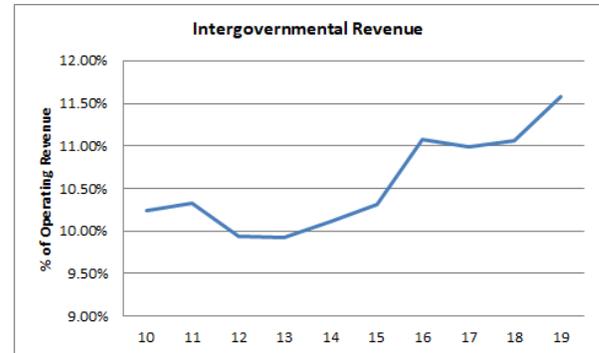


**Commentary:** In FY 2010, elastic operating revenues were roughly \$79.7M. For the first five years of the period, the revenues experienced an increase of 28.5% from 2010 to 2014, representing an impressive increase of 15.3% over the loss incurred during the previous rolling five-year period. The performance over the second half of the ten-year analysis is similar at 13.7% from 2015 to 2019.

**Analysis:** During periods of increased inflation, a high percentage of sales tax revenue compared to total revenue helps maintain purchasing power. The category's growth, which began modestly in 2011, expectedly trails, but still mimics the slow recovery and subsequent expansion of the economy. While this growth occurred at both the national and state levels, it at times has been outpaced locally by Nashville's economy. If not for considerable growth in other operating revenues, this category's performance would not appear to be nearly as artificially suppressed as the graph suggests. Also contributing to growth is the proliferation of out-of-state and internet sales tax collections as a result of voluntary compliance due to looming statutory changes. The spike observed in FY 2015 is the result of fund allocation adjustments and not representative of the actual continued growth of the underlying source itself, which continued in FY 2019.

## Intergovernmental Revenue

**Description:** Intergovernmental revenue consists of funds from federal, state, and other governmental entities, and non-profit groups. Often these funds are designated for specific uses. Too much dependence on intergovernmental revenue is risky; if funds are withdrawn, the local government may need to fill the gap or reduce services provided by the funding.



**Commentary:** Intergovernmental revenue, following fairly steady growth through FY 2009, declined considerably in FY 2010 in relation to total revenue and has remained comparatively flat since, ranging from roughly 10.0% to 11.6%. In part, this is due to increased property tax collections, which increased the percentage of revenue raised by the property tax relative to other sources. Along with this, during several of the years being examined there were reductions in intergovernmental transfers from state and federal sources due to budget reductions at the state level and shifting of resources out of federal grant programs. These revenues have started to trend upward since FY 2012, as fiscal tightening at the federal and state levels has lessened.

**Analysis:** For context, from FY 2007 to FY 2009 a sizeable spike in intergovernmental revenue occurred, which could be attributed to an inflow of federal stimulus funds, the cumulative measures of which later became known as the American Recovery and Reinvestment Act in 2009. Since then, the category's contribution to Metro's total revenue figure has leveled off to nearly precession levels and has remained consistent. As previously touched on, increases in state shared taxes have occurred as a result of one of the longest periods of economic expansion in recent history, only to be matched by spikes in other sources as well, lessening the category's bottom-line impact. Nevertheless, sustained favorable market conditions have allowed for considerable growth in intergovernmental revenue collections since FY 2010, increasing 61.8% overall.

## Revenue Benchmarks

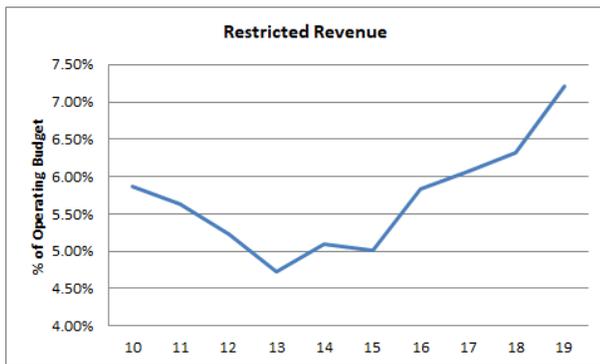
Revenue benchmarks serve as important symbols of the flexibility found in spending restrictions within the Metropolitan Government. These trends may reveal implementation of cost controls or fiscal policies.

## Restricted Revenue

**Description:** Restricted revenue is legally designated for a specific use, often spelled out in state or federal laws, bond covenants, or grant contracts. Specifically, restricted revenue includes revenue from other governments and governmental agencies, excluding the state income tax allocation and the state sales tax funds.

An increased percentage of restricted revenue as a percentage of total operating revenues can hinder the government's ability to modify spending priorities in response to changing service needs and demands.

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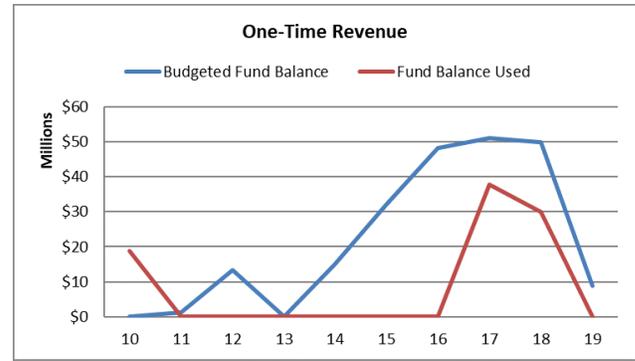
**Commentary:** The restricted revenue graph exhibits similarities to the overall trend that is illustrated in the intergovernmental revenue graph, declining to its lowest point of 4.7% in FY 2013 before recovering. Since then, except for FY 2015, the category has increased, exceeding its previous high for the period, 6.3% in 2018, this past year at 6.9% for 2019. This is further evidenced by absolute growth of 61.9% over the last five years. Comparatively, the previous rolling five-year period actually decreased 0.2%. However, this growth is to be expected following the decline in intergovernmental revenue related to the fiscal crisis of 2009 and the subsequent reduction of federal grant revenue. It is important to note that the state sales tax allocation and the income tax on dividends and interest are not included in the restricted revenue calculation.

While specific-use revenues allow local governments the opportunity to expand certain programs, it is a good idea to keep the percentage relatively low so that a government does not become overly reliant on funding from sources that cannot be guaranteed from year to year. However, as a percentage of total revenues, restricted revenues is at its highest point of 7.2% since the end of the recession.

## One-Time Revenue

**Description:** A one-time or temporary revenue source is one that is not expected to be a continuous funding source, such as the allocation of a portion of fund balance reserve, a one-time grant or gains from the sale of assets.

Continual use of one-time revenue to balance the budget may indicate that the revenue base is not sufficient to support current service levels. For this study, a one-time revenue source refers to funds that are appropriated from fund balance. Consecutive years of decreases in fund balance can serve as a warning signal, indicating a decrease in the availability of critical reserves often relied upon during economic downturns.

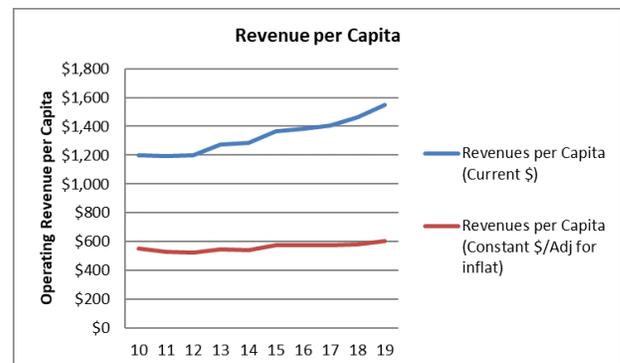


**Analysis:** This graph illustrates the budgeted amount of fund balance, as well as what was ultimately appropriated, to cover expenditures during the year. It demonstrates that while Metro has budgeted for the use of fund balance during a majority of the time period, it has managed to increase reserves rather than utilize these dollars in all but three years.

**Commentary:** The global economic crisis in 2008 significantly impacted local revenue, triggering declines in total revenue for the following two years. Initially, the recession limited Metro's ability to build fund balance; however, eventually diminishing revenue collections led to the use of \$18.8M in FY 2010 to cover shortfalls. Fund balance reserves did not stabilize until FY 2013, attributable to the property tax rate increase that same year. After nearly four years of budgeted increases in fund balance appropriations, a decrease in available reserves limited its use in 2019. However, despite being budgeted, actual fund balance usage has varied, with accumulations, rather than the use of, occurring from 2011 to 2016. 2017 and 2018 utilized fund balance, but both fell short of requiring the budgeted amount, while the most recent year managed to build it.

## Revenues per Capita

**Description:** This indicator assumes that services and revenues will increase proportionately with growth in the population and that the level of *per capita* revenue will stay at least constant in real terms. The population of Davidson County has grown by 10.8% since 2010.



**Commentary:** Adjusting for inflation, revenue per capita increased 4.0% year-over-year for the period of analysis;

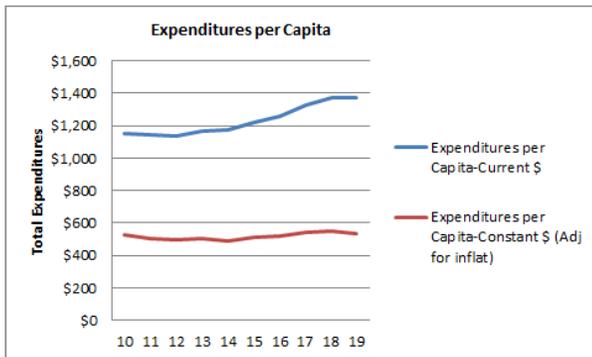
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requiring six years to return to 2009’s level, where it has essentially remained flat through the most recent year. In looking at performance in separate five-year periods, the effect of the 2008 Great Recession is evident in the 1.3% decrease from FY 2010 to FY 2014, and the post-recession 5.5% increase from FY 2015 to FY 2019. In terms of current dollars, revenue per capita saw a healthy increase of 5.7% in FY 2019. Total revenue per capita finished at \$604 for the year.

**Analysis:** Fluctuations in revenues per capita can be attributed to a steadily increasing population and the detrimental effects of the economic downturn during the first few years being examined. Fiscal recovery has been a gradual process, with revenues per capita hitting its lowest point in FY 2012, at \$523. Since then, revenues per capita have outpaced expenditures per capita, 15.6% to 8.0%.

## Expenditures per Capita

**Description:** This indicator assumes that changes in *per capita* expenditures reflect fluctuations in the population and compares changes to the rate of inflation. The graph compares nominal (current dollar) and real (constant dollar) data.



**Commentary:** The graph illustrates that between FY 2010 and FY 2019, actual expenditures per capita in constant dollars increased by 1.4%. In current dollars, expenditures *per capita* have increased at a quicker pace since FY 2015, totaling \$1,370, or 19.1%, for FY 2019.

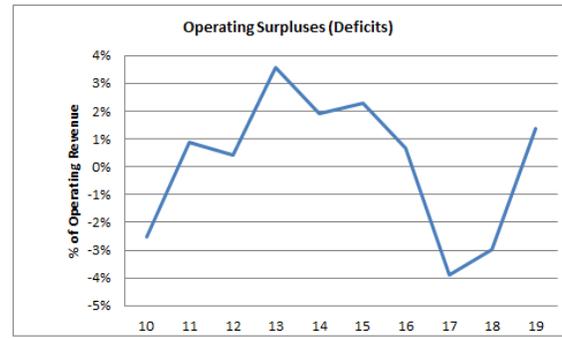
**Analysis:** The graph illustrates that in current dollars, Metro’s expenditures per capita have grown steadily since FY 2014, but in a fiscally responsible manner relative to revenue growth.

The noticeable dip in expenditures per capita in both current and constant dollars from approximately FY 2009 to FY 2012 can be attributed to the recessionary period and subsequent slow recovery during the same timeframe. A property tax increase in FY 2013 allowed for the restoration of selected expenses following expenditure cuts that were implemented in previous years. An uptick in revenue from other sources, to include local option sales and various state shared taxes has allowed for an expansion in services during the same period. A recognizable correlation exists when comparing

current revenues and expenditures per capita since FY 2012.

## Operating Deficits

**Description:** An operating deficit occurs when current expenditures exceed current revenues. This does not necessarily mean that the budget will be out of balance, since reserves from prior years may be used to cover the difference. However, credit rating firms regard a current-year operating deficit as a minor warning signal. Two consecutive years of such deficits indicate that current revenues are not supporting current expenditures and require more attention.



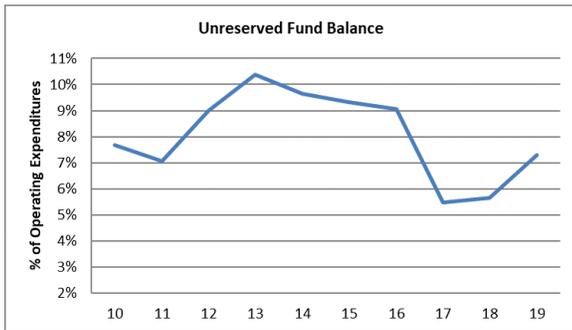
**Commentary:** Two or more consecutive years of operating fund deficits present a “red flag” with respect to the financial health of Metro Government. While there is some considerable variability over the last ten years, only three resulted in operational deficits of 2.5%, 3.9% and 3.0%; these finishes occurred in FY 2010, FY 2017 and FY 2018, respectively. These minimal deficits can be attributed to the planned use of fund balances to balance the operating budget. Following the two most recent, Metro managed to build fund balance in FY 2019 as a result of increased revenues and the implementation of cost efficiency measures, to include departmental targeted savings.

**Analysis:** The recession that occurred early in the time period being examined resulted in marked declines in net operating revenue for Metro and resulted in the decision to use fund balance dollars to maintain levels of service. Revenue did not begin to fully stabilize and reach prerecession growth levels until FY 2013, driven primarily by surges in property and sales taxes in the years to follow.

## Fund Balances

**Description:** Fund balances can be thought of as reserves. Since some fund balances may be designated for specific projects, it is necessary to differentiate between reserved and unreserved fund balance. Unreserved fund balance is the indicator in this case. Unreserved fund balances enable a government to meet future emergencies. A warning sign occurs when unreserved fund balances decline as a percentage of operating expenditures. This may show an inability to fund emergencies.

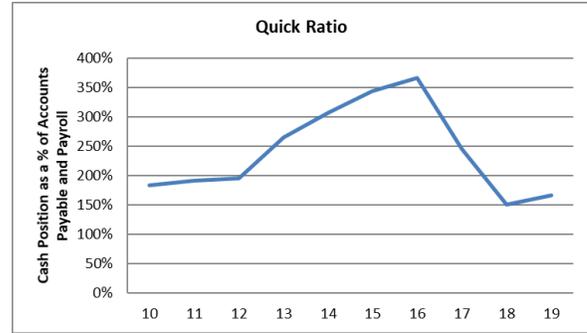
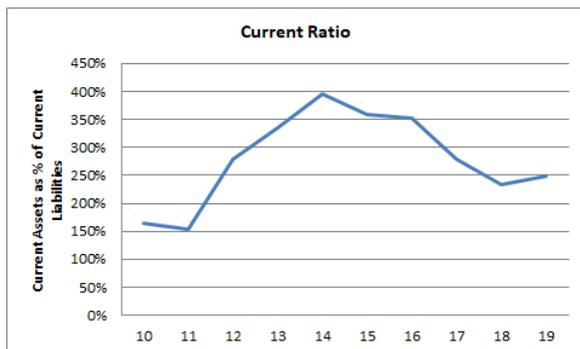
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**Commentary:** Fund balance, as a percentage of operating expenditures, improved favorably in FY 2019. Metro’s financial management policy pertaining to fund balance has established a 5.0% threshold for its three tax-supported operating funds, while state law only requires 3.0% for schools. An increase in the property tax rate in FY 2013, which essentially remained flat following the reappraisal and associated rate reset that occurred the following year, artificially deflated apparent growth in unreserved fund balance relative to operating expenditures. This increase in reserves remained flat in nominal terms from FY 2013 to FY 2016, while decreasing in comparison to growing operating expenditures. Following a drop two years ago, fund balance stabilized and remains safely above the required threshold.

## Liquidity

**Description:** Liquidity measures a government’s ability to pay its short-term obligations. Insufficient liquidity will make a government insolvent. In these graphs, liquidity is determined by taking current assets and dividing by current liabilities – a measure known in financial analysis as the current ratio and depicted in the graph below. The quick ratio, shown in the second graph below, takes this a step further by taking the most liquid of assets and dividing them by current liabilities. In this case, it is determined by dividing cash and cash equivalents by accounts payable and accrued payroll.



**Commentary:** Over the time period of analysis, liquidity, as measured by the current ratio, has ranged from a low of 154.1% in FY 2011 to a high of 395.4% in FY 2014, before settling at 248.1% last year. This ratio indicates that Metro has current asset coverage that is greater than two times the requirements of its most immediate obligations.

A positive quick ratio indicates that Metro has adequate cash reserves for immediate unexpected needs. The trend illustrated above shows an increase for much of the ten-year period, with a drop during the two years prior to FY 2019’s stabilization. Property tax revenues that fell short of budget in FY 2018 were partially responsible for the decrease, as revenues declined relative to payroll enhancements that occurred during the last three years of the period.

**Analysis:** Credit rating firms consider liquidity of less than 100% to be a negative factor, which has not occurred over the time period. A positive liquidity position indicates that Metro is not overextended in its financial obligations with current liquidity at more than 2.5 times that recommended level.

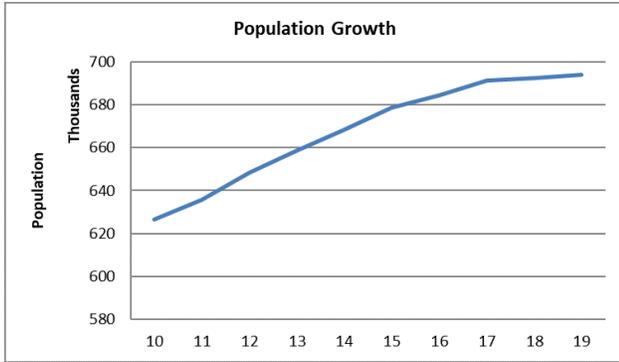
## Demographic Trends

Municipal fiscal health is related to citizen needs and available resources that are often reflected in economic and demographic indicators.

A greater variety of current demographic information is presented in Appendix 4, “About Nashville.”

**Population:** Population growth has a significant impact on Metro’s ability to generate and capture revenue as well as the cost to provide services. The population of Davidson County has increased steadily over the past decade, from 626,681 in 2010 to 694,144 in 2019, an increase of 10.8%.

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**Unemployment:** Over the past decade, Davidson County has maintained low unemployment rates that are parallel to, but lower than, national and state-wide figures. The county’s unemployment rate during the last decade has ranged from a low of 2.5% in 2019 to a high of 8.9% in 2010, compared with a range of 3.4% to 9.8% for the state and 3.7% to 9.6% nationally during the same periods.

Unemployment rates at the local, state, and national level have declined considerably since 2014, following consistently high levels as a result of the global fiscal economic crisis that took hold between 2009 and 2010. Active fiscal policy on the macroeconomic level by the Federal Reserve, decisive action by the U.S. government and nearly ten years of economic expansion have resulted in favorable unemployment levels during the last few years of the analysis. The average unemployment rate for Davidson County in 2019 was 2.5%, down from 2.6% in 2018.

Davidson County’s steady economic base is likely to continue to be healthy due to its economic diversification and higher-than-average concentration of jobs in education, health care, and professional and technical services. These industries are prominent on the national level and are projected to experience high growth rates over the next decade and beyond.

