

Appendix 7: FTMS

Financial Trend Monitoring System Indicators

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.

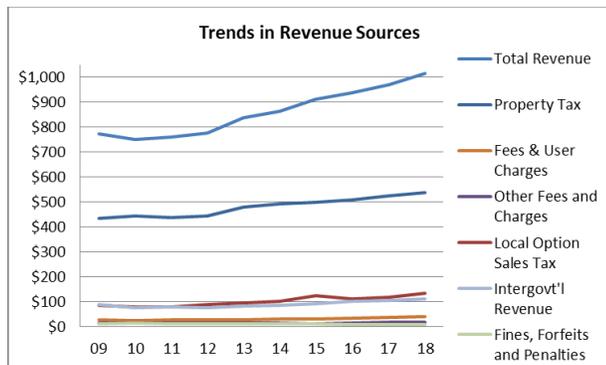
This evaluation reviews financial data from the general funds of the General Services District (GSD) and the Urban Services District (USD) for the ten-year time period extending from FY2009 to FY2018.

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 six categories: total revenue, property taxes, sales taxes, fees & user charges, revenue from other governments, and other revenue. 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 31.2% between FY2009 and FY2018, which represents a net increase of 9.6% 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 5.8% and 30.8%, respectively. During this time period, two basic trends are evident.

Metro experienced vastly different revenue growth patterns during separate five-year periods ranging from 2009 to 2018. 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, dampened total revenue growth, which increased by 8.5% from 2009 to 2013. This welcomed upturn represented a gain of 11.1% over the previous rolling period, the result of economic recovery and a property tax rate increase. This figure expanded to an exceptionally strong increase of 17.4% between 2014 and 2018, as the economy recovered on a local, national, and even global scale.

The predominant source of revenue is property taxes, which increased by approximately 9.7% between 2014 and 2018. This upward trend occurred, in-part, following an increase in property tax rates in FY2013. 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 FY2018. 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 nearly matched 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 values 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) decreased by 7.4% from FY2009 to FY2013. Relative to revenues from all other sources, its percentage of overall revenue continued to decline until about 2013, as absolute annual dollar amounts remained flat. Since then, there has been an upsurge over the last four years, which is a credit to economic recovery as well as increased 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 telecomm 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

Appendix 7: FTMS

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 FY2002 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 55.1% increase in local option sales tax. The impact of the recession is readily identifiable in this considerable expansion, with collections of just \$86.3M in FY2009, which continued to drop the subsequent two years. By comparison, revenue from this source was roughly \$133.9M in FY2018.

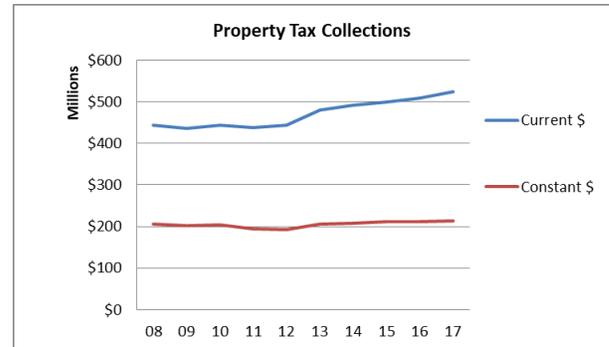
Overall, fees and user charge collections have increased approximately 40.7% between FY2009 and FY2018, however, categorically they account for a small portion of total revenue.

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 occurred at the beginning of the period being examined, the economy has been in a period of expansion for nearly 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, of which collections and distribution of are influenced considerably by. 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 13.9% year over year, making it one of the best performers during the year. However, per the status quo, 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 FY2018, the property tax constituted approximately 53.2% of all revenue collected by Nashville Metropolitan Government.

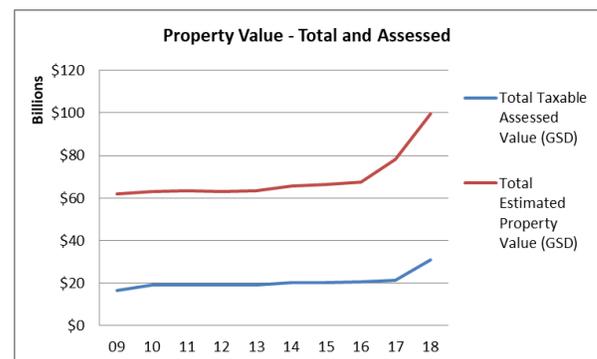


Commentary: The property tax, a comparatively stable funding source, should mirror the effects of inflation to ensure that dollars collected have consistent buying power year to year. For the analysis period, the current buying power of the property tax revenue has varied from a low of \$435.6M in FY2009 to a high of \$539.3M in FY2018. Since FY2012, as the total revenue generated has increased by roughly \$96.0M, constant buying power has failed to keep pace, increasing only \$21.0M.

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 \$435.6M in FY2009 to \$539.3M in FY2018.

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.



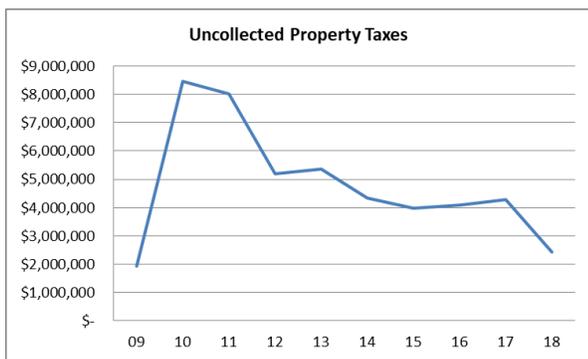
Appendix 7: FTMS

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 88.1% from FY2009 to FY2018. Over the same time period, total estimated property value increased 61.1%, further widening the divide experienced in the previous rolling ten year period; which already represented a departure from the two preceding periods in which the two figures matched one another. 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

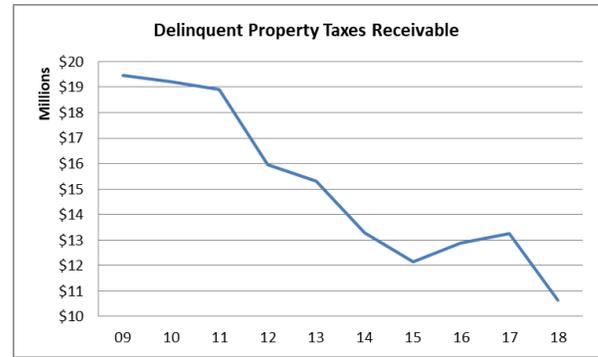
Description: Each year, a portion of assessed property taxes remain uncollected due to a variety of reasons. An increase in this percentage can indicate an overall decline in local government’s economic health. Delinquent and back property tax collections form a significant portion of annual property 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 FY2018. These relatively low levels can be attributed, in large part, to an annual agreement that began in FY2006, 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

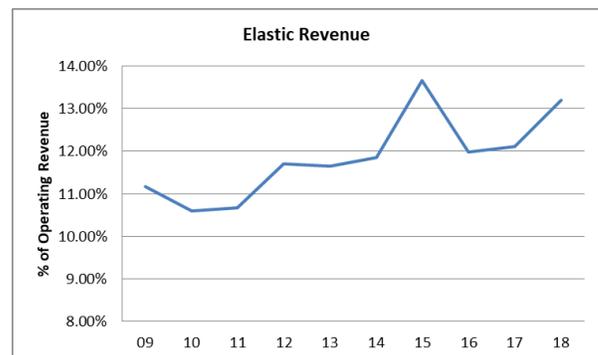


Commentary: Delinquent property tax receivables have fluctuated some during the time period of analysis; however, the overall trend exhibits that of a decrease. These fluctuations typically occur during periods of economic stagnation, which are often marked by declining income. This correlation serves 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 40.3% from FY2009 to FY2018.

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 FY2009 to FY2015, with FY2018’s total of \$10.6M being the lowest during the period.

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.



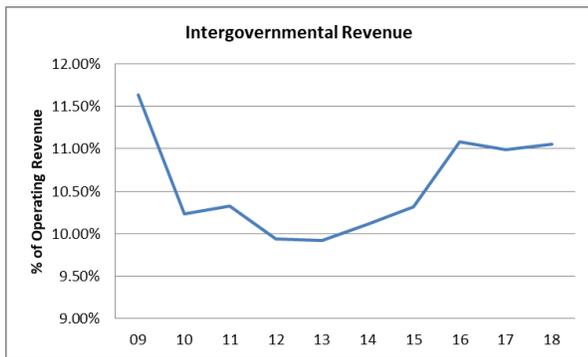
Appendix 7: FTMS

Commentary: In FY2009, elastic operating revenues were roughly \$86.3M. For the first five years of the period, the revenues experienced an increase of 13.2%, representing an impressive increase of 17.0% over the loss incurred during the previous rolling five year period. The performance over the second half of the ten year analysis is even stronger, increasing by 30.8%.

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 FY2015 is the result of fund allocation adjustments and not representative of the actual continued growth of the underlying source itself, which continued in FY2018.

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 FY2009, declined considerably in FY2010 in relation to total revenue and has remained comparatively flat since, ranging from roughly 10.0% to 11.0%. 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 FY2012, as

fiscal tightening at the federal and state levels has lessened.

Analysis: For context, from FY2007 to FY2009 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 prerecession 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 FY2009, increasing 24.7% overall.

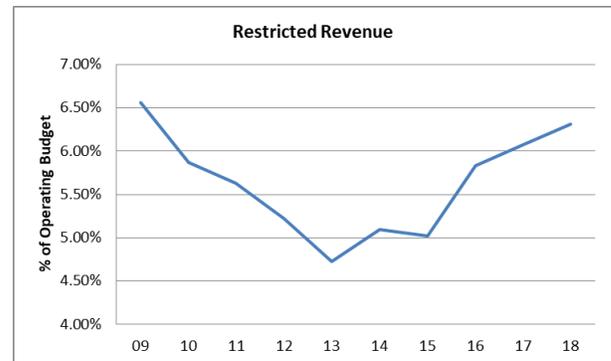
Revenue Benchmarks

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.



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 FY2013 before recovering. Since then, with the exception of FY2015, the category has increased, nearly matching its highest figure of the period, 6.56% in FY2009, this past year. This is further evidenced by absolute growth of 45.4% over the last five years. Comparatively, the previous rolling five year period actually decreased 21.8%. However, this growth is

Appendix 7: FTMS

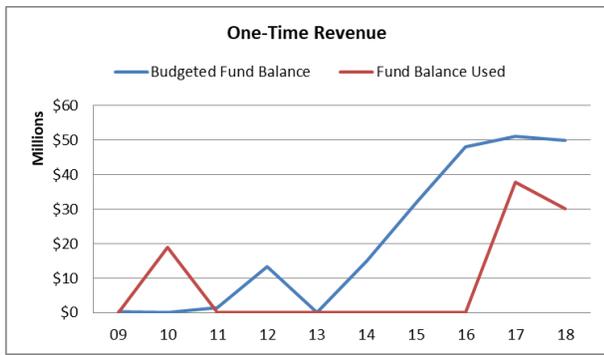
to be expected following the decline in intergovernmental revenue related to the fiscal crisis of 2009 and the subsequent reduction of federal grant revenue. It is important to note that the state sales tax allocation and the income tax on dividends and interest are not included in the restricted revenue 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. As a percentage of total revenues, restricted revenues have not exceeded 6.5% since FY2009.

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.



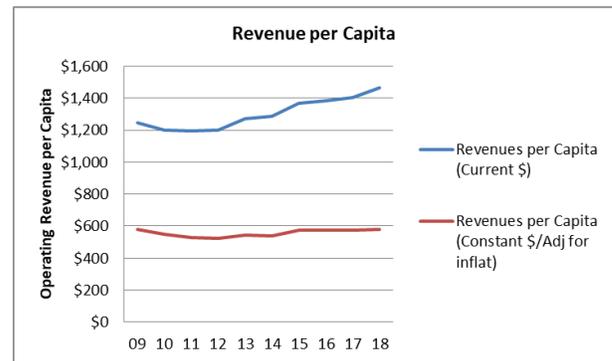
Analysis: This graph illustrates the budgeted amount of fund balance, as well as what was ultimately appropriated, to cover expenditures during the year. It demonstrates that while Metro has budgeted for the use of fund balance during a majority of the time period, it has managed to increase reserves 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 FY2010 to cover shortfalls. Fund balance reserves did not stabilize until FY2013, attributable to the property tax rate increase that same year. The last four years have seen an increase in the amount of fund balance budgeted to support operating

expenses. However, actual fund balance usage has varied, with accumulations, rather than the use of, occurring during the first two years. The latter two utilized fund balance, but both fell short of requiring the budgeted amount. This process has been managed effectively; Metro monitors its fund balances carefully, manages its use, and avoids appropriating fund balances to fund on-going operating expenses.

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 11.5% since 2009.



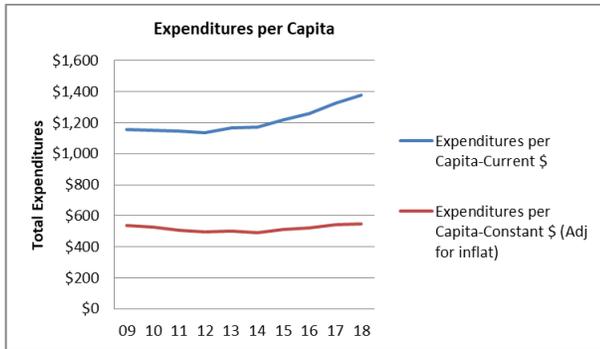
Commentary: Adjusting for inflation, revenue per capita increased 0.7% over the period of analysis; requiring six years to return to FY2009’s level, where it has essentially remained flat through the most recent year. In looking at performance in separate five-year periods, the effect of the 2008 Great Recession is evident in the 5.5% decrease from FY2009 to FY2013, and the post-recession 7.7% increase from FY2014 to FY2018. In terms of constant dollars, revenue per capita remained relatively flat in FY2018, as stronger YOY revenue growth was offset by increased inflation over the same period. Total revenue per capita finished at \$581 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 FY2012, at \$523. Since then, revenues per capita have outpaced expenditures per capita, 11.1% to 10.3%.

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.

Appendix 7: FTMS



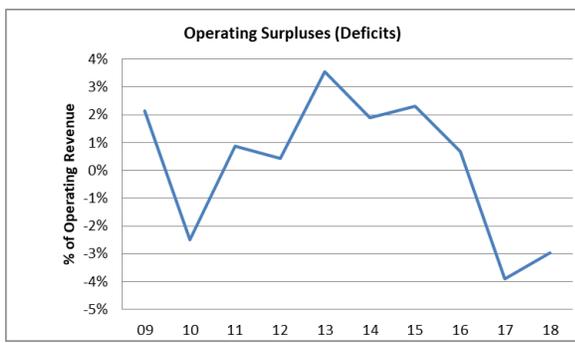
Commentary: The graph illustrates that between FY2009 and FY2018, actual expenditures per capita in constant dollars increased by 2.0%. In current dollars, expenditures *per capita* have increased at a quicker pace since FY2014, totaling \$1,376 for FY2018.

Analysis: The graph illustrates that in current dollars, Metro’s expenditures per capita have grown steadily since FY2014, 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 FY2009 to FY2012 can be attributed to the recessionary period and subsequent slow recovery during the same timeframe. A property tax increase in FY2013 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 FY2012.

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.



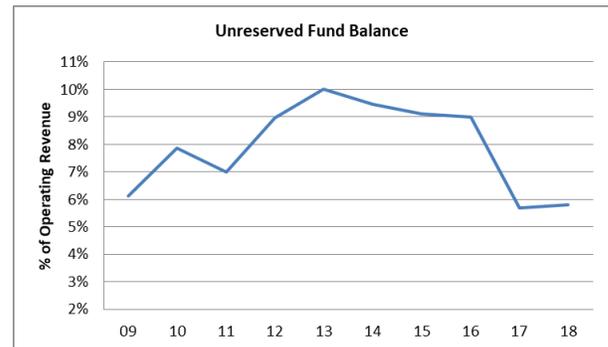
Commentary: While there is some considerable variability over the last ten years, only three resulted in

operational deficits of 2.5%, 3.9% and 3.0%; these finishes occurred in FY2010, FY2017 and FY2018, respectively. These minimal deficits can be attributed to the planned use of fund balances to balance the operating budget.

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 FY2013, driven primarily by surges in property and sales taxes in the years to follow. This strong growth, the first since FY2006’s rate increase, made the use of fund balance to maintain current service levels unnecessary until 2017.

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 net operating revenues. This may show an inability to fund emergencies.



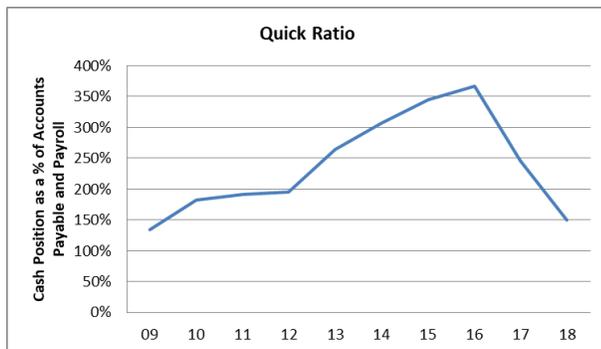
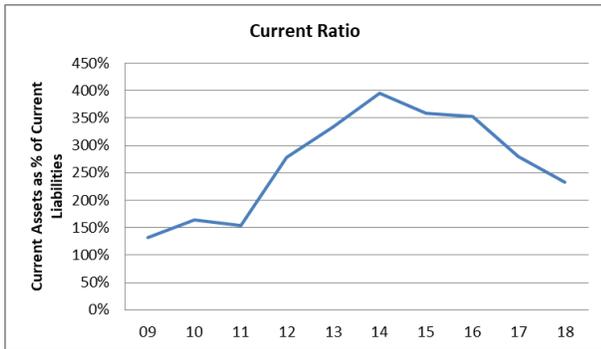
Commentary: Fund balance as a percentage of operating revenue has decreased by 0.32 percentage points since 2009, totaling over \$58.9M for FY2018, which represents 5.8% of net operating revenues. Metro’s financial management policy pertaining to fund balance has established a 5.0% threshold for its three tax-supported operating funds. An increase in the property tax rate in FY2013, 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 revenue. This increase in reserves remained flat in nominal terms from FY2013 to FY2016, while decreasing in comparison to growing operating revenues. 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

Appendix 7: FTMS

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 131.6% in FY2009 to a high of 395.4% in FY2014, before settling at 233.1% 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 the majority of the ten-year period, with a drop over the last two years. Property tax revenues that fell short of budget in FY2018 were partially responsible for the decrease, as revenues declined relative to payroll enhancements that occurred during the last three years of the period.

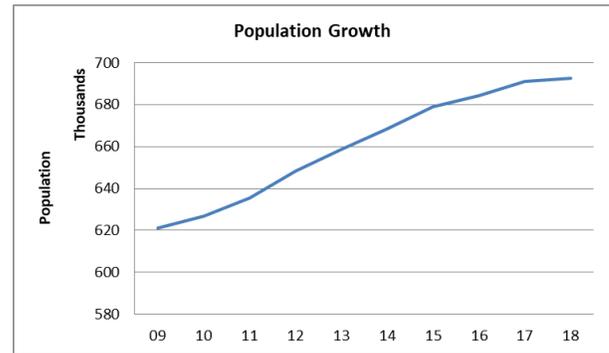
Analysis: Credit rating firms consider liquidity of less than 100% to be a negative factor, which has not occurred over the time period. A positive liquidity position indicates that Metro is not overextended in its financial obligations with current liquidity at more than 2.3 times that recommended level.

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 621,008 in 2009 to 692,587 in 2018, an increase of 11.5%.



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 2.6% in 2018 to a high of 8.9% in 2010, compared with a range of 3.5% to 10.5% for the state and 4.0% 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 nine 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 2018 was 2.6%, down from 2.9% in 2017.

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.

Appendix 7: FTMS

