
FISCAL IMPACT ANALYSIS REPORT

Anne Arundel County, Maryland

October 20, 2023

Prepared By:



FISCAL IMPACT ANALYSIS REPORT

Report on Phases I and II Fiscal Impact Analysis conducted for
Anne Arundel County, Maryland

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EXECUTIVE SUMMARY

BACKGROUND

TischlerBise is under contract with Anne Arundel County, Maryland, to conduct a Fiscal Impact Analysis of future growth scenarios. Documentation for the Fiscal Impact Analysis is provided in multiple reports: (1) ***Fiscal Impact Analysis Report (this document)***, (2) *Appendix A: Revenue and Expenditure Detail of the Fiscal Impact Analysis*, and (3) *Appendix B: Level of Service / Cost & Revenue Assumptions*. This document provides the findings from the Fiscal Impact Analysis, which includes all General Fund activities including Schools, Community College, and Libraries.

A fiscal impact evaluation analyzes revenue generation and operating and capital costs to the County associated with the provision of public services and facilities under a set of assumptions. **The fiscal impact shows direct revenues and costs from new development only and does not include revenues or costs generated from existing development.** The growth scenarios evaluated in the analysis are represented by numerical projections of population, housing units, employment, and nonresidential building area through the year 2045.

A fiscal impact analysis is intended to be used to help guide policy decisions regarding levels of service and revenue enhancements. **It should not be viewed as a budget-forecasting document.** A fiscal analysis essentially looks at revenues and expenditures separately. It does not project expenditures based on revenues available—unlike the annual budget process where a budget is balanced with the resources available.

SCENARIOS

TischlerBise and County staff developed three main growth scenarios for the fiscal analysis reflecting a number of “what if” situations given County recent development trends and market demands. The scenarios are as follows:

Scenario 1: Base Case (Trends, Lower, and Higher Growth Alternatives)

- *Scenario 1A: Base Case Trends.* Projections of residential and nonresidential development for Anne Arundel County are from Round 10 Baltimore Metropolitan Council (BMC) projections to 2045. These projections include land use and policy assumptions adopted in the Anne Arundel General Development Plan Update in 2021. The distribution of new housing units by type is based on recent development trends in the County with a higher share of single family attached and multifamily units relative to single family detached. The distribution assumed is 40 percent single

family attached, 24 percent multifamily, and 36 percent single family detached.

- **Scenario 1B: Base Case Lower Growth.** This is an alternative of Scenario 1A with less growth in both residential (population and housing units) and nonresidential development (jobs and nonresidential square footage) assumed at 50 percent of Trends growth. (Housing unit distribution is kept the same throughout.)
- **Scenario 1C: Base Case Higher Growth.** This is also an alternative of Scenario 1A with higher growth in both residential (population and housing units) and nonresidential development (jobs and nonresidential square footage) assumed at an increase of 50 percent of Trends growth. (Housing unit distribution is kept the same throughout.)

Scenario 2: Shift from Projected Retail/Office Growth to Industrial Growth

- This scenario tests the fiscal impact of a shift in nonresidential growth from retail/office uses to industrial, given recent trends indicating a declining market demand for new retail and office and an increasing demand for warehouse distribution, storage, industrial flex space, and similar types of development. This scenario reduces projected retail and office jobs/square footage and shifts to industrial development. The decrease in retail and office is assumed across the County and the increase in industrial is assumed to occur in Region Plan Areas (RPA)¹ 1, 2, 3, and 7. Residential growth is held constant at the Base Case Trends scenario (Scenario 1A) with housing unit distribution held constant from Scenario 1.

Scenario 3: Shift from Projected Retail/Office Growth to Residential Growth

- This scenario tests the fiscal impact of a shift in land use from retail and office growth to residential growth. This scenario tests a reduction in retail and office growth countywide and shifts the growth to residential development in RPAs 1, 2, 3, 4, 5, and 7. (Base case trends in industrial growth is maintained.) The additional residential modeled in this scenario is in addition to the base case (trends) growth. (Housing unit distribution is kept the same as Scenario 1.)

Figure 1. Summary of County Growth Scenarios: Net Increases 2024-2045

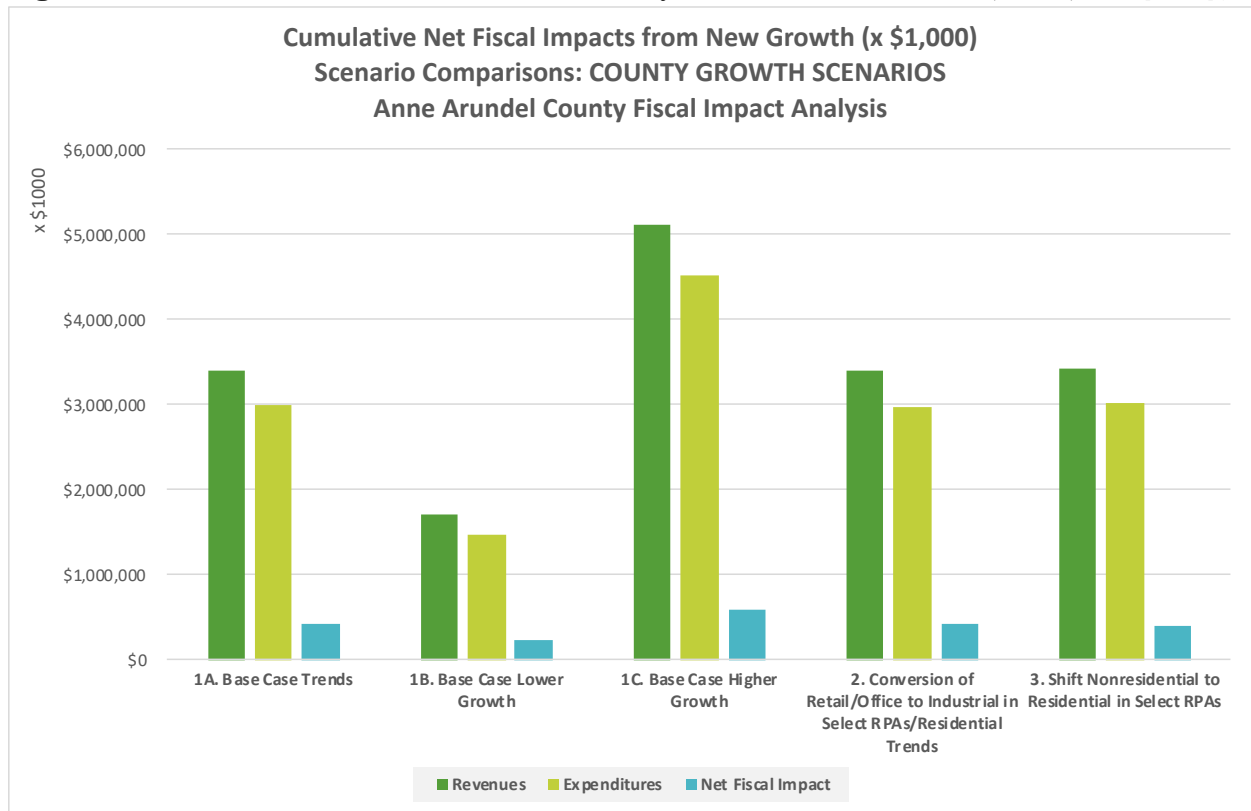
Net Growth (2024-2045) - Scenario Comparisons					
LAND USE SUMMARY					
Anne Arundel County, Maryland, Fiscal Impact Analysis					
Category	SCENARIO				
	1A. Base Case Trends	1B. Base Case Lower Growth	1C. Base Case Higher Growth	2. Conversion of Retail/Office to Industrial in Select RPAs/Residential Trends	3. Shift Nonresidential to Residential in Select RPAs
POPULATION	76,845	38,422	115,267	76,845	80,502
TOTAL UNITS	32,061	16,030	48,091	32,061	33,760
TOTAL JOBS	73,209	36,605	109,815	73,146	64,215
TOTAL ENROLLMENT	10,610	5,305	15,914	10,610	11,172

¹ See Figure 4 for a map of the Region Plan Areas (RPA).

SUMMARY OF FISCAL IMPACT RESULTS

Fiscal impacts are modeled over a 22-year period with revenues and expenditures projected from growth in each year. The overall finding is that the projected growth in each scenario generates sufficient revenues to cover total operating and capital impacts. Cumulative results are summarized below in Figure 2 reflecting total revenues generated minus operating and capital expenditures over the 22-year development timeframe. Figures are shown in \$1,000s.

Figure 2. Cumulative Net Fiscal Results – County Growth Scenarios (x\$1,000), 2024-2045



Cumulative net fiscal surpluses are generated in all scenarios with the Higher Growth Scenario (Scenario 1C) generating the highest amount of all scenarios. Cumulative net surpluses range from a high of approximately \$600 million in Scenario 1C to a low of \$230 million in Scenario 1B. The land use assumption changes in Scenarios 2 and 3 do not materially change the fiscal impact results, each generating a surplus of approximately \$420 and \$400 million, respectively.

The results indicate that the County’s revenue structure, with substantial revenue sources from residential growth—including property and income taxes and one-time revenue from recordation and transfer taxes,

is sufficient to cover the costs to serve growth projected in each scenario. Revenue from property taxes, local income tax, and recordation and transfer taxes combined represent approximately 95 percent of the projected General Fund operating revenues in each scenario. Because these sources are all derived based on property values for new development, values assumed in this analysis are a main determinant of the results.

Operating and Capital Results

Analyzing operating and capital results separately reveals net surpluses for operating results and net deficits for capital. It should be noted that the capital costs assumed for this analysis are current as of the September 2023 *Draft Development Impact Fee* findings²—but impact fee rates are from the County’s existing rate structure and current as of July 1, 2023. Cumulative revenues and expenditures for operating and capital are summarized in Figure 3.

Figure 3. Cumulative Net Fiscal Results – Operating and Capital Summary (x\$1,000), 2024-2045

Cumulative (2024-2045) Net Fiscal Results - Scenario Comparisons (x\$1,000)					
GROWTH SCENARIOS					
Anne Arundel County, Maryland, Fiscal Impact Analysis					
Category	SCENARIO				
	1A. Base Case Trends	1B. Base Case Lower Growth	1C. Base Case Higher Growth	2. Conversion of Retail/Office to Industrial in Select RPAs/Residential Trends	3. Shift Nonresidential to Residential in Select RPAs
Operating Revenues	\$2,750,033	\$1,374,965	\$4,125,001	\$2,735,117	\$2,776,392
Operating Expenditures	\$1,956,746	\$951,774	\$2,962,564	\$1,944,105	\$2,013,582
NET OPERATING IMPACT	\$793,287	\$423,191	\$1,162,437	\$791,013	\$762,810
Capital Revenues	\$658,129	\$329,054	\$987,172	\$657,425	\$650,492
Capital Expenditures	\$1,031,124	\$521,599	\$1,549,819	\$1,019,065	\$1,008,639
NET CAPITAL IMPACT	(\$372,994)	(\$192,545)	(\$562,647)	(\$361,640)	(\$358,147)
NET FISCAL IMPACT	\$420,293	\$230,646	\$599,790	\$429,373	\$404,663

Other Key Findings

- Scenarios tested with land use changes from (a) retail/office to industrial and (b) nonresidential to residential do not have a material effect on long-term fiscal impacts.
- Short-term negative fiscal results are generated due to initial school capacity needs in some areas of the County.

² Anne Arundel *Draft Development Impact Fee Study*, September 19, 2023, TischlerBise.

- School costs are significant. Combined operating and capital costs to serve the projected growth in each scenario represent between 55 and 60 percent of the overall costs projected.
- Road capital costs are another major expenditure for the County. Cumulatively, projected Road *capital* costs represent approximately 13 percent of total operating and capital expenditures projected in each scenario. The costs modeled reflect County funding for road capital improvements (as opposed to including state and federal dollars).
- It is important to acknowledge that fiscal issues are one aspect in evaluating development and growth trends. Environmental, land use, housing, jobs/housing balance, transportation, and other issues should also be taken into consideration when determining policy direction for the County.

INTRODUCTION

TischlerBise is under contract with Anne Arundel County, Maryland, to conduct a Fiscal Impact Analysis of future growth scenarios. Documentation for the Fiscal Impact Analysis is provided in multiple reports: (1) *Fiscal Impact Analysis Report* (this document), (2) *Appendix A: Revenue and Expenditure Detail of the Fiscal Impact Analysis*, and (3) *Appendix B: Level of Service / Cost & Revenue Assumptions*. This document provides the results of the Fiscal Impact Analysis, which includes all General Fund activities including Schools, Community College, and Libraries.

A fiscal impact evaluation analyzes revenue generation and operating and capital costs to the County associated with the provision of public services and facilities under a set of assumptions. **The fiscal impact for Anne Arundel County models direct revenues and costs from new development only and does not include revenues or costs generated from existing development.** The growth scenarios evaluated in the analysis are represented by numerical projections of population, housing units, employment, and nonresidential building area through the year 2045.

TischlerBise worked with County staff to identify scenarios to evaluate for the fiscal impact analysis. The scenarios represent a number of “what if” situations given the County’s recent development trends.

After scenarios are identified, the next major step of the fiscal impact analysis is to determine current service levels and capacities and associated revenues and costs. This was done through departmental interviews and follow-up discussions and correspondence as well as a review of applicable budgets and other relevant documents. The level of service/capacity analysis forms the foundation of the fiscal impact model used to evaluate the fiscal impact of the County Growth Scenarios. The results of this step have been approved by the County and are issued as *Appendix B: Level of Service / Cost & Revenue Assumptions*.

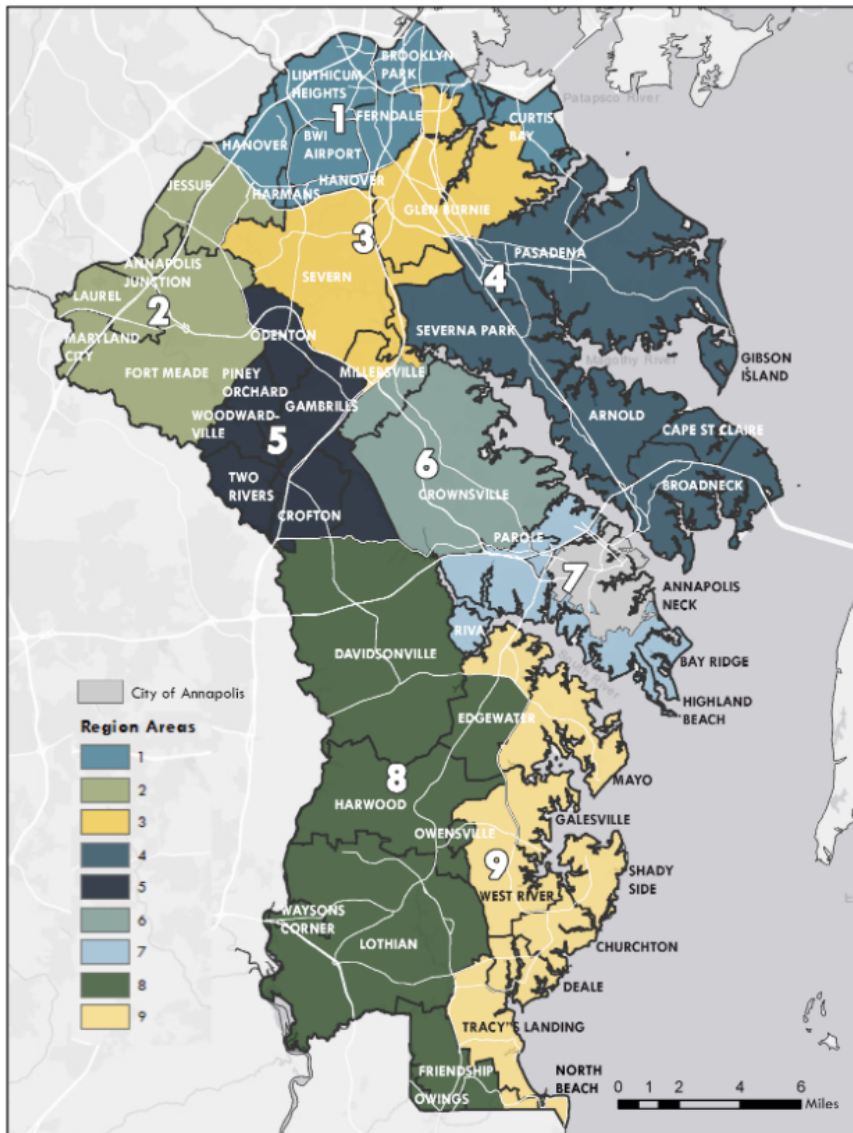
As noted above, a fiscal impact analysis determines whether revenues generated by development are sufficient to cover the resulting costs from that development for service and facility demands placed on the County under current levels of service. It is intended to be used to help guide policy decisions related to land use, levels of service, and revenue enhancements. **It should not be viewed as a budget-forecasting model or document.** A fiscal analysis essentially looks at revenues and expenditures separately. It does not project expenditures based on revenues available—unlike the annual budget process where a budget is balanced with the resources available.

It should also be noted that the level of capital expenditures assumed in the analysis and the resulting costs are projected independent of policy-making decision points such as capital improvement plans, debt capacity guidelines, or expectations for levels of service. Rather, the costs projected in this analysis **reflect the costs to serve new growth, regardless of whether the resources are available to cover the costs.**

FISCAL ANALYSIS ZONES & SCENARIOS

The County and TischlerBise established that the County's existing Regional Plan Areas (RPA) will be used to account for property value differences and infrastructure capacity by subarea of the County. These areas are referred to as Fiscal Analysis Zones in this analysis. A map of the RPAs is provided in Figure 4.

Figure 4. Region Plan Areas / Fiscal Analysis Zones



TischlerBise and County staff developed three main growth scenarios for the fiscal analysis reflecting a number of “what if” situations given County recent development trends and market demands. The scenarios are as follows:

Scenario 1: Base Case (Trends, Lower, and Higher Growth Alternatives)

- *Scenario 1A: Base Case Trends.* Projections of residential and nonresidential development for Anne Arundel County are from Round 10 Baltimore Metropolitan Council (BMC) projections to 2045. These projections include land use and policy assumptions adopted in the Anne Arundel General Development Plan Update in 2021.³ The distribution of new housing units by type is based on recent development trends in the County with a higher share of single family attached and multifamily units relative to single family detached. The distribution assumed is 40 percent single family attached, 24 percent multifamily, and 36 percent single family detached.
- *Scenario 1B: Base Case Lower Growth.* This is an alternative of Scenario 1A with less growth in both residential (population and housing units) and nonresidential development (jobs and nonresidential square footage) assumed at 50 percent of Trends growth. (Housing unit distribution is kept the same throughout.)
- *Scenario 1C: Base Case Higher Growth.* This is also an alternative of Scenario 1A with higher growth in both residential (population and housing units) and nonresidential development (jobs and nonresidential square footage) assumed at an increase of 50 percent of Trends growth. (Housing unit distribution is kept the same throughout.)

Scenario 2: Shift from Projected Retail/Office Growth to Industrial Growth

- This scenario tests the fiscal impact of a shift in nonresidential growth from retail/office uses to industrial, given recent trends indicating a declining market demand for new retail and office and an increasing demand for warehouse distribution, storage, industrial flex space, and similar types of development. This scenario reduces projected retail and office jobs/square footage and shifts to industrial development. The decrease in retail and office is assumed across the County and the increase in industrial is assumed to occur in RPAs 1, 2, 3, and 7. Residential growth is held constant at the Base Case Trends scenario (Scenario 1A) with housing unit distribution held constant from Scenario 1.

Scenario 3: Shift from Projected Retail/Office Growth to Residential Growth

- This scenario tests the fiscal impact of a shift in land use from retail and office growth to residential growth. This scenario tests a reduction in retail and office growth countywide and shifts the growth to residential development in RPAs 1, 2, 3, 4, 5, and 7. (Base case trends in

³ TischlerBise is currently conducting a Development Impact Fee Study for Anne Arundel County. The Trends Scenario for the Fiscal Impact Analysis is consistent with the land use projections documented for the Impact Fee Study with the exception of the distribution by type of new housing units (as noted), which assumes a shift to single family attached and multifamily units for purposes of this study.

industrial growth is maintained.) The additional residential modeled in this scenario is in addition to the base case (trends) growth. (Housing unit distribution is kept the same as Scenario 1.)

Projected Growth by Scenario

Growth for each scenario for 2024-2045 is provided below in Figure 5. Data is shown for **projected increases** in population (in housing units), housing units, employment, and public school enrollment for each scenario—and does not include the existing County base.

As shown, trend population growth (Scenario 1A) projects a population increase of almost 77,000 over the 22-year projection period. Scenarios 1B and 1C vary the trend population growth by assuming higher growth over the trend resulting in a population increase of approximately 115,000 (Scenario 1B) and lower growth from the trend at approximately 38,000. Scenario 2 assumes the base case trend residential growth, therefore projected population equals Scenario 1A. Scenario 3 assumes a shift to more residential, therefore projected population is slightly higher than the base case at approximately 80,500,

Base case employment growth (Scenario 1A) is projected at approximately 73,000 over the 22-year period. Higher than base case projects almost 110,000 jobs and lower than base case projects 36,600. Scenario 2 shifts retail and office land uses to industrial land use, thereby projecting a similar number of total jobs but with the distribution by type changed from the base. Scenario 3 projects a lower overall number of jobs given the scenario concept of shifting nonresidential land uses to residential. Detail is provided in Figure 5.

Figure 5. County Growth Scenarios: Net Increases 2024-2045

Net Growth (2024-2045) - Scenario Comparisons					
LAND USE SUMMARY					
Anne Arundel County, Maryland, Fiscal Impact Analysis					
Category	SCENARIO				
	1A. Base Case Trends	1B. Base Case Lower Growth	1C. Base Case Higher Growth	2. Conversion of Retail/Office to Industrial in Select RPAs/Residential Trends	3. Shift Nonresidential to Residential in Select RPAs
POPULATION	76,845	38,422	115,267	76,845	80,502
<i>Growth from Base Year</i>	13%	6%	19%	13%	13%
Single Family Detached Units	11,542	5,771	17,313	11,542	12,154
Single Family Attached Units	12,824	6,412	19,236	12,824	13,504
Multifamily Units	7,695	3,847	11,542	7,695	8,102
TOTAL UNITS	32,061	16,030	48,091	32,061	33,760
<i>Growth from Base Year</i>	13%	7%	20%	13%	14%
Retail Jobs	17,694	8,847	26,542	15,571	13,552
Office Jobs	19,129	9,565	28,694	16,642	14,277
Industrial Jobs	18,189	9,095	27,284	22,736	18,189
Institutional Jobs	18,196	9,098	27,295	18,196	18,196
TOTAL JOBS	73,209	36,605	109,815	73,146	64,215
<i>Growth from Base Year</i>	20%	10%	30%	20%	18%
Retail 1,000 Sq. Ft.	8,334	4,167	12,501	7,334	6,383
Office 1,000 Sq. Ft.	5,873	2,936	8,809	5,109	4,383
Industrial 1,000 Sq. Ft.	11,587	5,793	17,380	14,483	11,587
Institutional 1,000 Sq. Ft.	6,369	3,184	9,553	6,369	6,369
TOTAL NONRES 1,000 SQ. FT.	32,163	16,081	48,242	33,295	28,721
<i>Growth from Base Year</i>	20%	10%	30%	21%	18%
Elementary Enrollment	5,244	2,622	7,866	5,244	5,522
Middle School Enrollment	2,410	1,205	3,615	2,410	2,537
High School Enrollment	2,956	1,478	4,434	2,956	3,113
TOTAL ENROLLMENT	10,610	5,305	15,914	10,610	11,172
<i>Growth from Base Year</i>	13%	7%	20%	13%	14%

APPROACH AND MAJOR ASSUMPTIONS

A fiscal impact analysis determines whether revenues generated by new growth are sufficient to cover the resulting costs for service and facility demands placed on a jurisdiction. The fiscal impact analysis conducted by TischlerBise incorporates the case study-marginal cost approach wherever possible. The case study-marginal methodology is the most realistic method for evaluating fiscal impacts. This methodology takes site or geographic-specific information into consideration. Therefore, any unique demographic or locational characteristics of new development are accounted for, as well as the extent to which a particular infrastructure or service operates under, over or close to capacity. Available facility capacity determines the need for additional capital facilities and associated operating costs. Other costs such as non-salary operating costs generally are projected using an average cost approach.

The service level, revenue, and cost assumptions are based on TischlerBise's departmental interviews and follow-up discussions with Anne Arundel County staff, a detailed analysis of the *Fiscal Year 2023 Anne Arundel County Approved Budget*, previous year budgets, and other relevant documents.

The assumptions outlined in *Appendix B: Level of Service / Cost & Revenue Assumptions* (i.e., *LOS Document*) are utilized along with the growth projections developed specifically for this analysis to determine the fiscal impact on the County over a 22-year projection period. Calculations are performed using a customized fiscal impact model designed by TischlerBise specifically for this assignment.

The following major assumptions regarding the fiscal impact methodology should be noted. (See the *LOS Document* for further detail on projection methodologies.)

MARGINAL, GROWTH-RELATED COSTS AND REVENUES

For this analysis, all costs and revenues directly attributable to new development—by type of development—are included. Personnel and other operating costs are projected, as are expenditures for capital improvements. Where appropriate, costs reflect those services provided Countywide versus subareas of the County such as outside of Annapolis.

The General Fund, Component Units (Schools, Community College, and Library), and Capital Projects Funds are included in this analysis. Enterprise funds (e.g., utilities) are not included in this analysis as they are assumed to be self-sufficient.

Some costs and revenues are not expected to be impacted by demographic changes and are therefore considered “fixed” in this analysis. To determine costs and revenues that should be considered fixed, TischlerBise reviewed the FY2023 Budget and available supporting documentation as well as consulted with staff. Assumptions are documented in the *LOS Document* issued as Appendix B.

LEVEL OF SERVICE

Cost projections are based on a “snapshot approach” in which it is assumed the current level of service, as funded in the County budget and as provided in current capital facilities, will continue through the analysis period.⁴ Current demand base data was used to calculate unit costs and service level thresholds. Examples of demand base data include population, employment by type, vehicle trips, etc. *In summary, the “snapshot” approach does not attempt to speculate about how levels of service, costs, revenues and other factors will change over time nor whether the County will correct existing deficiencies.* Instead, it evaluates the fiscal impact of new growth to the County as conducted under the budget used in this analysis. The *LOS Document* provides further detail on levels of service assumptions.

REVENUE STRUCTURE

Revenues are projected assuming that the current revenue structure and tax and fee rates, as defined by the FY2023 budget, will not change during the analysis period. See the discussion on inflation rate assumptions for further explanation.

⁴ TischlerBise’s simultaneous work on the Anne Arundel County Development Impact Fee Study informed the assumptions for the capital facilities included in the impact fee analysis.

INFLATION RATE

The rate of inflation is assumed to be zero throughout the projection period, and cost and revenue projections are in constant 2023 dollars. This assumption is in accord with budget data and avoids the difficulty of speculating on inflation rates and their effect on cost and revenue categories—including property tax rate adjustments. It also avoids the problem of interpreting results expressed in inflated dollars over an extended period of time. In general, including inflation is complicated and unpredictable. This is particularly the case given that some costs, such as salaries, increase at different rates than other operating and capital costs such as contractual and building construction costs. And these costs, in turn, almost always increase in variation to the appreciation of real estate, thus affecting the revenue side of the equation. Using constant dollars avoids these issues.

NON-FISCAL EVALUATIONS

It should be noted that while a fiscal impact analysis is an important consideration in planning decisions, it is only one of several components that should be considered. Environmental and social issues, for example, should also be considered when making planning and policy decisions. The above notwithstanding, this analysis will enable interested parties to understand the fiscal implications of future development.

FISCAL IMPACT ANALYSIS RESULTS

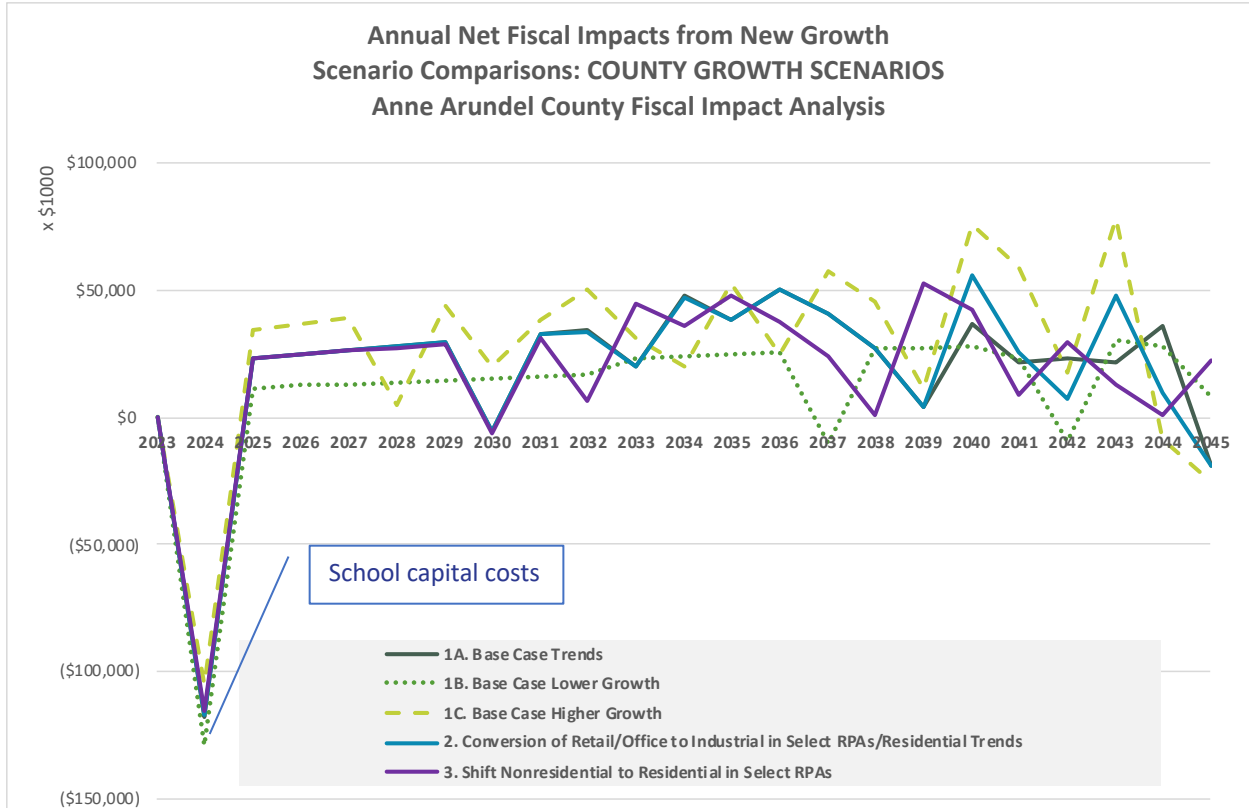
Fiscal impact results are shown in a number of different ways. First, **annual** net results are discussed and show the fiscal impacts (annual revenues minus annual expenditures) from one year to the next over the 22-year projection period. **Average annual** results are then shown over different time intervals to provide an easy way to compare multiple scenarios and summarize the general fiscal impacts over time. Finally, **cumulative** results are shown reflecting total revenues, expenditures, and net fiscal results over the 22-year development timeframe.

ANNUAL NET RESULTS

Figure 6 shows the **annual** (year to year) net results to the County for each of the scenarios over the study time horizon. Each year reflects total revenues generated minus total expenditures incurred in the same year. Both capital and operating costs are included. By showing the results annually, the magnitude, rate of change, and timeline of deficits and revenues can be observed over time. The “bumpy” nature of the annual results during particular years represents the opening of capital facilities and/or major operating costs being incurred.

On the following figure, data points above the \$0 line represent annual surpluses; points below the \$0 line represent annual deficits. **Each year’s surplus or deficit is *not* carried forward into the next year.** This enables a comparison from year-to-year of the net results without distorting the revenue or cost side of the equation. In reality, those surpluses would be carried forward or deficits would be funded through other revenue sources or means, such as debt financing for capital improvements, or levels of service would decrease. Figures are shown in \$1,000s.

Figure 6. Annual Net Fiscal Results – County Growth Scenarios (x\$1, 000)



As shown in Figure 6, all scenarios produce annual net revenues to the County over the projection period in most years except year 1, where major school capital needs are triggered due to capacity needs in certain areas of the County, and a few other years where other capital impacts are incurred. The annual surpluses are due mainly to the County’s revenue structure, including ongoing annual sources of revenue from property taxes and local income taxes as well as one-time recordation and transfer taxes, compared to the level of expenditure needed to serve growth. Given the amount of growth projected relative to existing population and employment base, the results tend to reflect the effect of economies of scale where serving new development can be absorbed by existing capacity. For those services and facilities where expansions or improvements are needed, the revenues generated by new development are generally adequate to cover the related expenditures.

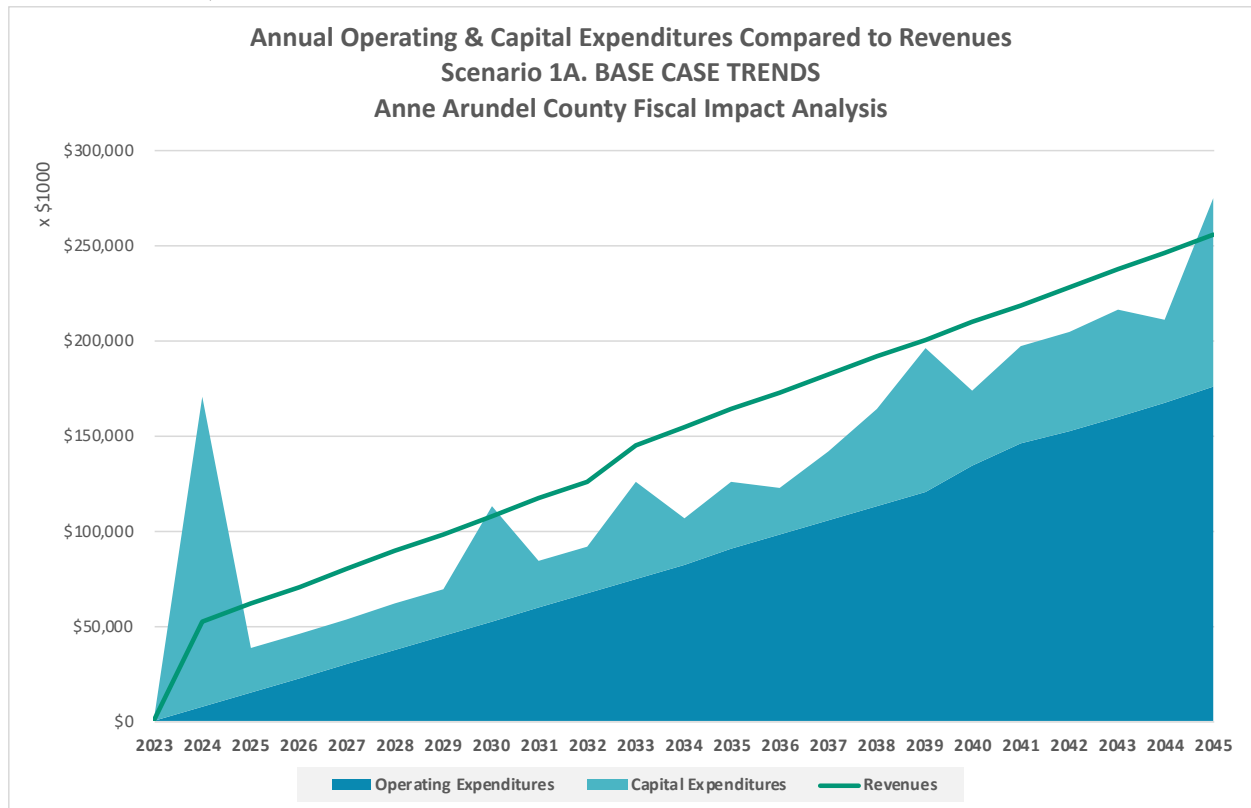
In all scenarios, other marginal capital costs are included where appropriate. For Roads, annual capital costs are included for capacity expansions to serve growth. Other frequent major capital expenditures are park improvements, parkland acquisition, library expansions, health centers, senior centers, fire stations and police stations.

Annual Operating and Capital Expenditures Compared to Revenues

Further detail on annual results is provided in Figure 7, depicting annual expenditures delineated between operating and capital impacts along with annual revenues for the Base Case Trends Scenario (Scenario 1A). (Results for the other scenarios are not shown, but the same general relationship occurs.) As shown in the figure, annual revenues generated are sufficient in most years to cover annual operating and capital expenditures. All years include capital costs for recreation and parks, roads, police, and fire. Years in which a deficit is triggered include additional capital impacts.

Specifically, in the first projection year, initial school capital impacts are triggered where capacity is unavailable in certain FAZs. In 2030, another school capital impact is triggered along with a library expansion. In 2045, capital impacts are incurred for schools, a health center, and a police station. It should be noted that some operating expenditures are tied directly to the opening of capital facilities. That is, when a new capital facility is “built” by the model, annual operating expenditures for that facility are triggered. (Appendix A provides further detail on revenue and expenditure outputs for each scenario.)

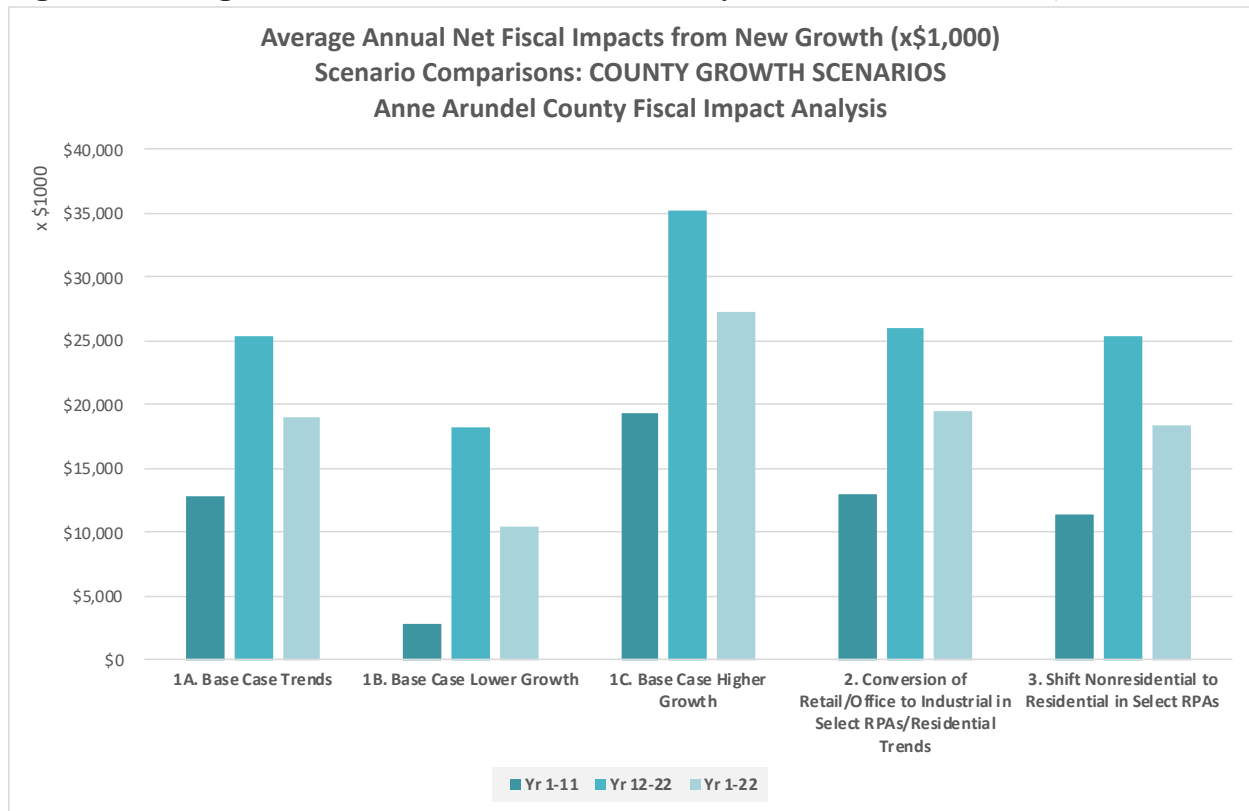
Figure 7. Annual Operating & Capital Expenditures Compared to Revenues: Scenario 1A. Base Case (x\$1,000)



AVERAGE ANNUAL NET RESULTS

Figure 8 below shows the **average annual** net fiscal results (average revenues minus average operating and capital expenditures) for the County Growth Scenarios. The results shown are for three time periods— (1) Years 1-11; (2) Years 12-22; and (3) Years 1-22, representing the entire 22-year growth period. All operating and new capital costs are included in the net fiscal results and represent those accruing from new development under each of the growth scenarios. Figures are shown in \$1,000s.

Figure 8. Average Annual Net Fiscal Results – County Growth Scenarios (x\$1,000)



As shown in Figure 8, average annual results show net surpluses over each time period with the first time period generating the lowest amount for all scenarios. Over the 22-year time frame, Scenario 1C, the Higher Growth Scenario, produces the highest overall revenues, costs, and net surplus of \$27 million per year on average. The Lower Growth Scenario (Scenario 1B) generates the lowest average annual surplus of approximately \$10 million.

Smaller net surpluses are generated in the first 11 years of the scenarios due to a tax base that is not as robust as it is in the later years due to the aggregating nature of property and income taxes. Later years

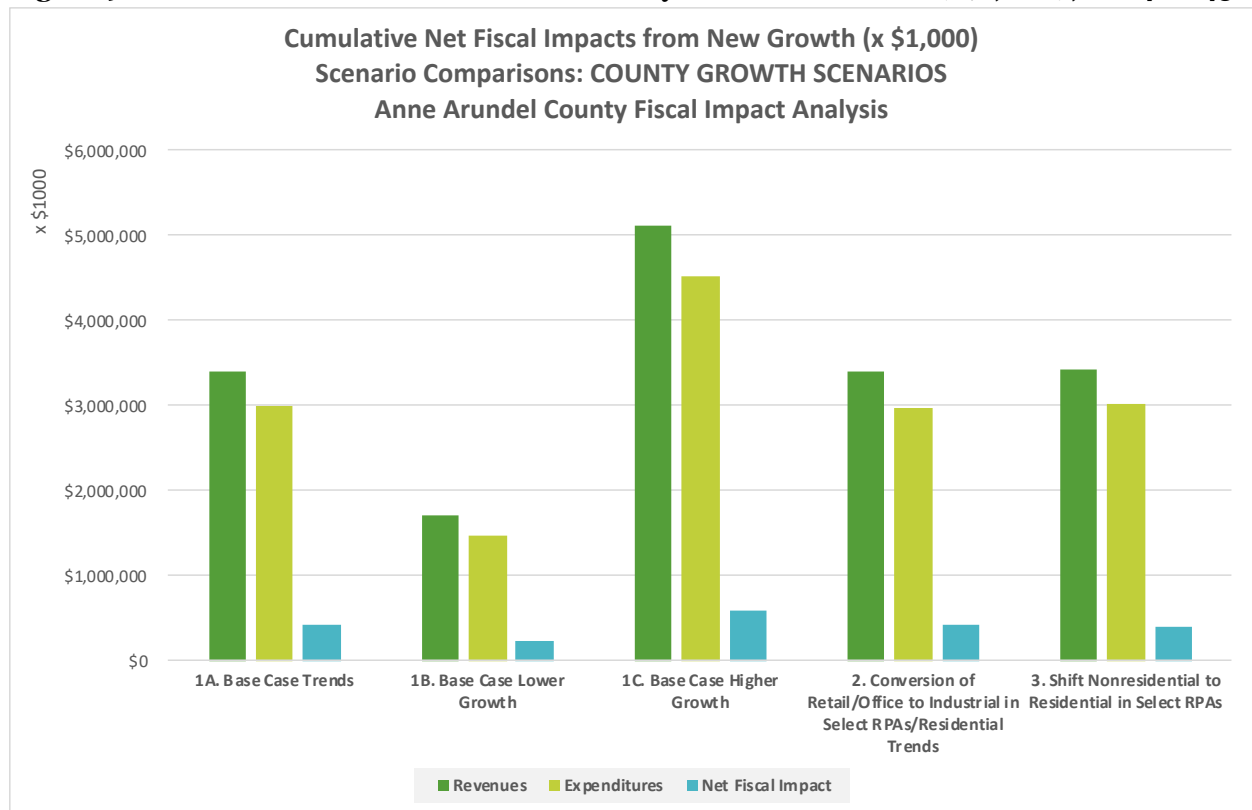
(after Year 9) benefit from the secondary influx of recordation and transfer tax revenue due to the turnover of housing units.

Overall, the average annual net surpluses generated by each scenario represent approximately .5 to 1.25 percent of the County’s current General Fund budget.

CUMULATIVE NET RESULTS

Cumulative figures reflect total revenues generated minus operating and capital expenditures over the 22-year development timeframe. Cumulative revenues, expenditures, and net results are shown in Figure 9. Figures are shown in \$1,000s.

Figure 9. Cumulative Net Fiscal Results – County Growth Scenarios (x\$1,000), 2024-2045



Cumulative net surpluses are generated in all scenarios with the Higher Growth Scenario (Scenario 1C) generating the highest amount of all scenarios. Cumulative net surpluses range from a high of approximately \$600 million in Scenario 1C to a low of \$230 million in Scenario 1B. The land use assumption

changes in Scenarios 2 and 3 do not materially change the fiscal impact results, each generating a surplus of approximately \$420 and \$400 million, respectively.

As noted previously, the results indicate that the County’s revenue structure, with growth-related revenue sources including property and income taxes and one-time revenue from recordation and transfer taxes, is sufficient to cover the costs to serve growth projected in each scenario. Revenue from property taxes, local income tax, and recordation and transfer taxes combined represent approximately 95 percent of projected General Fund operating revenues. Because these sources are all derived from property values of new development, the values assumed in this analysis are a main determinant of the results.

Further Detail on Operating and Capital Results

Analyzing operating and capital results separately reveals net surpluses for operating results and net deficits for capital impacts. It should be noted that the capital costs assumed for this analysis are current as of the September 2023 *Draft Development Impact Fee* findings—but impact fee rates are from the County’s rate structure as of July 1, 2023.

Cumulative revenues and expenditures for operating and capital are shown below in Figure 10. Capital revenues are those that are restricted for capital purposes (i.e., impact fees) for specific types of infrastructure (e.g., schools, parks, etc.) and capital expenditures shown are for all types of infrastructure projected. As shown, the projected revenues for capital needs are insufficient to cover projected infrastructure needs. (For further detail on operating and capital expenditures, see Appendix A.)

Figure 10. Cumulative Net Fiscal Results – Operating and Capital Detail (x\$1,000), 2024-2045

Cumulative (2024-2045) Net Fiscal Results - Scenario Comparisons (x\$1,000)					
GROWTH SCENARIOS					
Anne Arundel County, Maryland, Fiscal Impact Analysis					
Category	SCENARIO				
	1A. Base Case Trends	1B. Base Case Lower Growth	1C. Base Case Higher Growth	2. Conversion of Retail/Office to Industrial in Select RPAs/Residential Trends	3. Shift Nonresidential to Residential in Select RPAs
Operating Revenues	\$2,750,033	\$1,374,965	\$4,125,001	\$2,735,117	\$2,776,392
Operating Expenditures	\$1,956,746	\$951,774	\$2,962,564	\$1,944,105	\$2,013,582
NET OPERATING IMPACT	\$793,287	\$423,191	\$1,162,437	\$791,013	\$762,810
Capital Revenues	\$658,129	\$329,054	\$987,172	\$657,425	\$650,492
Capital Expenditures	\$1,031,124	\$521,599	\$1,549,819	\$1,019,065	\$1,008,639
NET CAPITAL IMPACT	(\$372,994)	(\$192,545)	(\$562,647)	(\$361,640)	(\$358,147)
NET FISCAL IMPACT	\$420,293	\$230,646	\$599,790	\$429,373	\$404,663

FISCAL IMPACT ANALYSIS FINDINGS

- All scenarios produce **annual** net revenues to the County over the projection period in most years except year 1, where major school capital needs are triggered due to capacity needs in certain areas of the County, and a few other years where other capital impacts are incurred. Annual surpluses are due mainly to the County's revenue structure, including ongoing annual sources of revenue from property taxes and local income taxes as well as one-time recordation and transfer taxes, compared to the level of expenditure needed to serve growth. Given the amount of growth projected relative to the County's existing population and employment base, the results tend to reflect the effect of economies of scale where serving new development can be absorbed by existing capacity. For those services and facilities where expansions or improvements are needed, the revenues generated by new development are generally adequate to cover the related expenditures.
- **Average annual** results show net surpluses over each time period with the first time period generating the lowest amount for all scenarios. Over the 22-year time frame, Scenario 1C, the Higher Growth Scenario, produces the highest overall net surplus of \$27 million per year on average. The Lower Growth Scenario (Scenario 1B) generates the lowest average annual surplus of approximately \$10 million. Smaller net surpluses are generated in the first 11 years of the scenarios due to a tax base that is not as robust as it is in the later years due to the aggregating nature of property and income taxes. Later years (after Year 9) benefit from the secondary influx of recordation and transfer tax revenue due to the turnover of housing units. Overall, the average annual net surpluses generated by each scenario represent .5 to 1.25 percent of the County's current General Fund budget.
- **Cumulative** net fiscal surpluses are generated in all scenarios with the Higher Growth Scenario (Scenario 1C) generating the highest amount of all scenarios. Cumulative net surpluses range from a high of approximately \$600 million in Scenario 1C to a low of \$230 million in Scenario 1B. The land use assumption changes in Scenarios 2 and 3 do not materially change the fiscal impact results, with each generating a surplus of approximately \$420 and \$400 million, respectively.
- The results indicate that the County's revenue structure, with substantial annual revenue sources from property and local income taxes, is sufficient to cover the costs to serve growth projected in each scenario. Revenue from property taxes, local income tax, and recordation and transfer taxes combined represent approximately 95 percent of projected General Fund revenues projected in each scenario. Because these sources are all derived based on property values for new development, the values assumed in this analysis are a main determinant of the results.

- While the proportion of revenues to expenditures is similar in each scenario, by virtue of higher revenue generation (even with higher total expenditures), the faster growth scenario generates the largest positive fiscal result of the scenarios.
- Capital revenues are insufficient to cover capital costs brought about by growth. (Note: capital costs have been updated based on the *Draft Development Impact Fee Study* assumptions (as of September 2023), but impact fee rates are as of July 1, 2023 (prior to any updates from the in-process study).)
- Scenarios tested with land use changes from (a) retail/office to industrial and (b) nonresidential to residential do not have a material effect on long-term fiscal impacts.
- Short-term negative fiscal impacts are generated due to initial school capacity needs.
- School costs are significant. Combined operating and capital costs to serve the projected growth in each scenario represent between 55 and 60 percent of the overall costs projected.
- Road capital costs are another major expenditure for the County. Cumulatively, projected Road *capital* costs represent approximately 13 percent of total operating and capital expenditures projected in each scenario. The costs modeled reflect County funding for road capital improvements (as opposed to including assumed state and federal contributions).
- When looking at fiscal results for operating and capital separately, surpluses are generated on the operating side with net deficits generated for capital. Earmarked revenues for capital expenditures (e.g., impact fees) are insufficient to cover growth-related infrastructure costs. Surpluses on the operating side—from general revenues that can be used for capital needs—generate sufficient revenues to cover the remaining capital shortfalls.
- All capital costs included in the analysis are modeled as “pay go.” By assuming pay go funding for all capital improvements, the true costs of capital impacts are depicted. If bond financed were assumed, debt service would continue beyond the last projection year and therefore would not be adequately captured in this analysis. Furthermore, the interest cost associated with bond financing is largely offset by the time value of money gained by the County.
- Results include both operating and capital expenditures from new development over the 22-year period. Operating expenditures generated from the growth scenarios represent approximately 65 percent of total expenditures in each scenario, and capital expenditures account for the remaining 35 percent.

- The capital expenditures assumed in this analysis are based on maintaining current levels of service for all government services, as opposed to including only those costs approved in the *County Capital Improvements Program*, master plans, or other facility plans. This approach is representative of the costs of growth because it does not include costs to remedy existing deficiencies (which would result in a higher level of service for future residents), nor is it fiscally constrained. As noted, capital costs reflect current cost estimates per the *Draft Development Impact Fee Study* (September 2023).

- Additionally, it should be noted that a fiscal impact analysis, while projecting specific capital facilities, is different from a facility plan. Particularly, the results shown and discussed below reflect needs due to *new growth only* and are projected based on current levels of service. This may be different from a facility plan where needs may be due to existing deficiencies, different policies, demographic shifts, technological changes, etc.

- It is important to acknowledge that fiscal issues are one aspect in evaluating development and growth trends. Environmental, land use, housing, jobs/housing balance, transportation, and other issues should also be taken into consideration when determining what is best for the County.