

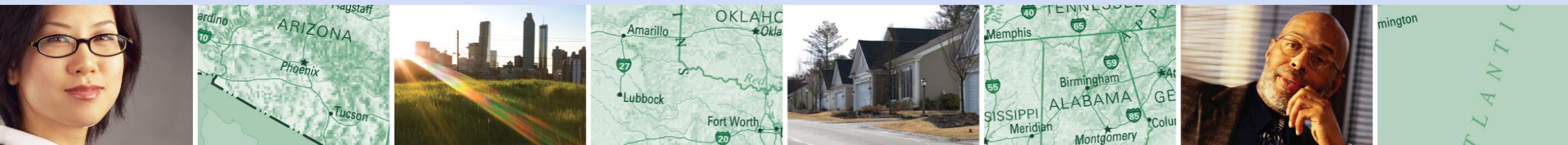
Incorporating Fiscal Impact Analysis in Land Use Planning

Presented By:

L. Carson Bise II, AICP, President

TischlerBise
Fiscal, Economic & Planning Consultants

www.tischlerbise.com



Observations

- **Most local governments do not know the true cost of development decisions**
- **Most local governments do not know if the current land use plan is fiscally sustainable**
- **Fiscal analysis is rarely required**
- **Lack of formal standards**
- **Considerable variation in methodologies employed**

Observations (continued)

- **Costs can change over time**
- **Does not address infrastructure replacement**
- **Seldom reflect geographic differences**

Questions that Can be Answered

- **What is the relationship between development densities and infrastructure costs?**
- **What is the relationship between municipal property tax and the density per acre?**
- **What is the return on municipal investment at various densities?**
- **What is the optimum mix of land uses?**
- **What is the relationship between the geographic location of new development and the cost?**
- **Are we living off of tomorrow's growth?**

Incorporating Market Analysis

- **Lends sense of “reality” to analysis**
- **Without market study analysis of multiple scenarios is imperative**
 - Fiscal model can be invaluable in this effort
- **Seeing an increasing trend of requiring market analysis as part of submittals**
 - Particularly for TIF

Provides Context to Fiscal Analysis

- **What are the region's competitive advantages?**
- **Where will employment growth likely locate?**
- **Is there a transitioning of the area's economy**
 - E.g., transition from manufacturing focus to office/services
- **Are jobs shifting from urban areas to suburbs or vice versa?**
- **What impact will changing demographics and lifestyle choices have on the jurisdiction's economy and government services?**

Fiscal Impact Analysis

- **Cash flow to the public sector**
 - Are the revenues generated by new growth enough to cover the resulting service and facility demands?
- **Reflects operating expenses and capital costs (debt service and pay-go)**
- **All revenues**
- **Revenue minus expenditures = net surplus/deficit**

Economic Impact Analysis

- **Reflects overall economy of the community**
- **Residential**
 - Primary factors are the construction phase and consumer spending
- **Nonresidential**
 - Primary factors are job creation and real disposable income
- **Doesn't follow jurisdictional lines**
 - Large portion of economic output flows out of jurisdiction and possibly State
- **Resident spending for mortgages, car payments, insurance probably are not sources of sales tax for local government**

Fiscal Impact Analysis vs. Revenue Forecasting

- **Municipal budgeting is primarily “revenue driven”**
 - Revenue forecast is used to establish spending target
- **Fiscal impact analysis is not revenue constrained**
 - Forecast expenses needed to maintain current LOS

Fiscal Impact Analysis in Practice

- **Majority of fiscal analyses are prepared for specific development proposals**
 - Project-level analyses are typically reviewed in a vacuum
- **An increasing number of local governments are requiring fiscal impact analyses**
 - Net neutrality
- **Most comprehensive plans do not directly address fiscal sustainability**
- **Lack of formal standards**
 - Considerable variation in methodologies employed

Methodologies

➤ **Proportional valuation**

- **Typically used for evaluating impacts of nonresidential development**
- **Assumes assessed property values are directly related to public service costs**

➤ **Comparable city**

- **Typically relies on data from U.S. Census of Governments**

➤ **Cost of community services**

- **Developed by American Farmland Trust**
- **Typically include residential, commercial/industrial, farmland/open space**

Methodologies

- **Case study-marginal approach**
 - **Reflects fiscal reality**
 - **Dependent on local levels of service**
 - **Available capacity triggers the staging of facilities**
 - **Reflects geographic differences**

- **Average cost approach**
 - **Focuses on per capita/employee**
 - **Doesn't consider available capacities**
 - **Masks timing**
 - **Uses average (current) costs**
 - **Budget in equilibrium**

Local Context#	Per Capita Multiplier Method Likely Appropriate	Case Study-Marginal Method Likely Appropriate
Time is constrained	X	
Staff expertise and resources are limited	X	
Budget is limited#	X	
Data collection capacity is limited	X	
Most services are at capacity	X	
Significant unused or overused capacity		X
Development will create unique service demands		X
New population likely to resemble the current population	X	
Services likely to continue at current level#	X	
Development requires significant new infrastructure		X
Type of Analysis		
City/countywide analysis		X
Area/corridor plans		X
Large mixed-use/planned-unit developments		X
Small/medium scale developments	X	
Cost of land uses studies	X	
Infill/redevelopment		X
Analysis of alternative development patterns		X
Annexation		X
Level of service changes		X
Long-term fiscal planning		X

#Edwards and Huddleston, 2010

*Bise, 2010

Elements of the Fiscal Equation

➤ **General perceptions**

- **Residential development doesn't pay for itself**
- **Nonresidential development generates surpluses**

Influencing Factors

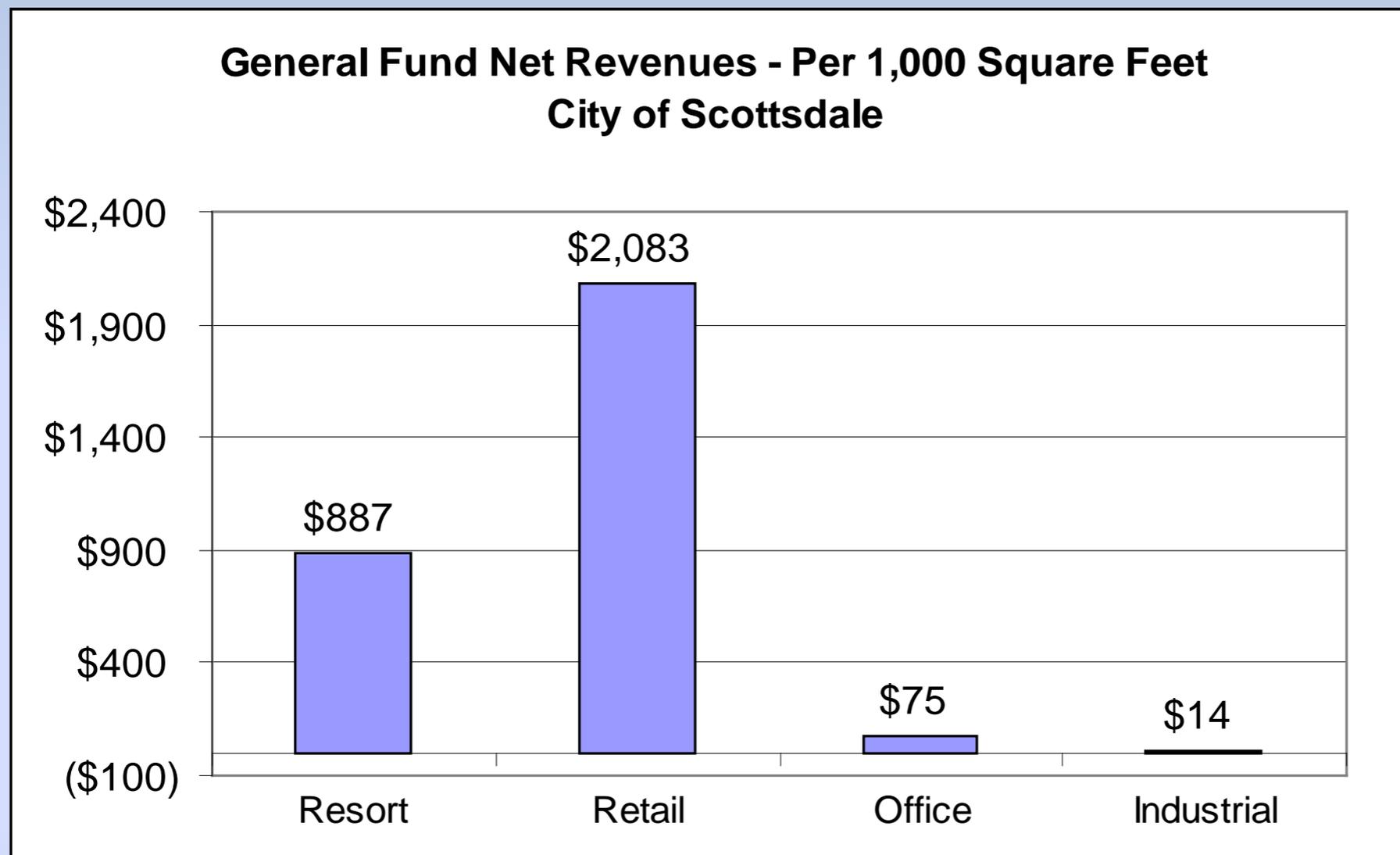
- **Revenue structure**
 - **Sources**
 - **Distribution formulas**
- **Levels of service**
- **Infrastructure lifecycle**
 - **Existing capacities**
- **Characteristics of new development**
 - **Demographic**
 - **Socioeconomic**

Factors that Influence Costs

- **Geographic location**
- **Timing/phasing of new development**
- **Density**
- **All of the above influence**
 - **Physical development pattern**
 - **Road network (curvilinear vs. grid)**
 - **Transportation choices**
 - **Intervention strategies**

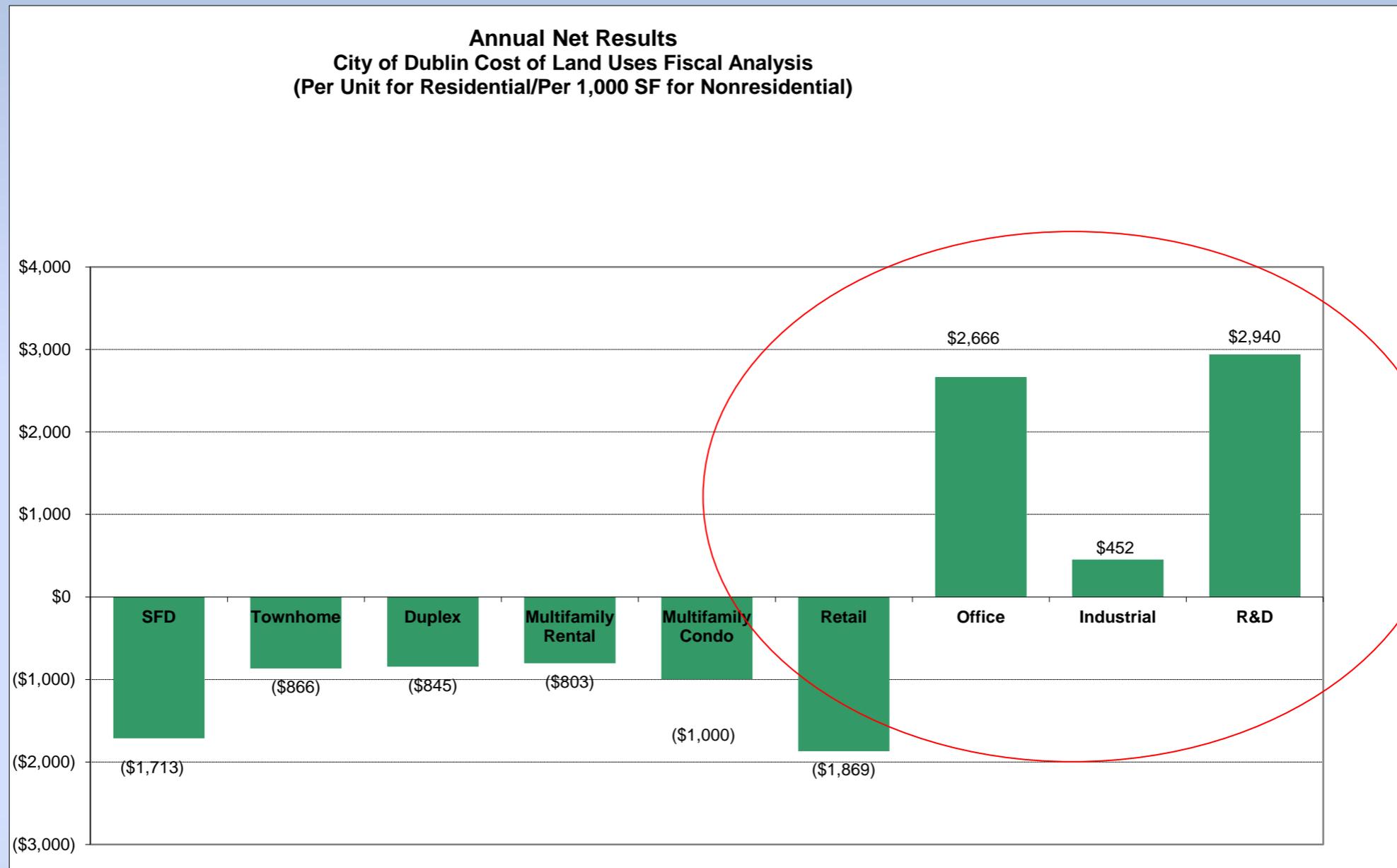
Case Examples

➤ Gross Receipts Tax



Case Examples

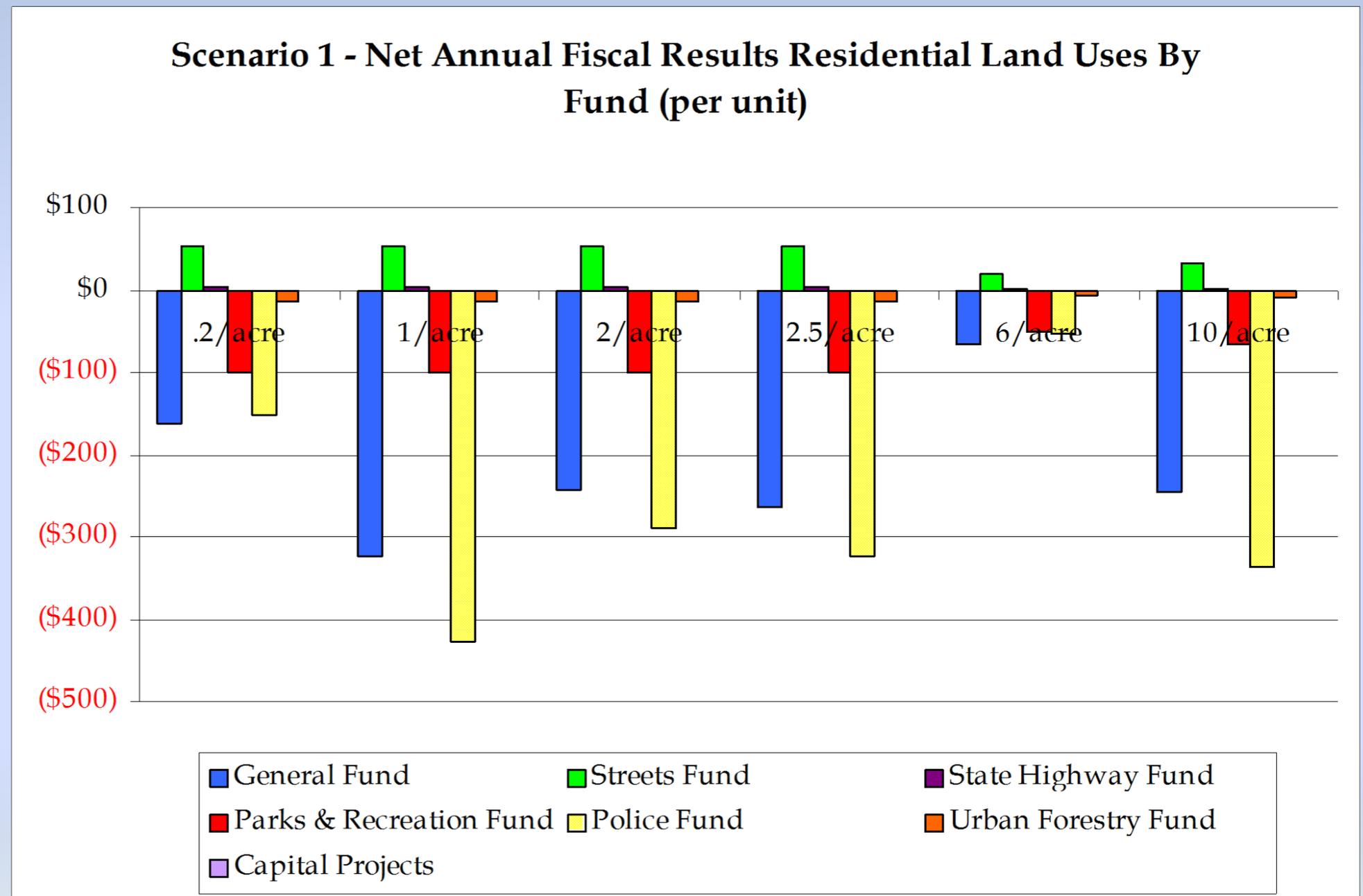
➤ Income Tax by Place of Employment



Case Examples

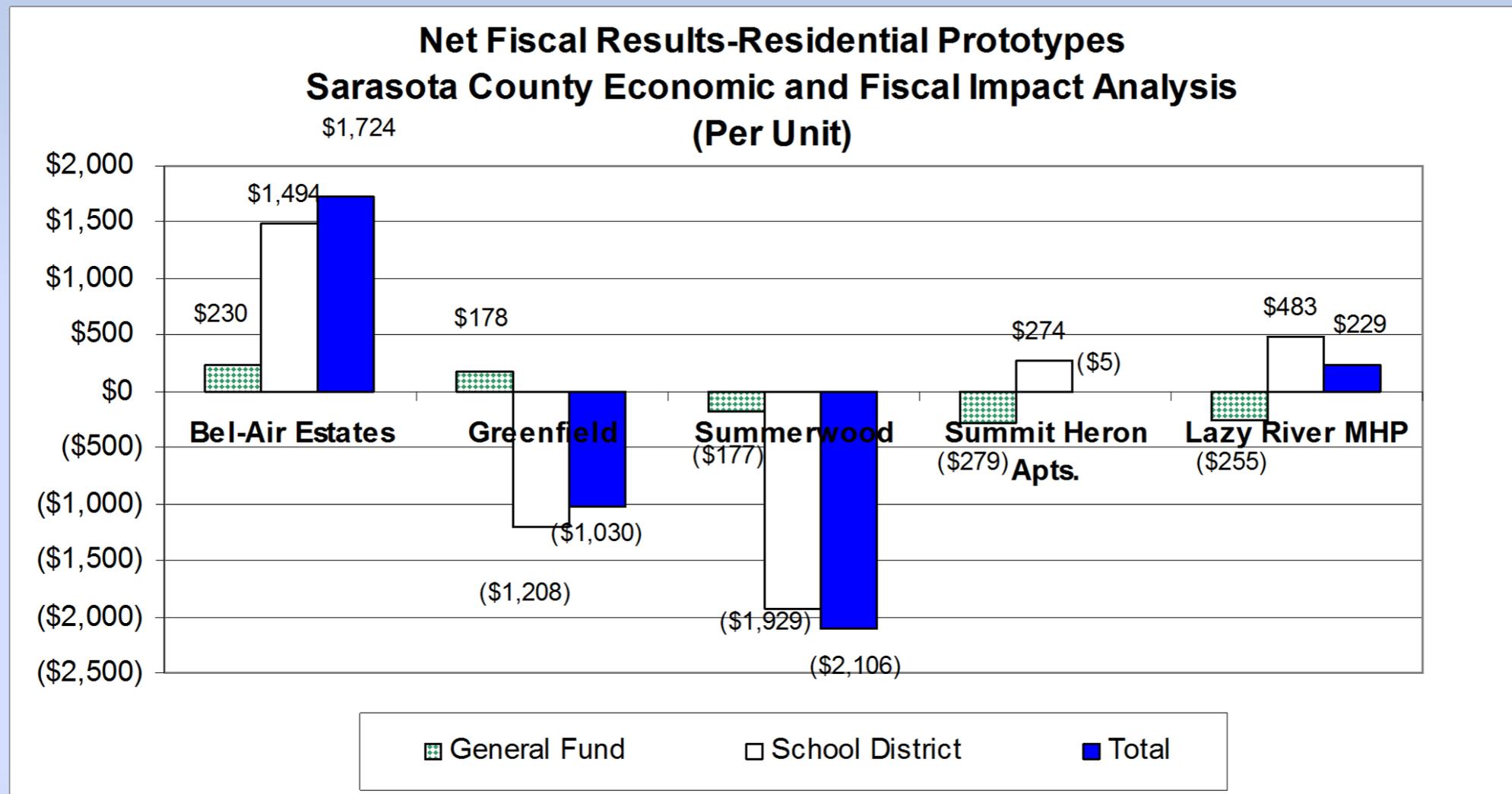
➤ Results Can Vary by Fund

Pickerington, OH



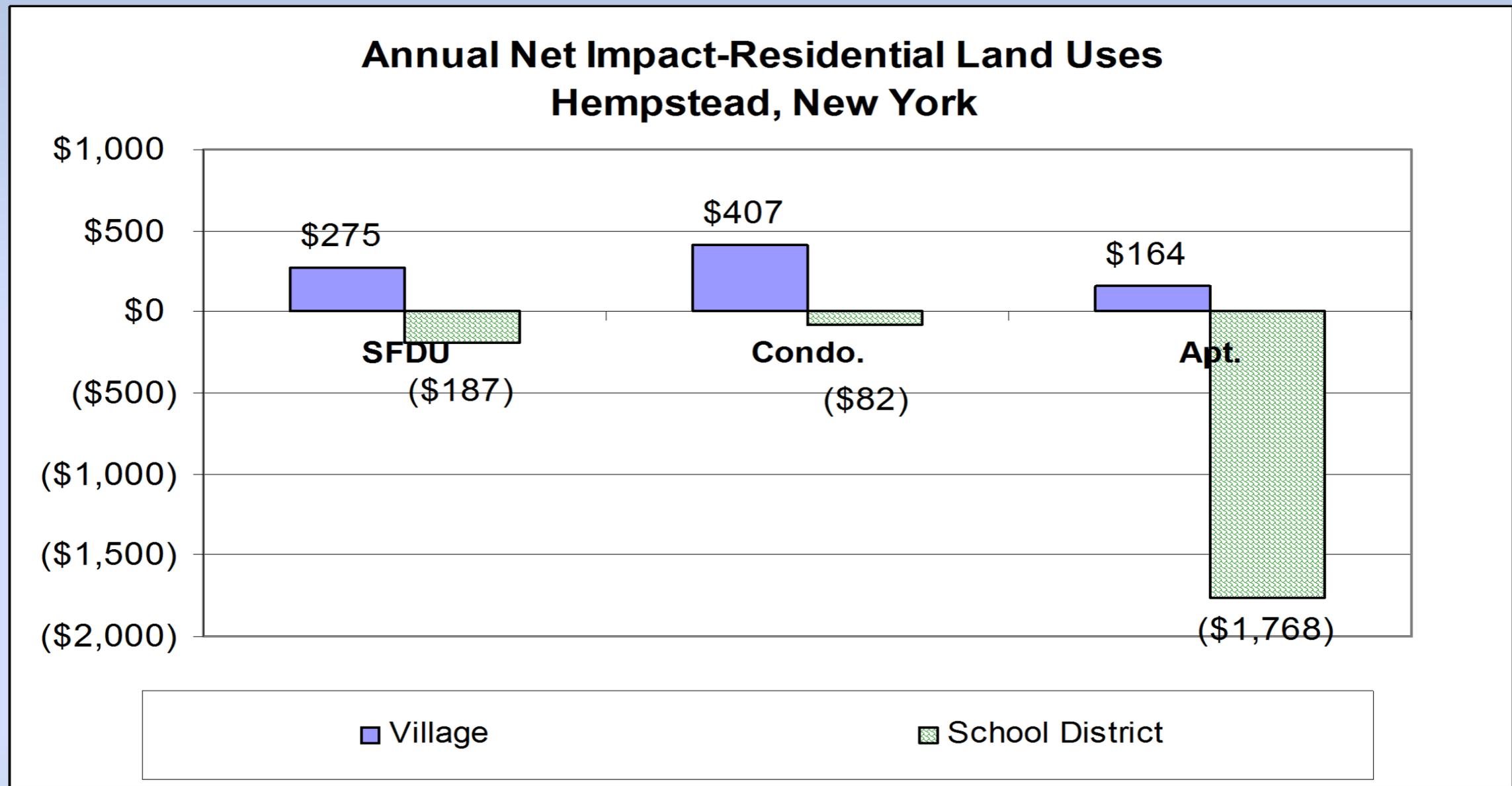
Case Examples

➤ Housing Characteristics



Case Example

➤ Overlap of governmental entities



Applications

- **Land use policies and development patterns**
- **Demographic and economic change**
- **Economic development incentives**
- **Leveraging public dollars for economic growth**
 - **How to invest limited funds as to maximize return**
- **Rezoning and specific development projects**
- **Timing on impacts**
- **Annexation**
- **Infrastructure planning**

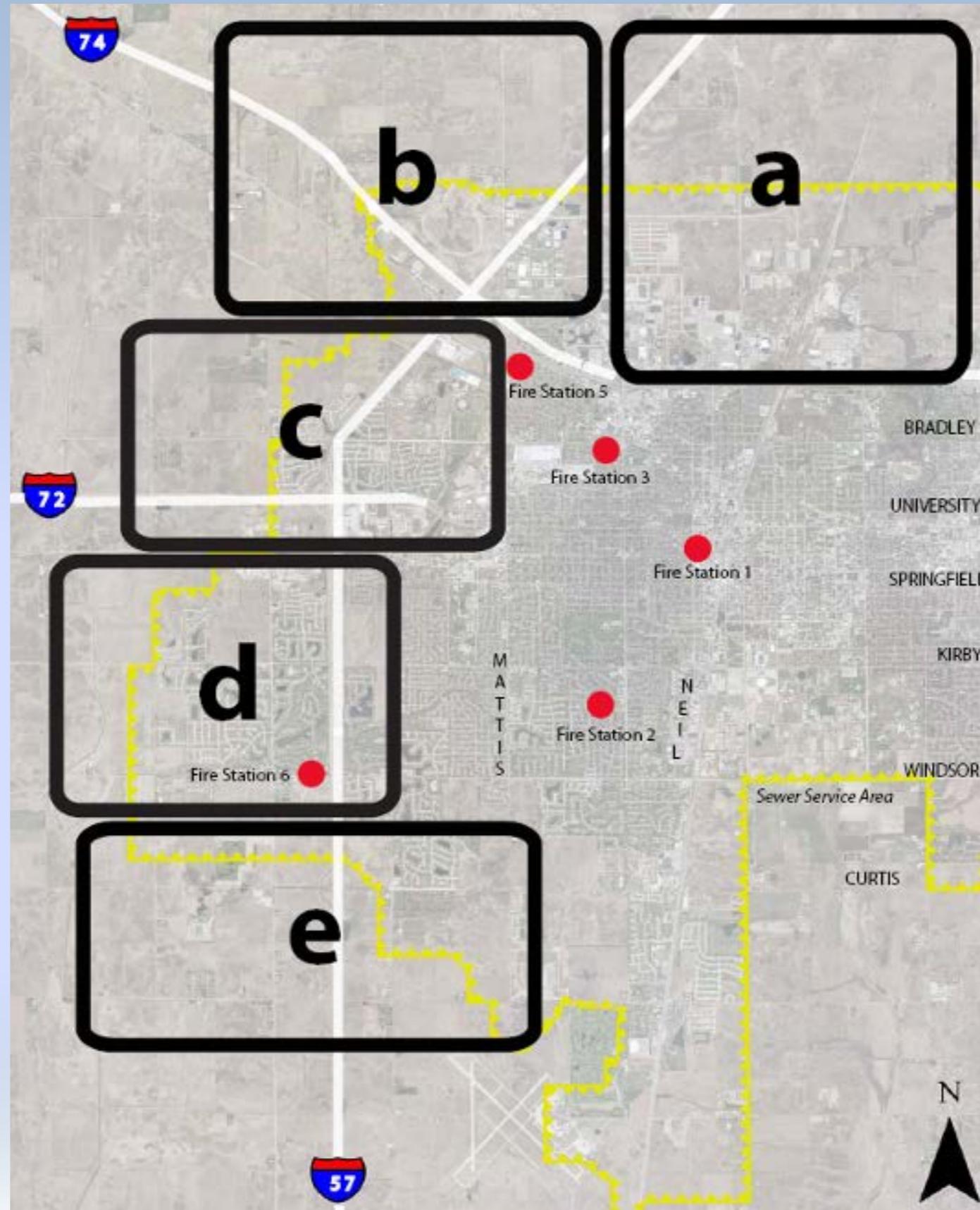
Case Studies

Evaluating Land Use Policy

Champaign, IL

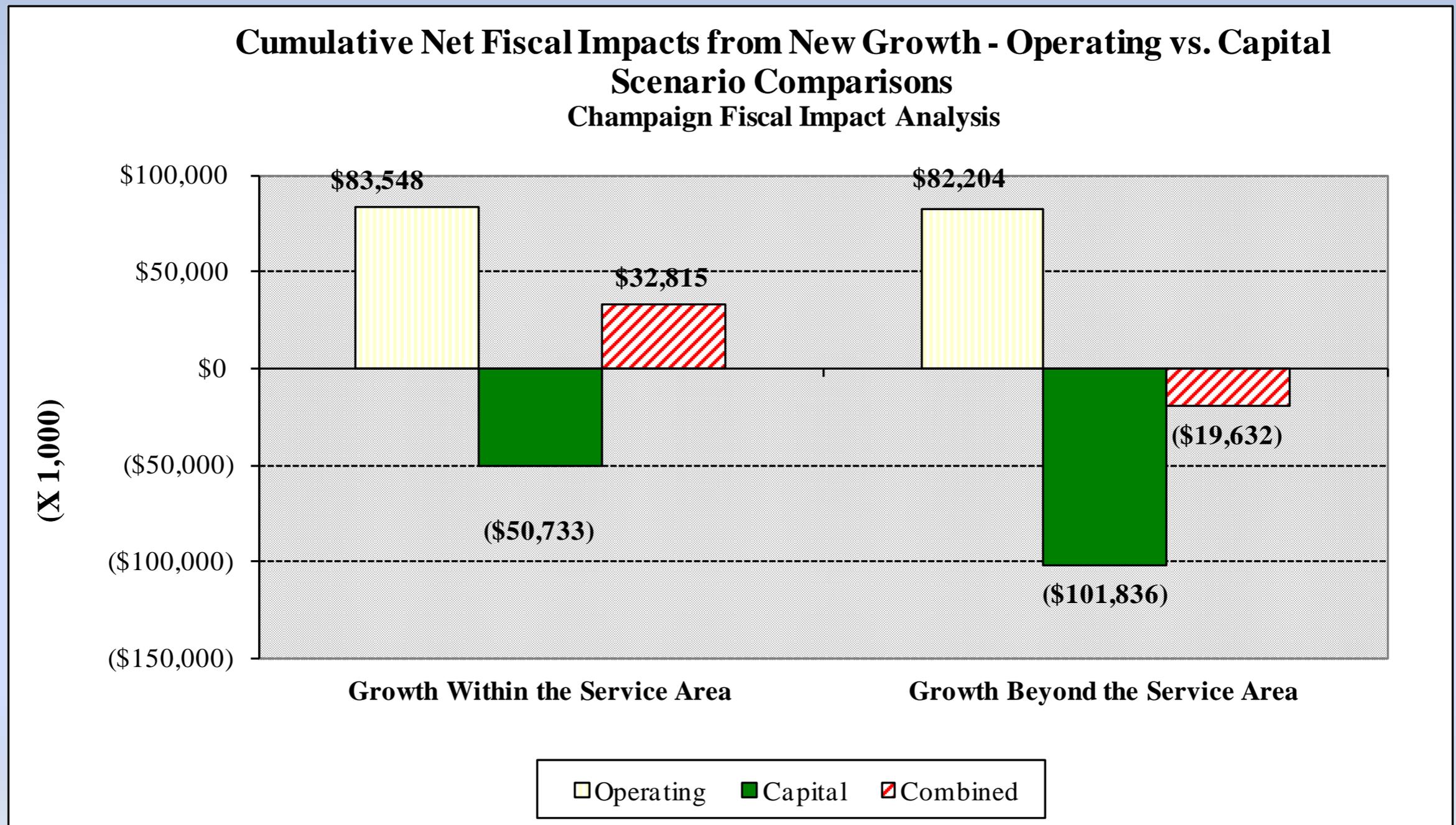
- **Three-phase fiscal impact study**
 - **What is the fiscal impact of current land uses?**
 - **What is the fiscal impact of future growth?**
 - Scenario 1: **Growth Within the Service Area**—all growth occurs within the current sanitary sewer service area.
 - Scenario 2: **Growth Beyond the Service Area**—growth occurs both within and outside of the current sanitary sewer service area.
- **What are ways we can raise revenue without raising taxes?**

Analysis Areas



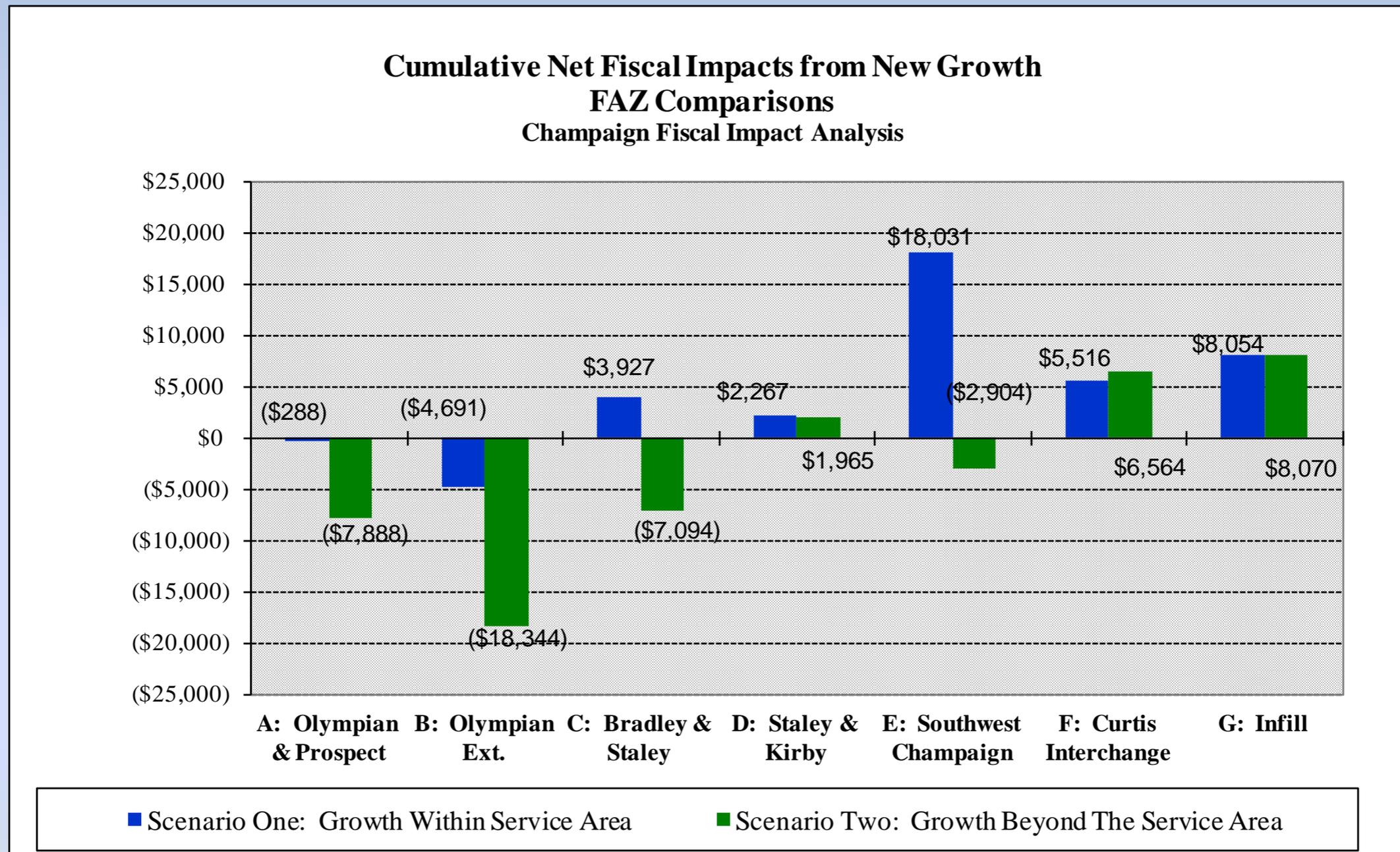
Champaign, IL

Fiscal Impact Results-Citywide



Champaign, IL

Fiscal Impact Results- By Subarea (FAZ)



Champaign, IL Findings

- **The difference in fiscal impact results of the two scenarios is driven mainly by much higher capital costs—\$52.3 million higher—for the Growth Beyond the Service Area scenario**
 - **Acreage available for development is more than double that of the Growth Within the Service Area scenario**
 - **Larger area available leads to a more scattered and leapfrog approach to development which requires the expansion of fire service areas as well as the road network**
 - **The results show this is an inefficient development pattern**

Champaign, IL Findings

- **The City is severely constrained as to the amount of revenue available for support of capital improvements needed to serve new development**
 - **The City should consider alternative financing sources such as impact fees for growth-related infrastructure, particularly for road projects**
 - **The implementation of a tiered impact fee program, that charges more for development further out, could assist the City in directing development in a phased manner**

Market and Fiscal Assessment: Orangeburg County, SC

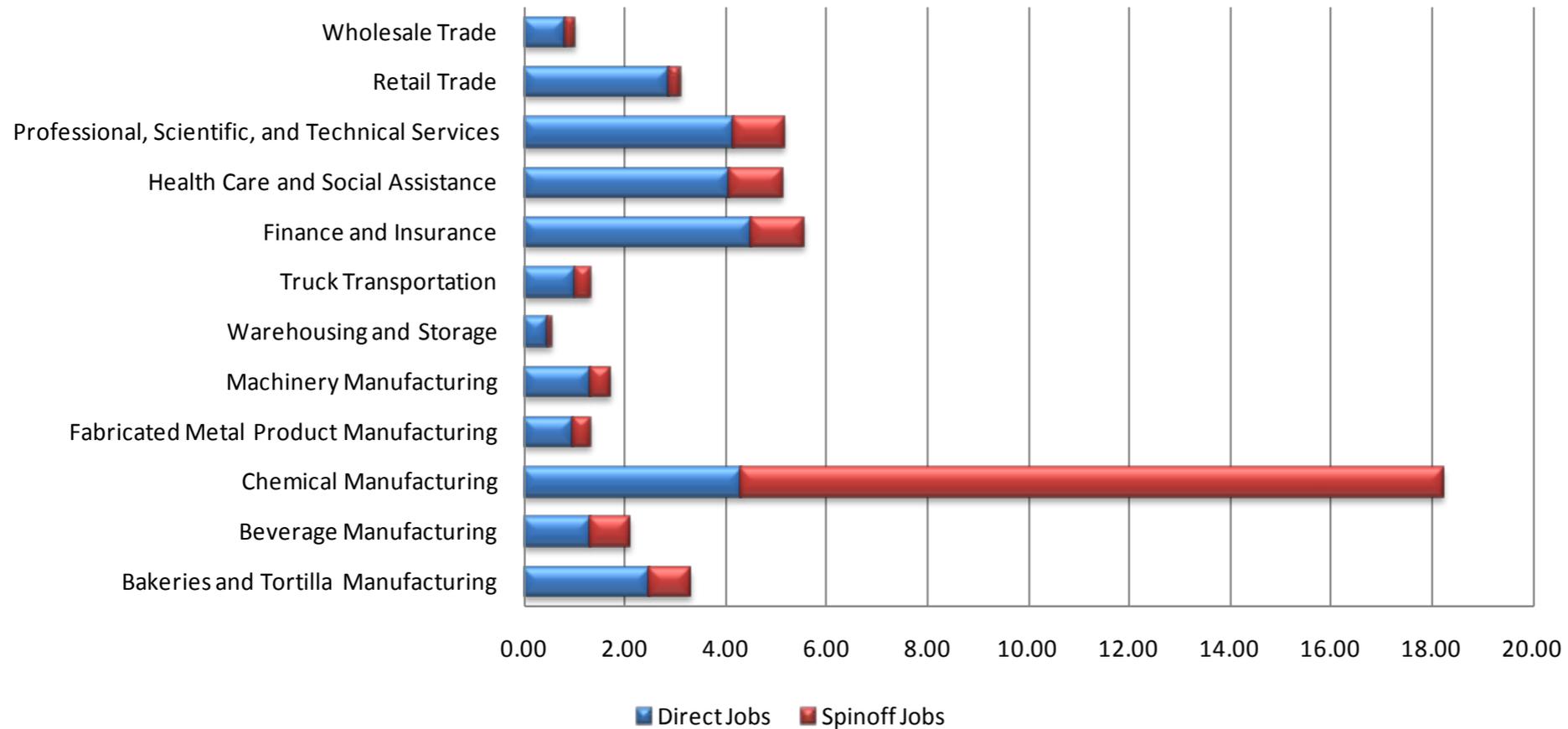
- **Fiscal impact analysis of combined direct and indirect employment impacts on the County**
- **Conducted as part of the County's Sustainability Plan**
- **Industries studied are identified as Targeted Industries in the County**
- **Questions to be answered by the study:**
 - **What type of growth pays for itself?**
 - **What nonresidential land uses provided best economic and fiscal return? And therefore should be considered for incentives?**
 - **What are direct and indirect effects of those industries?**
 - **Are we losing jobs to neighboring counties?**

Nonresidential Prototypes

NONRESIDENTIAL PROTOTYPES							
	<i>Land Use Prototype [1]</i>	<i>Market Value Per Sq. Ft. [1]</i>	<i>Assessment Ratio [2]</i>	<i>Assessed Value Per Sq. Ft. (rounded) [3]</i>	<i>Employees Per 1,000 SF [4]</i>	<i>Vehicle Trips Per 1,000 SF [5]</i>	<i>ITE Code</i>
1	Bakeries and Tortilla Manufacturing	\$41.08	10.5%	\$4.31	2.47	1.91	140
2	Beverage Manufacturing	\$41.08	10.5%	\$4.31	1.30	1.91	140
3	Chemical Manufacturing	\$41.08	10.5%	\$4.31	4.29	1.91	140
4	Fabricated Metal Product Manufacturing	\$41.08	10.5%	\$4.31	0.97	1.91	140
5	Machinery Manufacturing	\$41.08	10.5%	\$4.31	1.33	1.91	140
6	Warehousing and Storage	\$41.08	6.0%	\$2.47	0.45	1.78	150
7	Truck Transportation	\$41.08	9.5%	\$3.90	1.00	4.93	030
8	Finance and Insurance	\$76.66	6.0%	\$4.60	4.48	11.33	710
9	Health Care and Social Assistance	\$76.66	6.0%	\$4.60	4.05	18.07	720
10	Professional, Scientific, and Technical Ser	\$102.28	6.0%	\$6.14	4.14	9.18	710
11	Retail Trade	\$67.21	6.0%	\$4.03	2.86	26.83	820
12	Wholesale Trade	\$41.08	6.0%	\$2.47	0.80	3.37	860

Total Employment (Direct & Spinoff)

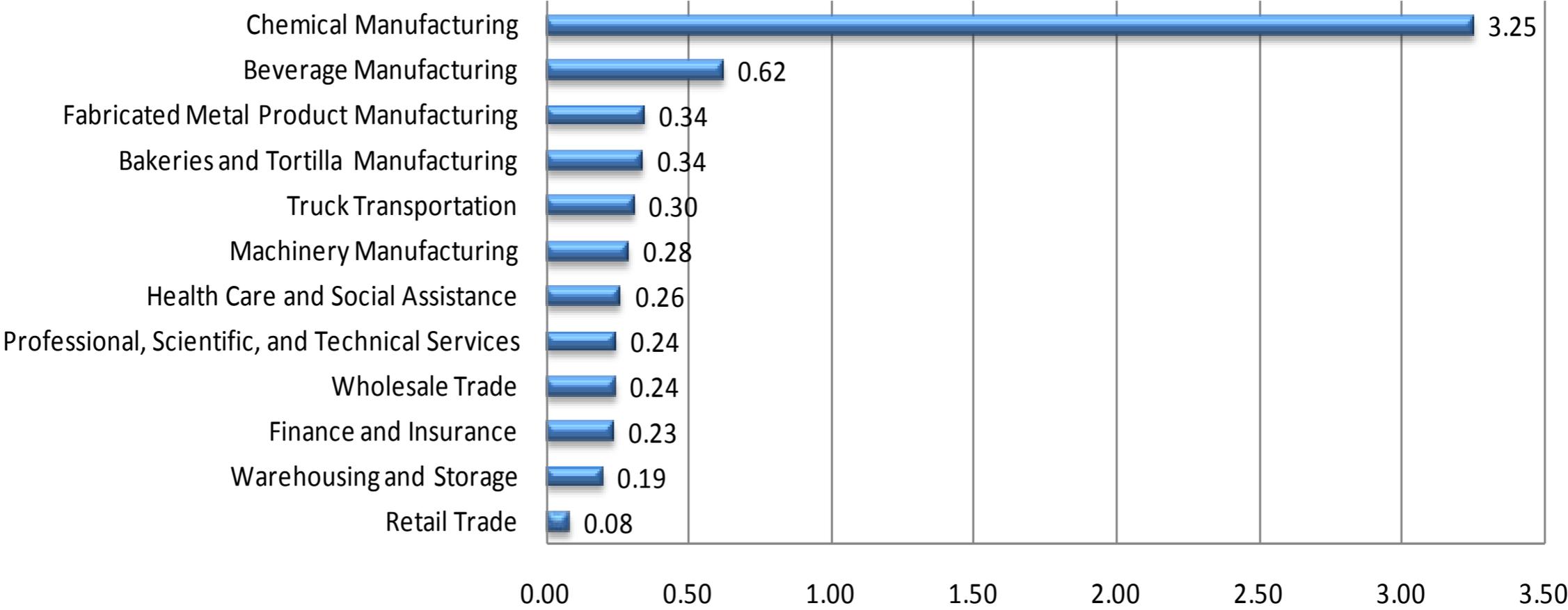
Total and Direct and Spinoff Jobs within the County per 1,000 Square Feet of Nonresidential Prototype



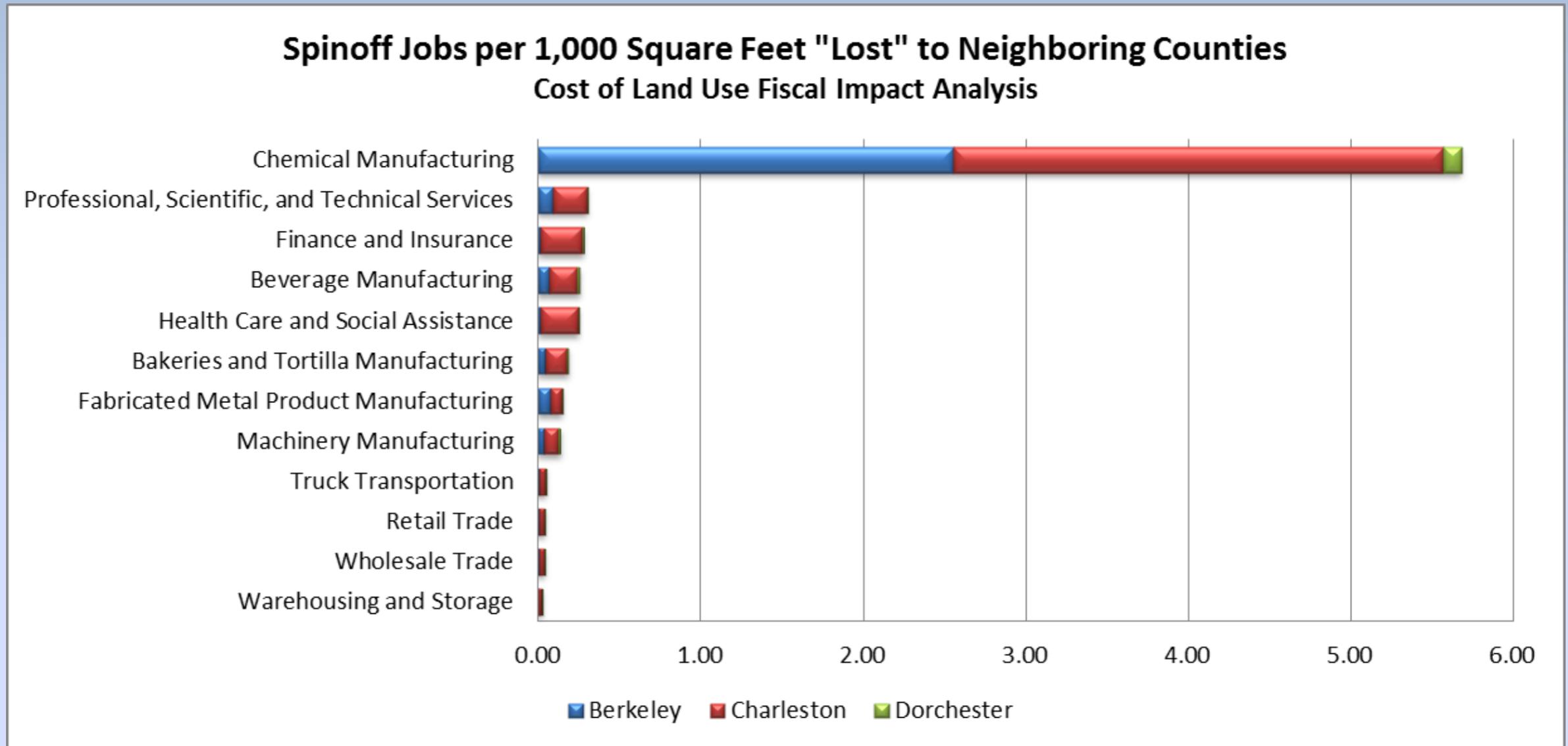
<i>Nonresidential Prototype</i>	<i>Direct Employees per 1,000 sf¹</i>	<i>Spinoff Employees per 1,000 sf²</i>	<i>Total Employment</i>
Bakeries and Tortilla Manufacturing	2.47	0.83	3.30
Beverage Manufacturing	1.30	0.80	2.10
Chemical Manufacturing	4.29	13.93	18.23
Fabricated Metal Product Manufacturing	0.97	0.33	1.31
Machinery Manufacturing	1.33	0.38	1.71
Warehousing and Storage	0.45	0.09	0.54
Truck Transportation	1.00	0.30	1.30
Finance and Insurance	4.48	1.04	5.52
Health Care and Social Assistance	4.05	1.05	5.10
Professional, Scientific, and Technical Services	4.14	1.00	5.14
Retail Trade	2.86	0.22	3.08
Wholesale Trade	0.80	0.19	0.99

Ratio of Spinoff Jobs to Direct

Spinoff:Direct Employment Ratio per 1,000 Squre Feet (Jobs w/in County)
Cost of Land Use Fiscal Impact Analysis



"Lost" Spinoff Jobs



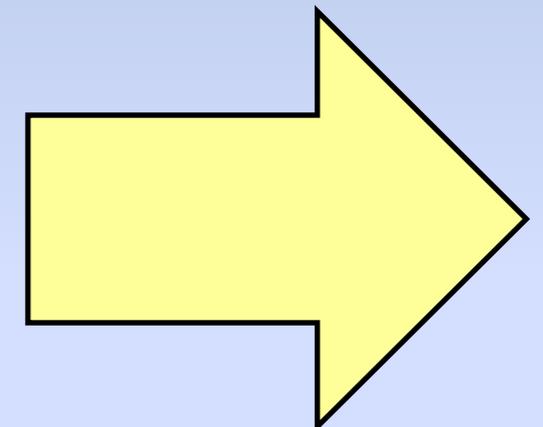
Direct and Spinoff Fiscal Results

DIRECT JOBS

<i>Nonresidential Prototype</i>	<i>Revenue</i>	<i>Expenditures</i>	<i>Net Fiscal Result</i>
Bakeries and Tortilla Manufacturing	\$643	\$311	\$332
Beverage Manufacturing	\$596	\$184	\$412
Chemical Manufacturing	\$712	\$508	\$204
Fabricated Metal Product Manufacturing	\$586	\$149	\$437
Machinery Manufacturing	\$599	\$188	\$412
Warehousing and Storage	\$333	\$89	\$243
Truck Transportation	\$543	\$220	\$322
Finance and Insurance	\$779	\$742	\$36
Health Care and Social Assistance	\$780	\$849	(\$70)
Professional, Scientific, and Technical Services	\$954	\$657	\$298
Retail Trade	\$3,685	\$921	\$2,764
Wholesale Trade	\$350	\$163	\$187

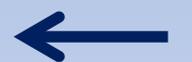
SPINOFF JOBS

<i>Nonresidential Prototype</i>	<i>Revenue</i>	<i>Expenditures</i>	<i>Net Fiscal Result</i>
Bakeries and Tortilla Manufacturing	\$550	\$187	\$363
Beverage Manufacturing	\$597	\$174	\$422
Chemical Manufacturing	\$9,684	\$3,017	\$6,668
Fabricated Metal Product Manufacturing	\$210	\$73	\$137
Machinery Manufacturing	\$280	\$84	\$196
Warehousing and Storage	\$73	\$23	\$50
Truck Transportation	\$204	\$72	\$132
Finance and Insurance	\$801	\$264	\$537
Health Care and Social Assistance	\$913	\$279	\$634
Professional, Scientific, and Technical Services	\$751	\$250	\$501
Retail Trade	\$191	\$59	\$132
Wholesale Trade	\$144	\$48	\$96



Combined Fiscal Results

<i>Nonresidential Prototype</i>	<i>Revenue</i>	<i>Expenditures</i>	<i>Net Fiscal Result</i>
Bakeries and Tortilla Manufacturing	\$1,193	\$498	\$695
Beverage Manufacturing	\$1,192	\$358	\$834
Chemical Manufacturing	\$10,396	\$3,524	\$6,872
Fabricated Metal Product Manufacturing	\$796	\$222	\$574
Machinery Manufacturing	\$880	\$272	\$608
Warehousing and Storage	\$405	\$112	\$293
Truck Transportation	\$746	\$292	\$454
Finance and Insurance	\$1,580	\$1,007	\$574
Health Care and Social Assistance	\$1,692	\$1,129	\$564
Professional, Scientific, and Technical Services	\$1,705	\$907	\$798
Retail Trade	\$3,876	\$979	\$2,896
Wholesale Trade	\$493	\$211	\$282



Another Way of Evaluating Results

Prototype Category	5 Highest Real Disposable Income	5 Highest Direct and Spinoff Jobs	Net Revenues to County General Fund	Net Revenues to School District	Net Revenues to School District Exceeds Deficit to County General Fund
Instruments/ Related Products	X	X	X	X	N/A
Finance, Insurance and Real Estate	X	X	X	X	N/A
Health Services	X	X	X	X	N/A
Electrical Equipment, except Computers	X	X		X	X
Legal, Engineering, Management and Miscellaneous Services	X	X		X	X

One Size Fits All?

State of Florida Department of Community Affairs

- **Task force assembled by Governor Bush in 2001 to examine whether growth pays**
 - **Is it possible to develop a sophisticated fiscal impact model that is relatively easy to use, update and maintain?**
 - **If a model could be developed, how and under what circumstances could or should it be used?**

The Florida Model

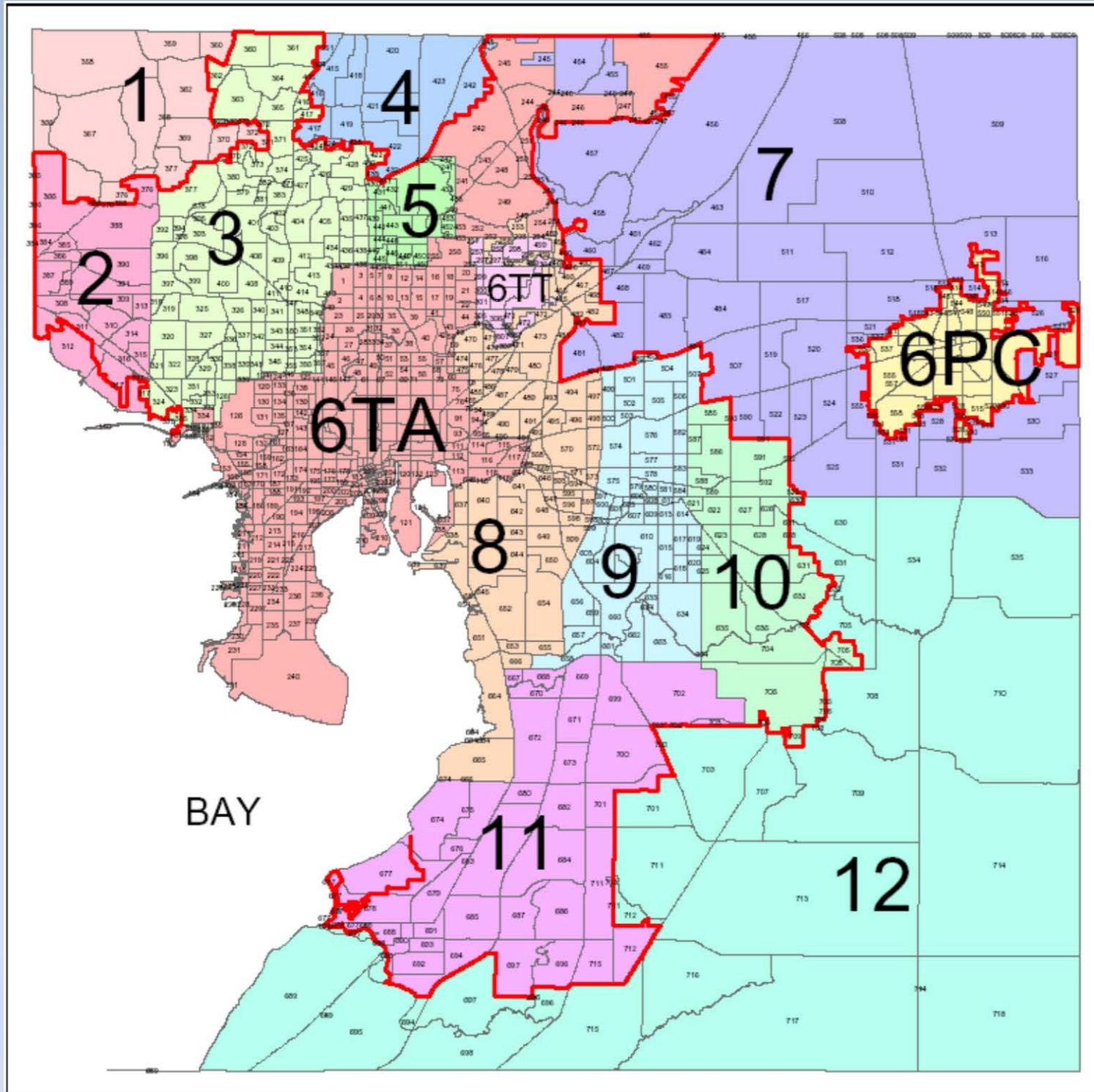
- **Uses average cost approach**
- **Evaluates one scenario at a time**
- **Field tested in seven pilot communities**
- **Capable of evaluating communitywide scenarios or specific projects**
- **Relatively easy to use**
- **Not sophisticated**

Hillsborough County Case Study

- **TischlerBise retained for a two-phase study intended to:**
 - **Determine fiscal sustainability of the County's current growth trend (macro-level analysis)**
 - **Develop a fiscal model for evaluating specific development proposals within the County (micro-level analysis)**

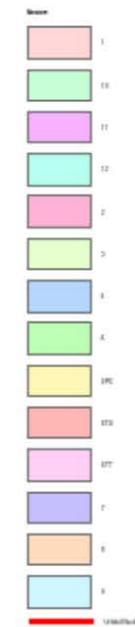
County is Large and Diverse

Fiscal Analysis Zones



FISCAL IMPACT ANALYSIS
STUDY AREAS (VER 5.1)
WITH URBAN/RURAL LINE
7/31/2003

DRAFT



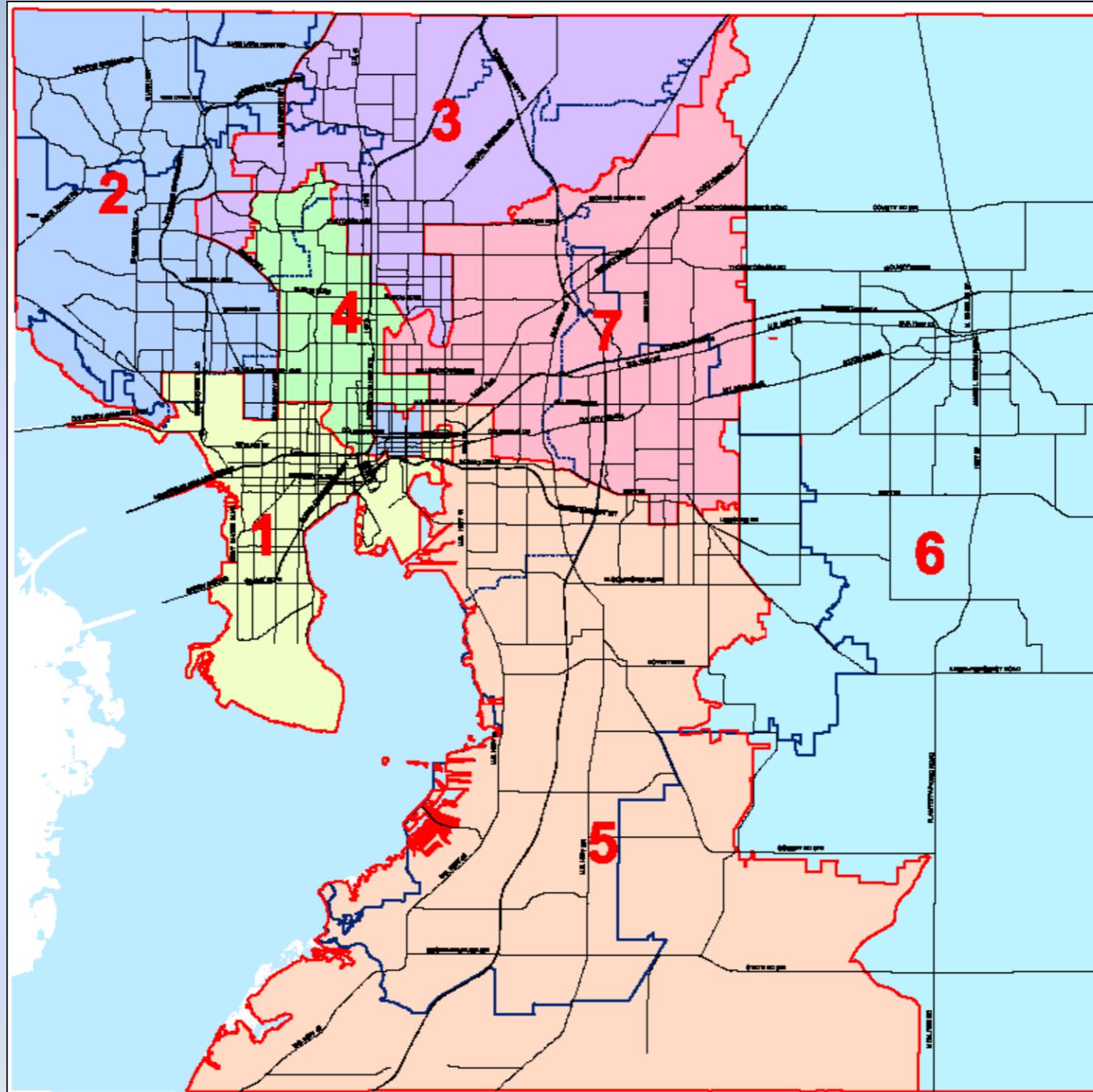
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THE PLANNING COMMISSION



County is Large and Diverse

School Choice Zones



Comparison of Model Results

➤ TischlerBise vs. State of Florida Model

COMPARISON OF FISCAL IMPACT RESULTS

Project	20-YEAR CUMULATIVE IMPACTS					
	HCCCPC			STATE MODEL		
	County	Schools	Total	County	Schools	Total
Residential 1:Small Lot Subdivision	(\$2,624,747)	(\$11,509,011)	(\$14,133,758)	\$3,043,480	(\$806,224)	\$2,237,256
Residential 2:Medium Lot Subdvision	\$2,812,405	(\$4,473,703)	(\$1,661,298)	\$5,833,412	\$96,409	\$5,929,821
Residential 3:Infill Apartments	(\$2,285,472)	(\$4,530,932)	(\$6,816,403)	\$594,406	(\$1,114,718)	(\$520,312)
Nonresidential 1:Shopping Center	\$740,892	\$1,183,326	\$1,924,218	\$842,526	\$180,194	\$1,022,720

Note: In order to facilitate a true comparison of results, the per capita inflation factors in FIAM are zeroed out to reflect constant dollars, which is why the fiscal results for FIAM do not mirror the results from the County's report.

The Realities

- **Fiscal impact analysis is both a science and an art**
- **A “one size fits all” approach leads to generalizations**
 - **Each jurisdiction is unique**
 - **Results can indicate the opposite of reality**
- **Fiscal impacts are only one part of the equation**
- **Goal should be to educate**
- ***Seek the right balance!!!!***