



# Town of Chapel Hill Fiscal Analysis Presentation

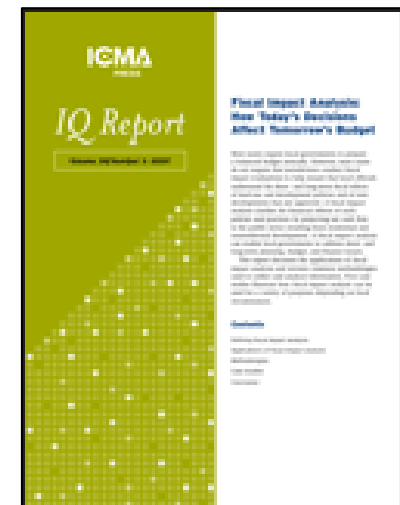
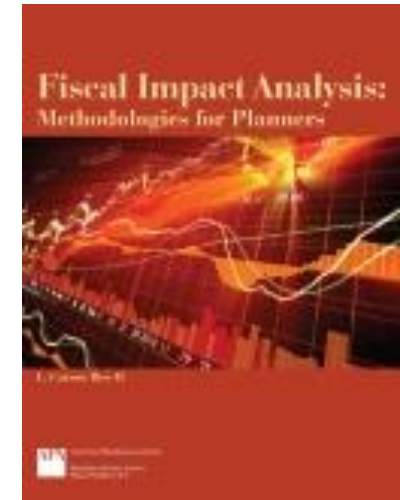
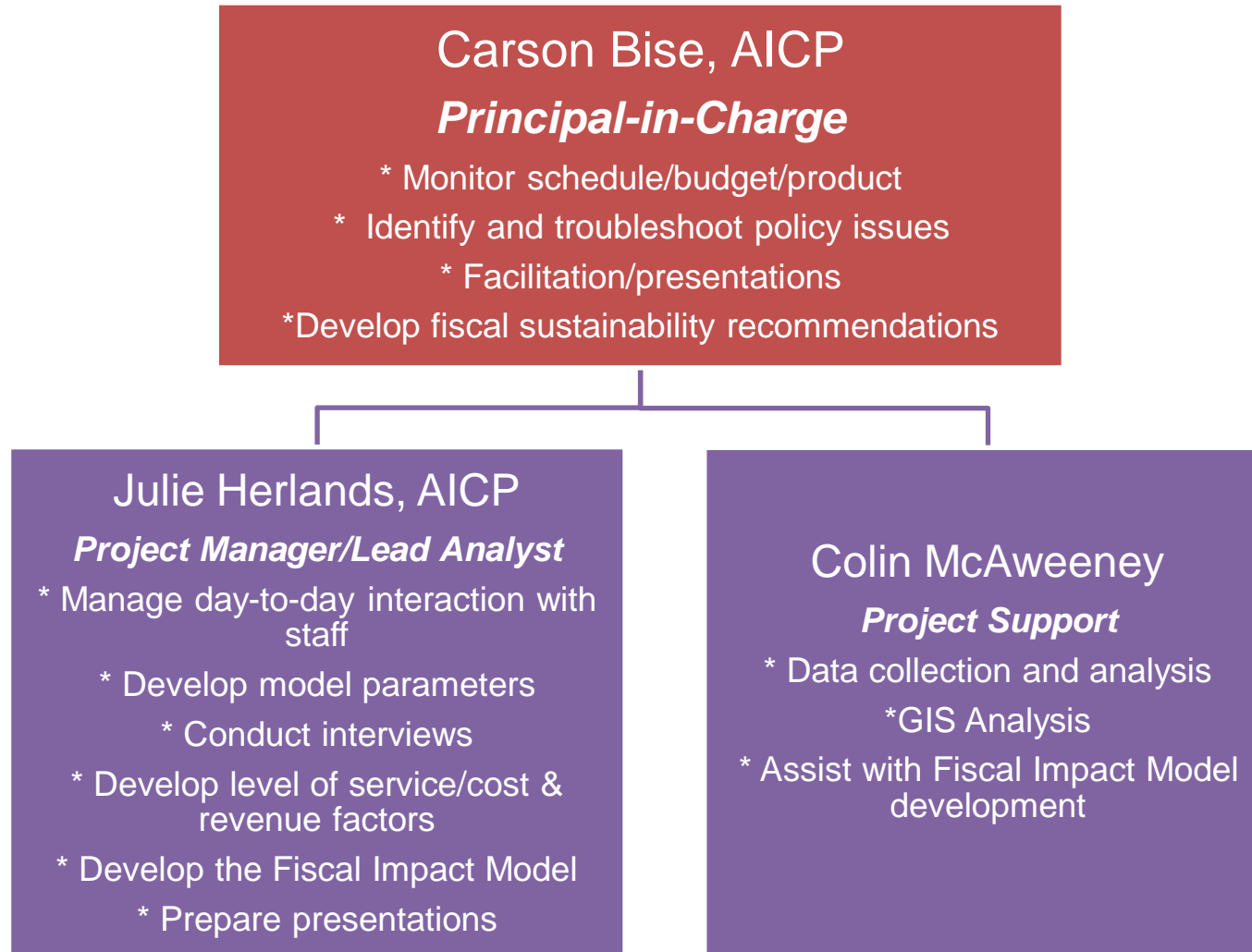
December 2, 2022

# TischlerBise

- 45-year national practice
- Fiscal Impact Analysis (1,000+)
- Impact Fees (1,000+)
- Economic Impact Analysis
- Real Estate and Market Feasibility
- Revenue Enhancement Options

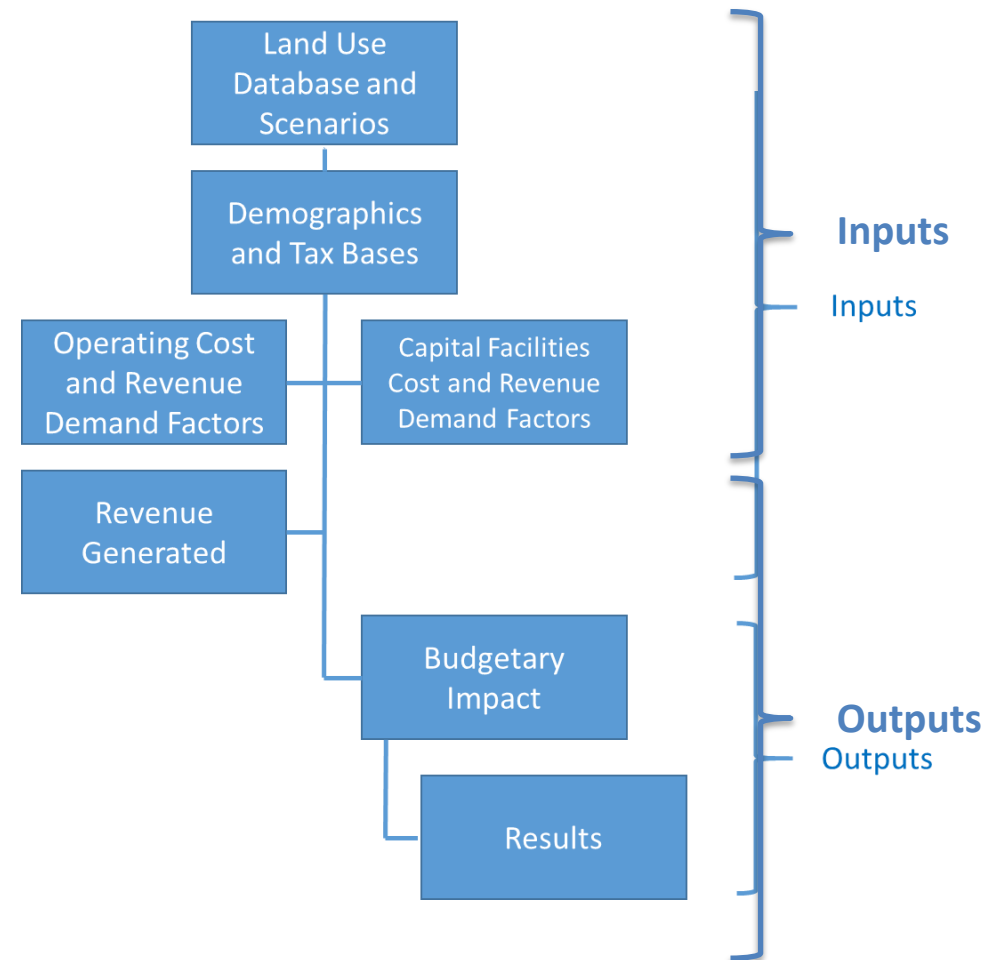


# Project Organization



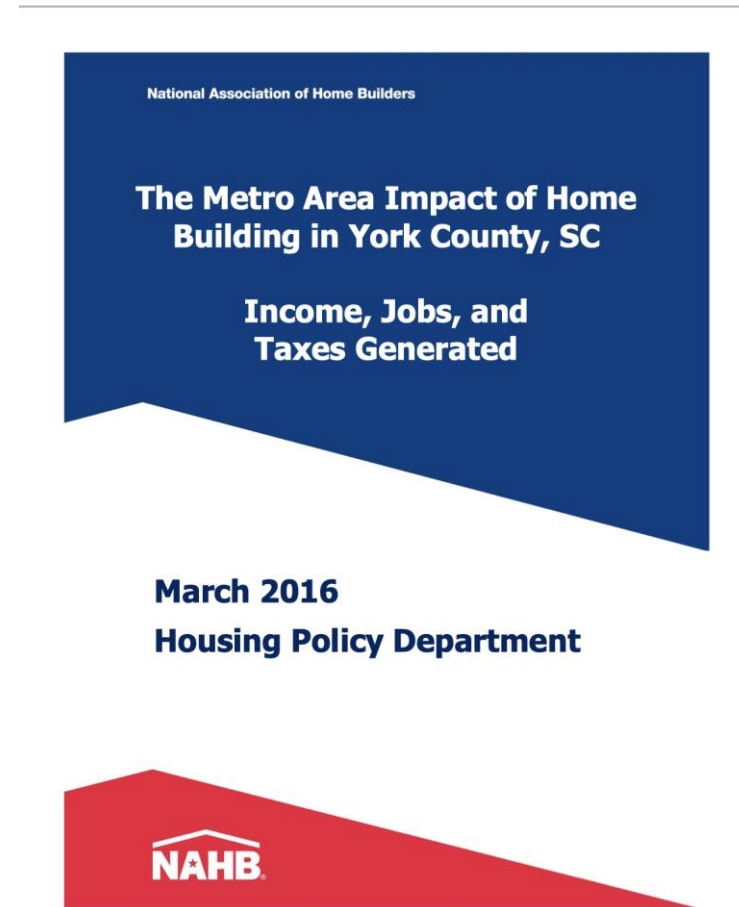
# What is Fiscal Impact Analysis?

- Cash flow to the public sector
  - Are the revenues generated by new growth enough to cover service and facility demands?
- Reflects operating expenses and capital costs
- All Revenues
- Revenues *minus* Costs =  
Net **Surplus** or **Deficit**



# How is FIA Different than Economic Impact Analysis?

- Often times elected officials don't know the difference between economic and fiscal analysis





# How is FIA Different than Economic Impact Analysis?

- Reflects overall economy of the community
- Residential impacts
  - Primary factors are construction and consumer spending
- Nonresidential impacts
  - Primary factors are job creation and disposable income
- Doesn't follow jurisdictional lines; data limitations
  - Large portion of economic output flows out of jurisdiction, region, and possibly State
- Resident spending for mortgages, car payments, insurance are not typical sources of sales tax for local governments



# What Questions Can be Answered?

- Land use policies and development patterns
  - What is the relationship between development densities and infrastructure costs?
  - What is the optimum mix of land uses?
  - What is the relationship between the geographic location of new development and the cost?
- Leveraging public dollars for economic growth (incentives)
  - How to invest limited funds to maximize return
  - Redevelopment
  - Tax increment financing
- Timing on impacts
  - Are we living off tomorrow's growth?



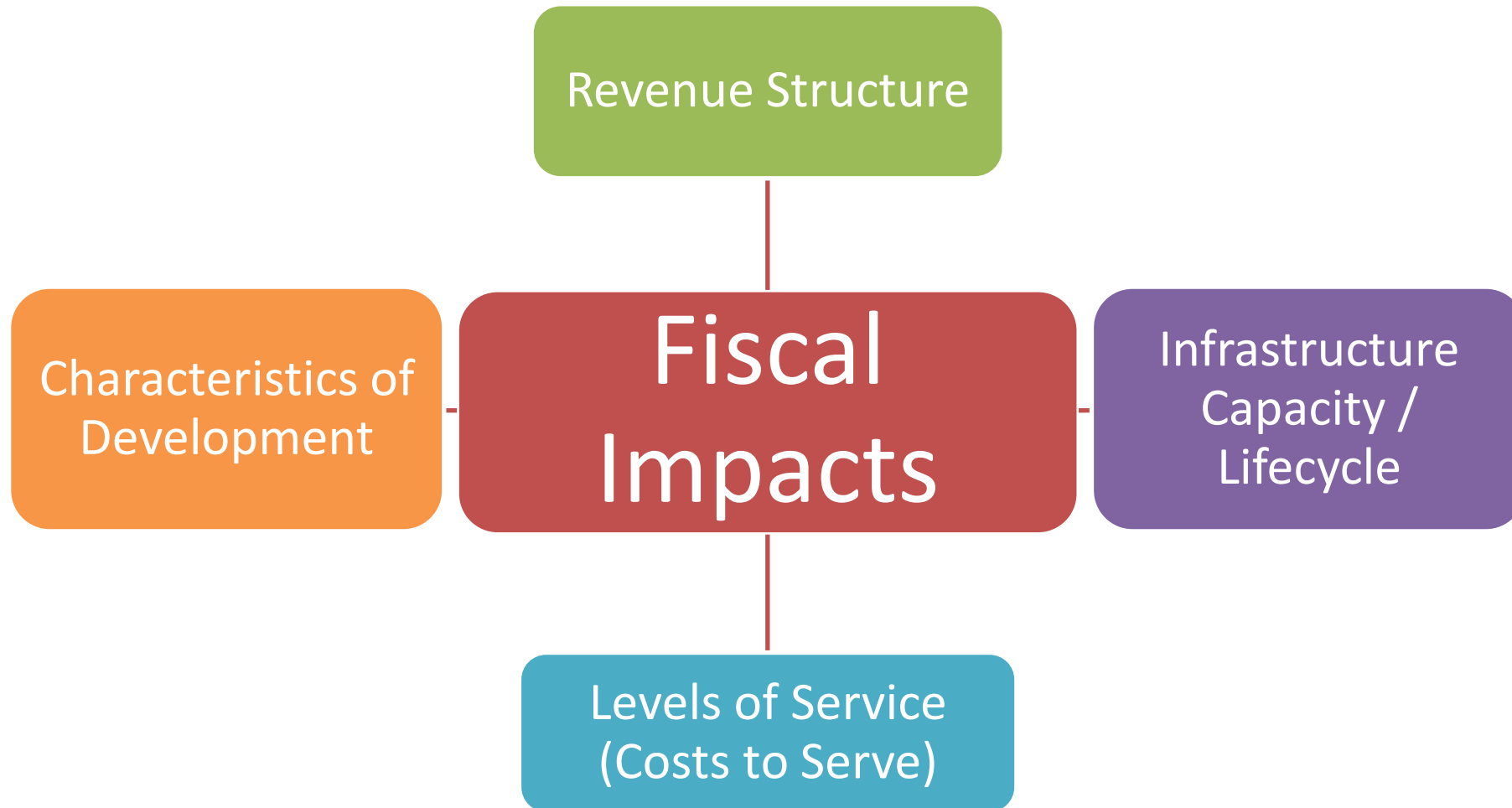
# What Questions Can be Answered?

- Demographic and economic change
  - Boomers aging in place
  - Gen X is largest group of homebuyers
  - Millennials are deferring home buying
- Impact of behavioral trends
  - New patterns in consumption
  - Traditional retail is dying
  - Shifting away from cars?
  - Walkable urbanism
- Impact of COVID 19
  - Changes to retail market and spending
  - What will future office needs be?
  - Working from home?
  - Movement to suburbs



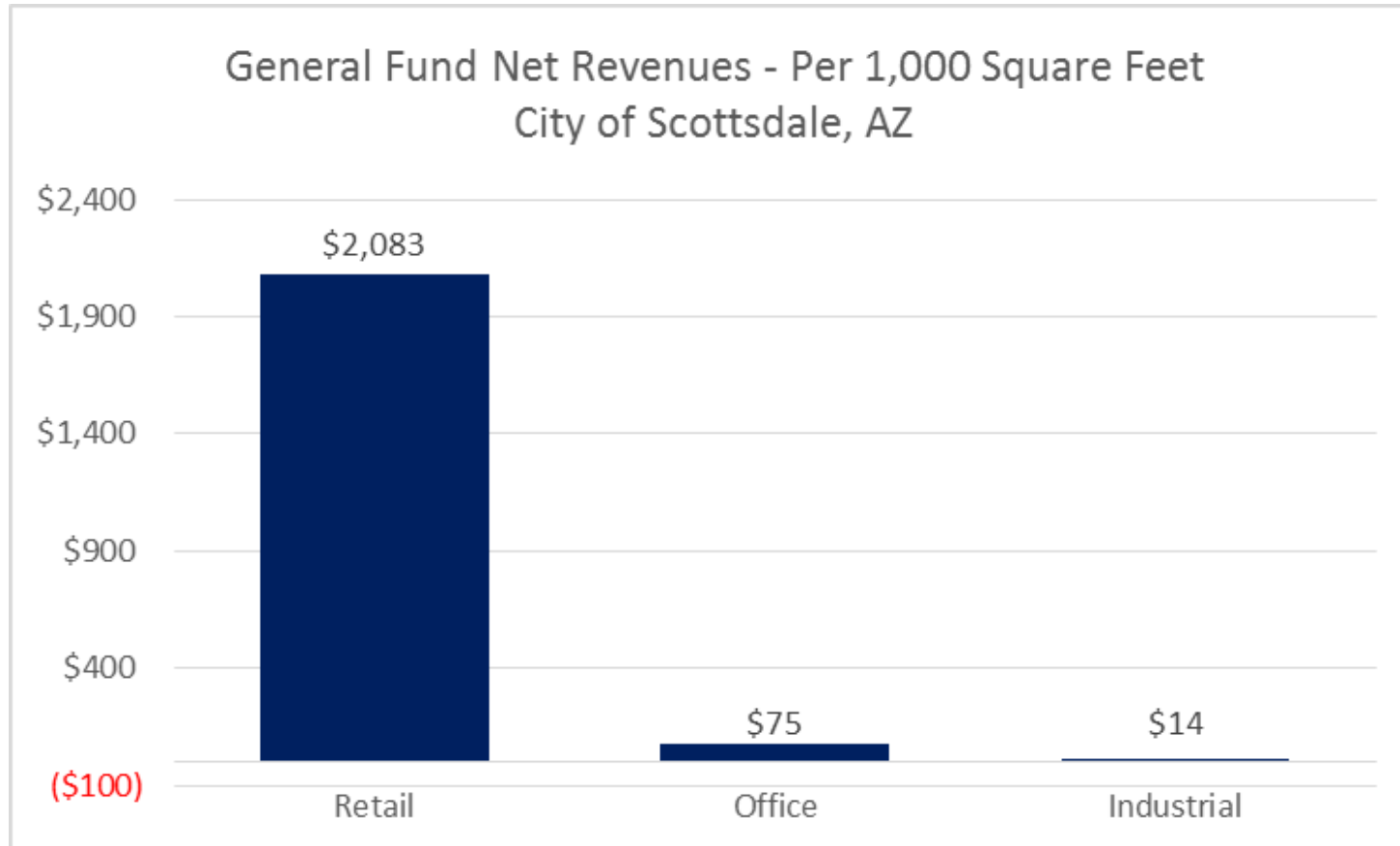


- Case study-marginal approach
  - Reflects fiscal reality
  - Dependent on local levels of service
  - Available capacity triggers the staging of facilities
  - Reflects geographic differences
- Versus the average cost approach
  - Focuses on per capita/employee
  - Doesn't consider available capacities
  - Masks timing
  - Uses average (current) costs
  - Budget in equilibrium

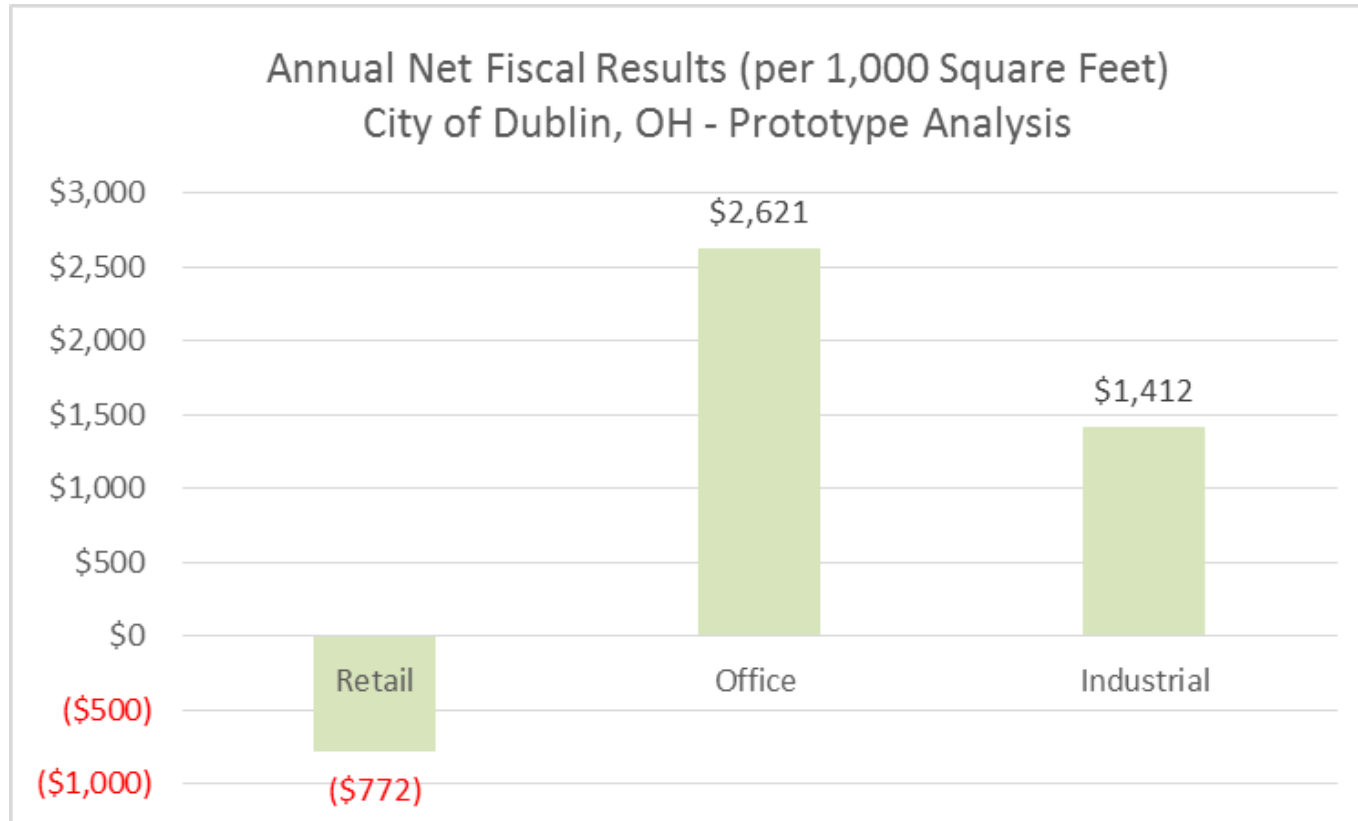


# Revenue Structure as Driver

## Locality with Point of Sale Sales Tax

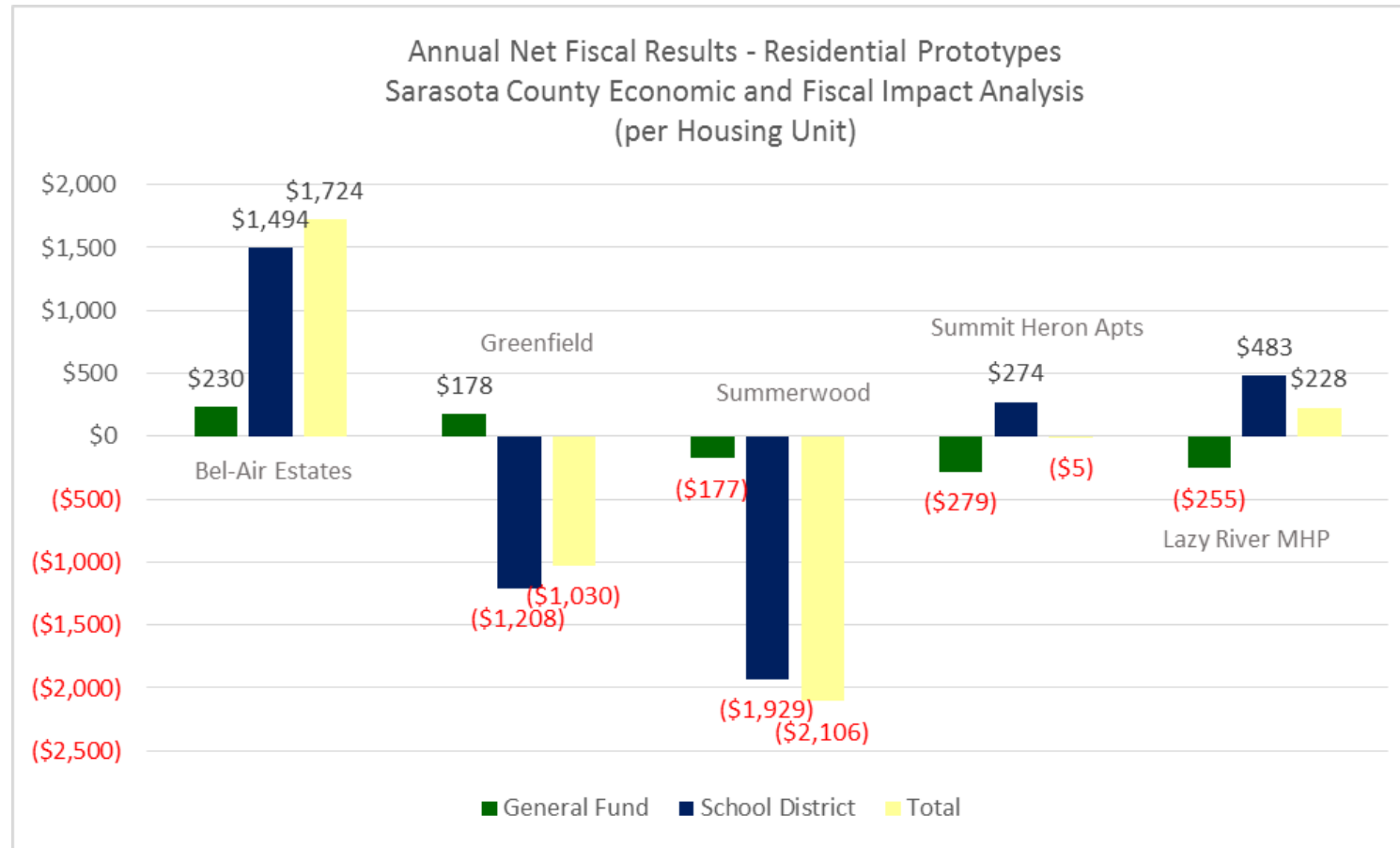


## Locality with Local Income Tax by Job Location



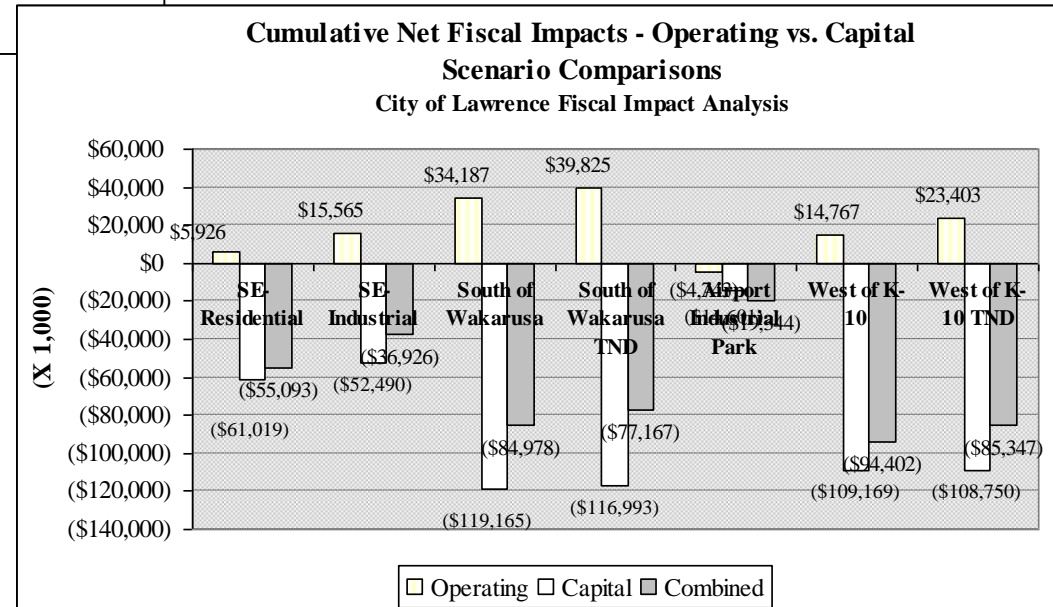
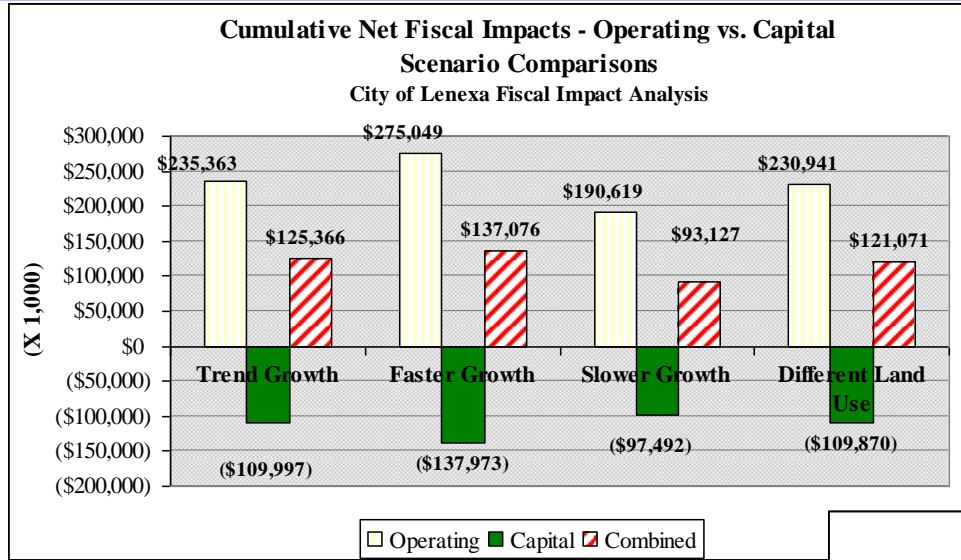
# Demographic Characteristics

## Influence of Single Family Unit Characteristics





# Infrastructure Lifecycle Examples



A Tale of Two Cities

# Another Way of Presenting Fiscal Results

- Delaware, OH: Suburban Placetypes

SUBURBAN											
Development Type	Tax Revenue		Demand for Services	Demand for Infrastructure	Fiscal Benefit	Walkability	Environmental Impact	Rural Conservation	Social Interaction	Car Dependency	Utility Demand
	Property	Income									
<b>Residential (per Unit)</b>											
Single Family - Early Suburban Neighborhood	Low	Low	High	High	Negative	Medium	Medium	Medium	Medium	High	Medium
Single Family - Late Suburban Neighborhood	Low	Low	High	High	Negative	Medium	Medium	Medium	Medium	High	Medium
Multifamily Complex	Low	Low	Medium	Medium	Negative	Medium	Medium	Medium	Medium	Medium	Medium
Mixed Residential	Low	Low	Low/Medium	Low/Medium	Negative/Neutral	High	Medium	High	High	Medium	Low
<b>Nonresidential / Mixed Use</b>											
Neighborhood Scale Activity Center	Low	Low/Medium	Low	Medium	Positive	High	Medium	Medium	High	Medium	Medium
Community Scale Activity Center	Medium	Low/Medium	Medium	High	Neutral/Positive	Medium	Medium	Medium	Medium	High	Medium
Regional Scale Activity Center	Medium	Medium	High	High	Neutral	Medium	Medium	Medium	Medium	High	Medium
Commercial Corridor	Medium	Low	High	High	Negative	Low	High	Medium	Low	High	Medium
<b>Industrial</b>											
Industrial Campus	Low	High	Low	Low	Positive	Low	High	Low	Low	High	High
Industrial Corridor	Low	High	Low	Low	Positive	Low	High	Low	Low	High	High

# Another Way of Presenting Fiscal Results

- Delaware, OH: Traditional Town/Urban Placetypes

## TRADITIONAL TOWN / URBAN

Development Type	Tax Revenue		Demand for Services	Demand for Infrastructure	Fiscal Benefit	Walkability	Environmental Impact	Rural Conservation	Social Interaction	Car Dependency	Utility Demand
	Property	Income									
<b>Residential (per Unit)</b>											
Small Block Neighborhood - Traditional	Low	Low	Medium	Medium	Neutral	High	Low	High	High	Low	Low
Small Block Neighborhood - Neotraditional	Low	Low	Medium	Medium	Neutral	High	Low	High	High	Low	Low
Large Block Neighborhood - Traditional	Low	Low	High	High	Negative	Medium	Low	High	Medium	Low	Low
<b>Nonresidential/Mixed Use</b>											
Traditional Activity District	Medium	High	Medium	Medium	Neutral/Positive	High	Medium	Medium	High	Low	Medium

# Thinking Spatially About Transportation and Land Use

Analysis of mixed-use developments in six regions of the United States found an average 29% reduction in trip generation as a function of seven “D” variables

## People/Household Characteristics

- *Demographics* (college students, young professionals and aging boomers)

## Land Use Characteristics

- *Density*
- *Diversity* (horizontal and vertical mixed use)
- *Development Scale*

## Transportation and Land Use Characteristics

- *Design* (place making and complete streets)
- *Destination Accessibility* (connectivity, urban grid, small blocks)
- *Distance to Transit*

Source: TischlerBise graphic based on Reid Ewing, Michael Greenwald, Ming Zhang, Jerry Walters, Mark Feldman, Robert Cervero, Lawrence Frank, and John Thomas. 2011. “Traffic Generated by Mixed-Use Developments: Six-Region Study Using Consistent Built Environmental Measures.” *Journal of Urban Planning and Development* 137(3): 248–61.

# Example of Service Area Inputs

- On average, urban residential has fewer vehicles available and persons per unit, thus lowering vehicular trip generation rates
- Urban settings provide options for walking, biking, and transit travel, thus lowering the vehicular mode share
- Mixed land use, more compact development, and better jobs-housing balance reduces average trip length

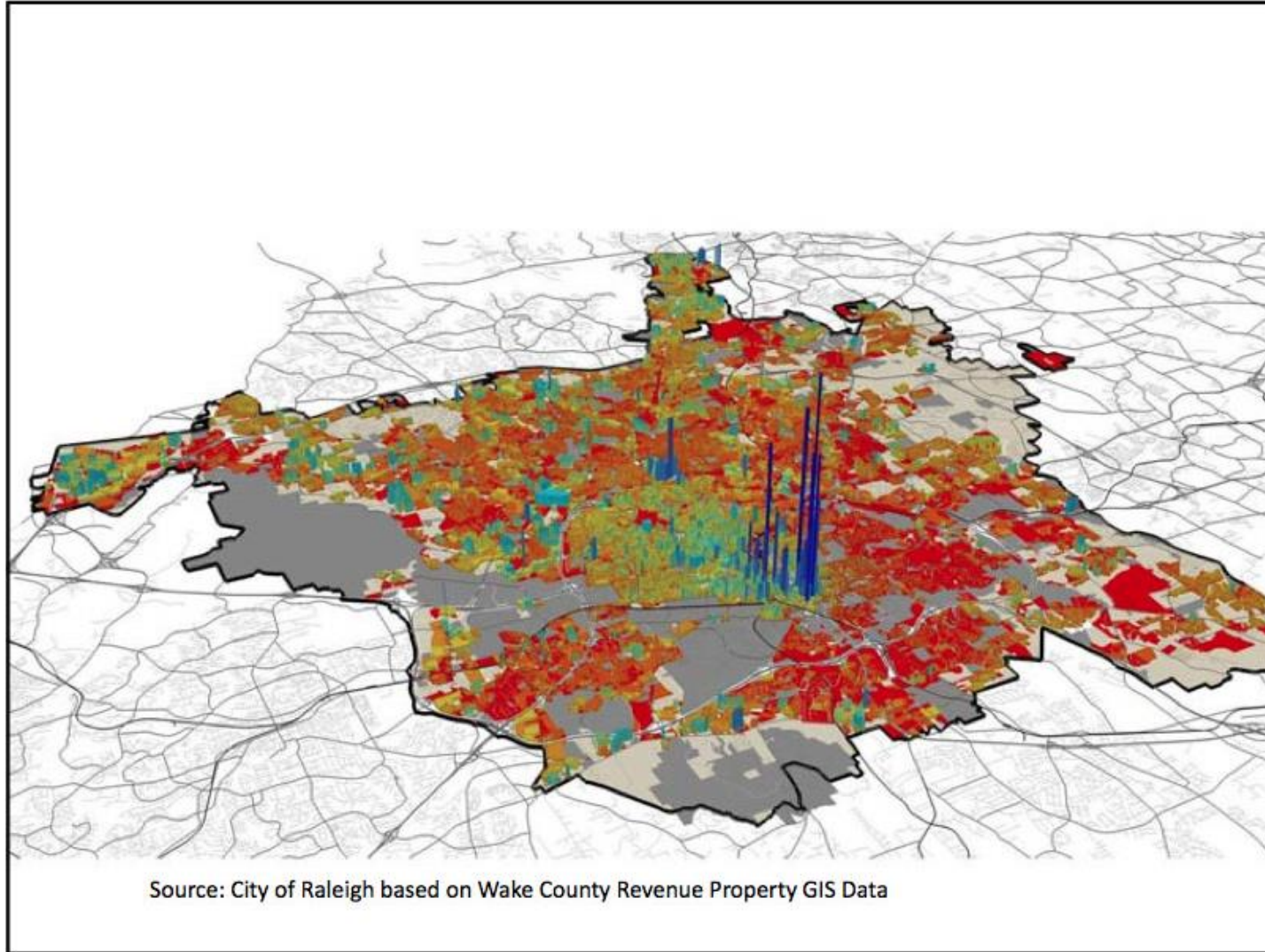
Service Area	Urban	Suburban
Vehicles Available per Housing Unit	1.05	1.70
Persons per Housing Unit	1.98	2.32
Single Units	40%	76%
2+ Units per Structure	60%	24%
Average Weekday Vehicle Trip Ends per Single Unit	7.02	8.44
Average Weekday Vehicle Trip Ends per 2+ Unit	4.51	5.70
Autos to Work	74%	90%
Walk/Bike/Bus to Work	26%	10%
Average Vehicle Trip Miles	3.93	5.40





# ADVOCACY VS. ANALYSIS

# Where Does Revenue Comes From?



# Caution: Revenue Per Acre Approaches

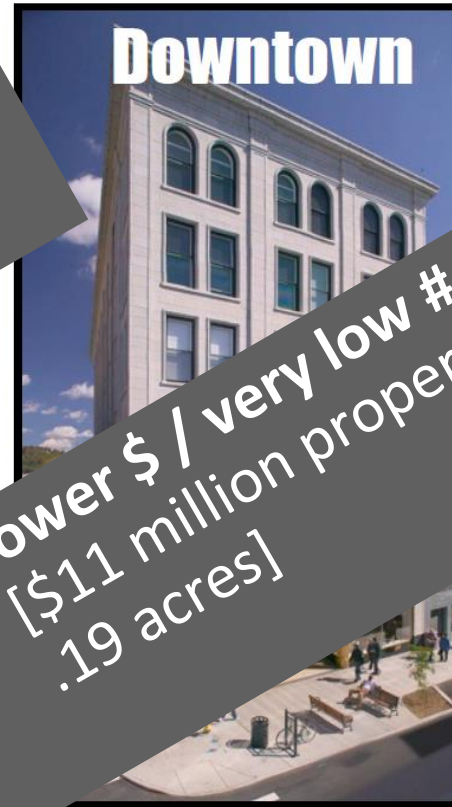


**Asheville  
Wal-Mart**

**large \$ / large # of acres** [\$20 million property value + retail sales taxes / 34 acres]

**\$50,800**

**Total Taxes/Acre to City**



**Downtown**

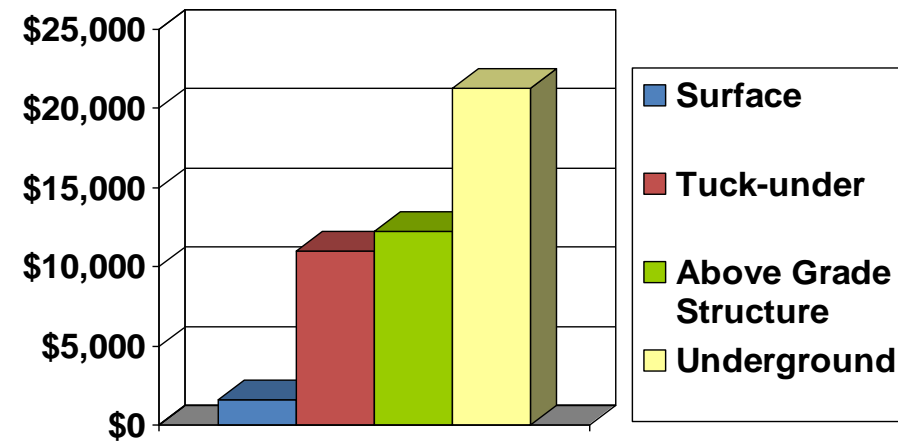
**lower \$ / very low # of acres** [\$11 million property value / .19 acres]

**\$414,000**

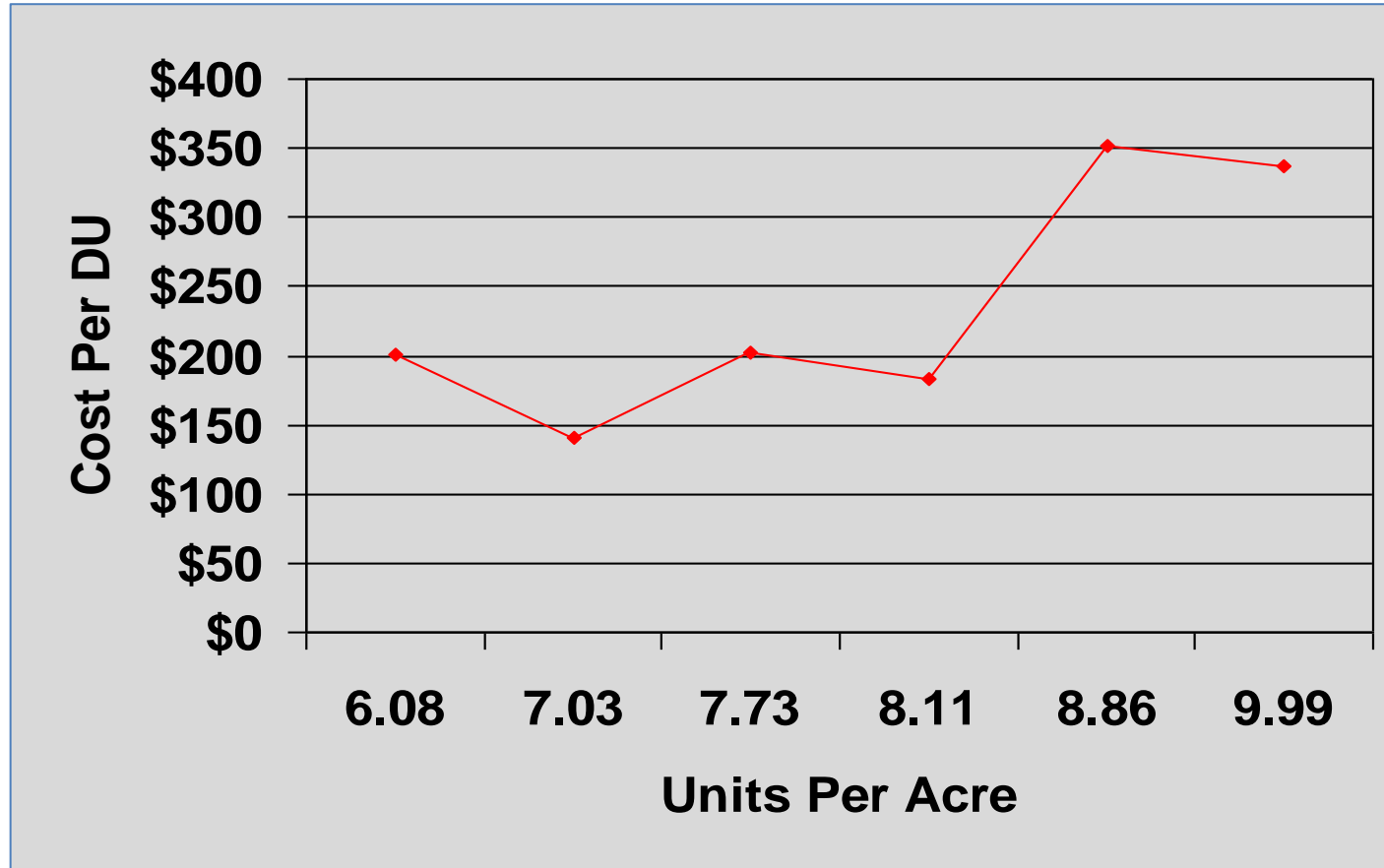
**Total Taxes/Acre to City**

# Problems with Revenue per Acre Approach

- Simplistic Analysis
  - Often used to indicate that one development strategy is better than the other
- Ignores market realities
- No real or credible analysis of costs
- Initially ignored sales tax
- Ignores the cost of parking

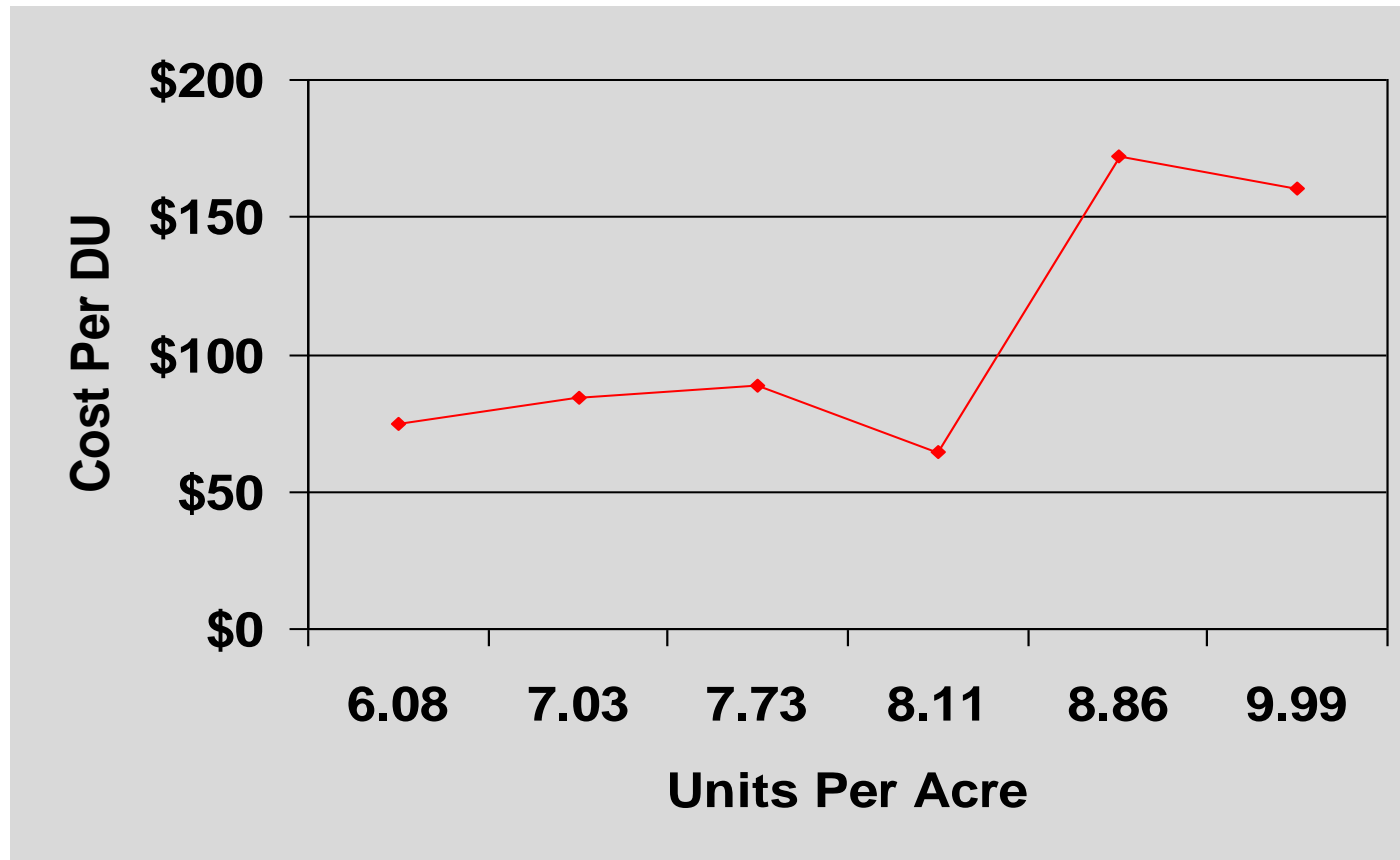


## Higher Density May **Increase** Costs: City in California: Police Service





## Higher Density May **Increase** Costs: City in California: Fire Service



- Solicit input on growth issues for further examination
  - Project website
  - Public forums
  - Online surveys

## WHAT DO NEW FACILITIES COST?

3 i

### Average Costs of Transportation, Parks, and Public Facilities

There are 1,249 miles of roadways, 6,998 street lights, 30 parks including 1,210 of park acres, 3 libraries, 7 fire stations, and 1 police station in the City of Denton. The construction and maintenance of these and new facilities factor into the City's budget. Population growth triggers the need for additional facilities, as well as road expansion. Adhering to sustainability and mobility goals also has budget implications and impact the fiscal picture.

#### ROADWAYS

New Arterial Street  
\$1,500,000 per lane mile

New Collector Street  
\$1,500,000 per lane mile

Traffic Signal Installation  
\$130,000 - 275,000 per intersection



#### PARKS

New Community Park (4 ac)  
\$200,000 per acre

New Neighborhood Park (2 ac)  
\$80,000 per acre

#### STORMWATER MANAGEMENT & DRAINAGE IMPROVEMENTS

Drainage Channel  
\$450,000 - 1,440,000 (typ.)



Detention Basin  
\$775,000 - 1,340,000 (typ.)

#### BIKE LANES, TRAILS, SIDEWALKS



New Bike Lane (on street)  
\$20,000 - 50,000 per mile

New Sidewalk  
\$80,000 - 150,000 per mile

New Multi-Use Trail (10' wide)  
\$150,000 - 400,000 per mile



Signing of bicycle facilities (5 signs per mile each way)  
\$3,000 - 5,000 per mile

#### FACILITIES BUILDINGS

Fire Station (average 8,000 s.f.)  
\$260 per square foot

Library (29,000 s.f. average)  
\$84 per square foot

Police (8,606 s.f. average)  
\$96 per square foot

Community Center (14,000 s.f. average)  
\$149 per square foot

Recreation Center (14,000 s.f. average)  
\$119 per square foot

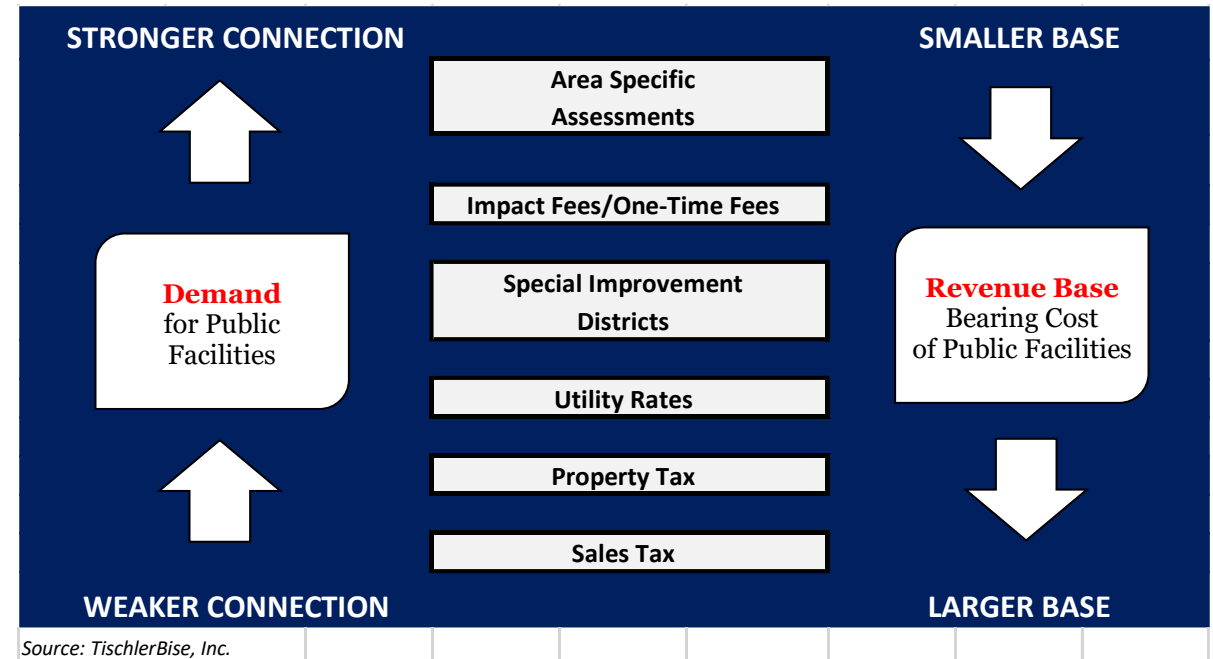


SOURCES: City of Denton Pedestrian and Bicycle Linkage Component of the Denton Mobility Plan (2012); City of Denton Drainage Improvements Updates; City of Denton Annual Program of Services, 2012-2103.

Denton Plan Update | Community Forum 2 

# Fiscal/Economic Sustainability Recommendations

- Extent to which current policies and regulations contribute to market efficiencies/inefficiencies and locational decisions
  - Potential regulatory changes
- Phasing of growth-related infrastructure
- Identifying intervention strategies to achieve Town objectives
- Creating a framework for evaluating fiscal/economic benefits for Town involvement/participation
- Identifying revenue enhancement opportunities





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