Bridging the Infrastructure Funding Gap

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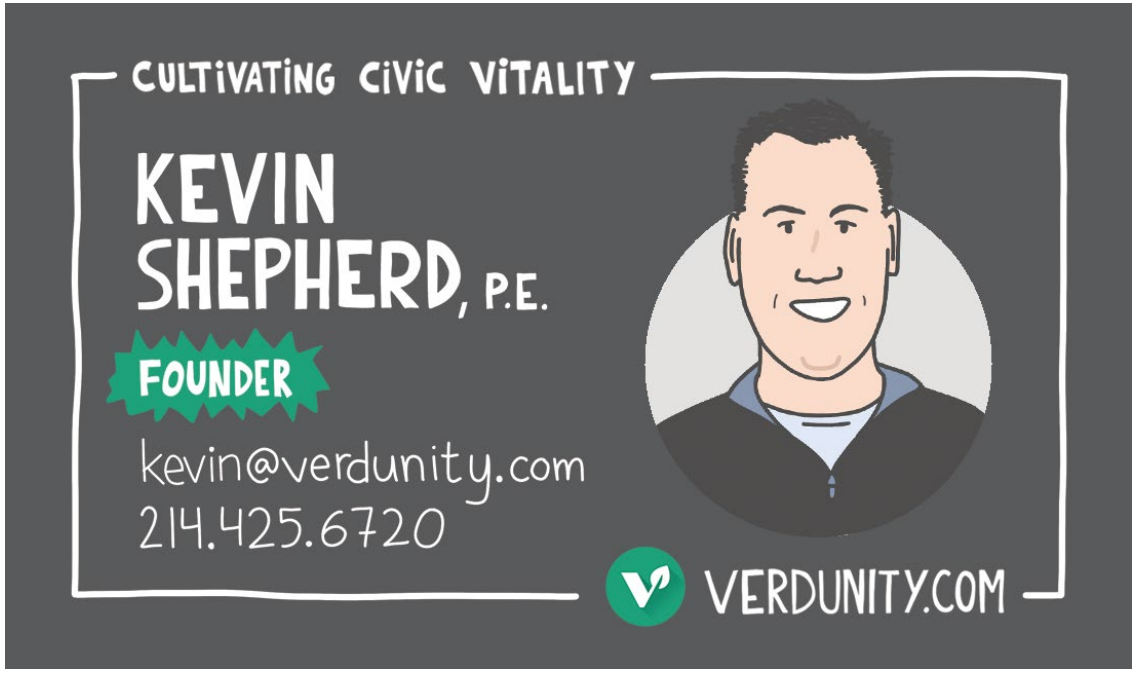


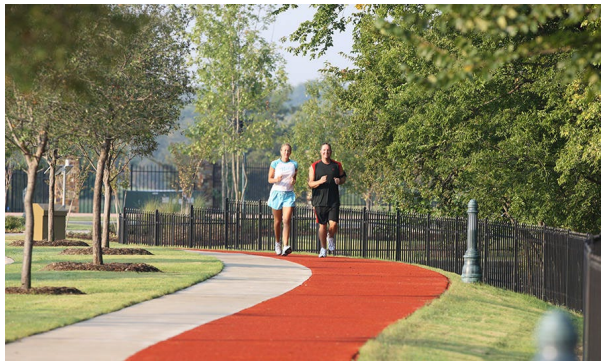
Follow and share your thoughts with me!

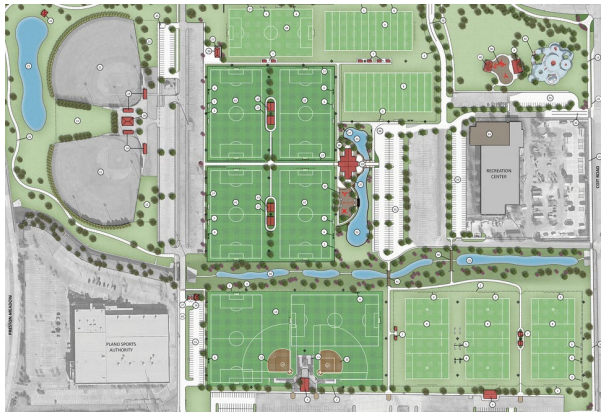
@k_shepherd @verdunity
#gocultivate #bridgethegap

Does your community have enough money to pay for basic services and infrastructure?

What about 10 years from now? 20?

Addressing Increasing Needs with Limited Resources





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My Career Before My A-Ha Moment

Residential Expansion

Hoover Dam Bypass

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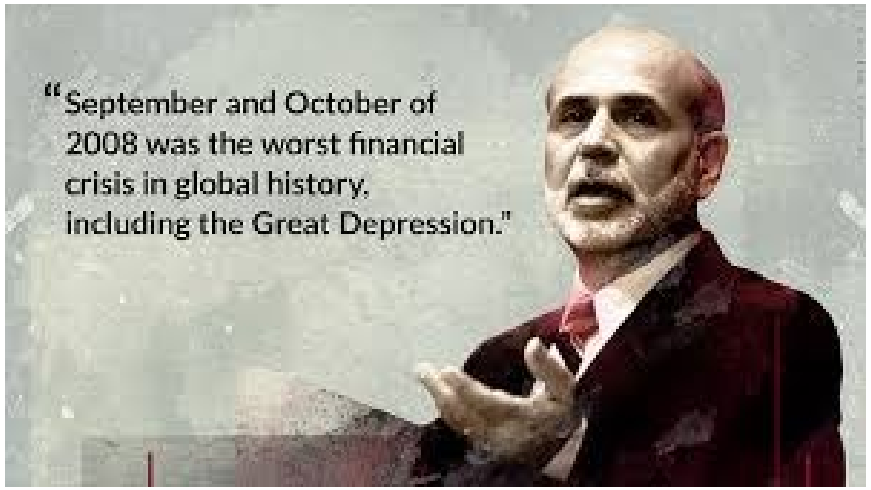
2008 Recession and Stimulus Program



Race to be the Best Place to Live, Work and Play

Post WW2, cities have aggressively pursued fast growth and higher quality of life in the short-term without fully considering long-term fiscal impacts.

What about Maintenance AFTER Growth?

The City's Infrastructure Backlog Has Climbed to $1.86B

The mayor has touted record investments in infrastructure and a 2016 measure sends more money to pay for projects, yet the city's five-year shortfall to fund projects is $286 million higher than the previous year.

Ashly McGlone
August 20, 2019

The city of San Diego will face at least $1.86 billion in various infrastructure needs over the next five years with no concrete plan to pay for them, city projections show.

The city's five-year infrastructure funding shortfall is $286 million higher than it was a year ago, despite the passage of a 2016 ballot measure that sends more tax money to infrastructure projects. But even that underestimates the extent to which things are getting worse. The

A street in Sherman Heights / Photo by Dustin Michelson

Price doubles to fix Macomb County's roads, Hackel says

Christina Hall, Detroit Free Press Published 2:03 p.m. ET May 22, 2019 | **Updated 5:37 p.m. ET May 22, 2019**

Macomb County Executive Mark Hackel discusses how much money is needed to fix county-maintained roads during a news conference May 22, 2019 in Mount Clemens. *(Photo: Christina Hall, Detroit Free Press)*

It's going to take $2.3 billion to fix all the county-maintained roads and bridges in poor condition in Macomb County.

The figure, announced Wednesday by County Executive Mark Hackel, is nearly twice as much as one announced last year.

Why?

The county included residential subdivision roads it has to maintain, mostly in the townships, in its updated list; officials said, and more roads are degrading.

"We are doing as much as we can with the funding we have," Hackel said during a news conference at the county's communications center in Mount Clemens.

But the funding, he said, just isn't enough.

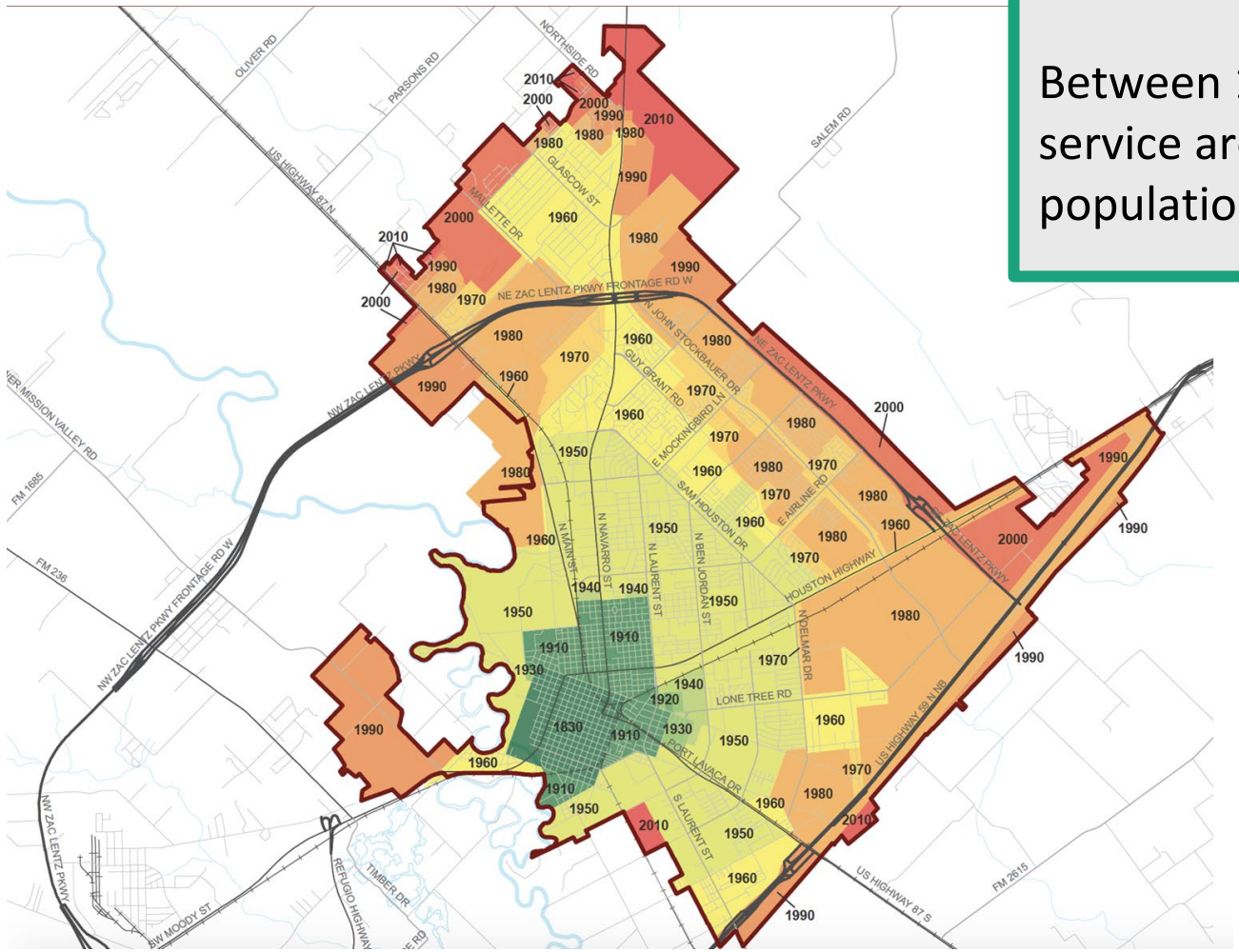
With all of the growth and prosperity we've experienced in this country, why do our cities struggle to pay for basic services and maintenance?

SLOW AND COMPACT → FAST AND SPREAD OUT

Increasing cost per capita/household

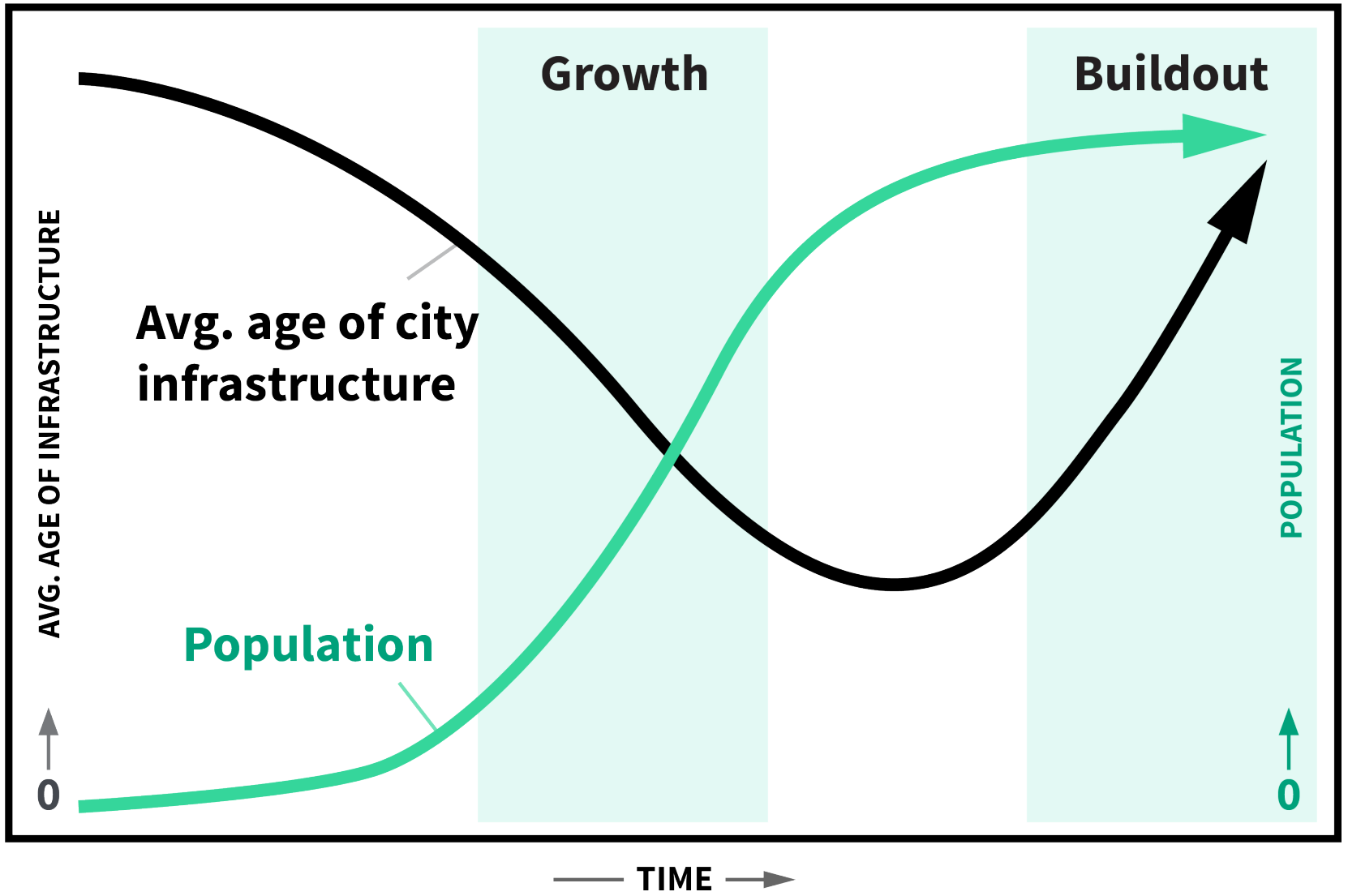
Between 1950 and 2015, Victoria's service area grew by 13X, while the population only grew by 4X.

MAP 6
ANNEXATION HISTORY



Victoria, TX Plan2035

THE "ILLUSION OF WEALTH"



“Our core problem is the lack of financial productivity in our development pattern brought about by the negative return-on-investment from our public infrastructure projects.”

~ Chuck Marohn, Strong Towns

EVALUATING INFRASTRUCTURE INVESTMENTS

Total Taxable Value of Adjacent Properties
$2,939,115
Average Property Value
$69,394
Tax Rate
0.59600
Annual Property Tax Revenue
$17,972

North Heights Phase VI Street Improvements

Project Cost: $1,050,000

Life Cycle: 25-30 years

Time to Pay Off Project

If 100% of the property tax revenue was dedicated to this project, it would take **58 Years** to pay off the investment, around **2X the life of the project.**

EVALUATING INFRASTRUCTURE INVESTMENTS

W 3rd STREET IMPROVEMENTS

Cost of Repairs: $875,000

Life Cycle: 20 years

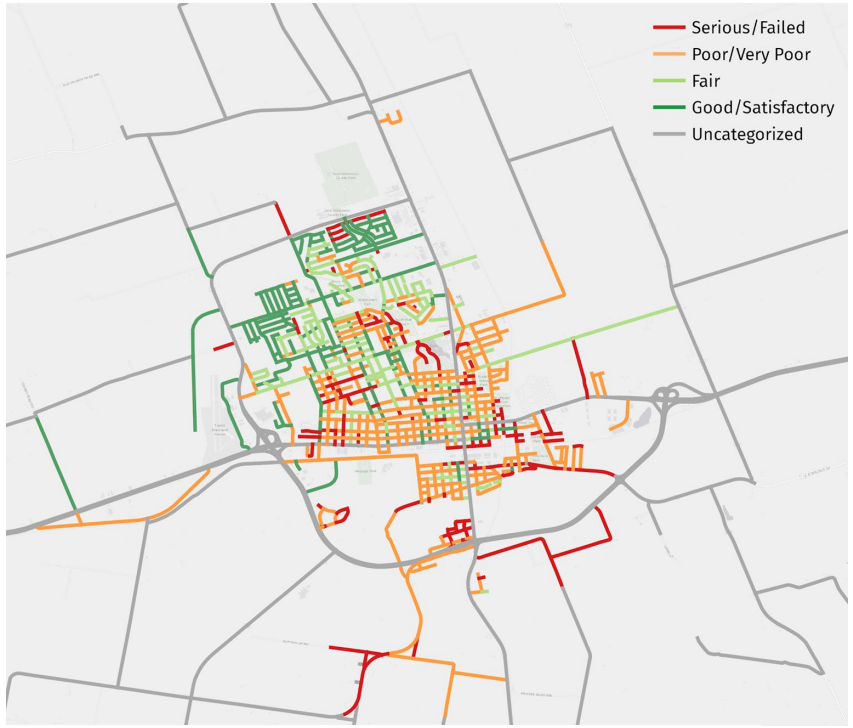
Land Use Fiscal Analysis
Taylor, TX

Total Taxable Value of Adjacent Properties
$1,690,893
Avg. Property Value
$112,726
Tax Rate
0.788000
Annual Property Tax Revenue
$13,324

Time to Pay Off Project

If 100% of the property tax revenue was dedicated to this project, it would take **65 Years** to pay off the investment, around **3X the life of the project.**

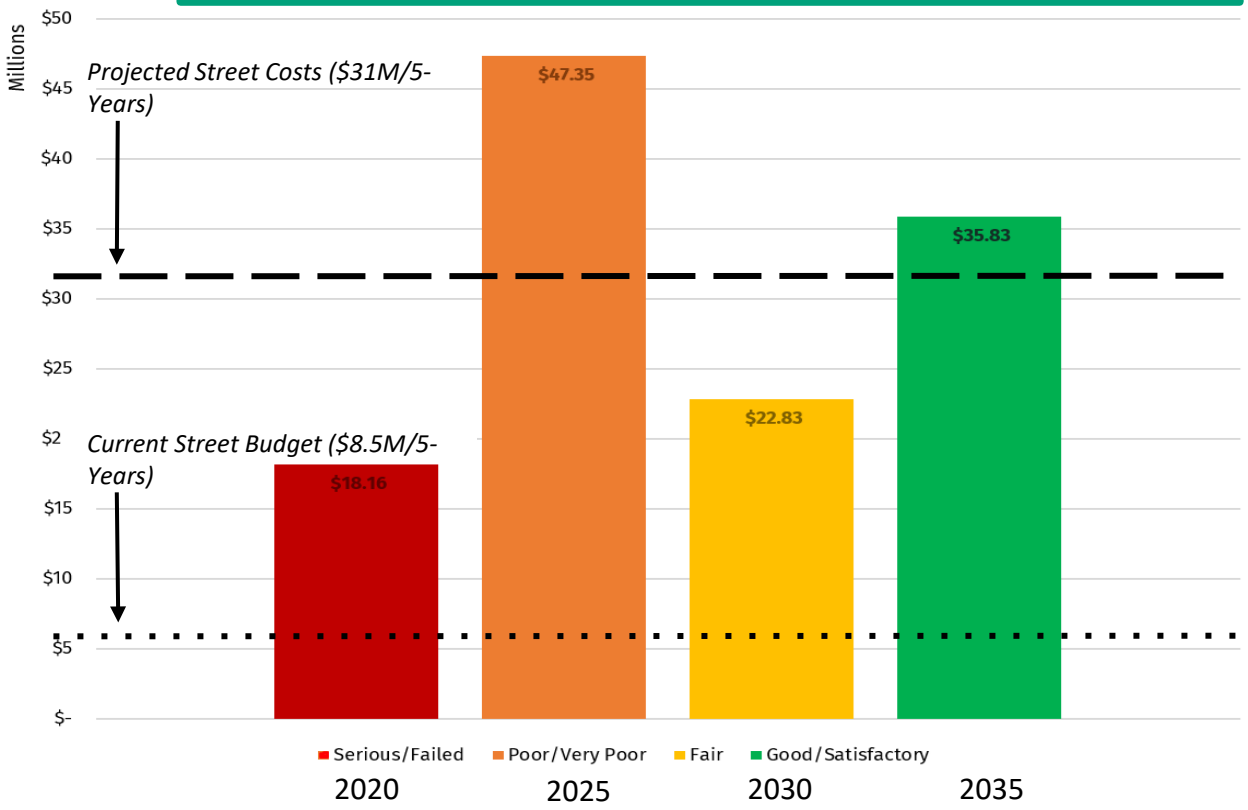
PROJECTED STREET REPLACEMENT COSTS



PCI	Replacement Timeframe
0-25 (Serious/Failed)	2020-2024
25-55 (Poor/Very Poor)	2025-2029
55-70 (Fair)	2030-2034
70-100 (Good)	2035+

Land Use Fiscal Analysis
Taylor, TX

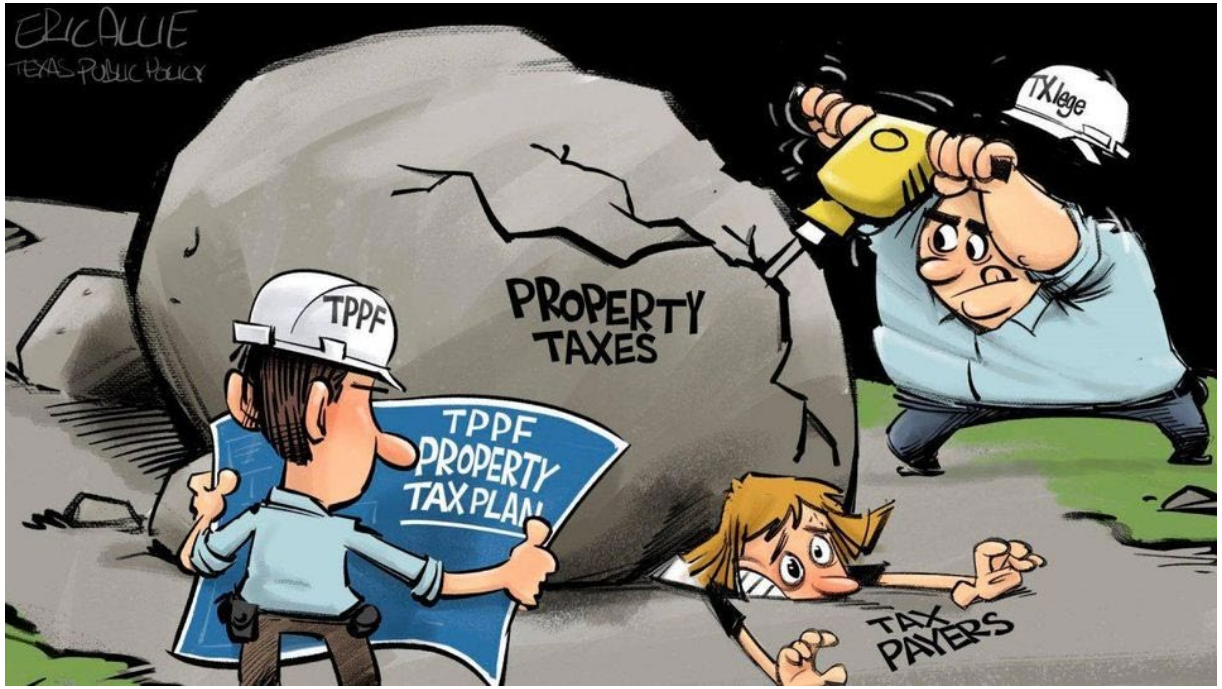
Total Street Reconstruction Costs:	$124,167,292
Annual Average Cost (20 yrs):	$6.2M/year
Current Street Budget (GF only):	$1.7M/year
Estimated Deficit:	$4.5M/year

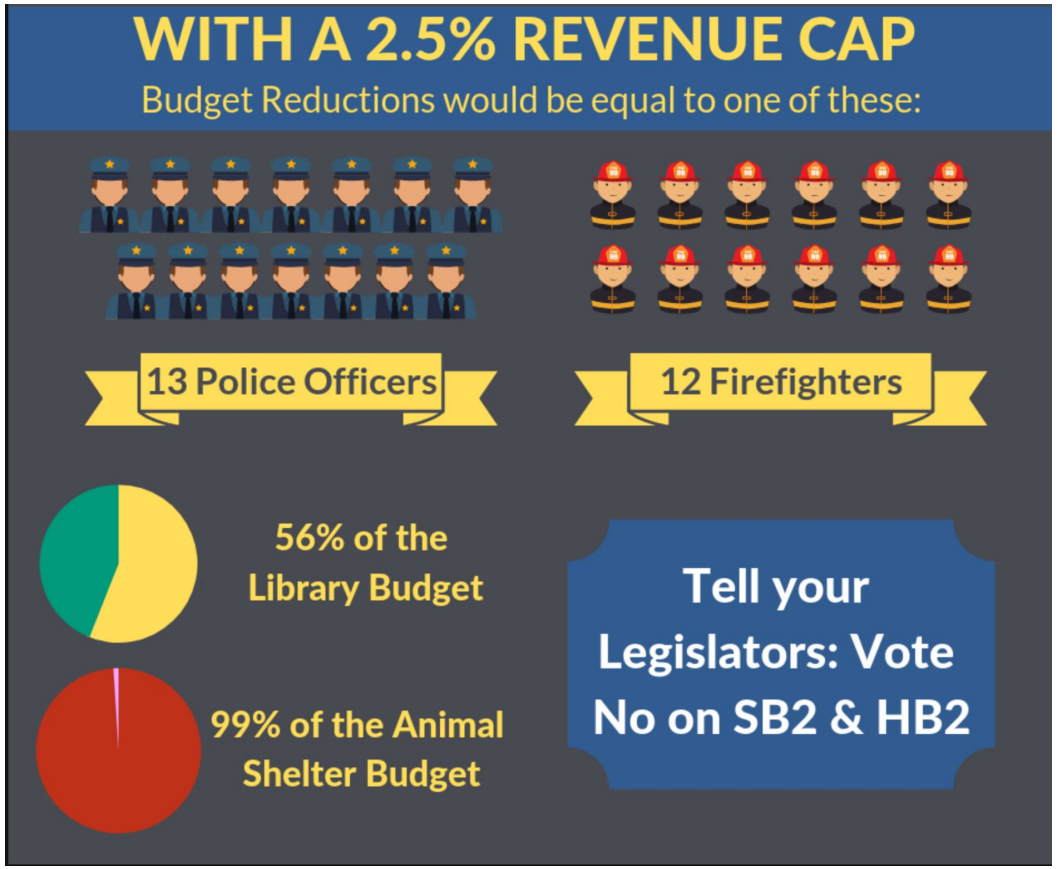


“Most city managers understand they have a resource gap, but when it’s not quantified and shared publicly, it’s easy to defer to next year. Once you put a number to it and see how large that number is, it creates an ethical obligation and urgency to address it immediately.”

~ Lynda Humble, City Manager

Who's Willing and Able to Pay to Close the Gap?





If taxpayers can't or won't pay more, and cities lack the funds needed to cover basic services, what should we do?

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OPTIONS TO CLOSE THE RESOURCE GAP

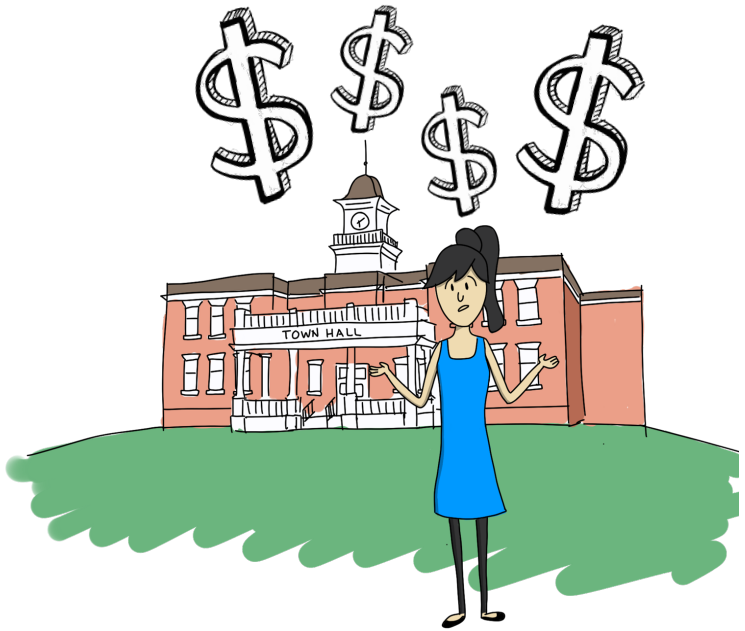
1. Keep development patterns and service levels where they are, but charge more (via higher taxes and fees) to cover the true costs.

2. Keep tax rate where it is, but cut services to align with revenues.

3. Shift development pattern and infrastructure design to enable an affordable balance of services and taxes.

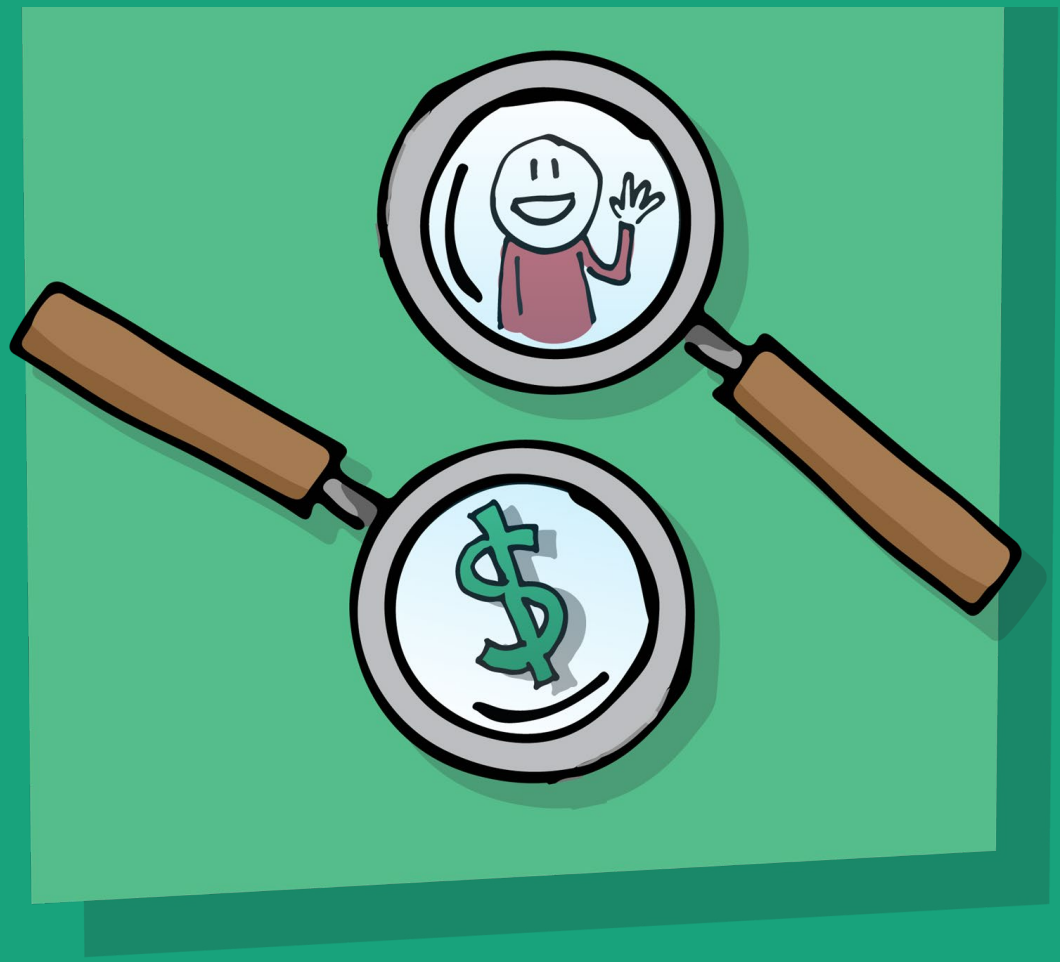
Our goal should be to align development patterns and service levels with what citizens are willing and able to pay for – now and in the future.

WE NEED A COMMON LANGUAGE TO **DISCUSS COMMON PROBLEMS** AND **BUILD COMMON SOLUTIONS**



Fiscal Sustainability = Dollar$ + *Sense*

Quantify and Communicate Your Resource Gap



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LAND USE FISCAL ANALYSIS: MATH, MAPS, AND MONEY!

Step 1: Property Tax Revenue per Acre

Map the existing property tax revenue (levy) per acre for all parcels in the city

Step 2: Net per Acre for Current Budget/Conditions (What You Have)

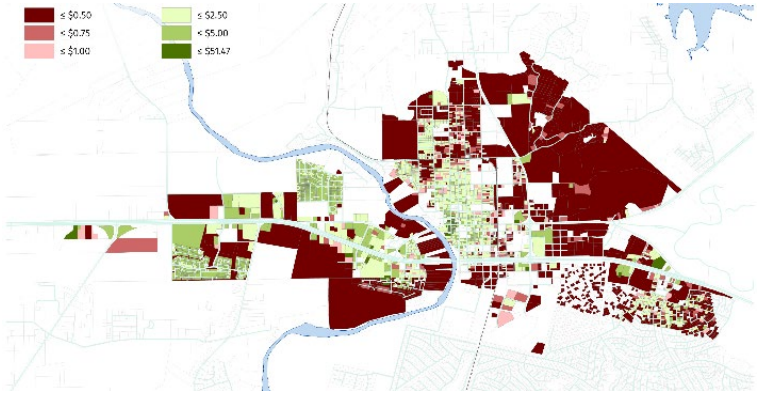
Map existing levy $ minus current operating budget funded by property tax

Step 3: Deficit/Unfunded Costs (What You Really Need)

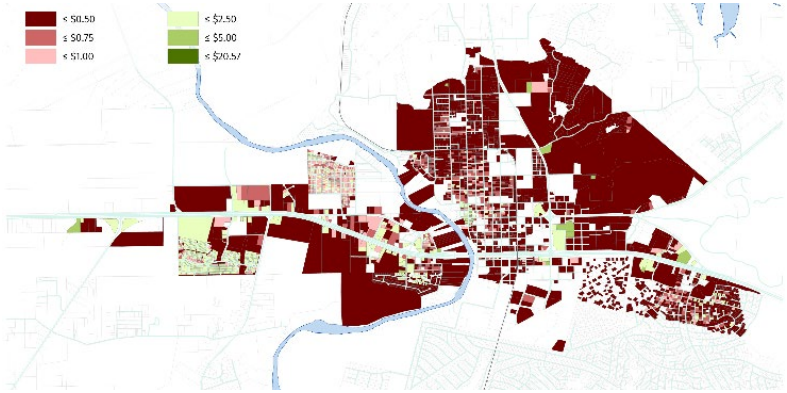
Adds projected general fund costs and unfunded street replacement costs spread over future years

Scenario Planning

Use baseline analysis and context data to project fiscal performance of development alternatives

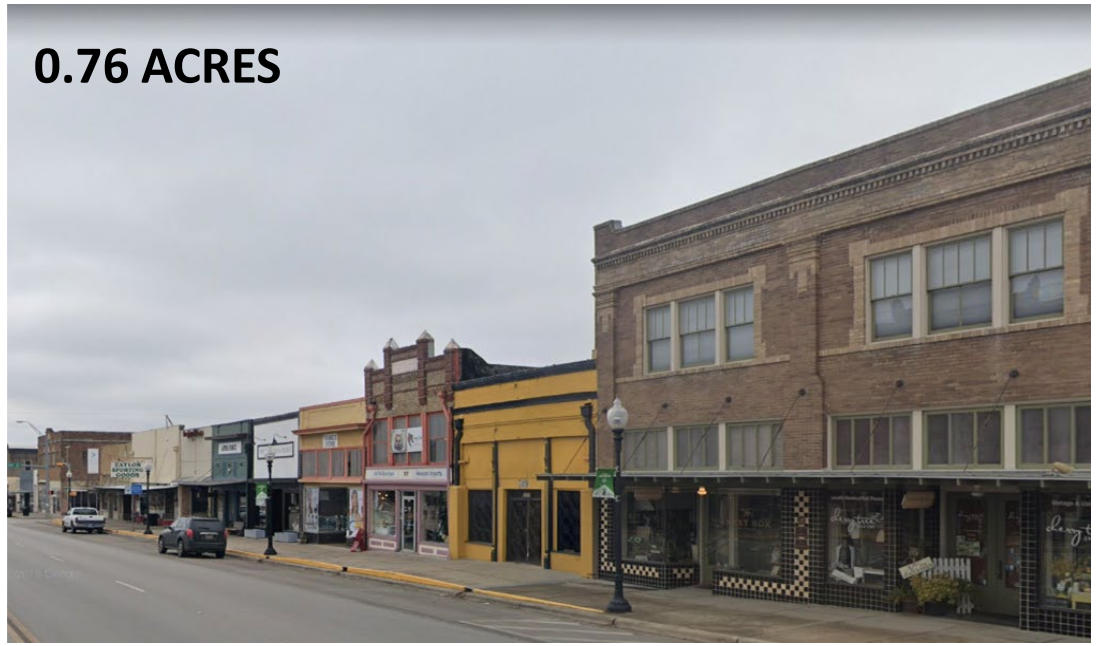


Net/Ac – Current Budget



Net/Ac – Budget + Streets

COMPARING THE VALUE OF DEVELOPMENT PATTERNS



Main Street
Mixed-Use

Prop. Tax Revenue/Acre
$15,940

Suburban Pad Site

Prop. Tax Revenue /Acre
$6,692

Land Use Fiscal Analysis
Taylor, TX

COMPARING THE VALUE OF DEVELOPMENT PATTERNS

Traditional Grid Downtown (10.46 Acres)

Prop. Tax Revenue /Acre

$12,307

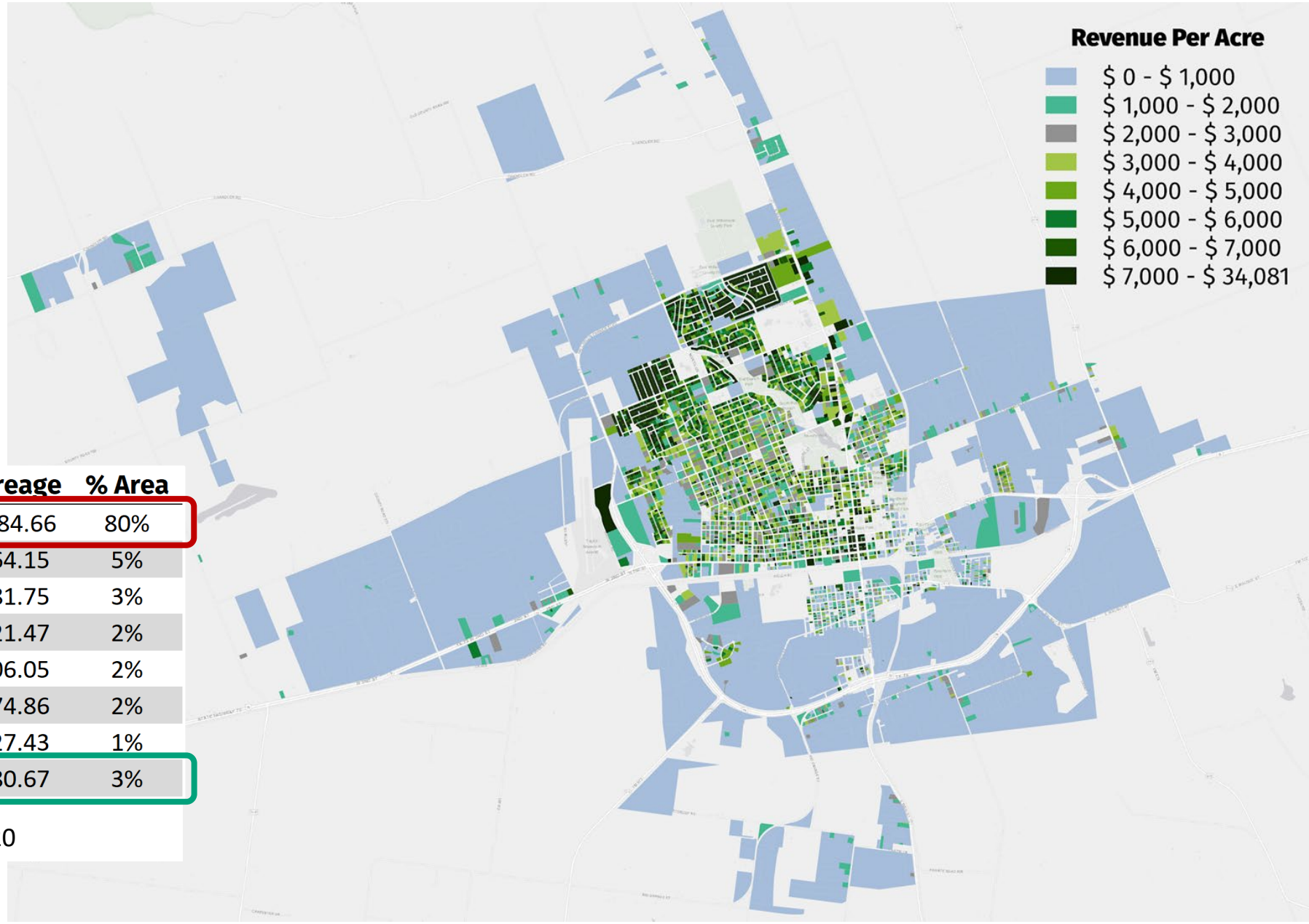
Auto Oriented Big Box (17.36 Acres)

Prop. Tax Revenue/Acre

$4,660

Land Use Fiscal Analysis
Taylor, TX

PROPERTY TAX REVENUE PER ACRE (2019)



Value Ranges	Count	% Parcel	Acreage	% Area
$0 - $1,000	1418	21%	7184.66	80%
$1,000 - $2,000	678	10%	464.15	5%
$2,000 - $3,000	692	10%	281.75	3%
$3,000 - $4,000	615	9%	221.47	2%
$4,000 - $5,000	644	10%	206.05	2%
$5,000 - 6,000	683	10%	174.86	2%
$6,000 - 7,000	557	8%	127.43	1%
$7,000 - $34,081	1393	21%	280.67	3%

* Current Break-Even Revenue/Acre = $820

Land Use Fiscal Analysis
Taylor, TX

NET REVENUE PER ACRE

CURRENT BUDGET

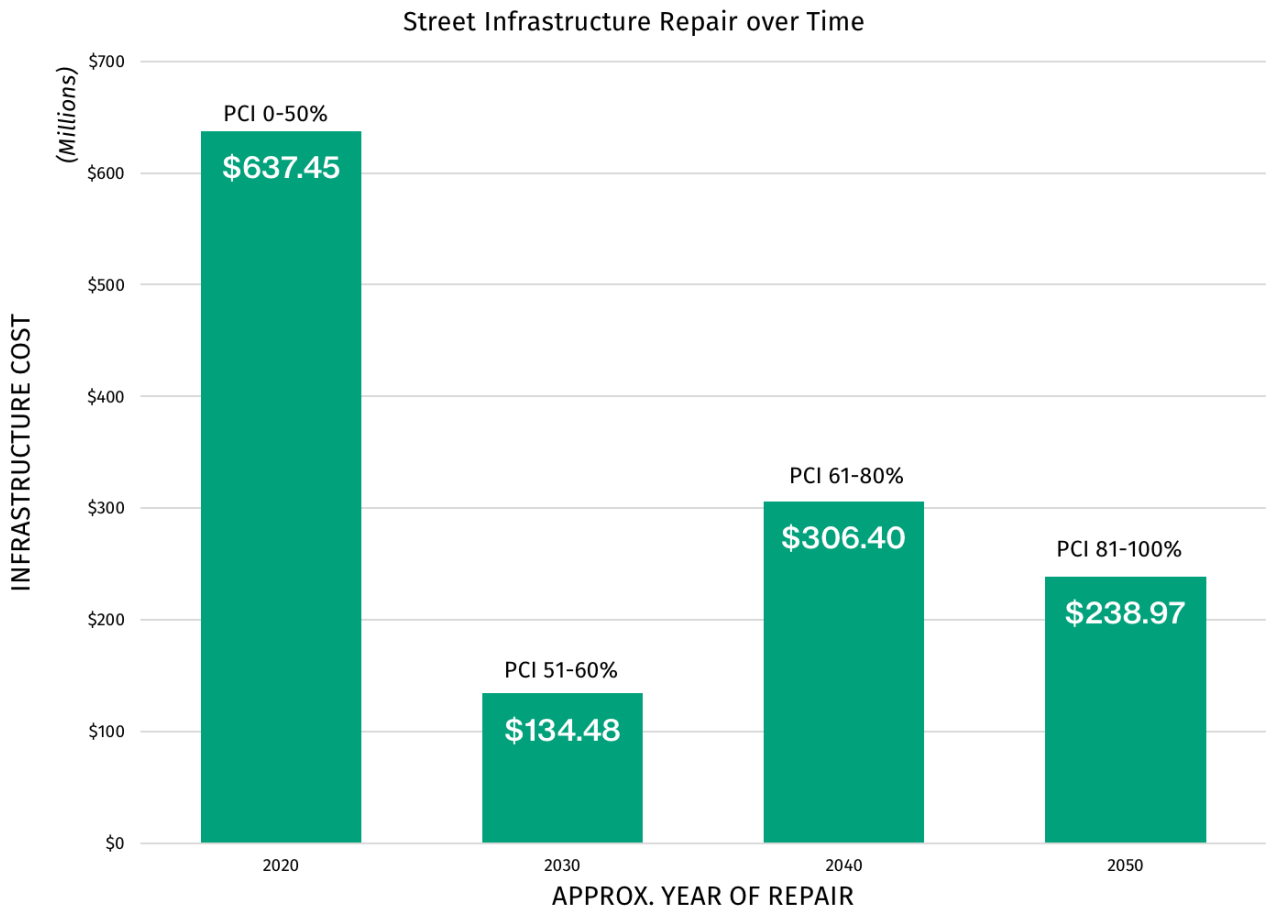
Land Use Fiscal Analysis
Taylor, TX

NET REVENUE PER ACRE

CURRENT BUDGET + UNFUNDED STREET COSTS

Land Use Fiscal Analysis
Taylor, TX

Projected (Unfunded) Street Replacement Costs

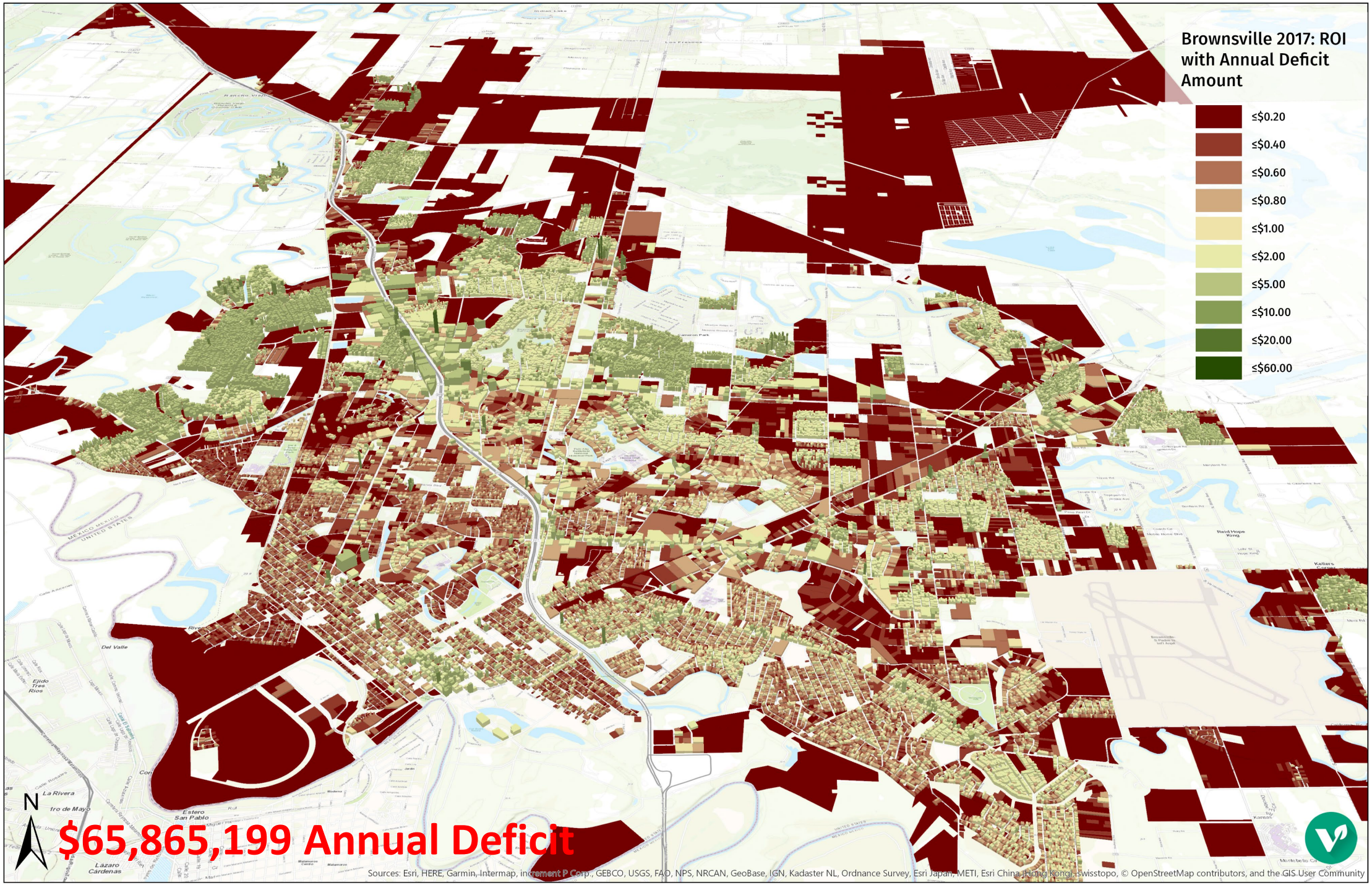


- Est. street replacement cost $1M per 11’ lane-mile
- Est. total replacement cost (existing streets) $1,317,303,993
- Distributed equally over 20 years = $65.9M per year

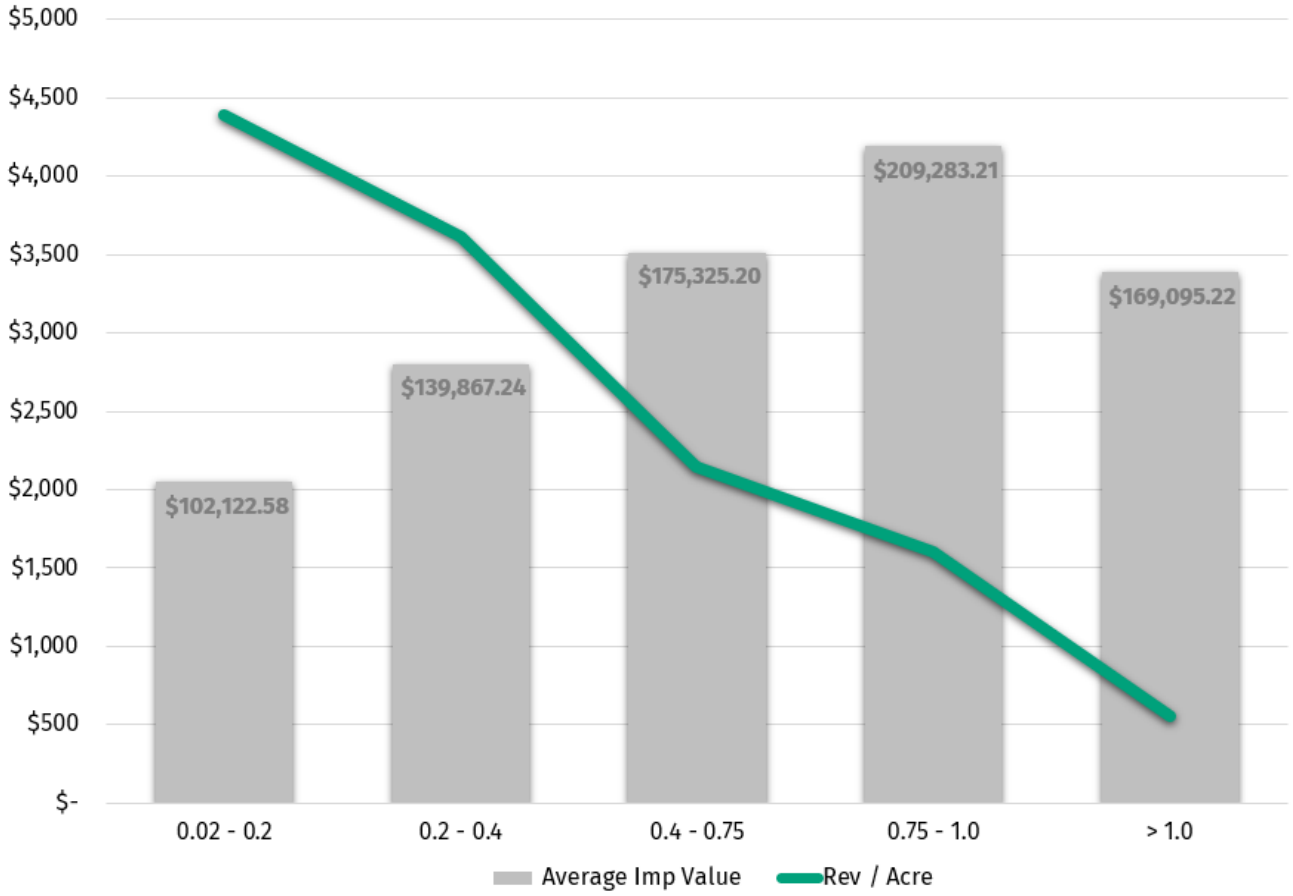
City of Brownsville, TX

City of Brownsville 2017 Return on Investment (ROI) for Currently Budgeted Property Tax Revenues.

City of Brownsville 2017 Return on Investment (ROI) for Currently Budgeted Property Tax Revenues with an Annual Road Maintenance Deficit Cost.



SMALL SCALE DEVELOPMENT IS A WIN-WIN!

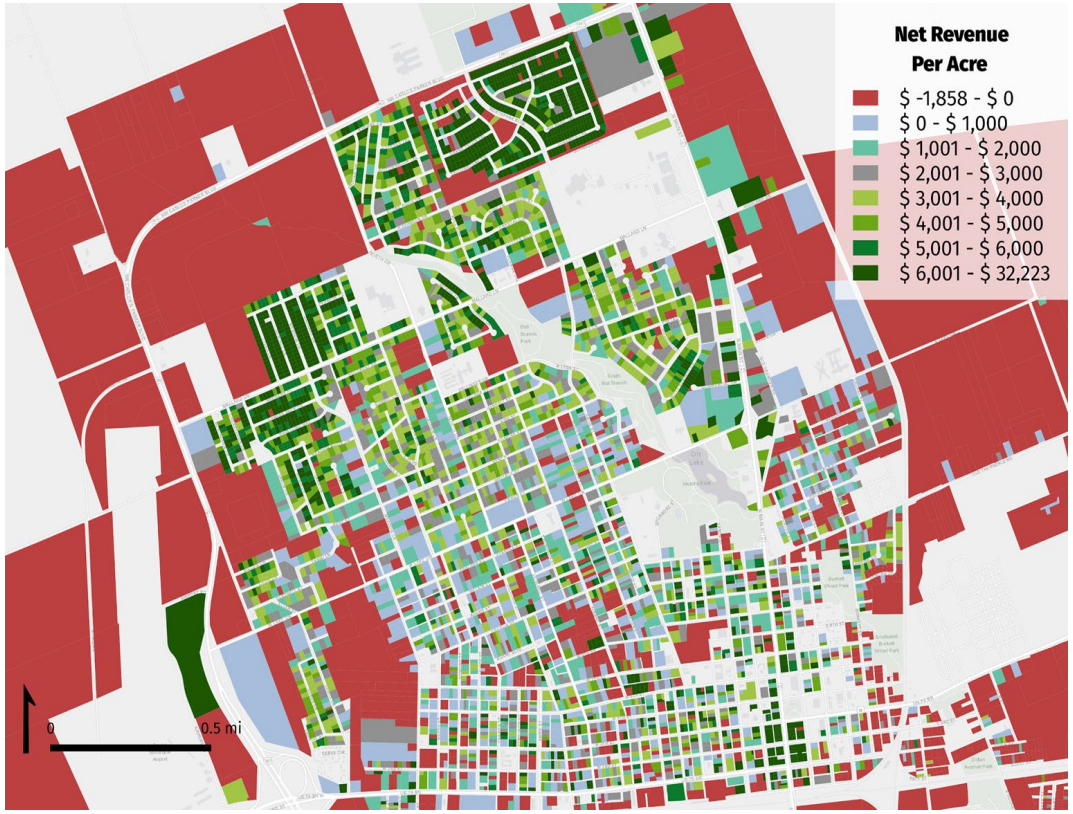


Land Use Description	Acreage	Rev / Acre	Average Imp Value
Single Family	All	$ 3,041	$ 124,841
	0.02 - 0.2	$ 4,393	$ 102,123
	0.2 - 0.4	$ 3,613	$ 139,867
Acreage	0.4 - 0.75	$ 2,140	$ 175,325
Sizes	0.75 - 1.0	$ 1,602	$ 209,283
	> 1.0	$ 551	$ 169,095

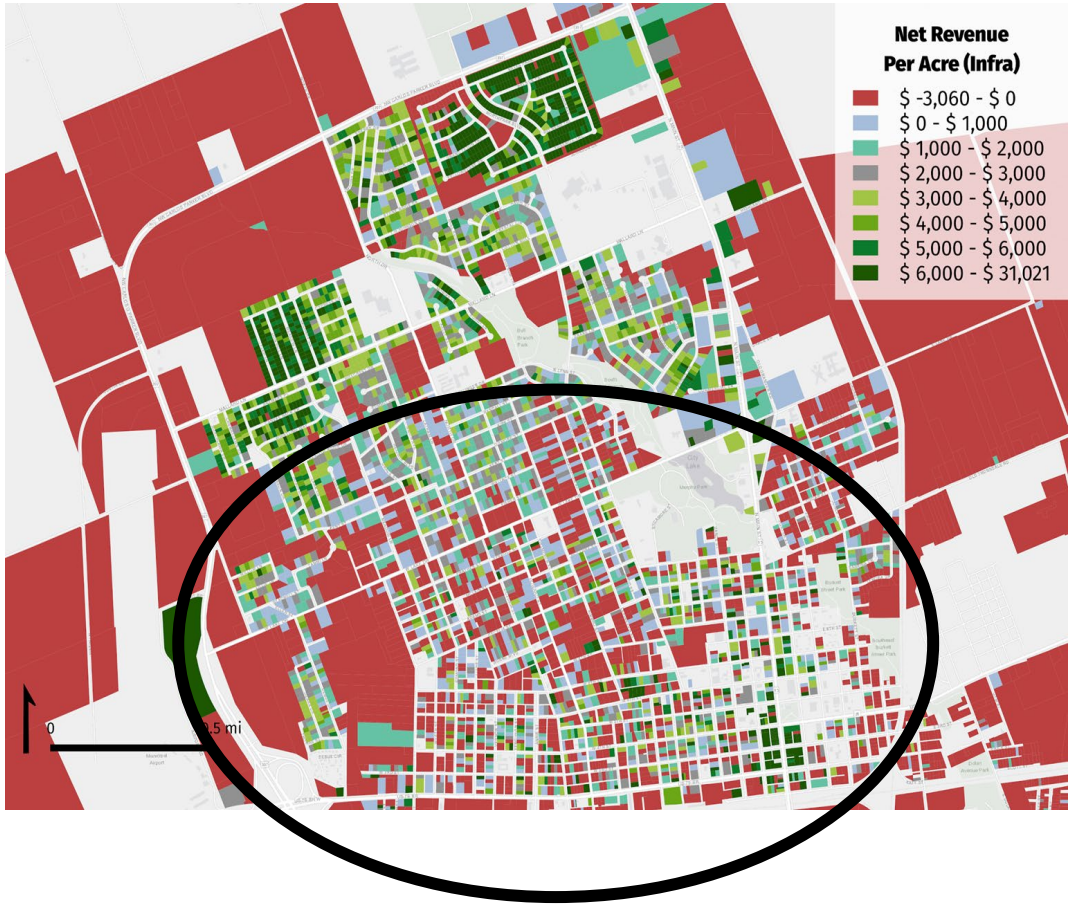
Land Use Fiscal Analysis
Victoria, TX

CLOSING THE GAP WITH INFILL DEVELOPMENT

Net Revenue/Acre – Current Budget

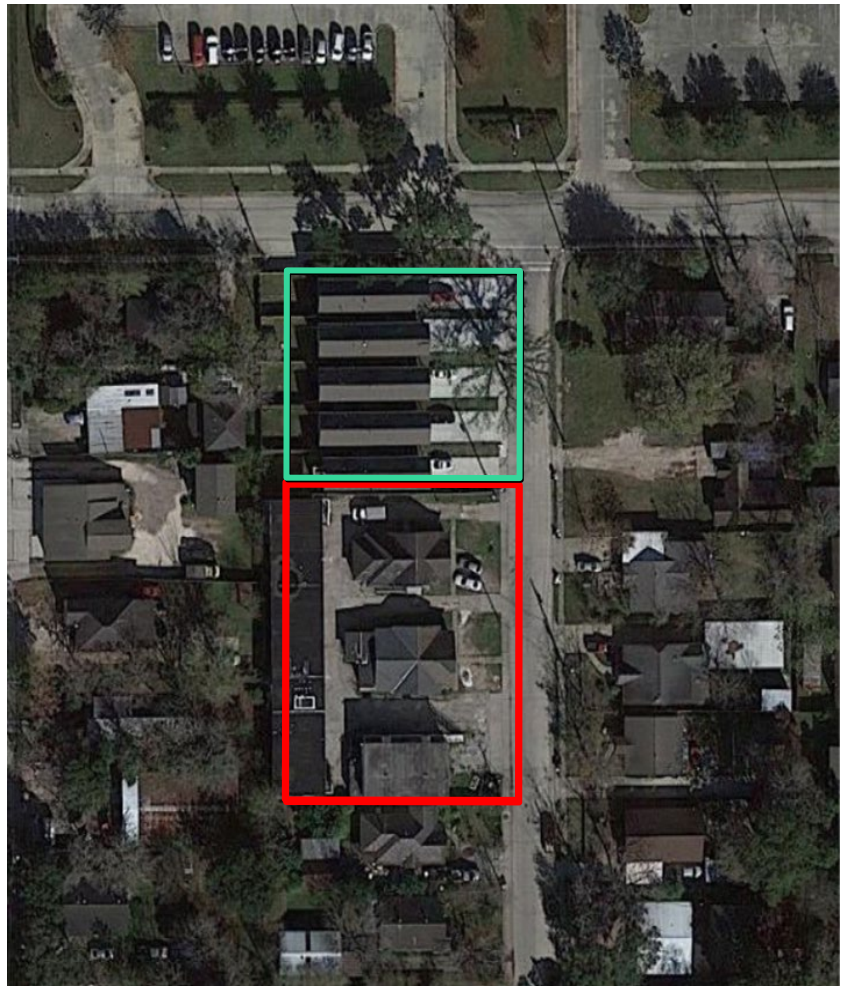


Net Revenue/Acre – Current Budget + Unfunded Streets



Land Use Fiscal Analysis
Taylor, TX

CLOSING THE GAP WITH INFILL DEVELOPMENT



Net Revenue/Acre with Service & Infrastructure Costs

Redeveloped Properties
Area = .35 ac
Net Rev/Ac = $29,100/acre

Existing Properties
Area = .49 ac
Net Rev/Ac = -$4281/acre

Land Use Fiscal Analysis & Strategic Plan
Pasadena, TX

Maximize Infrastructure Investments

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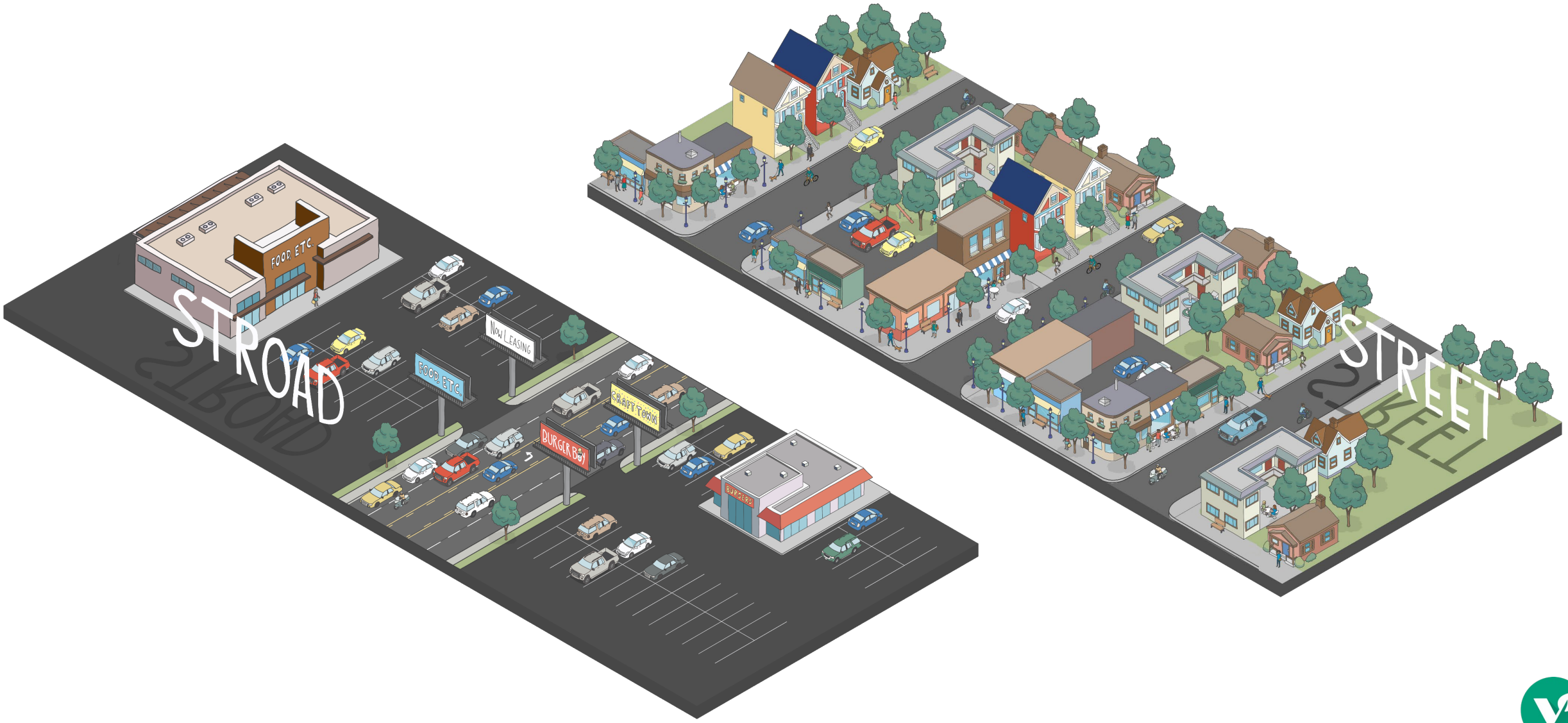
Streets, Roads, and Stroads



Comparing Costs & Benefits

STREETS

VS.

STROADS

$$	Initial infrastructure cost	$$$$$
$$	Maintenance cost	$$$$$
••	Right-of-way required	•••••
••	Land used for surface parking	•••••
$$$$$	Property tax revenue (/ac)	$
•••••	Flexibility to repurpose	•

VERDUNITY.COM

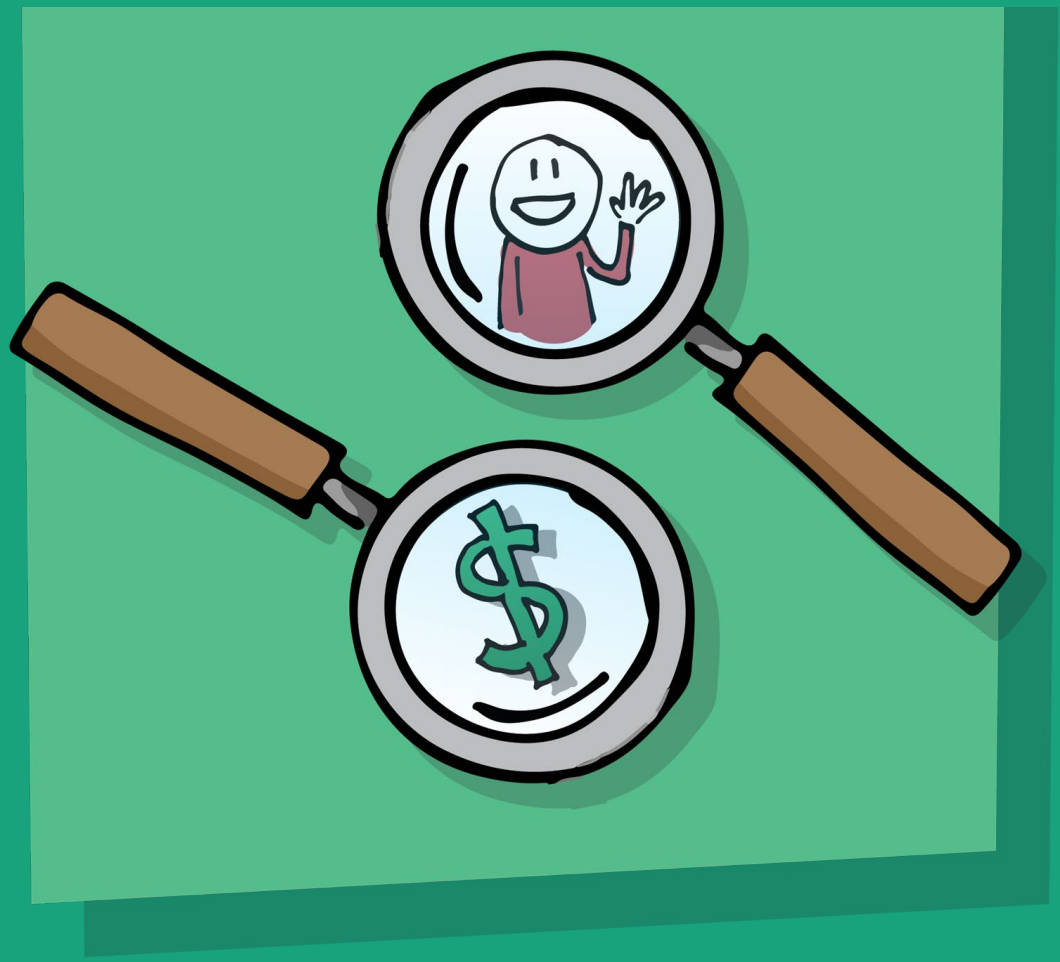
Prioritizing Public Right of Way for Cars vs People

Street Design and Public Safety

Our wide streets allow us to respond quickly to the collisions caused by our wide streets….

Are we designing our cities to accommodate large fire trucks or designing our public safety to fit the cities we want?

Evaluating the Fiscal Impact of New Development



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Fiscal Impact Analysis of New Development

LaFayette Place Financial Considerations	
Est Total Public Liabilities (per infrastructure cost est provided by applicant)	$90,000
Current Total Value of Property (per central appraisal district. Total phase area x current total tax value per acre).	$123,740
Current Total Tax Value Per Acre (Total phase area / Current total value of property)	$51,774
Current Total Annual Tax Revenue (current total value of property x Current tax rate [$0.2911 for each $100 of value])	$360.21
Est Total Value of Private Investment (ICC Valuation Rates w/ 85% state modifier	$3,270,000
Est Total Tax Value Per Acre (Est total value of private investment / Total phase area)	$1,368,201
Est Total Annual Tax Revenue (Est total value of private investment x Current tax rate; $0.2911 per $100 value)	$9,519
Private to Public Investment Ratio (Est total value of private investment / Est total public liabilities)	36:1
Est Years to Repay Public Liabilities (Est total public liabilities / Est total annual tax revenue)	9.5
Est Total Annual Cost to Serve ($1,314 x # of lots)	$34,716
Est Total Annual Depreciation (Est total public liabilities / 40 years)	$2,250.00
Est Total Annual Cost to Serve + Annual Depreciation	**$36,966**

Woodcreek Ph. 9B-9D2 Financial Considerations	
Est Total Public Liabilities (per infrastructure cost est provided by applicant)	$17,600,000
Current Total Value of Property (per central appraisal district. Total phase area x current total tax value per acre).	$2,361,240
Current Total Tax Value Per Acre (Total phase area / Current total value of property)	$16,375
Current Total Annual Tax Revenue (current total value of property x Current tax rate [$0.2911 for each $100 of value])	$6,873.57
Est Total Value of Private Investment (avg. existing SFR value in WC RCISD [$240,762] x # of lots)	$146,624,058
Est Total Tax Value Per Acre (Est total value of private investment / Total phase area)	$1,016,803
Est Total Annual Tax Revenue (Est total value of private investment x Current tax rate; $0.2911 per $100 value)	$426,823
Private to Public Investment Ratio (Est total value of private investment / Est total public liabilities)	8:1
Est Years to Repay Public Liabilities (Est total public liabilities / Est total annual tax revenue)	41.2
Est Total Annual Cost to Serve ($1,314 x # of lots)	$800,226
Est Total Annual Depreciation (Est total public liabilities / 40 years)	$440,000
Est Total Annual Cost to Serve + Annual Depreciation	**$1,240,226**

Development Fiscal Impact Analysis
Fate, TX

Fiscal Impact Analysis of New Development

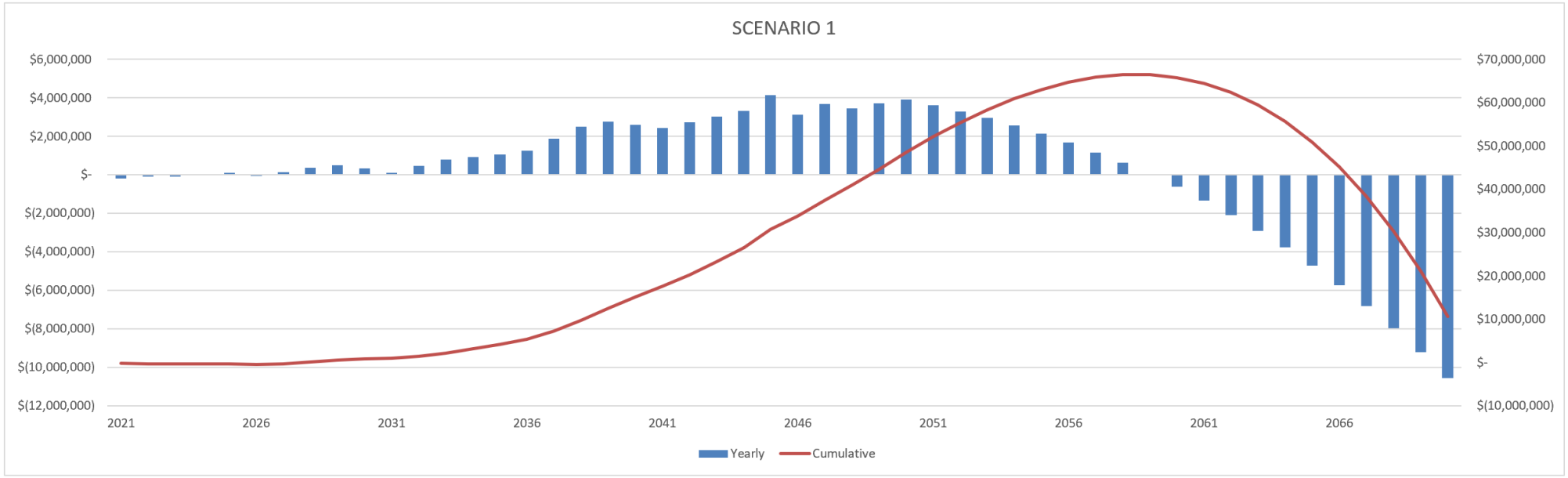
FISCAL IMPACT ANALYSIS

SCENARIO 1

MAJOR INPUTS	VALUE	UNIT
Analysis Length	50	years
Analysis Begins	2021	
Property Tax Change	0.011	Per year after FY 2028
Property Value Growth	2	%
Construction Inflation	5	%

BUILT-OUT CONDITIONS VALUES

	Max Yearly	Cumulative
Revenues	$ 41,951,870	$ 1,058,265,375
Projected GF Costs:	$ 7,299,798	$ 268,474,544
CIP Infrastructure	$ 29,370,713	$ 505,402,521
Residential Street Reconstruction	$ 15,844,124	$ 273,873,583
Total		$ 10,514,727



Final Thoughts

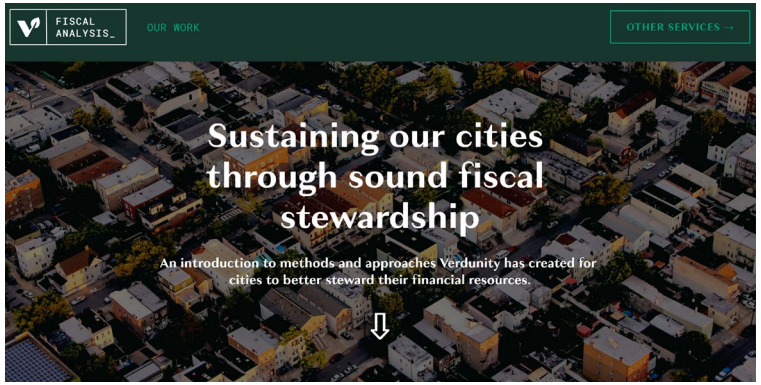
1) Most communities have rapidly growing infrastructure liabilities that are not funded.

2) While developers pay to install infrastructure on the front end, many development patterns do not produce sufficient revenue to pay for the maintenance and future replacement.

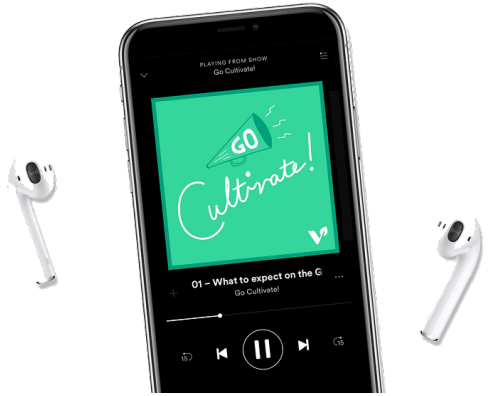
3) Closing the infrastructure funding gap will take a combination of additional fees, revisions to development policy and design standards, and partnerships between public agencies, private developers, and taxpayers.

4) Fiscal analysis can be a powerful tool in helping to educate, build consent, and inform land use, growth management, infrastructure and economic development decisions and investments.

Keeping the Conversation Moving Forward



Learn more about our fiscal analysis process and view interactive maps at www.fiscal.verdunity.com



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