



# MANAGING ECONOMIC SHOCKS TO VALUE CAPTURE-FUNDED PROJECTS IMPLICATIONS AND TOOLS FOR MANAGING: A PRIMER

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# Presenters



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# Presentation Outline

- 1 Introduction
- 2 Review of Value Capture (VC) Techniques
- 3 Impacts to VC Funding Sources & Project Implications
- 4 Tools to Manage Impacts
- 5 Cases
- 6 Annex: Covid-19 Impacts to Value Capture

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# Introduction

1



Provides overview of how economic shocks (e.g., Global Financial Crisis, COVID-19) affect value capture funding sources



Goal is to help sponsors of value-capture-funded projects understand how economic shocks can affect their projects & tools they can use to mitigate those shocks

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# Review of Value Capture Techniques

2



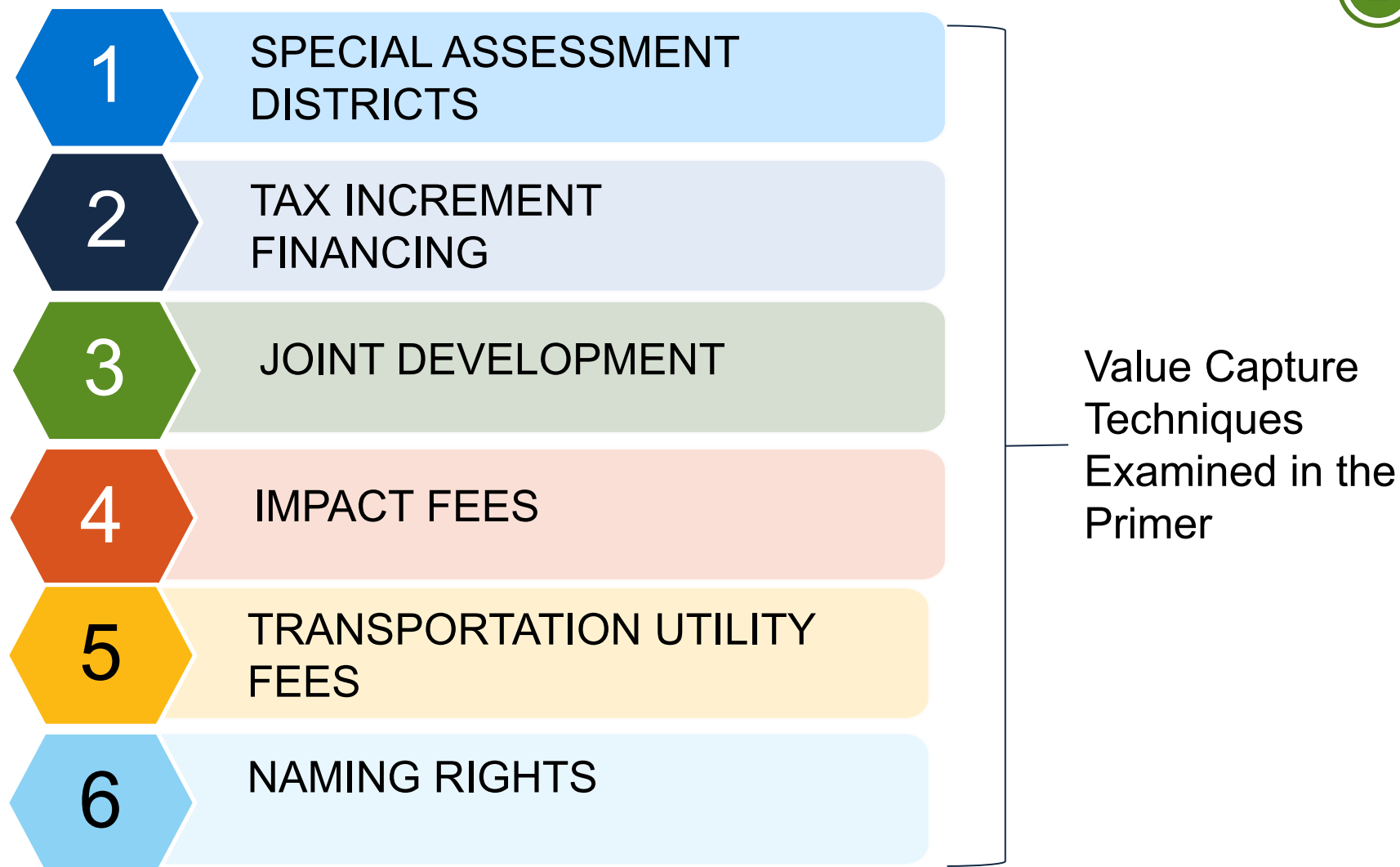
## WHAT IS VALUE CAPTURE?

- Set of techniques that take advantage of increased property values resulting from new or improved transportation infrastructure
- New infrastructure can increase attractiveness of certain areas, raising demand and property values; many value capture techniques seek to capture some of these property value increases



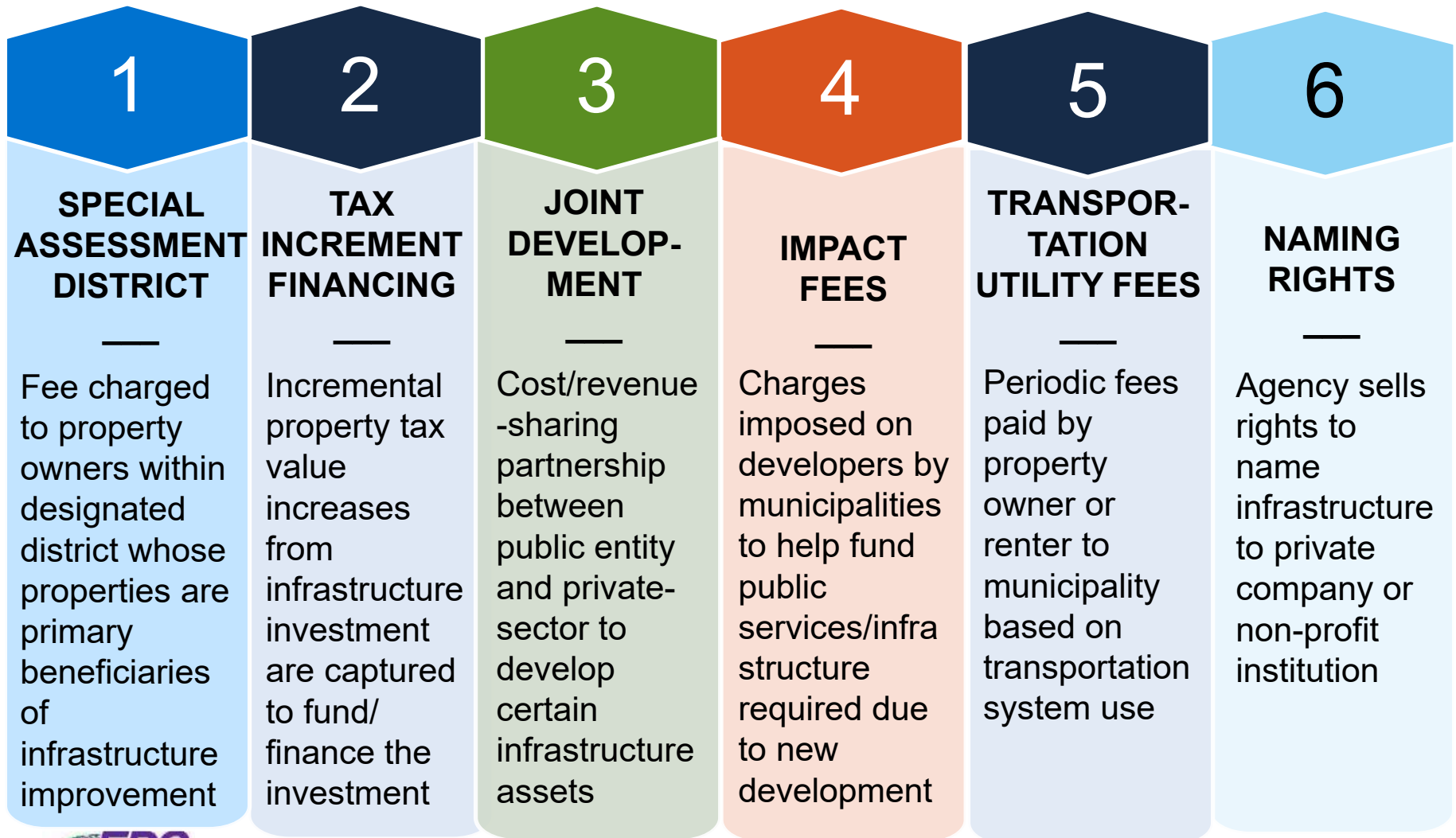
# Review of Value Capture Techniques

2



# Review of Value Capture Techniques

2

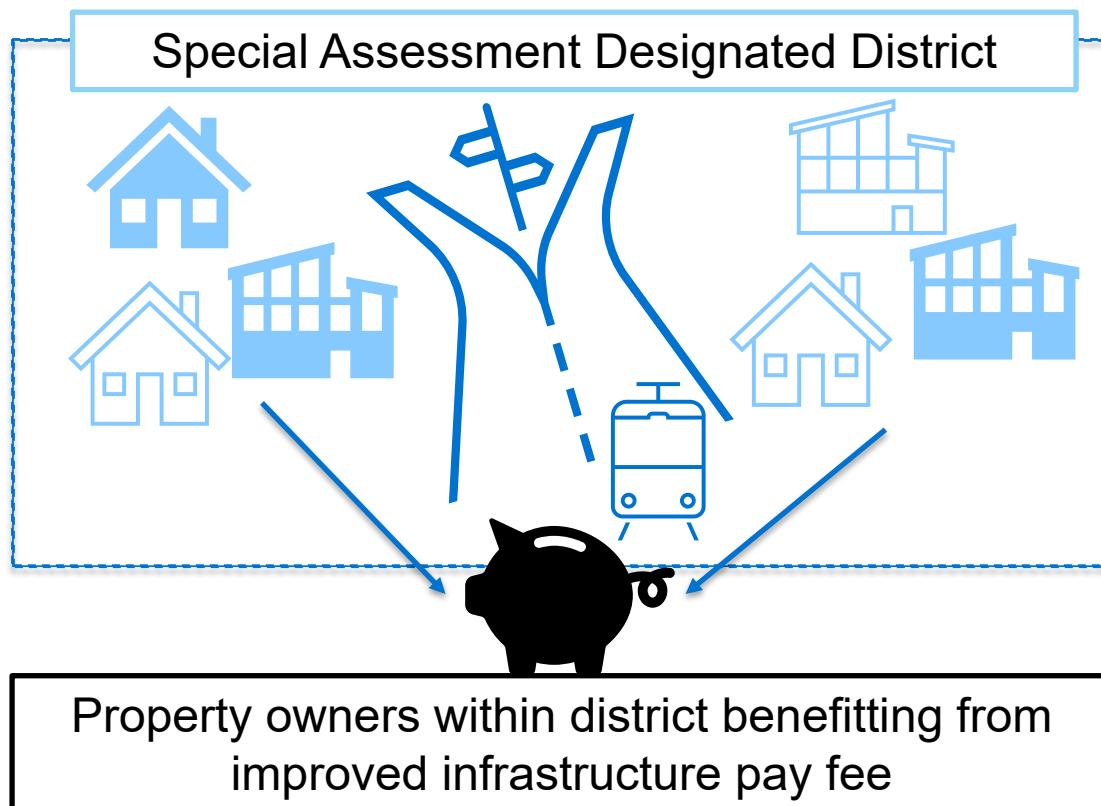


# Value Capture Techniques Reviewed

2

1

## SPECIAL ASSESSMENT DISTRICTS



### Other Names:

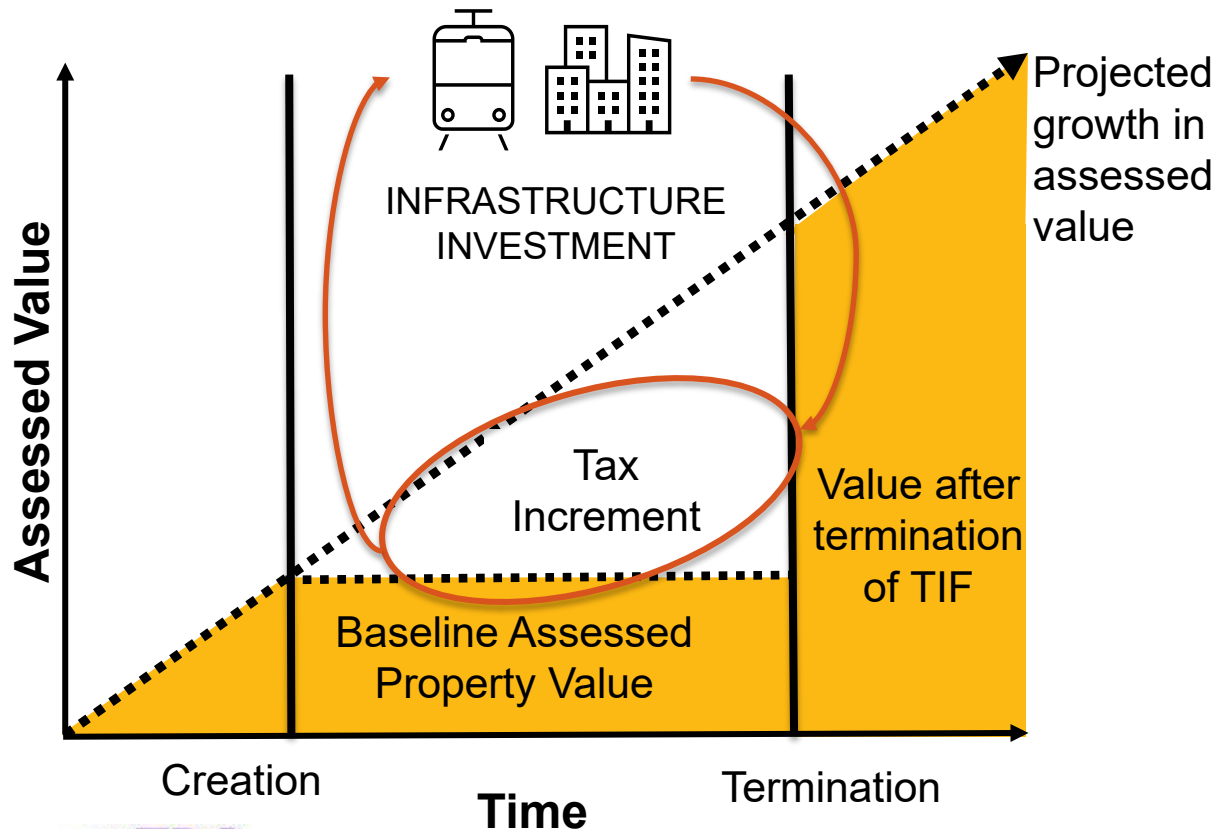
- Benefit Assessment District (CA)
- Local Improvement District (WA)
- Community Improvement District (MO)
- Downtown Improvement District, transportation improvement districts (VA, OH),
- Special Services Area (IL)

# Value Capture Techniques Reviewed

2

2

## TAX INCREMENT FINANCING



- **What:** Incremental property taxes captured in district to fund and finance infrastructure in that district
- **Alternate Terms:** Tax Allocation Districts; Transportation Reinvestment Zones
- **Uses:** Transit & Roads

# Value Capture Techniques Reviewed

2

3

## JOINT DEVELOPMENT



Creation of commercial property next to transportation project, e.g., rail station, often with benefit of defraying the cost of that project

### 2 KEY TYPES

1

Revenue Sharing Arrangements

2

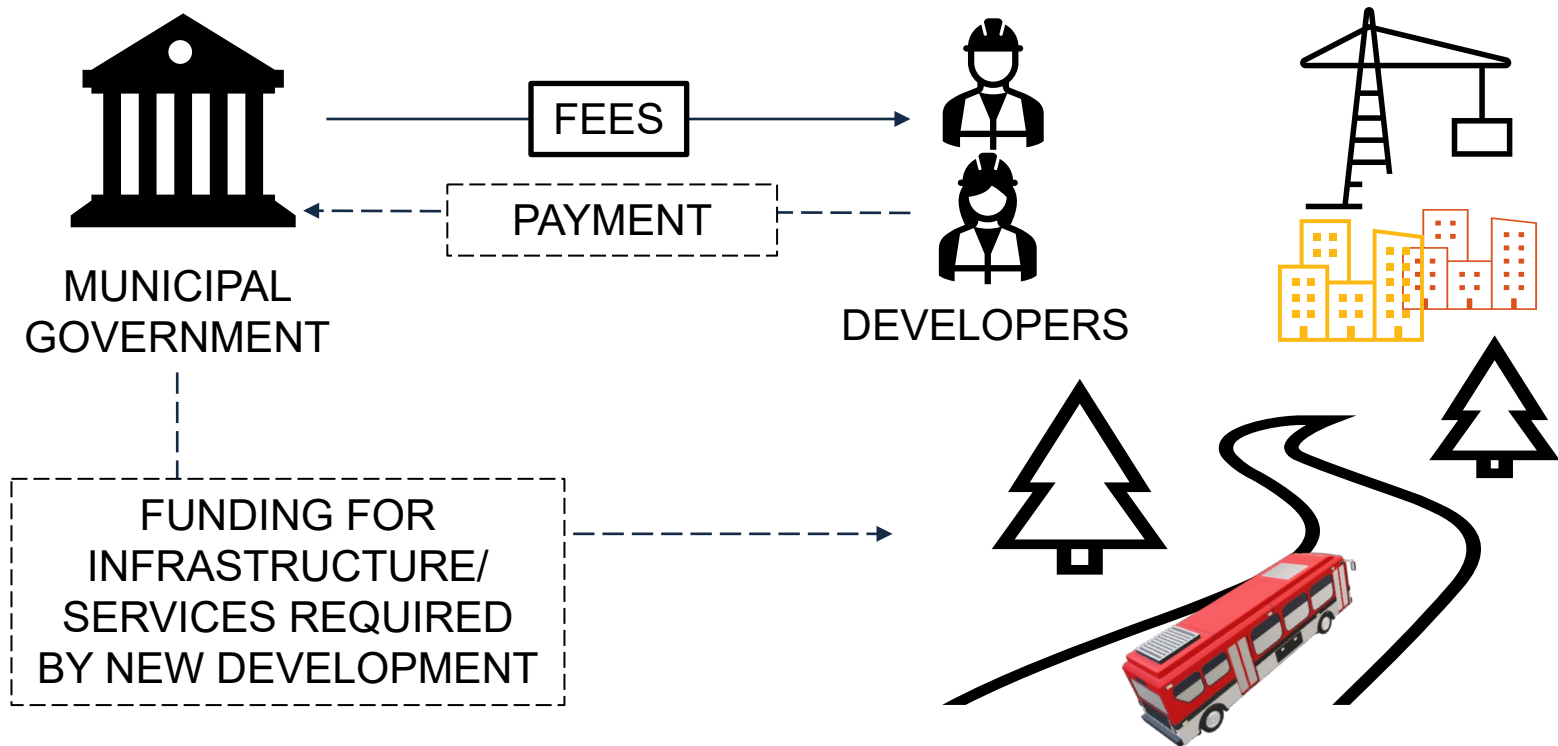
Cost Sharing Arrangements

# Value Capture Techniques Reviewed

2

4

## IMPACT FEES



# Value Capture Techniques Reviewed

2

5

## TRANSPORTATION UTILITY FEES



Building Occupants



Municipal Government

...periodic fees paid by property owner/building occupant to municipality based on use of local transportation system

**TUFs are also called:**

**Transportation Maintenance Fees**

**Street Maintenance Fees**

**Road Use Fees**

**Pavement Maintenance Utility Fees**

**Street Restoration & Maintenance Fees**

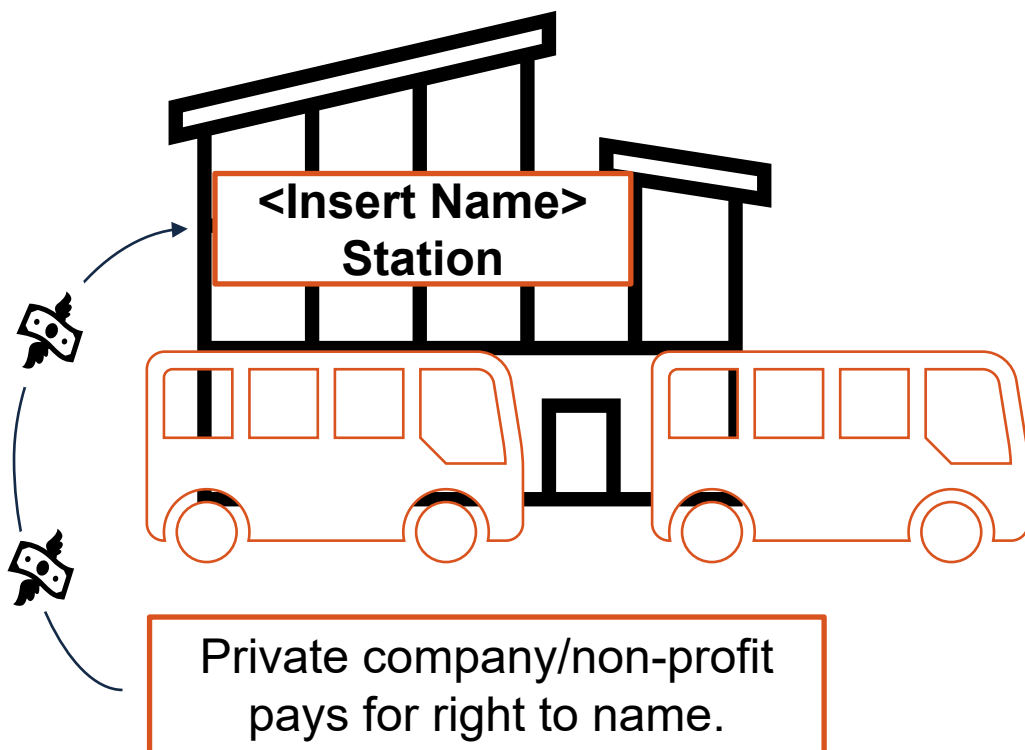
**Street Utility Fees**

# Value Capture Techniques Reviewed

2

6

## NAMING RIGHTS



Transit agency sells right to name infrastructure to private company/non-profit.

e.g., "Salesforce Transit Center" in San Francisco, CA, and "Atlantic Avenue Barclays Center" in Brooklyn, NY








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# Impacts to VC funding sources: economic shocks can lead to reduced revenues













3

	<b>DRIVER FOR REDUCTION IN VALUE CAPTURE REVENUE</b>	<b>VALUE CAPTURE TECHNIQUE IMPACTED</b>
	<b>Lower property value appreciation</b>	TIF, Joint Development, Special Assessments
	<b>Lower assessments and/or difficulty levying new assessments</b>	Special Assessments
	<b>Less new development leading to lower impact fees / reduction in fee</b>	Impact fees
	<b>Less commerce leading to lower sales tax district fees</b>	Special Assessment District, specifically sales tax district
	<b>Changing naming rights demand</b>	Naming Rights

# Lower property value appreciation – varies by shock

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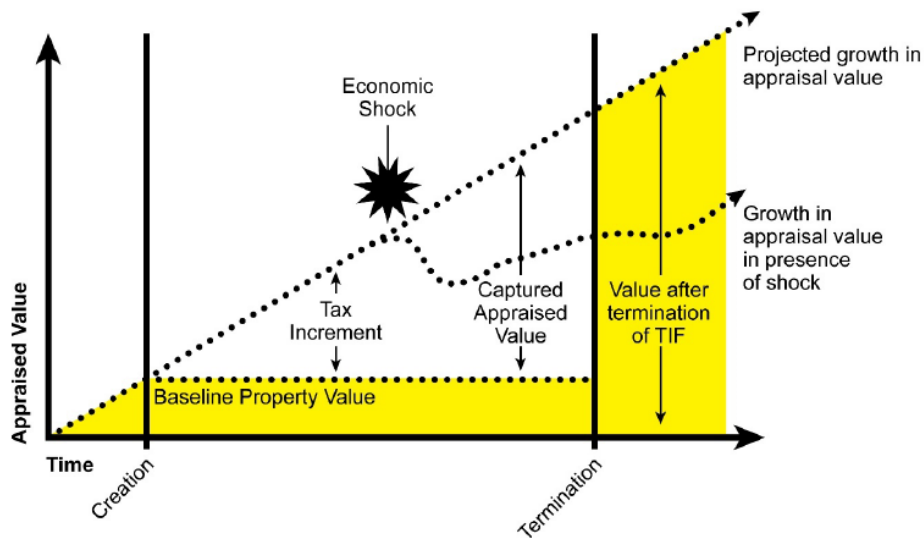
Impact to property value appreciation will vary by shock and real estate sector

Economic Shock	Office	Retail	Industrial	Multi-Family	Residential
Great Financial Crisis (GFC)					
COVID-19 Pandemic					
 = real estate sector saw depreciation  = real estate sector saw appreciation					

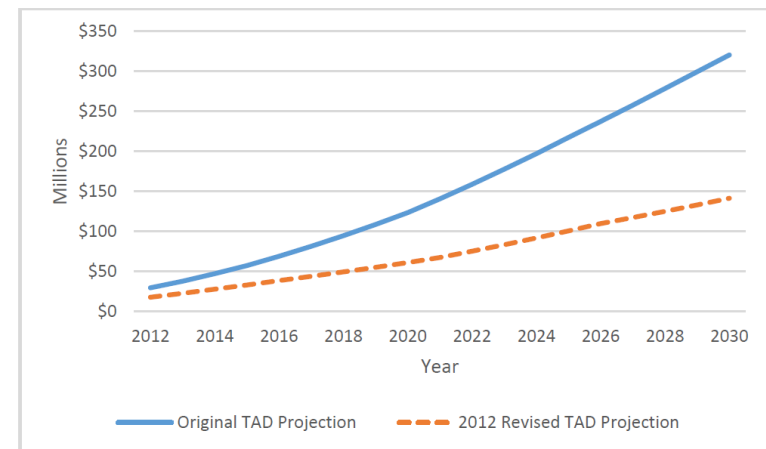
# Lower property value appreciation – negatively impacts TIF revenues

3

TIF relies on improved infrastructure assets leading to higher property values; but economic shocks can negatively affect growth in appraised property value



Conceptual Overview –  
Economic Shock Impacts on TIF



Projected Annual TAD Revenue for  
Atlanta BeltLine, 2012-2030

Data Source: Atlanta Beltline “Changes in Tax Increment Projections”

# Lower property value appreciation – can lower special assessment revenues

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Special Assessment District with Ad Valorem Levies



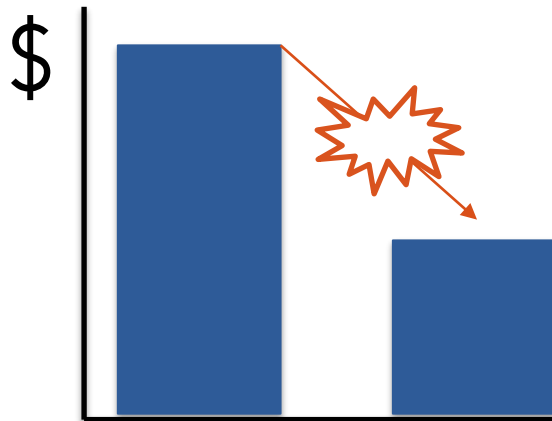
- ✓ Revenue collected based on value of property in special assessment district
- ✓ During shock, value of these properties may decline, and associated revenues will too



# Lower assessments / difficulty levying new assessments

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During economic shock it may be more difficult to levy new special assessments



Lower levies feasible during periods of economic shock

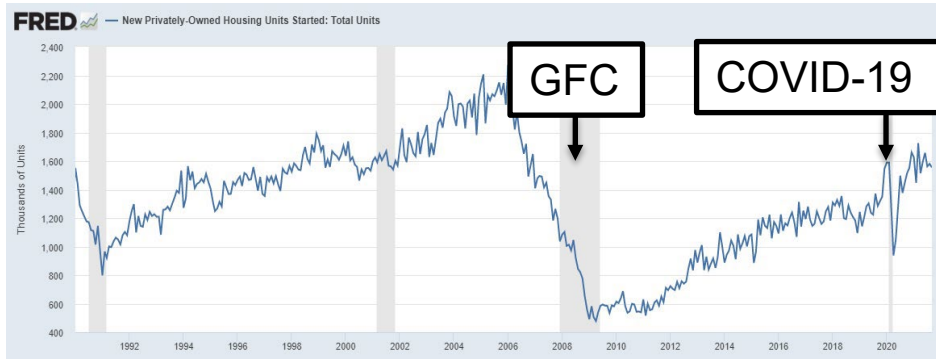


Property owners may block new levies during economic downturns



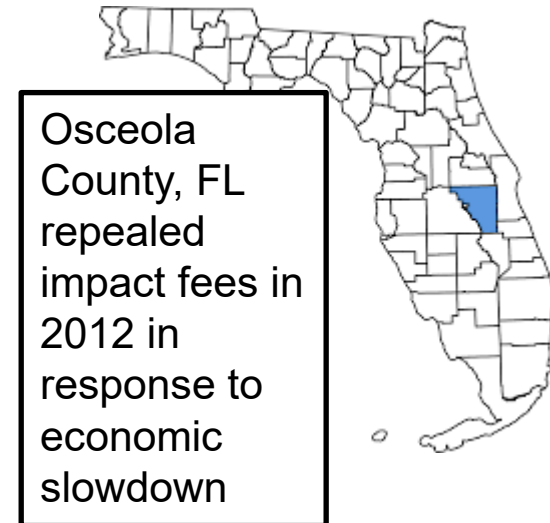
# Less new development leading to lower impact fees / reduction in fee

3



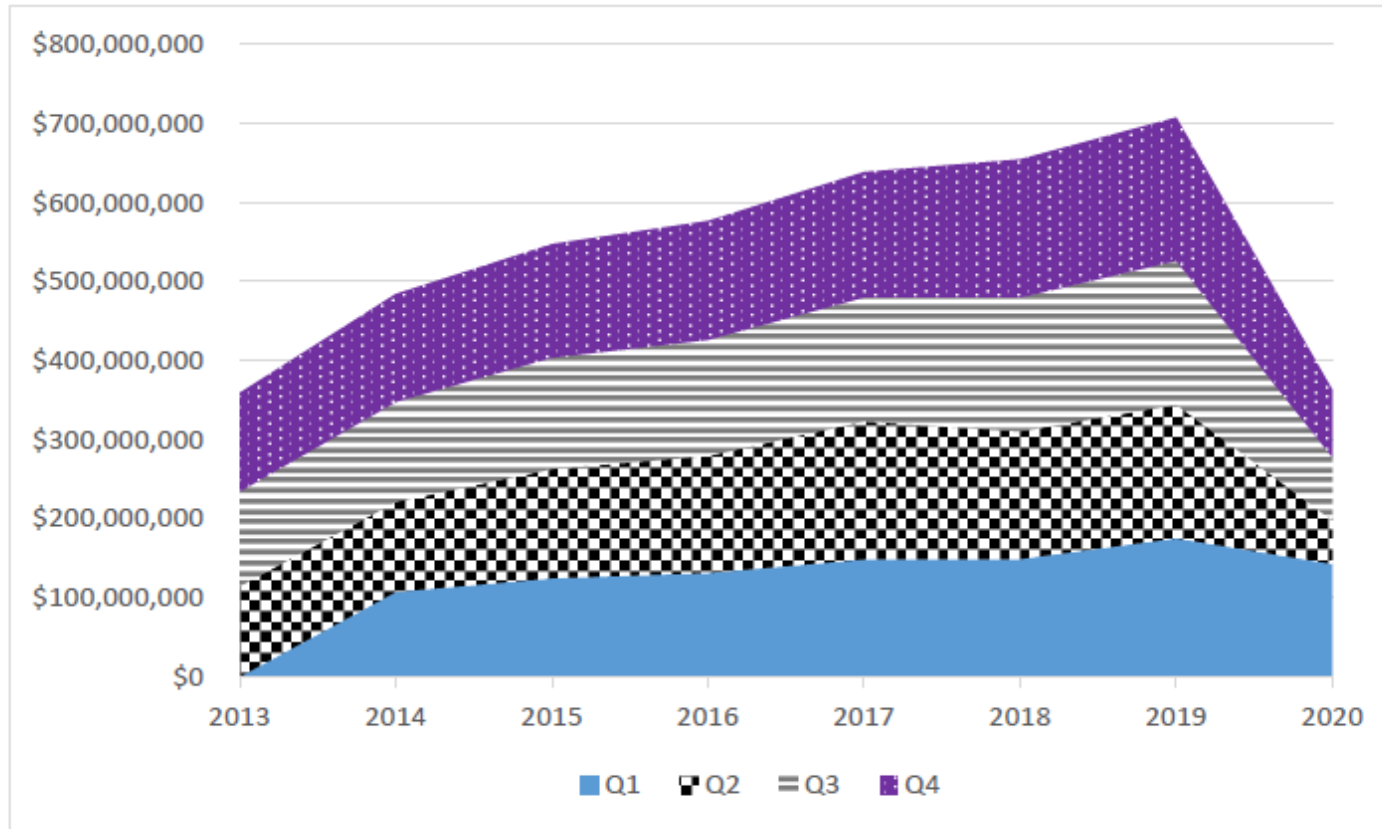
**New Privately Owned Housing Units Started, 1990-2021 (shaded areas indicate economic recession)**

Source: US Census Bureau and US Department of Housing and Urban Development



# Less commerce leading to lower sales tax district fees

3




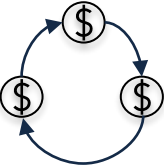


## Volume of Taxable Sales in the Kansas City Streetcar's Starter Line Transportation Development District

Source: Missouri Department of Revenue, Taxation Division, Taxable Sales and Use Tax by Locality – Taxable Sales for All Districts (2013 – 2021).



# Implications of reduced VC revenues on projects








	Implication	For example...
	<b>Inability to Meet Funding or Debt Service Requirements of Current Projects</b>	<ul style="list-style-type: none"> <li>✓ Atlanta BeltLine's less than expected TIF revenues during GFC hindered project</li> <li>✓ Assessed value of NYC office buildings declined by 16.6% in 2021</li> </ul>
	<b>Reduced Ability to Secure Project Financing</b>	<ul style="list-style-type: none"> <li>✓ With reduced TIF revenues during GFC, Atlanta BeltLine did not have enough debt capacity to issue more bonds</li> </ul>
	<b>Reduced Public Agency Willingness to Fund Future Projects</b>	<ul style="list-style-type: none"> <li>✓ Projects with unidentified funding sources or with less support will fail to get off the ground during economic shocks</li> </ul>
	<b>Switch to Pay-As-You-Go (Paygo) Modality</b>	<ul style="list-style-type: none"> <li>✓ May lead to project phasing as in Atlanta BeltLine or Colorado E-470</li> </ul>

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# Tools to Manage

4

	Mitigation Tool
	Analyze Downsides
	Over-collateralize
	Build in reserve funds
	Collect revenues before project start
	Reduce early cash flow pressure
	Develop projects by phase
	Backstop with creditworthy sources

# Tools to Manage

4

## Analyze Downsides



Conduct downside scenarios on value capture revenue projections to understand what is needed to ensure project cashflows can survive periods of stress



Prepare for and be flexible in face of tightened financial markets (e.g., Denver Union Station)



### Assembly Project



Planning showed need for additional funding sources in event of stress

During COVID-19 project's primary funding sources insufficient. Assembly drew on backstop of Special Assessments

# Tools to Manage

4



## Over-collateralize

Increase the Debt Service Coverage Ratio (DSCR) & Value to Bond Ratio

$$DSCR = \frac{\text{Net Operating Income}}{\text{Annual Debt Payment}}$$

Commit additional cash to revenues

$$\text{Value to Bond} = \frac{\text{Assessed Values}}{\text{Principal of Bond}}$$

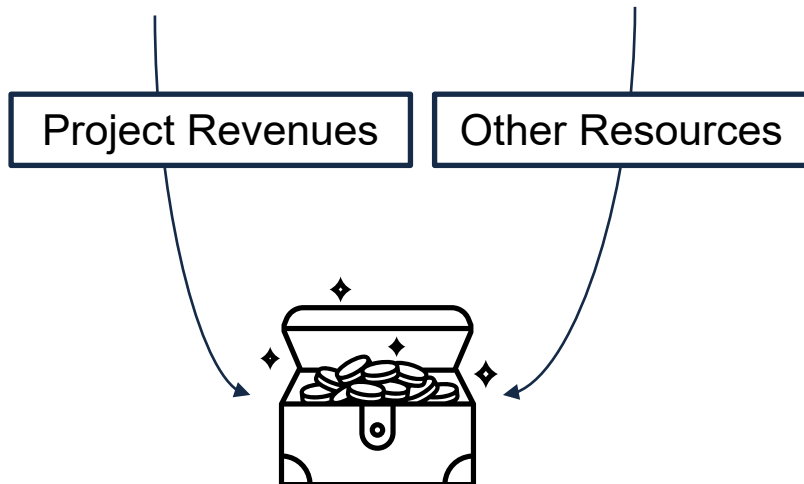
Reduce size of bond

# Tools to Manage

4



**Build in reserve funds**



- ✓ Either at sponsor's discretion
- ✓ Or, required per financial documents (e.g., Mosaic)



**Collect revenues before project start**



## Parole Town Center



2.4 mile-TIF district established 3 years prior to financial close. In those 3 years, property values within district grew by 6%+/year, resulting in 500,000-\$1M to fund debt service in first year

Source: Parole Town Center Project, Official Statement 2012, pp19-23

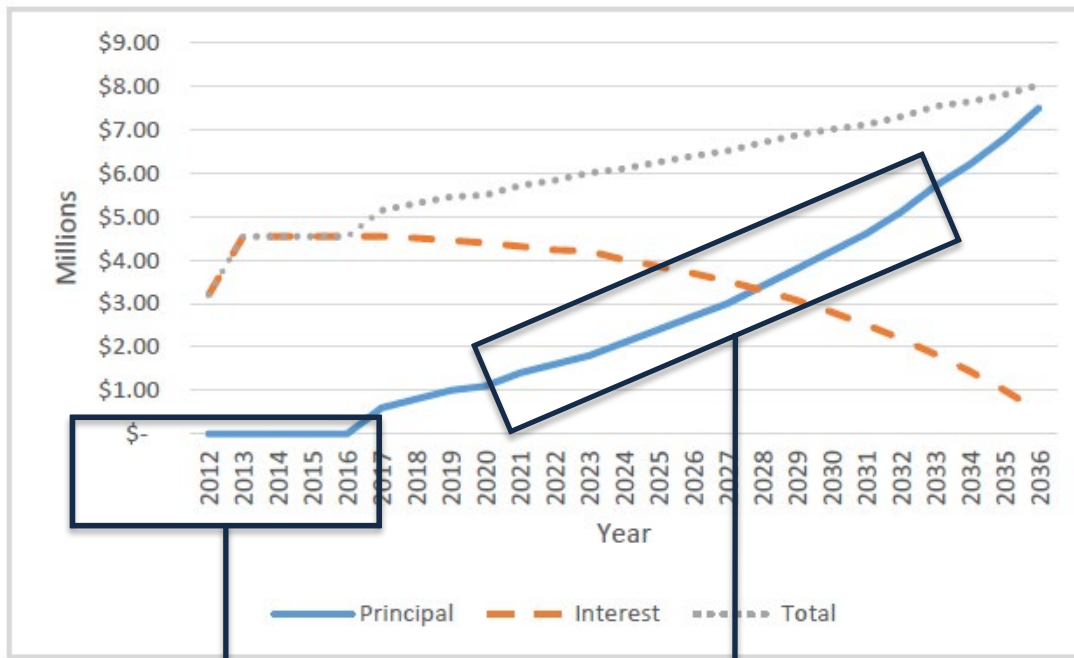
# Tools to Manage

4



Reduce early cash flow pressure

## Mosaic Project Total Debt Service Payments 2012-2036



3

Capitalize interest one year; or multiple years through capital appreciation bond

Delay principal payment

Escalate debt service by factor that follows expected growth of property valuations (TIF District)

Source for underlying data: "\$65,650,000 Mosaic District Community Development Authority (Fairfax County, Virginia) Official Statement (OS)," May 26, 2011, p. 15

# Tools to Manage

4

## Develop projects by phase

- ✓ Allows project to proceed as budgets and debt capacity become available
- ✓ May take longer this way; but can help ensure completion of project



### Colorado E-470



47-mile toll highway forming half of beltway around Denver, CO.

Built in segments in response to economic issues that affected toll and value capture related projects



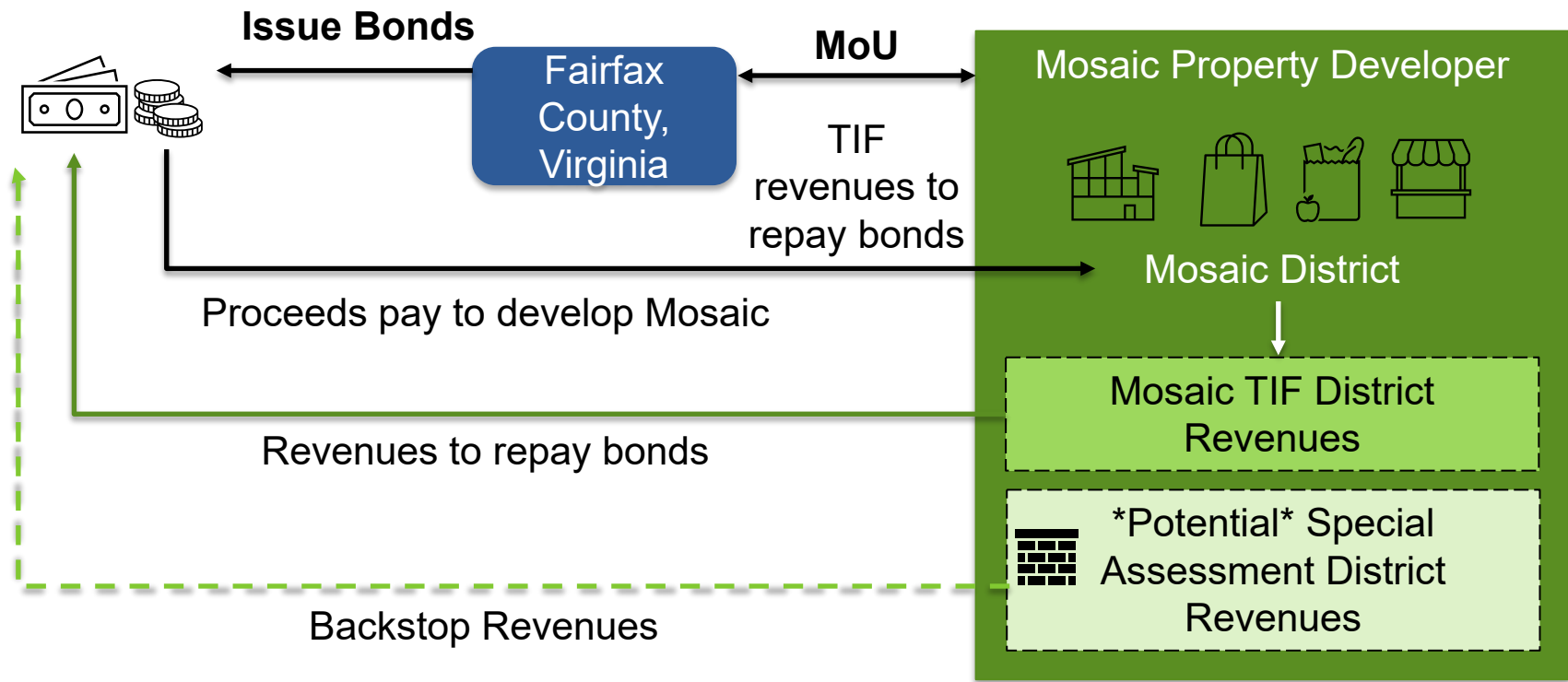
# Tools to Manage

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## Backstop with creditworthy sources

For example, Mosaic shopping & dining complex deployed this tool in case of depression in property values



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# Planning and financing for Mosaic District integrated many tools to mitigate impacts of economic shocks 5

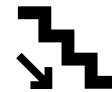


## Mosaic District:

- Walkable, mixed-use, development in Northern VA
- Financed with TIFs and supported by special assessments
- Developed in post GFC era with financial measures that anticipated downturns



## Mitigation Tools Deployed



**Analyze Downsides**



**Over-collateralize**



**Build in reserve funds**



**Reduce early cash flow pressure**



**Backstop with creditworthy sources**

Image source: <https://www.fcrevite.org/merrifield/mosaic-district>

# Project phasing and reduced early cash flow pressure helped Atlanta BeltLine weather economic shocks

5



## Atlanta BeltLine

- Transforming Atlanta's mostly abandoned freight rail corridors into a 33-mile trail network and ~22 miles of transit
- Financed with TIF and Special Assessment
- Experienced reduction in expected TIF revenues during GFC



## Mitigation Tools Deployed



Develop projects by phase



Reduce early cash flow pressure

## Mitigation Tools that could have helped, if deployed



Analyze Downsides

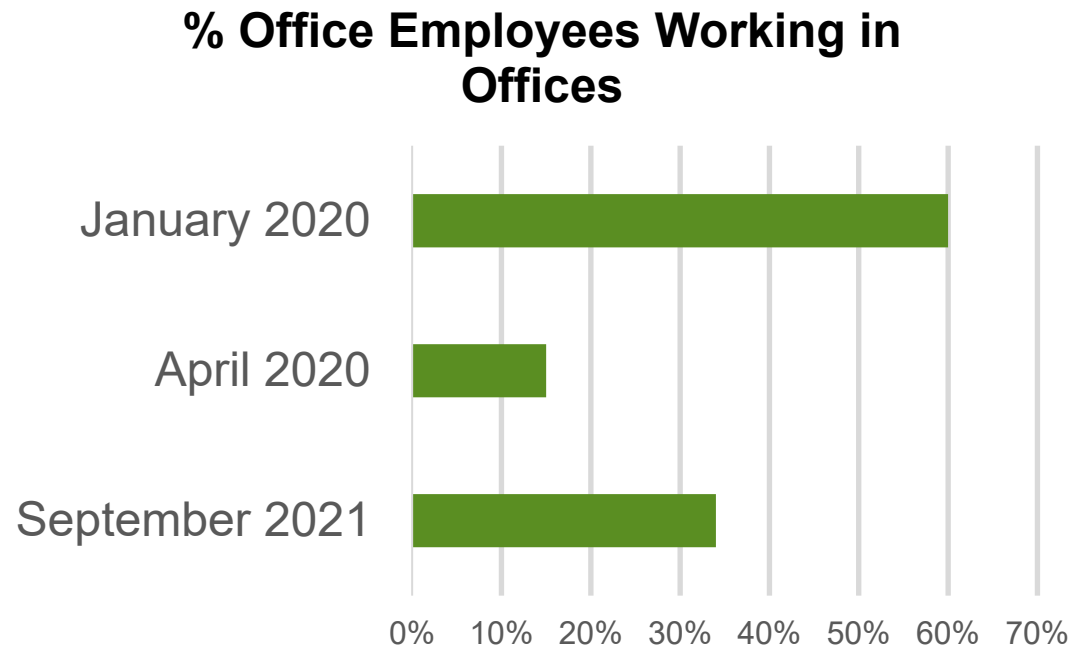
Image source: Christine Shepherd

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# The Pandemic may affect the future location of major employee occupational groups...

This will primarily affect office workers and have implications for transit and real estate



Source: Cushman & Wakefield, "Predicting the Return to the Office," September 2021, pp. 10 & 16.

**...during Pandemic, material number of employees have shifted to working from home (WFH)**

# Several studies concluded that WFH Pandemic employee productivity was same as before or higher

## 13% productivity increase

- Less break time
- Quieter work environment

Source: Bloom, Nicholas et al. "Does Working from Home Work? Evidence From a Chinese Experiment," *The Quarterly Journal of Economics* (2015), 165–218.

## 5% productivity increase

- 1/2 due to real productivity gain
- 1/2 due to reduced commute

Source: Barrero, Jose Maria, "The Work-From-Home Outlook in 2022 and Beyond," *Work From Home Research*, January 2022.

## Other evidence

- Reduced commute
- Less unproductive "water cooler talk"
- More exercise time
- Quiet spaces for complex work
- Greater work/non-work balance

Shea, Christopher, "No Commute, Less Water Cooler Talk, More Exercise, Maximum Productivity," *The Washington Post*, October 14, 2021.

# Despite what Elon Musk says, the hybrid—smaller—workplace may become the new normal

- No hybrid work → 40% of employees would seek another job\*
- Reduce space needs by 10 to 20 percent?

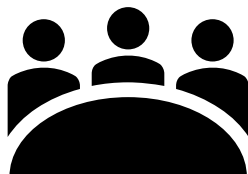
Monday	Tuesday	Wednesday	Thursday	Friday
Work	Home	Work	Work	Home

\* Source: Grant Thornton, “Grant Thornton Survey: Employees value flexibility over salary increases — one-third looking for new jobs,” October 6, 2021, p.1

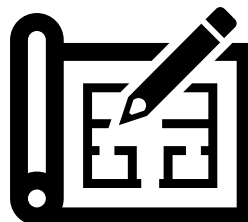


# The nature of the office—purpose, layout, location—may change

**More space for team-based work**



**New layouts: less open plan, more conference & training space**











**Changing office locations**



# White-collar employees are more likely to work outside of the office

- Long-term maybe 30% of U.S. work force will WFH some of time

Occupation	% of U.S. Workforce*	Type of Work	WFH Candidate?
White Collar	26%	 	✓
Blue Collar	23%	  	X
White Coat	52%	  	X?

\* Source: U.S. Bureau of Labor Statistics, "Labor Force Statistics from the Current Population Survey."

## In addition to office, there are other real estate sector losers and winners



Office



Food/beverage and retail



Hotels and conferencing



Residential real estate



Office to residential conversions

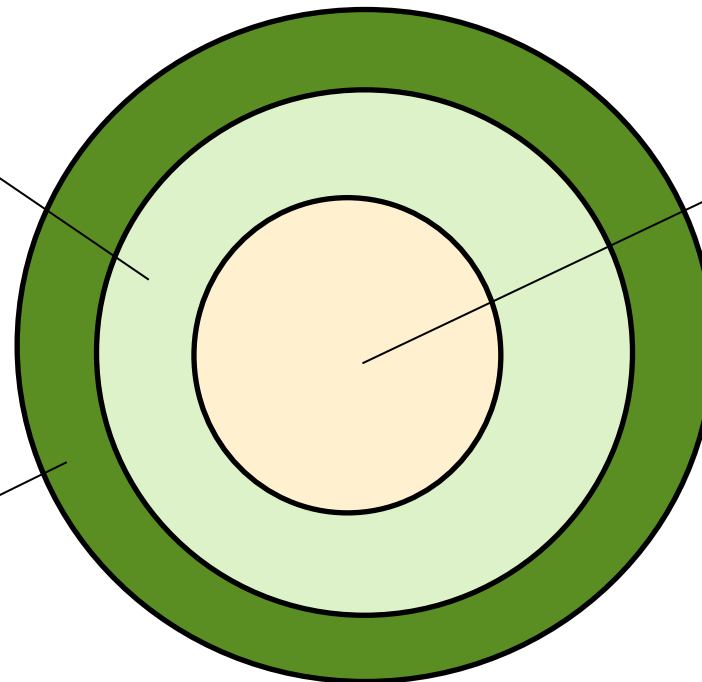


“Third location” and  
entertainment/leisure  
destinations

# Changing patterns of real estate demand within metropolitan regions may affect real estate growth

**Outer neighborhoods, inner suburbs:**  
thriving residential  
incl. multi-family, third locations,  
entertainment, office?

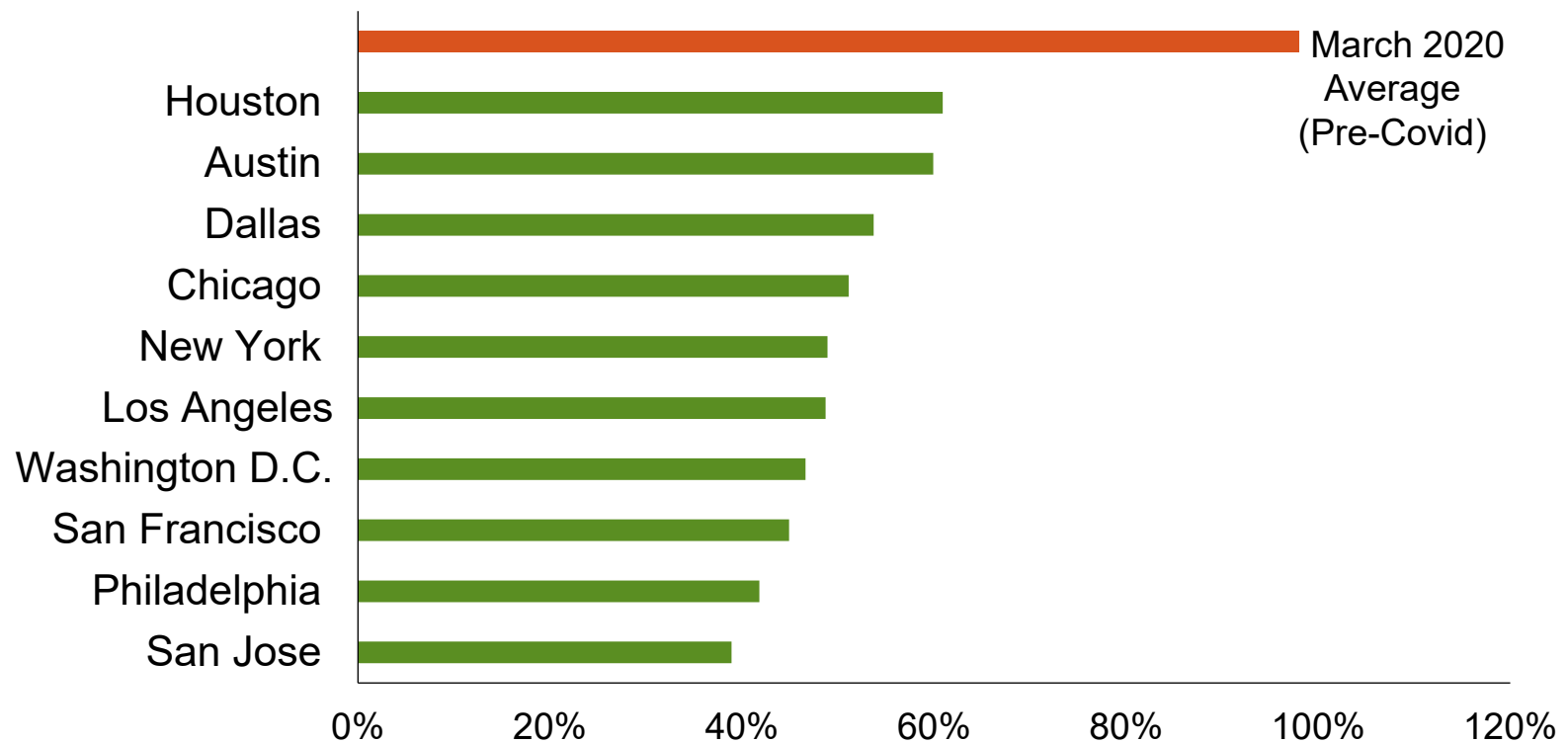
**Outer suburbs:**  
more residential?



**Downtown districts:**  
reduced office,  
retail, food;  
increased residential (incl.  
through conversions),  
entertainment

# Real estate is more complicated . . . by region (1/2)





## WORKPLACE OCCUPANCY AS OF MAY 17, 2023



Source: <https://www.kastle.com/safety-wellness/getting-america-back-to-work/>, accessed May 23, 2023

Note: Occupancy figure reflects swipes of Kastle access controls

# Real estate is more complicated . . . other nuances (2/2)

<b>LEED</b>	Quality/LEED buildings leased more
	Also, buildings maximizing health and safety
	Older, poor-quality buildings conversion candidates?
	Big tech share increasing, including laboratory
	Properties with strong transit accessibility still more attractive

# Impacts to real estate, transit, and value capture

## Real estate:

- Office occupancy impaired as firms go hybrid
- Reduction of office days  $\neq$  1:1 leasing decline
- Changing locations



Transit: fewer passengers and diminished joint development interest in certain locations

## Value capture:

- Lower property value appreciation dampens tax increment finance
- Lower assessments hurts special assessments
- Fewer eyeballs decreases naming rights \$



# Links to Resources

- Managing Economic Shocks to Value Capture-Funded Projects:  
[https://www.fhwa.dot.gov/ipd/value\\_capture/vcsp/fhwa\\_hin\\_22\\_002/executive\\_summary.aspx](https://www.fhwa.dot.gov/ipd/value_capture/vcsp/fhwa_hin_22_002/executive_summary.aspx)
- General Resources on Value Capture:  
[https://www.fhwa.dot.gov/ipd/value\\_capture/resources/value\\_capture\\_resources/general.aspx](https://www.fhwa.dot.gov/ipd/value_capture/resources/value_capture_resources/general.aspx)
- Value Capture Toolkit:  
[https://www.fhwa.dot.gov/ipd/value\\_capture/toolkit/](https://www.fhwa.dot.gov/ipd/value_capture/toolkit/)



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