



# Value Capture Implementation Manual (VCIM) *Overview*

*November 19, 2019  
1:00 PM – 2:30 PM EST  
Webinar*

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**Federal Highway  
Administration**

# Presenters

## Stefan Natzke

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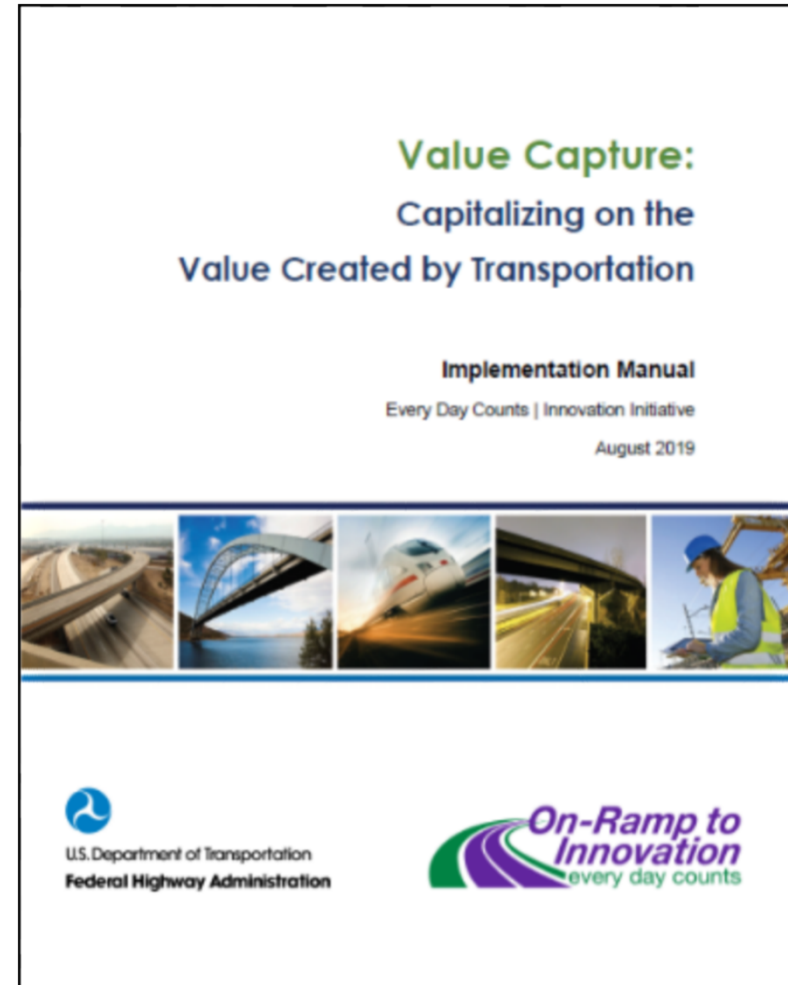
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Principal  
IMG Rebel Advisory, Inc.

# Purpose of presentation

- Overview of and background to Value Capture Implementation Manual (VCIM)
- What is value capture and what problems does it address?
- What are key value capture techniques covered in VCIM?
- What are key implementation issues related to each technique and value capture in general?



[www.fhwa.dot.gov/ipd/pdfs/value\\_capture/value\\_capture\\_implementation\\_manual\\_2019.pdf](http://www.fhwa.dot.gov/ipd/pdfs/value_capture/value_capture_implementation_manual_2019.pdf)



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# Every Day Counts-5

# ASCE 2017 Report Card



America's Cumulative Infrastructure Grade

**D+**

A	EXCEPTIONAL
B	GOOD
C	MEDIOCRE
D	POOR
F	FAILING

# Capacity and conditions challenges



- Two out of every five miles of America's urban interstates are congested
- One out of every five miles of highway pavement is in poor condition
- 47,000 bridges in poor condition and 43% (260,000 bridges) are over 50-year old
- Pedestrian deaths on US roads increased 11% since 2015; (5,977 in 2017)

# Transportation agencies face funding challenges

- ✓ Eroding infrastructure diminishes mobility, public safety, and quality of life
- ✓ Governments often struggle to mobilize necessary funds to maintain, rebuild and expand their local transportation networks
- ✓ Public monies may be insufficient
- ✓ Debt ceilings may prevent local authorities from financing

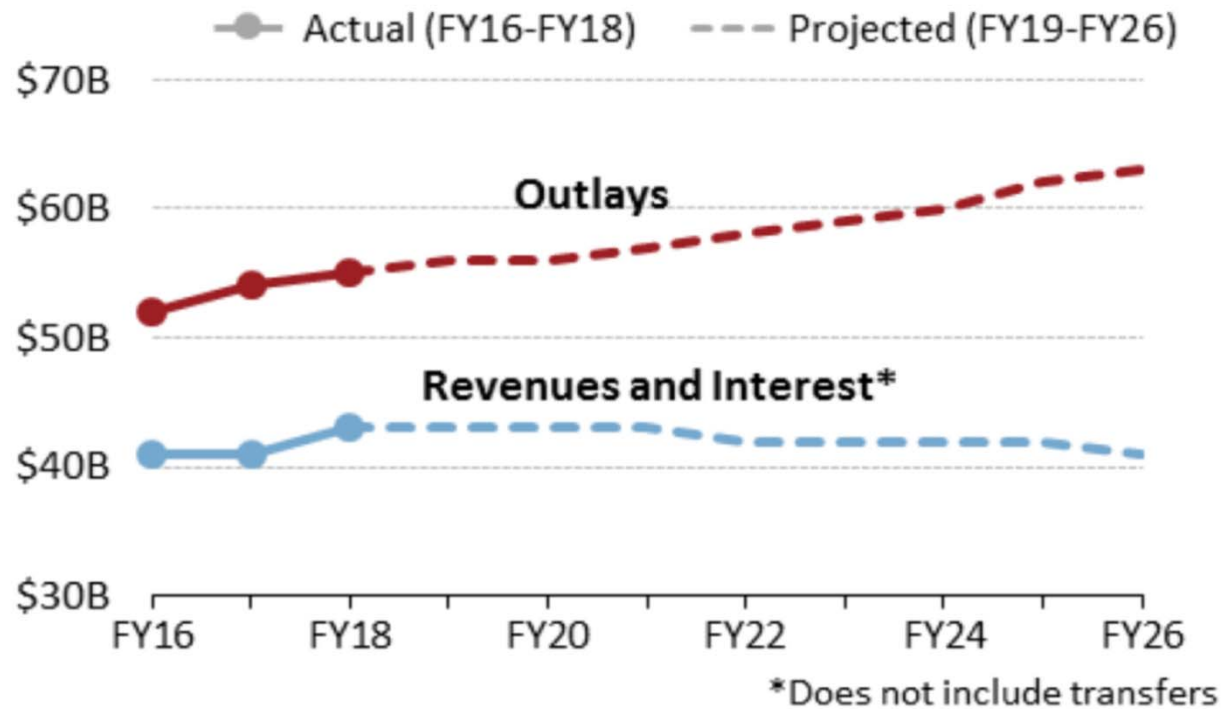


**Mileage by Federal-aid & non-Federal-aid**

Ownership	Federal-Aid Highways	Non-Federal-Aid Highways	Total
Rural	668,082	2,280,612	2,948,696
Urban	359,767	875,245	1,235,012
Total Rural & Urban	1,027,848	3,155,858	4,183,707



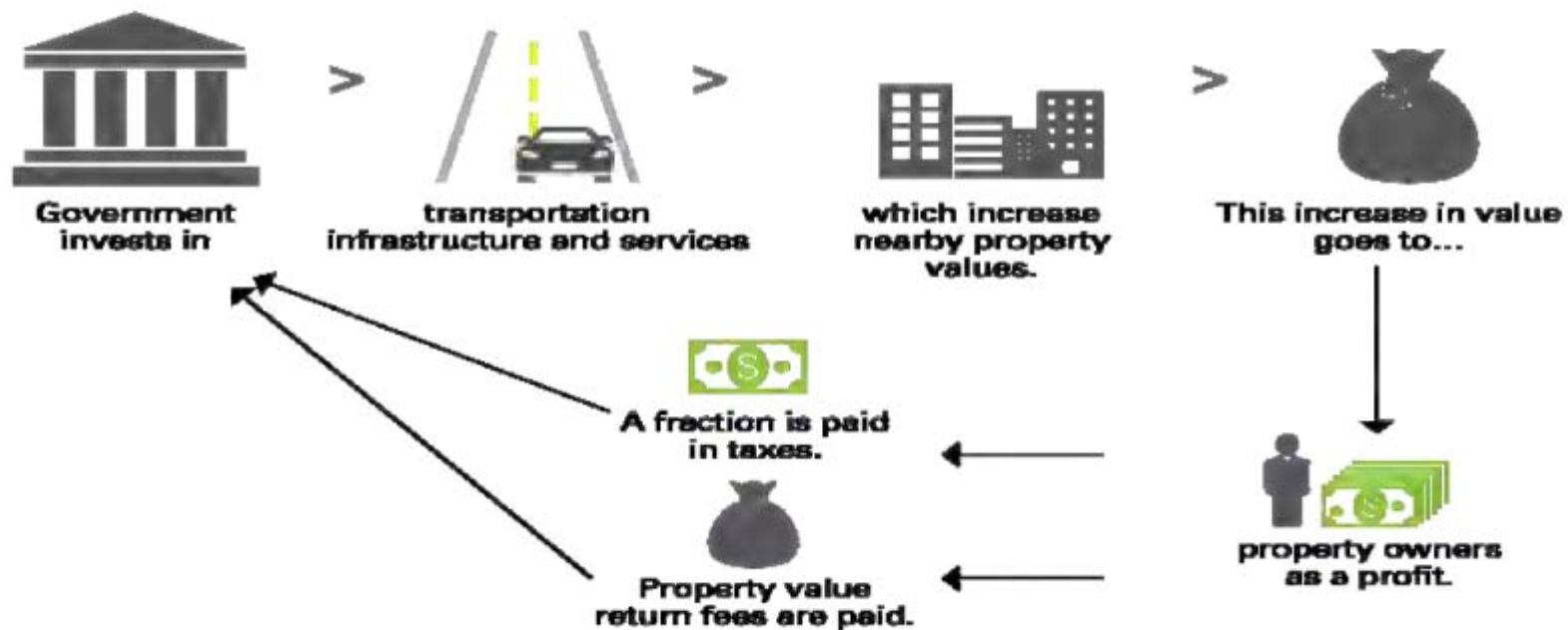
# Highway Trust Fund



**Source:** CBO, Highway Trust Fund Accounts—January 2019 Baseline.

# What is Value Capture?

“Value capture” refers to a toolbox of strategies used by public agencies to recover a portion of the increased property value created as a result of public infrastructure investment.



Source: NCHRP Research Report 873

# Value Capture Can.....



## Value Capture



**Value capture projects can recover up to 50% or more of overall project costs**

Can support multimodal projects



**Revenues captured are a portion of the benefit landowners receive**

Facilitates better land use and transportation planning



**Creates sustainable revenue sources**

TIFs don't raise taxes; they expand the tax base



**Can fund capital projects, as well as maintenance and operations**

Appropriate for all roads, from Interstate highways to local roads



**There are techniques available appropriate to urban, suburban, and rural settings**

Promotes efficient land use



# What is “*Every Day Counts*”(EDC)?

- ✓ State-based model to identify and rapidly deploy proven but underutilized innovations to:
  - ✓ Shorten the project delivery process
  - ✓ Enhance roadway safety
  - ✓ Reduce congestion
  - ✓ Improve environmental sustainability
  
- ✓ EDC Rounds: Two year cycles
- ✓ Initiating 5<sup>th</sup> Round (2019-2020) - 10 innovations
- ✓ To date: 4 Rounds, over 40 innovations

*For more information:* <https://www.fhwa.dot.gov/innovation/>

*FAST Act, Sec. 1444*

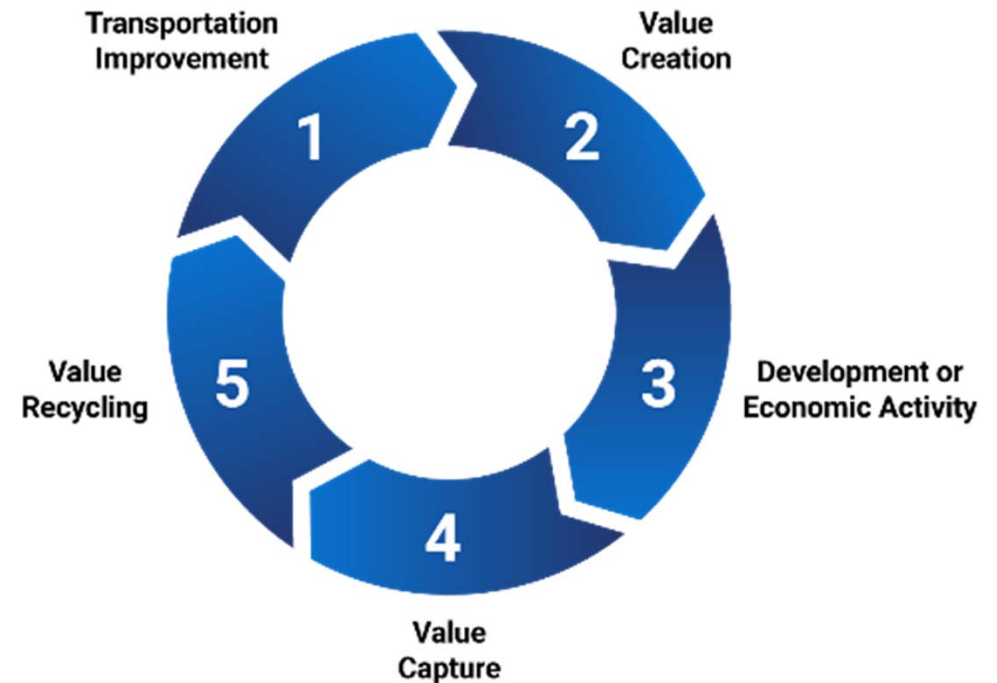


# Technical Work Group (TWG)

- Jennifer Ahlin, Virginia Department of Transportation
- Rafael Aldrete, Texas A&M Transportation Institute
- William Ankner, Transportation Solutions
- Rabinder Bains, Federal Transit Administration
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- Michael Weaver, Prime Strategies, Inc.
- Gregory Wilkens, Butler County, Ohio

# Value capture may address funding and other objectives


- ✓ Raise critical funding for projects
- ✓ Enhance and speed-up project delivery
- ✓ Advance equity objectives and build community support through “beneficiary pays” principle



# Additional Value Capture Resources

FHWA Home / OIPO / Accelerating Innovation / Every Day Counts / EDC-5: Value Capture: Capitalizing on the Value Created by Transportation

CAI Home [Every Day Counts](#) STIC Network AID Demonstration AMR Program Resources



## Value Capture: Capitalizing on the Value Created by Transportation

**Strategies for agencies to recover a portion of public transportation investments that result in increased land values.**

Public investment in transportation assets that improve access and increase opportunity benefits adjacent property owners through greater land value and other economic impacts. Many techniques are available to the public sector to share in a portion of this increased land value to build, maintain, or reinvest in the transportation system.

**Value capture** begins with the assessment created by the access transportation provides. Value is then enhanced through private sector investment and economic development enabled by the public investment. A portion of that appraisal created by the infrastructure can be "captured" by the public sector to reinvest in, operate, or maintain transportation infrastructure. These principles can be applied to most development scenarios, whether new infrastructure for new land development or rebuilt infrastructure in dense urban areas.

Both the planning and implementation for value capture rely primarily on local government initiatives. For these local public agencies, value capture provides the opportunity to raise

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## Resources

# FHWA Office of Innovative Program Delivery Center for Innovative Finance Support

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IFS Home Project Profiles Fact Sheets FAST Act Glossary Resources Site Directory Website Feedback

PUBLIC PRIVATE PARTNERSHIPS (P3) ALTERNATIVE PROJECT DELIVERY PROJECT FINANCE TOLLING AND PRICING VALUE CAPTURE

## Value Capture

**JUST ANNOUNCED!** [Value Capture Implementation Manual Webinar - November 19, 2019](#)

There are a variety of mechanisms that may be used to derive monetary value from transportation improvements to help defray the cost of their implementation.

Value capture strategies can be used to help pay for roadway and transit improvements by leveraging localized benefits. While more common with transit projects, value capture techniques may also be used with highway improvements, as is the case with the San Joaquin Toll Road in southern California and E-470 outside Denver, Colorado. Most value capture revenue is generated at the state or local level. The FHWA Center for Innovative Finance Support



I-15 Express Lanes Project - Riverside County, California

### LEARN MORE ABOUT VALUE CAPTURE

- [Value Capture Defined](#)
- [Transit-Oriented Development](#)
- [Traditional Transportation Revenue Sources](#)
- [Legislation](#)
- [Capacity Building](#)
- [Resources](#)
- [Value Capture Highlights](#)
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# Value Capture Implementation Manual (VCIM) Overview

# Intended VCIM audience

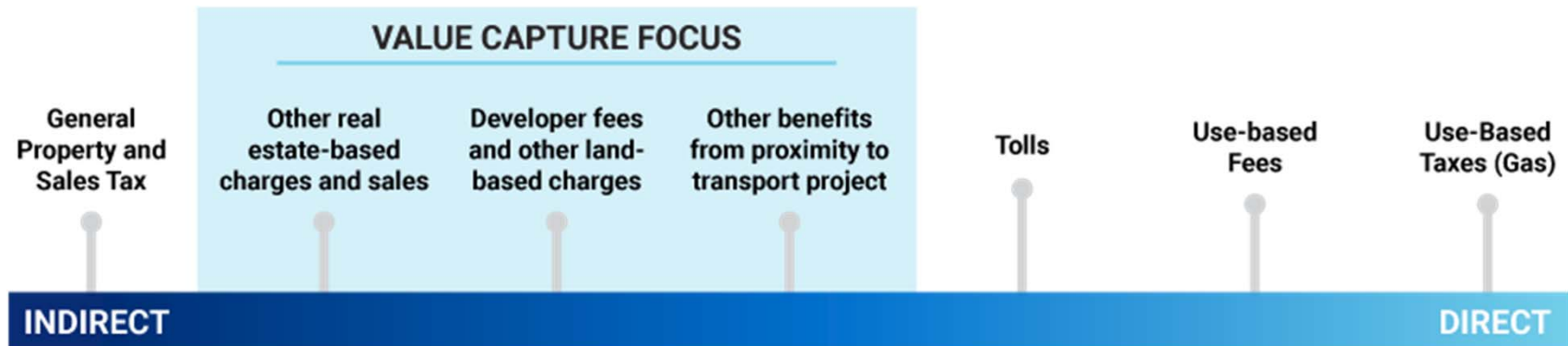
- ✓ Manual serves practitioners involved in planning and implementation process for specific project
- ✓ Practitioners include public sector practitioners and partners across all levels of government, including:
  - ✓ Local, regional, and tribal governments
  - ✓ State governments
  - ✓ Stakeholders
  - ✓ Private developers

# VCIM organization



# Value capture can complement traditional funding sources

- ✓ Value capture techniques are **complement to** and not a **substitute for** traditional funding sources
- ✓ Value capture techniques are one part of overall funding and financing solution for transportation project





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***On-Ramp to  
Innovation***  
every day counts

**The Details...**

# Value capture attractive since indirect & innovative; implementation is involved

	Funding Sources		Financing Mechanisms
	<i>Direct System Revenues</i>	<i>Other, Indirect Sources</i>	
TRADITIONAL	<ul style="list-style-type: none"> <li>• Direct user-fees (tolls)</li> <li>• Indirect Revenue:               <ul style="list-style-type: none"> <li>○ Traditional advertising</li> <li>○ Parking</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• State/Local:               <ul style="list-style-type: none"> <li>○ Appropriations</li> <li>○ Sales taxes</li> <li>○ Other local taxes (gas, lodging, rental car)</li> </ul> </li> <li>• Federal funds</li> </ul>	<ul style="list-style-type: none"> <li>• Pay-as-you-go</li> <li>• Tax-exempt and taxable bonds</li> <li>• Bank loans</li> </ul>
INNOVATIVE	<ul style="list-style-type: none"> <li>• Concessions</li> <li>• Parking innovations</li> <li>• Innovative advertising</li> </ul>	<ul style="list-style-type: none"> <li>• Value capture:               <ul style="list-style-type: none"> <li>○ Developer contributions</li> <li>○ Transportation Utility Fees</li> <li>○ Special taxes &amp; fees</li> <li>○ Joint development</li> <li>○ Incremental growth techniques (TIF)</li> <li>○ Naming rights</li> </ul> </li> <li>• Partner agencies tolls</li> </ul>	<ul style="list-style-type: none"> <li>• Innovative finance:               <ul style="list-style-type: none"> <li>○ TIFIA/RRIF</li> <li>○ Tax credit loans</li> <li>○ SIBs</li> <li>○ Section 129 Loans</li> </ul> </li> <li>• Via P3 delivery:               <ul style="list-style-type: none"> <li>○ Private activity bonds</li> <li>○ Availability/Milestone payments</li> <li>○ Private equity</li> </ul> </li> </ul>

# Value capture techniques can be grouped in six major categories

Category	Mechanism Included
1. Developer Contributions	Impact Fees
	Negotiated Exactions
2. Transportation Utility Fees	Transportation Utility Fees
3. Special Taxes and Fees	Special Assessment District
	Business Improvement District
	Land Value Tax
	Sales Tax District
4. Tax Increment Financing	Tax Increment Financing
5. Joint Development	At-Grade Joint Development
	Above-Grade Joint Development
	Utility Joint Development
6. Advertising & Naming Rights	Naming Rights

# Value capture techniques' key features

	Capex or O&M	Use for Highways and Roads	Funding or Financing	Revenue Potential	Timing of Revenue Received
Impact Fees	Capex	✓ ✓	Funding	✓ ✓	Immediate
Negotiated Exactions	Capex	✓ ✓	Funding	✓ ✓	Immediate
Transportation Utility Fees	O&M	✓ ✓ ✓	Funding	✓	Delayed
Special Assessment Districts	Capex	✓	Funding & Financing	✓ ✓ / ✓ ✓ ✓ □	Delayed
Business Improvement Districts	O&M and Capex	✓	Funding	✓	Immediate
Land Value Taxes	Capex / O&M	✓	Funding	✓ ✓ ✓	Delayed
Sales Tax Districts	Capex	✓ ✓	Financing	✓ ✓ ✓	Delayed
Tax Increment Financing	Capex	✓ ✓	Funding & Financing	✓ ✓ / ✓ ✓ ✓ □	Delayed
Joint Development	Capex	✓ ✓	Funding & Financing	✓ ✓	Immediate or delayed
Naming Rights	Capex / O&M	✓ ✓	Funding	✓	Immediate



# Developer contributions

A payment from developer to public agency to fund portion of infrastructure or services required for new development

Useful when development creates demands on existing infrastructure:

- ✓ Opportunities: Economically efficient, relatively easy to implement, and often well-understood by public. Because collected upfront, agencies can access these funds earlier than other sources
- ✓ Challenges: Estimating cost impact of new development and resistance from developers



**Osceola County, Florida** has taken advantage of transportation impact fees to facilitate construction of key bridge and roadway infrastructure for three decades. The fees were implemented in 1990 to address rapid growth of county, which had led to **severe traffic issues** and citizen frustration. Osceola County has **leveraged mobility fees** to streamline delivery of critical transport infrastructure through its **\$1 billion roadway and bridge program**, entirely funded by impact fees.

# Transportation utility fees

A periodic fee paid by a property owner or a building occupant to a municipality based on use of the transportation system

Option to fund road maintenance:

- ✓ Opportunities: May be more equitable and economically efficient than funding maintenance through property taxes
- Challenges: May face upfront administrative burden and outreach issues in educating stakeholders on cost calculation formula



**Tualatin County, OR** created six non-residential groups, plus an all-encompassing group and applied the average trip-generation rate to various uses that fell within a broad range. Wholesalers in Medford, OR rejected the new transportation utility fee, arguing that they should not have been with retailers that generate many more trips. This type of protest has led similar jurisdictions to cap cost calculation formula.

# Special taxes and fees

Includes special assessment districts, business improvement districts, land value taxes, sales tax districts

Useful when substantial funding is required for investment that is expected to generate property value increases that land-owners can tangibly recognize:

- ✓ Opportunities: May generate substantial revenues to fund and finance large projects
- ✓ Challenges: Requires significant outreach and implementation costs may be higher

**The Seattle, South Lake Union Streetcar**, which was completed in 2007, was part of a larger investment intended to revitalize the South Lake Union neighborhood in Washington. Property owners approved a local improvement district, which contributed almost half of the total project cost of \$56 million.



*Seattle South Lake Union Streetcar*

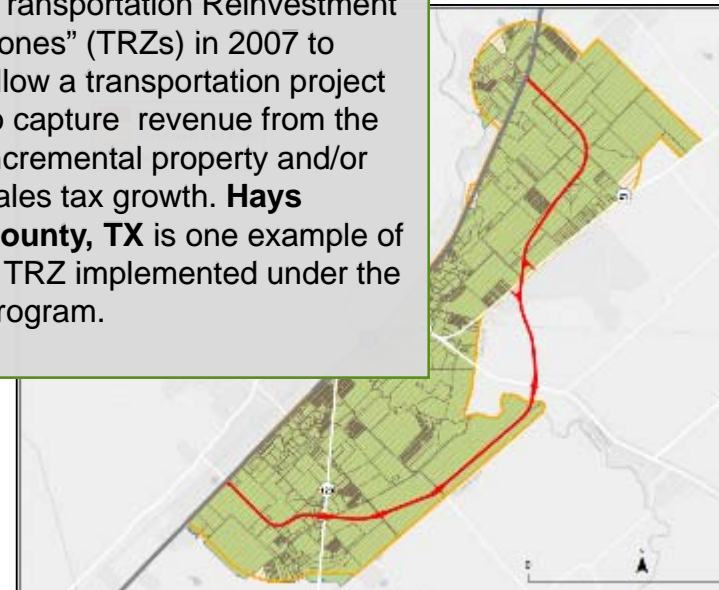
# Tax increment financing

District in which incremental property tax value increases from infrastructure investment are captured

Appropriate where projects would not otherwise occur, and the market value of development is raised by use of tax increment financing (TIF)

- ✓ Opportunities: Can raise revenues for capital projects through revenue-backed bonds in some cases
- ✓ Challenges: Requires significant institutional capacity to manage public outreach issues

**The State of Texas** enabled “Transportation Reinvestment Zones” (TRZs) in 2007 to allow a transportation project to capture revenue from the incremental property and/or sales tax growth. **Hays County, TX** is one example of a TRZ implemented under the program.



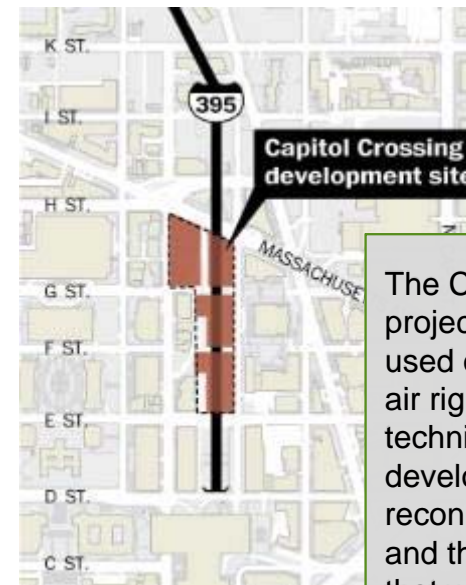
*Hays County Transportation Reinvestment Zone Map*

# Joint development

Public agency partners with developer to improve use of land near, below, or above infrastructure facility

Agencies may consider at-grade or above-grade joint development (JD) to fund transportation, including those bettering linking neighborhoods:

- ✓ Opportunities: At-grade and above grade JD can increase impact of key infrastructure and revitalize distressed areas
- ✓ Challenges: Agencies must take care to ensure these projects do not worsen equity issues



*Capitol Crossing Development Site*

The Capitol Crossing project in **Washington, DC** used of property taxes and air rights as funding techniques for a real estate development. The project reconnects the Capitol Hill and the East End areas that were cut off from each other by the construction of I-395 in the late 1960s. It forms a first of its kind “ecodistrict” in Washington.

# Advertising and naming rights

Public agency sells rights to name infrastructure or advertising space or media to private company

Agencies may consider naming rights for transit stations, rest stations, and agency fleets to raise funds:

- ✓ Opportunities: Can raise moderate sums of money for transportation projects
- ✓ Challenges: Must be weighed against reputational risks
- ✓ Advertising and naming rights agreements may be related

**Ohio** DOT entered into a ten-year, \$8.65 million agreement to advertise on its safety patrol vans in 2014, which provide assistance to motorists at crash sites.



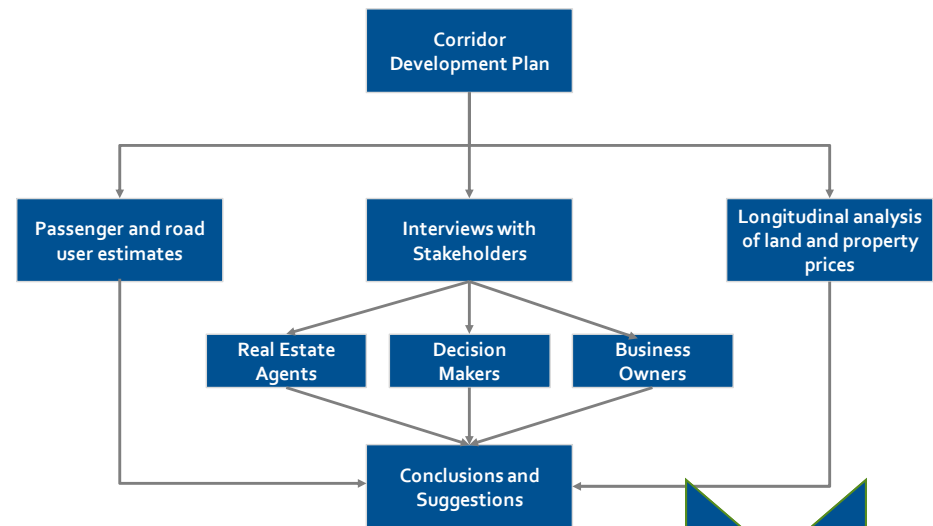
*Example of a branded safety patrol vehicle*

# Develop business and economic case

- Governments set policy, goals, objectives, and key performance indicators which form basis of policy case for project
- These are linked to business case for value capture technique, through allocation of costs and risks
- Business case consists of economic cost-benefit analysis, and alignment with stakeholder objectives
- Stakeholder input is key in planning and business case development process

Chapter includes:

- ✓ Defining goals & objectives
- ✓ Business and economic case development
- ✓ Preliminary planning and design considerations
- ✓ Involving stakeholders in planning process



*Business Case Development Process*

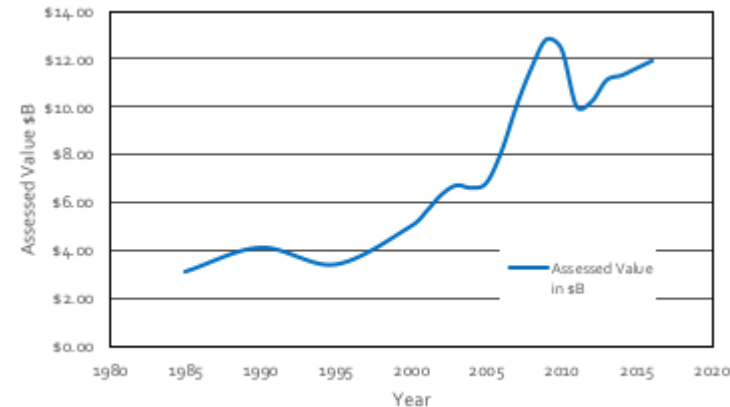
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# Address real estate risk

- Most value capture techniques are dependent on value creation through real estate development
- Real estate markets consist of several sectors, each of which respond differently to new transportation
- Local and macro factors play a role in determining real estate growth
- Real estate prices move in long cycles, so that understanding the cycle is important

Chapter includes:

- ✓ Drivers of real estate market
- ✓ Real estate cycle
- ✓ Local market
- ✓ Market around transportation facilities
- ✓ New urbanism, density, and value capture
- ✓ Timing
- ✓ Implementation steps



*Dulles Metrorail District Taxable  
Property Assessed Value*



# Establish regulatory framework

Successful value capture requires effective enabling environment and supportive public policy at multiple levels

Chapter includes:

- ✓ Local regulations, planning, and zoning
- ✓ State regulations
- ✓ Federal regulations
- ✓ Environmental review

## Key Questions

### Local Regulations

- What is local taxation and spending authority?
- How to address conflicts among overlapping jurisdictions?
- What are zoning regulations?

### State Regulations

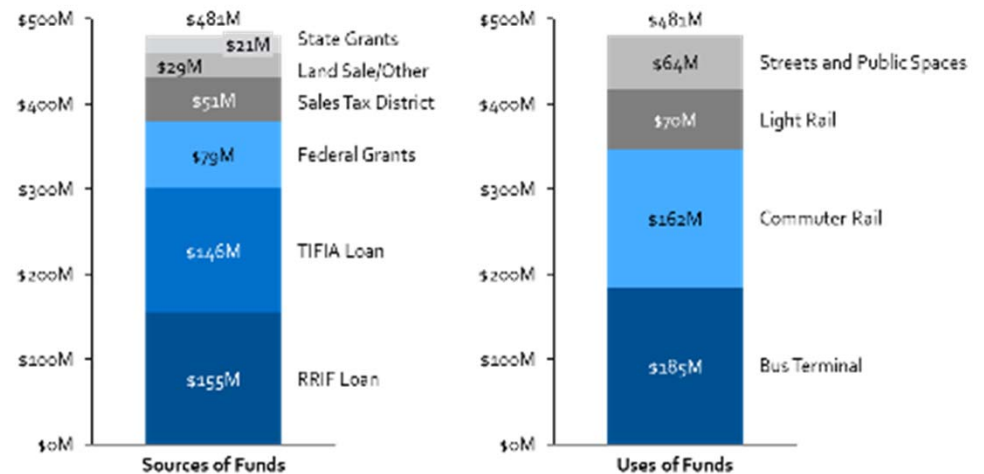
- Are public-private partnership regulations in place?
- Does current legislation enable this type of value capture?
- Does city have state's authority to raise funds in this manner?
- Are there restrictions around use of taxes or fees?
- Does state government have jurisdiction over this project?
- Does this project clearly comply with all state regulations?

# Implement funding and financing plan

- Start with assessment of financing options available
- Project value capture revenues over time
- Implement plan to collect and utilize revenues, and ensure that they are spent appropriately
- Describe risks associated with value capture revenues and how these risks can be mitigated through thorough analysis

Chapter includes:

- ✓ Financing considerations
- ✓ Developing value capture funding and financing plan
- ✓ Revenue collection
- ✓ Using revenue



*Denver Union Station Financing Plan*

# VCIM case studies illustrate most techniques and major issues

Case	Type(s) of VC Technique	Mode(s) of Transportation	Development Type
Atlanta, G Beltline Tax Increment Financing District	Tax Increment Financing	Highway, Transit, Multimodal	Urban
Bellevue, W Bel Red Impact Fees	Impact Fees	Multimodal, Road	Suburban
Bozeman, MT Impact Fees	Impact Fees	Road, Highway, Multimodal	Suburban, Rural
Columbus, OH Cap Joint Development	Above-Grade Joint Development	Highway	Urban
Washington, D.C. Capitol Crossing Joint Development	Above-Grade Joint Development	Road, Highway	Urban
Colorado E-470 Toll Road and Vehicle Registration Fees	Negotiated Exaction, Impact Fees, Sales Tax District (Vehicle Registration)	Highway	Suburban, Rural
Hays County, TX Transportation Reinvestment Zones	Tax Increment Financing	Highway	Suburban, Rural
Virginia Dulles Metrorail Special Assessment District	Special Assessment District	Transit	Urban, Suburban
Missouri US-63 Sales Tax District	Sales Tax District	Highway	Rural
Virginia Route 28 Special Tax District	Special Assessment District	Highway	Suburban, Rural



# Case Study 1: E-470 toll road with vehicle registration & impact fees + developer support

Beyond toll revenues, project also received material support from impact fee, vehicle registration fees, and developer contributions:

- ✓ Vehicle registration fees were material early revenue source
- ✓ Highway expansion fee played small role
- ✓ Developers donated ROW and advocated for project
- ✓ E-470 Authority leveraged land to locate solar panels and cell towers, adding additional revenues

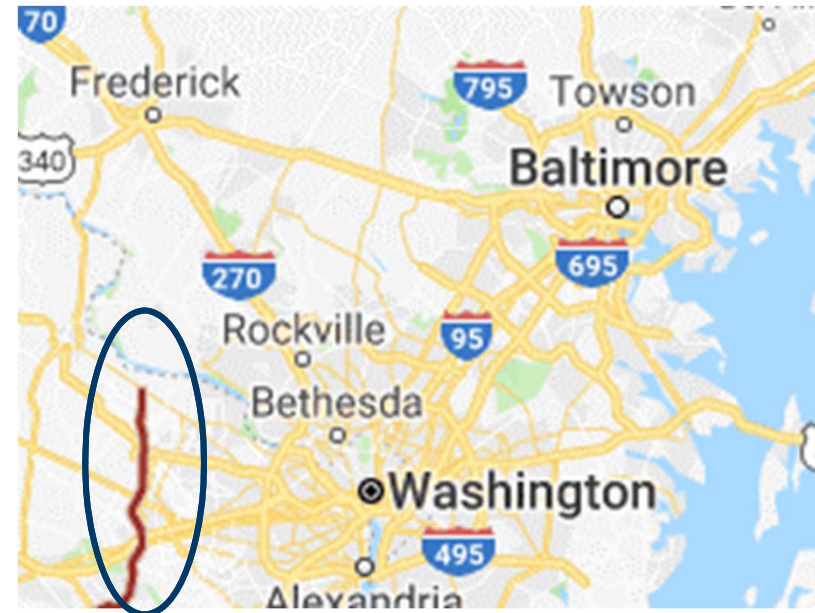


*E-470 alignment, interchange locations and connecting roads*

# Case Study 2: Virginia Route 28 special tax district

Illustrates how special tax districts can be financed fostering highway construction:

- ✓ Successful SAD requires consent of 51% of landowners
- ✓ Due to real estate downturn, real estate-related revenues were inadequate to pay for debt service during early years of project, so that it had to rely on **backstop** and funding support from public agencies

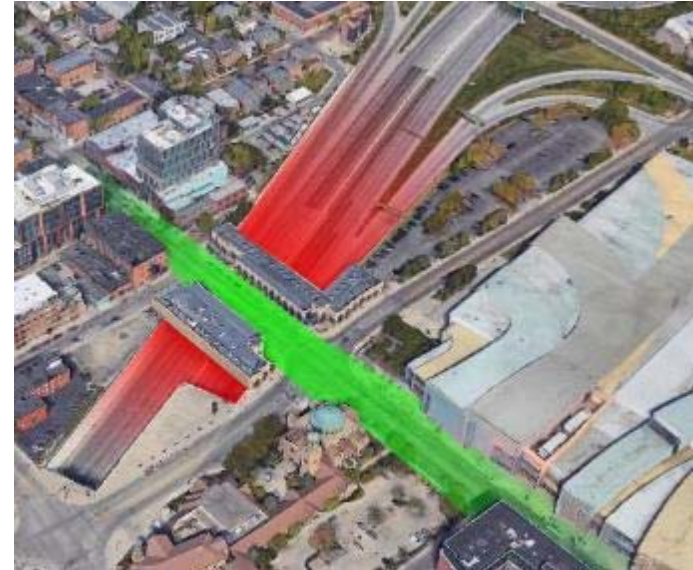


*Location of Route 28 in DC Metro Area*

# Case Study 3: The Cap at Union Station joint development

Governments and developers can utilize above grade joint development to fund infrastructure and reconnect divided neighborhoods:

- ✓ **Interstate widening projects can contribute to urban renewal** with limited incremental public cost
- ✓ **Community groups** originally opposed I-670 widening but **were appeased** with cap that increased urban walkability and provided accessibility cut off neighborhood
- ✓ **Retailers** are willing to pay premium for locations with high accessibility and cachet



*Cap at Union Station from above*

# Case Study 4: Atlanta Beltline tax increment financing district

Highlights use of tax increment financing for trail, future streetcar, and roadway improvement project:

- ✓ **Coalitions** can create self-sustaining cycle to overcome inertia
- ✓ **Strong execution** bolsters project's resilience; project survived 2007-2009 recession in part that project was well underway and benefits were evident to all stakeholders
- ✓ Stakeholders must be open to creative solutions to overcome differences, including funding allocation



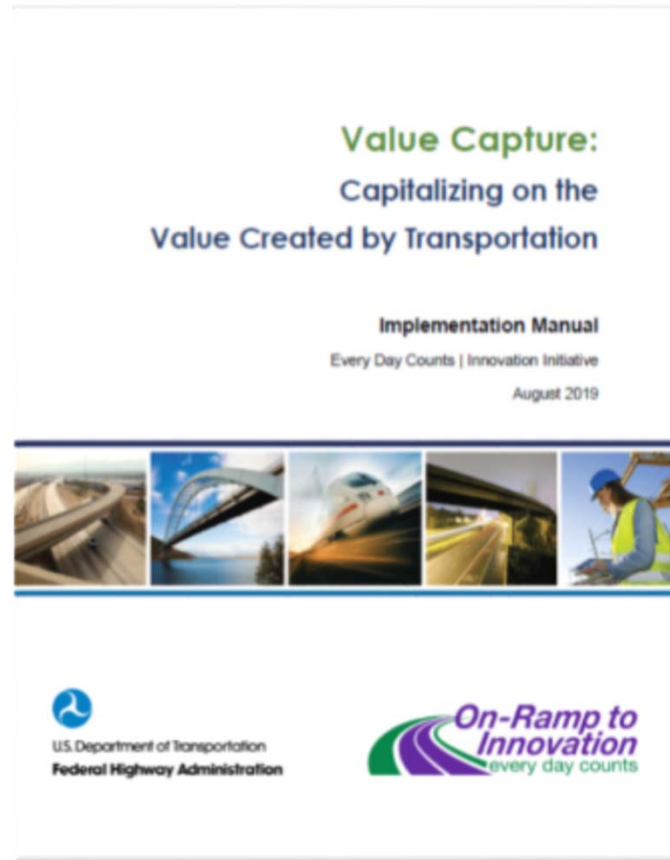
*Atlanta Beltline Map*

# Concluding thoughts

- Value capture presents an opportunity to **meet funding challenges** for transportation projects at a local and state level and deliver on public policy objectives
- While value capture can contribute significant revenue to projects for both capital and operating needs, it usually **supplements, rather than replaces**, traditional funding sources
- As shown through multiple case studies, it is critical for sponsors of projects involving value capture techniques to **involve stakeholders** and foster public involvement
- **Careful planning and implementation** is required to deliver on the potential benefits of value capture. This includes awareness of the economic, legal, and delivery implications of the various value capture techniques



# Any questions?



# Value Capture Program - Leads

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