

Center for Accelerating Innovation



U.S. Department  
of Transportation

**Federal Highway  
Administration**



# *Capital Improvement Programs*

# Disclaimer

The contents of this presentation do not have the force and effect of law and are not meant to bind the public in any way. This presentation is intended only to provide information and clarity to the public regarding existing requirements under the law or agency policies. Value capture techniques and policies are often implemented outside of Federal funding or regulatory requirements.

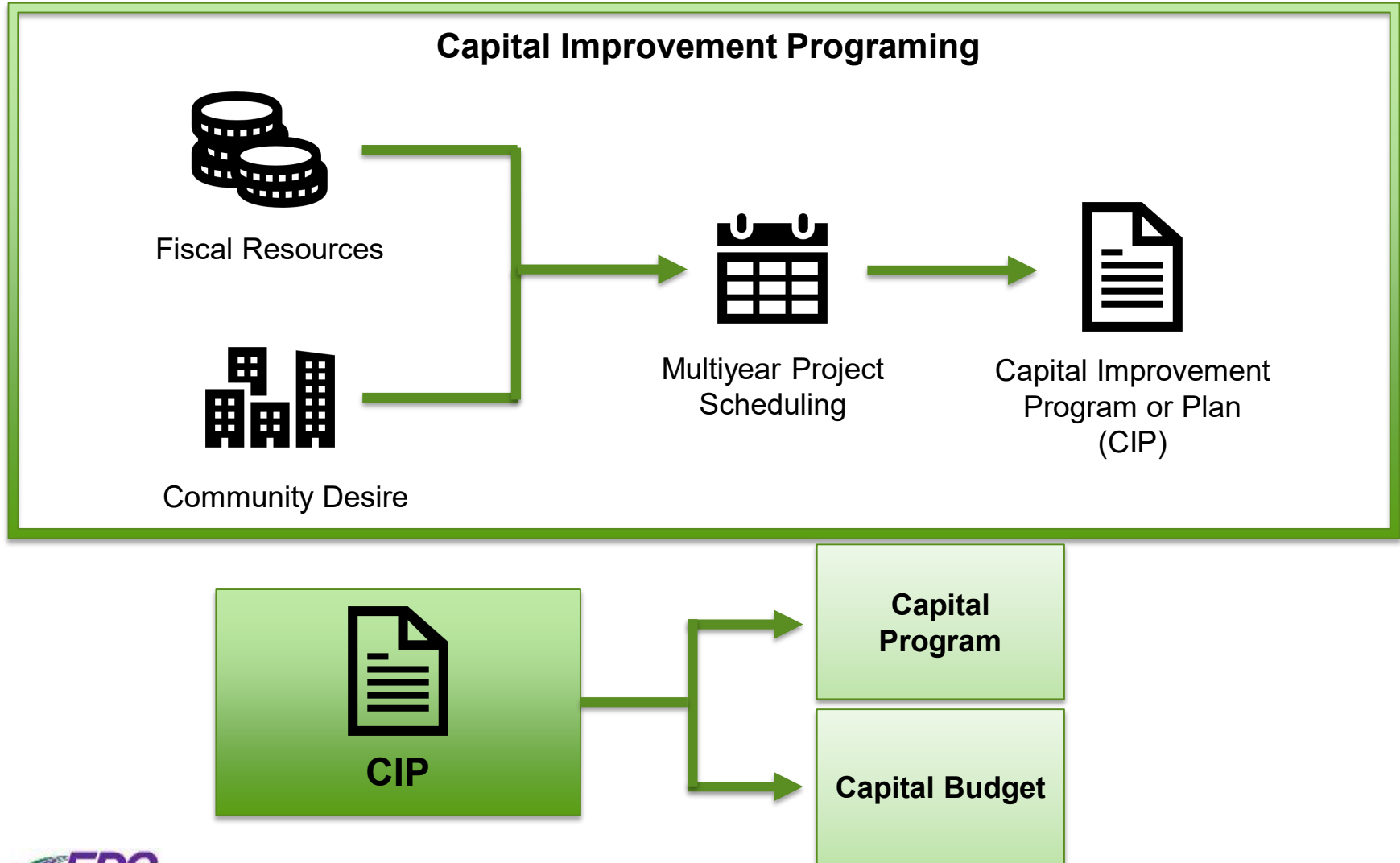
# Presentation Outline

- ① Overview
- ② Implementation
- ③ Legal Framework
- ④ Opportunities and Challenges
- ⑤ Value Capture Techniques in the CIP
- ⑥ Case Studies

# Presentation Outline

- ① Overview
- ② Implementation
- ③ Legal Framework
- ④ Opportunities and Challenges
- ⑤ Value Capture Techniques in the CIP
- ⑥ Case Studies

# Overview: Capital Improvement Programing



# Overview: CIP Objectives



CIP

- 1 Implementation of the comprehensive plan goals
- 2 Ensure timely construction or renovation of infrastructure to provide the LOS identified in the comprehensive plan
- 3 Identify funding sources for each capital improvement
- 4 Provide a baseline (recommended capital budget) for the annual budget
- 5 Coordinate capital and operating budgets
- 6 Create transparency around the process of selection and funding of capital projects considering public inputs
- 7 Inform the public about future needs and capital improvements

# Overview: CIP Elements



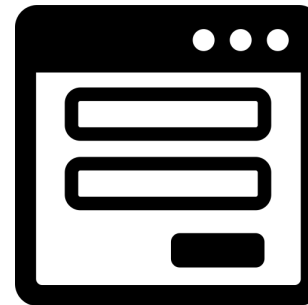
Narrative



Prioritized list of  
projects and  
cost estimates

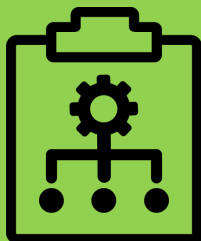


Funding  
Sources



Project Detail  
Forms

# Overview: CIP Uses



## Planning Tool

- Implement comprehensive plans
- Implement transportation plans



## Fiscal Management tool

- Identify capital needs in advance allowing time to secure state and federal funds
- Monitor ongoing projects in terms of schedule, costs, and financial status



## Budget Tool

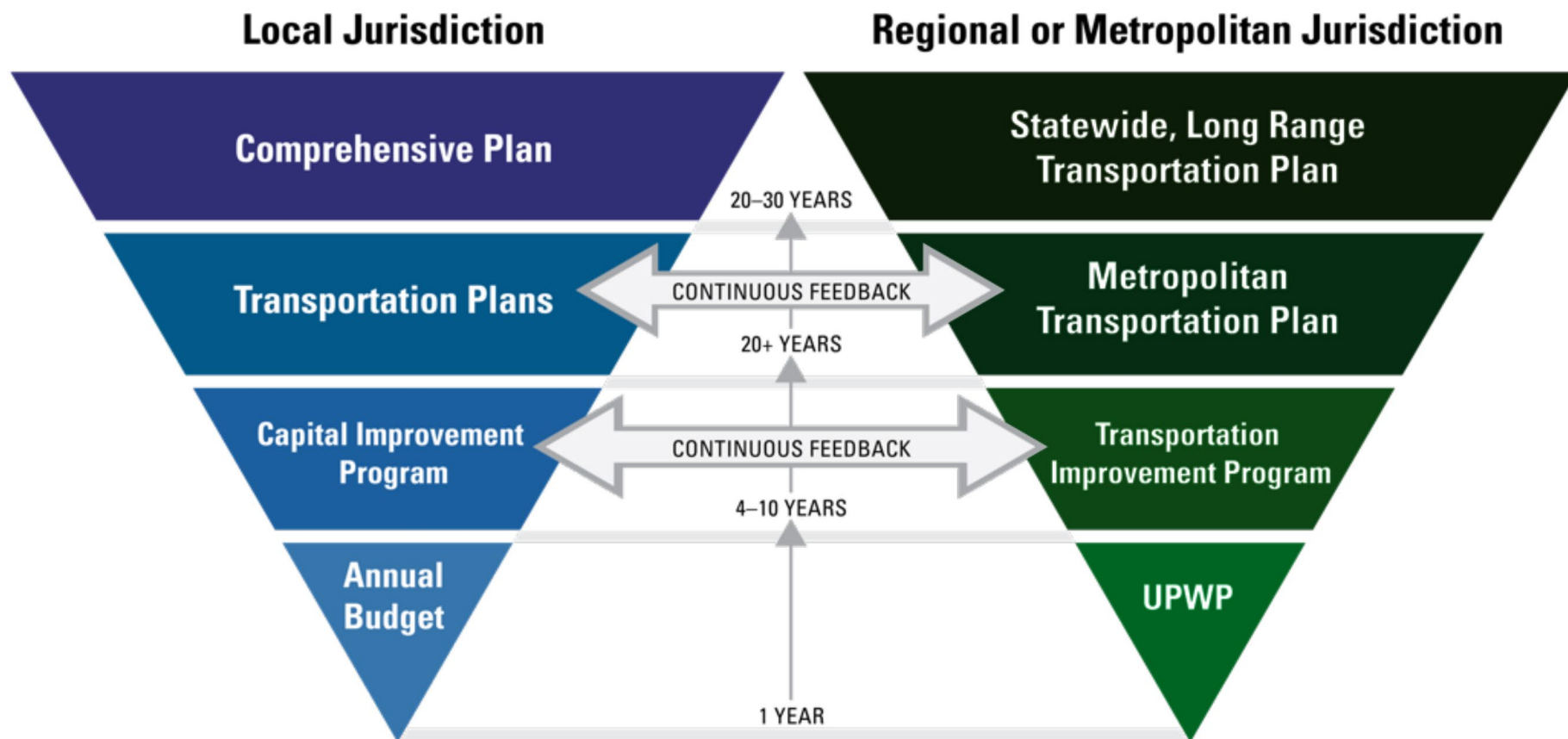
- Recommend capital budget
- Compute impact of capital improvements on operating budget
- Maintain a balanced budget



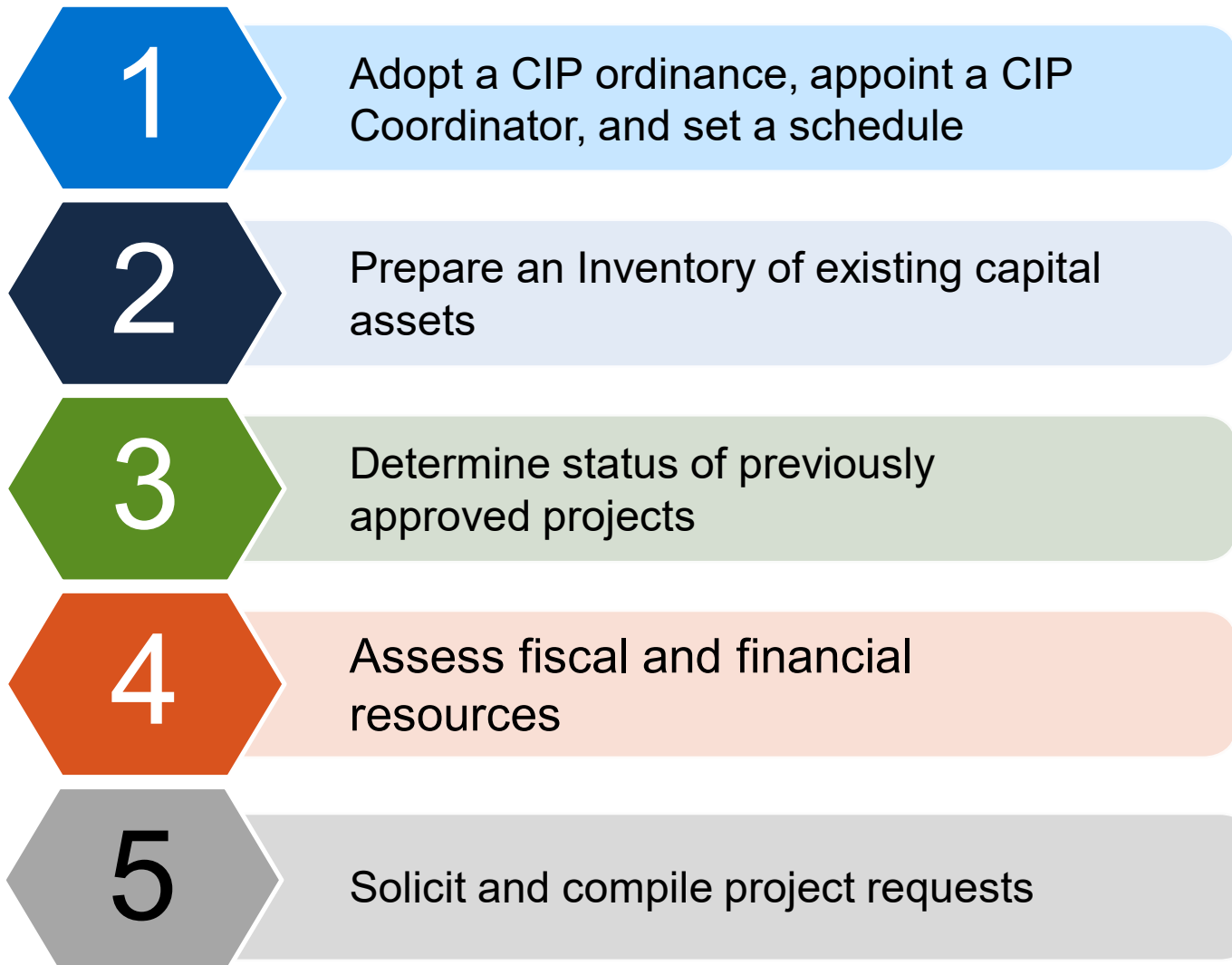
# Presentation Outline

- ① Overview
- ② Implementation
- ③ Legal Framework
- ④ Opportunities and Challenges
- ⑤ Value Capture Techniques in a CIP
- ⑥ Case Studies

# Implementation of CIP: Guiding Documents



# Implementation of CIP: Development



# Implementation of CIP: Development



# Implementation of CIP: Development

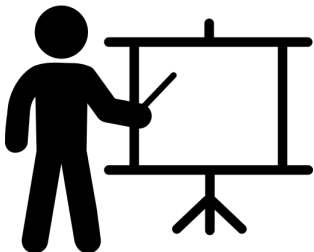
# 1

Adopt a CIP ordinance, appoint a CIP Coordinator, and set a schedule



Local  
Government

If the CIP is implemented for the first time, the local government creates a legal framework for the adoption of the CIP and establishes roles and responsibilities for its development.



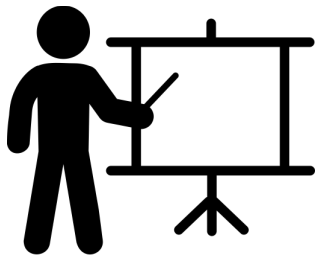
CIP  
Coordinator

Each year, the CIP coordinator establishes a schedule for all local officials with specific deadlines for completing each step of the CIP development process.

# Implementation of CIP: Development

## 2

### Prepare an Inventory of Existing Capital Assets



CIP  
Coordinator

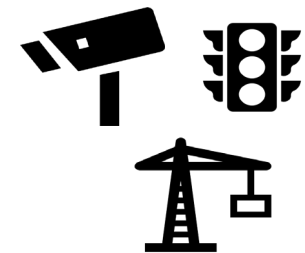
#### Asset Inventory



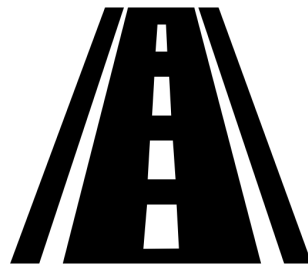
Fleet



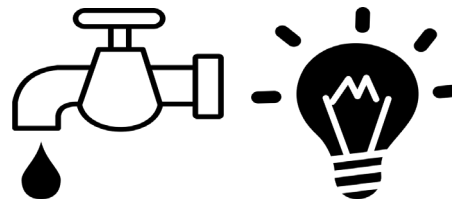
Buildings



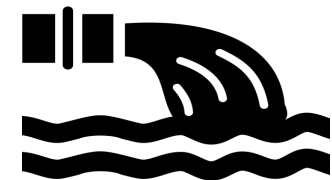
Equipment



Roads and Streets



Utilities



Sewers

# Implementation of CIP: Development

## 3

Determine status of previously approved projects

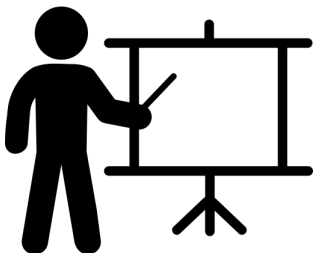


Local  
Government



The capital projects that are already underway should be reviewed to evaluate:

- If additional funds are needed
- If there are unspent funds that may become available
- If there are changes in the proposed schedule



CIP  
Coordinator

# Implementation of CIP: Development

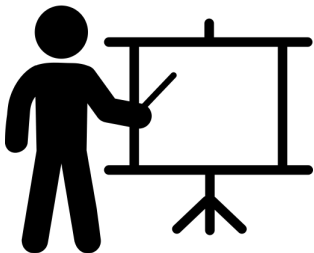
## 4

### Assess fiscal and financial resources



Local  
Government

Assessment of recent trends and projections of revenues and expenditures, including debt and other liabilities.



CIP  
Coordinator

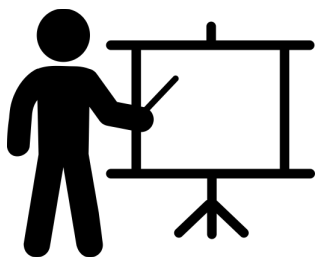
Results of this assessment helps the CIP coordinator propose a CIP with a funding source schedule aligned with community's fiscal policies and financial constraints.



# Implementation of CIP: Development

## 5

### Solicit and compile project requests



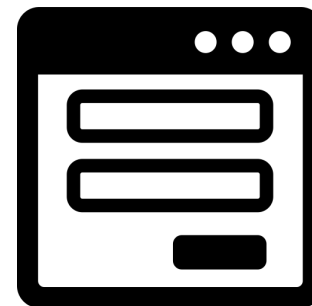
CIP  
Coordinator

The CIP coordinator solicits capital improvement project requests from all local agencies and departments ranked in order of priority.

#### Project Request Forms



Prioritized list of  
projects and cost  
estimates

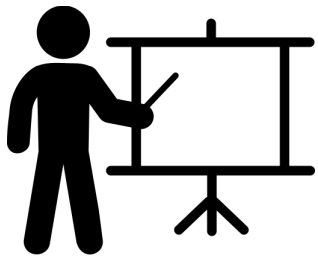


Project Detail  
Forms

# Implementation of CIP: Development

## 6

### Evaluate, prioritize and select projects



CIP  
Coordinator

The CIP coordinator convenes several meetings that include the local government's departmental leadership to review, discuss, and critique the project proposals received.

In this step, public's perspective is gathered and incorporated.

Generally, projects are prioritized using a scoring system based on established criteria to assess the value that each project brings to the community.

This step results in a list of projects selected to be included in the CIP in order of priority.

# Implementation of CIP: Development

## 6

## Evaluate, prioritize and select projects

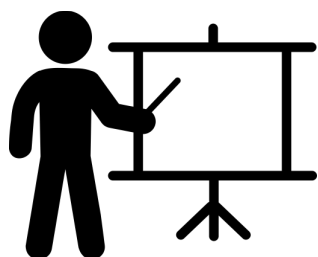
Example of Scoring System from Vanderburgh County, VA

	Criteria	Criteria Explanation	Points
Safety Improvements (40%)	Safety Improvements	Is there an accident history along the project site?	10
		Road accident history include fatality or high injury rate?	15
		Projects that will mitigate a hazard in locations. Does the project reduce conflicts and/or provides safety mitigation for any potential vehicular conflicts?	5
	Multi-Modal Benefit	Is there an accident history along the project site?	10
		Road accident history include fatality or high injury rate?	15
Development and Connectivity (40%)	Contribution to Focus Areas (Land Use)	Project is located in or directly serving a regional TIF District.	15
		Project is located in or directly serves a development, industrial center, or employment core.	10
		Project serves an activity center (Park, University, K-12 school).	5
	Connectivity of Corridor	The project completes a gap in a corridor (i.e. is the roadway on either end of segment constructed to County standards?).	10
Funding and Support (20%)	Non-county funding secured	Project is on the Statewide Functional Classification Roadway Network and eligible for Federal Funding.	5
	Project Support	Project is included in a local plan (transportation plan, corridor plan, etc.).	5
		Project has received stakeholder support (project discussed in stakeholder meeting; 1 person =5, >1 person = 10)	10
Total points possible			100

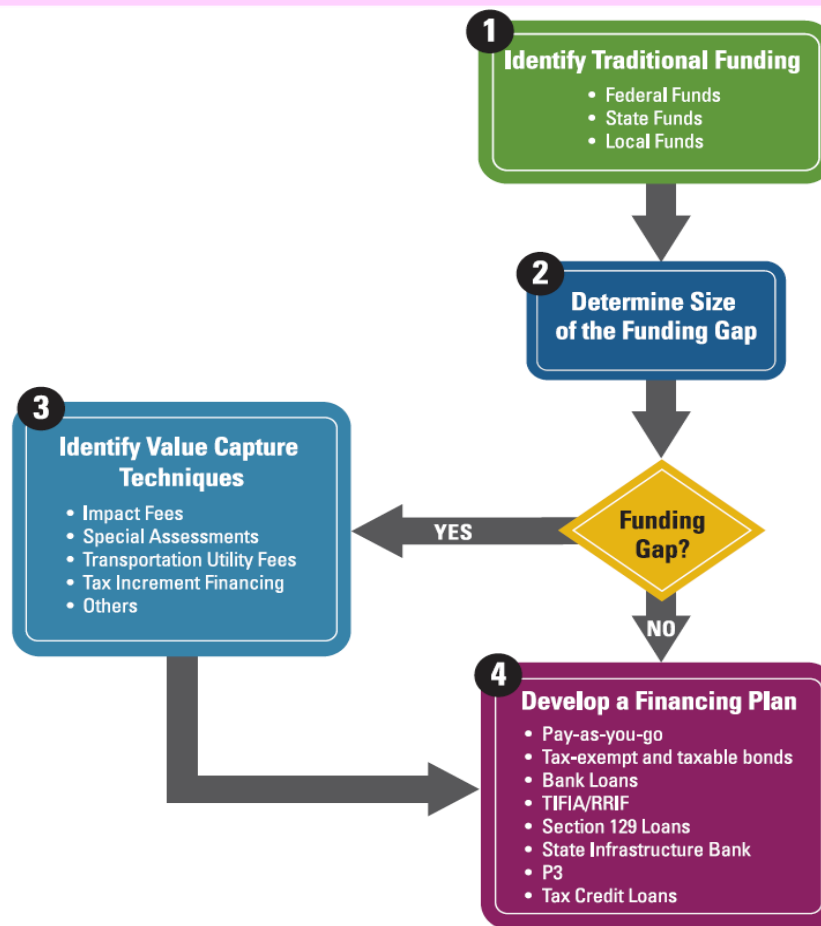
# Implementation of CIP: Development

## 7

### Develop a CIP Financing Plan



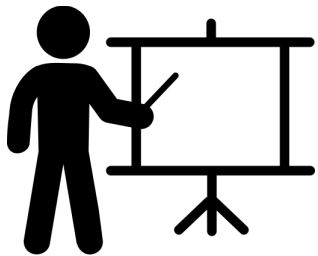
CIP  
Coordinator



# Implementation of CIP: Development

## 8

### Prepare program draft



CIP  
Coordinator

The CIP coordinator prepares the draft CIP and submits it to the governing body for its review and adoption.

#### Elements of a CIP



Narrative



Prioritized list  
of projects  
and cost  
estimates



Funding  
Sources



Project Detail  
Forms

# Implementation of CIP: Development

## 9

### Review and adopt the CIP



Local  
Government

The governing body reviews all recommended projects included in the CIP draft putting special attention to:

- Projects listed for the next fiscal (they need to be included in the annual budget)
- Projects and capital equipment purchases that are included for the first time in the CIP.
- Ongoing projects incurring in delays or cost overruns
- Projects that are moved forward several years

Public and representatives of public groups and organizations also have the opportunity of reviewing the CIP

The resulting CIP and capital budget are adopted.

# Implementation of CIP: Administration

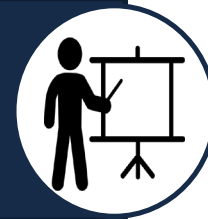
- Local government departments commence the execution of the projects.
- The execution of transportation projects requires a set of actions:
  - ✓ Planning and community engagement
  - ✓ Environmental
  - ✓ Right-of-Way
  - ✓ Design
  - ✓ Construction

Execute the approved CIP

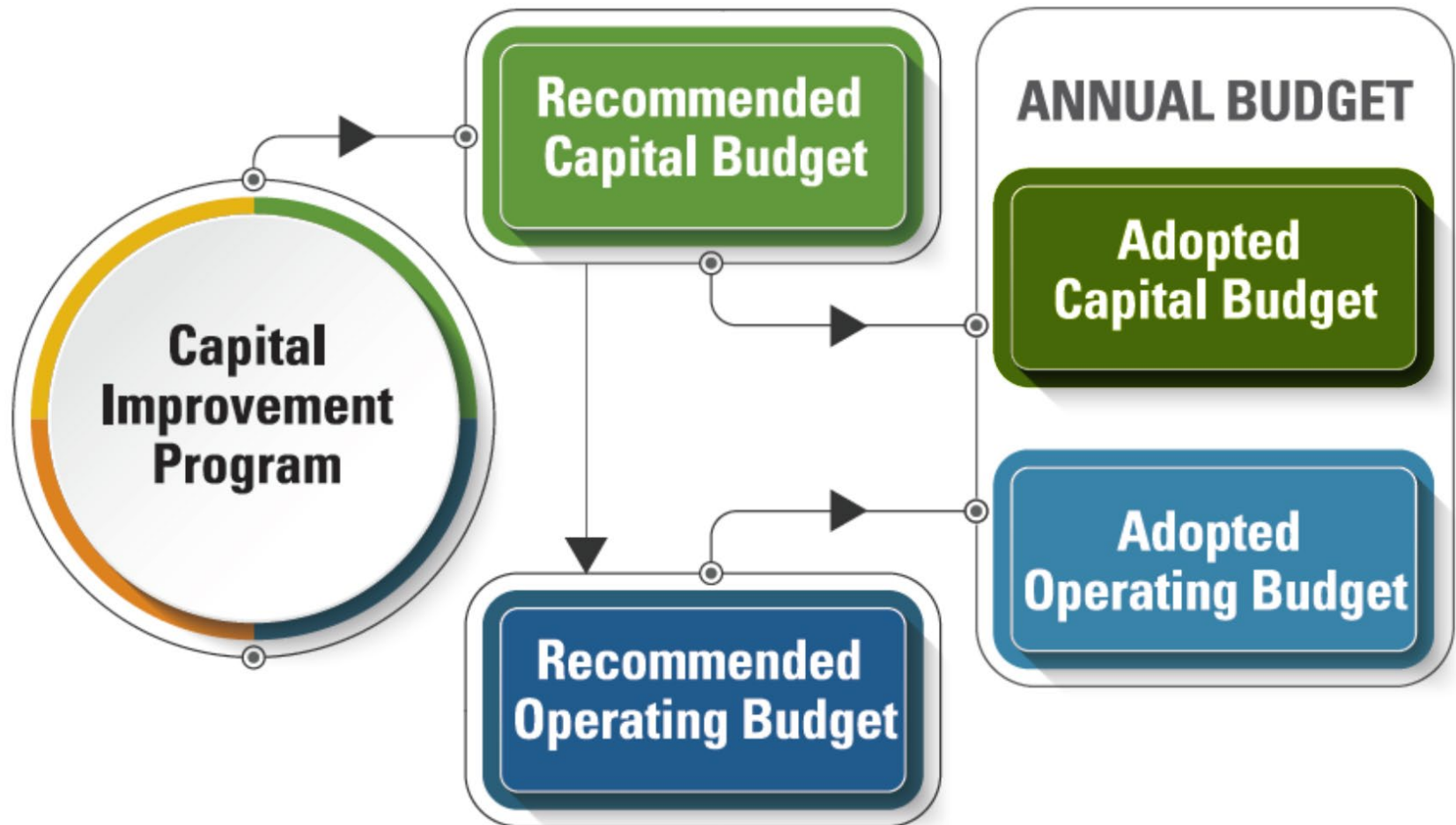


- It is important to update the CIP on an annual or biannual basis to:
  - ✓ Account for changes in community needs
  - ✓ Reflect new information, policies, and projects
  - ✓ Cost and funding amounts for current and future years are updated
  - ✓ Allocate uncommitted funds

Update the CIP



# Implementation of CIP: Annual Budget





# Presentation Outline

- ① Overview
- ② Implementation
- ③ Legal Framework
- ④ Opportunities and Challenges
- ⑤ Value Capture Techniques in the CIP
- ⑥ Case Studies

# Legal Framework: State Requirements



CIP legal framework is generally found in State laws dealing with local government planning and budgeting statutory provisions.

The requirement to adopt a CIP varies from not requiring one to explicitly or implicitly requiring it under certain circumstances.



# Presentation Outline

- ① Overview
- ② Implementation
- ③ Legal Framework
- ④ Opportunities and Challenges
- ⑤ Value Capture Techniques in the CIP
- ⑥ Case Studies

# Opportunities and Challenges: Acceptance



## Public Acceptance

- CIPs includes multiple opportunities to inform the public about capital improvements and gather inputs.
- CIPs also informs business owners, developers, and bond investors regarding the vitality of the community, the cost of services, and the sustainability of its tax burden.



## Political Acceptance

- CIPs provide transparency and a rational approach to prioritize capital improvements reducing public pressure on elected officials.
- CIP can help maintain steady payments and tax rates over a period of time.
- In contrast, certain officials who are uncomfortable with sharing control of the process with the public or other officials may not support the adoption of a CIP.

# Opportunities and Challenges: Equity

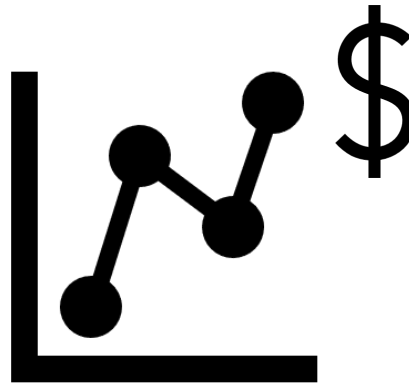
CIPs provide a mechanism to help ensure that capital investment decisions are made considering fairness to all stakeholders in a community in terms of who incurs the costs and consequences of those decisions.



Some cities have gone a step further and added equity-specific indicators to measure how its CIP allocations are distributed within neighborhoods in their jurisdiction.

# Opportunities and Challenges: Cost

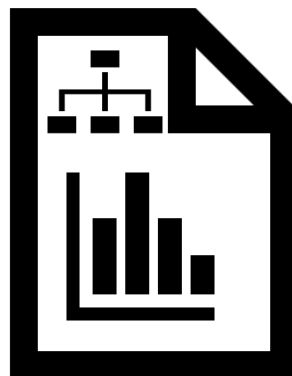
CIP can afford a community financial benefits, such as a good credit rating promoting economic development, spotting hidden costs or avoiding unexpected expenditures, and successfully competing for state or federal funds.



The cost challenge that communities may face in implementing a CIP, is that it requires a multi-disciplinary team skilled in financial management, project management, and public participation.

# Opportunities and Challenges: Administration

Managing, maintaining and monitoring a CIP also poses some administrative challenges. Implementing a CIP, particularly for the first time, requires a considerable amount of effort from local government officials and staff.



Over time, the process of updating an existing CIP (or developing a new one) becomes more familiar and less demanding.

# Presentation Outline

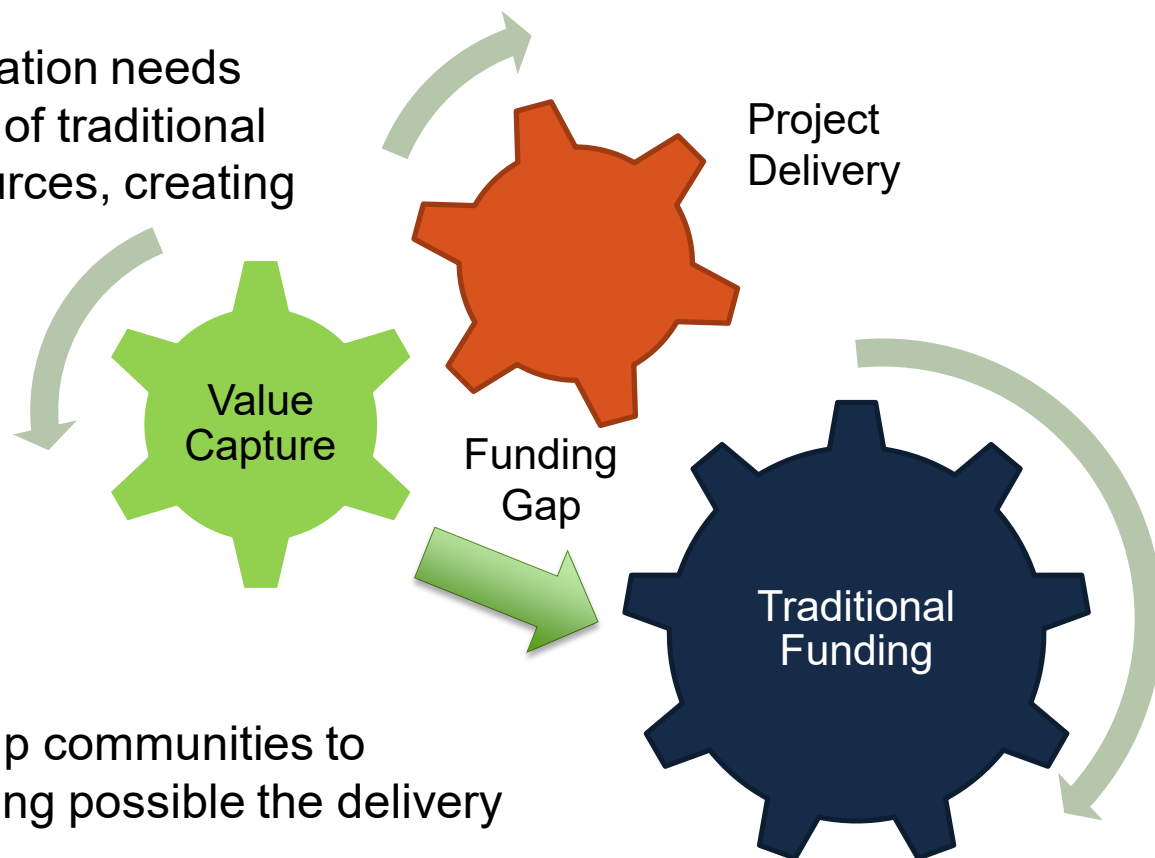
- ① Overview
- ② Implementation
- ③ Legal Framework
- ④ Opportunities and Challenges
- ⑤ Value Capture Techniques in the CIP
- ⑥ Case Studies



# Value Capture Techniques in the CIP: Role

State and federal transportation funds and grants have been traditionally used to fund transportation improvements.

The growth in local transportation needs has outpaced the availability of traditional state and federal funding sources, creating a funding gap.



Value capture techniques help communities to reduce this funding gap making possible the delivery of critically needed projects.

# Value Capture Techniques in the CIP

## Common Value Capture techniques included in CIPs

Technique	Definition
<b>Impact Fees</b>	Fees imposed on developers to help fund additional public services, infrastructure, or transportation facilities required due to the new development.
<b>Transportation Utility Fees</b>	Fees paid by property owners or building occupants to a municipality based on estimated use of the transportation system.
<b>Special Assessments</b>	Fees charged on property owners within a designated district whose properties are the primary beneficiaries of an infrastructure improvement.
<b>Tax Increment Finance</b>	Charges that capture incremental property tax value increases from an investment in a designated district to fund or finance the investment.

# Presentation Outline

- ① Overview
- ② Implementation
- ③ Legal Framework
- ④ Opportunities and Challenges
- ⑤ Value Capture Techniques in the CIP
- ⑥ Case Studies

# TUF - Jackson School Road Project

- City of Hillsboro, OR. Medium size community. The use of the CIP ensures the adequate combination of funds from various sources in time and quantity over entire life of the project.
- Jackson School Road Project includes:
  - ✓ Sidewalks
  - ✓ Cycle tracks
  - ✓ Continuous center turn lane
  - ✓ Street lighting
  - ✓ Culvert replacement
  - ✓ Landscaped planter strips
  - ✓ Landscaped planter strips
- The estimated cost is approximately \$28 million. **TUFs** and Impact Fees provide almost \$18 million and traditional sources around \$11 million.



Source: City of Hillsboro [Twitter](#)

# TUF - Jackson School Road Project



## Opportunities

- Additional funding to meet road maintenance needs.
- In 2020, revenues generated by the TUF represent approximately 60 percent of the City of Hillsboro street maintenance budget



## Challenges

- Legal challenges: Principles to establish TUFs not specifically defined by the State of Oregon. **Ad Hoc Transportation Finance Advisory Committee.**
- Political and public resistance: Inequities about how TUF rates are calculated and opposition from schools and non-profit organizations to pay. **Waivers, credits, and incentives. Public education and outreach program.**
- Equity challenges: Fairness at the time the TUF rate need to be revised. **Appointment of an oversight committee.**
- Lack of flexibility of funds: Funds generated by TUFs can only be used for road maintenance projects.

# SA - Dulles Corridor Metrorail Project

- Fairfax County, VA. Big size community. Fairfax County uses the CIP as a planning tool coordinate the financing and timing of the Dulles Corridor Metrorail Project in a way that maximizes the return to the public.
- The Dulles Metrorail Corridor Project, also known as the Silver Line, is a 23-mile extension of the Washington, DC, region's Metro system.



Source: <https://www.dullesmetro.com>

- The estimated cost is approximately \$5,684 million. Fairfax County will pay \$730 million using funds generated by two **Transportation Improvement Districts (TIDs)**.

# SA - Dulles Corridor Metrorail Project



## Opportunities

- The TIDs generate consistent revenue streams that can be used as funding or financing mechanisms.
- Fairfax County has been using funds generated by the two TIDs on a pay-as-you-go basis and to issue bonds.



## Challenges

- Implementation challenges: Landowners and developers may see it as a new tax and disagree with district limits. **Landowners Economic Alliance for the Dulles Extension of Rail (LEADER).**
- Revenue stream challenges: Future revenues are uncertain. **CIP and Districts Commissions annual reports.**
- Lack of transparency and equity: TIDs can be perceived as hidden invisible local governments imposing unfair taxes. **Public meetings of Districts Commissions and the Board of Supervisors.**

# IF - Baseline and Loop 202 Intersection Project

- City of Phoenix, AZ. Big size community. The city uses the CIP as fiscal planning tool to keep its budget balanced as mandated by the State of Arizona.
- The Loop 202 was recently completed after many decades of planning, public debate, legal action, and then funding issues. The Loop 202 connects with several major arterial streets, and one of those is Baseline Road. A new intersection is needed.
- The estimated cost of the Baseline and Loop 202 Intersection Project is approximately \$3.3 million, and the city contributed approximately \$1.6 million from **street impact fees**.
- The adjacent landowners provided the required public right of way to be dedicated for the roadway improvements.



# IF - Baseline and Loop 202 Intersection Project



## Opportunities

- Bring the opportunity of having a new funding source, collected upfront, for transportation projects.
- Encourage developers to start the projects as soon as they are ready expediting the pace of development.



## Challenges

- Implementation challenges: Significant amount of resources and coordination across city departments to fulfill the obligations mandated by the State of Arizona.
- Revenue stream challenges: Future revenues are uncertain. **The City of Phoenix performs forecasts on impact fee revenue potential for the next 5 years.**
- Resistance from developers and landowners: They may see equity issues because impact fees are higher in the north of the city. **The City of Phoenix created the Committee of Development of obtain inputs from developers and landowners while informing them.**

# TRZ - Eastlake Boulevard Extension Phase 2

- Town of Horizon City, TX. Small size community. The city uses the CIP as fiscal planning tool to ensure that project funds are available when needed, develop interagency partnerships, and leverage other financing mechanisms.
- The Eastlake Boulevards Extension Project was critical for the Town, as it significantly improved the Town's access to I-10 and connectivity to the City of El Paso, as well as to its neighboring City of Socorro.
- The project consisted of building a new six lane roadway, the project cost was of \$16.7 million. The Town of Horizon City was responsible for paying \$3.8 million.
- The Town of Horizon City paid its portion using the Town of Horizon City Transportation Reinvestment Zone No. 2 as a financing mechanism.

# TRZ – Eastlake Boulevard Extension Phase 2



## Opportunities

- Effective cooperation among local government agencies to improve regional mobility and transportation infrastructure.
- Advancement of economic goals through transportation investments.



## Challenges

- Internal challenges:
  - Introducing new funding concept to policymakers. **Continuous communication between policy makers and key municipal staff.**
  - Determining TRZ size. **CIP managers and financial staff working together to determine TRZ size.**
- External challenges:
  - Coordinating with external partners. **Designate a team to lead those discussions.**
  - ROW acquisition. **Work with property owners as early as possible.**
  - Changes in Property Designation. **Be prepared!**

# FHWA Contacts

## Thay Bishop

Center for Innovative Finance Support

[Thay.Bishop@dot.gov](mailto:Thay.Bishop@dot.gov)

## Stefan Natzke

Office of Planning, Environment, & Realty

[Stefan.Natzke@dot.gov](mailto:Stefan.Natzke@dot.gov)