



Municipal Financing 101

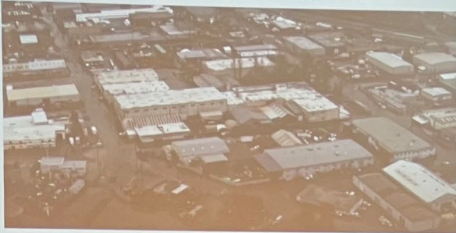
Duwamish Valley Resilience District

June 22, 2023


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Episodic SLR Impacts in South Park



Duwamish Valley Program

 City of Seattle

About Quantified Ventures



Episodic SLR Impacts in South Park

Downwash Valley Program

City of Seattle

COASTAL FLOODING & SEA LEVEL RISE (SLR)

SEA LEVEL RISE ADAPTATION STRATEGIES

OPPORTUNITIES FOR MULTIPLE BENEFITS

Quantified Ventures works with pioneering organizations to design, capitalize, and scale investible solutions that improve the wellbeing of people and planet.



Delivering Return on Investment (ROI) + Impact



Design



Capitalize



Scale

Across 2 Groups and 10 Solutions



Environment and Resilience



Health and Human Services

Certified



This company meets the highest standards of social and environmental impact

Quantified Ventures specializes in designing innovative and scalable solutions



Structured and replicated the first-ever **Environmental Impact Bond** financing green infrastructure to deliver social and environmental outcomes in urban areas



Launched the first subsidiary, ReHarvest Partners, that **stacks carbon and water quality outcomes** to pay farmers to implement conservation ag best management practices through the Soil and Water Outcomes Fund



Developing an innovative **family focused recovery health outcomes fund structure to sustainably scale capacity to provide Social Determinants of Health and health-related social services** that will lower costs and improve health outcomes





CONSOLIDATE the project and impact narratives

- Quantify impacts, using existing reports and data
- Streamline the narrative to its core components
- Produce a technical memorandum and summary sheet

STRATEGIZE on the quickest path to your goals

- Build on your existing strengths and incorporate creative and innovative approaches
- Be vigilant and pivot quickly towards new opportunities

CONNECT to our network of capital providers and partners

- Find the partners that play the roles you need in your new strategy – technical expertise, investment, grants, etc.
- Workshop your capital strategy

SUPPORT your deal team and project team

- Build knowledge and capacity in your typical service providers to incorporate innovative approaches
- Create documents that enable getting creative capital

Capture Project Revenues

Calculating projected environmental, health, and economic project outcomes and determining the potential to ***borrow upfront with the sale of those revenues repaying the principal.***

Leverage Project Outcomes

Quantifying the projects' impacts, identifying which organizations benefit, ***securing financial support from those beneficiaries,*** and creating financial tools to facilitate transactions, when necessary.

Assess Appropriate Governance

Assessing appropriate governance structure(s) comprised of community and government entities that are empowered with the legal authority to ***engage in contract agreements, solicit public funds, and pass-through funding for target investments.***

Municipal Financing Team Objectives

Episodic SLR Impacts in South Park



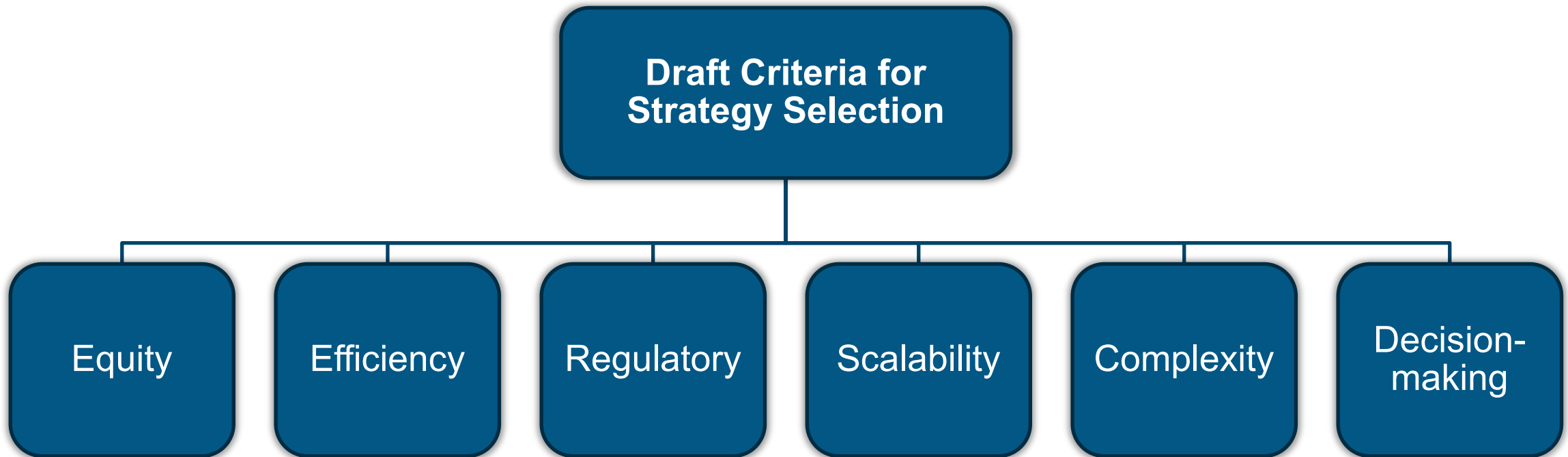
Duwamish Valley Program

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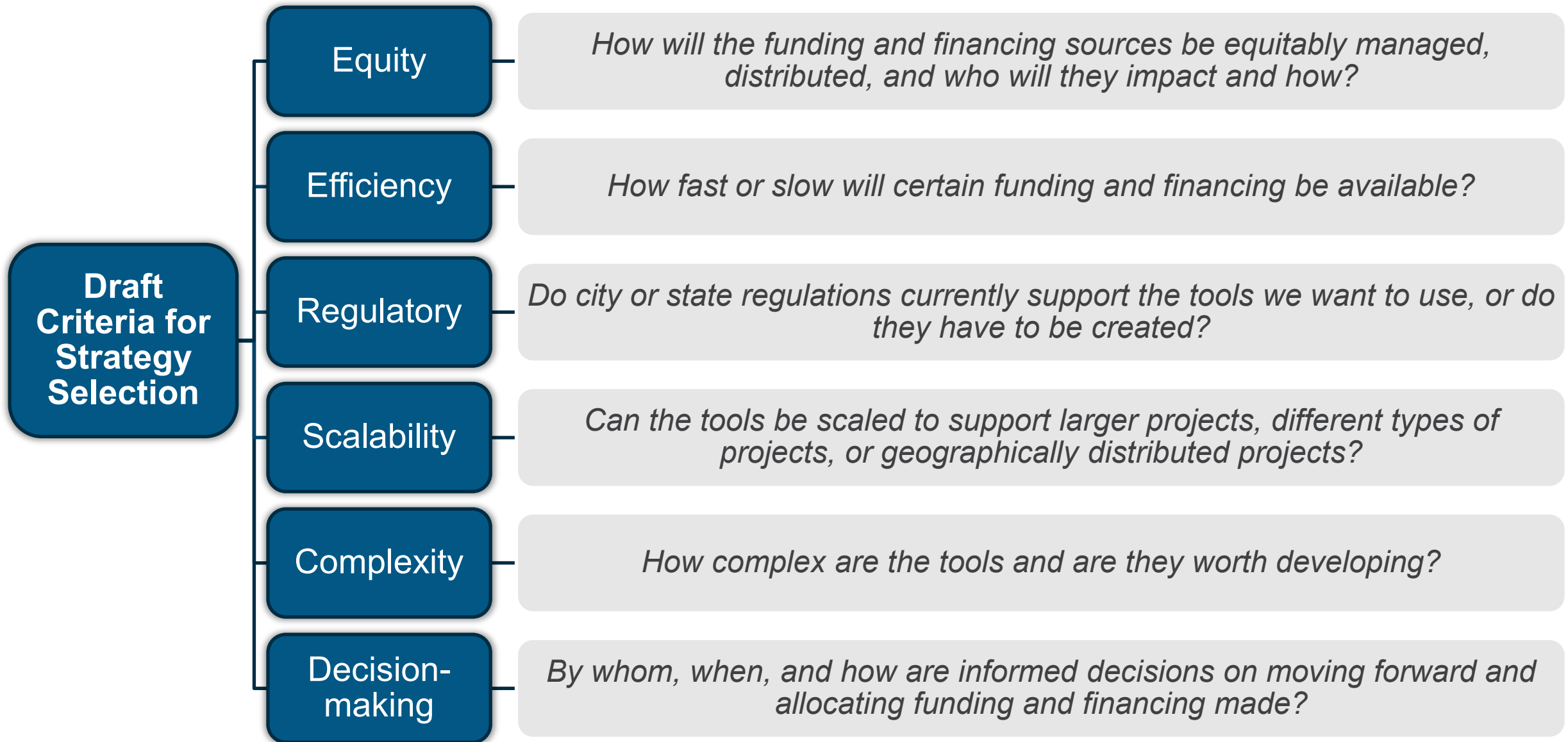


Identify ways to **generate capital** that can finance:

1. Infrastructure to **protect Duwamish Valley residential and industrial communities** from sea level rise
2. Improvements that will **advance health, equity, and wealth building** outcomes for residents



Municipal Financing Strategy Draft Selection Criteria



Duwamish Valley Resilience District Outcomes

Municipal Financing Project Outcomes



Climate Resilience



Health Benefits



Environmental Justice



Equity and Access



Stewardship



Economic Opportunity

Municipal Financing Organizational Outcomes

New Sources of Funding

Sustainable payors for project outcomes and revenues

Responsive

Funding/financing strategies that incorporate community input

Stronger Governance

Capacity to capture revenues from project and public funding sources

Current Priorities (Winter 2022 – Fall 2023)

1. Determine **library of financing options**, both tested and novel, to consider for SRD projects.
2. Build a **prioritization framework** and work with City, community advisors, and other consultant teams to determine the preferred option(s).
3. Produce a high-level **cost benefit analysis** of the SLR Analysis consultant team's priority projects aligned with the prioritized financing tools.

Future Priorities (Fall 2023 onwards)

1. Develop a feasibility study of selected financing options, align with necessary regulatory components to facilitate implementation, work with additional consultant teams to develop a map of sites for targeted land-value capture.

Funding and Financing 101



What is Municipal Financing?

Tools and policies that the City of Seattle can use to generate money to support Duwamish Valley Resilience District. The City can directly fund this work through the City budget, or it can pursue financing to have money upfront for projects that will be paid back through a specific revenue stream.

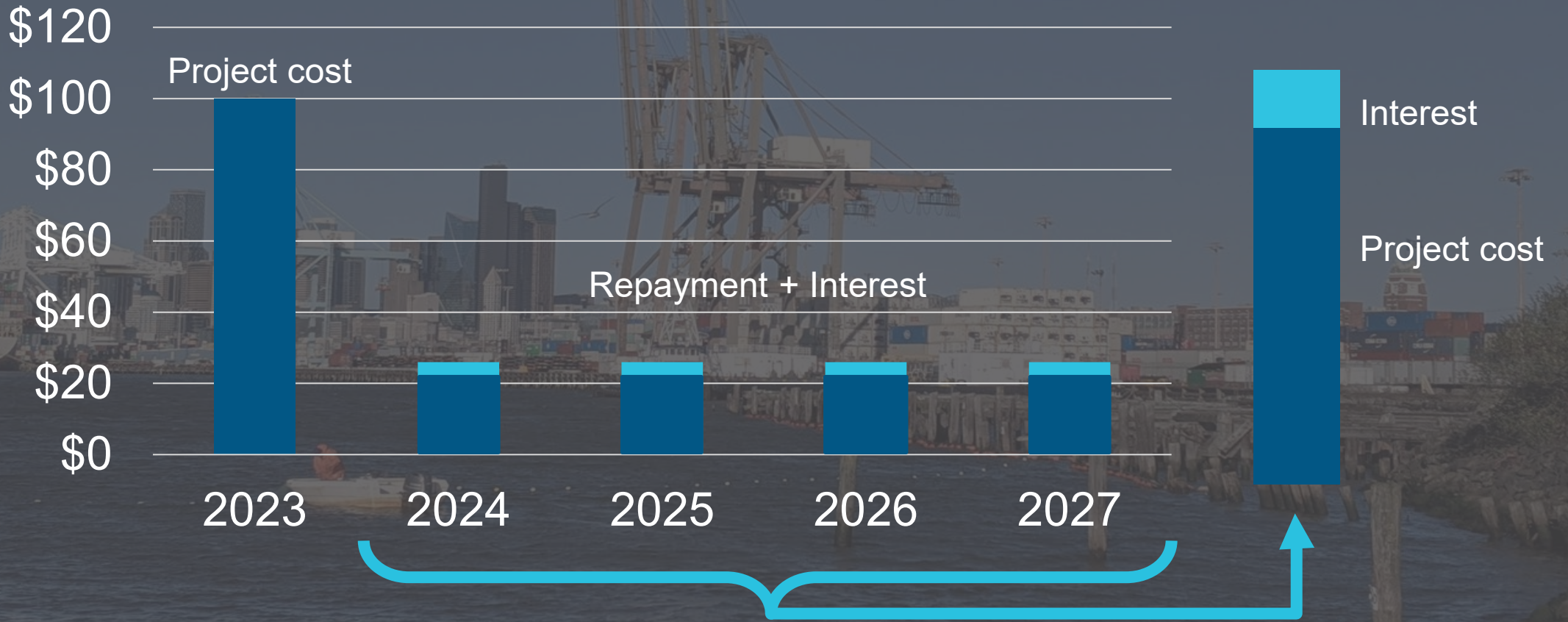
Municipal Funding

- Grants (Federal, State, Philanthropy)
- Ballot measures
- Utility payments
- Taxes / Tax incentives

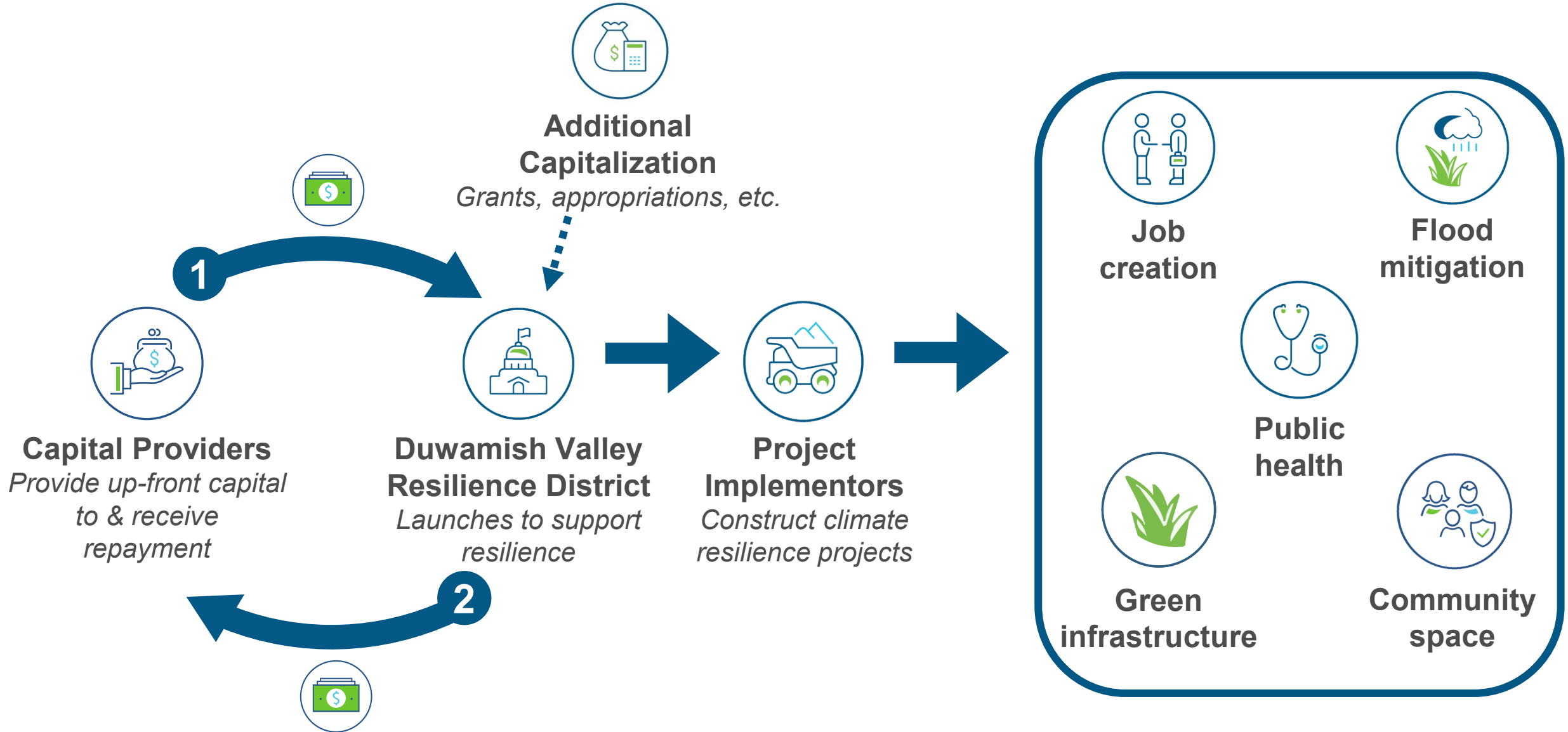
Municipal Financing

- Loans and investments
- Environmental markets
- Revolving incentive funds

Financing allows you to repay the project cost over time



Funding and Financing 101: Greater Community Impact



Funding and Finance 101: Tools and Stacking

“Municipal finance” refers to the tools and policies that the City of Seattle can use to generate money to support projects in the Duwamish Valley Resilience District. Financing involves pursuing money upfront for projects that will be paid back through a specific revenue stream.

Asset Classes:

**Grants and
Appropriations**

Debt

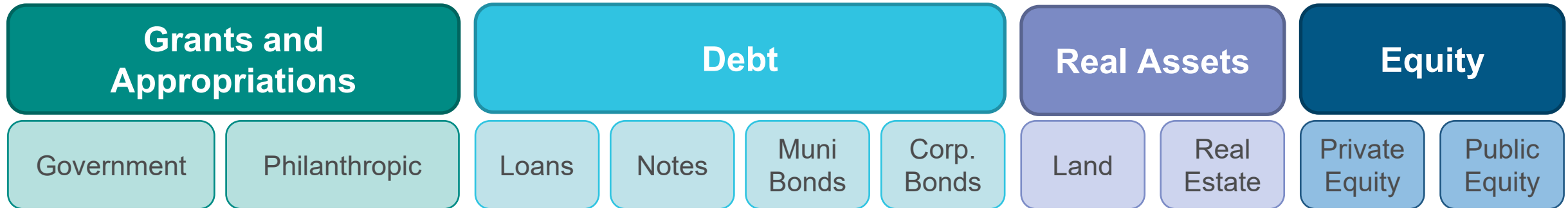
Real Assets

Equity

Funding and Finance 101: Tools and Stacking

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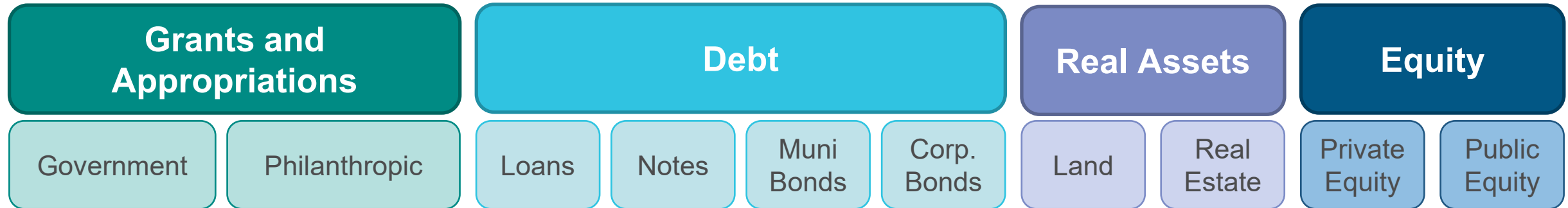
Asset Classes:



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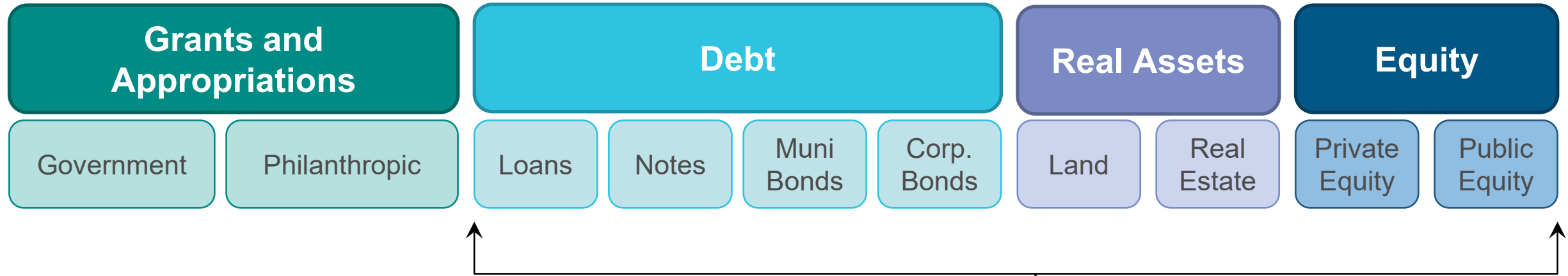
Blended Finance or the “Capital Stack”:

Combines different sources of investment capital, particularly with inclusion of government or philanthropic grants

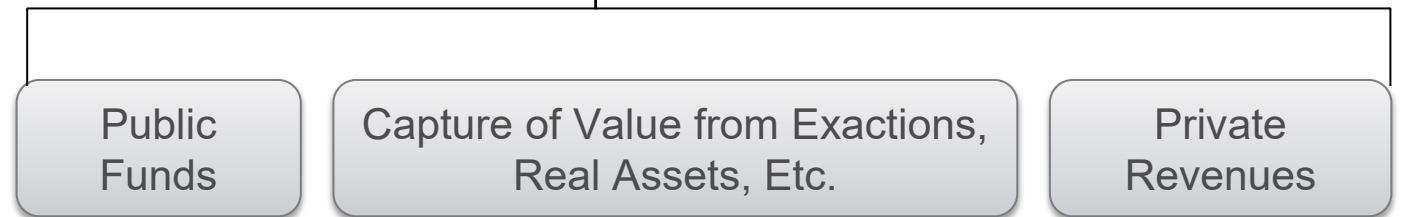
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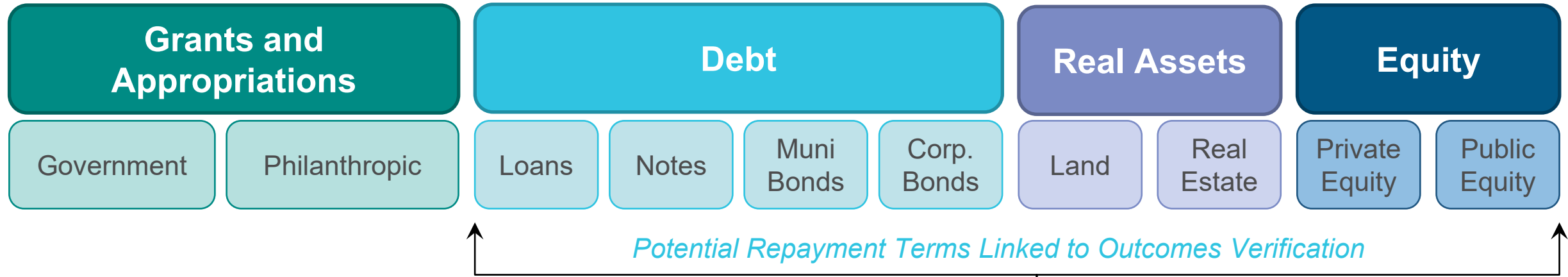
Repayment Streams:



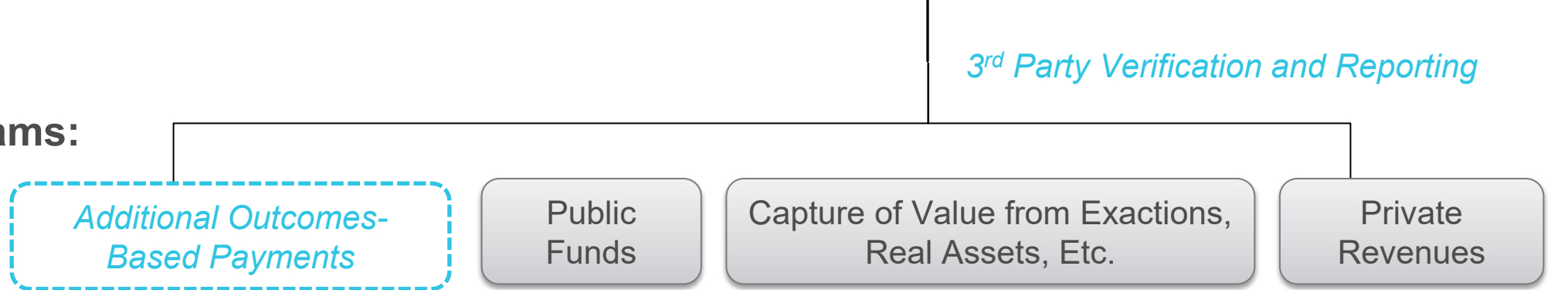
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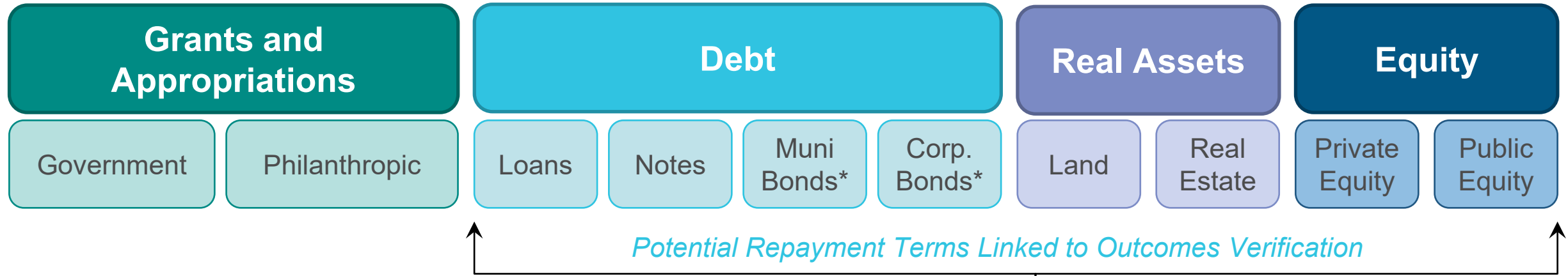
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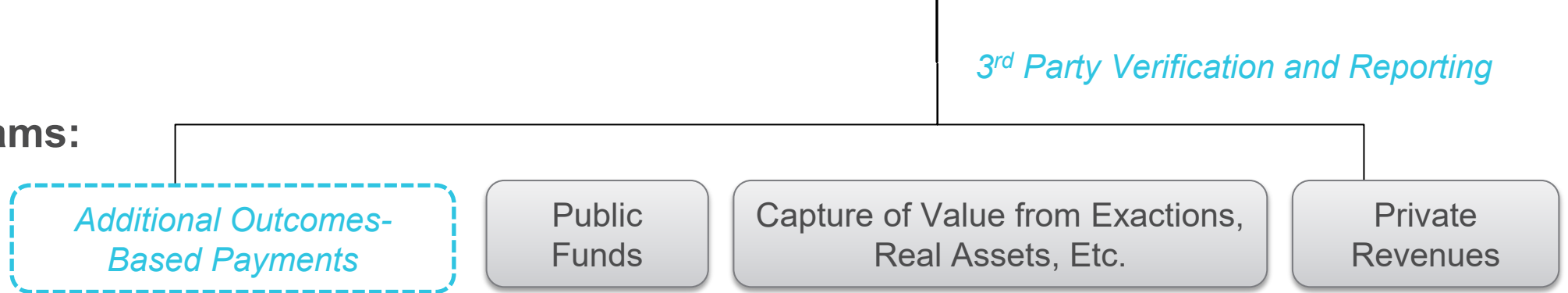
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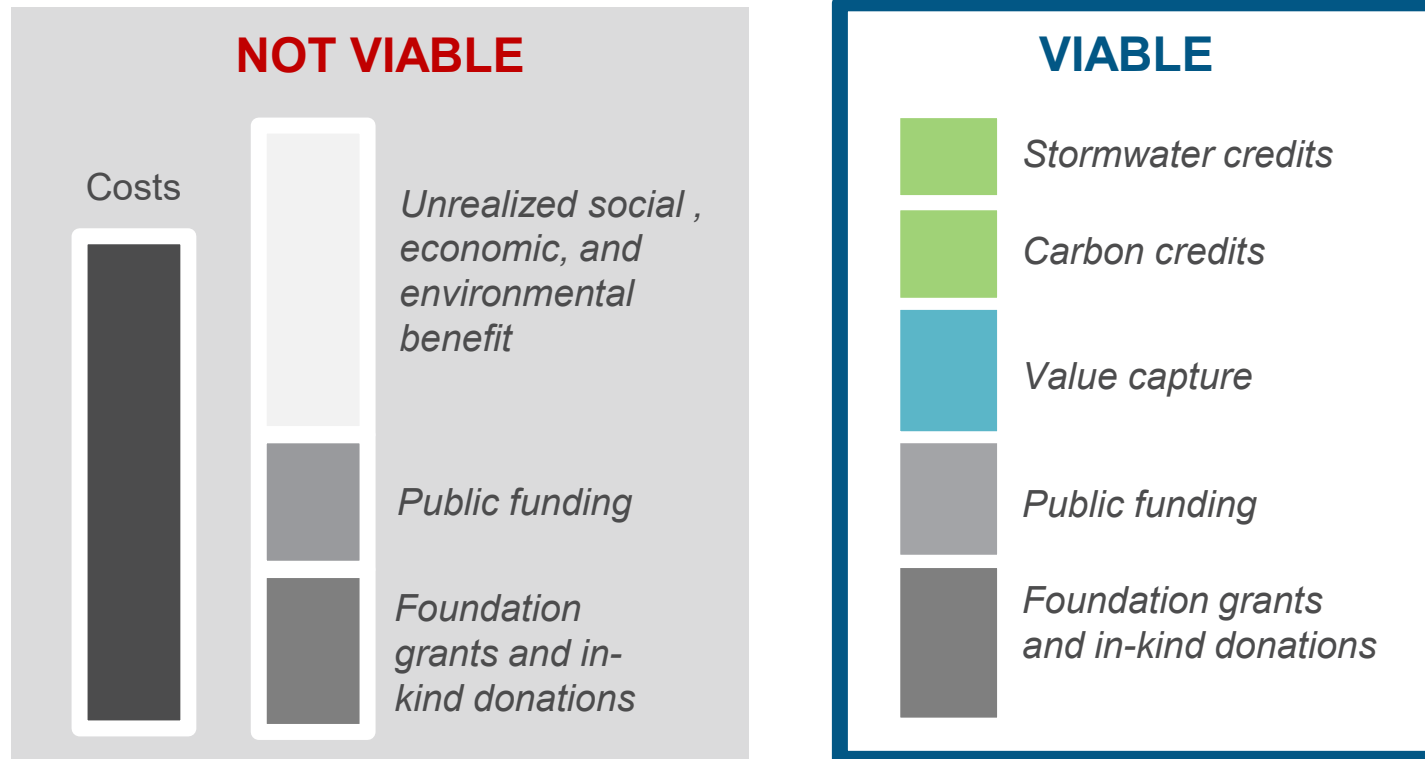
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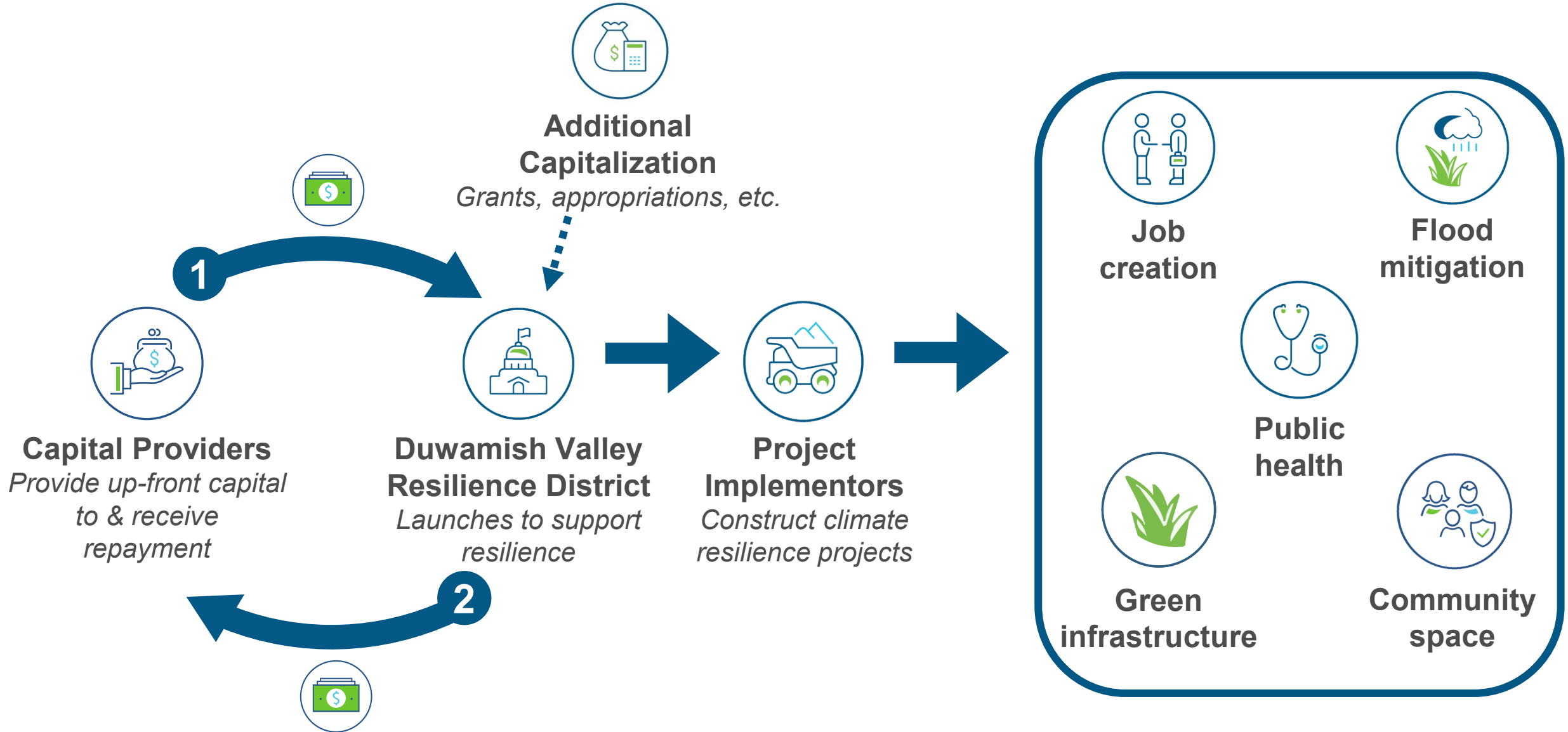
*Environmental Impact Bonds (EIBs)

An innovative capital stack refers to the layered approach to using a combination of multiple funding and financing mechanisms to fund a project with outcomes benefits included.

Stacking Benefits



Funding and Financing 101: Greater Community Impact



5 minute break!

Episodic SLR Impacts in South Park



Duwamish Valley Program

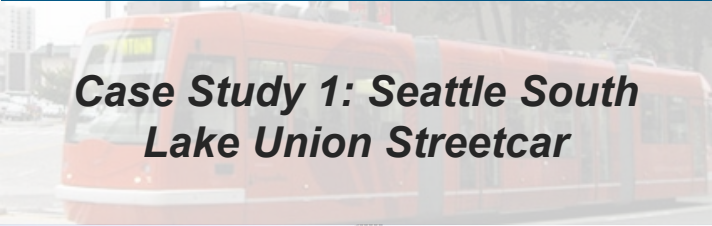
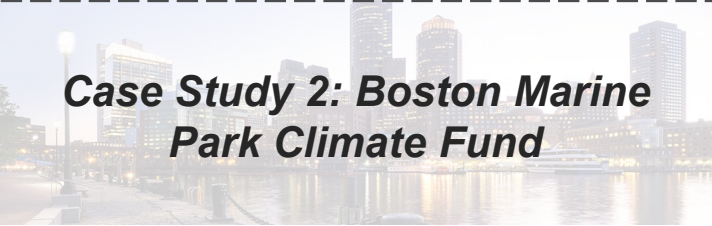
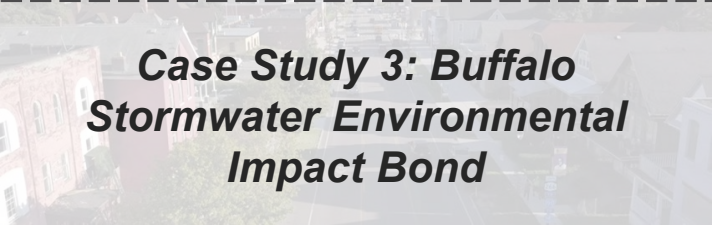
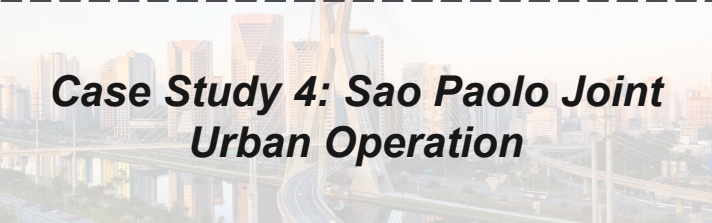
 City of Seattle



Funding and Financing Case Studies



Case Study Matrix

	What is being funded/financed?	Quantity of funding/financing raised?	Funding/financing source?	Regulatory Driver?
 <p>Case Study 1: Seattle South Lake Union Streetcar</p>	South Lake Union Streetcar	~\$25 Million	Local Business and Property Owners	Local Improvement District
 <p>Case Study 2: Boston Marine Park Climate Fund</p>	SLR Infrastructure	~\$40 Million	Real Estate Developers	Boston Public Development Authority Tenant Exactions
 <p>Case Study 3: Buffalo Stormwater Environmental Impact Bond</p>	Green Infrastructure Investment Incentives	~\$54 Million	Bond Purchasers	Buffalo Sewer Authority Bond Issuance
 <p>Case Study 4: Sao Paulo Joint Urban Operation</p>	Drainage Infrastructure, Housing	~\$806 Million	Purchasers of Construction Rights	National Legislation

Case Study: Seattle SLU Streetcar



- **Challenge:** Increase Seattle's public transportation offerings and connect the South Lake Union (SLU) area to Downtown Seattle and other important regional activity centers.
- **What is being funded:** South Lake Union streetcar
- **Quantity of funding raised:** ~\$25 million via property taxes on nearby property owners to supplement federal, state, and local funds for the \$53.5 million project
- **Financing Contributors:** Property owners
- **Financing Mechanism:** Local Improvement District

Financing Mechanism: Local Improvement District (LID)

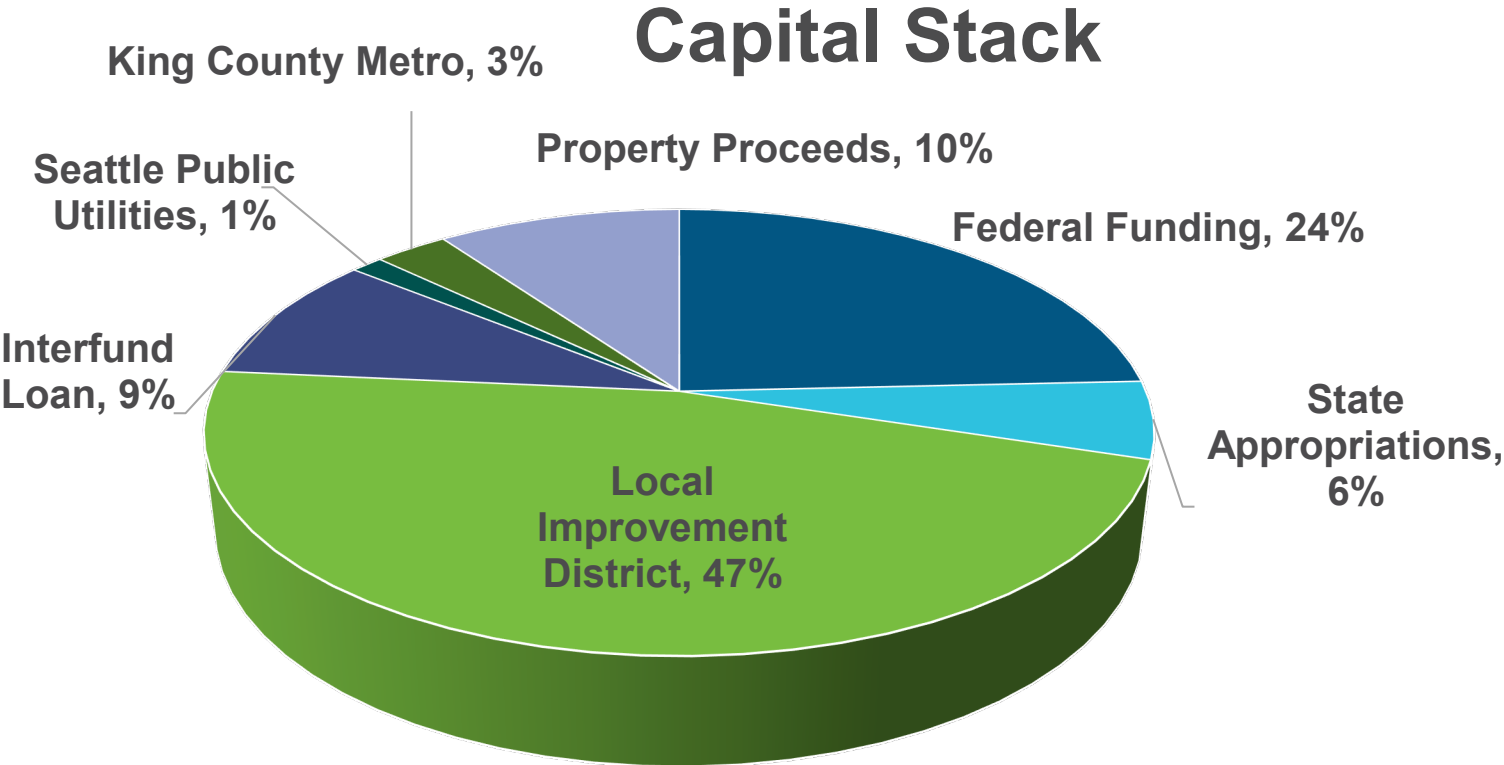
- A means of financing capital improvements by raising funds through a fee on benefiting properties, geographically bound by an established special assessment district
- The fees raised through property taxes can be a repayment mechanism for upfront project financing

Regulatory Process:

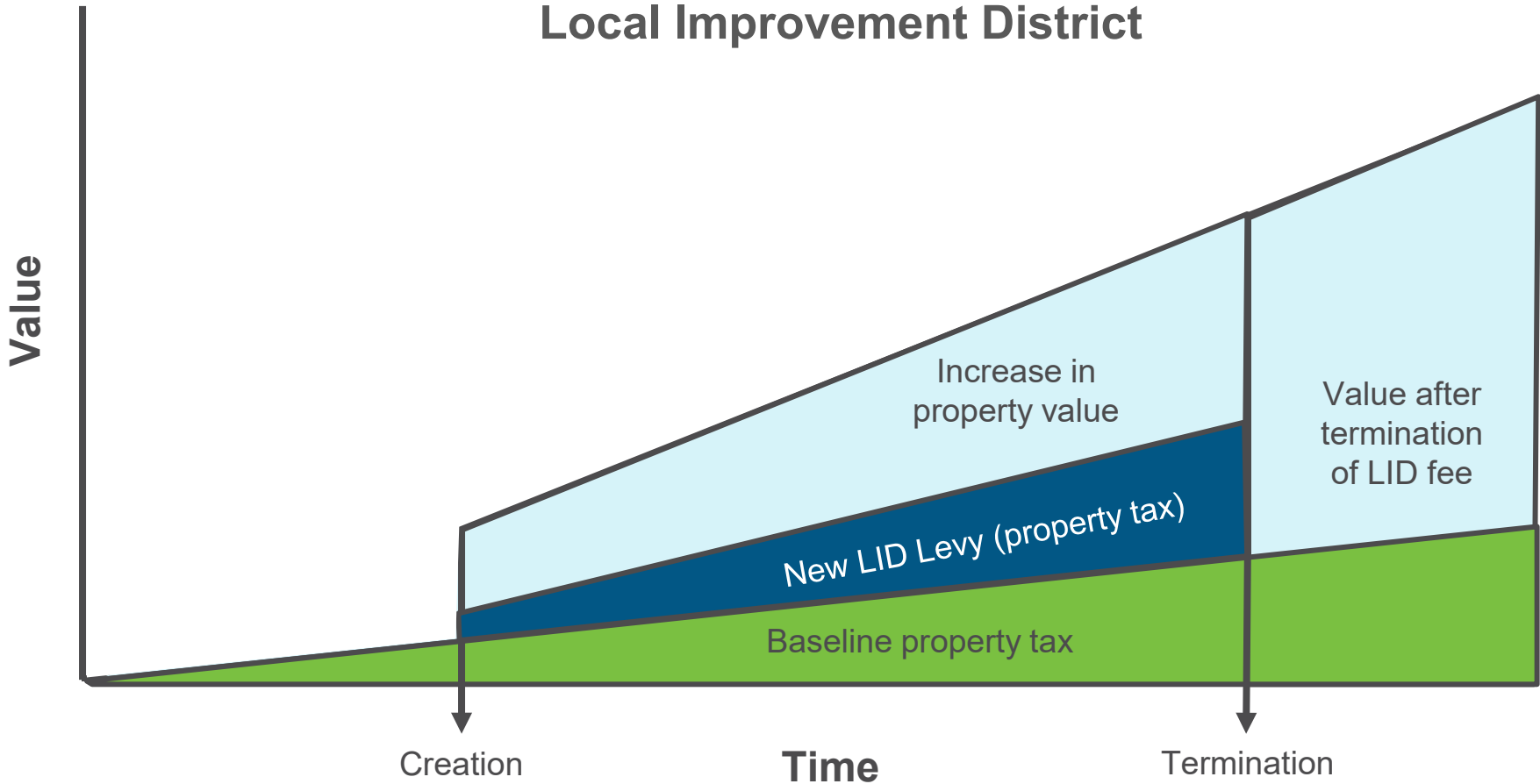
- The SLU LID was established in 2005 through a ballot initiative and was approved by 98% of local property owners.
 - Focused on nearby property owners that would benefit from streetcar-driven commercial activity
 - Property owners were assigned property tax rates based on proximity to the SLU, ranging from 8% to 1%
- SLU LID was one of multiple ways that the bond that financed the streetcar was repaid

Enabling Condition(s):

- Strong political support from business and property owners (ballot initiative)

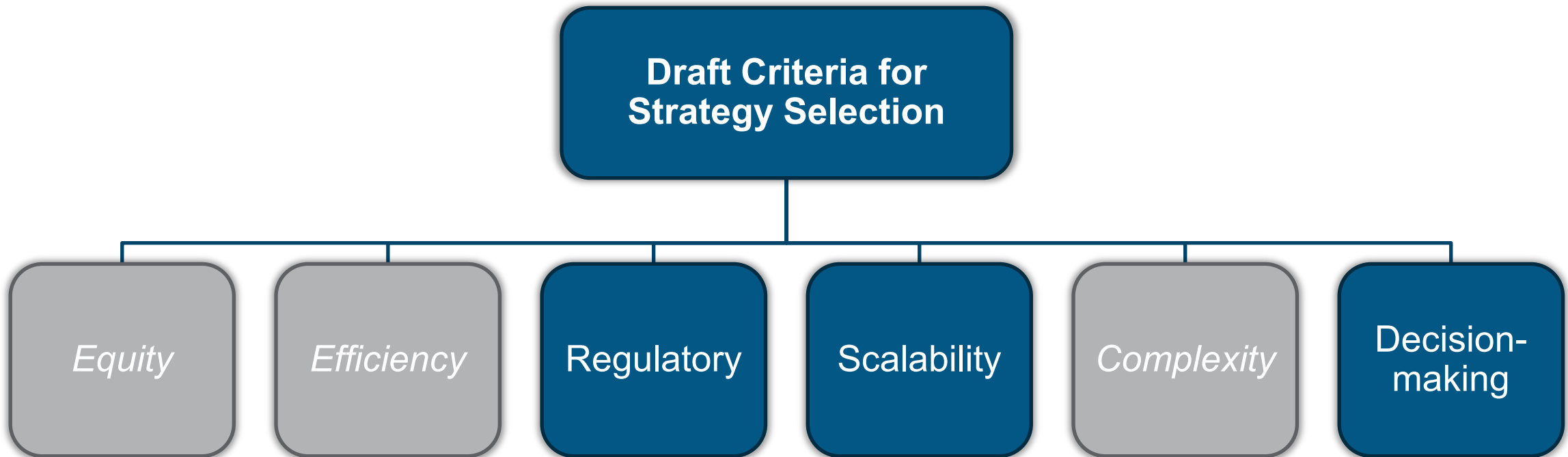


Seattle SLU Streetcar: Local Improvement District 101



Applicability to Seattle Resilience District

- The Seattle SLU streetcar offers lessons regarding:
 - **Regulatory:** Employs a regulatory approach already proven in Seattle
 - **Scalability:** Captures the additional value the intervention brings to the area
 - **Decision-making:** Includes opportunities for community to voice support for the project



General Feedback

- What questions do you have about the Seattle SLU Streetcar case study?
- What benefits do you see in this case study?

Questions about Infrastructure and Value

- What infrastructure do commercial / industrial members of the Duwamish Valley community value?
- What infrastructure do residential members of the Duwamish Valley community currently value?
- What do new members to the community value?



Case Study: Boston Marine Park Climate Fund

- **Challenge:** Boston is particularly vulnerable to sea-level rise and is preparing for potentially 16 inches of sea level rise by 2050.
- **What is being funded:** Sea level rise infrastructure
- **Quantity of funding to be raised:** ~\$40 Million
- **Funding Contributors:** Property tenants
- **Funding Mechanism:** Boston Public Development Authority tenant exactions

Funding Mechanism: Exaction-based Climate Fund

- Climate Resiliency Fund supported through **exactions (fees) paid by tenants** in the Marine Park
 - BPDA owns the land in the Seaport area, and offers long-term leases to potential tenants
 - BPDA leverages **negotiation points such as redevelopment, building, and/or transition conversations** to require Climate Fund contributions from developers

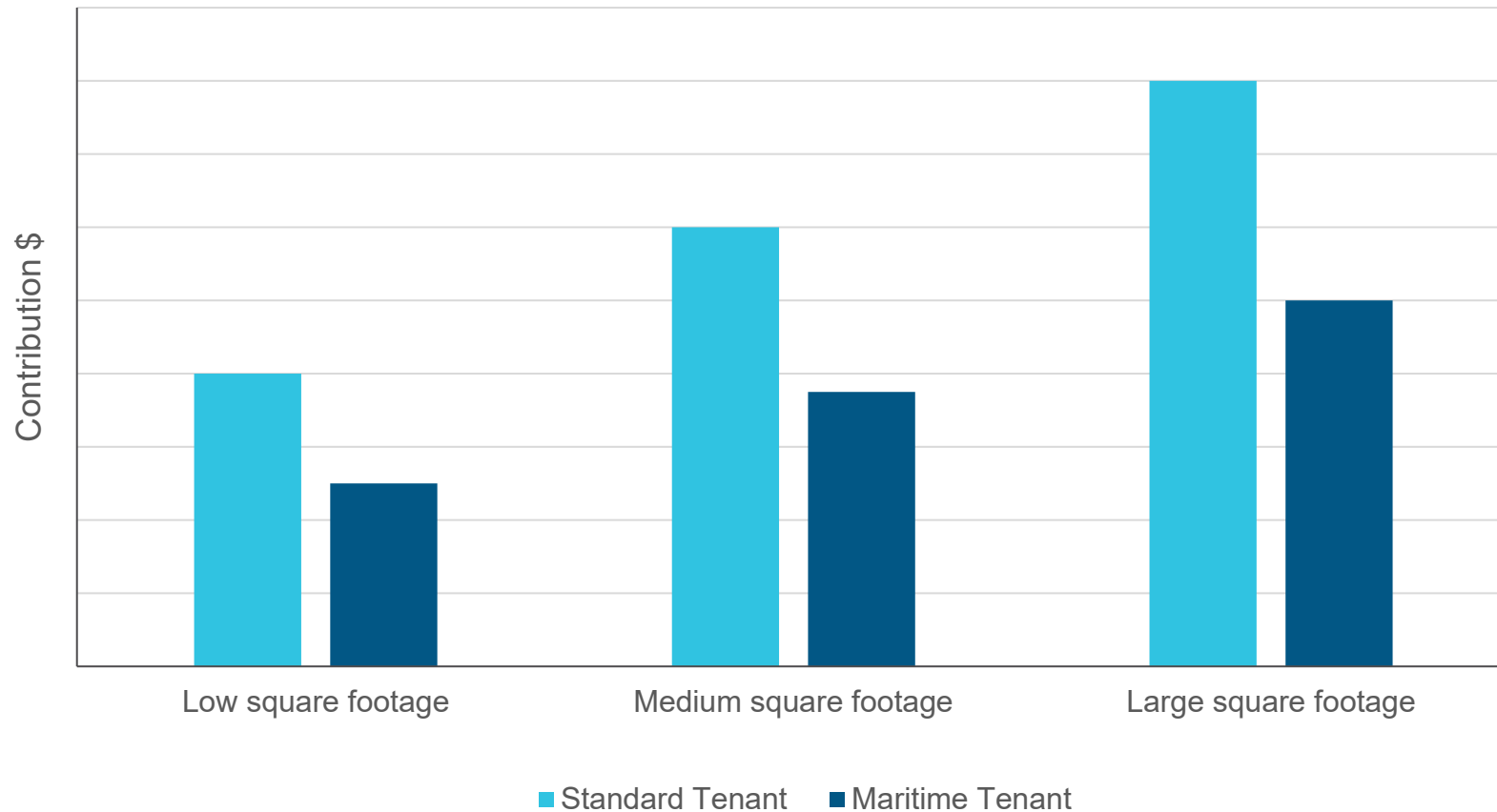
Regulatory Process:

- BPDA established the fund following the 2016 Climate Ready Boston plan release
- The Fund is not mandated via regulation and instead is a program being enforced by BPDA leadership

Enabling Condition(s):

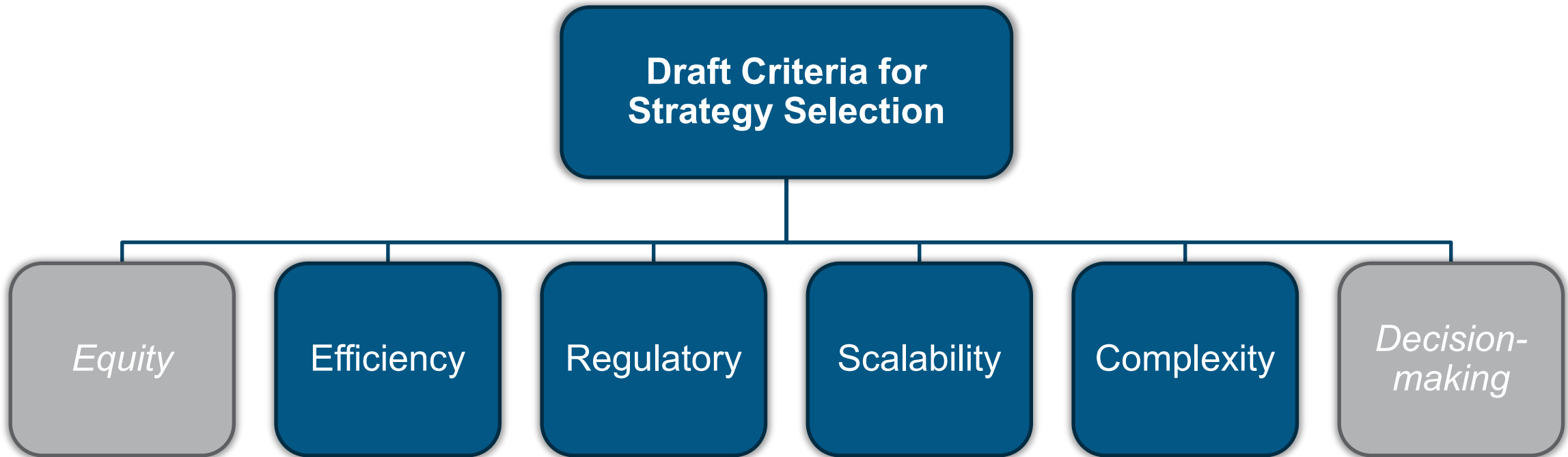
- Developer buy-in: Real estate investors recognize necessity of protecting the Marine Park from SLR
- BPDA ownership of Marine Park area: BPDA owns the land in the seaport, allowing them to require long-term tenant contributions for lease agreements
- Competitive Boston real estate market: Boston has one of the fastest growing real estate markets in the country, allowing BPDA to maintain a strong tenant base regardless of higher fees

Property Exactions



Exactions, taxes, and fees can be adjusted based on the project team's values – BPDA chose to subsidize the maritime industry.

- The Boston Marine Park Climate Fund offers lessons regarding:
 - **Efficiency:** Can only get tenant commitment at renegotiation points
 - **Regulatory:** Advanced by an Agency that had existing regulatory power
 - **Scalability:** Tenants are brought in over time, with fee collection delayed
 - **Complexity:** A straightforward mechanism for raising funds to support financing



General Feedback: Broad questions about the case study

- What questions do you have about the Boston Marine Park Climate Fund?
- What benefits do you see in this case study?

Questions about Ownership

- What types of ownership arrangements might promote the values of the Resilience District?

Case Study: Outcomes-Based Financing in Buffalo, NY

- **Challenge:** Buffalo hopes to capture stormwater, reduced combined sewer overflows, and enhance community benefits, including employment opportunities.
- **What is being funded:** Green infrastructure investment incentives
- **Quantity of funding raised:** ~\$52 Million
- **Financing Contributors:** Bond purchasers, repayment via sewer utility payments
- **Financing Mechanism:** Buffalo Sewer Authority Bond Issuance



Financing Mechanism: Environmental Impact Bond

- A performance contract with a contingent loan
 - Payments to investors contingent on the effectiveness of green infrastructure
 - If a greater volume of stormwater was managed, Buffalo had to pay less money to investors (based on acreage)
- Third-party investors provided up-front funding to be repaid by the Buffalo Sewer Authority from budgetary savings and societal benefits generated by successful outcomes
- Raised \$52 million for Rain Check 2.0

Regulatory Process:

- Buffalo Sewer Authority had powers and credit range to issue a bond

Enabling Condition(s):

- Majority Board buy-in: Resolution by the Sewer Authority Board to authorize a bond
- Rain Check 2.0 Report: Created framework for green infrastructure in Buffalo with an equity lens

Traditional Municipal Bonds or Other Debt

- Business as usual
- Payment for project alone, regardless of whether it successfully achieves goals and outcomes
- No risk transfer
- No outcomes evaluation
- No engagement with additional beneficiaries or stakeholders at the table

EIBs and Other Outcomes-Based Financing

- Enable payments based on achievement of successful outcomes and goals
- Transfer risk of project performance to investors
- Outcomes evaluation builds evidence base to inform future project planning and funding
- Tap into new base of impact and ESG investors
- Enhanced reporting on and disclosure of outcomes to investors
- Opportunities to engage other beneficiaries and stakeholders and bring them to the table

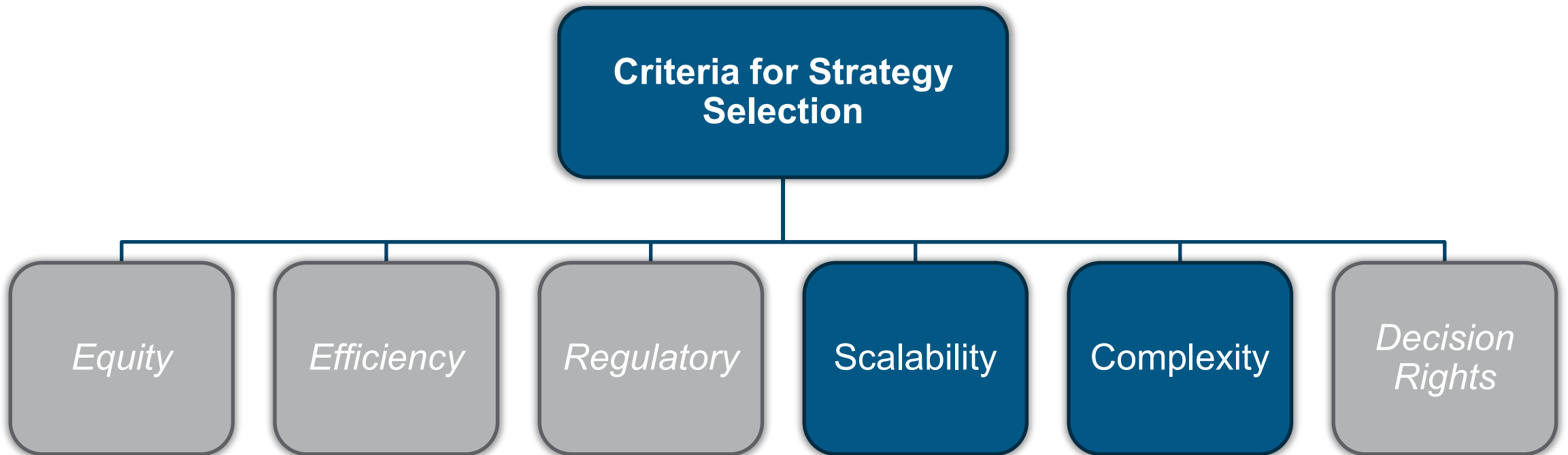
An Environmental Impact Bond does three things:

1 Quantitative prediction of a project outcome metric

2 Post-implementation evaluation of actual project outcomes
Simple low-cost protocols, ideally using existing issuer expertise and capacity

3 Disclosure of actual outcomes to investors and stakeholders
EIBs may have some terms of the investment change with outcomes

- The Buffalo Environmental Impact Bond offers lessons regarding:
 - **Scalability:** While projects produce positive outcomes, the EIB model can be scaled to a variety of project types and sizes
 - **Complexity:** Though the performance contract associated with the EIB add some complexity, the municipal bond model is proven and time-tested



General Feedback: Broad questions about the case study

- What questions do you have about the Outcomes-Based Financing in Buffalo case study?
- What benefits do you see in this case study?

Questions about Outcomes, Beneficiaries, and Support

- What outcomes could SLR infrastructure in the Duwamish Valley offer?
- Who might the beneficiaries of those outcomes be? How could you envision them paying for those outcomes?



Case Study: Sao Paulo Joint Urban Operation

- **Challenge:** The City of Sao Paulo hoped to address informal housing and drainage problems in the Agua Espraiada district, and to facilitate urban development occurring near the area.
- **What is being funded:** Transportation & drainage infrastructure, social housing, public spaces.
- **Quantity of funding raised:** \$806 Million
- **Funding Contributors:** Purchasers of zoning rights at auction
- **Financing Mechanism:** Construction permit trading

Financing Mechanism: Construction Permit Trading

- Sale of Certificates of Additional Construction Potential (CEPACs): A certificate allowing for larger floor area ratios in new development, issued by the city government, and sold on the stock market through auction

Regulatory Process:

- Value capture enshrined in 1988 constitution, first implemented in Sao Paulo through the city's 2002 strategic master plan and resulting Urban Operations (UOs)
- Governed by a Management Commission consisting of local government representatives, private investors, community members, and civil society groups

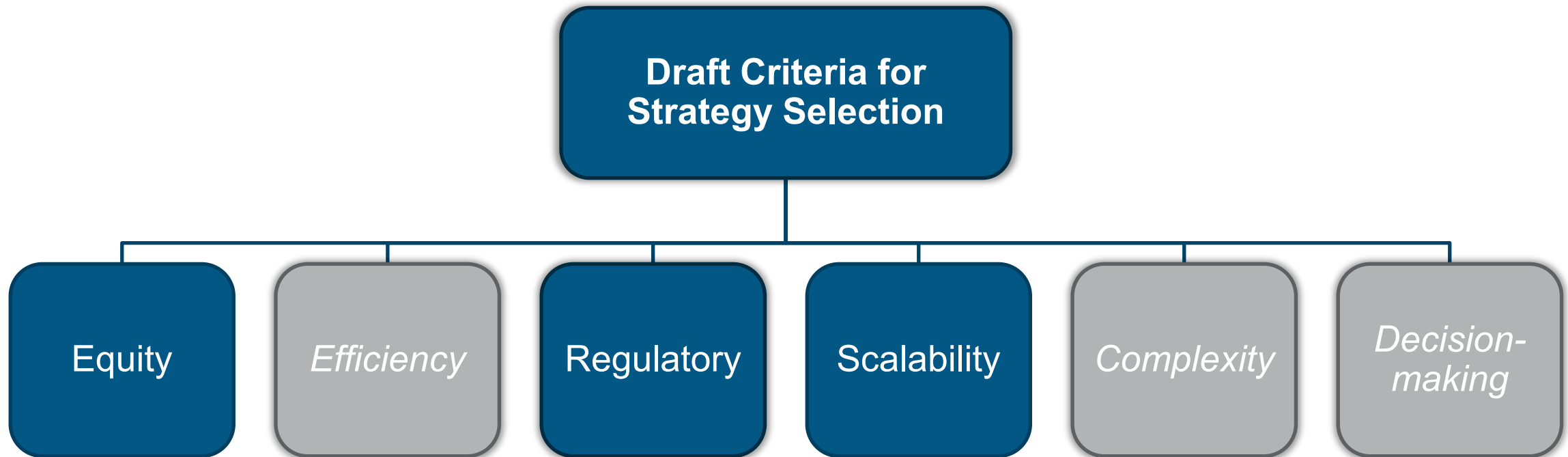
Equity

- Sao Paulo set aside 34% of funds generated for infrastructure/urban services directly benefitting low-income families
- Struggled to deliver on equity promises, with more than 8,000 families displaced

Enabling Condition(s):

- High demand for land in the Agua Espraiada area
- Legislative support underpinning efforts

- The Sao Paulo Joint Urban Operation offers lessons regarding:
 - **Equity:** Includes dedicated mechanism for equitable outcomes, though struggled to deliver on those promises
 - **Regulatory:** Demonstrates the impact of an enabling legislative environment
 - **Scalability:** Able to deliver almost \$1B worth of financing to a wide variety of projects



General Feedback

- What questions do you have about the Sao Paulo Joint Urban Operation case study?
- What benefits do you see in this case study?

Questions about Assets

- Are there any existing or future assets in the Duwamish Valley that could be considered as a sustainable revenue source?


Next Steps & Discussion



Episodic SLR Impacts in South Park



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- What additional questions do you have about funding and financing?
- What municipal funding and financing tools are you aware of that we haven't covered?
- What roadblocks might we anticipate making some tools harder to employ than others?
- How might we think creatively about how our decision-making criteria (next slide) will inform strategy selection?

Draft Criteria for Strategy Selection

Equity

How will the funding and financing sources be equitably managed, distributed, and who will they impact and how?

Efficiency

How fast or slow will certain funding and financing be available?

Regulatory

Do city or state regulations currently support the tools we want to use, or do they have to be created?

Scalability

Can the tools be scaled to support larger projects, different types of projects, or different geographically located projects?

Complexity

How complex are the tools and are they worth developing?

Decision-making

By whom, when, and how are informed decisions on moving forward and allocating funding and financing made?

- Late June:
 - Municipal Financing team & City leads regroup on today's learnings
- July:
 - Municipal Financing team debriefs with other consulting teams
 - Municipal Financing <> Organizational Development alternatives alignment
- August:
 - Municipal Financing <> Racial Equity evaluation
- September:
 - Municipal Financing Alternatives Advisory Group meeting