Barriers to Resilience Funding and Finance and Guidebook

Opportunity Mapping

The following table appears in the *Ready-to-Fund Resilience Toolkit* and references elements within the Toolkit. Each section identifies common barriers within four categories: economic, capacity, cultural, and regulatory. The characteristics mentioned that can be used to address these barriers can be found in the *Ready-to-Fund Resilience Toolkit*[1].

Table 1. Barriers to Resilience Funding and Finance and Guidebook Opportunity Mapping.

ECONOMIC - difficulty making the business case.	ECONOMIC - scale and timeframe of resilience funding and finance requirements.	CAPACITY - lack of capacity.	CAPACITY - project complexity.
• A lack of clear understanding and/or quantification of the myriad benefits that can accrue years after project completion, both directly in the form of revenue or indirectly in the resultant economic activity, environmental and quality of life improvements. • Guidance is limited about how to account in monetary terms for potential social and environmental benefits produced by adaptation and resilience projects. • Challenges to monetizing more holistic social and environmental project benefits plus uncertainty about when they will be realized and valued can skewer calculating	• Benefits from adaptation and resilience projects may be unrealized for years following project completion and they may hinge on nuanced concepts such as avoided costs or unrealized damages that can prove a challenge to communicate so the public understands. • The precision required to identify anticipated benefits and the need to determine specific beneficiaries makes assigning payment responsibilities difficult for adaptation and resilience projects that use traditional revenue-generating tools. • Since adaptation and resilience projects may require large upfront	• When local governments must contend with limited budgets, conflicting policies, and limited capacity, it can be difficult to meet resource and technical capacity requirements for securing funding and finance for equitable climate resilience. This can be even more pronounced for small and mid-sized cities with fewer resources. • Adaptation and resilience projects may be large in scale and designed to provide myriad benefits. Larger projects may require tapping into different funding sources to be realized. • Procedural and administrative requirements outlined in both state and federal funding sources can make it difficult	• Planning for adaptation and resilience projects requires significant effort so more upfront resources may be needed for coordination and community engagement and complex design, engineering, and economic considerations. • Local governments already operate with constrained resources and limited capacity to assume additional responsibilities so limited capacity can affect the ability to pursue and secure funding and deploy monies for adaptation and resilience projects. • Even if grant funding is available, some agencies don't have the capacity to onboard grant funds and administer or spend the money effectively.

[1] Doi 10.25923/crr2-dh90

cost-benefit assessments that prioritize wealthier communities over those historically disadvantaged. LMI and BIPOC communities often have the most to gain in terms of social and environmental co-benefits of climate resilience projects, yet these considerations often are omitted from project prioritization considerations. • Some resilience projects don’t have a direct revenue source. Unlike renewable power that generates energy that can be sold, a flood mitigation project does not have a revenue stream. Investors consider projects without revenue associated with them as “unbankable.” Guidebook characteristics that address this barrier: Characteristic 7 Characteristic 8	expenditures, debt financing often is needed. • To create debt financing, project proponents must identify and commit to securing a dependable revenue source that will repay investors over a longer time period. • For communities, the bigger issue than access to financing sources is the shortage of funding to pay back financing. Guidebook characteristics that address this barrier: Characteristic 5 Characteristic 7 Characteristic 8	to combine funding streams. Guidebook characteristics that address this barrier: Characteristic 1 Characteristic 2 Characteristic 6	• Sometimes, grant administration rules are so onerous that jurisdictions don’t apply. • No funding exists for planning a project. • Many debt service tools, such as taxes, require administrative resources to generate broad public support to meet voter approval thresholds. Guidebook characteristics that address this barrier: Characteristic 1 Characteristic 2 Characteristic 6
CAPACITY - competing priorities. • Planning for adaptation and resilience projects is challenging because at the programmatic and project level, communities can face conflicting guidance about what needs to be done. For instance, a state may advocate that coastal communities consider sea-level rise in their	CAPACITY - novelty and transaction costs. • Several newer and “innovative” finance tools, such as social impact bonds and insurance-linked securities, have emerged in funding and financing infrastructure for adaptation and resilience projects. These tools are largely unproven in the mainstream financing	CULTURAL - siloed approach. • Often, the climate resilience agenda isn’t a priority or lacks the understanding of the importance of cross-agency involvement. • Compounding this lack of connectivity is little knowledge of, and capacity for, the resilience needed by finance and legal staff in particular and elected	CULTURAL - misalignment. • When incentives and regulations misalign across local governments, investors can find it difficult to assess projects. • Creating financing structures and jurisdiction for each project increases transaction time and costs. Infrastructure experts estimate that the use of lawyers, engineers, and

decisions while also asking to increase their housing stock. • Coastal communities face significant housing shortages, so development opportunities can fall in low-lying areas at risk from sea-level rises. Western fires underscore the risks of living at the wildland urban interface. Redeveloping homes in the same locations could exacerbate climate-related risk. Guidebook characteristics that address this barrier: Characteristic 1 Characteristic 7	market. • Innovative financing mechanisms may be more difficult to use in the near-term since the presence or perception of transaction risk may exist because of a lack of performance and other data. Guidebook characteristics that address this barrier: Characteristic 2 Characteristic 5 Characteristic 10	officials. • If a resilience agenda has no or low priority, it can prove difficult to persuade department and agency leads of the need for cross-sector/ cross-discipline resilience work. Guidebook characteristics that address this barrier: Characteristic 1 Characteristic 2	other advisers can equal one-to-five percent of project costs that prove difficult to recoup since they are not capitalized. • For resilient infrastructure projects, transaction and development costs may even be higher because limited data on financial and risk performance makes deal evaluation more complicated. Guidebook characteristics that address this barrier: Characteristic 1 Characteristic 6 Characteristic 10
CULTURAL - failure to center equity. • Disadvantaged and vulnerable communities often face disproportionate impacts from a changing climate. Yet, they are deprioritized for climate resilience investment. • These front-line communities with fewer resources will often possess limited capacity to pursue funding, secure financing, and deploy monies for adaptation and resilience projects. • Existing institutionalized funding and financing practices could further increase disparities in community resilience if such	REGULATORY - climate risk and resilience requirements are absent within policy and decision-making. • Information about and measures to address risks from climate change are not incorporated into most policies governing public and private institutions. • The absence of quantitative data on the financial and risk performance of resilience infrastructure projects exacerbates this problem which can incentivize risky behavior. • Ahead, economic and financial realities will demand better accounting for climate	REGULATORY - unfavorable and uncertain regulations and policy. • Few regulatory incentives and policies exist to attract and secure private investors effectively. Climate risk is often absent or underemphasized in decision-making processes for investors. • Because climate change is often perceived as slow-moving with impacts far into the future, climate risks are undervalued or not accounted for in many types of market investments. Guidebook characteristics that address this barrier:	REGULATORY - planning. • Governments often fail to develop long-term plans so infrastructure needs are unknown. • Even with a long- term plan, the pipeline may not be well communicated, resilient or equity- centered. • When the number of projects is unclear, investors find it difficult to justify investing in diligence and credit-evaluation expertise or in partnerships. • The project proposal and design processes often are decoupled from implementation as well as funding and finance

practices do not change to explicitly remove inequity. Guidebook characteristics that address this barrier: Characteristic 3 Characteristic 4	risk in public and private sector policies and programs. Guidebook characteristics that address this barrier: Characteristic 8 Characteristic 10	Characteristic 10	considerations. Guidebook characteristics that address this barrier: Characteristic 9