

# Chapter 8

## Prioritization Framework

# Asset Prioritization Framework

This framework is designed to systematically evaluate diverse asset types and identify those that should be prioritized for intervention.

Stakeholders can start by assessing vulnerable assets using this Asset Prioritization Framework, which is applicable across sectors and helps identify assets for which resilience projects that could deliver the greatest benefits.

Criteria		Working Definition	Low	Medium	High	
<b>Need:</b> How vital an asset is to the safety, stability, and functioning of interconnected systems or sectors.	N1	<b>Life Safety</b>	The extent to which damage to the asset would result in health and wellness impacts.	L: Impacts to the asset would not compromise life safety or cause health and wellness consequences.	M: Impacts to the asset would indirectly compromise life safety or cause health and wellness consequences.	H: Impacts to the asset would directly compromise life safety or cause health and wellness consequences.
	N2	<b>Urgency</b>	The extent to which the asset is already experiencing climate impacts.	L: The asset is not currently experiencing climate-related service disruptions, and models project exposure only in late-century scenarios beyond current design thresholds.	M: The asset shows early or intermittent impacts today, with moderate disruptions projected by 2035–2050 under at least one emissions scenario.	H: The asset is already experiencing major, recurring disruptions, with severe and chronic impacts projected by 2035 or sooner under both scenarios.
	N3	<b>Criticality</b>	The extent to which other systems or sectors depend on the asset. A highly critical asset may cause cascading failures across multiple systems if disrupted.	L: Dependencies are limited or non-critical. The asset supports localized or non-essential functions, and its failure would cause inconvenience without compromising safety or essential operations.	M: The asset provides important community or regional functions, and its failure would create significant but manageable disruptions across multiple users or sectors.	H: Disruption would trigger widespread, cascading impacts across multiple systems and communities, extending well beyond the immediate area.
	N4	<b>Redundancy</b>	The extent to which the asset creates additional capacity or alternative service delivery during a climate event.	L: The asset has strong redundancy, with multiple reliable alternatives capable of maintaining service under both present and future high-emission scenarios.	M: The asset has limited redundancy, with alternatives available but constrained in capacity or exposed to similar hazards.	H: The asset has no redundancy, and failure would result in total loss of service with no viable alternatives.
	N5	<b>Number of People Impacted</b>	The number of people, including residents and workers, which the asset serves or protects.	L: The asset serves or protects a minimally populated area, less than 100 people per square mile, with a low number of residents and workers.	M: The asset serves or protects a moderately populated area, between 100 to 1,000 people per square mile, with a moderate number of residents and workers.	H: The asset serves or protects a densely populated area, more than 1,000 people per square mile, with a large number of residents and workers.
<b>Equity and Community Support:</b> Whether an asset serves or protects vulnerable populations, aligns with community priorities, promotes environmental justice, and protects economic opportunities.	E1	<b>Supports Vulnerable Populations</b>	The extent to which the asset serves communities with high Social Vulnerability Indices.	L: The asset serves a community with Social Vulnerability Indices below 0.50.	M: The asset serves a community with Social Vulnerability Indices from 0.50 to 0.75.	H: The asset serves a community with Social Vulnerability Indices above 0.75.
	E2	<b>Community Supported</b>	The extent to which the asset is important to the local community.	L: Asset has not been identified in community or municipal stakeholder engagement.	M: Asset has been identified in community or municipal stakeholder engagement.	H: Asset has been discussed on multiple occasions in community or municipal stakeholder engagement.
	E3	<b>Advances Environmental Justice</b>	The extent to which the asset serves and/or reduces environmental burdens on historically underserved communities.	L: The asset does not serve or protect a historically underserved community.	M: The asset indirectly serves a historically underserved community.	H: The asset is located in an Environmental Justice area or directly serves a historically underserved community.
	E4	<b>Protects Economic Resources</b>	The extent to which an asset protects economic resources.	L: The asset has minimal or no impact on protecting economic resources.	M: The asset moderately protects economic resources, indirectly supporting economic growth and job creation.	H: The asset significantly protects economic resources, acting as a hub of economic growth, development, and job creation.
<b>Strategic Alignment:</b> How well an asset aligns with broader municipal, regional, or resilience planning goals, including comprehensive and hazard mitigation planning efforts.	S1	<b>Alignment with Local/Municipal Goals</b>	The extent to which the asset aligns with local and municipal goals.	L: The asset does not contribute to local and municipal goals.	M: The asset indirectly supports local and municipal goals.	H: The asset directly supports local and municipal goals.
	S2	<b>Identified in Multiple Planning Initiatives</b>	The extent to which the asset is listed as a priority asset in planning initiatives, such as Hazard Mitigation Plans.	L: The asset is not listed as a priority asset in planning initiatives.	M: The asset is listed as a priority asset in a singular planning initiative.	H: The asset is listed as a priority asset in multiple planning initiatives.
<b>Holistic Resilience:</b> Whether an asset contributes to long-term environmental, cultural, and social well-being beyond its primary function.	H1	<b>Advances or Protects Biodiversity</b>	The extent to which the asset enhances and protects biodiversity.	L: The asset does not impact, or have the ability to impact, biodiversity.	M: The asset minimally enhances or protects biodiversity, or minimally has the opportunity to enhance or protect biodiversity.	H: The asset meaningfully advances and/or protects biodiversity.
	H2	<b>Provides Ecosystems Services or Co-Benefits</b>	The extent to which the asset improves the ecosystems more broadly, such as improving air and water quality.	L: The asset does not impact ecosystems.	M: The asset minimally improves, or minimally has the opportunity to improve ecosystems.	H: The asset meaningfully improves ecosystems and provides co-benefits, such as improving air and water quality.
	H3	<b>Supports Sustainability Goals or Initiatives</b>	The extent to which the asset reduces greenhouse house gas (GHG) emissions, sequesters carbon, or can support decarbonization efforts.	L: The asset increases greenhouse gas (GHG) emissions.	M: The asset has no impact on greenhouse gas (GHG) emissions.	H: The asset reduces greenhouse gas (GHG) emissions.
	H4	<b>Carries Cultural or Historical Value</b>	The extent to which the site is an active cultural or historical site.	L: The asset is not identified as a cultural or historical site.	M: The asset is identified as a cultural or historical site.	H: The asset is identified as a cultural or historical site and/or provides tangible or intangible meaning where impacts result in irreversible cultural loss.

# Project Prioritization Framework

This framework is designed to systematically evaluate projects after they have been identified. Stakeholders can use the Project Prioritization Framework to assess and rank these projects based on feasibility, impact, and alignment with statewide resilience goals. The process helps determine which concepts should advance first, resulting in a prioritized list of projects that can guide investment decisions and inform the next phase of implementation.

Criteria		Working Definition	Low	Medium	High	
<b>Cost Factors:</b> Captures the overall financial commitment required to implement and sustain the project.	C1	<b>Initial Capital Costs</b>	The magnitude of upfront financial resources required to initiate the project, including design, permitting, and construction start-up expenses.	L: Initial capital costs are substantial and represent a significant portion of available funding or require complex multi-source financing.	M: Initial capital costs are moderate and may require some external funding or reallocation of local resources.	H: Initial capital costs are minimal relative to total program budgets and can be absorbed without external financing or external financing for initial costs has already been obtained.
	C2	<b>Ongoing Costs</b>	The degree of recurring financial commitment required to operate, maintain, and monitor the project after completion.	L: Ongoing costs are high and may require dedicated long-term funding sources or new operational capacity.	M: Ongoing costs require moderate annual allocations or shared maintenance responsibilities among partners.	H: Ongoing costs are minimal and can be integrated into existing budgets without additional staffing or operational strain.
	C3	<b>Cost of Doing Nothing</b>	The financial, social, and operational risks associated with inaction—specifically, the cost of damages, service disruption, and lost productivity or wellbeing if the project is not implemented.	L: Minimal or no measurable losses are expected if the project is deferred; impacts can be easily mitigated or addressed later.	M: Deferral of the project would lead to moderate disruptions, costs or degradation in service quality, requiring additional expenditures in the near term.	H: Inaction would result in significant financial, social, or infrastructure losses, escalating repair or replacement costs, or permanent loss of functionality.
	C4	<b>Potential Economy of Scale</b>	Potential cost efficiencies, resource sharing, or performance improvements that can be realized by implementing multiple related projects together or at a larger scale.	L: Project is stand-alone with limited opportunities for cost savings or integration with other efforts.	M: Project could achieve moderate efficiencies if coordinated with one or more related projects or programs.	H: Project offers substantial cost savings or performance improvements through being implemented jointly with other projects, leveraging shared resources or infrastructure.
<b>Impact:</b> Reflects the extent to which the project benefits people and businesses in the broader community.	I1	<b>Impacted Populations</b>	The extent to which the project benefits or affects individuals within the community, measured by reach, safety, or accessibility.	L: Benefits a small number of residents or primarily already well-served populations.	M: Benefits a moderate number of residents, including some underserved areas or populations.	H: Benefits a large number of residents, with clear, measurable benefits for vulnerable or historically underserved populations.
	I2	<b>Economic Resilience and Business Impact</b>	The degree to which the project influences economic activity through improved infrastructure, access, or resilience.	L: Project does not meaningfully support or improve local or regional economic stability or continuity.	M: The project provides measurable improvements to operations, access, or infrastructure that enhance the economic resilience of local or regional economies.	H: The project generates widespread, measurable benefits for local and regional economies by significantly improving infrastructure, access, and resilience. Multiple regions experience enhanced operational reliability, reduced vulnerability to disruptions, and strengthened market competitiveness as a result of the project.
	I3	<b>Number of Assets and Services Impacted</b>	The extent to which the project benefits or affects other assets essential to Rhode Island's resilience.	L: Supports, protects, and/or improves a limited number of assets.	M: Supports, protects, and/or improves a moderate number of assets.	H: Supports, protects, and improves multiple assets across several categories.
	I4	<b>Ecosystem Health and Environmental Resilience</b>	The degree to which the project protects, restores, or enhances natural ecosystems and their capacity to provide essential services—such as water filtration, flood mitigation, habitat support, and carbon sequestration.	L: The project does not meaningfully protect or improve local ecosystems, or may have neutral ecological effects.	M: The project includes measurable environmental co-benefits, such as moderate habitat restoration, water quality improvements, or reduced resource consumption.	H: The project delivers substantial, lasting ecological benefits, such as large-scale habitat restoration, improved water or air quality, enhanced carbon storage, or the creation of self-sustaining natural systems that increase ecosystem resilience to climate and human pressures.
<b>Lifespan:</b> Indicates how long the investment will deliver value and remain functional without major reinvestment or degradation in performance.	S1	<b>Longevity of Investment</b>	The degree to which the project delivers long-term, durable benefits that reduce the need for future interventions.	L: Provides short-term or temporary benefit; requires frequent maintenance or replacement. (<10 years).	M: Provides medium-term benefit with moderate maintenance needs; may require future upgrades (10–30 years).	H: Offers long-lasting, self-sustaining benefits that permanently reduce risks or enhance resilience, with minimal need for reinvestment (30+ years).
<b>Implementation and Maintenance Feasibility:</b> Measures the ease of successful implementation based on funding availability, organizational capacity, and project complexity.	F1	<b>Funding Source</b>	The availability, reliability, and eligibility of funding sources to support project implementation and maintenance.	L: The project does not align with existing funding sources, and there is no clear fit for potential funding mechanisms.	M: Some potential funding sources identified but contingent on future approvals or may need to be partially funded by various funding sources.	H: Secured or committed funding in place; clear and strong eligibility across one or more funding sources and match commitments established.
	F2	<b>Leading Entity</b>	The degree to which a specific organization or agency is identified and prepared to manage project implementation and maintenance.	L: No clear lead entity or responsible organization identified.	M: Potential lead identified but with limited capacity or competing priorities.	H: Clearly defined lead entity with authority, capacity, and commitment to manage implementation as well as strong partnerships and resources supporting lead entity.
	F3	<b>Complexity</b>	The level of technical, regulatory, and logistical difficulty associated with implementing the project.	L: Highly complex with significant interagency coordination, technical challenges, or permitting hurdles that could delay execution.	M: Moderate complexity requiring multiple partners or regulatory reviews but manageable within standard timelines.	H: Straightforward implementation with minimal permitting, coordination, or technical risk.
	F4	<b>Adaptability</b>	The project's capacity to accommodate changing conditions, technologies, or future expansion.	L: Design is rigid and difficult to modify once implemented.	M: Moderate adaptability with some opportunities for adjustment or incremental upgrades.	H: Highly adaptable design that supports future scaling, technological integration, or climate resilience.