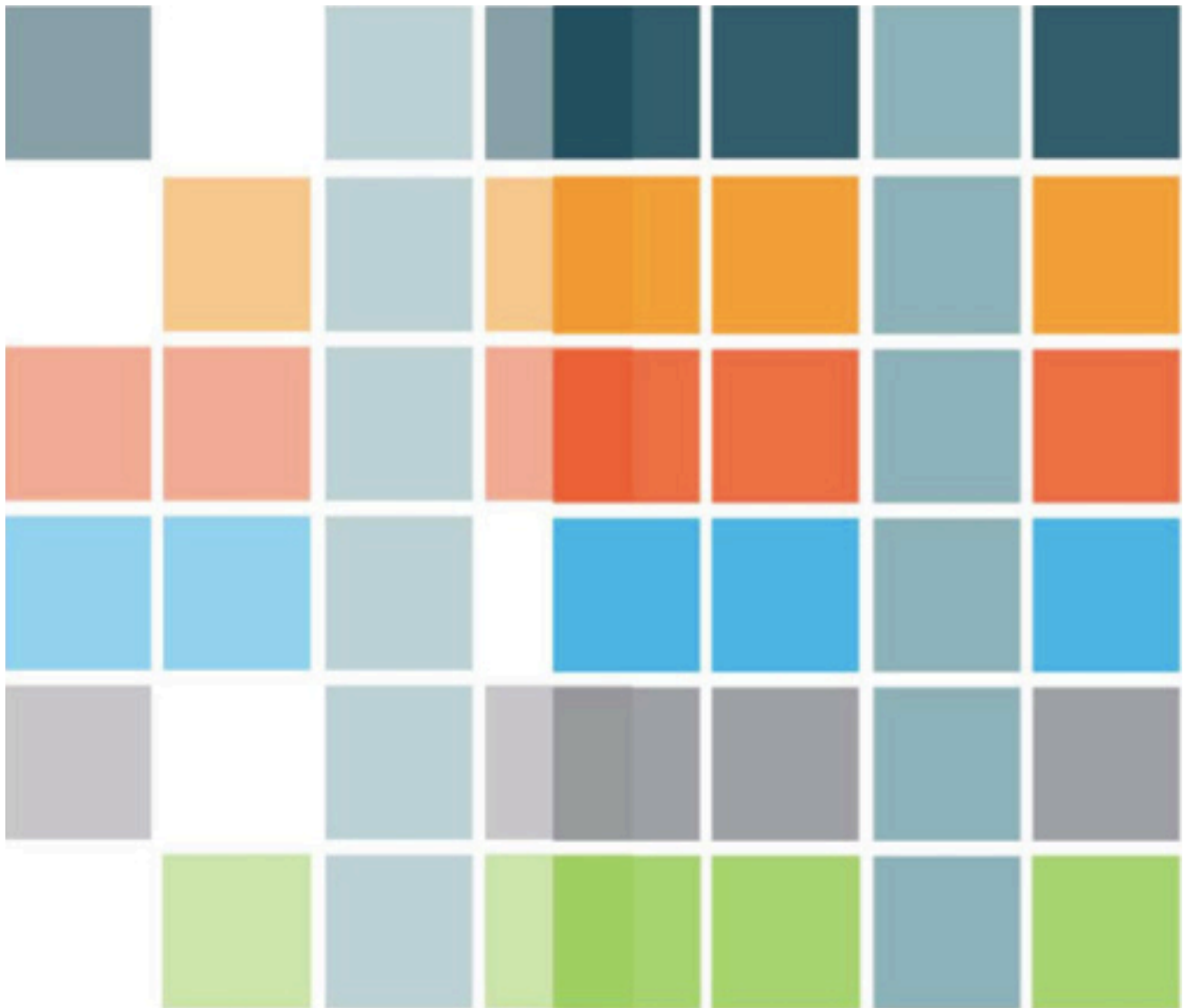




Plan Integration for
Resilience Scorecard™

PIRS™ SUPPLEMENTAL PRIMER



FOR SUSTAINABILITY OFFICERS

PRIMER OVERVIEW

[The Plan Integration for Resilience Scorecard \(PIRS™\) guidebook](#) details how communities can understand and discuss inconsistencies in resilience planning across their network of planning documents. Through the spatial evaluation of community planning documents and the creation of a resilience scorecard, PIRS™ enables communities to increase their awareness of connections between plans and natural hazard vulnerability. The resulting cross-entity collaborations and conversations helps reduce a community's vulnerability to hazard events and improves its resilience if such events were to happen.

This supplemental primer is developed to speak to the opportunities available for sustainability officers to maximize the potential of this tool to advance their work to mitigate the environmental impacts of human activity. This primer provides sustainability officers the tools they need to:

- Identify policy tools that could support sustainability plans.
- Understand a range of sustainability conflicts that might be encountered in planning documents and how amendments ought to be proposed.

SUSTAINABILITY PLANNING & PLAN INTEGRATION: A COMPLIMENTARY RELATIONSHIP

Sustainability planning activities are initiatives where sustainability officers are setting goals and developing strategic actions to address environmental issues and meet sustainability goals. These plans are often accompanied by an adopted measurement rating system to help document progress over time. There are a number of such systems available that communities can adopt to measure sustainable outcomes at the building level (such as LEED® BD + C, Living Building Challenge, WELL Building Standard, etc.), the infrastructure project level (Envision, Greenroads/Greenrails, INVEST), and at the district level (Ecodistricts™, LEED-ND, Star Communities, WELL Community).

Plan integration for sustainability are initiatives where sustainability officers ensure consistency between sustainability planning initiatives and local plans developed by other departments and entities. These would include comprehensive plans, economic development plans, transportation plans, parks and facility plans among others. By integrating sustainability priorities into other community planning documents, sustainability officers can shape local ordinances and develop capital project funding requests. Plan integration also enables sustainability officers to flag and discuss potential planning initiatives that would be detrimental to priorities laid out within their sustainability plans.

As stated below, this process is meant as an important complement to the sustainability planning and established rating systems by extending these efforts into economic, land use, and transportation planning initiatives that often do not take advantage of the beneficial environmental opportunities available to them.

Sustainability Rating Systems	Plan Integration Resilience Scorecard (PIRS™)
Details how sustainability managers can integrate sustainability priorities into the plans and planning processes of other entities.	Details how sustainability officers can integrate sustainability priorities into the plans and planning process of other entities.

WHAT MAP LAYERS SHOULD SUSTAINABILITY OFFICERS USE TO MEASURE ITS ENVIRONMENTALLY SENSITIVE AREA?

For sustainability officers, hazards area maps display environmentally vulnerable areas. In the PIRS™ Guidebook, the floodplain is used to designate the natural hazards areas related to flooding. Beyond the special flood hazard area maps from the PIRS™ guidebook, sustainability officers can customize their PIRS™ experience with additional maps and data below.

Maps & data from the Environmental Protection Agency’s Environmental Justice Screen Map - [EJScreen \(epa.gov\)](https://www.epa.gov/ejscreen).

- Areas Susceptible to Coastal Flooding & Sea Level Rise, Drought, & Wildfire Hazards
- Pollution & air quality hazardous area – To include particulate matter over 2.5, ozone, diesel particulate matter, air toxics cancer risk, air toxic for the respiratory systems, traffic proximity
- Hazardous waste, underground storage tank, and lead paint proximity
- Wastewater discharge areas
- Superfund & areas requiring an EPA risk management program.

Areas of endangered wildlife habitats – The U.S. Fish & Wildlife Service has a “Critical Habitat for Threatened & Endangered Species” map & GIS layer available on its website at [ECOS: USFWS Threatened & Endangered Species Active Critical Habitat Report](https://www.fws.gov/ecos).

WHAT POTENTIAL CONFLICTS SHOULD SUSTAINABILITY OFFICERS BE LOOKING FOR WHEN REVIEWING PLANS?

When proceeding with reviewing the community's network of plans for consistency with sustainability priorities, sustainability officers should keep a particular eye out for the following potential conflicts:

- Future land use and zoning plans for increased greenfield development that could cause increases in sensitive environmental areas such as areas of endangered wildlife and plant habitats.
- Plans for concentrated or increased industry and sources of pollution near low-income and minority neighborhoods.
- Plans to increase the urban footprint of the City in a way that is not compact and connected and would increase vehicular miles traveled for ordinary trips.
- Rules and regulations that reduce tree canopies and can increase urban heat.
- Transportation infrastructure projects that would significantly impact the migration patterns of sensitive wildlife.
- A lack of inclusion and provisions for environmental infrastructure, such as electric vehicle charging stations.

POLICY TOOLS RECOMMENDATIONS FOR SUSTAINABILITY OFFICERS

The PIRS™ tool, starting on page 5, provides an overview of the policy tools available to sustainability officers as they analyze the results of the PIRS™ process. For sustainability officers, there are several planning areas that PIRS™ could help identify conflicts in. The below table shows how PIRS™-identified policy tools could be employed to:

- Retrofit developed areas for sustainability
- Protect undeveloped environmentally sensitive areas
- Reduce energy consumption / greenhouse gas emissions

Policy Tools for Sustainability Officers			
Policy Tool¹	Retrofit Developed Areas for Sustainability	Protect Undeveloped Environmentally Sensitive Areas	Reduce Energy Consumption / Greenhouse Gas Emissions
Development Regulations			
Permitted Land Use	X	X	
Density of Land Use	X	X	X
Subdivision Regulations			X
Zoning Overlays	X	X	
Setback or Buffer Zones	X		
Cluster Development		X	X
Land Acquisition			
Acquire Land & Property		X	
Open Space or Easement Requirement /Purchase		X	
Transfer / Purchase of Development Rights		X	
Financial Incentives & Penalties			
Density Bonuses	X		
Tax Abatements	X	X	
Impact / Special Study / Protection Fees	X	X	X
Land Use Analysis & Permitting Processes			
Land Suitability	X	X	
Site Review	X		X
Design / Construction Guidelines / Requirements	X		X
Public Facilities (including Public Housing)			
Siting	X		

¹Chapter 2 page 27 of the PIRS™ Guidebook, V.2.0 contains definitions of each of the listed policy tools.

Policy Tools for Sustainability Officers			
Policy Tool ¹	Retrofit Developed Areas for Sustainability	Protect Undeveloped Environmentally Sensitive Areas	Reduce Energy Consumption / Greenhouse Gas Emissions
Sizing & Capacity	X		
Capital Improvements			
Infrastructure “Hardening” / Weatherproofing Improvements	X		
Elevating	X		
Drainage Improvements or Flood Control	X	X	
Ecosystem Enhancement		X	X
Slope / Dune Stabilization		X	

EXPLORATORY CONVERSATIONS WITH THE POLICY TOOLBOX

Having explored the policy statements themselves and within the context of physical and social vulnerability², the next step is to have conversations about the policy tools and solutions that can strengthen the supportive policy statements and address the concerning action statements. Below are some examples of how to apply the policy toolkit to particular concerns sustainability officers may have. These conversations often involve multiple administrative departments and relate to a number of public policy issues and therefore it is highly recommended that these conversations happen collaboratively and transparently as a response to the lessons learned from PIRS™ on how to improve your community’s resilience. Please note, a complete list of policy tools is provided in the appendix.

² See PIRS™ Guidebook, Version 2.0 (2021), Assessing Vulnerability, p. 55-62 for how to detail physical and social vulnerability.

Potential Conflict	Potential Policy Tool	Conversational Questions
Threats to sensitive environmental areas and wildlife migration patterns such as areas of endangered wildlife and plant habitats.	Limiting Development activity through Zoning or Zoning Overlays or Cluster Developments or the extension of utility infrastructure	<ul style="list-style-type: none"> • Are there areas of the city that should be left as natural areas? • Are there areas where development can be accommodated in a limited way? • Can we allow more intense development in some areas in order to provide open green space in other areas?
	Infrastructure improvements: Provision of wildlife corridors	<ul style="list-style-type: none"> • Is there room in the budget or opportunities to receive grants for providing wildlife corridors or habitats? • Can floodplains double as wildlife and recreational corridors?
	Acquire Land & Property or Transfer/ Purchase of Development Rights	<ul style="list-style-type: none"> • Are strategic investments needed in the City's growth path to ensure environmental areas remain undeveloped while compensating the property owner.
Not increasing environmental standards for developed areas.	Facilities development	<ul style="list-style-type: none"> • Is there political will to require environmental provisions such as LEED certifications and EV charging stations for new public facilities?
	Ensuring design/ construction guidelines/ requirements include sustainability requirements	<ul style="list-style-type: none"> • Does our jurisdiction adopt the latest building and residential codes and uphold the latest environmental and energy standards? • What requirements (like solar panels) or bans (like new natural gas hookups) are politically viable?
	Site Review	<ul style="list-style-type: none"> • Are there provisions in the site planning process to protect existing large caliper trees, pay into a tree canopy fund, or require the planning of new canopy trees?

Potential Conflict	Potential Policy Tool	Conversational Questions
<p>Plans that concentrate locally undesirable land uses in socially vulnerable areas.</p>	<p>Permitted Land Use/ Zoning Overlay</p>	<ul style="list-style-type: none"> • Can we enact zoning overlays to ensure that further locally undesirable land uses are not located in areas that already have their fair share of such uses.
	<p>Acquire Land & Property</p>	<ul style="list-style-type: none"> • Is the pollution and environmental hazards a great enough concern to human health to trigger a buyout of homes in the area?
<p>Plans for low density areas that do not allow for transit or bicycle infrastructure.</p>	<p>Subdivision requirements.</p>	<ul style="list-style-type: none"> • Do street connectivity requirements provide short connected blocks so local trips can be made via walking? • Do requirements for new streets provide dedicated space and protection for bicycles?
	<p>Acquire land & property to better connect streets to maximize safe routes to school.</p>	<ul style="list-style-type: none"> • Could strategic land or easement purchases be made to connect streets so that more school trips are made by bicycle or walking?