



TIPS FROM A PLANNER:
IMPLEMENTING THE INFRASTRUCTURE
RESILIENCE PLANNING FRAMEWORK



INFRASTRUCTURE RESILIENCE PLANNING FRAMEWORK (IRPF) AND GREEN RIVER AREA DEVELOPMENT DISTRICT

The Infrastructure Resilience Planning Framework (IRPF) was developed by the [Cybersecurity and Infrastructure Security Agency \(CISA\)](#) to help regions understand infrastructure dependencies within their local systems and “to enable the incorporation of security and resilience considerations in critical infrastructure planning and investment decisions.” By demonstrating how to include local governments, community leaders, and private sector stakeholders in the planning conversations, the IRPF provides a potential model for integrating hazard mitigation plans into a region’s Comprehensive Economic Development Strategy (CEDS).



COLIE SMITH

*Regional Resiliency Coordinator
and Economic Development Specialist*



To test run the IRPF and understand the real-world applications, CISA worked in partnership with the [Green River Area Development District \(GRADD\)](#). Since EDDs in Kentucky take on a significant amount of regional planning for their local communities, GRADD was an ideal choice to test run the IRPF model. With CEDS planning and regional hazard mitigation planning under the same roof, aligning regional planning models becomes easier and easier.

GRADD staff chose to take on this IRPF pilot partnership, commenting that they were going back to the Kentucky Division of Emergency Management and [Federal Emergency Management Agency \(FEMA\)](#) funding opportunities with the same projects affecting the same areas after disasters, perpetuating a build-disaster-rebuild-disaster-rebuild-disaster cycle. Utilizing the IRPF, GRADD aimed to break this cycle of disaster funding dependency by better evaluating and understanding the connections between infrastructure systems, determining where the region was most vulnerable, and building a path forward for addressing these vulnerabilities.

Colie Smith, Regional Resiliency Coordinator and Economic Development Specialist at GRADD provided the following tips for other planners looking to utilize the IRPF after GRADD’s successful pilot partnership with CISA.



START AT THE BASE LEVEL OF DEPENDENCY AND WORK UP.

The regional economy and essential services are dependent on highly interconnected power, communications, and other infrastructure systems and technologies that can be disrupted by both natural and human threats. With complex interconnected infrastructure systems, it can be easy to get sidetracked or go off on tangents that are not oriented towards the greater goal of total system dependency. Constantly referring to the base levels of dependency between systems can help keep your planning sessions targeted and focused. GRADD learned during this process that two of their joint municipal water systems were only connected through one physical connection. Smith said, *“during a recent potable water emergency, a system lost its’ raw water source and tried to activate an emergency system interconnect with a system in a neighboring county, only to discover that pressures were inadequate to support their needs. Over several days a regional solution was discovered and two nearby systems were able to interconnect and supply the system in crisis by moving water through two neighboring counties.”* As one system relied on the other for consistent, clean water, this situation created higher risks for the communities if this connection was interrupted. GRADD found that utilizing this more wholistic approach to project identification made applying for [Building Resilient Infrastructure in Communities \(BRIC\)](#) funds through FEMA much easier.

LOCAL RESILIENCE BUILDS REGIONAL RESILIENCE.

The IRPF framework both promotes and is improved by a regional approach. Since EDDs often provide both CEDS and hazard mitigation planning for their local cities or counties, getting member communities onboard with a more regional approach to hazard mitigation planning, and the IRPF, builds on this existing relationship. The first step in this process is identifying exactly which communities are currently creating hazard mitigation plans. From there, EDDs can make natural alignments based on combined interests, common shared hazards, or existing planning relationships. When presenting the IRPF to your CEDS Strategy Committee or HMP planning group, highlight that the IRPF promotes analyzing the dependency in systems within communities and between the regional members based on common shared hazards that may span several jurisdictional boundaries.

Through using the IRPF and zooming out to the regional level, GRADD discovered that poor construction standards for a dam built in the 1940s were the cause of three previously thought to be unrelated issues with a local drinking water source. Smith said, *“The application of the IRPF brought this root cause to light when we held county level meetings to discuss project ideas based on the gaps and vulnerabilities that were identified in the individual system interviews.”*

GRADD is now tackling all three issues at the regional level by working with local affected communities to find funding for a full redesign and rebuild of the root dam issue. Under prior planning models, the root problem with the dam design may have not been identified as each issue was seemingly unrelated. Without the IRPF, the communities may have spent millions of dollars on band-aid fixes that failed to provide actual long-term resolutions.

USE THE IRPF TO INTEGRATE REGIONAL AND LOCAL HAZARD MITIGATION PLANS WITH YOUR CEDS.

The IRPF has specific recommendations and strategies for incorporating private sector stakeholders' input into the planning process. Use this framework to build planning relationships with the private sector in your area and demonstrate to them the value of hazard mitigation planning, business continuity planning, and participating in future CEDS Strategy Committees or planning groups.

GRADD made significant progress on this by utilizing the [System Owner/Operator Dependency Interview Guide](#) to navigate conversations with their local private utility operators.

COLIE SMITH



Colie Smith is a native of Owensboro, KY and currently holds the positions of Regional Resiliency Coordinator and Economic Development Specialist at the Green River Area Development District (GRADD). Colie is a veteran of the United States Army and graduate of Western Kentucky University. He worked in the private sector for ten years as a special projects consultant and crisis management coordinator before joining GRADD.

Colie participated in the pilot project of the Infrastructure Resiliency Planning Framework (IRPF), using the IRPF to assess infrastructure dependencies for the water and wastewater sector in the seven county GRADD region located in northwestern Kentucky.

ADDITIONAL RESOURCES:

- [CISA - Infrastructure Resiliency Planning Framework](#)
- [CISA Infrastructure Dependency Primer](#)
- [CISA – GRADD Case Study](#)
- [CISA IRPF Contact](#)
- [IRPF Bonus Resources](#)
- [FEMA Fact Sheet – CEDS and Hazard Mitigation Plan Alignment Guide](#)
- [Full Guide – FEMS CEDS and Hazard Mitigation Plan Alignment Guide Full guide](#)
- [NADO CEDS and Hazard Mitigation Planning Alignment Tip Sheet](#)
- [Building Economic Resilience in the Kerr-Tar Region: Recommendations for Linking CEDS and Hazard Mitigation Plans](#)
- [FEMA – Implement, Integrate and Maintain Mitigation Planning Activities](#)

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