# Nuclear Power Plant Closure: Barriers to Economic Redevelopment

A new report by The Nuclear Decommissioning Collaborative takes a unique initial look at these impacts, the barriers to planning and mitigation, and offers recommendations to nuclear closure communities across the nation.

There are 60 commercial nuclear power plants operating in the United States. According to studies by the Nuclear energy Institute, the average plant generates roughly $470 million in sales of goods and services in the local community and nearly $40 million in total labor income. Direct expenditures for goods, services, labor, and profit are approximately $453 million. Secondary effects include indirect and induced spending by the plant and its employees in restaurants, in shops, and hiring by local businesses accounts for roughly $17 million. Secondary effects grow to $80 million at the state level and $393 million nationally per operating plant.

Nearly 30 communities have experienced or are facing losses from plant closures. Considering most nuclear power plants operate in relatively rural areas, these economic losses pose extreme hardships to communities when plants close. Failures in planning and execution to compensate for these losses result in outsized challenges and harm for these communities.

## Findings: Significant barriers to planning and mitigation measures exist.

* **Chronic resource limitations** on time, funding, and local capacity severely hinder community efforts to plan for and mitigate socioeconomic impacts.
* **Steep learning curve** around economic development planning is compounded by the technical complexity of nuclear decommissioning with no clear roles for community engagement or opportunities for peer-to-peer learning and collaboration at a national level.
* **Poorly understood socioeconomic impacts of nuclear plant closure and decommissioning** with no centralized, credible data set to guide decision making, planning, and policy development.
* **The long-term presence of spent nuclear fuel hinders economic development** and presents a significant and enduring barrier to economic recovery.
* **The lack of a coordinated federal framework with limited focus on socioeconomic impacts** obstructs other federal agencies with supportive roles to play, hinders assistance to host communities, and increases inefficiencies.

## Recommendations: Early action, planning and resource coordination at all levels will yield improved outcomes for communities.

**Local Level**: Act early to gather resources, form strategies, build relationships.

* *Develop the knowledge base* of socioeconomic ties between the plant and the community including wages, taxes, supply chains, philanthropy, and volunteerism.
* *Recognize resource constraints* and make efforts to secure available resources long before plant closure.
* *Appreciate the connections* and gather stakeholders with roles in the socioeconomic impacts across municipalities, counties, and up through the state and national levels.
* *Approach recovery as a self-directed outcome* and local community officials and organizations must take on the burden for planning, goals, and approaches.
* *Avoid focus on site-reuse* which will take decades for communities to realize any form of comparable industrial use of the decommissioned site.
* *Focus early efforts on reducing barriers* through increased funding sources and progress on national spent fuel management efforts.
* *Recognize it will happen to you* and that time is not on your side to form, revisit and revise plans for post-closure economic development efforts.

**State Level**: Recognize impacts beyond energy and environment to engage state support and engagement in the planning process.

* *Clarify roles, responsibilities, and options* that align with State priorities to guide NRC interaction, environmental and radiological oversight, NDT finances, and economic development.
* *Expand economic development programs* to consider and include nuclear plant closures in the State long before those impacts take effect.
* *Engage higher education expertise* and additional resources including the EDA’s University Center Economic Development Program to assist with planning and coordination early in the process.
* *Set guidelines for Citizen Advisory Panels* to include socioeconomic planning early, while plants are still operating, and engagement is strong.

**National Level**: Establish and sustain a multi-agency network of resources and support.

* *Establish an Alliance for Nuclear Closure Community Regeneration* to connect and engage peer communities modeled on similar efforts like the Energy Communities Alliance for Department of Energy facility communities or the Office of Economic Adjustment supporting the Base Realignment and Closure (BRAC) process.
* *Prioritize knowledge building* through university knowledge centers and national research partners to expand data, insights, and effective approaches.
* *Identify resources for scenario-based planning* that only strong relationships with federal leadership can provide modeled on brownfields, Superfund and BRAC initiatives.
* *Establish and sustain multi-agency federal support for nuclear closure communities* to make the most of lead time to closure and operating revenues from the plant for mitigation planning.
* *Consider compounding socioeconomic forces* like those we are currently experiencing from the COVID-19 global pandemic.