
The Socioeconomic Impact of Uranium Mining and Milling in the Chatham Labor Shed, Va

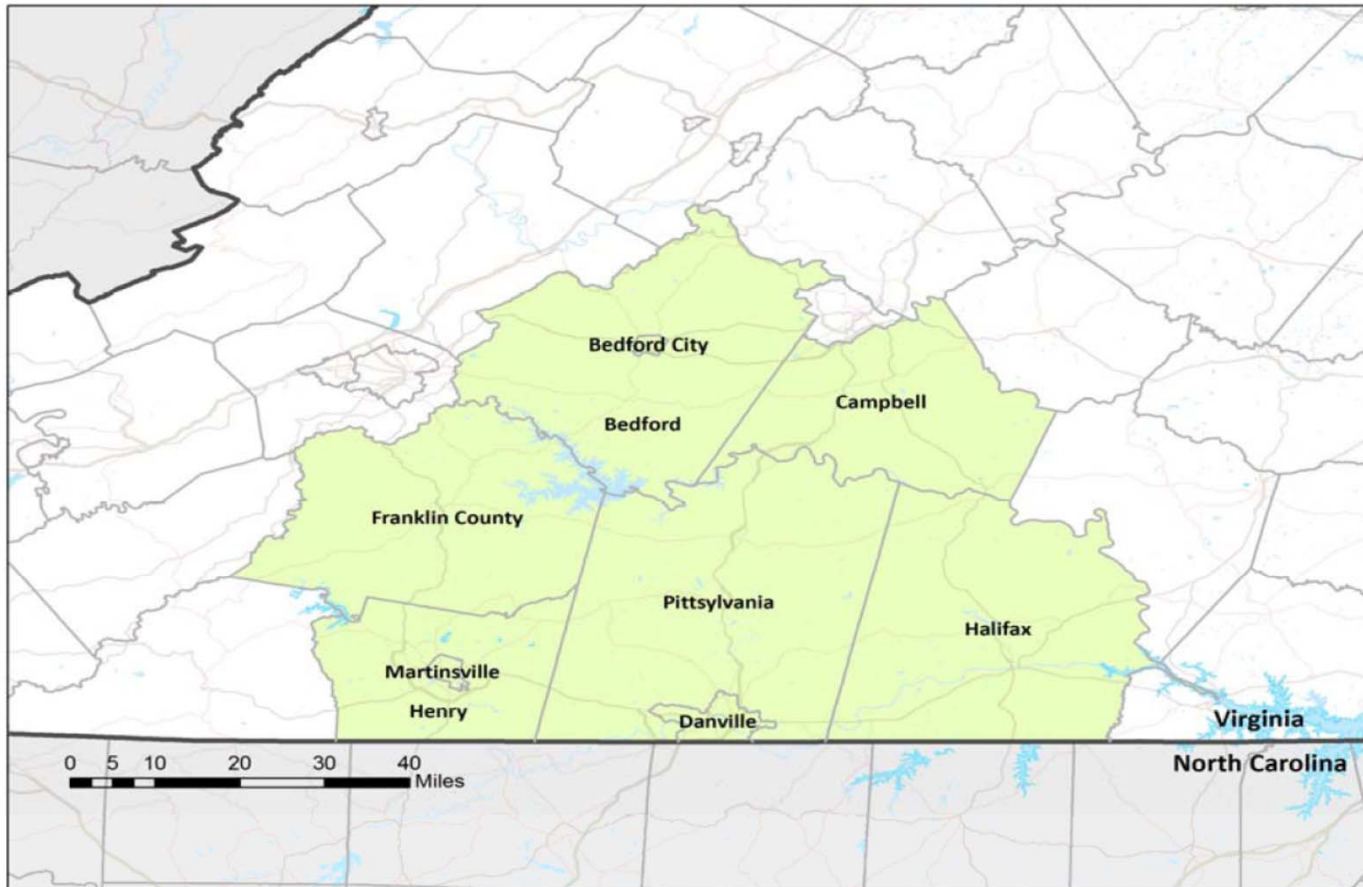
Prepared for the
Virginia Coal and Energy Commission
By Chmura Economics & Analytics
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Presentation Overview

- Committee resources did not allow for presentation by Chmura directly.
 - Digital copy of the report is available on Chmura's website (see agenda)
 - Presentation is a direct summary of the report's statements
 - Part of larger review of all reports
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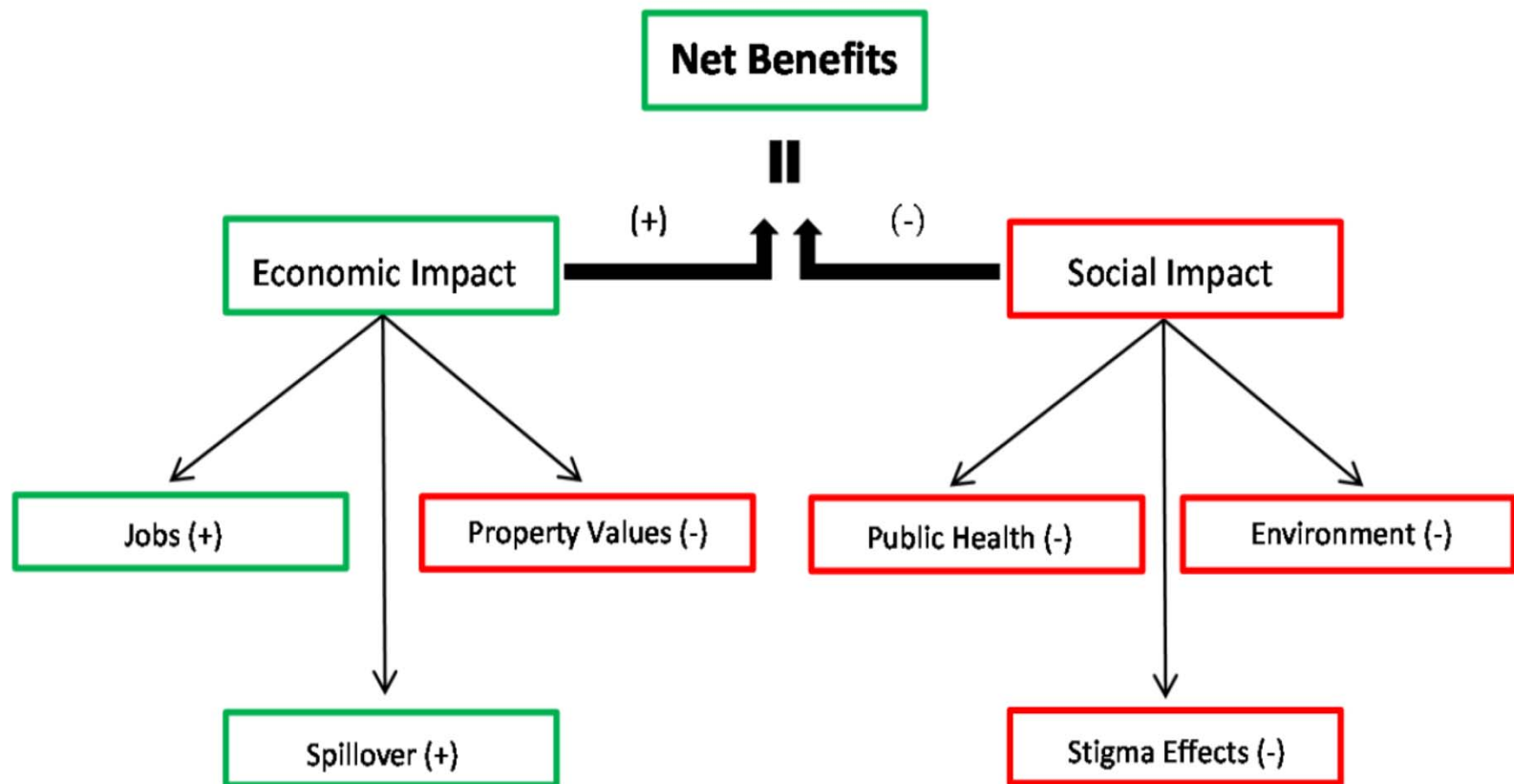
Report Findings

Figure 4.1: Chatham Labor Shed



Report Overview

The conceptual framework shown below depicts the process and components that underlie our assessment of the net benefit to Virginia from a uranium mining and milling operation:



Report Overview

Scenario 1: Negligible environmental impact. The qualities of air, water, noise, and soil are not materially altered from today's existing conditions.

Scenario 2: (BASELINE) Moderate environmental impact in terms of the qualities of air, water, noise, and soil—all contamination remains within limits set by current federal standards.

Scenario 3: Significant environmental impact in terms of the qualities of air, noise, or soil (but not water). At least in one of these three areas, (air, soil, or noise, but not water) contamination exceeds the limits set by current federal standards.

Scenario 4: Severe environmental impact in terms of the qualities of air, water, noise, and soil. Contamination of both water and at least one other area (air, soil, or noise) exceeds the limits set by current federal standards.

Assumes a uranium price of \$60 per pound with a range of \$45 to \$75 per lb

Report Overview

Chmura's analysis concludes that under the first two scenarios, the net economic impact for Pittsylvania County as well as for Virginia is clearly substantial and positive. However, the risks and rewards are not balanced, and the adverse economic impact under the worst-case scenario is nearly twice as great as the corresponding positive impact in our best-case scenario. Under scenario 3, the Coles Hill operation would still provide a positive net economic impact over the long-term so long as the mine and mill operated for roughly 10 years before environmental contamination reached the levels assumed in this scenario. Under scenario 4, the Coles Hill site unambiguously has a negative net economic impact no matter how long the site operates before environmental contamination reached the levels assumed in this scenario. A key finding, however, is that the most significant driver of the socioeconomic costs is not the reclamation and remediation price-tag to clean-up the environment, but rather the potential negative stigma effects impacting agriculture, tourism, and possibly other industries. It may also be possible to mitigate some of these stigma effects to reduce the negative impact.

Report Findings

In the opinion of Chmura, the mining and milling operations would bring substantial and much needed economic benefits to Pittsylvania County, the immediately surrounding areas, and the state. During its projected 35 years of operations, the Coles Hill site is expected to support more than 1,000 jobs annually (direct, indirect, and induced)¹ and have an annual net positive economic impact of approximately \$135 million. This net benefit comes after subtracting for a broad array of potential socioeconomic costs (such as public health and the environment) and negative “stigma” effects on some sectors (such as tourism and agriculture), which under specific circumstances, Chmura judges most likely to be minimal. Over the life of the operation, the Coles Hill site could generate almost \$5.0 billion in net accumulated economic revenue for Virginia firms.

These impressive figures, however, are predicated on the assumption that the Coles Hill site will be continuously operated and ultimately decommissioned within established federal guidelines, which, by law, reduce environmental and public health risks to the surrounding communities to near negligible levels.

Discussion

Commentary

- ◆ Discussion of Perceived Risk:
 - Difficult to estimate
 - Scope too limited
- ◆ Environmental Impacts
 - Watershed discussion was superficial
 - Missed impact of remediation should contamination occur
- ◆ Better Environmental Cost Estimates Needed.