A White Paper by

Replacing Coal Revenue and Investing in Economic Transition: Solutions for Coal-Dependent Communities

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ABOUT HEADWATERS ECONOMICS

Headwaters Economics is an independent, nonprofit research group whose mission is to improve community development and land management decisions.

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I. EXECUTIVE SUMMARY

When coal mining and power generation operations cut back or retire, states and communities feel the pinch—especially when they have depended on coal-related tax and royalty revenues for many years to pay for roads and bridges, schools, fire departments, and other government services. Sixty-six U.S. counties will experience the partial or full closure of a coal mine or power plant in the coming decade. Fifteen of these counties will experience the full or partial closure of both.

How do states and communities replace tax and royalty revenue lost when coal facilities retire? And how can communities most vulnerable to economic and fiscal impacts of closures better prepare for economic transition by building wealth and investing over time?

In this paper we identify the characteristic vulnerabilities of communities most at risk from plant and mine closures to better understand and anticipate the biggest challenges and barriers they face during a transition. To be clear about transition goals and outcomes, we also articulate desired characteristics of a community that has successfully navigated a transition away from coal.

We offer 11 concrete fiscal solutions that address specific vulnerabilities and are designed to attain the markers of success. Solutions are categorized into three groups: revenue, investment, and assessment and planning solutions.

Insights, ideas, and solutions presented in this paper were gathered and refined at a *Coal Transition Solutions Forum* hosted by Headwaters Economics in July 2018 in Bozeman, Montana. Seventeen diverse participants shared their expertise in local and state government, academia, consulting, and policy work over two days. The facilitated forum provided an opportunity for participants to discuss policy solutions that they believed ought to be considered, based on their broad experience rather than their professional position or political considerations.

II. INTRODUCTION

The U.S. energy sector is transitioning away from the use of coal in power generation. The amount of coal burned for power generation has declined by nearly 40% due to the closure of dozens of coal-fired power plants since 2010.[1]

As a result, half of all U.S. coal mines have closed since 2008.[2] The energy transition away from coal has implications for the places that have traditionally hosted coal mining and coal-fired power plants. Sixty-six U.S. counties will face the partial or full closure of a coal mine or power plant in the coming decade. A small number will witness closure of both a plant and a mine.[3]

For many years these facilities have paid taxes, royalties, and fees to states and communities where they are located, providing relatively stable and substantial revenue. In rural areas especially, state and local government funding has evolved to depend heavily on the coal industry. Local decisions to use coal revenue to maintain low taxes on other sectors and on individuals created a tax base dependent on revenue from coal. Subsequently, limits on local fiscal autonomy—for example taxation and expenditure limitations imposed on local governments[4]— increases vulnerability to fiscal stress and the economic effects of coal mine and coal plant closures.

A 2018 review of coal-dependent regions where power plants are scheduled to retire found that no community had a dedicated "transition fund" or a revenue replacement plan at the time power plant closure was announced.[5] The same paper recommends that communities facing plant or mine closures

develop a Transition Revenue and Investment (TRI) strategy as part of a broader transition planning process.

In response, Headwaters Economics hosted a *Coal Transition Solutions Forum* in summer 2018 to develop a portfolio of policies that could begin to unwind dependence on coal for revenue and build wealth and capacity in vulnerable communities. Seventeen diverse participants shared their expertise in local and state government, academia, consulting, and policy work over two days. The facilitated forum provided an opportunity for participants to discuss policy solutions that they believed ought to be considered, based on their broad experience rather than their professional position or political considerations.

We asked two questions:

1. How do states and communities replace tax and royalty revenue lost when coal facilities retire?

2. How can communities most vulnerable to economic and fiscal impacts of closures build wealth and invest for a future without coal?

Forum participants first defined the characteristics of vulnerable communities in order to orient and focus the conversation around communities most at risk. Characteristics of vulnerability included demographic and geographical factors as well as fiscal issues.[6]

Participants were also asked to articulate a vision of what a successful transition looks like. Again, socioeconomic factors and community dynamics were discussed, but within the context of good fiscal policy.

With vulnerabilities identified and success defined, the group then discussed 11 fiscal solutions within the three components of a transition revenue and investment (TRI) strategy: **revenue solutions** that stabilize budgets and build dedicated transition funds; **investment solutions** that tie revenue to specific transition goals; and **assessment and planning solutions** that are part of a broader transition planning process.

Revenue solutions:
1. Reallocate coal revenue to transition needs and priorities;
2. Broaden the tax base to replace lost coal revenue;
3. Ensure resource taxes address transition needs and priorities;
4. Fund effective federal grant and loan programs for coal communities;
5. Secure one-time transition payments from facility owners;
6. Increase local fiscal autonomy, including allowing for local savings authority.

Fiscal Transition

Transition, from a fiscal perspective, means communities have successfully replaced coal revenue and can fund local services, infrastructure, and institutions with stable and diverse sources—that is, coal revenue is not replaced with politically uncertain appropriations or by dependence on a new volatile sector.

Funds also are available to pay for lifecycle coal development costs including development impacts, facility closure, reclamation and workforce and community transition costs (including workforce retraining and/or relocation). Reserves are on hand to contribute to unanticipated transition costs.

Finally, communities have resources to invest throughout the duration of coal activity in assets that continue to generate wealth after coal revenue declines and to increase resilience and capacity of local institutions. Resilient local institutions help these communities adapt to change.

Investment solutions:

7. Invest in local institutional capacity;
8. Invest in workforce and entrepreneurs;
9. Secure investment capital for transition communities and businesses.

Assessment and planning solutions:

10. Require and support transition planning in resource-dependent communities;
11. Establish and support regional authorities and teams to lead transition planning.

In the following sections we summarize the discussions at the *Coal Transition Solutions Forum*, including: characteristics of vulnerable communities (Section III); descriptions of what success looks like (Section IV); and further explanation of each of the 11 fiscal solutions listed above (Section V). Each solution is assessed based on the vulnerability that the solution addresses, the specific actions that must be taken, and the advantages and disadvantages of pursuing these actions.

III. COMMUNITY VULNERABILITY AND BARRIERS TO TRANSITION

The particular geographic, economic, and demographic characteristics of coal regions make some communities more vulnerable to the loss of a major employer and revenue source. These vulnerabilities can be exacerbated by policy barriers at the state and federal level.

The community that stands to benefit the most from a Transition Revenue and Investment (TRI) strategy is geographically or culturally isolated and has historical dependence on coal and other extractive industries. Livelihoods and the continuity of basic government services here are likely to suffer when industrial activity declines; the fiscal shock is even greater when plant shutdown or mine closure is unanticipated and sudden.

Geographic, economic, and demographic characteristics of vulnerable communities are:

- The community is **relatively isolated** from major population centers and markets. The community has difficulty attracting high-wage jobs in knowledge-based innovation sectors that rely on clusters of finance, companies, and labor most commonly found in cities. The remote community also is challenged by labor-saving technology that has increased productivity but decreased jobs, with wages remaining stagnant in resource extraction sectors.

- Community **institutional and leadership capacity is limited** relative to transition challenges. For example, some communities have little or no planning staff and a small number of capable community members serve on multiple boards and committees. The community struggles to sustain collaborative planning processes and has limited decision-making authority and political capital relative to the scale of key factors in their future.

- The community has strong local social and political networks but **weaker ties to state or regional actors** and lacks access to regional and state support for transition. Communities often lack capacity to apply for federal and state assistance.

- Energy deregulation in the West resulted in **fragmented ownership** of plants and mines. Owners often are located in distant states or regions. As a result, plant owners respond to different incentives based on: 1) their ownership structure (investor-owned utilities, rural co-ops, merchant

power generators, and federal, state, and municipal owners), and 2) have customers who often live in big cities. Rural communities where plants are located may have difficulty navigating the variety of regulations in multiple states that govern reclamation, decommissioning, and costs.

- **Workers and their families can be trapped** in place by mortgages and other factors. Their existing commitments leave them less able to pursue opportunities in other locations or economic sectors.
- The community has an **aging workforce** that is **highly skilled and "over-adapted."** Highly specialized skills in coal mining, in particular, do not translate easily into opportunities in other sectors.

From a fiscal perspective, the following characteristics make transition even more difficult:

- The community has depended on coal revenues for a long time. **Long-term dependence** increases exposure to fiscal problems to the point where plant or mine closure and the subsequent loss of tax and royalty revenue may jeopardize the community's long-term viability.
- Dependence also **delays acceptance of transition** and encourages a focus on maintaining coal mining and coal-fired power production (to protect tax revenue) and discourages long-term planning, savings, and economic diversification. This focus on defending existing industry exacerbates fiscal risks and entrenches existing processes and social power dynamics.
- The community **lacks adequate fiscal autonomy**. Local dependence on coal revenue is exacerbated by state restrictions on local budgeting authority imposed by state taxation and expenditure limitations. Tax competition, including business relocation incentives, can increase vulnerability by limiting the fiscal benefits from new economic development.
- After a long history of contributing to coal production and energy generation, the community has few, if any, **funds for transition planning** and implementation.
- The community **lacks adequate information** to assess fiscal risks and the limitations imposed by state and federal fiscal policies. Fiscal policy is not well-integrated into comprehensive economic development and transition plans.
- Federal assistance programs for coal communities can be **over-prescribed and poorly targeted**, thereby limiting local autonomy and flexibility to use funds to meet locally defined needs. Federal programs often require annual appropriations from Congress, limiting their predictability and capacity to fund more than one-year grants.

IV. WHAT DOES SUCCESS LOOK LIKE?

Characteristics of a successful community during and after transition include:

- A successful community has a **vision** of what it wants to become. Successful communities are open to change and embrace new ideas and pathways to success. From the moment a coal mine or power plant is established, transition is understood, anticipated, and accepted.

- A successful community has **realistic plans** and is clear about implementation, monitoring, and updating the timeline and process. The community identifies social impacts of mine or plant closure and develops strategies to mitigate impacts and facilitate development.

- A successful community has financial resources to **sustain robust local institutions** that convene flexible, adaptive, and continuous dialogue to ensure plans are revisited, revised, and supported throughout the lifecycle of coal activity.

- Successful communities also recognize and **accept risk** and business failures in the economy. Startups that fail provide critical lessons to communities. Economic rejuvenation is not a one-time effort, but a constant motivation even during economic booms. Communities must continually adapt and government must be seen as a partner and risk-taker in these endeavors.

- A successful community understands and pursues self-determined strategies for **place-based** economic development and expansion of **people-based** opportunities and choices for workers and their families. Place-based strategies focus on enhancing competitive economic advantage and the local capture, retention, and circulation of investment capital. People-based strategies are designed to meet the differing needs of individuals during transition, including access to job retraining, relocation assistance (including housing assistance), retirement, and revenue to meet family needs (e.g., education and health care for children). In some communities, especially those with long historical associations with extractive industries, resourcefulness (in terms of self-provisioning) and established civic organizations are important buffers to transition impacts.

- Successful communities integrate **reclamation and restoration** into economic development plans, recognizing the employment and investment benefits of these activities, and leverage the restored landscape into new economic opportunity for agriculture, recreation, and other benefits.

Good fiscal policy underlies a successful transition process. A successful community asks whether fiscal decisions will increase or decrease dependence on coal revenue and whether decisions will exacerbate or alleviate socioeconomic inequalities in the community. Successful fiscal policies insulate communities from market, resource, and political volatility and uncertainty. Success generates stable funding and partnerships that cannot be defunded or politicized by election cycles. Fiscal practices that enable good decision-making are:

- The successful community has **replaced lost revenue from coal** and can fund local services, infrastructure, and institutions with stable and diverse sources (that is, coal revenue is not replaced with politically uncertain appropriations or by dependence on a new volatile sector). Communities that have continuing revenue from coal ensure it is not spent on annual budgets or tax breaks that would increase dependence.

- Funds are available to **pay for transition needs,** including facility closure, reclamation, and workforce and community transition costs (including workforce retraining and/or relocation).

- Communities have **resources to invest** throughout the duration of coal activity and transition in assets that continue to generate wealth after coal revenue declines. These include investments in permanent savings that stabilize coal revenue over time and ensure revenue is available to invest in the community long after coal activities end.

- The community coordinates with state and regional institutions to ensure it **has appropriate fiscal autonomy and capacity** to collect, save, and distribute funds in ways that do not exacerbate or amplify dependence or socioeconomic inequalities.

- Successful communities benefit from **federal and state resources** for planning and development. Local teams coordinate with regional, state, and federal agencies to build strong networks.

V. SOLUTIONS

The 11 fiscal solutions identified at the *Coal Transition Solutions Forum* are organized below into revenue, investment, and assessment solutions that make up the components of a TRI strategy.

Transition Revenue and Investment (TRI) Strategy

Revenue Solutions: Communities identify specific fiscal strategies to replace lost coal revenue for general government and to secure revenue dedicated for transition.

Investment Solutions: Fiscal strategies are identified in locally developed transition plans, linking revenue with priority strategies to bolster resilience and the capacity of local institutions.

Assessment and Planning Solutions: Communities assess their level of dependence and exposure to fiscal risks when coal revenue declines or ends. Communities understand fiscal policy tools and barriers.

We asked questions of each solution, including:
- What is the problem that this solution solves?
- How does this solution work?
- What are the advantages and disadvantages of this solution?

Revenue Solutions

One of the largest challenges during transition is replacing public revenues lost when coal-fired power generators and coal mines close. Revenue solutions would:

1. Reallocate coal revenue to transition needs and priorities;
2. Broaden the tax base to replace lost coal revenue;
3. Ensure resource taxes address transition needs and priorities;
4. Fund effective federal grant and loan programs for coal communities;
5. Secure one-time transition payments from facility owners; and
6. Increase local fiscal autonomy, including allowing for local savings authority.

These revenue strategies can be implemented independently or together to replace lost revenue needed to maintain annual operating budgets, to allocate revenue needed to address acute transition costs, and to

make revenue available for long-term savings and investments in community resilience. They are explained in more detail below.

1. Reallocate coal revenue to transition needs and priorities.

This solution would reform current tax policies that mandate coal revenue be used for tax relief. These policies include local government choices to maintain low tax rates and state taxation and expenditure limitations that mandate coal revenue is used to offset other sources of revenue. Instead, coal revenue would be used for transition purposes including permanent savings and long-term investments. As a result, existing revenue would be used first for transition needs and priorities without raising tax rates or imposing new types of taxes.

What vulnerabilities and barriers are addressed?

- Long-term dependence on coal revenue.
- Lack of adequate funds for transition.
- Lack of adequate fiscal autonomy.

How would this solution work?

In some states, coal revenue is used to lower other sources of tax revenue. For example, Montana's school equalization funding law requires that coal gross proceeds tax revenue be used first to offset local property tax levies before it can be spent to increase school budgets. The result is that coal revenue is not saved or spent on economic development or transition needs but provides ephemeral tax breaks that must be reversed when coal prices or production slows or ends. Maintaining existing tax rates and reallocating coal revenue to transition could generate substantial resources without raising tax rates or imposing new types of taxes.

Undoing mandates to use coal revenue for tax relief would decrease dependence on coal revenue to fund annual operating budgets—lowering risks associated with the coal transition—and would reallocate coal revenue to dedicated transition purposes.

What are the advantages of this solution?

- Reducing dependence on coal revenue to fund annual governmental budgets would reduce the fiscal risks for communities when coal facilities retire and revenue declines or ends.
- Allocating coal revenue to transition needs would provide permanent and/or dedicated funding for transition planning and implementation, which is limited in most communities.
- Re-allocating coal revenue to transition purposes could expand local fiscal autonomy and allow for greater local control over transition spending defined by communities according to their priorities.

What are the disadvantages of this solution?

- Eliminating mandated tax relief could require changes in state law. The need for state legislative action limits local autonomy and might make these solutions difficult if not impossible at the local level. Coal-dependent states and communities often do not have capacity or political will to reform tax policy.
- Reallocation of coal revenue to transition purposes works best when communities have time before coal extraction or burning end (e.g., where closures are not yet announced or are years away). Communities where closures are imminent have less time to plan for and use coal revenue for transition.

2. Broaden the tax base to replace lost coal revenue.

This solution would replace declining coal revenue with increased revenue from other sources, including higher or new income and sales taxes.

While some tax relief is mandated (a situation addressed by Solution 1, above), a more common scenario is that states and local governments elect to use coal revenue to fund annual operating budgets, which causes them to maintain a relatively narrow tax base. For example, Wyoming does not have an income tax and Montana has no sales tax. In these states, coal pays a disproportionate share of the state's general revenue compared to its contributions to GDP.

What vulnerabilities and barriers are addressed?

- Long-term dependence on coal revenue.
- Lack of adequate fiscal autonomy.
- Lack of adequate funds for transition.

How would this solution work?

As the U.S. economy shifts away from goods-producing sectors and toward services-providing sectors, states are beginning to consider tax reform to ensure that their tax structure continues to generate revenue consistent with economic growth. Moody's Analytics reports that tax revenue in many states is increasingly decoupled from the underlying economy in part because of the structural shift from goods-producing to services-providing economic sectors. Several states in the western United States—including Montana, Wyoming, and Utah—will assess whether the current tax structure can continue to fund necessary services and infrastructure as the economy changes.[7] They will consider new types of taxes (e.g., a sales tax in Montana or an income tax in Wyoming) and expansion of the base of existing taxes (e.g., extending the sales tax in Utah to include services).

States should also consider ending tax expenditures—including subsidies and business relocation incentives—for other industry sectors that limit the fiscal benefits of economic diversification. For example, Colorado assesses wind generation and transmission facilities at a lower value, limiting the fiscal contributions of renewable energy facilities relative to coal facilities. Business relocation incentives and subsidies for renewable energy can limit the benefits of growth in jurisdictions where companies locate, eroding support for transition policies and planning.

States should also consider local option taxes (e.g., local option sales or income tax) in resource-dependent communities. If state tax reform is not possible or if reform is only relevant for communities in transition, local option taxes may provide a more politically feasible option.

What are the advantages of this solution?

- Increasing revenue from non-coal sources may ensure that services and infrastructure are not affected when coal revenue is reallocated to transition purposes or declines after closures.
- Depending on how these solutions are implemented, increasing local government revenue could expand local autonomy over budgeting and allow for local control over transition spending defined by communities according to their priorities.

What are the disadvantages of this solution?

- Increasing tax rates and new taxes would require changes in state law. The need for state legislative action limits local autonomy.
- Coal-dependent states and communities often do not have capacity or political will to reform tax policy.

3. <u>Ensure resource taxes address transition needs and priorities.</u>

This solution would reform state coal production taxes based on an assessment of the lifecycle costs of coal development, production, closure, and reclamation.

Coal is a non-renewable resource and most states levy production or "severance" taxes that compensate the state for the depletion of resource wealth. Production taxes are special taxes and have multiple purposes in tax law and policy, including mitigating the impacts associated with extraction and related development activities, creating financial endowments to ensure revenue will be available after resources are depleted (sometimes called an intergenerational purpose), and funding for infrastructure, education, and economic development activities that replace one-time resource wealth with assets that will continue to generate wealth over time.

What vulnerabilities and barriers are addressed?

- Inadequate information and integration with comprehensive planning.
- Lack of adequate funds for transition.
- Weak ties to state and regional actors.

How would this solution work?

Few states set severance tax rates based on any type of fiscal impact assessment or based on a comprehensive transition plan. This solution encourages states to estimate the full lifecycle costs of coal development from project construction to closure and reclamation. These costs would be fully recovered through production tax and royalty rates, bonding requirements, and other fiscal mechanisms.

States often have industrial siting regulations or impact mitigation requirements for facility siting, impact mitigation, and reclamation. This process could be used to estimate lifecycle costs of coal extraction and coal burning activities. States also could begin a new coal transition planning process to estimate transition costs and incorporate them into existing production taxes.

Once a lifecycle cost estimate is produced, states would review existing severance tax rates, exemptions, and incentives to ensure they are consistent with the costs and needs directly associated with coal facilities, including closure and transition. Exemptions, deductions, and incentives are offered for a variety of purposes, including to encourage additional coal production or new mine development and to encourage the use of specific technology and practices, but these financial incentives also limit the amount of revenue available for transition. For example, Montana's New Coal Production Incentive Act of 1985 cut severance taxes statewide by more than half to encourage additional coal production. Later the state added a more targeted reduction to the gross proceeds tax rate for new underground coal mines specifically to encourage the development of the Bull Mountain coal mine in Montana (SB 266, 2011 Montana Legislature).

States should coordinate with each other to avoid charges of tax competition. Ideally, new revenue would be dedicated to local governments to support locally developed transition plans. States also could grant authority to local governments to impose local-option production taxes to fund transition activities.

What are the advantages of this solution?

- Economic efficiency is improved by linking taxation directly to costs associated with extraction. States should recover the full lifecycle cost of extraction (including transition) through production taxes rather than shift costs onto the public.

- Using production taxes to fund transition and reclamation would reduce the risk that taxpayers take on these costs after closure.
- Using severance taxes to fund transition would allow for transition planning and investments to begin before closure.
- This solution may not require a change in production tax rates but could be accomplished by reallocating production tax revenue from general operating budgets to dedicated transition funds.
- States can increase revenue from coal without having a large impact on the total amount of coal extracted and burned. Academic and government models of price elasticity suggest that the revenue benefits of increasing tax rates (directly by raising tax rates or by closing exemptions and incentives) outstrip the relatively small reduction in production.

What are the disadvantages of this solution?

- Competition among states (lack of regional coordination on severance taxes, for example) allows industry to play states off one another as it fights higher production taxes and advocates for lower rates.
- If tax rates are increased, politicians may substitute new revenue for other taxes to fund government rather than carry out the transition programs. New revenue must be tied to specific transition purposes.

4. Fund effective federal grant and loan programs for coal communities.

This solution would reauthorize, appropriate funding to, and expand the purposes of federal assistance programs for vulnerable communities affected by the coal transition.

The primary federal assistance programs for coal communities include the U.S. Economic Development Agency's Assistance to Coal Communities program (ACC), the Partnerships for Opportunity and Workforce and Economic Revitalization (POWER) program in the Appalachian region, and funding for reclamation under the Abandoned Mine Lands (AML) program and the proposed RECLAIM Act that would expand the uses of AML funds to integrate reclamation, economic development, and workforce programs.

A variety of additional federal programs are available to address economic distress in communities, but these are not specific to coal. Reforms could improve funding predictability over time; improve coordination among federal assistance programs and between federal and NGO, state, and local programs; and better target assistance based on locally identified priorities.

What vulnerabilities and barriers are addressed?

- Lack of adequate fiscal autonomy.
- Weak ties to state and regional actors.
- Limited institutional and leadership capacity.
- Over-prescribed and poorly targeted assistance programs.

How would this solution work?

Congress would work with the Administration to secure long-term, predictable funding for assistance programs and to coordinate purposes, application processes, and monitoring across related assistance programs. Agencies responsible for making assistance grants, loans, and payments would improve networks with communities, NGOs, and states to better address priorities identified by locally led transition plans and to increase the capacity of vulnerable communities to access resources.

Funding should be secured for a minimum of 10 years and ideally for 25 years for ACC, POWER, and RECLAIM, ending the uncertainty of annual discretionary funding from Congress and allowing for longer-term projects and partnerships between communities and federal agencies. Predictable funding that is available outside the annual budget process also insulates the programs from politics (politicians can't withhold funding for entire programs over individual projects or funding priorities they may disagree with).

Improving coordination among state and federal coal-specific assistance programs would help vulnerable communities access the most appropriate grants and assistance and leverage the benefits of multiple funding opportunities. In 2016, the POWER program included funding and assistance from 11 different offices and agencies.[8] The EDA Office of Economic Development Integration should be adequately funded and empowered to work across agencies to improve collaboration and coordination of application criteria and processes, funding priorities, and support and monitoring of grants.

Other resources are available from the Just Transition Fund, a charitable foundation and assistance organization that helps build capacity in coal-dependent communities to prepare them to apply for federal assistance, and from the National Association of Counties (NACo) and National Association of Development Officials (NADO) coal-reliant communities resources, trainings, and workshops. Federal agencies responsible for assistance to coal communities could also rely more on these intermediary regional organizations and NGOs to support rural communities that have less capacity to apply for and manage federal funding.

Finally, more flexibility is needed in how grants can be used to meet the needs of vulnerable communities. For example, many funds can only be used for planning and not implementation, monitoring, or continuing existing services threatened by the loss of coal revenue. The annual funding cycle limits the uses of assistance.

Some federal assistance programs carry a long list of requirements that makes this funding virtually inaccessible for vulnerable communities, including a minimum match requirement, land ownership requirements, a minimum number of jobs that must have been impacted be become eligible, and others. For example, the EDA Assistance to Coal Communities program falls within the broader EDA Economic Distress program. Applications by communities impacted by coal compete with all other economic distress applications, coal-related or otherwise, and have prohibitive eligibility requirements and matching funding requirements. The application process itself is often time-consuming and requires information that makes it more difficult for communities with low staff capacity to complete and compete. Sometimes funding goes to the communities with the most well-resourced administrative and development staff.

What are the advantages of this solution?

- Federal funding can be important where local and state funds are limited because of political or economic constraints.
- Robust federal assistance and funding could strengthen regional networks by providing technical assistance, sharing data, coordinating among different federal programs, and facilitating dialogue and relationships among communities, states, utilities, and other stakeholders.

What are the disadvantages of this solution?

- Federal programs are exposed to congressional budget negotiations and changing purposes, limiting the long-term benefits and opportunities that these types of programs can provide.
- Securing, managing, and reporting on federal grants and loans can be complex and time-consuming.

- Local governments with greater capacity are often most effective at securing grant and loan funds, undermining the purpose of making revenue available for transition in the most vulnerable communities.

5. Secure one-time transition payments from facility owners.

This solution would secure one-time transition funds directly from the owners of power generation facilities (utilities), mine owners, or state regulators and legislators.

Energy deregulation in the West resulted in fragmented ownership of coal assets, and owners are often located far from the plant or mine location. For example, deregulation in Montana and sale of Montana Power Company's generation assets (including the Colstrip coal-fired power plant) to a variety of utility and private owners fundamentally altered the relationship between the community, state government, and the utility owners. It weakened government's ability to influence transition planning and revenue.[9]

What vulnerabilities and barriers are addressed?

- Lack of adequate funds for transition.
- Fragmented ownership and regulatory environment.
- Weak ties to state and regional actors

How would this solution work?
States could intervene directly on behalf of local governments, labor unions, conservation organizations, and other stakeholders to negotiate for post-closure funds from utility owners. For example, several Montana conservation groups negotiated for transition funds as part of a settlement agreement that resulted in the scheduled retirement of two units at the Colstrip power plant (the original lawsuit was over air quality). Puget Sound Energy, based in Washington State and part-owner of the two closing units, offered $10 million for economic transition in Colstrip. The settlement came after Montana tried and failed to pass legislation to force Colstrip's out-of-state owners to pay for economic transition, but the pressure brought by Montana also was important in securing funding.

In Washington State, the closure of the Centralia coal-fired power plant will be accompanied by $60 million in funds from TransAlta Centralia for energy efficiency investments, renewable energy projects, and workforce retraining.

State policy allowing for securitization of outstanding debt—lowering the cost of retiring coal facilities—offers another way to generate one-time transition funds. States may require that a portion of these savings are dedicated to transition needs. For example, New Mexico recently passed the Energy Transition Act that includes a provision that would allow Public Service Co. of New Mexico (PNM), part-owner of the San Juan Generating Station and Four Corners Generation Station, to refinance its debt in these "stranded" coal generation assets using lower-cost, customer-backed bonds. The Energy Transition Act would also include $40 million for economic transition in Farmington and other communities.

What are the advantages of this solution?

- Utility owners have shown a willingness to assist communities when policy and markets move away from coal generators.
- Transition funds provide incentive to plan and identify transition priorities.

What are the disadvantages of this solution?

- One-time funding may not be sufficient to sustain transition activities over time.
- Communities have little standing or leverage over remote utility owners, and negotiations may not be successful.
- Negotiating funds could discourage utilities from operating in states where this tactic is pursued aggressively. The Montana Legislature rejected a legislative mandate that utilities pay for transition costs after plant closure.

6. Increase local fiscal autonomy, including allowing for local savings authority.

This solution would give local governments authority to save and invest revenue in permanent trust funds (endowments) and rainy day funds. Communities also could budget coal revenue over multiple years, removing annual balanced-budget requirements for coal transition activities.

All western states that levy production taxes and royalties on coal and other natural resources have established permanent trust funds and most also maintain rainy day funds. Rainy day funds are designed to deal with cyclical revenue volatility. Permanent trust funds are designed to handle structural downturns by ensuring revenue is available after resources are exhausted or when markets or policies shift away from specific industry sectors.

In contrast, local governments are generally prohibited from saving and investing revenue. The inability to plan and invest for transition means local governments face greater risks associated with annual revenue volatility and ultimately closure and transition. Some states allow local governments to carry fund balances with limitations. In most states, however, revenue and expenditure limitations often require local governments to forgo windfall revenue during resource booms by mandating tax relief to remain within budget limits.

What vulnerabilities and barriers are addressed?

- Lack of adequate fiscal autonomy.

How would this solution work?

This solution would allow local governments to save and invest revenue from coal and to budget on at least a biennial basis. Creating new savings authority could be accomplished by establishing new investment funds at the state level, by allowing local governments to invest in existing state trust funds (for example, Montana's Coal Tax Trust Fund), or allowing local governments to establish local permanent savings funds. Local government would be allowed to invest specified revenue into the funds and use distributions from the funds for any purpose identified in a locally-led transition plan.

Local governments with transition plans also would be allowed to budget for long-term expenditures and investments on at least a biennial basis, if not longer. Providing for long-term budgeting would reduce the risks of requiring local governments to spend volatile coal revenue on an annual basis.

What are the advantages of this solution?

- This solution increases autonomy of local institutions in budgeting, specifically to manage volatile revenue streams.
- States could permit or require savings for local governments that have substantial risk of revenue volatility. Many states already track local government fiscal health[10] and could establish a process to measure revenue volatility that would trigger savings requirements for local governments that meet threshold criteria.

- Local permanent (savings) funds could be incentivized by state and/or federal matching contributions. For example, states could match local government savings with contributions from state permanent funds built up from coal revenue. This would increase the value of permanent savings for transition. Incentives could also be attached to transition planning requirements.
- The principal balance of the permanent fund could be used as a pool of public investment capital to leverage private investments in businesses that contribute to transition in vulnerable communities (e.g., local entrepreneurs or businesses seeking to locate or expand in vulnerable communities).
- Creating local savings authority could result in local experimentation with revenue and savings strategies. Some local governments will maximize savings while others may choose to save little if any money for transition. The performance of these communities could be tracked over time to learn more about the role of fiscal policy in vulnerable communities.
- Establishing the savings vehicle at the state level would use existing fund management capacity of state investment boards and guard against local governments raiding the principal of permanent funds.

What are the disadvantages of this solution?

- This solution requires delayed gratification, which is difficult for local politicians.
- State law would have to be changed to extend revenue, savings, and investment authority to local governments.
- Permanent funds and investments are not immune from volatility in markets. This could be mitigated by investment and distribution policies (e.g., distributing an average percent of the ending fund balance instead of annual interest earnings).
- This solution decouples annual budgets from ongoing coal activities and may encounter opposition from the coal industry which is happy for communities and states to be dependent on their continued operations.
- Politicians may have difficulty raising other forms of taxes and fees if a revenue stream (or large fund) appears to be available. Politicians may use distributions to maintain low taxes on other sectors and individuals. The state might need to restrict how revenue can be spent across all eligible communities or based on local priorities identified in transition plans.

Investment Solutions

The community that is successful in securing revenue for transition also must dedicate these revenues to investment strategies that increase community resilience and institutional capacity.

Community resilience provides a grounding concept to address transition. Defined as networked capacity for robustness in response to "shocks," community resilience expresses itself as self-organizing community action. Place-based investment solutions identified as part of a locally-led transition planning process should focus on enhancing competitive economic advantage and the local capture, retention, and circulation of investment capital. People-based solutions expand opportunity and choice for workers and their families. Strategies that incentivize business relocation, protect declining industries, or weaken regulations or capacity are discouraged.

Solutions that integrate fiscal policy with community planning practices include:

7. Invest in local institutional capacity;

8. Invest in workforce and entrepreneurs;
9. Secure investment capital for transition communities and businesses.

These solutions are explained in more detail below.

7. **Invest in local institutional capacity.**

When a coal mine or power plant retires, vulnerable communities lack funds to maintain public services, essential services, or other responsibilities of a community—which makes it increasingly more difficult to attract new businesses and residents.

This solution would ensure new revenue available for transition spending is allocated to sustain and grow local institutional capacity. In vulnerable communities, these institutions include local governments (counties, schools, libraries), community planning and health NGOs, local business organizations, and collaborative partnerships among government, business, and NGOs. Local institutions contribute to community resilience in multiple ways, including: gathering and sharing information about local challenges and opportunities; learning from peer communities; and networking with regional, state, and federal institutions to bring in new funding, ideas, and partnerships.

This solution encourages the community to take responsibility for its own economic growth by establishing clear processes for promoting and assisting small business and innovative approaches to economic development, which will build capacity and replace some revenue and jobs. Communities should invest in local institutions and entrepreneurial strategies even if they feel that their economic base in extraction is secure. Establishing clear processes keeps a community on track and provides a buffer against political cycles and power plays within the community and from outside sources.

What vulnerabilities and barriers are addressed?

- Limited institutional and leadership capacity.
- Weak ties to state and regional actors.
- Lack of forward-looking vision.

How would this solution work?

Reinvesting the wealth generated from coal mining and power generation back into local institutional capacity focuses economic development spending on activities that enhance competitive economic advantages rather than offering the more traditional business relocation incentives. This strategy seeks to avoid the dynamics where fiscal stress and dependence on coal weakens local government capacity and erodes networks, partnerships, and vision that are required for resilience and growth.

What are the advantages of this solution?

- Solutions are locally led; priorities are locally determined.
- The community is engaged; social and political networks are strengthened.
- The benefits (e.g., supported schools, libraries, local services) are immediately and easily recognized by the community.

What are the disadvantages of this solution?

- This solution might require overturning or relaxing state taxation and spending limitations.

8. Invest in workforce and entrepreneurs.

State programs targeted at workforce retraining and supporting entrepreneurs are important aspects of people-based economic development strategies. These strategies can help displaced workers replace lost wages and allow workers to take risks to start new businesses or acquire new skills or degrees.

Challenges facing laid-off workers extend beyond lost wages. Families can be limited by mortgages that restrict their ability to move for jobs, education costs for workers and their children are jeopardized, and families can lose access to health care and other services, particularly in vulnerable communities that may be required to cut services and increase taxes after plant closures.

What vulnerabilities and barriers are addressed?

- Limited workforce mobility.
- Highly skilled but less well-educated workforce.
- Lack of adequate funds for transition.
- Over-prescribed and poorly targeted assistance.

How would this solution work?
States and federal agencies should better coordinate workforce and entrepreneurial assistance programs. In some cases, programs require greater flexibility to allow workers to address specific needs, including relocation, retraining, education, or health care needs. Securing local funds for people-based transition needs would allow communities to address their specific circumstances more directly.

What are the advantages of this solution?

- The workforce in resource-dependent communities is highly skilled but often over-adapted to particular industries and activities. Providing transition assistance to individuals and entrepreneurs leverages existing talent in transitioning communities.
- Flexible and locally driven transition programs allow workers to access resources for purposes that are best for each individual, including retraining, education, business startup, or relocation purposes. Overly prescribed programs may be popular with politicians but often fail to provide resources where they are most powerful and effective.

What are the disadvantages of this solution?

- People-based strategies may not help communities, particularly when strategies are not tied to place—they may actually help local entrepreneurs and businesses move to more promising opportunities.
- Entrepreneurship has a high failure rate. Public officials and taxpayers need tolerance for failure and willingness to continue to invest. "Government" needs to be understood as a partner and risk-taker in economic development activities.
- Some economists are skeptical of the value of economic development activities, particularly workforce training programs. Research has shown that retraining and economic diversification didn't work in formerly manufacturing and timber-dependent communities, but the reasons are complicated.

9. Secure investment capital for transition communities and businesses.

This solution would identify public and private sources of investment capital that could be made available in vulnerable communities to help diversify and transition the economy.

Economic restructuring has concentrated most new jobs and finance in large cities and in communities connected to them. Vulnerable communities can be difficult places for local businesses and entrepreneurs to take risks and grow because of a lack of capital. Vulnerable communities often have fewer resources if they lack a local bank, local government is experiencing revenue reductions associated with dependence and coal closures, and workers and their families are facing job loss and financial stress. Financial capital from other creative public and private sources could fill these gaps and help local businesses finance new physical space and equipment or contract professional services and hire employees.

What vulnerabilities and barriers are addressed?

- Relative isolation.
- Weak ties to state and regional actors.
- Lack of adequate funds for transition.

How would this solution work?

This solution would identify public and private sources of capital that could be available for investment in vulnerable communities for activities other than existing coal mining or coal burning.

Government has a long track record of financing basic research, startup industries, and technologies that the private sector is unwilling to take a risk on.[11] State and local governments can become more active partners and risk-takers in financing businesses and entrepreneurs in vulnerable communities where access to traditional capital is limited. Public finance also can lower the costs of borrowing, potentially making investments in vulnerable communities more attractive.

Examples of public and private investment solutions include a community venture fund or community foundation; statewide lending mechanisms (state banks or private banks backed by the state) with a mission or vision that is open to different types of return on investment.

Communities also could support B Corporations (or Benefit Corporations) that can meet local social and environmental goals. B Corporations are businesses certified by the B Impact Assessment developed and administered by B Lab, a nonprofit organization.[12] The B Certification evaluates how a company's operations and business model impacts workers, community, environment, and customers to balance profit and "purpose." Importantly, B Certification is recognized by some impact investors and foundations as desirable and may make new capital available to businesses that achieve B Certification status.

What are the advantages of this solution?

- Solutions that build wealth in communities add to communities' abilities to adapt to change and capitalize on local and regional economic opportunities. Vulnerable communities often have significant assets in infrastructure, access to resources, and skilled workers but lack the financial capital to leverage these assets into business opportunities and new wealth.

What are the disadvantages of this solution?

- Expertise in business development and management are often lacking in vulnerable communities.

- Investment should go hand-in-hand with robust and realistic planning to ensure that every dollar is used efficiently for community priorities. Access to investment capital must be paired with sufficient resources to initiate and sustain fiscal assessments and comprehensive planning.

Assessment and Planning Solutions

Assessing where local government revenue comes from, how it is spent, and how it impacts different entities (e.g., fire districts, schools, county government) is critical to successful transition and long-term planning. A Transition Revenue and Investment (TRI) strategy would help local leaders understand their dependence on coal revenue and the nature of the fiscal risk; describe policies at the local and state level that affect local revenue, saving, and spending authority; and help determine immediate spending priorities based on comprehensive transition plans.

Most importantly, fiscal assessments must be linked to planning and capacity-building solutions. The final three solutions address assessment as well as social processes that provide a framework for fiscal management going forward. These include:

10. Require and support transition planning in resource-dependent communities.
11. Establish independent, multi-agency regional redevelopment (restoration) authorities.

These solutions are explained in more detail below.

10. <u>Require and support transition planning in resource-dependent communities.</u>

This solution would require and support resource-dependent communities to develop transition plans that include Transition Revenue and Investment (TRI) strategies.

The buildup of coal infrastructure in the western United States was informed by federal energy policy to utilize domestic and reliable sources of power, large-scale regional infrastructure planning (e.g., the Northwest Power Study), and leadership at the state level to ensure that development benefited workers and communities. Subsequent energy deregulation and the tax revolt mean that communities are often left to negotiate and plan for transition without federal or state policy and coordinated planning assistance.

What vulnerabilities and barriers are addressed?

- Limited institutional and leadership capacity.
- Weak ties to state and regional actors.
- Lack of forward-looking vision.
- Inadequate information and integration with comprehensive planning.

How would this solution work?

This solution would require counties and cities that receive revenue from coal mines and coal-fired power plants to develop a Transition Revenue and Investment (TRI) strategy. The mandate would include funding for planning activities and technical assistance from state agencies—including data collection and sharing, learning, and communicating best practices—and coordinating existing economic development,

planning, workforce retraining, and infrastructure assistance programs at the state, regional, and federal levels.

Short of a state mandate, state agencies could make resources available to local governments for transition planning. For example, the state could conduct fiscal assessments for all counties that receive revenue from coal and then facilitate and provide funding for locally-led planning processes and review of fiscal policies that limit the ability of local governments to replace lost coal revenue.

What are the advantages of this solution?

- A state mandate and support for TRI strategies would build fiscal literacy—an identified challenge facing communities. For example, participatory planning and budget conversations could include conversations about why coal is taxed, what the revenues are used for, and fiscal transition needs.
- Planning also would increase awareness of other industries and their fiscal contributions to understand how growth would or would not solve fiscal transition needs.
- Planning could increase community confidence in long-term viability of local institutions and culture.

What are the disadvantages of this solution?

- Government planning mandates or even government support for planning may be politically impossible or may not be accepted by communities wary of unfunded mandates and more bureaucracy.
- Mandates that are not sufficiently funded or supported are likely to fail because of limited capacity and limited access to information and peer learning opportunities.

11. <u>Establish and support regional authorities and teams to lead transition planning.</u>

This solution resolves local capacity and authority problems by establishing and financing authorities and teams at the regional scale and across government jurisdictional boundaries.

Vulnerable communities often lack the ability to think and plan strategically and to effectively move ideas forward. Communities that have success often credit their success on one particularly strong or influential leader. Building long-term capacity supports local leaders and ensures longevity and sustainability of transition planning and implementation. A regional entity can augment a small, rural community's limited decision-making authority and political capital by increasing access to financial resources, fiscal tools, and expertise.

What vulnerabilities and barriers are addressed?

- Lack of adequate fiscal autonomy.
- Limited institutional and leadership capacity.
- Weak ties to state and regional actors.
- Inadequate information and integration with comprehensive planning.

How would this solution work?

A single-purpose redevelopment authority would manage transition and restoration funds at the behest of a board of directors that represents diverse interests in the region. Independent authorities have more autonomy to coordinate multiple agencies and interests and to devise creative solutions. The authority's independence insulates it and its funding from politics and raiding by local and state government and reduces the incentive for hasty or ineffective spending. Authorities are often more transparent than

government jurisdictions because of their responsibility to report to stakeholders. Regional authorities also can leverage private investment capital for public infrastructure and institutions. In some cases, they coordinate specific services across multiple jurisdictions.

Establishing an authority requires defining the geography covered by the authority and representation of all stakeholders (e.g., local government, tribes, private businesses, NGOs, utilities). The fiscal structure and spending authority must be clearly defined. And the authority must be guided by regional plans and priorities defined by stakeholders. Long-term professional staff at the authority can help create institutional knowledge, package projects for smooth implementation, build long-term relationships with grant funding entities, and foster an environment of "good governance."

States and communities also could appoint and empower transition teams to coordinate transition activities and funding. Transition teams are locally driven groups that engage diverse citizen-stakeholders. They rely on expertise from financial, utility, planning, entrepreneurial, and economic development experts from the private sector, and representatives of peer communities and regional/state government agencies. Ideally, these teams would be assigned to all resource-based communities to engage in thoughtful planning prior to a crisis.

These teams, ideally run by the private sector, would follow a logical process at the local level that would be as free of politics as possible. They should be incentivized and avoid adding another layer of bureaucracy. They would build credibility by accomplishing tasks. Teams could receive dedicated funding to help with a specific transition strategy. For example, a local/regional team could be tasked with conducting a fiscal assessment in Solution 10, or with a lifecycle cost assessment or resource tax evaluation proposed in Solution 3.

Teams must have clear expectations and accountability and must show measurable outcomes. Through peer-to-peer learning, communities can model acceptance of transition. Results will include improved consistency of communication and operations, and ability to maintain projects despite changes in elected leadership.

Objectives of the teams would include mapping assets and opportunities; identifying future scenarios and what these mean to the geography, population, financial situation, and landscape; identifying sources of immediate, mid-term, and long-term assistance (financial and otherwise); and making tough choices and sticking to the necessary path to implement those choices.

What are the advantages of this solution?

- In each case, a regional authority or transition team would demand (and so build) leadership capacity.
- This model has historical precedence in energy landscapes (e.g., the North Central Power Plan) and mirrors watershed planning that is often already established and understood in many vulnerable communities.
- A regional team doesn't depend on specific closure dates of coal-fired generators.
- This collaborative model gives utilities and mining companies a seat at the table as participants in planning restoration and transition strategies.

What are the disadvantages of this solution?

- A regional authority must be approved by multiple jurisdictions which can be time-consuming to set up. As with any coordinating body, governance structure (including a process for selecting representative board members) can be difficult to define and establish.

- Because they handle funding from various private and public sources, authorities must have proper oversight and penalties for malfeasance. Some states may limit or prohibit regional authorities from developing and implementing transition strategies, in which case state law would have to be changed.
- To be effective, a regional authority requires a politically powerful leader or small group of strong advocates working to maintain their independence. Ineffective leadership may result in authorities being captured by politics or particular stakeholders and could result in boondoggles.
- The planning process will be subject to many pressures. Economic development folks will want to steer the process to the existing CEDs, feasibility studies, etc. These are resources but almost always ineffective to address the problems at hand.
- Short-term capacity won't solve the problem although it can provide a critical boost. Long-term capacity requires a commitment to the costs of new personnel.

VI. CONCLUSION

Isolated areas face real economic challenges as the economic transition toward technology and services has reshaped the U.S. economic geography. They are vulnerable to economic restructuring and the energy transition because of their relative isolation from cities, their small size, and limited institutional capacity. Despite a long history contributing to coal production and energy generation, coal-dependent communities often have no transition plan in place when coal-fired power plant closures or mine closures are announced. Energy deregulation of the 1990s weakened the position of local and state governments to negotiate transition fiscal needs. The tax revolt (i.e., the desire for small government and lower taxes) has taken various forms across states and has often left rural communities with anemic general tax structures, limited local autonomy, and cuts to state assistance that exacerbate local vulnerabilities.

This white paper provides 11 solutions to fiscal dependence that can become part of a forward-looking transition planning and economic development strategy. The strategies emerged from a two-day "solutions forum" hosted in July 2018 in Bozeman, Montana. Attendees at the forum suggested these solutions as ideas that have potential and ought to be tried, or as already implemented ideas that should be shared and applied more broadly.

The most effective fiscal policies for vulnerable communities facing transition are those that enable places to build wealth over time and strengthen community capacity. Building wealth can be accomplished through effective taxation of resource activities, autonomy for local governments to establish permanent savings, and ensuring resource revenue is linked to long-term strategies to build resilience and capacity rather than funding tax breaks and annual operations that lead to dependence. Equally important, fiscal policies must allow communities to realize benefits from activities other than resource extraction such as recreation, restoration, and diversified services.

ENDNOTES

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