Renewable Energy and Sustainable Agriculture Applications as Economic Development Opportunities on Surface-Mined Lands
Request For Proposals (RFP)

PROGRAM GUIDE &
APPLICATION INSTRUCTIONS

Administered by the

West Virginia Brownfields Assistance Center *at Marshall University*

A program of
Marshall University's Center for Environmental, Geotechnical and Applied Sciences (CEGAS)

Funded by and Under Direction of the

West Virginia Division of Energy
Office of Coalfield Community Development

and the

Appalachian Regional Commission

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I. Program Guide - Background and Overview

Background

Surface mining historically impacts 24 West Virginia counties, eight of these designated "distressed" or "at-risk" in 2014 by the Appalachian Regional Commission (ARC), based on unemployment, income and poverty data. After mining the land may not be able to maintain prior levels of mining employment. Renewable energy production and sustainable agriculture endeavors may offer productive re-use options for these lands.

Through its Office of Coalfield Community Development, the W.Va. Division of Energy requires the preparation of Community Impact Statements (CIS) from operators who receive surface mine permits from the W.Va. Department of Environmental Protection. The CIS details plans for land use after mining. Operators have a choice of several options for post-mine land use including forestland, hayland or pasture, cropland, water impoundments, residential, industrial/commercial, public service, rangeland, commercial woodland, fish and wildlife habitat and recreation lands, or combined uses. Overwhelmingly, operators choose hayland/pasture as their post-mine land use, which results in few post-mining jobs or revenue for the area.

Thousands of these acres are within communities that have significant potential for redevelopment purposes such as housing, commercial or industrial use, and marketable recreational space. Specialty uses, like wildlife management areas, large-scale warehousing facilities or energy parks, are just a few examples of how these otherwise idle mine lands can provide positive, revenue-generating reuse. Strategies for further development of West Virginia's surface-mined lands may include: the development of value-added activities that complement existing industries, support for high-technology business endeavors, and investment in sustainable, agricultural-based ventures, as described below. This RFP will encourage operators and landowners to consider innovative property redevelopment activities that may generate jobs and associated revenue from the re-use of surface-mine lands.

Beginning in 2009, the West Virginia Division of Energy (WVDOE) partnered with the West Virginia Brownfields Assistance Center at Marshall University, through its Center for Environmental, Geotechnical and Applied Sciences (CEGAS) to coordinate and support the development of economic opportunities on surface-mined lands (and other activities). This partnership is structured so that CEGAS provides assistance in various capacities to the WVDOE's Office of Coalfield Community Development

In the summer of 2013, WVDOE, assisted by CEGAS, submitted an application to the Appalachian Regional Commission (ARC) for funding to establish a cost-shared program to provide grants for projects that demonstrate renewable energy applications on surface-mined properties. This proposal was approved by ARC in September 2013. The objective of this program was to increase renewable energy and reforestation projects on surface-mined lands. The strategy employed to meet this objective was to provide funding support of projects on surface-mined lands.

Competitive cost-shared sub-grants were issued by WVDOE to fund projects with the potential to yield sustainable biomass energy production or meet reforestation purposes, wind generation of electricity and solar photovoltaic and concentrated solar power applications on surface-mined lands in West Virginia. To date, three projects have been funded under this program, and CEGAS is administering the grants.

Overview of RFP

WVDOE is now issuing an additional RFP to utilize remaining ARC funds for a wider range of projects involving the use of surface-mine lands. In addition to renewable energy projects, this RFP will include the option to fund agriculture-based projects that utilize surface-mine land and have the potential to contribute to sustainable economic development in the region.

This RFP aims to promote promising practices and address challenges in West Virginia's agriculture and energy sectors in response to the following industry trends:

> **Agriculture** - The number of agriculture-related businesses declined significantly in recent decades. The number of farms in West Virginia has dropped from an estimated high of 105,000 in 1935 to just 21,489 farms in 2012. Other examples of reduced agriculture activity in West Virginia include:
> - o Cattle inventory in January 2013 was estimated at 410,000, down from an estimated 620,000 in 1982
> - o Sheep and lamb inventories totaled 30,000 in January 2013, down from an estimated 300,000 in the 1950s
> - o Land used for orchards has decreased from 22,878 acres in 1982 to 6,691 acres in 2012, a loss of over 16,000 acres (over 70 percent) in a 30-year period
> - o Between 2003 and 2012, apple orchard acreage decreased from approximately 6,000 to 4,000; peach orchard acreage decreased from approximately 1,100 to 750. Even with these decreases, apple production in the state in 2012 was valued at $23.2 million (8th in the U.S); peach production in 2012 was valued at $5.3 million (16th in the nation)
>
> More traditional agriculture jobs, historically a significant part of the economy of the state, could again have a major role in new economic development.
>
> **Energy** - West Virginia's existing fossil fuel electricity-generating companies will likely seek to diversify their production methods in response to state renewable energy portfolios and the Clean Air Interstate Rule. The renewable energy industry provides many opportunities for high-technology jobs as well as for more traditional jobs. The state's in-place wind projects have employed or are employing steel fabricators, site engineers, service technicians and equipment operators. Biomass feedstock plantings could be the foundation of a new industry focused on wood/grasses to energy and/or chemicals.

Examples of eligible projects may include, but are not limited to:
- Biomass projects could include demonstration plantings of biomass energy crops (e.g. switchgrass, Arundo donax, miscanthus, seed crops, and trees, including tree plantings that could support wood-powered electric generating facilities).
- Tree plantings utilizing loose soil compaction reclamation techniques advanced through the Appalachian Regional Reforestation Initiative (ARRI) to promote higher growth rate and lower mortality rate,
- Renewable energy projects such as small-scale wind, solar and/or low-head hydroelectric power generation applications for facilities located on surface-mined lands.
- Agriculture-based projects could include plantings of fruit trees to establish orchards for fruit production, or selected crop plantings for harvesting. For these types of applications, soil preparation, including the use of soil amendments, would be considered as an applicable project expense.

By providing support to diversify renewable energy and sustainable agriculture activities, the partners aim to leverage existing assets in a way that complements traditional energy sources *and* supports economic development efforts.

II. Description of Funding Opportunity

1. **Main Objective** - The focus of this RFP is to demonstrate and promote renewable energy development and / or sustainable agricultural development on surface-mine properties in West Virginia.
2. **Administration & timeline** – Sub-grants will be administered by CEGAS. To yield the best projects on surface-mined lands, CEGAS is soliciting project proposals from potential partners. CEGAS will collect applications from those who choose to submit an application for consideration. All eligible applications will be forwarded by CEGAS to WVDOE for funding consideration. WVDOE will review applications, receiving input from CEGAS and selected energy or agricultural experts as needed, and forward selected applications to ARC with recommendations for final approval. ARC will review applications before final project approval. Approval of successful projects is expected to occur by Feb. 6, 2015. Sub-grantees must provide progress reports and a final report at project conclusion. Regardless of project start date, all projects must be completed by July 15, 2015.
3. **Funding Amount** - Average proposal amounts are expected to be in the $20,000 to $30,000 range. Funding requests up to a maximum of $40,000 will be considered for funding, based on project scope and amount of funding available. All projects are required to provide cost share and/or in-kind match equal or greater than the grant funding that is requested.
4. **Applicant Eligibility** - Eligible applicants include the following:
    a. Units of local government
    b. Public or private non-profit organizations (documentation of non-profit status may be requested)
    c. Quasi-governmental entities that operate under the supervision and control of, or as an agent of, a unit of local government
    d. Government entity created by state legislature
    e. Regional council or group of general purpose units of local government
    f. Redevelopment agency that is chartered or otherwise sanctioned by the state of West Virginia
    g. West Virginia school systems and higher education entities
    h. Public / private partnerships where the public entity is the grant applicant and will be receiving all requested funding
    i. Each applicant can submit up to two proposals. Each proposal can include more than one site, if the type of project is the same at those sites.
5. **Allowable Costs and Uses of Program Funds**
    a. **The project must involve utilization of surface-mined property in West Virginia**. Both former and reclaimed active surface mine lands are eligible.
    b. The entire amount of the award, including match monies and in-kind contributions, must be used for costs related directly to project tasks, including all supplies, equipment, labor, and related expenses. Personnel costs must be quantified with hourly rates for labor performed. Grantees must remain current on their match requirements throughout the grant

period. Grantees may not front-load their project operations with grant funds with the intent of making up the match later in the project life-cycle.

    c. Examples of allowable expenses include:

        i. **Equipment / Supply Purchase – Examples include:**

           1. Solar panels and necessary support equipment (panel supports, electrical inverters, wiring, performance controls, etc.)
           2. Seeds / seedlings for biomass planting
           3. Wind turbine, including installation support equipment
           4. Trees for planting
           5. Applicable soil preparation costs for tree planting

(Please note: private entities, excluding private non-profits, may NOT purchase nor own equipment funded by this grant)

        ii. **Labor – Examples include:**

           1. Skilled labor for system installation / biomass planting, tree plantings, etc.
           2. Project manager to oversee project, and for meeting reporting and administrative project requirements

        iii. **Project Support / Miscellaneous Activities – Examples include:**

           1. Project permitting (if required), consultation / meetings with WVDOE and CEGAS personnel
           2. Interaction with appropriate public and / or private entities to promote project and encourage surface-mine reuse development
           3. Miscellaneous expenses (approved by WVDOE **prior** to expense occurring)

6. **Ineligible costs**: Construction projects are not allowable. Funds must be used for direct costs associated with the specific project. Indirect costs, costs that cannot be directly associated or easily identified with a specific project, are not permissible under this funding program. Direct costs and indirect costs are defined below:

    a. **Direct costs** are any costs that can be easily identified with a specific project (grant/contract), such as materials and supplies, equipment, or subcontracts with experienced contractor. Direct costs are permissible under this program. Please note that ARC requires all recipients of federal funds must be vetted through the Excluded Party List System, which is now part of the system for award management (see https://www.sam.gov/portal/public/SAM/). Grantees are responsible for ensuring that all recipients of subcontracts and sub-awards do not appear on the Excluded Party List for the duration of the ARC project.

    b. **Indirect costs** are any costs that cannot be directly associated or easily identified with a specific project. ***Indirect costs are not permissible under this program.*** Indirect costs include:

1. <u>Fringe Benefits</u>: services or benefits provided to employees - e.g., health insurance, payroll taxes, pension contribution, paid absences

2. <u>Overhead</u>: costs associated with the performance of a project - e.g., facility costs (i.e., rent, heat, electricity), general lab supplies

3. <u>General & Administrative</u>: costs associated with the overall management of an organization- e.g., Human resources office, accounting office, general office supplies, office maintenance

7. **<u>Matching Funds</u> - Matching funds are required**, at a level of 100 percent of the grant funds. For example, an award of $25,000 grant funds will require $25,000 matching funds. Match sources must be from non-ARC funds and both cash match and in-kind match funds are allowed. All matching funds must be adequately documented for use specifically within the proposed scope of work. Proposals with significant cash match and / or more than the required match funds may constitute a more favorable consideration for potential funding. All matching funds must be verifiable from recipient records, conformable to grant / contract limitations, necessary and reasonable for accomplishing the project objectives, and not included as cash match or in-kind match on any other program. Awardees may not front-load their project operations exclusively with grant funds with the intent of making up the match later in the project life-cycle.

8. **<u>Impact</u>** – All projects must demonstrate measurable outputs and outcomes. See Appendix for more information about Performance Measures.

III. <u>Applicant Obligations</u>

1) **Capacity for Implementation**
Applicants must demonstrate their capacity to administer this grant. Successful applicants will be required to complete proposed project activities within the contract period, and show how the project will be sustained after completion of funded scope of activities.

2) **Contractual Requirements**
Awardees will be required to enter into a contractual relationship with Marshall University Research Corporation on behalf of CEGAS and declare the terms of the award including, but not limited to: date parameters of the project, amount of award requested, match requirements, statement of work, reporting requirements, and the responsibilities of each participating party.

3) **Reporting**
A Progress Report will be due at a specific date after the project start date has been determined. This report will, at a minimum, include a summary of completed activities, planned activities during the next project phase, and an up-

to-date financial report and the status of matching funds. In addition, performance measures obtained during the reporting period must be included. The performance measure chart in the appendix is a minimum guide. If your project will meet these outputs and outcomes, please include them in your application. If your project can make use of other ARC performance measures, include them in your application. See "Performance Measures" and "Guidance for Performance Measures for ARC Projects."

In addition to the Progress Report, a final report will be due at the end of the project, and no later than July 15, 2015. This report will include a final financial report, full details of activities conducted, and all applicable information compiled as part of the project, status of matching funds, including evaluation of the success of the project and ARC Performance Measures (outputs and outcomes) met.

3) **Payment (or reimbursement) requests**
   Grant recipients will be required to submit requests for reimbursement to CEGAS. Reimbursements for eligible expenses incurred during the project period will be made pending adequate documentation of such expenditures and evidence of applicable cash or in-kind matching funds. The amounts of reimbursement requested must be accounted for with receipts or invoices for expenditures, items purchased, equipment, supplies, lodging and travel, as well as contracts with third parties for goods and services. Acceptable templates for invoicing CEGAS for reimbursable expenses and allowable cost share and in-kind match reports will be provided to grant recipients upon award.

4) **Project changes**
   Any significant proposed change to the project must be reviewed and approved by CEGAS.

IV. Program schedule

November 10, 2014   Program request for proposal announcement

January 9, 2015   Last date to submit applications

February 6, 2015   Approval of successful projects

Immediately after the last date to submit applications has passed, the process for application review will proceed. All applications submitted within the required timeframe will be reviewed and funding decision made, with successful applicants notified, and a projected project start date determined. Any applications submitted after the required due date will not be considered. After project start date has been determined, each grantee will be required to provide progress reports during set timeframes during the project, and a final report at the conclusion of the project.

V. <u>Review process & evaluation criteria</u>

WVDOE and CEGAS will communicate with and solicit competitive applications for these sub-grants from potential partners for funding consideration. All applications will be reviewed by CEGAS for completeness and information accuracy, ensuring application meets threshold criteria. Upon determination that the application has met threshold criteria, it will be forwarded to WVDOE for review and consideration. Applications passing eligibility requirements and meeting budgetary requirements, and satisfying likelihood of success considerations, will be forwarded with recommendations to ARC for final approval. Input from renewable energy and/or agricultural experts and / or other individuals with relevant expertise may be utilized in the review process. Projects will be reviewed by ARC before final approval. Applications will be reviewed on the following criteria:

Minimum requirements

1. Applicant site is located in the state of West Virginia.
2. Applicant meets eligibility requirements per program guidelines.
3. Application is complete, timely, and follows application guidelines.
4. Applicant site is considered a surface-mine property.
5. Match funding requirements are documented and meet program requirements.
6. Application has a strong likelihood of success with future sustainability after project period.

Evaluation criteria:

1. Project description

   - Identification of a specific site

   - Identification of problem(s) or issue(s) hindering successful project completion

   - How proposed activities promote renewable energy and / or agriculture development

   - Budget is realistic for proposed project activities

   - Timeframe for project completion is practical

   - Use of matching funds and in-kind contributions to meet scope of project

   - Projected performance measures (outputs and outcomes) meet ARC guidelines

2. Capacity for project implementation

   - Applicant's ability to administer the project

   - Identification of supporting partners (if applicable)

   - How project will be sustained after proposed activities are complete

VI. <u>Instructions for RFP Submission and Inquiries</u>

- **Please review application materials thoroughly prior to completing the application.**

- **Applications are due on or before January 9, 2015. Late or incomplete applications will not be considered. Completed applications may be sent through U.S. Postal Service, commercial delivery service, or electronically.**

    HARD COPY SUBMISSIONS
    - Proposals sent through the U.S. Postal Service or commercial delivery service must be postmarked by January 9, 2015. Mail one (1) complete proposal to:

        Marshall University Center for Environmental, Geotechnical and Applied Sciences (CEGAS)
        1 John Marshall Drive
        Huntington, WV 25755-2585
        RE: Renewable Energy Program Application
        Attn: George Carico

    ELECTRONIC SUBMISSIONS
    - Proposals submitted via email must be submitted to <u>carico@marshall.edu</u> no later than 5:00 p.m. Eastern Time on January 9, 2015. In the subject line, please include both applicant and site names. Applicant accepts all risks associated with email submissions, including server delays and transmission difficulties.

- **For program and/or application questions, please contact:**

    Teresa Buckland
    Marshall University Center for Environmental, Geotechnical and Applied Sciences (CEGAS)
    West Virginia Brownfields Assistance Center at Marshall University
    304-696-3568
    buckland@marshall.edu

- **For potential project and/or general questions, please contact:**

    George Carico, Environmental Manager, Marshall University Center for Environmental, Geotechnical and Applied Sciences (CEGAS)
    West Virginia Brownfields Assistance Center at Marshall University
    304-696-5456
    <u>carico@marshall.edu</u>

Each submission must include the following items:

1) **Application cover sheet** – provide applicant name, full contact information, summary of proposal, on applicant letterhead, signed by official applicant representative (not more than 2 pages in length).

2) **Project description** includes:
   a. Name of the project / site
   b. Description of the site
      i. Location, property size
      ii. Historical use
      iii. Current status, including site conditions and ownership information
   c. Description of the proposed activities for funding, including:
      i. a detailed description of the proposed activities
      ii. plan for activity implementation, including timeframe for completion
      iii. projected performance measures (outputs and outcomes)
   d. **Capacity for project implementation –** Provide applicant ability and experience in grant funds administration

3) **Budget** – Provide a budget summary that includes how funds are projected to be used, including a complete breakdown of cash / in-kind match funding, labor rates, equipment / supply costs. Please use the budget template below and provide additional budget narrative as needed.

	Salary / Rate	Grant Funds Requested	Cash Match	In-Kind Match	Total Cost
Personnel					
Supplies					
Equipment					
Travel					
Contractors					
Other (explain)					
Total grant funds requested					
Total cash match					
Total in-kind match					
Total project costs					

4) **Budget narrative** – clearly describe each budget line item, giving rationale for expense, itemizing expenses, and showing how funds will be spent. List and explain the source of match and in-kind support.

5) Signed letter(s) of support and commitment (if applicable)

Include letter(s) of support or commitment from partners that have significant interest in the project or are being included to commit in-kind or cash contributions. If the applicant does not own the property, include a signed letter of support for the project by the property owner.

Please limit submission packet to 14 pages including cover sheet and budget (minimum 1-inch margins and 12-font text). Support letters and supplemental information are to be provided as appendices and are included in the page limit.

APPENDIX

Minimum Performance Measures

Guidance and Performance Measures for ARC Projects

Minimum Performance Measures

Please provide information to document the outcomes of the project. Proposals should explain how the applicant will measure the success of the project.

Outputs measure how many individuals, organizations, or communities will participate in project activities. Outcomes measure the effect that activities will have on individuals, organizations, and communities.

MINIMUM PERFORMANCE MEASURES (as applicable)	
Outputs	**Outcomes**
Energy capacity (in KW produced)	**Costs reduced (in KWh saved)**
Reports (# of research reports produced)	
Students or participants served (#)	**Students or participants improved (#)**
Acreage (# of acres impacted by project)	
Trees planted (#)	

Guidance and Performance Measures for ARC Projects

All ARC projects must address performance measures; estimated measures are submitted during the application phase and actual measures are submitted at the project end date. This document summarizes and defines the standard performance measures that may be used for ARC projects.

Projects must address at least one output and one outcome measure from this list. Projects can utilize either a) Single Measure Outputs and Outcomes, or b) Paired Measures. If appropriate, projects can include more than one measure.

While developing projects, applicants should focus on key performance targets and design their project to maximize outcomes.

Single measures: Outputs *(These outputs do not have to be paired with specific outcomes. The following outputs can 'stand-alone.')*	Single measures: Outcomes *(These outcomes do not have to be paired with specific outputs. The following outcomes can 'stand-alone.')*
• **Access Road Miles** • **Acreage** • **Energy Capacity (KWh/KW)** • **Linear Feet** • **New Visitors -Days** • **New Visitors -Overnights** • **Plans/Reports** • **Square Feet** • **System Capacity (MG/MGD)** • **Plans/Reports** *(often paired with outcome "Programs Implemented" but not required)*	• **Businesses Created** • **Costs Reduced** • **Housing Units Constructed/Rehabbed** • ****Jobs Created** • ****Jobs Retained** • ****Leveraged Private Investment (LPI)** • **Programs Implemented** *(often paired with output "Plans/Reports" but not required)* • **Revenues Increased- Export Sales** • **Revenues Increased- Non-export** • **Telecom Sites**

See definitions below.

Paired Measures: *The following outcomes are paired with specific outputs. This means that each outcome must be used with a specific, corresponding output.*

For example, if you use this output:

Businesses Served	*Then the recommended outcome to include is…*	**Businesses Improved**
Communities Served	*Then the recommended outcome to include is…*	**Communities Improved**
Households Served	*Then the recommended outcome to include is…*	****Households Improved**
Organizations Served	*Then the recommended outcome to include is…*	**Organizations Improved**
Participants Served	*Then the recommended outcome to include is…*	**Participants Improved**
Patients Served	*Then the recommended outcome to include is…*	**Patients Improved**
Students Served	*Then the recommended outcome to include is…*	****Students Improved**
Workers/Trainees Served	*Then the recommended outcome to include is…*	****Workers/Trainees Improved**
Plans/Reports	*Not always paired; recommended outcome to include is…*	**Programs Implemented**

See definitions below.

DEFINITIONS (single outputs):

- *Access Road Miles* – The length of access road constructed as part of the project (in miles or decimals of miles, not linear feet; e.g. 0.17 miles).
- *Acreage*- The number of acres impacted by the project, such as the acres graded and prepared for development at an emerging industrial park, the number of acres open to future development, or the number of acres improved in a reclamation project, etc.
- *Energy Capacity (KWh/KW)*—The number of kilowatt hours saved by energy efficiency projects or kilowatts produced by renewable energy projects, <u>within one year of project implementation</u>.
- *Linear Feet* – The number of linear feet of pipe, wire, cable, trails etc. to be constructed or installed as part of an ARC project.
- *New Visitors -Days* – The number of new daytime visitors to a tourism destination times the number of days they visit, <u>within one year of project implementation</u>, resulting from an ARC investment.
- *New Visitors -Overnights* – The number of new overnight visitors to a tourism destination times the number of their overnight stays, <u>within one year of project implementation</u>, resulting from an ARC investment.
- *Plans/Reports* – Plans or reports developed as a result of an ARC project; could include strategic plans, master plans, concept plans, or plans for infrastructure improvements or new programs, as well as research reports, feasibility studies etc. This measure is often paired with the outcome "Programs implemented" as a program (or specific activity) is often implemented as a result of a planning process.
- *Square Feet* –The number of square feet constructed or improved by the project, such as the square footage of a renovated community center, newly constructed parking lot, reconfigured interior space, etc.
- *System Capacity (MG/MGD)* –The capacity (in millions of gallons per day) of a water or sewer system or (in millions of gallons) of a water tank. This could include either the capacity of a new water or sewage treatment plant or water tank, or the increase in capacity of a plant due to renovation, new equipment, or other improvements. This measure may be expressed in decimals.

DEFINITIONS (single outcomes):

- *Businesses Created* – New businesses created as a result of an ARC project. This is generally a secondary measure in business development projects such as entrepreneurship training, value-added agriculture, access to capital, or business accelerators/incubators. The grantee should determine how many new businesses will be created <u>within three years of the project end date</u>.
- *Costs Reduced* – Costs reduced as a result of project activities, <u>within one year of project implementation</u>. For example, small business technical assistance may help a business streamline and cut costs, or an energy efficiency program may help to reduce energy costs, either with a renegotiated flat fee for energy use, or paying for less KWh. If the KWh amount saved (or produced in renewables projects) is known, that number should be recorded as well, see measure *"Energy capacity in KWh."*
- *Housing Units Constructed/Rehabbed* – The number of housing units constructed or rehabilitated as a part of an ARC housing project.
- ***Jobs Created** – Number of direct hires made as a result of the project's operation (excluding construction jobs) created <u>within three years of the project end date</u>. Part-time and seasonal jobs are converted to full-time equivalents (FTEs) and rounded up to whole numbers. Employers must provide letters that explicitly state their intention to create a specific number of new jobs if the ARC investment is made.

- ****Jobs Retained** – Number of jobs that would be lost or relocated without the ARC-funded project. Employers must provide letters that explicitly state the number of jobs at risk due to loss of competitiveness or relocation without the ARC-funded project. Existing jobs benefitting from an infrastructure upgrade or other ARC-funded project should not be counted as "Jobs Retained."
- ****Leveraged Private Investment (LPI)** – Dollar amount of private sector financial commitments, outside of project costs, that result from an ARC investment. Businesses should provide letters that explicitly state their intention to make a specific level of additional investment if the ARC investment is made. The amount provided to ARC should be the dollar amount of investment expected within 3 years of the end of the project's completion.
- **Programs Implemented-** The number of new programs, or ongoing activities directed at achieving a mutually-agreed upon goal, actually implemented as a result of an ARC project. (When applicable, use with other measures that indicate the results of the project, such as students, workers, participants, etc.)
- **Revenues Increased- Export Sales** – The increase in revenue in export sales that a business or businesses realize as a result of an ARC project <u>within three years of the project end date</u>.
- **Revenues Increased- Non-export** – The increase in revenue in domestic (non-export) sales that a business or businesses realize as a result of an ARC project <u>within three years of the project end date</u>.
- **Telecom Sites** –This measure is used wherever there is new telecom service installed as a result of project. This measure is very diverse and can include new telemedicine sites, new wi-fi hotspots, a new wireless router or computer lab at a high school, new fiber run to an industrial site, a new antenna used to provide broadband service, etc.

DEFINITIONS (paired measures):
- **Businesses Served** – The number of businesses served by an ARC project, this can include entrepreneurship, business technical assistance, infrastructure projects, etc.
- **Businesses Improved** – The number of businesses with a measureable improvement as a result of the project. For each project this number is *ALWAYS* the same as, or a subset of, the "Businesses Served" output measure above.
- **Communities Served** – The number of communities served by an ARC project (e.g. a project that maps water systems for twelve municipalities, or communities served by projects which improve planning, civic participation, community pride, infrastructure, educational opportunities etc. Use this measure for consolidated TA grants (in which case, "community" will be defined by the number of projects that are submitted).
- **Communities Improved** – The number of communities with a measureable improvement as a result of the project. For each project, this number is *ALWAYS* the same as, or a subset of, the "Communities Served" output measure to the left. Use this measure for consolidated TA grants.
- **Households Served** –The number of households served by an ARC infrastructure project. This includes the number of households with either *new service* (e.g. water, sewer, gas line, telecommunications) or the number of households with *improved quality of life/service* (e.g. improvements in health, safety, compliance with environmental quality, improved water pressure, etc.).
- ****Households Improved** – The number of households with a measureable improvement as a result of the project. For each project this number is *ALWAYS* the same as, or a subset of, the "Households Served" output measure to the left. Generally, for infrastructure projects, the output and outcome numbers are the same.
- **Participants Served** – The number of individual participants served by a project (i.e. when patients, students or worker/trainee measures do not apply). This can include the number of attendees at a

meeting, workshop or conference, the number of community members participating in a planning charrette, etc.

- *Participants Improved* –The number of participants with a measureable improvement as a result of the project. For each project, this number is *ALWAYS* the same as, or a subset of, the "Participants Served" output measure above.
- *Organizations Served* – The number of organizations served by an ARC project, such as hospitals, schools, churches, non-profits, non-governmental organizations, and government agencies (i.e. when businesses or households do not apply).
- *Organizations Improved* – The number of organizations with a measureable improvement as a result of the project. For each project, this number is *ALWAYS* the same as, or a subset of, the "Organizations Served" output measure above.
- *Patients Served* – The number of patients served by a health project. This can include the increase in patients seen at a clinic where the project has helped add staff, the number of patients served by a new piece of equipment at a rural hospital, etc. For equipment projects, this measure is generally reported for <u>the duration of the project period (if applicable) and one year after the end date of the project.</u> For clinical projects, this measure is the number of unique patients served <u>during the project period.</u>
- *Patients Improved* – In most cases, it is assumed that all patients served by a health project will receive some beneficial outcome. Therefore, generally it is suggested to use the same number for patient outputs and outcomes. If, however, there is a specific measureable outcome, the outcome can be reported as a subset of the output measure. For example, if 30 obese patients participate in a special exercise program and they expect 25 to lower their BMI by a certain percentage, the output could be recorded as 30 and the outcome as 25 patients.
- *Students Served* – This measures the capacity of an education project. This measure should be the number of students served <u>during the project period and up to three years beyond the project end date</u>, depending on the nature of the project. For example, the number of students enrolling in a new community college program the year of the project and three years after.
- ***Students Improved* – The number of students who receive a career credential or obtain a job in the field for which they were specifically trained, or have been passed or graduate to the next grade or level necessary to continue their education. For each project, this number is *ALWAYS* the same as, or a subset of, the "Students Served" output measure above.
- *Workers/Trainees Served* – This measures the capacity of a workforce training project. This measure should be the number of worker/trainees served <u>during the project period and up to three years beyond the project end date</u>, depending on the nature of the project. For example, the number of worker/trainees enrolling in a new workforce education program the year of the project and three years after. (The outcome, right, would be the number receiving a certificate or getting higher pay or a better position within this timeframe.)
- ***Workers/Trainees Improved* – The total number of worker/trainees with improved skills that permit these trainees or workers to either obtain or enhance their employment (e.g. the number receiving a certificate or getting higher pay or a better position within this timeframe). The essential difference between "training" and "education" is that the latter leads to a diploma or degree, whereas the former does not. The gray area comes with private vocational schools that give "diplomas" which may or may not be recognized by the state (e.g., barber schools, computer tech schools). The reasons for classification should be documented in the performance notes. For each project, this number is *ALWAYS* the same as, or a subset of, the "Workers/Trainees Served" output measure above.