Guide to ARC Project Performance Measures

All ARC projects must have documented output and outcome performance measures. Estimated measures are   included in project applications and actual measures are reported in the project closeout reports. This guide lists   and defines the performance measures that may be used for ARC projects.

Every ARC project must have at least one output measure and one outcome measure from the lists below. Some   output measures can be used with a range of outcome measures (these are called "stand-alone measures"), and   some output measures must be used with specific outcome measures (these are called "paired measures"). Projects that have paired output and outcome measures may also have a stand-alone output or outcome measure with no corresponding measure.

Stand-Alone Performance Measures

Stand-alone output measures can be used with any of the outcome measures on the stand-alone outcome measures list below.

Stand-Alone Output Measures
- access road miles
- acreage
- energy capacity (KWh/KW)
- linear feet
- new visitors: days
- new visitors: overnights
- plans/reports
- square feet
- system capacity (MGD/MG)

Stand-Alone Outcome Measures
- businesses created
- costs reduced
- housing units constructed/rehabbed
- jobs created
- jobs retained
- leveraged private investment (LPI)
- programs implemented
- revenues increased: export sales
- revenues increased: non-export sales
- telecom sites

Paired Performance Measures

The output and outcome measures below must be paired as shown.

Output Measure	Outcome Measure
businesses served	businesses improved
communities served	communities improved
households served	households improved
organizations served	organizations improved
participants served	participants improved
patients served	patients improved
students served	students improved
workers/trainees served	workers/trainees improved

Definitions: Outputs

Access Road Miles
The length of the access roads constructed as part of the project, in miles or decimals of miles (not linear feet).

Acreage
The number of acres impacted by an ARC site-development or reclamation project, such as the number of acres graded and prepared for development at an emerging industrial park, the number of acres open to future development, or the number of acres remediated in a reclamation project.

Businesses Served
The number of businesses served by an ARC project. For infrastructure projects, this includes either the number of non-residential entities *with access to* new service (e.g., water, sewer, gas line, or telecommunications) or improved service (e.g., improvements in health or safety, compliance with environmental quality, improved water pressure). For business development projects, this includes businesses receiving technical assistance or participating in training, entrepreneurship, export, or other business development and improvement programs.

Communities Served
The number of communities served or impacted by an ARC project, including projects that address planning, civic participation, infrastructure, educational opportunities, and community capacity. For consolidated technical assistance grants, the number of communities served is the number of projects submitted by state ARC program offices.

Energy Capacity (KWh/KW)
The number of kilowatt hours saved by energy efficiency projects, or kilowatts produced by renewable energy projects within one year of project implementation.

Households Served
The number of households served by an ARC infrastructure project. This includes either the number of households *with access to* new service (e.g., water, sewer, gas line, or telecommunications) or improved service (e.g., improvements in health or safety, compliance with environmental quality, improved water pressure).

Linear Feet
The number of linear feet of pipe, wire, cable, trails, etc. to be constructed or installed.

New Visitors: Days
The number of new daytime visitors to a tourism destination times the number of days they visit, within one year of project implementation.

New Visitors: Overnights
The number of new overnight visitors to a tourism destination times the number of their overnight stays, within one year of project implementation.

Organizations Served
The number of organizations served by an ARC project, including hospitals, schools, churches, non-profits, non-governmental organizations, and government agencies (use when number of businesses or households does not apply).

Participants Served
The number of individual participants served or targeted by an ARC project (use when patients, students, or worker/trainee measures do not apply). This can include the number of attendees at a meeting, workshop or conference. For example, the number of individuals participating in a planning process; participating in a leadership program; or the number of individuals attending health promotion activities.

Patients Served
The number of unique patients receiving clinical services one or more times as a result of an ARC health project. For equipment projects, report the number of unique patients served by that equipment during the project period and one year after the equipment is deployed. For health projects that do not provide clinical services (such as health promotion activities), use the measure "participants served."

Plans/Reports
The number of plans or reports developed as a result of an ARC project. This 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," since 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 an ARC project, such as the square footage of a renovated community center, a newly constructed parking lot, a reconfigured interior space, etc.

Students Served
The number of students served by an ARC education project, measured during the project period, when possible (e.g., the number of students served by a science and technology program in a given semester or year). For projects that are not fully operational during the project period, the measurement time period may be extended up to three years after the project end date. Projects that expand existing programs count only the additional number of students served.

System Capacity (MGD/MG)
The capacity of a water or sewer system, in millions of gallons per day; or the capacity of a water tank, in millions of gallons. This includes 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.

Workers/Trainees Served
The number of worker/trainees served by an ARC training project, measured during the project period when possible. For example, the number of worker/trainees the project will be able to enroll in a new workforce education program. For projects that are not fully operational during the project period, the measurement time period may be extended up to three years after the project end date. Projects that expand existing programs count only the additional number of workers/trainees that the project will be able to serve.

Definitions: Outcomes

Businesses Created
The number of new businesses created as a result of an ARC project. This measure is used for business development projects such as entrepreneurship training, value-added agriculture, access to capital, and business incubation programs (including seed accelerators). This measure should only be used to measure new business creation, not the number of existing businesses recruited or otherwise relocated from other areas. The grant applicant should estimate how many new businesses will be created within three years of the project end date.

Businesses Improved
The number of businesses with a measureable improvement as a result of an ARC project. For new service infrastructure projects, the output (served) is the number of non-residential entities with *access to* the infrastructure service while the outcome (improved) is the number of non-residential customers that *are connected to* the infrastructure service. For improved service projects (e.g., improvements in health or safety, compliance with environmental quality, improved water pressure), all non-residential customers served are also considered improved. For business development projects, the grant applicant and ARC project manager must agree on what constitutes "measureable improvement" and a method for measuring the degree of improvement must be provided. For each project this number is always a subset of, or the same as, the "businesses served" output measure.

Communities Improved
The number of communities with a measureable improvement as a result of an ARC project, including projects that address planning, civic participation, infrastructure, educational opportunities, and community capacity. For community capacity projects, this is the number of communities with enhanced capacity. This measure should also be used for consolidated technical assistance grants. The grant applicant and ARC project manager must agree on what constitutes "measureable improvement" and a method for measuring the degree of improvement must be provided. For each project, this number is always a subset of, or the same as, the "communities served" output measure.

Costs Reduced
The amount of costs reduced as a result of project activities, within one year of project implementation. 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, through a renegotiated flat fee for energy use or through a reduction in kilowatt hours used. See the output measure "energy capacity."

Households Improved
The number of households with measureable improvement as a result of an ARC project. For new service infrastructure projects, the output (served) is the number of households with *access to* the infrastructure service while the outcome (improved) is the number of residential customers that *are connected to* the infrastructure service. For improved service projects (e.g., improvements in health or safety, compliance with environmental quality, improved water pressure), all residential customers served are also considered improved. For each project, this number is always a subset of, or the same as, the "households served" output measure.

Housing Units Constructed/Rehabbed
The number of housing units constructed or rehabilitated as a part of an ARC housing or community development project.

Jobs Created
The number of jobs created (direct hires, excluding construction jobs) as a result of an ARC project, measured during the project period and up to three years after the project end date. Part-time and seasonal jobs should be converted to full-time equivalents and rounded up to whole numbers. Note: for infrastructure projects, employers must provide letters stating their intention to create a specific number of new jobs; for non-infrastructure jobs, grant applicants should estimate the number of jobs that will be created by the organizations expected to benefit from the project.

Jobs Retained
The number of jobs retained as a result of an ARC project. These are existing jobs that would be lost or relocated if the ARC project were not undertaken. Note: for infrastructure projects, employers must provide letters explicitly stating the number of jobs at risk, due to relocation or loss of competitiveness, without the project. Existing jobs benefitting from an infrastructure upgrade cannot be counted as jobs retained. For non-infrastructure projects, grant applicants should estimate the number of existing jobs that would be at risk, due to relocation or loss of competitiveness, without the ARC-funded project.

Leveraged Private Investment (LPI)
The dollar amount of private-sector financial commitments, outside of project costs that result from an ARC project, measured during the project period and up to three years after the project end date. Note: for infrastructure projects, businesses must provide letters stating their intention to make a specific level of investment if the project is funded; for non-infrastructure projects, grant applicants should estimate the dollar value of investments that will be made by the company or companies that will benefit from the project.

Organizations Improved
The number of organizations with a measureable improvement as a result of an ARC project, including hospitals, schools, churches, non-profits, non-governmental organizations, and government agencies (use when number of businesses or households does not apply). The grant applicant and ARC project manager must agree on what constitutes "measureable improvement" and a method for measuring the degree of improvement must be provided. For each project, this number is always a subset of, or the same as, the "organizations served" output measure.

Participants Improved
The number of participants with a measureable improvement as a result of an ARC project (use when patients, students, or worker/trainee measures do not apply, as with a leadership program or planning process). If outcomes are not achieved or cannot be measured within three years after the project is completed, the number of participants that complete or attend all or a required number of components of the project activity may be substituted. For example, the number of participants that attend at least four out of the five community workshops offered. The grant applicant and ARC project manager must agree on what constitutes "measureable improvement" and a method for measuring the degree of improvement must be provided. For each project, this number is always a subset of, or the same as, the "participants served" output measure.

Patients Improved
The number of unique patients expected to benefit from an ARC health project. Because it is usually assumed that all patients served by a health project receive some benefit from it, the numbers for "patients served" and "patients improved" are usually the same. However, if the grant applicant can perform clinical measurement of health outcomes, the outcome number may be lower than the output number. For example, if 30 obese patients participate in an exercise program and 25 are expected to lower their BMI by a certain percentage, the output could be recorded as 30 patients served and the outcome as 25 patients improved.

Programs Implemented
The number of new programs, or the number of ongoing activities related to a defined goal, which are implemented as a result of an ARC project. If possible, 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 realized by a business as a result of an ARC project, within three years of the project end date.

Revenues Increased: Non-Export Sales
The increase in revenue in domestic (non-export) sales realized by a business as a result of an ARC project, within three years of the project end date.

Students Improved
The number of students who obtain a job in the field for which they were specifically trained; the number that receive a diploma, certificate or other career credential; or the number of students who successfully complete a course or unit of study and/or graduate to the next grade or level necessary to continue their education. When outcomes occur after the project period, the number of students improved may be counted up to three years beyond the project end date. For programs where final outcomes are achieved after three or more years, the number of students improved may be counted by an alternative benchmark, such as the number of students completing a skill, grade, or level, or continued enrollment for the project period. For each project, this number is always a subset of, or the same as, the "students served" output measure.

Telecom Sites
The number of new telecom services installed as a result of an ARC project. This diverse measure includes, but is not limited to, 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.
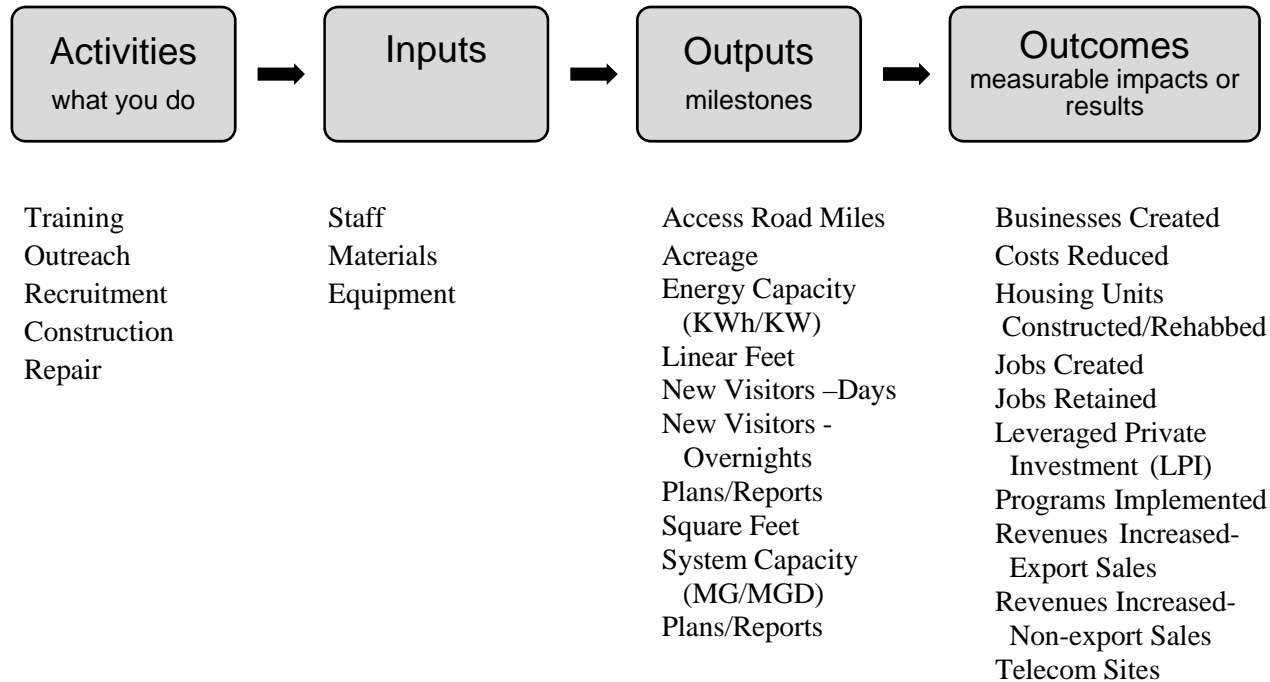
Workers/Trainees Improved
The number of workers/trainees with improved skills that enable them to obtain employment or to enhance their current employment. For example, the number of workers or trainees obtaining a new job; getting higher pay or a better position; or receiving a certification, measured during the project period when possible. When outcomes occur after the project period, the number or workers or trainees improved may be counted up to three years beyond the project end date. For programs where outcomes are achieved after three or more years, the number of students improved may be counted by an alternative benchmark, such as completion of a skill, level/course, or continued enrollment for the project period. For each project, this number is always a subset of, or the same as, the "workers/trainees served" output measure.

What are Outputs and Outcomes? How are they connected?

Outputs: Outputs are the activities or deliverables that will be accomplished as a result of a grant. Outputs are generally described as deliverables or milestones in a work plan or timeline. Outputs include things like the number of workers trained, square feet developed, or new day visitors to a facility. Outputs are generally accomplished during the life of the grant.

Outcomes: Outcomes are the measurable impacts or results of the work of the grant. Outcomes sometimes occur after the completion of the grant.

Activities what you do	→	Inputs	→	Outputs milestones	→	Outcomes measurable impacts or results

Activities	Inputs	Outputs	Outcomes
Training	Staff	Access Road Miles	Businesses Created
Outreach	Materials	Acreage	Costs Reduced
Recruitment	Equipment	Energy Capacity (KWh/KW)	Housing Units Constructed/Rehabbed
Construction		Linear Feet	Jobs Created
Repair		New Visitors –Days	Jobs Retained
		New Visitors - Overnights	Leveraged Private Investment (LPI)
		Plans/Reports	Programs Implemented
		Square Feet	Revenues Increased- Export Sales
		System Capacity (MG/MGD)	Revenues Increased- Non-export Sales
		Plans/Reports	Telecom Sites

Paired Measures

These paired output measures must be used with corresponding outcomes.

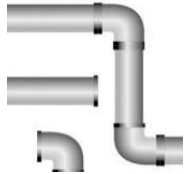| Outputs		Outcomes
Businesses Served	⟷	Businesses Improved
Communities Served	⟷	Communities Improved
Households Served	⟷	Households Improved
Organizations Served	⟷	Organizations Improved
Participants Served	⟷	Participants Improved
Patients Served	⟷	Patients Improved
Students Served	⟷	Students Improved
Workers/Trainees Served	⟷	Workers/Trainees Improved

Tips for Paired Measures

If the project will result in stakeholders or groups that will be *served* (i.e. inputs such as: students, businesses, organizations, or patients), then the grantee must also measure the number of stakeholders or groups that will be *improved* (i.e. outcomes such as: students, businesses, organizations, or patients). For example, if a project results in 100 households served (output), then the project must also estimate how many will be improved (outcome). The improved (outcome) number is always a subset of, or the same as, the served (output) measure.

Sample ARC Project Types & Performance Measures

The following chart lists examples of common ARC project types and the performance measures that are typically tracked by these projects. ARC grant applicants must select at least one output and one outcome per ARC project, though not necessarily all the performance measures listed below. Applicants may be asked to demonstrate how they estimated projected measures and how they will verify the measures during the course of the project.

If selected, paired measures must be used together. Paired measures are linked with an arrow in the chart below.

PROJECT TYPE	COMMON OUTPUTS	COMMON OUTCOMES
Water, sewer, or infrastructure construction project	Households served ⟷ Businesses served ⟷ MGD capacity Linear feet	Households improved Businesses improved Jobs created Jobs retained Leveraged private investment
Tourism facility, revitalization, or trail construction project	Communities served ⟷ Businesses served ⟷ Square feet Acreage New visitors - days New visitors – overnights	Communities improved Businesses improved Revenues increased- non-export sales (tourism)
Education or workforce development project	Students served ⟷ Workers/trainees served ⟷	Students improved Workers/trainees improved Programs implemented
Healthcare access, health promotion project	Communities served ⟷ Patients served ⟷	Communities improved Patients improved Programs implemented

Sample ARC Project Types & Performance Measures, cont'd.

PROJECT TYPE	COMMON OUTPUTS		COMMON OUTCOMES
Business development, entrepreneurship project	Businesses served	⟵⟶	Businesses improved Businesses created Jobs created Jobs retained Leveraged private investment Revenues increased- export sales Revenues increased- non-export sales
Local access road project	Businesses served Access road miles	⟵⟶	Businesses improved Jobs created Jobs retained Leveraged private investment Revenues increased- export sales Revenues increased- non-export sales