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)
- plans/reports

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.

<table>
<thead>
<tr>
<th>Output Measure</th>
<th>Outcome Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>businesses served</td>
<td>businesses improved</td>
</tr>
<tr>
<td>communities served</td>
<td>communities improved</td>
</tr>
<tr>
<td>households served</td>
<td>households improved</td>
</tr>
<tr>
<td>organizations served</td>
<td>organizations improved</td>
</tr>
<tr>
<td>participants served</td>
<td>participants improved</td>
</tr>
<tr>
<td>students served</td>
<td>students improved</td>
</tr>
<tr>
<td>workers/trainees served</td>
<td>workers/trainees improved</td>
</tr>
</tbody>
</table>

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, including entrepreneurship projects, business technical assistance, and infrastructure projects.

Communities Served
The number of communities served by an ARC project, including projects that improve planning, civic participation, infrastructure, and educational opportunities. 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 a new service (e.g., water, sewer, gas line, or telecommunications) or the number of households with improved infrastructure (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).

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 patients served 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.”

Participants Served
The number of individual participants that can be served or are 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; or the number of individuals attending health promotion activities.

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
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 that an ARC education project will be able to serve, 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 that an ARC training project will be able to serve, 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
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 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 each project this number is always the same as, or a subset of, 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 improve planning, civic participation, infrastructure, and educational opportunities. This measure should also be used for consolidated technical assistance grants. The “communities improved” number will always be the same as, or a subset of, the “communities served” output measure.

Costs Reduced
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 each project this number is always the same as, or a subset of, the “households served” output measure. For infrastructure projects, the output and outcome numbers are usually the same.

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 projected number of jobs (direct hires, excluding construction jobs) that will result from 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, 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 that would be lost or relocated without the ARC project, measured during the project period and up to three years after the project end date. Existing jobs benefitting from an infrastructure upgrade cannot be counted as jobs retained. Note: for infrastructure projects, employers must provide letters explicitly stating the number of jobs at risk, due to loss of competitiveness or relocation, without the project. For non-infrastructure projects, applicants should estimate the number of existing jobs that would be at risk, due to loss of competitiveness or relocation, without the ARC-funded project.

Leveraged Private Investment (LPI)
The dollar amount of private-sector financial commitments, outside of project costs, which result from a 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 jobs, 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. This number is always the same as, or a subset of, the “organizations 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” is usually the same. However, if the project grantee 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.

Participants Improved
The number of participants with a measureable improvement as a result of the project (use when patients, students, or worker/trainee measures do not apply). A plan and a method for measuring the degree of improvement must be provided. This number is always the same as, or a subset of, the “participants served” output measure. 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.

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 that a business or businesses realize 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 that a business or businesses realize 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. This number is always the same as, or a subset of, 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.
This number is always the same as, or a subset of, the “workers/trainees served” output measure.
What are Outcomes and Outputs? 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.

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

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**Tips for Paired Measures**

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

<table>
<thead>
<tr>
<th>PROJECT TYPE</th>
<th>COMMON OUTPUTS</th>
<th>COMMON OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water, sewer, or infrastructure construction project</td>
<td>Households served, Businesses served, MGD capacity, Linear feet</td>
<td>Households improved, Businesses improved, Jobs created, Jobs retained, Leveraged private investment</td>
</tr>
</tbody>
</table>

| Tourism facility, revitalization, or trail construction project | Communities served, Businesses served, Square feet, Acreage, New visitors - days, New visitors – overnights | Communities improved, Businesses improved, Non-export (tourism) revenues increased |

| 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.

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<th>PROJECT TYPE</th>
<th>COMMON OUTPUTS</th>
<th>COMMON OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Development, Entrepreneurship project</td>
<td>Businesses served</td>
<td>Businesses improved&lt;br&gt;New businesses created&lt;br&gt;Jobs created&lt;br&gt;Jobs retained&lt;br&gt;Leveraged private investment&lt;br&gt;Export revenues increased&lt;br&gt;Non-export revenues increased</td>
</tr>
<tr>
<td>Local access road project</td>
<td>Businesses served&lt;br&gt;Access road miles</td>
<td>Businesses improved&lt;br&gt;Jobs created&lt;br&gt;Jobs retained&lt;br&gt;Revenues increased&lt;br&gt;LPI</td>
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</table>