Appalachian Regional Commission

Guide to ARC Project Performance Measures – Water and Sewer Projects

Standalone Measures

Costs Reduced Outcome	
Definition	The costs reduced as a result of project activities
Example grant activities	Renovating infrastructure to detect or prevent leaks, which reduces treatment costs; replacing a pump station so that one doesn't need to be rented any longer, etc.
How might this be measured?	Estimate of savings based on anticipated reduction of Operations and Maintenance (O&M) costs, expressed in number of dollars
Typical timeframe	One year after grant closeout
Additional guidance	Please provide what was included in the calculation of cost savings

Jobs Created Outcome	
Definition	The number of direct hires, excluding construction jobs, that result from an ARC project
Example grant activities	Installation/construction, renovation, or extension of water and/or sewer lines or increased or renovated storage capacity that is the **only factor** upon which the creation of new jobs hinges
How might this be measured?	Confirmation of number of jobs created. Documentation required at project start counts as acceptable evidence for approval.
Typical timeframe	Up to 3 years after grant closeout
Additional guidance	Must have a letter from firm(s) that state(s) the number of full-time equivalent (FTE) jobs created and identifies the project-related infrastructure as the sole reason for the jobs created. Part-time and seasonal jobs should be converted FTEs.

Jobs Retained Outcome	
Definition	The number of existing jobs that would be lost or relocated if the ARC project were not undertaken
Example grant activities	Installation/construction, renovation, or extension of water and/or sewer lines or increased or renovated storage capacity without which jobs would be lost
How might this be measured?	Number of jobs retained, expressed as full-time equivalents
Typical timeframe	Up to 3 years after grant closeout

Jobs Retained *Outcome*	
Additional guidance	• Applicants must submit a signed letter from the employer(s) verifying the number of FTE jobs* to be retained; include references to evidence that these jobs would be relocated without the project. If a business is staying due to the completion of the project, all employees working at that business location may be counted in "jobs retained." • Existing jobs benefiting from an infrastructure upgrade cannot be counted as jobs retained. *Part-time and seasonal jobs should be converted to full-time equivalents (FTE).

Leveraged Private Investment (LPI) *Outcome*	
Definition	The dollar amount of private-sector financial commitments, outside of project costs, that result from an ARC project
Example grant activities	New or improved water and/or wastewater infrastructure that enables the private sector to invest in the project area
How might this be measured?	Dollar amount of private investment resulting from an ARC project. Documentation required at project start counts as acceptable evidence for approval.
Typical timeframe	Up to 3 years after grant closeout
Additional guidance	Applicants must submit a signed letter from the company or investor verifying the amount of LPI.

Linear Feet *Output*	
Definition	The number of linear feet of pipes and/or mains for sewer or water lines
Example grant activities	• New or improved water and/or wastewater lines • Can include repairs (such as cured in place pipes [CIPP]), replacement, and/or new mains, force mains, and lines
How might this be measured?	From Preliminary Engineering Report (PER) when writing approval memo and from project inspection engineer when verifying measures upon completion
Typical timeframe	By grant closeout
Additional guidance	

Million Gallons (MG)	
Output	
Definition	The fixed storage capacity for a water or wastewater facility
Example grant activities	Water tank, water reservoir, sewage lagoon
How might this be measured?	Specs from engineer or engineering firm
Typical timeframe	By grant closeout
Additional guidance	

Million Gallons Per Day (MGD)	
Output	
Definition	The peak flow capacity of a water or wastewater system in millions of gallons per day
Example grant activities	New water or wastewater treatment plant, or upgrades to an existing facility due to renovation, new equipment, or other improvements
How might this be measured?	Specs from engineer or engineering firm
Typical timeframe	By grant closeout
Additional guidance	

Plans/Reports	
Output	
Definition	Number of plans or reports developed as a result of an ARC project
Example grant activities	Strategic plans, master plans, concept plans, plans for infrastructure improvements or new programs, research reports, feasibility studies
How might this be measured?	The number of plans or reports developed as a result of an ARC project
Typical timeframe	By grant closeout
Additional guidance	

Paired Measures

	Businesses Served	Businesses Improved
	Output	*Outcome*
Definition	The number of businesses (i.e., any non-residential customers) served or impacted by an ARC project	The number of businesses (i.e., any non-residential customers) with a measurable improvement as a result of an ARC project
Example grant activities	Extending or replacing water and/or sewer lines, upgrading water lines to provide adequate fire suppression capacity, building or	

	Businesses Served *Output*	Businesses Improved *Outcome*
	replacing a water tank, increasing water reservoir capacity, tapping a new source for water	
How might this be measured?	Number of non-residential customers that receive access to **new** or **improved** water- or wastewater-related infrastructure	Number of non-residential customers that hook up to new or improved water- or wastewater-related infrastructure
Typical timeframe	By grant closeout	Up to 3 years after grant closeout
Additional guidance	Grant applicants should identify the number of business and household customers in the service area in their application.	

	Communities Served *Output*	Communities Improved *Outcome*
Definition	Number of communities that are reached when an infrastructure improvement is implemented	Number of communities that benefit when an infrastructure improvement is implemented
Example grant activities	Improvements to water or wastewater treatment systems (quality and/or capacity) that support an entire community or number of communities	
How might this be measured?	PER (Preliminary Engineering Report)	PER
Typical timeframe	By grant closeout	Up to 3 years after grant closeout
Additional guidance	• This measure can be used if the project is a system-wide improvement in which all residential and non-residential customers are served and/or improved. • Please list the community(ies) noted as served and/or improved by the project.	

	Households Served *Output*	Households Improved *Outcome*
Definition	The number of households served by an ARC infrastructure project	The number of households with measurable improvement as a result of an ARC project
Example grant activities	Installation/construction, renovation, or extension of water and/or sewer lines that households can hook up to	
How might this be measured?	Number of households that receive access to **new** or	Number of households that hook up to new or improved

	Households Served *Output*	Households Improved *Outcome*
	improved water- or wastewater-related infrastructure	water- or wastewater-related infrastructure
Typical timeframe	By grant closeout	Up to 3 years after grant closeout
Additional guidance	Grant applicants should identify the number of business and household customers in the service area in their application.	