

Federal, State and Local Evidence Definitions

Federal Definitions

Agency	Definition
Americorps	Americorps State and National Grant Program STRONG - The applicant has submitted up to two evaluation reports demonstrating that the same intervention described in the application has been tested nationally, regionally, or at the state-level (e.g., multi-site) using a well-designed and well-implemented experimental design evaluation (i.e., Randomized Controlled Trial (RCT)) or a Quasi-Experimental Design evaluation (QED) with statistically matched comparison (i.e., counterfactual) and treatment groups. Alternatively, the proposed intervention's evidence may be based on multiple (up to two) well-designed and well-implemented QEDs or RCTs of the same intervention described in the application in different locations or with different populations within a local geographic area. The overall pattern of evaluation findings must be consistently positive on one or more key desired outcomes of interest as depicted in the applicant's logic model. Findings from the RCT or QED evaluations may be generalized beyond the study context. The evaluations were conducted by an independent entity external to the organization implementing the intervention. MODERATE - The applicant has submitted up to two well-designed and well-implemented evaluation reports that evaluated the same intervention described in the application and identified evidence of effectiveness on one or more key desired outcomes of interest as depicted in the applicant's logic model. Evidence of effectiveness (or positive findings) is determined using experimental design evaluations (i.e., Randomized Controlled Trials (RCT)) or Quasi-Experimental Design evaluations (QED) with statistically matched comparison (i.e., counterfactual) and treatment groups. The ability to generalize the findings from the RCT or QED beyond the study context may be limited (e.g., single-site.) The evaluations were conducted by an independent entity external to the organization implementing the intervention. PRELIMINARY - the applicant has submitted up to two outcome evaluation reports (
Education	Every Student Succeeds Act Evidence-based refers to an activity, strategy, or intervention that (i) demonstrates a statistically significant effect on improving student outcomes or other relevant outcomes based on



- (I) STRONG evidence from at least 1 well designed and well implemented experimental study;
- (II) MODERATE evidence from at least 1 well designed and well implemented quasi-experimental study; or
- (III) PROMISING evidence from at least 1 well designed and well implemented correlational study with statistical controls for selection bias; or
- (ii) (I) DEMONSTRATES A RATIONALE based on high quality research findings or positive evaluation that such activity, strategy, or intervention is likely to improve student outcomes or other relevant outcomes; and (II) includes ongoing efforts to examine the effects of such activity, strategy, or intervention.

Human Services

Family First Prevention Services Act

WELL-SUPPORTED - A practice shall be considered to be a 'well-supported practice' if—

- (I) the practice is superior to an appropriate comparison practice using conventional standards of statistical significance (in terms of demonstrated meaningful improvements in validated measures of important child and parent outcomes, such as mental health, substance abuse, and child safety and well-being), as established by the results or outcomes of at least two studies that—
 - (aa) were rated by an independent systematic review for the quality of the study design and execution and determined to be well-designed and well-executed;
 - (bb) were rigorous random-controlled trials (or, if not available, studies using a rigorous quasi-experimental research design); and
 - (cc) were carried out in a usual care or practice setting; and
- (II) at least one of the studies described in subclause (I) established that the practice has a sustained effect (when compared to a control group) for at least 1 year beyond the end of treatment.

SUPPORTED —A practice shall be considered to be a 'supported practice' if—

- (I) the practice is superior to an appropriate comparison practice using conventional standards of statistical significance (in terms of demonstrated meaningful improvements in validated measures of important child and parent outcomes, such as mental health, substance abuse, and child safety and well-being), as established by the results or outcomes of at least one study that—
 - (aa) was rated by an independent systematic review for the quality of the study design and execution and determined to be well-designed and well-executed;
 - (bb) was a rigorous random-controlled trial (or, if not available, a study using a rigorous quasi-experimental research design); and
 - (cc) was carried out in a usual care or practice setting; and
- (II) the study described in subclause (I) established that the practice has a sustained effect (when compared to a control group) for at least 6 months beyond the end of the treatment.

PROMISING PRACTICE - A practice shall be considered to be a 'promising practice' if the practice is superior to an appropriate comparison practice using conventional standards of statistical significance (in terms of demonstrated meaningful improvements in validated measures of important child and parent outcomes, such as mental health, substance abuse, and child safety and well-being), as established by the results or outcomes of at least one study



that-

- (I) was rated by an independent systematic review for the quality of the study design and execution and determined to be well-designed and well-executed; and
- (II) utilized some form of control (such as an untreated group, a placebo group, or a wait list study).

Maternal, Infant, and Early Childhood Home Visiting

EVIDENCE-BASED - The model conforms to a clear consistent home visitation model that has been in existence for at least 3 years and is research-based, grounded in relevant empirically-based knowledge, linked to program determined outcomes, associated with a national organization or institution of higher education that has comprehensive home visitation program standards that ensure high quality service delivery and continuous program quality improvement, and has demonstrated significant, (and in the case of the service delivery model described in item (aa), sustained) positive outcomes, as described in the benchmark areas specified in paragraph (1)(A) and the participant outcomes described in paragraph (2)(B), when evaluated using well-designed and rigorous—

- (aa) randomized controlled research designs, and the evaluation results have been published in a peer-reviewed journal; or
- (bb) quasi-experimental research designs.

Justice

<u>Juvenile Justice and Delinquency Prevention Act</u>

EVIDENCE-BASED means a program or practice that—

- (A) is demonstrated to be effective when implemented with fidelity;
- (B) is based on a clearly articulated and empirically supported theory;
- (C) has measurable outcomes relevant to juvenile justice, including a detailed description of the outcomes produced in a particular population, whether urban or rural; and
- (D) has been scientifically tested and proven effective through randomized control studies or comparison group studies and with the ability to replicate and scale;

PROMISING means a program or practice that—

- (A) is demonstrated to be effective based on positive outcomes relevant to juvenile justice from one or more objective, independent, and scientifically valid evaluations, as documented in writing to the Administrator; and
- (B) will be evaluated through a well-designed and rigorous study, as described in paragraph (34)(D);

Labor

Clearinghouse for Labor Evaluation and Research

HIGH - we are confident that the estimated effects are solely attributable to the intervention examined. Two types of studies can receive a high rating: (1) well-conducted RCTs that have low attrition and no other threats to study validity and (2) ITS designs with sufficient replication wherein the intervention condition is intentionally manipulated by the researcher.

MODERATE - A moderate rating means we are somewhat confident that the estimated effects are attributable to the intervention studied, but there might be other contributing factors that were not included in the analysis. Research that meets the CLEAR guidelines for regression designs receives a moderate rating; this includes RCTs and ITS designs that do not receive a high rating.



Treasury

American Rescue Plan State and Local Fiscal Recovery Funds

STRONG - Strong evidence means the evidence base that can support causal conclusions for the specific program proposed by the applicant with the highest level of confidence. This consists of one or more well-designed and well-implemented experimental studies conducted on the proposed program with positive findings on one or more intended outcomes.

MODERATE - Moderate evidence means that there is a reasonably developed evidence base that can support causal conclusions. The evidence base consists of one or more quasi-experimental studies with positive findings on one or more intended outcomes or two or more non-experimental studies with positive findings on one or more intended outcomes. Examples of research that meet the standards include: well-designed and well-implemented quasi- experimental studies that compare outcomes between the group receiving the intervention and a matched comparison group (i.e., a similar population that does not receive the intervention).

PRELIMINARY - Preliminary evidence means that the evidence base can support conclusions about the program's contribution to observed outcomes. The evidence base consists of at least one non-experimental study. A study that demonstrates improvement in program beneficiaries over time on one or more intended outcomes or an implementation (process evaluation) study used to learn and improve program operations would constitute preliminary evidence. Examples of research that meet the standards include: (1) outcome studies that track program beneficiaries through a service pipeline and measure beneficiaries' responses at the end of the program; and (2) pre-and post-test research that determines whether beneficiaries have improved on an intended outcome.



State Definitions

State	Definition
Colorado	Colorado law provides the following definitions:
	 "Evidence-based decision-making" as "the intersection of the best available research evidence, decision-makers' expertise, constituent needs, and implementation context." "Best available research evidence" as the weight of the research evidence from the most rigorous and relevant studies available regarding a program or practice, which studies are identified using a systematic process."
	Evidence Continuum
	Strong Evidence: meaning at least two evaluation reports have demonstrated that an intervention or strategy has been tested nationally, regionally, at the state- level, or with different populations or locations in the same local area using a well-designed and well-implemented experimental design evaluation (i.e., Randomized Controlled Trial (RCT)) or a quasi-experimental design evaluation (QED) with statistically matched comparison (i.e., counterfactual) and treatment groups. See CLEAR.dol.gov for full definitions of strong or moderate study design. The overall pattern of evaluation findings must be consistently positive on one or more key workforce outcomes. The evaluations should be conducted by an independent entity external to the organization implementing the intervention.
	Moderate Evidence: meaning at least one evaluation report has demonstrated that an intervention or strategy has been tested using a well-designed and well-implemented experimental or quasi-experimental design showing evidence of effectiveness on one or more key workforce outcomes. The evaluations should be conducted by an independent entity external to the organization implementing the intervention.
	Preliminary Evidence: meaning at least one evaluation report has demonstrated that an intervention or strategy has been tested using a well-designed and well-implemented pre/post-assessment without a comparison group or a post-assessment comparison between intervention and comparison groups showing evidence of effectiveness on one or more key workforce outcomes. The evaluation may be conducted either internally or externally.
	Pre-preliminary Evidence: meaning there is program performance data for the intervention showing improvements for one or more key workforce outputs or outcomes.
Illinois	The Illinois Budgeting for Results Commission provides the following definitions:
	Evidence-Based: Programs or interventions that have undergone multiple rigorous evaluations which demonstrate the efficacy of the program's theory of change and theory of action.
	Theory Informed : A program where a lesser amount of evidence and/or rigor exists to validate the efficacy of the program's theory of change and theory of action than an evidence-based program.



Maryland

Maryland's Department of Budget and Management provides the following definitions:

Evidence-Based: meaning there is evidence from an experimental or quasi-experimental study that a key program component has been effective in improving a relevant outcome with similar populations or in similar settings.

Evidence-building: a program planning to conduct an experimental or quasi-experimental study on a key program component.

Minnesota

Minnesota's Department of Management and Budget provides the following definitions:

Evidence Ratings and Definitions:

Proven Effective: A Proven Effective service or practice offers a high level of research on effectiveness for at least one outcome of interest. This is determined through multiple qualifying evaluations outside of Minnesota or one or more qualifying local evaluations. Qualifying evaluations use rigorously implemented experimental or quasi-experimental designs.

Promising: A Promising service or practice has some research demonstrating effectiveness for at least one outcome of interest. This may be a single qualifying evaluation that is not contradicted by other such studies but does not meet the full criteria for the Proven Effective designation. Qualifying evaluations use rigorously implemented experimental or quasi-experimental designs.

Theory Based: A Theory Based service or practice has either no research on effectiveness of research designs that do not meet the above standards. These services and practices may have a well-constructed logic model or theory of change. This ranking is neutral. Services may move up to Promising or Proven Effective after research reveals their causal impact on measured outcomes.

Mixed Effects: A Mixed Effects service or practice offers a high level of research on the effectiveness of multiple outcomes. However, the outcomes have contradictory effects. This is determined through multiple qualifying studies outside of Minnesota or one or more qualifying local evaluations. Qualifying evaluations use rigorously implemented experimental or quasi-experimental designs.

No Effect: A service or practice rated No Effect has no impact on the measured outcome or outcomes of interest. Qualifying evaluations use rigorously implemented experimental or quasi-experimental designs.

Proven Harmful: A Proven Harmful service or practice offers a high level of research that shows program participation adversely affects outcomes of interest. This is determined through multiple qualifying evaluations outside of Minnesota or one or more qualifying local evaluations. Qualifying evaluations use rigorously implemented experimental or quasi-experimental designs.

North Carolina

Tiered Levels of Evidence

Proven Effective: A service or practice that is proven effective offers a high level of research on effectiveness for at least one outcome of interest. This is determined through multiple qualifying evaluations outside of North Carolina or one or more qualifying North Carolina-based evaluations. Qualifying evaluations use rigorously implemented experimental or quasi experimental designs.

Promising: A promising service or practice has some research demonstrating effectiveness for at



least one outcome of interest. This may be a single qualifying evaluation that is not contradicted by other such studies but does not meet the full criteria for the proven effective designation. Qualifying evaluations use rigorously implemented experimental or quasi-experimental designs.

Theory-based: A theory-based service or practice has no research on effectiveness or research designs that do not meet the standards for "promising" or "proven effective." These services and practices may have a well-constructed logic model or theory of change that has not been tested. This ranking is neutral. Services may move to another category after research reveals their causal impact on measured outcomes.

Mixed Effects: A mixed effects service or practice offers a high level of research on the effectiveness of multiple outcomes. However, the outcomes have contradictory effects, and there is not additional analysis to quantify the overall favorable or unfavorable impact of this service. This is determined through multiple qualifying studies outside of North Carolina or one or more qualifying North Carolina-based evaluations. Qualifying evaluations use rigorously implemented experimental or quasi-experimental designs.

No Effect: A service or practice with no effects has no impact on the measured outcome. It does not include the service's potential effect on other outcomes. Qualifying evaluations use rigorously implemented experimental or quasi-experimental designs.

Proven Harmful: A service or practice that is proven harmful offers a high level of research that shows participation adversely affects outcomes of interest. This is determined through multiple qualifying evaluations outside of North Carolina or one or more qualifying North Carolina based evaluations. Qualifying evaluations use rigorously implemented experimental or quasi-experimental designs.

Mississippi

Mississippi statute (27-103-159), enacted in 2014, provides the following definitions:

Evidence-based program: an intervention program that has had multiple site randomized controlled trials across heterogeneous populations demonstrating that the program is effective for the population and that does not have an equivalent or more probative body of rigorous evaluation demonstrating its ineffectiveness.

Research-based program: an intervention program that has had at least one (1) rigorous controlled evaluation demonstrating effectiveness and does not have an equivalent or more probative body of evaluations demonstrating its ineffectiveness.

Promising program: an intervention program that has had at least one (1) rigorous controlled evaluation demonstrating effectiveness.

New Mexico

New Mexico law provides the following definitions:

Evidence-based: a program or practice:

- (1) incorporates methods demonstrated to be effective for the intended population through scientifically based research, including statistically controlled evaluations or randomized trials;
- (2) can be implemented with a set of procedures to allow successful replication in New Mexico; and
- (3) when possible, has been determined to be cost beneficial;



Research-based: a program or practice has some research demonstrating effectiveness, but does not yet meet the standard of evidence-based; and

Promising: a program or practice, based on statistical analyses or preliminary research, presents potential for becoming research-based or Evidence-based;

North Carolina

North Carolina's Office of State Budget and Management provides the following definitions:

Tiered Levels of Evidence:

Proven Effective: A service or practice that is proven effective offers a high level of research on effectiveness for at least one outcome of interest. This is determined through multiple qualifying evaluations outside of North Carolina or one or more qualifying North Carolina-based evaluations. Qualifying evaluations use rigorously implemented experimental or quasi experimental designs.

Promising: A promising service or practice has some research demonstrating effectiveness for at least one outcome of interest. This may be a single qualifying evaluation that is not contradicted by other such studies but does not meet the full criteria for the proven effective designation. Qualifying evaluations use rigorously implemented experimental or quasi-experimental designs.

Theory-based: A theory-based service or practice has no research on effectiveness of research designs that do not meet the standards for "promising" or "proven effective." These services and practices may have a well-constructed logic model or theory of change that has not been tested. This ranking is neutral. Services may move to another category after research reveals their causal impact on measured outcomes.

Mixed Effects: A mixed effects service or practice offers a high level of research on the effectiveness of multiple outcomes. However, the outcomes have contradictory effects, and there is not additional analysis to quantify the overall favorable or unfavorable impact of this service. This is determined through multiple qualifying studies outside of North Carolina or one or more qualifying North Carolina-based evaluations. Qualifying evaluations use rigorously implemented experimental or quasi-experimental designs.

No Effect: A service or practice with no effects has no impact on the measured outcome. It does not include the service's potential effect on other outcomes. Qualifying evaluations use rigorously implemented experimental or quasi-experimental designs.

Proven Harmful: A service or practice that is proven harmful offers a high level of research that shows participation adversely affects outcomes of interest. This is determined through multiple qualifying evaluations outside of North Carolina or one or more qualifying North Carolina based evaluations. Qualifying evaluations use rigorously implemented experimental or quasi-experimental designs.

Oregon

A <u>2003 Oregon law</u> provides the following definitions:

Evidence-Based Program: a program that "incorporates significant and relevant practices based on **scientifically based research**; and is cost effective".

Scientifically Based Research: research that obtains reliable and valid knowledge by:

(a) Employing systematic, empirical methods that draw on observation or experiment;



- (b) Involving rigorous data analyses that are adequate to test the stated hypotheses and justify the general conclusions drawn;
- (c) Relying on measurements or observational methods that provide reliable and valid data across evaluators and observers, across multiple measurements and observations and across studies by the same or different investigators; and
- (d) Utilizing randomized controlled trials when possible and appropriate.

These definitions apply to the following agencies:

- Oregon Department of Corrections
- Oregon Youth Authority
- Oregon Department of Human Services
- Oregon Health Authority
- Oregon Criminal Justice Commission
- Oregon State Police

Rhode Island

The Rhode Island Office of Management and Budget provides the following definitions:

Evidence Scale

Proven Effective: A program or service that is "proven effective" has a high level of research on effectiveness for at least one outcome of interest, determined through multiple rigorous evaluations. Qualifying evaluations include studies such as randomized controlled trials and evaluations that incorporate strong comparison group designs. These programs have been tried and tested by many jurisdictions, and typically have specified procedures that allow them to be successfully replicated. We expect that very few budget requests will be "proven effective" –this is the highest evidence-based standard, and most programs have not yet been studied rigorously enough to achieve it.

Promising: A "promising" program or service has some research demonstrating effectiveness, but not as much as would be required for a "proven effective" designation. This could include, for example, a single randomized controlled trial or evaluation with a comparison group design that is not contradicted by other studies, but not confirmed by multiple such evaluations. It could also include the existence of a robust body of outcome data that your agency, or another agency that delivers a similar program, has collected and analyzed about the program over time. We expect that some, but not many, budget requests will be "promising."

Theory-Based: A "theory-based" program or service has no qualifying evaluations on effectiveness or conclusive randomized controlled studies. Typically, theory-based programs have been tested using less rigorous research designs that do not meet the standards outlined above but have a well-constructed logic model or theory of change. Often, theory-based requests are based on anecdotal evidence or expert opinions. We expect that most expansionary budget requests will be in the "theory-based" category. The best and most compelling of these requests will include a plan for study that would theoretically allow the intervention to move up the evidence scale within a designated time period.

Evidence of Insufficient Impact or Unintended Effects: A program has "evidence of insufficient impact" if quality evaluations have measured no meaningful difference in outcomes between program participants and those in a comparison group. A program that regularly fails to reach its



	outcomes targets also falls into this category. A program has "evidence of unintended effects" if quality evidence suggests that it has a negative impact on outcomes for program participants. We expect that many proposals will involve programs that fall into this category.
<u>Tennessee</u>	The Tennessee Office of Evidence and Impact provides the following definitions:
	Evidence Framework:
	Strong Evidence: Two or more rigorous evaluations support the program model.
	Evidence: At least one rigorous evaluation supports the program model.
	Outcomes: Data collected over time demonstrate a change or benefit for participants.
	Outputs: Process measures support continuous improvement.
	Logic Model: "If we do x, y, and z activities, then we expect to see a, b, and c results."



Locality	Definition
Dane County. Wisconsin Department of Human Services	Evidence-based : Evidence-based practice (EBP) is the objective, balanced, and responsible use of current research and the best available data to guide policy and practice decisions, such that outcomes for consumers are improved. Used originally in the health care and social science fields, evidence-based practice focuses on approaches demonstrated to be effective through empirical research rather than through anecdote or professional experience alone. An evidence-based approach involves an ongoing, critical review of research literature to determine what information is credible, and what policies and practices would be most effective given the best available evidence. It also involves rigorous quality assurance and evaluation to ensure that evidence-based practices are replicated with fidelity, and that new practices are evaluated to determine their effectiveness. The county's Youth Justice and Prevention program adopted a definition from the National Institute of Corrections to guide their programs.
Multnomah County, OR's Department of Community Justice	Evidence-Based: An evidence-based practice is a strategy, curriculum, or approach that has been shown to be effective at achieving its intended outcomes using extensive scientific research and evaluation. Evidence-based practices in corrections are those that have been shown to reduce recidivism or improve other outcomes for justice involved youth and adults.