- (A) the proposals funded by the Foundation are of high quality and advance scientific knowledge; and
- (B) the Foundation's grants address societal needs through basic research findings or through related activities; and
- (4) as evidenced by the Foundation's contributions to scientific advancement, economic growth, human health, and national security, its peer review and merit review processes have identified and funded scientifically and societally relevant basic research and should be preserved.

(b) Merit review criteria

The Foundation shall maintain the intellectual merit and broader impacts criteria, among other specific criteria as appropriate, as the basis for evaluating grant proposals in the merit review process.

(c) Updates

If after January 6, 2017, a change is made to the merit-review process, the Director shall submit a report to the appropriate committees of Congress not later than 30 days after the date of the change.

(Pub. L. 114–329, title I, §101, Jan. 6, 2017, 130 Stat. 2970.)

Editorial Notes

CODIFICATION

Section was enacted as part of the American Innovation and Competitiveness Act, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

Statutory Notes and Related Subsidiaries

DEFINITIONS

Pub. L. 114–329, §2, Jan. 6, 2017, 130 Stat. 2970, provided that: "In this Act [see Short Title of 2017 Amendment note set out under section 1861 of this title and Tables], unless expressly provided otherwise:

- "(1) APPROPRIATE COMMITTEES OF CONGRESS.—The term 'appropriate committees of Congress' means the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives
- "(2) FEDERAL SCIENCE AGENCY.—The term 'Federal science agency' has the meaning given the term in section 103 of the America COMPETES Reauthorization Act of 2010 (42 U.S.C. 6623).
- "(3) FOUNDATION.—The term 'Foundation' means the National Science Foundation.
- "(4) Institution of Higher Education.—The term institution of higher education has the meaning given the term in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)).
- "(5) NIST.—The term 'NIST' means the National Institute of Standards and Technology.
- "(6) STEM.—The term 'STEM' has the meaning given the term in section 2 of the American [sic] COMPETES Reauthorization Act of 2010 [Pub. L. 111–358] (42 U.S.C. 6621 note).
- "(7) STEM EDUCATION.—The term 'STEM education' has the meaning given the term in section 2 of the STEM Education Act of 2015 [Pub. L. 114-59] (42 U.S.C. 6621 note)."

§ 1862s-1. Transparency and accountability

(a) Findings

- $(1)^1$ building the understanding of and confidence in investments in basic research is essential to public support for sustained, predictable Federal funding;
- (2) the Foundation has improved transparency and accountability of the outcomes made through the merit review process, but additional transparency into individual grants is valuable in communicating and assuring the public value of federally funded research; and
- (3) the Foundation should commit to transparency and accountability and to clear, consistent public communication regarding the national interest for each Foundation-awarded grant and cooperative agreement.

(b) Guidance

(1) In general

The Director of the Foundation shall issue and periodically update, as appropriate, policy guidance for both Foundation staff and other Foundation merit review process participants on the importance of transparency and accountability to the outcomes made through the merit review process.

(2) Requirements

The guidance under paragraph (1) shall require that each public notice of a Foundation-funded research project justify the expenditure of Federal funds by—

- (A) describing how the project—
- (i) reflects the statutory mission of the Foundation, as established in the National Science Foundation Act of 1950 (42 U.S.C. 1861 et seq.); and
- (ii) addresses the Foundation's intellectual merit and broader impacts criteria; and
- (B) clearly identifying the research goals of the project in a manner that can be easily understood by both technical and non-technical audiences.

(Pub. L. 114–329, title I, §102, Jan. 6, 2017, 130 Stat. 2971.)

Editorial Notes

REFERENCES IN TEXT

The National Science Foundation Act of 1950, referred to in subsec. (b)(2)(A)(i), is act May 10, 1950, ch. 171, 64 Stat. 149, which is classified generally to this chapter. For complete classification of this Act to the Code, see Short Title note set out under section 1861 of this title and Tables.

CODIFICATION

Section was enacted as part of the American Innovation and Competitiveness Act, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

Section is comprised of section 102 of Pub. L. 114–329. Subsec. (c) of section 102 of Pub. L. 114–329 amended section 1862p–14 of this title.

 $^{^1\}mathrm{So}$ in original. Probably should be preceded by introductory text.

Statutory Notes and Related Subsidiaries

DEFINITIONS

For definitions of terms used in this section, see section 2 of Pub. L. 114–329, set out as a note under section 1862s of this title.

§ 1862s-2. Oversight of NSF major multi-user research facility projects

(a) Facilities oversight

(1) In general

The Director of the Foundation shall strengthen oversight and accountability over the full life-cycle of each major multi-user research facility project, including planning, development, procurement, construction, operations, and support, and shut-down of the facility, in order to maximize research investment.

(2) Requirements

In carrying out paragraph (1), the Director shall—

- (A) prioritize the scientific outcomes of a major multi-user research facility project and the internal management and financial oversight of the major multi-user research facility project;
- (B) clarify the roles and responsibilities of all organizations, including offices, panels, committees, and directorates, involved in supporting a major multi-user research facility project, including the role of the Major Research Equipment and Facilities Construction Panel;
- (C) establish policies and procedures for the planning, management, and oversight of a major multi-user research facility project at each phase of the life-cycle of the major multi-user research facility project;
- (D) ensure that policies for estimating and managing costs and schedules are consistent with the best practices described in the Government Accountability Office Cost Estimating and Assessment Guide, the Government Accountability Office Schedule Assessment Guide, and the Office of Management and Budget Uniform Guidance (2 C.F.R. Part 200):
- (E) establish the appropriate project management and financial management expertise required for Foundation staff to oversee each major multi-user research facility project effectively, including by improving project management training and certification:
- (F) coordinate the sharing of the best management practices and lessons learned from each major multi-user research facility project;
- (G) continue to maintain a Large Facilities Office to support the research directorates in the development, implementation, and oversight of each major multi-user research facility project, including by—
 - (i) serving as the Foundation's primary resource for all policy or process issues related to the development, implementation, and oversight of a major multi-user research facility project;
 - (ii) serving as a Foundation-wide resource on project management, including

- providing expert assistance on nonscientific and nontechnical aspects of project planning, budgeting, implementation, management, and oversight;
- (iii) coordinating and collaborating with research directorates to share best management practices and lessons learned from prior major multi-user research facility projects; and
- (iv) assessing each major multi-user research facility project for cost and schedule risk; and
- (H) appoint a senior agency official whose responsibility is oversight of the development, construction, and operations of major multi-user research facilities across the Foundation.

(b) Facilities full life-cycle costs

(1) In general

Subject to subsection (c)(1), the Director of the Foundation shall require that any preaward analysis of a major multi-user research facility project includes the development and consideration of the full life-cycle cost (as defined in section 2 of the National Science Foundation Authorization Act of 1998 (42 U.S.C. 1862k note)) in accordance with section 1862n-4 of this title.

(2) Implementation

Based on the pre-award analysis described in paragraph (1), the Director of the Foundation shall include projected operational costs within the Foundation's out-years as part of the President's annual budget submission to Congress under section 1105 of title 31.

(c) Cost oversight

(1) Pre-award analysis

(A) In general

The Director of the Foundation and the National Science Board may not approve or execute any agreement to start construction on any proposed major multi-user research facility project unless—

- (i) an external analysis of the proposed budget has been conducted to ensure the proposal is complete and reasonable;
- (ii) the analysis under clause (i) follows the Government Accountability Office Cost Estimating and Assessment Guide;
- (iii) except as provided under subparagraph (C), an analysis of the accounting systems has been conducted;
- (iv) an independent cost estimate of the construction of the project has been conducted using the same detailed technical information as the project proposal estimate to determine whether the estimate is well-supported and realistic; and
- (v) the Foundation and the National Science Board have considered the analyses under clauses (i) and (iii) and the independent cost estimate under clause (iv) and resolved any major issues identified therein.

(B) Audits

An external analysis under subparagraph (A)(i) may include an audit.