

capital facilities which modern research and education programs require.

(b) It is the purpose of sections 1862a to 1862d of this title to assist in modernizing and revitalizing the Nation's research facilities at institutions of higher education, independent non-profit research institutions and research museums, and consortia thereof, through capital investment.

(Pub. L. 100-570, title II, §202, Oct. 31, 1988, 102 Stat. 2873.)

#### REFERENCES IN TEXT

Sections 1862a to 1862d of this title, referred to in subsec. (b), was in the original "this title", meaning title II of Pub. L. 100-570, Oct. 31, 1988, 102 Stat. 2873, known as the Academic Research Facilities Modernization Act of 1988, which enacted sections 1862a to 1862d of this title, repealed former sections 1862a and 1862b of this title, and repealed provisions set out as a note under section 1861 of this title. For complete classification of this Act to the Code, see Short Title of 1988 Amendments note set out under section 1861 of this title and Tables.

#### CODIFICATION

Section was enacted as part of the Academic Research Facilities Modernization Act of 1988, and also as part of the National Science Foundation Authorization Act of 1988, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

#### PRIOR PROVISIONS

A prior section 1862a, Pub. L. 100-418, title VI, §6402, Aug. 23, 1988, 102 Stat. 1542, related to establishment of National Science Foundation Academic Research Facilities Modernization Program, prior to repeal by Pub. L. 100-570, §206.

### § 1862b. Establishment of Program

#### (a) Establishment; purpose

(1) To carry out sections 1862a to 1862d of this title, the Director shall establish and carry out a new Academic Research Facilities Modernization Program (hereafter in sections 1862a to 1862d of this title referred to as the "Program"), under which awards are made to institutions of higher education, independent nonprofit research institutions, and research museums, and consortia thereof, for the repair, renovation, or, in exceptional cases, replacement of obsolete science and engineering facilities primarily devoted to research.

(2) Such awards shall, consistent with the functions of the Foundation set forth in section 1862 of this title and through established Foundation selection procedures, serve to—

(A) promote the modernization of graduate academic science and engineering research laboratories and related facilities so as to facilitate and support research in the scientific and engineering disciplines;

(B) assist those academic institutions that historically have received relatively little Federal research and development funds to improve their academic science and engineering infrastructures and broaden and strengthen the Nation's science and engineering base; and

(C) promote the modernization of undergraduate academic science and engineering research laboratories and related facilities so as to facilitate and support research in the scientific and engineering disciplines.

#### (b) Improvement projects; maximum amounts

(1) The Program shall be carried out through projects which involve the repair, renovation, or, in exceptional cases, replacement of specific science and engineering facilities devoted primarily to research at eligible institutions, or consortia thereof, and for which funds are awarded in response to specific proposals submitted by such eligible institutions or consortia in accordance with procedures prescribed by the Director pursuant to section 1862c of this title.

(2) Awards made under the Program shall not exceed \$7,000,000 to any institution or consortium over any period of 5 years for the repair, renovation, or, in exceptional cases, replacement of academic research facilities.

(3) The Director shall, in making awards under the Program, consider the extent to which that institution or consortium has received funds for the repair, renovation, construction, or replacement of academic facilities from any other Federal funding source within the 5-year period immediately preceding the application. The Director shall give priority to institutions or consortia that have not received such funds in the preceding 5 years.

(4) The Director shall, in awarding funds under sections 1862a to 1862d of this title, consider the distribution of funds among institutions of different sizes and geographical locations.

#### (c) Criteria for award of funds

Criteria for the award of funds to any institution for a project under the Program shall include—

(1) the quality of the research and training to be carried out in the facility or facilities involved;

(2) the need for the proposed repair, renovation, or, in exceptional cases, replacement based on an analysis of the age and condition of existing research facilities and equipment;

(3) the congruence of the institution's research and training activities with the future research needs of the Nation and the research mission of the Foundation;

(4) the contribution that the project will make toward meeting national, regional, and institutional research and related training needs;

(5) in the case of an institution that historically has received relatively little Federal research and development funding, the contribution the proposed project will make to improving the institution's academic scientific and engineering infrastructure and broadening the Nation's science and engineering base; and

(6) the impact of the award on the overall geographic distribution of awards made under the Program, with the objective of avoiding undue concentration of awards.

(Pub. L. 100-570, title II, §203, Oct. 31, 1988, 102 Stat. 2874.)

#### CODIFICATION

Section was enacted as part of the Academic Research Facilities Modernization Act of 1988, and also as part of the National Science Foundation Authorization Act of 1988, and not as part of the National Science Foundation Act of 1950 which comprises this chapter.

## PRIOR PROVISIONS

A prior section 1862b, Pub. L. 100-418, title VI, §6403, Aug. 23, 1988, 102 Stat. 1544, related to establishment of National Science Foundation College Science Instrumentation Program, prior to repeal by Pub. L. 100-570, §206.

## MAJOR RESEARCH INSTRUMENTATION

Pub. L. 107-368, §13, Dec. 19, 2002, 116 Stat. 3055, required Director of the National Science Foundation to conduct a review and assessment of the major research instrumentation program and, not later than 1 year after Dec. 19, 2002, submit a report, including specified estimates, descriptions and analyses, of findings and recommendations to certain Congressional committees, and also required the Director to enter into an arrangement with the National Academy of Sciences to assess the need for an interagency program to establish and support fully equipped, state-of-the-art university-based centers for interdisciplinary research and advanced instrumentation development, and not later than 15 months after Dec. 19, 2002, to transmit to the committees the assessment conducted by the National Academy of Sciences together with the Foundation's reaction to the assessment.

**§ 1862c. Procedures, guidelines, and planning activities**

**(a) Procedures**

(1) The Director shall, consistent with the objectives of the Program and the criteria set forth in section 1862b(c) of this title, set forth procedures for the Program.

(2) The procedures so prescribed shall contain such terms, conditions, and guidelines as may be necessary in the light of Program objectives, but shall in any event provide that—

(A) funds to carry out the Program will be awarded only on the basis of merit after a comprehensive review using established Foundation procedures;

(B) the membership of merit review panels that assess proposals will be broadly representative of eligible institutions, including research universities and predominantly undergraduate and minority institutions;

(C) the institution receiving an award shall provide at least 50 percent of the cost, in cash or in kind, fairly evaluated, of the repair, renovation, or replacement involved and shall provide this contribution from private or non-Federal public sources, except that the Director may accept a match of less than 50 percent, but at least 30 percent, for institutions which are not ranked among the top 100 of the institutions receiving Federal research and development funding, as documented in the latest annual report of the Foundation entitled "Federal Support to Universities, Colleges, and Selected Nonprofit Institutions"; and

(D) to the extent practicable, eligible institutions of a given type will compete against similar institutions for Program awards.

**(b) Comprehensive planning activities**

The Director shall conduct comprehensive planning activities, including surveys of research facility needs and other information-gathering activities, necessary to implement the Program and to develop the procedures called for under subsection (a) of this section.

**(c) Guidelines**

Prior to the issuance of the comprehensive plan required by subsection (d) of this section,

and consistent with the Program criteria set forth in section 1862b(c) of this title, the Director shall publish in the Federal Register proposed Program guidelines for public review for a comment period of 30 days. Such guidelines shall provide detailed information on eligibility, criteria, terms, and conditions and shall include, but not be limited to—

(1) definitions for the terms "institutions of higher education", "private non-profit research organizations", "research museums", "consortia", "facilities", "facilities primarily devoted to research", "instrumentation", "equipment", "repair", "renovation", and "replacement";

(2) selection criteria to be used by the Foundation in evaluating proposals from institutions and consortia thereof, including criteria for evaluating scientific merit and for evaluating the age and condition of existing research facilities; and

(3) requirements for matching a Program award with contributions from non-Federal sources.

**(d) Comprehensive plan**

The Director, after gathering appropriate information and after considering comments on the proposed Program guidelines published in the Federal Register pursuant to subsection (c) of this section, shall develop a comprehensive plan for the Program that—

(1) defines the appropriate roles and responsibilities of the Federal Government, institutions of higher education, State governments, private foundations, and other appropriate organizations;

(2) states what procedures will be used to ensure that predominantly undergraduate institutions and colleges and universities that historically have received little Federal research and development funding will receive substantial percentages of the funds awarded under sections 1862a to 1862d of this title;

(3) states the estimated percentage of Program funds available for each category of eligible institutions, including predominantly undergraduate institutions and colleges and universities that historically have received little Federal research and development funding as well as research universities; and

(4) evaluates and addresses, to the maximum extent possible, a variety of factors which include—

(A) the unique circumstances and research facilities needs of research universities, undergraduate institutions, and other institutions whose enrollment includes substantial percentages of minorities underrepresented in science and engineering research;

(B) innovative approaches in the management of the Program that address both short-term and long-term aspects of the renovation, repair, and replacement of academic research facilities;

(C) programmatic approaches that recognize and support excellence, strengthen scientific and engineering research potential and, to the maximum extent possible and consistent with the purposes of this Act, assure an equitable distribution of resources