

(d) The proportion of the estimated capital outlays to be expended by non-Federal entities is 100 percent. There is no feasible method for breaking this down among the non-Federal entities.

II. Dental Schools

A. NATURE AND COMPOSITION OF PUBLIC WORK OR FACILITY

1. DESCRIPTION OF FACILITY

(a) *General Physical Characteristics—Structures and Equipment*

Physical characteristics of dental schools vary widely depending on the number of students and the demands for space developed by the training programs. To provide completely for the needs of a dental education, facilities are required for training in the basic and pre-clinical sciences, for instruction in clinical practice and for guidance and experience in developing research techniques. Schools vary in size from 70,000 square feet of net area to almost 200,000 square feet of such space. Depending upon program needs net space per entering class student will range from 1,000 square feet to more than 2,500 square feet.

Constructions systems used will depend largely upon the area in which the school is being erected. Any system that produces a fire resistant structure in keeping with national and local building codes is appropriate.¹ This includes steel frame structures, cast-in-place reinforced concrete, reinforced masonry or any of the prestressed, precast concrete systems available. The height of buildings for dental education ranges from low 2-story structures on 12 acres of ground in rural areas to 14-story edifices in densely populated urban neighborhoods slated for redevelopment.

In dental school buildings the proportional cost of built-in plus movable equipment as related to total construction costs will be similar to that found in research laboratory buildings.² This is about 45 percent of the total construction package. Dental clinical facilities require dental units, chairs, and X-ray equipment and provision for air, water, gas, and vacuum attachments. Cabinetry and laboratory benches of a specialized nature to meet the needs of preclinical and basic science instruction are required in abundance as well as expensive equipment such as electron microscopes, fume hoods, and data processing machines.

(b) *Services Rendered*

Dental schools, through didactic and clinical training produce new dentists who are:

- (1) Soundly educated in the biological and health sciences.
- (2) Specially prepared to render superior clinical dental care; and
- (3) Morally and ethically committed to serve society in a professional capacity.

(c) *Standards of Performance*

During the school year that ended in June 1965, U.S. dental schools had an enrollment of 13,876 undergraduate students, which was

¹ The national codes here mentioned are issued by professional and trade organizations. To some extent, the local codes make use of these same standards; but the local codes are, of course, established by local governments.

² A cost breakdown between built-in and movable equipment is not available.