

The Manpower Development and Training Act of 1962 provides institutional and on-the-job training programs for unemployed, employed but underskilled, and partly employed workers. MDTA training in the building trades occupations, cumulative to December 1965, has provided training and/or retraining to nearly 11,000 construction workers (see table 12). Training is at the entry level (preapprenticeship) or represents an upgrading of skills. For example, 400 journeymen operating engineers and 120 carpenters in California were upgraded in new skill requirements of their trades during 1965. Apprentice-entry bricklayer training programs were started to prepare 300 workers in Georgia and 160 workers in the District of Columbia as apprentice-entry bricklayers.

TABLE 12.—MDTA training in the building and construction trades occupations, 1962 through 1965

Occupation	Institutional		On-the-job	
	Projects	Trainees	Projects	Trainees
Total.....	289	9,045	84	1,674
Bricklayer.....	41	1,069	12	588
Bulldozer operator.....	2	48	—	—
Cabinetmaker.....	24	596	16	139
Carpenter.....	90	2,333	20	462
Cement finisher.....	11	341	2	20
Concrete mixer operator.....	—	—	1	2
Electrician.....	29	694	—	—
Glazier.....	—	—	2	2
Heavy equipment operator.....	—	—	2	8
Structural steelworker.....	4	172	—	—
Ornamental ironworker.....	—	—	8	132
Painter.....	12	320	5	36
Pipefitter ¹	13	1,613	3	180
Plumber.....	17	341	—	—
Power shovel operator.....	1	16	—	—
Sheet metal worker.....	41	1,446	13	105
Tile setter.....	3	41	—	—
Truck crane operator.....	1	15	—	—

¹ Includes pipefitters trained in ship and boat industry.

Source: U.S. Department of Labor.

The most obvious point that emerges for data on training of construction craftsmen is that it takes place on the job. Even formal apprenticeship combines on-the-job instruction with classroom work. Obviously, construction contractors and unions play a key role in training the future supply of skilled workers, even when through informal means.

III. TECHNOLOGICAL DEVELOPMENTS IN THE CONSTRUCTION INDUSTRY

The Bureau of Labor Statistics has recently prepared a report on the technological developments in 40 important industries.⁸ Included in the report are the following statements of technological trends in the construction industry.

"Continuing increases in the size, capacity, power, speed, and durability of earthmoving equipment, such as trucks, tractors, scrapers, and shovels are resulting in the moving of many times the amount of material than was previously possible."

⁸ "Technological Trends in Major American Industries," Bureau of Labor Statistics, Bulletin 1474, issued 1966.