

Highway construction alone accounted for about half of State and local construction in the 1947-65 period. The predominance of materials and the development of new laborsaving equipment, which has resulted in higher productivity in this type of construction, has been a dominant factor in the increase of the materials share of public construction outlays from 35 to 50 percent over the past 20 years. In educational construction there have also been new material applications such as increasing use of prestressed concrete in place of brick.

In the next decade it is expected that there will be a further shift in the mix of State and local public works expenditures—with hospital, institutional, sewer, and water construction having the highest growth rates. Highway construction is the only major type which is expected to decrease in relative importance, although in absolute volume it will remain significantly large. These shifts will produce differing growth rates in materials usage. There will be increased emphasis on metal doors, windows, and trim, electrical equipment, pipe, and concrete products with less relative material consumption of fabricated structural steel, lumber products, bitumen, and rock products. Nevertheless, it is expected that the overall materials share of total outlays for construction will remain at about 50 percent.

In the past a steadily growing private market for building materials has been an important factor in stimulating the productive capacity which could also supply the vast volume of public works. Thus, shortages of building materials for State and local construction in the period 1947-65 have not been particularly frequent. Most of the shortages which have taken place have been the result of special factors not directly related to insufficient productive capacity. For example, shortages of structural steel were aggravated by the 1956 steel strike. Shortages of nickel in 1955 contributed to a shortage of stainless steel building sheets. Transportation problems have occasionally caused difficulties for lumbermen in supplying the eastern markets.

During the Korean conflict insufficient productive capacity did finally result in the rationing of such metals as steel and copper. Yet with some product substitution, building materials were available to support a high level of construction activity. In 1955 and 1956 at the height of the economy's investment boom, shortages in a number of building materials occurred. Structural steel and aluminum were in short supply as were gypsum products. From 1954 through early 1957 the cement industry, although expanding rapidly in response to heavy highway construction requirements, was still under pressure to meet demand. Generally, after 1956, few shortages of a serious nature seemed to exist. In 1959, during the extended steel strike, inventories were adequate to supply construction needs throughout the strike period. Construction during the first half of the 1960's seems to have been unhindered by any significant materials shortages.

To meet future increases in construction demand in both the private and public sectors it is expected that the construction and building materials industries will increase their productive capacities. Prefabrication and prefinishing have been and will continue to be important sources of promoting innovation and labor-saving devices on construction sites. This will be particularly true in the lumber and concrete products industries. The trend for prestressed concrete and