Iron and Steel. The basic iron and steel industry is characterized by a high degree of economic concentration. In 1947, 45 percent of the output of the industry was produced by four major companies, and by the midfifties these companies accounted for more than half of the output. But in terms of fabricated products including most building products, only from one-fifth to one-fourth of the industry's output is concentrated in four companies.

In the basic steel industry there is a long leadtime between the planning stage and effective utilization of new capacity, generally more than 5 years, whereas for all manufacturing the period is shorter. Thus, the steel industry has not been able to respond quickly to capacity pressures. The long leadtime was felt in the immediate postwar years. Production from expanded plant capacity which came in the late forties was not really available until the midfifties when there was a significant increase in output.

However, the lag in increasing capacity has diminished somewhat in the last few years with the development of oxygen injection which reduces the time required for individual heats and increases open-hearth capacity by as much as 30 percent. An increase in capacity in existing plants can be obtained from capital outlays of approximately 20 percent of the cost of equivalent capacity in new plant. It has been estimated that by 1970 about two-fifths of the Nation's capacity may be basic oxygen and this may reach one-half by 1975. The implications for steel construction products are quite favorable from a cost standpoint. In addition, new welding techniques which permit production of a wider range of structural shapes also promises to reduce production costs.

Steel. Iron and steel products will continue to be important in State and local construction although less steel may be used proportionately for structural shapes. The supply of structural steel should be adequate to meet projected construction needs, and domestic production will probably be increasingly supplemented by foreign supply which also may provide considerable price competition for the domestic industry. Another factor pointing toward an increase in steel imports, from the present 10 percent of total supply, is the rising importance of reinforced concrete. The types of steel used in this product are particularly heavy import items.

For State and local construction the growth in aggregate demand for steel will approximate 3 million tons by 1975 (chart IIIa).

Lumber Products. Since the end of World War II substitutions for lumber products have been increasingly made by a variety of other building materials, especially for structural uses (table 2). The production rate of the industry showed an average annual decline of 0.4 percent between 1948 and 1963. In nonresidential buildings the emphasis on fireproof and low-maintenance materials has also resulted in a declining use of many wood products. Although the tendency toward continued substitutions away from lumber will continue, some expansion in the use of wood in nonresidential buildings and the greater use of fire-retardant lumber may reverse this trend. Many building codes and insurance provisions have been revised to allow more use of wood.

While the consumption level of structural lumber used in State and local construction may hold up, it will continue to become a smaller proportion of total lumber used, with concrete particularly gaining more of the market for structurals (chart IIIb).