

TABLE 17.—*Income¹ elasticities of select local public services, St. Louis City-County area, 1951-52 and 1954-55*

<i>Services</i>	<i>Income elasticity</i>
Education:	
Total current plus debt service.....	+0.56
Total current without debt service.....	+.52
General control.....	+.50
Instruction.....	+.42
Auxiliary services.....	+1.15
Plant operation and maintenance.....	+.55
Fixed charges.....	+.29
Fire protection.....	+10.1
Police protection.....	+.98

¹ Since assessed valuation of real property is highly correlated with income and information about it is much more readily available, the former is used for measurement. The rank correlation coefficient, relating 1949 median income with 1954-55 per pupil assessed valuation of 10 of the districts about coterminous with municipal or census tract boundaries, is +0.905, which is highly significant at an α of 0.05.

As was to be expected, income elasticities computed with the aid of cross section data are lower than those based on time series data.³¹ Actually, depending on the type of data used, the coefficient answered slightly different questions. Income elasticities of education based on cross section data reflect the average percentage change in per pupil education expenditures that is brought about as average per capita personal income changes from one school district to the next by 1 percent within a given year or sets of years. If based on time series data, the coefficient testifies to the average percentage change in per pupil education expenditures that results as average per capita personal income changes over time by 1 percent. The first provides a static picture, while the second reflects dynamic changes in our society.

But no matter which of the two concepts is used, there can be little doubt that the income elasticity of public education is quite low. (Especially low appears to be the income elasticity of instruction.) It is low in comparison to income elasticities of other public services and in particular such consumer amenities as air conditioning, automobiles, golf, speedboats, etc. It is also low compared to what it must be if public education in the United States is to be improved. No doubt, people's attitudes toward education and the existing tax system, which relies so heavily on proportional property and sales taxes, are mainly responsible for the low income elasticity of education.

The United States can readily afford the expenditures needed to raise the level of education as required by our status as a leading world power; but the necessary funds will only become available if an increasing portion of people's income is channeled into public education. This will require the combined leadership of all branches of government and educators. Further shifts will be needed in the responsibility of financing education from local to State and possibly Federal Government. Matching Federal funds combined with specific performance criteria for eligibility for aid appear to offer a useful approach.

Among the States' performance criteria two will be mentioned—tax effort and partial statewide equalization of educational opportunity. Only States that raise a given percent of personal income for education should be eligible. In addition, a certain minimum education budget needs to be underwritten by the State for each and every child in the State.

³¹ Marguerite C. Burk, "Some Analysis of Income-Food Relationships," *Journal of the American Statistical Association*, 53 (December 1958), pp. 905-927.