The demand condition which is most important in this consideration is the income elasticity of demand for the various forms of passenger transportation. Economists have estimated the income elasticities as follows: [1]

Railroad passenger trains	0.6
Automobile	+1.2
Air lines	+2.5

That is to say, the typical American family will respond to a 1 per cent increase in income by decreasing its expenditures on rail passenger transportation by 0.6 per cent, by increasing its consumption of services associated with the automobile by 1.2 per cent, and by increasing its consumption of air travel by 2.5 per cent. Rail passenger service is the analog of "inferior goods" the consumption of which decreases with increments in income: potatoes, bread and farinaceous food of the character of spaghetti and macaroni. Both automotive transportation and air travel have strong positive income elasticities, and thus are the analogs of "normal goods," the consumption of which increases with income: meat, houses, outdoor recreational facilities, education, and the majority of other goods and services. The foregoing income elasticities are coupled with relatively low price elasticities of demand for transportation; that is, Americans are not highly responsive to small changes in the prices of passenger transportation.

Although the automobile will probably decline eventually, it is generally recognized that there is no immediate prospect of Americans foregoing automobile travel in significant measure, given the alternatives presently available. Both the flexibility of the automobile in scheduling departure and arrival and the ability to use the vehicle for local trips upon arrival are attractions for which Americans are willing to pay heavily in time, money, and risk of accident. Accordingly, it is the relative demand conditions for public transportation which are relevant in the present connection.

A comparison between the attractions of air and rail transportation illustrates the reason for the relative income elasticities of the two services. At present the Santa Fe, providing about as high a standard of service as is possible with railroad technology, charges $75.73 for a one-way coach ticket between Chicago and Los Angeles, a trip of about 39 hours. The minimum air fare for the same trip is $94.50, tax included, for a trip of about four hours. The train offers the passenger an opportunity to save about $20.00 at the expenditure of about 35 hours in time. One will opt for such an alternative only if he evaluates his time at something less than 60¢ an hour, or holds an erroneous view of the relative risks of the two forms of travel, or secures some form of consumption value from rail travel.

One can predict with perfect confidence that the number of people who will opt for such an opportunity will fall continuously. Only two groups will consistently evaluate their time under 60¢ an hour: low income persons and the retired. Evaluation of the risks of flying on the basis of the experience of early aviation is also principally characteristic of the elderly. Both of these groups can only atrophy: the poor become richer, and so evaluate their time more highly, and the present generation of elderly die. The number of people who out of rail enthusiasm or otherwise derive a consumption value from rail travel, as distinct from using it only as a means to reach a destination, is so small as not to constitute a significant market.

Not only does the evaluation of passengers' time enable one to predict that the volume of rail passenger travel will atrophy continuously, but it also explains the change in the nature of the demand conditions for the service. One would expect business travel to have deserted the railroads first, since the time of businessmen is relatively valuable. Remaining railroad passengers should consistently be motivated mainly by economy; it is not rational behavior to spend 35 hours to save $20 and then to devote the time to eating filet mignon en route. This presumption is verified by experience. Pullman travel declines more rapidly than coach, and demand for standard dining car meals declines relative to demand for snack-bar food service. This situation is frequently irritating to the retired and to enthusiasts, who may consistently have a low evaluation of time, but still be willing to pay for a high standard of service. Such people often

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[1] Rail estimate from Louis J. Paradiso and Clement Wilson, "Consumer Expenditure-Income Patterns," *Survey of Current Business*, XXXV (September 1955), 29. Automobile estimate from Walter Oi and Paul W. Shuldiner, *An Analysis of Urban Travel Demands* (Evanston: Northwestern University Press, 1962), p. 182. Airline estimate from Norman Asher, *et alia*, *Demand Analysis for Air Travel by Supersonic Transport* (Washington: Institute for Defense Analysis, 1966), Report No. R–118, I, 8).