

sider interest rates in its economic studies, and in a pending polar study it is using the rates recently suggested by the Bureau of the Budget.

That completes the review of our current practices. I would like to mention briefly the problem which confronts the Department in connection with economics of safety. Virtually all of the Department of Transportation programs are heavily safety oriented, and they involve determinations of some value to be placed on human life. It is always difficult and it is not very popular, we find, to try to assign values. It is very difficult conceptually and analytically. Nevertheless, it is a necessary part of any rational analysis of the kind of programs which the Department of Transportation has. I think perhaps the most significant point to mention is that as we view the value of individual life in terms of economics and in terms of the changing social environment, it appears to us that we would need constantly to increase the outlays for any given assurance for saving human life. The value, both from the production and the consumption standpoint, I suppose you would say, of human life is increasing. We are at work trying to find ways to take this into account in our analysis.

I would like to skip some now. The next part of my statement refers to problems which result from the private and public nature of the investment decisions. Mr. Hoffman went into this in some detail. It is particularly significant to us in Transportation because of mixed ownership. The multiple decisionmaking process in public investment is important to us.

Due to the highway trust fund, the United States has now come within sight of a nationwide express highway system built to minimum standards in accordance with an articulated plan. Federal funds were available for highways for a generation before the highway trust fund was created.

But State and local governments still receive the lion's share of the funds derived from taxes on automobile and trust use; and State and local governments dominate in providing both the funds and the criteria for new highway investment. This dominance in determining criteria is especially marked if we believe that the Interstate Highway System, with 90 percent Federal financing, confers general benefits which are hard to quantify, while projects of more local significance may be more susceptible to detailed economic analysis.

This multiple decisionmaking has produced sharp contrasts in discounting policies. As I mentioned, a number of States use zero discount rates in the process of evaluating the costs and benefits to be expected from new highway investment. Other States use discount rates over the entire range from 0 to 8 percent. These extreme differences in policy do not necessarily imply that the zero interest-rate calculations produce larger highway programs, because the total size of such programs may be determined by receipts from use taxes or other budget constraints. But, if a given investment fund proves to be inadequate at a zero discount rate, then it must be parceled out among individual projects on the basis of benefit-cost ratios a good deal higher than unity. A combination of a zero discount rate and high benefit-cost ratios is sure to distort both the geographical distribution and the physical characteristics of highway investment. The very word "in-