a rational rate of discount. Instead, my testimony will emphasize the many unusual features of discounting transportation costs and benefits which complicate the forecasting chores of the Department of

Transportation.

The Department of Transportation obviously does not have responsibility for the total investment budget of the U.S. Government, although the Federal highway program is one of the larger single elements in this budget. We are not directly concerned with overall investment criteria in the sense that the Treasury, the Bureau of the Budget, or the Council of Economic Advisers would be. The Department does have important areas for potential investment which involve tradeoffs between investment and operating expenses.

But the more important aspect of the use of investment criteria by the Department of Transportation, within its present statutory framework, is its inability to lay down uniform rules for methods of calculating future costs, future benefits, or appropriate rates of discount to convert these future costs and benefits into present values.

The outstanding example of this inability is contained in the DOT statute itself. Section 7(a) instructs the Secretary to "develop and * * * revise standards and criteria consistent with national transportation policies, for the formulation and economic evaluation of all proposals for the investment of Federal funds in transportation facilities or equipment * * *," but this instruction is subject to two major qualifications. Section 7(a) itself contains a list of six conceptions, including very important ones with respect to grant-in-aid and water resource projects. This water resource exception is at least partly balanced by provision for membership of the Department of Transportation in the Water Resources Council, but it nevertheless leaves discounting and other investment criteria with respect to water transportation in a different environment than comparable criteria for Government investment in other modes of transport.

Mr. Chairman, as you will note, part of section 7(a) of our act is particularly limiting in that it specifies in detail the method for calculating waterway benefits in terms of a comparison of waterway transportation rates in the future and existing rail rates or existing truck rates so that there results an inherently unnatural and unrealistic comparison. But it is built into law and the judgments on water

resource projects are based on that statutory standard.

In addition, as I will later point out in more detail, the application of uniform rules is rendered difficult by the division of investment responsibility for transport facilities such as highways and certain airports between Federal and State or between Federal and local government agencies, and by divisions both between modes and, within many of the modes, between private ownership and investment—as with railroads, or airlines, or trucking concerns—and public ownership and investment—as with highways and major airports.

The conceptually ideal situation, of course, would be to begin with a unified approach to definitions of benefits, costs, and appropriate rates of discount to be applied to future values. This ideal situation would have special advantages in the field of transportation, due to the degree of substitutability of demand for important transportation modes—such as the demand for freight movement by rail, by barge, or by motortruck—as well as the possibility of trade-offs between