Sustained timber harvest, carried on continuously, year after year, is the most practical beetle control method yet devised. Today's logging practices of leaving 10% to 15% of each drainage in "beetle trap areas" to be logged last on each sale, with the residual slash material subsequently piled and burned, is effectively controlling the spread of the bark beetle. Should this cycle of continuous logging be broken, then in a year or two an epidemic buildup is practically certain; and hand spraying would be the last resort to prevent the wildfire spread of the beetle.

The pink line, Line 10, graphs this potential Federal expenditure which could amount to \$175,000.00 annually on the 3,500 acres Douglas Studs logs each year. The red and pink line, Line 11, graphs the cumulative potential annual Federal expenditure, amounting to over \$550,000.00, almost three times the average expenditure of \$109,000.00, if Douglas Stude has to suggest the expenditure of \$109,000.00, if Douglas Stude has to suggest the expenditure of \$100,000.00, if Douglas Stude has to suggest the expenditure of \$100,000.00, if Douglas Stude has to suggest the expenditure of \$100,000.00, if Douglas Stude has to suggest the expenditure of \$100,000.00, if Douglas Stude has to suggest the expenditure of \$100,000.00, if Douglas Stude has to suggest the expenditure of \$100,000.00, if Douglas Stude has the suggest the expenditure of \$100,000.00, if Douglas Stude has the suggest the expenditure of \$100,000.00, if Douglas Stude has the suggest the expenditure of \$100,000.00, if Douglas Stude has the suggest the expenditure of \$100,000.00, if Douglas Stude has the suggest the expenditure of \$100,000.00, if Douglas Stude has the suggest the suggest the suggest that the suggest the suggest the suggest the suggest the suggest that the suggest the suggest that the suggest the suggest the suggest that the suggest the suggest that the suggest that the suggest the su annual road expenditure of \$192,000.00, if Douglas Studs has to suspend operations. To put it bluntly, Federal money will be spent for access roads, or it will have to be spent for public assistance and bark beetle control.

On the positive side, federally financed Forest Service access road authorization rates a high priority on a cost benefit basis, not only from the dollar aspect, but also from the human side of sustaining and expanding the rural economy. On the negative side, all the positive values are lost, and in the end, more will be spent on welfare and forest protection than would have been required for

access road construction.

Mr. Buchanan. We operate in a valley in Colorado called the San Luis Valley. The preponderance of our people are Spanish-American. Two of our counties have been recently unfavorably advertised as

having malnutrition prevailing.

The level of unemployment is, with the consequences, higher in San Luis Valley than in the rest of the State of Colorado.

One of the vital elements necessary to our continued operation is the construction of permanent access roads, with appropriate funds.

We, under the timber appraisal system, can build about, in dollar volume, one-third of the roads, and appropriated funds must build the other two-thirds.

In these days of financial stringencies, which I think we understand, it seems to me that there are so many areas that are critical that some priority basis should be established, and we feel that one of the priorities, or a leading priority, would be the matter of investment and the return on investment.

The chart that I put up there shows that on the average we need around \$200,000 worth of appropriated funds for the necessary 35 billion board feet a year; and I have tried to base this study on 1 mile,

the major mile in the area in one national forest.

The returns are many. The first return on the investment we make in roads, which is about \$100,000; the stumpage we pay, which is something over \$300,000; and the income taxes for the employees and the corporation, which makes the total direct return to the Govern-

ment something like three and a half to one.

If we take into consideration the wage return, which is almost \$600,000, not including income taxes, and the cash flow that we return to this valley, with meager employment opportunities, should our mills cease operation, the total return to the Government of about three and a half to one, the total economy to about 14 to one; it seems to me to establish a pretty high degree of priority.

There is a negative aspect to lack of appropriated funds for road construction. I would not mean to say that if the roads were built that we would necessarily shut down in the next month, but sooner or later we would have to shut down, and the welfare load in the

valley would increase some \$300,000 a year.