Chart D is a percentage breakdown of net funds invested in tax-exempt securities.

Chart A: In taking a taxable security with a Federal guarantee, we fortunately have precedent on rate comparison with the Federal National Mortgage participation certificate which is backed by the full faith and credit of the United States. Assuming a rate of six and a half percent, this is a fair rate for your highest grade taxable issue.

On the tax-exempt side of the coin, we have the Public Housing Authority guaranteed by the Government. This would, in our opinion, command a four and seven-eighths interest cost. Assuming the issuance of a billion dollars, the annual interest cost to the issuer is \$65 million on the taxable side less receipts from taxes on interest income, assuming 13.4 percent tax rate, versus \$48,750,000 on the tax-exempt side.

At this point please look at the method by which we calculated the 13.4 percent effective tax rate on Chart B. You will notice that in lumping '66, '67 and '68, \$40.5 billion taxable securities were issued. Of the \$40.5 billion issued, \$22.5 billion were purchased by State and local governments and private pension funds which are in the zero tax bracket. This amount means that 56 percent of your total purchasers are in the zero tax bracket.

Mutual savings banks and life insurance companies, the second major group of purchasers, are in the 1 to 20 percent tax bracket and consumed 29 percent

of the total taxable issues, or \$11.6 billion.

If you notice on Chart C, the effective tax rate that we used for mutual savings banks was 18 percent. This is the maximum figure, and I think you will find that the majority of savings banks today would be closer to zero, rather than 18 percent, so we are obviously being very conservative.

The remainder of purchases of corporate securities, 16 percent of the total, are in the 21 to 50 percent bracket, comprising households, the Federal Reserve, and the rest of the world category. We put them in the 50 percent bracket which I think is quite conservative and on the high side.

Going back to Chart A, the Treasury would obviously, by going the tax-exempt route, lose \$8,710,000 of additional revenue. However, the net savings on the one and five-eighths interest cost differential, would be \$7.54 million per \$1 billion amount per year on the tax-exempt method of financing. The \$7.54 million does not reflect the additional cost of interest subsidy.

ECONOMIC IMPACT STUDY

My name is W. James Lopp II representing Eastman Dillon, Union Securities and Company of New York. On behalf of Eastman Dillon and myself, I wish to express our appreciation for the opportunity to submit a statement on H.R. 15906.

Last fall our firm was requested by the Federal Water Pollution Control Administration to prepare a study on the economic impact on affected units of Government of the cost of installation of waste treatment facilities. This study was called for by the Congress in the Federal Water Pollution Control Act, as amended. The study was submitted to the Congress by Secretary of the Interior Udall on March 12, 1968. I was the director of this report.

We were also requested in conjunction with the economic impact study to prepare a report suggesting an alternative method of financing the Federal grant program. Appropriations as a source of grants to local governments for the construction of waste treatment facilities had been falling behind authorized levels as a result of severe budgetary demands for other issues. I was also the director of this study, although Mr. John Mitchell, a leading municipal bond attorney, was greatly responsible for the actual drafting of the report. The study is available for the record if the Committee so desires.

First let me say that the concepts embraced in H.R. 15906 are necessary if our pollution abatement program is not to become mired down with delays at increasing costs. Many State and local governments are moving forward with their grant programs; others are in the process. As of last fall, twenty states had

adopted a participating grant program.

As a result of working with many State governments, I am aware of an extreme despondency over the inadequate funding of the Federal grant program. The public and State legislatures have responded positively to the sense of urgency of protecting our Nation's water resources. If disappointed over their