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COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20541

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B-114874

1975

The Honorable Leo Ryan
House of Representatives



Dear Mr. Ryan:

As you requested, we have developed estimates of mail volume, Postal Service expenses, and first-class postage under various subsidies for ~~fiscal years 1976, 1977, and 1978~~, the period covered by the current Postal Service labor agreement. On September 15, 1975, we briefed a member of your staff on our estimates.

We have forecast three different situations for each year for subsidies ranging from zero to \$2.6 billion (the amount provided in H.R. 8603, as originally introduced), and projected the price of first-class postage for each situation.

For example, our forecast for fiscal year 1978 (see enc. VIII), which assumes a total of 95.6 billion pieces of mail, an inflation rate of 8 percent, and annual productivity increases of 0.7 percent, indicates that with subsidies of zero, \$1 billion, and \$2.6 billion the price of first-class postage would have to be \$0.15, \$0.16, and \$0.11, respectively, to recover expenses. The effect of inflation can be seen by considering that in terms of 1975 dollars, first-class postage for the three subsidy levels would be \$0.14, \$0.12, and \$0.09.

We also estimated the recently ratified National Labor Agreement's effects on the average cost of compensation and benefits for postal employees. The agreement, covering July 1975 to July 1978, provides in part that the employees' base salary would undergo four increases by a specified amount during the period and could further increase twice a year with increases in the Consumer Price Index. There is to be a one-cent-per-hour increase for each four-tenths-of-a-point increase over the June 1975 index. Using an inflation rate of 8 percent, we project a rise in costs (salary, overtime, fringe benefits) from an average of \$14,400 per employee in fiscal year 1975 to \$18,700 in fiscal year 1978. (See enc. IX.)

GGD-76-19

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METHODOLOGY

The methodology used to estimate the price of first-class postage was the same as discussed on pages 2 and 3 of appendix I of our report "Forecast of Postal Service Self-Sufficiency Potential" (GGD-75-58, Feb. 20, 1975). (Your office has been provided with a copy of this report.) However, we had to update the equations used to estimate both expenses and revenue; these equations are included in enclosure X to this letter.

We also modified some of the assumptions used in our previous report to reflect current forecasts of the U.S. economic situation. The following discussion provides the rationale for our assumptions.

Disposable personal income

Since our February 1975 report was issued, estimates of growth in disposable personal income have been lowered. Because this growth is a major factor in our volume equation, recent figures were obtained from the national economic model developed by Data Resources Institute Incorporated.

Inflation

An assumption as to future inflation rates was required, to estimate the cost of the new labor agreement (for example, in computing the amount of cost-of-living increases) and to provide a common basis for working with dollars expressed in terms of different years. Estimates of future inflation have also been revised since our previous report was issued. The figure we selected, 8 percent per year, is higher than the rates used before.

Volume

We also developed estimates of the price of first-class postage based on recently released Postal Service forecasts of mail volume. As shown in enclosure II, these estimates are lower than ours. We had no time to determine the reasons for differences between our volume estimates and those of the Postal Service.

Productivity

In our previous report, we developed estimates assuming increases in productivity of 0.7 percent, 2 percent, and 3 percent to show the effect of changes in productivity on the price of a first-class stamp. Increases in productivity of 0.7 percent represent the most likely case, so our current estimates are based on that rate.

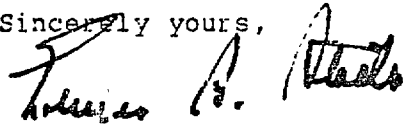
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The enclosures contain copies of the charts we used in briefing your staff, and set forth the possibilities indicated by our analysis.

Forecasting necessitates making assumptions as to conditions during the forecast period and reactions to these conditions. Once the assumptions have been accepted, a technique to develop the forecast can be adopted. The forecasts must be viewed in terms of these assumptions. They do not represent certainties, but possibilities. Consequently, the forecasts set forth what the situation might be, rather than what it will be.

As your office requested, we have not obtained agency comments.

Sincerely yours,



Comptroller General
of the United States

Enclosures - 10

ENCLOSURE I

ENCLOSURE I

Mail volume estimates based on

- historical data,
- disposable personal income, and
- number of families and individuals.

ENCLOSURE II

GAO AND POSTAL SERVICE

VOLUME ESTIMATES

<u>FY</u>	<u>Postal Service</u> (billions)
1976	86.00
1977	83.70
1978	82.30

The statements on page 3 of this report of this enclosure.

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ENCLOSURE III

ENCLOSURE III

Expense estimates based on

- historical data,
- estimated mail volume,
- productivity of 0.7 percent, and
- inflation of 8 percent.

EXPENSE ESTIMATES FOR CONTRACT YEARS

<u>FY</u>	<u>Expense</u>	
	<u>1975</u> <u>dollars</u>	<u>Current year's</u> <u>dollars</u>
	(billions)	
1976	\$12.07	\$13.04
1977	11.92	13.91
1978	12.05	15.18

The statements on page 2 of this report are an integral part of this enclosure.

COMPARISON OF EXPENSES USING GAO
AND POSTAL SERVICE VOLUME ESTIMATES

<u>FY</u>	<u>Expenses in 1975 dollars</u>	
	<u>Postal Service</u>	<u>GAO</u>
	(billions)	
1976	\$11.70	\$12.07
1977	11.19	11.92
1978	11.16	12.05

The statements on page 3 of this report are an integral part of this enclosure.

IMPACT OF VARIOUS SUBSIDY LEVELS ON
COST OF FIRST-CLASS STAMP

FY 1976

	<u>Cost of first-class stamp</u>			
	<u>Based on</u>		<u>Based on GAO</u>	
	<u>Postal Service</u>		<u>volume estimates</u>	
	<u>1975</u>	<u>1976</u>	<u>1975</u>	<u>1976</u>
	<u>dollars</u>	<u>dollars</u>	<u>dollars</u>	<u>dollars</u>
	<u>(note a)</u>	<u>(note a)</u>	<u>(note a)</u>	<u>(note a)</u>
No subsidy	\$0.15	\$0.17	\$0.14	\$0.15
\$1 billion subsidy	.13	.18	.12	.13
Subsidy in H.R. 8603 (note b) (\$2.6 billion)	.09	.10	.08	.08

a/Assumes inflation rate of 8 percent.

b/As originally introduced.

The statements on page 3 of this report are an integral part of this enclosure.

IMPACT OF VARIOUS SUBSIDY LEVELS ONCOST OF FIRST-CLASS STAMPFY 1977

	<u>Cost of first-class stamp</u>			
	<u>Based on</u>		<u>Based on GAO</u>	
	<u>Postal Service</u>		<u>volume estimates</u>	
	<u>1975</u>	<u>1977</u>	<u>1975</u>	<u>1977</u>
	<u>dollars</u>	<u>dollars</u>	<u>dollars</u>	<u>dollars</u>
	<u>(note a)</u>	<u>(note a)</u>	<u>(note a)</u>	<u>(note a)</u>
No subsidy	\$0.16	\$0.18	\$0.14	\$0.16
\$1 billion subsidy	.13	.16	.12	.14
Subsidy in H.R. 8603 (note b) (\$2.6 billion)	.10	.11	.08	.10

a/Assumes inflation rate of 8 percent.

b/As originally introduced.

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IMPACT OF VARIOUS SUBSIDY LEVELS ON
COST OF FIRST-CLASS STAMP

FY 1978

	Cost of first-class stamp			
	Based on		Based on GAO	
	Postal Service		volume estimates	
	1975	1978	1975	1978
	dollars	dollars	dollars	dollars
	(note a)	(note a)	(note a)	(note a)
No subsidy	\$0.16	\$0.20	\$0.14	\$0.18
\$1 billion subsidy	.14	.18	.12	.16
Subsidy in H.R. 8603 (note b) (\$2.6 billion)	.11	.14	.09	.11

a/Assumes inflation rate of 8 percent.

b/As originally introduced.

The statements on page 3 of this report are an integral part of this enclosure.

ESTIMATED IMPACT OF 1975-79 NATIONAL LABOR AGREEMENT ON
COSTS FOR EMPLOYEES

Average compensation and
benefit costs per employee
(note a)

FY 1975	\$ 14,400
FY 1976	16,100
FY 1977	17,100
FY 1978	18,700

Notes:

1. All data includes casuals.
2. Assumes increase in Consumer Price Index of 8 percent per year.
3. Assumes FY 1975 overtime levels continue through each of the contract years.
4. Assumes cost-of-living adjustments are effective one month after month on which adjustments are based.
5. Assumes cost-of-living increases within a year are of equal amount.
6. Assumes expenses due to basic pay and cost-of-living adjustments accrue on a monthly basis (except for payments against unfunded liability to civil service retirement fund).

a/Includes regular pay, overtime pay, and such benefit costs to Postal Service as

- health benefits,
- life insurance premiums,
- retirement (including unfunded liability contributions),
- workman's compensation, and
- unemployment compensation.

The statements on page 3 of this report are an integral part of this enclosure.

EQUATIONS USED IN PREPARING ESTIMATES

(Computed value in parentheses)

1. Postal volume

$$V = -150349 + 34.3546 \text{ DPI} + 5441.82 \text{ FAMIND} - 35.0093 \text{ FAMIND}^2$$

(4.70100) (13.4447) (-11.3582)

$$R^2 = .99783$$

2. Postal expenses

$$\log \exp = 7.1521 + .5326 \log V - 1.1213 \log \text{prod} + .02558 \text{ Econ}$$

(5.76969) (-5.16651) (2.77300)

$$R^2 = .82561$$

3. Postal revenue

$$\text{INC} = 3691.89 + .3559 \text{ P} + .11204 \text{ V}$$

(7.64339) (24.2401)

$$R^2 = .99214$$

WHERE:

DPI = Disposable personal income in 1973 constant dollars using the gross national product (GNP) price deflator.

Econ = Dummy variable inserted to correct for unusual economic conditions in 1974 and 1975.

exp = Postal Service expenses in 1975 constant dollars using General Government (Federal) price deflator.

FAMIND = Number of families and unrelated individuals.

INC = Postal Service operating income in 1975 constant dollars using GNP price deflator.

P = Cost of first-class stamp (in 1975 constant dollars using GNP price deflator) lagged 1 year.

prod = Productivity measured in pieces of mail per paid man-year.

V = Number of pieces of mail, all classes.