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THE ECONOMIC IMPLICATIONS OF THE PANAMA CANAL TREATIES

INTRODUCTION

As the United States Senate begins consideration of the proposed Panama Canal treaties, new attention has focused upon the complicated economic arrangements incorporated in the agreements. In late January and early February, 1978, both the Senate Foreign Relations and Armed Services Committees held hearings dealing with potential costs and consequences of the implementation of the economic sections of the treaties (particularly Articles III and XIII). Only with these hearings and the appearance of studies by the Panama Canal Company, the General Accounting Office and others did the magnitude of potential costs and problems become evident.

It now appears that either directly or indirectly the proposed treaties will cost American consumers and producers more than \$1 billion in higher tolls and a one-half billion dollar shortfall in previously anticipated payments to the U.S. Treasury. Beyond this, if the treaties are ratified unchanged, the Congress quite likely will have to appropriate funds periodically over the next 22 years in order to compensate Panama each year that Canal revenues do not equal canal costs plus mandatory payments to the Panamanian government under the treaties. Other appropriations will also be necessary.

This paper examines the current economic arrangements and how these are transformed under the proposed treaties; what calculations have been made concerning anticipated expenses and necessary toll increases to cover expenses; and the impact of toll increases upon American exports and imports, particularly Alaskan oil transported to Gulf Coast refineries and agricultural sales to Asia. The total cost to the United States under the terms of these treaties is estimated in this paper to range from \$2.5 to over \$3 billion. Several concluding tables summarize the nature and amounts of the costs.

Previous Heritage Studies have dealt with the general background of the Panama Canal Question ("The Canal Zone - Panama and the U.S.," Backgrounder No. 31) an analysis of the specific provisions of the proposed treaties ("Panama: Terms of the Treaties," Backgrounder No. 40); the relationship of Panama to U.S. Latin American relations ("The Deterioration of U.S. - Latin American Relations," Backgrounder No. 45), and the global dimension of the Panama question (The Panama Canal and Soviet Imperialism: War for the World Waterways by Jeffrey St. John, Critical Issue study).

THE DISSOLUTION OF THE PANAMA CANAL COMPANY

Since its opening in 1914, the Panama Canal has been operated by the United States Government. In 1952, through a reorganization by the Congress, both the Panama Canal Company and Canal Zone Government came into being. Although in recent years the Panama Canal Company has run some deficits, in 22 of the 26 years of its existence small profits have been recorded. During this period of time, the Company generated \$313 million of capital investment in the Canal and paid a total of \$288 million in interest to the U.S. Treasury on the total investment. Only from fiscal years 1973 to 1976 did the Canal enterprise lose money with the drastic increases in inflation in the aftermath of the oil embargo and the reopening of competition from the Suez Canal. With toll increases on July 8, 1974, and November 18, 1976, the Company made a small profit again in 1977 and without the new treaties anticipated a modest \$9.3 million "surplus" in this coming fiscal year, used to pay interest on the total investment.

Under the terms of the proposed treaties, the Panama Canal Company would be dissolved and replaced by the Panama Canal Commission as the administering agent overseeing Canal operations. The assets of the Canal would eventually all be transferred to the Panamanian Government by the year 2000. As of June 30, 1977, the net book value of the property, plant, and equipment of the Panama Canal Company stood at \$567 million. However, Governor Parfitt of the Panama Canal Zone estimates that the replacement value of these facilities amounts to about \$4.6 billion. This includes only civilian installations related to the Canal and Canal Zone government.

On the date the proposed treaties would take effect, an estimated \$92 million of the \$567 million in assets will be transferred to Panama and another \$30 million to other U.S. government agencies. In the early years of the first treaty, Panama would receive another \$4 million in assets and at the conclusion of the treaty in 2000, Panama would receive all remaining assets and additional facilities and improvements made during the 22 year life of the main treaty. The Panama Canal Company estimates that the net book value of properties transferred at the termination date would amount to \$522 million. This would make a total transfer of assets valued at \$618 million to Panama, not including improvements. This figure

represents the net book value which, as indicated above, is about one-eighth of the replacement value.

Beyond these assets, Panama will receive over the 22 year life of the first treaty all of the military facilities of the United States, including the 14 military bases now in operation. The replacement value of these bases has been estimated at about \$1.2 billion. The value of Canal Zone Government facilities are estimated at \$4 billion and thus the total replacement value of all American assets totals about \$9.8 billion.

PAYMENTS TO PANAMA AND POSSIBLE DISPUTES UNDER THE PROPOSED TREATIES

The new treaties include four different modes of providing compensation to Panama over the next 22 years. These include the following:

1. \$.30 for each Panama Canal net ton of shipping transiting the Canal which "will be adjusted to reflect the changes in the United States wholesale price index for total manufactured goods" each two years after an initial five-year period, or potentially a total of nine readjustments.
2. A fixed annuity of \$10 million replacing the present figure of \$2.3 million, which consists of continuing compensation for the Panama Railroad and not rent for the use of land.
3. \$10 million per year to Panama for providing "police, fire protection, street maintenance, street light, street cleaning, traffic management and garbage collection." This will also be periodically readjusted to reflect inflation and other factors. The real cost to Panama of providing these services, however, has been estimated at only \$4.4 million per year.
4. "An annual amount of up to \$10 million per year" out of operating expenses of the Canal if any surplus exists. If no surplus in revenue exists in any given year then "the unpaid balance shall be paid from operating surpluses in future years."

In his testimony before the Senate Foreign Relations Committee, Secretary of State Vance estimated that "Panama would initially receive about \$60 million per year under this formula, which would apply until the year 2000." He emphasized that "All of these payments are made from Canal revenues." Similarly, in an address to the nation on February 1, 1978, President Carter asked, "Are we paying Panama to take the Canal?" He responded as follows: "We are not. Under the new treaties payments to Panama will come from tolls paid by ships which use the Canal."

In hearings before Senate committees in late January and early February, statistical evidence apparently contradicted the assertions of the Carter Administration. In particular, the Panama Canal Commission, established under the treaties as a U.S. Government agency, presumably would be responsible for making up the difference between income and expenditures if a deficit occurred. Thus, in any given year in which toll collections and other sources of revenue do not equal ordinary operating expenses of the Canal plus the payments to Panama, the funds would have to be appropriated by the U.S. Congress. Ordinarily a deficit could be carried over into the next year and be recovered by later surpluses; however, under the treaty provisions, any subsequent surplus, up to \$10 million, must go to Panama. Consequently, no surplus funds would ever be available to liquidate previous debts (except in the unexpected event of a surplus exceeding the total of accumulated surplus) and any annual deficit would have to come out of Congressionally appropriated funds.

This particular facet of Canal expenditures has not been clearly delineated because the implementing legislation to carry out these provisions had not been completed at the time major reports and testimony were taken by the Senate. However, in the hearings, Administration witnesses indicated that the \$10 million surplus funds payment to Panama would not be figured into the calculations dealing with increases in tolls. Thus, with a five-man American majority on the Commission, tolls presumably would only rise to meet other anticipated expenses.

In contrast, the Panamanians have maintained that the \$10 million per year figure should be included in the toll structure; thus a source of potential conflict has already arisen even prior to ratification of the treaties. The Panamanians also insist that if surpluses do not occur during the 22 year life of the treaty, *i.e.*, amounting to \$220 million (22 times \$10 million), then the United States has an obligation to pay Panama the difference between \$220 million and any surplus revenues that go to Panama before the transfer of complete operation takes place. Secretary of Transportation Adams, in testimony before the Senate Foreign Relations Committee, expressed a view at variance with the Panamanians when asked if this payment of accumulated surplus funds is necessary in 1999. Adams responded, "No, sir, I do not interpret the treaty to state that we would have to pay the accumulation at that time because that is not a lien on the structure."¹ Quite clearly a real crisis can develop, possibly in 1999, involving \$200 million. If the United States has a sharp dispute with Panama at that time over contested payments under the treaty it would certainly disrupt U.S. - Panamanian relations at precisely the time when Panama will take full control of the Canal and when harmony would be essential to guaranteeing U.S. rights.

1. Senate Foreign Relations Hearings, Vol. I, p. 368.

Due to the differences between the United States and Panama over the \$10 million surplus payment, friction could be created in the 22 years preceding a possible termination date controversy. If the United States refuses to calculate in the \$10 million in figuring toll increases, then Panama would have an incentive to oppose any toll increases.

Once denied any incentive for creating a surplus in revenues, it would be in Panama's financial and political interest to maintain tolls at the lowest level possible. All other payments to Panama under the treaty are guaranteed and the \$.30 a ton figure will rise with more traffic and hence their revenues. Regardless of the size of the deficit that might result from low tolls, the United States Congress would be obligated each year to appropriate funds to make up the difference. Thus, quite possibly the situation could develop in which the United States, which holds a five to four majority on the Panama Canal Commission, will be in the embarrassing position of voting higher tolls to prevent congressional appropriations, while the Panamanians advocate a freeze in low tolls.

Despite the fact that the new tolls would be necessary to generously compensate Panama under the treaty, the Panamanians could blame the United States for raising the tolls over the next 22 years and Washington would have to weather the criticism of all other Latin American nations objecting to such increases. Even in anticipation of the new treaties, the Latin American nations have overwhelmingly gone on record against any significant increase in the tolls charged. At the annual meeting of the Organization of American States last summer, they passed a resolution reaffirming "the principle that the Panama Canal tolls should exclusively reflect the actual operating costs." On this 17-0 vote both the United States and Panama conspicuously abstained. Consequently, the whole toll situation potentially could drive a costly financial wedge between the United States and the Latin nations, including Panama, rather than the new harmony which the proposed treaties were ostensibly designed to create.

LOSS OF U.S. REVENUE UNDER THE TREATIES

Beyond the real possibility that Congress will have to appropriate operating funds for the Panama Canal Commission, the United States Treasury will also apparently suffer an annual loss of \$20 million under the proposed treaties. At present, as part of the operating expense of the Panama Canal Company, they allocate about \$20 million a year in order to pay interest on the U.S. government investment in the Canal. This year the payment, at 5.66% interest, amounted to about \$18 million and was expected to rise to \$20 million in 1979. As presently contemplated in the implementing legislation, the Panama Canal Commission will forego this payment. Thus, over the 22 year life of the first treaty this would mean a total of \$440 million in lost revenue to the U.S. Treasury. (Naturally no

compensation on investment occurs after the year 2000 either.) This shortfall will have to be made up for by either additional borrowing or tax increases. Thus, a direct cost of the treaties will be imposed on the American taxpayer.

Other costs under the treaty that directly effect American taxpayers are difficult to judge with any precision. But each year, as the size of the American work force in Panama decreases, this will mean many fewer jobs held by Americans and the loss of income tax payments they would ordinarily pay. In fiscal year 1976, e.g., U.S. civilian citizens working in the Panama Canal Zone were paid \$76,498,316. If they only paid 20% of their income on taxes, this would amount to \$15.3 million in 1976. Naturally, the loss of these jobs will also mean certain dislocations in the U.S. economy as many of the workers look for work elsewhere or draw upon their unemployment or retirement benefits.

In order to help induce just such retirements, the treaties include incentives for Americans to leave their jobs in Panama early. The estimated cost of this program, \$7.5 million per year, will be charged against the U.S. Civil Service Commission budget, i.e., drawn from Congressional appropriations in the U.S. budget. Beyond retirement, other expenses born by the U.S. Government under the treaties will include a subsidy for hospital and education services for 2,100 to 2,400 employees being transferred to the Department of Defense and payment of existing accrued leave liability for employees transferred to Panama and other U.S. government agencies. No figures are available on the costs involved.

Also, the United States Government must reach some resolution of the disposition of the current debt of Panama for past services provided by the Panama Canal Company. This bill, now totalling over \$8.4 million, includes utility and other charges Panama has refused to pay, some of them dating back as far as 1955.²

Similarly, the Defense Department budget will have to absorb additional costs estimated at \$42.9 million for the relocation of facilities and new construction as American military forces consolidate bases remaining in Panama until 2000. No one has estimated any additional defense spending that may be required after the year 2000 in order to project American strength into Panama at a time of crisis. Presumably, the nearest remaining military bases in Guantanamo Bay, Cuba, on the Atlantic side, or California on the Pacific side, will have to be reinforced and additional air lift capacity be maintained.

Other general expenses will result from the relocation of military fueling and communications facilities as well as the jungle warfare school and the entire Southern Command structure presently in the Panama Canal Zone. Finally, the phasing out of the last remaining

2. Testimony of Elmer B. Staats, Comptroller General of the United States, before the Senate Armed Services Committee, February 1, 1978.

American military bases on the mainland of Latin America may contribute to larger naval and air force budgets in order to compensate for this deficiency in dealing with hemispheric defense.

TOLL INCREASES AND MEETING THE NEW EXPENSES

In order to prevent direct appropriation of funds by the Congress to Panama, the treaty negotiators decided to attempt to include any payments to Panama in general toll increases. As indicated above, the tolls will not meet all of the anticipated expenditures. The following data, most of it supplied by studies commissioned by the Panama Canal Company or the General Accounting Office, provide a detailed breakdown of the nature of the problem.

In assessing the magnitude of toll increases necessary to offset anticipated expenses, the Panama Canal Company made the following assumptions in their calculations:

- * 5% inflation rate is applicable beyond fiscal year 1979
- * Commission of about \$20 million not required to pay interest on U.S. investment
- * activity cost reductions can meet treaty date schedules
- * \$10 million contingent payment not considered a cost for inclusion in tolls base; payment dependent upon generation of revenues in excess of requirements
- * \$10 million public service payment to remain fixed
- * toll base can include costs to cover capital requirements beyond depreciation

This series of assumptions constitutes a very optimistic assessment of the situation. During the past five years the rate of inflation has been 6.5% and costs in the operation of the Panama Canal actually rose by 7.5%. These assumptions also include substantial use of the Panama Canal in the transport of Alaskan crude oil to Gulf Coast refineries, with expected toll revenues from this source alone amounting \$25 to \$30 million in 1980. Also, they do not calculate in the equation the \$10 million surplus revenue figure that Panama insists should be included. Finally, as Elmer Staats, Comptroller General of the United States, pointed out in his testimony, the Panama Canal Company's estimate of maintaining investment to cover capital requirements is very conservative.

Nonetheless, using these figures the Panama Canal Company has constructed the following chart of expected deficiencies and how they could be met in the years immediately ahead through an immediate toll increase of 19.5% and another 7.9% increase in 1983.

DEFICIENCIES UNDER TREATY
AND IMPACT OF 19.5% TOLL INCREASE³

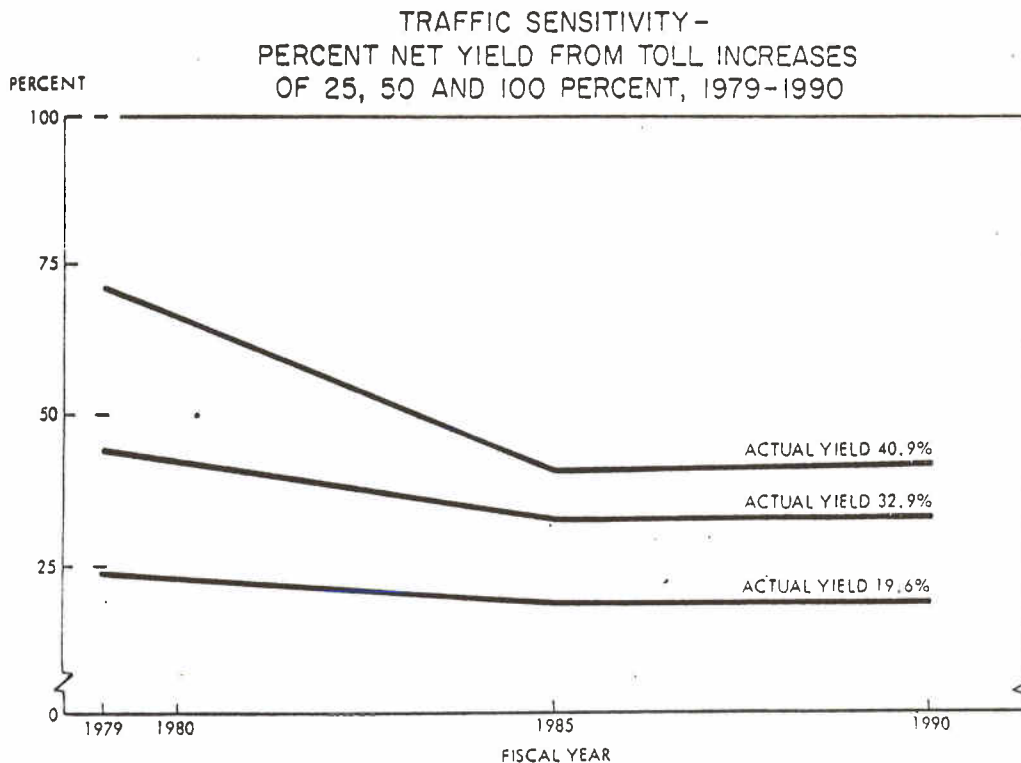
1979-1984

(In millions of dollars)

	<u>FY 79</u>	<u>FY 80</u>	<u>FY 81</u>	<u>FY 82</u>	<u>FY 83</u>	<u>FY 84</u>
Total Costs	231.7	235.0	238.3	239.0	244.6	267.1
Expected Tolls	195.0	198.4	200.1	202.8	205.5	208.2
Deficiency at existing rates	(36.7)	(36.6)	(38.2)	(36.2)	(39.1)	(58.9)
Effect of 19.5% rate increase:						
Added revenue	36.9	36.9	36.9	36.1	35.2	34.4
Reduced tonnage payment to Panama (sensitivity)	.2	.3	.4	.6	1.0	1.3
MARGIN (LOSS)	.4	.6	(.9)	.5	(2.9)	(23.2)

One should note in these charts that margins of revenues remain relatively constant until 1984. This derives largely from the diminished effect of oil shipments from Alaska peaking and leveling off. Also, one should note that with this modest increase in tolls they calculate some reduction of traffic due to sensitivity, or the use by some shippers of other modes of competing transportation. As the following chart indicates dramatic rises of the tolls, at 25%, 50%, or 75% leads to diminishing yields of revenue because of the sensitivity problem. Thus when tolls rise by 25% the actual yield of revenue will only amount to 19.6% because of diversion of some traffic and consequent reduction of tonnage of cargo.

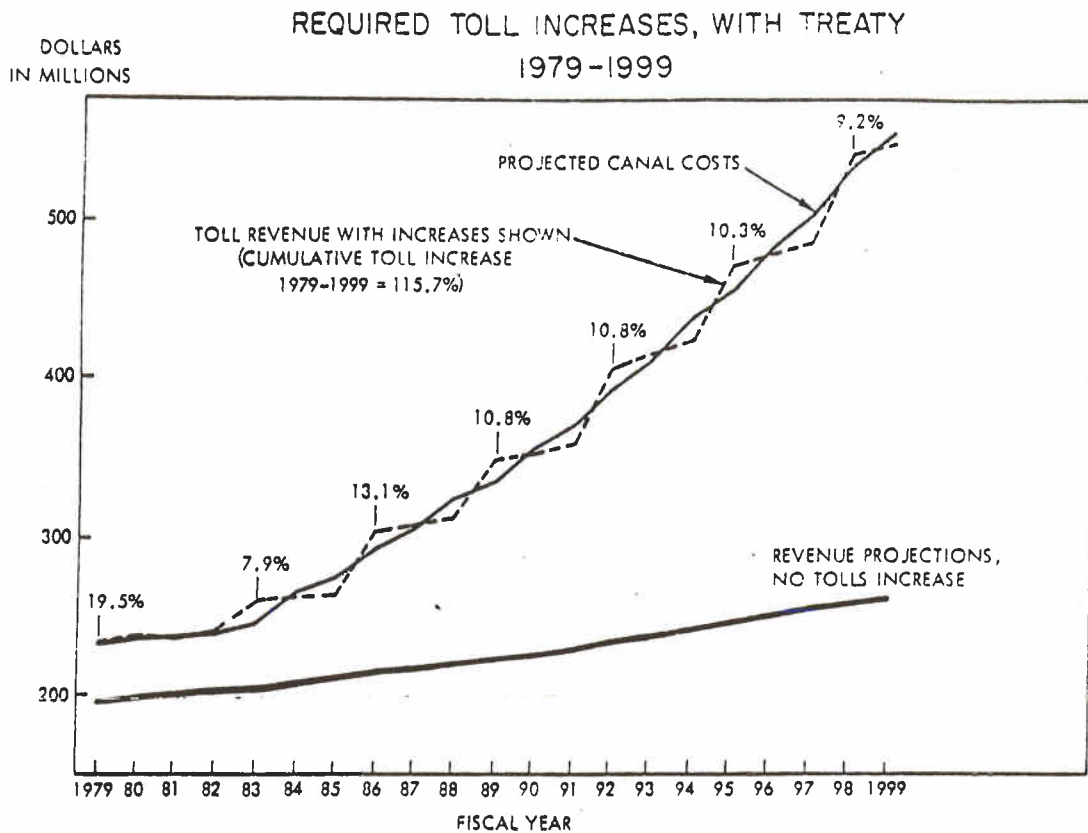
3. This chart and all others, unless otherwise indicated, provided by Governor Parfitt in his testimony before the Senate Armed Services Committee, February 1, 1978.



Revenues are maximized at a toll increase of about 75% because beyond that substantial traffic is diverted. The rise, as noted in the chart above, from 50% to 75% only yields 8% more revenue. A 150% rise in tolls would actually raise less revenue than a 50% increase because traffic would decrease by 50%. These are projections and the impact of the only real toll increases in Canal history provides a more sobering picture. Coincident with the rises in tolls of approximately 50% between 1974 and 1976, net Canal tonnage plunged from 148 million to 122 million. Only with the increase provided by Alaskan oil will tonnage in 1979 finally exceed that of 1974.

In the long term the Canal Company projections indicate that six additional toll increases (projections in the following chart) would be required during the life of the first treaty. These increases, cumulatively amount to 81.6%, but compounded on top of one another amount to a total increase of 115.7%. This projected rise has caused Gov. Parfitt to express concern that, even with his optimistic assumptions in calculating revenues from future traffic, serious questions arise whether the necessary toll increases can possibly generate revenues to meet the new expenses. He warned the Armed Service Committee to "be alert to the possibility that the Canal operation may not be self-sustaining in the out (beyond 1985) years."² Tolls will

4. Testimony of Governor H. R. Parfitt, Governor of the Canal Zone, Senate Armed Services Committee Hearings, February 2, 1978.



rapidly reach the point at which traffic will diminish and hence revenues will at best remain constant. But at such a point the inflationary factors would continue to raise the obligations the Panama Canal Commission would have to the Panamanian Government. These calculations indicate significant problems can arise in the so-called "out years" or after FY 1984. But the calculations are based upon tenuous assumptions dealing not only with inflation and minimizing payments to Panama, but also on expectations of heavy traffic of oil from the North Slope fields in Alaska.

In an explanation of the economic viability of the proposed treaties, the State Department sent a press statement to all Senate offices on February 10, 1978, emphasizing the importance of Alaskan oil. Their estimates assume that no pipeline will be built, and as late as 2000, 12.5 million tons of Alaska oil shipments will move through the Canal.

However, if a pipeline is completed as an alternative mode of transporting the Alaskan oil, then all calculations would be drastically altered as the following table indicates:

STUDY PERIOD 1979 - 1984

COMPARISON OF TOLLS INCREASE REQUIREMENT WITH THE PROPOSED
TREATY FOR BEST CASE AND FOR 75% REDUCTION
IN NORTH SLOPE TRAFFIC AFTER 1980

<u>Best Case Estimate</u>		<u>75% reduction in North Slope traffic after FY 1980</u>	
Toll increase in 1979	19.5%	Toll increase in 1979	19.5%
Toll increase in 1983	7.9%	Toll increase in 1981	9.4%
		Toll increase in 1984	11.7%
Cumulative	28.9%	Cumulative	46.0%
Additional Tolls	\$254.7M	Additional Tolls	\$307.3M

The Standard Oil Company of Ohio, which owns a 53% interest in the North Slope fields and a 35% interest in the Alaska pipeline, has invested over \$25 million in the pipeline project and believes that such a system could be operational in less than two years; however, local ordinances and environmental groups may prevent construction for years, as occurred with the Alaska pipeline. Other alternative pipeline proposals have been studied traversing either Mexico, Guatemala, or Nicaragua. If either drastic toll increases occur or efforts to complete a line across California prove unsuccessful, then these other options will be explored more seriously.

THE RANGE OF TOLL INCREASES

With the new treaties, payments to Panama would amount to approximately \$67.5 million and with projected rises in inflation and traffic the amount will eventually rise to over \$173 million by the year 2000. The Panamanian Minister of Planning and Economic Policy has projected total payments to his government at \$2.262 billion over the next 22 years, or an average of \$102 million per year. With other port and shipping facilities being transferred over to Panama, approximately another \$140 million per year will accrue to the Panamanian Government.

Some current costs of government and other functions now assumed by the Panama Canal Company will be terminated or transferred to the Panamanian Government and consequently some difficulties arise in comparing economic arrangements under the old and new treaties. The deficiency in existing rates of \$36.7 million for FY 79 on page 8 assumes that a projected surplus of \$9.3 million would be available to help reduce added expenses of \$46 million. Others who question the role of this surplus and other potential obligations under the treaties estimate deficiencies ranging up to \$96 million.

The variations arise from whether one includes or excludes the following items: \$20 million interest on the capital investment; \$23 million to depreciate the value of investment over 22 years; and \$10 million "surplus" revenues pledged to Panama under Article XIII.

Estimates of the necessary toll increases naturally vary according to the amount of revenue sought. The 19.5% used in the table on page 8 is the lowest estimate. Ambassador Linowitz cited a prospective rise of 25% to 30% upon ratification of the treaties. The Transportation Association of America has forecast an increase of 30%. In the entire 64-year history of the Canal, only two actual increases have taken place, both in recent years, with a 19.7% rise in 1974 and another 19.5% increase in 1976. Technically, rates began at \$1.20 per Panama Canal ton (a measure of volume rather than weight), but through re-computation fell to \$.80 for laden ships and less for those in balast. In 1976 the tolls rose to the present figure of \$1.29 per ton. Thus, prospective increases would be based upon this amount.

IMPACT OF TOLL INCREASES ON THE UNITED STATES

In assuming that most of the payments made to Panama under the proposed treaties come from Canal tolls, the Carter Administration has contended that the United States will not have to bear the costs involved. Secretary of State Vance categorically assured the Foreign Relation Committee that "the treaties require no new appropriations, nor do they add to the burdens of the American taxpayers."⁵ As indicated above, numerous appropriations will have to be made to deal with various aspects of the Canal treaties. Moreover, the American taxpayers are also the consumers or producers of goods flowing through the Panama Canal whose prices will escalate upward by increases in the toll schedules.

As the principal user of the Panama Canal, Americans will sustain the largest share of the costs of the new toll increases. This will increasingly be the case in the next few years with the anticipated huge influx of Alaskan oil. The following table summarizes trade volume, revenues, and the impact on U.S. commerce with a toll increase of 30%:

5. Senate Foreign Relations Committee Hearings, Pt. I., p. 12.

PROJECTED FISCAL 1979⁶

Panama Canal Net Tons	158,900,000
Canal Revenues Based on Present Tolls	\$199,400,000
Canal Revenues Based on 30% Toll Increase	<u>\$259,200,000</u>
 INCREASE	 \$ 59,800,000
 Economic Burden on U.S. Commerce Based on Present Tolls (43% of total above)	 \$ 85,742,000
Economic Burden on U.S. Commerce Based on Projected 30% Toll Increase	<u>\$111,456,000</u>
 Additional Economic Burden on U.S. Commerce Based on 30% Toll Increase	 \$ 25,714,000

The 43% figure in the table is derived from the fact that 54.4% of all Canal traffic will involve U.S. exports and imports in 1979, and it is estimated that 15.8% of all Canal traffic will consist of U.S. domestic commerce. Thus, in the table one-half of the 54.4% figure is added to 15.8% resulting in 43%. This represents a sharp change from data in recent years due to the growing impact of Alaskan oil through the Canal. While in 1977 only 4% of the Canal traffic consisted of domestic commerce, this will nearly quadruple due simply to the oil; over 75% of domestic U.S. commerce through the Canal will be oil.

Thus, one of the most dramatic impacts of the new tolls will be the additional burden placed upon the cost of America's domestically produced oil. At present, it costs slightly more than 17¢ per barrel in tolls to transit the Panama Canal. With an expected flow of 200,000 barrels per day through the Canal this year the total tolls collected on the oil would amount to \$34,000 per day or \$12.4 million for the year. By 1979 this volume will at least double to 400,000, amounting to \$25 million. But with a toll increase of 30% this figure would rise by \$7.5 million. Thus, one can roughly calculate that initially the payments to Panama under the proposed treaty will raise energy costs in the United States \$7.5 million per year. Higher tolls in the future will increase this yearly amount and if the volume of oil transported peaks at 700,000, the figure would rise by another \$5.7 million per year.

6. Table provided by the Transportation Association of America in testimony before the Senate Foreign Relations Committee, Congressional Record, January 20, 1978, p. S189.

Along with the impact of tolls upon Alaskan oil supplies, American agricultural exports could be substantially effected by any significant change in the toll structure. According to figures from the Department of Agriculture, \$8.5 billion of total agricultural exports of \$23 billion go to Asian markets. Of these exports, 70% pass through the Panama Canal. The price of these products in markets in the Orient depend upon both reliable service through the Canal and low tolls, so that shippers down the Mississippi River can compete with Canadian exports out of their Pacific Coast port of Vancouver and Australian foodstuffs sent north over open seas.

In a study produced by the Economic Research Service of the U.S. Department of Agriculture, Floyd D. Gaibler states quite bluntly that "Provisions in the new proposed Panama Canal treaty have caused concern over probable impacts they will have on agricultural commodities transported from U.S. Atlantic and gulfports through the Canal to Asian markets." He calculates that the new payments to Panama will immediately "add approximately 2% to the freight rate for transporting heavy grains from the U.S. Atlantic and gulfports to Japan." Naturally, any increases in transporting goods reduce their competitive position and lower still further the very narrow profit margin on foodstuffs. Gaibler further notes that with the inflationary escalator clauses in the treaties, tolls could rise up to eight additional times in the next 22 years and after 1999 Panama will have complete discretion over what they desire to charge customers.⁷

In order to assess the American share of the impact of toll increases designed to offset payments to the Panamanian Government under the treaty, various formulations can be made. Since such projections rely upon assumptions about increases in the amount of freight using the Canal, rates of inflation, various interpretations of obligations under the treaties and other imponderables, the estimates must be quite tentative and wide ranging.

Using the most optimistic assumptions outlined in the Panama Canal Company figures presented in the previous tables, the estimated toll impact could be derived from apportioning the projected payments to Panama on the basis of \$.30 per ton, plus inflation, plus the annual annuity payment of \$10 million, plus the \$10 million payment for services. This would ignore other Panamanian benefits deriving from Canal operating expenses, such as wages paid, which would also be of both direct and indirect benefit to the Panamanian Government. Nonetheless, by projecting volume increases and multiplying them by the increased tolls, one could estimate that by 1999 Panama would be

7. Floyd D. Gaibler, "Ocean Freight Rates for Major Agricultural Trade Routes," Foreign Agricultural Trade of the United States, November, 1977.

receiving an annual payment of about \$173 million, in contrast to the 1979 figure of about \$68 million.

1979

Volume of traffic	158.9 million tons
Rate 30¢ per ton	\$47.7 million
Fixed annuity payment	10 million
Service payment	10 million
	<u>\$ 67.7 million</u>

1999

Total traffic increase of 35%	208 million tons
30¢ at 5% inflation for 22 years yield 73.2¢ in 1999	\$153 million
Fixed annuity payment	10 million
Service payment	10 million
	<u>\$173 million</u>

The above figure of \$173 million would represent the payment to Panama on the basis of Article XIII of the treaty and with the service payment fixed at \$10 million per year. Figuring the payments on the basis of projected increases in traffic and the 5% inflation rate raising the 30¢ per ton figure each two years after 1983, the average payment to Panama from 1979 to 1999 would amount to about \$108 million. Given the fact that about 43% of the toll increase is born by the United States (see page 13), this would make the American share of the tolls used for payments to Panama amount to about \$46.4 million per year or a total of \$1,021 million during the life of the treaty.

The actual rate of inflation in recent years has averaged about 6.5% instead of the 5% level used in the calculations given above. If a steady rate of 6.5% were used in calculating the 8 increases in the 30¢ per ton payment to Panama, the amount would rise to 94¢ per ton in 1999. The average payment to Panama, using the same projected tonnage increases, would rise to \$124 million per year with an American share of \$53.3 million for a 22 year total of \$1,172.6 million.

The total cost would rise further if the \$10 million surplus revenue payment to Panama became a part of the calculation of the toll base. This would add \$220 million over the life of the treaty and raise the U.S. portion of the additional tolls by \$94.6 million. Finally, the payments for services provided by Panama in Article III will undoubtedly also rise over the life of the treaty, although at present the services anticipated will initially cost Panama only \$4.4 million per year to perform.

If the traffic and hence revenues do go up, so do payments to Panama; therefore, the U.S. share of transport costs will always rise. If traffic levels off or falls, then revenues will diminish but payments mandated to Panama will not diminish by a proportional amount because of the fixed nature of the annuity and service payments and because both the 30¢ per ton and service payments rise with inflation. If, for example, North Slope oil should be diverted to pipeline transportation, or some major bulk products either move to other modes of transport due to toll sensitivity, or are no longer competitive in some markets with producers who do not use the Canal, then serious problems arise as to whether the Canal can be a self-sustaining enterprise.

If deficits occur in the next 22 years, as the evidence presented in this study strongly suggests, then quite clearly the United States, as operator of the Canal, will have to appropriate such funds as may be necessary to balance expenses with revenues. Moreover, the real possibility exists that after the year 2000, particularly if the U.S. begins subsidizing the Canal itself before that date, then the Canal will no longer be operated with either the efficiency or regularity as at present. Panama could not bear such costs herself. Thus, the U.S. may find it necessary to continue to subsidize Canal operations after 2000 for her commercial and military interests.

CHARTS OF ECONOMIC DATA COVERING THE NEXT 22 YEARS

A. Toll increases born by the United States at:

5% inflation	\$1,021	million
6.5% inflation	1,172.6	million
with \$10 million surplus payment	<u>94.6</u>	<u>million</u>

Total would range from \$1,021 million to \$1,267.2 million.

B. Necessary Congressional Appropriations:

1. Early retirement of employees: \$7.5 million for 22 years	\$165 million
2. Defense Department costs of base relocations in Panama for first three years	43 million
3. Defense Department costs for providing dependent benefits (particularly schooling): \$5 million for 22 years	110 million

- | | |
|--|---------------------|
| 4. Inventory of all assets of
Panama Canal Company and Panama
Canal Zone government facilities | <u>\$ 2 million</u> |
|--|---------------------|

Total known appropriations necessary	\$320 million ⁸
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Other potential appropriations not listed above could include the following:

1. Cost of relocating bases for Panama's defense after 2000 and the purchase of necessary equipment to move forces swiftly into Panama.
2. Costs involved in relocating Southern Command structure and jungle warfare school.
3. Additional costs for maintaining refueling, communication, and reconnaissance capabilities without use of Panama bases after 2000.
4. Appropriations necessary to cover any annual deficit in Canal operations for the next 22 years (as noted on page 4).
5. Cost of major new capital investment in next 22 years if such cannot be covered by toll increases.
6. Costs of any debts existing in 1999 that must be paid when Panama assumes complete control over the Canal.

C. Loss of anticipated revenues under the treaties:

- | | |
|---|---------------|
| 1. Foregoing of interest payments due to U.S. Treasury of \$20 million per year for 22 years | \$440 million |
| 2. Foregoing of depreciation to recoup U.S. investments on book value of \$618 million; \$23 million per year for 22 years | 506 million |
| 3. Loss of tax base for U.S. Treasury of American workers in the Panama Canal Zone; gradually reaching \$15 million by 1999 | 165 million |

\$1,111 million

8. In a letter by the Department of State to all Senators on February 10, 1978, these figures were corroborated as follows: "The total appropriations impact over the next 21 years based on present information is unlikely to be much more than \$350 million."

The first two items could be recovered through implementing legislation if Congress insists upon figuring these expenses into the toll base over the next 22 years, but the Carter Administration opposes both proposals. If such expenses were included in the toll base structure, the United States would bear the indirect costs through the higher toll rates, or approximately 43% of \$946 million, or \$407 million. Toll increases necessary to recover \$43 million per year in additional revenues would undoubtedly have substantial repercussions on commerce through the Canal.

D. Value of assets transferred:

Assuming that the United States does not depreciate the investment in Panama, the assets would have the following book and replacement values:

	<u>Book Value</u>	<u>Replacement Value</u>
Panama Canal Company facilities	\$310 million	\$5.0 billion
Canal Zone Government facilities	257 "	3.6 "
U.S. Government Military Installations	<u>353 "</u>	<u>1.2 "</u>
	\$920 million	\$9.8 billion

E. Proposed economic and military assistance program to Panama:

1. Up to \$200 million in Export-Import Bank credits
2. Up to \$75 million in AID housing guarantees
3. A \$20 million Overseas Private Investment Corporation (OPIC) loan guarantee.
4. Up to \$50 million in military credit sales

While not a part of the treaties, the above program has been recommended by the Carter Administration to accompany the transfer of the Canal over the next five years. These programs all consist of loans, though at concessionary rates of interest, and presumably will eventually be paid off. Only \$5 million in appropriated funds would be necessary to support repayment guarantees for the military credit programs.

The above sets of figures relate some of the complications involved in attempting to assess the economic implications of the Panama Canal treaties. One can generally conclude that the arrangements in the treaties will cost Americans a total of higher tolls of from \$1,021 to \$1,267 million and \$1,111 million in lost revenues, and over \$320 million in new appropriations. This would represent a total cost of at least \$2.5 billion and more likely over \$3 billion over the next 22 years.

CONCLUSION

This study has only dealt with the treaties for the next 22 years when the U.S. will continue to have primary jurisdiction over the administration of the Panama Canal, although the growing domination of Panamanian workers in the operation of the Canal may make the jurisdiction more de jure rather than de facto. Nonetheless, most economic projections indicated that the costs and consequences of the economic sections of the treaties are far more profound and controversial than generally assumed.

The absence of precise data or even clear understandings of the nature of the terms of the treaties has made comprehensive analysis impossible. Unfortunately, even as the Senate has already begun their debate, many questions concerning the economic arrangements still remain to be worked out in the implementing legislation. But the evidence available, especially that brought forth in the Senate hearings, indicates that major new economic burdens will be imposed, both directly and indirectly, on the United States through higher tolls on products transiting the Canal and the necessary Congressional appropriations to carry out the implementing legislation.

Finally, the vagueness of many economic terms and conflicting interpretations of them quite possibly will lead to substantial friction between the United States and Panama if the treaties are ratified in their present form. More broadly, the new toll increases, falling heavily upon Latin nations, for which the Canal is a commercial lifeline, may cause Latin Americans to be further antagonized, rather than gratified by the new arrangements.

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