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April 25, 1977

To: Special Deputy Comptroller for New York City

From: Bruno Stein, Regina Armstrong, and David Raff

Transmitted herewith is our analysis of the Agreement between the Housing Authority and Local 237, IBT.

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A COST EVALUATION
of the
PROPOSED COLLECTIVE BARGAINING AGREEMENT
between the
CITY EMPLOYEES UNION, LOCAL 237
and the
NEW YORK CITY HOUSING AUTHORITY

January 1, 1977 - December 31, 1978

for the
Special Deputy Comptroller for New York City

by
Bruno Stein, Regina Armstrong, and David Raff

April 25, 1977

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I. INTRODUCTION

A. Purpose and Scope

This report analyzes the incremental cost implications of the collective bargaining agreement reached between the City Employees Union, Local 237, International Brotherhood of Teamsters and the New York City Housing Authority (hereafter NYC HA). The new contract period extends from January 1, 1977 to December 31, 1978. The proposed contract was compared with the expired contract, in force from January 1, 1974 to December 31, 1976. The cost of performing the contract was computed and presented year-by-year on a fiscal year basis (Fiscal Year 1976-77, 2nd Half; Fiscal Year 1977-78; and Fiscal Year 1978-79, 1st Half) as the difference in expenditures over the last calendar year (1976) of the preceding contract. The assumption of a stable work force was made, based upon the stated anticipation of no net hiring by the NYC HA.

Future costs of the new agreement are in current dollars, itemized by 9 major and 9 minor provisions, and estimated for 2 non-contractual obligations. In the opinion of David Raff, the Consultant Attorney, there are no provisions in the agreement which obscure costs in the

contract period or obligate the Housing Authority to large unknown future costs. The NYC HA has, however, agreed to study the concept of gainsharing, the nature of which is unclear. A legal opinion on gainsharing will be forthcoming from the Housing Authority.

Except for educational and assignment differentials, all costs by item increase over the new contract period, including all fringe benefit expenditures. There are no provisions with offsetting fringe benefit reductions. Several other provisions of the new agreement are cost-sensitive but not quantifiable. They pertain, for the most part, to the establishment of study teams, task forces, and training programs. Other items relate to equipment procedures, but information from the NYC HA confirms that these provisions do not differ from current practice.

The NYC HA Comptroller and Payroll Department performed cost computations for most major and several minor items. They also provided the following basic data: employees by title, salary level and longevity; overtime, educational, and assignment differential expenditures; ratios of non-contractual expenses to salary payment, bank run and mileage allowances; and terminal leave expenses and projections. Preliminary analyses were also performed for 3 major items by the NYC Office of Management and Budget. Where the incre-

mental costs of our independent computations differ from these sources, an explanation is given.

Overall, the costs portrayed for items are conservative, in that actual expenditures may be lower than estimates shown herein. A portion of the NYC HA budget is funded from inter-governmental revenues and no estimate is made for the amount reimbursable. Moreover, turnover within a stable work force will produce compositional changes by salary level that should reduce direct labor payments and associated non-contractual expenditures. However, promotions between job titles were not considered. A new provision (4e), pertaining to step 1 increase upon promotion, may shorten or lengthen the time lapse for an employee's first salary increase. This provision, which is discussed in Section II.A.1, could not be costed, in the absence of a promotion schedule.

II. DESCRIPTION AND ESTIMATES OF COST ITEMS

A. Direct Payments

1. Salaries

The work force of the NYC HA covered by the proposed contract for full-time employees is comprised of 6229 receiving economic benefits and 1046 with non-economic benefits. Salary provisions were given for 20 titles with 6229

employees as of December 31, 1976. Five additional titles, and conceivably four full-time personnel, were not identified as to wage payments. 1046 prevailing wage employees in 9 titles, including 880 maintenance men, were covered by items of the agreement except for the wage, pension, and welfare fund expenditures which are subject to the Comptroller's determination. Among these, 166 Skilled Trades (Section 220) personnel are newly covered by the proposed contract; benefits they received by joining are additional disability, unlimited accumulation of annual leave, and heat days. Incremental costs for prevailing wage employees are, therefore, addressed only under minor cost and nonquantifiable items.

Provisions of the new contract freeze the salary schedule at rates pertaining on July 1, 1976 by title and level for all employees with economic benefits, with the exception of 194 foremen of housing caretakers who are to receive an equalization of pay adjustment of \$385 per year. 707 of the employees are CETA janitorial assistants, for whom salary costs under \$10,000 per worker and associated fringe benefits are reimbursed. Larger payroll expenditures will be required for the work force from step increases in a 3-step pay plan to remain in effect during the new contract period. Assuming a stable work force, the incremental salary costs from step increases are estimated to be \$1,093,435 in FY 1976-

77, 2nd Half; \$3,187,227 in FY 1977-78; and \$2,093,792 in FY 1978-79, 1st Half, over the annual salary expenses of the base year 1976. A total of \$6,374,454 additional salary payments will be required by performing the proposed contract over the two calendar year period, as shown in Table 1.

This estimate differs from the calculation of incremental salary costs by the NYC OMB, summed to \$2,530,402 for calendar years 1977 and 1978. The difference is twofold: 1) the work force used by OMB excluded 741 persons in two titles, including the CETA personnel; and 2) only period-to-period changes in expenditures were shown by OMB, rather than the full increment in new contract period costs over the base year of the expired contract on an annualized basis. These exclusions, with the exception of 34 housing maintenance helpers, also account for the difference between estimates shown herein and lower NYC HA calendar year projections. Period-to-period cost increments are given for the consultant's estimate in Table 1; excluding CETA expenses, they are in complete agreement with NYC HA calculations.

As noted earlier, these incremental salary costs from step increases could be pared from labor turnover, by the replacement of existing employees with new entries at lower salary levels. Or alternatively, these costs could be increased by promotional practices and a new provision. Clause

TABLE 1

TOTAL AND INCREMENTAL SALARY COST IMPLICATIONS OF STEP INCREASES
FOR 6229 EMPLOYEES WITH ECONOMIC BENEFITS: NEW CONTRACT
PERIOD BY FISCAL YEAR OVER BASE YEAR OF EXPIRED CONTRACT

	Total Cost	Incremental Cost	
		Cumulative ^a	Period ^b
Base Year of Expired Contract:			
Calendar 1976	\$74,576,592	--	--
Fiscal Year 1976-77, 2nd Half	38,381,731	\$1,093,435	\$1,093,435
Fiscal Year 1977-78	77,763,819	3,187,227	2,093,792
Fiscal Year 1978-79, 1st Half	39,382,088	2,093,792	1,000,357
New Contract Period:			
Calendar 1977 and 1978	\$155,527,638	\$6,374,454	\$4,187,584

Note: This and subsequent tables may exclude four full-time employees for whom data were not available.

^aChange in each Fiscal Year, or portion thereof, over base year 1976.

^bChange in each Fiscal Year, or portion thereof, over preceding period.

4e in the new contract elevates a job promoted employee to a first step level on January 1 following. This practice is in contrast to the Step 1 increase which otherwise occurs on the anniversary date of employment, and is followed thereafter by January 1 increases to higher levels. According to the NYC HA an employee can benefit or lose and the provision will not necessarily entail a speed-up in salary increases. The consultants concur in this reasoning.

2. Cost-of-Living Adjustment Clause (COLA)

Four separate computations of COLA payments were performed for purposes of this analysis. The work force eligible for these payments were the 6229 full-time employees receiving economic benefits, including CETA workers. The first computation was built upon a 6 percent annual rate of increase in the N.Y.-N.E. N.J. SCA Consumer Price Index over the two year period in which the proposed contract would be in force. It reflects the maximum exposure or cap on COLA payments provided by the agreement. A second computation, at a 5 percent annual rate of inflation, assumes the continuation of the current rise in the regional CPI in 1977 and 1978. A third variation, at a 7 percent yearly increase, reflects the annual rate of inflation in the 1970 decade, and illustrates the probable upper limit on the portion of costs that might be deferred and subject to consideration if defrayed by

productivity, other savings, or other revenues. A second deferral provision of the agreement, or that amount of COLA representing the difference between a full three-tenths (0.3) and four-tenths (0.4) point increase in the CPI, was computed with a 6 percent cap on inflation and is the final variation.

Alternative costs are shown by fiscal year in Table 2. The maximum exposure would be \$6,278,832 for the entire contract period. Should the rate of inflation average 7 percent annually, an additional \$1,046,472 would be deferred. Alternatively, should the CPI continue at its current 5 percent yearly rise, a savings of \$948,365 from the maximum would be realized. The assumption of a three-tenths (0.3) point rise in the CPI, at a 6 percent rate of inflation, would require the expenditure of \$8,437,182, or the deferral of \$2,158,350 subject to productivity, other savings, or other revenues in the two year period. The determination on the payment of COLA deferrals will be made by the Emergency Financial Control Board from recommendations by the NYC HA submitted after December 31, 1977 and October 1, 1978. In this COLA provision, which is unique to the Housing Authority and differs from the Memorandum of Interim Understanding, the EFGB determination on COLA payments is to be based on the

TABLE 2

COST IMPLICATIONS OF COLA PAYMENTS TO 6229 EMPLOYEES WITH ECONOMIC BENEFITS, UNDER
ALTERNATIVE ASSUMPTIONS AS TO INFLATION IN THE NEW CONTRACT PERIOD
BY FISCAL YEAR

	Cost by Annual Infl.		Deferrals Above Cap	
	Maximum Rate (6%) ^b	Current Rate (5%) ^c	'70s Ave. Rate (7%) ^d	Alt. Point Rise in CPI ^e
Base Year of Expired Contract: Calendar 1976	--	--	--	--
Fiscal Year 1976-77: 3rd Quarter	--	--	--	--
4th Quarter ^a	\$ 261,618	\$ 261,618	--	\$ 98,107
Fiscal Year 1977-78	3,074,011	2,616,180	\$ 490,534	1,046,473
Fiscal Year 1978-79: 1st Half	2,943,203	2,452,669	555,938	1,013,770
New Contract Period: Calendar 1977 and 1978	\$6,278,832	\$5,330,467	\$1,046,472	\$2,158,350

^aPayment effective April 1, 1977.

^bCPI assumptions: 9/76, 178.6; 8/77, 188.4; 9/77, 189.3; 8/78, 199.7.

^cCPI assumptions: 9/76, 178.6; 8/77, 186.8; 9/77, 187.5; 8/78, 196.1.

^dCPI assumptions: 9/76, 178.6; 8/77, 190.1; 9/77, 191.1; 8/78, 203.4; total cost of \$7,325,304.

^eTotal cost of \$8,437,182.

overall financial condition of the NYC HA, rather than on the financial position of the City.*

It should be noted that the capped computation in this report differs from the maximum exposure estimated by the NYC OMB at \$5,715,265 for the entire period. The difference is twofold: 1) the smaller work force noted in Section II.A.1; and 2) the use by OMB of both the full four-tenths rise and fractional share thereof in the computation of the average payment per employee. The consultant's estimates also differ from a COLA projection by the NYC HA. In this regard, the difference reflects: 1) the exclusion by the NYC HA of the CETA employees, for whom costs are reimbursed; and 2) the assumption of a 5 percent rate of annual inflation over the two year period.

3. Longevity

The Longevity clause in the proposed contract remains unchanged from the expired contract with the exception of a provision for a Union Management Committee to be established for review of employee eligibility, based upon length of Authority service. This provision has a potential cost for the NYC HA which cannot be quantified. The incremental cost calculation for longevity expenses in the new contract period, based upon the number of eligible employees in 1977 and 1978 from the NYC HA, is provided in Table 3.

* The dates for the computation and effectiveness of the COLA provision in this Agreement differ from those of the Memorandum of Interim Understanding in that they begin and end six months later than those in the Memorandum.

TABLE 3

TOTAL AND INCREMENTAL COST IMPLICATIONS OF LONGEVITY INCREASES FOR
244 PREVIOUS AND 140 NEW PERMANENT CIVIL SERVICE EMPLOYEES
MEETING ELIGIBILITY REQUIREMENTS IN THE NEW CONTRACT PERIOD
BY FISCAL YEAR

	Total Cost	Incremental Cost ^a
Base Year of Expired Contract: Calendar 1976	\$ 89,075	--
Fiscal Year 1976-77, 2nd Half	53,950	\$ 9,412
Fiscal Year 1977-78	115,400	26,325
Fiscal Year 1978-79, 1st Half	61,450	16,913
New Contract Period: Calendar 1977 and 1978	\$230,800	\$52,650

^aOver base year of expired contract.

Seven titles with a current work force of 1228 have 244 employees with permanent civil service status eligible for longevity payments as of 1976, an additional 85 employees eligible in 1977, and 55 more in 1978. Payments increase by length of service at specific rates for each of the selected titles; payments are apportioned equally over the calendar year. As a result of aging and new additions to the eligible work force, the incremental cost of providing the longevity payments over the entire contract period is \$52,650.

This estimate differs from both the OMB and NYC HA computations of incremental longevity payments. OMB estimates of the eligible work force exceeded the actual count by 258 persons, whereas a computational error in the aging of eligible housing assistants in 1978 accounted for the difference of \$6,100 between the consultant's and the Authority's estimates of total costs in 1978.

4. Welfare Fund

A new provision in the Welfare Fund clause increases the NYC HA contribution to the Union trust fund by \$25 per annum for all 6229 employees receiving economic benefits, effective January 1, 1978. As stipulated in the contract, this increase must be funded through independently measured savings or other revenues in accordance with the general wage

TABLE 4

INCREMENTAL COST IMPLICATIONS OF \$25 INCREASE PER EMPLOYEE
IN WELFARE FUND CONTRIBUTIONS FOR 6229 EMPLOYEES RECEIVING
ECONOMIC BENEFITS IN THE NEW CONTRACT PERIOD
BY FISCAL YEAR

	Incremental Cost ^b
Fiscal Year 1976-77, 2nd Half	--
Fiscal Year 1977-78 ^a	\$77,863
Fiscal Year 1978-79, 1st Half	77,863

^aEffective January 1, 1978.

^bOver base year of expired contract.

and salaries policies issued by the EFCB. The per annum rate per covered employee in calendar year 1977 remains in effect at \$350. The incremental cost of providing the Welfare Fund increase over the new contract period is estimated to be \$155,726. Calculations were not performed by the NYC HA or the Office of Management and Budget.

5. Overtime

The overtime provision which pertains to 18 titles in the work force receiving economic benefits remains unchanged in the new agreement with respect to the expired contract. Moreover, the Housing Authority foresees no increase in the demand for overtime work. However, base salary payments are expected to rise from step increases, and a constant share of overtime expenditures to salaries in the base year 1976, when applied to salaries in the new contract period, does yield a considerable increase in overtime expenditures for 1977 and 1978. Table 5 shows that the incremental costs of overtime payments for 3575 employees in the new contract period, as computed by the NYC HA, is \$449,835. The full cost of overtime work is \$16,985,016, or 11 percent of direct salary payments, for the entire forecast period.

TABLE 5

TOTAL AND INCREMENTAL COST IMPLICATIONS OF OVERTIME PROVISIONS FOR 3575
EMPLOYEES RECEIVING ECONOMIC BENEFITS IN THE NEW CONTRACT PERIOD
BY FISCAL YEAR

	Total Cost	Incremental Cost ^a
Base Year of Expired Contract:		
Calendar 1976	\$8,267,591	---
Fiscal Year 1976-77, 2nd Half	4,226,255	\$ 92,460
Fiscal Year 1977-78	8,492,508	224,917
Fiscal Year 1978-79, 1st Half	4,266,253	132,458
New Contract Period:		
Calendar 1977 and 1978	\$16,985,016	\$449,835

^aOver base year of expired contract.

6. Educational Differential

The clause pertaining to the continuance of an educational differential awarded prior to January 1, 1974 is not altered by the new agreement. As of 1976, the differential was provided to 12 employees at a total cost of \$10,800. The Housing Authority expects no significant change or incremental cost from performing this provision in the new contract period. Data were not available to verify this conclusion.

7. Assignment Differential

Five titles with a total 456 employees currently receive assignment differentials from provisions in the expired contract, or addendum thereto, which remain unchanged in the new agreement. Assignment differentials, which range from \$200 to \$800 per annum, are accorded to employees in selected titles on special assignment, such as the Emergency Service Squad. The full cost of assignment differentials for resident building superintendents, housing community activities coordinators, housing caretakers, and housing maintenance helpers was \$191,970 in 1976. Since no change in the monetary award is provided by the new agreement, and the NYC HA expects no significant increase in the work force receiving assignment differentials, the total cost is anticipated to remain constant for 1977 and 1978 and no incremental costs will be incurred in the new

contract period. Data were not available to verify this conclusion.

8. Terminal Leave

For all employees, annual leave will be converted to terminal leave upon termination at the rate of one day for each month of service, not to exceed 72 days. The Housing Authority estimates total costs of the terminal leave provision will increase from \$946,164 in 1976, to \$984,081 in 1977, and \$1,027,612 in 1978, as a function of increased base pay. The incremental costs for the new contract period are, therefore, \$119,365 as shown in Table 6. Data were not available to verify the Housing Authority computation.

9. Health Insurance

Health Insurance is fully paid for each employee and retiree in titles receiving economic benefits, beginning on the employee's appointment date. The Health Insurance clause is new to the proposed contract, although it provides for the continuance of past practice on the part of the Housing Authority. The NYC HA will continue to fund the choice of a basic Health and Hospitalization Plan and accept full responsibility for the payment of any increase in the basic premium due to experiments by employee organizations other than the Union during the term of agreement.

TABLE 6

TOTAL AND INCREMENTAL COST IMPLICATIONS OF TERMINAL LEAVE PAYMENTS FOR
ALL COVERED EMPLOYEES IN THE NEW CONTRACT PERIOD
BY FISCAL YEAR

	Total Cost ^a	Incremental Cost ^b
Base Year of Expired Contract: Calendar 1976	\$ 946,164	--
Fiscal Year 1976-77, 2nd Half	492,040	\$ 18,958
Fiscal Year 1977-78	1,005,847	59,683
Fiscal Year 1978-79, 1st Half	513,806	40,724
New Contract Period: Calendar 1977 and 1978	\$2,011,693	\$119,365

^a Housing Authority estimate based on share applied to incremental salary costs.

^b Over base year of expired contract.

The payment of Health Insurance premiums amounts to 3.4 percent of base salary pay for all 6229 employees.

Assuming this rate in the new contract period, Table 7 shows that the incremental cost implications of future Health Insurance provision will be \$216,732 over the new contract period. Total costs will rise from \$2,535,604 in 1976 to an average annual level of \$2,643,970 in 1977 and 1978. The method of estimation is intended to be a first approximation only, since future health insurance premium cannot easily be forecast.

B. Non-Contractual Payments

1. Pensions

All 5522 employees in 19 titles receiving economic benefits and approximately 50 of the 707 CETA workers participate in the Employees' Retirement System. According to the NYC HA, pension costs as a share of salaries were 20.27 percent in 1976, and are expected to rise to 21.1 percent in 1977 and 22.0 percent in 1978. Since pension expenses are budgeted on a current basis by the Authority, the present value has not been discounted to reflect the two year lag in payment. Table 8 shows that the incremental costs of providing pension contributions over the new contract period will

TABLE 7

TOTAL AND INCREMENTAL COST IMPLICATIONS OF HEALTH INSURANCE PAYMENTS
FOR 6229 EMPLOYEES RECEIVING ECONOMIC BENEFITS IN THE
NEW CONTRACT PERIOD BY FISCAL YEAR

	Total Cost ^a	Incremental Cost ^b
Base Year of Expired Contract: Calendar 1976	\$2,535,604	--
Fiscal Year 1976-77, 2nd Half	1,304,979	\$ 37,177
Fiscal Year 1977-78	2,643,970	108,366
Fiscal Year 1978-79, 1st Half	1,338,991	71,189
New Contract Period: Calendar 1977 and 1978	\$5,287,940	\$216,732

^aApplied to base pay for all employees.

^bOver base year of expired contract.

TABLE 8

TOTAL AND INCREMENTAL COST IMPLICATIONS OF NON-CONTRACTUAL PAYMENTS FOR 6229 EMPLOYEES RECEIVING ECONOMIC BENEFITS: NEW CONTRACT PERIOD BY FISCAL YEAR OVER BASE YEAR OF EXPIRED CONTRACT

	Pensions ^a		Social Security ^b	
	Total	Incremental	Total	Incremental
Base Year of Expired Contract: Calendar 1976	\$13,979,417	--	\$4,048,725	--
Fiscal Year 1976-77, 2nd Half	7,463,688	\$ 473,979	2,151,247	\$ 126,885
Fiscal Year 1977-78	15,345,156	1,365,739	4,616,898	568,173
Fiscal Year 1978-79, 1st Half	7,883,543	893,834	2,477,982	453,620
New Contract Period: Calendar 1977 and 1978	\$30,692,387	\$2,733,552	\$9,246,127	\$1,148,678

^a Applied to base pay for 5572 employees, excluding 657 CETA workers not eligible for Employees' Retirement System.

^b Applied to base pay, overtime, COLA, longevity, educational and assignment differentials for all employees based on Housing Authority report of average share FICA in 1976 and 1977 and projection to 1978 which assumed a rise in social security base from \$16,500 to \$18,000 and rate from 5.85% to 6.05%.

be \$2,733,552. Because of additions to the base salary payments from step increases in 1977 and 1978, total pension expenses will rise from \$13,979,417 in 1976 to an annual average of \$15,346,193 in the new contract period.

2. Social Security

Social security payments are calculated on base pay, overtime, COLA, longevity, educational and assignment differentials for all 6229 employees receiving economic benefits. Changes in the Social Security base from \$15,300 to \$16,500 annual salary between 1976 and 1977, while the rate has remained constant at 5.85 percent of the base, has increased the average share of FICA in all salary and related payments from 4.87 percent in 1976 to 5.0 percent in 1977. The NYC HA anticipates the ratio will rise again in 1978, from a further expansion in the Social Security base pay to \$18,000 and rate to 6.05 percent. This assumption translates into a 5.3 percent annual share of FICA payments in all salary and related expenditures for calendar year 1978.

The salary and related expenditures subject to Social Security payments will increase by nearly 6 percent in 1977, and again by 4 percent in 1978, as the result of the upgrading in NYC HA work force to higher salary levels from step increases, larger COLA payments, and greater overtime expenses.

The FICA payments will climb at an even faster rate, or rise by 10 percent in 1977 and another 7 percent in 1978. The incremental costs of employer Social Security contributions in the new contract period has been estimated at \$1,148,678, as shown in Table 8. This calculation differs from the estimate provided by the Housing Authority for two reasons: 1) CETA employees were excluded from base pay and COLA expenditures by the NYC HA because their costs are largely reimbursed, and 2) COLA expenditures are predicated on a 5 percent annual rate of inflation, rather than the maximum exposure included in the consultant's estimate.

III. ESTIMATES OF MINOR COST ITEMS

A. Fringe Benefits

1. Coveralls

The new agreement provides for the issuance of a maximum 3 pairs of coveralls per year to housing firemen and a minimum of 1 pair to Skilled Trades employees who perform boiler work and roofers working in elevator shafts. The provision, which is a reaffirmation of past practices of the NYC HA, covers 768 employees. Maximum total costs were calculated at 1977 and projected 1978 apparel prices per Housing Authority records, or from \$10.08 to \$10.51 per unit.

Incremental costs were priced at \$29,782 for firemen and \$2,738 for Skilled Trades over the new contract period, as shown in Table 9. The overall increase of \$32,520 represents the difference between the cost of maximum yearly issuance for the two year period and the prevailing low rate of cover-all provision in 1976.

2. Shoes

Neoprene shoes purchased by housing caretakers, housing firemen and roofers are reimbursable at one-third the purchase price, or from \$12 to \$14 per one pair of shoes in a calendar year. This provision in the new agreement represents a \$2 increase in the maximum allowance stated by a similar provision of the expired contract. Safety or work shoes purchased by Skilled Trades and 6 Housing Authority titles are also reimbursed, at the rate of \$10 to \$12 per one pair per year. This clause is entirely new to the proposed agreement. The work force covered by these provisions are 3583 for neoprene shoes, and an estimated 572 for safety shoes. Unit incremental costs are \$2 per year for neoprene shoes and \$12 per year for safety shoes. Incremental costs for the entire contract period are estimated to be \$14,332 for neoprene shoes and \$13,728 for safety shoes, or a combined additional expenditure of \$28,060 in 1977 and 1978 as shown in Table 9.

TABLE 9

INCREMENTAL COST IMPLICATIONS OF MINOR PROVISIONS ON COVERALLS, SHOES, AND CHOLINESTERASE TESTS
FOR SELECTED TITLES OF EMPLOYEES IN THE NEW CONTRACT PERIOD BY FISCAL YEAR

	Coveralls		Shoes		Cholinerase	
	Firemen	Sect. 220	Neoprene	Safety	Test	
Fiscal Year 1976-77, 2nd Half	\$ 7,251	\$ 667	\$ 3,583	\$ 3,432	\$	850
Fiscal Year 1977-78	14,891	1,369	7,166	6,864		1,700
Fiscal Year 1978-79, 1st Half	7,640	702	3,583	3,432		850
New Contract Period: Calendar 1977 and 1978	\$29,782	\$2,738	\$14,332	\$13,728		\$3,400

3. Cholinesterase test

The new agreement provides for the Authority to have administered a mandatory cholinesterase test annually to all housing exterminators. It is estimated by the consultants that the test costs \$25 per employee, for 68 respective employees, or a period total incremental cost of \$3,400 as shown in Table 9.

4. Upgrading Titles

The Housing Authority has agreed to upgrade the title of senior housing teller to supervising housing teller at 3 additional consolidated or large projects during the course of the new contract period. The promotional difference in salary at the top step is \$967 per year. The incremental costs of performing this provision over the entire contract period are \$5,802, as shown in Table 10.

5. Heat Days

The new agreement allows for Skilled Trades to receive one heat day per annum credited to their annual leave after Labor Day 1977, and two heat days per annum after Labor Day 1978, in lieu of the benefit of a shortened summer work day received by other covered employees. At current hourly wages and length of day for the 166 Section 220 employees, this allowance is priced at \$11,015 for FY 1977-78 and

TABLE 10

INCREMENTAL COST IMPLICATIONS OF MINOR PROVISIONS ON UPGRADING TITLES
AND HEAT DAYS FOR SELECTED TITLES OF EMPLOYEES IN THE
NEW CONTRACT PERIOD BY FISCAL YEAR

	Upgrading 3 Sr. Housing Tellers to Supervisors	Heat Days for Sect. 220 ^a
Fiscal Year 1976-77, 2nd Half	\$1,450	--
Fiscal Year 1977-78	2,901	\$11,015
Fiscal Year 1978-79, 1st Half	1,451	11,015
New Contract Period: Calendar 1977 and 1978	\$5,802	\$22,030

^aCalculated at current hourly rates for skilled trades with one heat day allowance in Fiscal Year 1977-78, and two heat days in Fiscal Year 1978-79.

\$22,029 for FY 1978-79, or a total cost of \$22,030 for the new contract period and \$11,014 extending beyond the term of the agreement, as shown in Table 10.

6. Bank Run

The new contract will provide an increase in the car allowance to housing teller employees for a bank run, or an additional \$0.75 per run from \$1.25 provided in the expired contract to \$2.00 in the current agreement. The NYC HA estimates that this provision will increase total bank run expenses from \$61,000 in 1976 to \$97,000 annually in the new contract period. As Table 11 shows, this added allowance entails an incremental cost of \$72,000 over the two year period. Data were not available to verify the Housing Authority computation.

7. Mileage

Effective January 1, 1977 under the new agreement, compensation to employees for authorized and required use of their automobiles increased by 2¢ per mile, to the rate of 16¢ per mile, with an additional minimum guarantee of 10 miles per day, to an overall guarantee of 30 miles minimum for each day of authorized and actual use. This expanded allowance over the provision in the old contract is estimated by the NYC HA to increase mileage costs by \$200,000 in the new

TABLE II

INCREMENTAL COST IMPLICATIONS OF MINOR PROVISIONS ON BANK RUN CAR ALLOWANCE AND MILEAGE ALLOWANCE
FOR EMPLOYEES RECEIVING ECONOMIC BENEFITS IN THE NEW CONTRACT PERIOD BY FISCAL YEAR

	Bank Run ^a		Mileage ^b	
	Total	Incremental	Total	Incremental
Base Year of Expired Contract: Calendar 1976	\$ 61,000	--	\$150,000	--
Fiscal Year 1976-77, 2nd Half	48,500	\$18,000	125,000	\$ 50,000
Fiscal Year 1977-78	97,000	36,000	250,000	100,000
Fiscal Year 1978-79, 1st Half	48,500	18,000	125,000	50,000
New Contract Period: Calendar 1977 and 1978	\$194,000	\$72,000	\$500,000	\$200,000

^aHousing Authority estimate based on \$0.75 increase in allowance per run, from \$1.25 to \$2.00.

^bHousing Authority estimate based on 2¢ per mile increase in allowance and 10 miles additional minimum guarantee per day.

contract period, or from \$130,000 total costs in 1976 to \$230,000 annually in 1977 and 1978, as shown in Table 11.

Data were not available to verify the Housing Authority computation.

B. Other Provisions Having Cost Effects

1. Cost Effects not Quantifiable

a. Disability. Any employee, including a Skilled Trades worker, physically disabled as a result of assault in the course of employment during the new contract period shall receive leave with pay, not chargeable to the employee's annual leave balance, for up to 18 months from the date of injury. This new agreement differs from the expired contract by extending coverage to Section 220 workers and by enlarging the disability leave for an additional 6 months, from a maximum allowance of 12 months provided by the old agreement. This provision has cost implications which cannot be measured for the new contract period.

b. Annual Leave. Coverage of Section 220 employees, the Skilled Trades, by the new agreement now entitles them, like all other employees, to unlimited accumulation of annual leave. This is subject to a limit on the number of days that can be converted to terminal leave. By joining the Union, Skilled Trades received an increase in this limit from 54 to

72 days, or the cap provision stipulated in this contract and discussed previously in Section II.A.8. This increased benefit for the 166 Skilled Trades employees has long run cost implications which extend beyond the new contract period and cannot be quantified.

c. Study Teams, Training Programs, and Task Force.

The Authority has agreed to create a study team with the Union to review payroll procedures and the costs involved in establishing a weekly payroll. The Authority and Union agree to study the concept of gainsharing and, if accepted by the NYC HA, this new contract will not bar the implementation of a gainsharing agreement. In the opinion of Mr. Allan Graff of the Housing Authority, Article 51 does not obligate the Authority to enter into an agreement, and is not to be construed as a reopening clause.

The Authority will also establish a training program for new housing teller appointees, and a program of in-service training for foremen of housing caretakers on methods of employee supervision and training. The latter program will run for a period of three months on a trial basis. The Union and the Authority will form a compactor task force to study caretaker problems in compacting garbage, related health hazards, safety problems, and the feasibility of containerization. All five programs imply costs for the Authority in

the new contract period, and cost implications that may extend beyond the term of this agreement based upon accepted recommendations of the study teams and task force.

d. Equipment. The Authority has agreed to assign lockers to Skilled Trades employees at housing projects and to review the need to assign a truck to the central trades storeroom. The Authority has also agreed to install a "Sprint" alarm system, and to air condition management offices in housing projects with sufficient wiring. The installations have already been performed, or entail no incremental costs during the new contract period.

IV. SUMMARY OF FINDINGS

The sum of incremental costs measured by this analysis for the new contract between Local 237 and the NYC HA is \$17,893,636 for the two year term of the agreement. Incremental cost components by major, non-contractual, and minor items are shown for fiscal years in Table 12. It indicates that the Authority will incur additional expenditures of \$2,199,157 for the 20 measured items in FY 1976-77, 2nd Half, over a comparable half year in 1976. FY 1977-78 will require \$8,874,210 incremental expenditures over the base year 1976, and FY 1978-79, 1st Half, will entail \$6,820,269 more in outlays over the last half year of the expired contract. By

TABLE 12

SUMMARY OF INCREMENTAL COST IMPLICATIONS OF NEW CONTRACT BY MAJOR, NON-CONTRACTURAL, AND MINOR ITEMS IN THE NEW CONTRACT PERIOD BY FISCAL YEAR

	FY 1976-77	FY 1977-78	FY 1978-79	New Contract Period
	2nd Half		1st Half	Calendar 1977 & 1978
<u>Major Items</u>				
Stop Increases	\$1,093,435	\$3,187,227	\$2,093,792	\$6,374,454
COLA Cap	261,618	3,074,011	2,943,203	6,278,832
Longevity	9,412	26,325	16,913	52,650
Welfare Fund	--	77,863	77,863	155,726
Overtime	92,460	224,917	132,458	449,835
Educ. & Assignment Differential	--	--	--	--
Terminal Leave	18,958	59,683	40,724	119,365
Health Insurance	37,177	108,366	71,189	216,732
<u>Non-Contractual Items</u>				
Pensions	\$ 473,979	\$1,365,739	\$ 893,834	\$2,733,552
Social Security	126,885	568,173	453,620	1,148,678
<u>Minor Items</u>				
Coveralls: Firemen & Sect. 220	\$ 7,918	\$ 16,260	\$ 8,342	\$ 32,520
Shoes: Neoprene & Safety	7,015	14,030	7,015	28,060
Cholinesterase Test	650	1,700	850	3,400
Bank Run Allowance	18,000	36,000	18,000	72,000
Mileage Allowance	50,000	100,000	50,000	200,000
Heat Days	--	11,015	11,015	22,030
Upgraded Titles	1,450	2,901	1,451	5,802
<u>Total Items</u>	\$2,199,157	\$8,874,210	\$6,820,269	\$17,893,626

decreasing size, the largest incremental costs in the new contract are: Step increases, \$6,374,454; COLA cap, \$6,278,832; related Pensions, \$2,733,552; related FICA contributions, \$1,148,678; Overtime, \$449,835; Health Insurance contributions, \$216,732; and Mileage allowance, \$200,000.

All other provisions represent less than 3 percent of the total incremental costs estimated by this analysis.

NYC Transit Authority Employees
Productivity Reports
1977

ARTHUR YOUNG & COMPANY

277 PARK AVENUE
NEW YORK, N. Y. 10017

April 22, 1977

Mr. Sidney Schwartz
Special Deputy Comptroller
for the City of New York
270 Broadway
New York, New York 10007

Dear Mr. Schwartz:

We have completed our review and analysis of the productivity programs submitted by the TA on March 30, 1977 for the April 1977 certification. The attached report presents our analysis of the programs included in the April certification and updates previously certified programs with actual figures where available.

The April certification contained 17 programs - 5 in Surface and 12 in Rapid. Of the 17 programs contained in the April certification, we have determined that 13 programs, 4 in Surface and 9 in Rapid, meet the criteria established by the EFCB/OSDC. The remaining 4 programs (Program 4.4: Annual Employee Vacancies; Program S-WS-4: Reduce Manning of Token Booths; Program M-WS-1: Change Tours of Duty; Program C-OT-1: Overtime Control) do not meet all of the criteria. They are identified in Exhibit I and discussed in detail in our report.

On the basis of the figures submitted by the TA in the April certification, the TA has claimed savings of \$1,254,650 for COLA for the month of April 1977, and a total of \$6,940,663 through March 31, 1977. Our review and analysis of these

programs show the savings to be \$453,419 for COLA for the month of April 1977, and \$3,691,423 through March 31, 1977. The following chart summarizes the savings claimed by the TA and analyzed by AY for COLA for the month of April 1977, and the total savings through March 31, 1977. This information is presented on a program-by-program basis in Exhibit I of the attached report.

	<u>Total Certified Savings through 2/28/77</u>	<u>Revisions to Previously Certified Savings</u>	<u>Revised Certified through 2/28/77</u>	<u>Current Monthly Certification</u>	<u>Total Certified Savings through 3/31/77</u>
	(a)	(b)	(c)	(d)	(e)
Surface					
TA	\$2,943,407	\$ -	\$2,943,407	\$ 537,694	\$3,481,101
AY	1,275,583	56,761 (1)	1,332,344	247,395	1,579,739
Rapid					
TA	3,075,954	(333,348)(2)	2,742,606	716,956	3,459,562
AY	1,927,779	(22,119)(3)	1,905,660	206,024	2,111,684
Total					
TA	6,019,361	(333,348)	5,686,013	1,254,650	6,940,663
AY	3,203,362	34,642	3,238,004	453,419	3,691,423

NOTE: Column (a) + Column (b) = Column (c)

Column (c) + Column (d) = Column (e)

- (1) This revision is comprised of: \$39,376 for the minimum wage positions; \$10,783 for an adjustment to the maintenance Super Extra List projection based on the actuals; and \$6,602 for the fringe benefits of eliminated positions.
- (2) Adjustments to previously certified savings, Overtime Control Program - CMD, based on April certification.
- (3) Adjustments to estimates, Electric Motor Rebuild Program, based on actual production for January and February.

Our report includes summary descriptions for each of the programs contained in the April 1977 certification. Detailed program description sheets for programs that were submitted for the first time are attached to our report. The detailed program description sheets for programs that were reviewed and/or certified prior to the April 1977 certification, are contained in either our January 7, February 28, March 11, or April 4, 1977 report, as appropriate.

The criteria used by AY to establish the applicability and trackability of savings claimed by the TA are the same as those used in our analyses of previous certifications and detailed in our reports of January 7, February 28, March 11 and April 4, 1977. There were no new issues raised with respect to the criteria used to establish savings in the April certification.

If you have any questions concerning the information presented in the attached report, please contact Mr. John R. Nolan at (212) 922-5928 or Mr. Howard Oboler at (212) 922-5004.

Very truly yours,

Arthur Young & Company

Attachment

SURFACE DIVISION - APRIL 1977 CERTIFICATION

For the April 1977 certification, the Surface Division submitted a package of 5 programs which included \$537,694 for the month of March 1977 and a total of \$3,481,101 accumulated through March 31, 1977. One of the programs, Work Schedule Revisions - Program No. 4.5, was submitted for the first time. After reviewing the submitted package and the supporting documentation, we have verified productivity savings of \$247,395 for the month of March 1977 and \$1,579,739 for the total accumulated through March 31, 1977. These figures are presented in Exhibit I.

Based on data supplied by the TA, approximately 91% of the runs eliminated through the Selective Patching of Runs Program do not appear to result from reductions in user demand. In light of the present OSDC/EFCB guidelines, this would appear to constitute a service reduction. Therefore, the savings associated with that portion of the program that appears to constitute a service reduction were not considered applicable at this time for the purposes of funding COLA. A further analysis of the patched runs is being performed to determine whether the resulting savings are applicable to COLA.

Each program and the outstanding concerns are discussed briefly. A program description for Program 4.5, Work Schedule Revisions, is included.

Program 1.1 - Super Extra List

The Super Extra List backup documentation included savings realized by TA Transportation in the months of April, May and June of 1976. These savings have not been included in AY's calculation. To date, the cost associated with the minimum wage positions (minimum wage positions are those for which a worker has reported for his designated shift and there is no open work) for both TA and MaBSTOA Transportation Departments has been charged against the savings. This was erroneous, since a factor is included in the savings calculation for each department to account for the minimum wage positions. An adjustment of \$39,376 has been made for the period July 1, through February 28, 1977 where the cost of the minimum wage positions was deducted from the savings.

The March tracking report for the maintenance Super Extra List was not submitted in time for inclusion in this report. A projection based upon an average of the previous four months' actuals has been used for the AY figures. Savings for the maintenance Super Extra List shown on our April 4, 1977 report have been adjusted by \$10,783, based on the difference between our estimate for February 1977 and the actual figures for February 1977.

For this program, the actual savings through February 28, 1977 are \$592,590 and the projected savings through March 31, 1977 are \$649,685.

The comments in our January 7, 1977 report dealing with the Super Extra List program are unchanged, except in relation to charging the minimum wage positions as a cost to the program. With respect to the TA Maintenance Department, the Surface Division has agreed to include the 36 relief positions created by Program 3.5 (Acceleration and Standardization of Productivity) on the tracking reports for the maintenance Super Extra List.

An additional 15 relief positions created by Supplemental Programs 1 and 2 (Car Cleaners and Maintenance Helper "B") as of November 28, 1976 have also been included on the tracking reports for the maintenance Super Extra List. These programs are fully discussed in Arthur Young & Company's March 11 report on the Supplemental Certification. The cumulative savings through March 31, 1977 resulting from the application of the Super Extra List program to all these positions are included in the current certification for April 1977.

Program 2.2 - Spread of Vacations

The TA did not claim any savings for this program in the April 1977 certification. Since savings for this program were only projected for the prime vacation periods, and January, February, and March 1977 are not considered prime vacation periods, no additional savings for these two months have been accumulated for the current submission.

The comments made in our January 7, 1977 report with respect to this program are still valid.

Program 3.5 - Productivity Acceleration

The savings for this program are based on the reduction of 56 men in the TA Maintenance Department. The monthly savings are calculated as follows:

56 men X (Number work days in month with holidays
estimated) X 8 hours X \$7.0069/hour = Monthly
Savings

The 56 men whose positions were eliminated have been transferred to relief positions. Five of these men have left the system through attrition since the program began. The Surface Division has agreed to track the remaining 51 men with the Super Extra List program. This approach will see that these 51 men are utilized prior to the other Super

Extra List men. These men are included on the tracking reports for the Super Extra List to ensure that there are no costs to the system as a result of this program.

The actual savings for this program through March 31, 1977 are \$487,386.

The comments in our January 7, 1977 report with respect to this program are still valid. COLA increases should not change the base pay rate of \$7.0069/hour since the positions were eliminated prior to January 1, 1977.

Program 4.2 - Selective Patching of Runs

On February 25, 1977 the Surface Division submitted documentation which indicated that 8.71% of the dollar savings claimed for this program resulted from patching runs and extras on "special occasions", e.g., snow storms, school holidays, etc., when the expected demand for service would be reduced. Based on this documentation, a letter dated February 25, 1977 from the Special Deputy Comptroller to the Senior Executive Officer of the TA stated:

"Upon reviewing further documentation from the TA, it appears that over 90 percent of the patching during the period from July 1 through December 31, 1976 (for which savings of \$779,000 have been submitted by the TA)* was random and not directly related to a reduction in user demand for that service."

"We ask that the TA provide data to support the position that patching is not in fact a service reduction. Until such data are provided, that portion of the program involving elimination of runs without a reduction in user demand would appear to be a service reduction and therefore not eligible to fund COLA payments."

* "The FY 1977 value of this program as estimated by Arthur Young in their January 7, 1977 report was \$1.5 million."

On the basis of these criteria, the savings for the Selective Patching of Runs program that are the result of a management decision on special occasions (9%) appear acceptable. The TA has provided data supporting its position that the remaining 91% is not, in fact, a service reduction. This data is currently under review. The savings associated with this 91% are being held in abeyance until such time as it is determined whether these are acceptable for COLA. As a result, the actual savings from this program through February 28, 1977 are \$88,666; and through March 31, 1977 the actual savings are \$99,916.

In computing the savings attributed to this program, we have not included \$262,918 in savings realized during April, May and June of 1976 from the backup documentation supplied by the Surface Division. The TA has not certified to these savings.

Program 4.5 - Work Schedule Revisions

This program was presented for the first time in the April certification. A detailed program description sheet is attached. This program involves revising the bus schedules and reducing the non-productive time, i.e. boost time and swing time.

PRODUCTIVITY PROGRAM DESCRIPTIONAs of Date: 4/14/77

TITLE: Work Schedule Revisions

Code: TA 4.5 AY T-WS-01

DIVISION: Surface

DEPARTMENT: Transportation (TA and OA)

APPLICABILITY TO COLA: Yes - d IMPLEMENTATION DATES: TA-10/31/76;
OA-7/1/76 and 9/12/76

		Cash to 3/31/77	Avg. Monthly Sav.	F/Y 1977 Total
Savings Claimed	TA	\$105,880	\$50,000	*
Savings Computed	AY	\$101,928	\$50,000	\$350,000

DESCRIPTION:

This program involves revising selected bus schedules throughout the NYC/TA and MaBSTOA systems. It is expected that these revisions will result in a reduction in the scheduled and unscheduled hours, as well as a reduction in the operating expenses (fuel and tires); the TA has not claimed any savings of operating expenses. The savings result basically from a reduction in non-productive time, i.e. boost time and swing time.

TA TRACKING SYSTEM PROPOSED:

The tracking system for compiling the savings accruing from this program involves comparing the old and new schedules and crediting to savings the net reduction in pay hours over vehicle hours. The old schedules are the program base reference point.

EVALUATION OF TRACKING SYSTEM:

The tracking system is adequate.

DOCUMENTATION SUBMITTED:

Comparison of old and new schedules.

MONITORING SYSTEM:

It would be difficult to develop periodic reports to monitor this program. However, it should result in substantial savings (COLA and non-COLA savings). It is recommended that periodically (once a quarter) internal auditors review the actual results for the schedule revisions to ensure they are in conformance with the current schedules.

PRODUCTIVITY PROGRAM DESCRIPTIONCode: TA 4.5 AY T-WS-01

GENERAL COMMENTS:

A reporting system should be developed which periodically compares the actual route times to the schedules and accrues the savings based on this comparison. The system should also include a comparison of the operator quotas required for the schedule to the actual number of incumbents both in positions and baseline dollars as a cross-check.

* The Surface Division has not submitted a fiscal year estimate.

RAPID TRANSIT DIVISION - APRIL CERTIFICATION

April 20, 1977

A total of 12 programs are presented by the Division for the April certification. Of these 12 programs, 11 were presented in previous monthly certifications. One program, Revise Check Distribution Schedules (S-WM-1) from the Stations Department, is presented for the first time with this certification.

The TA's claimed savings for the April certification were \$716,956. AY's review of the April certification determined that savings applicable to COLA were \$206,024. With the April certification totals, the revised certified savings through March 31, 1977 are a TA claimed total of \$3,459,562, of which AY has calculated \$2,111,684 as applicable to COLA under the established guidelines.

It should also be pointed out that the Overtime Control Program (C-OT-1) from the Car Maintenance Department lacked sufficient tracking information to establish the savings available for COLA for April. However, we were informed that information is being prepared to substantiate the savings claimed and will be presented with the May certification (see detailed program description).

Exhibit I presents the status of all programs presented for certification through March 31, 1977.

P-WM-1b1 Revise Cleaning Cycles Power Department

This program is described in our January 7, 1977 report and was submitted for certification by the TA for the first time in the February certification. It is applicable to COLA.

The TA claimed \$7,590 in savings for this program in their certification and a total of \$57,569 in previously claimed savings through February 28, 1977. The TA calculated savings based on a 50% fringe benefits factor. Adjusting for the 13% factor (see April 4, 1977 report), AY calculated a total of \$5,718 as savings applicable to COLA for April and a total of \$47,362 through March 31, 1977.

P-WM-1b2 Methods Improvements - IND

This program is described in our January 7, 1977 report and was submitted for certification by the TA for the first time in the February certification. It is applicable to COLA.

The TA claimed \$13,333 in savings for this program in their April certification, and a total of \$79,999 in previously claimed savings through February 28, 1977. When the TA's claimed savings are adjusted for the revised fringe benefits factor, a total savings of \$69,603 through March 31, 1977 is calculated by AY as applicable to COLA.

S-WM-1 Reduce Check Distribution Schedules

This program is presented for the first time for certification in this report. It is described in our January 7, 1977 report. (Revised Productivity Program Description Form enclosed.) It is applicable to COLA. The TA's claimed savings for April were \$10,023. AY has reviewed the program and the method of calculating savings and has found the criteria used consistent with EFCB/OSDC criteria.

S-WM-2 Tailor Service - Stations Department

This program is described in our January 7, 1977 report and was presented for certification by the TA for the first time in the December 10, 1976 certification. It is applicable to COLA.

The TA claimed \$43,046 in savings for this program in their April certification, and a total of \$258,934 in previously claimed savings through February 28, 1977. AY has reviewed the previously submitted documentation and has found the claimed savings consistent with previously presented estimates of savings available for COLA.

Total savings through March 31, 1977 are \$301,980.

S-WS-1 Extend Cleaning Cycles - Stations Department

This program is described in our January 7, 1977 report and was presented for certification by the TA for the first time in the December 10, 1977 certification. It is applicable to COLA.

The TA claimed \$59,815 in savings for this program in their April certification, and a total of \$555,435 in previously claimed savings. When the TA's claimed savings are adjusted for the revised fringe benefits factor, a total savings of \$67,591 for the April certification are calculated by AY as applicable to COLA. Total savings through March 31, 1977 as calculated by AY are \$571,521.

S-WS-2 Refine Collection Agent Schedules - Stations Department

This program is described in our January 7, 1977 report and was presented for certification by the TA for the first time in the February certification. It is applicable to COLA.

The TA claimed \$4,022 in savings for this program in their April certification, and a total of \$25,188 in previously claimed savings through February 28, 1977. When the TA's claimed savings are adjusted for the revised fringe benefits factor, a total savings of \$4,545 for the April certification are calculated by AY as applicable to COLA. Total savings through March 31, 1977 as calculated by AY are \$32,903.

S-WS-4 Reduce Manning Token Booths - Stations Department

This program was presented for the first time in the Supplemental Certification. It appears that this program might impact service levels to the public and therefore could result in a possible service reduction. In the February 25, 1977 letter from the Special Deputy Comptroller to the Senior Executive Officer of the TA, the issue is presented and detailed information was requested from the TA to substantiate that the program is not a service reduction.

The TA has provided documentation to corroborate their position that the program meets the criteria for funding COLA. However, until this information is fully reviewed, the claimed estimated savings cannot be established as applicable to COLA.

M-OT-1 Sick Leave - Vacation - Maintenance of Way

This program is described in our January 7, 1977 report and was presented for certification for the first time in the December 10, 1976 certification. It is applicable to COLA.

The TA claimed \$18,860 in savings for this program in their April certification, and a total of \$214,020 in previously claimed savings through February 28, 1977.

AY's review of this program established a total savings through March 31, 1977 of \$232,880.

M-WS-1 Change Tours of Duty -- Maintenance of Way

The program was implemented in January of 1977, and details were presented in the Supplemental Certification.

The program details the revision of tours of duty from the midnight to 8 A.M. tour to a new 10 P.M. to 6 A.M. tour for four gangs. It is claimed that these revisions of tours will provide increased productivity due to the effect of peak volumes, when men are not allowed on the tracks, from 6 A.M. to 8 A.M. However, the information presented in both the Supplemental, March and April certifications does not substantiate or quantify the productivity savings generated by the program, i.e. reduced number of personnel required, more track miles maintained, etc. Therefore, until the savings generated by specific productivity-related items can be documented, we cannot determine the savings applicable to COLA. It should also be pointed out that the rescheduling of tours of duty does not generally affect productivity unless idle time is substituted by productive time or unit output per man-hour is increased because of the new schedules.

The TA's claimed savings for April are \$8,329.

M-WS-2 Schedule Revision Power Division - Maintenance of Way Department

This program is presented for the first time in the March certification. The TA's claimed savings for April were \$9,181, without fringe benefits. AY applied the revised fringe benefits factor of 13% as previously described. With this adjustment, AY calculated savings of \$10,650 for the April certification.

C-OT-1 Overtime Control - Car Maintenance Department

This program was first presented in the February certification. The program is applicable to COLA.

However, as pointed out in our February 28, 1977 report, the TA's present tracking system can only be applied to savings through October 31, 1976. Previous to this certification, only savings through October 31, 1976 were presented. After this date, the tracking system must reflect the effects of excess personnel and reduced car miles on the accumulated savings. Although no detailed analysis of these effects are presented by the TA, we were informed that an analysis is being prepared to substantiate savings after October 31, 1976 and will be submitted with the May certification. Therefore, AY has considered the savings as yet to be established (T.B.E.).

C-WM-9 Electric Motor Rebuild -- Car Maintenance Department

This program was presented in the December 10, 1976 certification and is analyzed in our January 7, 1977 report. It is applicable to COLA. However, the base reference used to calculate savings under the applicable criteria resulted in a \$349,435 difference between the TA calculation and the AY calculation through March 31, 1977 (see April 4, 1977 report).

Based on the information presented, and employing the same criteria previously used, the TA calculation of \$580,057 through March 31, 1977 is reduced to \$230,622 by AY calculations.

PRODUCTIVITY PROGRAM DESCRIPTIONAs of Date: 4/21/77

TITLE: Reduce Number of Pay Locations

Code: TA 1 AY S-WM-1

DIVISION: Rapid Transit

DEPARTMENT: Stations

APPLICABILITY TO COLA: Yes - d

IMPLEMENTATION DATE: 7/6/77

		Cash to 3/31/77	Avg. Monthly Sav.	F/Y 1977 Total
Savings Claimed	TA	\$10,023	\$6,700	\$20,046
Savings Computed	AY	\$10,023	\$6,700	\$20,046

DESCRIPTION:

This program calls for the elimination of several pay locations on payday. The manpower needed to man pay location requirements during payday is presently thirty. This program reduces the requirement to twenty man-days on paydays.

TA TRACKING SYSTEM PROPOSED:

For each monthly certification, the number of paydays in the period will be calculated and the respective savings associated with the reduction of ten man-days will be determined.

AY EVALUATION OF TRACKING SYSTEM:

As these jobs were always covered with overtime, and there exist no excess Board positions, savings are due to savings in overtime. The tracking assumes that there are no excess Board positions. Therefore, the tracking system is adequate for the situation where overtime must be used to cover required jobs such as check distribution. If overtime does not become necessary and Board positions are available to cover the jobs, the savings must be re-computed.

MONITORING SYSTEM PROPOSED BY AY:

Total man-hours of overtime charged for check distribution should be monitored to insure that it does not exceed the twenty man-days.

PRODUCTIVITY PROGRAM ANALYSIS
PROGRAM-BY-PROGRAM BASIS
APRIL CERTIFICATION

Program Number	Surface Program Description	TA AY	Total Certified Savings through Feb. 28, 1977	Revisions to Previous Certifications Based on Updated Data	Revisions Based on Fringe Benefits Calculations	Revised Certified Savings through Feb. 28, 1977	Current Monthly Certification	Total Certified Savings through March 31, 1977	Fiscal Year Estimates Previous	Revisions to Fiscal Year Estimates Based on April Certification	Revisions to Fiscal Year Estimates Based on Fringe Benefits Calculations	Revised Fiscal Year Estimates March 31, 1977
1.1	Super Extra List	TA AY	\$ 605,570 542,431	- 50,159 (1)	- -	\$ 605,570 592,590	\$ 93,927 57,095 (2)	\$ 699,497 649,685	\$1,101,049 879,316	\$ - 60,000	\$ - -	\$1,101,049 939,316
2.2	Spread of Vacations	TA AY	255,283 240,824	- -	- -	255,283 240,824	- -	255,283 240,824	228,000 228,935	- 12,000	- -	228,000 240,935
3.5	Productivity Acceleration	TA AY	425,302 403,662	- -	6,602 -	425,302 410,264	64,508 77,122	489,810 487,386	685,403 695,180	- -	- -	685,403 695,180
4.2	Selective Patching of Runs	TA AY	1,171,849 88,666	- -	- -	1,171,849 88,666	109,338 11,250 (2)	1,281,187 99,916	1,350,000 83,000	- 17,000	- -	1,350,000 100,000
4.4	Annual Employee Vacancies	TA AY	485,403 -	- -	- -	485,403 -	164,041 -	649,444 -	590,000 -	- -	- -	590,000 -
4.5	Work Schedule Revisions	TA AY	- -	- -	- -	- -	105,880 101,928	105,880 101,928	- -	- 350,000	- -	- 350,000
S4	Overrun in Productivity	TA AY	- -	- -	- -	- -	- -	- -	100,976 -	- -	- -	100,976 -
	Subtotal - Surface	TA AY	\$2,943,407 \$1,275,583	\$ - \$50,159	\$ - \$6,602	\$2,943,407 \$1,332,344	\$537,694 \$247,395	\$3,481,101 \$1,579,739	\$4,055,428 \$1,886,431	\$ - \$439,000	\$ - \$ -	\$4,055,428 \$2,325,431

(1) AY figures for previous certification included projections. This adjustment is based on the actuals as reported by the Surface Division and the correction pertaining to minimum wage positions.

(2) The February tracking reports were not available (TA Maintenance, Super Extra List and Patching); thus, an estimate has been used.

(3) The Surface Division has not made a fiscal year estimate for this program.

APRIL CERTIFICATION

Program Number	Rapid Transit Program Description	Total Certified Savings through Feb. 28, 1977	Revisions to Previous Certifications Based on Updated Data	Revisions Based on Fringe Benefits Calculations	Total Certified Savings through Feb. 28, 1977	Current Monthly Certification	Total Certified Savings through March 31, 1977	Fiscal Year Estimates Previous Certification	Revisions to Fiscal Year Estimates Based on April Certification	Revisions to Fiscal Year Estimates Based on Fringe Benefits Calculations	Revised Fiscal Year Estimates March 31, 1977
P-OT-1	Reporting Time Relief Crews	TA AY \$ 1,578 1,578	-	-	\$ 1,578 1,578	NC NC	1,578 1,578	11,400 7,352	-	-	\$ 11,400 7,352
P-AC-1	Control Sick Leave	TA AY 14,135 14,135	-	-	14,135 14,135	NC NC	14,135 14,135	27,000 27,000	-	-	27,000 27,000
P-WM-1b1	Revise Cleaning Cycles	TA AY 57,569 41,644	-	-	57,569 41,644	7,590 5,718	65,159 47,362	118,888 89,562	-	-	118,888 89,562
P-WM-1b2	Methods Improvements - IND	TA AY 79,999 59,359	-	-	79,999 59,559	13,333 10,044	93,332 69,603	133,331 100,691	-	-	133,331 100,691
S-WM-1	Revised Check Distribution	TA AY -	-	-	-	10,023 10,023	10,023 10,023	-	20,046 20,046	-	20,046
S-WM-2	Tailor Service	TA AY 258,934 258,934	-	-	258,934 258,934	43,046 43,046	301,980 301,980	366,755 366,755	-	-	366,755 366,755
S-WS-1	Extend Cleaning Cycles	TA AY 555,435 503,930	-	-	555,435 503,930	59,815 67,591	615,250 571,521	784,000 764,067	-	-	784,000 764,067
S-WS-2	Refine Collection Agent Schedules	TA AY 25,188 28,358	-	-	25,188 28,358	4,022 4,545	29,210 32,903	53,157 45,853	-	-	53,157 45,853
SD	Slug Detection	TA AY -	-	-	-	-	-	1,400,000	-	-	1,400,000
M-OT-1	Sick Leave - Vacation	TA AY 214,020 214,020	-	-	214,020 214,020	18,860 18,860	232,880 232,880	269,536 269,536	-	-	269,536 269,536
M-OT-1a	Excess Personnel to Fill Quota Jobs	TA AY -	-	-	-	-	-	64,000	-	-	64,000
M-OT-3a	Revise W&D Tours of Duty	TA AY SUPERSEDED BY PROGRAM M-OT-4	-	-	-	-	-	-	-	-	-
M-OT-3b	Substations - General Maintenance	TA AY SUPERSEDED BY PROGRAM M-OT-4	-	-	-	-	-	-	-	-	-
M-OT-3c	Emergency Truck	TA AY SUPERSEDED BY PROGRAM M-OT-4	-	-	-	-	-	-	-	-	-
M-OT-3e	Revise W&D Min. Manpower	TA AY SUPERSEDED BY PROGRAM M-OT-4	-	-	-	-	-	-	-	-	-
M-OT-4	Overtime Control	TA AY 8,128 -	-	-	8,128 -	NC NC	8,128 -	48,771	-	-	48,771
M-WM-1a	Increase Relay Repair	TA AY 4,050 4,050	-	-	4,050 4,050	NC NC	4,050 4,050	5,800 5,800	-	-	5,800
M-WM-1b	Electric Welding	TA AY 17,930 17,930	-	-	17,930 17,930	NC NC	17,930 17,930	30,578 30,578	-	-	30,578
M-WM-2	Rubbish Pick-up	TA AY 6,995 T.B.E.	-	-	6,995 T.B.E.	NC NC	6,995 T.B.E.	248,084 180,473	-	-	248,084 180,473
M-WM-3	Tamping - Surfacing	TA AY -	-	-	-	-	-	110,260	-	-	110,260
M-WS-1	Change Tours of Duty	TA AY 8,329 -	-	-	8,329 -	8,329	16,658	49,573	-	-	49,573
M-WS-2	Schedule Revisions - Power Dist.	TA AY 9,181 10,099	-	-	9,181 10,099	9,181 10,650	18,362 20,749	45,905 32,580	-	-	45,905 32,580
S-WS-4	Token Booths	TA AY 39,610 -	-	-	39,610 -	93,842	133,452	571,377	-	-	571,377

PRODUCTIVITY PROGRAM ANALYSIS
PROGRAM-BY-PROGRAM BASIS
APRIL CERTIFICATION

Program Number	Rapid Transit Program Description	Total Certified Savings through Feb. 28, 1977	Revisions to Previous Certifications Based on Updated Data	Revisions Based on Fringe Benefits Calculations	Total Certified Savings through Feb. 28, 1977	Current Monthly Certification T.B.E.	Total Certified Savings through March 31, 1977	Fiscal Year Estimates Previous Certification	Revisions to Fiscal Year Estimates Based on April Certification	Revisions to Fiscal Year Estimates Based on Fringe Benefits Calculations	Revised Fiscal Year Estimates March 31, 1977
C-OT-1	Overtime Control - CMD	TA 556,348 AY 556,348	\$(333,348)	-	\$ 223,000 556,348	\$ 433,323 T.B.E.	\$ 556,323 556,348	\$ 556,348 556,348	\$ 99,975 T.B.E.	-	\$ 656,323 556,348
C-AC-1	Sick Leave - Counseling	TA AY	PROGRAM SUPERSEDED BY C-OT-1								
C-MM-9	Electric Motor Rebuild	TA 564,465 AY 217,194	(22,119)	-	564,465 195,075	15,592 35,547	580,057 230,622	622,280 368,000	-	-	622,280 368,000
C-MM-10	Pre-Existing	TA 654,060 AY -	-	-	654,060 -	-	654,060 -	1,119,000 -	-	-	1,119,000 -
Subtotal - Rapid Transit		TA \$3,075,954 AY \$1,927,779	\$(333,348) \$ (22,119)	\$ - -	\$2,742,606 \$1,905,660	\$716,956 \$206,024	\$3,459,562 \$2,111,684	\$6,636,043 \$2,844,595	\$120,021 \$ 20,046	\$ - -	\$6,756,064 \$2,864,641
Grand Total		TA \$6,019,361 AY \$3,203,362	\$(333,348) \$ 28,040	\$ - \$6,602	\$5,686,013 \$3,238,004	\$1,254,650 \$ 453,419	\$6,940,663 \$3,691,423	\$10,691,471 \$ 4,731,026	\$120,021 \$459,046	\$ - -	\$10,811,492 \$ 5,190,072

NC - Program not certified in April certification, but savings available from previous certifications.
T.B.E. - To be established, if applicable.

ARTHUR YOUNG & COMPANY

277 PARK AVENUE
NEW YORK, N. Y. 10017

April 4, 1977

Mr. Sidney Schwartz
Special Deputy Comptroller
for the City of New York
270 Broadway
New York, New York 10007

Dear Mr. Schwartz:

We have completed our review and analysis of the productivity programs submitted by the TA on February 28, 1977 for the March 1977 certification. The attached report presents our analysis of the programs included in the March certification and updates previously certified programs with actual figures where available.

The March certification contained 19 programs - 5 in Surface and 14 in Rapid. Of the 19 programs contained in the March certification, we have determined that 15 programs, 5 in Surface and 10 in Rapid, meet the criteria established by the EFCB/OSDC. The remaining 4 programs (Program S-WS-4: Reduce Manning of Token Booths; Program M-OT-5: Overtime Program; Program M-WM-2: Rubbish Pick-up; and Program M-WS-1: Change Tours of Duty) do not meet the criteria. They are identified in Exhibit I and discussed in detail in our report.

On the basis of the figures submitted by the TA in the March 1977 certification, the TA has claimed savings of \$1,053,330 for the month of February 1977, and a total of

\$6,019,361 through February 28, 1977. Our review and analysis of these programs show the savings to be \$491,869 for the month of February, and \$3,203,362 through February 28, 1977. The following chart summarizes the savings claimed by the TA and analyzed by AY for the month of February 1977 and the total savings through February 28, 1977. This savings information is presented on a program-by-program basis in Exhibit I of the attached report.

	<u>Total Certified Savings through 1/31/77</u>	<u>Revisions to Previously Certified Savings</u>	<u>Revised Certified through 1/31/77</u>	<u>Current Monthly Certification</u>	<u>Total Certified Savings through 2/28/77</u>
	(a)	(b)	(c)	(d)	(e)
Surface					
TA	\$2,212,183	\$ -	\$2,212,183	\$ 731,224	\$2,943,407
AY	1,032,649	(2,247)	1,030,402	245,181	1,275,583
Rapid					
TA	2,760,446	(6,598)	2,753,848	322,106	3,075,954
AY	1,771,095	(90,004)	1,681,091	246,688	1,927,779
Total					
TA	\$4,972,629	\$(6,598)	\$4,966,031	\$1,053,330	\$6,019,361
AY	\$2,803,744	\$(92,251)	\$2,711,493	\$ 491,869	\$3,203,362

NOTE: Column (a) + Column (b) = Column (c)

Column (c) + Column (d) = Column (e)

Our report includes summary descriptions for each of the programs contained in the March 1977 certification. Detailed Program Description sheets for programs that were submitted for the first time are attached to our report. The detailed Program Description sheets for programs that were reviewed and/or certified prior to the March 1977 certification, are contained in either our January 7, February 28, or March 11, 1977 report, as appropriate.

The criteria used by AY to establish the applicability and trackability of savings claimed by the TA are the same as those used in our analyses of previous certifications and detailed in our reports of January 7, February 28, and March 11, 1977. There were no new issues raised with respect to the criteria used to establish savings in the March certification.

It should be noted that for those programs generating savings through attrition, a change has been made in the fringe benefits factor used by AY to determine savings in fringe benefits payments. In our analyses of the certifications submitted by the TA prior to the March 1977 certification, we applied a 31% factor to the salary savings associated with those employees who have left the TA in order to determine the associated fringe benefits savings. A large portion of the fringe benefits savings is, however, associated with pension payments. Since there is a two-year lag in pension payments in the TA, savings on pension payments relating to an employee who leaves the TA in fiscal 1977 will not be realized on a cash basis until at least fiscal 1979. In the March 30, 1977 letter from the Special Deputy Comptroller to the Senior Executive Officer of the Transit Authority, it was resolved by the OSDC that the portion of fringe benefit savings attributable to pension payments should be subtracted from the fringe benefit savings claimed by the TA in fiscal

1977. Based on data supplied by the TA, it was determined that 21% of the fringe benefits factor is attributable to pension payments. In light of this decision to subtract savings attributable to pension payments, a revised fringe benefits factor of 13% has been applied to those programs submitted in the March certification for which the TA has claimed fringe benefits savings. Further, in Exhibit I of our report we have indicated the revision in fringe benefit savings for all those existing programs that are impacted by the reduction in the fringe benefits factor.

Finally, five programs which were certified to be in the Supplemental Certification were not updated with actual figures in the March certification. This omission was brought to the attention of the Senior Executive Officer of the TA by the Special Deputy Comptroller in his letter of March 30, 1977. The five programs are: Program P-OT-1: Reporting Time Relief Crews; Program P-AC-1: Control Sick Leave; Program C-OT-1: Overtime Control; Program M-OT-1a: Excess Personnel to Quota Jobs; and Program M-WM-3: Tamping.

If you have any questions concerning the information presented in this report, please contact Mr. John R. Nolan at (212) 922-5928 or Mr. Howard Oboler at (212) 922-5004.

Very truly yours,

Arthur Young & Company

SURFACE DIVISION - MARCH 1977 CERTIFICATION

For the March 1977 certification, the Surface Division submitted a package of 5 programs which included \$731,224 for the month of February and a total of \$2,943,407 accumulated through February 28, 1977. After reviewing the submitted package and the supporting documentation, we have verified savings of \$244,758 for the month of February and \$1,275,160 for the total accumulated through February 28, 1977. These figures are presented as Exhibit I.

Based on data supplied by the TA, approximately 91% of the runs eliminated through the Selective Patching of Runs Program do not appear to result from reductions in user demand. Based on present OSDC/EFCEB guidelines, this would appear to constitute a service reduction. The savings associated with that portion of the program, therefore, were not considered applicable at this time for the purposes of funding COLA. Additional analysis of the patched runs will be undertaken to determine whether the resulting savings are applicable to COLA.

Also, it should be recognized that the savings calculated by the TA for the month of February in the Surface Division programs, including Program 3.5 (Acceleration and Standardization of Productivity), include the COLA increase approved for January. The COLA increase should not be included in the savings attributed to Program 3.5 since the positions were eliminated prior to the COLA increase.

There are still concerns with some of the programs. Each program and these concerns are discussed briefly. No new programs were submitted by the Surface Division.

Program 1.1 - Super Extra List

The Super Extra List backup documentation included savings realized by TA Transportation in the months of April, May and June of 1976. These savings have not been included in AY's calculation. In addition, the cost associated with the minimum wage positions, both TA and MaBSTOA Transportation Departments, has been charged against the savings. Within the TA Maintenance Department, there are no minimum wage positions.

The February tracking report for the maintenance Super Extra List was not submitted in time for inclusion in this report. A projection based upon an average of the previous four months' actuals has been used for the AY figures. Savings shown on our February 28, 1977 report have been adjusted based on the difference between our estimate for January and the actual figures for January 1977.

For this program the actual savings through January 31, 1977 are \$425,494; and through February 28, 1977 the projected savings are \$542,431.

The comments in our January 7, 1977 report dealing with the Super Extra List program are unchanged. With respect to the TA Maintenance Department, the Surface Division has agreed to include the 36 relief positions created by Program 3.5 (Acceleration and Standardization of Productivity) on the tracking reports for the maintenance Super Extra List.

An additional 15 relief positions created by Supplemental Programs 1 and 2 (Car Cleaners and Maintenance Helper "B") as of November 28, 1976 have also been included on the tracking reports for the maintenance Super Extra List. The cumulative savings through February 28, 1977 resulting from the application of the Super Extra List program to all these positions are included in the current certification for February 1977.

Program 2.2 - Spread of Vacations

The tracking reports for the months of January 1977 and February 1977 were not completed in time for inclusion with this report. Savings reported are those resulting from application of the program to the Christmas-New Year holiday season. The difference of \$5,458 between the TA certification of \$25,431 and the verified amount of \$19,973 is the result of an error in the TA calculation. The TA expects to correct this error on its April certification. Since savings for this program were only projected for the prime vacation periods, and January 1977 and February 1977 are not considered prime vacation periods, no additional savings for these two months have been accumulated for the current submission.

The comments made in our January 7, 1977 report with respect to this program are still valid.

Program 3.5 - Productivity Acceleration

The savings for this program are based on the reduction of 56 men in the TA Maintenance Department. The monthly savings are calculated as follows:

56 men X (Number work days in month with holidays
estimated) X 8 hours X \$7.0069/hour = Monthly
Savings

The 56 men whose positions were eliminated have been transferred to relief positions. Five of these men have left the system through attrition since the program began. The Surface Division has agreed to track the remaining 51 men with the Super Extra List program. This is to insure that these 51 men are utilized prior to the other Super Extra List men.

The actual savings for this program through February 28, 1977 are \$403,662.

The comments in our January 7, 1977 report with respect to this program are still valid. COLA increases should not change the base pay rate of \$7.0069/hour since the positions were eliminated prior to January 1, 1977. The Surface Division has claimed these increases for the month of February 1977 but will correct this minor error in the April certification.

Program 4.2 - Selective Patching of Runs

It is our understanding that the Selective Patching program has been terminated during February 1977 in accordance with an agreement between the involved unions and the Surface Division. On February 25, 1977 the Surface Division submitted documentation which indicated that 8.71% of the dollar savings claimed for this program resulted from patching runs and extras on "special occasions", e.g., snow storms, school holidays, etc., when the expected demand for service would be reduced. Based on this documentation, a letter dated February 25, 1977 from the Special Deputy Comptroller to the Senior Executive Officer of the TA stated:

"Upon reviewing further documentation from the TA, it appears that over 90 percent of the patching during the period from July 1 through December 31, 1976 (for which savings of \$779,000 have been submitted by the TA)* was random and not directly related to a reduction in user demand for that service."

"We ask that the TA provide data to support the position that patching is not in fact a service reduction. Until such data are provided, that portion of the program involving elimination of runs without a reduction in user demand would appear to be a service reduction and therefore not eligible to fund COLA payments."

* "The FY 1977 value of this program as estimated by Arthur Young in their January 7, 1977 report was \$1.5 million."

On the basis of these criteria, the savings for the Selective Patching of Runs program that are the result of a

management decision on special occasions (9%) appear acceptable. The remaining 91% of the savings are being held in abeyance until such time as the TA provides data supporting their position that selective patching is not a service reduction. As a result, the actual savings from this program through January 31, 1977 are \$82,999; and through February 28, 1977 the actual savings are \$88,666.

In computing the savings attributed to this program, we have not included \$262,918 in savings realized during April, May and June of 1976 from the backup documentation supplied by the Surface Division. The TA has not certified to these savings.

RAPID TRANSIT DIVISION - MARCH CERTIFICATION

MARCH 30, 1977

A total of 14 programs are presented by the Division for the March certification. Of these 14 programs, 9 were presented in previous monthly certifications, 3 were presented in the Supplemental Certification and 2 are submitted for the first time in the March certification. A total of 10 programs are applicable for COLA and 4 fail to meet COLA criteria as defined.

The status of the 14 programs presented is the following:

. Programs applicable to COLA:

Power Department

Revise Cleaning Cycles
Methods Improvements - IND

Stations Department

Tailor Service
Extend Cleaning Cycles
Refine Collection Agent Schedules

Maintenance of Way Department

Sick Leave - Vacations
Increase Relay Repair
Electric Welding
Schedule Revisions - Power Distribution
(New Program)

Car Maintenance Department

Electric Motor Rebuild

. Programs not applicable to COLA at the present time (See program by program analysis):

Stations Department

Token Booths

Maintenance of Way Department

Overtime Control (New Program)
Rubbish Pick-up
Change Tours of Duty

The TA's claimed savings for the March certification was \$332,106. AY's review of the March certification determined that savings applicable to COLA were \$246,688. With these March totals, the revised certified savings through February 28, 1977 are a TA claimed total of \$3,075,954, of which AY has calculated \$1,927,779 as applicable to COLA under the established guidelines.

It should be noted that the revised fringe benefits factor of 13% has been used and previous calculations adjusted to reflect this revision whenever applicable.

Exhibit I presents the status of all programs presented for certification through February 28, 1977.

P-W-1b1 Revise Cleaning Cycles Power Department

This program is described in our January 7, 1977 report and was submitted for certification by the TA for the first time in the February certification. It is applicable to COLA.

The TA claimed \$31,832 in savings for this program in their March certification, and a total of \$25,737 in previously claimed savings through January 31, 1977. In our February 28, 1977 report, AY determined the TA savings for this program to be \$34,799 through January 31, 1977. The difference is due to the information presented in the Supplemental Certification, which was not used by the TA to update the March submission. Previous certifications, therefore, are revised by \$9,062. When this adjustment is made and the revised fringe benefits calculation is used, AY calculated a total of \$18,301 as savings applicable to COLA.

P-WM-1b2 Methods Improvements - IND

This program is described in our January 7, 1977 report and was submitted for certification by the TA for the first time in the February certification. It is applicable to COLA.

The TA claimed \$35,334 in savings for this program in their March certification, and a total of \$44,665 in previously claimed savings through January 31, 1977. AY computed savings of \$39,007 through January 31, 1977 and presented this analysis in the February 28, 1977 report. When the TA's claimed savings are adjusted for the revised fringe benefits factor, a total savings of \$59,559 through February 28, 1977 is calculated by AY as applicable to COLA.

S-WM-2 Tailor Service - Stations Department

This program is described in our January 7, 1977 report and was presented for certification by the TA for the first time in the December 10, 1976 certification. It is applicable to COLA.

The TA claimed \$56,001 in savings for this program in their March certification, and a total of \$202,933 in previously claimed savings through January 31, 1977. AY has reviewed the previously submitted documentation and has found the claimed savings consistent with previously presented estimates of savings available for COLA.

S-WS-1 Extend Cleaning Cycles - Stations Department

This program is described in our January 7, 1977 report and was presented for certification by the TA for the first time in the December 10, 1977 certification. It is applicable to COLA.

The TA claimed \$52,041 in savings for this program in their March certification, and a total of \$503,394 in previously claimed savings. AY computed savings of \$517,838 through January 31, 1977 as presented in our February 28, 1977 report. When the TA's claimed savings are adjusted for the revised fringe benefits factor, a total savings of \$57,245 for the March certification are calculated by AY as applicable to COLA. Total savings through February 28, 1977 as calculated by AY are \$503,930.

S-WS-2 Refine Collection Agent Schedules - Stations Department

This program is described in our January 7, 1977 report and was presented for certification by the TA for the first time in the February certification. It is applicable to COLA.

The TA claimed \$3,499 in savings for this program in their March certification, and a total of \$21,689 in previously claimed savings through January 31, 1977. AY computed savings of \$28,413 through January 31, 1977 as presented in our February 28, 1977 report. When the TA's claimed savings are adjusted for the revised fringe benefits factor, a total savings of \$3,849 for the March certification are calculated by AY as applicable to COLA. Total savings through February 28, 1977 as calculated by AY are \$28,358.

S-WS-4 Reduce Manning Token Booths - Stations Department

This program was presented for the first time in the Supplemental Certification. It appears that this program might impact service levels to the public and therefore could result in a possible service reduction. In the February 25, 1977 letter from the Special Deputy Comptroller to the Senior Executive Officer of the TA, the issue is presented and detailed information was requested from the TA

to substantiate that the program is not a service reduction. This information had not been made available to AY at the time our report on the March certification was prepared. Unless the TA can provide documentation to corroborate the fact that the program meets the criteria for funding COLA, the claimed estimated savings cannot be verified as applicable to COLA.

M-OT-1 Sick Leave - Vacation - Maintenance of Way

This program is described in our January 7, 1977 report and was presented for certification for the first time in the December 10, 1976 certification. It is applicable to COLA.

The TA claimed \$29,142 in savings for this program in their March certification, and a total of \$184,878 in previously claimed savings through January 31, 1977. In our February 28, 1977 report, AY determined the TA savings to be \$180,251 through January 31, 1977. This difference is due to the information presented in the Supplemental Certification which was not used to update the March submission. Previous certifications, therefore, are revised by \$4,627.

With this adjustment, AY calculated a total savings for the March certification of \$29,142 and a total savings through February 28, 1977 of \$214,020.

M-OT-4 Overtime Program - Maintenance of Way

This program combines four programs that were presented for certification in the February submission:

. Revise V&D Tours	M-OT-3a
. Substations - General Maintenance	M-OT-3b
. Emergency Truck	M-OT-3c
. Revise V&D Min. Manpower	M-OT-3e

TA's claimed savings submitted with their certification for March was \$8,128.

No detailed documentation was presented in the March certification to describe the programs or define the tracking system. AY was therefore not able to determine the savings applicable to COLA. Department personnel informed us that documentation is now being developed and will be presented with the April certification.

M-WM-1a Increase Relay Repair - Maintenance of Way

This program is described in our January 7, 1977 report and was presented for certification for the first time in the February certification. It is applicable to COLA.

The TA claimed \$1,298 in savings for this program in their March certification and a total of \$2,752 in previously claimed savings through January 31, 1977. In our February 28, 1977 report, AY determined the TA savings for this program to be \$4,300 through January 31, 1977. The difference is due to the information presented in the Supplemental Certification which was not used by the TA to update the March submission. Previous certifications, therefore, are revised by \$1,548. In light of this adjustment, AY calculated a total savings for the March certification of \$1,298 and a total savings through February 28, 1977 of \$4,050.

M-WM-1b Electric Welding - Maintenance of Way

This program is described in our January 7, 1977 report and was presented for certification for the first time in the February certification. It is applicable to COLA.

The TA claimed \$2,202 in savings for this program in their March certification and a total of \$15,728 in previously claimed savings through January 31, 1977. AY has reviewed the previously submitted documentation and has found the claimed savings consistent with previously presented estimates of savings available for COLA.

M-WM-2 Reduce Cost Rubbish Pick-up - Maintenance of Way

This program is described in our January 7, 1977 report. A detailed presentation of the program is included in the Supplemental Certification. The program is presented for the first time for monthly certification with the March submission. TA claimed a savings of \$6,995 for March COLA.

During our March 25 meeting with Department personnel, we were informed that the calculation was based on cubic yards of rubbish removed. This approach was followed in the original program presentation. However, the new method of removal compacts the rubbish and therefore cubic yards of rubbish removed cannot be used as a criterion for measuring productivity for this program. The Department is now in the process of developing a more representative method of tracking the savings generated by the program. AY therefore cannot track this program at the present time and will re-analyze the program in the future.

M-WS-1 Change Tours of Duty - Maintenance of Way

This program is described in our January 7, 1977 report. At the time of the November 24, 1976 cut-off date for receiving information for our January 7, 1977 report, the program was scheduled to be implemented in the future. It was agreed that at the time of its implementation,

detailed data on the savings generated would be presented. The program was implemented in January of 1977, and details were presented in the Supplemental Certification.

The program details the revision of tours of duty from the midnight to 8 A.M. tour to a new 10 P.M. to 6 A.M. tour for four gangs. It is claimed that these revisions of tours will provide increased productivity due to the effect of peak volumes, when men are not allowed on the tracks, from 6 A.M. to 8 A.M. However, the information presented in both the Supplemental and the March certifications does not substantiate or quantify the productivity savings generated by the program, i.e. reduced number of personnel required, more track miles maintained, etc. Therefore, until the savings generated by specific productivity-related items can be documented, we cannot determine the savings applicable to COLA. It should also be pointed out that the rescheduling of tours of duty does not generally affect productivity unless idle time is substituted by productive time or unit output per man-hour is increased because of the new schedules.

The TA's claimed savings for March are \$8,329.

M-WS-2 Schedule Revision Power Division - Maintenance
of Way Department

This program is presented for the first time in the March certification. (See enclosed Productivity Program Summary Form.) The TA's claimed savings for March were \$9,181, without fringe benefits. AY applied the revised fringe benefits factor of 13% as previously described. With this adjustment, AY calculated \$10,099.

C-WM-9 Electric Motor Rebuild - Car Maintenance Department

This program was presented in the December 10, 1976 certification and is analyzed in our January 7, 1977 report. It is applicable to COLA. However, the base reference used to calculate savings under the applicable criteria resulted in a \$346,000 difference between the TA calculation through January 31, 1977 (\$526,000) and the AY calculation through January 31, 1977 (\$180,000). The March certification is an update of the estimated totals through February 28, 1977. Based on the information presented, and using the same criteria previously used, the TA calculation of \$564,000 through February 28, 1977 is reduced to \$217,000 by AY calculations.

PRODUCTIVITY PROGRAM DESCRIPTION

As of Date: 3/30/77

TITLE: Schedule Revisions Power Distribution Code: TA MN 16 AY M-WS-2

DIVISION: Rapid Transit

DEPARTMENT: Maintenance of Way

APPLICABILITY TO COLA: Yes - a & d Implementation Date January 29, 1977

		Cash to 2/28/77	Avg. Monthly Sav.	F/Y 1977 Total
Savings Claimed	TA	\$9,181	\$9,181	\$36,724
Savings Computed	AY	\$10,099	\$10,099	\$40,396

DESCRIPTION:

This program calls for the introduction of new schedules for the Power Distribution Division, which will mean a reduction of four of 34 teams consisting of one Power Distribution Maintainer and one Helper Maintainer. The reduction of the eight positions will be possible, while maintaining the same level of service.

TA TRACKING SYSTEM PROPOSED:

The effect of the reduction of the eight positions was calculated on a monthly basis using scheduled work hours and regular pay rates for the positions.

Monthly average incumbents are tracked versus quotas to insure that the total number of incumbents for Power Distribution Maintainers and Circuit Breaker Maintainers (positions covered by the 30 teams) does not exceed the 305 quota.

AY EVALUATION OF TRACKING SYSTEM:

Based on the information presented, tracking system should adequately track dollar savings associated with the program.

MONITORING SYSTEM PROPOSED BY AY:

Number of incumbents assigned to Power Distribution Maintainers and Circuit Breaker Maintainers positions should be monitored to insure that budgeted quotas are not exceeded by verifying totals on Daily Incumbents Report. Quality of maintenance should be reviewed periodically with Department personnel to insure that service levels are maintained. Number of failures or breakdowns in switching mechanisms should be reviewed periodically as an index of maintenance.

PRODUCTIVITY PROGRAM ANALYSIS
PROGRAM-BY-PROGRAM BASIS
MARCH CERTIFICATION

Program Number	Surface Program Description	Jan. 31, 1977	Revisions to Previous Certifications Based on Updated Data	Revisions Based on Fringe Benefits Calculations	Revised Certified Savings through Jan. 31, 1977	Current Monthly Fringe Certification	Total Certified Savings through Feb. 28, 1977	Fiscal Year Estimates Previous Certification	Revisions to Fiscal Year Estimates Based on March Certification	Revisions to Fiscal Year Estimates Based on Fringe Benefits Calculations	Revised Fiscal Year Estimates Feb. 28, 1977
1.1	Super Extra List	TA 436,973 AY 288,656 AY (Trans.) 136,838 (Maint.)	\$ - - (2,247)(1)	\$ - - -	\$ 436,973 288,656 134,591	\$168,597 20,038 99,146 (2) }	\$ 605,570 542,431	\$1,101,049 (4) 879,316 (4)	\$ - -	\$ - -	\$1,101,049 879,316
2.2	Spread of Vacations	TA 229,852 AY 220,851	-	-	229,852 220,851	25,431 19,973	255,283 240,824	228,000 228,935	-	-	228,000 228,935
3.5	Productivity Acceleration	TA 299,250 AY 303,305	-	-	299,250 303,305	126,052 100,357	425,302 403,662	685,403 (5) 695,180 (5)	-	-	685,403 695,180
4.2	Selective Patching of Runs	TA 833,027 AY 82,999	-	-	833,027 82,999	338,822 5,667 (3)	1,171,849 88,666	1,350,000 83,000	-	-	1,350,000 83,000
4.4	Annual Employee	TA 413,081 AY -	-	-	413,081 -	72,322	485,403	590,000	-	-	590,000
S4	Overrun in Productivity	TA - AY -	-	-	-	-	-	100,976	-	-	100,976
	Subtotal - Surface	TA \$2,212,183 AY \$1,032,649	\$ - \$(2,247)	\$ - -	\$2,212,183 \$1,030,402	\$731,224 \$245,181	\$2,943,407 \$1,275,583	\$4,055,428 \$1,886,431	\$ - -	\$ - -	\$4,055,428 \$1,886,431

- (1) AY figures for previous certification included projections. These adjustments are based on the actuals as reported by the Surface Division.
- (2) The February tracking report was not available. Therefore, an estimate has been used for the OA Maintenance Department of \$24,077 of AY total figures.
- (3) AY figures for Selective Patching, Program 4.2, have been revised based on the February 25, 1977, letter from the Special Deputy Comptroller to the Senior Executive Officer of the TA.
- (4) Figures include totals for Program S3 reported on the Supplemental Certification.
- (5) Figures include totals for Programs S1 and S2 reported on the Supplemental Certification.

PRODUCTIVITY PROGRAM ANALYSIS
PROGRAM-BY-PROGRAM BASIS
MARCH CERTIFICATION

Program Number	Rapid Transit Program Description	Total Certified Savings through Jan. 31, 1977	Revisions to Previous Certifications Based on Updated Data	Revisions Based on Fringe Benefits Calculations	Revised Certified Savings through Jan. 31, 1977	Current Monthly Certification	Total Certified Savings through Feb. 28, 1977	Fiscal Year Estimates Previous Certification	Revisions to Fiscal Year Estimates Based on March Certification	Revisions to Fiscal Year Estimates Based on Fringe Benefits Calculations	Revised Fiscal Year Estimates Feb. 28, 1977
C-OT-1	Overtime Control - CMD	TA \$ 556,348 AY 556,348	\$ -	\$ -	\$ 556,348	NC	\$ 556,348	\$ 556,348	\$ -	\$ -	\$ 556,348
C-AC-1	Sick Leave - Counseling	TA AY	PROGRAM SUPERSEDED BY C-OT-1								
C-WM-9	Electric Motor Rebuild	TA 525,771 AY 179,597	180	-	525,951 179,597	38,514 37,597	564,465 217,194	622,280 368,000	-	-	622,280 368,000
C-WM-10	Pre-Existing	TA 654,060 AY -	-	-	654,060	NC NC	654,060	1,119,000	-	-	1,119,000
	Subtotal - Rapid Transit	TA \$2,760,446 AY \$1,771,095	\$(6,598) \$(5,411)	\$ - \$(84,593)	\$2,753,848 \$1,681,091	\$ 322,106 \$ 246,688	\$3,075,954 \$1,927,779	\$ 6,590,138 \$ 3,000,083	\$45,905 \$32,580	\$ - \$(188,068)	\$6,636,043 \$2,844,595
	Grand Total	TA \$4,972,629 AY \$2,803,744	\$(6,598) \$(7,658)	\$ - \$(84,593)	\$4,966,031 \$2,711,493	\$1,053,330 \$ 491,869	\$6,019,361 \$3,203,362	\$10,645,566 \$ 4,886,514	\$45,905 \$32,580	\$ - \$(188,068)	\$10,691,471 \$ 4,731,026)

NC - Program not certified in March certification, but savings available from previous certifications.
T.B.E. - To be established, if applicable.

PRODUCTIVITY PROGRAM ANALYSIS
PROGRAM-BY-PROGRAM BASIS
MARCH CERTIFICATION

Program Number	Rapid Transit Program Description	Total Certified Savings through Jan. 31, 1977		Revisions to Previous Certifications Based on Updated Data		Revisions Based on Fringe Benefits Calculations		Revised Certified Savings through Jan. 31, 1977		Current Monthly Certification		Total Certified Savings through Feb. 28, 1977		Fiscal Year Estimates Previous Certification		Revisions to Fiscal Year Estimates Based on March Certification		Revisions to Fiscal Year Estimates Based on Fringe Benefits Calculations		Revised Fiscal Year Estimates Feb. 28, 1977	
		TA	AY	\$		\$		\$		NC	NC	\$		\$		\$		\$		\$	
P-OT-1	Reporting Time Relief Crews	TA	AY	1,578	1,578	-	-	1,578	1,578	NC	NC	1,578	1,578	11,400	7,352	-	-	-	-	11,400	7,352
P-AL-1	Control Sick Leave	TA	AY	14,135	14,135	-	-	14,135	14,135	NC	NC	14,135	14,135	27,000	27,000	-	-	-	-	27,000	27,000
P-WM-1b1	Revise Cleaning Cycles	TA	AY	34,799	30,391	(9,062)	(7,914)	25,737	18,301	31,832	23,343	57,569	41,644	118,888	103,829	-	-	(14,267)	-	118,888	89,562
P-WM-1b2	Methods Improvements - IND	TA	AY	44,665	39,007	-	-	44,665	33,647	35,334	25,912	79,999	59,559	133,331	116,730	-	-	(16,039)	-	133,331	100,691
S-WM-2	Tailor Service	TA	AY	203,463	203,463	(530)	(530)	202,933	202,933	56,001	56,001	258,934	258,934	366,755	366,755	-	-	-	-	366,755	366,755
S-WS-1	Extend Cleaning Cycles	TA	AY	503,613	517,838	(219)	-	503,394	446,685	52,041	57,245	555,435	503,930	784,000	885,777	-	-	(121,710)	-	784,000	764,067
S-WS-2	Refine Collection Agent Schedules	TA	AY	21,689	28,413	-	-	21,689	24,509	3,499	3,849	25,188	28,358	53,157	53,157	-	-	(7,304)	-	53,157	45,853
S-WS-4	Token Booths	TA	AY	-	-	-	-	-	-	-	-	39,610	39,610	571,377	-	-	-	-	-	571,377	-
SD	Slug Detection	TA	AY	-	-	-	-	-	-	-	-	-	-	1,400,000	-	-	-	-	-	1,400,000	-
M-OT-1	Sick leave - Vacation	TA	AY	180,251	180,251	4,627	4,627	184,878	184,878	29,142	29,142	214,020	214,020	269,536	269,536	-	-	-	-	269,536	269,536
M-OT-1a	Excess Personnel to Fill Quota Jobs	TA	AY	-	-	-	-	-	-	-	-	-	-	64,000	-	-	-	-	-	64,000	-
M-OT-3a	Revise V&D Tours of Duty	TA	AY	SUPERSEDED BY PROGRAM M-OT-4																	
M-OT-3b	Substations - General Maintenance	TA	AY	SUPERSEDED BY PROGRAM M-OT-4																	
M-OT-3c	Emergency Truck	TA	AY	SUPERSEDED BY PROGRAM M-OT-4																	
M-OT-3e	Revise V&D Min. Manpower	TA	AY	SUPERSEDED BY PROGRAM M-OT-4																	
M-OT-4	Overtime Control	TA	AY	-	-	-	-	-	-	8,128	8,128	8,128	8,128	48,771	-	-	-	-	-	48,771	-
M-WM-1a	Increase Relay Repair	TA	AY	4,300	4,300	(1,548)	(1,548)	2,752	2,752	1,298	1,298	4,050	4,050	5,800	5,800	-	-	-	-	5,800	5,800
M-WM-1b	Electric Welding	TA	AY	15,774	15,774	(46)	(46)	15,728	15,728	2,202	2,202	17,930	17,930	30,578	30,578	-	-	-	-	30,578	30,578
M-WM-2	Rubbish Pick-up	TA	AY	-	-	-	-	-	-	6,995	T.B.E.	6,995	T.B.E.	248,084	209,221	-	-	(28,748)	-	248,084	180,473
M-WM-3	Tamping - Surfacing	TA	AY	-	-	-	-	-	-	-	-	-	-	110,260	-	-	-	-	-	110,260	-
M-WS-1	Change Tours of Duty	TA	AY	-	-	-	-	-	-	8,329	8,329	8,329	8,329	49,573	-	-	-	-	-	49,573	-
M-WS-2	Schedule Revisions - Power Dist.	TA	AY	-	-	-	-	-	-	9,181	10,099	9,181	10,099	-	-	45,905	32,580	-	-	45,905	32,580

ARTHUR YOUNG & COMPANY

277 PARK AVENUE
NEW YORK, N. Y. 10017

March 18, 1977

Mr. Sidney Schwartz
Special Deputy Comptroller
for the City of New York
270 Broadway
New York, New York 10007

Dear Mr. Schwartz:

This letter summarizes the results of our analysis of the Supplemental Certification, dated February 15, 1977 and the February certification submitted by the Transit Authority to comply with EFCB resolutions. In order to establish the estimated fiscal year savings as of February 28, 1977 we analyzed the net effect of both certifications on the fiscal year estimates utilizing all available information.

Exhibit I summarizes on a program-by-program basis the fiscal year estimates for all programs certified through February 28, 1977. A total of 33 programs are presented--9 from the Surface Division and 24 from the Rapid Transit Division. The TA claimed a total fiscal year estimated savings for these programs of \$10,646,000. AY's review has established that \$4,887,000 of the \$10,646,000 meet all of the criteria established for programs applicable to COLA. The following chart is a summary of the estimated savings claimed by the TA and the respective figures developed by AY from our analysis.

	<u>Fiscal Year Estimates Dec. 10, 1976 Certification</u>	<u>Revisions Based on Supplemental Certification</u>	<u>Revisions Based on February Certification</u>	<u>Fiscal Year Estimates Feb. 28, 1977</u>
Surface				
TA	\$3,520,000	\$ 427,428	\$ 108,000	\$ 4,055,428
AY	3,021,363	326,752	(1,461,684)	1,886,431
Rapid				
TA	3,282,000	3,531,858	(223,720)	6,590,138
AY	1,786,777	1,217,354	(4,048)	3,000,083
TOTAL				
TA	\$6,802,000	\$3,959,286	\$ (115,720)	\$10,645,566
AY	\$4,808,140	\$1,544,106	\$(1,465,732)	\$ 4,886,514

The criteria used to establish the applicability and trackability of the savings claimed are the same as those used and detailed in our January 7, 1977 report (December 10, 1976 Certification analysis), our February 28, 1977 report (February Certification analysis) and our March 11, 1977 report (Supplemental Certification analysis).

If you have any questions concerning the information presented in this report, please contact Mr. John R. Nolan at (212) 922-5928 or Mr. Howard Oboler at (212) 922-5004.

Very truly yours,

Arthur Young & Company

Exhibit I
p. 1 of 3

Program Number	Surface Program Description		Fiscal Year Estimates Dec. 10, 1976 Certification	Revisions Based on Supplemental Certification	Revisions Based on February Certification	Fiscal Year Estimates Feb. 28, 1977
1.1	Super Extra List	TA AY	\$ 852,000 826,567	\$ - -	\$ 108,000 (86,073)	\$ 960,000 740,494
2.2	Vacation Spread	TA AY	228,000 228,935	- -	- -	228,000 228,935
3.5	Acceleration and Standardization	TA AY	500,000 507,250	- -	- -	500,000 507,250
4.2	Selective Patching	TA AY	1,350,000 1,458,611	- -	- (1,375,611)	1,350,000 83,000
4.4	Annual Vacancies	TA AY	590,000 -	- -	- -	590,000 -
S1	Reduction of Car Cleaners	TA AY	- -	110,175 111,947	- -	110,175 111,947
S2	Reduction of Maintenance Helper "B"	TA AY	- -	75,228 75,983	- -	75,228 75,983
S3	Super Extra List - Additional	TA AY	- -	141,049 138,822	- -	141,049 138,822
S4	Overrun in Productivity	TA AY	- -	100,976 -	- -	100,976 -
	Total Surface	TA AY	\$3,520,000 \$3,021,363	\$427,428 \$326,752	\$ 108,000 \$(1,461,684)	\$4,055,428 \$1,886,431

PRODUCTIVITY PROGRAM ANALYSIS
PROGRAM-BY-PROGRAM BASIS
FISCAL YEAR ESTIMATES
THROUGH 28 FEBRUARY, 1977

Program Number	Rapid Transit Program Description	Fiscal Year Estimates Dec. 10, 1976 Certification		Revisions Based on Supplemental Certification		Revisions Based on February Certification		Fiscal Year Estimates Feb. 28, 1977	
		\$		\$		\$			
P-OT-1	Reporting Time Relief Crews	TA	-	11,400	-	(4,048)	-	11,400	-
		AY	-	11,400	-		-	7,352	-
P-AC-1	Control Sick Leave	TA	-	27,000	-	-	-	27,000	-
		AY	-	27,000	-	-	-	27,000	-
P-WM-1b1	Revise Cleaning and Inspections	TA	-	118,888	-	-	-	118,888	-
		AY	-	103,829	-	-	-	103,829	-
P-WM-1b2	Methods Improvements - IND	TA	-	133,331	-	-	-	133,331	-
		AY	-	116,730	-	-	-	116,730	-
S-WM-2	Tailor Service	TA	297,000	69,755	-	-	-	366,755	-
		AY	297,000	69,755	-	-	-	366,755	-
S-WS-1	Extend Cleaning Cycles	TA	784,000	NA	-	-	-	784,000	-
		AY	885,777	NA	-	-	-	885,777	-
S-WS-2	Refine Collection Agents Schedules	TA	-	53,157	-	-	-	53,157	-
		AY	-	53,157	-	-	-	53,157	-
S-WS-4	Token Booths	TA	-	571,377	-	-	-	571,377	-
		AY	-	-	-	-	-	-	-
M-OT-1	Sick Leave - Vacation	TA	236,000	33,536	-	-	-	269,536	-
		AY	236,000	33,536	-	-	-	269,536	-
M-OT-1a	Excess Personnel to Fill Quota Jobs	TA	-	64,000	-	-	-	64,000	-
		AY	-	-	-	-	-	-	-
M-OT-3a	Revise V&D Tours of Duty	TA	-	2,000	-	-	-	2,000	-
		AY	-	-	-	-	-	-	-
M-OT-3b	Substations - General Maintenance	TA	-	26,437	-	-	-	26,437	-
		AY	-	-	-	-	-	-	-
M-OT-3c	Emergency Truck	TA	-	17,834	-	-	-	17,834	-
		AY	-	-	-	-	-	-	-
M-OT-3e	Revise V&D Min. Manpower	TA	-	2,500	-	-	-	2,500	-
		AY	-	-	-	-	-	-	-

PRODUCTIVITY PROGRAM ANALYSIS
PROGRAM-BY-PROGRAM BASIS
FISCAL YEAR ESTIMATES
THROUGH 28 FEBRUARY, 1977

Program Number	Rapid Transit Program Description		Fiscal Year Estimates Dec. 10, 1976 Certification		Revisions Based on Supplemental Certification		Revisions Based on February Certification		Fiscal Year Estimates Feb. 28, 1977	
			TA	AY	\$		\$		\$	
M-WM-1a	Increase Relay Repair		TA	-	\$ -	5,800	-	-	\$ 5,800	
			AY	-		5,800	-	-	5,800	
M-WM-1b	Electric Welding		TA	-		30,578	-	-	30,578	
			AY	-		30,578	-	-	30,578	
M-WM-2	Rubbish Pick-up		TA	-		248,084	-	-	248,084	
			AY	-		209,221	-	-	209,221	
M-WM-3	Tamping - Surfacing		TA	-		110,260	-	-	110,260	
			AY	-		-	-	-	-	
M-WS-1	Change Tours of Duty		TA	-		49,573	-	-	49,573	
			AY	-		-	-	-	-	
C-OT-1	Overtime Control - CMD		TA	-		556,348	-	-	556,348	
			AY	-		556,348	-	-	556,348	
C-AC-1	Sick Leave Counseling		TA	167,000		NA	(167,000) (1)		-	
			AY	-		NA	-		-	
C-WM-9	Electric Motor Rebuild		TA	679,000		NA	(56,720)		622,280	
			AY	368,000		NA	-		368,000	
C-WM-10	Pre-Existing		TA	1,119,000		NA	-		1,119,000	
			AY	-		NA	-		-	
SD	Slug Detection		TA	-		1,400,000	-		1,400,000	
			AY	-		-	-		-	
Total - Rapid Transit			TA		\$3,282,000	\$3,531,858	\$ (223,720)		\$ 6,590,138	
			AY		\$1,786,777	\$1,217,354	\$ (4,048)		\$ 3,000,083	
Grand Total - Surface & Rapid			TA		\$6,802,000	\$3,959,286	\$ (115,720)		\$10,645,566	
			AY		\$4,808,140	\$1,544,106	\$ (1,465,732)		\$ 4,886,514	

NA = Not applied to Supplemental Certification.

(1) Program superseded by Overtime Control - CMD (C-OT-1).

Productivity

ARTHUR YOUNG & COMPANY

277 PARK AVENUE
NEW YORK, N. Y. 10017

March 11, 1977

Mr. Sidney Schwartz
Special Deputy Comptroller
for the City of New York
270 Broadway
New York, New York 10007

Dear Mr. Schwartz:

We have completed our review and analysis of the 24 productivity programs submitted by the TA on February 15, 1977 for Supplemental Certification. The Supplemental Certification was submitted by the Transit Authority to comply with the EFCB Resolution of February 7, 1977. The resolution requested that the TA update those programs which it proposed to utilize to offset the approximately \$4.0 million savings shortfall in Fiscal Year 1977 that was identified in your report to the EFCB dated January 28, 1977. The attached report is our analysis of the Supplemental Certification.

It should be noted that the Supplemental Certification is used to update fiscal year estimates presented in the December 10, 1976 certification and does not contain any other information from subsequent certifications. Only the information presented in the Supplemental Certification is considered in this report.

The Supplemental Certification contained 24 programs - 4 in Surface and 20 in Rapid. We have determined that 14 of these programs - 3 in Surface and 11 in Rapid, meet the criteria established by the EFCB/OSDC for funding COLA. The

remaining 10 programs do not meet the established criteria. The 24 programs contained in the Supplemental Certification are discussed in detail in our report and have been identified in Exhibit I.

Based on the figures submitted in the Supplemental Certification, the TA has claimed an additional \$3,959,000 fiscal year savings. AY's review has established that \$1,544,000 of the \$3,959,000 meet all of the criteria established for programs applicable to COLA. The following chart is a summary of the estimated savings claimed by the TA and the respective figures developed by AY from our analysis of the Supplemental Certification.

	<u>Fiscal Year Estimates Dec. 10, 1976 Certification</u>	<u>Revisions Based on Supplemental Certification</u>	<u>Revised Fiscal Year Estimates Dec. 10, 1976 Certification</u>	<u>New Programs Fiscal Year Estimates</u>	<u>Revised from Supplemental Certification</u>
	(a)	(b)	(c)	(d)	(e)
Surface					
TA	\$3,520,000	\$ -	\$3,520,000	\$ 427,428	\$ 427,428
AY	3,021,363	-	3,021,363	326,752	326,752
Rapid					
TA	3,282,000	103,291	3,385,291	3,428,567	3,531,858
AY	1,786,777	103,291	1,890,068	1,114,063	1,217,354
Total					
TA	6,802,000	103,291	6,905,291	3,855,995	3,959,286
AY	4,808,140	103,291	4,911,431	1,440,815	1,544,106

NOTE: Column (a) + Column (b) = Column (c)
 Column (b) + Column (d) = Column (e)

The criteria used to establish the applicability and trackability of the savings claimed are the same as those used in the previous certification and detailed in our report dated January 7, 1977. However, the question was raised as to whether two programs included in the Supplemental Certification, Slug Detection and Reduced Manning of Token Booths, met the EFCB's COLA guidelines.

These two programs were reviewed and it was resolved that:

- . The Slug Detection program involves additional revenues generated by Transit Police who are not TWU/ATU members. The January 28, 1977 report by the OSDC to the Emergency Financial Control Board states that "the guidelines of the EFCB resolution require that TWU and ATU members accrue their own productivity savings to offset their COLA payments." Consequently, the savings generated by the Slug Detection program may not be used to pay COLA to TWU/ATU employees. Further, it was noted that there may be other considerations related to possible service reductions and revenue savings vs. productivity savings which could impede the applicability of the program for payment of COLA.
- . The Reduced Manning of Token Booths Program in the Station Department appears to constitute a service reduction, since the closing of booths may result in an increased inconvenience to rapid transit patrons. This program would therefore appear to violate the "no service reduction" criterion of the EFCB resolution on TA productivity.

The attached report includes summary descriptions of each of the programs contained in the Supplemental Certification. Program Description Sheets have been developed for programs that were submitted for the first time. These sheets are attached to this report. The Program Description Sheets for programs that were previously submitted and reviewed are contained in our report dated January 7, 1977.

It should be noted that we have considered savings in fringe benefits payments as part of total productivity savings for Rapid Transit Division programs in which savings are claimed through attrition. Based on data supplied by the Rapid Transit Division, we have applied a 31% factor to the salary savings in order to determine the associated fringe benefits savings associated with those employees who have left the TA.

To date, the Surface Division has not claimed savings for fringe benefits associated with employees who have left the TA. The Surface Division has therefore not submitted fringe benefits documentation which AY could, in turn, apply to a fringe benefits factor that would be consistent with the 31% fringe benefits factor we developed and applied to appropriate Rapid Division programs. In view of insufficient fringe benefits information for the Surface Division, and the fact that the Surface Division has not claimed fringe benefits savings, we have not included any fringe benefits savings for Surface Division programs covered in the Supplemental Certification. We will investigate this area when the Surface Division certifies to these savings.

If you have any questions concerning the information presented in this report, please contact Mr. John R. Nolan at 922-5928 or Mr. Howard Oboler at 922-5004.

Very truly yours,

Arthur Young & Company

Attachment

INTRODUCTION

This report covers our review of the programs included in the Supplemental Certification submitted by the Transit Authority to comply with the EFCB Resolution of February 7, 1977. The EFCB resolution requested that the TA submit a Supplemental Certification covering those programs which it proposed to utilize to offset the approximately \$4.0 million savings shortfall in Fiscal Year 1977 that was identified by the SDC in his January 28, 1977 report to the EFCB.

The objective of our review was to analyze the programs included in the Supplemental Certification and verify the productivity savings claimed by the TA in accordance with the guidelines of the EFCB for the payment of COLA increases to TA employees. It should be noted that our verification of the data provided by the TA applies only to actual figures submitted. We cannot verify estimated figures, but will indicate whether we found the methodology used to develop the estimates to be reasonable and consistent with the established criteria for calculating productivity savings.

The Supplemental Certification contained 24 programs - 4 in Surface and 20 in Rapid Transit. Based on information submitted by the TA we have determined that 14 of these programs - 3 in Surface and 11 in Rapid - met the criteria established by the EFCB/OSDC for funding COLA. The remaining 10 programs do not meet the established criteria. All 24 programs are discussed in detail in this report and have been identified in Exhibit I.

Our report includes summary descriptions of each of the programs contained in the Supplemental Certification. Program Description sheets have been developed for programs that were submitted for the first time. These sheets are included in this report at the conclusion of our discussion of the Surface Division programs and Rapid Transit Division programs, as appropriate. The Program Description Sheets for programs that were previously submitted and reviewed are contained in our report dated January 7, 1977.

It should be noted that for the Rapid Transit Division, we have considered savings in fringe benefits payments as part of total productivity savings for those programs in which savings are claimed through attrition. Based on data supplied by the Rapid Transit Division, we have applied a 31% factor to the salary savings in order to determine the fringe benefits savings associated with those employees who have left the TA. While the Supplemental Certification included the attrition of personnel in both the Surface and Rapid Divisions, the Surface Division did not claim savings for the fringe benefits associated with the attrition of personnel. To date, the Surface Division has not claimed savings for fringe benefits associated with employees who have left the TA. The Surface Division has therefore not submitted fringe benefits documentation which AY could, in turn, use to develop a fringe benefits factor that would be consistent with the 31% fringe benefits factor which we applied to appropriate Rapid Division programs. In view of the insufficient fringe benefits information for the Surface Division, and the fact that the Surface Division has not claimed fringe benefits savings, we have not included any fringe benefits savings for Surface Division programs covered in the Supplemental Certification. We will investigate this area when the Surface Division certifies to these savings.

SURFACE DIVISION - SUPPLEMENTAL CERTIFICATION

FEBRUARY 15, 1977

The Surface Division has submitted four programs, all of which are presented for the first time in the Supplemental Certification. AY has found three applicable to COLA. One program (Overrun in Productivity Savings to December 31, 1976) does not meet criteria for acceptance because it deals only with adjustments to the Surface Division's previous submissions. Since AY's figures are continually updated based upon the Surface Division's monthly tracking reports, the overrun in Productivity Savings is not a program but merely an adjustment by the Surface Division to their previous figures. For the four programs the TA claims an estimated fiscal year savings of \$427,428. AY's review established a fiscal year estimate of \$327,000 for the Supplemental Certification.

The Supplemental Certification covers the attrition of personnel from the Surface Division. This is the first time the attrition of personnel has been certified for COLA savings by the Surface Division. While no savings were claimed for the fringe benefits associated with these individuals, we understand that fringe benefit savings will probably be claimed by the Surface Division in a subsequent certification. As a result, we have not included any fringe benefits savings for these programs, but will investigate this area when the Surface Division certifies to these savings.

Each of the four programs submitted is individually discussed on a separate program sheet. Supplemental Program 1 (Reduction of Car Cleaners) and Supplemental Program 2 (Reduction of Maintenance Helper "B") will be tracked as

part of Program 3.5 (Acceleration and Standardization of Productivity). Supplemental Program 3 (Super Extra List - Additional Men from Supplemental Programs 1 and 2) will be tracked as part of Program 1.1 (Super Extra List - Maintenance).

PRODUCTIVITY PROGRAM DESCRIPTIONAs of Date: 2/25/77
Supplemental

TITLE: Reduction of Car Cleaners

Code: TA 1 AY S1

DIVISION: Surface

DEPARTMENT: Maintenance

APPLICABILITY TO COLA: Yes - b IMPLEMENTATION DATE: 11/28/76 and 3/6/77

		Cash Projected for 6/30/77	Average Monthly Savings
Savings Projected	TA	110,175	17,509
Savings Projected	AY	111,947	17,509

DESCRIPTION:

This program was developed as a result of an agreement between the hourly Unions and management to increase the number of buses to be cleaned each tour by each car cleaner. As a result, there was a reduction of 13 car cleaners on the picks effective November 28, 1976, for the Brooklyn and Manhattan Divisions, and there will be a reduction of four car cleaners on the picks effective March 6, 1977, for the Queens and Staten Island Divisions. Eight of the individuals holding these positions have left the TA, and the nine will be transferred to the Super Extra List.

TA TRACKING SYSTEMS PROPOSED:

The proposed tracking system for accruing the savings from this program is based on reduced manpower (17 positions). Nine of these men have been transferred as of March 9, 1977 to the Super Extra List. This reduced manpower constitutes the program base reference point.

EVALUATION OF TRACKING SYSTEM:

This tracking system is adequate, provided that the nine individuals transferred to the Super Extra List are tracked on that system.

DOCUMENTATION SUBMITTED:

- . Program Description
- . Picks for November 28, 1976 in the Brooklyn and Manhattan Divisions
- . Picks for March 6, 1977 in the Queens and Staten Island Divisions

PRODUCTIVITY PROGRAM DESCRIPTIONCode: TA 2 AY S2

MONITORING SYSTEM:

The monitoring system should verify that the 12 individuals are being assigned relief work. Also, periodic audits should be conducted to ensure that the new standards are being followed.

GENERAL COMMENTS:

This is a productivity improvement program. The savings should be certified, provided that there is not a reduction in the work accomplished (quality and quantity). The formula for computing the savings in a given period is:

$$\text{Number of men} \times \text{Number of work hours in period} \times \$6.29/\text{hr.} = \text{Savings}$$

The slight difference in the Savings Projected through 6/30/77 is caused by an adjustment to the figure used for "Number of work hours in period." The TA used a monthly figure for work hours in period, while AY used a weekly figure since the savings are based on weekly totals.

First presented for certification: Supplemental Certification

PRODUCTIVITY PROGRAM DESCRIPTIONAs of Date: 2/25/77TITLE: Reduction of Maintenance
Helper "B"Supplemental
Code: TA 2 AY S2

DIVISION: Surface

DEPARTMENT: Maintenance

APPLICABILITY TO COLA: Yes - b IMPLEMENTATION DATE: 11/28/76 and
3/6/77

	Cash Projected for 6/30/77	Average Monthly Savings
Savings Projected TA	75,228	13,083
Savings Projected AY	75,983	13,083

DESCRIPTION:

This program involves a new method of fueling and revenue collection. Instead of gearing to a peak operation for a short period, the department has spread the work over a longer period of time through the ability to pool buses. As a result, the manpower requirements were reduced by seven helpers in the Brooklyn and Manhattan Divisions on the picks effective November 28, 1976, and will be reduced by five helpers on the picks effective March 6, 1977, for the Queens and Staten Island Divisions. These helpers have been transferred to the Super Extra List effective March 6, 1977.

TA TRACKING SYSTEM PROPOSED:

The proposed tracking system for accruing the savings from this program is based on the reduced manpower (12 positions). This reduced manpower constitutes the program base reference points.

EVALUATION OF TRACKING SYSTEM:

This tracking system is adequate, provided that the 12 individuals transferred to the Super Extra List are tracked on that system.

DOCUMENTATION SUBMITTED:

- . Program Description
- . Picks for November 28, 1976 in the Brooklyn and Manhattan Divisions
- . Picks for March 6, 1977 in the Queens and Staten Island Divisions

PRODUCTIVITY PROGRAM DESCRIPTIONSupplemental
Code: TA 1 AY S1

MONITORING SYSTEM:

The monitoring system should verify that the nine individuals still within the system are being assigned relief work. Also, periodic audits should be conducted to ensure that the new standards are being followed.

GENERAL COMMENTS:

This is a productivity improvement program. The savings should be certified, provided there is not a reduction in the work accomplished (quality and quantity). The formula for computing the savings in a given period is:

$$\text{Number of men} \times \text{Number of work hours in period} \times \$5.942 = \text{Savings}$$

The slight difference in the Savings Projected through 6/30/77 is caused by an adjustment to the figure used for "Number of work hours in period." The TA used a monthly figure for work hours in period, while AY used a weekly figure since the savings are based on weekly totals.

First presented for certification: Supplemental Certification

PRODUCTIVITY PROGRAM DESCRIPTIONAs of Date: 2/25/77

TITLE: Super Extra List - Additional Men
from Supplemental Programs 1 & 2

Code: TA 3 AY S3

DIVISION: Surface

DEPARTMENT: Maintenance

APPLICABILITY TO COLA: Yes - c IMPLEMENTATION DATE: 1/28/76 and 3/6/77

	Cash Projected for 6/30/77	Average Monthly Savings
Savings Projected TA	141,049	11,754
Savings Projected AY	138,822	11,569

DESCRIPTION:

This program is an addition to Program 1.1 described in the January 7, 1977 report. Essentially, this program involves transferring the individuals eliminated by Supplemental Programs 1 and 2 to the Maintenance Super Extra List.

TA TRACKING SYSTEM PROPOSED:

The proposed tracking system is the one currently used for Program 1.1 in the January 7, 1977 report. These individuals would be added to the Super Extra List.

EVALUATION OF THE TRACKING SYSTEM:

The tracking system is adequate.

DOCUMENTATION SUBMITTED:

. Program Description

MONITORING SYSTEM:

The monitoring system is fully discussed in the January 7, 1977 report. With respect to these additions to the Super Extra List, the monitoring system should ensure that these individuals are assigned work tasks prior to assigning this work to incumbents from the Super Extra List. The reasoning behind assigning these people first is that credit has been given for transferring them from the regular work force through the institution of Supplemental Programs 1 and 2. By assigning them relief work on a priority basis, they will not become a cost to the system (minimum wage position on the Super Extra List).

PRODUCTIVITY PROGRAM DESCRIPTION

Supplemental
Code: TA 3 AY S3

GENERAL COMMENTS:

Since this program is an expansion of an existing program, our previous comments concerning the Super Extra List are still valid and applicable. The variance in the savings is due to an error in the TA's computation of work-week used.

First presented for certification: Supplemental Certification

PRODUCTIVITY PROGRAM DESCRIPTIONAs of Date: 2/25/77TITLE: Overrun in Productivity Savings
to December 31, 1976Supplemental
Code: TA 4 AY S4

DIVISION: Surface

DEPARTMENT: All

APPLICABILITY TO COLA: No

IMPLEMENTATION DATE: Adjustments through
2/25/77

		Cash Projected for 6/30/77	Average Monthly Savings
Savings Projected	TA	100,976	--
Savings Projected	AY	--	--

DESCRIPTION:

This is not a separate productivity program but an adjustment to previous projections based on the actual program results of the 4 programs submitted in the December 10, 1977 certification. These totals have already been incorporated in AY fiscal year estimates presented in the February 1977 certification.

First presented for certification: Supplemental Certification

RAPID TRANSIT DIVISION - SUPPLEMENTAL CERTIFICATION

FEBRUARY 15, 1977

A total of 20 programs are presented by the Division for the Supplemental Certification. Of these 20 programs, 2 were presented in the December 10, 1976 certification and are applicable to COLA. 9 of the remaining 18 programs are applicable to COLA and 9 fail to meet COLA criteria.

The status of the 20 programs presented is the following:

. Programs applicable to COLA:

Reporting Time - Relief Crews - Power Department
Control Sick Leave - Power Department
Revise Cleaning & Inspections - Power Department
Methods Improvements - IND - Power Department
Tailor Service - Stations Department
Refine Collection Agents Schedules - Stations Department
Sick Leave - Vacation - Maintenance of Way
Reduce Cost of Relay Repair - Maintenance of Way
Electric Welding - Maintenance of Way
Overtime Control - Car Maintenance
Reduce Cost - Rubbish Pick-up - Maintenance of Way

. Programs not applicable to COLA at the present time:

Reduce Manning Token Booths
Change Tours of Duty - Maintenance of Way
Tamping - Surfacing - Maintenance of Way
Slug Detection
Excess Personnel to Fill Quotas - Maintenance of Way
Reduce OT Emergency Truck - Maintenance of Way
Revise V&D Min. Manpower - Maintenance of Way
Subst. General Maintenance Gangs - Maintenance of Way
Revise V&D Tours of Duty - Maintenance of Way

The TA revised fiscal year estimated savings, based on the 20 programs, are \$3,531,858. AY's review established a total fiscal year estimated savings, based on the 11 programs presented in the Supplemental Certification which are applicable to COLA, of \$1,217,354.

S-WM-2 Tailor Service - Stations Department

This program is described in our January 7, 1977 report and updated figures are provided in the Supplemental Certification. Based on the information presented, previous fiscal year estimates are revised upward by \$69,755. The TA's estimated savings for the 1976-1977 fiscal year are revised from \$297,000 to \$366,755. AY has reviewed the TA's calculations and has found the methodology used to develop the estimates to be reasonable and consistent with the established criteria for calculating productivity savings.

M-OT-1 Sick Leave - Vacation - Maintenance of Way

This program is described in our January 7, 1977 report. It is applicable to COLA. The TA's estimated savings for the 1976-1977 fiscal year are revised upward by \$33,536 to \$270,000. AY has reviewed the TA's calculations and has found the methodology used to develop the revised estimates to be reasonable and consistent with the established criteria for calculating productivity savings.

P-OT-1 Reporting Time - Relief Crews - Power Department

This program is discussed in our January 7, 1977 report. It is presented for the first time for certification in this submission. It is applicable to COLA. The TA's estimated savings for the 1976-1977 fiscal year are \$11,400. AY has reviewed the TA's calculations and has found the methodology used to develop the estimates to be reasonable and consistent with the established criteria for calculating productivity savings.

P-AC-1 Control Sick Leave - Power Department

This program is presented in our January 7, 1977 report. It is presented for the first time for certifi-

cation in this submission. It is applicable to COLA. The TA's estimated savings for the 1976-1977 fiscal year are \$27,000. AY has reviewed the TA's calculations and has found the methodology used to develop the estimates to be reasonable and consistent with the established criteria for calculating productivity savings.

P-WM-1b1 Revise Cleaning and Inspections - Power Department

This program is described in our January 7, 1977 report. The savings claimed are applicable to COLA. The TA's estimated savings for the 1976-1977 fiscal year are \$118,888, applying a 50% fringe benefits factor. AY applied a 31% fringe benefits factor, which adjusted the fiscal year savings to \$103,829. (For a detailed discussion of fringe benefits factors used by AY, refer to our report dated February 28, 1977.) AY has reviewed the TA's calculations and, after adjusting for the 31% fringe benefits factor, has found the methodology used to develop the estimates to be reasonable and consistent with the established criteria for calculating productivity savings.

P-WM-1b2 Methods Improvements - Substations - Power Department

This program is described in our January 7, 1977 report. The savings are applicable to COLA. The TA's estimated savings for the 1976-1977 fiscal year are \$133,330, applying a 50% fringe benefits factor. AY applied a 31% fringe benefits factor, which adjusted the fiscal year savings to \$116,730. (For a detailed discussion of fringe benefits factors used by AY, refer to our report dated February 28, 1977.) AY has reviewed the TA's calculations and, after adjusting for the 31% fringe benefits factor, has found the methodology used to develop the estimates to be reasonable and consistent with the established criteria for calculating productivity savings.

S-WS-2 Refine Collection Agent Schedules - Stations Department

This program is described in our January 7, 1977 report. It is applicable to COLA. The TA's estimated savings for the 1976-1977 fiscal year are \$53,157. AY has reviewed the TA's calculations and has found the methodology used to develop the estimates to be reasonable and consistent with the established criteria for calculating productivity savings.

M-WM-1a Increase Relay Repair -- Maintenance of Way

This program is described in our January 7, 1977 report. It is applicable to COLA. The TA's estimated savings for the 1976-1977 fiscal year are \$5,800. AY has reviewed the TA's calculations and has found the methodology used to develop the estimates to be reasonable and consistent with the established criteria for calculating productivity savings.

M-WM-1b Electric Welding - Maintenance of Way

This program is described in our January 7, 1977 report. It is applicable to COLA. The TA's estimated saving for the 1976-1977 fiscal year are \$30,578. AY has reviewed the TA's calculations and has found the methodology used to develop the estimates to be reasonable and consistent with the established criteria for calculating productivity savings.

C-OT-1 Overtime Control Car Maintenance Department

This program was presented for the first time in the February certification. It is applicable to COLA. (See Productivity Program Description form in February certification.) The TA's claimed savings of \$556,349 for the 1976-1977 fiscal year through October 31, 1976, is presented in

the Supplemental Certification. AY verified a total savings of \$556,349 through October 31, 1976.

However, it should be pointed out that the savings presented are actual figures through October 31, 1976, and not fiscal year estimates. These savings could be substantially increased or reduced, based on actuals for the remaining eight months.

S-WS-4 Reduce Manning Token Booths - Stations Department

This program is presented for the first time in the Supplemental Certification. It appears that this program might impact service levels to the public and therefore could result in a possible service reduction. In the February 25, 1977 letter from the Special Deputy Comptroller to the Senior Executive Officer of the TA, the issue is presented and detailed information was requested from the TA to substantiate that the program is not a service reduction. Unless the TA can provide documentation to corroborate the fact that the program meets the criteria for funding COLA, the claimed estimated savings cannot be verified as applicable to COLA.

M-WM-2 Reduce Cost of Rubbish Pick-up - Maintenance of Way

This program is described in our January 7, 1977 report. At the time of the November 24, 1976 cut-off date for receiving information for our January 7, 1977 report, the program was scheduled to be implemented in the future. It was agreed that at the time of its implementation, detailed data on the savings generated would be presented. The program was implemented in January of 1977, and detailed calculations are presented in the Supplemental Certification. The savings are applicable to COLA.

The TA's estimated saving for the 1976-1977 fiscal year is \$248,084, applying a 55% fringe benefits factor. AY

applied a 31% fringe benefits factor, which adjusted the fiscal year savings to \$209,221. (For a detailed discussion of fringe benefits factors used by AY, refer to our report dated February 28, 1977.)

AY has reviewed the TA's calculations and has found, after adjusting for the 31% fringe benefits factor, the methodology used to develop the estimates to be reasonable and consistent with the established criteria for calculating productivity savings.

M-WS-1 Change Tours of Duty - Maintenance of Way

This program is described in our January 7, 1977 report. At the time of the November 24, 1976 cut-off date for receiving information for our January 7, 1977 report, the program was scheduled to be implemented in the future. It was agreed that at the time of its implementation, detailed data on the savings generated would be presented. The program was implemented in January of 1977, and details are presented in the Supplemental Certification.

The program details the revision of tours of duty from the midnight to 8 A.M. tour to a new 10 P.M. to 6 A.M. tour for four gangs. It is claimed that these revisions of tours will provide increased productivity due to the effects of peak volumes on the tracks from 6 A.M. to 8 A.M. However, the information presented in the Supplemental Certification does not substantiate or quantify the productivity savings due to the program, i.e. reduced number of personnel required, more track miles maintained, etc. Therefore, until the savings generated by specific productivity-related items can be documented, we cannot verify the savings applicable to COLA. It should also be pointed out that the rescheduling of tours of duty does not generally affect productivity unless idle time is substituted by productive time or unit output per man-hour is increased because of the new schedules.

The TA's estimated savings for the 1976-1977 fiscal year is \$49,573. AY cannot verify any savings to date until specific documentation is presented on the savings attributable to specific productivity items.

M-OT-1a Excess Personnel to Fill Quota Vancancies - Maintenance of Way

This program is described in our January 7, 1977 report. A revised description of the program is presented in the Supplemental Certification. At the time of the November 24, 1976 cut-off date for receiving information for our January 7, 1977 report, the program was scheduled to be implemented in the future. It was agreed that at the time of its implementation, detailed data on the savings generated would be presented. The Supplemental Certification does not present data on the tracking of the program and detailed calculations on estimated savings. Therefore, AY was not able to present an estimated savings.

It is our understanding that the program is to be resubmitted in the future as part of an expanded approach to overtime productivity savings.

TA claimed estimated fiscal year savings: \$64,000

M-WM-3 Tamping Surfacing - Maintenance of Way

This program is presented for the first time in the Supplemental Certification. (See Productivity Program Summary form attached to this report.) It is to be implemented in March and is applicable to COLA.

The program is expected to reduce personnel by a total of 28 and improve the level of maintenance performed. The information presented in the Supplemental Certification details the potential savings for the program and the expected improved level of service. However, since the

program has not been implemented, it will be necessary for the TA to demonstrate that the 26 Trackmen and 2 Foremen will be removed from the Tamping operation and placed in quota jobs or attrited from the system when the program is implemented.

The TA's estimated savings for the 1976-1977 fiscal year is \$110,860. Because no actual savings have been recorded and because of the importance of establishing the status of the excess personnel generated by the program, AY is not able to verify the claimed savings at this time.

M-OT-3e Revise V & D Minimum Manpower - Maintenance of Way

This program is described in our January 7, 1977 report. A revised description of the program is presented in the Supplemental Certification. At the time of the November 24, 1976 cut-off date for receiving information for our January 7, 1977 report, the program was scheduled to be implemented in the future. It was agreed that at the time of its implementation, detailed data on the savings generated would be presented. The Supplemental Certification does not present data on the tracking of the program and detailed calculations on estimated savings. Therefore, AY was not able to present an estimated savings.

It is our understanding that the program is to be resubmitted in the future as part of an expanded approach to overtime productivity savings.

TA claimed estimated fiscal year savings: \$2,500

M-OT-3c Reduce OT - Emergency Truck - Maintenance of Way

This program is described in our January 7, 1977 report. A revised description of the program is presented in the Supplemental Certification. At the time of the

November 24, 1976 cut-off date for receiving information for our January 7, 1977 report, the program was scheduled to be implemented in the future. It was agreed that at the time of its implementation, detailed data on the savings generated would be presented. The Supplemental Certification does not present data on the tracking of the program and detailed calculations on estimated savings. Therefore, AY was not able to present an estimated savings.

It is our understanding that the program is to be resubmitted in the future as part of an expanded approach to overtime productivity savings.

TA claimed estimated fiscal year savings: \$17,834

M-OT-3b Substations - General Maintenance Gang - Maintenance of Way

This program is described in our January 7, 1977 report. A revised description of the program is presented in the Supplemental Certification. At the time of the November 24, 1976 cut-off date for receiving information for our January 7, 1977 report, the program was scheduled to be implemented in the future. It was agreed that at the time of its implementation, detailed data on the savings generated would be presented. The Supplemental Certification does not present data on the tracking of the program and detailed calculations on estimated savings. Therefore, AY was not able to present an estimated savings.

It is our understanding that the program is to be resubmitted in the future as part of an expanded approach to overtime productivity savings.

TA claimed estimated fiscal year savings: \$26,437

M-OT-3a Revise V & D Tours of Duty - Maintenance of Way

This program is described in our January 7, 1977 report. A revised description of the program is presented in the Supplemental Certification. At the time of the November 24, 1976 cut-off date for receiving information for our January 7, 1977 report, the program was scheduled to be implemented in the future. It was agreed that at the time of its implementation, detailed data on the savings generated would be presented. The Supplemental Certification does not present data on the tracking of the program and detailed calculations on estimated savings. Therefore, AY was not able to present an estimated savings.

It is our understanding that the program is to be resubmitted in the future as part of an expanded approach to overtime productivity savings.

TA claimed estimated fiscal year savings: \$2,000

SD Slug Detection Program

This program is presented for the first time in the Supplemental Certification. (See enclosed Productivity Program Summary Form.)

The Slug Detection program involves additional revenues generated by Transit Police who are not TWU/ATU members. The January 28, 1977 report by the OSDC to the Emergency Financial Control Board states that "the guidelines of the EFCB resolution require that TWU and ATU members accrue their own productivity savings to offset their COLA payments." Consequently, the savings generated by the Slug Detection program may not be used to pay COLA to TWU/ATU employees. Further, it was noted that there may be other considerations related to possible service reductions and revenue savings vs. productivity savings which could impede the applicability

of the program for payment of COLA.

TA claimed estimated fiscal year savings: \$1,400,000

PRODUCTIVITY PROGRAM DESCRIPTIONAs of Date: 2/15/77

TITLE: Reduce Manning of Token Booths

Code: TA - AY S-WS-4

DIVISION: Rapid Transit

DEPARTMENT: Stations

APPLICABILITY TO COLA: T.B.E. IMPLEMENTATION DATE: 4/12/77

		Cash Projected for 6/30/77	Average Monthly Savings
Savings Projected	TA	571,377	T.B.E.
Savings Projected	AY	T.B.E.	T.B.E.

DESCRIPTION:

This program calls for the closing of selective token booths based on the following criteria:

- . At multiple booth stations, the night tour of one of the booths would be eliminated. There would remain at least one other booth open at that station during the night tour.
- . At multiple booth stations, a booth for any tour of duty in which it handled less than 1,500 passengers during that tour. There was, of course, another booth at that station remaining open during that tour.

It has not been determined whether these criteria are "service reductions" under the EFCB guidelines.

TA TRACKING SYSTEM PROPOSED:

Savings for the remainder of the fiscal year are computed by determining the exact date of each tour of duty which is eliminated and multiplying the number of manhours remaining in fiscal year, from that date, by \$6.12. (A night differential rate is included where necessary.)

PRODUCTIVITY PROGRAM DESCRIPTION

Code: TA - AY S-WS-4

AY EVALUATION OF TRACKING SYSTEM:

The status of all personnel eliminated by the program must be verified before accrued savings can be accumulated. The information presented does provide for adequate tracking of the programs.

MONITORING SYSTEM PROPOSED BY AY:

To be established based on the detailed tracking system presented by the TA.

Program certified to for the first time: Supplemental Certification

PRODUCTIVITY PROGRAM DESCRIPTIONAs of Date: 2/15/77

TITLE: Tamping Surfacing

Code: TA 19 AY M-WM-3

DIVISION: Rapid Transit

DEPARTMENT: Maintenance of Way

APPLICABILITY TO COLA: Yes - b IMPLEMENTATION DATE: March, 1977

		Cash Projected for 6/30/77	Average Monthly Savings
Savings Projected	TA	\$110,260	\$27,565
Savings Projected	AY	T.B.E.	T.B.E.

DESCRIPTION:

This program calls for the introduction of a new Tamper with automatic features that allows for a total of 334,000 feet of tamping per year with a significant reduction in personnel.

TA TRACKING SYSTEM PROPOSED:

When the program is implemented, the status of the excess personnel and their impact on the savings claimed will be documented to substantiate the claimed savings.

AY EVALUATION OF TRACKING SYSTEM:

The tracking of actual savings should be evaluated when the program is implemented to establish estimated fiscal year savings.

MONITORING SYSTEM PROPOSED BY AY:

After the program is implemented, the total number of incumbents in Trackmen and Firemen positions should be monitored to insure that personnel made excess by this program are being employed in quota positions or attrited from the system. Also, the total number of feet tamped should be monitored periodically to insure that productivity is maintained at 334,000 feet per year.

DOCUMENTATION SUBMITTED:

- . Program description
- . Savings estimates calculation

PRODUCTIVITY PROGRAM DESCRIPTIONAs of Date: 2/15/77

TITLE: Slug Detection Program

Code: TA - AY SD

DIVISION: Rapid Transit

DEPARTMENT: Maintenance of Way, TA Police, Revenue Dept.

APPLICABILITY TO COLA: T.B.E. IMPLEMENTATION DATE: October, 1975

		Cash Projected for 6/30/77	Average Monthly Savings
Savings Projected	TA	\$1,400,000	T.B.E.
Savings Projected	AY	T.B.E.	T.B.E.

DESCRIPTION:

Revenues saved from the reduction of the use of slugs is claimed as a productivity savings.

TA PROPOSED TRACKING SYSTEM:

The revenue impact of this program is measured by comparing slug usage in October 1975 to October 1976.

AY EVALUATION OF TRACKING SYSTEM:

Until the factors that relate to productivity have been defined and the specific productivity related items quantified, an analysis of the tracking system is not possible.

However, it should also be pointed out that the \$1,400,000 savings is calculated based on the difference in slug usage for the month of October 1975 versus October 1976. It was also pointed out that October 1975 was a peak month for slug use. Therefore, it will be important to establish that the \$1,400,000 is a reasonable tracking of fiscal year savings and not an extrapolation based on a peak period.

PRODUCTIVITY PROGRAM ANALYSIS
PROGRAM-BY-PROGRAM BASIS
SUPPLEMENTAL CERTIFICATION
OF 15 FEBRUARY, 1977

Program Number	Surface Program Description		Fiscal Year Estimates Dec. 10, 1976 Certification	Revisions Based on Supplemental Certification	Revised Fiscal Year Estimates Dec. 10, 1976 Certification	New Programs Fiscal Year Estimates	Total Revised from Supplemental Certification
			TA AY	- -	\$ 852,000 826,567	\$ -	\$ -
1.1	Super Extra List						
2.2	Vacation Spread	TA AY	228,000 228,935	- -	228,000 228,935	- -	- -
3.5	Acceleration and Standardization	TA AY	500,000 507,250	- -	500,000 507,250	- -	- -
4.2	Selective Patching	TA AY	1,350,000 1,458,611	- -	1,350,000 1,458,611	- -	- -
4.4	Annual Vacancies	TA AY	590,000 -	- -	590,000 -	- -	- -
Subtotal - Previous Programs			TA AY	- -	\$3,520,000 \$3,021,363	\$ -	\$ -
S1	Reduction of Car Cleaners	TA AY	- -	- -	- -	110,175 111,947	110,175 111,947
S2	Reduction of Maintenance Helper "B"	TA AY	- -	- -	- -	75,226 75,983	75,228 75,983
S3	Super Extra List - Additional	TA AY	- -	- -	- -	141,049 138,822	141,049 138,822
S4	Overrun in Productivity	TA AY	- -	- -	- -	100,976 -	100,976 -
Subtotal - New Programs			TA AY	- -	\$ \$ -	\$427,428 \$326,752	\$427,428 \$326,752
Total Surface			TA AY	- -	\$3,520,000 \$3,021,363	\$427,428 \$326,752	\$427,428 \$326,752

PRODUCTIVITY PROGRAM ANALYSIS
PROGRAM-BY-PROGRAM BASIS
SUPPLEMENTAL CERTIFICATION
OF 15 FEBRUARY, 1977

Program Number	Rapid Transit Program Description	Fiscal Year		Revisions		Revised		New Programs		Total	
		Estimates	Dec. 10, 1976	Based on	Supplemental	Estimates	Dec. 10, 1976	Fiscal Year	Estimates	Revised from	Supplemental
			Certification	Certification	Certification		Certification			Certification	Certification
S-WM-2	Tailor Service	TA	\$ 297,000	\$ 69,755		\$ 366,755		\$ -	-	\$ 69,755	
		AY	297,000	69,755		366,755		-	-	69,755	
S-WS-1	Extend Cleaning Cycles	TA	784,000	NA		784,000		-	-	NA	
		AY	885,777	NA		885,777		-	-	NA	
C-AC-1	Sick Leave Counseling	TA	167,000	NA		167,000		-	-	NA	
		AY	-	NA		-		-	-	NA	
M-OT-1	Sick Leave - Vacation	TA	236,000	33,536		269,536		-	-	33,536	
		AY	236,000	33,536		269,536		-	-	33,536	
C-WM-9	Electric Motor Rebuild	TA	679,000	NA		679,000		-	-	NA	
		AY	368,000	NA		368,000		-	-	NA	
C-WM-10	Pre-Existing	TA	1,119,000	NA		1,119,000		-	-	NA	
		AY	-	NA		-		-	-	NA	
Subtotal - Previous Programs		TA	\$3,282,000	\$103,291		\$3,385,291		\$ -	-	\$103,291	
		AY	\$1,786,777	\$103,291		\$1,890,068		\$ -	-	\$103,291	
P-OT-1	Reporting Time Relief Crews	TA	-	-		-		11,400	11,400		
		AY	-	-		-		11,400	11,400		
P-AC-1	Control Sick Leave	TA	-	-		-		27,000	27,000		
		AY	-	-		-		27,000	27,000		
P-WM-1b1	Revise Cleaning and Inspections	TA	-	-		-		118,888	118,888		
		AY	-	-		-		103,829	103,829		
P-WM-1b2	Methods Improvements - IND	TA	-	-		-		133,331	133,331		
		AY	-	-		-		116,730	116,730		
S-WS-2	Refine Collection Agents Schedules	TA	-	-		-		53,157	53,157		
		AY	-	-		-		53,157	53,157		
M-WM-1a	Increase Relay Repair	TA	-	-		-		5,800	5,800		
		AY	-	-		-		5,800	5,800		
M-WM-1b	Electric Welding	TA	-	-		-		30,578	30,578		
		AY	-	-		-		30,578	30,578		

PRODUCTIVITY PROGRAM ANALYSIS
PROGRAM-BY-PROGRAM BASIS
SUPPLEMENTAL CERTIFICATION
OF 15 FEBRUARY, 1977

Program Number	Rapid Transit Program Description	Fiscal Year		Revisions		Revised		New Programs	Total
		Estimates Dec. 10, 1976 Certification	Based on Supplemental Certification	Estimates Dec. 10, 1976 Certification	Estimates Dec. 10, 1976 Certification	Estimates Dec. 10, 1976 Certification	Estimates Dec. 10, 1976 Certification		
C-OT-1	Overtime Control - CMD	TA AY	\$ -	\$ -	-	\$ -	\$ 556,348	\$ 556,348	\$ 556,348
S-WS-4	Token Booths	TA AY	-	-	-	-	556,348	556,348	556,348
M-WM-2	Rubbish Pick-up	TA AY	-	-	-	-	571,377	571,377	571,377
M-WS-1	Change Tours of Duty	TA AY	-	-	-	-	248,084	248,084	248,084
M-OT-1a	Excess Personnel to Fill Quota Jobs	TA AY	-	-	-	-	209,221	209,221	209,221
M-OT-3e	Revise V&D Min. Manpower	TA AY	-	-	-	-	49,573	49,573	49,573
M-WM-3	Tamping - Surfacing	TA AY	-	-	-	-	-	-	-
M-OT-3c	Emergency Truck	TA AY	-	-	-	-	64,000	64,000	64,000
M-OT-3b	Substations - General Maintenance	TA AY	-	-	-	-	2,500	2,500	2,500
M-OT-3a	Revise V&D Tours of Duty	TA AY	-	-	-	-	110,260	110,260	110,260
SD	Slug Detection	TA AY	-	-	-	-	-	-	-
Subtotal - New Programs		TA AY	\$ -	\$ -	-	\$ -	1,400,000	1,400,000	1,400,000
Total - Rapid Transit		TA AY	\$3,282,000	\$103,291	\$3,385,291	\$3,428,567	\$3,531,858	\$3,531,858	\$3,531,858
Grand Total - Surface & Rapid		TA AY	\$1,786,777	\$103,291	\$1,890,068	\$1,114,063	\$1,217,354	\$1,217,354	\$1,217,354
Grand Total - Surface & Rapid		TA AY	\$6,802,000	\$103,291	\$6,905,291	\$3,855,995	\$3,959,286	\$3,959,286	\$3,959,286
Grand Total - Surface & Rapid		AY	\$4,808,140	\$103,291	\$4,911,431	\$1,440,815	\$1,544,106	\$1,544,106	\$1,544,106

NA = Not applied to Supplemental Certification.

ARTHUR YOUNG & COMPANY

277 PARK AVENUE
NEW YORK, N. Y. 10017

February 28, 1977

Mr. Sidney Schwartz
Special Deputy Comptroller
for the City of New York
270 Broadway
New York, New York 10007

Dear Mr. Schwartz:

We have completed our review and analysis of the productivity programs submitted by the TA for the February certification. The purpose of the attached report is to present our analysis of the February certification and to update previously certified programs with actual figures where available.

Of the 18 programs contained in the certification, we have determined that 16 programs, 4 in Surface and 12 in Rapid, meet the criteria established by the EFCB/OSDC. The remaining 2 programs (Program 4.4: Annual Employee Vacancies and Program C-WM-10: Pre-Existing Programs - Car Maintenance Department) do not meet the criteria. They are identified in Exhibit I and discussed in detail later in this report.

Based on supplemental updates to the figures submitted by the TA for the 18 programs in the February certification, the TA has claimed savings of \$1,340,340 for the month of January and a total of \$4,972,630 through January 31, 1977. Our verification of these programs show the savings to be \$977,010 and \$2,803,745 respectively. The following chart is a summary of the savings claimed by the TA and verified by AY for the month of January 1977 and the total savings through January 31, 1977.

	Savings on Dec. 10, 1976 Certification	Adjustments to Dec. 10, 1976 Certification Based on Actuals	Current Certification January '77	Total Certified Savings through 1/31/77
Surface				
TA	\$1,810,000	\$ -	\$ 402,183	\$2,212,183
AY	1,534,503	(640,353)	138,499	1,032,649
Rapid				
TA	1,751,821	70,469	938,157	2,760,447
AY	862,116	70,469	838,515	1,771,096
Total				
TA	3,561,821	70,469	1,340,340	4,972,630
AY	2,396,619	(569,884)	977,010	2,803,745

The attached report includes summary descriptions of each of the programs contained in the February 3, 1977 certification. The detailed Program Description Sheets for programs that were previously reviewed but not included in any certification are contained in our report dated January 7, 1977. Program Description Sheets for programs that were submitted for the first time are attached to this report.

The criteria used to establish the applicability and trackability of the savings claimed are the same as those used in the previous certification and detailed in our report of January 7, 1977. However, several new issues were raised which dealt with the criteria to be used to establish savings in this certification and they required resolution before the savings claimed could be verified. The issues were:

- . Which base reference should be used to verify the savings generated by the Overtime Control Program in the Car Maintenance Department given that overtime exists where there are "excess" employees on the payroll.
- . Whether a portion of the savings realized from the Selective Patching of Runs Program should be classified as service reductions and thus deleted from productivity savings.

These issues were presented to the OSDC for resolution. It was resolved that:

- . If the titles affected by the overtime in the Overtime Control Program of the Car Maintenance Department are not the same as those that are considered "excess," for this program, the effect of the excess does not impact the savings generated.
- . Approximately 91% of the runs in the Selective Patching of Runs Program appear to constitute a service reduction. Therefore, the savings associated with that portion of this program will not be considered to be applicable for the purposes of funding COLA until such time as the TA can verify that service reductions have not occurred.

It should also be pointed out that figures presented in the Supplemental Certification were used instead of the February certification figures when the former proved to be more current. Because both reports were received within a week of each other, it was possible to use the more current figures presented in the Supplemental Certification. Whenever Supplemental Certification figures are used instead of the February certification figures, it is annotated in the text. The updated figures increased the TA's claimed savings for the month of January 1977 from \$1,070,522 to \$1,340,340.

Finally, for those programs generating savings through attrition, we have considered savings in fringe benefits payments as part of the total productivity savings. We have applied a 31% factor to the salary savings associated with those employees who have left the TA in order to determine the associated fringe benefits savings. A large portion of this 31% savings is, however, associated with pension payments. Since there is a two year lag in pension payments in the TA, savings on pension payments relating to an employee who leaves the TA in fiscal 1977 will not be realized until at least fiscal 1979.

If you have any questions concerning the information presented in this report, please contact Mr. Harold O. Davidson at 922-2398 or Mr. John R. Nolan at 922-5928.

Very truly yours,

Arthur Young & Company

Attachment

SURFACE DIVISION - FEBRUARY 3, 1977, CERTIFICATION

For the February certification, the Surface Division submitted a package of 5 programs which included \$402,183 for the month of January and a total of \$2,212,183 accumulated through January 31, 1977. After reviewing the submitted package and the supporting documentation, we have verified savings of \$138,499 for the month of January and \$1,032,649 for the total accumulated through January 31, 1977. These figures are presented as Exhibit I.

It was determined that approximately 91% of the runs in the Selective Patching of Runs Program appear to constitute a service reduction. Therefore, the savings associated with that portion of the program were not considered applicable for the purposes of funding COLA.

Also, it should be recognized that the savings calculated for the month of January in the Surface Division programs, except Program 3.5 (Acceleration and Standardization of Productivity), include consideration of the COLA increase approved for January. The COLA increase should not be included in the savings attributed to Program 3.5 since the positions were eliminated prior to the COLA increase.

There are still major concerns with some of the programs. Each program and these concerns are discussed briefly. No new programs were submitted by the Surface Division.

Program 1.1 - Super Extra List

The Super Extra List backup documentation included savings realized by TA Transportation in the months of April, May and June of 1976. These savings have not been

included in AY's calculation. In addition, the cost associated with the minimum wage positions, both TA and MaBSTOA Transportation Departments, has been charged against the savings. Within the TA Maintenance Department, there are no minimum wage positions.

The January tracking report for the maintenance Super Extra List was not submitted in time for inclusion in this report. A projection based upon an average of the previous five months has been used.

For this program the actual savings through December 31 are \$349,222; and through January 31 the projected savings are \$425,494.

The comments in our January 7, 1977 report dealing with the Super Extra List program are unchanged. With respect to the TA Maintenance Department, the Surface Division has agreed to include the 36 relief positions created by Program 3.5 (Acceleration and Standardization of Productivity) on the tracking reports for the maintenance Super Extra List.

Program 2.2 - Spread of Vacations

The tracking report for the month of December was not completed in time for inclusion with this report. In the Surface Division's submission, an adjustment of \$20,000 was made to reflect an error in their original calculation. This adjustment was made in the AY figures for the January 7, 1977 report. Since savings for this program were only projected for the prime vacation periods, and January is not considered a prime vacation period, we have not accumulated any additional savings for this program as submitted currently.

Since the December actuals were not available when this report was prepared, the projected savings through December 31 and January 31 are \$220,851.

The comments made in our January 7, 1977 report with respect to this program are still valid.

Program 3.5 - Productivity Acceleration

The savings for this program are based on the reduction of 36 men in the TA Maintenance Department. The monthly savings are calculated as follows:

36 men X (Number work days in month with holidays
estimated) X 8 hours X \$7.0069/hour = Monthly
Savings

The 36 men whose positions were eliminated have been transferred to relief positions. The Surface Division has agreed to track these 36 men with the Super Extra List program. This is to insure that these 36 men are utilized prior to the other Super Extra List men.

The actual savings for this program through December 31 are \$260,322, and through January 31 the actual savings are \$303,305.

The comments in our January 7, 1977 report with respect to this program are still valid. COLA increases should not change the base pay rate of \$7.0069/hour since the positions were eliminated prior to January 1, 1977. The Surface Division has not claimed these increases.

Program 4.2 - Selective Patching of Runs

It is our understanding that the Selective Patching program has been terminated during February in accordance with an agreement between the involved unions and the

Surface Division. On February 25, 1977 the Surface Division submitted documentation which indicated that 8.71% of the dollar savings claimed for this program resulted in patching runs and extras on "special occasions", e.g., snow storms, school holidays, etc., when the expected demand for service would be reduced. Based on this documentation, a letter dated February 25, 1977 from the Special Deputy Comptroller to the Senior Executive Officer of the TA stated:

"Upon reviewing further documentation for the TA, it appears that over 90 percent of the patching during the period from July 1 through December 31, 1976 (for which savings of \$779,000 have been submitted by the TA)* was random and not directly related to a reduction in user demand for that service."

"We ask that the TA provide data to support the position that patching is not in fact a service reduction. Until such data are provided, that portion of the program involving elimination of runs without a reduction in user demand would appear to be a service reduction and therefore not eligible to fund COLA payments."

* "The FY 1977 value of this program as estimated by Arthur Young in their January 7, 1977 report was \$1.5 million."

Based on this, the savings for this program resulting from a management decision on special occasions (9%) appear acceptable. The remaining 91% of the savings are being held in abeyance until such time as the TA provides data supporting the position that patching is not a service reduction. As a result, the actual savings from this program through December 31 are \$63,755; and through January 31 the actual savings are \$82,999.

In computing the savings attributed to this program, we have not included \$262,918 in savings realized during April, May and June of 1976 from the backup documentation supplied by the Surface Division. The TA has not certified to these savings.

The comments in our January 7, 1977 report with respect to this program are still valid.

Program 4.4 - Annual Employee Vacancies

This program involves not filling vacancies of annual positions. The program is unacceptable for the purpose of offsetting the COLA payments to the TWU and ATU workers in that the employees associated with the program are not members of either the TWU or ATU.

The comments in our January 7, 1977 report with respect to this program are still valid.

RAPID TRANSIT DIVISION - FEBRUARY 3, 1977 CERTIFICATION

A total of 13 programs are presented by the Division for the February certification. Of these 13 programs, 5 are updated programs from the December 10, 1976 certification, 7 are programs reviewed in our January 7, 1977 report and judged to be applicable to COLA but not previously presented for certification, and one program is presented for the first time. Also, a program that was included in the December certification (Control Sick Leave-Car Maintenance Department) is superseded by the introduction of the new program--Overtime Control-Car Maintenance Department.

The total additional savings claimed by the TA for February over the previous certification was \$938,000. AY verifies a total of \$839,000 of the \$938,000 savings claimed by the TA as being applicable to COLA under the criteria and guidelines furnished by the EFCB/OSDC. Applying all adjustments to the previous certification, the total savings certified by the TA through January 31, 1977 is \$2,760,000. AY was able to verify a total of \$1,771,000 using the established procedures and standards.

It should be noted that the TA's calculation of a 50% fringe benefits factor is based on 1,820 worked hours per year, per incumbent. This total hours figure is derived from 2,080 hours per year, less paid vacations and holidays. Calculated savings for all programs where attrition is considered is based on 2,080 hours per year, per incumbent. Therefore, we used a fringe benefits factor of 31% to reflect a consistent base for calculating savings, i.e., 2,080 hours per year, per incumbent.

Details of the certification are presented on a program-by-program basis in Exhibit I.

P-OT-1 Reporting Time - Relief Crews - Power Department

This program was not presented in the previous certification but has been analyzed in our January 7, 1977 report. It is applicable to COLA. This program was estimated to have savings of \$5,210 through December 31, 1976. Actual savings for the period are \$1,162. Estimated savings through January 31, 1976 are projected by the TA to be \$1,578.

P-AC-1 Control Sick Leave - Power Department

This program was not presented in the previous certification but has been analyzed in our January 7, 1977 report. It is applicable to COLA.

Previous estimates for savings through December 31, 1976 were \$13,500, which is \$635 under the actual value. Estimated savings for January are expected by the TA to be zero. Therefore estimated savings, which have been verified by AY, through January 31, 1977 are \$14,135.

P-WM-1b1 Revise Cleaning and Inspections - Power Department

This program was not presented in the previous certification, but is analyzed in our January 7, 1977 report. This program calls for the reduction of ten car cleaners as part of a program for increasing productivity. At the time of the November 24, 1976 cut-off date for receiving information for our January 7 report, only five of the ten cleaners had been attrited from the system. The Supplemental Certification

documents the fact that the remaining five positions had been vacated on January 1, 1977. Accumulated savings from January 1 forward are for the ten positions.

The TA based their savings on a 50% fringe benefits factor. AY applied a 31% fringe benefits factor based on annual wages. With this adjustment, the claimed TA savings of \$34,799 through January 15, 1977 is reduced to \$30,391, as verified by AY, based on the 31% fringe benefits factor.

P-WM-1b2 Methods Improvements - IND - Power Department

This program was not presented in the previous certification but is detailed in our January 7, 1977 report and is applicable to COLA.

Savings claimed by the TA are based on a 50% fringe benefits factor. AY applied a 31% fringe benefits factor based on annual wages. With the use of the 31% fringe benefits factor, the claimed TA savings of \$44,665 through January 31, 1977 is reduced to \$39,007 as verified by AY.

S-WM-2 Tailor Service - Stations Department

This program was presented in the December 10, 1976 certification and is analyzed in our January 7, 1977 report. Actual savings through January 31, 1977 are \$36,933 over the December estimates. Total certification for the month of January was \$24,530 based on TA calculations. With the previous certification and these calculations, the savings claimed by the TA through January 31, 1977, and verified by AY, are \$203,500.

S-WS-1 Extend Cleaning Cycles - Stations Department

This program was presented in the December 10, 1976 certification and is analyzed in our report of January 7, 1977. It is applicable to COLA and the calculations presented are an update of the actual savings. However, as we indicated in our January 7, 1977 report, TA savings for this program are accumulated from May 4, 1976, and do not include fringe benefits savings. AY calculations are based on savings from July 1, 1976, and include 31% fringe benefits. When these differences are accounted for, the TA savings from May 4, 1976 through January 31, 1977 are \$503,600 and the AY verified savings are \$517,800 from July 1, 1976 through January 31, 1977.

S-WS-2 Refine Collection Agents Schedules - Stations Department

This program was not presented in the December 10, 1976 certification but is detailed in our January 7, 1977 report. It is applicable to COLA. TA savings claimed through January 1977, \$21,689, does not include 31% fringe benefits for personnel attrited from the system. The revised savings, including the 31% fringes, total \$28,413 through January 31, 1977 as verified by AY.

M-OT-1 Sick Leave - Vacation - Maintenance of Way

This program was presented in the December 10, 1976 certification and was analyzed in our January 7, 1977 report. It is applicable to COLA.

The February certification is an update of the program which revises original estimates with actual savings through January 31, 1977. Actual savings through January 1, 1977

were \$33,500 over the estimated values, and the savings certified for the month of January are \$14,900. The total certified savings through January 31, 1977 are \$180,251, and have been verified by AY.

M-WM-1a Reduced Cost of Relay Repair - Maintenance of Way Department

This program was not presented in the previous certification but is detailed in our January 7, 1977 report. It is applicable to COLA. Based on estimates presented in the Supplemental Certification, savings through January 31, 1977 are \$4,300 as verified by AY.

M-WM-1b Electric Welding - Maintenance of Way Department

This program was not presented in the previous certification but is detailed in our January 7, 1977 report. It is applicable to COLA. Based on the information presented in the Supplemental Certification, estimated savings through January 31, 1977 are running \$3,930 ahead of the previous estimates. With this adjustment, the total estimated savings, verified by AY, through January 31, 1977 are \$15,774.

C-AC-1 Sick Leave Counseling - Car Maintenance Department

This program was presented in the December 10, 1976 certification and is analyzed in our January 7, 1977 report.

This program has been withdrawn and has been superseded by the Overtime Program (see C-OT-1).

C-WM-9 Electric Motor Rebuild - Car Maintenance Department

This program was presented in the December 10, 1976 certification and is analyzed in our January 7, 1977 report. It is applicable to COLA. However, the base reference used to calculate savings under the applicable criteria resulted in a \$326,000 difference between the TA calculation through January 1, 1977 (\$468,000) and the AY calculation through January 1, 1977 (\$142,000). The February certification is an update of the estimated totals through January 31, 1977. Based on the information presented, and using the same criteria previously used, the TA calculation of \$525,800 through January 31, 1977 is reduced to \$179,600 by AY calculations.

C-WM-10 Pre-Existing Programs - Car Maintenance Department

This program was presented in the December 10, 1976 certification and is detailed in our January 7, 1977 report. It is not applicable to COLA, as it does not meet the criteria defined in our January 7, 1977 report. Therefore, the TA claimed savings of \$93,060 is not applicable to COLA. For details on the approach and criteria used, our January 7, 1977 report should be referenced.

C-OT-1 Overtime Control - Car Maintenance Department

This program is presented for the first time in this certification. A detailed analysis is presented on the enclosed Productivity Program Description form. It is applicable to COLA.

The savings presented by the TA are based on actual overtime hours through October 31, 1976. Updated values through February 28, 1977 will be presented in the March certification.

The savings claimed in the February certification was \$223,000. However, the Supplemental Certification presented a revised analysis with a total savings of \$556,349 through October 31, 1976. Our analysis was based on the information presented in the Supplemental Certification. Using the established criteria, AY verified a total savings of \$556,349 through October 31, 1976.

PRODUCTIVITY PROGRAM DESCRIPTION

As of Date: 2/28/77

TITLE: Overtime Control

Code: TA - AY C-OT-1

DIVISION: Rapid Transit

DEPARTMENT: Car Maintenance

APPLICABILITY TO COLA: Yes - See note below

		Cash to 10/31/77	Average Monthly Savings	F/Y 1977 Total
Savings Claimed	TA	\$566,348	T. B. E.	T. B. E.
Savings Computed	AY	\$566,348	T. B. E.	T. B. E.

DESCRIPTION:

In order to control the use of overtime in the department, a management by objectives approach was taken for overtime allocations. Weekly goals for overtime use are established based on the job requirements. It is expected that this new control procedure will allocate overtime based on job requirements which will improve the effective level of service and lower labor costs. We were informed that this program was implemented in April 1976.

TA PROPOSED TRACKING SYSTEM:

On a monthly basis, the total paid overtime hours for the department will be compared to paid overtime hours for the same month during the 1975-1976 fiscal year. The current average hourly rate for overtime in the department will be used in the calculation. The effects of reduced quotas, changes in the number of incumbents and excess personnel by title will be analyzed and appropriate adjustments made to the net savings required.

AY EVALUATION OF TRACKING SYSTEM:

The tracking system described is adequate to track the total paid overtime hours saved in comparison to the paid hours of the previous fiscal year. The data presented to date did not require a detailed analysis of changes in quotas, numbers of incumbents or extras. Therefore, when those issues are found to impact the savings claimed, further analysis of the tracking system and methodology used must be made.

PRODUCTIVITY PROGRAM DESCRIPTION

MONITORING SYSTEM PROPOSED BY AY:

Periodically, the Payroll Hours - Data Report furnished by the Accounting Department should be audited to insure that the paid overtime hours presented by the department are accurate and that the same basis is used for comparisons. When information is presented on the adjustments for quotas, incumbents and extras, detailed monitoring systems will be presented. Also, the number of inspections and repairs performed should be monitored from time-to-time to insure that no significant drop in service levels occurred.

DOCUMENTATION SUBMITTED:

- . Program description - Supplemental Certification
- . Historical paid overtime hours, car mileage and excess employees
- . Department memos on program

NOTE ON APPLICABILITY TO COLA AND CRITERIA USED:

This program can be considered a productivity program based on the approach that the same volume of work is being done with a reduced amount of payroll overtime hours. Implied in this approach is the fact that for the same work to be done with fewer paid hours, the work force must be operating more effectively and with increased productivity.

The data presented with the Supplemental Certification shows that excess employees increased by 208 from June to July. The TA claimed that this jump in excess personnel did not affect the paid overtime because it was due to a drop in quotas in the new fiscal year budget in expectation of the reduction in car miles scheduled for September 1. Also, it was pointed out that the reduced car miles will not affect the Car Maintenance workload until two months later. This difference is caused by the lag in inspection times after the cars are scheduled for inspection based on miles run. We found both these arguments to be reasonable and consistent with generally accepted norms for maintenance operations. However, savings claimed after November 1, must be adjusted to accommodate the impact of the excess personnel, reduced car miles and total number of incumbents based on the new quotas.

- (1) AY figures for previous certification included projections. These adjustments are based on the actuals as reported by the Surface Division.
- (2) The January tracking report was not available. Therefore, an estimate has been used for AY figures.
- (3) The December tracking report was not available. See program write-up.
- (4) Based on monthly tracking reports.
- (5) TA has not formally revised any of their annual projections.
- (6) AY figures for Selective Patching, Program 4.2, have been revised based on the February 25, 1977, letter from the Special Deputy Comptroller to the Senior Executive Officer of the TA.

PRODUCTIVITY PROGRAM STATUS
PROGRAM-BY-PROGRAM BASIS
FEBRUARY CERTIFICATION

Program Number	Program Description	Savings on 12/10/76 Certification	Adjustments to 12/10/76 Certification Based on Actuals	Current Certification January '77	Total Certified Savings through 1/31/77	Fiscal Year Estimates from Previous Report	Adjustments to F/Y Estimates Based on Current Certification	Revised Fiscal Year Estimates	Revised Average Monthly Savings
P-OT-1	Reporting Time-Relief Crews	TA \$ - AY -	\$ -	\$ 1,578 (1) 1,578 (1)	\$ 1,578 1,578	\$ 11,400 11,400	\$ - (4,048)	\$ 11,400 7,352	\$ 2,000 1,200
P-AC-1	Control Sick Leave	TA - AY -	-	14,135 (1) 14,135 (1)	14,135 14,135	27,000 27,000	-	27,000 27,000	2,600 2,600
P-WM-1b1	Revise Cleaning & Inspections	TA - AY -	-	34,799 (1)(2) 30,391 (1)(2)	34,799 30,391	107,284 T.B.E.	11,604	118,888 103,829	16,800 14,700
P-WM-1b2	Methods Improvements-IND-Subst.	TA - AY -	-	44,665 39,007 (3)	44,665 39,007 (3)	115,396 115,396 (3)	17,937 1,336	133,333 (3) 116,732 (3)	17,700 15,500 (3)
S-WM-2	Tailoring Service	TA 142,000 AY 142,000	36,933 36,933	24,530 24,530	203,463 203,463	297,000 297,000	69,755 (4) 36,933 (4)	366,755 333,933	32,700 26,200
S-WS-1	Extend Cleaning Cycles	TA 449,000 AY 446,295	-	54,613 71,543	503,613 517,838	784,000 885,777	-	784,000 885,777	56,100 73,600
S-WS-2	Refine Collection Agents Sched.	TA - AY -	-	21,689 (1) 28,413 (1) (3)	21,689 28,413 (3)	53,157 53,157 (3)	-	53,157 53,157 (3)	6,300 6,300 (3)
M-OT-1	Sick Leave-Vacation	TA 131,821 AY 131,821	33,536 33,536	14,894 14,894	180,251 180,251	236,000 236,000	-	236,000 236,000	11,100 11,100
M-WM-1a	Reduced Cost of Relay Repair	TA - AY -	-	4,300 (1) 4,300 (1)	4,300 4,300	3,600 3,600	2,200 2,200	5,800 5,800	300 300
M-WM-1b	Electric Welding	TA - AY -	-	15,774 (4) 15,774 (4)	15,774 (4) 15,774 (4)	26,648 (4) 26,648 (4)	3,930 3,930	30,578 30,578	3,000 3,000
C-AC-1	Sick Leave Counseling	TA - AY -	-	(TO C-OT-1) PROGRAM SUPERSEDED BY OVERTIME PROGRAM					
C-WM-9	Electric Motor Rebuild	TA 468,000 AY 142,000	-	57,771 37,597	525,771 179,597	679,000 368,000	(56,720)	622,280 368,000	19,300 37,000
C-WM-10	Pre-Existing Programs	TA 561,000 AY -	-	93,060	654,060	-	-	-	-
C-OT-1	Overtime Control (4)	TA - AY -	-	556,349 (1) (5) 556,349 (1) (5)	556,349 (5) 556,349 (5)	-	-	T.B.E. T.B.E.	66,670 T.B.E.
Subtotals - Rapid Transit		TA \$1,751,821 AY \$ 862,116	\$70,469 \$70,469	\$938,157 \$838,511	\$2,760,447 \$1,771,096	\$2,340,485 \$2,023,978	\$48,706 T.B.E.	T.B.E. T.B.E.	\$224,135 T.B.E.
Grand Total		TA \$3,561,821 AY \$2,396,619	\$70,469 \$(569,884)	\$1,340,340 \$ 977,010	\$4,972,630 \$2,803,745	\$5,860,485 \$5,045,341	\$156,706 T.B.E.	T.B.E. T.B.E.	\$388,135 T.B.E.

Footnotes explained on following page.

FOOTNOTES

- (1) Current certification includes total savings through January 31, 1977 if program is presented for certification for the first time.
 - (2) Savings based on actual values through January 15 only.
 - (3) 31% fringe benefits savings added.
 - (4) Values from Supplemental Certification used.
 - (5) Savings values through October 31 only.
- T. B. E. = To Be Established.