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PLAN2: A Receipts and Disbursements Code for
Preparing R&D Operating Plans

los alamos
scientific laboratory
of the University of California
LOS ALAMOS, NEW MEXICO 87544

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by

D. R. Harris

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PLAN2, A RECEIPTS AND DISBURSEMENTS CODE
FOR PREPARING R&D OPERATING PLANS

by

D. R. Harris

ABSTRACT

PLAN2, a FORTRAN-IV code for the CDC and UNIVAC computers, prepares receipts and disbursements operating plans for management planning of research and development organizations. A particular, but representative, relationship of management, costing, and funding structures is assumed.

I. INTRODUCTION

Management planning of research and development (R&D) programs requires anticipation of capability for carrying out program obligations. Thus, forecasts of personnel and other resources must be projected into the future as constrained by costs and funds. Such projections are referred to as operating plans and are part of the well-developed discipline of internal management accounting.¹ Operating plans are useful in examining alternative use of R&D resources, in making proposals and commitments, and in supporting proposed changes in personnel and other resources.

Operating plans for R&D must conform in format to internal accounting practice used at the installation where the research and development is to be administered. This requirement arises because of the necessity for a formatted data base from which to extrapolate and because of the recurrent need to check operating plans against reported fact. On the other hand, operating plans for research and development organizations share certain common features and simplicities in contrast to forecasting for manufacturing or marketing organizations.¹ In particular, the product of research and development often consists of reported discoveries and related accomplishments and is not easily subject to fiscal

accounting. Hence, optimization techniques for R&D are not as relevant as is simple forecasting. In addition, R&D costs, other than for capital equipment, reflect personnel levels, and these can be forecast more simply than can costs for raw materials, etc., required for manufacturing and marketing organizations. Although there are considerable variations in costing procedures from one R&D installation to another, there is a certain uniformity in funding procedure insofar as funds are solicited, received, and accounted for the technical program. Thus, it is possible to relate R&D capabilities (personnel, equipment, services, and materials) in a reasonably general way with committed and anticipated funding and with known and anticipated costs.

The so-called receipts and disbursements method for fiscal forecasting¹ is appropriate for preparing R&D operating plans between yearly balance sheets. To be compatible with funding procedures and to be useful in management planning, the forecast must extend over one fiscal year and, in most cases, through the next fiscal year. This approach requires "soft" financial data such as anticipated funding levels, cost-of-living adjustments, etc., and can be criticized on this count. Nevertheless, reasonable use of "hard" existing accounting data can be made and systematized in a communicable computer code.

PLAN2 is a receipts and disbursements accounting forecast code to prepare operating plans for R&D organizations in the framework of the accounting system current at the Los Alamos Scientific Laboratory. In its reported form, the code accesses accounting data from card input. The code consists of about 500 statement lines and is written in FORTRAN-IV to be compatible with CDC and UNIVAC computers.

Required data and calculations for PLAN2 are described in Sec. II. Input and output are described in Secs. III and IV, respectively. Code variable definitions are given in Appendix A. Inputs and outputs are listed in Appendixes B through E for two test problems. These illustrate the treatment of management planning requirements for two complementary forms of R&D organization; one the funded *program* described earlier and one the administratively unified group or collection of personnel, equipment, etc., that will be referred to here simply as a *group*.

II. DATA AND CALCULATIONS

It has already been noted that the product of R&D is difficult to quantify in fiscal or other units. Hence, it is not clear how an operating plan for R&D can be optimized in the usual product sense by linear programming,² by optimization based on sensitivity analysis,³ or by some other technique. However, alternative reasonable allocations of funds for salaries, wages, materials, services, computer time, travel, etc., can be projected and compared. The PLAN2 code prepares operating plans in this sense, i.e., a proposed plan and anticipated or proposed funding are input, and the code computes projected costs and balances.

Research and development funds ordinarily are solicited for a technical program and, when received, are accounted from a "funding center" that we shall refer to as a *program*. Clearly, a *program* can have a variety of local names and characteristics. As costs (described next) accumulate, they are charged to the *program* and are subtracted from the *program* balance. For present purposes, an R&D *program* is an accounting entity with a proper balance, as well as being a technical management entity with goals, schedules, and other features.

The way costs are collected and are ultimately assigned to the program can vary greatly. We shall assume that, as the R&D work progresses, costs are incurred and charged directly or indirectly to a "cost center." To administer costs in relation to R&D capability, it is useful, though not necessary, that the cost center be equated with the administratively unified *group* described earlier. The PLAN2 code assumes that this is the case. As is true for the *program*, a *group* can have a variety of local names and characteristics.

With these assumptions, the fundamental unit for preparing an operating plan must be the cost center-funding center or, as we have equated cost center and *group* and funding center and *program*, the *group-program*. The *group-program* entity thus is that part of a particular administratively unified *group* that is supported by a particular *program*. Operating plans for *group-program* entities then can be collected in many ways: (a) for all the *group-programs* in a *program* to examine total capability, proper balance, etc.; (b) for all the *group-programs* in a *group* to examine comparative costs and to re-allocate resources, etc.; and (c) for the *group-programs* in administrative-accounting entities larger than the *group* or *program*.

To prepare an operating plan, a PLAN2 user first projects for each required *group-program* entity the planned monthly levels of staffing in terms of professional staff members (full-time equivalent) and of other employees (full-time equivalent). Known accounting data from previous months are read in for each *group-program*. An initial balance at the beginning of the current fiscal year is read in for each *group-program* and, if operating plans are to be collected for a *program*, for the *program* as well. Although a balance has not the significance for a *group-program* entity that it has for a *program*, still it reflects cumulative costs in the *group-program*. Therefore, a balance for each *group-program* is computed and printed by PLAN2. PLAN2 projects for two or more fiscal years between balance sheets at the end of fiscal years. The PLAN2 user also supplies data on anticipated or proposed new funds, anticipated cost-of-living adjustments, fund carry-overs from one fiscal year to the next, and cost computation options. PLAN2 then computes costs and balances as follows.

Projected costs for salaries and wages for a particular *group-program* entity are computed from the projected personnel levels by one of three options selected by the control parameter KONSAL.

Suppose that the user is preparing an operating plan for a *group*. If KONSAL equals 3, the projected salary cost, SAL(IM,IE), is computed as input, PAVSAL, times the number of professional staff members, SMFTE(IM,IE), for all forecasted months, IM, and for *group-program* entities in the *group*. Similarly, the projected wage cost, WGS(IM,IE), is computed as input, PAVWGS, times the number of other employees, GSFTE(IM,IE). If KONSAL equals 2, the input constants, PAVSAL and PAVWGS, are replaced by the average salary per professional staff member and the average wages per other employee, respectively, averaged over all the *group-program* entities in the *group* for the last month, LAMON, with known accounting data. If KONSAL equals 1, the input constants, PAVSAL and PAVWGS, are replaced by the average salary per professional staff member and the average wages per other employee, respectively, averaged over all the *group-program* entities in the *group* and also averaged over all known accounting months, (1,LAMON).

Now suppose the PLAN2 user is preparing a forecast for a *program*. If KONSAL equals 3, the projected salary cost, SAL(IM,IE), is computed as input, AVSALP(IE), times the projected number of professional staff members, SMFTE(IM,IE). Similarly, the projected wage cost, WGS(IM,IE), is computed as input, AVWGS(IE), times the forecast, GSFTE(IM,IE). When KONSAL equals 2 or 1, the projected salaries and wages for the *group-program* entity, IE, are computed as appropriate projected personnel levels times cost per person figures determined for that *group-program* entity alone for the last accounted month or are averaged over all accounted months, respectively.

Two aspects of the calculation are noteworthy. First, salary and wage costs per person are computed as averaged over all *group-program* entities in a *group*. Second, suppose a new *group-program* entity is to be added to a *program* operating plan prepared using KONSAL equal to 1 or 2. In this case, no wage or salary information has yet been established for the *group-program* entity, so the average over other *group-program* entities in the

program is used. Perhaps it would have been better to use instead wage and salary information for the *group* to which this *group-program* entity belongs, but it cannot be assumed that the required accounting data have been read into the code.

Indirect costs may include plant maintenance, general laboratory overhead, and other costs not directly charged to the *group-program*. Indirect monthly costs (burden) are forecast in PLAN2 as a factor times the sum of salaries and wages for the *group-program* entity for that month. The factor is selected by an input control parameter, KONFAC. If KONFAC is 3, then the factor is an input quantity, PFIND. If KONFAC equals 2, the value computed from the last accounted month, LAMON, is used. If KONFAC equals 1, the value averaged over all accounted months is used.

The KONSAL and KONFAC options are detailed in Appendix A and in comment lines in the PLAN2 code.

Several "materials and services" (M&S) cost categories, NC in number, are charged directly to the *group-program*. These include, at the option of the PLAN2 user, materials, travel, computer services, certain kinds of equipment, etc. Capital equipment is not included, nor are its costs forecast by PLAN2. Monthly costs in each M&S category are forecast as factor times the number of personnel "ceiling points" in the *group-program* for that month. The number of ceiling points is equal to SMFTE(IM,IE) plus a constant CPFAC times GSFTE(IM,IE), and CPFAC is set in PLAN2 to be 1/2, a value which has been found to yield reasonable forecasts.* The multiplying factor noted above is determined as an average over the already accounted months or, if for a new *group-program*, is determined from the value for the preceding *group-program* in the job.

Certain monthly M&S category costs are exceedingly difficult to forecast, except in a time-average sense as, for example, for travel, for computer costs, and for certain types of equipment. Because of these and other inevitable uncertainties in forecasting, PLAN2 eschews such niceties as, for example, computing wages as being proportional to the number of working days in each month.

Finally, monthly costs and a balance are forecast for each *group-program* entity and summed over

*The PLAN1 code, not reported, computed salaries plus wages and, hence, indirect as well, on a "ceiling point" basis.

4

ACKNOWLEDGEMENT

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2. L. A. Welsch and R. M. Syert, Eds., Management Decision Making (Penguin Books, Inc., Baltimore, Md, 1971).
3. A. Rappaport, "Sensitivity Analysis in Decision Making," Accounting Review, pp 441-456 (July 1967).

APPENDIX A

PLAN2 VARIABLE DEFINITIONS

```

C   PLAN2 PREPARES OPERATING PLANS FOR GROUP-PROGRAM ENTITIES AND COLLECTS
C   BY GROUP (COST-CENTER), PROGRAM (FUNDING CENTER), ETC.
C
C   DEFINITIONS
C   ACENT(IE)=GROUP (COST CENTER) ID FOR ENTITY IE, EG, GXX1
C   APROG(IE)=PROGRAM (FUND CENTER) ID FOR ENTITY IE, EG, PXX1
C   AVFAC(IM)=RATIO OF INDIRECT TO SALARY IN MONTH IM
C   AVSSM(IM,IE)= AVERAGE SALARY PER PROFESSIONAL STAFF MEMBER IN
C   MONTH IM FOR ENTITY IE
C   AVSSM(IM,NE+1)= AVERAGE SALARY PER PROFESSIONAL STAFF MEMBER
C   AVERAGED OVERALL GROUP-PROGRAM ENTITIES IN JOB
C   AVWGS(IM,IE)= AVERAGE WAGES PER GS(FTE) IN MONTH IM FOR ENTITY IE
C   AVWGS(IM,NE+1)= AVERAGE WAGES PER GS(FTE) IN MONTH IM AVERAGED
C   OVER ALL GROUP-PROGRAM ENTITIES IN JOB
C   AVSALP(IE)=PROJECTED INPUT SALARY PER PROFESSIONAL STAFF MEMBER
C   FOR ENTITY IE
C   AVWGSP(IE)= PROJECTED WAGES PER GS(FTE) FOR ENTITY IE
C   BAL(IM,IE)=BALANCE AT END OF MONTH IM FOR GROUP-PROGRAM ENTITY IE
C   BALIN(IE)=INITIAL BALANCE IN ACCOUNT FOR ENTITY IE
C   COLFAC(II)=II-TH COST OF LIVING FACTOR
C   COST(IM,IE)=COST FOR ENTITY IE IN MONTH IM
C   CPI(IM,IE)=CEILING POINTS IN ENTITY IE FOR MONTH IM COMPUTED AS SMFTE
C   PLUS CPFAC*GSFTE
C   CPFAC=FACTOR USED IN CEILING POINT COMPUTATION
C   DIN(IM,IE)=INDIRECT COST IN MONTH IM FOR ENTITY IE
C   FDATE=FORECAST DATE, EG, 12/26/72
C   GPDEN=GROUP, PROGRAM, DIVISION ENTITY FOR WHICH DATA ARE COLLECTED
C   FUNDS(IM,IE)=NEW FUNDS ARRIVING IN MONTH IM FOR PROGRAM APROG(IE)
C   GSFTE(IM,IE)=NUMBER OF NON-PROFESSIONAL EMPLOYEES (FULL TIME EQUIVALENT)
C   FOR GROUP-PROGRAM ENTITY IE IN MONTH IM
C   IMCOL(II)=II-TH MONTH IN WHICH COST OF LIVING FACTOR IS TO BE APPLIED
C   IMFUND(II)=II-TH MONTH IN WHICH FUNDS ARRIVE
C   KONCAR(IE)=0 IF NO CARRYOVER OF FUNDS FROM ONE FISCAL YEAR TO NEXT FOR
C   GROUP-PROGRAM ENTITY IE
C   KONFAC=1 IF AVERAGE RATIO OF INDIRECT TO (SALARY+WAGES) FROM ALREADY
C   ACCOUNTED MONTHS 1,LAMON IS TO BE PROJECTED TO MONTHS LAMON+1,NM.
C   =2 IF AVERAGE RATIO OF INDIRECT TO (SALARY+WAGES) FROM ALREADY
C   ACCOUNTED MONTH LAMON IS TO BE PROJECTED. =3 IF INPUT PFIND IS TO
C   BE PROJECTED
C   KONPRO=0 IF PROJECTING FOR GROUP. =1 OTHERWISE
C   KONSAL=1 IF AVERAGE SALARY PER SMFTE IS TO BE PROJECTED AS AVERAGE OF
C   ALREADY ACCOUNTED MONTHS 1,LAMON. =2 IF AVERAGE SALARY PER SMFTE IS
C   TO BE PROJECTED FROM LAST ACCOUNTED MONTH LAMON. =3 IF INPUT PAVSAL
C   IS TO BE PROJECTED OR IF KONPRO=1 THEN AVSALP(IE) IS PROJECTED AS
C   INPUT FOR EACH IE. AVERAGE WAGES PER GSFTE ARE PROJECTED WITH SAME
C   CONTROLS
C   LAMON=LAST ACCOUNTED MONTH BEFORE FORECAST
C   NC=NUMBER OF CATEGORIES IN M+S
C   NE=NUMBER OF GROUP-PROGRAM ENTITIES IN PLAN
C   NFY=CURRENT FISCAL YEAR NUMBER
C   NM=NUMBER OF MONTHS IN PROJECTION
C   NMCOL=NUMBER OF MONTHS COST OF LIVING FACTORS ARE TO BE APPLIED
C   NMFUND=NUMBER OF MONTHS IN WHICH NEW FUNDS ARRIVE FOR A PROGRAM
C   PAVSAL=PROJECTED AVERAGE SALARY PER PROFESSIONAL STAFF MEMBER
C   PAVWGS=PROJECTED AVERAGE WAGES PER GS(FTE)
C   PFIND=PROJECTED INDIRECT FACTOR
C   SAL(IM,IE)=SALARIES IN MONTH IM FOR ENTITY IE
C   SMFTE(IM,IE)=NUMBER OF PROFESSIONAL STAFF MEMBERS (FULL TIME EQUIVALENT)
C   FOR GROUP-PROGRAM ENTITY IE IN MONTH IM
C   SM(IM,IE,IC)=MATERIALS AND SERVICES COSTS FOR ENTITY IE IN MONTH
C   IM OF CATEGORY IC.
C   TEMP(IC),TEMP1,TEMP2,ETC=TEMPORARIES
C   WGS(IM,IE)=WAGES IN MONTH IM FOR ENTITY IE

```

APPENDIX B

SAMPLE INPUT FOR PLAN2 FOR A GROUP

```

LASL GROUP GXX1 10/5/73
      2      2      3      1973      2      3      1      13
.170000E+01 .700000E+00 .500000E+00 .106000E+01
      0      0      1
.800000E+01 .800000E+01 .800000E+01 .800000E+01 .800000E+01 .800000E+01
.800000E+01 .800000E+01 .800000E+01 .800000E+01 .800000E+01 .800000E+01
.700000E+01 .700000E+01 .700000E+01 .700000E+01 .700000E+01 .700000E+01
.700000E+01 .700000E+01 .700000E+01 .700000E+01 .700000E+01 .700000E+01
.200000E+01 .200000E+01 .200000E+01 .200000E+01 .200000E+01 .200000E+01
.200000E+01 .200000E+01 .200000E+01 .200000E+01 .200000E+01 .200000E+01
.100000E+01 .100000E+01 .100000E+01 .100000E+01 .100000E+01 .100000E+01
.100000E+01 .100000E+01 .100000E+01 .100000E+01 .100000E+01 .100000E+01
.300000E+01 .300000E+01 .300000E+01 .300000E+01 .300000E+01 .300000E+01
.300000E+01 .300000E+01 .300000E+01 .300000E+01 .300000E+01 .300000E+01
.400000E+01 .400000E+01 .400000E+01 .400000E+01 .400000E+01 .400000E+01
.400000E+01 .400000E+01 .400000E+01 .400000E+01 .400000E+01 .400000E+01
0. 0. 0. 0. 0. 0.
0. 0. 0. 0. 0. 0.
.100000E+01 .100000E+01 .100000E+01 .100000E+01 .100000E+01 .100000E+01
.100000E+01 .100000E+01 .100000E+01 .100000E+01 .100000E+01 .100000E+01
GXX1 PXX1
0.
.700000E+01 .200000E+01 .112000E+02 .140000E+01 .680000E+01 .100000E+01
.280000E+01
.700000E+01 .200000E+01 .112000E+02 .140000E+01 .680000E+01 .120000E+01
.240000E+01
.800000E+01 .200000E+01 .126000E+02 .140000E+01 .700000E+01 .150000E+01
.290000E+01
GXX1 PXX2
.250000E+02
.300000E+010. .480000E+010. .240000E+01 .200000E+00
.130000E+01
.300000E+010. .480000E+010. .240000E+01 .400000E+00
.150000E+01
.300000E+010. .510000E+010. .255000E+01 .300000E+00
.140000E+01
.528736E+00 .528736E+00 .500000E+00 .500000E+00 .500000E+00 .500000E+00
.500000E+00 .500000E+00 .500000E+00 .500000E+00 .500000E+00 .500000E+00
.500000E+00 .500000E+00 .500000E+00 .500000E+00 .500000E+00 .500000E+00
.160000E+01 .160000E+01 .157500E+01 .160909E+01 .160909E+01 .160909E+01
.160909E+01 .160909E+01 .160909E+01 .160909E+01 .160909E+01 .160909E+01
.170564E+01 .170564E+01 .170564E+01 .170564E+01 .170564E+01 .170564E+01
.170564E+01 .170564E+01 .170564E+01 .170564E+01 .170564E+01 .170564E+01
.160000E+01 .160000E+01 .170000E+01 .160909E+01 .160909E+01 .160909E+01
.160909E+01 .160909E+01 .160909E+01 .160909E+01 .160909E+01 .160909E+01
.170564E+01 .170564E+01 .170564E+01 .170564E+01 .170564E+01 .170564E+01
.170564E+01 .170564E+01 .170564E+01 .170564E+01 .170564E+01 .170564E+01
.700000E+00 .700000E+00 .700000E+00 .700000E+00 .700000E+00 .700000E+00
.700000E+00 .700000E+00 .700000E+00 .700000E+00 .700000E+00 .700000E+00
.742000E+00 .742000E+00 .742000E+00 .742000E+00 .742000E+00 .742000E+00
.742000E+00 .742000E+00 .742000E+00 .742000E+00 .742000E+00 .742000E+00
.700000E+00 .700000E+00 .700000E+00 .700000E+00 .700000E+00 .700000E+00
.700000E+00 .700000E+00 .700000E+00 .700000E+00 .700000E+00 .700000E+00
.742000E+00 .742000E+00 .742000E+00 .742000E+00 .742000E+00 .742000E+00
.742000E+00 .742000E+00 .742000E+00 .742000E+00 .742000E+00 .742000E+00
      2      1      13
.310000E+03
.270000E+03
      2      3      17
.120000E+03
.170000E+03

```

SAMPLE OUTPUT FOR PLAN2 FOR A GROUP

[illegible]

PLAN2 OPTIONS KONSAL= 2 KONFAC= 3

LASL GROUP 00X1 OPERATING PLAN FOR FISCAL YEAR 1974 MONTHLY PERSONNEL, COSTS, AND BALANCE IN THOUSANDS FORECAST ON 10/9/73

[illegible]

SAMPLE INPUT FOR PLAM2 FOR A PROGRAM

10

APPENDIX E

SAMPLE OUTPUT FOR PLAN2 FOR A PROGRAM

LAST PROGRAM PLAN OPERATING PLAN FOR FISCAL YEAR 1972						MONTHLY PERSONNEL COSTS AND BALANCE IN THOUSANDS					FORECAST ON 10/3/73			
GROUP	PROGRAM	LINE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE
001	001	SM(FTE)	7.00	7.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
		GS(FTE)	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
		AV SAL/SMFTE	1.00	1.00	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
		AV WAGES/GSFTE	.70	.70	.70	.70	.70	.70	.70	.70	.70	.70	.70	.70
		SALARY AND WAGES	12.00	12.00	14.00	14.13	14.13	14.13	14.13	14.13	14.13	14.13	14.13	14.13
		INDIRECT	8.00	8.00	7.00	7.07	7.07	7.07	7.07	7.07	7.07	7.07	7.07	7.07
		MOS CAT 1	1.00	1.20	1.50	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
		MOS CAT 2	2.00	2.00	2.00	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92	2.92
		COST	23.20	23.00	25.40	25.44	25.44	25.44	25.44	25.44	25.44	25.44	25.44	25.44
		NEW FUNDS	310.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		BALANCE	0.00	288.00	230.00	412.96	187.52	162.07	136.63	111.19	85.75	60.31	34.87	9.42
002	002	SM(FTE)	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
		GS(FTE)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		AV SAL/SMFTE	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		AV WAGES/GSFTE	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80
		SALARY AND WAGES	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
		INDIRECT	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
		MOS CAT 1	1.00	.80	1.10	.97	.97	.97	.97	.97	.97	.97	.97	.97
		MOS CAT 2	1.00	1.50	1.80	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70
		COST	20.00	20.30	20.90	20.67	20.67	20.67	20.67	20.67	20.67	20.67	20.67	20.67
		NEW FUNDS	250.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		BALANCE	0.00	429.20	248.90	187.33	146.67	126.00	105.33	84.67	64.00	43.33	22.67	2.00
TOTAL		SM(FTE)	14.00	14.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
		GS(FTE)	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
		SALARY AND WAGES	24.00	24.00	26.00	26.13	26.13	26.13	26.13	26.13	26.13	26.13	26.13	26.13
		INDIRECT	12.00	12.80	13.00	13.07	13.07	13.07	13.07	13.07	13.07	13.07	13.07	13.07
		MOS CAT 1	2.00	2.00	2.60	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29
		MOS CAT 2	4.00	3.90	4.70	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62
		COST	44.00	43.30	46.30	46.11	46.11	46.11	46.11	46.11	46.11	46.11	46.11	46.11
		NEW FUNDS	580.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		BALANCE	0.00	516.00	472.70	380.29	334.18	288.07	241.97	195.56	149.75	103.64	57.53	11.42
		IND/SAL	.52	.52	.50	.50	.50	.50	.50	.50	.50	.50	.50	.50
		PLAN2 OPTIONS	KONFAL= 1	KONFAC= 3										

APPENDIX E (cont.)

LAST PROGRAM PXX1 OPERATING PLAN FOR FISCAL YEAR 1976													MONTHLY PERSONNEL COSTS, AND BALANCE IN THOUSANDS				FORECAST ON 10/5/73																																											
GROUP-PROGRAM LINE													JAN				FEB				MAR				APRIL				MAY				JUNE																											
													OCT				NOV				DEC																																							
													AUG				SEPT																																											
													JULY																																															
													0.00																																															
													247.64				202.91				180.55				158.19				133.46				91.10				68.73				46.37				24.01				1.86											
													BALANCE				0.00				0.00				0.00				0.00				0.00				0.00				0.00				0.00				0.00				0.00							
													270.00				22.36				22.36				22.36				22.36				22.36				22.36				22.36				22.36				22.36				22.36							
													NEW FUNDS				22.36				22.36				22.36				22.36				22.36				22.36				22.36				22.36				22.36				22.36							
													COST				22.36				22.36				22.36				22.36				22.36				22.36				22.36				22.36				22.36				22.36							
													M'S CAT 1				1.10				1.10				1.10				1.10				1.10				1.10				1.10				1.10				1.10				1.10							
													M'S CAT 2				2.43				2.43				2.43				2.43				2.43				2.43				2.43				2.43				2.43				2.43				2.43			
													SALARY AND WAGES				12.55				12.55				12.55				12.55				12.55				12.55				12.55				12.55				12.55				12.55				12.55			
													AV SAL/WGSTE				1.69				1.69				1.69				1.69				1.69				1.69				1.69				1.69				1.69				1.69				1.69			
													AV SAL/SMTFE				1.00				1.00				1.00				1.00				1.00				1.00				1.00				1.00				1.00				1.00							
													TOTAL				2.00				2.00				2.00				2.00				2.00				2.00				2.00				2.00				2.00				2.00							
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