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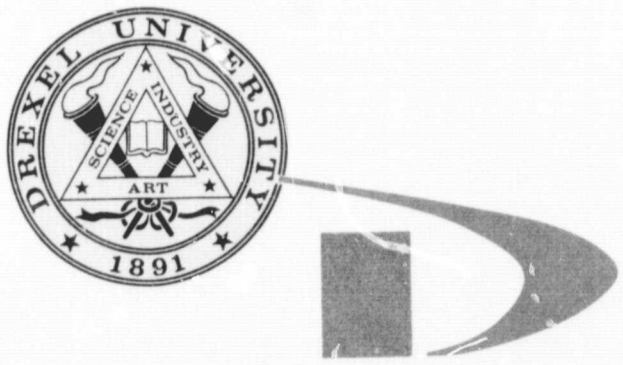
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Drexel University





Center for the Study of Environment

RESEARCH AND EDUCATION
IN MANAGEMENT OF LARGE-SCALE
TECHNICAL PROGRAMS

NASA Grant NGL 39-004-020

Second Semiannual Progress Report
December 31, 1969

Appendix E

Appendix E
MISPA - MANAGEMENT INFORMATION SYSTEMS FOR PUBLIC ADMINISTRATION

MANAGEMENT INFORMATION SYSTEMS

for

PUBLIC ADMINISTRATION

(MISPA)

A resource allocation model for
Public Service Administration Personnel
Development and Training

PART I: INTRODUCTION AND PLAYER INSTRUCTIONS

RESOURCE ALLOCATION FOR GOVERNMENT SYSTEMS:---

A CASE STUDY: GARDEN CITY SYSTEMS MANAGEMENT

Due to the large number of problems in city government that require analysis, and the contribution previous analyses has made to improved decisions on municipal problems, the City Council has formed a Program Evaluation Department. You, an outsider, have been brought in to manage the department, and are being given freedom to hire personnel, define projects, and assign priorities for your staff. All this must be accomplished within your assigned budget (as described later).

Garden City Background Information

Garden City is a medium-size city (population 800,000, area 45 square miles) located in the eastern United States. It is governed by a Mayor and a seven man City Council with current budget of $270,500,000. (Details in Figures 1 and 2).

Over the past ten years, the city has spent over $30 million annually for public capital improvements. Of the 800,000 people living in the city, the black population comprises about 25%; while children make up 18% of the total. The average family income in the city for the past year was $7500. 62% of the family units own their houses.

The city has 30 recreation centers (most of which are very small and concentrated in the ghetto areas to reduce tension), 200 schools, two universities, four colleges, two junior colleges, and 21 hospitals.

The city's five major departments: Operation Programs Department; Judicial Programs Department; Commercial and Industrial Programs Department; Education, Cultural, and Community Development Department; and Housing and Urban Development Department, are further divided into twenty-eight functional sub-departments. The Program Evaluation Department will work with each of these departments and report its conclusions directly to the Mayor and his seven-man Council.

Project Work Requests

The Program Evaluation Department (PED) reports directly to the City Council. The Council may direct your attention to certain problems through the published "minutes" of their weekly meetings with the Mayor. Usually, these are sent to you with the note "please give this problem attention when you can work it into your schedule." At other times, the note is less gracious: "Do the following fast!" Additional projects are requested by other Department or Agency Heads.

As you read through the initial assignments for this case study, decide in general terms which are most important. With only the present amount of background available, what order of priority would you assign to each? As a new employee managing a new department, you can work only with what you see of the situation. Later, you will be able to refine your priorities. As a matter of fact, once you have set priorities, you will put your analysts to work getting more information in the study areas, and you can then refine your priorities in keeping with the additional perspective obtained through their reports. Beyond this, you will have to apply your best intuition and management experience. Additional projects will be furnished as play develops.

You will note that some suggested projects are quite broad and some quite narrow. Some represent situations where short-run returns are possible, and other necessitate a long-range viewpoint; that is, a willingness to invest now and realize returns quite a bit later.

Because this is a new position for you, it is going to take some time before these study areas can be seen in any degree of breadth and depth. This lack of perspective, however, is not due only to your newness on the job. The problems themselves are new. If these situations were all clear and easy to describe, there would be no need for you or for your department. Because management has decided that these areas are worth investigating, they have initiated these assignments. They have not yet, however, placed any significant rankings on these problems. You must do this in order to know which types of analysts, and how many, to assign to the proper projects. Before you do this, it is well to look at the resources you have available for work on such projects.

Budget and Measurement Framework

To get "PED" started, the city has set up a salary budget of $100,000. This figure is exclusive of your personal salary. You therefore have the total amount for the hiring of personnel for your department. Secretarial and clerical help are assigned to you, but are not (for the present) charged against your budget. This budget is for a six-month period. Near the end of this six-month period, the Council will review your results and consider funds for the following six months. Obviously, they are keeping pressure on you to obtain results.

You have been told, tentatively, that a budget formula will be applied to your department. This will not take effect until results are recorded for your department at the end of the second six-month period. At that time, the formula will be used to set your budget for the third six-month period, and for each period thereafter. The formula to be used is:

New budget = B + 10% (S - 2C), where

B = your budget for the previous six months, S = your savings from systems studies during the previous six months, and C = your salary charges (excluding hiring charges) during the previous six months. Of course, if you show period one savings, your budget will be increased accordingly for period two.

Your department works on projects that result in savings in other departments of the city. The savings referred to in the budget formula are net savings in these departments: the total benefits of the new system in these departments are expressed in dollars and the expenses of installing the system in these departments are then deducted to give net savings resulting from the project. Net savings will be realized, in varying amounts, while a study is in progress. These net savings are net only as far as the other departments are concerned. The salaries you pay to your analysts are additional costs, and still have to be justified.

The budget formula measures PED's performance by subtracting the project's salary costs from the new savings in the other departments. As is typical, PED is required to do better than just break even. Under this budget arrangement, you must get savings that are twice your salary costs merely to keep the same budget. Above or below this point, you get a higher or lower budget for the next period.

You, of course, are happy that this formula will not be used until you get your feet on the ground. With a good start, you believe that this formula will provide growth for your staff as the workload increases. Meanwhile, you have "starting" projects and $100,000. To make money, you have to spend money; in this case, for hiring personnel.

Other Criteria

As in real life, you are also responsible for achieving certain goals which are difficult to measure in terms of dollar savings--and may not be easily amenable to quantative measurement at all. Thus, in addition to dollar measurements, you will be asked to include these criteria in evaluating the effectiveness of the results obtained:

1) Development of effective department staff
   a) Promotions
   b) Seniority and turnover rate
   c) Stability of staff

2) Governmental context
   a) New or improved services to the public
   b) Broad political support
   c) Increased efficiency through savings in operations

3) Administration promises
   Those political election promises which must be followed---
   or those which must give the appearance of action being taken

4) Furthering of society
   Achievement of certain objectives which you consider your personal obligation to society.

5) Response to demands from higher authority.

PROGRAM ANALYST PERSONNEL - CLASSES AND SALARIES

You have worked out an agreement with the Personnel Department on grades and salaries for the analysts that you must hire. For the present, your needs are for people who can dig in and come up with refined problem definitions. Computer programming also has been assigned as your responsibility. The little programming that is presently necessary is being done by outside contract, and you plan to continue this until there is greater need for in-house programmers.

Three grades of systems personnel appear to satisfy your present needs. These have been given position titles of Group Leader, Senior Systems Analyst, and Junior Systems Analyst. The average* charge for each of these grades and the initial costs of hiring are:

	Period Salary Charge*	Hiring Cost
Group Leader.	$15,000	$900
Senior Analyst.	12,000	750
Junior Analyst.	8,000	600

The salary charge is for each period, and includes a 120% overhead factor, pro-rated to each employee based upon salary.

The hiring costs are one-time expenses, and were set by the Personnel Department. Hiring costs are charged against your current budget, but are not included in the budget formula for figuring next period's budget.

Junior analysts are used primarily to gather facts and to present them as basic reports. Seniors have more experience, and are expected to be able both to gather facts and to draw conclusions about the significance of these facts. Group leaders represent trained systems analysts, with experience in a variety of management areas, and with the additional abilities necessary to provide proposals and recommendations. For purposes of this case, assume that all personnel within a grade are equally talented. Talents vary between grade levels, but do not vary among individuals within a grade level. (For purposes of this case, you may assume that a Senior Analyst is about 3/4 as effective as a Group Leader, and similarly, a Junior Analyst is about 2/3 as effective as a Senior Analyst.

After PED has been in operation for a while, you will have to think about promotions for Seniors and Juniors. If you wait too long, you may have some "quits" right in the middle of some studies, and this means that your possible savings for that period will be lost.

* For the purposes of this case study, the impact of salary levels within grades and raises have been ignored to allow the use of an average salary per grade.

This background operational information has been provided to allow an analysis that is reasonably realistic. You now have:

1. A set of unevaluated possible studies;
2. A $100,000 budget for the first six months;
3. Costs for three levels of systems skills.

One other item is important, and that is the way you look at the achievements of your analysts. In practice, success is a reflection of three things: (1) the talents of your personnel; (2) the opportunities that actually exist in possible projects; (3) your skill in recognizing project opportunities. We have emphasized the last two factors in this game. If desired, any department employee may work on two projects at once (each project being scored at one-half value and penalized 5 points). You may transfer an employee between projects at the start of any period, but a penalty will be assessed against each project if the one he is leaving has not been completed or halted by higher authority. You may fire an employee, but not demote him.

SEQUENCE OF PLAY

Instructions for Use of Study Cost Worksheet

1. For each play, read over all background materials and (after first period) read any report pages received from your analysts.

2. Decide which projects offer the most potential for net savings. Rank these projects, and decide which projects (one or more) you will work upon this period.

3. Assign types and numbers of analysts to the projects you decided upon, and record the number assigned on the Study Cost Worksheet, by type and source, for each project to be worked upon this period.

4. Calculate the salary charges, by type of analyst, for each project worked upon this period. Record the costs on the Study Cost Worksheet.

5. Calculate the hiring charges, by type of analyst, for each project worked upon this period. Record the costs on the Study Cost Worksheet. These are one-time charges for new hires only.

6. Add the total salary and hiring charges this period for all projects. Stay within your budget.

7. Give the Study Cost Worksheet and the Project Accounting Form to the Scorer. He will calculate the progress which your analysts have made on each project, and give you any progress reports earned.

Instructions for Use of Project Report Form

1. Your analysts will provide three figures at the bottom of each of their reports. The first two figures represent the analyst's best estimate of (1) what it will cost to continue the particular project to completion, and (2) what savings could be obtained in the department's studies upon completion of the project. None of these figures include your costs. Note that these two estimates are no more than the analyst's expression, in dollars, of what he has written out on the page. He is required to make these financial estimates, and therefore he does. This means that you must temper your confidence in these figures by careful reading of the written materials that represent the analyst's best statement of the project to date.

   The third figure is the amount of net savings that has already been obtained in the department studied as a result of the project. The analyst has a standard procedure for making this calculation. Note also that the Actual (Net) Savings to Date, given at the bottom of each report sheet, are cumulative; that is, they include any savings that you have had in previous periods. Do not double-count by adding the last period's Actual Savings to Date; these are already included.

2. Record the three dollar-figures, at the bottom of the last report you have received, on the Project Accounting Form. Do this for each project. Also, fill in the column for Actual Cost to Date from your Cost Worksheet. (Include any actual costs accumulated from the previous periods). These four figures give you an accounting picture of the status of each project being worked upon.

   These accounting figures, plus the reports, are used by you as you make the decisions regarding the quantity and quality of analysts you will assign to projects in the next period. The idea is to spread your group leaders, senior analysts, and junior analysts over the projects you select so that they will return you the highest savings over costs.

3. At the end of the game, your performance will be measured by the amount of savings you produced, over and above your total salary and hiring charges. Calculate your net gain or loss on the bottom of the Project Accounting Form.

4. Use the budget formula on page 2 to determine your budget for the third and subsequent periods.

THE INITIAL ASSIGNMENTS

PROJECT A: Attention to Clerical Work Measurement
From Minutes of the City Council Meeting:

1. A management consulting firm has offered to install a system of clerical work measurement. They predict an estimated savings of 20% in labor cost.
2. Please evaluate this offer immediately, giving us answers to these questions:
   a) Is this prediction realistic?
   b) Can we accomplish similar results using our own personnel?
   c) Should we enter into further negotiations with this firm?

PROJECT B: Governmental Information Display Center
Memo from: Secretary, City Council
to: Manager, Program Evaluation Department
Subject: Council Meeting Minutes
The last council meeting contained certain assignments for your department. Applicable extracts are attached from meeting minutes.

Subject: Attention to the development of a Governmental Information Display Center.

In keeping with the City's policy of progress and the u[illegible] of new management methods, it seems advisable to study the new developments in visual displays of management information using the computer.

Please determine the feasability of setting up a room in which key information can be presented to the executives of the various city departments and the city council members.

PROJECT C: Development of a Standard Purchasing Procedure

Considerable thought has been devoted by various governmental boards and commissions to the matter of obtaining more uniform quality and better prices on supplies used in various governmental agencies. A large part of the advantage of chain stores and mail-order houses, as forms of distributive organizations, is due to advantages in the purchasing field. It would seem that there are analagous opportunities to be obtained through the development of large-scale buying in the governmental field through various arrangements between the different levels and units of Government.

Currently in our city, all purchasing of materials, supplies, machinery, services (other than personal), etc. is handled through the Department of Procurement at the request of the department needing the equipment. It is felt that a uniform revision of the city's purchasing procedure could result in reduced costs and increased efficiency.

PROJECT D: Study of a New City Recreation Project
Memo from: Manager, City Recreation
to: Director, Community Development

We are continually receiving complaints from various community groups regarding the lack of adequate recreation facilities. These complaints vary from "Not having the right type of equipment and facilities" to "We can never use the pools, courts, etc., since they are so crowded." Other complaints claim the slum areas have no facilities whereas the better neighborhoods have too much.

The basic question seems to be: Have we let the current recreation program stagnate; and is duplication on the one hand costing us too much direct expenses; and on the other hand will a better program produce "fall out" benefits in the areas such as reduced crime rates in slum areas, decreased vandalism, reduced cost of public services, and build better relationships within the community?

Please give me your thoughts on which way we should proceed--
I'm afraid that we may have trouble next summer if we don't take some action soon.

(Handwritten note on bottom page)
To: Systems Manager
Bill--looks as if you could help us out -- and have a nice project to get your staff going. Please look into the Recreation Program for us. You recall that this was part of the Mayor's last election campaign.
John

PROJECT E: Attention to City Planned Program Budget

From: Chief, City Planning Department
To: Manager, Systems Department

The city is having a hard time securing Federal funds because of lack of inter-departmental coordination. Once a project is approved, the next year it is buried in the departments budget base and never seen again. The city is in the process of planning for rapid growth and will not be able to tolerate such inefficiencies in the future.

Please investigate this lack and take whatever action necessary to institute a satisfactory system of control.

PROJECT F: Automatic Data Processing for all Agencies in the City

Our municipal agencies have hardly begun to make intelligent use of computer technology. The hiring of computer experts and occupation of large computing centers for planning purposes could be the single best investment to help alleviate some of our urban problems

Because of the possibility that total information systems could link the various agencies of the city, exploratory study should be undertaken, collecting and coordinating the view of all the agencies that might be concerned.

PROJECT G: Attention to Inventory Control Problems

From: Minutes of the City Council:
In keeping with the current Management Improvement Program, it appears to be advisable to investigate the effectiveness of our Inventory Control activities. Certain trouble spots are apparent:

1. Despite our efforts to forecast future inventory balances, we often come up with results very out-of-line.
2. Year-end physical inventories have likewise had wide deviations from perpetual inventory records.
3. Various departments have made gross departures from the general inventory policy of the city. It is possible that this may be investigated in the future.
4. Maintenance, stationary supplies, engineering and plant equipment stock rooms have expanded without apparent control.
5. No recent check has been made on unused items held in stock.

PROJECT H: Policy Formulation and Compliance

From: Secretary, City Council
To: Manager, Systems Department
The Council asked that I forward the attached results from last year's attitude survey to you for action.

The result of a recent attitude survey of employees in several of our agencies, together with the passage of a resolution by our legislative body urging standardization of policies in order to effect tax savings in governmental operations, requires a look at the manner in which policies are formulated and at the arrangements for checking to see that policies are being followed. The following has been noted from the attitude survey.

1. "Policies within agencies are often inconsistent, and policies in one agency may be contrary to those in other agencies."
2. "Policies often conform to Civil Service requirements without consideration as to whether they meet our operating needs."
3. "Policy manual never up-to-date and often cluttered with additional pages, memos, etc."
4. "Systems changes are often ineffective because related policy has not been clearly defined."

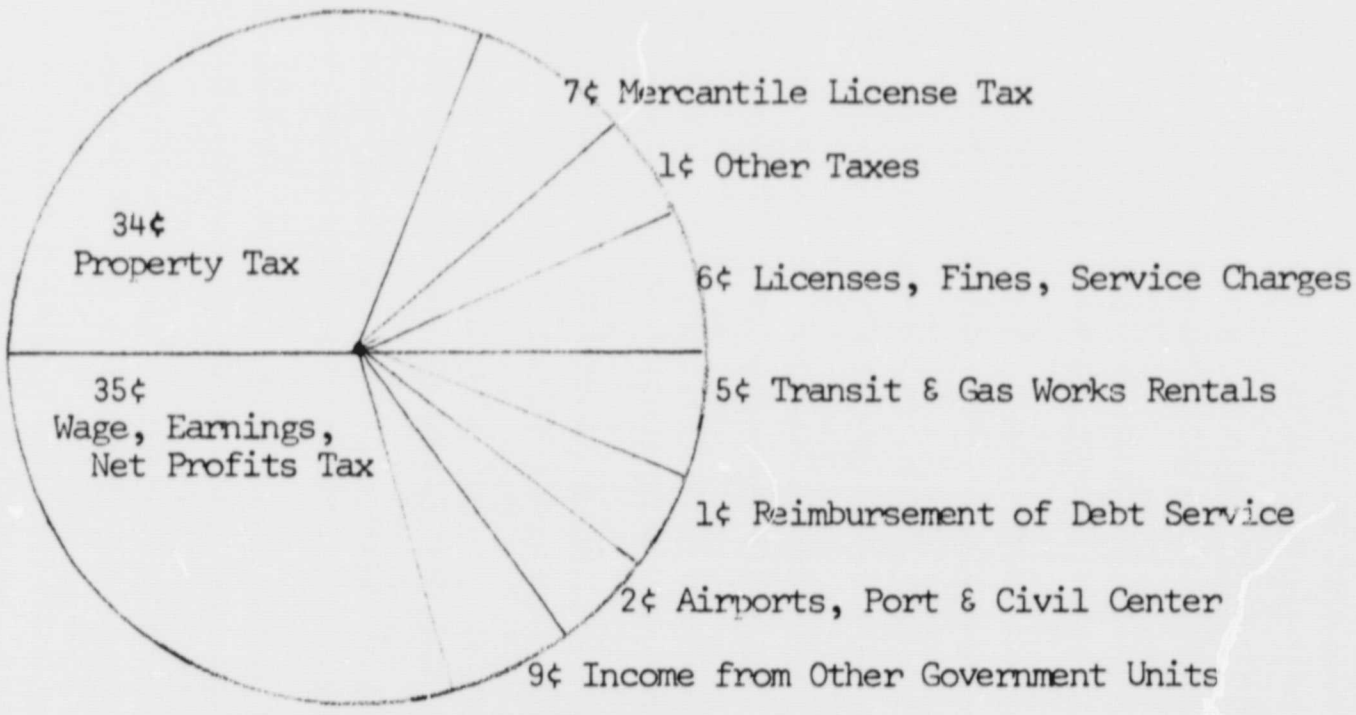
PROJECT I: Computerized Personnel Appraisal System

A directive was received from the Director of Personnel and Manpower, Mayor's Office, stating:

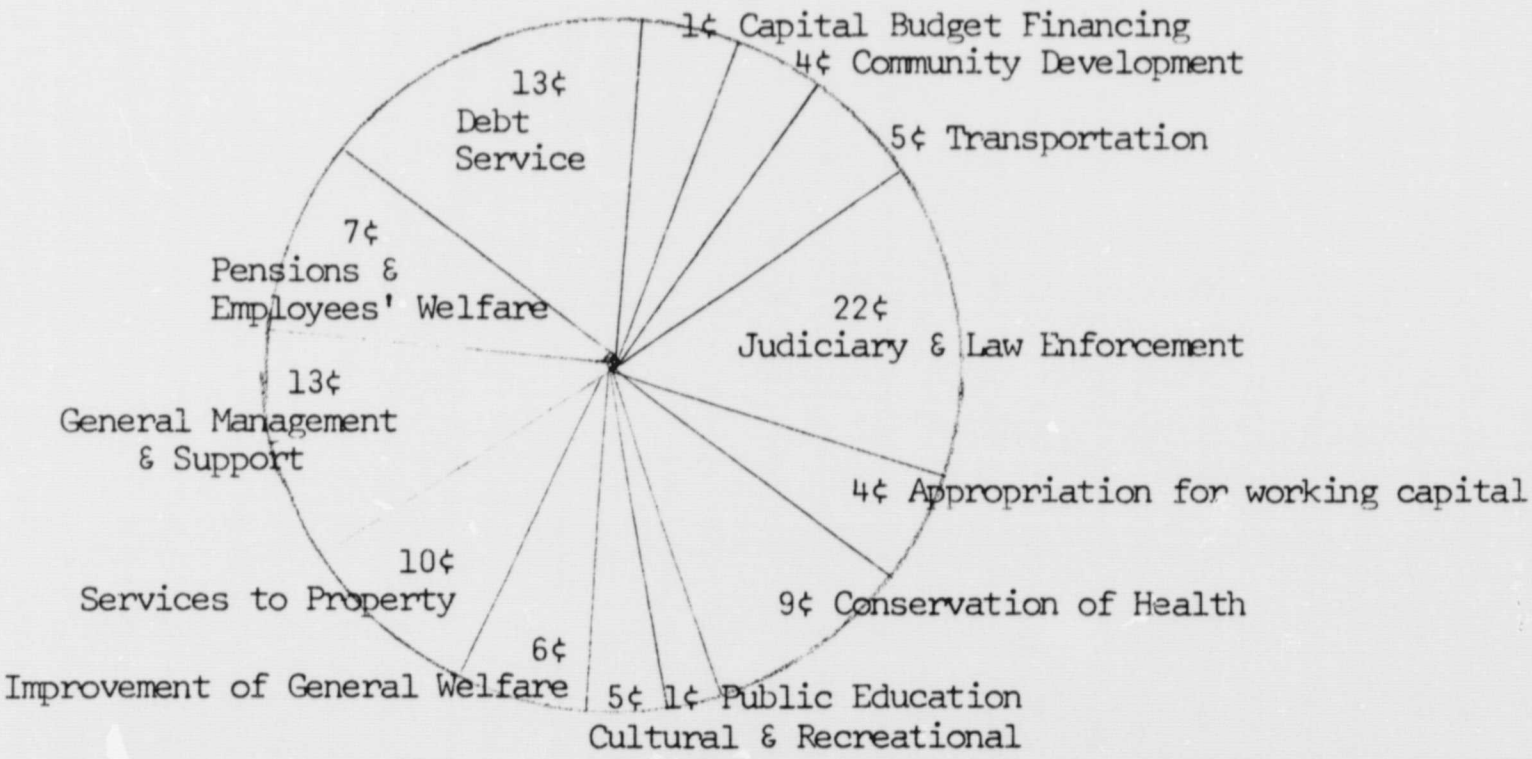
> Please investigate the possibilities of developing a centralized data bank for personnel appraisals. In the past year, high turnover and poor job placement has caused ineffective performance of municipal services to the public. What services do the various Personnel Divisions perform for their Departments? Is it feasible to develop a computer program to improve these services?

BASIC DATA FOR BACKGROUND

Budget Dollar - General Fund
Source of Income



Disbursements



(Figure 1)

Financial Program

The Financial Program of the City for the year will operate through several funds

FUNDS

Income		Outgo	
General Fund			
Property Taxes	$69,700,000	Police & Fire Protection	$66,100,000
Wage Taxes	70,600,000	Hospitals	29,300,000
Mercantile License Tax	14,300,000	Institutions	86,700,000
Other Receipts & Taxes	48,627,000	Parks & Playgrounds & Miscellaneous Financing	21,127,000
	$203,227,000		$203,227,000
Water Fund			
Sale of Water & Other Income	$ 13,600,000	Salaries, Supplies & Equipment	$ 6,600,000
		Payment of Debt on Capital Improvements	4,700,000
		Other	2,008,500
	$ 13,600,000		$ 13,308,500
Sewer Fund			
Sewer charges paid by users & other income	$ 10,000,000	Salaries, Supplies, Equipment	$ 2,500,000
Grant from State	400,000	Payment of Debt on Capital Improvements	6,700,000
Surplus from prior years	1,300,000	Other	1,611,000
	$ 11,700,000		$ 10,811,000
Other Operating Funds			
State Grant: County Liquid Fuel Tax Fund	$ 1,600,000	Paving & Maintenance of streets	$ 3,500,000
State Grant: Special Gasoline Tax Fund	2,506,000	Construction of Parking Facilities, Maintenance of Meters, & Coin Collection	544,000
Parking Meters	717,000		
	$ 4,823,000		$ 4,044,000

(Figure 2)

Income		Outgo	
Capital Projects Fund			
Tax-Supported Loans	$ 13,990,000	City Highways & Bridges	$ 1,310,000
Self-sustaining Loans	23,685,000	Recreational & Cultural	5,590,000
Pay-as-you-go	1,369,111	Hospital & Health	930,000
		Redevelopment-Urban	2,500,000
		Miscellaneous: Community College, Refuse Disposal, Transit, Rehabilitation of City Buildings	28,714,111
	$ 39,044,111		$39,044,111

City School District

Income

Local	$ 50,700,000
State Assistance	40,836,000
Federal Support	4,878,000
	$ 96,414,000

Number of City Employees
(Permanent, Full Time, & Part Time)

Community Development	291
Transportation	955
Judiciary & Law Enforcement	3,241
Conservation of Health	1,090
Cultural and Recreational	822
Improvement of General Welfare	215
Services to Property	2,333
General Management & Support	1,012
Board of Education(4,000 Teachers)	9,334
Total Employees	19,293

(Figure 2 -continued)

PART II: GAME DIRECTOR'S GUIDE

STEP 1 - Prior to Play

Distribute game description to all participants (preferably a day or two before the game is to be played).

STEP 2 - Day of Play - Initial Instructions

A. Review game description. Ensure that there are no misunderstandings at the start.

B. Divide the participants into teams of 3-5 players.

C. Pass out Player Cost Worksheet and Project Accounting Summary. Review scoring procedure.

D. Pass out Project Summaries Number A - I

E. Project N (Tax Revenue) is to be given out to groups only if applicability is raised - for instance, given to a group which notes that "tax revenues form the bulk of our revenue and thus should somehow looked at-- but we have no project covering the topic."

PLAY NO. 1 - Initial Play

Instruct the teams to hire personnel and assign them for Period 1 Play. Record actions on the Player Cost Worksheet and give to the Scorer at the end of play (30 minutes should be ample).

SCORING PROCEDURE

A. Review Cost Computations on Play Cost Worksheet. Ensure allowable budget is not exceeded. Return to Player if in error. Personnel must be fired if personnel costs are above current budget.

B. Separate the Carbon Form.
Make point computations on Scorer's (second) copy.

C. Determine Progress Reports Earned from Progress Report Matrix (Figure 1).

D. Return Player's (First) copy of Worksheet with earned progress reports.

E. Have Players record savings and cost data on Accounting Summary and continue further play.

PLAY NO. 2

Pass out Projects F and L just prior to play No. 2. Continue as before.

BONUS AND PENALTY

A. Recreation Project:

Bonus of $10,000 Budget per period upon receipt of Progress Report 2 for the duration of the project.

B. Civil Service Project (Integration of Hard Core)

If, at the end of Play 3, the player has not obtained the first Progress Report on Civil Service, he must be ordered to place one group leader on the project for the next two plays.

PLAY NO. 3 AND SUBSEQUENT PLAY

Continue as before

FINAL SCORE

After Play No. 10, compute final score for each team.

(Figure 1)

PROGRESS REPORT MATRIX

Progress Report Number

PROJECT	1	2	3	4	5	6	7	8	9	10	11	12	13	14
A-Clerical Work Measurement	75	175	250											
B-Display Center	100	175	275	350	450	600								
C-Purchasing Procedure	80	160	250	325	375	425	475	525						
D-Recreation Project	50	130	250	380	510	640	770							
E-Programmed Budget	50	150	300	450	600	750	900	1000						
F-Automatic Data Processing	50	100	150	200	280	360	460	610	710					
G-Inventory Control	50	100	175	225	300	400	450	500	550	600				
H-Policy Formulation	50	100	150	225	375	450	550	775						
I-Personnel Appraisal	175	225	300	475	550	630	725	780						
J-														
K-Centralized Typing	75	200	275											
L-Integration of Hard Core	100	200	300	400	500	600	700	800	900					
M-Forms Control	50	100	150	275	400									
N-Tax Assessment	50	150	225	300	400	500	600	700	800					

Matrix entry is total points required to receive through the indicated project report on each project.

PLAYER COST WORK SHEET

PLAY NO. _____

		Project Assignments																
		A	B	C	D	E	F	G	H	I	J	K	L	M	N		Cost per Position	Cost
HIRE & FIRE (Use 1/2 to indicate split assignment upon hire)	Group Leader																$900	
	Senior Analyst																$750	
	Junior Analyst																$600	
																Sub-Total Hiring Costs		
II TRANSFER(from current project) & REASSIGNMENT (from completed project) Use - for "From" and + for "To"	Group Leader																	
	Senior Analyst																	
	Junior Analyst																	
III SUMMARY OF ASSIGNMENTS	Group Leader																$15K	
	Senior Analyst																$12K	
	Junior Analyst																$8K	
																Sub-Total Wage Costs		
																Total Costs		
																Less Bonus		
																Net Costs		

$B_{N+1} = B_N + B + 10\% (S_N - 2C_N)$

B_N (Old Budget) = _____

S_N (Net Savings) = _____

C_N (Salary Costs) = _____

B_{N+1} (Next Period's Budget _____

SCORER COPY

PLAYER COST WORK SHEET

PLAY NO. _____

		Project Assignments															
I		A	B	C	D	E	F	G	H	I	J	K	L	M	N	Cost per Position	Cost
HIRE & FIRE . (Use 1/2 to indicate split assignment upon hire)	Group Leader															$900	
	Senior Analyst															$750	
	Junior Analyst															$600	
SPLIT PENALTY POINTS (@ 5 Pts. per Project)															Sub-Total Hiring Costs		
II TRANSFER(from current project) & REASSIGNMENT (from completed project) Use - for "From" and + for "To"	Group Leader																
	Senior Analyst																
	Junior Analyst																
TRANSFER PENALTY POINTS (@ 20 Pts. from the Project going to)																	
III SUMMARY OF ASSIGNMENTS	Group Leader															$15K	
	Senior Analyst															$12K	
	Junior Analyst															$8K	
POINTS EARNED	GL @ 100 SA @ 75 JA @ 50															Sub-Total Wage Costs	
TOTAL																Total Costs	
LESS PENALTY																Less Bonus	
NET																Net Costs	
PROGRESS REPORTS EARNED																	

$B_{N+1} = B_N + 10\% (S_N - 2C_N)$

B_N (Old Budget) = _____

S_N (Net Savings) = _____

C_N (Salary Costs) = _____

B_{N+1} (Next Period's Budget _____

PROJECT ACCOUNTING SUMMARY
(ESTIMATED AND ACTUAL DATA ON COSTS AND SAVINGS)

NEW BUDGET = B + 10% (S - 2C)

Period _____ (These figures are from Report Pages)

Actual Study Cost to Date by Project (From Cost Worksheet)	Estimated Cost at End of Study	Estimated Savings at End of Study	Actual Savings to Date (Cumulative)

Total Actual Savings to Date: $_____
Minus Savings to Date Last Period $_____
Total Actual Savings This Period $_____

Period _____ (Add Study Cost to Date from Previous Period)

Total Actual Savings to Date: $_____
Minus Savings to Date Last Period: $_____
Total Actual Savings this Period: $_____

PART III: PROJECT PROGRESS REPORTS

From Minutes of the City Council Meeting

Project A

Subject: Attention to Clerical Work Measurement

1. A management consulting firm has offered to install a system of clerical work measurement. They predict an estimated savings of 20% in labor cost.

2. Please evaluate this offer immediately, giving us an answer to these questions:

   a) Is this prediction realistic?
   b) Can we accomplish similar results using our own personnel?
   c) Should we enter into further negotiations with this firm?

The significant findings are:

1. No work method or work measurement has been done in the clerical area.

2. The number of clerical employees has risen 300% in the last ten years -- up 10% in the last year.

3. The price tag for installation of the consultant's system is $75,000; this includes training of two employees in application of their data. In addition there would be cost of new equipment and other training.

Cost Estimate at End	Consultant's Savings Estimate at End	Actual Savings to date	Achievement Points
$125,000	$350,000	$5,000	75

The significant findings are:

1. There is no major dissatisfaction with the output of clerical work, however, many people have said that their workload has been increasing at a very large rate.

2. The turnover and absenteeism rates of the clerical personnel is very low, most of the employees have been with the agency for many years.

3. A yearly survey is taken, based on job description, but there is no on-the-job verification of duties.

4. The wage rates of clerical help are in line with surrounding industry, and overtime for the present is at a minimum.

Cost Estimate at End	Consultant's Savings Estimate at End	Actual Savings to date	Achievement Points
$150,000	$200,000	$15,000	175

The significant findings are:

1. A final report was submitted to management in response to the original request; it was as follows:

   A. This project as an internal function does represent savings possibilities although not of the magnitude of the consultant's proposal.

   B. Development of reliable data for the system would cost in excess of $50,000 -- and computer programming would run that much more.

   C. It is suggested that this type of study be postponed because:

      1) There is little management enthusiasm for this study at present.

      2) There is no need to measure the clerical work done, as there is no present or foreseeable problem.

      3) The information gathered to date will aid greatly in eventually setting up an internal system.

      4) Some slight procedural changes have resulted in minor savings.

2. It is recommended that the offer of the consultant be declined.

Cost Estimate at End	Savings Estimate at End	Actual Savings to date
$150,000	$250,000	$20,000

Memo from: Secretary, City Council Project B

to: Manager, Program Education Department

Subject: Council Meeting Minutes

The last council meeting contained certain assignments for your department. Applicable extracts are attached from meeting minutes.

GOVERNMENTAL INFORMATION DISPLAY CENTER

Subject: Attention to the development of a Governmental Information Display Center

In keeping with the city's policy of progress and the use of new management methods, it seems advisable to study the new developments in visual displays of management information, using the computor.

Please determine the feasability of setting up a room in which key information can be presented to the executives of the various city departments and the city council members.

Summary of Systems Survey

Project: Governmental Information Display Center B-1

The project team surveyed the various agencies of the city to determine what type of information do they now display visually. All of the agencies, to varying degrees and in various ways, make a visual display of their information. None of them use a computor in relation to the display of the information.

The project team has made several visitations to organizations which are using visual displays of information. The two most interesting trips were to Space Age Electronics Corporation and Over-Night Freight Airlines.

The management of the electronics firm was very enthusiastic about their use of computor-linked information display center. It served to aid in their planning and in coordinating the research and development programs and their production efforts. The airlines uses the visual displays for information retrieval in the reservations system. They also have an impressive arrangement that displays, on a large screen, a complete set of information showing flight schedules and relevant situations for all routes. This includes weather conditions, freight loads, and time until next maintenance is required.

Cost Estimated at End	Savings Estimated at End	Actual Savings to date
?	$300,000	None

A preliminary estimate is that significant savings could result from an information display system which would provide for a more efficient use of information by many departments, the elimination of duplication in information gathering and keeping efforts, and much greater coordination between departments.

Summary of Systems Survey B-2

Project: Governmental Information Display Center

In a visit to study the information of the police department, we were able to make a recommendation of gathering and storing their information which resulted, over a two-year period, in some savings.

The project team arranged for the mayor's chief administrative assistant, the chief city planner, the president of the city council, and the chairman of the finance committee of the city council to vist the IBM information display center and NASA's Apollo Action Center. Following these visits, the city officials were enthusiastic about the possibilities of a Governmental Information Display Center. They saw it as a valuable tool for comprehensive planning; for keeping track of progress on the multitude of city projects; and for aiding in better financial planning.

In a conversation with an IBM staffer, he gave an "off-the-top-of-his-head" estimate of installing a display system.

Estimated Cost at End	Estimated Savings at End	Actual Savings to Date
$95,000	$300,000	$7,000

Project: Governmental Information Display Center

Two possible locations for the Center have emerged. One is to use the city planning departments large conference room. The other is a smaller conference room which has a store room adjacent to it. The latter seems to be more desirable, but it has been traditionally used by councilmen to meet with small groups. The head of building maintenance estimates that it would cost $9,700 and $11,350 respectively to refurnish the above mentioned rooms.

Discussions with representatives of the Board of Education, which has its own independent political base, indicates no interest in participating in the Center. In fact, they intimated that it is just another attempt by the mayor's city planning office to control every aspect of planning for the city's future. In addition, police department officials were doubtful about the value of the Center as far as their operations are concerned.

A local consulting firm, which specializes in computer applications, has given a preliminary estimate of the cost of installing the display system.

Cost Estimated at End	Estimated Savings at End	Actual Savings to date
$125,000	$300,000	$20,000

Project: Governmental Information Display Center

Our work with the city planning department has enabled them to increase their savings on information gathering costs and the display of its information.

The project team met with the "model city's" project staff to discuss their use of an information display center. They are the representatives from related city agencies who were most interested in exploring the possibilities of such a center.

The community board for the "Model cities" project area has been frustrated in its attempt to keep track of all the activities of the agencies involved in the project area. The local board authorized its staff to apply to the Department of Housing and Urban Development for a grant to set up an information display center. Initial contacts with HUD officials do not seem to be too encouraging.

Continuing discussions with a local computer utilization consulting firm indicates that the estimated cost for installing a computer related information display system has to be revised upwards in order to allow for the handling of additional information more rapidly.

Estimated Cost at End	Estimated Savings at End	Actual Savings to date
$175,000	$300,000	$32,000

Summary of Systems Survey B-5

Project: Governmental Information Display Center

HUD approved the application for the $125,000 grant to set up an information display center. They are hopeful that our city will be able to serve as a pilot project for the use of such a center in relation to the "Model Cities" projects.

A presentation of the Center concept is scheduled for the first of next month for members of the City Council and Department heads.

Estimated Cost at End	Estimated Cost at End	Actual Savings to date
$175,000	$425,000	$55,000

Summary of Systems Survey

Project: Governmental Information Display Center

The grant from HUD has been received.

The Board of Education and Police Department liaison representatives on the "model Cities" project staff are actively involved in the planning for the Center.

The presentation was made to the City Council and Department heads. At the Council meeting the following week, it voted to make available the conference room that it had been using as the new Center. They also allocated the necessary funds to remodel the room. This was done with the understanding that the work on the "model cities" project will serve as an experimental period to see how the city's agencies can cooperate in the development and utilization of such an information display center.

It is expected that once the Center is fully operational that greatly improved coordination among agencies will be possible and important financial economies will be realized.

Work on this project halted at this point until after the "model cities" project is developed and made operational.

A "scale value"* of $200,000 has been assigned to this study.

Estimated Cost at End	Estimated Savings at End	Actual Savings to date
$175,000	$650,000	$275,000 ***

* An estimate of what the city would have been willing to pay (for example, to an outside consultant) to obtain such improvements in the operation of city government.

** Includes the "scal value" amount.

From Notes of the City Council Meeting

Subject: Development of a Standard Purchasing Procedure Project C

Considerable thought has been devoted by various governmental boards and commissions to the matter of obtaining more uniform quality and better prices on supplies used in various governmental agencies. A large part of the advantage of chain stores and mail-order houses, as forms of distributive organizations, is due to advantages in the purchasing field. It would seem that there are analagous opportunities to be obtained through the development of large-scale buying in the governmental field through various arrangements between the different levels and units of Government.

Currently in our city, all purchasing of materials, supplies, machinery, services (other than personal), etc. is handled through the Department of Procurement at the request of the department needing the equipment. It is felt that a uniform revision of the city's purchasing procedure could result in reduced costs and increased efficiency.

Summary of Systems Survey C-1

Project: Development of a Standard Purchasing Procedure

The significant findings at this time in the survey of the Purchasing Department are as follows:

1. Questionnaires concerning purchasing procedures have been sent to other municipalities which seem to be operating efficiently according to their budgets.

2. A general review of the city's purchasing policy has been undertaken to uncover any overt inefficiencies in the system.

3. Additional information concerning governmental purchases was solicited from the Federal Government.

4. Attended a purchasing managers conference last week and was impressed by the substantial possible savings several organizations have been able to obtain by going to centralized systems. On entropolation of such organizations led me to arrive at the listed savings and costs.

Cost Estimate at End	Savings Estimate at End	Actual Savings to date
$137,000	$400,000	None

Summary of Systems Survey C-2

Project: Development of a Standard Purchasing Procedure

The following results have been obtained in the Purchasing Department study:

1. "Cutting corners" in purchases seems to be widely prevalent, that is, many department heads often order supplies on their own directly from the vendor (especially office supplies) and pay higher prices than would be paid if the order were processed through the Procurement Department.

2. Certain political factors have often entered into the purchasing decisions of the city (especially with contract work) causing obvious inefficiencies.

3. No recommendations have been received as yet from the Federal Government or other municipalities concerning their purchasing policies, but preliminary information suggests that some form of cooperative purchasing policy could result in increased savings and efficiency.

Cost Estimate at End	Savings Estimate at End	Actual Savings to date
$137,000	$400,000	$14,000

Project: Development of a Standard Purchasing Procedure

Information received from the Federal Government and other municipalities throughout the country reveal that:

1. There are five principal types of purchasing procedures in Government agencies depending upon what is purchased:

   a. Direct purchase from suppliers.
   b. Purchase from General Schedule of Supplies.
   c. Purchase under contracts of another agency.
   d. Purchase from warehouse stocks of Procurement Division.
   e. Purchase from suppliers through the Procurement Division

2. Many cities have entered into agreements with the Federal Government for purchasing supplies, thus taking advantage of lower prices resulting from economies of size.

3. If our city could enter into such an agreement with the Federal Government, we feel that our purchasing costs would be substantially reduced. The possibilities are being investigated.

Cost Estimate at End	Savings Estimate at End	Actual Savings to date
$137,000	$400,000	$14,000

Project: Development of a Standard Purchasing Procedure

The results of the investigation have determined:

1. An information system should be designed so as to improve procurement practices. The system should serve the following purposes:

   a. Provide information on possible economies through improvement of timing of purchases.

   b. Provide information as to where consolidation of orders can best be effected.

   c. Provide information as to where procurement facilities of one agency can profitably be utilized by others.

2. Our present Procurement Department would act as a liaison between the needs of the city and the Federal Government.

3. The additional investment necessary to staff our information system is expected to be compensated for in savings in our purchases. Further investigation is in order.

Cost Estimate at End	Savings Estimate at End	Actual Savings to date
$152,000	$400,000	$14,000

Summary of Systems Survey C-5

Project: Development of a Standard Purchasing Procedure

The following results have been obtained from the Purchasing Department study:

1. It has been determined to proceed with the establishment of a coordinated purchasing policy between our city and the Federal Government. The major factor influencing our decision to pursue this course of action has been the recommendations of numerous municipalities throughout the country who have initiated the program and have had favorable results.

Cost Estimate at End	Savings Estimate at End	Actual Savings to date
$152,000	$400,000	$14,000

Project: Development of a Standard Purchasing Procedure

The following has occurred in the Purchasing Department study:

1. An information system has been established to help coordinate activities between the city and federal levels.

2. Although the system seems to be operating effectively, there are numerous coordination problems that are reducing the efficiency of the purchasing system (especially the purchases of service contracts.)

3. An understanding of mutual needs is required between the two levels of Government if the system is to operate effectively.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$152,000	$400,000	$37,000

Summary of Systems Survey C-7

Project: Development of a Standard Purchasing Procedure

The following results have been obtained in the Purchasing Department study:

1. Large savings have resulted from the establishment of a coordinated local-Federal purchasing procedure. Savings range from 8% on electrical supplies to over 30% on tire chains.

2. Savings have also been realized in administrative expenses due to the shifting of many purchasing functions to the Federal level.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$152,000	$408,000	$408,000

Project: Development of a Standard Purchasing Procedure

The results of the Purchasing Department study are as follows:

1. A standardized coordinated purchasing policy between the city and federal level is presently in operation and appears to have ironed out its minor problems.

2. Consideration is being given to the idea of coordinating other functions of city government with those of the federal level.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$152,000	$408,000	$410,000

Memo From: Manager, City Recreation Project D

To: Director, Community Development

Subject: Study of a New City Recreation Project

We are continually receiving complaints from various community groups regarding the lack of adequate recreation facilities. These complaints vary from "not having the right type of equipment and facilities" to "we can never use the pools, courts, etc. since they are so crowded." Other complaints claim the slum areas have no facilities whereas the better neighborhoods have too much.

The basic question seems to be: Have we let the current recreation program stagnate, and is duplication on the one hand costing us too much direct expenses; and on the other hand will a better program produce "fall out" benefits in the areas such as reduced crime rates in slum areas, decreased vandalism, reduced cost of public services, and build better relationships within the community?

Please give me your thoughts on which way we should proceed. I'm afraid that we may have trouble next summer if we don't take some action soon.

Handwritten note on bottom of page:

To: Systems Manager

Bill -- looks as if you could help us out and have a nice project to get your staff going. Please look into the Recreation Program for us. You recall that this was part of the Mayor's election campaign.

John

The significant findings at this time in the survey are as follows:

1. Approximately 2/3 of the equipment in all city recreation areas are in a non-functioning or "in need of repair" conditions.

2. 50% of the recreation areas in certain districts of the city are utilized only 10% of the time and during these periods with only a 25% capacity.

3. Many other areas containing swimming facilities in summer and ice rinks in the winter are overcrowded, under-staffed and are constantly the seed-beds for gang wars.

4. Sampling of residents in several areas of the city indicate the need for more parks to keep their children off the streets.

5. A two-day seminar with the Parks Department, Juvenile Delinquency Office, Bureau of Economic Evaluation and representatives from our maintenance department and several equipment manufacturers have enabled us to quantify some of the major costs and savings inputs involved in our study.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$250,000	$425,000	None

Project: Study of a New City Recreation Project D-2

1. A meeting with the Juvenile Division of the Welfare Board indicates a strong relationship between lack of supervised recreation facilities and gang wars, vandalism, drug addiction.

2. Approximately 70% of vandalism to school property occurs at schools which have no supervised recreational facilities in the school yards.

3. Land values (and potential tax gains) show a marked positive relationship to those areas of neighborhoods which have favorable recreational facilities. This would substantially increase our previous "Savings Estimate."

4. Current records at supervised playground areas indicate attendance of individuals follows a pattern of high attendance for initial period of program and then rapid drop off. Spot interviews show this is due to dissatisfaction with programs which become boring or poorly supervised.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$250,000	$650,000	None

Memo from: Mayor
To: PED Manager

Your recreation project came up today, and I think it's one of the most worthwhile endeavors we are doing.

I can make additional funds available from my discretionary fund to allow you to put an additional man on this project exclusively.

Memo From: City Treasurer
To: Manager, PED

Per the Mayor's instructions, I am transferring funds from the Discretionary Fund to your budget for one Senior Analyst, at $10,000 per period for the duration of the Recreation Project.

Please be informed that this kind of expenditure is not within the letter of the City Budget Allowance Act of 1937 and, therefore, in my opinion, is illegal.

I have informed the City Comptroller of my opinion.

Significant findings at this time indicate:

1. Merchants in slum areas show willingness to share some of the cost of refurbishing equipment at rundown playgrounds. This,they feel, will keep kids off the street and stop pilferage, broken windows, slashed tires of customers, etc.

2. Local universities are anxious to start a co-op program within their physical education and arts departments which will provide semi-professional supervisors for city recreational programs throughout the school year at considerably less cost than anticipated.

3. Re-zoning survey of recreational district shows need to acquire eight more sites of land in minimum packages of three-acre parcels for proposed mini-playgrounds and pools.

4. Initial contact with Federal Department of Interior shows potential for their sharing cost of new pool construction at several sites if we are willing to utilize their new design and concepts of total land use patterns.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$200,000	$750,000	$85,000

Significant findings at this time indicate:

1. Outdoor lighting can be installed at 80% of the recreation centers which would increase use time by a factor of 2 to 3, depending on season.

2. An experimental day-care center at several of the recreation centers could provide mothers who so desire the ability to continue working through the summer instead of having to stop while children are off from school. The reduction of welfare to such parents is a significant savings.

3. 50% of all current recreational equipment has been restored or replaced.

4. 25 new recreational areas have been established at various school grounds throughout the city.

5. 12 local theaters have arranged for free children's (8 to 16) shows one afternoon per week.

6. Three universities assigned a total of 75 co-op supervisors to city recreation program for this summer.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$200,000	$800,000	$195,000

Project: Study of a New Recreation Project D-5

Significant findings at this time indicate:

1. Welfare Department quite impressed by joint program at recreation centers to act as day-care centers. Feel welfare spending will be reduced by 15% during the summer.

2. 35% reduction in pilfering, window breakage, etc. at those schools now maintaining supervised recreational programs.

3. Initial concentration of recreation facilities for 4 to 17 year age group needs additional expansion to include the elderly category. Personal interview survey shows this group also suffering in lack of facilities and adequate equipment. Result has been to force these people to vacate city during summer months and in so doing we have suffered a tax (sales) decrease.

4. Police and Fire Departments show marked decrease in services required in high slum areas which now have adequate and updated recreational facilities with co-op supervisors.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$250,000	$850,000	$375,000

Significant findings at this time are as follows:

1. All land has been acquired for the eight additional parks. Construction is under way on three more swimming pools with a government grant paying for 35% of pool costs.

2. A current drive to organize baseball, football, hockey, basketball leagues for evening and late afternoon schedules has been favorably accepted and is being sponsored by many local businessmen.

3. Merchants in several areas of the city have noticed a slight increase in sales which according to them is tied into the neater streets, lack of customers being antagonized by boys and a generally more friendly atmosphere on the part of the communities. Slashed tires, broken antennae etc. have greatly been reduced in local city parking lots.

4. Attendance at many under-utilized recreational areas has picked up by as much as 50%. The overcrowded sites hve seen some reduction due to the additional new sites in these areas.

5. 60% of the play grounds are now equipped and running evening programs with supervised staff. Attendance at some high crime rate areas is approaching more than daytime attendance.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$200,000	$850,000	$560,000

Significant findings at this time:

1. A survey in detail of "elder age group recreational needs" should be undertaken at some future time once the current recreational project is stabilized. It is recommended that an outside consulting firm with geriatrics experts be hired to consult on such a survey.

2. Approximately 20 child day-care centers have been established for mothers who have decided to continue working through the summer.

3. City hospitals report a 22% decrease in the number of patients between ages of 8 and 17, who require treatment between hours of 8 AM and 12 midnight.

4. An equipment maintenance and replacement system capable of computer processing is needed to maintain the high success of the recreation project.

5. All swimming pools, mini parks, and wading pools are operational.

6. Three more universities have joined our supervisor/recreation co-op program. The usual summer payroll increase for program directors and staff has been reduced by 35%.

7. False fire alarms have been dropping at the rate of 8% per week during a period when they usually increase at 35% per week. Open fire hydrants also show a similar trend.

8. It is recommended that the city acquire several more parcels of land in those areas pointed out in the initial survey as future sites for recreational projects.

9. No further action is recommended until the present program is evaluated over a two or three year period.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$200,000	$850,000	$837,000

From: Chief, City Planning Department
To: Manager, Systems Department

Project E

Attention to City Planned Program Budget

The city is having a hard time securing Federal funds because of lack of inter-departmental coordination. Once a project is approved, the next year it is buried in the departments budget base and never seen again. The city is in the process of planning for rapid growth and will not be able to tolerate such inefficiencies in the future. Please investigate this lack, and take whatever action is necessary to institute a satisfactory system of control.

Significant findings at this time are:

The mayor expects the city's growth rate to increase rapidly over the next ten years. The problem is that detailed breakdown for capital expenditures and programs are not made after the year in which the original budget is approved. The federal government requires a constant breakdown of all monies provided to the city. Therefore, if the city wants to finance these programs with Federal aid, we must implement a planned programmed budget system.

I was trapped into a brief discussion with the mayor when I was talking with his secretary, and he wants some feedback on how we are doing, as soon as possible.

In addition to making it possible to become eligible for Federal funds, I estimate that we could save a considerable amount internally by reducing the duplication of effort. Costs and direct savings are estimated as follows:

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$200,000	$900,000	None

Significant findings:

1. When a program covers more than one department, there is no one place where the entire program's cost and benefits can be seen.

2. The city has presently undertaken a city redevelopment program. A PPB System would reduce the cost and increase the effectiveness of this project.

3. Analysts suggest that an information system be developed to complement the CRP and to resolve the problem outlined above.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$200,000	$900,000	$50,000

Significant Findings:

1. After an initial study, these proglem areas were identified:

   a. There will be some degree of difficulty in obtaining inter-agency cooperation.

   b. The present financial personnel will have to be retrained.

   c. A program structure must be developed and priorities assigned.

   d. The A.D.P. System will have to be re-designed.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$200,000	$830,000	$70,000

Significant findings:

1. The first step to designing the PPBs is the development of a management information system. The system will improve inter-agency cooperation and will provide information to decide future strategies.

2. Basic training programs have been initiated through local colleges and universities, with some degree of success.

3. Program relationships have been flow-charted. There is an overall relationship between independent agencies and projects.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$220,000	$850,000	$100,000

Significant findings:

1. The mayor has ordered a pilot program on city waste disposal.
2. The PPB will establish a six-year capital program with a six-year financial budget.
3. The program structure will be developed for the entire city government operations.
4. Performance standards and a reporting system have been developed and should be placed into operation in the near future.
5. The mayor has applied for funds under the City Redevelopment Act.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$220,000	$850,000	$120,000

Significant findings:

1. The city has received a $150,000 grant from Federal Government under the City Redevelopment Act.

2. The grant is being applied to the waste disposal project.

3. The waste disposal project has provided improved service, and location of incinerator sites outside the city limits. These facilities are equipped with the most modern air pollution devices and will give the city a capacity of 200% over previous capacity. Actual savings from this project are estimated at $90,000.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$200,000	$860,000	$250,000

1. The mayor has ordered the whole program be adopted. The program will involve nine areas.

   a. Community Development
   b. Transportation
   c. Judiciary
   d. Conservation of health
   e. Public Education
   f. Service to Property
   g. General Management
   h. Welfare and Wages
   i. Debt Service

2. The mayor has appropriated $400,000 for the first year, and $450,000 for the second, as a target.

3. Work on setting priorities and determining sub-divisions of projects has started.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$180,000	$860,000	$302,000

Significant findings:

The PPBs has been implemented and incorporated into the city's operations. The city's financial personnel have been trained and are taking over operation of the system.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$180,000	$860,000	$850,000

Automatic Data Processing for All Agencies in the City Project F

Our municipal agencies have hardly begun to make intelligent use of computer technology. The hiring of computer experts and occupation of large computing centers for planning purposes could be the single best investment to help alleviate some of our urban problems.

Because of the possibility that total information systems could link the various agencies of the city, exploratory study should be undertaken collecting and coordinating the view of all the agencies that might be concerned.

Summary of System Survey

Project: Automatic Data Processing Uses Study F-1

The significant findings at this time in the survey of Inter-Agency Automatic Data Processing Uses:

System personnel have been assembling literature on "Management Information Systems in Governmental Administration." Several other cities already having A.D.P. information systems have been contacted and requested to send information concerning their particular systems operation implementing costs current and proposed savings.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
?	?	None

Summary of Systems Survey

Project: A.D.P. Uses Study F-2

The significant findings at this time in the survey of the A.D.P. uses are as follows:

Information received from solicited city government fielded programs that are applicable to similar functions in our town.

Among these programs are:

1. Preparation of utility bills
2. Computation of survey-closure
3. Control of traffic signals
4. Storage and retrieval of data about individual welfare recipients.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$50,000	$600,000	$3,500

Summary of Systems Survey

Project: A.D.P. Uses Study F-3

The significant findings at this time in the survey of the A.D.P. uses are as follows:

Several meetings have been held with the City Planning Department. These meetings have been of the seminar format--with discussion of what the various agencies have done so far in the development of "Automatic Data Processing Information."

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$50,000	$600,000	$5,300

Summary of Systems Survey

Project: A.D.P. Uses Study F-4

The significant findings at this time in the survey of the Automatic Data Processing Uses are as follows:

Meetings continuing.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$50,000	$600,000	$7,100

Summary of Systems Survey

Project: A.D.P. Uses Study F-5

The significant findings at this time in the survey of the Automatic Data Processing Uses are as follows:

Systems personnel have completed a study along with the Police Department for the analysis and design of an information system. A set of equipment specification description of the first phase system were produced, interview data, real-time retrieval of wants and warrants, the statistical processing for management control and reporting, and the retrieval of specific data to support investigation of crimes.

The Department is currently awaiting a Federal grant of $150,000 toward the development of the system.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$100,000	$600,000	$9,200

Summary of Systems Survey

Project: A.D.P. Uses Study F-6

The significant findings at this time in the survey of the A.D.P. Uses are as follows:

At present, physical and social planning---for public health, transportation, poverty, recreation, education, and the like --- tends to be uncoordinated. Urban management must cut across jurisdictional and functional lines.

Investigations were begun into the possibility of developing information systems which cut across department lines and integrate functions.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$100,000	$600,000	$12,800

Summary of Systems Survey

Project: A.D.P. Uses Study F-7

The significant findings at this time in the survey of the A.D.P. Uses are as follows:

1. Work with the Department of Taxation and Finance produced a program that would predict future revenue. The program is based on the effects of a) changes in personal income, and b) change in tax structure, based on a random sample of tax returns and ten variables.

2. Work the Public Service Commission will possibly lead to a program for determining mortality of physical property. This program is to be based on an analysis of utility property retirement and survival for the establishment of depreciation rates.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$100,000	$600,000	$25,700

Summary of Systems Survey

Project: A.D.P. Uses Study F-8

The following results have been obtained from Automatic Data Processing Use Study:

1. The programs prepared for the Department of Taxation and Finance and the Public Service Commission have been tested and "debugged." They will be placed into immediate use.

2. The Department of Highways began work on a program for Mobile Equipment Operating Control. This program will accumulate locations, operating costs, vendor, and depreciation.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$100,000	$600,000	$77,900

Summary of Systems Survey

Project: A.D.P. Uses Study F-9

The following results have been obtained from the Automatic Data Processing Use Study:

1. A Federal Government agency has approved funds of $400,000 to underwrite the installation of an integrated city and state-wide information system to serve the needs of physical and social planning. This system is to be used as a test model for future integrated information systems.

2. A supplemental appropriation of $150,000 from the state was granted following the system's installation.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$70,000	$550,000	$575,000

From: Minutes of the City Council Project G

Subject: Attention to Inventory Control Problems

In keeping with the current Management Improvement Program, it appears to be advisable to investigate the effectiveness of our Inventory Control activities. Certain trouble spots are apparent:

1. Despite our efforts to forecast future inventory balances, we often come up with results very out-of-line.

2. Year-end physical inventories have likewise had wide deviations from perpetual inventory records.

3. Various departments have made gross departures from the general inventory policy of the city. It is possible that this may be investigated in the future.

4. Maintenance, stationery supplies, plant and engineering equipment stock rooms have expanded without apparent control.

5. No recent check has been made on unused items held in stock.

The significant findings at this time in the survey of Inventory Control are as follows:

1. Approximately $11,700,000 is tied up in inventories.

2. The cost of running the present system of inventory control (not including purchasing) is $70,000 per year.

3. The inventory control system is staffed as follows for each of three locations: an inventory control supervisor at $5,200 and three clerks at $4,800, totaling $58,800.

4. Inventory levels are established in conjunction with the Superintendent on the basis of personal judgement and past experience.

5. Supervisors have historically resented being blamed for inventory problems such as "out of stock" (averaging 5%) and returns for wrong items (averaging 1%).

6. Rough estimate for cost and savings of implementation of a centralized inventory control system are shown below.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$80,000	$160,000	None

The significant findings at this time in the survey of Inventory Control are as follows:

1. There are 6,500 catalog items listed in the catalog. Spare and replacement parts are not shown in the catalog. The Engineering Department records are used to service requests for spare and replacement parts. Their 3 x 5 card records cover 60,000 components and sub-assemblies.

2. Inventory items are designated by original sales order number plus consecutive number appearing on Bill of Materials. Example: Recording Paper, Code 300-6.

3. Each warehouse purchases separately.

4. Buyers in purchasing departments are assigned by job orders, not class of item.

5. Purchase specifications are prepared by Engineering Departments and are not subject to revision by the purchasing function.

6. Less than 20% of items purchased are procured on an annual basis.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$85,000	$180,000	$18,300

The significant findings at this time in the survey of Inventory Control are as follows:

1. The survey shows that some 85% of items in inventory represent only 15% of items distributed by dollar value.

2. Items taking up 10% of our warehouse space have not moved in the last three years. Book value involved is about $500,000. These items should be studied for scrap and salvage value.

3. Inventory Control reports to the Controller and to the Purchasing Agent are both too late and not informative enough to allow appropriate financial and purchasing decisions.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$75,000	$185,000	$40,600

The significant findings at this time in the survey of Inventory Control are as follows:

1. A monthly report on inventory is taken off the inventory record cards. Report is issued to the Supervisor with a carbon copy to the Financial Officer.

2. This report is issued approximately ten days after the end of the month.

3. Inventory Control reports show the following information:
   a. Amount on hand end of last period.
   b. Amount purchased this period.
   c. Amount issued this period.
   d. Amount allocated, but not issued this period.
   e. Amount on hand at end of this period.
   f. Dollar value of ending inventory (LIFO)

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$75,000	$185,000	$77,100

The significant findings at this time in the survey of Inventory Control are as follows:

1. Vendors are complaining that the city has tendency to order on a rush basis.

2. Yearly expected inventory needed are for total city, not by warehouses.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$75,000	$185,000	$94,500

Project: Inventory Control - Systems Audit G-6

The following recommendations have been made to City Council:

1. There should be established a centralized Material Control Department reporting to the Director of Finance.

2. Inventory Control groups in warehouses should continue to report directly to Superintendent---but would be under functional control of Material Control Department for methods and procedures to be followed.

3. Inventory forecasting should be given attention as a separate study.

4. There should be immediate attention to having available inventory forecasts once every three months rather than the present yearly forecast.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$75,000	$185,000	$152,000

The following recommendations have been made to City Council:

1. The Engineering and Purchasing Departments should study the following:
   a. Standardization of component parts.
   b. Development of new classification and coding system for all materials.
   c. Vendor relations.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$105,000	$190,000	$168,400

Project: Inventory Control - Systems Audit

The following action has been taken:

1. City Council has agreed to establish a centralized Materials Control Department under the Director of Finance.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$130,000	$290,000	$170,300

The following acts have been taken:

1. Obsolete materials have been removed from inventory with a scrap and salvage recovery of $50,000.

2. The Purchasing Department has made these improvements:

   a. Min-Max analysis has improved the out-of-stock situation with estimated savings in production downtime of $20,000 per year.

   b. Vendor relations have improved. It is noted that certain vendors are now willing to anticipate our orders and actually are carrying in their inventories materials formerly in ours. It is estimated that this change in attitude is worth some $40,000 per year to us.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$130,000	$340,000	$254,700

The following results have been obtained from the Inventory Control-Systems Audit Study:

1. General coordination among departments has improved.

2. More attention to the importance of inventory costs has been reflected in associated areas such as:

   a. Space utilization

   b. Engineering specifications.

From: Secretary, City Council Project H

To: Manager, Systems Department

Subject: Attention to Policy Formulation and Compliance Problems

The Council asked that I forward the attached results from last year's attitude survey to you for action.

The result of a recent attitude survey of employees in several of our agencies, together with the passage of a resolution passed by our legislative body urging standardization of policies in order to effect tax savings in governmental operations, requires a look at the manner in which policies are formulated and at the arrangements for checking to see that policies are being followed. The following has been noted from the attitude survey:

1. "Policies within agencies are often inconsistent, and policies in one agency may be contrary to those in other agencies."

2. "Policies often conform to Civil Service requirements without consideration as to whether they meet our operating needs."

3. "Policy manual never up-to-date and often cluttered with additional pages, memos, etc."

4. "Systems changes are often ineffective because related policy has not been clearly defined."

Project: Policy Formulation and Compliance

The significant findings at this time in the survey of Policy problems are as follows:

1. Each agency has a policy manual, copies of which have been obtained for our use. These contain all policies in effect at the date of the most recent compilation of the manual, and a number of memoranda and directives from relevant federal and regional agencies regarding recent programs in which our agencies participate.

2. It appears that Civil Service regulations and strict requirements of the budget allocation and accounting procedures are used as policy guidelines by many agency supervisors.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$160,000	$400,000	None

Project: Policy Formulation and Compliance

The significant findings at this time in the survey of policy problems are as follows:

1. All policies are written out according to prescribed forms, and are distributed to all employees. Much time is spent up-dating policy manuals, and bulletin boards of many agencies are over-flowing with policy change memos.

2. Some agencies have developed the practice of filling out and filing away reports which employees determine are of little use. This results in development of informal procedures, causing difficulty in determining system study processes.

3. The City Treasurer (an elected official) has urged all agencies to effect savings in the present fiscal year.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$200,000	$450,000	$5,200

Project: Policy Formulation and Compliance

The significant findings at this time in the survey of policy problems are as follows:

1. The council revised its committee structure and the new committees are calling for revisions of agency practice based upon policy formulations being prepared by the committees.

2. The committee on inter-agency cooperation has directed the systems department to provide it with a comprehensive analysis of agency policies with a matrix of comparable policy guidelines in the various agencies.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$200,000	$450,000	$8,600

Project: Policy Formulation and Compliance

The following actions have taken place with regard to the policy study:

1. Written policies of the various agencies have been collected, sorted, classified, and compared in a matrix.

2. The following problem classifications have been identified as a framework for separating policies:

    1. Authorizing legislation and mandate
    2. Executive Planning and Control
    3. Organization Concepts, Methods and Procedures
    4. Controllership
    5. Finance and Budget Requests
    6. Accounting
    7. Travel and Expense Accounts
    8. Systems and Procedures
    9. Legal Service
    10. Operations Planning and Control
    11. Facilities utilization
    12. Property Management and Control
    13. Selection, Placement and Promotion
    14. Discharge and Retirement
    15. Training and Personnel Classification
    16. Wage and Salary Administration
    17. Fringe Benefits
    18. Grievance Procedure and Discipline
    19. Personnel Records
    20. Supply and Stores
    21. Purchasing
    22. Transportation
    23. Community Relations
    24. Inter-Agency cooperation and Coordination

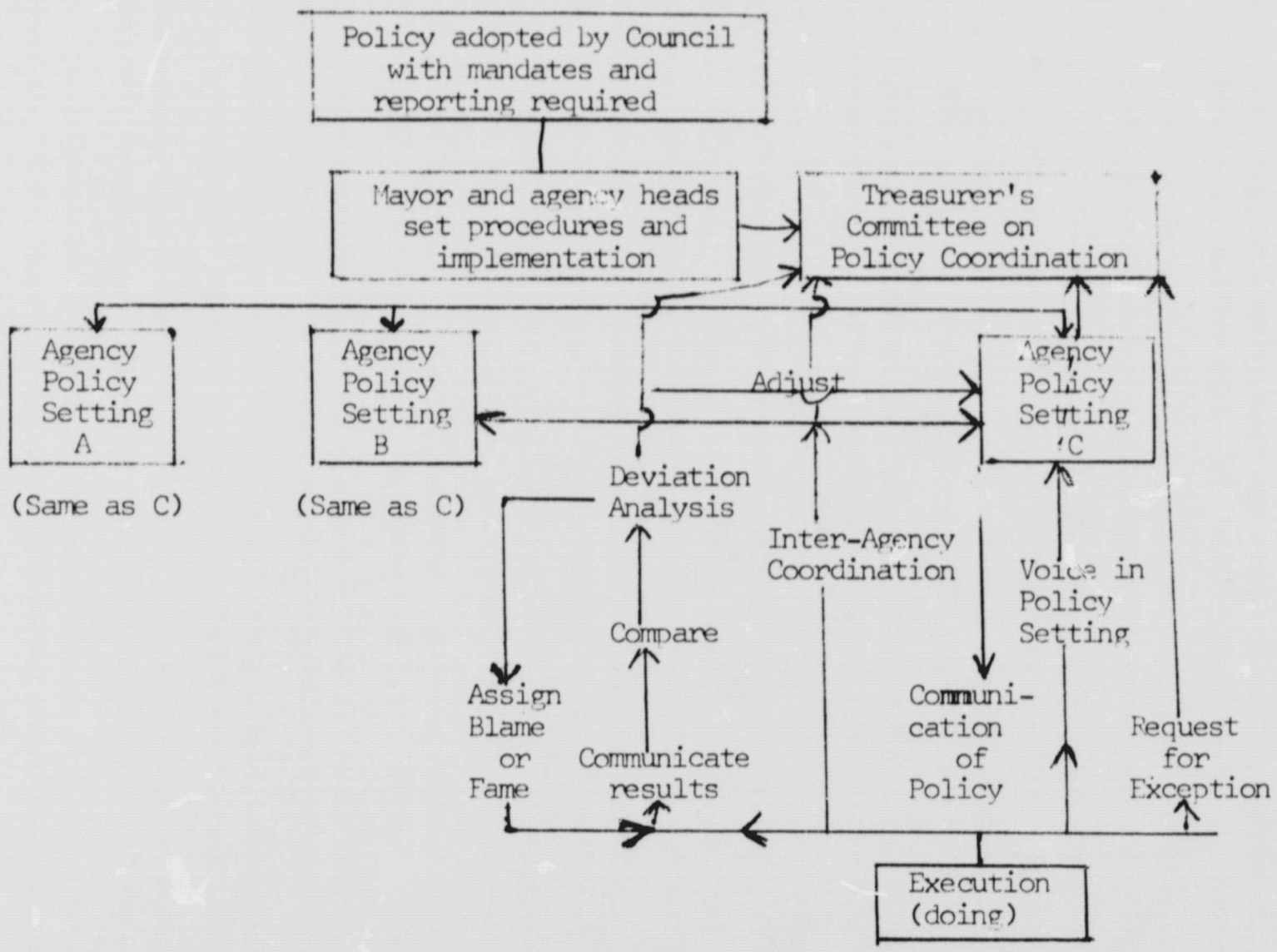
Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$250,000	$650,000	$38,000

Project: Policy Formulation and Compliance

The following actions have taken place:

1. A presentation has been made to the council through the treasurer using the diagram below to highlight elements felt to be significant for further study.

2. The council has set a hearing for consideration of the study, and has requested all agency heads to prepare written comments of the proposed system.



Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$270,000	$680,000	$69,000

Project: Policy Formulation and Compliance

The following actions have taken place:

1. The Mayor has appointed a policy coordination committee

2. The coordinating committee has developed the following statement to acquaint all levels of supervision with the importance of well-developed, consistent policies:

   Explicit policies communicated within the agency to other agencies of this government and to the community we serve will provide better service to the community. Policies should provide increased service at present budget levels, or maintain present services at lower budget levels.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$270,000	$700,000	$121,000

Project: Policy Formulation and Compliance

The following actions have taken place:

1. Agenda for the council now includes a report from the policy coordinating committee listing problems among the various agencies together with proposed priorities. While this is mainly for reporting purposes, the council has the right to revise priorities following debate.

2. The policy coordinating committee prepares appropriate information for its use and the use of the Mayor. Abstracts of this information are available for the councilmen.

3. Agency heads are informed of policies, procedures and responsibilities assigned in the government.

4. The cabinet secretary keeps these policies, procedures, and responsibilities in an information center.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$230,000	$700,000	$213,200

Project: Policy Formulation and Compliance

The following results have been obtained from the policy study:

1. There is a sense of greater cooperation among departments of the government with referrals between departments.

2. Services have improved as systems recommendations are more readily implemented.

3. The Mayor has been mentioned as a candidate for higher office, and editorials have called upon other governmental units to follow the lead of our departments.

The Budget Committee of the Council has estimated that the improved services made possible by this new approach would have added a tax burden of $800,000 under the former operation.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$230,000	$800,000	$800,000

Subject: Computerized Personnel A-praisal System Project I

A directive was received from the Director of Personnel and Manpower, Mayor's Office, stating:

Please investigate the possibilities of developing a centralized data bank for personnel appraisals. In the past year, high turnover and poor job placement has caused ineffective performance of municipal services to the public. What services do the various Personnel Divisions perform for their Departments? Is it feasible to develop a computer program to improve these services?

Project: Computerized Personnel Appraisal System

The significant findings at this time in the survey of Personnel Appraisal Systems are as follows:

In the preliminary investigation of the personnel records: they originate with the forms filled out by the applicants and processed through the Civil Service Commission when the occupational examinations are verified. This initial phase of processing indicates the need of coordination with the Civil Service Commission in developing the system. Thereafter, the employee's records are sent to his place of assignment and government employment documents, changes in personal data, and evaluations of performance are filed in that department. One of the problems discovered is that the changes in employee records are not or incorrectly up-dated. Also, there is a lack of coordination between departments on transferring employee records with transfers of assignments of personnel.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$150,000	$250,000	None

Project: Computerized Personnel A-praisal System

The significant findings at this time in the survey of the Personnel Appraisal System are as follows:

A review of the forms in the Personnel Records Section indicate that there are too many forms used to record changes in data and that there are inconsistancies in coding data which causes confusion in interpretation both in the departments of origin and upon transfer of records to other departments.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$150,000	$250,000	None

Project: Computerized Personnel Appraisal System

The significant findings at this time in the survey of Personnel Appraisal System are as follows:

A standard form for employee records has been developed suitable for getting employment information to computer facility. Also, forms have been designed for up-dating personal data, change of assignments and adding yearly performance evaluations. Along with the forms, a coding manual has been written giving all the needed codes for the classifications.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$150,000	$250,000	$5,000

Project: Computerized Personnel Appraisal System

The significant findings at this time in the survey of Personnel Appraisal System are as follows:

As a result of a meeting with all Department Personnel Managers and a representative of the Civil Service Commission, a system of forms flow within departments and a transfer procedure of employee records were worked up and approved. With this system, the forms previously developed can now be initiated as far as using the primary employee form.

Obtaining this data is expensive in terms of analytical effort because of inter-personal problems (feelings are very expensive data).

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$150,000	$250,000	$25,000

Project: Computerized Personnel Appraisal System

The significant findings at this time in the survey of Personnel Appraisal System are as follows:

With the classifications, codes and the forms developed, a system design has been developed to process these pieces of information in the computer.

Using a file data code to identify the employee record (this code is also on the employee record form) by department, division, job classification, and employee number, the system process the inputs, performs operations such as, printing out personnel that fit needed job specifications to be promoted laterally within departments. The system will also generate management reports on turnover, transfers and section or division manpower status (slots allocated vs. slots filled).

The system has been presented to the committee previously mentioned and was approved.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$150,000	$250,000	$25,000

Project: Computerized Personnel Appraisal System

The significant findings at this time in the survey of Personnel Appraisal System are as follows:

The programming, using a card feed input and magnetic tape information process, has been written. The debugging was coordinated by the systems designer and using the forms, coding and procedures has been completed.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$150,000	$250,000	$25,000

Project: Computerized Personnel Appraisal System

The significant results at this time in the survey of Personnel Appraisal System are as follows:

A procedure for the operations of the computer facility to process the employee records has been developed. The standard operating procedures are as follows (examples - total list is not shown):

1. Personnel Departments will fill out completely Employee Personnel Record (MGE form A) on all employees under the Civil Service jurisdiction.

2. The computer operations will arrange for all Personnel Records (MGE formA) to enter into the computer system.

3. All changes in data, Personal Data (MGE Form B), Assignment Change (MGE Form C), Employee Performance Evaluation (MGE Form D), Termination/Retirement (MGE Form E) will be delivered to computer operations at 4:00 PM every Thursday of every week. In case of holidays, etc., the day before at 4:00 PM before holiday starts.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$150,000	$250,000	$25,000

Project: Computerized Personnel Appraisal System

The system is now operative.

Note: Due to the necessity for accurate processing and the value of personnel records, the systems must be run in parallel until all processes are found sound -- approximately 18 months.

Cost Estimate at end	Savings Estimate at end	Actual Savings to date
$150,000	$250,000	$100,000

TO: Programming Evaluation Project K

FROM: City Managers

PROJECT: CENTRALIZED TYPING AND DUPLICATION SERVICE

The head of the duplicating department has recently returned from a workshop given by the General Accounting Office. At this meeting the savings resulting from typing and stenographic pools and a centralized reproduction service were presented in great detail. It is his impression, based on the material presented, that our clerical and printing operations are of sufficient size to warrant such a pool.

The significant findings at this time regarding the typing pool problem are:

1. The meeting referred to was April 4, 5, and 6 in Washington, D.C. It was a workshop entitled, "Office Overhead - How to Keep the Roof from Falling In."

2. The typing, steno, and duplicating reports by two other departments not connected with our line of work, both with clerical employment twice as large as ours.

3. However, both the speakers and the current literature support the idea that savings are probable at our level of employment.

4. Further investigation seems advisable.

Cost Estimate at end	$100,000
Savings Estimate at end	$250,000
Actual Savings to date	None

The significant findings at this time regarding the typing pool problem are:

1. The following equipment is necessary for the efficient operation of centralized typing and duplicating facility:

   a. Typewriters
   b. Dictaphones
   c. Xerox machines
   d. Printing press
   e. Miscellaneous office supplies

2. We need several new typewriters and dictaphones, a larger Xerox machine, and the printing press is badly in need of repairs.

3. More space is needed, but this does not appear to be a major problem as we presently have several hundred square feet available.

4. The necessary equipment was purchased and the repairs were made.

Cost Estimate at end	$100,000
Savings Estimate at end	$200,000
Actual Savings to date	$ 3,000

The following results have been obtained from the typing pool study:

1. Various personnel problems arose. These mainly centered around the apparent loss of status. All the girls were assured that they would retain their old GS rating and salary.

2. The girls finally agreed to a six months trial basis based on our presentation, which stressed the more even distribution of work and the possibility for a more varied work assignment.

3. The GS rating for new typing pool employees was lowered slightly, resulting in additional savings.

4. Lost time and work due to absences has been reduced by spreading that girl's work over the entire pool.

5. A study was made and it was determined that a large part of our daily correspondence and reports are of a repetitive nature, and that much time is wasted in repeatedly typing these standardized forms. To solve this problem, an MT/ST (Magnetic Tape Selective Typewriter) was purchased. The MT/ST consists of an IBM Selectric Typewriter attached to a magnetic tape. As you type on the typewriter, each item is recorded on the tape, with an identifying code number. When you want to type that form you place the tape back in the machine, dial the code number, and when the machine has found your item, it automatically prints it out.

6. The administrative problems of pick up and distribution of work were easily worked out and written up in great detail.

7. Other department managers have expressed growing interest in this technique.

Cost Estimate at end	$100,000
Savings Estimate at end	$230,000
Savings to date	$149,000

The following results have been obtained from the typing pool study:

1. The typing pool has worked extremely well and everyone is quite satisfied.
2. No further activity is required at this time.

Cost estimate at end	$100,000
Savings estimate at end	$230,000
Actual savings to date	$180,000

FROM: Mayor, Garden City Project L

TO: Manager, Systems Management Department

PROJECT: INTEGRATION OF HARD-CORE DISADVANTAGED HIRES INTO CIVIL SERVICE

The federal and state governments have allocated funds to the city to be used exclusively for the integration of the hard-core unemployed into the municipal service agencies. The Systems Department has been given the responsibility of investigation and implementation of this program on an inter-urban basis. As a result of the current administration's concern for the high unemployment level, the amount of funds allocated to the city in this and other related areas in the future may very possibly hinge upon how quickly and efficiently this program is instituted.

FROM: Mayor, Garden City

TO: Manager, Systems Management Department

The following results have been obtained as a result of this study:

1. A survey has been conducted supplemented with data provided by various federal and state welfare and unemployment offices producing the following findings:
    a. Approximately 4% of the city's population is unemployed.
    b. Of this 4%, approximately 5000 are considered "hard-core" disadvantaged, i.e., have not completed secondary schooling and with a record of chronic unemployment.
2. A pilot program at a cost of less than $250,000 could be attempted. It would consist of a one-year training period at minimum responsibility jobs with six hours of classes per week oriented to preparing the trainee to qualify for Civil Service position.

Cost Estimate at end $250,000

Savings Estimate at end ?

Actual Savings to date None

Page 2.

1. Tests and screening have taken place and 200 possible trainees have been selected.

   a. 25 will be selected to begin as soon as possible with another 25 to begin in about six months, thus setting up a bi-yearly turnover.

2. The trainees will be employed at:

   a. The municipal Services Building

   b. City Hall

   c. Police Administration Building

3. Final job definition will be left to the personnel administrators at the various locations.

   a. Typical jobs: mailroom (delivery, sorting, etc.), duplicating services, time keeping, etc.

Cost estimate at End:	$250,000
Savings Estimate at end:	$600,000
Actual Savings to date:	None

The city officials, realizing the opportunity for increased state and federal funds as well as the social significance of this type of program, have directed your department to get the program underway as soon as possible. They have requested that at least one junior and one senior analyst be devoted exclusively to the project to its completion.

Cost Estimate at end	$250,000
Savings Estimate at end	$600,000
Actual Savings to date	None

1. A group of personnel administrators and sociologists from a local university have designed the weekly classroom program to be conducted by municipal personnel directors which will emphasize:

   a. Basic occupational skills
   b. Preparation for the competitive Civil Service Exams
   c. Pride, self-help, and social awareness

2. The first corps of 25 trainees has been selected representing a cross-section of the city's disadvantaged.

3. Final assignments have been made and the starting date has been set.

Cost Estimate at end	$250,000
Savings estimate at end	$600,000
Actual Savings to date	$ 3,000

Pages 5 and 6

1. 5 trainees from the first group have quit.
2. Attendance has averaged to 75% per week.
3. Supervisors and regular employees are beginning to complain at an increasing rate.
4. There have been various instances of overt antagonism between trainees and regular employees.
5. Personnel administrators at the various locations have become increasingly antipathetic toward the program and have begun to regard it as a "necessary evil."

Cost Estimate at End: $300,000
Savings Estimate at End: $450,000
Actual Savings To Date: $ 10,000

1. City officials, having had the opportunity to see the trainees at work and having read your monthly reports are highly displeased. They have suggested that your entire Systems Group budget could be significantly affected by the second 25 employee corps' progress and performance.

2. The mayor has written a letter to all personnel administrators at the three locations stressing the importance of this program and putting them directly responsible to the Systems Group for the programs implementation.

Cost Estimate at end	$300,000
Savings Estimate at end	$350,000
Actual Savings to date	$ 18,000

Page 8

1. The following steps have been taken by the Systems Group to alleviate those conditions outlined on pages 5 and 6.

a. Your Group Leaders have conducted compulsory seminars for all supervisors explaining every phase and objective of the program.

b. The supervisors have been given the responsibility of clarifying the program to the remainder of the employees.

c. All supervisors have been authorized to take sterner disciplinary measures with the trainees with respect to delinquency, conduct, etc.

d. A complete job description for each trainee has been requested and received with the intent to suggest more productive and rewarding jobs.

e. To achieve better instructor-trainee rapport, local educators and social workers have been enlisted to conduct the classroom sessions.

Cost Estimate at end	$300,000
Savings Estimate at end	$525,000
Actual Savings to date	$150,000

1. The preceeding innovati·ns have produced significant improvements in all phases of the program.

2. As a result of the now successful pro·gram, the federal and state governments have doubled the city's allotments for proverty, welfare, and employment oriented programs.

3. As a result, the city has given the Systems Department a $30,000 budget increase for the subsequent period. (This figure will be added to the budget for next period after calculation.)

Cost Estimate at end	$325,000
Savings Estimate at end	$650,000
Actual Savings to date	$300,000

1. The program has been expanded to include other smaller municipal service locations.

2. This expansion has enabled the number of trainees per period to be increased by 50%.

3. The Systems Group has begun soliciting local businesses to institute similar smaller scale programs offering their services as consultants where-ever needed.

Cost Estimate at end	$325,000
Savings Estimate at end	$650,000
Actual Savings to date	$650,000

FROM: Jr. Systems Analyst Project M

TO: Manager, Systems Department

Forms Controls for all Agencies

Consideration is necessary in the reduction of paper work generated due to too many different types of forms. Inter-governmental agencies are using their own forms without coordination for uniformity.

Within the individual agencies, there are many forms that are related and could be consolidated. All forms ask too much information which is not utilized.

Might be too many duplicates made of the same form.

We should look into this.

PRECEDING PAGE BLANK NOT FILMED.

At this time some important revelations are worth mention. Most forms are filled out in 4 copies with one having no meaningful purpose. Many forms can be combined by adding a few lines, which would not be used for one purpose but would be used for another. We have formulated a few composite forms and distributed them for trial usage.

Cost Estimate at end	$ 90,000
Savings Estimate at end	$225,000
Actual Savings to date	$ 2,000

We have further studied the number of copies used and their significance in actual savings. There is no need for more than 3 forms. In addition, we have discovered that the use of carbon paper between copies is more expensive than forms which are coated on the back to produce prints on next page. Changes were instituted in these areas with positive results.

Cost Estimate at end	$125,000
Savings Estimate at end	$300,000
Actual Savings to date	$ 90

The lack of coordination between agencies has been studied carefully and conferences held with responsible people in this area. After much ado, about doing it their way, we made final decisions on all forms to be used by the system. We feel that after the people accept the idea and all the old forms are used up, there will be much better conditions in this area.

Cost Estimate at end	$150,000
Savings Estimate at end	$300,000
Actual Savings to date	$200,000

The project has reached its conclusion and all things are operating well.

Cost Estimate at end	$150,000
Savings Estimate at end	$300,000
Actual Savings to date	$300,000

PROJECT: TAX ASSESSMENT STUDY Project N

The Tax Bureau has conducted a preliminary survey to evaluate the possibility of increased revenues through more equitable structure and enforcement. Results are as follows:

1. Current tax revenue is $11.124 million.
2. Market value estimated at $597.781 million.
3. Assessed value is $366.262 million.
4. The tax rate is $30.25 per $1,000 assessment.
5. Per cent assessed to market is 61.3%.

Cost Estimate at End	Savings Estimate at End	Actual Savings
$150,000	$90,000,000	none

PROJECT: TAX ASSESSMENT STUDY

The significant findings at this time in the survey of tax assessment are as follows:

1. The tax rate can be reduced if assessment is made on market values, giving us the the same tax revenues.

2. Land values appreciate in our city approximately 15% per year. More frequent assessments would increase the accuracy of the assessed values.

Cost Estimate at End	Savings Estimate at End	Actual Savings
$150,000	$90,000,000	None

PROJECT: TAX ASSESSMENT STUDY

The significant findings at this time in the survey of tax assessment are as follows:

1. The city will be divided into new tax districts for the systematic reassessment of all properties.

2. All properties in the districts will be taxed at the new rate of $24.75 per $1,000. The old rate cannot be used since the taxpayers would not vote favorably in the coming elections.

Cost Estimate at End	Savings Estimate at End	Actual Savings
$130,000	$4,000,000	none

TO: Systems Department Manager
FROM: Chairman, Executive Committee
SUBJECT: TAX ASSESSMENT STUDY

Implementation of the reassessment program has started. We are as yet a little slow getting started due to personnel problems, however, as our staff grows and gets more familiar with its new functions, we will show great strides in true assessment values.

Due to work done with existing departments, it was decided by city council that we will only get credited with 15% of the actual savings by our department. We are fighting this, since we are sure this does not reflect as favorably on our department, however, until this is changed, we will have to change our savings estimate from $4,000,000 to $600,000.

Cost Estimate at End	Savings Estimate at End	Savings to Date
$130,000	$600,000	$45,000

PROJECT: TAX ASSESSMENT STUDY

The significant findings at this time in the survey of tax assessment are as follows:

Continued implementation of tax assessment program.

Cost Estimate at End	Savings Estimate at End	Savings to Date
$130,000	$600,000	$120,000

PROJECT: TAX ASSESSMENT STUDY

The significant findings at this time in the survey of tax assessment are as follows:

Continued implementation of tax assessment program.

Cost Estimate at End	Savings Estimate at End	Savings To Date
$130,000	$600,000	$180,000

PROJECT: TAX ASSESSMENT STUDY

The significant findings at this time in the survey of tax assessment are as follows:

Continued implementation of tax assessment program.

Cost Estimate at End	Savings Estimate at End	Savings To Date

PROJECT: TAX ASSESSMENT STUDY

The significant findings at this time in the survey of tax assessment are as follows:

Continued implementation of tax assessment program.

Cost Estimate at End	Savings Estimate at End	Savings To Date
$150,000	$600,000	$510,000

PROJECT: TAX ASSESSMENT STUDY

The significant findings at this time in the survey of tax assessment are as follows:

Continued implementation of tax assessment program.

Cost Estimate at End	Savings Estimate at End	Savings To Date
$160,000	$600,000	$540,000

PROJECT: TAX ASSESSMENT STUDY

The significant findings at this time in the survey of tax assessment are as follows:

Continued implementation of tax assessment program.

Cost Estimate at End	Savings Estimate at End	Savings To Date
$170,000	$600,000	$570,000