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ABSTRACT

The manual is one of nine resulting from a project to design planning procedures for local and State vocational education agencies. It describes the overall planning process for LEAs and is to be used in conjunction with the related documents. Planning involves two aspects: making decisions that have long-term consequences and making analyses that lead to such decisions. The ideal planning process begins with preparation for planning (forming and training a planning committee, duties of coordinator and staff, convening the committee). Next the needs for data collection are determined. The district planning model is composed of eight sectors, each representing a major operating center or otherwise active component of a school district. Data collected is then analyzed and goals and objectives are set. The first series of committee work sessions culminated in school board action establishing short and long term objectives. The second series of sessions leads to the approval of operating plans by the board of subsequent budgeting and implementation. (MS)

A Vocational Education Planning System FOR LOCAL SCHOOL DISTRICTS

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LOCAL EDUCATION AGENCY USERS' MANUAL

Vol. I

FILMED FROM BEST AVAILABLE COPY

A VOCATIONAL EDUCATION PLANNING SYSTEM
FOR
LOCAL SCHOOL DISTRICTS

Volume I: Local Education Agency Users' Manual

Produced For

Edison Township

Linden

Lower Camden County Regional
High School District

Middlesex County Vocational Schools,

Somerset County Vocational School
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and

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The Division of Vocational Education of the New Jersey State Department of Education has long recognized the need to introduce more science into the art of educational planning. This publication is an outgrowth of its efforts to devise more systematic, objective, and precise bases for program decisions. The Division has determined, moreover, that the key to the success of its system is to insure that the Local Education Agency has an advanced planning capability.

Grateful acknowledgment is given to Dr. Robert M. Worthington, former Assistant Commissioner of Education (DVE), for initiating this study and to Mr. Stephen Poliacik, Assistant Commissioner of Education (DVE), for his guidance and support in continuing the study when problems seemed insurmountable. Also, to former Commissioner of Education, Dr. Carl L. Marburger, and Acting Commissioner of Education, Dr. Edward W. Kilpatrick for their support and patience. Appreciation is further expressed to the Superintendents of the five LEAs: Mr. Charles A. Boyle, Edison; Mr. Americo R. Taranto, Linden; Mr. Joseph R. Wilson, Somerset; Mr. Leonard A. Westman; Lower Camden County Regional High School; and Dr. J. Henry Zanzalari, Middlesex County Vocational Schools and Technical Institute for their cooperation and understanding.

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Series Preface

Planning is a universal concept based on the proposition that if you think a bit about what you intend to do, you are likely to do whatever it is better than if you don't think about it. This process of thinking ahead generally involves gathering information, analyzing the information and then formulating one or more courses of action to follow. The planning system presented here embodies these elements in operational procedures for planning for school districts.

The Vocational Education Planning System for Local School Districts draws heavily upon a growing body of experience in educational planning which has been generated by Government Studies and Systems (GSS). The introduction describes these concepts. Out of this experience has evolved a set of planning techniques, particularly suited by design and through actual use, to enable effective planning. The bases for and uses of indicators, planning factors, forecasts, models and others of these techniques are clearly laid out in this manual as they appear in the normal course of the planning cycle.

This manual is one of several resulting from a project to design planning procedures for local and state vocational education agencies. This manual describes the overall planning process for LEAs. It is to be used in conjunction with the following manuals:

- ✓ Volume I: Local Education Agency Users' Manual
- ✓ Volume II: Local Education Agency Users' Data Collection Manual
- ✓ Volume III: Local Education Agency Planning Analyst's Procedures
- ✓ Volume IV: State Application Funding Procedures
- Volume V: Enrollment Forecasting Procedures
- ✓ Volume VI: Procedures for Estimating Adult and Post-Secondary Potential Enrollment
- Volume VII: Job Demand Forecasting Program
- Volume VIII: Training Materials
- Volume IX: Guide to Project Manuals

The most important ingredients in effective planning, however, are the people who do the planning. The planning team itself should include, at the very least, those who are going to be directly responsible for the execution of the plan, once developed, and those who are otherwise directly affected by the plan. People who participate in the planning process, who see their input take shape in a plan, tend to be better advocates and implementors of that plan.

INTRODUCTION:

SOME BASIC IDEAS ABOUT SCHOOL DISTRICT PLANNING

Objectives

The purpose of this initial section is to introduce some basic concepts of formal planning. The concepts presented are the basis for the detailed planning system documented in this series of manuals.

The discussion begins with general definitions of "planning" and related terms, illustrated with a simple analogy. To illustrate the concepts a "pure" or ideal planning process is then described. Because contemporary planning relies on forecasts and predictions, the section concludes with comments on computational aids.

Planning - A Definition

Planning has two definitions depending on who you are. If you are a decision maker, a manager, superintendent, or director then you have to make decisions leading to the allocation of funds, the authorization of programs and so on. Some of these decisions have long-term consequences and are hard to reverse. It would be difficult to "unbuild" a building once constructed. Other major decisions are: the introduction of a major program, the addition of large groups of tenured staff or a major organizational change (reassigning who reports to whom and who has authority to make certain decisions). For you planning is the process of thinking out and making these decisions.

Since these decisions are critical, many decision makers call on their staff for special analyses and support. For a staff person, planning means making the analyses to help in making such decisions. How are these analyses best made?

Planning

- Making decisions that have long-term hard-to-reverse consequences

Facilities

Major program changes or additions

Major additions to tenured staff

Organizational changes

- Analyses leading up to such decisions

Results of Planning

Semantically, it is natural to think of the result of "planning" as a "plan." It is more useful, however, to realize that the results of planning analyses and decision making are budget allocations, program authorizations and the others listed here.

Organizational changes may imply the assignment of certain personnel to existing positions or the reassignment of functions to specific positions or groups.

Results of planning

Budget allocations

Capital program allocations

Program authorizations

budget

personnel
facilities
facilities

Project approvals

New regulations or guidelines
(policies)

Organizational changes

personnel - position

function - group

(Not a "plan")

An Example of Planning

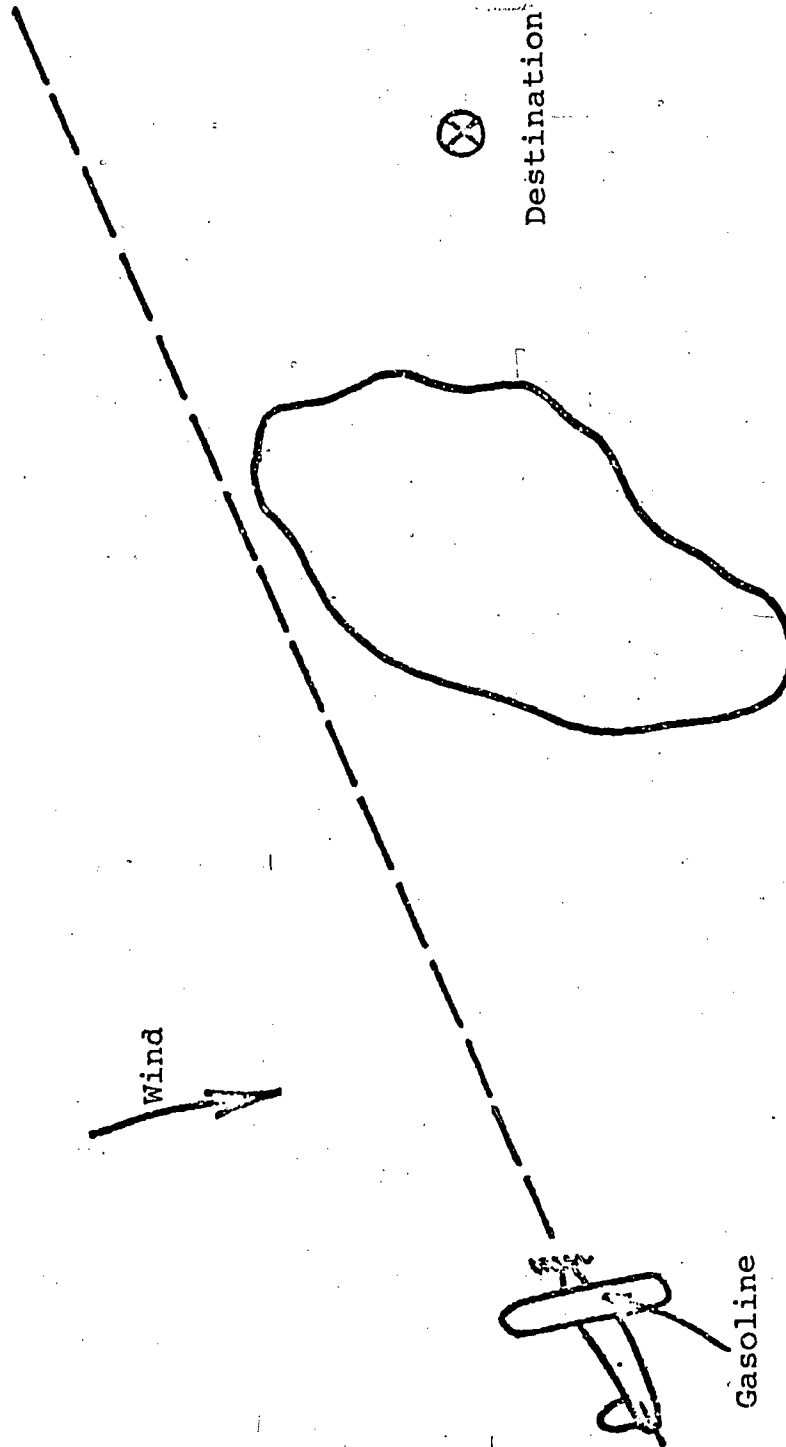
Consider the more visible process of planning an airplane flight. The plane is in flight. The destination (the goal) has already been chosen. The situation might look like that shown in the figure.

The first thing the crew has to do is collect data (what is their present location, how much fuel is left). The second step is to forecast the environment, what is the terrain ahead, what is the weather in the area, whether there are intermediate airports for emergency landing.

The next process is to see where the plane will go on its present path. We will call this the base case (the status and trend report). The base case analysis also estimates the fuel (resources) required. Note that this analysis requires a prediction of flight path, presumably using knowledge of the theories of flight..

Now a comparison is made to see if the base case path will reach the goal, the destination. Assume, as is often the case (at least in educational planning) it will not. (At this point a review could be made to see if the destination needs to be changed.) The difference between the predicted position at some point in the future and the destination is called a gap or discrepancy. Obviously one purpose of planning is to eliminate, or at least reduce the gaps.

Example of "Planning"



Goal: get to destination in reasonable comfort and near scheduled time

There may be several gaps, in relation to the several different aspects of the goal. The obvious possible gap is that the present flight path will miss the destination. Another gap could be between the extrapolation of the present flight plan and the closeness to an obstacle.

A third indicator of the progress toward a goal is the passengers' level of comfort. The desire to reduce a gap -- eliminate a discrepancy -- to a certain level by a specified date is called an objective. Since a crash is worse than missing the destination, avoiding the obstacle is a higher priority objective.

In order to reduce gaps -- meet objectives -- various alternative flight plans are considered. This implies some process of thinking-up alternatives (e.g., suggestions from crew members or ground centers). Each alternative is carefully defined, in terms of the path and the resources used. Now there must be a process of comparing alternatives. They are compared in terms of probability of reducing the gaps and in terms of fuel requirements. This is a cost-effectiveness analysis and again requires an ability to predict the consequences of undertaking the alternative. To predict requires some method of interrelating many factors (in this case: wind, speed, obstacles, fuel, weather) to compute the future location of the plane. One way to do this is in one's head (intuitively). (Many intuitive pilots end-up

located six feet underground.) Experience proves that more formal prediction methods lead to better results.

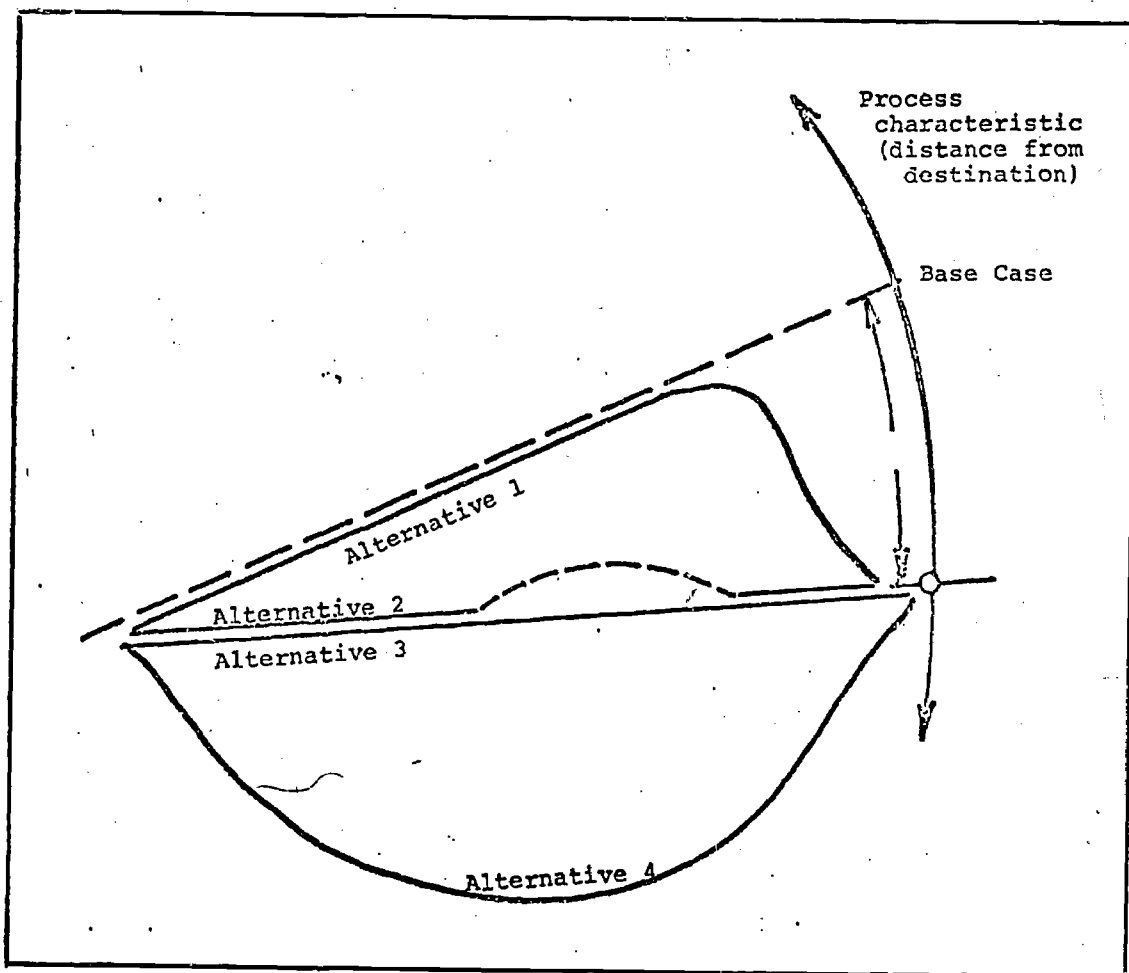
More formal prediction procedures are explicit, so that they can be checked and corrected. They also are based on models or theories, which means they are embodying the experience -- and thinking of many people, not just that of the one intuitive decision-maker.

Finally, a decision is made and the new flight path set into motion.

What can we learn from this example about the logic of planning? It appears that formal planning requires these steps:

- . Collect data
- . Forecast the environment
- . Predict consequences of present activities --
base case
- . Revise goals, if necessary
- . Analyze gaps -- comparison
- . Set objectives and priorities
- . Propose alternatives
- . Predict consequences of alternatives

- . Select best alternative(s)
- . Put plan into effect (authorizations and budgets)



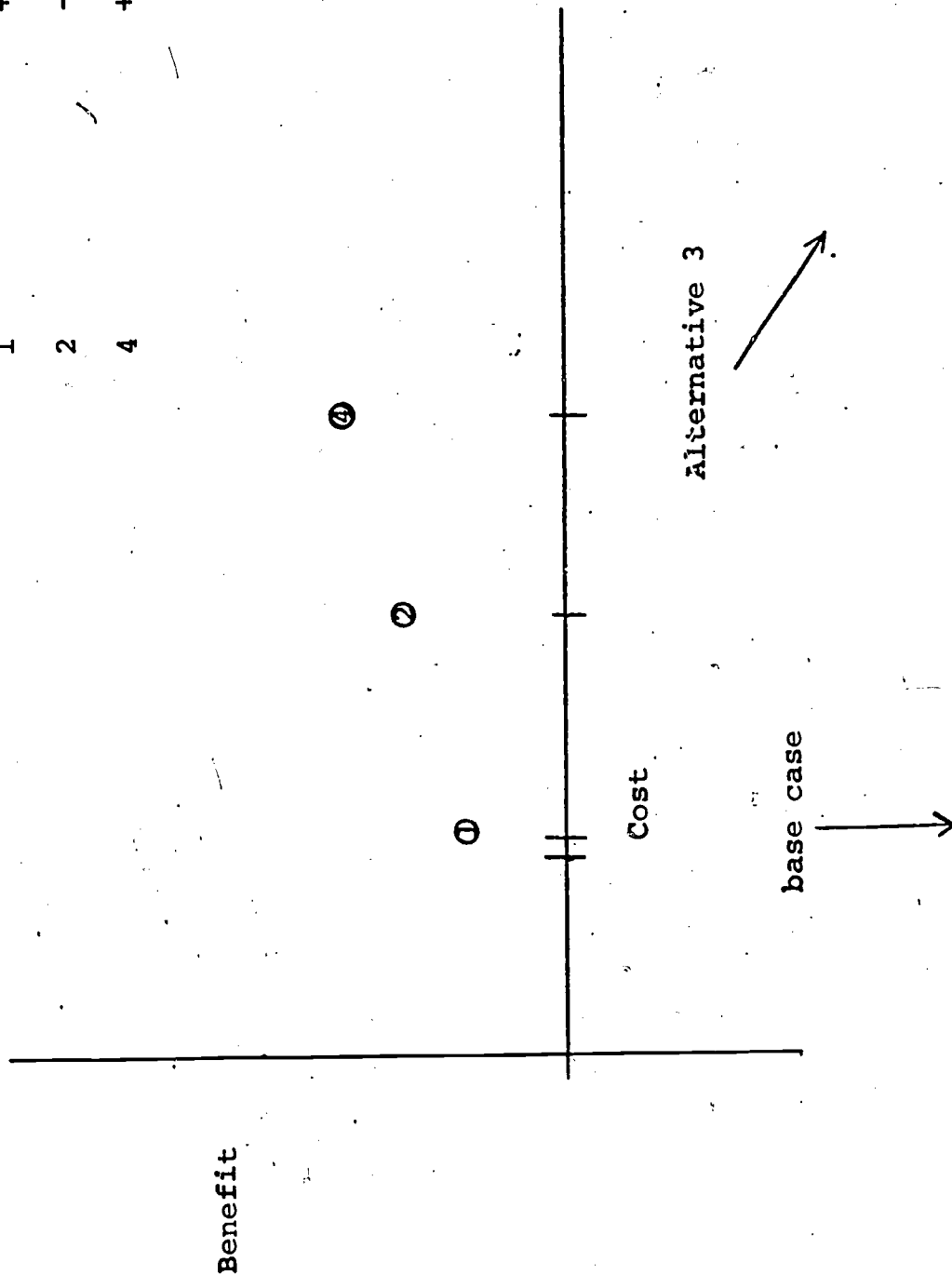
Choosing an Alternative

We have identified three feasible alternatives, numbers 1, 2, and 4. In the upper right hand corner of the chart, we see how these are rated in terms of the two principal indicators, comfort and timeliness. Timeliness has a specific measure, number of hours late. Comfort is rated on an arbitrary opinion scale. (Notice that the decision maker must predict what the comfort and timeliness will be along each alternative path. This process of prediction is relatively easy in the aircraft example but difficult in a real educational situation.)

Next we have the problem of combining comfort and timeliness into one overall measure. Often this cannot be done. Assuming it can be, we might get an overall estimate of benefit or effectiveness shown in the figure on the center of the chart. We see that the alternatives are increasingly costly (in terms of gasoline used and operating costs) but with increasing benefits. The choice between these alternatives must be made as a value judgment by the decision makers. They might, for example, take number two as being a good compromise between benefits and costs. (Alternative four costs more and does not add much benefit.)

Choosing an Alternative

<u>Alternative</u>	<u>Comfort.</u>	<u>Time</u>
1	+1	-3
2	-1	-1
4	+1	-2



Review of Concepts

This example brings out the concepts shown in this chart. It is important to note that we must develop indicators first, next measure the gap between where we expect to go and where we would like to go and then set objectives. (Some of the literature on planning implies that objectives follow directly from goal statements, which is difficult to do.) We also have been introduced to the concept of a base case or no change plan and an alternative.

This planning process can be applied at any level of management, but I will speak especially of its application to the agency or school district level.

Review of Concepts

Goal - general statement of the ideal or desired future

Indicators - measures of progress toward goals

Process Characteristics - measure of the extent and quality of the process, (not directly related to goals)

Gap - difference between predicted and desired level of an indicator

Objective - gap to be closed

Priority - rank of importance of objective to goals

Base case - no-change plan

Alternative - different plan

Comparison of the Education and Air Planning Examples

Just to be sure we see the relationships, this chart shows corresponding concepts for the example and a school district.

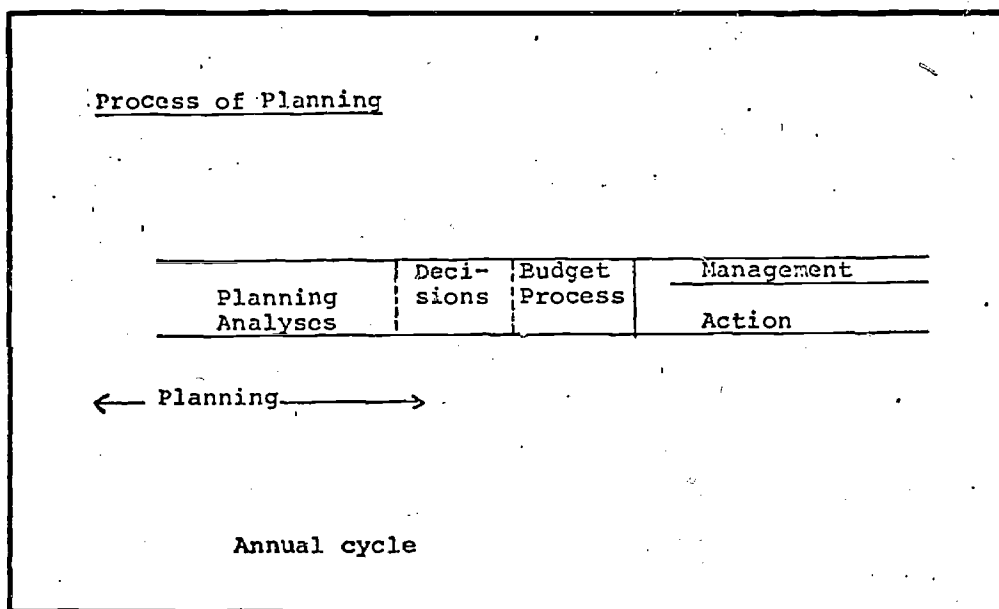
<u>Comparison of the Education and Air Planning Examples</u>		
	<u>Education</u>	<u>Plane</u>
Goal:	Basic Skills	Be on time
Indicator:	Test Score	Lateness in hours
Process Characteristic:	Student/Teacher	Distance from destination Miles per gallon

The Process of Planning

In most agencies, there is an annual cycle which focuses on budget preparation. Preceding budget preparation there is a period of planning. Following the budget approval, the activities, authorized by the budget, are carried out. "Management" is the process of insuring that these activities are carried out according to plan and other institutional guidelines and constraints.

You may not recognize the planning period as a specific function because in most institutions it is quite informal. It consists of all those activities, many taking place in the hallways, where people negotiate and bargain with each other. Sometimes they undertake specific isolated studies in order to justify their own budget requests. Much of the informal planning takes place in people's head or in unrecorded discussions.

The main point of this discussion is that this planning process can be done on a formal basis, that is, as a series of prescribed steps. Each phase of the analysis and decision-making is predefined, although of course, the specific values and decisions are not. The roles of the various people in the process are clearly established as is the way in which they are appointed to the role.



Details of the Planning Process

This chart shows, in some more detail, those steps which are required for good planning.

To accomplish proper planning an agency should have a firmly established annual process which involves the following steps:

- A. The planning staff estimates what the future (next 10 years) will be like:
 1. Forecast the population's status and desires.
 2. Forecast enrollment levels.
 3. Forecast the levels of revenues that will be available for financing health services. These forecasts will utilize general demographic and economic forecasts; generally available from other sources.
- B. The planning staff predicts the future of the educational system assuming present policies, plans and program activities and the needs (or demand) forecast in A. (The "base case" plan prediction.)
 1. Measure current levels of activities, services, expenditures and resources (facilities, manpower) and results as a starting point for the prediction.
 2. Predict school operations by estimating future levels of the factors listed in B-1.
- C. The decision-making group sets priorities for this cycle.
 1. Analyze the base case prediction (B-2) to determine where predicted indicators are less than the desired levels. (Desired levels are set by the decision-making body with input from the community.) The differences between desired and predicted are "gaps."
 2. Set objectives which are statements of a gap to be partially or completely closed.

Process of Planning II

Informal

Negotiations

Bargaining

Special studies

Formal

Analytic processes predefined

Roles predefined

Sequence predefined

STEPS IN PLANNING

A. FORECAST ENVIRONMENT

1. Population status
2. Enrollment
3. Revenues

B. PREDICT EDUCATION SYSTEM OPERATIONS

1. Current status
2. Prediction

C. SET POLICY

1. Analyze prediction
2. Set objectives
3. Set priorities
4. Announce

D. DESIGN IMPROVEMENTS

1. Determine what is likely to work
2. Design
3. Submit proposal

E. COST-EFFECTIVENESS

1. Select promising proposals
2. Predict
3. Compare costs & results

F. DECISION

1. Select cost-effective proposals
2. Approve & implement

3. Set priorities between objectives.
 4. Announce the objectives and priorities.
- D. Faculty (and others) design new programs and changes in existing programs to meet objectives (and so close gaps).
1. Utilize previous experience, empirical studies and research results to suggest fruitful changes to move a part of the system toward an objective.
 2. Design the new or changed course, activity, service, information program, etc.
 3. Prepare and submit a proposal. Proposals can be for program descriptions (types and extent of change), as well as applications for specific projects.
- E. The planning staff analyzes the proposals to rank them.
1. Select proposals most likely to accomplish high priority objectives (several different groups might be selected).
 2. Predict (using same techniques as for B-2) the indicator levels and resource requirements for each group of proposals.
 3. Compare the costs, in dollars and manpower requirements, and the benefits, in terms of outcome indicators. Identify for final decisions, the group of proposals which most nearly meet objectives (and, hence, overall goals) within feasible revenue levels.
- F. The decision-makers make decisions for this cycle.
1. Select the group(s) and, hence, proposals for approval based on the analyses in E and other considerations as the council feels relevant.
 2. Support the implementation programs by:
 - a. Review and selective approval of project applications that fit into proposed programs throughout the year.
 - b. Monitor the new activities to insure they are carried out per plan.

Prerequisites for Formal Planning

This discussion is not meant to imply that formal planning is always better than the informal mode. However, should an agency decide that formal planning does have some advantages, and it does, then there are certain prerequisites. The advantages of formal planning are largely twofold. (1) It forces all participants to examine alternative and weigh carefully their outcomes. Charisma, emotions, friendships and irrelevant factors are somewhat reduced. (2) Formal planning tends to provide the documentation necessary to explain the resulting decisions and budgets to the tax-paying public, as well as to faculty, staff and students.

In order to accomplish such a planning cycle, the agency must have developed a positive attitude towards a formal process. The leader of the agency must give it support. An appropriate planning analyst must be available who can guide the process, see that the steps are carried out and have the necessary computations performed.

The agency must have established the appropriate goals and have chosen indicators for measurement of progress towards them.

The agency must have decided on how the various costs and results will be reported so that analyses can be made and so that the decision-makers can understand the results of them.

One aspect of the report format is the so-called program structure.

One essential feature of formal planning is that a common data base is available which contains information which everyone can utilize for analyses and comparisons. Thus, an information system is required. It need not be a complicated computer-based system, but there must be a conscious effort to accumulate, record and report the necessary data - which is usually more than just accounting data.

Prerequisites for formal planning

Attitudes

Leadership

Staff

Goals

Indicators

Report formats
(program structure)

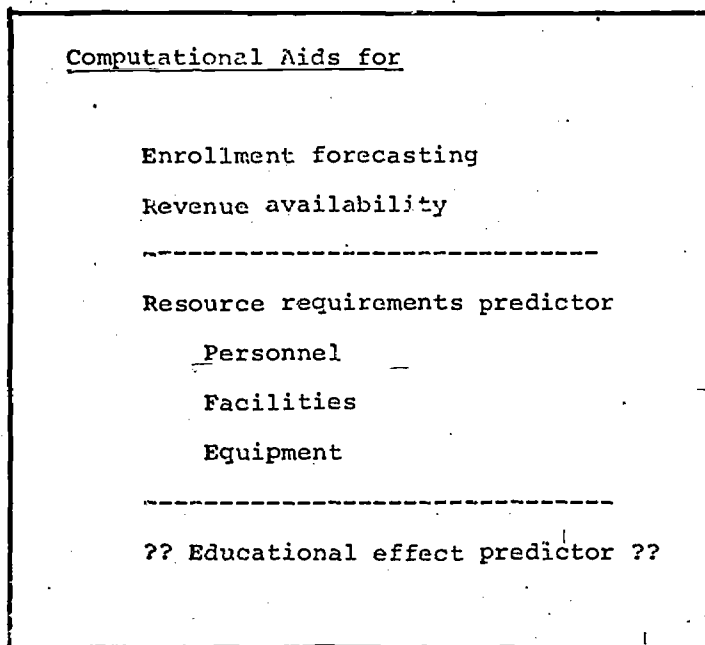
Information system

Computational aids (models)

Computational Aids

Finally, sophisticated agencies may wish to use formal computational aids for forecasting factors such as enrollments and revenues and for computing the resource requirements necessary for various alternatives. (These computational aids are sometimes called "models".)

In education, another computational aid that would be very desirable would be one which would compute the educational effectiveness of a proposed project or program change. The state of the research in education does not, however, permit the development of such a forecaster and expert judgment must be used.



Information System for Planning

Information for planning can usually be derived from other data systems which are used for operational activities, such as, accounting systems, personnel record systems, test score processing and so on. That is, much of the data is already available.

One of the advantages of developing models to aid in the decision making is that the models specify very exactly what data is required.

Information System for Planning

Should utilize other data systems

Much of the data already available

Models help define data requirements

I. SUMMARY

Preparing for Planning. Teacher orientation, traditional budgeting, contract negotiations, and student scheduling are each programmed into the routine operation of the school district and proceed along a somewhat standard string of steps to produce an expected result. As with these other administrative activities, planning involves organized efforts of district personnel scheduled as a series of specific activities. Figure 1 charts these activities.

During the Spring months, in preparation for planning, the superintendent is encouraged to appoint the following season's planning committee. Appointed early, the committee members are able to prepare for the fast moving but thorough planning events in Spring and Fall. In April, say, staff are assigned data collection responsibilities in support of the planning committee.

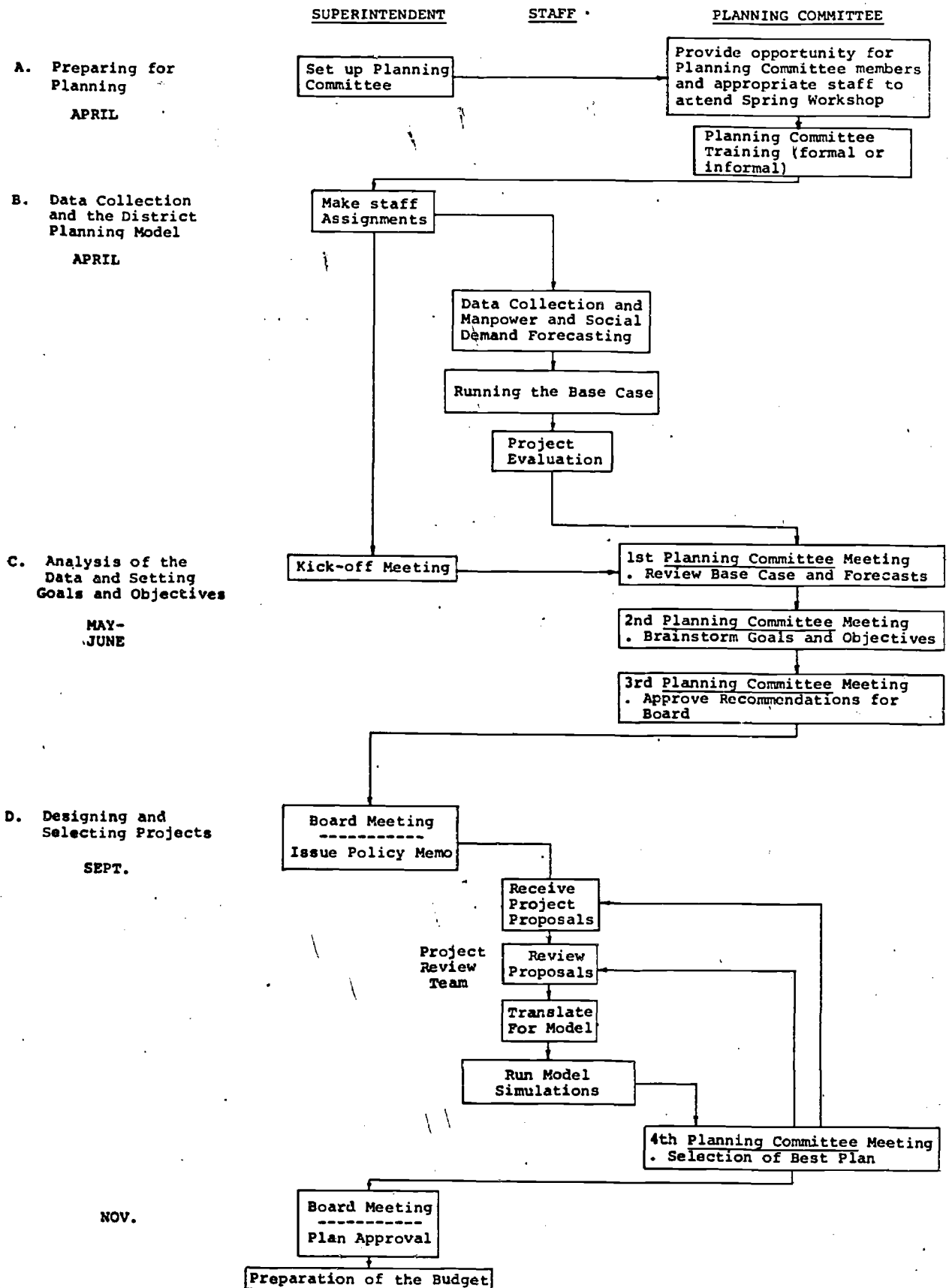
Finally, the superintendent schedules a planning kick-off session for May involving planning committee members and other interested board members, staff, faculty, students and employers.

Data Collection and the District Planning Model.

At first glance, data collection may appear to be a thankless, albeit necessary, clerical chore. The truth of the matter is that data is the fuel of effective planning. Analysis

Figure 1

LEA VOCATIONAL EDUCATION PLANNING SYSTEM



of information about the school district, the county, and the field of vocational education forms the basis for actions which are subsequently developed and executed.

Eight categories of data about the school district are collected:

- Manpower and Social Demand
- Programs
- Student enrollment
- Courses
- Teachers
- Facilities
- Material, supplies, and travel
- Equipment and equipment maintenance
- Overhead costs

Data in these categories is collected for the year just completed, the current year. Some data must be projected five years into the future. Forms for detailed descriptions of each item of data are provided to facilitate data collection. (See Volume II: Local Education Agency Users' Data Collection Manual.)

Once data is collected, a computerized model of the school district is used to prepare snapshot views, in report form, of the eight categories or sectors and of the school district as a whole. This model serves many other purposes

throughout the planning process, such as:

- . training or orientation of the participants in planning,
- . facilitating analysis of the district's activities
- . aiding the investigation of alternative proposed actions and,
- . enabling greater communication regarding district operations.

Analysis of the Data and Setting Goals and Objectives.

Once data about the district has been collected and presented through use of the model, the planning committee members take a hard look at the data and predictions made by the model to see what's happening in the school district and the county. During a series of sessions, the planning committee members explore questions such as: where is the district trending with regard to teacher requirements, student enrollment, program costs and facility use? And what do these trends mean? What county trends in manpower needs and social demand are afoot with implications for the district?

The focus of the planning committee or the board shifts then to questions of "where to?" What ought the district be doing in this county at this time in its development with regard to its program? Courses? Equipment? What should our objectives be over this coming year? Over the next five years?

The first series of planning committee work sessions culminates in a school board action establishing district objectives for the short and long term.

Project Design and Selection. A second and final series of staff and planning committee sessions leads to the approval of operating plans by the board for subsequent budgeting and implementation.

Project proposals are solicited from teachers, students, administrative staff, and perhaps, employers. Each proposal provides a description of specific proposed activities or policy changes, a statement of the anticipated outcome, an analysis of the proposed changes' impact on operations, and a justification or rationale for the proposal.

The proposals are reviewed, then translated into data for the computer model of the district. Outputs from runs of the model for each of the proposals and for selected combinations of them provide the planning committee with projections of their impact.

Working with the district objectives, the proposals, and the model reports, the planning committee fashions what it believes to be the optimum package of changes for recommendation to the school board. The data in the proposals

for the changes which the board ultimately accepts, with all data produced by the model or established by the administrative staff and the planning committee, is then used as input to the budget for the coming year.

II. PREPARING FOR PLANNING

Setting up for an analysis of a school district and the establishment of goals and objectives begins in the Spring (for LEA's whose budgets are approved the next Spring). It is then that the planning committee for the following year is appointed and an opportunity for training of the committee members provided.

A. FORMING THE PLANNING COMMITTEE. This committee is called upon to assist the board in providing direction for vocational activities. To attain responsiveness of planning to the constituents of vocational education, an LEA might chose a committee comprised of ten-to-fifteen members drawn approximately equal number from members of the board, the student body, the faculty, administrative staff, and the local business community. The superintendent is automatically considered one of the members on the committee and also the convener of the group.

Initially, the superintendent might appoint all of the committee members or he might perhaps call on teachers and student groups to appoint members. Once the district's first planning committee has been established, the superintendent might ask that group to recommend to the board alternate methods of selecting future planning committee members.

The planning committee should be appointed in the Spring, well in advance of the start of the formal planning cycle, and, often, of course, will be a continuation of the existing committee.

B. TRAINING THE PLANNING COMMITTEE. The superintendent should see that each member of the committee gets a copy of this user's manual. However, no other preparation would be more productive than to give the newly appointed committee members an orientation in issues and background important to vocational educational planning; for example:

- . Current problems and efforts in the measurement of student achievement.
- . Vocational education financing
- . Current trends in curriculum and technique
- . School district operations

The planning model is useful in helping committee members see some of the relationships and data. Its use in orientation will be made explicit below. The orientation could at a minimum consist of selected reading material provided each member. A more thorough approach would be the establishment of a Spring series of seminars which would also be open, space permitting, to the entire board as well as to other students and faculty.

While the form of orientation is certainly at the discretion of the school district, it should be apparent that the more effort expended in such training, the more meaningful and productive will be the planning.

C. PLANNING COORDINATOR AND STAFF WORK. In the Spring the planning coordinator will perform three support activities for the planning committee in preparation for their work sessions.

The activities are:

- . data gathering and computing forecasts
- . running the base case

In the Fall, he is responsible for supporting project design and analysis and for the final proposal selection analyses.

1. Description of Staff Work

The person assigned to support the planning activities will have to perform the tasks described here (the background and experience requirements for the staff are described in the next section). He should have as his full-time job performing this staff work, supporting the planning committee, and seeing that the planning process stays on schedule.

a. Data Gathering

Staff will have to extract data from the schools' files in order to complete a series of forms. These forms are set forth in Volume II of this series of manuals. The staff member assigned should be supported by a clerk. The effort required to collect this data is shown in Table 1. Some of this data is already available in reports prepared for the State, or for other purposes. Some of it has to be extracted directly from individual course

Table 1

EFFORT REQUIRED FOR DATA COLLECTION

	<u>First Year</u>	<u>Subsequent Years</u>
Staff	20 Mandays	10 Mandays
Clerk	3 Mandays	20 Mandays

records. Some of it has to be estimated by the faculty or administrative staff.

Some years the administration will require this planning coordinator to make surveys in order to determine (a) the social demand or potential enrollment for vocational education (see Volume VI of this series of manuals) and (b) the manpower demand or job opportunities. Each of these should be estimated for approximately the next five years.

b. Preparing forecasts

The coordinator will analyze this collected data in order to make forecasts of certain factors, such as the social demand and manpower demand, possible revenue levels, and costs factors.

c. Preparing the Base Case

He will have to complete the data forms in the prescribed manner and forward these to the computing service which has been set up to do the computations. (The computing service will keypunch the data and run it through the computer system.) Staff will be expected to check the computer-produced outputs (both intermediate and final) for accuracy and completeness. He is responsible for making corrections and insuring that the base case reports are properly prepared. Instructions for preparing the base case and interacting with the computer service are presented in Volume III (Local Education Agency Planning Analyst's Procedures).

The planning coordinator is responsible for disseminating the base case outputs to the planning committee and explaining it to them. He is responsible for working with them to insure that they analyze it and then set objectives and priorities.

d. Project Analysis

The coordinator is responsible for working with various faculty, student, administration and other groups to prepare proposals for projects or program changes which will help meet the objectives.

e. Proposal Analysis

He is responsible for analyzing the proposals to insure that they contain the required data. He re-runs the computer model with various combinations of proposals. This is done in cooperation with planning committee in order to help them explore the consequences of adopting various proposals or plans.

2. Experience

The staff member should have the following qualifications shown in Exhibit I.

Some staff work can be provided by a consultant, but at least one full-time staff member should be given the responsibility of insuring that the planning processes are carried out.

EXHIBIT I

EDUCATIONAL PLANNING COORDINATOR

Job Description

General

A planning coordinator works under the direction of the administrator of an agency or a planning committee and is responsible for coordinating the efforts of all parties to produce the information required by the decision-making body for planning, for the production of the annual plan, and for insuring that the budget and plan are consistent. The coordinator would be responsible for seeing that the information required to support planning is available and the analyses are properly made on schedule. He would be responsible to see that the planning process is continually improved and that new personnel entering the agency (or related organizations) are trained for their role in the planning process.

Specific Responsibilities

1. Insures that local educational agencies, the State Department of Education, collaborating industrial organizations, unions, and other public agencies provide the data required according to schedule.
2. Sees to it that the data is edited, corrections are made as necessary, and that the data is placed in the planning

Exhibit I (cont'd)

file system. He should be able to utilize a computer-based system for this purpose.

3. Insures that all reports required for planning, regular and requested on an ad-hoc basis by the decision-making group, are provided.
4. Makes certain that the steps of the annual planning cycle are carried out.
5. Makes certain that estimates of the consequences of future activities are computed accurately, disseminated, presented, and explained to interested parties.
6. Works with the decision-making group to interpret these predictions and other inputs in order to identify current and future problems, to establish specific objectives, and to establish priorities on all identified objectives.
7. Works with various schools and departments and other community groups to develop proposals for projects and program changes which will help meet established objectives.
8. Analyzes proposals and assists the decision-making group to select that set of proposals which are determined to be most suitable.
9. Works with faculty in efforts to implement approved proposals.
10. Works with funding sources to obtain the required revenues to accomplish program goals.

Exhibit I (cont'd)

11. Conducts training programs in the planning system and the planning processes.
12. Consults with the decision-making group and local education agency personnel on all aspects of planning.

Requirements

Education

The planning coordinator should have graduated with at least a B.A. or B.S. in Business Administration, Educational Administration or Engineering (or exhibit the equivalent education).

Experience

The applicant should have at least seven years of experience in either industry or in education. It is desirable that three years of this experience should have been in some educational organization. If possible, the experience should include three years in dealing with formal planning procedures and two (possibly overlapping) years of experience working with computers and computer forecasting processes.

General Capabilities

The person should have the facility for working with people to encourage them to provide the necessary inputs. He should be able to present formal and informal training programs and to make presentations before the decision-making group and other interested bodies.

He should understand the current trends and practices in education, especially in the substantive area with which the planning system is concerned.

Once the base case has been run, a staff analysis should be prepared comparing last year's actual values of indicators and planning factors, and this year's values with the new base case projections. Other measures of program and project impact may also be studied and reported in the staff analysis.

A copy of the staff report on each project should be sent to the project's supervisor for his or her review and comment. The reports, with comments, are then compiled by the staff assigned for presentation to the planning committee.

D. **CONVENING THE PLANNING COMMITTEE.** Prior to actually analyzing the initial reports (which formally opens the planning cycle), a kick-off session with committee members, interested board members and supporting staff should be called. At this session a member of the staff (or planning consultant) should review the planning process. The superintendent should present the planning schedule. Questions about user' manuals or the time schedule would be answered.

After the first year, this first meeting will also feature a review of last year's planning activity; what went right and what could have been done better.

Most of all, the meeting serves as a preparation session with an opportunity for committee members, board members and staffers to get reacquainted. The stage will then be set for productive work session ahead.

III. DATA COLLECTION

A. WHAT DATA DO WE NEED FOR PLANNING?

1. THE PLANNING DATA SET. This section formally opens the LEA planning cycle with an essential first step required for effective planning - collecting data. Presented on pages III-3 thru III-5 is a complete chart of all of the information which is required by the district planning model. These information or data elements are organized by eight functional categories or sectors. This chart will be referred to several times in this manual.

In addition to the planning data set, last year's district plan and an analysis of last year's projects round out the data collection needs for the planning cycle. ("Projects" includes any change made in the past which is identified for follow-up.) The analysis of last year's projects is discussed in a later chapter. This chapter is devoted to the data requirements for the district planning model.

2. THE TIME-FRAMES IN PLANNING. To assess where a school district has been, and is now, and to investigate alternative futures for the school district, thorough attention must be given to the complete and regular (annual) updating of the district's planning data. In addition to the subject matter area of the data to be compiled (teachers, students, facilities, etc.), it will be helpful to categorize where in the time frame of events particular elements of the planning data set are updated. This view

of the data will reveal that each year three types of data must be collected, namely:

- a. "New" data about the year we're in, called the current year. (It is "year 1" for which we planned last year.)
- b. "Finished" data about last year, the year completed last June and for which we planned two years ago.
- c. Forecasts of the years coming up (years 1 through 5).

To determine which data elements fall into each of these categories, refer to columns 2, 3, and 4 of the planning data set matrix on the next page.

3. NEW DATA ABOUT THE CURRENT YEAR. To render quite accurate our picture of where the district is this current year, the data set is updated with data which were only estimates during the planning cycle last year. Included in this category would be current year program enrollments, course enrollments, staff levels (teacher availability), teacher salaries and other teacher benefit indicators, overhead factors and budgeted (approved) expenses.
4. FINISHED DATA ABOUT LAST YEAR. Data about last year, used to generate a historic perspective of the district by which to judge the continuity (or discontinuity) of planned futures, and generally to aid in the assessment of past activity or programs.

THE PLANNING DATA SET

	When Data Gathered			New Forecasts Y1 to Y5
	Data Card	CY Update (only CY)	Completed Year Update	
IA District (LEA) Background				
LEA Number	LEA			
County	LEA			
School District	LEA	X		
Current School Year	LEA			
LEA Name	LEA			
IB Overhead				
Full time Equiv. Staff	OVA	X		
Full time Equiv. Students	OVA	X		
Voc. Non-Teaching Staff	OVB	X		
Current Total Space	OVB	X		
Space Alloc. to Voc. Admin.	OVB	X		
Overhead A/C#	ACE			
Sub-Number	ACE			
Inflation Rate	ACE	X	X	X
A/C	ACE			
II Teachers				
Voc. Teacher Attrition Rate	LPR			
Non-Voc. Teacher Attrition Rate	LPR		X	
Fringe Benefits (%)	LPR		X	
Substitution Allowance (%)	LPR	X		
Average Salary Increase (%)	LPR	X		
Entrance Salary Increase (%)	LPR	X	X	X
Program				
FTE Teachers	CUR	X		
Avg. Salary Voc./Teachers	CUR	X		
Avg. Entrance Salary/Teachers	CUR	X		
Teacher Avail. Periods	PPR			
Teacher Avail. Weeks	PPR			

THE PLANNING DATA SET

	When Data Gathered			New Forecasts Y1 to Y5
	Data Card	CY Update (only CY)	Completed Year Update	
IIIA <u>Facilities</u> Space Use (Voc/Non-Voc) Space Type Facilities Available Stations Available Sq. Ft./Station Periods/Week Available Stations Utilization Space Name	FAC			
	FAC			
	FAC	X		
	FAC	X		
	FAC			
	FAC			
	FAC			
	FAC			
IV <u>Material, Supplies & Travel</u> Materials Cost Increase/Decr. Travel Cost Increase/Decr. Materials Cost/Student Travel Cost Student	PGM	X	X	
	PGM	X	X	
	CUR	X	X	
	CUR	X	X	
VA <u>Equipment & Equipment Maint.</u> Equipment Maint. Factor CY Voc. Equipment Value Program New Equipment Cost Repl. Equipment Cost	LPR	X	X	X
	LPR			
	EQP	X	X	
	EQP	X	X	
VI <u>Programs</u> Level (PS,S,A) Type (Voc/Non-Voc) Category Program Number Program Name Completion Rate Placement Rate	PGM			
	PGM			
	PGM			
	PGM			
	PGM			
	MAN		X	
	MAN		X	

THE PLANNING DATA SET

	When Data Gathered			New Forecasts Y1 to Y5
	Data Card	CY Update (only CY)	Completed Year Update	
VI Programs (cont'd)				
Program Name (cont'd)				
Desired Average Class Size				
County Manpower Needs				
LEA Target Portion				
Social Demand				
VII Courses				
Reg. School Year Duration/Level				
Maximum Pers./Week Level				
Course Type (Voc/Non-Voc)				
Course Number				
O.E. Code Number				
Space Type				
Periods/Week				
Course Length				
Course Name				
VIII Student Enrollment Program				
Program Year of Student				
Grade of Student				
Full-Time Students				
Course No. Program				
Program Year of Course				
Grade (of student)				
Full-Time Students				

Included in this category are last year actuals for: overhead account values, inflation rates, completed construction data, program completions and placement rates, Voc. and Non-Voc. teacher attrition rates, teacher substitution allowance, and direct material, supply, travel and equipment expenditures.

5. FORECASTS OF THE YEARS COMING UP. Some of the assessment and decision-making which takes place during the planning cycle requires that we have the best possible estimates of conditions under which the district will be operating and which will affect the district over the next five years. Forecasting models which have been designed to provide estimates of manpower needs and social demand are discussed in the next section.

Also to be forecast are future values for overhead account inflation rates, teacher fringe benefits and substitution allowance and the equipment maintenance factor.

Volume II of this series of manuals contains the data input forms and detailed instructions.

IV. THE DISTRICT PLANNING MODEL

A. THE DISTRICT PLANNING MODEL: WHAT'S IT FOR?

That a planning committee should undertake to plan for a school district requires that the members of that committee have (1) something to contribute; either background in the field of education or one of a set of other perspectives important in educational planning -- e.g., as student, teacher, parent, employer, etc. and (2) an understanding of the operational dynamics of the school district.

The experience and perspectives represented on the planning committee are primarily a function of the care which goes into the selection or appointment of the committee. Understanding what makes a school district tick, then, becomes an educational task for the committee members themselves -- a task which is greatly facilitated by the district planning model.

The district planning model, described below, is comprised of eight sectors, each one representing a major operating center or otherwise active component of a school district. (See Figure 2.) Reports produced from the model detail facts and conditions of each sector and also, the effects of the sectors on one another.

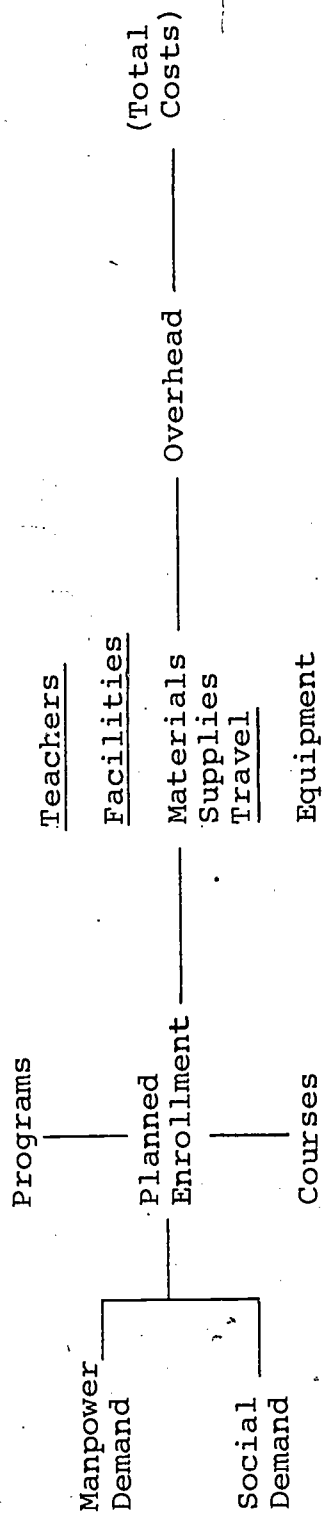
The model fulfills many useful functions, among which are:

Knowledge

- . Increasing our knowledge about institutionalized education. The very process of having to define

FIGURE 2

DISTRICT PLANNING MODEL



[Sector 7,8]

[Sector 2-5]

[Sector 1]

and measure variables inherent in the operation of a school district increases knowledge and comprehension.

Training

- . As a tool for training planning committee members and district staff in the dynamics of the school district.

Analysis

- . Facilitating the systematic assessment or analysis of the school district.
- . Aiding investigation of the effect of alternative projects, programs or policies.

Communication

- . As an aid for communicating district functions and budgets.

B. THE MODEL SECTORS

1. Administration and Overhead. Identification of the school district, and district-wide overhead cost figures are available from this sector of the model. Overhead projection, for future years are developed on the basis of given overhead rates applied to future enrollments (sector 8), future teacher staffing (sector 2) or other such criteria (adjusted for inflation).
2. Teachers. Teacher availability in number, periods per week, and weeks per year, plus teacher cost data, are

available from this sector. Teacher requirements are developed through interaction with student enrollments (sector 8), programs (sector 6), and course periods and length (sector 7).

3. Facilities. The number of characteristics of available space (by types) reside in this sector. Facility requirements are developed in this sector, much like teacher requirements, through interaction with student enrollments (sector 8), programs (sector 6), and course periods and length (sector 7). Facility utilization as a function of student enrollments (sector 8) and course period and length (sector 7) is developed in this sector.
4. Materials, Supplies and Travel. Per student costs of these direct-cost items and cost-trend data reside in this sector.
5. Equipment. Current equipment values, projected new or replacement equipment expenditures and equipment maintenance costs are available from this sector.
6. Programs. Program identification data, completion (of program by student) and placement rates, desired average class size, manpower needs and social demand are generally program-centered and reside at this time in this sector. Manpower needs and social demand are forecasted through methods detailed by accompanying manuals and entered into this sector. Manpower needs met and social demand fulfilled are developed through interaction with student enrollments (sector 8).

7. Courses. Course identification and characteristics, space type used and course periods and length are available from this sector.
8. Students. Student program and course enrollments, by program year and by grade, reside in this sector.

It is important to recognize that this version of the district planning model deals almost exclusively with operating characteristics of the school district. Such a base is essential as a building block toward more sophisticated educational planning. Natural evolution of the model, through actual use in planning, will undoubtedly entail qualitative expansion, particularly of the sectors for Teachers, Students, Courses, and Programs.

Summary data is also provided for all sectors, both by schools and district-wide.

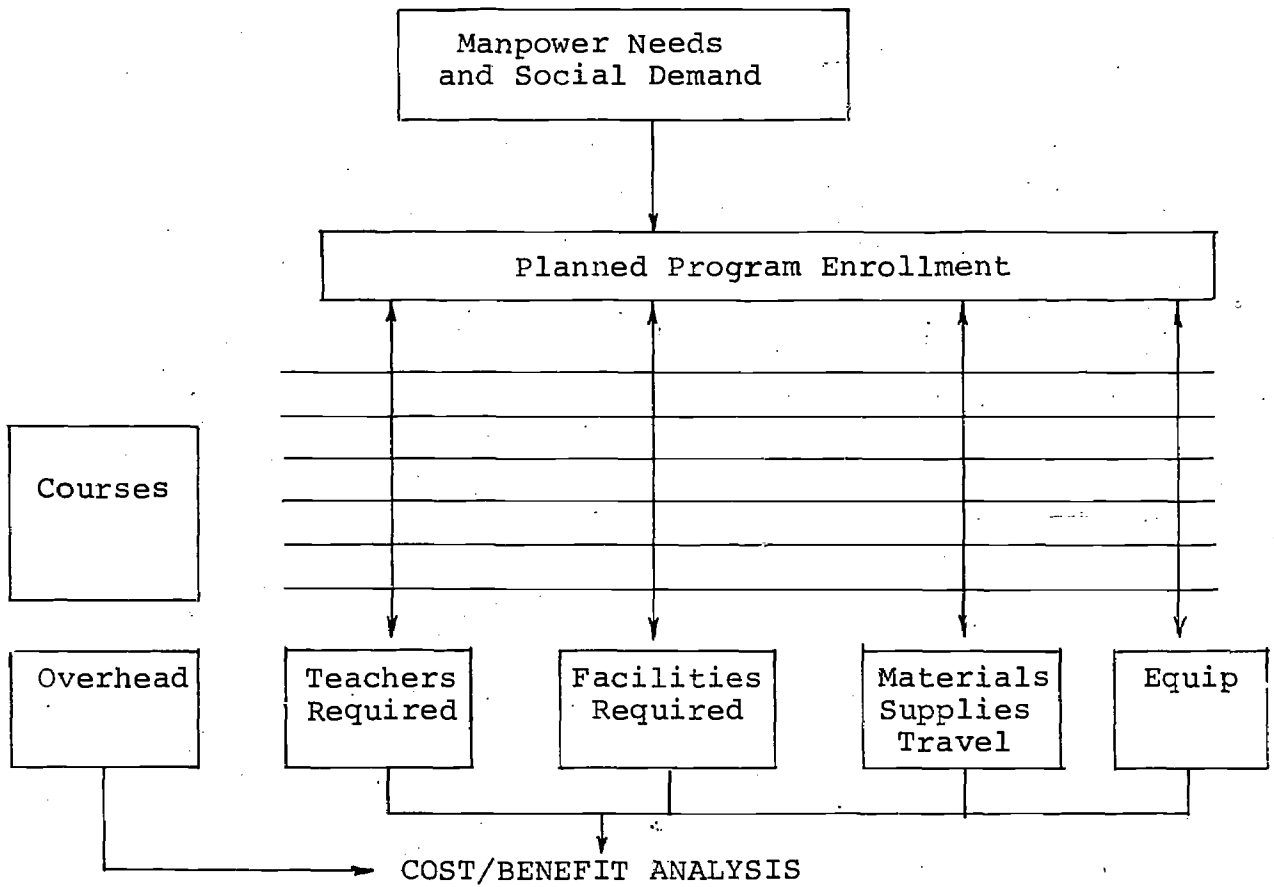
C. THE MODEL REPORTS

As a prelude to school district planning, it is important to consider another "picture" of the planning model and of the school district itself.

Described in the previous two sections are the basic sectors or components of a school district. Pictured here is a conceptualization of how these sectors interact in "real life" to produce the phenomenon we know of as a school district. (See Figure 3.)

FIGURE 3

THE LEA VOCATIONAL EDUCATION PLANNING SYSTEM



As shown, student enrollment has perhaps the greatest impact of any factor on all other components of a vocational school district. Program enrollments beget course enrollments, which translate directly into teacher, facility and other resource requirements. This picture of the model also underscores the desired subordination of all operating components to higher-level considerations of educational goals.

On the following page are found both examples and descriptions of the key reports produced by the district planning model. (The next pages is a list of these reports.) The reports are organized to permit a logical progression of review: From indicators of district objectives to enrollments to subsequent operating characteristics and finally to a summary of operating costs. (Volume II contains examples of all the reports produced by the model.)

May, 1973

PLANNING MODEL EXAMPLE REPORTS

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REPORT TITLE: Planned Program Enrollment - By Program

DESCRIPTION: The enrollments listed in this report are decided by the planners. These are the number of full-time majors in each program in the current year and for five years of the planning period. These enrollments represent all voc-ed students in any year of the program.

DEFINITION OF FIELDS:

1. Level - This code will identify the appropriate instructional level:
 - E - Elementary
 - S - Secondary
 - P - Post Secondary
 - A - Adult
2. Program Identification Number (PRO-IDEN) - A unique five digit number assigned by the LEA to each of its programs.
3. Program Name (PROG-NAME) - The program name assigned corresponding with the identification number.
4. PLAN-YEAR - In each of the reports there will be six years listed under plan-year. The first year will always be the current school year, and the other five years are the subsequent years in the planning cycle.
5. Program Enrollment - The enrollment by "major" or program area of interest. (This is related to, but not the same as, course enrollment.)

6. TOTAL - Sum of program enrollments in each year of the plan.

PURPOSE: These enrollment levels are a very basic decision.

They represent the extent to which the LEA plans to meet demands. On the basis of anticipated program enrollment, course enrollments, resource requirements will be calculated. The planning group should carefully review these levels within each year of each program. If there are several different assumptions about future enrollments under discussion, the model can be re-run for each.

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
PLANNED PROGRAM ENROLLMENT - BY PROGRAM

			PLAN-YEAR					
LEVEL	PROG-IDEN	PROG-NAME	1972	1973	1974	1975	1976	1977
S	00499	DISTRIBUTIVE EDUCATION	77	115	130	130	130	130
	00709	HEALTH SERVICES	18	18	18	18	18	18
	00802	CLOTHING TECHNOLOGY	23	25	25	45	50	50
	01400	OFFICE OCCUPATIONS	210	240	263	289	319	361
	01703	AUTO MECHANICS	33	40	50	50	50	50
	01710	BUILDING TRADES	44	50	50	50	50	50
	01713	PAINTING	36	33	26	37	40	40
	01714	ELECTRICAL TRADES	39	40	50	50	50	50
	01719	BOILERING TRADES	44	50	50	50	50	50
	01723	MACHINE TRADES	42	50	55	55	55	55
	01726	COSMETOLOGY	60	50	50	50	50	50
	01729	COMMERCIAL FOODS	31	34	45	50	50	50
	11400	OFFICE OCCUPATIONS	109	132	145	178	197	213
	11703	AUTOMOTIVE MAINTENANCE	19	35	40	40	40	40
	11710	BUILDING TRADES	11	20	24	34	38	42
	11713	PAINTING	36	36	36	36	36	36
	11726	COSMETOLOGY	0	20	40	40	40	40
TOTAL			812	992	1141	1202	1263	1325

REPORT TITLE: Manpower Needs Fulfilled

DESCRIPTION: Each program can be evaluated according to the percentage of estimated manpower needs it meets. A detail analysis of that process is described below.

DEFINITION OF FIELDS:

1. County Manpower Forecast (COUN-MAN-FOR) - A forecast of manpower openings expected in the county for the occupational area corresponding to that program. (See Volume VII.)
2. LEA Requirements (LEA-REQT) - The job openings that the LEA will be trying to fill from graduates of each program. This figure is based on the percentage of the county manpower forecast this LEA will serve.
3. Students in Last Year of Program (STUD-IN-LSTYR) - Taken from the program enrollments, these are the students shown as being in the last year of their programs.
4. Students Completing (STUD-COMP) - The number of students completing their program and ready for job placement (whether graduated or not). This figure is calculated by taking the number of students in the last year of their program, and multiplying by the completion rate (opposite of dropout rate).
5. Students Placed (STUD-PLCD) - The students completing a program, multiplied by the placement rate associated with it.

6. Percentage of Manpower Needs Met (PCT-ND-MT) - The comparison between students placed and the LEA's requirements in that occupational area.

PURPOSE: Fulfilling certain manpower requirements is one of the essential goals of vocational education. Analysis of these figures will show to what extent individual programs of instruction are meeting those needs, and in what areas problems may be developing. Each program can be checked to determine its effectiveness in this regard. This may lead to a need for alternative plans with different enrollment patterns.

It is recognized that these are only approximate forecasts, because of uncertainty in regard to the county forecast, the LEA percentage, and so on. Nevertheless these estimates should be a useful guideline.

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE • 1972
MANPOWER NEEDS FULFILLED

LEVEL	PROG-IDEN	PROG-NAME	PLAN-YEAR	COUN-HAN-FOR	LEA-REQT	STD-IN-LSTYR	STUD-COMP	STUD-PLCD	PCT-ND-MT
S	00499	DISPERUTIVE EDUCATION	1972	421	84.2	11	11.0	10.9	12.9
			1973	421	84.2	15	15.0	14.8	17.6
			1974	421	84.2	30	30.0	29.7	35.3
			1975	421	84.2	30	30.0	29.7	35.3
			1976	421	84.2	30	30.0	29.7	35.3
			1977	421	84.2	30	30.0	29.7	35.3
	00709	HEALTH SERVICES	1972	97	72.7	18	14.4	14.3	19.6
			1973	97	62.1	18	14.4	14.3	23.0
			1974	97	51.4	18	14.4	14.3	27.7
			1975	97	40.7	18	14.4	14.3	35.0
			1976	97	30.1	18	14.4	14.3	47.4
			1977	97	19.4	18	14.4	14.3	73.5
	00902	CLOTHING TECHNOLOGY	1972	64	22.4	10	9.3	4.2	18.6
			1973	64	20.4	10	9.3	4.2	20.5
			1974	64	18.4	15	13.9	6.3	34.2
			1975	64	16.3	20	18.6	8.4	51.3
			1976	64	14.3	25	23.2	10.5	73.3
			1977	64	13.6	25	23.2	10.5	76.9
	01400	OFFICE OCCUPATIONS	1972	2100	210.0	44	43.2	41.0	19.5
			1973	2100	210.0	55	49.5	47.0	22.4
			1974	2100	210.0	60	54.0	51.3	24.4
			1975	2100	210.0	66	59.4	56.4	26.9
			1976	2100	210.0	72	64.8	61.6	29.3
			1977	2100	210.0	79	71.1	67.5	32.2
	01703	AUTO MECHANICS	1972	64	44.2	17	12.7	11.5	24.8
			1973	64	39.4	20	15.0	13.5	34.2
			1974	64	32.6	25	18.7	16.9	51.7
			1975	64	25.8	25	18.7	16.9	65.3
			1976	64	19.0	25	18.7	16.9	88.6
			1977	64	13.6	25	18.7	16.9	124.1
	01710	BUILDING TRADES	1972	257	215.9	24	18.0	17.1	7.9
			1973	257	182.5	25	18.7	17.8	9.8
			1974	257	149.1	25	18.7	17.8	11.9
			1975	257	115.6	25	18.7	17.8	15.4
			1976	257	82.2	25	18.7	17.8	21.7
			1977	257	51.4	25	18.7	17.8	34.7
	01713	DRAFTING	1972	20	14.0	19	14.2	.0	.0
			1973	20	12.0	16	12.0	1.2	10.0
			1974	20	10.0	16	12.0	2.4	24.0
			1975	20	8.0	17	12.7	3.8	47.8
			1976	20	6.0	20	15.0	6.0	100.0
			1977	20	4.0	20	15.0	7.5	187.5
	01714	ELECTRICAL TRADES	1972	27	22.7	23	20.7	16.6	73.0
			1973	27	19.2	20	18.0	14.4	75.1
			1974	27	15.7	25	22.5	18.0	114.9
			1975	27	12.1	25	22.5	18.0	148.1
			1976	27	8.6	25	22.5	18.0	208.3
			1977	27	5.4	25	22.5	18.0	333.3
	01719	PRINTING TRADES	1972	46	9.2	19	14.2	12.1	131.7
			1973	46	9.2	25	18.7	15.9	173.2

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
MANPOWER NEEDS FULFILLED

LFVFL	PROG-IDFN	PROG-NAME	PLAN-YEAR	COUN-MAN-FOR	LFA-QFQT	STD-IN-LSTYR	STUD-COMP	STUD-PLCO	PCT-ND-MT
5	01714	PRINTING TRADES	1974	46	9.2	25	18.7	15.9	173.2
			1975	46	9.2	25	18.7	15.9	173.2
			1976	46	9.2	25	18.7	15.9	173.2
			1977	46	9.2	25	18.7	15.9	173.2
01723		MACHINE TRADES	1972	27	20.0	15	15.0	6.7	33.8
			1973	27	17.0	20	20.0	9.0	52.9
			1974	27	14.0	25	25.0	11.2	80.1
			1975	27	11.1	25	25.0	11.2	101.6
			1976	27	8.1	25	25.0	11.2	138.9
			1977	27	5.4	25	25.0	11.2	208.3
01726		COSMETOLOGY	1972	60	42.0	30	18.0	9.0	21.4
			1973	60	36.0	25	15.0	7.5	20.8
			1974	60	30.0	25	15.0	7.5	25.0
			1975	60	24.0	25	15.0	7.5	31.3
			1976	60	18.0	25	15.0	7.5	41.7
			1977	60	12.0	25	15.0	7.5	62.5
01729		COMMERCIAL FOODS	1972	84	27.7	13	9.1	7.3	26.3
			1973	84	25.2	18	12.6	10.1	40.0
			1974	84	22.7	20	14.0	11.2	49.4
			1975	84	20.2	25	17.5	14.0	69.4
			1976	84	17.6	25	17.5	14.0	79.4
			1977	84	16.8	25	17.5	14.0	83.3
11400		OFFICE OCCUPATIONS	1972	2100	210.0	16	4.0	2.0	1.0
			1973	2100	210.0	28	14.0	9.8	4.7
			1974	2100	210.0	53	29.1	21.9	10.4
			1975	2100	210.0	55	33.0	26.4	12.6
			1976	2100	210.0	60	39.6	31.7	15.1
			1977	2100	210.0	63	41.6	33.3	15.8
11703		AUTOMOTIVE MAINTENANCE	1972	68	6.8	0	0	0	0
			1973	68	6.8	15	12.0	9.6	141.2
			1974	68	6.8	20	16.0	12.8	188.2
			1975	68	6.8	20	16.0	12.8	188.2
			1976	68	6.8	20	16.0	12.8	188.2
			1977	68	6.8	20	16.0	12.8	188.2
11710		BUILDING TRADES	1972	257	20.6	0	0	0	0
			1973	257	20.6	8	7.2	5.8	28.0
			1974	257	20.6	12	10.8	8.6	42.0
			1975	257	20.6	16	14.4	11.5	56.0
			1976	257	20.6	18	16.2	13.0	63.0
			1977	257	20.6	20	18.0	14.4	70.0
11713		DRAFTING	1972	20	2.0	18	17.1	0	0
			1973	20	2.0	18	17.1	1.7	85.5
			1974	20	2.0	18	17.1	3.4	171.0
			1975	20	2.0	18	17.1	5.1	256.5
			1976	20	2.0	18	17.1	6.8	342.0
			1977	10	1.0	18	17.1	8.5	855.0
11726		COSMETOLOGY	1972	60	0	0	0	0	0
			1973	60	6.0	0	0	0	0
			1974	60	6.0	20	16.0	8.0	133.3
			1975	60	6.0	20	16.0	8.0	133.3

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
MANPOWER NEEDS FULFILLMENT

LFVEL	PROG-IDFN	PROG-NAME	PLAN-YEAR	COUN-MAN-FOR	LFA-RFOT	STD-IN-LSTYR	STUD-COMP	STUD-PLCD	PCT-ND-MT
5	11726	COSMETOLOGY	1976	60	6.0	20	16.0	8.0	133.3
			1977	60	6.0	20	16.0	8.0	133.3

REPORT TITLE: Manpower Needs Fulfilled - Summary

DESCRIPTION: The data presented in this table is summary information to reflect the overall LEA factors relating to manpower. It is a summary across all programs of the data in the previous table.

DEFINITION OF FIELDS

1. County Manpower Forecast (COUN-MAN-FOR) - The sum of county manpower forecast openings for all programs in that year.
2. LEA Requirements (LEA-REQT) - The sum of individual program requirements.
3. Students in Last Year of Program (STUD-IN-LSTYR) - A sum of all students in the last year of their programs.
4. Students Completing (STUD-COMP) - The total number of students completing across programs.
5. Students Placed (STUD-PLCD) - Of the students completing the last year of their programs, these are the total number finding employment in their skill area.
6. LEA Manpower Percentage (LEA-MAN-PCT) - This is the overall percentage of county manpower requirements being met by the LEA for any year, across all programs. It is calculated by dividing the total LEA requirements by the total County Manpower Forecast (X 100.0).

7. LEA Completion Percentage (LEA-COMP-PCT) - This is the calculated actual percentage for the LEA in any given year. It is derived by dividing the total students completing by the total students in the last year of program (X 100.0).
8. LEA Placement Percentage (LEA-PLAC-PCT) - An actual calculated placement rate for the LEA. Total students placed divided by total students completing (X 100.0) will give this figure.
9. Total Percentage of Manpower Needs Met (PCT ND MET) - Across all instructional vocational programs, this is the overall percentage of manpower needs met. It is the ratio of total students placed to total LEA Requirements in that year.

PURPOSE: These composite figures identify trends by year.

Policies which affect the future course of decisions to be made in an LEA may first appear clearly in this area.

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
MANPOWER NEEDS FULFILLED

PLAN-YEAR	COUN-MAN-FOR	LFA-MEQT	STD-IN-LSTYR	STUD-COMP	STUD-PLCD	LEA-MAN-PCT	LEA-COMP-PCT	LFA-PLAC-PCT	PCT-ND-MT
1972	5780	1026.4	281	221.0	152.6	17.8	78.7	69.1	14.9
1973	5780	962.5	336	268.6	196.6	16.7	79.9	73.2	20.4
1974	5780	842.6	432	346.1	257.2	15.4	80.1	74.3	28.8
1975	5780	822.7	455	367.9	277.8	14.2	80.9	75.5	33.8
1976	5780	752.8	476	388.6	295.6	13.0	81.6	76.1	39.3
1977	5770	689.4	488	398.7	307.9	11.9	81.7	77.2	44.7

REPORT TITLE: Social Demand Analysis

DESCRIPTION: A comparison between the estimated student population that would like to be in a program, determined by surveys (see Volume VI), and the actual number of student enrollments planned for in that year.

DEFINITION OF FIELDS:

1. Social Demand (SOC-DEMAND) - An input which represents the staff's best approximation of the number of students who would like to enroll in a program in a given year (that is, the enrollment in the situation where everyone who applied could be accommodated).
2. Students in First Year of Program (STD IN FSTYR) - Also input data, this is the number of students currently planned for in each program. These figures reflect a decision made and take into consideration the numerous constraints in the LEA (physical size, economics, environment, etc.)
3. Percent Demand Served (PCT-DMD-SVD) - The ratio of those students in the first year of their programs to the stated demand.

PURPOSE: Because enrollment generally reflects built in constraints (plant, teachers, revenues available, etc.), the comparison to social demand highlights the extent to which those students who have expressed an interest in a program cannot be served. For many districts, closing this gap will be a primary objective.

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
SOCIAL DEMAND ANALYSIS

LFVFL	PROG-INFN	PROG-NAME	DISTRIBUTIVE EDUCATION	PLAN-YEAR	SOC-DEMAND	STD-IN-FSTYP	PCI-DMD-SVD
S	00409						
			DISTRIBUTIVE EDUCATION				
				1972	70	55	74.6
				1973	74	60	81.1
				1974	81	60	74.1
				1975	88	60	68.2
				1976	94	60	63.8
				1977	101	60	59.4
				1972	17	18	105.9
				1973	18	18	100.0
				1974	20	18	90.0
				1975	22	18	81.8
				1976	24	18	75.0
				1977	24	18	69.2
				1972	23	13	54.5
				1973	24	15	62.5
				1974	26	20	76.9
				1975	28	25	89.3
				1976	30	25	83.3
				1977	32	24	78.1
				1972	129	05	73.6
				1973	137	105	76.6
				1974	150	115	76.7
				1975	163	126	77.3
				1976	175	140	80.0
				1977	188	154	81.9
				1972	20	16	80.0
				1973	21	20	95.2
				1974	23	25	108.7
				1975	25	25	100.0
				1976	27	25	82.6
				1977	29	25	84.2
				1972	28	20	71.4
				1973	30	25	83.3
				1974	33	25	75.8
				1975	36	25	69.4
				1976	38	25	64.1
				1977	42	25	59.5
				1972	17	17	100.0
				1973	17	17	100.0
				1974	20	20	100.0
				1975	20	20	100.0
				1976	20	20	100.0
				1977	20	20	100.0
				1972	40	16	40.0
				1973	43	20	46.5
				1974	47	25	53.2
				1975	51	25	49.0
				1976	55	25	45.5
				1977	59	25	42.4
				1972	36	25	69.4
				1973	38	25	65.8
				1972	38	25	65.8
				1973	38	25	65.8

TECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
SOCIAL DEMAND ANALYSTS

LEVEL	PROG-IDFN	PROG-NAME	PLAN-YEAR	SOC-DEMAND	STD-IN-FSTYR	PCT-DMD-SVD
S	01719	PRINTING TRADES	1974	42	25	59.5
			1975	46	25	54.3
			1976	49	25	51.0
			1977	53	25	47.2
			1978	48	27	56.3
01723		MACHINE TRADES	1973	51	30	58.8
			1974	56	30	53.6
			1975	61	30	49.2
			1976	65	30	46.2
			1977	70	30	42.9
			1978	59	30	50.8
01726		COSMETOLOGY	1973	37	25	67.6
			1974	41	25	61.0
			1975	45	25	55.6
			1976	50	25	50.0
			1977	55	25	45.5
01729		COMMERCIAL FOODS	1972	23	18	78.3
			1973	24	20	83.3
			1974	26	25	96.2
			1975	28	25	49.3
			1976	30	25	83.3
			1977	32	25	78.1
			1978	129	43	33.3
11400		OFFICE OCCUPATIONS	1973	137	48	35.0
			1974	150	52	34.7
			1975	163	54	35.6
			1976	175	65	37.1
			1977	188	75	39.9
11703		AUTOMOTIVE MAINTENANCE	1972	20	10	95.0
			1973	21	20	95.2
			1974	23	20	87.0
			1975	25	20	80.0
			1976	27	20	74.1
			1977	29	20	64.0
11710		BUILDING TRADES	1972	12	11	91.7
			1973	13	12	92.3
			1974	14	16	114.3
			1975	15	18	120.0
			1976	16	20	125.0
			1977	17	22	129.4
11713		DRAFTING	1972	17	18	105.9
			1973	17	18	105.9
			1974	20	18	90.0
			1975	20	18	90.0
			1976	20	18	90.0
			1977	20	18	90.0
11726		COSMETOLOGY	1972	0	0	74.1
			1973	27	20	66.7
			1974	30	20	60.6
			1975	33	20	60.6

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
SOCIAL DEMAND ANALYSIS

LEVEL	PROG-IDFN	PROG-NAME	PLAN-YEAR	SOC-DEMAND	STD-IN-FSTYP	PCT-DMD-SVD
S	11726	COSMETOLOGY	1976	36	20	55.6
			1977	40	20	50.0

REPORT TITLE: Social Demand Analysis - Summary

DESCRIPTION: This is a compilation of the social demand factors across all vocational programs in the LEA. It is a summary of the previous report.

DEFINITION OF FIELDS:

1. Social Demand - Sum for all programs for that year.
2. Students in First Year of Programs - The total figure across all programs.
3. Percent Demand Served - This is calculated in the same manner as the program social demand served.

PURPOSE: While the social demand analysis by program provides a more sensitive measurement, the overall analysis of this need will also be useful for the LEA. The trend in this indicator will undoubtedly affect decisions in the district.

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
SOCIAL DEMAND ANALYSIS

PLAN-YEAR	SOC-DEMAND	STD-IN-FSTYR	PCT-DMD-SVD
1972	688	441	64.1
1973	729	494	68.3
1974	802	539	67.2
1975	869	563	64.8
1976	932	586	62.9
1977	1001	612	61.1

REPORT TITLE: Planned Course Enrollment

DESCRIPTION: Within each program there are many possible courses which a program major may take. This report is a detailed breakdown of the current and future course enrollment. At the present time course enrollments are estimated by the staff in such a way as to be consistent with program enrollments. (Later a more automatic estimation of course enrollment may be developed.)

DEFINITION OF FIELDS:

1. Program Year (PROG-YR) - All of the years in the curriculum of each program are accounted for. These may vary by program.
2. Course Number (COURSE) - Course numbers as assigned by the district.
3. Course Type (COURSE-TYPE) - Code used for distinguishing between instructional areas:
 - V - Vocational Courses
 - R - Related Courses (Applied Science, Applied Math, etc.)
 - M,S,E,G, - Non-vocational Courses coded by subject,
E for English, etc.
4. Office of Education Codes (OE-CODE) - An eight digit number applicable for the vocational course.

5. Course Name (COURSE-NAME) - LEA course name assigned to correspond with course number.
6. Grade - The grades in which a particular course is given within a specific program year.

PURPOSE: Analysis of this report will indicate, among other things, which courses have reached enrollment capacity, or are far underutilized. This data should be checked for accuracy, because it influences further computations.

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
PLANNED COURSE ENROLLMENT

		PLAN-YEAR									
		1972	1973	1974	1975	1976	1977				
LEVEL	PRG-INDN	PRG-YR	COURSE	COURSE-TYPE	DE-CODE	COURSE-NAME	GRADE				
5	00409	1	6400	V	6400000	DISTIN. ED. 1	10	55	60	60	60
		2	6410	V	6400000	DISTIN. ED. 2	11	11	40	40	40
		3	6420	V	6400000	DISTIN. ED. 3	12	11	15	30	30
			6430	V	6400000	TRD. MARKETING	12	11	15	30	30
			6440	V	6420000	COOP. MERCHANDISING	12	11	15	30	30
			6450	V	6420000	ON-THE-JOB-TRAINING	12	11	15	30	30
			6460	V	6420000	HEALTH SERVICES	12	11	15	30	30
			6470	V	6420000	CLOTHING TECH 1	11	13	15	20	25
			6480	V	6420000	CLOTHING TECH 2	12	10	10	15	25
			6490	V	6420000	TYPING 1	10	75	83	91	100
			6500	V	6420000	TYPING 2	11	83	91	100	110
			6510	V	6420000	ACCOUNTING 1	10	20	29	32	32
			6520	V	6420000	INTRO TO OFF. OCCUP	11	10	11	12	13
			6530	V	6420000	ACCOUNTING 2	11	10	11	12	13
			6540	V	6420000	STENOGRAPHY 1	11	64	70	77	85
			6550	V	6420000	OFFICE PRACTICES 1	11	54	59	65	72
			6560	V	6420000	OFFICE PRACTICES 2	12	13	14	15	17
			6570	V	6420000	CLERICAL PRACTICE 1	11	13	14	15	17
			6580	V	6420000	STENOGRAPHY 2	12	24	26	29	32
			6590	V	6420000	OFFICE PRACTICES 2	12	19	21	23	25
			6600	V	6420000	DATA PROCESSING	12	19	21	23	25
			6610	V	6420000	AUTO MECHANICS 1	11	16	20	25	25
			6620	V	6420000	AUTO MECHANICS 2	12	17	20	25	25
			6630	V	6420000	AUTO MECHANICS 3	13	20	25	25	25
			6640	V	6420000	BUILDING TRADES 1	11	20	25	25	25
			6650	V	6420000	BUILDING TRADES 2	12	24	25	25	25
			6660	V	6420000	BUILDING TRADES 3	13	24	25	25	25
			6670	V	6420000	DRAFTING 1	11	17	17	20	20
			6680	V	6420000	DRAFTING 2	12	19	16	17	20
			6690	V	6420000	ELECTRICAL TRADES 1	11	16	20	25	25
			6700	V	6420000	ELECTRICAL TRADES 2	12	23	20	25	25
			6710	V	6420000	PRINTING TRADES 1	11	25	25	25	25
			6720	V	6420000	PRINTING TRADES 2	12	19	25	25	25
			6730	V	6420000	MACHINE TRADES 1	11	27	30	30	30
			6740	V	6420000	MACHINE TRADES 2	12	15	20	25	25
			6750	V	6420000	COSMETOLOGY 1	11	30	25	25	25
			6760	V	6420000	COSMETOLOGY 2	12	30	25	25	25
			6770	V	6420000	COMMERICAL FOODS 1	11	18	20	25	25
			6780	V	6420000	COMMERICAL FOODS 2	12	13	14	20	25
			6790	V	6420000	TYPING 1	10	43	48	60	70
			6800	V	6420000	ACCOUNTING 1	11	37	40	55	60
			6810	V	6420000	TYPING 2	12	27	30	35	40
			6820	V	6420000	ACCOUNTING 2	13	30	30	35	40
			6830	V	6420000	STENOGRAPHY 1	11	29	35	40	45
			6840	V	6420000	OFFICE PRACTICES 1	11	20	27	35	40
			6850	V	6420000	CLERICAL PRACTICES 1	11	9	15	20	25
			6860	V	6420000	STENOGRAPHY 2	12	6	20	30	35
			6870	V	6420000	OFFICE PRACTICES 2	12	5	15	25	30
			6880	V	6420000	CLERICAL PRACTICES 2	12	5	9	15	20
			6890	V	6420000	DATA PROCESSING	12	5	0	10	15
			6900	V	6420000	OFFICE MACHINES	12	5	0	15	20
			6910	V	6420000	AUTO MAINTENANCE 1	11	19	20	20	20

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
PLANNED COURSE ENROLLMENT

LEVEL	PROG-IDFN	PROG-YR	COURSE	COURSE-TYPE	OF-CODE	COURSE-NAME	GRADE	PLAN-YEAR					
								1972	1973	1974	1975	1976	1977
S	11703	2	73101	V	17030000	AUTO MAINTENANCE 2	12	0	15	20	20	20	20
	11710	1	73201	V	17300000	BUILDING TRADES 1	11	11	12	16	18	20	22
		2	71301	V	17100000	BUILDING TRADES 2	12	0	8	12	16	18	20
	11713	1	71801	V	17130000	DRAFTING 1	11	18	18	18	18	18	18
		2	71901	V	17130000	DRAFTING 2	12	18	18	18	18	18	18
1	11726	1	71601	V	17260200	COSMETOLOGY 1	11	0	20	20	20	20	20
		2	71701	V	17260200	COSMETOLOGY 2	12	0	20	20	20	20	20

REPORT TITLE: Program Description - Periods Per Week by Course

DESCRIPTION: The basic descriptive data is displayed, for every course within a program that has a current or projected enrollment. This report is the periods per week that each course meets.

PURPOSE: Among the many possibilities that may be altered during the planning cycle is basic course data. Neither the periods per week a course meets, nor course length, need be a fixed value. Alternative combinations can be tested and evaluations made of the results. This report, and also the following report, provide the planners with an up-to-date record of this essential decision information.

TECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972

PROGRAM DESCRIPTION - PERIODS PER WEEK BY COURSE

LEVFL	PROG-IDEN	PROG-YR	COURSE	COURSE-TYPE	OF-CRSE	COURSE-NAME	PLAN-YEAR					
							1972	1973	1974	1975	1976	1977
S	00400	1	6400	V	4000000	DISTRIB. FD. 1	5.0	5.0	5.0	5.0	5.0	5.0
		2	6410	V	4000000	DISTRIB. FD. 2	15.0	15.0	15.0	15.0	15.0	15.0
		3	6420	V	4000000	DISTRIB. FD. 3	5.0	5.0	5.0	5.0	5.0	5.0
			6450	V	4120000	TNT & MARKETING	5.0	5.0	5.0	5.0	5.0	5.0
			6460	V	4120000	COOP. MERCHANDIZING	5.0	5.0	5.0	5.0	5.0	5.0
	00700	1	6470	V	4030000	OM-TRF - JOP-TRAINING	15.0	15.0	15.0	15.0	15.0	15.0
		1	7220	V	500000	HEALTH SERVICES	15.0	15.0	15.0	15.0	15.0	15.0
		2	7270	V	4020200	CLOTHING TECH 1	15.0	15.0	15.0	15.0	15.0	15.0
		2	7280	V	4020200	CLOTHING TECH 2	15.0	15.0	15.0	15.0	15.0	15.0
		1	6100	V	14000200	TYPING 1	5.0	5.0	5.0	5.0	5.0	5.0
01400		6120	V	14010100	ACCOUNTING 1	5.0	5.0	5.0	5.0	5.0	5.0	
	2	6370	V	14000000	INTRO TO OFF. OCCUP	5.0	5.0	5.0	5.0	5.0	5.0	
		6220	V	14010100	ACCOUNTING 2	5.0	5.0	5.0	5.0	5.0	5.0	
		6260	V	14070300	STENOGRAPHY 1	5.0	5.0	5.0	5.0	5.0	5.0	
		6250	V	14030000	OFFICE PRACTICES 1	10.0	10.0	10.0	10.0	10.0	10.0	
		6260	V	14000300	CLERICAL PRACTICE 1	5.0	5.0	5.0	5.0	5.0	5.0	
	3	6300	V	14070300	STENOGRAPHY 2	5.0	5.0	5.0	5.0	5.0	5.0	
		6310	V	14030000	OFFICE PRACTICES 2	10.0	10.0	10.0	10.0	10.0	10.0	
		6330	V	14020200	DATA PROCESSING	15.0	15.0	15.0	15.0	15.0	15.0	
		7100	V	17030200	AUTO MECHANICS 1	15.0	15.0	15.0	15.0	15.0	15.0	
01703	2	7110	V	17030200	AUTO MECHANICS 2	15.0	15.0	15.0	15.0	15.0	15.0	
	1	7120	V	17100000	BUILDING TRADES 1	15.0	15.0	15.0	15.0	15.0	15.0	
	2	7130	V	17100000	BUILDING TRADES 2	15.0	15.0	15.0	15.0	15.0	15.0	
	1	7140	V	17130000	DRAFTING 1	15.0	15.0	15.0	15.0	15.0	15.0	
	2	7150	V	17130000	DRAFTING 2	15.0	15.0	15.0	15.0	15.0	15.0	
	1	7200	V	17140100	ELECTRICAL TRADES 1	15.0	15.0	15.0	15.0	15.0	15.0	
	2	7210	V	17140100	ELECTRICAL TRADES 2	15.0	15.0	15.0	15.0	15.0	15.0	
	1	7250	V	17190200	PRINTING TRADES 1	15.0	15.0	15.0	15.0	15.0	15.0	
	2	7260	V	17190200	PRINTING TRADES 2	15.0	15.0	15.0	15.0	15.0	15.0	
	1	7230	V	17230400	MACHINE TRADES 1	15.0	15.0	15.0	15.0	15.0	15.0	
01723	2	7240	V	17230400	MACHINE TRADES 2	15.0	15.0	15.0	15.0	15.0	15.0	
	1	7140	V	17260200	COSMETOLOGY 1	20.0	20.0	20.0	20.0	20.0	20.0	
	2	7170	V	17260200	COSMETOLOGY 2	20.0	20.0	20.0	20.0	20.0	20.0	
	1	7140	V	17290000	COMMERCIAL FOODS 1	15.0	15.0	15.0	15.0	15.0	15.0	
	2	7150	V	17290000	COMMERCIAL FOODS 2	15.0	15.0	15.0	15.0	15.0	15.0	
	1	6100	V	14000200	TYPING 1	5.0	5.0	5.0	5.0	5.0	5.0	
		6120	V	14010100	ACCOUNTING 1	5.0	5.0	5.0	5.0	5.0	5.0	
	2	6200	V	14000100	TYPING 2	5.0	5.0	5.0	5.0	5.0	5.0	
		6220	V	14010100	ACCOUNTING 2	5.0	5.0	5.0	5.0	5.0	5.0	
		6240	V	14070300	STENOGRAPHY 1	5.0	5.0	5.0	5.0	5.0	5.0	
01726		6250	V	14030000	OFFICE PRACTICES 1	5.0	5.0	5.0	5.0	5.0	5.0	
	3	6260	V	14070300	STENOGRAPHY 2	5.0	5.0	5.0	5.0	5.0	5.0	
		6300	V	14030000	OFFICE PRACTICES 2	5.0	5.0	5.0	5.0	5.0	5.0	
		6310	V	14070300	STENOGRAPHY 1	15.0	15.0	15.0	15.0	15.0	15.0	
		6320	V	14030000	OFFICE PRACTICES 2	7.5	7.5	7.5	7.5	7.5	7.5	
		6330	V	14040300	CLERICAL PRACTICES 1	7.5	7.5	7.5	7.5	7.5	7.5	
		6340	V	14020200	DATA PROCESSING	15.0	15.0	15.0	15.0	15.0	15.0	
		6300	V	14010400	OFFICE PRACTICES 1	5.0	5.0	5.0	5.0	5.0	5.0	
	1	7300	V	17030000	AUTO MAINTENANCE 1	15.0	15.0	15.0	15.0	15.0	15.0	

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
PROGRAM DESCRIPTION - PERIODS PER WEEK BY COURSE

LEVEL	PROG-IDEN	PROG-YR	COURSE	COURSE-TYPE	OF-CODE	COURSE-NAME	PLAN-YEAR					
							1972	1973	1974	1975	1976	1977
S	11703	2	73101	V	17039000	AUTO MAINTENANCE 2	15.0	15.0	15.0	15.0	15.0	15.0
	11710	1	71201	V	17360000	BUILDING TRADES 1	15.0	15.0	15.0	15.0	15.0	15.0
		2	71301	V	17100000	BUILDING TRADES 2	15.0	15.0	15.0	15.0	15.0	15.0
	11713	1	71401	V	17130000	DRAFTING 1	15.0	15.0	15.0	15.0	15.0	15.0
		2	71501	V	17130000	DRAFTING 2	5.0	5.0	5.0	5.0	5.0	5.0
	11726	1	71601	V	17260200	COSMETOLOGY 1	20.0	20.0	20.0	20.0	20.0	20.0
		2	71701	V	17260200	COSMETOLOGY 2	20.0	20.0	20.0	20.0	20.0	20.0

REPORT TITLE: Program Description - Course Length in Weeks

DESCRIPTION: The number of weeks each course meets for each of the years in the planning period. See "Program Description - Periods Per Week Per Course".

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
PROGRAM DESCRIPTION - COURSE LENGTH IN WEEKS BY COURSE

LEVEL	PROG-IDENT	PLAN-YR	COURSE#	COURSE-TYPE	OF-CURF	COURSE-NAME	PLAN-YEAR					
							1972	1973	1974	1975	1976	1977
S	00409	1	6400	V	4000000	DISTIN. ED. 1	36.0	36.0	36.0	36.0	36.0	36.0
		2	6410	V	4000000	DISTIN. ED. 2	36.0	36.0	36.0	36.0	36.0	36.0
		3	6420	V	4000000	DISTIN. ED. 3	18.0	18.0	18.0	18.0	18.0	18.0
			6450	V	4120000	TNT & MARKETING	18.0	18.0	18.0	18.0	18.0	18.0
			6460	V	4120000	COMM. MERCHANDIZING	18.0	18.0	18.0	18.0	18.0	18.0
			6470	V	4090000	ON-THE-JOB-TRAINING	18.0	18.0	18.0	18.0	18.0	18.0
	00709	1	7220	V	7000000	HEALTH SERVICES	36.0	36.0	36.0	36.0	36.0	36.0
	00902	1	7270	V	9020200	CLOTHING TECH 1	36.0	36.0	36.0	36.0	36.0	36.0
		2	7280	V	9020200	CLOTHING TECH 2	36.0	36.0	36.0	36.0	36.0	36.0
		3	6100	V	14000200	TYPIING 1	36.0	36.0	36.0	36.0	36.0	36.0
	01400		6120	V	14010100	ACCOUNTING 1	36.0	36.0	36.0	36.0	36.0	36.0
			6370	V	14000000	TRAINING TO OFF. OCCUP	36.0	36.0	36.0	36.0	36.0	36.0
		2	6220	V	16010100	ACCOUNTING 2	36.0	36.0	36.0	36.0	36.0	36.0
			6240	V	14070300	STENOGRAPHY 1	36.0	36.0	36.0	36.0	36.0	36.0
			6250	V	14030000	OFFICE PRACTICES 1	36.0	36.0	36.0	36.0	36.0	36.0
			6260	V	14030300	CLERICAL PRACTICE 1	36.0	36.0	36.0	36.0	36.0	36.0
			6300	V	14070300	STENOGRAPHY 2	36.0	36.0	36.0	36.0	36.0	36.0
		3	6310	V	16030000	OFFICE PRACTICES 2	36.0	36.0	36.0	36.0	36.0	36.0
	01703	1	6330	V	16020200	DATA PROCESSING	36.0	36.0	36.0	36.0	36.0	36.0
			7100	V	17030200	AUTO MECHANICS 1	36.0	36.0	36.0	36.0	36.0	36.0
	01710	2	7110	V	17030200	AUTO MECHANICS 2	36.0	36.0	36.0	36.0	36.0	36.0
		1	7120	V	17100000	BUILDING TRADES 1	36.0	36.0	36.0	36.0	36.0	36.0
		2	7130	V	17100000	BUILDING TRADES 2	36.0	36.0	36.0	36.0	36.0	36.0
	01713	1	7140	V	17130000	DRAFTING 1	36.0	36.0	36.0	36.0	36.0	36.0
		2	7150	V	17130000	DRAFTING 2	36.0	36.0	36.0	36.0	36.0	36.0
	01714	1	7200	V	17160100	ELECTRICAL TRADES 1	36.0	36.0	36.0	36.0	36.0	36.0
		2	7210	V	17160100	ELECTRICAL TRADES 2	36.0	36.0	36.0	36.0	36.0	36.0
	01719	1	7250	V	17190200	PRINTING TRADES 1	36.0	36.0	36.0	36.0	36.0	36.0
		2	7260	V	17190200	PRINTING TRADES 2	36.0	36.0	36.0	36.0	36.0	36.0
	01723	1	7280	V	17230400	MACHINE TRADES 1	36.0	36.0	36.0	36.0	36.0	36.0
		2	7290	V	17230400	MACHINE TRADES 2	36.0	36.0	36.0	36.0	36.0	36.0
	01726	1	7160	V	17260200	COSMETOLOGY 1	36.0	36.0	36.0	36.0	36.0	36.0
		2	7170	V	17260200	COSMETOLOGY 2	36.0	36.0	36.0	36.0	36.0	36.0
	01729	1	7140	V	17290000	COMMERCIAL FOODS 1	36.0	36.0	36.0	36.0	36.0	36.0
		2	7150	V	17290000	COMMERCIAL FOODS 2	36.0	36.0	36.0	36.0	36.0	36.0
	11400	1	6100	V	14000200	TYPIING 1	36.0	36.0	36.0	36.0	36.0	36.0
			6120	V	14010100	ACCOUNTING 1	36.0	36.0	36.0	36.0	36.0	36.0
		2	6200	V	14000100	TYPIING 2	36.0	36.0	36.0	36.0	36.0	36.0
			6220	V	14010100	ACCOUNTING 2	36.0	36.0	36.0	36.0	36.0	36.0
			6240	V	14070300	STENOGRAPHY 1	36.0	36.0	36.0	36.0	36.0	36.0
			6260	V	14030000	OFFICE PRACTICES 1	36.0	36.0	36.0	36.0	36.0	36.0
		3	6300	V	14070300	STENOGRAPHY 2	36.0	36.0	36.0	36.0	36.0	36.0
			6310	V	14030000	OFFICE PRACTICES 2	36.0	36.0	36.0	36.0	36.0	36.0
			6320	V	14040300	CLERICAL PRACTICES 2	36.0	36.0	36.0	36.0	36.0	36.0
			6330	V	14020200	DATA PROCESSING	36.0	36.0	36.0	36.0	36.0	36.0
			6340	V	14010400	OFFICE MACHINES	36.0	36.0	36.0	36.0	36.0	36.0
	11703	1	7300	V	17030000	AUTO MAINTENANCE 1	36.0	36.0	36.0	36.0	36.0	36.0

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
PROGRAM DESCRIPTION - COURSE LENGTH IN WEEKS BY COURSE

LEVEL	PRG-IDEN	PRG-YR	COURSE	COURSE-TYPE	OF-COEF	COURSE-NAME	PLAN-YEAR					
							1972	1973	1974	1975	1976	1977
S	11703	2	73101	V	17030000	AUTO MAINTENANCE 2	36.0	36.0	36.0	36.0	36.0	36.0
	11710	1	71201	V	17360000	BUILDING TRADES 1	36.0	36.0	36.0	36.0	36.0	36.0
		2	71301	V	17100000	BUILDING TRADES 2	36.0	36.0	36.0	36.0	36.0	36.0
	11713	1	71401	V	17130000	DRAFTING 1	36.0	36.0	36.0	36.0	36.0	36.0
		2	71501	V	17130000	DRAFTING 2	36.0	36.0	36.0	36.0	36.0	36.0
	11725	1	71601	V	17250200	COSMETOLOGY 1	36.0	36.0	36.0	36.0	36.0	36.0
		2	71701	V	17250200	COSMETOLOGY 2	36.0	36.0	36.0	36.0	36.0	36.0

REPORT TITLE: Teaching Requirements

DESCRIPTION: This report displays the teachers required to operate the programs and courses at the planned levels of enrollment. The data used to compute these requirements is also presented.

DEFINITION OF FIELDS:

1. Average Class Size (AVER-CL-SIZE) - This figure is input. It is a decision: the desired class size for the courses within each program for each of the five planning years. The current year figure is calculated on the following basis:

$$\begin{aligned} \text{AVER-CL-SIZE} &= \frac{(\text{course enrollment} \times \text{course periods/week} \times \text{course length})}{(\text{teachers available} \times \text{teacher periods/week} \times \text{teaching weeks})} \\ &= \frac{\text{Student Periods}}{\text{Teacher Periods}} \end{aligned}$$

2. Teaching Periods (TCHR-PDS) - The number of periods per week a full-time teacher is available to teach this program; an input.
3. Teaching Weeks (TCHR-WKS) - The number of weeks a year a teacher will be instructing this program; an input.
4. Teachers Required (TCHR-REQ) - Calculated by:

$$\frac{(\text{Course Enrollment} \times \text{Course Periods/Week} \times \text{Course Length})}{(\text{Average Class Size} \times \text{Teaching Periods} \times \text{Teaching Length})}$$

For the current year, teachers required will be equal to the teachers available. If the heading "Rounded to Nearest .5," appears on the report page, the required teacher figure has been rounded either up or down to the nearest half teacher. (This option can be specified before running the model.)

5. Teachers Available (TCHR-AVL) - Current Year teachers available is input. Otherwise, $TCHR-AVL = TCHR-REQ \times (1 - \text{Vocational Teacher Attrition Rate})$; that is, the teachers in the last year less attrition.
6. Teachers to be Hired (TCHR-HIRES) - The difference between teachers required and teachers available. A negative number indicates an excess of teachers available.

PURPOSE: Given certain basic teacher load information and desired average class size, the teachers required in any given year are calculated. This information is helpful in planning future hiring. It is also used in calculating program cost data.

TECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
TEACHING REQUIREMENTS

LEVEL	PROG-IDEN	PROG-NAME	PLAN-YEAR	AVER-CL-SIZE	ICHR-PDS	ICHR-WKS	ICHR-REQ	ICHR-AVL	ICHR-HRFS
S	00499	DISTRIBUTIVE EDUCATION	1972	13.4	30.0	36.0	1.5	1.5	.0
			1973	30.0	30.0	36.0	1.0	1.2	-.2
			1974	30.0	30.0	36.0	1.0	.A	.2
			1975	30.0	30.0	36.0	1.0	.A	.2
			1976	30.0	30.0	36.0	1.0	.A	.2
			1977	30.0	30.0	36.0	1.0	.A	.2
			1978	14.0	15.0	36.0	1.0	1.0	.0
00709	HEALTH SERVICES	1973	14.0	15.0	36.0	1.0	.A	.2	
		1974	14.0	15.0	36.0	1.0	.A	.2	
		1975	14.0	15.0	36.0	1.0	.A	.2	
		1976	14.0	15.0	36.0	1.0	.A	.2	
		1977	14.0	15.0	36.0	1.0	.A	.2	
		1978	11.5	30.0	36.0	1.0	.A	.0	
		1979	25.0	30.0	36.0	1.0	.A	.2	
00902	CLOTHING TECHNOLOGY	1973	25.0	30.0	36.0	1.0	.A	.2	
		1974	25.0	30.0	36.0	1.0	.A	.2	
		1975	25.0	30.0	36.0	1.0	.A	.2	
		1976	25.0	30.0	36.0	1.0	.A	.2	
		1977	25.0	30.0	36.0	1.0	.A	.2	
		1978	10.9	35.0	36.0	6.0	.A	.0	
		1979	30.0	35.0	36.0	2.0	4.9	-2.0	
01400	OFFICE OCCUPATIONS	1973	30.0	35.0	36.0	3.0	1.6	1.4	
		1974	30.0	35.0	36.0	3.0	2.4	.6	
		1975	30.0	35.0	36.0	3.0	2.4	.6	
		1976	30.0	35.0	36.0	4.0	2.4	.6	
		1977	30.0	35.0	36.0	1.0	1.0	.0	
		1978	25.0	30.0	36.0	1.0	.A	.2	
		1979	25.0	30.0	36.0	1.0	.A	.2	
01703	AUTO MECHANICS	1974	25.0	30.0	36.0	1.0	.A	.2	
		1975	25.0	30.0	36.0	1.0	.A	.2	
		1976	25.0	30.0	36.0	1.0	.A	.2	
		1977	25.0	30.0	36.0	1.0	.A	.2	
		1978	22.0	30.0	36.0	1.0	1.0	.0	
		1979	25.0	30.0	36.0	1.0	.A	.2	
		1980	25.0	30.0	36.0	1.0	.A	.2	
01710	BUILDING TRADES	1974	25.0	30.0	36.0	1.0	.A	.2	
		1975	25.0	30.0	36.0	1.0	.A	.2	
		1976	25.0	30.0	36.0	1.0	.A	.2	
		1977	25.0	30.0	36.0	1.0	.A	.2	
		1978	18.0	30.0	36.0	1.0	1.0	.0	
		1979	25.0	30.0	36.0	1.0	.A	.2	
		1980	25.0	30.0	36.0	1.0	.A	.2	
01713	DRAFTING	1974	25.0	30.0	36.0	1.0	.A	.2	
		1975	25.0	30.0	36.0	1.0	.A	.2	
		1976	25.0	30.0	36.0	1.0	.A	.2	
		1977	25.0	30.0	36.0	1.0	.A	.2	
		1978	18.0	30.0	36.0	1.0	1.0	.0	
		1979	25.0	30.0	36.0	1.0	.A	.2	
		1980	25.0	30.0	36.0	1.0	.A	.2	
01714	ELECTRICAL TRADES	1974	25.0	30.0	36.0	1.0	.A	.2	
		1975	25.0	30.0	36.0	1.0	.A	.2	
		1976	25.0	30.0	36.0	1.0	.A	.2	
		1977	25.0	30.0	36.0	1.0	.A	.2	
		1978	19.5	30.0	36.0	1.0	1.0	.0	
		1979	25.0	30.0	36.0	1.0	.A	.2	
		1980	25.0	30.0	36.0	1.0	.A	.2	
01719	PRINTING TRADES	1974	25.0	30.0	36.0	1.0	.A	.2	
		1975	25.0	30.0	36.0	1.0	.A	.2	
		1976	25.0	30.0	36.0	1.0	.A	.2	
		1977	25.0	30.0	36.0	1.0	.A	.2	
		1978	22.0	30.0	36.0	1.0	1.0	.0	
		1979	25.0	30.0	36.0	1.0	.A	.2	
		1980	25.0	30.0	36.0	1.0	.A	.2	

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
TEACHING REQUIREMENTS

LEVEL	PROG-IDEN	PROG-NAME	PLAN-YEAR	AVER-CL-SIZE	TCHP-PDS	TCHR-WKS	TCHP-RFQ	TCHR-AVL	TCHR-HIPFS
S	01719	PRINTING TRADES	1974	25.0	30.0	36.0	1.0	.A	.2
			1975	25.0	30.0	36.0	1.0	.A	.2
			1976	25.0	30.0	36.0	1.0	.A	.2
			1977	25.0	30.0	36.0	1.0	.A	.2
01723		MACHINE TRADES	1972	21.0	30.0	36.0	1.0	1.0	.0
			1973	25.0	30.0	36.0	1.0	.A	.2
			1974	25.0	30.0	36.0	1.0	.A	.2
			1975	25.0	30.0	36.0	1.0	.A	.2
			1976	25.0	30.0	36.0	1.0	.A	.2
			1977	25.0	30.0	36.0	1.0	.A	.2
01725		COSMETOLOGY	1972	40.0	30.0	36.0	1.0	1.0	.0
			1973	25.0	30.0	36.0	1.0	.A	.2
			1974	25.0	30.0	36.0	1.0	.A	.2
			1975	25.0	30.0	36.0	1.0	.A	.2
			1976	25.0	30.0	36.0	1.0	.A	.2
			1977	25.0	30.0	36.0	1.0	.A	.2
01729		COMMERCIAL FOODS	1972	15.5	30.0	36.0	1.0	1.0	.0
			1973	25.0	30.0	36.0	1.0	.A	.2
			1974	25.0	30.0	36.0	1.0	.A	.2
			1975	25.0	30.0	36.0	1.0	.A	.2
			1976	25.0	30.0	36.0	1.0	.A	.2
			1977	25.0	30.0	36.0	1.0	.A	.2
11400		OFFICE OCCUPATIONS	1972	12.0	30.0	36.0	3.0	3.0	.0
			1973	30.0	30.0	36.0	2.0	2.4	.4
			1974	30.0	30.0	36.0	3.0	1.6	1.4
			1975	30.0	30.0	36.0	3.0	2.4	.6
			1976	30.0	30.0	36.0	3.0	2.4	1.6
			1977	30.0	30.0	36.0	4.0	3.2	.A
11703		AUTOMOTIVE MAINTENANCE	1972	4.5	30.0	36.0	1.0	1.0	.0
			1973	25.0	30.0	36.0	1.0	.A	.2
			1974	25.0	30.0	36.0	1.0	.A	.2
			1975	25.0	30.0	36.0	1.0	.A	.2
			1976	25.0	30.0	36.0	1.0	.A	.2
			1977	25.0	30.0	36.0	1.0	.A	.2
11710		BUILDING TRADES	1972	5.5	30.0	36.0	1.0	1.0	.0
			1973	25.0	30.0	36.0	.0	.A	.A
			1974	25.0	30.0	36.0	1.0	.0	1.0
			1975	25.0	30.0	36.0	1.0	.A	.2
			1976	25.0	30.0	36.0	1.0	.A	.2
			1977	25.0	30.0	36.0	1.0	.A	.2
11713		DRAFTING	1972	12.0	30.0	36.0	1.0	1.0	.0
			1973	25.0	30.0	36.0	.0	.A	.A
			1974	25.0	30.0	36.0	.0	.0	.0
			1975	25.0	30.0	36.0	.0	.0	.0
			1976	25.0	30.0	36.0	.0	.0	.0
			1977	25.0	30.0	36.0	.0	.0	.0
11726		COSMETOLOGY	1972	.0	30.0	36.0	.0	.0	.0
			1973	25.0	30.0	36.0	1.0	.0	1.0
			1974	25.0	30.0	36.0	1.0	.A	.2
			1975	25.0	30.0	36.0	1.0	.A	.2
			1976	25.0	30.0	36.0	1.0	.A	.2
			1977	25.0	30.0	36.0	1.0	.A	.2
			1972	12.0	30.0	36.0	1.0	1.0	.0
			1973	25.0	30.0	36.0	.0	.A	.A
			1974	25.0	30.0	36.0	.0	.0	.0
			1975	25.0	30.0	36.0	.0	.0	.0
			1976	25.0	30.0	36.0	.0	.0	.0
			1977	25.0	30.0	36.0	.0	.0	.0
			1972	.0	30.0	36.0	.0	.0	.0
			1973	25.0	30.0	36.0	1.0	.0	1.0
			1974	25.0	30.0	36.0	1.0	.A	.2
			1975	25.0	30.0	36.0	1.0	.A	.2
			1976	25.0	30.0	36.0	1.0	.A	.2
			1977	25.0	30.0	36.0	1.0	.A	.2

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
TEACHING REQUIREMENTS

LEVEL	PROG-INDN	PROG-NAME	PLAN-YEAR	AVER-CL-SIZE	TCHR-PDS	TCHR-WKS	TCHR-PFG	TCHR-AVL	TCHR-HIRFS
5	11726	COSMETOLOGY	1976	25.0	30.0	36.0	1.0	.8	.2
			1977	25.0	30.0	36.0	1.0	.8	.2

REPORT TITLE: Teaching Expense

DESCRIPTION: A detailed report on teaching expenses for each of the programs in the planning period.

DEFINITION OF FIELDS:

1. Entering Salary (ENT-SAL) - Current year average entering salaries for entering teachers (i.e., new teachers) are supplied for each program. The entering salaries for each of the plan years are calculated according to the entering salary increment (also input) which is like an adjustment for inflation.
2. Average Salary (AVER-SAL) - This is handled in the same manner as entering salary: current year is input and subsequent years calculated on the basis of average salary increments.
3. Base Salary (BASE-SAL) - Teachers Salaries for the program based on both those returning and newly hired:

$$\text{BASE-SALARY} = (\text{AVER-SAL} \times \text{TCHR-AVL}) + (\text{ENT-SAL} \times \text{TCHR-HIRES})$$

4. Fringe Benefits (FRINGE-BENE) - The fringe benefits rate times the base salary yields the dollars for benefits in each program.
5. Substitution Expense (SUBST-EXP) - This is computed as the base salary times a substitution present allowance.

6. Total Teaching Expenses (TOT-TCHR-EXP) - The sum of the base salary, fringe benefits, and substitution expenses for any year.

PURPOSE: To identify the costs associated with teachers in each program.

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
TEACHING EXPENSE

LFVFL	PROG-IDEN	PROG-NAME	PLAN-YEAR	FNI-SAL	AVFR-SAL	RASF-SALARY	FRINGE-RFNE	SURST-FXP	TOT-TCH-EXP
S	00409	DISTRIBUTIVE EDUCATION							
			1972	7450	10000	15000	450	300	15750
			1973	8045	10799	13067	392	261	13720
			1974	8649	11663	11093	333	222	11653
			1975	9384	12597	11987	360	240	12587
			1976	10135	13604	12945	388	259	13592
			1977	10945	14593	13931	419	280	14680
00709		HEALTH SERVICES	1972	7200	7450	7450	223	149	7822
			1973	7775	8045	7994	240	160	8394
			1974	8394	8680	8434	259	173	9066
			1975	9069	9384	9324	280	186	9790
			1976	9795	10135	10070	302	201	10573
			1977	10579	10945	10876	326	218	11420
00902		CLOTHING TECHNOLOGY	1972	7200	11550	11650	349	233	12232
			1973	7775	12581	11668	350	233	12251
			1974	8398	13588	12662	374	252	13232
			1975	9069	14675	13610	408	272	14290
			1976	9795	15849	14699	441	294	15434
			1977	10579	17117	15875	476	317	16668
01400		OFFICE OCCUPATIONS	1972	7450	9000	9000	1620	1080	9450
			1973	8045	9719	9719	1417	945	10058
			1974	8689	10497	10497	1417	945	10800
			1975	9384	11337	10906	1417	945	11653
			1976	10135	12244	11779	1417	945	12587
			1977	10945	13223	12721	1417	945	13592
01703		AUTO MECHANICS	1972	7200	9000	9000	1620	1080	9450
			1973	7775	9719	9719	1417	945	10058
			1974	8398	10497	10497	1417	945	11003
			1975	9069	11337	10906	1417	945	11653
			1976	9795	12244	11779	1417	945	12587
			1977	10579	13223	12721	1417	945	13592
01710		BUILDING TRADES	1972	7200	9000	9000	1620	1080	9450
			1973	7775	9719	9719	1417	945	10058
			1974	8398	10497	10497	1417	945	11003
			1975	9069	11337	10906	1417	945	11653
			1976	9795	12244	11779	1417	945	12587
			1977	10579	13223	12721	1417	945	13592
01713		DRAFTING	1972	7200	9000	9000	1620	1080	9450
			1973	7775	9719	9719	1417	945	10058
			1974	8398	10497	10497	1417	945	11003
			1975	9069	11337	10906	1417	945	11653
			1976	9795	12244	11779	1417	945	12587
			1977	10579	13223	12721	1417	945	13592
01714		ELECTRICAL TRADES	1972	7200	9000	9000	1620	1080	9450
			1973	7775	9719	9719	1417	945	10058
			1974	8398	10497	10497	1417	945	11003
			1975	9069	11337	10906	1417	945	11653
			1976	9795	12244	11779	1417	945	12587
			1977	10579	13223	12721	1417	945	13592
01719		PRINTING TRADES	1972	7200	9000	9000	1620	1080	9450
			1973	7775	9719	9719	1417	945	10058

TECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
TEACHING EXPENSE

LEVEL	PROG-IDEN	PROG-NAME	PLAN-YEAR	ENT-SOL	AVER-SAL	BASE-SALARY	FRINGE-BENE	SUBST-EXP	TOT-ICH-EXP
S	01719	PRINTING TRADES	1974	8398	15513	14161	425	243	14869
			1975	9069	16754	15204	459	306	16059
			1976	9795	18094	16517	496	330	17343
			1977	10579	19542	17839	535	357	18731
			1972	7200	11300	11300	339	226	11865
01723	MACHINE TRADES	1973	7775	12203	12203	11362	341	227	11930
		1974	8398	13180	13180	12271	368	245	12884
		1975	9069	14234	14234	13253	398	265	13916
		1976	9795	15373	15373	14313	429	286	15028
		1977	10579	16603	16603	15458	464	309	16231
01726	COSMETOLOGY	1974	7200	11300	11300	11300	339	226	11865
		1975	7775	12203	12203	11362	341	227	11930
		1976	8398	13180	13180	12271	368	245	12884
		1977	9069	14234	14234	13253	398	265	13916
		1972	7200	11300	11300	11300	339	226	11865
01729	COMMERCIAL FOODS	1973	7775	12203	12203	11362	341	227	11930
		1974	8398	13180	13180	12271	368	245	12884
		1975	9069	14234	14234	13253	398	265	13916
		1976	9795	15373	15373	14313	429	286	15028
		1977	10579	16603	16603	15458	464	309	16231
11400	OFFICE OCCUPATIONS	1972	7450	9000	9000	2100	810	540	24350
		1973	8045	9719	9719	2317	709	472	24798
		1974	8689	10497	10497	2496	870	580	30446
		1975	9384	11337	11337	3238	987	658	34543
		1976	10135	12244	12244	4555	1370	913	47948
11703	AUTOMOTIVE MAINTENANCE	1977	10946	13223	13223	5161	1535	1023	53719
		1972	7200	11300	11300	11300	339	226	11865
		1973	7775	12203	12203	11362	341	227	11930
		1974	8398	13180	13180	12271	368	245	12884
		1975	9069	14234	14234	13253	398	265	13916
11710	BUILDING TRADES	1976	9795	15373	15373	14313	429	286	15028
		1977	10579	16603	16603	15458	464	309	16231
		1972	7200	11300	11300	11300	339	226	11865
		1973	7775	12203	12203	11362	341	227	11930
		1974	8398	13180	13180	12271	368	245	12884
11713	DRAFTING	1975	9069	14234	14234	13253	398	265	13916
		1976	9795	15373	15373	14313	429	286	15028
		1977	10579	16603	16603	15458	464	309	16231
		1972	7200	11300	11300	11300	339	226	11865
		1973	7775	12203	12203	11362	341	227	11930
11726	COSMETOLOGY	1974	8398	13180	13180	12271	368	245	12884
		1975	9069	14234	14234	13253	398	265	13916
		1976	9795	15373	15373	14313	429	286	15028
		1977	10579	16603	16603	15458	464	309	16231
		1972	7200	11300	11300	11300	339	226	11865

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
TEACHING-EXPENSE

LEVEL	PROG-IDENT	PROG-NAMF	PLAN-YEAR	FNT-SAL	AVEP-SAL	HASF-SALARY	FPINGF-RENF	SUBST-EXP	TOT-ICH-EXP
S	11726	COSMETOLOGY	1976	9795	12244	11779.	353.	236.	12368.
			1977	10579	13223	12721.	382.	254.	13357.

REPORT TITLE: Teaching Expense - Summary

DESCRIPTION: This report provides in an aggregate form the projected teaching expenses in vocational education programs within the LEA, with a breakdown of the various components of that cost. Each of the data fields -- Base Salary, Fringe Benefits, Substitution Expense, and Total Teaching Expense -- are totaled across all programs for each of the years in the plan.

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
TEACHING EXPENSE

LEVEL	PLANNED YEAR	BASE-SALARY	FPI/94-BENE	SUMST-EXP	TOT-TC-EXP
S	1972	236250.	7086.	6725.	244061.
	1973	230626.	6320.	4610.	242154.
	1974	216286.	5684.	4326.	227094.
	1975	240039.	7231.	4418.	252988.
	1976	270348.	8107.	5405.	283860.
	1977	304763.	9145.	6093.	320001.

REPORT TITLE: Stations Required By Program

DESCRIPTION: This report presents the facilities (classrooms or labs), stations, and corresponding calculated amount of square feet required for each program.

DEFINITION OF FIELDS:

1. Space Type - The unique code number assigned specifically to a particular facility type (e.g., auto mechanics lab).
2. Space Use - A code used to identify whether the facility is used for:
 - V - Vocational
 - N - Non-Vocational
 - R - Related
3. Facilities Required (FACREQ) - The facilities required, calculated for each Space Type by dividing the total number of stations required by the desired average class size designated for that space type.
4. Stations Required (STATREQ) - A calculation which compares total student periods to total facility periods; the actual formula used is:
$$\text{STATREQ} = \frac{(\text{Course Enrollments} \times \text{Course Periods/Week} \times \text{Course Length})}{(\text{Weeks Open} \times \text{Periods/Week Facility is Available} \times \text{Station Utilization Rate})}$$

The utilization rate makes this figure realistic by accounting for the fact that a room cannot be scheduled to be exactly full every period it is used.

5. Square Feet Required (SQFTREQ) - The footage required for each station, times the stations required, produces this figure.

PURPOSE: Shows the facility resource-requirements for each program. Where several types of space are used in a program, each is shown separately.

TECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972 STATIONS REQUIRED (BY PROGRAM)

LEVEL	PROG-INDEN	PROG-NAME	SPACE-TYPE	SPACE-USF	PLAN-YEAR	FACREQ	STATREQ	SOFTREQ
5	00499	DISTRIBUTIVE EDUCATION	036	V	1972	.2	3.2	168.2
					1973	.1	4.0	212.9
					1974	.3	7.5	397.5
					1975	.2	7.0	372.7
					1976	.2	6.6	350.7
					1977	.2	6.6	350.7
					1978	.2	6.6	350.7
					1979	.2	6.6	350.7
					1980	.2	6.6	350.7
					1981	.2	6.6	350.7
					1982	.2	6.6	350.7
					1983	.2	6.6	350.7
					1984	.2	6.6	350.7
					1985	.2	6.6	350.7
					1986	.2	6.6	350.7
					1987	.2	6.6	350.7
					1988	.2	6.6	350.7
					1989	.2	6.6	350.7
					1990	.2	6.6	350.7
					1991	.2	6.6	350.7
					1992	.2	6.6	350.7
					1993	.2	6.6	350.7
					1994	.2	6.6	350.7
					1995	.2	6.6	350.7
					1996	.2	6.6	350.7
					1997	.2	6.6	350.7
					1998	.2	6.6	350.7
					1999	.2	6.6	350.7
					2000	.2	6.6	350.7
					2001	.2	6.6	350.7
					2002	.2	6.6	350.7
					2003	.2	6.6	350.7
					2004	.2	6.6	350.7
					2005	.2	6.6	350.7
					2006	.2	6.6	350.7
					2007	.2	6.6	350.7
					2008	.2	6.6	350.7
					2009	.2	6.6	350.7
					2010	.2	6.6	350.7
					2011	.2	6.6	350.7
					2012	.2	6.6	350.7
					2013	.2	6.6	350.7
					2014	.2	6.6	350.7
					2015	.2	6.6	350.7
					2016	.2	6.6	350.7
					2017	.2	6.6	350.7
					2018	.2	6.6	350.7
					2019	.2	6.6	350.7
					2020	.2	6.6	350.7
					2021	.2	6.6	350.7
					2022	.2	6.6	350.7
					2023	.2	6.6	350.7
					2024	.2	6.6	350.7
					2025	.2	6.6	350.7
					2026	.2	6.6	350.7
					2027	.2	6.6	350.7
					2028	.2	6.6	350.7
					2029	.2	6.6	350.7
					2030	.2	6.6	350.7
					2031	.2	6.6	350.7
					2032	.2	6.6	350.7
					2033	.2	6.6	350.7
					2034	.2	6.6	350.7
					2035	.2	6.6	350.7
					2036	.2	6.6	350.7
					2037	.2	6.6	350.7
					2038	.2	6.6	350.7
					2039	.2	6.6	350.7
					2040	.2	6.6	350.7
					2041	.2	6.6	350.7
					2042	.2	6.6	350.7
					2043	.2	6.6	350.7
					2044	.2	6.6	350.7
					2045	.2	6.6	350.7
					2046	.2	6.6	350.7
					2047	.2	6.6	350.7
					2048	.2	6.6	350.7
					2049	.2	6.6	350.7
					2050	.2	6.6	350.7
					2051	.2	6.6	350.7
					2052	.2	6.6	350.7
					2053	.2	6.6	350.7
					2054	.2	6.6	350.7
					2055	.2	6.6	350.7
					2056	.2	6.6	350.7
					2057	.2	6.6	350.7
					2058	.2	6.6	350.7
					2059	.2	6.6	350.7
					2060	.2	6.6	350.7
					2061	.2	6.6	350.7
					2062	.2	6.6	350.7
					2063	.2	6.6	350.7
					2064	.2	6.6	350.7
					2065	.2	6.6	350.7
					2066	.2	6.6	350.7
					2067	.2	6.6	350.7
					2068	.2	6.6	350.7
					2069	.2	6.6	350.7
					2070	.2	6.6	350.7
					2071	.2	6.6	350.7
					2072	.2	6.6	350.7
					2073	.2	6.6	350.7
					2074	.2	6.6	350.7
					2075	.2	6.6	350.7
					2076	.2	6.6	350.7
					2077	.2	6.6	350.7
					2078	.2	6.6	350.7
					2079	.2	6.6	350.7
					2080	.2	6.6	350.7
					2081	.2	6.6	350.7
					2082	.2	6.6	350.7
					2083	.2	6.6	350.7
					2084	.2	6.6	350.7
					2085	.2	6.6	350.7
					2086	.2	6.6	350.7
					2087	.2	6.6	350.7
					2088	.2	6.6	350.7
					2089	.2	6.6	350.7
					2090	.2	6.6	350.7
					2091	.2	6.6	350.7
					2092	.2	6.6	350.7
					2093	.2	6.6	350.7
					2094	.2	6.6	350.7
					2095	.2	6.6	350.7
					2096	.2	6.6	350.7
					2097	.2	6.6	350.7
					2098	.2	6.6	350.7
					2099	.2	6.6	350.7
					2100	.2	6.6	350.7
					2101	.2	6.6	350.7
					2102	.2	6.6	350.7
					2103	.2	6.6	350.7
					2104	.2	6.6	350.7
					2105	.2	6.6	350.7
					2106	.2	6.6	350.7
					2107	.2	6.6	350.7
					2108	.2	6.6	350.7
					2109	.2	6.6	350.7
					2110	.2	6.6	350.7
					2111	.2	6.6	350.7
					2112	.2	6.6	350.7
					2113	.2	6.6	350.7
					2114	.2	6.6	350.7
					2115	.2	6.6	350.7
					2116	.2	6.6	350.7
					2117	.2	6.6	350.7
					2118	.2	6.6	350.7
					2119	.2	6.6	350.7
					2120	.2	6.6	350.7
					2121	.2	6.6	350.7
					2122	.2	6.6	350.7
					2123	.2	6.6	350.7
					2124	.2	6.6	350.7
					2125	.2	6.6	350.7
					2126	.2	6.6	350.7
					2127	.2	6.6	350.7
					2128	.2	6.6	350.7
					2129	.2	6.6	350.7
					2130	.2	6.6	350.7
					2131	.2	6.6	350.7
					2132	.2	6.6	350.7
					2133	.2	6.6	350.7
					2134	.2	6.6	350.7
					2135	.2	6.6	350.7
					2136	.2	6.6	350.7
					2137	.2	6.6	350.7
					2138	.2	6.6	350.7
					2139	.2	6.6	350.7
					2140	.2	6.6	350.7
					2141	.2	6.6	350.7
					2142	.2	6.6	350.7
					2143	.2	6.6	350.7
					2144	.2	6.6	350.7
					2145	.2	6.6	350.7
					2146	.2	6.6	350.7
					2147	.2	6.6	350.7
					2148	.2	6.6	350.7
					2149	.2	6.6	350.7
					2150	.2	6.6	350.7
					2151	.2	6.6	350.7
					2152	.2	6.6	350.7
					2153	.2	6.6	350.7
					2154	.2	6.6	350.7
					2155	.2	6.6	350.7
					2156	.2	6.6	350.7
					2157	.2	6.6	350.7
					2158	.2	6.6	350.7
					2159	.2	6.6	350.7
					2160	.2	6.6	350.7
					2161	.2	6.6	350.7
					2162	.2	6.6	350.7
					2163	.2	6.6	350.7
					2164	.2	6.6	350.7
					2165	.2	6.6	350.7
					2166	.2	6.6	350.7
					2167	.2	6.6	350.7
					2168	.2	6.6	350.7
					2169	.2	6.6	350.7
					2170	.2	6.6	350.7
					2171	.2	6.6	350.7
					2172	.2	6.6	350.7
					2173	.2	6.6	350.7
					2174	.2	6.6	350.7
					2175	.2	6.6	350.7
					2176	.2	6.6	350.7
					2177	.2	6.6	350.7

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
STATIONS REQUIRED (BY PROGRAM)

LEVEL	PROG-IDEN	PROG-NAME	SPACE-TYPE	SPACE-USF	PLAN-YEAR	FACREQ	STATREQ	SOFTREQ
S	01714	ELECTRICAL TRADES	024	V	1974	1.0	25.0	3075.0
					1975	.9	23.4	2882.8
					1976	.9	22.1	2713.2
					1977	.9	22.1	2713.2
01719		PRINTING TRADES	039	V	1972	1.2	25.4	4264.6
					1973	1.1	26.8	4500.0
					1974	1.0	25.0	4200.0
					1975	.9	23.4	3937.5
					1976	.9	22.1	3705.9
					1977	.9	22.1	3705.9
01723		MACHINE TRADES	032	V	1972	1.2	24.2	4070.8
					1973	1.1	26.8	4500.0
					1974	1.1	27.5	4620.0
					1975	1.0	25.8	4331.2
					1976	1.0	24.3	4076.5
					1977	1.0	24.3	4076.5
01726		COSMETOLOGY	018	V	1972	1.2	46.2	3876.9
					1973	1.4	35.7	3000.0
					1974	1.3	33.3	2800.0
					1975	1.3	31.3	2625.0
					1976	1.2	29.4	2470.6
					1977	1.2	29.4	2470.6
01729		COMMERCIAL FOODS	017	V	1972	1.2	17.9	1287.7
					1973	.8	20.4	1665.7
					1974	.9	22.5	1620.0
					1975	.9	23.4	1687.5
					1976	.9	22.1	1588.2
					1977	.9	22.1	1588.2
11400		OFFICE OCCUPATIONS	147	V	1972	3.5	44.8	1415.9
					1973	2.0	58.9	1862.1
					1974	2.5	74.4	2383.2
					1975	2.8	85.1	2688.5
					1976	3.1	93.0	2939.3
					1977	3.5	105.9	3345.9
11703		AUTOMOTIVE MAINTENANCE	105	V	1972	1.2	11.0	1556.5
					1973	.8	18.8	2662.5
					1974	.8	20.0	2840.0
					1975	.8	18.8	2662.5
					1976	.7	17.6	2505.9
					1977	.7	17.6	2505.9
11710		BUILDING TRADES	109	V	1972	1.2	6.3	901.2
					1973	.4	10.7	1521.4
					1974	.4	14.0	1988.0
					1975	.6	15.9	2263.1
					1976	.7	16.8	2380.4
					1977	.7	18.5	2631.2
11713		DRAFTING	121	V	1972	1.2	13.8	332.3
					1973	.5	12.9	308.6
					1974	.5	12.0	288.0
					1975	.5	11.3	270.0

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
STATIONS REQUIRED (BY PROGRAM)

LFVFL	PROG-IDENT	PROG-NAME	SPACE-TYPE	SPACE-USF	PLAN-YEAR	FACHEQ	STATREQ	SOFTREQ
5	11713	DRAFTING	121	V	1976 1977	.4 .4	10.6 10.6	254.1 254.1
	11726	COSMETOLOGY	114	V	1972 1973 1974 1975 1976 1977	.0 .6 1.1 1.0 .9 .9	.0 14.3 26.7 25.0 23.5 23.5	.0 685.7 1240.0 1200.0 1129.4 1129.4

REPORT TITLE: Facilities Status

DESCRIPTION: A comparison, by space type, of facilities and stations available, against the calculated facilities and stations required.

DEFINITION OF FIELDS:

1. Facilities Available (FAC-AVAIL) - The number of rooms of this space type available, an input. This will include changes due to construction projects to be completed during the planning period.
2. Stations Available (STAT-AVAIL) - The number of stations available in the particular space type. Changes by year are reflected.
3. Station Utilization (STAT-UTILIZ) - Desired levels of station utilization supplied as an input based on typical experience (but adjustable to explore the effects of new scheduling procedures). This figure is a ratio of expected actual use to capacity. (Because of scheduling realities, this is rarely over 90%.)

PURPOSE: While the previous report displayed various facility levels by program, this set of reports collects data by space type (since it may be shared by several programs). The purpose in doing this is to allow for the analysis of basic facility requirements. The comparison of facilities required and available, or of stations required and available, provides keys to what type of additional facilities will be required and when.

TECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
FACILITIES STATUS

SPACE-TYPE	SPACE-USE	SPACE-NAME	PLAN-YEAR	FST FAC-Avail	FST STAT-Avail	FST STAT-UTILIZ	FACRFO	STATRFO
005	V	AUTO MECHANICS	1972	1.0	25.0	65.0	1.2	19.0
			1973	1.0	25.0	70.0	.9	21.4
			1974	1.0	25.0	75.0	1.0	25.0
			1975	1.0	25.0	80.0	.9	23.4
			1976	1.0	25.0	85.0	.9	22.1
			1977	1.0	25.0	85.0	.9	22.1
009	V	BUILDING TRADES	1972	1.0	25.0	65.0	1.2	25.4
			1973	1.0	25.0	70.0	1.1	26.8
			1974	1.0	25.0	75.0	1.0	25.0
			1975	1.0	25.0	80.0	.9	23.4
			1976	1.0	25.0	85.0	.9	22.1
			1977	1.0	25.0	85.0	.9	22.1
016	V	CLOTHING TECHNOLOGY	1972	1.0	25.0	65.0	1.2	13.3
			1973	1.0	25.0	70.0	.5	11.4
			1974	1.0	25.0	75.0	.7	17.5
			1975	1.0	25.0	80.0	.8	21.1
			1976	1.0	25.0	85.0	.9	22.1
			1977	1.0	25.0	85.0	.9	22.1
017	V	COMMERCIAL FOODS	1972	1.0	25.0	65.0	1.2	17.9
			1973	1.0	25.0	70.0	.8	20.4
			1974	1.0	25.0	75.0	.9	22.5
			1975	1.0	25.0	80.0	.9	23.4
			1976	1.0	25.0	85.0	.9	22.1
			1977	1.0	25.0	85.0	.9	22.1
018	V	COSMETOLOGY	1972	1.0	25.0	65.0	1.2	46.2
			1973	1.0	25.0	70.0	1.4	35.7
			1974	1.0	25.0	75.0	1.3	33.3
			1975	1.0	25.0	80.0	1.3	31.3
			1976	1.0	25.0	85.0	1.2	29.4
			1977	1.0	25.0	85.0	1.2	29.4
021	V	DRAFTING	1972	1.0	24.0	65.0	1.2	20.8
			1973	1.0	24.0	70.0	.7	17.7
			1974	1.0	24.0	75.0	.7	18.0
			1975	1.0	24.0	80.0	.7	17.3
			1976	1.0	24.0	85.0	.7	17.6
			1977	1.0	24.0	85.0	.7	17.6
024	V	ELECTRICAL TRADES	1972	1.0	25.0	65.0	1.2	22.5
			1973	1.0	25.0	70.0	.9	21.4
			1974	1.0	25.0	75.0	1.0	25.0
			1975	1.0	25.0	80.0	.9	23.4
			1976	1.0	25.0	85.0	.9	22.1
			1977	1.0	25.0	85.0	.9	22.1
032	V	MACHINE TRADES	1972	1.0	25.0	65.0	1.2	24.2
			1973	1.0	25.0	70.0	1.1	26.8
			1974	1.0	25.0	75.0	1.1	27.5
			1975	1.0	25.0	80.0	1.0	25.8
			1976	1.0	25.0	85.0	1.0	24.3
			1977	1.0	25.0	85.0	1.0	24.3
034	V	HEALTH SERVICES	1972	1.0	18.0	65.0	.6	10.4

TECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972

FACILITIES STATUS

SPACE-TYPE	SPACE-USE	SPACE-NAME	PLUM-YEAR	FAC-AVAIL	FST	STAT-AVAIL	FST	STAT-UTILIZ	FACFPO	STATREQ
034	V	HEALTH SERVICES	1973	1.0		14.0		70.0	.5	9.6
			1974	1.0		14.0		75.0	.5	9.0
			1975	1.0		14.0		80.0	.5	8.4
			1976	1.0		14.0		85.0	.4	7.9
			1977	1.0		14.0		85.0	.4	7.9
036	V	COOP INDUSTRIAL ED LAB	1972	1.0		30.0		65.0	.2	3.2
			1973	1.0		30.0		70.0	.1	4.0
			1974	1.0		30.0		75.0	.3	7.5
			1975	1.0		30.0		80.0	.2	7.0
			1976	1.0		30.0		85.0	.2	6.6
			1977	1.0		30.0		85.0	.2	6.6
039	V	PRINTING TRADES	1972	1.0		25.0		65.0	1.2	25.4
			1973	1.0		25.0		70.0	1.1	26.8
			1974	1.0		25.0		75.0	1.0	25.0
			1975	1.0		25.0		80.0	.9	23.4
			1976	1.0		25.0		85.0	.9	22.1
			1977	1.0		25.0		85.0	.9	22.1
045	V	DISTRIBUTIVE ED	1972	2.0		60.0		65.0	1.5	20.1
			1973	2.0		60.0		70.0	1.2	34.2
			1974	2.0		60.0		75.0	1.2	37.5
			1975	2.0		60.0		80.0	1.2	35.2
			1976	2.0		60.0		85.0	1.1	33.1
			1977	2.0		60.0		85.0	1.1	33.1
047	V	OFFICE OCCUPATIONS	1972	7.0		210.0		65.0	8.1	88.3
			1973	7.0		210.0		70.0	3.0	90.0
			1974	7.0		210.0		75.0	3.1	92.3
			1975	7.0		210.0		80.0	3.2	95.3
			1976	7.0		210.0		85.0	3.3	98.8
			1977	7.0		210.0		85.0	3.6	108.7
105	V	AUTOMOTIVE MAINTENANCE-FW	1972	1.0		15.0		65.0	1.2	11.0
			1973	1.0		15.0		70.0	.8	14.8
			1974	1.0		15.0		75.0	.8	20.0
			1975	1.0		15.0		80.0	.8	18.8
			1976	1.0		15.0		85.0	.7	17.6
			1977	1.0		15.0		85.0	.7	17.6
109	V	BUILDING TRADES-FR	1972	1.0		15.0		65.0	1.2	6.3
			1973	1.0		15.0		70.0	.4	10.7
			1974	1.0		15.0		75.0	.6	14.0
			1975	1.0		15.0		80.0	.6	15.9
			1976	1.0		15.0		85.0	.7	16.8
			1977	1.0		15.0		85.0	.7	18.5
118	V	COSMETOLOGY - FR	1972	.0		.0		65.0	.0	.0
			1973	1.0		20.0		70.0	.6	14.3
			1974	1.0		20.0		75.0	1.1	26.7
			1975	1.0		20.0		80.0	1.0	25.0
			1976	1.0		20.0		85.0	.9	23.5
			1977	1.0		20.0		85.0	.9	23.5
121	V	DRAFTING - FR	1972	1.0		30.0		65.0	1.2	13.8
			1973	1.0		30.0		70.0	.5	12.9

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
FACILITIES STATUS

SPACE-TYPE	SPACE-USE	SPACE-NAME	PLAN-YEAR	FST FAC-AVAIL	FST STAT-AVAIL	FST STAT-UTILIZ	FACRFQ	STATREQ
121	V	DRAFTING - FP	1974	1.0	30.0	75.0	.5	12.0
			1975	1.0	30.0	80.0	.5	11.3
			1976	1.0	30.0	85.0	.4	10.6
			1977	1.0	30.0	85.0	.4	10.6
147	V	OFFICE OCCUPATIONS-FR	1972	5.0	150.0	65.0	3.5	44.8
			1973	5.0	150.0	70.0	2.0	58.9
			1974	5.0	150.0	75.0	2.5	75.4
			1975	5.0	150.0	80.0	2.8	85.1
			1976	5.0	150.0	85.0	3.1	93.0
			1977	5.0	150.0	85.0	3.5	105.9

REPORT TITLE: Equipment on Hand and Maintenance Expense

DESCRIPTION: Program equipment maintenance costs are allocated on a per pupil basis. The factors involved are contained in this report.

DEFINITION OF FIELDS:

1. Vocational Equipment on Hand (VOC-EQUIP) - The dollar value of all vocational equipment in the district. The current year figure is input, the subsequent years are determined by new equipment added to each program or by construction projects.
2. Equipment Maintenance Percentage (EQP-MNT-PCT) - A percentage of the value of the vocational equipment on hand that will be expended for maintenance of that equipment.
3. Maintenance Expense (MAINT-EX) - The dollar value of equipment maintenance, calculated as the vocational equipment on hand times the equipment maintenance percent.
4. Maintenance Expense Per Pupil (MAIN-EX-PP) - Maintenance Expense divided by the number of students in each vocational program.

PURPOSE: In this report, projections of maintenance costs are made, and the basis for allocating this cost to specific vocational programs is also established.

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
EQUIPMENT ON-HAND AND MAINTENANCE EXPENSE

PLAN-YEAR	VOC-EQUIP	PCT-FOP-MNT	MAINT-FX	STUD-IN-PROG	MAIN-FY-PP
1972	176994	4.0	7080.	812	8.72
1973	187703	5.0	9385.	992	9.46
1974	195653	6.0	11739.	1141	10.24
1975	204638	7.0	14325.	1202	11.92
1976	215858	8.0	17269.	1263	13.67
1977	227813	9.0	20503.	1325	15.47

REPORT TITLE: Material - Supplies and Travel Expenses

DESCRIPTION: In this report are the factors that are used in the calculation of these two expenses, and the projected dollar costs.

DEFINITION OF FIELDS:

1. Materials and Supplies Cost Per Student (MTLS-COST-ST) - Current years costs are input; they are then inflated by year, according to a materials and supplies percentage increment (also input).
2. Travel Cost Per Student - Current year figures are input, and the subsequent years calculated using the travel cost inflation increment.
3. Material and Supplies Expense (MAT-ANS-SUP) - Calculated by multiplying the material and supply cost per student factor by the number of students in the program that year.
4. Travel Expense (TRAVEL) - Calculated by multiplying the travel per student cost factor by the number of students in the program that year.

PURPOSE: To identify supply and travel costs by program for each year in the plan.

TECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
MATERIAL-SUPPLIES AND TRAVEL EXPENSES

LEVEL	PROG-IDEN	PROG-NAME	PLAN-YEAR	MTLS-COST-ST	TRAV-COST-ST	MAT-AND-SUP	TRAVEL
S	00499	DISTRIBUTIVE EDUCATION	1972	13.00	6.50	1001.	500.
			1973	14.30	7.15	1644.	822.
			1974	15.73	7.86	2045.	1022.
			1975	17.30	8.65	2249.	1124.
			1976	19.03	9.52	2474.	1234.
			1977	20.94	10.47	2722.	1361.
00700		HEALTH SERVICES	1972	21.11	5.00	340.	90.
			1973	23.22	5.00	414.	90.
			1974	25.54	5.00	460.	90.
			1975	28.10	5.00	504.	90.
			1976	30.91	5.00	556.	90.
			1977	34.00	5.00	612.	90.
00902		CLOTHING TECHNOLOGY	1972	43.48	.00	1000.	0.
			1973	47.83	.00	1196.	0.
			1974	52.61	.00	1441.	0.
			1975	57.87	.00	2604.	0.
			1976	63.66	.00	3183.	0.
			1977	70.02	.00	3501.	0.
01400		OFFICE OCCUPATIONS	1972	8.95	2.38	1479.	509.
			1973	9.84	2.62	2362.	629.
			1974	10.93	2.88	2848.	757.
			1975	11.91	3.17	3442.	916.
			1976	13.10	3.48	4179.	1110.
			1977	14.41	3.83	5202.	1343.
01703		AUTO MECHANICS	1972	43.33	.00	1470.	0.
			1973	47.66	.00	1906.	0.
			1974	52.43	.00	2621.	0.
			1975	57.67	.00	2883.	0.
			1976	63.64	.00	3172.	0.
			1977	69.78	.00	3489.	0.
01710		BUILDING TRADES	1972	104.54	.00	4600.	0.
			1973	114.99	.00	5749.	0.
			1974	126.49	.00	6324.	0.
			1975	139.14	.00	6957.	0.
			1976	153.06	.00	7653.	0.
			1977	168.36	.00	8418.	0.
01713		DRAFTING	1972	32.14	.00	1157.	0.
			1973	35.35	.00	1167.	0.
			1974	38.89	.00	1400.	0.
			1975	42.74	.00	1583.	0.
			1976	47.06	.00	1802.	0.
			1977	51.76	.00	2070.	0.
01714		ELECTRICAL TRADES	1972	62.22	.00	2427.	0.
			1973	68.44	.00	2738.	0.
			1974	75.29	.00	3764.	0.
			1975	82.81	.00	4140.	0.
			1976	91.10	.00	4555.	0.
			1977	100.21	.00	5010.	0.
01719		PRINTING TRADES	1972	227.27	.00	10000.	0.
			1973	250.00	.00	12500.	0.

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
MATERIAL-SUPPLIES AND TRAVEL EXPENSES

LEVEL	PROG-INDN	PROG-NAME	PLAN-YEAR	MTLS-COST-ST	TRAV-COST-ST	MAT-AND-SUP	TRAVEL
S	01719	PRINTING TRADES	1974	275.00	.00	13750.	0.
			1975	302.50	.00	15125.	0.
			1976	332.75	.00	16634.	0.
			1977	366.02	.00	14301.	0.
01723		MACHINE TRADES	1972	26.92	.00	1131.	0.
			1973	29.51	.00	1440.	0.
			1974	32.57	.00	1791.	0.
			1975	35.84	.00	1971.	0.
			1976	39.41	.00	2168.	0.
			1977	43.35	.00	2384.	0.
01726		COSMETOLOGY	1972	56.66	.00	3400.	0.
			1973	62.33	.00	3116.	0.
			1974	68.56	.00	3428.	0.
			1975	75.41	.00	3770.	0.
			1976	82.96	.00	4148.	0.
			1977	91.25	.00	4563.	0.
01729		COMMERCIAL FOODS	1972	108.33	.00	3354.	0.
			1973	114.16	.00	4528.	0.
			1974	131.04	.00	5899.	0.
			1975	144.19	.00	7209.	0.
			1976	158.61	.00	7930.	0.
			1977	174.47	.00	8723.	0.
11400		OFFICE OCCUPATIONS	1972	24.30	.00	2163.	0.
			1973	26.73	.00	3528.	0.
			1974	29.40	.00	4851.	0.
			1975	32.34	.00	5757.	0.
			1976	35.54	.00	7009.	0.
			1977	39.14	.00	8337.	0.
11703		AUTOMOTIVE MAINTENANCE	1972	73.30	.00	1343.	0.
			1973	80.53	.00	2422.	0.
			1974	88.69	.00	3548.	0.
			1975	97.56	.00	3902.	0.
			1976	107.32	.00	4293.	0.
			1977	118.55	.00	4722.	0.
11710		BUILDING TRADES	1972	80.00	.00	840.	0.
			1973	88.00	.00	1760.	0.
			1974	96.80	.00	2710.	0.
			1975	106.48	.00	3620.	0.
			1976	117.13	.00	4451.	0.
			1977	128.84	.00	5411.	0.
11713		DRAFTING	1972	32.14	.00	1157.	0.
			1973	35.35	.00	1273.	0.
			1974	38.49	.00	1400.	0.
			1975	42.74	.00	1540.	0.
			1976	47.06	.00	1694.	0.
			1977	51.76	.00	1863.	0.
11726		COSMETOLOGY	1972	56.66	.00	0.	0.
			1973	62.33	.00	1247.	0.
			1974	68.56	.00	2742.	0.
			1975	75.41	.00	3016.	0.

TECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
MATERIAL-SUPPLIES AND TRAVEL EXPENSES

LEVFL	PROG-IDEN	PROG-NAME	PLAN-YEAR	MILS-COST-ST	TRAV-COST-ST	MAT-AND-SUP	TRAVEL
S	11726	COSMETOLOGY	1976	82.96	.00	331A.	0.
			1977	91.25	.00	3650.	0.

REPORT TITLE: Material - Supplies and Travel Expense - Summary

DESCRIPTION: The total expenses for materials and supply and
for travel in the voc-ed activities of the LEA.

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
MATERIAL-SUPPLIES AND TRAVEL EXPENSES

PLAN-YEAR	MAT-MIN-SUP	TRAVEL
1972	37356.	1090.
1973	49434.	3541.
1974	61422.	1869.
1975	70274.	2130.
1976	79303.	2438.
1977	88974.	2834.

REPORT TITLE: LEA Cost Less Direct Vocational Cost On Per Units
Basic

DESCRIPTION: A presentation of the cost factors used in the
projection of overhead costs.

DEFINITION OF FIELDS:

1. Overhead Inflation Rate (OVER-INFL-RT) - A figure input
for each account, representing the expected annual rate
of inflation.

2. Overhead Base Type (OVER-BASE-TY) - Each overhead cost
will be related to one of the following (called the
"base"):

S - Total Students or

T - Total Staff or

Q - Total Square Feet

3. Costs Per Base - For the current year this is equal to
Total LEA Costs Less Current Year Direct Vocational
Costs divided by the value of the corresponding relation-
ship (students, staff, square feet) for the account.

For each of the plan years, this formula is used:

Plan Year Amount Per Base = Current Year Amount Per Base x
(1.0 + Overhead Inflation Rate)
raised to the power (Plan Year - Current Year)

PURPOSE: This bases are used in the calculation of Total LEA
Costs and Vocational Overhead.

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
LFA COSTS LESS DIRECT VOC. COSTS PER BASE

OVER-ACT-NO	OVER-ACT-NAM	OVER-INFL-RT	OVER-BASE-TY	PLAN-YEAR					
				1972	1973	1974	1975	1976	1977
J4	SPECIAL SCHOOLS	5.0	S	3.71	3.90	4.09	4.29	4.51	4.74
0100	ADMINISTRATION	5.0	S	35.88	37.67	39.56	41.54	43.61	45.79
0200A	INSTRUCTION DIRECT	7.0	S	712.41	742.28	815.64	872.73	933.82	999.19
0200R	INSTRUCTION INDIRECT	7.0	S	171.51	183.52	196.36	210.11	224.81	240.55
0300	ATTENDANCE SERVICES	5.0	S	4.37	4.59	4.82	5.06	5.31	5.58
0400	HEALTH SERVICES	5.0	S	12.60	13.23	13.89	14.59	15.32	16.08
0500	TRANSPORTATION	10.0	S	125.52	138.07	151.88	167.07	183.77	202.15
0600	PLANT OPERATION	5.0	O	1.39	1.46	1.53	1.61	1.69	1.77
0700	PLANT MAINTENANCE	10.0	O	.24	.26	.29	.32	.35	.39
0800A	F.C. - STAFF	10.0	T	568.43	625.27	687.80	756.58	832.24	915.46
0800R	F.C. - STUDENT	7.0	S	2.97	3.18	3.40	3.64	3.89	4.17
0800C	F.C. - PROPERTY	7.0	O	.05	.05	.06	.06	.07	.07
0900	FOOD SERVICES	.0	S	.74	.74	.74	.74	.74	.74
1000	STUDENT ACTIVITIES	7.0	S	27.30	29.21	31.26	33.44	35.78	38.29
1100	COMMUNITY SERVICES	.0	S	.50	.50	.50	.50	.50	.50
1200	CAPITAL OUTLAY	7.0	S	24.71	26.44	28.29	30.27	32.39	34.66

REPORT TITLE: Total LEA Costs (With Computed Direct Vocational Costs)

DESCRIPTION: These costs are the result of adding the data from "LEA Costs Less Direct Vocational Cost Report," and the computed direct vocational costs. The direct costs are added in the following accounts:

0200A, Instruction Direct - Base salary, fringe benefit, and substitution allowance.

0700, Plant Maintenance - Replacement equipment and equipment maintenance.

1200, Capital Outlay - New equipment.

These forecasts should approximate the overall financial picture for the LEA in the next few years (assuming a "base case" for the non-vocational part of a comprehensive district).

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
TOTAL LEA COSTS WITH DIRECT VOCATIONAL COSTS

OVER-ACT-NO	OVER-ACT-NAM	PLAN-YEAR				
		1972	1973	1974	1975	1976
J6	SPECIAL SCHOOLS	15000.	17530.	20042.	22762.	25704.
0100	ADMINISTRATION	14400.	16953.	19383.	22013.	24859.
0200	INSTRUCTION DIRECT	31630.	37238.	42870.	49508.	56883.
0200	INSTRUCTION INDIRECT	6927.	8258.	9621.	11135.	12814.
0300	ATTENDANCE SERVICES	17650.	20648.	23608.	26812.	30277.
0400	HEALTH SERVICES	50000.	59835.	68088.	77306.	87298.
0500	TRANSPORTATION	50609.	62132.	74420.	86545.	104751.
0600	PLANT MAINTENANCE	55327.	58207.	61214.	64275.	67482.
0700	F.C. - STAFF	10670.	11663.	12983.	14567.	16397.
0800	F.C. - STUDENT	14620.	16604.	19774.	23756.	27663.
0900	F.C. - PROPERTY	12000.	14301.	16662.	19283.	22190.
1000	FOOD SERVICES	20300.	21371.	22867.	24667.	26180.
1100	STUDENT ACTIVITIES	3000.	3330.	3626.	3922.	4214.
1200	COMMUNITY SERVICES	11025.	13149.	15315.	17751.	20397.
1300	CAPITAL OUTLAY	2000.	2250.	2450.	2650.	2850.
1320	DEPT PRINCIPAL	11025.	12788.	14473.	16570.	18942.
1330	SERVICE INTEREST	33000.	33000.	33000.	33000.	33000.
		396507.	388577.	380805.	373189.	365725.
TOTAL		6382595.	7323521.	8292710.	9419348.	10667351.
						12057972.

REPORT TITLE: Total Vocational Program Cost With Overhead

DESCRIPTION: These are the total program costs including allocated overhead distributed to each program for all years.

DEFINITION OF FIELDS:

1. Materials, Supplies, and Travel Costs (MTS-TRV) - The sum of Material and Supply Costs, and Travel Cost together.
2. Equipment Costs (EQPT-COST) - The sum of both new and replacement equipment for a program in that year.
3. Overhead - Overhead (from LEA Cost Allocated to Vocational Programs) allocated to all vocational programs on a per pupil basis. First, the total LEA Cost Allocated to Vocational Programs for each year is divided by the total number of vocational students, to establish an overhead cost per student. Then, that figure, multiplied by the number of students in each program, determines the overhead assigned to that program.

PURPOSE: In order to fully understand the total costs and resources required for any program, total costs with overhead (indirect) should be considered. This report presents those costs.

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
TOTAL VOCATIONAL PROGRAM COST WITH OVERHEAD

LEVEL	PROG-IDEN	PROG-NAME	PLAN-YEAR	TOT-TCMR	MTS-JRV	MAINT-FICE	EQPT-COST	OVERHEAD	TOT-COST
S	00499	DISTRIBUTIVE EDUCATION	1972	15750.	1501.	671.	300.	86352.	104574.
			1973	13720.	2466.	1088.	435.	132197.	149906.
			1974	11653.	3067.	1338.	200.	155120.	171378.
			1975	12587.	3373.	1550.	200.	163737.	181447.
			1976	13542.	3712.	1777.	300.	173805.	193186.
			1977	14680.	4083.	2011.	400.	184891.	206065.
00709		HEALTH SERVICES	1972	7822.	470.	157.	0.	20186.	28635.
			1973	8304.	508.	170.	90.	20692.	29454.
			1974	9066.	550.	185.	100.	21478.	31379.
			1975	9700.	596.	215.	110.	22671.	33382.
			1976	10573.	648.	246.	170.	24065.	35700.
			1977	11420.	702.	278.	205.	25600.	38205.
00902		CLOTHING TECHNOLOGY	1972	12232.	1000.	201.	250.	25793.	39476.
			1973	12251.	1196.	236.	265.	28738.	42686.
			1974	13232.	1341.	360.	300.	41763.	57496.
			1975	14290.	2604.	536.	500.	56678.	74608.
			1976	15434.	3183.	683.	650.	66848.	86798.
			1977	16668.	3501.	773.	650.	71112.	92704.
01400		OFFICE OCCUPATIONS	1972	56700.	2374.	1831.	0.	235504.	296414.
			1973	49596.	2991.	2770.	583.	275889.	331329.
			1974	30446.	3605.	2706.	300.	313419.	350876.
			1975	34543.	4358.	3445.	500.	364001.	406847.
			1976	37307.	5284.	4361.	600.	426490.	474047.
			1977	51783.	6585.	5585.	700.	513429.	578082.
01703		AUTO MECHANICS	1972	6450.	1430.	288.	0.	37008.	48176.
			1973	9817.	1906.	378.	1600.	45982.	59683.
			1974	10603.	2621.	514.	1000.	59661.	74399.
			1975	11451.	2883.	546.	500.	62976.	78406.
			1976	12368.	3172.	683.	600.	66848.	83671.
			1977	13357.	3489.	773.	750.	71112.	89481.
01710		BUILDING TRADES	1972	8872.	4600.	384.	225.	49344.	63425.
			1973	9311.	5749.	473.	225.	57477.	73235.
			1974	10058.	6324.	514.	250.	59661.	76807.
			1975	10862.	6957.	596.	475.	62976.	81866.
			1976	11731.	7653.	683.	500.	66848.	87415.
			1977	12669.	8414.	773.	650.	71112.	93622.
01713		DRAFTING	1972	11865.	1157.	314.	1000.	40372.	54708.
			1973	11930.	1167.	312.	146.	37935.	51490.
			1974	12886.	1400.	370.	150.	42956.	57760.
			1975	13916.	1583.	441.	175.	46602.	62717.
			1976	15028.	1882.	547.	300.	53478.	71235.
			1977	16231.	2070.	619.	375.	56890.	75185.
01714		ELECTRICAL TRADES	1972	11865.	2427.	340.	292.	43737.	58661.
			1973	11930.	2738.	378.	575.	45982.	61603.
			1974	12886.	3764.	514.	400.	59661.	77223.
			1975	13916.	4140.	596.	500.	62976.	82128.
			1976	15028.	4555.	683.	600.	66848.	87714.
			1977	16231.	5010.	773.	600.	71112.	93726.
01719		PRINTING TRADES	1972	13965.	10000.	384.	800.	49344.	74493.
			1973	13766.	12500.	473.	500.	57477.	84716.

TECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972

TOTAL VOCATIONAL PROGRAM COST WITH OVERHEAD

LEVEL	PROG-IDEN	PROG-NAME	PLAN-YEAR	TOT-TCR	MTS-TRV	MAINT-FNCE	EQPT-COST	OVERHEAD	TOT-COST
S	01719	PRINTING TRADES	1974	14849.	13750.	514.	500.	59661.	89294.
			1975	16059.	15125.	506.	1000.	62976.	95756.
			1976	17343.	16638.	683.	1500.	66848.	103012.
			1977	18731.	18301.	773.	1500.	71112.	110417.
			1972	11845.	1131.	366.	0.	47101.	60463.
01723		MACHINE TRADES	1973	11940.	1480.	473.	0.	57477.	71360.
			1974	12804.	1741.	566.	0.	66628.	80869.
			1975	13916.	1971.	566.	0.	69274.	85817.
			1976	15028.	2168.	752.	1000.	73533.	92481.
			1977	16231.	2384.	851.	1000.	78223.	98689.
01726		COSMETOLOGY	1972	11865.	3400.	523.	0.	67287.	83075.
			1973	11430.	3115.	473.	0.	57477.	72996.
			1974	12804.	3428.	514.	400.	59661.	76887.
			1975	13916.	3700.	506.	500.	62976.	81758.
			1976	15028.	4144.	683.	600.	66848.	87307.
01729		COMMERICAL FOODS	1977	16241.	4563.	773.	600.	71112.	93279.
			1972	11865.	3358.	270.	250.	34765.	50508.
			1973	11930.	4528.	349.	50.	43683.	60550.
			1974	12804.	5499.	663.	100.	53695.	73041.
			1975	13916.	7204.	596.	150.	62976.	84847.
11400		OFFICE OCCUPATIONS	1976	15028.	7930.	643.	200.	66848.	90649.
			1977	16231.	8723.	773.	250.	71112.	97089.
			1972	28300.	2163.	776.	750.	90809.	131848.
			1973	24744.	3528.	1249.	500.	151739.	181814.
			1974	30606.	4451.	1694.	500.	196883.	234378.
11703		AUTOMOTIVE MAINTENANCE	1975	34563.	5757.	2122.	1000.	224194.	267616.
			1976	47948.	7009.	2693.	1000.	263381.	322031.
			1977	53719.	8337.	3295.	1000.	302937.	369288.
			1972	11865.	1393.	166.	2500.	21308.	37232.
			1973	11930.	2422.	331.	1500.	40234.	56817.
11710		BUILDING TRADES	1974	12804.	3548.	412.	1500.	47729.	66073.
			1975	13916.	3902.	477.	1500.	50381.	70174.
			1976	15028.	4293.	547.	1000.	53478.	74346.
			1977	16231.	4722.	619.	1000.	56890.	79462.
			1972	11865.	880.	166.	1500.	12336.	26677.
11713		DRAFTING	1973	10379.	1760.	189.	1800.	22491.	37119.
			1974	8818.	2710.	288.	1800.	33410.	47026.
			1975	13916.	3620.	405.	1300.	42824.	62065.
			1976	15028.	4451.	519.	1500.	50804.	72302.
			1977	16231.	5411.	650.	1500.	59736.	83526.
11713		DRAFTING	1972	11865.	1157.	314.	125.	40372.	53833.
			1973	10379.	1273.	341.	146.	41383.	53522.
			1974	0.	1400.	370.	150.	42056.	44876.
			1975	0.	1540.	424.	175.	45343.	47487.
			1976	0.	1584.	492.	300.	48131.	50617.
11724		COSMETOLOGY	1977	0.	1863.	557.	375.	51201.	53996.
			1972	0.	0.	10.	4738.	0.	4738.
			1973	8163.	1247.	189.	2294.	22991.	34884.
			1974	10603.	2742.	412.	300.	47729.	61786.
			1975	11451.	3016.	477.	400.	50381.	65725.

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
TOTAL VOCATIONAL PROGRAM COST WITH OVERHEAD

LEVEL	PRGR-IDEN	PRGR-NAME	PLAN-YEAR	TOT-TCR	MIS-TPV	MAINTENANCE	EQPT-COST	OVERHEAD	TOT-COST
S	11726	COSMETOLOGY	1976	12368.	3318.	547.	400.	53478.	70111.
			1977	13357.	3650.	619.	400.	56890.	74916.

REPORT TITLE: Total Vocational Program Cost With Overhead -
Summary

DESCRIPTION: As in the previous Total Vocational Program Cost
report (without overhead), all values are added across
programs to arrive at yearly figures for comparison. Cost
Per Student figures all also listed.

POLYTECHNICAL REGIONAL VOCATIONAL DISTRICT - JUNE, 1972
TOTAL VOCATIONAL PROGRAM COST WITH OVERHEAD

PLAN-YEAR	TOT-ICHP	VTS-TW	MAINTENANCE	FOOT-COST	OVERHEAD	TOT-COST	FST VOC-STUD	COST-PFR-STU
1972	248061.	38444.	7081.	12730.	910618.	1216936.	812.0	1498.69
1973	242154.	50975.	9382.	10704.	1140344.	1453564.	992.0	1465.29
1974	227834.	63241.	11738.	7950.	1361471.	1671548.	1141.0	1464.98
1975	252984.	72404.	14329.	8985.	1513942.	1862648.	1202.0	1549.62
1976	283860.	81741.	17262.	11220.	1688579.	2082662.	1263.0	1648.98
1977	320001.	91812.	20495.	13955.	1884669.	2328732.	1325.0	1757.53

V. ANALYSIS OF THE DATA AND SETTING GOALS AND OBJECTIVES

The link between data collected about a school district and policy is the effort which goes into analysis or interpretation of the data. The analysis must be accomplished in a few short weeks to permit review of the analysis and the development of policy by the board in early November.

A. **PLANNING WORKBOOKS.** In May, planning workbooks prepared by the staff are distributed to the members of the planning committee. The workbooks (looseleaf) contain:

- . Last year's plan (final model simulation)
- . Last year's project descriptions
- . Current base case reports
- . Current project evaluations

Committee members are asked to review this material thoroughly in preparation for their first work session. In order that the base case reports can be presented by committee members themselves, two or three of the members are asked to meet with staff to review the base case reports.

B. **THE COMMITTEE'S ANALYSIS.** This section and the next are presented as alternatives for the school district; depending on whether the school board wishes to lean on the planning committee (1) only for initial data review (Alternative 1) or (2) for both data review and an analysis leading to recommendations (Alternative 2).

If the board is likely to want to participate actively in goal-and objective-setting, the major contribution the planning committee will make before meeting with the board

is to preview and help digest the data. Thus prepared, the planning committee members will undoubtedly be a strong catalyst in the goal-and objective-setting of the combined group.

County vocational districts may favor the limited planning committee role more than those vocational districts which are integrated into the comprehensive school districts.

In either alternative, the committee will come together in Mid-October, following an agenda somewhat like that shown below:

Meeting of the
District Planning Committee

A G E N D A

- I. Data Collection review - Moderated by the staff member assigned to data collection. This review briefly outlines both the source and content of all data collected or otherwise newly added to the district planning model.
- II. Base Case Reports - Moderated by two or three of the committee members. This discussion includes specific reference to major changes from last year and the status of indicators and planning factors.
- III. Project Reviews - Moderated by the superintendent. The superintendent presents both fact and opinion with regard to the performance of each project.
- IV. Forecasts - Moderated by the staff member assigned to forecasts.

Taking note of questions asked and insights gained, the presentation is modified and compacted in preparation for presentation to the board.

- C. THE COMMITTEE'S ANALYSIS - ALTERNATIVE 2. This alternate role for the planning committee flows is similar to B. above, through presentation of the forecasts.

The committee then brainstorms possible goals and objectives for the school district. If the committee is so inclined, they might split up and schedule further presentation and brainstorming sessions with assemblies of students, teachers, and business leaders.

The planning committee reconvenes to hammer out a realistic and representative set of recommended goals and objectives, with priorities and measurements specified. In the presentation to the board, committee members describe the process by which the recommendations were compiled.

Assuming that the committee's work has been open and thorough, the board then has a significant head start in its deliberations on policy for the district.

- D. THE POLICY MEMO. The policy memo is a statement of the objectives which the board approves, stated in the form of a request for proposals by which the district can be expected to meet the objectives.

Whether the board develops its own goals and objectives or directs the planning committee to come up with recommendations, the board's final decisions will be expressed in the policy memo.

At the planning committee's presentation, the board will want to examine the quantitative goals previously set, the progress that was made toward meeting them, and whether or not the objectives and priorities are to remain the same. External factors -- economic, legal, or political -- may require changes in the LEA's objectives.

The revised indicator targets and priorities that emerge from the board's deliberations become the basis for the Policy Memo.

VI. PROJECT DESIGN AND SELECTION

INTRODUCTION

At this stage the process is opened to teachers, students, parents, and employers, as well as the planning staff and Board, to provide an opportunity for broad participation. The project design process thus becomes in itself virtually as important as the results it produces. And although the process is designed to be open enough to allow for this range of participation, it is also structured enough so that it is "workable." A flow chart on the next page describes the activities and participants involved. Following this is an explanation of each of the steps in the process.

Project Design and Selection

Participants

ACTIVITIES

Board

POLICY MEMO
ISSUED

Students, Teachers,
Parents groups,
Industry, etc.

DESIGN PROJECTS
AND
SUBMIT PROJECT
PROPOSALS

Project Review Team

REVIEW
PROPOSALS

Staff

SUMMARIZE
FOR MODEL

Staff and Computer

PROJECTIONS
USING MODEL

Planning Committee

SELECT
BEST PLAN

Board

ACCEPTANCE
BY BOARD

A. SUBMIT PROJECT PROPOSALS

Within the constraints defined in the Policy Memo, project designs are now solicited from the range of interested parties. Because a creative idea is only a start toward a project designed to achieve educational change, the proposals must address the following points:

1. Project Description - A brief description of the project proposal, highlighting its salient features.
2. Anticipated Outcome - A statement of the indicators (results) that will be affected by the project and how they will be affected.
3. Impact on Operations - The anticipated resources required for the project, including costs, staff, space, equipment, and materials.
4. Justification - A rationale or defense of the idea, showing the reasons that the designer believes it will achieve the predicted results; this includes research data, expert opinions (documented), information about similar programs in other school districts, etc.
5. Capital Projects - In the case of facilities construction projects, there should be an estimate of the number of student stations or rooms by type

of space that will become available, and the years in which they will become available.

In addition to proposing new projects and continuations of projects, it is also important to develop "negative" projects which discontinue some activity or service. Eliminating programs and activities is as valid an approach to a problem as developing additional projects. The same procedures and data requirements are necessary, although many of the values (e.g., costs and staff) will now be negative.

On the next page is an example of a condensed form an LEA may want to use as a model for project design.

B. PROPOSALS REVIEW

The project review team should then examine the various proposals for conformity of design requirements and accuracy. One of three possible courses of action should be recommended:

1. Rejection - If the proposal requires more than a reasonable limit of resources or is found to be weak in its probability for success.
2. Re-Writes - For the proposals that have a good basis but need some revisions or additional thought or data.

LEA PROJECT SUMMARY

TITLE:

Date Prepared _____

Objective Number _____

Project Span (Years) _____

- A. PROJECT DESCRIPTION: Indicate the scope, activities, schedule, etc.
- B. ANTICIPATED OUTCOME: Describe the changes this project is anticipated to produce in indicator levels, planning factor values and/or other measures.
- C. PROJECTED OPERATING CHANGES OR ADDITIONS: Specify what direct changes or additions implementation of this project will require in manpower, space, materials and equipment, direct costs, program and/or course enrollment, and planning factors.
- D. PROJECT DEFENSE: Support this project by supplying research data, document expert testimony, or information about similar programs in other districts.

3. Acceptance - Of those proposals that the review group finds within the bounds of the policy memo and educationally valid.

C. SUMMARIZE PROJECTS FOR MODEL

At this point, acceptable project proposals will be summarized to produce the input elements that can be used by the LEA planning system model. (See Volumes II and III). Designers from outside the educational system, as well as some from within the district, may be unaware of certain facts such as salary schedules, data on pupils and teachers, or legal requirements. Consequently, the planning staff will amend the data, and prepare the proposals for analysis.

D. RUN MODEL

The model iterations can be viewed as two distinct, yet related, subgroups. In the first situation the LEA planners may desire to run each accepted project proposal individually with the base case plan. This will enable them to see specific effects of each alternative in terms of indicator levels, resources, and costs.

Upon noting the effects of the individual projects, the planners will then want to try various combinations of projects to assess their cumulative results on both indicators and or costs.

E. SELECT BEST PLAN

Following this process, the planning committee in the LEA will eventually arrive at several alternative plans (combinations of projects) which ought to be seriously evaluated. During this evaluative process, a few courses of action may become apparent.

In one instance, it is conceivable that within the given set of indicator targets, cost guidelines, or other policy constraints, that none of the alternative plans are acceptable for final approval. The difficulty could be either in the incompatibility of the project combinations or in the basic underlying assumptions of the projects. If, after this analysis, a series of acceptable alternative plans still cannot be generated, a call for new projects should be issued. Under the most unusual of circumstances, it is possible that there will still be unsatisfactory plans from which to choose. In this case, and only as a last resort, the board will be asked to reevaluate its policy decisions and to set new objectives. However, because the levels previously set by the board already reflect their collective intent as to what direction the LEA should be taking, this modification would be very unfortunate.

The other, and more likely, situation is that there will be several plans which meet the cost and resource constraints and address the priority objectives. Selecting the "best" alternative plan which is economically feasible can be approached in one of several ways. If there are a large number of indicators, planning factors, priority ratings and alternative plans, several formal decision schemes can be utilized. However, in this version of the LEA planning system, it will probably still be possible to observe by simple inspection that plan which achieves all or most of the desired levels in indicators by Year 5 and is still economically acceptable. This search should be carried out by the senior staff and policy makers in the school district, and reviewed by the planning committee and board.

VII. APPENDICES

APPENDIX A

A BRIEF GLOSSARY OF PLANNING TERMS

- Base Case Plan ----- The projection of the LEA's operation over a five year period, assuming that no new decisions are made concerning the allocation of resources during this period. Changes in the environment, such as increases or decreases in enrollment, however, are taken into account.
- Best Plan ----- That project and program set which produces the most benefit within the given cost range.
- Budget ----- A document which specifically authorizes the next year's expenditures; to be derived from the first year of the plan.
- Constraint ----- A boundary or limit on the variables within the LEA, predicated on either legal, political, physical, or practical policy matters.

- Decision-Making Group ----- The group of individuals responsible for determining policies, plans, programs, and budgets for the LEA.
- Indicator ----- A quantifiable factor that can be used to judge the benefits of an educational activity to the LEA (examples might include drop-out rates or county manpower needs filled).
- Operating Characteristic ---- A measure used to relate outputs to other criteria of quality, efficiency, or effectiveness. Examples may include: cost per pupil per program; successful graduates per program; etc.
- Output ----- The quantity of end results from a project or program.
- Priority ----- Specific and quantifiable measures of relative importance among the several objectives in the LEA.

- Plan ----- A description of activities to be undertaken by the LEA over a specified period including:
1. a statement of resource level in terms of manpower and other expenditures for each project and program;
 2. an estimate of the total costs of all activities;
 3. an estimate of the levels of indicators to be expected during the planning period.
- Program ----- The designation of a set of continuing activities which are intended to educate a specific client group.
- Program Completions ----- The number of students completing a program and ready to take a job.
- Project ----- A set of activities which have been designed to fulfill an educational objective and are not continuing.
- Project & Program Set ----- A combination of projects and programs (which can be either operational or capital improvements) in the LEA planning system. Any change in a single program or group of programs is considered to be a project.

Appendix B

Illustrative Agendas for a District Planning Committee

The following five agendas of planning committee meetings are presented as illustrative of both the content and possible form of planning committee work. The committee acts as a subcommittee of the school board to assist the development of objectives for a district and plans to achieve those objectives. The five meetings span a period of three months -- November through January. They assume a certain amount of activity between meetings of committee members, especially in the development of adequate measures for objectives and later, in the development of projects or strategies to achieve the objectives.

In the fifth meeting agenda, project development is depicted as occurring during the course of that work session. Actually, the development of projects in response to objectives would span at least a month's time and would involve more meeting work than any other step of the planning cycle. Once objectives and adequate measures of those objectives have been developed, project development stands out as the most creative and powerful step in the planning process: the design of planned activities and programs in the district in direct response to stated objectives and specific measures of those objectives.

These example agendas are in no way intended to be limiting. The frequency and scope of meetings or work sessions will vary from district to district.

1. The first meeting. This meeting gets the planning committee moving and takes it deep into the analysis of data about the school district and about the environment within which the district is working.

First Meeting: Agenda

- I. Role of the Planning Committee: Project Schedule
- II. Report on Data Gathering Effort
- III. The Data
 - A. Base Case
 - B. Current Year Budget
 - C. County Census Data
 - D. Issues for Planning

Additional Materials

- . Alphabetized Heading Index
- . Report Descriptions
- . EPPBS Article

2. Second Meeting. This meeting concludes the presentation and analysis of data and takes the committee through a structured process in the development of a first draft of objectives for the district.

Second Meeting: Agenda

- I. Close-out Review of Data
 - . Base Case
 - . Manpower Needs
 - II. Brainstorm School and District Objectives
 - III. Review Previously Developed Objectives
 - IV. Establish Priorities
 - V. Develop Recommended Set of Objectives
3. Third Meeting. At this meeting the objectives for the district are refined and work is begun in developing explicit measures of how the achievement of those objectives will be recognized.

Third Meeting: Agenda

- I. Review Goals from Previous Meeting
 - II. Develop Inclusive List of Goals and Priorities
 - III. Discussion on Quantification of Objectives
 - IV. Small Group Development of Explicit Goals and Priorities
 - V. Resolution of Small Group Results by Entire Planning Committee
 - VI. Data Assignments.
4. Fourth Meeting. At this meeting, the development of the means by which the achievement of the objectives are to be measured (measures) is completed. The recommended objectives are then stated explicitly in terms of the measures.

Finally, the objectives are prepared for presentation to the board for adoption as district policy, with or without modification.

Fourth Meeting: Agenda

- I. Complete Development of Measures for Recommended Objectives
5. Fifth Meeting. Once a set of objectives (with measures) has been approved by the school board, the planning committee commences work on a project which ultimately comprises the school board's plan and budget, once approved, for the following year.

Fifth Meeting: Agenda

- I. Review Sub-Committee Refinement of Measures for:
 - A. Student and Graduate Feedback
 - B. Integration of Academic, Related and Shop/Trade Course Work
 - C. Community Public Relations
- II. Presentation on Relating Project Development to:
 - A. Objectives
 - B. Quantitative (computer) and Qualitative Output
 - C. Computer Input Requirements
- III. Group Work on Project Development
- IV. Presentation of Group Results to Entire Planning Committee