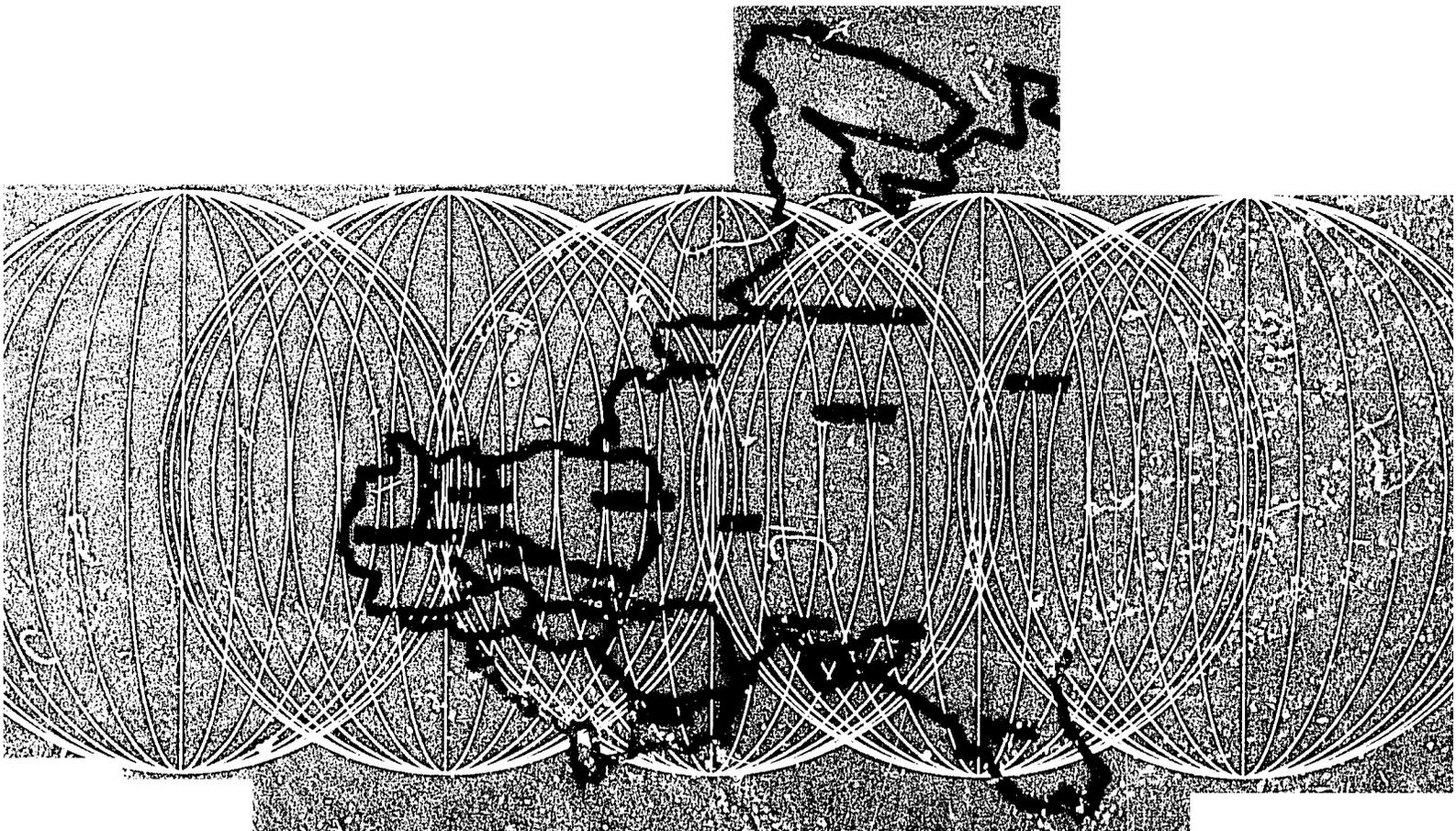


FN-ABN-723 8/2/82

FROM PLANNING TO MARKETS
HOUSING IN EASTERN EUROPE



THE URBAN INSTITUTE
Prepared for the Office of Housing and Urban Programs (USAID)

PN-ABN-723

**SHELTER SECTOR REFORM PROJECT
RUSSIAN FEDERATION/CITY OF MOSCOW**

**REAL ESTATE MANAGEMENT
TRAINING MATERIALS**

Prepared by

Quadel Consulting Corporation

Under Subcontract to

The Urban Institute
2100 M Street, NW
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Real Estate Management
Training Materials

Prepared by:
Quadel Consulting Corporation

December 1992

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Real Estate Management
Unit 1
Introduction to Real Estate Management
Advance Reading

INTRODUCTION TO REAL ESTATE MANAGEMENT

Training Objective: To introduce the business of Real Estate Management. This module begins with a brief review of the key elements of a Market Economy. We then look at the basic private enterprise financial model and the responsibilities of the owner of any business. Finally, we introduce the Real Estate Management Business.

I. THE KEY ELEMENTS OF A MARKET ECONOMY

A. Basic Assumption of a Market Economy

- Competition among sellers
- Free will among buyers
- Information
- If any of these three elements is less than perfect then the Market Economy becomes less perfect.

B. Role of Government in Market Economy

- To promote competition, free will, and information.
- To provide goods or services which society needs or wants but which the market cannot or will not provide
(Examples: lighthouses).
- In the USA we are constantly rethinking what should be public and what should be private (example: in some cities the government collect trash; in other cities a private contractor is paid by the city to collect trash; in still others each household or business pays a contractor to collect the trash.
- A common compromise between public and private provision of services needed by society is for private ownership/management and public assistance (example: private owned/managed rental housing with government assistance for low income residents).

C. Importance of Contractors

- All transactions between buyers and seller are contracts.
- A contract can be written or oral and usually includes the following elements, either specifically or implicitly:
 - What the seller is providing
 - What the buyer will pay or do for what the seller is providing (the "consideration")
 - The transaction must be lawful
 - The recourse if seller or buyer fail to perform

D. How Price is Determined by the Buyer and the Seller

- The seller's cost to provide the good or service plus desired profit is the starting point for pricing, but other factors can make price go up or down, sometimes dramatically.
- Some other pricing factors are:
 - Demand compared to supply
 - Quality of information about the market available to buyers and seller
 - Seller or buyer urgency, special requirements or lack of effort
 - Seller business objectives (example: willingness to sell at a smaller profit or even a loss to enter a market)
- Generally, there is less profit in simple common items (example: aspirin) and more profit in unique "value-added" products (example: a patented medicine).

E. Market Places Can be Anywhere where Sellers and Buyers Get Together

- In person
- By telephone
- By mail

- There may be special markets for certain goods (example: New York Stock Exchange for buying and selling of shares in U.S. corporations).
- There may be several steps in the sale of a good or service from the producer to the final buyer/user. Generally speaking (but not always) the buyer/user will get the best price by getting as close as possible to the producer.

F. Both Private Enterprise and Government Buyers Have Strengths in a Market Economy

- The strengths of private enterprise are:
 - Better information about sellers.
 - Ability to use both formal and informal procurement methods, whichever works best in a particular situation.
 - Private purchasing contracts tend to be shorter term and allow the private buyer to take advantage of market price shifts.
 - Private enterprise has a strong incentive to buy at the best price, to maximize profits.
- The strengths of government are:
 - As a big customer buying large quantities, it can obtain better prices.
 - Government usually requires wide competition among sellers. which is good for prices and offers opportunity for sellers.
 - Government is usually more careful about its contracts with sellers.
 - In purchasing labor (that is, employees) government is usually more fair to lower paid and lower skilled employees.
- Both private enterprise and government can learn from each other in purchasing most advantageously.

II. THE PRIVATE ENTERPRISE FINANCIAL MODEL

Equity is the owner's (there may be one or more owners) investment in the company to create the capacity to deliver a good or service to the buyer. Equity is not repaid. It stays in the company. In some businesses (example: making folk art) the owner's labor ("sweat equity") can substitute for cash equity.

Debt is money borrowed to create the capacity to deliver a good or service to the buyer. Interest must be paid on any debt and the principal amount of the debt must be repaid.

Retained Earnings are profits earned which are kept within the company and are not distributed out to shareholders.

Accounts Receivable are amounts owed to the company by customers or other parties.

Accounts Payable are amounts owed by the company to other parties.

A Balance Sheet is a statement of a company's financial condition at any point in time.

A typical Balance Sheet contains the following elements:

THE COMPANY BALANCE SHEET AS OF (DATE)

<u>Assets</u>	<u>Liabilities</u>
Cash	Debt
Accounts Receivable	Accounts Payable
Inventory	<u>Other Liabilities</u>
Land/Equipment/Structure	Total Liabilities
<u>Minus</u> Depreciation of Equipment/Structures to Date	
<u>Other Assets</u>	
Total Assets	
Assets <u>Minus</u> Liabilities = Net Worth	
Net Worth = Equity Plus <u>Retained</u> Earnings	

An Operating Statement is a statement of a company's financial results for any period of time. It compares income earned versus expenses for a specific time (example: for the current month or for the year to date).

Operating Statements are usually prepared on a cash basis, if the company has a regular flow of business. Cash basis Operating Statements look only at cash received and cash expenses during the period of time being analyzed. Normally, a calculation of accounts receivable and accounts payable are prepared with the Operating Statement. These will show whether there have been changes in receivables and payables which would indicate more or less profit than is shown on the Operating Statement.

Operating Statements for Real Estate Projects are usually prepared monthly, for both that month and for the year to date. They are prepared on a cash basis.

A typical Operating Statement (also called a Profit Loss Statement) contains the following elements:

THE COMPANY OPERATING STATEMENT
FOR PERIOD
(BEGINNING, DATE) TO (ENDING DATE)

<u>Income</u>	<u>Expense</u>
Cash Income Received	Direct Labor to Produce Income (including benefits) Other Direct Costs to Produce Income (materials, contracts, other indirect costs) (general and administrative expense not directly charged to specific products or projects)
	Financial Expense (interest on debt)
	<u>Depreciation of Land/Structures/Equipment</u>
Total income	Total Expense

Total income plus increase in receivables plus decrease in payables minus total expense equals profit.

IMPORTANT NOTES:

1. Investment in equipment or structure with long term usefulness is not an operating expense. This is treated as a capital expense and is depreciated (expensed) over the useful life of the investment (example: if a truck cost 300,000 rubles and is expected to have a useful life of 6 years then it is capitalized as an asset when first purchased and depreciated (expensed) at the rate of 50,000 rubles per year).
2. Money borrowed (debt) is not income and debt repaid is not expense. Interest paid on debt is expense.
3. Profit does not necessarily go into the owner's pocket. It may be kept in the company as cash or it may be used to buy equipment or other capital assets.
4. Profit can be distributed out of the company to the owners. This distribution is called a dividend. Profit kept in the company is called Retained Earning.

III. RESPONSIBILITIES OF A BUSINESS OWNER AND HIS EMPLOYEES

A. Producing the Product or Providing the Service

- Planning the work.
- Managing employees
- Purchasing outside contracted services, supplies and materials (Note: Purchasing the right goods and services at the best price is of critical importance in making a profit. It is often easier to increase profit by reducing cost than by increasing price).
- Controlling costs (direct and indirect).
- Ensuring Quality

B. Selling the Product or Service

- Establishing the price based on costs, desired profit, competition, and business objectives.
- Creating a desire for the product by marketing the product through advertising and other promotions.
- Selling the product by contact with the buyer.
- Getting the product or service from the seller to the buyer (this is called distribution).

C. Providing customer service which makes buyers want to do business with the seller. Treating customers well is the key to business survival and success. In the USA, we have two expressions which illustrate this: "The customer is king." and "The customer is always right."

D. Financial Management

- Charging customers, collecting payments, crediting payments to customer accounts and depositing income to company bank accounts.
- Receiving supplier invoices, approving invoices, and making payments.
- Maintaining company accounting records.
- Financial Reporting Analysis.
- Preparing Budgets and Business Plans.
- Creating Internal Controls to ensure financial accuracy and honesty.

E. Managing the Company

- Providing Leadership and Vision.
- Hiring, training, supervising, disciplining and compensating employees.
- Planning current and future company activities.
- Research and Development of New Products or improvement of existing products.

NOTE: A public agency must perform these very same functions in order to be effective and efficient.

IV. THE REAL ESTATE MANAGEMENT BUSINESS

A. Owning and operating a residential rental property involves the same elements as any other business:

- The Service provided is the dwelling unit along with all the building systems, common areas and grounds which support the dwelling unit. The owner must provide all services specifically required by the Agreement and by law. The owner must also provide a level of quality care of the property which is implied by the amount of rent charged or is necessary to complete with comparable properties. All this must be done by employees or contractors for less than rental income, so the owners will achieve profit on their investment.
- In Russia, the owner also provides several services for the government. These include passport registration, draft registration, and communal services calculations.
- The owner must collect the rent from residents, pay staff, contractors, suppliers and utility companies, keep accurate financial records, and prepare financial plans, budgets and reports.
- The owner should have a long term plan for maintaining, and perhaps increasing, the value of the property (this is called "asset management"). Value is preserved and enhanced through a good maintenance program and regular replacement or rehabilitation of deteriorated building element. It also means regular upgrading of building elements that are out of date and no longer competitive with what is offered in newer buildings. Value enhancement can also mean, through good customer services, strong management, and effective marketing, creating an image of the property

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as a quality property of its type. One further technique of enhancing property value is to actively contribute to the value and image of the surrounding neighborhood.

B. Property Management is a term which refers to the task of supervising the daily work of management and maintenance of the property and the long term plan of enhancing value. Property Management can be done in one of three ways:

1. The owner can be the property manager himself. This only works if the owner has relatively few properties and has the time available. The owner saves the money he would have paid a property manager, but he has to work for the money he saves.
2. An owner of many properties might create a related subsidiary company, which he owns, to manage the properties. This subsidiary is paid a fee out of each property's income to pay for the service it provides. The advantage of this approach is that the owner himself does not have to be the property manager, but has people to do this for him who should be responsive to his plans and priorities. Another advantage is that if the property management subsidiary company is well managed (that is, its expenses are less than the fees it is paid), it can be another source of profit for the owner. One disadvantage of this approach to property management is that the owner cannot easily replace his own property management company if he is unhappy with their work.
3. Finally, the owner may hire an independent property management company to manage his property and pay that firm a fee to perform that service.

C. A property management company's fee may be calculated in several ways:

- As a fixed fee per month.
- As a fee per unit per month (for all units or for only occupied units).
- As a percentage of Income Collected.
- There may be additional fees for special services (example: managing a physical improvement program).
- There may be incentive fees for achievement of certain asset management goals (example: leasing vacant units)

D. For its fee, the property management company normally provides the following services:

- General supervision of staff who do management and maintenance work at the property.
(NOTE: There are usually a site manager and a maintenance foreman who provide daily supervision of staff at the property.)
- Establishment of standard operating procedures, management plan and required policies.
- Regular property resets (at least once a week) to monitor property conditions.
- Training of staff at the property.
- Assistance to staff at the property when problems arise.
- Supervision and approval of all procurements of goods and services.
- All accounting and financial management functions, including budget preparation.
- Monthly reports to the owner on financial condition, property maintenance activities, rent collections, and other critical management concerns.
- Assistance to the owner in preparing and implementing a plan for asset management and value enhancement.

- E. The Property Manager is really running two business: 1) the business of the rental property on behalf of the owner, and 2) the business of the property management company itself. (See Section III above).
- F. For the planned "privatization" experiment, the selected "property management" companies will be responsible only for the management of the Maintenance function. These companies will report to the Board of the Unified Customer (DEZ), who is the owner. Our five part training program to be conducted in December will cover the following topics:

Session One: Maintenance Planning and Budgeting

Session Two: Maintenance Work Order Systems

Session Three: Procurement and Inventory Management

Session Four: Accounting for Maintenance and Facilities Operation

Section Five: Roles of the Owner (DEZ) and the Property Management Companies; Property Management Company Reporting; Monitoring by the DEZ

Real Estate Management
Unit 1
Introduction to Real Estate Management
Session Materials

KEY ELEMENTS OF A MARKET ECONOMY

A. Basic Assumptions

- Competition among sellers
- Free will among buyers
- Information about options and prices

B. Government in a Market Economy

- Some of society's needs can only be met by government (the public sector)
- Some needs are met very well by the private sector
- Some needs can be met by either (cost, quality and equality issues generally determine which sector will meet the need)

C. Importance of Contracts

- Contracts govern all transactions between buyers and sellers
- Contracts may be written or oral
- All contracts are subject to law
- Contracts are also subject to custom and precedent

D. Price of Goods and Services

- Determined between Buyer and Seller
- Most important factors in pricing are:
 - Cost to provide good or service
 - Demand compared to supply
- Pricing can become very inefficient if competitive buyers and sellers cannot easily come together

E. Efficient Market Places are Essential to a Market Economy

DISCUSSION QUESTIONS - THE MARKET ECONOMY

Let's talk about ways a RAIU could use the emerging market economy in Russia to meet its needs for plumbing services and supplies:

1. What are the sources (markets) for plumbing services?
2. What are the sources (markets) for plumbing supplies?
3. Assuming all options were available to a RAIU Director, without restriction, what is his/her cheapest/best quality source for plumbing services? Why?
4. Assuming all options were available, what is the Director's cheapest/best quality source for plumbing supplies? Why?
5. Are supplies more available and/or available less expensively for independent plumbers than for RAIU's? If so, what techniques do independent plumbers (either companies or individuals) use that RAIU's might learn from?

EXAMPLES
BALANCE SHEET AND OPERATING STATEMENT

Balance Sheet - September 30, 1992

<u>Assets</u>		<u>Liabilities</u>	
Cash	100,000 Rubles	Accounts Payable	40,000
Accounts Receivable	50,000		
Equipment	180,000		
<u>Minus Depreciation</u>	<u>-60,000</u>		
Total Assets	270,000	Total Liabilities	40,000
		<u>Net Worth</u>	230,000
		(Equity)	

OPERATING STATEMENT (CASH)
OCTOBER 1-31, 1992

Income

Operating Income	175,000 Rubles	
Interest Income	1,000	
Other Income	<u>4,000</u>	
Total Income		180,000

Expenses

Direct Expense	110,000	
Indirect Expense	40,000	
Total Expenses		<u>150,000</u>
Net Operating Income		30,000

**END OF MONTH ACCOUNT BALANCES
OCTOBER 31, 1992**

Cash	130,000 Rubles	
Accounts Receivable	90,000	(change since 9/30/92 = +40,000)
Accounts Payable	60,000	(change since 9/30/92 = +20,000)

**BALANCE SHEET
OCTOBER 31, 1992**

<u>Assets</u>		<u>Liabilities</u>	
Cash	130,000 Rubles	Accounts Payable	60,000
Accounts Receivable	90,000		
Equipment	180,000		
<u>Minus Depreciation</u>	<u>65,000</u>		
Total Assets	335,000	Total Liabilities	60,000
		Net Worth	275,000

IMPORTANT ACCOUNTING FORMULAS

- 1) Cash at End of Month = Beginning Cash plus cash receipts minus cash expenses
(example: $100,000 + 180,000 - 150,000 = 130,000$ Rubles)
- 2) Operating Income = Cash Income minus expense
(example: $180,000 - 150,000 = 30,000$ Rubles)
- 3) Profit = Operating Income minus depreciation plus increase in accounts receivable plus decrease in accounts payable
(example: $30,000 - 5,000 + 40,000 + (-20,000) = 45,000$ Rubles)
- 4) Net Worth at the End of the Period = Beginning Net Worth plus Profit during the period
(example: $230,000 + 45,000 = 275,000$ Rubles)

EXERCISE - BALANCE SHEET AND OPERATING STATEMENT

At the end of last month your company's balance sheet looked like this:

<u>Assets</u>		<u>Liabilities</u>	
Cash	400,000 Rubles	Accounts Payable	600,000
Accounts Receivable	700,000	Debt	<u>500,000</u>
Inventory	300,000		
Equipment	360,000		
<u>Minus Depreciation</u>	<u>- 120,000</u>		
Total Assets	1,640,000 Rubles	Total Liabilities and Net Worth	1,640,000 Rubles

This month the following financial activity occurred:

1)	Cash Income	530,000 Rubles
2)	Cash Expenses - Salaries Charged to Projects	300,000
3)	Cash Expenses - Other Direct Project Costs	50,000
4)	Cash Expenses - Indirect Costs (includes interest on debt)	100,000
5)	Payment of Debt Principal	20,000
6)	Use of Inventory for Projects	50,000
7)	Depreciation on Equipment	10,000
8)	Accounts Payable at End of Month	520,000
9)	Accounts Receivable at End of Month	600,000
10)	Cash at End of Month	460,000
11)	No Equipment Purchased	
12)	No Additions to Inventory	

Prepare an Operating Statement for the current month

<u>Income</u>		<u>Expenses</u>	
Cash Received	_____ Rubles	Non-cash Expense - Inventory	_____ Rubles
		Cash Expense - Direct Labor	_____
		Cash Expense - Other Direct Labor	_____
		Cash Expense - Indirect Labor	_____
		Depreciation	_____
Total	_____ Rubles	Total	_____ Rubles
		Increase in Receivables during current month	_____
		Decrease in Payables during current month	_____

SUMMARY CALCULATION

	Income	_____
+	Increase in Receivables	_____
+	Decrease in Payables	_____
-	Expenses	_____
=	Operating Profit for the Month	_____

Prepare a Balance Sheet stating the financial condition of the company at the end of the current month.

<u>Assets</u>		<u>Liabilities</u>	
Cash	_____	Accounts Payable	_____
Accounts Receivables	_____	Debt	_____
Inventory	_____		
Equipment	_____	Total Liabilities	_____
<u>Minus</u> Depreciation	_____	Net Worth	_____
		Total Liabilities	
Total Assets	_____	and Net Worth	_____

ANSWER - BALANCE SHEET AND OPERATING STATEMENT EXERCISE

Answers Operating Statement

<u>Income</u>	<u>Expenses</u>	
Cash Income <u>530,000</u> Rubles	Non-Cash Expense - Inventory	<u>50,000</u> Rubles
	Cash Expense - Direct Labor	<u>300,000</u>
	Cash Expense - Other Direct Project Costs	<u>50,000</u>
	Cash Expense - Indirect Costs	<u>100,000</u>
	Depreciation	<u>10,000</u>
Total <u>530,000</u> Rubles	Total	<u>510,000</u> Rubles
	Increase in Receivables during current month	<u>-100,000</u>
	Decrease in Payables during current month	<u>80,000</u>

SUMMARY CALCULATION

Cash Income	<u>+530,000</u>
+ Increase in Receivables	<u>-100,000</u>
+ Decrease in Payables	<u>+ 80,000</u>
- Expense	<u>-510,000</u>
- Operating Income for the Month	<u>0</u>

ANSWERS - BALANCE SHEET

<u>Assets</u>		<u>Liabilities</u>	
Cash	<u>460,000</u> Rubles	Accounts Payable	<u>520,000</u> Rubles
Accounts Receivable	<u>600,000</u>	Debt	<u>480,000</u>
Inventory	<u>250,000</u>		
Equipment	<u>560,000</u>	Total Liabilities	<u>1,000,000</u>
Minus Depreciation	<u>- 130,000</u>		
		Net Worth	<u>540,000</u>
Total Assets	<u>1,540,000</u>	Total Liabilities and New Worth	<u>1,540,000</u>

Verification for Change in Cash

Sources of Cash

Starting Balance	400,000 Rubles
Cash Income	<u>+ 530,000</u>
Total	930,000

Uses of Cash

Total Cash Expenses	450,000 Rubles
Payment of Debt Principal	<u>+ 20,000</u>
	470,000

Cash Balance at End of Month

930,000 Rubles Sources
<u>- 470,000 Rubles Uses</u>
460,000

**CROSS-COMPARISON OF GENERAL BUSINESS
OWNER RESPONSIBILITIES TO THE SPECIFIC
RESPONSIBILITIES OF AN OWNER OF A
REAL ESTATE MANAGEMENT BUSINESS**

<u>General Business</u>	<u>Real Estate Management</u>
<u>Responsibilities</u>	<u>Responsibilities</u>

- | | |
|---|--|
| A. Producing the Product or Providing the Service | A. Supervise all aspects of property operations and maintenance. Supervise property-based staff on behalf of the owner. Keep financial records. Assist owner to prepare and implement asset management plans. Prepare and analyze progress reports |
| B. Selling the Product or Service | B. Sell the Real Estate Management Service to new owner customers. Renew contracts with existing owner customers. |
| C. Customer Service | C. Satisfy the owner's quality, timeliness, and other requirements for <u>how</u> the service is delivered. Provide customer service to tenants on behalf of the owner. |
| D. Financial Management | D. Manage all accounting operations on behalf of the owner. Manage the Real Estate Management company's own accounting and financial affairs. Keep owner and management company finances strictly separate. |

General Business

Responsibilities

E. Managing the Company

Real Estate Management

Responsibilities

E. Develop a Business Plan for the creation and growth of the management company. Recruit, hire, train, and supervise the management company's own staff. Provide leadership.

A property manager runs two businesses - the owner's and his own.

EXERCISE

The class will divide into four groups, each representing one of four potential bidders for the work of providing private maintenance services for 500 dwelling units located in three elevator high-rise buildings now managed by a RAIU in suburban Moscow.

The services to be provided are janitorial, emergency and routine repairs to both dwelling units and buildings, and scheduled preventive maintenance. The maintenance contractor will hire other contractors as needed for specialized services such as elevator maintenance. The maintenance contractor will keep accounting records of all maintenance and facility operating costs and will authorize payment by the owner (the DEZ) maintenance and facility operating invoices. Finally, the contractor will prepare regular reports to the DEZ. The maintenance contractor will hire staff on behalf of the owner who will be assigned full-time to do required maintenance work. This includes trades workers, janitors, and foremen. Overall supervision work and accounting work will be completed by the contractor's own employees.

The Contractor will be selected on the basis of qualifications and proposed cost. The four potential bidders are:

Group A: A company which now manages a number of Departmental Housing dwelling units of the Defense Ministry, who has privatized.

Group B: A neighboring RAIU, who has privatized.

Group C: An existing private maintenance company which for the past year has been providing services to several small residential and commercial buildings in Moscow.

Group D: The Chief of Maintenance and Operation at a large, well-known hotel who is starting a private maintenance company.

Each group should act as though they were one of the potential bidders and by working together answer the following questions from their bidder's point of view. It would be helpful if one person in the group could make notes of the discussion. Another person should be appointed from each group to present answers to the whole class.

Question 1: What three things do you think the owner is most interested in that you will emphasize in your proposal?

Question 2: Which of the other three bidders do you think is your main competitor for the job? Going back to the areas of special concern to the owner in Question 1, in what areas is your competitor strong where you are weak? How could you strengthen yourself in these weak areas?

Question 3: Where would you propose to pay for start-up equipment and costs that cannot be charged to the owner but which must be charged to your company?

Question 4: Assuming that you are selected to do this work and after six months are doing well, what would you do to get more business? List your two best business "targets of opportunity" and what you would do to market your services to them.

**Real Estate Management
Unit 2
Maintenance Management:
Planning and Budgeting**

Advance Reading

Maintenance Management and Budgeting

Training Objective: To introduce and explore the idea of planning a maintenance program. We will first define what maintenance is in a market economy. Next, we will outline the basic elements that comprise a maintenance program and how they interrelate. We will then discuss budgeting as a maintenance planning tool. Finally, we will tie all the above together into the concept of creating a maintenance plan.

I. MAINTENANCE IN A MARKET ECONOMY

A. Some typical property maintenance objective include:

- Provide an attractive, clean, environment free of hazards.
- Achieve lowest life-cycle costs for building components.
- Minimize emergencies and disruptions to building operations.
- Operate the facilities in the most economic way.
- Make timely capital investments and improvements.
- Meet resident expectations for routine services and repairs.

However, in a market economy we cannot regard maintenance as adherence to a commonly accepted standard of appropriate upkeep and management of the site, buildings, units and services of a property. First of all, there is no commonly accepted comprehensive maintenance standard. Also, this approach ignores the critical role that ownership goals play in planning a maintenance program. It is important for the maintenance manager to recognize that what the owner wants from the property in both short and long term will influence how the manager should structure and implement the maintenance operation. Questions about ownership goals include:

- Does the owner want to maximize current cash flow (i.e., short-term net income)?
- Is the owner willing to build future value at the cost of current cash flow?
- What resident market is the owner targeting (high, moderate, low income) and how will this affect the planned maintenance program?
- What level of services is the owner planning to offer to tenants?
- How long will the owner hold the property?
- At what level of upkeep does the owner perceive that the return on investment for the property will be greatest?

The answers to such questions define the owner's goals. Although these goals will not change the basic elements of the maintenance process, they will determine the relative emphasis placed and the resources allocated to each of them in the maintenance plan for the property.

In view of the above, the definition of maintenance of property in a market economy becomes:

The application of available resources (labor, time, materials, equipment and capital) in such a way as to meet the physical needs of the property and the service needs of the tenants in a manner that is consistent with meeting the short and long range goals of the owner of the property.

- B. In addition to owner goals, other factors which affect the planning of a maintenance program include tenant needs and expectations and regulatory requirements or requirements of law. Tenant quality expectations usually increase with the amount of rent paid. However, at a minimum, all tenants expect not to be concerned in a regular way about development physical conditions. This is one of the reasons they are renters and not owners.

Regulatory controls on property maintenance may come from local laws (i.e., housing codes), lender requirements, or requirements by government agencies providing rent subsidies to tenants.

II. THE 5 BASIC ELEMENTS OF A MAINTENANCE PROGRAM

- A. Janitorial and Groundskeeping. A program of daily, weekly, and other periodic activities to avoid hazardous conditions and maintain cleanliness and attractive appearance must be established. The quality of the janitorial work at a property is usually directly related to the resident market level the owner is targeting. However, janitorial and groundskeeping activities help reduce other maintenance costs. Components include:

- Cleaning of building common areas.
- Cleaning of vacant dwelling units for new tenants.
- Trash handling.
- Pick-up of litter in exterior areas.
- Maintenance of plants, grass, and landscaping.
- Cleaning of sidewalks and paved surfaces.
- Snow removal.

B. Scheduled and Preventive Maintenance. A program of inspections, routine upkeep and repairs to reduce the frequency and severity of breakdowns and service interruptions. Components include:

- Analysis of current or baseline condition of the property through a comprehensive inspection and assessment of all equipment, buildings, dwelling units, common areas and services provided to tenants. Through such a procedure, the maintenance manager learns what problems he faces and what resources are needed to solve the problems.
- A program of regularly scheduled inspections to dwelling units, building common areas, the site, and building systems.
- Correction of deficiencies found during inspections. (These items might also be considered to be responsive maintenance).
- The scheduling and completion of manufacturer recommended routine maintenance of equipment and systems.
- Monitoring of the preventive maintenance program as it progresses.

C. Responsive Maintenance. (Also called corrective maintenance) Completion of work in response to service requests generated by tenants or staff. Maintenance managers should categorize service requests. Staff should base the order in which they respond to requests by priority. Priority categories include:

- Emergency requests. Situations that immediately threaten life, health or safety of residents or the integrity of the property. (Example: no heat.)
- Urgent requests. Situations that are a major inconvenience or hardship to tenants and/or could result in health or safety hazards to tenants or further damage to the property if left undone. (Example: clogged sink drain.)
- Routine requests. Conditions that warrant repair but are not of an emergency or urgent nature. (Example: leaking faucet.)

D. **Deferred Maintenance.** Required maintenance that is not completed. Some maintenance may be delayed because of poor planning or lack of proper organization or supervision. Ideally, however, deferred maintenance should be a conscious choice on the part of management to meet ownership goals or as an economic choice. Indefinitely continued deferred maintenance will ultimately result in the deterioration of the property. It should not be allowed to occur for an extended period of time. If, however, ownership goals dictate that deferring or delaying maintenance of a particular maintenance item is in the owner's interest, then the property manager must take the following steps:

- Analyze the problem.
- Review ownership goals.
- Analyze benefits/costs/risks of the choices to defer.
- Monitor results or future problems.
- Plan for date when deferred maintenance will be addressed.

The most important points to be remembered about deferred maintenance are that:

1. It should be done consciously with full awareness of the effects of the decision being made, and
2. It should be for a limited time.

E. **Modernization or Improvements.** Application of resources to upgrade or improve the baseline condition of the property, to modernize or improve the condition or efficiency of systems or to improve the economic viability of the development. Improvements may include equipment upgrades or changes which improve staff productivity. The process includes:

- Analyze the problem.
- Review ownership goals.
- Analyze benefits/costs/risks of choices.
- Plan, develop and schedule improvements.
- Implement improvement plan.
- Monitor work and the results.

III. INTERRELATION OF THE 5 BASIC ELEMENTS

- A.** The job of the maintenance manager is to design a maintenance program that balances the 5 basic elements in such a way as to meet the goals of the owner. The owner decides upon the direction; the manager allocates resources among the 5 basic elements to achieve the desired result. The resources available to the property manager include:
- Staff resources and skill levels.
 - Equipment.
 - Cash flow.
 - Availability of investment capital.
 - Supervisory capabilities.
- B.** The manager has at his disposal a finite level of resources. The manager must make choices about how to divide those resources. If the manager directs resources towards one basic element, it limits his ability to address the other basic elements. For example, if a manager embarks upon an aggressive capital improvements program, it will reduce the owner's immediate cash flow. However, such a program may, over time, reduce the need to respond to tenant requests for service, thereby saving staff resources.
- C.** To efficiently allocate resources, the manager must constantly fine tune plans and the resources themselves. The maintenance manager must:
- Review the maintenance plan; revise it as needed to better meet changing conditions.
 - Review owner goals to assure that the maintenance program is proceeding in the right direction.
 - Expand cash in the most effective manner.
- D.** The most important resource available to the maintenance manager is usually the staff resource. In order to successfully manage this resource, a maintenance superintendent must:
- Clearly define the roles of staff so that each person understands his or her position and function within the organization. Is he or she a property-wide manager responsible for directing the maintenance work for an entire property or group of properties; a site supervisor in charge of the

operations of a single site or location within a site; a skilled trades person engaged in plumbing, electrical, plastering, carpentry or other specialized work; a mechanical generalist employed to accomplish relatively uncomplicated repairs to a broad range of systems; a janitor engaged in cleaning; a dispatcher?

- Constantly assess the capabilities and evaluate the effectiveness of staff and provide training and motivation to optimize performance.
- Review all job descriptions and revise them as necessary; hire the with the skills required to meet the organization's labor needs.
- Decide when to use in-house staff and when to utilize outside specialists or contractors.
- Provide adequate and effective supervision.
- Develop an effective system for assigning work, monitoring staff progress in completing assignments, and checking the quality of completed work.
- Recommend and implement capital improvements or purchase new or upgraded equipment to reduce labor costs and improve operating efficiency.

IV. THE BUDGET AS A PLANNING TOOL

A. A well-thought-out budget is an essential tool that the maintenance manager must use to plan the maintenance program. The budget process includes the following steps:

- Assessment of the property's baseline condition at the beginning of each budgetary period. Information for this step comes from property inspections, as-built plans, architectural plans and designs, engineering studies, staff input and observations and many other sources.
- Writing a clear and detailed description of the work that must be completed during the budget period in order to maintain the property in accordance with the owner's goals. Descriptions of required work should indicate anticipated tasks and the frequency that these tasks will be completed.
- Stating the anticipated levels of staffing and other resources (i.e., supplies or outside contractor) required to complete the work anticipated.

- Planning for capital improvements, modernization efforts, or purchase of maintenance equipment.
 - Estimating the financial resources required to accomplish the maintenance program.
 - Scheduling the expenditures necessary to accomplish the work on a periodic basis (month-by-month, semi-annually, annually, etc.).
- B.** Maintenance managers should consider the budget as a living document. In this way they can realize its fullest potential as a planning tool. As the budget period progresses, managers must constantly review their budget to see if it accurately reflects what has happened to date and if it effectively projects anticipated conditions and actions for the remainder of the period. In reviewing the budget, managers should ask themselves:
- Do the baseline conditions upon which the budget was formulated still hold true?
 - Have there been unanticipated occurrences which required or will require the reallocation of resources?
 - Have ownership goals for the property, and thus maintenance priorities, changed?
 - Have planned physical improvements or equipment purchases taken place, and if they have, did they result in the anticipated outcomes? If not, should resources be reallocated?
 - Were financial resources correctly forecast? Should the budget be adjusted because of new information on financial resources?
 - Were staffing requirements correctly anticipated; will fewer or more staff resources be needed in the future?
- C.** The best way to measure budgetary performance for a period is to compare projected performance against actual performance on a regular basis. The maintenance manager should compare the budget against a monthly operating statement to determine where projections have been on target and where they have missed the mark. The manager should then measure actual performance, in terms of work accomplished, for the period against what the maintenance plan projected would be accomplished for the same time-span. If there are any significant differences between projected and actual expenditures or accomplishments, the manager must evaluate the reasons for the differences and revise the budget and/or the maintenance plan to accommodate the changes in the future.

D. The effective maintenance manager can further increase the value of the budget as a planning tool by using it as a rolling (ongoing) planning mechanism. To accomplish this, the manager should:

- Establish a budgetary period (i.e., a twelve month period).
- Complete a budget for the budget period. If possible, the budget should reflect month-to-month expense variations.
- Each month, review the operating statement for the property and compare actual operating costs to budgeted expectations.
- After reviewing the budget, project any changes necessary for the remainder of the full budgetary period (in this example, for the remainder of the twelve month period).

By following this process, the manager monitors the performance of the maintenance operation and plans for the future by reallocating the available resources continually. In so doing, the manager can take a long-range approach to maintaining the property.

V. DEVELOPING THE MAINTENANCE PLAN

The maintenance manager is now ready to develop a maintenance plan for the property. The steps in the actual planning process are as follows:

A. Goal Establishment

- Meet with the property owner to discuss the long and short term goals that have been established for the property.
- Identify tenant needs and expectations which should be met (both at a minimum and optionally).
- Identify requirements from local law, the lender, or any other party or agreement agency with an interest in the property.

B. Fact Finding

- Determine baseline conditions of the property including:
 - Physical condition of the property (includes identification of previously deferred maintenance).
 - Staff capabilities.

- Anticipated changes.
- History of physical improvements.
- Recommended service intervals for equipment and systems.
- A review of all pertinent documents, plans, reports, inspections, building codes and regulatory requirements, etc.
- Estimate of required frequency of routine janitorial and groundskeeping tasks.
- Historical data on volume of expensive maintenance activity.
- Survey all existing management systems to ascertain if they are adequate to the task at hand. Assess (and identify improvement requirements) in the following area:
 - Supervisory systems.
 - Work order procedures.
 - Inspection schedules and record keeping.
 - Inventory and purchasing procedures.
 - Quality control methods.
- Determine availability of resources including:
 - Staffing levels and skills.
 - Equipment and supplies.
 - Financial resources.
 - Availability of outside support services (contractors, governmental services, etc.).

C. Clearly State the Objectives of the Maintenance Program. Make sure the statement of objectives reflects the baseline information at hand.

- State the ownership goals for the property.
- Briefly describe the baseline conditions found at the property.

- Outline the resources available to the property.
- Define maintenance program objectives; For example:

Increase scheduled preventive maintenance activities to reduce responsive maintenance cost by X%.

Complete all resident service requests within 24 hours.

Reduce expenditures on outside contractors for responsive maintenance by X%.

Reduce janitorial staff overtime by X% through the purchase of improved equipment.

Complete the following capital improvements:

Complete the following janitorial and groundskeeping program:

- It is important to make all objectives specific and measurable.

D. Recommend Allocation of Resources Among the 5 Basic Elements Based Upon Objectives.

- Janitorial and Groundskeeping

Estimate total work hour and other costs to be used to complete routine janitorial and groundskeeping tasks according to the desired schedule.

Scheduled and preventive maintenance. List elements of the plan. For example:

- o Estimate Total work hours to be used for preventive maintenance procedures including:
 - Periodic inspection of all systems etc. (include schedules).
 - Completion of work orders generated from the inspection process.

List the expected results (reduction in service requests, reduction in use of outside contractors, reduction in equipment failures, etc.)

- **Responsive Maintenance.** Estimate total work hours and other costs to complete resident and staff generated service requests. List goals for response to service request categories. For example:
 - Emergencies will be answered in X period of time.
 - Urgent service request will be answered in X period of time.
 - Routine service requests will be answered in X period of time.
- **Deferred Maintenance.** Based upon the owner's goals, plan for maintenance which must be deferred. Minimize negative effects of deferred maintenance. For example, if the owner wants to delay roof replacements or major repair for a year, outline a plan to complete only those repairs that are necessary to prevent further major damage to the property and to defer any repairs to less severe conditions. Plan regular inspection to detect any problems. Estimate total work hours.
- **Capital Improvements.** Incorporate into your plan a detailed list of the following:
 - What improvements are planned (based on owner's goals).
 - What is the schedule for improvement.
 - Anticipated costs and sources of funding.
 - Anticipated savings to result from the improvement.
 - Method of accomplishing the work (in-house staff; contractors).

E. Develop a Budget. Calculate month-by-month expenditures necessary to accomplish the desired maintenance program. Adjust the program as necessary to reflect available financial resources.

- Compare budget against actual operations on a monthly basis.
- Adjust program and budget as conditions change.
- Project budget as a rolling base and develop as a mechanism for future planning.

F. Reporting to Owner. Develop a method for periodic reporting to owner on the progress of the maintenance plan to date. Give owner the opportunity to evaluate maintenance performance, provide direction and change goals. Incorporate owner comments and changes into future actions.

Maintenance Planning and Budgeting Worksheet

A	B	C	D	E	F
Staff Costs	Quantity person hours each time work task is completed	Frequency of completion per year	Total person hours per year (BxC)	Average staff labor cost per hour	Total staff labor cost per year for work task (DxE)
<u>Work Tasks</u> Daily Building Janitorial Daily Groundskeeping Other Routine Janitorial/Grounds					
Subtotal Janitorial:					
<u>Preventive Maintenance</u> <u>Work Tasks</u> Preventive Maintenance Inspection Preventive Maintenance					
Subtotal Preventive Maintenance					
<u>Responsive Maintenance</u> <u>Work Tasks</u> Plumbing Repair Electrical Repair Carpentry Repair Other Skilled Trades General Trades Repair					
<u>Capital Improvements</u> <u>Work Task</u> (specify)					
Subtotal:					
<u>Supervisor and</u> <u>Administrative</u> Maintenance Supervisor Foreman Clerk/Storekeeper Dispatcher					
Subtotal Administration:					
TOTAL STAFF COST LABOR:					

Other Maintenance Costs			
Cost Item	Cost	Basis	Annual Cost
Materials and Supplies Janitorial/Groundskeeping Schedule and Preventive Maintenance Responsive Maintenance Capital Improvements (Other)			
Sub-total Maintenance and Supplies:			
Contractual Cost (excluding capital Improvements) Rubbish Removal Janitorial Extermination Trader Contractor Elevator Exterminating Plumbing Electrical Appliances Heating (Other)			
Sub-total Contract Costs:			
Capital Improvement Contractors (Specify)			
Sub-total Capital Improvement Contractor:			
Total Other Maintenance Costs:			
GRAND TOTAL COSTS:			

**Real Estate Management
Unit 2
Maintenance Management:
Planning and Budgeting**

Session Materials

Introduction to Maintenance Management

I. DEFINITION OF MAINTENANCE IN A MARKET ECONOMY

- A. In a market economy ownership goals play a critical role in defining the maintenance plan. Questions about ownership goals include:
- Does the owner want to maximize current cash flow (i.e., short-term net income).
 - Is the owner willing to build future value at the cost of current cash flow?
 - What resident market is the owner targeting (high, moderate, low income) and how will this affect the planned maintenance program?
 - How long will the owner hold the property?
 - What level of services is the owner planning to offer to tenants?
 - At what level of upkeep does the owner perceive that the return on investment for the property will be greatest?

Also important in defining the maintenance program are tenant expectations and regulatory requirements.

- **Definition of Maintenance in a Market Economy**

The application of available resources (labor, time, materials, equipment, capital) in such a way as to meet the physical needs of the property and the service needs of the tenants in a manner that is consistent with meeting the short and long range goals of the owner of the property.

Discussion Questions

1. The owner of municipal housing in Russia is both the individual privatized resident and the DEZ. What do you think are the property maintenance goals of each of these two owners? How do their goals coincide and how do they differ?
2. What are the categories of resources available to the owner to be used at its discretion to achieve maintenance goals? What maintenance resources are beyond the control of the owner and the manager?

II. THE FIVE BASIC ELEMENTS OF A MAINTENANCE PROGRAM

A. Janitorial and Groundskeeping. A program of daily, weekly, and other periodic activities to maintain cleanliness and attractive appearance. Components include:

- Cleaning of building common areas.
- Trash handling.
- Pick-up of litter in exterior areas.
- Maintenance of plants, grass, and landscaping.
- Cleaning of sidewalks and paved surfaces.
- Snow removal.

B. Scheduled and Preventive Maintenance. A program of inspections, routine upkeep and repairs to reduce the frequency and severity of breakdowns and service interruptions. Components include:

- Analysis of current or baseline condition of the property through a comprehensive inspection and assessment of all equipment, buildings, units, common areas and services provided to tenants. Through such a procedure, the maintenance manager learns what problems he faces and what resources are needed to solve the problems.
- A program of regularly scheduled inspections.
- Correction of deficiencies found during inspections. (Could also be considered Responsive Maintenance).
- The scheduling and completion of manufacturer recommended routine maintenance of equipment and systems.
- Monitoring of the preventive maintenance program as it progresses.

C. Responsive (Corrective) Maintenance. Completion of work in response to service requests generated by tenants or staff. Maintenance managers should categorize service requests. Staff should base the order in which they respond to requests on their priority. Priority categories include:

- Emergency requests. Situations that immediately threaten life, health or safety of residents or the integrity of the property. (Example: no heat.)
- Urgent requests. Situations that are a major inconvenience or hardship to tenants and/or could result in health or safety hazards to tenants or further damage to the property if left undone.
- Routine requests. Conditions that warrant repair but that are not of an emergency or urgent nature.

D. Deferred Maintenance. Required maintenance that is not completed by conscious planning. Decision to defer requires:

- Analyze the problem.
- Review ownership goals.
- Analysis of benefits/costs/risks of choices.
- Implementation of choices.
- Monitoring of results or future problems.

E. Modernization or Improvements. Application of resources to upgrade or improve the baseline condition of the property, to modernize or improve the condition or efficiency of the systems, to improve the economic viability of the development or to improve staff productivity. The process includes:

- Analysis the problem.
- Review of ownership goals.
- Analysis of benefits/costs/risks of choices.
- Planning, developing and scheduling improvements.
- Implementation of improvement plan.
- Monitoring of work and of the results.

III. INTERRELATION OF THE 5 BASIC ELEMENTS

A. The maintenance manager must design a maintenance program that balances the 5 basic elements in such a way as to meet the goals of the owner. The owner decides upon the direction; the manager allocates resources among the 5 basic elements to achieve the desired result. The resources available to the property manager include:

- Staff resources and skill levels.
- Equipment.
- Operating Income.

- Availability of investment capital.
 - Supervisory capabilities.
- B.** The manager has at his disposal a finite level of resources. The manager must make choices about how to divide those resources. If the manager directs resources towards one basic element, it limits his ability to address the other basic elements.
- C.** To efficiently allocate his resources, the manager must:
- Review the maintenance plan; revise it as needed to adjust it to better meet changing conditions.
 - Review owner goals to assure that the maintenance program is proceeding in the right direction.
 - Expand cash in the most effective manner.
- D.** The most important resource available to the maintenance manager is the staff resource. In order to successfully manage this resource, a maintenance superintendent must:
- Clearly define the roles of staff so that each person understands his or her position and function within the organization.
 - Constantly assess the capabilities and evaluate the effectiveness of staff and provide training and motivation to optimize performance.
 - Review all job descriptions and revise them as necessary; hire the people with the skills required to meet the organization's labor needs.
 - Decide when to use in-house staff and when to utilize outside specialists or contractors.
 - Provide adequate and effective supervision.
 - Develop an effective system for assigning work, monitoring staff progress in completing assignments and checking on the quality of completed work.
 - Recommend and implement capital improvements or purchases of new or upgraded equipment to reduce labor costs and improve efficiencies.

GROUP DISCUSSION EXERCISE

1. Break into small discussion groups. Assume that you and other members of your group live in the same building have all privatized your dwelling units. You are now contracting for private management for the building. You are now preparing a list of maintenance goals for your contractor. Give the contractor instructions in each of the following maintenance categories (use your own real-life apartment building for baseline information about deferred maintenance items and capital improvement needs).

A. Scheduled and Preventive Maintenance

- List two most important janitorial and groundskeeping tasks and desired frequency.
- List the two building systems that most require regular preventive maintenance (other than the heating system).
- List two previously deferred maintenance items that need immediate action.

B. Capital Improvements

- What two building items most urgently need replacement, repair or improvement and are beyond the scope of scheduled maintenance.

C. Deferred Maintenance

- Assume you find the above items cannot all be done with available resources. What two items can be deferred or adjusted?

IV. THE BUDGET AS A PLANNING TOOL

A. A well-thought-out budget is an essential tool that the maintenance manager must use to plan the maintenance program. The budget process includes the following steps:

- Assessment of the property's baseline condition at the beginning of each budgetary period.
- Writing a clear and detailed description of the work.
- Estimating the levels of staffing required.
- Planning for capital improvements.

- Estimating the financial resources required.
 - Outlining the expenditures necessary to accomplish the work on a periodic basis (month-by-month, semi-annually, annually, etc.).
- B. The budget is a living document to be adjusted based on experience and changes in property conditions. Maintenance managers should regularly review budgets for the following:
- Do the baseline conditions upon which the budget was formulated still hold true?
 - Have there been unanticipated occurrences which required or will require the reallocation of resources?
 - Have ownership goals for the property, and thus maintenance priorities changed?
 - Have planned physical improvements or equipment purchases taken place, and if they have, did they result in the anticipated outcomes?
 - Were financial resources correctly forecast? If not, what adjustments are needed?
 - Were staffing requirements correctly anticipated; will fewer or more staff resources be needed in the future?
- C. The best way to measure budgetary performance for a period is to compare projected performance against actual performance on a regular basis.
- D. The effective maintenance manager can further increase the value of the budget as a planning tool by using it as a rolling base planning mechanism.
- Establish a budgetary period (for example, a twelve month period).
 - Complete a month by month budget for the period.
 - Each month, review the operating statement for the property and compare actual operating costs to budgeted costs.
 - Compare actual maintenance performance to maintenance goals.
 - After reviewing budget versus actual costs and maintenance goals versus actual performance, project any changes necessary for the remainder of the full budgetary period.

By following this process, the manager monitors the performance of the maintenance operation and plans for the future by reallocating the available resources continually. In so doing, the manager can take a long-range approach to maintaining the property.

V. DEVELOPING THE MAINTENANCE PLAN

A. Goal Establishment.

- Meet with the property owner to discuss long and short term goals.

B. Fact Finding

- Determine baseline conditions of the property including:
 - Physical condition of the property.
 - Staff capabilities.
 - History of physical improvements.
 - Recommended service intervals for equipment and systems.
 - A review of all pertinent documents, plans, reports, inspections, building codes and requirements, etc.
- Survey all in-place management systems.
 - Supervisory systems.
 - Work order procedures.
 - Inspection schedules and record keeping.
 - Inventory and purchasing procedures.
 - Maintenance equipment.
 - Quality control methods.
- Determine availability of resources including:
 - Staffing levels and skills.
 - Equipment and supplies.

- Financial resources.
- Availability of outside support services (contractors, trainers, governmental assistance, etc.).

C. Clearly State the Objectives of the Maintenance Program.

- State the ownership goals for the property.
- Give a brief recap of the baseline conditions found at the property.
- Outline the resources available to the property.
- Define the objectives.
- It is important to make all objectives specific and measurable.

D. Recommend Allocation of Resources Among the 5 Basic Elements Based Upon Objectives

- **Scheduled and Preventive Maintenance.**
 - List goals of the plan.
 - List the expected results.
- **Responsive Maintenance.**
 - List goals for response to service request categories.
- **Deferred Maintenance.** Based upon the owner's goals, plan for any maintenance which will be deferred.
- **Improvements.** Incorporate into your plan a detailed list of planned improvements of property of maintenance equipment, including:
 - What improvements are planned (based on owner's goals and property needs).
 - What the schedule for improvements is.
 - Anticipated costs and sources of funding.
 - Anticipated savings to result from the improvement.
 - Method of accomplishing the work (in-house staff; contractors).

Estimate staff, contractor, and other resources required in each of the above areas.

- E. **Develop a Budget.** Show month by month expenditures necessary to meet objectives.
- Compare budget against actual operating costs on a monthly basis.
 - Adjust program and budget as conditions change.
 - Use budget and actual experience as a mechanism for future planning.
- F. **Reporting to Owner.** Develop a method for periodic reporting to owner on the progress of the maintenance plan to date. Give owner opportunity to evaluate maintenance performance, provide direction and to change goals. Incorporate owner comments and changes into future actions.

Exercise

Attached is a three month report for the XYZ Property which compares operating costs and operating results for maintenance and facility operations. Three month actual expenses are compared to budgeted costs for the three period and actual maintenance performance is compared to maintenance objectives.

On your own, review these results and write down your observations on positive and negative trends, problem areas, and possible explanations for problems.

After ten minutes, join together with a group and talk through the same analysis - reach a group consensus on trends which are positive trends and which are of concern. In areas of concern consider potential explanations for problems and suggest future action.

Personal observations based on statistics

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Positive trends

- 1.
- 2.
- 3.

Areas of concern and recommended action

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

**XYZ Property
January-March 1992**

**Budget Versus Actual Expense Analysis
Maintenance Performance Analysis**

	Budget Performance			Maintenance Performance	
	Year to Date Budget	Year to Date Actual	Variance	Performance Objective	Performance Actual
<u>Janitorial and Grounds</u>					
Janitorial & Cleaning Payroll	16,000	14,000	2,000	100% completion of tasks as scheduled	75% of tasks on schedule (position vacancy)
Janitorial & Cleaning Supplies	1,300	1,500	(200)	Within budget	15% Over budget
Janitorial & Cleaning Contract	-0-	-0-	-0-		
Grounds Contract	5,500	4,800	700	100% completion of tasks as scheduled	100% on schedule
Grounds Supplies	-0-	-0-	-0-		-0-
<u>Preventive and Corrective Maintenance</u>					
Payroll - Preventive	6,000	6,000	-0-	100% completion of tasks as scheduled	66% of plan program completed on schedule
Payroll - Corrective	9,000	9,000	-0-	100% within 24 hours of receipt	95% of corrective work complete within 24 hours
Materials and Supplies	2,000	2,500	(500)		
Contracts	4,000	1,500	2,500	Within budget	Staff completed more work than expected
<u>Administrative</u>					
Payroll - Supervision	6,000	4,000	2,000	Within budget	Position vacancy for one month
Payroll - Clerical	-0-	-0-	-0-		
Other Administrative	-0-	-0-	-0-		
<u>Utilities Costs</u>					
Electricity	9,000	8,500	500	Within budget	OK
Water	13,000	13,000	-0-	Within budget	OK
Gas	<u>19,000</u>	<u>21,000</u>	<u>(2,000)</u>	Within budget	10.5% Over Budget
Subtotal Operations	90,800	85,800	5,000		
<u>Capital Improvements</u>					
Improvements - Payroll	6,000	-0-	6,000	On schedule within budget	Not started
Improvements - Materials & Supplies	1,000	-0-	1,000	On schedule within budget	Not started
Improvements - Contract	<u>15,000</u>	<u>-0-</u>	<u>15,000</u>	On schedule within budget	Not started
Subtotal Capital Improvements	22,000	-0-	22,000		
GRAND TOTAL	122,800	85,800	27,000		

**XYZ Property
January-March 1992**

**Budget Versus Actual Expense Analysis
Maintenance Performance Analysis**

Observations which may be made based on statistics

1. If you just looked at overall results then you would appear to be 27,000 under budget.
2. However, 22,000 of this is explained as a failure to begin capital improvements.
3. Operations is 5,000 under budget. Is this good?
4. Of this, 4,000 represents position vacancies.
5. Performance is poor on PM and janitorial.
6. Supplies costs are over-budget.
7. Contract cost are under budget. Use of staff instead of contractors may explain why PM is off-schedule.
8. Heat costs are above budget - is failure to complete PM a problem?
9. Corrective work performance is good. This is positive but may mean reactive attention to the most visible problems and weak organization.
10. No superintendent for 1 month might be a major reason for capital improvement lag and PM/Janitorial slippage and even may explain materials problem.
11. Other?

**Real Estate Management
Unit 3
Maintenance Work Assignments**

Advance Reading

MAINTENANCE WORK ASSIGNMENTS

I. INTRODUCTION

To achieve the goals of an effective maintenance system (that is, meeting owner goals, preserving the assets, providing customer service, maintaining the reputation and appeal of the development, maximizing staff and equipment productivity, controlling costs and maintaining staff morale and motivation), the property management company must have an effective system of assigning the work that is to be done.

One of the goals of a work assignment system is to have the resources (personnel, skills and equipment/parts) available for the work that needs to be done. The management company, through its own staff or through contractors, must obtain the skills needed for the required work. Management companies seek to achieve a staffing level and mix that can be maintained over a long period of time and try to avoid fluctuations in staffing levels, surplus staff on the payroll, assigning tasks beneath the skills of the staff available, or assigning tasks to persons not qualified to do the work.

Some management companies maintain a staff of maintenance generalists who are trained on the specific systems of the developments to which they are assigned. The time of these staff members is spent primarily on clean-up of the property, making vacant units ready for new tenants, completing regular activities to check on the condition of the development (preventive maintenance), and responding to resident service calls. Most management companies do not maintain on staff highly qualified specialists (i.e., electricians, plumbers). Rather, they contract those functions to electrical and plumbing contractors.

The key to an effective work assignment system is to know the work that is to be done, to have the staff (or contractors) with the skills available to do the work, to prioritize the work, to efficiently assign the work, to establish standards (time and quality) for the work, and to check the completion of the work.

This training module examines key aspects of work assignment to be sure that the most critical work is done first, that the work is completed efficiently, that the work is done properly and on time, and that costs are minimized.

We first look at ways in which maintenance work is categorized, particularly between scheduled and unscheduled maintenance, between preventive and corrective maintenance, and between emergency and non-emergency maintenance. Work is also categorized by the type of skill level required.

These work assignment concepts are examined by describing a sample work assignment system.

This is followed by a discussion of monitoring the work to be sure that it is completed properly and timely. We then discuss techniques for supervising maintenance employees and methods for maintaining a happy and productive maintenance staff. We look at these issues in terms of the role of the supervisor and in terms of job design, career paths and rewards and sanctions.

Finally, the module discusses how the data generated by the work assignment system can be used to assist in decision making about systems, staffing levels, employee performance evaluations, and personnel actions. This includes some techniques for continually attempting to improve the overall maintenance system to improve efficiency and service and to reduce costs.

II. CATEGORIZING MAINTENANCE WORK

There are many ways to categorize maintenance work. These include:

1. The skill level required by the work,
2. Whether the work is to prevent a problem from happening or to deal with a problem that exists,
3. Whether the work is a part of regular schedule or is unscheduled, and
4. The urgency of getting the work done.

Skill Levels Required

For efficient work assignment, it is critical to know the skill level required for each work assignment and to assign persons who are qualified to do it. It is not efficient to assign work to persons who are overqualified, particularly if they are being paid at a higher level because of skills not needed for this particular task. (Such assignments can have adverse morale effects for other staff and may cause lower skilled staff to attempt to have these tasks more continually assigned to higher paid staff.)

Maintenance work typically is divided into three categories: janitorial, general maintenance, and specialized maintenance.

Janitorial tasks These tasks are typically completed by the least skilled and lowest paid of the maintenance staff. (Sweeping, cleaning, grass cutting, trash pick-up, etc.) are typically part of a daily routine of keeping the development grounds and common areas clean.

General maintenance. These are tasks that can be performed by a maintenance generalist who knows basic skills related to minor carpentry and simple electrical and plumbing tasks. Some management companies have only janitorial and general maintenance staff and then contract out for more technical trade skills. Some companies do distinguish among general maintenance employees to recognize different combinations of skills and experience.

Technical maintenance. Some companies maintain more highly skilled tradesmen to handle the more extensive repair jobs and perhaps to do remodeling and reconstruction work (though most U.S. companies contract the latter). One situation in which these trades persons may be retained on staff is when there are a very large number of units or developments in a single geographic area making it feasible to keep a person busy full time and which would be less costly than contracting for these repairs. Another would be when the services of contractors to provide these skills are not generally available or not available on short notice.

Preventive and Corrective Maintenance

Preventive maintenance is work assigned on a regular basis in accordance with a schedule developed by the management firm. The activities of preventive maintenance may include checking, measuring, observing, and correcting. They are designed to either prevent or to identify and document unsatisfactory conditions which could jeopardize the useful life of the property. The frequency of preventive tasks depends on the manufacturer's specifications for particular equipment, age and condition of the property, materials involved, and past experience of maintenance activities.

Corrective maintenance is work to correct a condition that is out of repair. It may result from tenant requests, unit turnover, observations by staff, or may result from conditions discovered during preventive maintenance activities. Some corrective maintenance may need to be performed immediately because of the threat to the tenants or the buildings. Other corrective maintenance may be included in the regular scheduling process and some may be deferred for a longer period of time.

Scheduled and Unscheduled Maintenance

Scheduled maintenance (both preventive and corrective) refers to work that is established on a periodic basis (i.e., daily, weekly, monthly, quarterly, semi-annually, annually). These activities are expressed in an overall preventive maintenance plan for each building item that requires maintenance.

Unscheduled maintenance is usually corrective maintenance. This is work identified from preventive maintenance activities, staff observation or from tenant requests that was not on the regular schedule.

III. PRIORITIES OF WORK ASSIGNMENTS

Within each of the above categories of maintenance tasks there is considerable variation in the urgency of the work to be performed. Management companies should adopt clear policies related to how work is prioritized. The most common practice is to make every effort to complete all preventive maintenance tasks on schedule, while prioritizing the unscheduled work.

An example of an overall priority system in guiding work assignment is show below.

Within this priority structure, management companies should have a set of standards against which they judge their performance. These standards are designed to reinforce the company's priority policies. For example, not only should emergency repairs be done as a first priority, but the company might have a standard that all emergency repairs will be responded to immediately, and in no case should repair take longer than 24 hours. An example of a set of standards for maintenance activities is shown on page 5.

EXAMPLE OF MAINTENANCE TASK PRIORITIES

<u>Priority</u>	<u>Maintenance Task</u>	<u>Reason</u>
1	Emergency Corrective Maintenance	At any time, any immediate threat to health, safety or property requires an immediate response (usually within minutes)
2	Resident Request Corrective Maintenance	At all times the resident has the right to enjoy normal, uninterrupted use of the unit.
3	Unit Turnover Corrective Maintenance	Unit turnover can cause loss of income; accomplishment of these tasks facilitates maximum building occupancy and reduces loss of rental income; the dwelling unit must be available on the date promised to a new resident.
4a	Preventive Maintenance (Annual, Semi-Annual Quarterly, Monthly)	All Preventive Maintenance tasks scheduled for accomplishment during a specific week must be accomplished; the relative infrequent occurrence of these tasks makes them more important.
4b	Preventive Maintenance (Weekly)	These tasks occur every week.
5	Planned Corrective Maintenance	These tasks have the most flexibility in scheduling for accomplishment; delaying performance to accommodate higher priority tasks will not harm residents or the property.

**EXAMPLE OF
MINIMUM MAINTENANCE STANDARDS**

<u>Maintenance Task</u>	<u>Criteria</u>	<u>Standard</u>
Emergency Corrective Maintenance	Response Time	Immediate abatement of the problem;
	Task Completion	Corrective work completed within 24 hours.
Resident Request Corrective Maintenance	Task Completion	Within 24 hours of work order initiation
Unit Turnover Corrective Maintenance	Unit ready for reoccupancy	Completed within 3 days
	Quality	Suitable for new resident
Preventive Maintenance	Percent Tasks Completed Weekly	100 percent
Planned Corrective Maintenance	Percent Tasks Completed	100 percent within 3 weeks of initiation except for painting and tasks involving major expenditure. For these tasks, additional long term planning may be required.
Janitorial	Percent Tasks Completed Daily	100 Percent

IV. SAMPLE WORK ASSIGNMENT SYSTEM

To illustrate the essential elements of a work assignment system, the following describes a sample system. This sample is a rather sophisticated system in many respects in that it is supported by very clear management company policy and is facilitated by an extensive automated data system. However, the basic steps involved can and should be completed whether or not an automated system is available.

In this system, work activities to be assigned are divided into three general types: (1) routine janitorial activities that are completed daily or weekly by generally lower paid staff; (2) preventive maintenance work orders generated in advance based on a comprehensive preventive maintenance plan, and (3) corrective maintenance to correct deficiencies (usually unscheduled) identified by tenants or staff (i.e., at turnover or through preventive maintenance activities). The basic company policies related to priority of work and work standards are those shown in the previous examples.

ROUTINE JANITORIAL TASKS

Some routine janitorial tasks can be accomplished without a separate work order to be completed. Many management companies develop a detailed schedule of the work to be completed by a particular staff member each day of the week, with a place for the supervisor to sign that they have checked the work. A sample of such a form is provided on Exhibit A.

PREVENTIVE MAINTENANCE PROGRAM

For non-janitorial or non-routine tasks a more detailed system of documentation through work orders is typically used. The following illustrates how a preventive maintenance program for non-janitorial tasks might be organized. It describes the way in which preventive maintenance workload is identified and the work is assigned, completed, checked and recorded. It is described as a series of steps undertaken by the manager assigning the work and the maintenance person who conducts and records the work.

This example looks at only one area of maintenance at a single housing development. The key forms used in this system are:

- The list of preventive maintenance areas for a particular development (see Exhibit B).
- The list of preventive maintenance tasks for each maintenance item, by skill level and frequency of each task (see Exhibit C).
- A preventive maintenance work order on which the work tasks to be completed are listed, the work assignment is indicated, and other important information is collected for management purposes (see Exhibit D).

- A corrective maintenance work order form (see Exhibit E) is similar to the preventive maintenance form. Some maintenance systems use one form for both types of activity.
- A Weekly Maintenance Summary of maintenance activity at that development (see Exhibit F).

Step 1: Preparation of Preventive Maintenance Work Orders for the Next Week

Early in the week (e.g., Tuesday) prior to the one in which the work is scheduled, the manager should review the list of scheduled preventive maintenance activities and, based upon skill level requirements, prepare work orders for maintenance staff that include all scheduled preventive maintenance activities for the development.

Some very sophisticated systems actually print-out these preventive maintenance work orders (by skill level) well in advance of the week the work is to be performed. The specific work orders may even include work assignments based upon expected times for the completion of each task, resulting in a relatively balanced daily workload. Other systems identify all tasks for that week for a particular maintenance item, leaving the assignment task to the manager.

The manager must identify and assign all scheduled preventive maintenance activities. The manager should also identify the specific parts or supplies needed to perform the tasks listed and be sure those are in inventory so that the work can be performed. (Some systems automatically provide a list of parts needed to complete the tasks identified on the preprinted work order. Other systems provide a list of parts needed for each particular type of activity to which the manager may refer.) Stocking of adequate (but not excessive) inventories of parts and supplies is a critical part of an effective work assignment system.

Advance preparation of preventive maintenance work orders also gives the manager an opportunity to see what the overall scheduled workload is going to be for the week. This can be compared to staff availability to determine if adequate resources are available and to determine the amount (if any) of planned corrective maintenance that can be scheduled for the week (assuming the typical amount of emergency and turnover maintenance).

Step 2: Organizing and Sorting Preventive Maintenance Work Orders

On Friday of the previous week, the manager organizes the preventive maintenance ("PM") work orders for the following week. This will enable work to begin promptly Monday morning. Sorting should be done as follows:

1. Group work orders by skill requirement into separate stacks. (Work orders should always be prepared on the basis of the skill requirements.)
2. Further organize these stacks in daily work assignments for each maintenance person in the following manner:
 - a. Review the preventive maintenance tasks to be performed in each work order. Based on your estimate of the capabilities of each maintenance person, the workload identified on the work orders, and specific location of the maintenance item, divide the work orders into a stack for each maintenance person who is available next week. On each work order write the name of the maintenance person assigned.
 - b. Subdivide the stack of work orders assigned to each maintenance person into daily work order assignments, for each day of the week that the person is performing preventive maintenance. Give particular attention to the location of the maintenance item. Attempt to schedule each day's work within a particular area, if possible. This will increase the productivity of the maintenance staff by having them accomplish PM on as many maintenance items as possible which are close together. Write the day of the week the work order will be performed next to the name of the maintenance person(s) assigned.
 - c. Review the preventive maintenance workload given to each person. If there is more than one person with a specific maintenance skill, work orders may be added or subtracted in order to equalize workload, if desired.
 - d. Review the corrective maintenance work anticipated the next week to assure that PM assignments are realistic given corrective maintenance requirements.

Step 3: Assignment of Preventive Maintenance Work Orders

In the morning of each day, the manager gives the preventive maintenance work orders for that day to the maintenance person to whom they are assigned.

Step 4: Performance of the Tasks specified on the Preventive Maintenance Work Orders

Each maintenance person will perform all of the tasks listed on the Preventive Maintenance Work Orders on the day assigned. The following information is to be filled in as the work is performed:

- **Materials Needed/Utilized-Conditions Observed:** List the materials used and note any conditions that should be addressed in a separate corrective work order.
- **Cost:** The cost of parts or supplies used must be entered on the work order by the manager.
- **Completed By:** Maintenance person initials each task as completed.
- **Time Taken:** Maintenance person indicates the time in hours and minutes taken for each task. (For a fixed sequence of tasks, the time for the total sequence may be entered.)

Step 5: Returning Completed Preventive Maintenance Work Orders

At the end of each workday, maintenance personnel will turn in their preventive maintenance work orders assigned that day. Completed work orders will be set aside for review by the manager at the end of the week. Work orders not fully completed will be reviewed by the supervisor to determine the causes. The manager may reassign any incomplete preventive maintenance work orders to be completed the next day.

Step 6: Reviewing Completed Preventive Maintenance Work Orders

The manager will gather all of the preventive maintenance work orders turned in each day throughout the week. The manager will complete a weekly review of returned preventive maintenance work orders, with the aid of the Weekly Maintenance Summary.

CORRECTIVE MAINTENANCE

Corrective maintenance is made up of tasks which are intended to repair or remedy conditions jeopardizing the physical condition or useful life of an asset or degrading its satisfactory appearance or safety.

For our sample system, we have a separate work order form for use in corrective maintenance activities. This permits having the preventive and corrective work orders contain only the categories relevant to them and it allows for use of different colors of paper for each type for quick identification.

The following describes the steps a manager would go through in making work assignments:

Step 1: Taking/Initiating a Corrective Maintenance Work Order

In taking the information for corrective maintenance work orders it is critical to get clear and accurate information. It is not sufficient to indicate that a faucet needs repair. It should indicate which faucet and the nature of the problem (i.e., is it a slow leak, is the

faucet not operating, or is water flooding the apartment) so that the response is appropriate. Corrective Work Orders include the sub-categories of emergency work orders, vacant unit turnover work orders, nonemergency tenant requests, and planned corrective maintenance.

Emergency Corrective Maintenance

All management companies need to have a system that enables tenants or staff to identify emergency situations whenever they occur to enable an immediate response. If the emergency occurs during the work day, the information is received immediately at the management office. Most management companies have an emergency system that enables fast contact with maintenance personnel at any hour. (Some may have staff either living on-site or on-site at night with regular work assignments, and who can be reached if an emergency call is received.)

The company must have a policy regarding how off-hours emergencies are to be handled. This may involve having maintenance personnel assigned "on-call" on a rotating basis. It may involve having arrangements for emergency response by subcontractors (i.e., plumbers, electricians).

Once it is determined that an emergency exists, the following information needs be documented on the corrective maintenance work order:

1. The name of the individual/resident reporting the emergency,
2. The apartment number or building/grounds location of the emergency,
3. The resident's phone number if the emergency exists in an occupied unit, and
4. A simple but fully descriptive statement of the nature of the emergency.

The person taking the call will then notify the appropriate staff person or contractor to respond to the situation and will complete other parts of the work order (Date Called In, Taken By, Check Emergency) and place the work order in the work order control location for review by the manager.

Depending on the nature of the emergency, the manager may be immediately notified or this notification may wait until the next morning. If the emergency occurs off-hours, "on-call" personnel may be assigned to correct it but the work order might be written up the following day.

Non-Emergency Resident Request and Planned Corrective Maintenance

For non-emergency requests from tenants, a corrective maintenance work order will be completed and submitted to the control location. The manager may also initiate planned corrective maintenance work orders based upon his/her daily observations of the property and as identified by the maintenance staff during preventive maintenance activities.

Unit Turnover

During move-out of a resident, work orders may be generated. It is very important to coordinate maintenance activities so that repairs can be completed as fast as possible to minimize vacancies and to meet commitments to new tenants.

Any time there is a move out, the manager should conduct a move out inspection to document the condition of the unit. After inspection, the manager initiates the necessary work orders (i.e., maintenance, painting). A separate work order should be completed for each of these jobs to be performed in order to track task performance, person hours and costs.

Step 2: Assignment and Control of Corrective Maintenance Work Orders

Assignment of corrective work orders is more difficult than the assignment of preventive maintenance work orders. The manager cannot predict when corrective maintenance situations will occur. Nonetheless, some types of corrective maintenance situations do give the manager lead time in which to plan for completing the work. The amount of time depends on maintenance task priorities and performance standards.

The manager needs an effective way to plan for daily completion of corrective maintenance so that corrective tasks performed on any day are truly the most important. Scheduling decision rules (along with good judgment) will produce an effective corrective maintenance work plan. The following illustrates a sample of decision rules:

- a. **Maintenance Priority Rule:** Work orders must be assigned for accomplishment based on relative priority. (See previous example.)
- b. **The Assignment Rule:** Only those work orders for which action is to begin or accomplishment is to be achieved on any given work day will be assigned that day.
- c. **Assigning Emergency Corrective Maintenance Work:** Once an emergency work order has been received or initiated, it must be responded to immediately. If possible, the work order should be given immediately to the maintenance person who is to perform the work. Once the emergency is abated, but if additional corrective maintenance is required, a new corrective maintenance work order will be prepared.

d. **Assigning Resident Requests, Unit Turnover, and Planned Corrective Maintenance:** Prior to or at the beginning of each work day, the manager will review and prioritize all corrective maintenance work orders on hand. In general, the priority for assigning these work orders should be as follows:

- Tenant requested work orders previously assigned but not yet completed.
- Tenant requested work orders not yet assigned.
- Vacant Unit turnover maintenance.
- Planned corrective maintenance previously assigned but not yet completed.
- Planned corrective maintenance not yet assigned.

For work orders previously assigned but not yet completed, the manager must determine if the work can now be completed. For example, work orders which were assigned but not completed because of lack of parts or supplies cannot be reassigned until the necessary materials are available. They may be assigned to the person originally doing the work or to someone else, depending on availability and staff work locations on the day the work is reassigned.

In considering the relative priority of each vacant unit turnover work order, the manager should consider scheduling in terms of the completion of other turnover activities and commitments to a future tenant.

Step 3: Performance of Corrective Maintenance Work Order Tasks

When the maintenance person assigned to do the work arrives at the work location, he may discover that the work statement is not correct or complete and should correct the work statement if necessary. After completing the work he must complete the work order form, identify the materials used, the cost of materials (if unknown, this will be filled in by the manager), and the time required.

Step 4: Returning corrective maintenance work orders

Completed corrective maintenance work orders should be returned at the end of each day. Those not completed will be discussed at the end of each workday and, if necessary, reassigned to other personnel by the Manager.

WEEKLY MAINTENANCE SUMMARY

A summary of the week's work orders is provided in the Weekly Maintenance Summary (see Exhibit F). This form provides information for each development on the work orders for the week, distinguishing between preventive and corrective work orders.

For preventive maintenance it identifies the number of preventive tasks scheduled for the week, the number completed (including the number of hours spent), and the costs of preventive maintenance broken down between work completed in-house and that contracted out.

For corrective maintenance it identifies the number completed and the hours spent, the backlog of incomplete work orders, and costs (both in-house and contractor) for completed work.

The final section of the form identifies the number of staff hours spent for the week, distinguishing between supervisors, maintenance men, and custodians.

The manager uses this report to evaluate performance and to help make decisions regarding the next week's work. This information may also be used to identify trends in the number and type of corrective work orders, the hours spent on maintenance, the costs of maintenance activities, the size of the backlog of workorders, and the number of emergency workorders.

V. MONITORING MAINTENANCE WORK

An effective maintenance system must monitor the quality and quantity of the work being performed. This should be done as soon as possible after the work is completed and feedback to the employee (positive or negative) should follow as soon as possible. Contractors must be monitored just as carefully as staff.

Monitoring can be on a sampling basis, but can also vary on a number of factors. For example:

- o Monitoring of new employees (or contractors), employees assigned to new duties, and employees previously demonstrating less than satisfactory performance should be more frequent and feedback more immediate.
- o Monitoring might be more extensive for tasks whose performance is most essential to the safety of the tenants and the protection of the assets. This might include electrical repairs or heating system repairs during the winter.

- o Monitor less frequently, but still monitor on a periodic basis, those employees (or contractors) who have demonstrated the ability to make the assigned repairs and who have previously consistently performed at a high level.

Two traditional maintenance work monitoring techniques are:

1. Daily supervisory inspection and approval of janitorial work.
2. Supervisory inspection of a sample of completed preventive or corrective maintenance work orders.

Another useful monitoring technique is a periodic complete inspection of all maintenance items at a development, completed by someone other than the development maintenance manager. This will help not only to evaluate the effectiveness of maintenance activities, but it may also identify long-term concerns that need to be addressed.

Monitoring data can be used to modify the preventive maintenance system, to identify training needed by the staff, to suggest the need for better repair techniques, and to guide purchasing and contracting decisions.

VI. SUPERVISION

Essential to achieving a successful maintenance operation are:

1. Well qualified and trained supervisors and staff,
2. Clear and shared understanding by both the supervisor and the employee about what is expected of the employee, and
3. A compensation system that reinforces high performance.

One consideration in supervision is that there is a limit to the number of persons which a person can effectively supervise. There is no magic correct number--it is affected by employee skill levels, geographic dispersion, variety of jobs performed, quality of written instructions and procedures, experience and performance of staff, and the extent of authority of the supervisor. Generally, more persons can be supervised if those persons have similar job skill levels, are all located at the same site, are well trained, and have a very clear understanding of what is expected of them on the job.

Employee Motivation

Studies of management in U.S. organizations indicate that employees are happier when they:

- Have a clear understanding of what is expected of them in their job. This can be greatly enhanced by having up-to-date job descriptions and clear identification of how the performance is to be evaluated. (See attached samples of job descriptions.)
- Receive frequent and appropriate feedback from supervisors. Semi-annual or annual comprehensive performance reviews are recommended and are helpful in making a number of personnel decisions (i.e., training, promotion, compensation). But this should be accompanied by much more frequent feedback so that an employee always knows where he stands and what he needs to do to improve his performance. The results of an annual review (especially an unsatisfactory evaluation) should never be a surprise to the employee.
- Understand the rewards/sanctions that they will receive for various levels of performance, and the rewards/sanctions given out actually do reflect performance. Generally individual rewards are more effective motivators than group rewards. Also, while for most people money is the most effective reward, other types of rewards (i.e., special recognition, special job assignments, training opportunities, positive feedback) are also effective.
- Have an opportunity to advance within the organization (i.e., a career path) and there are opportunities to learn new skills to enable them to advance.
- Have some variety in their jobs. For example, while they may have some routine jobs they must perform every day, they get some task variation. This allows them to learn new skills and reduces the boredom of the job.
- They have some control over their work. While a maintenance employee may receive a work order telling what work to do, they should be permitted to do it without the supervisor managing each step in the process. Certainly closer supervision is required for new employees and for employees performing tasks that are new to them. However, supervisors should convey to employees that receiving less direct supervision is a reward for high performance.
- There have been many successful uses of work teams in which work assignments have been made to a group of staff members who are responsible as a group for getting the job done to meet time and quality standards. This allows them a greater variety of job assignments and more control over their work. This has been particularly successfully when there are rewards to the group for high performance.

VII. USING INFORMATION FROM THE MAINTENANCE WORK ASSIGNMENT SYSTEM FOR DECISION-MAKING

The sample system illustrated above generates considerable data that can be used to analyze and improve the effectiveness of the maintenance activities. Information from work orders can be used to calculate the frequency of certain types of repairs, repairs required on particular units, and variations in the amounts of time taken for particular repairs. In addition, the system provides considerable data on the costs of various aspects of the maintenance operation. All this information can help management make decisions about staffing levels needed, which systems might need to be replaced because repair costs are high, whether there needs to be a change in the skill mix of the maintenance staff or whether training is indicated. It can also guide other personnel decisions.

Much of the value of this information is in monitoring the change over time to identify the trend in costs/time requirements and the frequency of certain repairs. For example, a ten percent increase in the number of unscheduled work orders related to the heating system might alert the manager and owner to a need to consider a more comprehensive review of the system for major repairs or replacement.

Also in evaluating time for completing various tasks, it is important to look not just at averages but also at a distribution of the times to get a sense of whether the average is being affected by a few unusually long or short performances.

Data about maintenance costs is essential to building an effective budget for the project. Management companies that have budgets based upon quality data are less likely to have surprises in their actual cost performance and will be more quickly able to recognize the impacts of changes in their costs (e.g., fuel, supplies) as unit costs change.

CONCLUSION

A well designed and comprehensive system of work assignments including a comprehensive preventive maintenance program can provide great benefits. It is essential to meeting owner goals of preserving the asset, keeping and attracting satisfied tenants, having satisfied employees, and achieving a profitable operation. Maintenance is the greatest cost of property management that can be controlled, and efforts to understand costs and achieve control are essential.

EXHIBIT A

SAMPLE WEEKLY JANITORIAL SCHEDULE

BUILDING ADDRESS: _____ (Seven Story Building)

Week of: _____

Janitor: _____

MONDAY		TUESDAY		WEDNESDAY	
<u>Morning</u>	<u>Afternoon</u>	<u>Morning</u>	<u>Afternoon</u>	<u>Morning</u>	<u>Afternoon</u>
Sweep/Mop lobby and elevator floors	Final clean vacant unit #106 for move-in	Sweep/Mop lobby and elevator floors	Spot clean lobby walls and woodwork	Sweep/Mop lobby and elevator floors	Cut grass
Pick up litter on grounds		Pick up litter on grounds	Clean all surfaces of elevator cabs	Wax lobby and elevator floors	Wash lobby windows
Put trash out for pickup		Put trash out for pickup	Clean and disinfect trash room	Pick up litter on grounds	
Sweep/mop floors 2-4 hallways		Sweep/mop floors 5-7 hallways		Put trash out for pickup	
Approved: _____	Approved: _____	Approved: _____	Approved: _____	Approved: _____	Approved: _____

THURSDAY		FRIDAY			
<u>Morning</u>	<u>Afternoon</u>	<u>Morning</u>	<u>Afternoon</u>		
Sweep/Mop lobby and elevator floors	Final clean vacant unit #408 for move-in	Sweep/Mop lobby and elevator floors	Sweep/mop all interior stairways		
Pick up litter on grounds		Pick up litter on grounds			
Put trash out for pickup		Put trash out for pickup			
Sweep/mop floors 2-4 hallways		Sweep/mop floors 5-7 hallways			
Approved: _____	Approved: _____	Approved: _____	Approved: _____		



Exhibit B

**SAMPLE LIST OF MAINTENANCE AREAS FOR
PREVENTIVE MAINTENANCE CHARMING GARDENS**

<u>Item No.</u>	<u>Maintenance Items</u>
1	Heating Boiler, Office
2	Heating Circulation Pump, Office
3	2 Water Heaters, Office
4	Hot Water Circulating Pump, Office
5	Apartment Heating Boilers
6	Apartment Hot Water Heaters
7	Apartment Heating Circulation Pumps
8	Building Interiors
9	Building Exteriors and Roofs
10	Grounds
11	Grounds Equipment

Exhibit C

PREVENTIVE MAINTENANCE TASKS LIST

DEVELOPMENT: Charming Gardens
MAINTENANCE ITEM: Heating Boiler, Office
NUMBER: 1
LOCATION: Office
MANUFACTURER: Crane Co.
IDENTIFICATION: ABC 6-552

<u>Skill</u>	<u>Frequency</u>		Perform the following tasks during the heating season
1	M	1.	Check all relief valves for free operation
1	M	2.	Check all water and gas gate and globe valves for free operation and leakage
1	M	3.	Check all manifolds for leakage
1	M	4.	Check all water and gas piping for leakage
1	Q	5.	Check condition of gas pipes, burners, valves
1	W	6.	Check operation of electrical hardware and connections
1	W	7.	Check operation of all automatic controls
1	W	8.	Check low water cut-offs
1	W	9.	Check condition of boiler pressure and temperature gauges, record readings
1	W	10.	Check all safety controls and equipment
1	Q	11.	Check condition of paint
1	W	12.	Secure any loose guards or access panels
1	W	13.	Check operation of boiler, witness starting and shutdown, check for excess smoking
1	W	14.	Check operation and condition of flue
1	A	15.	Perform internal and external annual inspection
1	M	16.	Check condition of expansion tank
1	M	17.	Bleed air from boiler

W = Weekly
M = Monthly
Q = Quarterly
A = Annually

Exhibit D

Warning: Shut Machines Down Before Working. Observe all Safety Precautions. Wear all Required Safety Clothing. Perform Work Only if Experienced.

PREVENTIVE MAINTENANCE WORK ORDER

Project: _____ Skill Requirements: _____
 Maintenance Item: _____ Scheduled Week of: _____
 Location: _____ To be Performed by: _____

SCHEDULED WORK TASKS	Completed by Initials/Date	Time Taken	Checked By	Materials Needed/Utilized Conditions Observed	Cost
Perform the following tasks during the heating season M 1. Check all relief valves for free operation and leaking M 2. Check all water and gas gate and globe valves for free operation and leakage M 3. Check all manifolds for leakage M 4. Check all water and gas piping for leakage W 5. Check condition of electrical hardware and connections W 6. Check operation of all automatic controls W 7. Check low water cut-offs W 8. Check condition of boiler pressure and temperature gauges, record readings W 9. Check all safety controls and equipment W 10. Secure any loose guards or access panels W 11. Check operation of boiler, witness starting and shutdown, check for excess smoking W 12. Check operation and condition of flue W 13. Check condition of expansion tank M 14. Bleed air from boiler					

W = Weekly
 M = Monthly

Exhibit E

Warning: Shut Machines Down Before Working. Observe all Safety Precautions. Wear all Required Safety Clothing. Perform Work Only if Experienced.

CORRECTIVE MAINTENANCE WORK ORDER

B1240012

EMERGENCY _____

Project: _____
Name/Maintenance Item: _____
Apt. No./Location: _____
Telephone: _____
Authorized Entry: Yes _____ No _____ When _____

Date Called In: _____
Time Called In: _____
Taken By: _____
Skills Requirements: _____
Scheduled Week of: _____
To be Performed by: _____

Table with 6 columns: CORRECTIVE WORK TASKS/PROBLEM, Completed by Initials/Date, Time Taken, Checked By, Materials Needed/Utilized Conditions Observed, Cost. Multiple empty rows for data entry.

Resident: _____ Date: _____ Total Material: _____
Management: _____ Date: _____ Total Labor: _____
Total: _____

Handwritten mark resembling the number 15.

Exhibit F

WEEKLY MAINTENANCE SUMMARY
(To Be Completed by Noon on Monday for Prior Week)

PROJECT: Charming Gardens		WEEK OF: January 10	
PREVENTIVE MAINTENANCE			
NUMBER OF TASKS SCHEDULED THIS WEEK	_____		
NUMBER COMPLETED	_____		Labor Hours _____
COST OF PREVENTIVE MAINTENANCE (In-house)	_____		
COST OF PREVENTIVE MAINTENANCE (Outside Contractor)	_____		
CORRECTIVE MAINTENANCE			
EMERGENCY WORK ORDERS COMPLETED	_____		
NON-EMERGENCY WORK ORDERS COMPLETED	_____		Labor Hours _____
INCOMPLETE WORK ORDERS AT BEGINNING OF WEEK	_____		
COMPLETE WORK ORDERS AT END OF WEEK	_____		
COST OF CORRECTIVE MAINTENANCE (In-House)	_____		
COST OF CORRECTIVE MAINTENANCE (Outside Contractor)	_____		
PERSONNEL			
MAINTENANCE SUPERVISORS THIS WEEK	_____	Hours	
MAINTENANCE MEN THIS WEEK (Number ____)	_____	Hours	
JANITORS THIS WEEK (Number ____)	_____	Hours	
		_____	Manager

HOUSING AUTHORITY OF THE CITY OF EAST ST. LOUIS

JOB DESCRIPTION

TITLE: Field Supervisor (Work Order Completior

GENERAL STATEMENT OF DUTIES:

Responsible for the field supervision of maintenance staff to ensure the delivery of maintenance and repair services to public housing tenants and the maintenance of ESLHA non-dwelling properties and offices.

REPORTS TO: Assistant Maintenance Superintendent (Work Order Completion)

SUPERVISES: Under the direction of the supervisor, all staff assigned to the division including:

Plasterers
Painters
Carpenters
Maintenance Mechanics
Maintenance Trainees
Casual Laborers

KEY DUTIES:

1. Provides day-to-day supervision of staff assigned.
2. As directed by the supervisor, schedules work and monitors performance of assigned staff. Holds staff meetings as necessary.
3. Conducts performance appraisals and takes appropriate personnel actions in accordance with ESLHA policies and/or union contracts.
4. Provides technical assistance to staff as needed.
5. On a daily basis, conducts field inspection of work in progress to determine quality of workmanship and staff productivity.
6. Refers work orders or conditions requiring outside contractors to the supervisor for assignment.
7. Responds to tenant complaints and inquiries regarding maintenance repairs and project conditions requiring attention.
8. Responds to emergency work order requests to determine work requirements. Assigns appropriate staff to complete work.

Job Description
Field Supervisor (Work Order Completion)
Page Two

9. Monitors staff use of equipment and materials and advises supervisor of same required to assure efficient operations.
10. Prepares and submits reports as requested.
11. Performs other duties as assigned.

PERFORMANCE STANDARDS

- o Attendance is reliable; leave does not exceed the amount permitted, the employee has no unexcused absences from the job and the employee is available to work during non-business hours when the need arises.
- o Employee takes all appropriate safety precautions to avoid on-the-job accidents.
- o 95% of priority 1 work orders are completed within one day.
- o 85% of priority 2 work orders are completed within two days.
- o All work completed meets quality standards established by the supervisor.
- o Employee assures that ESLHA tools, materials and equipment are operated efficiently, properly and safely.
- o 98% of job related documents (reports, time sheets, etc.) are prepared properly and on a timely basis.
- o Site visits and inspections of work in progress are conducted daily.
- o Random site inspections reveal that 95% of the jobs have been completed in a professional manner.
- o The employee has demonstrated the ability to work cooperatively with both tenants and staff in the opinion of the supervisor.

QUALIFICATIONS

EDUCATION: High School Diploma. Two years of college or trade school desirable.

EXPERIENCE: A minimum of five years experience in residential maintenance, rehab or construction. At least one year's experience in a supervisory capacity.

**Job Description
Field Supervisor (Work Order Completion)
Page Three**

**SPECIAL
SKILLS:**

Excellent supervisory skills and ability to communicate effectively with subordinates to ensure productivity and good work habits.

Ability to plan and organize work load.

Ability to read, write and prepare reports.

Ability to relate well to tenants.

OTHER

REQUIREMENTS: Excellent employment and character references.

Bondable

Valid driver's license and safe driving record.

SALARY:

Grade 20

/0158C

HOUSING AUTHORITY OF THE CITY OF EAST ST. LOUIS

JOB DESCRIPTION

TITLE: Maintenance Mechanic II

GENERAL STATEMENT OF DUTIES:

Responsible for performing semi-skilled and skilled maintenance and repair tasks in order to maintain the ESLHA units in a decent, safe and livable condition.

REPORTS TO: Assistant Maintenance Superintendent

SUPERVISES: This is not a supervisory position.

KEY DUTIES:

1. Repairs and/or replaces faucets, washers to faucets, seats, stems and spigots. Also repairs clogged drains.
2. Performs minor electrical maintenance such as replacement of lighting fixtures, wall receptacles, and fuses.
3. Assists with minor repairs to furnaces, water heaters, and gas stoves, including adjustment of gas burners and the cleaning of furnace filters.
4. Operates miscellaneous electrical hand tools and simple manual hand tools.
5. Repairs and replaces doors, window sills, door locks, cabinets, drawers, etc.
6. Installs window shades and screens; cuts all types of glass.
7. Installs and repairs electrical systems in all units.
8. Detects and corrects gas leaks; repairs gaslines.
9. Repairs and installs ranges, refrigerators, water heaters, and furnaces. Lights water heaters, furnaces, and ranges; adjusts pilot lights.
10. Performs preventive maintenance tasks.

(Rev. 6/83)

11. Installs some plumbing materials and equipment.
12. Maintains grounds: cleaning, mowing, trimming, etc.
13. Performs other duties as assigned.

PERFORMANCE STANDARDS:

- o Attendance is reliable; leave does not exceed the amount permitted, and the employee has no unexcused absences from the job.
- ? Employee takes all appropriate safety precautions to avoid on-the-job accidents.
- ? 95% of priority 1 work orders assigned are completed within one day.
- ? 85% of priority 2 work orders assigned are completed within two days.
- o All work completed meets quality standards established by the supervisor.
- o Employee uses special skills necessary to the job, and shows evidence of developing additional skills through experience.
- o Employee uses ESLHA tools, materials and equipment efficiently, properly and safely.
- o 98% of job related documents (work orders, time sheets etc.) are prepared properly and submitted to the supervisor daily.

QUALIFICATIONS:

Education: Able to pass a basic reading/writing/math test. Two years of vocational training desirable.

Experience: Minimum of four years of working experience in residential maintenance.

Special Skills: Ability to perform a variety of semi-skilled tasks assisting lower and higher level maintenance employees in plumbing, electrical, and preventive maintenance work.

Ability to operate the more common types of machine shop or woodwork equipment.

(Rev. 6/88)

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**Ability to pass ESLHA Maintenance Qualification Test
yearly to the level assigned.**

Other

Requirements:

Excellent employment and character references.

Valid driver's license and safe driving record.

(Rev. 6/88)

HOUSING AUTHORITY OF THE CITY OF EAST ST. LOUIS

JOB DESCRIPTION

TITLE: Janitor/Janitress

GENERAL STATEMENT OF DUTIES:

Responsible for performing cleaning and general maintenance work in vacant ESLHA units.

REPORTS TO: Assistant Maintenance Superintendent

SUPERVISES: This is not a supervisory position.

KEY DUTIES:

1. Removes furniture and trash from vacated apartments.
2. Performs other trash collection duties as assigned.
3. Cleans and prepares vacant units for occupancy: cleans range surfaces and ovens; strips wax off floors, waxes floors; cleans refrigerator exteriors, interiors and freezing compartments; cleans bathrooms, closets, and kitchen cabinets.
4. Performs other duties assigned.

PERFORMANCE STANDARDS:

- o Attendance is reliable; leave does not exceed the amount permitted and the employee has no unexcused absences from the job.
- o Employee takes all appropriate safety precautions to avoid on-the-job accidents.
- o Completes vacant unit cleaning duties in accordance with the schedule established by the supervisor 95% of the time.
- o All work completed meets quality standards established by the supervisor.
- o Employee uses ESLHA tools, materials and equipment efficiently, properly and safely.
- o 98% of job related documents (work orders, time sheets etc.) are prepared properly and submitted to the supervisor daily.

(Rev. 6/88)

QUALIFICATIONS:

Education: Able to pass a basic reading/writing/math test.

Experience: Prior employment performing custodial work desirable.

Special Skills: Ability to properly use all standard cleaning equipment.

Other Requirements: Excellent employment and character references.
Valid driver's license and safe driving record.

(Rev. 6/88)

Real Estate Management
Unit 3
Maintenance Work Assignments
Session Materials

85

MANAGEMENT OF WORK ASSIGNMENT

I. OBJECTIVES OF WORK ASSIGNMENT SYSTEM

- A. To help meet overall objectives of the owners and management company.
- B. Get the maintenance work done on schedule and in priority order.
- C. Not have surplus staff, either in number or higher paid underutilized skilled staff.
- D. Avoid big fluctuations in workload and staffing levels to avoid unnecessary costs.
- E. Achieve job design and work assignments to maintain high staff morale and motivation and to minimize undesirable staff turnover.
- F. Have assignment systems that identify staff, equipment, supply and parts needs so that all necessary resources are available when needed for the work load.

II. KEY ASPECTS OF AN EFFECTIVE WORK ASSIGNMENT SYSTEM

- A. Getting the scheduled work done on a timely basis.**
- B. Keeping the staff busy on productive work, while maintaining enough flexibility to respond to emergencies and changing priorities.**
- C. Have adequately trained staff.**
- D. Perform preventive maintenance on a timely basis.**
- E. Record work assignments, progress toward completion, and information about the hours and costs of the work completed to inform future decisions.**
- F. Provide proper supervision, including quality control reviews of the work completed.**

III. CATEGORIZING MAINTENANCE WORK

- A. Janitorial Tasks.**
- B. General Maintenance.**
- C. Technical Maintenance.**
- D. Preventive Maintenance**
- E. Corrective Maintenance**
- F. Schedule and Unscheduled Work**

IV. PRIORITIZING MAINTENANCE WORK

<u>Priority</u>	<u>Maintenance Task</u>	<u>Reason</u>
1	Emergency Corrective Maintenance	At any time, any immediate threat to health, safety or property requires an immediate response (usually within minutes)
2	Resident Request Corrective Maintenance	At all times the resident has the right to enjoy normal, uninterrupted use of the unit.
3	Unit Turnover Corrective Maintenance	Unit turnover can cause loss of income; accomplishment of these tasks facilitates maximum building occupancy and reduces loss of rental income; the dwelling unit must be available on the date promised to new resident.
4a	Preventive Maintenance (Annual Semi-Annual Quarterly, Monthly)	(a) All Preventive Maintenance tasks scheduled for accomplishment during a specific week must be accomplished; the relative infrequent occurrence of these tasks makes them more important.
4b	Preventive Maintenance (Weekly)	(b) These tasks occur every week.
5	Planned Corrective Maintenance	These tasks have the most flexibility in scheduling for accomplishment; delaying performance to accommodate higher priority tasks will not harm residents or the property.

**EXAMPLE OF
MINIMUM MAINTENANCE STANDARDS**

<u>Maintenance Task</u>	<u>Criteria</u>	<u>Standard</u>
Emergency Corrective Maintenance	Response Time	Immediate abatement of the problem:
	Task Completion	Corrective work completed within 24 hours.
Resident Request Corrective Maintenance	Task Completion	Within 24 hours of work order initiation
Unit Turnover Corrective Maintenance	Unit ready for reoccupancy	Completed within 3 days
	Quality	Suitable for new resident
Preventive Maintenance	Percent Tasks Completed Weekly	100 percent
Planned Corrective Maintenance	Percent Tasks Completed	100 percent within 3 weeks of initiation except for painting and tasks involving major expenditure. For these tasks, additional long term planning may be required.
Janitorial	Percent Tasks Completed Daily	100 Percent

Daily Maintenance Performance Report

Date: _____

Janitorial Performance

Building (or other work area)	Staff Assigned	Lobby	Elevator	Upper Floors	Grounds	Trash Room	Other
1							
2							
3							
4							
5							
6							

Check if OK

Preventive Maintenance

#PM Work Orders completed this date _____

#PM Work Orders complete on schedule _____

#PM Work Orders assigned and not completed _____

Average amount of time overdue _____

#PM Work Orders overdue and not yet assigned _____

Average amount of time overdue _____

Corrective Maintenance

Corrective Work Orders received this date _____

Corrective Work Orders completed this date _____

Corrective Work Orders completed within time goals _____

Incomplete Work Orders at end of day _____

Daily Property Walking Inspection Report

Conditions Observed

Corrective Action Planned or Taken

EXERCISE ON DAILY WORK ASSIGNMENT

It is Tuesday morning. Mikhail Resourceful, the manager of Market Economy Towers, a 250 unit building, arrives early in order to prepare work assignments so they are ready when the maintenance staff reports for work.

The Efficient Property Management (EPM) company policy is to make every effort to stick to the priority system (see earlier description) and also to complete all of the clean-up and preventive maintenance as scheduled.

Last night the manager tentatively planned the following work for the day:

Janitorial - Includes pick up of litter on grounds, moving trash for removal by contractor, sweeping and mopping of ground floor public areas, sweeping of several upper floors, sweeping of the parking area and walkways and removal of a fallen tree that the manager noticed on his way into the office in the morning. All these activities will require 2 person days to complete.

Preventive - Maintenance Checking inside resident apartments for leaking faucets and toilets in the kitchens and bathrooms. The schedule includes checking 12 apartments each day. Inspection plus corrective work is estimated to require 1/2 person day to complete.

Corrective - Maintenance Repair of an emergency water leak which appeared yesterday. The leak is located in a domestic cold water line in the ground outside the building. It is not causing any damage to apartments, however water is leaking into the ground causing a deep puddle near a sidewalk. It is estimated that the repair will take 4 hours and digging and refilling the hole will take another 4 hours.

Three carpentry work items were requested by residents two weeks ago and have been pending. The parts have just arrived. The work will require 1/2 day for a trades-general worker to complete.

Capital - Improvements Resetting loose ceramic floor tiles in a hallway. All of the supplies are available, and the loose tiles are in a heavily used hallway area near the elevators. They are potentially dangerous as a tripping hazard, but they have been in this condition for a number of months. This is a full-day job for a trades-general worker.

Note: Due to illness of one of the trades-general employees last week, the plumbing preventive maintenance work is behind schedule. Out of last week's schedule of 60 apartments to be inspected for plumbing, only 12 inspections were completed. Yesterday (Monday) all 12 scheduled inspections were completed.

As soon as the manager arrives at the office to begin assigning the work several things happen. One of the maintenance staff (a trades general with the best plumbing skills of all staff) calls in to report he is ill and will not be coming to work today. There has been a small leak in the roof causing slight water damage to two units (1503, 1504) for three weeks. Today, for the first time in three weeks, the weather is dry and materials are available for repairing the roof. The work will require 4 hours for the trades general worker to complete alone. However, with help he can complete the work in half that time. The resident in Unit 107 calls with an emergency work request for a plumbing problem that threatens to damage the ceiling of the unit below. The work is not complex but will take 3 hours to complete.

Staff who will be reporting to work today are:

Janitors (2) - The janitors are each capable of assisting trades general workers with any unskilled labor that is required today.

Trades-general (2) - One of these persons is generally good at a lot of types of work but does not have a high skill level in any area. The other is good overall as well as having excellent carpentry skills. The third trades-general who has good plumbing skills is the person who is sick today.

Decide how Mikhail should schedule the work for today with one trades-general out sick.

1. What janitorial work will be done today? Will you consider using one or both of the janitors to assist the trades-generals with any of the other work that you may determine is a higher priority than the daily janitorial work?
2. What will you do about the emergency plumbing leak outside?
3. Since you have just received the parts for the carpentry repairs to residents units, will you actually perform that work today? Remember, the work was requested several weeks ago.
4. Will you call in an outside plumbing contractor to correct the plumbing leak today? This may help you catch up on some work, but it will cost extra money, since your staff could perform the work if they were all present.
5. Will you have the capital improvements (floor tile replacement) done today as originally scheduled?

EXERCISE ON PRIORITIZING CORRECTIVE MAINTENANCE REQUESTS

You are Mikhail Resourceful, manager of a building. It is Monday morning in January. You have an answering machine on which residents of your building may call in maintenance work requests. Your clerk has arrived early on Monday and written up all of the work requests that had been recorded on the machine. She has left a stack of the requests on your desk for assignment to maintenance staff for the day.

In addition to these work requests, you have regular janitorial and preventive maintenance work that must be done. One trades-general has approximately five working hours available and the other approximately 1 hour available for corrective work orders today. It is clear to you that you will not be able to make all of the requested repairs today. While you have basic tools and supplies in stock, you do not have any specialized appliance and electrical parts in stock. Assume that, given the time, your staff could complete any of these repairs.

The following is a list of the requested work orders you received today. Decide on the assignment order of these work orders (use Maintenance Tasks Priorities in this handout) to place the eleven work orders in order of assignment. How many can be completed today, and which, if any, will be delayed? For which items would you call an outside contractor to avoid delays? For any of those delayed, how soon must the work be done to avoid more costly repairs later?

<u>Priority</u>	<u>Order of Assignments</u>
-----------------	-----------------------------

1. Apartment 506 - has a leak under the kitchen sink. The leak is coming from the supply line, and is dripping constantly.
2. Apartment 411 - the lock on the apartment entrance door is broken. The resident has placed a chair inside to the door to keep it closed, but they are afraid to leave the apartment, because they cannot secure the door if no one is inside.
3. Apartment 110 - two burners on the stove top are not working. It is an electric stove.
4. An unidentified caller states that the glass in the rear entrance door to the building was broken last night. Glass is in the hallway, and cold air is coming into the hallway through the broken window.
5. Apartment 215 - The overhead lights in the bedroom and bathroom do not work. The resident states in their message that they have tried new light bulbs, but that does not work.

**Order of
Priority Assignments**

6. Apartment 102 - The toilet has backed-up, and overflowed onto the floor. The resident has mopped up the floor, but cannot flush the toilet. Because this has happened a number of times recently, the wood floor outside the bathroom is damaged.
7. Apartment 1022 - This resident on the top floor has reported several large holes in the walls in the apartment because of a roof leak and would like them repaired.
8. Several callers reported that of the four elevators in the building, two have not been working for the past two days. One of the callers reported having the elevator stop with him inside for ten minutes last night. Eventually, it started again and he was able to get out safely.
9. Apartment 714 - The living room window has a long crack in it. It is allowing cold air to come into the apartment.
10. Apartment 406 - Has water dripping from the kitchen light fixture, and the ceiling is wet and beginning to bulge over the sink
11. Apartment 121 - called to report that the hall lights are out.

Exercise

The following is the routine Weekly Janitorial Schedule for XYZ Property.

Regular Janitorial Schedule XYZ Property

Routine Weekly Schedule

Building or Work Area	MON	TUE	WED	THU	FRI	SAT	SUN
1	A	A	A	A	A	B	B
2	B	B	B	C	C	C	C
3	C	D	D	D	D	D	E
4	E	E	E	E	F	F	F
5	F	F	G	G	G	G	G
Grounds/Swing	H	H	H	H	H	-	-
Grounds/Swing	I	I	-	-	I	I	I

Let us assume that each janitor routinely completes essential routine functions in the first six hours of each day and spends the other two hours doing other special janitorial tasks as assigned.

Let us assume that Janitor A goes on vacation this week. Please adjust schedules of other janitors to make certain the most essential services are covered.

- 1). What are the options of providing 6 hours of janitorial service Monday through Friday at Building 1? What are the pros and cons of each?
- 2). Let us assume that on Thursday Janitor G calls in sick. How would you service Building 5 that day? What janitorial functions will not be completed that day?

Use the form below to create your schedule for the week:

Building or Work Area	MON	TUE	WED	THU	FRI	SAT	SUN
1							
2							
3							
4							
5							
Grounds/Swing							
Grounds/Swing							

**Procurement and Inventory
Management
Unit 4**

Advance Reading

Procurement Inventory Management

Training Objective: To identify the steps in the procurement processes and the management issues related to the inventory of maintenance equipment and goods. This module begins with planning and assessing procurement needs and a brief review of the basic procurement steps. We then look at the different types of arrangements used for procurement and monitoring. Finally, we discuss problems and issues.

We all know about procurements that didn't end as anticipated.

- 1). The hallways need painting. Rather than bidding the job out, the painter who just finished the lobby is asked to paint the hallways. Halfway through the job he tells you the price is twice what he estimated because of the cracks and holes in the walls. The buyer is stuck either paying the higher cost or terminating the contract with the job half done.
- 2). A vendor approaches the manager with a fantastic deal on faucets. The manager orders 30 because they are such a good deal only to discover that historically only 5 faucets a year need replacement.
- 3). The manager hires his brother-in-law to cut the grass. No specifications were written for the job. The grass is not cut often enough nor is the trimming finish work completed. The manager is left with paying for an incomplete job.

Potential procurement problems can be minimized if the buyer follows a prescribed set of steps including planning, writing of specifications, solicitation and analysis of vendor bids and monitoring of performance. The buyer who takes shortcuts is often left with unmet expectations and higher costs.

I. Planning for Procurement

The success of a maintenance program relies heavily on the identification and procurement of the supplies and contracted maintenance services necessary to complete tasks in a timely and cost effective manner. This means planning well in advance for the services and goods intended to be procured. The planning process and definition of needs can be done in conjunction with the annual budget process.

A. Defining and Projecting Needs

- Review and analyze maintenance requests and the preventive maintenance program to determine skills and goods required to complete the projected maintenance needs.

- Assess the skills available on staff and compare to need. Define possible areas where procurement of contracted skills may be needed and the availability of vendors providing such services.
- Assess current inventory and based on janitorial, preventive maintenance, and corrective maintenance history. Project goods and equipment that will be needed.
- From the list of procurement requirements, determine what type of procurement is best suited to meet each need.
 - One-time purchase of goods is generally used when a infrequent need is identified, such as the purchase of special equipment.
 - Indefinite quantity purchase of goods is used when supplies are needed on an on-going, regular basis. Arrangements are made with a vendor to supply goods on a regular schedule (e.g., monthly) or on an as needed basis. Examples include items such as janitorial supplies, electrical fuses, etc.
 - One-time purchase of services is used to fill a special maintenance need that is not continuous in nature. Typical examples include work such as roof replacement, exterior building painting and parking lot repairing.
 - On-going purchase of services is generally used when a routine maintenance function can be performed more cost effectively by a contractor. Example of this might be grounds maintenance or extermination.
- Establish a procurement budget based on assumptions of need and estimated cost. If available rubles don't permit full funding of budget projections, the needs may be prioritized in order of most critical to least critical.
- Designate staff responsible for initiating and authorizing procurements, obtaining bids and selecting vendors, monitoring vendor performance, and approving payment.

II. The Procurement Process

Procurement for both goods and services follows the same general cycle:

- Planning and budgeting procurement
- Approving procurement
- Tracking against the budget

- Estimating cost
- Developing specifications
- Identifying sources
- Soliciting quotations/negotiations
- Selecting vendor
- Accepting delivery/approving payment

A. Setting-Up a Procurement System

The procedures and policies developed for procurement are influenced by staff organization, the kinds (services and goods) and value of the purchases to be made, and the desired level of control over the procurement process. The most common methods of purchasing for property management companies are:

- Development purchase and central payment - The development orders goods and services directly from a vendor. The vendor submits an invoice to the development for the manager's approval. The manager forwards the invoice to the central accounting office for payment to the vendor.
- Development purchase and payment - The development is authorized to purchase goods and services. Generally there is an authorized limit established which may not be exceeded for each purchase. For example, purchases of 1,000,000 rubles or less may be done on-site; any purchase in excess of 1,000,000 rubles must be authorized and processed centrally. Control is exercised by requiring the development manager stay within budget and purchase limitations.
- Central purchasing - The chief of maintenance or the development manager sends a purchase requisition to a central purchasing office. The central purchasing office issues a purchase order to the vendor who supplies the goods or services directly to the development. The development signs for delivery and the central purchasing office pays the vendor being sure the purchase order, vendor invoice, and signed delivery ticket all match. The advantages of central purchasing are: greater control over expenditures; goods and services may be less expensive if central purchasing orders in quantity from a selected vendor and; vendors are dealing with one purchasing agent rather than several developments. The disadvantage is that the centralized process is time consuming and can become insensitive to the special requirements of each development.

B. Developing Specifications

The purchase requirements for both goods and services must be clearly spelled out. Failure to be specific may result in the delivery of unusable or the wrong goods or, in the case of contracts for services, unmet expectations and performance.

- Specifications for goods should include:
 - Quantity required
 - If goods from only one producer/manufacturer are satisfactory, specific type of good including manufacturer requirements, model numbers, quality (e.g., General Electric replacement coil type burner for model number JKSPE07 Stoves.)
 - If goods from several producers/manufacturers are acceptable, identify quality requirements or identify one brand name and specific product as the standard to be met.
 - Delivery/shipping requirements
 - Warranty requirements
 - Provisions for replacement of faulty goods
 - Time requirements for delivery
 - Penalties for non-performance
 - Purchaser's normal payment procedures

- Specifications for services are generally written into a statement of work that should include the following:
 - Detailed tasks to be performed
 - Expected performance standards
 - Required completion dates or other timing or frequency requirements
 - Anticipated type and amount of equipment and materials needed to complete the task
 - Estimate of the amount of time involved (if applicable)
 - Type and qualifications of personnel necessary
 - Any equipment, materials and personnel supplied by the purchaser
 - Any required coordination with purchaser or other vendor activities

When the specifications are completed they are combined with other contract requirements and information into a Request for Proposal (RFP) which is given to potential vendors who respond with proposals.

C. Identifying Sources

- Generally it is to the buyer's advantage to have multiple sources who can supply requested goods and services. However, with an economy in transition multiple sources may not always exist.
- When procuring goods and services for which there are multiple vendors available in the market place, the vendors may be identified and notified by:
 - Publishing notices or advertizing buyer needs
 - Talking to other property managers
 - Industry lists of suppliers
- When few or no sources exist, they may have to be developed. Eventually demand will stimulate supply. In the interim, the buyer may have to be creative and take some risks to develop sources of supply. This may include:
 - Procuring services which places the burden on the vendor to provide materials and supplies. For example, if the maintenance department cannot procure lawnmowers to cut grass, then it may be more effective to contract out the job and have the vendor supply the lawnmowers, fuel and other tools to complete the job.
 - Helping a business get started by guaranteeing a certain volume purchase of goods or services if the vendor can produce them.
 - Pooling the procurement needs of several developments to increase buying power and justify extraordinary effort to find supply sources and arrange shipment.
 - Assisting in the development of joint ventures between foreign producers and Russian vendors.

D. Competitive Bidding and Selection

- Competitive bidding is not a method of purchasing, it is a process used to select suppliers or contractors before the purchase is made. The competitive bidding process means soliciting bids from several sources, evaluating each proposal and awarding the contract. The goal is to attract qualified vendors and to award contracts based on the best price, quality

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- Evaluation of bidder proposals is based on a set of criteria that clearly states what factors will be considered in making a selection. Criteria usually include the following general categories:
 - quality of the goods or known capability of the service contractor
 - price
 - experience of the service contractor or supplier of goods
 - references on contractor or supplier past performance
- Criteria can be quantified by assigning quantitative measures to each of these criteria. Assigning a numerical weight to each criteria allows for variation in the importance the buyer places on each of the criteria.
- An independent estimate made by the buyer prior to reviewing proposals is helpful. This gives the buyer an idea of what a product or service should reasonably cost and provides a starting point if negotiations are necessary. The estimate should include all vendor costs, including:
 - labor
 - materials
 - overhead and general and administrative expenses of the vendor
 - profit

Note: An estimate must also be done during the early stages of procurement planning and budgeting.
- If one or more proposals receive high evaluations the next step is to negotiate the contract. If negotiations involve more than one vendor it is a good opportunity to negotiate for a more favorable price. The greater the competition the better the negotiating position for the buyer.
- Negotiations are usually held only with vendors in the "competitive range" of quality and price. These vendors are often offered an opportunity to make a "best and final offer." The buyer then makes a selection.

E. Accepting Delivery

- Prior to payment, the delivery of service and/or goods must be accepted by the designated staff member.
- For goods this generally means checking what was delivered against what was ordered and what was billed; the checking includes both quantity and quality.

- Accepting delivery of services requires a more comprehensive approach. The performance of a contract for services may involve multiple tasks and extend over a long period of time. A monitoring system must track delivery, identify actual problems and alert the buyer to potential problems before the contract is completed. (See monitoring, Section IV)

III. Procurement Contract Types

The buyer's objective in selecting a contract type is to provide the vendor with the greatest incentive for efficient and economical performance. A firm-fixed-price contract is the preferred type of contract because it best utilizes the basic profit motive of business.

A. Fixed-Price Contracts

The most simple form of a firm-fixed-price contract provides for delivery of a specific good or service a price mutually agreed upon by the buyer and vendor which is not subject to later adjustment. There are variations of fixed price contracts which embellish the basic concept. These range from those contracts which accommodate economic price adjustments in accordance with inflation rates to those which provide special payment incentives for performance. Variations include:

- Fixed-price with inflation adjustments
- Fixed-price with incentive bonuses
- Fixed-price with minimum quantity or volume requirements or price adjustments based on volume

B. Cost Reimbursement Contracts

A cost reimbursement contract provides for payment of allowable contractor costs to the extent prescribed in the contract. Cost reimbursement contracts may have a maximum dollar amount but the difficulty is that this can become a target rather than a limit. Sophisticated cost reimbursement contracts build in a cost saving incentive for the vendor.

The following are the types of cost reimbursement contracts:

- Cost
- Cost-plus-fee plus incentives
- Cost plus fixed fee

1.05

C. Authorization to Proceed or Authorization to Incur Costs

Authorization to proceed is a preliminary letter contract instrument authorizing the vendor to begin performance immediately. The authorization usually sets limits on incurred costs and may contain other requirements. This is preferable to a verbal authorization to proceed. The terms and conditions of a letter authorization are subject to subsequent negotiations when the formal contract is prepared.

D. Purchase Orders

Purchase orders are issued against an established contract or established vendor relationship. They may be used for example by a chief of maintenance who needs delivery of 100 light bulbs when a contract is already in place with a vendor to supply light bulbs.

IV. Monitoring Contract Performance

When a contract is signed, it is the intent of both parties to perform their respective obligations. However, not all contracts are performed according to specifications or other terms and conditions within the required time. Poor performance or late deliveries may cause costly delays. Effective contract monitoring will help ensure that desired goods and services are delivered on time and comply with the specifications of the contract. Development of monitoring systems is influenced by the nature and amount of the procurement. The following elements may be included in a monitoring system.

- Designation of both a staff member responsible for monitoring performance and the vendor personnel responsible for delivery. Accountability and communication are key to successful performance.
- Progress and other monitoring reports required by a buyer's normal monitoring procedures or by the contract itself often provide early warning signs of potential changes, delays, or other problems in contract performance. Written data from the vendor may, however, be difficult to obtain unless it is specifically required by the contract.
- Periodic inspection is an effective method for assuring that contract specifications are being met. For example, a contract for the installation of a new roof may require periodic inspection to assure that the correct methods and materials are being used and that completion dates will be met.

V. Inventory Management

The success of a maintenance operation depends heavily on the quality of the supply system. If the supplies, materials or parts needed to complete a maintenance task are not available the work cannot be done.

The solution might be to buy a lot of everything so that you never run out. This, however is not inventory control nor good business. It ties up large amounts of cash and offers no return on the investment. The key to inventory management is knowing what and how much you need, how often to buy it, and how to securely store it.

A. Assessing Inventory Need

- Using historical data, input from maintenance staff and the preventive maintenance schedule, the inventory list is created. The list reflects everything needed to maintain the property. In preparing the lists it may be helpful to break them into categories such as electrical, plumbing, janitorial and painting. Quality requirements must be clearly determined and agreed upon by the procurement staff and material users.
- The initial lists may be all inclusive but over time items will be added and deleted to reflect changing needs. Ideas on quality requirements and preferred manufacturers/producers may also change over time.

B. Estimating How Much Is Needed

- Once the inventory lists have been developed decisions need to be made about how much of each item should be on hand, and when to reorder as inventory stock is depleted. The materials and supplies can be classified:
 - Common Items - such as paint are readily available, have multiple suppliers and are frequently used. These items are easy to maintain in a regular inventory system and do not need to be stored in large quantities.
 - Uncommon Materials and Supplies - These are critical items which are not available from routine suppliers and may be unique to a property. They may have a long delivery time and substitute parts may not be available. The decision to maintain these items in stock is made on a case by case basis and is influenced by the age and condition of the property and the use of outside contractors who may have a better source of supply.

- The availability of storage space also influences the size of the inventory. Storage should be secured and access limited to authorized staff. Most maintenance storage rooms have at least two areas - one limited access area for portable, valuable materials and other areas for less valuable or bulky items less likely to be stolen.

C. Inventory Systems

- An inventory system is made up of two parts:
 - 1) A method for tracking the number of inventory items remaining at any given time and;
 - 2) A decision to reorder items when the stock reaches a certain level.
- The following factors may be considered in determining maximum amount to stock, when to reorder, and how much to reorder:
 - Consumption Rate - This is the rate at which items are used and is based on both experience and the projections for preventive and responsive maintenance.
 - Delivery time - The time it takes to order, deliver and process receipt of an order can vary tremendously. The process can be lengthy if competitive bidding is involved. The longer the normal anticipated delivery time the larger the inventory needs to be in order to have a responsive maintenance system.
 - Safety Margin - This is the amount of stock needed to cover emergencies and delays in delivery.
- Periodic counts of actual inventory may take place annually or more frequently if desired. This count will help assure that the inventory figures are right. If it is determined that the figures are not accurate, additional security measures may be necessary to protect the inventory or the work order system may need to be reviewed to make certain that materials are being reported when used.

VI. Problem Issues

A. Performance Problems

- Performance problems occur when a vendor/contractor fails to deliver the goods or services in the manner prescribed in the statement of work in the contract. Examples include:
 - Failure to deliver on time
 - Costs that greatly exceed the estimates on a cost-reimbursement contract
 - Delivering of inferior supplies or services
- Potential performance problems can be minimized by clear contract language and an effective monitoring system which tracks delivery and costs during the performance period.
- Serious performance issues which can not be resolved or negotiated between the buyer and the vendor may result in a stop-work order, cancellation of the contract or a contract adjustment.

B. Change Orders

- Change orders may occur at any time during the life of a contract and may be initiated by the buyer or vendor. They are a change in the terms and conditions of the contract.
- The buyer may make changes to clarify contract requirements based on revised needs or estimates.
- The vendor may request changes if he finds the job requires more time and or money to complete satisfactorily. Example: A roofing contractor bid to replace roof shingles on a building. In the course of replacement he discovers that the sub-roof has rotted and needs to be replaced. This is an unanticipated problem not covered in the original contract. The contractor and buyer then negotiate a change to the contract to address the problem.

C. Underbidding

- In the competitive bidding process, bidders may intentionally underbid a contract in hopes of being low bidder and winning the contract. Often underbid contracts require change orders in order to be successfully completed. The result is that the final cost is no less, and in some cases more, than the other bids that were originally received.

Caution should be observed when a bid is significantly lower than the others received. The buyer should be sure that the quality and type of materials, supplies and personnel meet contract specifications. Developing an independent estimate of contract cost prior to complete bidding will give the buyer a range of anticipated cost so that vendors who underbid can be identified and rejected.

**Procurement and Inventory
Management
Unit 4**

Session Materials

Procurement and Inventory Management

I. Planning for Procurement

A. Defining and Projecting Needs

- Analyze total maintenance needs.
- Assess staff skills to determine what maintenance tasks will be done by staff and what will be contracted.
- Analyze inventory/supply needs.
- Determine most appropriate type of procurement to meet needs.
 - One time purchase of goods
 - Indefinite quantity purchase of goods
 - One time purchase of services
 - Ongoing purchase of services
- Develop a procurement budget.
- Designate staff responsible for establishing procurement services, procedures, authorization, monitoring and payment.

II. The Procurement Process

A. Procurement Cycle

- Planning and budgeting procurement
- Requesting and approving procurement
- Estimating cost; budgeting
- Developing specifications
- Identifying potential vendors
- Soliciting bids; negotiation
- Selecting a vendor and executing a contract
- Accepting delivery; approving payment

B. Developing a Procurement System

- Influenced by the types and value of purchase. Various methods include:
 - Development level purchase and central payment
 - Development level purchase and payment
 - Centralized purchasing

C. Developing Specifications

- Specifications for goods should include:
 - Quantity required
 - Specific type of good or quality/performance requirements
 - Delivery/shipping requirements
 - Warranty requirements
 - Replacement provisions of faulty goods
 - Timing of delivery
 - Penalties for non-performance
 - Normal invoice/payment procedures
- Specifications for services include:
 - Detail of work required
 - Performance requirements
 - Frequency of work
 - Type and amount of equipment and materials needed
 - Estimate of time involved
 - Type and qualifications of personnel
 - Equipment, materials and personnel supplied by buyer
 - Coordination with other vendors or purchasers

D. Identify Potential Vendors

- Publish notices/advertise
- Sharing among management companies
- List of suppliers
- Developing sources

EXERCISE I

Group Discussion

The ABC Management Company has decided to procure janitorial services for the Grand Apartment Building. The building is 28 years old and has 240 units on 12 floors. All hallway and public areas are ceramic tile. Trash is taken to dumpster in the parking lot by residents. There are 4 elevators, 2 stairwells and a lobby.

1. Prepare a basic set of specifications to be included in the request for proposals. (List the tasks to be performed daily, weekly, monthly and quarterly. What are the work methods and performance standards to be met?)

TASKS	FREQUENCY (Check one for each task)			
	D	W	M	Q

2. What should the bidder submit to you in the proposal?
3. How would you establish a reasonable price for this service?
4. Where do you find bidders?
5. Are there any minimum eligibility requirements such as experience or submission of references.
6. What type of procurement should this be? (One-time for fixed period or ongoing)
7. What kind of contract is best suited for this type of purchase?

III. Vendor Selection and Contracting

A. Competitive Bidding and Selection

- Evaluation of proposals is based on criteria such as technical capability, quality, cost, experience, past performance and references.
- An independent buyer estimate helps buyer to determine reasonableness of vendor bids.
- Negotiating with potential vendors is a good opportunity to buy at a more favorable price.
- Beware of bids that look too low or that are not specific about how the job will be done.

B. Types of Procurement Contracts

- Fixed price contracts call for delivery of predetermined goods and services at a predetermined price.
- Cost reimbursement contracts provide for reimbursement of allowable incurred costs plus a profit.
- Authorization to proceed or incur costs are informal agreements authorizing the vendor to begin performance subject to later negotiations and contract execution.

C. Monitoring Contract Performance

- Designate staff who is accountable for monitoring.
- Monitoring systems are influenced by the size and type of procurement. Poor performance or late deliveries may cause costly delays.
- Progress reports and/or periodic inspections are effective monitoring methods.

EXERCISE II

Role Play

The ABC Management Company has decided to contract out the painting of the doors, walls, ceilings and trim in hallway at Grand Apartment Building. It has been 10 years since they have been painted. The specifications call for:

- Washing down of surfaces
- Replastering, patching, caulking were needed
- Priming of bare surfaces
- Two coats of paint
- The grade of paint is specified
- The job must be completed within 90 days.

Three bids have been received. All of them are within an acceptable range based on the independent estimate that ABC developed. The bids are all for a fixed price.

Mr. Middle Range - Addressed all of the specifications. Cost is 5% below ABC's budgeted amount, between Mr. Low and Ms. High. Reference checks are good.

Mr. Low Bid - Submitted the proposal for the lowest cost (15% below ABC's budgeted amount) but the management company and owner have serious doubts about the quality of work and think the scope of work was under estimated in the bid. Reference checks are mostly good but some are mediocre.

Ms. High Bid - Submitted the highest cost proposal but the evaluation process rated it the best quality. The cost is 5% higher than ABC budgeted. Reference checks are excellent.

Break into 4 groups. Group 1 plays the role of the owner/management company. Groups 2-4 play the roles of the bidders.

1. What kinds of questions will the owner ask the vendors? Common questions? Questions unique to each bidder?
2. How will the vendors respond?
3. What will each vendor offer or propose to do to make their bid more competitive in cost and quality? What is their best and final offer?
4. What areas might be negotiable for the owner? Each vendor?

5. What kind of monitoring system will be developed to assure performance?
6. How and when is payment wanted by the bidder? Should the owner do it?
7. Will the owner assess penalties if job is not completed according to specifications and on time.

IV. Inventory Management

A. Assessing Needs

- Use historical data, input from maintenance staff and preventive maintenance schedule to create needs list.
- Amount of inventory is influenced by availability and storage space.

B. Tracking and Reordering

- Reordering is determined by consumption rate and delivery time.
- Items which are used must be recorded so that an accurate count is always available. Frequently this is tied into the work order system.
- Periodic counts will assure that inventory is correct. If actual numbers don't agree with the tracking system security may have to be increased or work order system checked.

EXERCISE III

Inventory Management Individual Exercise

The ABC Management Company has assigned the maintenance foreman the task of maintaining an inventory of kitchen faucets and faucet parts for the Grand Apartment Building, a 240 unit, 12 story building. The foreman has looked at the preventive maintenance plan and the work orders from the previous 12 months and found the following:

- The items he needs to analyze are:
 - complete faucet sets
 - replacement stems/barrels
 - replacement washers
- The preventive maintenance plan estimates a need to completely replace 48 faucet sets a rate of 4 per month over the next year because of severe corrosion and repeated need for repair. As a preventive measure the plan calls for replacement of all washers (2 per faucet set) on a regular cycle of every 2 years so that 240 washers (120 sets x 2) must be completed each year to maintain the 2 year cycle. Stems will only be replaced as required. It is estimated that 30 stems will be replaced in the coming year.
- An analysis of the previous years work orders shows 56 requests to fix leaking or dripping kitchen faucets. The repairs required were as follows:
 - 6 total faucet replacements
 - 10 stem replacements
 - 40 washers replacements
- The foreman knows that the time between ordering and receiving faucet parts is anywhere from 2-6 weeks.
 1. Estimate the maximum quantity of each of the faucet materials that should be held in inventory. (Assume that on the first day of the year maximum quantities were on hand.)
 2. At what point should each of the parts be reordered to assure availability to meet repair requests and the preventive maintenance schedule? What are the inventory levels at reorder? In which months does reordering occur?

**Real Estate Management
Unit 5
The Roles of the Owner and
the Property Management Company**

Advance Reading

THE ROLES OF THE OWNER AND THE PROPERTY MANAGEMENT COMPANY

Training Objective: To review likely apartment building ownership and management responsibilities under the proposed Russian privatization experiment. We will discuss the structure of ownership, review important documents, and discuss the owner's decision making authority and the property management company's responsibility to carry out the owner's wishes. Roles of the owner and property management company in the management of a maintenance program will be defined. We will also discuss the methods by which the management company provides information to the owner on the management of the property and by which the owner monitors management company progress.

OWNERSHIP STRUCTURE

A United States Model - Condominium Ownership:

- In the United States a commonly used form of ownership of property is condominium ownership. Initially, a condominium is owned by a developer or builder, and as apartments are ready for occupancy they are sold to individuals. The individual purchases and owns the interior of the apartment and a share of all the common elements of the development or building (including hallways, playground, parking, heating plant, etc.). During the initial sales period, the developer retains ownership of all of the common areas until a defined percentage of the individual residential apartments are sold (often 95%). Once 95% of the apartments have been purchased by residents, the ownership of the common elements is transferred to the collective owners.
- The form of organization of these owners is an Association, with each apartment owner having an equal vote in governing operations. The Association is responsible for the maintenance, upkeep, management (including financial management) of common areas. Monthly fees are assessed to owners to pay for the upkeep of the common elements. The more upkeep owners provide, either voluntarily or by formal agreement, the lower the assessed fees need be.
- Condominium associations form a Board of Directors by electing individual apartment owners to serve in a governing capacity for a specific period of time (anywhere from one to three years). These individuals are not paid by the Association, they are volunteers and perform these duties in addition to their regular occupations. The Board of Directors is responsible to assure that adequate management is provided to the building to maintain an acceptable level of appearance and repair so that the individual apartments retain their value. Boards of Directors often appoint committees to oversee particular areas of management, such as maintenance, landscaping or recreation facilities.

- Most condominium associations hire a management company to perform the management work. The management company signs a contract to perform specified management services for a fee and then hires the staff and supervises the daily management activity. The Board of Directors works with the management company in goal setting and direction, but allows the management company to make everyday decisions on management issues.
- Some condominium associations are self-managed. Instead of hiring a management company to perform services, an individual is hired to act as manager who reports directly to the Board of Directors. This form of management is often more time consuming for the Board of Directors because as the supervisor of the manager they are more involved in the everyday decisions of managing the property. Top quality management is more difficult to achieve in a self-managed condominium, because the Board of Directors will need to learn the business of property management in order to effectively direct the manager.

Russian Variations on the U.S. Condominium Model:

- Three forms of ownership similar to condominium ownership as described above may be found in Russia during the privatization experiment:
 1. Ownership of an entire building, including common areas, by the DEZ;
 2. Ownership of individual apartments by some residents and ownership of other apartments and common areas by the DEZ. This arrangement is similar to the condominium ownership described above during the time when the developer still owns more than 5% of the units, and retains ownership of the common areas, or;
 3. Ownership of all apartments by residents.
- If ownership includes the DEZ as well as individual apartment owners, a structure for owner decision making must be developed and described in documents similar to the condominium documents described below. Collective ownership may be structured in any of the following ways:
 - a Board of Directors, composed of residents (and also perhaps DEZ officials representing non-privatized units), having overall governing authority;
 - the DEZ, acting as the overall governing authority, with advisory input of individual apartment owners;
 - committees of residents, having decision making power in particular areas;
 - or
 - a combination of any of the options above.

- Regardless of the ownership structure, or the nature of the entity with decision making authority, in order to provide effective management there must be a clear structure of management authority on behalf of all the owners.
- The owner entity will then be responsible for goal-setting and selection/management of the management provider.

KEY DOCUMENTS CONTROLLING THE PROPERTY MANAGEMENT ARRANGEMENT

Documents used in the United States to define the relationship between owner and management company, and which specify management activities, authority and responsibility, are described below.

1. **Management Contract or Agreement:** A contract between the owner and property management company specifying all of the duties to be performed by the management company and the fees earned (just compensation) for performance of the required duties. The contract may be quite specific regarding the types of maintenance activities performed by the agent and those contracted out. It generally also specifies the amount of money which can be spent on management without specific owner approval and at what point the owner must be consulted.
2. **Management Plan:** A management plan is a strategic plan describing general methods which will be used to accomplish the management objectives of the owner. It will describe the maintenance and budgetary processes and methods for procuring inventory and services. The management plan generally provides greater detail in describing management activities than does the management contract. Sometimes the management contract includes all items which would otherwise be in a management plan and there is no separate plan document.
3. **Operating Policies and Procedures:** Policies and procedures carry the strategy outlined in the management plan to an even greater level of detail. They generally consist of a manual, or collection of instructive memoranda describing specific procedures used to carry out maintenance and management functions. Not all management companies have developed these procedures, but those who are the most effective usually have such written policies for critical activities..
4. **Personnel Policy:** A written policy governing employment practices that will be followed by the employer, describing terms and conditions of employment. Each property management company should have a personnel policy describing policies, terms and conditions of employment. This policy usually applies not only to the property management company's personnel who are paid from the management fee, but they also apply to the personnel at the property who are paid from the operating budget. Some of the specific items included in the policy will be: staff training, promotion, pay dates, absence from work, expected employee conduct, disciplinary actions in cases of employee misconduct, holiday schedules, etc. The personnel policy may be a part of the management plan.

5. **Budget.** A document projecting income and expenses for a property for a specified period of time, generally one year. Expenses are divided into categories by type such as utility costs, administrative expenses, repairs, trash disposal. See Unit 2 for more detail on budgets.

6. **Condominium Documents:** A set of rules and regulations by which an association of owners conducts business. The documents will specify how often the owners must meet to discuss management issues, how they will decide on the management and maintenance policies and practices of the property, and how many owners must be present to vote and make binding decisions on management practices and procedures. Requirements for elections of condominium Directors and approvals of key decision such as monthly condominium fees and capital assessments are also specified in these documents.

7. **Dwelling Lease Agreement:** A contract between the owner of a unit or building and a resident (non-owner) of the apartment. The lease provides possession of the apartment in exchange for rent. It specifies when rent is due, who performs maintenance, and other conditions placed on the occupancy of the apartment. Some lease provisions will be the same as are included in the condominium documents for that unit.

8. **House Rules:** A listing of rules related to residency in a building to be followed by residents, such as:
 - how to dispose of garbage;
 - required quiet hours;
 - where to pay the rent;
 - restriction on pets, etc.

ESTABLISHING OWNER ASSET MANAGEMENT GOALS

- The owner must have a long term goal for asset management which guides the management company. Several alternative goals are:

- **Maintaining the status quo:** This goal is to continue the same level of service and maintain the property in the same condition, with no deterioration. This is an appropriate goal when there are no financial resources to make improvement to the property. It is important in such circumstances not to allow deterioration which may cause the value of the building and apartments to decrease.

- **Rehabilitation:** Refers to returning of a building to sound condition without changing its basic use. It can mean changing the cosmetic appearance of the property or repairing part of the building where maintenance has been deferred. The goal is to return the property to a well-maintained condition. The level of rehabilitation may vary depending upon the money that is available and the condition of the property. Cosmetic rehabilitation may mean attention to form

rather than substance (for example, patching and painting rather than major replacement of building elements). More extensive rehabilitation might include refinishing tubs or kitchen cabinets or restoring playground equipment. One effect of rehabilitation may be to increase the value of the building.

- Modernization: The purpose of modernization is to replace out-of-date items with modern, cost-efficient materials, or items that increase operating efficiency. Modernization reduces the loss in value due to changing styles or functions, which is called functional obsolescence. Essentially, modernization changes the property to meet the demands of the market. The ultimate goal of modernization is to extend the property's economic life as well as increasing value.
- Conversion: This is a change in the use of a property to create or increase value. Conversion could be changing the use of the first two floors of a residential building into commercial space, or privatization of apartment ownership. In the United States conversions occur generally because a change in use is the best financial alternative for the owner. In the case of apartment buildings, the desire in the market economy for homeownership often results in conversion to condominium ownership as the best financial alternative for a property owner.

IMPORTANT CONSIDERATIONS IN OWNER GOAL SETTING

In condominium ownership there are many ownership voices, and the wants and needs of individual owners may vary widely. Establishing common goals may be difficult. Adding to this difficulty is the fact that the DEZ interests as the owner of non-privatized units may diverge from the general interests of privatized individual owners.

The ultimate goal of any owner may be achievable only in stages. For example, if financing for required rehabilitation or modernization is not available, the owner's short term goal might be maintaining the status quo until rehabilitation or modernization. Deterioration of the property would simply increase the future extent (and therefore the cost) of rehabilitation or modernization needs. If increased operating income is to be obtained through higher rents, residents will only be willing to pay higher rents if they see that the property will at least be maintained at its current level and that value is being maintained.

If financing through another source becomes available for rehabilitation or modernization, the amount of financing provided may be directly related to the established value of the property. Value is directly related to the condition of a property.

- When residents of a building are the owners and are willing to volunteer to provide some services to a building, more ambitious goals may be reached than would be possible based on operating income alone. For example, if the residents of a building are willing to provide the hallway cleaning services, then the money which might have been budgeted for that task may be spent on something else, such as purchasing paint to repaint the hallways, or glass to replace broken panes in the lobby windows. Increased volunteerism may be a goal which will assist in reaching the asset management goals.

MANAGEMENT GOALS

- Based on the overall goal established for the property (status quo, rehabilitation, conversion), the owner must determine specific management goals that will enable the owner to meet his overall objective. The owner should seek input from the property management company as to realistic management expectations and cost considerations.
- Management goals typically include:
 - Provision of an attractive, clean environment free of hazards.
 - Operation of the building in the most economic way.
 - Timely capital investments and improvements.
 - Meeting resident expectations for routine services and repairs.

See Unit 2 for additional information on management goals.

THE ROLE OF THE MANAGEMENT COMPANY

- The property management company is charged with supervising the daily work of management and maintenance in a way that meets the asset management goals determined by the owner. The specific requirements of meeting these goals are defined in a management contract signed by the management company and the owner. In this contract, property management company duties and the fees that will be paid by the owner are described.
- An owner and a property management company should negotiate the specific services that will be provided and the fees that will be paid for provision of such services, and then prepare a written contract describing responsibility, authority and expectations of both parties. Typical items to be covered in a management contract are:
 - General supervision of staff who do management and maintenance work at the property.
 - Establishment of standard operating procedures, management plan and required policies.

- Regular property visits (at least once a week) to monitor property conditions.
- Training of staff at the property.
- Assistance to staff at the property when problems arise.
- Supervision and approval of all procurements of goods and services.
- All accounting and financial management functions, including budget preparation.
- Monthly reports to the owner on financial condition, property maintenance activities, rent collections, and other critical management concerns.
- Assistance to the owner in preparing and implementing a plan for asset management and value enhancement.

Prior to signing a management contract, the owner and the property management company must agree on the goals. It is critical that the goals be realistic. Unrealistic goals will nearly always ensure failure of the property management company, and cause financial damage to the owner and residents of a building.

While respecting the owner's goals and decisions, a good property management company will be assertive in communicating realistic expectations and activities even when such advice conflicts with the owner's stated expectations. Owners should look for property management companies that will be assertive in accomplishing management activity, and open in giving professional advice to the owner.

Even though the final decision making authority rests with the owner, once a management company is hired, the owner must trust the agent to make basic decisions regarding management activities, and not attempt to direct every daily activity. Such interference will cause difficulties in the relationship, and may result in the owner doing the work of the management company, even when the management company is being paid to provide the daily decision making.

Generally, the activities described in a contract are not detailed. The property management company will specify management activities in more detail in the form of a management plan, and operating policies and procedures.

OWNER/PROPERTY MANAGEMENT SKILLS AND TECHNIQUES

As well as having a contract, a management plan, operating policies and personnel policies, owner and managers use a number of management techniques to more effectively carry out their role. Effective management techniques include:

- Managing the manager. While regular reporting will identify how well the management company is performing, the owner is also responsible to manage the manager. This is similar to managing and motivating any other staff or a vendor. Managers often have additional motivation in the form of incentive fees earned for good performance (see Unit 1 for

discussion of management fees). It is important that the ownership entity identify one board member to manage the manager. Generally the chairman of the board will take the lead in supervising a manager.

Running a monthly meeting of the owner and the management company. Agendas should be set and provided to meeting participants in advance. One person should "run" (take control over) the meeting. Attention should be focused on covering all agenda items, but flexibility to discuss new business or unscheduled items must be maintained.

Making interim decisions. When unexpected events occur between regularly scheduled board meetings quick decisions need to be made to solve problems immediately. Boards should develop policies related to interim decision making and must decide how much decision making authority to allow the manager, and when the board should be consulted. U.S. owners often delegate authority based on the cost of solving the problem. Many boards have a progressive system for dealing with interim problems, allowing the manager to make decisions up to a maximum cost. If the cost exceeds the manager's authority an executive committee (only several board members) is authorized to act. If the interim issue is quite costly a special unscheduled board meeting may be called.

Roles of Committees versus a Board of Directors. Committees can concentrate on one particular area of management in more detail than the board will have time for. Committees can be appointed by the board of directors to provide advisory services. They may be composed of persons not elected to the board, involving more residents in the management process. This technique spreads the volume of management work over a greater number of persons, so that more time can be devoted to important issues, and so that more residents are involved in the management of the building.

Role of the Chairman of the Board. The Chairman should subscribe to the notice of fiduciary responsibility described below. The influence of the chairman is best used administratively in assuring that all of the decisions that need to be made are made, and to assure as best possible that the interests of the building and all the residents are considered. The position should not be used to force the chairman's individual wishes on the board, but to advise the board on activity.

Role of the Treasurer. The treasurer monitors the overall financial condition of the property, reports to the Board of Directors on financial conditions and makes financial policy and procedural recommendations to the Board.

Understanding of Fiduciary Responsibility. All members of the Board of Directors and the Chairman must recognize that all decisions must be made in the best long-term interest of all residents and not for the particular good of any individual. Board members must be especially careful not to use their position to benefit or appear to benefit themselves. Acting in the interests of individuals rather than in the interest of all residents can cause serious management and maintenance difficulties. Activity in other than a fiduciary manner can make divisive issue almost impossible to resolve.

REPORTING

- There are two reasons an owner needs reports from the property management firm:
 1. to evaluate the conditions and activity at the property, and;
 2. to evaluate the performance of the property management firm.
- A good management contract will require regular reporting by the property management company to the owner on activities and achievements. Information reported to the owner might include the following:
 - Financial reporting: The most helpful type of financial reporting is a comparison of actual income and expenses to budgeted income and expenses. If the actual expenses are less than budgeted, the owner will want to know whether all the planned work has been carried out, or whether less work than anticipated is needed on the property. If the expenses are more than budgeted the owner will want to know why. Was the necessary work underestimated, have the utility costs been underestimated, have more than the budgeted supplies been purchased? Based on the reported information, the owner may want to revise the short term maintenance goals, so that actual and budgeted expenses and income balance.
 - General Financial reports provided by the management company to the owner should include periodic Balance Sheets, Operating Statements and projections of cash flow. Rent Receipts reports should include the amount of rents charged and the amount paid. These should include aged resident rent delinquency information as well as current month delinquency information.

Key Performance Measures:

- Ongoing Maintenance: The property management company should report on the completion of scheduled activities based on the maintenance plan. Has any scheduled work been deferred and why. Is the management company have difficulty in obtaining necessary supplies? Are the supplies more expensive than anticipated? Are the only supplies available inferior quality?

Maintenance Reports including summaries of all types of work scheduled, completed and deferred. Some U.S. companies also compile information on productivity of individual maintenance staff.

- Capital Improvements: What is the status of all scheduled improvements? Have improvements completed been within the budgeted expense? Is pending work on schedule? Are budget amendments needed? Does original scope of work need change?
- Lease and By-Law Enforcement: Have any unusual activities occurred in any units that the property management company is aware of. Do any such activities have an effect on building wide maintenance activities or costs. What is the property manager doing to correct the problem?
- Move-in and Move-out activity: The owner will want to know who is living in the building, and who owns each individual unit. Information on unit swaps or privatization will be important for ongoing activity. Occupancy reports should include information on move-ins, move-outs, unit swaps, unit leases, units privatized and vacant units.
- Personnel Actions: Have any staff resigned, been fired, or hired? What staff training has occurred or has been scheduled. Which positions are vacant. Is the property management agent have difficulty in finding qualified staff at the budgeted salary? Have any staff disciplinary actions been taken?

When reports are provided, the owner will have to make decisions regarding revision of goals and budgets based on actual activity. The owner will want to have enough information to determine whether the unexpected information reported is within or outside of the control of the property management firm.

- Owners may conduct periodic (semi-annual or quarterly) first-hand reviews of the property management company's performance including a review of accounting records, work order records and a walk through inspection of the property. An independent audit provides another way of confirming the information provided by the property management company.

POTENTIAL PROBLEMS AND SOLUTIONS

- Problems typically found in U.S. condominium associations, which might also affect privatized Russian apartment buildings, and possible solutions include the following:

Divisive boards or resident owners. Many involved owners consider only their personal interests in management decision-making. A commitment must be made by the governing body to put aside all personal interests and to act for the good of all. The entire board is responsible to act this way and to not allow other board members to act based on self-interest. Even where self-interest is not a problem, resident owners may become divided over particular issues. Effective leadership and open communication of differences can usually result in an agreeable compromise.

New boards want new managers causing a lack of management continuity. When a new Board of Directors is elected, they may decide that management complaints and ills are due to the lack of competence of a management firm. Frequent changes of Boards and changes in management companies can bring any management progress to a standstill, because all the new players must learn the system before they become truly productive. Board members terms of office can be staggered so that no wholesale change in the board occurs at once. A board with both long term and newer members is more likely to achieve a continuity with a management company, or be able to make a fully informed decision to find a new management company.

Over-stretched managers. It is not unusual in a troubled property to find that the manager has been assigned to personally see to every task and that owner demands and requests are never-ending. Because of over-reliance on the manager the owner may believe the manager is not performing. Owners must recognize the limitations of one manager and while alot should be expected of a manager, owners must realize that overloading responsibility results in missed deadlines and inadequate performance. Agreement should be reached with the manager of the job expectations, and the manager must be assertive when too many expectations are placed on the position.

- Showing progress when there is no budget flexibility. When a new management system or policy is implemented, residents look for quick improvement and change. If they do not perceive improvement, dissatisfaction with the management system often results. If no funds are available to make property improvements some improvement needs to occur in the perception of residents so that they begin to have confidence in the management and accept the changes in policy. Higher standards for cleaning services through better management, quicker response times on requested maintenance work (assuming the supplies are available) are two short-term actions which can provide residents with a feeling of improvement without costing additional money.

- Communication with other Owners. Some Boards become an apparently impenetrable group. This can cause discontent among other owners not intimately involved with management. Owner groups should be sensitive to this issue and should use governing policies which promote inclusiveness and participation. The committee system can be very helpful in getting many more owners involved. There is potential for the DEZ and individual owners to disagree on management direction, goals and policies. Open discussion of the goals for the building and the good of all residents must occur. Residents must be able to see a rational decision making process.

If the owner believes that management performance problems are resulting from inadequate management, he must determine whether the problems can be solved through working with the management company, or whether the contract should be terminated and a new management company hired. Generally, it is to the owner's advantage to try and solve problems with the current management company, because it is so time consuming to find, negotiate with and transfer ongoing management responsibilities to a new management company.

**Real Estate Management
Unit 5
The Roles of the Owner and
Property Management Company**

Session Materials

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THE ROLE OF THE OWNER

A. Ownership Structures:

1. Ownership by one organization - the DEZ.
2. Collective ownership by individual apartment owners
3. Combination of individual owners and the DEZ

B. Key Documents Controlling the Property Management Arrangement

1. Management Contract or Agreement
2. Management Plan
3. Operating Policies and Procedures
4. Personnel Policy
5. Budget
6. Condominium Documents
7. Dwelling Lease Agreement
8. House Rules

C. The Role of the Owner - Goal Setting for the Physical Condition of the Building:

1. Maintaining the Status Quo
2. Rehabilitation
3. Modernization
4. Conversion
5. Sources of financing for improvement:
 - 1) Rents
 - 2) Assessments
 - 3) Sweat Equity
 - 4) Loans
 - 5) Grants

ROLE PLAY - ESTABLISHING OWNER GOALS FOR A PROPERTY

Background:

The building, Market Economy Towers has 240 units on 12 floors. While it needs both cosmetic and capital improvement work, it is in reasonably good condition. The lobby and hallway are not clean, and have not been painted for 10 years. The elevators break down regularly and are repaired at minimum cost. They could be refurbished at a reasonable expense by a contractor, but this has not been done. There are some roof leaks which affect about five residents of the top floor. Their apartments have stained and cracked ceilings and walls from the leaks.

There are many young children in the building, but the playground equipment outside has deteriorated badly from use and weather conditions. Some light fixtures in the hallways and stairwells have been broken and need new globes, some do not work at all. Other interior hallway elements also need repair. The general exterior appearance of the building could be greatly improved by adding some shrubbery around the building and moving the dumpsters to the rear entrance and enclosing them. Because the plumbing is twenty years old, periodic leaks are occurring and need attention. No inspection of all of the plumbing has occurred for anyone to know how serious these periodic leaks are, and whether there are leaks that have never been reported by residents.

The building is partially privatized. The DEZ acts as the owner of the non-privatized apartments and the common elements of the building. The ownership structure is a board of directors. Several residents who have privatized are on the board of directors, but the DEZ holds most of the units and therefore the most control in decision making. In order to make any financial decisions regarding work on the property and increasing rents, the DEZ must approve the action.

Instructions:

Break into three groups. At each table you will be assigned the role of one group. Once your table has been assigned a role, you will discuss your group's goals for short and long term management of the building and what specifically should be accomplished the first year of privatization. What would you like to have accomplished in years 2 and 3? What is your long-term "blue sky" goal?

One spokesperson from your table will then be chosen to act out the role of your group along with the other two actors. The actors will be discussing the goals that should be established for the management of the building. Each of you has some specific reasons for wanting somewhat different goals. Can you come to consensus on what the goals for the management company should be for the first year of privatization? What about the second and third years?

The three groups are:

- Low-income residents - assume you have not privatized your apartments, and are not sure you will ever want to because you think all costs of living will increase as a result of this privatization process and that dwelling unit resale is unlikely. You are having great difficulty in paying all of your living expenses now and believe you will simply not be able to afford any higher rent.
- Higher-income residents of a building - Assume you have already privatized your apartments. You decided you wanted to participate in homeownership, and really want to see some improvement in the quality of your apartment and the building as a whole. You would like to see the roof repaired, some extra clean-up, landscaping, installation of laundry facilities and some other improvements. It is OK with you if it will cost you more every month as long as you can see some improvements being made for the extra money you will be spending.
- The DEZ - Because you still own a number of the units in this building you must keep in mind that you have the interests of the DEZ to consider as well as the interests of all the non-privatized tenants in the building. Your primary concern however is that the DEZ still has a lot of responsibility for individual apartments, and the common elements. With some cosmetic improvements you will be able to convince more residents to privatize, but many of the residents who have not yet privatized are low income and will not be able to afford any increase in rent. While the building could use much improvement, there is no funding available unless either a very large tenant rent increase or increase in the government operating contribution.

THE ROLE OF THE PROPERTY MANAGEMENT COMPANY

A. The Role of the Property Management Company

1. Implementing the owner goals set forth in a management contract and plan, such as:
 - a. Maintaining an attractive, clean, environment free of hazards.
 - b. Operating the facilities in the most economic way
 - c. Meeting resident expectations for routine services and repairs.
 - d. Staff supervision and training
 - e. Development of Operating Procedures
 - f. Property visits
 - g. Supervision of procurement
 - h. Assisting the owner with improvement plans
2. Negotiating goals with the owner.
3. Providing honest and professional advise to the owner.
4. Reporting to the owner.

OWNER/PROPERTY MANAGER SKILLS AND TECHNIQUES

A. Effective management includes:

1. Managing the manager
2. Running meetings
3. Making interim decisions
4. Establishing roles of Committees and Board of Directors.
5. Defining the role of Chairman
6. Defining the role of Treasurer
7. Understanding Fiduciary Responsibility

DISCUSSION EXERCISE

Assume that this group is the Board of Directors of Market Economy Towers. (See the project description from the previous exercise). We are preparing to hire a property management company. At our Board of Directors meeting we must prepare a list of the services we expect to be performed by the management company. We need to agree on the scope of the services, the frequency of each service and the standard to which the services must conform. Remember, as a Board member it is each individual's responsibility to act in the best interests of the building.

REPORTING, MONITORING AND PROBLEM SOLVING

- A. Owners receive reports for two reasons:**
 - 1. To evaluate the condition of the property, and;
 - 2. To evaluate the performance of the property management company.

- B. Management Company reporting consists of:**
 - 1. Financial Reports
 - 2. Ongoing Maintenance Reports
 - 3. Occupancy Reports
 - 4. Capital Improvements Program Reports
 - 5. Personnel Information.

- C. Owner monitoring activities include:**
 - 1. Property visits
 - 2. Periodic reviews of financial records, work order and procurement systems, etc.
 - 3. Comparison of budgeted to actual expenses.

- D. Problem recognition and resolution:**
 - 1. Divisive boards or resident owners.
 - 2. Lack of management continuity
 - 3. Overstretched managers
 - 4. Showing progress when there is no budget flexibility
 - 5. Communication with other owners

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INDIVIDUAL EXERCISE

You are a member of the Association Board of a 240 unit building. In advance your monthly meeting with the property manager you have received the attached monthly report on capital improvements. After reviewing all the information reported, what questions do you have for the property management company?

Capital Improvements Program Report June 1992

WORK ITEM	Budget			Performance	
	1992 Annual Budget	1992 Year to Date Budget	1992 Year to Date Actual	1992 Performance Objective	1992 Actual Performance
Window Caulking (Staff)	200,000	100,000	120,000	All 240 units completed this year	90 units complete.
Hallway Ceramic Floor Tile Repair/Replacement (Staff)	180,000	90,000	140,000	1 hallway per month All 12 floors done this year	4 1/2 hallways complete.
Playground Equipment (contracted)	30,000	30,000	0	Equipment purchase 3/1/92 100% completion by June 30, 1992	Equipment not purchased. Construction not started.

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**Capital Improvements Program Report
June 1992**

Work Item	Association Board Questions	Property Manager Answers
Window Caulking	Why were only 90 units completed when in one half year 120 should have been done?	Didn't expect to do any units in Winter. Will do 30 units per month between April and November. Are on Schedule
Window Caulking	Why is actual cost over budget?	Bought all caulking material at one time.
Hallway Floor Tile	Why are we behind schedule? We should have done 6 floors.	We ran out of tile midway through 5th floor. We can't find any anywhere.
Hallway Floor Tile	Why are we overbudget on costs but not on schedule.	Our staff is slower than we thought they would be.
Playground	Why hasn't equipment been ordered?	Resident recreation committee hasn't decided what to order. Their preliminary plans would cost 60,000.

What would be your recommendations, if any, in each of these areas.

Real Estate Management
Unit 6
Financial Management
Advance Reading

FINANCIAL MANAGEMENT

Training Objective: To review the most important Accounting and Financial Management aspects of the Real Estate Management business. This unit is divided into six major sub-areas: 1) the Real Estate Management Chart of Accounts, 2) Budgeting, 3) Management of Expenses, 4) Management of Income, and 5) Financial Controls and 6) Financial Reporting.

I. INTRODUCTION

The key elements in the financial management of a real estate development are as follows:

- o Preparing an annual operating budget of income and expense based on previous operating history and on maintenance and management plans for the budget year.
- o Collecting all income due.
- o Controlling expenses so that they do not exceed budget.
- o Paying expenses promptly; paying only the amount due for goods and services satisfactorily provided.
- o Maintaining up to date, accurate, and complete accounting records of receipts, disbursements, and other financial transactions.
- o Preparing timely reports of financial activity.
- o Evaluating financial results and current status to adjust the operating budget and maintenance and management plans and to make other operating decisions.
- o Maintaining internal controls to prevent financial recordkeeping errors and fraud.

- o Being prepared for "worst-case" circumstances with adequate financial reserves or other contingency plans.
- o Using outside accountants to conduct periodic financial audits as required by owners, lenders or government agencies.

II. GENERAL LEDGER CHART OF ACCOUNTS

The central financial document for any business is the General Ledger. All income, expense and other financial transactions are recorded to this document. Therefore, the general ledger for any business must be subdivided in a way that accommodates all the categories of income and expense that are particular to that business. The way in which the General Ledger is subdivided is called the Chart of Accounts. The important thing is that the Chart of Accounts accommodates all the potential financial transactions of a business and that it be detailed enough to provide useful management information.

In the United States, most real estate owners use a chart of accounts similar to the following. A separate set of financial records ("books") is kept for each property. Separate bank accounts are also desirable, but with good accounting, consolidated bank accounts are workable.

You will note that this Chart of Accounts includes all the accounts necessary to document all income and expenses and to prepare the Operating Statements and Balance Sheets which we discussed in Unit 1 of this training program.

SAMPLE CHART OF GENERAL LEDGER ACCOUNTS

Property Management (Kept on a per development basis)

ASSETS

Cash on Hand (petty cash)
Cash in Bank, Operating Account
Cash in Bank, Tenant Security Deposit Account
Cash in Bank, Operating Reserve Account
Cash in Bank, Reserve for Replacement Account
Tenant Accounts Receivable
Accounts Receivable - Other
Pre-Paid Expenses
Fixed Assets - Equipment and Furnishings
Fixed Assets - Building
Fixed Assets - Land
(Less Depreciation of Equipment, Furnishing and Building)

LIABILITIES

Accounts Payable
Short-Term Notes Payable
Long-Term Notes Payable
Security Deposits Payable
Principle - 1st Mortgage
Principle - 2nd Mortgage

CAPITAL (Owners Equity or Net Worth)

Owners Equity

INCOME

Rental Income (gross potential - if all units were occupied and 100% of the tenants paid their rent)
Rent - Residential Units - Paid by Tenants
Rent - Residential Units - Subsidy from Government
Rent - Residential Units - Subsidy from Other Sources
Rent - Commercial Units
Rent - Furniture, Appliances, Equipment
Rent - Parking Space or Garage
Rent - Community Space

Vacancy Loss (A negative number; equals income loss because of unoccupied apartments)
(Rent - Residential Units)
(Rent - Commercial Units)
(Rent - Parking Space or Garage)

Interest Income - Operations
Interest Income - Security Deposit Account
Interest Income - Reserve for Replacement Account
Other Income
 Laundry Income
 Late Charges
 Communal Services Charges
 Returned Check Fees
 Tenant Damages and Cleaning Fees
 Legal Fees (Reimbursed by Tenants)
 Other Revenue

EXPENSES

Administrative
 Advertising
 Credit Checks
 Tenant Concessions (reductions in rent)
 Other Renting Expenses
 Office Salaries
 Office Expenses (materials, etc.)
 Office Rent
 Management Fee
 Manager's Salary
 Rent for Manager's Apartment
 Legal Fees
 Auditing Fees/Tax Return Preparation
 Accounting/Bookkeeping Fees
 Computer Services/Supplies
 Telephone
 Bad Debts (uncollectible amounts written off)
 Employee Training
 Community/Tenant Affairs
 Miscellaneous Administrative Expenses

Utilities

Fuel (Oil/Coal)
Electricity
Water
Gas
Sewer

Operating and Maintenance Expenses

Janitor and Cleaning Payroll
Janitor and Cleaning Supplies
Janitor and Cleaning Contract
Exterminating Supplies
Exterminating Contract
Garbage Removal
Security Payroll
Security Contract
Grounds Payroll
Grounds Supplies
Grounds (Landscaping) Contract
Repairs Payroll
Repairs Supplies
Repairs Contract
Elevator Maintenance/Repairs
Elevator Service Contract
Heating/Air Conditioning Repairs
Snow Removal
Painting/Decorating Payroll
Painting/Decorating Supplies
Painting/Decorating Contract
Vehicle and Equipment Repair
Uniform Expense
Miscellaneous Operating Expense

Taxes and Insurance

Real Estate Taxes
Employee Payroll Taxes
Miscellaneous Taxes, Licenses, and Permits
Property and Liability Insurance
Fidelity Bond
Worker's Compensation Insurance
Employee Benefits
Automobile Insurance
Other Insurance

Financial Expenses

- Interest on Mortgage (1st)
- Interest on Mortgage (2nd)
- Interest on Notes Payable
- Mortgage Insurance Premium or Service Charge
- Miscellaneous Financial Expenses

III. BUDGET PREPARATION

Prior to the beginning of each Fiscal Year the Management Company prepares, and the owner approves, an Operating Budget for that year. The Budget includes all the projected income and expenses for the property and follows the General Ledger chart of accounts. Expense projections must be based on planned activities for the coming year, as well as on recent historical expense experience and projected inflation rates. If projected expenses exceed projected income, then the owner and the management company must reduce planned activities, and expense, generate additional income from some source (perhaps from the owner or through borrowing), or use operating reserve funds.

SAMPLE OPERATING BUDGET

The following is an explanation of how to prepare an operating budget, based on the income and expense categories show in the General Ledger Chart of Accounts shown above.

For our example, let us take a small housing estate of 101 units called Pavlova Terrace. Pavlova Terrace consists of one fifteen story building surrounded by several hectares of land. The site is slightly hilly, and the building is surrounded by grassy slopes, thick vegetation and trees. The estate was built in 1968.

The property has its own administrative and maintenance staff due to the amount of administrative paperwork required, deferred maintenance, and complicated nature of operations. It has one full-time superintendent (manager), one full-time office worker, one maintenance supervisor, and two maintenance/janitorial workers.

The following is a copy of the Pavlova Terrace budget plus an explanation of how the budget was developed.

BUDGET WORKSHEET FOR PAVLOVA TERRACE

<u>Description of Account</u>	<u>Audited 1991 Results</u>	<u>Current 1992 (8 mos.)</u>	<u>Budget 1/93- 12/93</u>
<u>Income</u>			
Rental Income			
Tenant Rent	278,004	215,672	190,242
Subsidy Payments from Government	110,376	92,432	443,898
Total Rent Potential at 100% Occupancy	388,380	308,104	634,140
Vacancies			
Residential Units	(15,099)	(9,045)	(19,024)
Total Vacancies	(15,099)	(9,045)	(19,024)
Net Rental Revenue	373,281	299,059	615,116
Financial Revenue			
Interest Income - Operating Account	527	4,000	600
Interest Income - R & R Account	6,406	4,219	8,000
Total Financial Revenue	6,933	8,219	8,600
Other Revenue			
Laundry and Vending	1,127	939	1,182
Late Fees	90	59	620
Damages and Cleaning Fees	5,255		4,540
Other Revenue	865	1,861	1,750
TOTAL REVENUE	387,551	310,137	631,808

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<u>Description of Account</u>	<u>Audited 1991 Results</u>	<u>Current 1992 (8 mos.)</u>	<u>Budget 1/93- 12/93</u>
<u>Expenses</u>			
Administrative Expenses			
Advertising			150
Tenant Concessions			480
Office Salaries	19,140	12,760	25,680
Office Supplies	6,113	6,127	11,224
Management Fee	31,340	24,297	53,655
Manager's Salary	33,252	22,168	34,920
Rent for Manager's Apartment	11,928	9,464	12,192
Legal Expenses	750	50	1,000
Auditing Expenses	4,969	6,418	5,000
Bookkeeping/Accounting	3,213	2,020	4,242
Telephone	2,348	2,156	2,670
Employee Training	213	5,879	1,720
Total Admin. Expenses	113,266	91,339	152,933
Utilities			
Electricity	3,119	1,537	3,275
Water	9,540	5,325	10,017
Gas	3,465	2,805	3,638
Sewer	21,851	14,033	25,042
Total Utility Expenses	37,9752	3,700	41,972
Operating and Maintenance Expenses			
Janitor and Cleaning Expenses			180
Janitor and Cleaning Contract	1,180		1,440
Exterminating Contract	1,555	1,821	2,160
Garbage and Trash Removal	25,907	10,982	21,792
Security Contract	1,631	930	3,684
Grounds Supplies	224		240
Grounds Contract	12,876	12,500	18,480
Repairs Payroll	30,371	20,554	64,300
Repairs Material	26,313	9,318	28,155
Repairs Contract	9,710	24,697	23,150
Heating and Air Conditioning Repairs	145	118	250
Decorating Contract	43,641	3,702	22,500
Decorating Supplies	3,545	348	1,500
Vehicle & Equipment Repair	5,760	3,085	5,421
Miscellaneous Maintenance Expenses	1,626	1,291	1,433

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Total Operating & Maintenance Expenses	164,608	89,346	194,685
Taxes and Insurance			
Real Estate Taxes	15,648	11,094	15,961
Employee Payroll Taxes	7,325	4,993	11,090
Miscellaneous Taxes, Licenses and Permits	1,517	424	1,520
Property & Liability Insurance	16,889	10,768	18,071
Fidelity Bond	40	32	40
Workers' Compensation	7,779	5,469	12,428
Employee Benefits	2,400	1,634	3,600
Other Insurance			1,861
Total Taxes & Insurance	51,598	34,414	64,571
Financial Expenses			
Interest on Mortgage (1st)	26,402	16,672	21,500
Mortgage Service Charge	9,333	6,056	8,804
Total Financial Expenses	35,735	22,728	30,304
Total Cost of Operations	403,182	261,527	484,465
Reserve for Replacement Deposits Required	35,124	46,167	111,000
Principal Payments Required	31,793	22,331	36,343
TOTAL: ALL EXPENSES	470,099	330,025	631,808
LESS TOTAL REVENUE	(387,551)	(310,137)	(631,808)
NET PROFIT/(DEFICIT)	(82,548)	(19,888)	0

NOTES FOR PREPARATION OF OPERATING BUDGET FOR PAVLOVA TERRACE

The budget for Pavlova Terrace has three columns. One is a column which shows actual receipts and expenses which occurred during the 1991 calendar year. In the United States, it is common for the financial records, or books, to be audited at the end of each fiscal year by an independent accountancy firm. The audit consists of a series of financial tests which are used to determine whether or not the property's financial records are accurate and to safeguard against misappropriation of funds. In any event, the final profit and loss statement, as verified by the accountancy firm after the audit is conducted, provides the most accurate picture of the financial activity which occurred during the subject period. This historical data partially forms the basis for the budget for successive years.

The second column shows income received and expenses incurred during the first eight months of 1992. One may assume that the 1993 budget was prepared during September, 1992. This eight month "snapshot" of financial activity can be used to estimate total income and expenses for the year. For instance, if the total revenue for the first eight months of 1992 was 310,137 rubles, and no changes in income were anticipated for the balance of the year, it would be relatively safe to assume that the total income for 1992 would be as follows:

$$\begin{aligned} \frac{310,137}{8 \text{ months}} &= 38,767 \text{ per month} \\ 38,767 \times 12 \text{ months} &= 465,204 \end{aligned}$$

The same method of projection can be used for all income and expenses, provided one takes into consideration any unusual circumstances, such as windfall revenue or large extraordinary expenses. Therefore, if Pavlova Terrace's revenue and expenses for the first eight months of 1991 were standard, and no unusual circumstances were foreseen for the remaining four months of the year, it would be safe to assume the following:

$$\begin{aligned} \frac{330,025}{8 \text{ months}} & \text{ (total expenses, 1/92 - 8/92) } = 41,253 \\ 41,253 \times 12 \text{ months} &= 495,036 \end{aligned} \quad \begin{aligned} & \text{(total estimated 1992 expenses, based} \\ & \text{on actual expenses incurred, 1/92 -} \\ & \text{8/92)} \end{aligned}$$

Furthermore, it can be assumed that the projected operating deficit at the end of 1991 would be as follows:

465,204 (estimated 1992 revenue)
(495,036) (less: estimated 1991 expenditures)

(29,832) (estimated 1992 deficit)

This information also provides a partial basis for the 1993 operating budget, as historical information can demonstrate both usual and unusual circumstances in the collection of revenue and in the occurrence of expenses. Furthermore, if the rate of inflation can be predicted, and the level of operations is not expected to change dramatically from year to year, it is safe to assume that the projected budget expenses should be roughly equal to the preceding year's expenses multiplied by the inflation factor. Thus, if estimated inflation for 1992 is projected at 30%, an initial estimate of 1992 expenses would be roughly as follows:

495,036 (1992 estimated expenditures)
x 1.30 (inflation adjustment)
643,547 (1993 estimated expenditures)

This is a good starting point for preparation of a budget. In our example of Pavlova Terrace, the historical information was adjusted based on information regarding current costs and planned repairs and estimated income to create a 1993 operating budget which projects expenses of 631,808. A well documented budget would have attached to it an explanation of how each income and expense item was calculated.

Annual budgets may be further refined by budgeting income and expense month by month. This is particularly valuable as a way to identify months in which cash expenses will exceed cash income and to make plans for meeting this shortfall. Normally, but not always, surplus cash carried over from previous years is used to meet the shortfall.

The Pavlova Terrace example calls for a balanced budget. There is no margin for unexpected operating expense. This is acceptable only if the property has surplus cash or an operating reserve which provides a "safety net." If there is no operating reserve or surplus then the budget should call for income to be at least 10% more than expense.

If a development has no surplus cash or operating reserve then achieving budget surpluses until the reserve is adequate is normally a high priority.

RESERVE FOR REPLACEMENTS

The 1993 budget for Pavlova Terrace calls for a 111,000 ruble deposit to the Reserve for Replacement account. The purpose of the Reserve for Replacement account is to allow for the setting aside of funds to replace major pieces of equipment or building systems.

Every component of a building has an estimated useful life. Each year, when preparing the budget, the management company should conduct (or update) a physical needs assessment and determine what components need to be addressed in the next few years.

For example, let us suppose that at Pavlova Terrace the management company hired a construction expert who identified the following work which should be completed. (Note: these cost estimates included an inflation factor):

<u>Work Item</u>	<u>Estimated Cost</u>
Exterior Painting	74,300 rubles
Roof Replacement	65,680
Replacement of gutters/downspouts	15,200
Concrete repairs	2,000
Sprinkler system, partial replacement	8,000
Replacement, domestic galvanized hot water system	119,747
Replacement of boilers	42,000
Replacement of exhaust fans	300
Replacement of entry doors and locks	44,500
Replacement of windows at building entry	<u>9,000</u>
Replacement of common area windows, each floor	72,000
Total Anticipated Needs	452,727

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The Property Manager realized that it would be impossible for Pavlova Terrace to pay for these repairs at one time. For one thing, as of September, 1992, when the budget was being prepared, the balance in Pavlova Terrace's Reserve for Replacement for Replacement account was only 149,606.

The Property Manager decided that it was feasible for the required repairs to be made over a three year period, from 1993 through 1995, if the monthly deposits to the Reserve for Replacement account were increased.

The Property Manager first prepared a three year repair schedule. In the schedule, items of the highest priority were addressed first. The schedule is as follows:

<u>Description of Item</u>	<u>Total</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>
Exterior painting	74,300		60,000	14,300
Roof Replacement	65,680	20,830	22,395	22,455
Gutters and Downspouts	15,200	5,000	5,200	5,000
Concrete Repairs	2,000	2,000		
Sprinkler System	8,000			8,000
Domestic Galvanized Hot Water System	119,747	119,747		
Replacement of Boilers	42,000	14,000	14,000	14,000
Replacement of Exhaust Fans	300	100	100	100
Replacement, Entry Doors and Locks	44,500	22,250	10,250	12,000
Replacement of Windows at Building Entry	9,000	4,500	4,500	
Replacement of Common Area Windows, Each Floor	<u>72,000</u>	<u>24,000</u>	<u>24,000</u>	<u>24,000</u>
Totals	<u>452,727</u>	<u>212,427</u>	<u>140,445</u>	<u>99,855</u>

The Property Manager then prepared an analysis of the Reserve for Replacement account to determine what the shortfall would be each year at the current rate deposits were being made to the Reserve for Replacements, 5,778 per month.

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Account balance as of	9/30/92	149,606
Plus deposits,	10/92 - 12/92	17,334
Less withdrawals,	10/92-12/92	<u>0</u>
Account Balance as of	12/31/92	166,940
Plus deposits,	1/93 - 12/93	69,336
Less 1993 estimated expenditures		<u>212,427</u>
Account balance as of	12/31/93	23,849
Plus deposits,	1/94 - 12/94	69,336
Less 1994 estimated expenditures		<u>140,445</u>
Account balance as of	12/31/94	(47,260)
Plus deposits,	1/95 - 12/95	69,336
Less 1995 estimated expenditures		<u>99,855</u>
Account balance as of	12/31/95	(77,779)

It was clear that the monthly deposits to the Reserve for Replacement account would have to be increased so that shortfalls would not occur during 1994 and 1995. As is shown in the Operating Budget, the monthly deposits were increased to 9,250 as of January, 1993. Rents were increased to cover this amount as well as increases in the other expense categories. The account fluctuation analysis at the new rate of deposit is as follows:

Account balance as of	9/30/92	149,606
Plus deposits,	10/92 - 12/92	17,334
Less withdrawals	0	
Account balance as of	12/31/92	166,940
Plus deposits, 1/93 -	12/93	111,000
Less 1993 estimated expenditures		<u>(212,427)</u>
Account balance as of	12/31/93	65,513
Plus deposits, 1/94 -	12/94	111,000
Less 1994 estimated expenditures		<u>(140,445)</u>
Account balance as of	12/31/94	36,068
Plus deposits,	1/95 - 12/95	111,000
Less 1995 estimated expenditures		<u>(99,855)</u>
Account balance as of	12/31/95	47,213

With the increase in monthly deposits to the Reserve for Replacement account, the priority work items will be addressed, while the account will still have a positive balance at the end of the three year period.

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IV. MANAGEMENT OF Expenses

A. Control and Approval of Expenditures

All expenses, no matter how small, must be controlled and accounted for.

Certain expenses (for example, utility costs) cannot be controlled directly. However, many other expenses (examples: contracts, materials, staff overtime labor) can be controlled. Methods of control vary among management companies. Some companies require that supervisory personnel approve almost all proposed expenses. Others allow site personnel greater discretion, up to certain limits, and so long as the expense is within budget.

Knowing whether an expense is within budget requires that the person approving the expense know not only cash expenditures to date for that line item, but also unpaid invoices and previously approved expenditures for which invoices have not been received. The approval decision must take into account other expected demands on that budget line item for the balance of the fiscal year.

If an expenditure is approved which would overrun a budget line item, sources of savings elsewhere in the budget should be identified, if possible.

An important means of controlling expense is through well planned procurements (see Unit 4).

It is critical that goods and services be accepted and approved at the time they are delivered. If this is not feasible then the invoice from the vendor must be approved by a staff person (usually the manager) who can verify that the goods or services were received and that the quality and price conform to the purchase contract.

B. Disbursements

The first step in paying for an expense is recording the expense to Accounts Payable. This requires that it be posted to an expense account in the Chart of Accounts. Ideally, the account to which the expense is posted should be approved in advance by the manager. If not, the manager should review all postings for his/her property and make any required changes prior to the financial closing for each month.

Once an invoice is posted to the payables the management company will pay it based on contract requirements and availability of funds. In the United States virtually all disbursements are made by check. This allows for effective management of cash resources. It also provides another level of review for accuracy by an officer of the management company, who will review the attached invoice when signing the check. The final benefit of this system is the "paper trail" it provides.

In Russia, and elsewhere in Europe and Asia, bank transfers and debits are commonly used to pay vendors. For some vendors, such as utility companies, the Management Company may not be able to control timing of expense, since debits are made on a predetermined schedule or based on the vendor's needs. This creates an extra cash planning requirement for the management company.

V. MANAGEMENT OF INCOME

The most common type of earned revenue received by a building is rental income from residential units and from commercial units. Other types of tenant revenue which are common in the United States are garage rent, revenue from coin-operated washing machines and vending machines, reimbursements for damages to the unit caused by the tenant (or reimbursements for improvements made to a unit at the request of the tenant), reimbursements for legal actions billed on behalf of the landlord (such as eviction actions), reimbursements from utility companies, and interest on bank accounts. In addition to earned income, properties may receive various types of operating subsidies from the government.

Each type of revenue should be assigned an account number from the general ledger.

Tenant Cash Receipts. Rental revenue and other tenant revenue is generally recorded on a daily basis in an interim working document called a "journal," which in this case is called the receipts journal. At the beginning of each month, a tenant cash receipts journal should be generated for each property. This will be used to record all cash received during that month. The journal can be generated and kept manually, or it can be generated and updated by computer. At a minimum, the journal should include the following information:

- a. Project Name and Building Number
- b. Unit Number
- c. Tenant Family Name
- d. Current Month Rent
- e. Current Month Charges (Other than Rent)f. Past Due Rent
- g. Past Due Charges (Other than Rent)
- h. Balance Due (Total of d., e., f. and g.)

Current month charges and past due charges other than rent are those items billed to the tenant (such as communal services charges) and collected by the Property Management Company. The current and past due amounts for these other charges must be monitored, along with current and past due rents.

There might be two additional columns on the journal. One should be for recording the amounts received from the tenants during the month. The last column should show the balance due after any and all payments are received during the month. (If the tenant doesn't make a payment during the month, the balance shown in the last column will equal that which is shown in the "Balance Due" column.)

At the end of the month, the transactions for the month are all tabulated, and ending balances are determined. This is called "closing the books" or "the month end closing." At the end of the month, after the books are closed, a journal for the new month should be prepared. The balance shown in the "Balance Forward" column at the end of the previous month should be the total of the amounts shown in the Past Due Rent and Past Due Charges columns in the new month. These items, plus current rent and current charges, will make up the new Balance Due or "opening balance."

At any time during the month, the Property Manager should be able to post additional fees or charges to a tenant's account, as necessary. These include late fees, fees for checks which are returned for insufficient funds, damage charges or legal fees. (Each of these charges should have its own general ledger account code number.) For instance, if a late payment fee is to be charged to any tenant who doesn't pay rent before the sixth day of the month in which it is due, on the sixth, the charge should automatically be posted to the account of any tenant who has not yet paid. This can be done in a manual system as well as in a computerized system. On this date, letters should be sent to all tenants who have not yet paid their rent; the letter should inform them of their delinquency and the late charge.

The receipts journal can be expanded to include more columns, one for each type of other charge. It would thus be easier to distinguish among different types of revenue.

This journal might also have a section for other types of revenue, as described previously. A separate general ledger account code should be assigned to each type of revenue.

If a manual system is used, it is common for a separate ledger card to be maintained for each tenant. This gives a chronological record of all transactions (charges and payments) affecting the particular tenant's account. Similar ledgers or records can be kept on a computer as well.

At the end of each day, if a manual system is used, the Property Manager should add up each column for each of the transactions posted for that day. If a computerized system is being used, the program should have the capacity to print a summary of transactions for the day, so that one person can check to make sure that the amounts entered on the computer equal the amount of revenue actually received. This summary of transactions should be checked against the bank deposit slip, which should record all payments deposited into the bank on that day.

If an error is discovered in an entry to the journal from a previous day, a manual reversing entry (one that is the opposite of the previous entry) should be made to the journal. This can be illustrated by the following: Mr. Byelorusev made a rent payment of 115 rubles on July 5. This was incorrectly posted on the receipts journal as a payment of 515 rubles to his account. This is discovered the next day, and a reversing entry is made. The proper amount is then posted in a separate entry.
(Original Entry)

	Current Month Rent Due	Current Other Charges Due	Past Rent Due	Other Charges Due	Total Balance Due	Amount Received This Month	Balance Forward
Byelorusev (Reversing Entry)	100	15	0	0	115	515	(400)
Byelorusev (Proper Entry)	100	15	0	0	115	(515)	115
Byelorusev	100	15	0	0	115	115	0

Special Income Management Concerns

If tenants pay rent at a bank or other location then the management company must receive timely notice of payments in order to have up to date records for pursuing cases of non-payment and for closing each month's books. Also, because payments may pass through several hands before they are posted to the management company's books special attention must be paid to accuracy.

Irrespective of whether tenants pay rent directly to the management company or whether they pay it at another location, accurate tenant accounts are essential to property management. This means that charges other than rent must be calculated, approved, and posted on a fixed schedule. Reconciliations of receipts must be completed daily. Rent collection efforts should be made with confidence in the accuracy of delinquency information.

Proper crediting of other funds transferred into property management accounts is also essential. Transfers of funds between bank accounts to pay operating subsidies are efficient. However, because the "paper trail" is weaker, special effort must be devoted to correctly identifying and crediting each transfer.

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**SAMPLE
PROPERTY NAME
TENANT CASH RECEIPTS JOURNAL
MONTH: _____**

Unit #	Tenant Name	Current Month Rent Due	Current Month Other Charges Due	Past Rent Due	Past Other Charges Due	Total Balance Due	Amount Received This Month (Date)	Balance Forward

1/6/1

VI. FINANCIAL CONTROLS

A property management company must establish internal financial controls adequate to insure accounting accuracy and prevent fraud. Several useful financial control procedures are as follows:

A. Separation of Accounts Payable Duties

The most effective procedure for preventing accounts payable errors or dishonest collusion between a vendor and an employee is involvement of at least three different persons in the procurement and disbursement process. The person receiving and approving the invoice, the person preparing the payment paperwork (check or fund transfer authorization) and the management company official(s) signing the payment paperwork should be different and act independently.

B. Separation of Cash Receipts and Other Income Accounting Duties

The ideal separation of income accounting duties again involves at least three persons: A cashier or clerk who receives and records receipts and prepares deposits, a supervisor who reviews the deposit for accuracy and consistency with the Receipts Journal and other daily accounting activity, and another (usually senior) staff person who compares bank deposit and General Ledger records to Receipts Journal and tenant ledger records of payment. To prevent theft or misappropriation of cash deposits, property managers may hire bonded (insured) security companies to transfer funds from their offices to the bank.

C. Authorization to Sign Checks or Approve Account Debits/Fund Transfers

Many companies require two signatures on all disbursement checks or fund transfers or on transactions above a certain level. This is an effective means of preventing employee fraud at the highest levels, although it can be inconvenient if both signatories are not routinely available.

D. Bank Reconciliations

Bank reconciliations must be completed monthly, immediately upon receipt of the monthly bank statement. Bank reconciliations usually require the following steps:

- 1) Review of the bank's deposit transaction records for conformance to General Ledger records.
- 2) Review of all cancelled checks and confirmations of bank fund transfers for conformance to authorized amounts and payees, and authorized signatures. If checks are used, investigation of the status of any missing or out of sequence checks.
- 3) Reconciliation of the General Ledger to the bank statement, adjusting for transactions in the General Ledger which occurred after the date the bank statement was prepared.

E. Internal Audit Techniques

The most common Internal Audit practices are regular reconciliations of accounts which must balance. (Example: Doing a Sources and Uses of Cash analysis, comparing bank records to General Ledger cash income and expense records, and comparing bank cash to general ledger cash.)

Another helpful audit technique is in-depth analysis of certain transaction types. For example, tenant other charges could be checked for accurate calculation and timely posting to tenant accounts.

F. Quality of Recordkeeping

Good back-up documentation is the key to good accounting. Documentation should be prepared at the same time as the transaction and must clearly explain the transaction. (Example: if a vendor invoice is adjusted and the amount paid is different from the invoiced amount, then the reason for the adjustment must be noted.) Generally, any deviation in straightforward equality of invoice amount, general ledger entry, and payment amount must be documented.

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VII. FINANCIAL REPORTING

A. A property management companies typically provides to the owner the monthly reports listed below. These are normally provided two to three weeks after the end of the month:

1. Income and Expense Statement, with Comparison to Budget Information

This is perhaps the best summary of a property's financial performance. It shows income, expense and net cash flow for both the current month and for the year to date. The analysis of variance between actual and budgeted expenses is a major feature of this report. (See following example.) Some management companies provide a narrative explanation of any significant variances.

2. Sources and Uses of Cash

This report summarizes all sources and uses of cash and the change in cash available to the property. (See following example.)

3. Accounts Payable Report

This is usually organized in vendor alphabetical order with the age and amount of each unpaid invoice shown.

4. Monthly Check Register

This is a report that is generated at least monthly and more frequently if required. It lists all cash disbursements, the account they were coded to and the date of the invoice and payment. (See following example.)

5. Tenant Accounts Receivable Report

This report lists all tenants who have outstanding amounts due and provides detail about that tenants account. Some receivables reports also indicate action taken by management to collect the amount due.

6. Vacancy Report

This report is critical since fast preparation and re-renting of vacancies is critical to maximizing property income. (See following example.)

B. At the end of the year the following financial reports are usually prepared:

- 1. Year end Income and Expense Statement with Comparison to Budget Information.**
- 2. Profit and Loss Statement (Operating Statement).**

This is a statement of the operating profit as loss for the year. The following example shows results both before depreciation is taken into account and after depreciation. (See example of Operating Statement in Unit 1 of this training material.)

- 3. Balance Sheet at end of year (See explanation of balance sheet in Unit 1 of this training material.**

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SAMPLE INCOME AND EXPENSE STATEMENT

INCOME AND EXPENSE STATEMENT
AND COMPARISON TO BUDGET REPORT

PAVLOVA TERRACE
FOR THE PERIOD ENDED 20/12/91

ACTUAL	CURRENT MONTH		DESCRIPTION	YEAR-TO-DATE		
	BUDGET	VARIANCE		ACTUAL	BUDGET	VARIANCE
REVENUE						
RENTAL						
27403	26423	980	Tenant rents	346597	302744	43853
24096	26422	-2326	Subsidy payments	255322	302732	-47410
	-1585	1585	Less: Vacancies	0	-18930	18930
51499	51260	239	Total rental income	601919	586546	15373
FINANCIAL INCOME						
0	50	-50	Interest income	0	1832	-1832
0	50	-50	Total financial income	0	1832	-1832
OTHER INCOME						
112	99	13	Laundry and vending	1235	1182	53
0	52	-52	Late fees	30	620	-590
0	0	0	Cleaning & Damages	98	0	98
0	379	-379	Forfeited Sec. Deposits	0	4539	-4539
345	0	345	Other Income	4511	0	4511
457	530	-73	Total other income	5874	6341	-467
51956	51840	116	TOTAL REVENUE	607793	594719	13074
EXPENSES						
ADMINISTRATIVE EXPENSES						
0	0	0	Advertising	0	150	150
0	40	40	Tenant concessions	0	463	463
2620	2140	-480	Office salaries	30073	25680	-4393
1202	936	-266	Office Expenses	19226	10354	-8872
5266	4471	-795	Management Fees	49227	50160	933
2771	2910	139	Manager's salary	33384	34642	1258
0	1016	1016	Manager's rent	15929	12526	-3403
0	0	0	Legal fees	788	1000	212
47	0	-47	Auditing expense	4996	5000	4
353	354	1	Bookkeeping/Accounting	3636	4242	606
192	223	31	Telephone	2825	2670	-155

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0	0	0	Empoyes training	1514	0	-1514
0	102	102	Miscellaneous Admin.	3086	1720	-1366
12451	12192	-259	Total administrative expenses	164684	148607	-16077
UTILITIES EXPENSE						
172	290	118	Electricity	4953	3275	-1676
678	835	156	Water	25124	10017	-15107
62	325	263	Gas	1893	3638	1745
1559	2087	528	Sewer	3232	25042	21810
2471	3537	1065	Total utilities expense	35202	41972	6770
OPERATING & MAINTENANCE EXPENSE						
0	15	15	Janitor & cleaning supplies	382	180	-202
0	120	120	Janitor & cleaning contract	0	1200	1200
0	180	180	Exterminating contract	2555	2160	-395
2021	1816	-205	Garbage removal	28496	21792	-6704
345	307	-38	Security contract	2952	3684	732
397	20	-377	Grounds supplies	398	240	-158
1400	1540	140	Grounds contract	31309	18466	-12843
3707	5358	1651	Repairs payroll	49510	57180	7770
979	2346	1367	Repairs material	32762	24460	-8302
3348	1929	-1419	Repairs contract	29808	19290	-10518
0	0	0	Heating repairs	0	250	250
7909	1875	-6025	Decorating contract	56698	20250	-36448
0	125	125	Decorating supplies	125	1500	1375
0	78	78	Uniform rental	286	936	150
0	0	0	Vehicle & equip. repair	5579	5421	-258
0	0	0	Misc. operating expense	348	497	149
20097	15709	-4388	Total operating & maintenance	241308	177506	-64202
TAXES & INSURANCE						
1349	1330	-19	Property taxes	16373	15961	-412
736	924	188	Payroll taxes	9973	10724	751
0	0	0	Business taxes & licenses	3792	1520	-2272
1280	1506	226	Property insurance	15595	18071	2476
0	0	0	Fidelity bond insurance	57	40	-17
866	1036	170	Workers compensation	10370	11723	1353
302	300	-2	Employee benefits	3703	3600	-103
0	155	155	Other insurance	4836	1860	-2976
4533	5251	718	Total taxes & insurance	64699	63499	-1200
39552	36689	-2864	TOTAL OPERATING EXPENSE	505893	431584	-74709
12404	15151	-2980	NET OPERATING INCOME	101900	163135	-61235
DEBT SERVICE						
1700	1792	92	Mortgage interest	23439	21500	-1939
731	734	3	Mortgage service charge	8855	8804	-51

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2431	2526	95	Total debt service	32294	30304	-1990
41983	39215	-2769	TOTAL EXPENSES	538187	461888	-76699
3202	3029	-173	Payments to principal	35294	36343	1048
9250	7250	-2000	Deposits to reserve account	105606	84056	-21550
54435	49494	-4942	TOTAL CASH DISBURSEMENTS	679087	582287	-97201
0	0	0	RELEASES FROM RESERVE ACCOUNT	111557	100000	11557
-2479	2346	-4825	NET CASH FLOW	40263	112432	-72169

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EXAMPLE

**PAVLOVA TERRACE
STATEMENT OF SOURCES AND USES OF CASH
DECEMBER 1991**

1.	Cash On Hand and In the Bank - Beginning of the Month	(1) Opening Cash	4,429.67
2.	Amounts Received During the Month:		
	(a) Tenants Apartment Rent	28,965.25	
	(b) Prepaid Rent	2.00	
	(c) Govt. Rent Subsidy Payments	24,096.00	
	(d) Laundry Income	112.00	
	(e) Miscellaneous Refunds	295.00	
	(f) Legal Fee Reimbursements	50.00	
		(2) Total Receipts	53,524.25
3.	Disbursements Made During the Month:		
	(a) Routine Operations	(3) Total Disbursements	
			60,534.04
4.	Cash On Hand and in the Bank- End of Month (Line 1 + 2 - 3)		2,520.12

Sample Month-to-Date Check Register

**PAVLOVA TERRACE
Month-to-Date Check Register
(25/11/91 - 12/12/91)**

<u>CK#</u>	<u>DESCRIPTION</u>	<u>G/L ACCT</u>	<u>INV. DATE</u>	<u>CK. DATE</u>	<u>AMOUNT</u>
	KIROV MANAGEMENT CO.				
962	Mgmt. fee	6320	25/11/91	26/11/91	5,265
	THE DOOR DOCTOR				
963	Doors	6541	8/10/91	26/11/91	1,600
	KAMINSKY & CO.				
964	Tax Service	6342	31/10/91	05/12/91	100
	IVANEV ROOFING CO.				
965	Roof replacement	6542	15/11/81	05/12/91	1,590
	MINSKY OFFICE SUPPLY				
966	Paper	6311	18/11/91	05/12/91	539
	GODONOV LUMBER				
967	Lumber	6541	25/10/91	05/12/91	346
	MOSCOW TELEPHONE CO.				
968	Telephone	6360	05/11/91	05/12/91	192
	MOSCOW WATER DEPT.				
969	Water	6451	21/10/91	05/12/91	678
	Sewer	6453	21/10/91	05/12/91	1,558
					2,236
	MOSCOW RUBBISH REMOVAL				
970	Trash removal	6525	01/12/91	05/12/91	2,021
	MATROSOV CPA				
971	Annual Audit	6350	15/10/91	05/12/91	47
	METROPOLITAN INTERIORS				
972	Vinyl flooring	6560	18/9/91	10/12/91	7,730
	LERMONOSEV LANDSCAPING				
973	Landscaping	6537	30/11/91	12/12/91	1,400

MP

974	MOSCOW GAS AND ELECTRIC				
	Electricity	6450	06/11/91	12/12/91	172
	Gas	6452	06/11/91	12/12/91	61
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TOTAL CHECKS WRITTEN 23,299

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Sample Vacancy Report

Pavlova Terrace

Vacancy Report
as of 31/12/91

<u>Unit #</u>	<u>Date Vacated</u>	<u>Work Needed</u>	<u>Date Completed</u>	<u>Date Re-rented</u>	<u>Date Occupied</u>
12	30/11/91	New linoleum, new living room window, cleaning	20/12/91	24/12/91	
33	31/10/91	New linoleum, New toilet, bathtub, sink, kitchen cabinets			
67	15/12/91	Cleaning	20/12/91	24/12/91	27/12/91

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Sample Profit and Loss Statement

Profit and Loss Statement for

Pavlova Terrace

for the Period Beginning 1/1/91 and Ending 31/12/91

<u>Description of Account</u>	<u>Acct. No.</u>	<u>Amount</u>	
Rental Income - 5100			
Apartment Rent - Tenants	5120	350,154	
Govt. Subsidy Payments	5121	255,322	
Total Rent Revenue Potential at 100% Occupancy			605,476
Vacancies - 5200			
Apartments	5220	<9,979>	
Total Vacancies			<9,979>
Net Rental Revenue Rent Revenue Less Vacancies			595,497
Financial Revenue - 5400			
Interest Income - Operations	5410	520	
Total Financial Revenue			520
Other Revenue - 5900			
Laundry and Vending	5910	635	
Late Fees	5920	30	
Damages and Cleaning Fees	5930	1,691	
Forfeited Tenant Security Deposits	5940	4,237	
Total Other Revenue			6,593
Total Revenue			602,610
Administrative Expenses - 6200/6300			
Office Salaries	6310	28,054	
Office Supplies	6311	20,902	
Management Fee	6320	49,809	
Manager/Superintendent Salaries	6330	33,252	
Manager/Superintendent's Apartment Rent	6331	12,526	
Legal Expenses	6340	788	
Auditing Expenses	6350	4,996	
Bookkeeping Fees/ Accounting Services	6351	3,737	
Telephone	6360	2,678	
Total Administrative Expenses			156,742

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Utilities Expense - 6400			
Electricity	6450	3,179	
Water	6451	12,684	
Gas	6452	3,467	
Sewer	6453	18,600	
Total Utilities Expense			37,930
Operating and Maintenance Expenses - 6500			
Janitor and Cleaning Supplies	6515	1,167	
Exterminating Payroll/Contract	6519	2,215	
Garbage and Trash Removal	6525	23,250	
Security Payroll/Contract	6530	2,952	
Grounds Supplies	6536	398	
Grounds Contract	6537	27,109	
Repairs Payroll	6540	51,135	
Repairs Material	6541	30,249	
Repairs Contract	6542	37,796	
Decorating Payroll/Contract	6560	55,456	
Decorating Supplies	6561	126	
Vehicle & Equipment Repair	6570	5,680	
Total Operating & Maintenance Expense			237,533
Taxes and Insurance - 6700			
Real Estate Taxes	6710	17,325	
Payroll Taxes	6711	9,935	
Miscellaneous Taxes, Licenses & Permits	6719	3,792	
Property & Liability Insurance	6720	17,464	
Fidelity Bond Insurance	6721	57	
Workers Compensation	6722	10,638	
Employee Benefits	6723	3,705	
Total Taxes and Insurance			62,916
Financial Expenses - 6800			
Interest on 1st Mortgage	6820	21,979	
Mortgage Service Charge	6850	8,993	
Total Financial Expenses			30,972
Total Cost of Operations Before Depreciation			521,093
Profit (Loss) Before Depreciation			76,517

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Depreciation		109,389
Operating Profit or (Loss)		(32,872)
Corporate or Mortgagor Entity Expenses		
Long-term Notes Payable Interest Expense	354,410	
Total Corporate Expenses		354,410
NET PROFIT OR (LOSS)		(387,282)

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Sample Balance Sheet

Pavlova Terrace

Balance Sheet

December 31, 1991

ASSETS

Cash		2,102
Receivables		
Tenants	888	
Reserve for Replacements	<u>10,280</u>	11,168
Prepaid Insurance		13,093
Tenant Security Deposits held in Trust		16,944
Impounds (for taxes, insurance) ⁵		16,614
Reserve for Replacements		168,708
Rental property - at cost (Fixed Assets)		
Building	3,272,983	
Furniture and equipment	<u>98,190</u>	
	3,371,173	
Less accumulated depreciation	<u>1,032,219</u>	
	2,338,954	
Land	<u>353,500</u>	2,692,454
Deposit		<u>400</u>
		<u>2,921,483</u>

⁵Impounds are amounts paid with the mortgage payment which are placed in a separate account for express purposes, such as the eventual payment of real estate taxes or property and liability insurance. Impounds are like forced savings. The mortgagee occasionally requests that impound accounts be set up so that a property is certain of having sufficient funds to pay for certain expenses.

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LIABILITIES

Accounts payable	40,437
Excess rents due HUD	40,868
Accrued interest	2,722,524
Prepaid rent	2
Tenant security deposits	16,900
14% long-term note payable	3,500,000
Contributions from owner	439,269
Accumulated deficit	(3,838,517)
	<u>2,921,483</u>

**Real Estate Management
Unit 6
Financial Management**

Session Materials

Key Elements in Financial Management of Real Estate

- Annual Operating Budget
- Collecting Income Due
- Controlling Expense
- Paying Expenses promptly; paying only proper amount
- Maintaining accurate accounting records
- Preparing timely reports
- Using financial results to adjust plans
- internal controls to prevent errors and fraud
- Being prepared for "worst-case" circumstances of income or expense.
- Periodic audits by outside accountants

General Ledger and Chart of Accounts

- The General Ledger is the central financial document.
- The General Ledger is subdivided into a Chart of Accounts to record all financial statements.
- Chart of Accounts includes all accounts necessary to prepare financial reports.
- Separate financial records are kept for each property.

Preparation of the Annual Operating Budget

- Normally prepared 2-3 months in advance of the new year.
- Based on the following information:
 - Historical Data from most recent full year.
 - Year to Date and projected data from current year.
 - Maintenance and Management plans for the coming year.
 - Inflation estimates for the coming year.
 - Any other information concerning costs for the coming years.
- The Budget process includes an evaluation of capital improvement needs. Reserve for Replacement contributions are modified based on needs.

Exercise - Budget Preparation

You are preparing the 1993 Operating Budget for Pavlova Terrace. Heat and hot water are produced using steam from a district steam boiler plant. Pavlova is charged based upon the amount of steam condensate which is returned to the boiler plant. There are two meters measuring the condensate, one for heat and one for hot water. The following is the information you have about the projected amount of steam needed for heating and its cost:

1. Inflation adjusted (to 1992) actual cost for steam for heat in 1991: 666,666 Rubles
2. Actual cost for steam for heat for the months of January-June 1992: 400,000 Rubles
3. In checking the weather history you found that the average daily temperature during the heating months was roughly the same for both 1991 and 1992. However, the average for 1991 and 1992 was about 10% less than the overall average over the past 30 years.
4. In analyzing the monthly cost of heat over the past five years you discovered that the annual cost was distributed month to month as follows:

Jan	16%	July	0%
Feb	14%	Aug	2%
Mar	12%	Sep	4%
Apr	8%	Oct	3%
May	6%	Nov	12%
Jun	4%	Dec	14%

5. You have planned some capital improvements for July 1993 which will reduce heating costs by 10% for the months of July-December 1993.
6. You expect 1993 steam rates to be 50% higher than 1992 rates, because of inflation. The rates for 1993 will be set in December 1992 and will be constant throughout 1993.

Using this information you will be able to budget heat cost for each month in 1993. To reduce the number of calculations in this exercise however, calculate only the total annual budgeted amount and the amounts for March and October.

Total Annual Budget for Heat _____ Rubles

Budgeted for March 1993 _____ Rubles

Budgeted for October 1993 _____ Rubles

Answers - Budget Preparation
Exercise

Steps in Budget Preparation

1. Identify Historical Baseline Costs (annual).
2. Identify which conditions are likely to change and how these will affect costs in the budget year.
3. Adjust Baseline cost to a Budgeted Annual Cost.
4. Allocate annual cost among the 12 months of the year.

1. Step One: Baseline Costs

1991 costs (in 1992 rubles) = 666,666

1992 costs 6 months only = 400,000

Annualized = $400,000 \div .60$ (60% of heat costs are in first 6 months) = 666,666

The consistency of heat costs in the two years is supported by the weather consistency.

This is consistent with weather results

Baseline Cost = 666,666

2. Step Two: Conditions which will change

- Weather most likely to be 10% colder than 1991 and 1992 experienced.
- Steam rates to increase by 50%
- Capital improvements will decrease steam use by 10% in July-Dec 1993.

3. Step Three: Adjust Baseline Costs

Baseline Cost = 666,666
x 110% to allow for
colder weather x 1.1
733,333

x 150% to allow for
steam rate increase x 1.5
Estimated annual cost 1,100,000

Cost for first six month of 1993

60% x 1,100,000 = 660,000 Rubles

Cost for second six months of 1993

40% x 1,100,000 = 440,000

Less 44,000 Savings
396,000 Total

Total Budget for Heat for 1993 = 1,056,000 Rubles

Budget for March 1993

12% x 660,000 = 132,000 Rubles
60%

Budget for October 1993

8% x 396,000 792,000 Rubles
40%

Budget for other months can be calculated in similar fashion.

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Management of Expenses

A. Control and Approval of Expenditures

- The management company must decide which decisions can be made at the development level.
- Approval of expenditures must be based on budget status of that line item:
 - How much of budget is unspent
 - Are there other commitments for these funds
 - What other potential need is there for these funds
- If this expenditure would cause total line item expense to exceed the budget then other sources of funds must be found in the budget or elsewhere.

B. Disbursements

- Acceptance of goods/services and approval of invoice.
- The account to which an expense is charged should be approved by the manager.
- Payment made based on contract/vendor requirements and cash available.
- Importance of cash planning.
- Documentation of expenses and disbursements.

Management of Income

A. Typical Income Categories

- Rental income from tenants.
- Other charges to tenants.
- Interest income.
- Government Operating/Rent Subsidies.

B. Each income item must be billed, received, recorded to the Books of Account and deposited. The exact process for each income item varies.

C. Key Elements of Income Management

- Accurate calculation and invoicing of all amounts due.
- Crediting of payments to proper accounts.
- Follow-up of Delinquent Accounts.
- Secure handling of all receipts to avoid theft or fraud.

D. Rental Income for Tenants

- Ideally, tenants receive invoices for amounts due, or have payment books.
- Management agent creates Cash Receipts Journal.
- Cash Receipts are posted to the Journal.
- Bank Deposits are reconciled to the Journal.
- A separate ledger should be kept for each tenant.

Exercise - Tenant Rental Income

It is December 31, the last day of 1992 and six tenants (all of whom happen to live on the first floor of the same building) have come into the management office to pay their December balance due (or in several cases, only some of it).

Task 1: Complete the attached Cash Register Journal for December 1992 to reflect the following payments:

Pavlov	600
Frolov	450
Kosarev	650
Sorokin	450
Nevsky	700
Dmitrov	550

Complete the amount Received Column and the Balance Forward Column. Indicate how the payment is credited by writing the amount of the credit in the appropriate columns under the amount due in that column. Total the cash receipts for the day. The receipts recorded on your books must equal your bank deposit for the day.

Important Notes:

The management's policy is to accept any payment in any amount made by a resident and to credit it in the following priority:

1. Past Rent Due
2. Past Other Charges Due
3. Current Month Rent Due
4. Current Month Other Charges Due

Task 2: Prepare the Cash Receipts Journal for the month of January 1993. For each tenant, please complete the columns listing current and past due amounts and the total balance due. Effective January 1, all tenants received a 100 ruble monthly rent increase. There were no other charges for any tenant.

**Pavlova Terrace
 Tenant Cash Receipts Journal
 Month: December 1992**

Unit #	Tenant Name	Current Month Rent Due	Current Month Other Charges Due	Past Rent Due	Past Other Charges Due	Total Balance Due	Amount Received This Month (Date)	Balance Forward
10	Pavlov	550	40	0	40	630		
11	Frolov	450	0	450	0	900		
12	Kosarev	650	80	0	0	730		
13	Sorokin	450	0	0	0	450		
14	Nevsky	650	50	650	0	1,350		
15	Dmitrov	550	20	0	0	570		
TOTAL:								

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**Pavlov Terrace
 Tenant Cash Receipts Journal
 Month: January 1993**

Unit #	Tenant Name	Current Month Rent Due	Current Month Other Charges Due	Past Rent Due	Past Other Charges Due	Total Balance Due	Amount Received This Month (Date)	Balance Forward
10	Pavlov							
11	Frolov							
12	Kosarev							
3	Sorokin							
14	Nevsky							
15	Dmitrov							
TOTAL								

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**Pavlova Terrace
 Tenant Cash Receipts Journal
 Month: December 1992**

Answer Sheet

Unit #	Tenant Name	Current Month Rent Due	Current Month Other Charges Due	Past Rent Due	Past Other Charges Due	Total Balance Due	Amount Received This Month (Date)	Balance Forward
10	Pavlov	550 550 Credit	40 10 Credit	0	40 40 Credit	630	600	30
11	Frolov	450	0	450 450 Credit	0	900	450	450
12	Kosarev	650 650 Credit	80	0	0	730	650	80
13	Sorokin	450 450 Credit	0	0	0	450	450	0
14	Nevsky	650 50 Credit	50	650 650 Credit	0	1,350	700	650
15	Dmitrov	550 550 Credit	20	0	0	570	550	20
TOTAL:		3,300 2,250 Credit	190 10 Credit	1,100 1,100 Credit	40 40 Credit	4,630	3,400	1,230

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**Pavlov Terrace
 Tenant Cash Receipts Journal
 Month: January 1993**

Answer Sheet

Unit #	Tenant Name	Current Month Rent Due	Current Month Other Charges Due	Past Rent Due	Past Other Charges Due	Total Balance Due	Amount Received This Month (Date)	Balance Forward
10	Pavlov	650	0	0	30	680		
11	Frolov	550	0	450	0	1,000		
12	Kosarev	750	0	0	80	830		
13	Sorokin	550	0	0	0	550		
14	Nevsky	750	0	600	50	1,400		
15	Dmitrov	650	0	0	20	670		
TOTAL		3,900	0	1,050	180	5,130		

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Financial Controls

Financial Controls are required to insure accounting accuracy and prevent fraud. The following are typical financial controls.

- **Separation of Accounts Payable Duties:**
 - Invoice Approval
 - Preparation of Payment
 - Payment Execution

- **Separation of Income Accounting Duties:**
 - Income Receipt and Deposit Preparation
 - Deposit Review
 - Reconciliation with General Ledger and Bank Statement

- **Two signatures for checks or fund transfer authorizations.**

- **Bank Reconciliations**
 - Review of Deposits
 - Review of Canceled checks/fund transfers
 - Reconciliation to General Ledger

- **Internal Audits**

- **Recordkeeping and documentation (consistency between invoices, General Ledger expense entries and payments - consistency between deposit records and General Ledger income entries).**

Financial Reporting

A. Monthly Reports

- **Monthly Income and Expense Statements and Comparison to Budget**
- **Sources and Uses of Cash Analysis**
- **Accounts Payable Report**
- **Monthly Checks/Funds Transfer Register**
- **Tenant Accounts Receivables Report**
- **Vacancy Report**

B. Year End Reports

- **Year End Income and Expense Statement**
- **Profit and Loss Statement (Operating Statement)**
- **Balance Sheet**

Group Exercise

Analyze the Income and Expense Statement for Pavlova Terrace for the period ended 20/12/91 (see pages 25-27). This report is both a year end report and a report for the month of December 1992.

Discuss the following questions:

1. In the expense area, what are areas of particular concern?
2. In what areas are December expense results an improvement over the annual results?
3. In what areas are December expense results worse than the annual results?
4. What expenditures might actually be a positive sign and be of future benefit?

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SAMPLE INCOME AND EXPENSE STATEMENT

INCOME AND EXPENSE STATEMENT
AND COMPARISON TO BUDGET REPORT

PAVLOVA TERRACE
FOR THE PERIOD ENDED 20/12/91

ACTUAL	CURRENT MONTH		DESCRIPTION	YEAR-TO-DATE		
	BUDGET	VARIANCE		ACTUAL	BUDGET	VARIANCE
REVENUE						
RENTAL						
27403	26423	980	Tenant rents	346597	302744	43853
24096	26422	-2326	Subsidy payments	255322	302732	-47410
	-1585	1585	Less: Vacancies	0	-18930	18930
51499	51260	239	Total rental income	601919	586546	15373
FINANCIAL INCOME						
0	50	-50	Interest income	0	1832	-1832
0	50	-50	Total financial income	0	1832	-1832
OTHER INCOME						
112	99	13	Laundry and vending	1235	1182	53
0	52	-52	Late fees	30	620	-590
0	0	0	Cleaning & Damages	98	0	98
0	379	-379	Forfeited Sec. Deposits	0	4539	-4539
345	0	345	Other Income	4511	0	4511
457	530	-73	Total other income	5874	6341	-467
51956	51840	116	TOTAL REVENUE	607793	594719	13074
EXPENSES						
ADMINISTRATIVE EXPENSES						
0	0	0	Advertising	0	150	150
0	40	40	Tenant concessions	0	463	463
2620	2140	-480	Office salaries	30073	25680	-4393
1202	936	-266	Office Expenses	19226	10354	-8872
5266	4471	-795	Management Fees	49227	50160	933
2771	2910	139	Manager's salary	33384	34542	1258
0	1016	1016	Manager's rent	15929	12526	-3403
0	0	0	Legal fees	788	1000	212
47	0	-47	Auditing expense	4996	5000	4
353	354	1	Bookkeeping/Accounting	3636	4242	606
192	223	31	Telephone	2825	2670	-155

0	0	0	Employee training	1514	0	-1514
0	102	102	Miscellaneous Admin.	3086	1720	-1366
12451	12192	-259	Total administrative expenses	164684	148607	-16077
UTILITIES EXPENSE						
172	290	118	Electricity	4953	3275	-1678
678	835	156	Water	25124	10017	-15107
62	32	263	Gas	1893	3638	1745
1559	2087	528	Sewer	3232	25042	21810
2471	3537	1065	Total utilities expense	35202	41972	6770
OPERATING & MAINTENANCE EXPENSE						
0	15	15	Janitor & cleaning supplies	382	180	-202
0	120	120	Janitor & cleaning contract	0	1200	1200
0	180	180	Exterminating contract	2555	2160	-395
2021	1816	-205	Garbage removal	28456	21792	-6704
345	307	-38	Security contract	2952	3684	732
397	20	-377	Grounds supplies	398	240	-158
1400	1540	140	Grounds contract	31309	18466	-12843
3707	5358	1651	Repairs payroll	49510	57180	7770
979	2346	1367	Repairs material	32762	24460	-8302
3343	1929	-1419	Repairs contract	29808	19290	-10518
0	0	0	Heating repairs	0	250	250
7900	1875	-6025	Decorating contract	56698	20250	-36448
0	125	125	Decorating supplies	125	1500	1375
0	78	78	Uniform rental	286	936	150
0	0	0	Vehicle & equip. repair	5679	5421	-258
0	0	0	Misc. operating expense	348	497	149
20097	15709	-4388	Total operating & maintenance	241308	177506	-64202
TAXES & INSURANCE						
1349	1330	-19	Property taxes	16373	15961	-412
736	924	188	Payroll taxes	9973	10724	751
0	0	0	Business taxes & licenses	3792	1520	-2272
1280	1506	226	Property insurance	15595	18071	2476
0	0	0	Fidelity bond insurance	57	40	-17
866	1036	170	Workers compensation	10370	11723	1353
302	300	-2	Employee benefits	3703	3600	-103
0	155	155	Other insurance	4836	1860	-2976
4533	5251	718	Total taxes & insurance	64699	53499	-1200
39552	36689	-2864	TOTAL OPERATING EXPENSE	505893	431584	-74709
12404	15151	-2980	NET OPERATING INCOME	101900	163135	-61235
DEBT SERVICE						
1700	1792	92	Mortgage interest	23439	21500	-1939
731	734	3	Mortgage service charge	8855	8804	-51

2431	2526	95	Total debt service	32294	30304	-1990
41983	39215	-2769	TOTAL EXPENSES	538187	461888	-76699
3202	3029	-173	Payments to principal	35294	36343	1048
9250	7250	-2000	Deposits to reserve account	105606	84056	-21550
54435	49494	-4942	TOTAL CASH DISBURSEMENTS	679087	582287	-97201
0	0	0	RELEASES FROM RESERVE ACCOUNT	111557	100000	11557
-2479	2346	-4825	NET CASH FLOW	40263	112432	-72169