

Plant Assets

Topics to be Discussed

Plant, property and equipment
Accounting for acquisition
Accounting for costs subsequent to acquisition
Accounting for depreciation
Accounting for disposal

Description

Tangible, long-term assets acquired for use in the operation of the accounting entity

Acquisition costs

Includes all costs of acquiring assets and preparing them for their intended use
Cash price today

Land

cost includes

purchase price

costs incurred in “closing”

- title
- attorney’s fees
- recording fees

costs incurred in getting land in condition for intended use

- grading, filling, draining, clearing

additional land improvements having indefinite life

Building

cost includes

all costs incurred starting with excavation to completion of building

fees, such as attorney’s and architect’s

building permits

Equipment

cost includes

insurance on equipment while in transit

cost of special foundations

assembling and installation costs

costs of conducting trial runs

Account captions

LAND CAPTIONS	Number of Companies			
	2006	2005	2004	2003
Land	325	337	339	342
Land and improvements	140	128	132	132
Land and buildings	60	59	56	55
Land combined with other identified assets	7	10	9	7
No captions with term land	42	46	48	47
	574	580	584	583
Lines of business classification	26	20	16	17
Total Companies	600	600	600	600

DEPRECIABLE ASSET CAPTIONS

<u>Buildings</u>	Number of Companies			
	2006	2005	2004	2003
Buildings	183	184	189	195
Buildings and improvements	275	267	269	256
Buildings and land or equipment	78	85	84	73
Buildings combined with other identified assets	11	13	14	14
No caption with term buildings	42	34	32	49
	589	583	588	587
Lines of business classification	11	17	12	13
Total Companies	600	600	600	600

Other Depreciable Asset Captions

	Number of Companies			
	2006	2005	2004	2003
Machinery and/or equipment	377	387	391	387
Machinery and/or equipment combined with other assets	130	129	128	113
Construction in progress	289	284	276	274
Leasehold improvements	129	133	135	131
Leased assets	62	59	60	66
Automobiles, marine equipment, etc. ..	99	97	89	84
Furniture, fixtures, etc.	106	100	106	107
Computer equipment	69	63	59	38
Software	67	67	56	58
Assets leased to others	25	13	15	21

Costs subsequent to acquisition

Capital vs. revenue expenditure

capital expenditure - an outlay that will provide a benefit beyond the current period; recorded as an asset

revenue expenditure - expenditures that benefit only the current period; charged to expense account

distinction is not always clear-cut

Cost allocation procedures

costs incurred to achieve greater future benefits are capitalized

useful life of the asset must be increased

quantity of units produced from the asset must be increased

quality of the units produced must be enhanced

expenditures that simply maintain a given level of services are expensed

most expenditures below an established arbitrary minimum amount are expensed rather than capitalized

Depreciation

Depreciation accounting is the process of allocating the cost of fixed assets to the accounting periods in which benefits are received

Depreciation is not a matter of valuation but a means of cost allocation

Factors affecting service life of plant asset

- wear and tear due to use
- wear and tear due to the elements
- inadequacy - asset ceases to be useful because demands of firm have increased
- supersession - replacement of one asset with another more efficient and economical asset
- obsolescence

Depreciation methods

Components of calculation

C = Cost

S = Salvage value

L = Useful service life

R = Depreciation rate

Demonstration Problem

Basic Data

Type of Asset: Equipment
 Cost (C): \$500,000
 Salvage Value (S): \$50,000
 Useful Life (L): 5 years

Straight Line Method

$$\frac{C - S}{L}$$

Year	C-S	Rate	Annual Depr.	Accum. Depr.	Book Value
1					
2					
3					
4					
5					

Declining Balance Method

Year	Rate	Annual Depr.	Accum. Depr.	Book Value
0				
1				
2				
3				
4				
5				

Units of Production Method

$(C - S) \times (\text{Units Produced in Period} / \text{Expected Total Production})$

Estimated production during the life of asset: 360,000 units

Actual production:

Year 1	120,000 units
Year 2	_____ units
Year 3	_____ units
Year 4	_____ units
Year 5	_____ units

Year	C-S	Rate	Annual Depr.	Accum. Depr.	Book Value
1					
2					
3					
4					
5					

Depreciation Captions

DEPRECIATION METHODS	Number of Companies			
	2006	2005	2004	2003
Straight line	592	592	586	580
Declining balance	16	14	16	22
Sum-of-the-years'-digits	5	4	6	5
Accelerated method - not specified	27	30	32	41
Units of production	23	24	22	30
Group/composite	9	10	8	4

ACCUMULATED DEPRECIATION	Number of Companies			
	2006	2005	2004	2003
Accumulated depreciation	357	345	337	336
Accumulated depreciation and amortization	184	188	192	193
Accumulated depreciation, amortization and depletion	14	18	19	16
Accumulated depreciation and depletion	5	6	6	7
Allowance for depreciation	15	17	17	20
Allowance for depreciation and amortization	5	5	9	6
Other captions	20	21	20	22
Total Companies	600	600	600	600