



## Notes – Topic 6

### Long-Term Assets

- I. What are long-term assets?
  - a. Land, buildings, equipment, natural resources.
  - b. Intangible Assets
    - i. Patents, copyrights, etc.
    - ii. Still depreciate as they expire.
    - iii. Good Will
      1. Excess paid when purchasing company above fair market value.
      2. Company's existing customers and products let you gain more than you could with just the raw assets.
  - c. Leasehold Improvements
    - i. Improvements on leased space.
    - ii. Can't keep after the lease expires, so depreciate the cost over the lease term regardless of the expected duration of the improvements.
  - d. Capital Lease
    - i. Pretend you own the leased thing.
    - ii. Match with a Liability, not an Equity entry.
    - iii. More later.
- II. Timeline
  - a. Evaluation
    - i. Should I buy the thingamajig?
    - ii. Cost compared to payback time.
  - b. Acquire
    - i. Could purchase outright, could lease, could construct in-house, could be part of a "pbasket purchase" (land, building, resources, etc, all for one package price), or could purchase an entire company and have to split those varying assets.
    - ii. Items Included in PPE Costs
      1. Buildings
      2. Land
        - a. Legal, Escrow, Surveying fees
        - b. Clearing & grading land.
      3. Equipment
        - a. Tax & Freight In
        - b. Installation (physically placing the thing) and Preparation for Use (trial runs that don't affect production, calibration, training?)
      4. Lease
        - a. Operating Lease
          - i. Ordinary leases
          - ii. DR Lease Expense. CR Cash
        - b. Capital Lease
          - i. Defined in FASB 13
            1. If lease meets any one of four criteria, it's a capital lease.
            2. Asset at end of term reverts to lessee.
            3. 75% of the asset's useful life is included in the lease term
            4. There's a bargain purchase option (lessee can buy the asset for a price so good they'd be crazy not to)

5. If minimum lease payments 90% of the fair market value of the asset at lease inception. (Too complicated to discuss further.)
    - ii. DR Capital Lease, CR Capital Lease Liability
    - iii. Payments: DR Liability, DR Interest Expense, CR Cash
    - iv. Must be depreciated!
- c. Depreciation
- i. DR Depreciation Expense, CR Accumulated Depreciation
  - ii. Assets that Depreciate
    1. Land maintained on balance sheet but has no depreciation.
    2. Buildings and equipment have "Depreciation"
    3. Natural Resources have "Depletion"
  - iii. Calculation
    1. Need to know the original cost, anticipated life, and estimated residual value.
    2. Total depreciation at the end of the asset's anticipated life needs to be its original cost less its estimated residual value.
    3. Straight Line
      - a. Easiest and most common.
      - b. Recognize depreciation equally over the asset's life.
    4. Unit Depreciation
      - a. Recognize depreciation based on the number of units used.
      - b. Ex: Mileage on a car
      - c. Periodic =  $((\text{Cost} - \text{Residual}) / \text{Units Available}) * \text{Units Used}$
      - d. Define the rate as total depreciation per total units, then apply that rate to periodic usage.
    5. Accelerated Depreciation
      - a. Any method of calculation where the rate exceeds that of straight-line depreciation.
      - b. Double Declining Balance (DDR)
        - i. Do *not* subtract residual value from original cost before determining rate.
        - ii. Rate =  $2 * (100\% / \text{Lifespan})$
        - iii. Apply rate to book value (Cost less Accumulated Depreciation) each period.
        - iv. Toward the end of the schedule be careful not to depreciate away the residual value!
    6. Sum of Years' Digits
      - a. In four years,  $1 + 2 + 3 + 4 = 10$
      - b. In year 1, Rate =  $4/10$
      - c. In year 2, Rate =  $3/10$
      - d. A cross between straight-line and DDB.
    7. Single Declining Balance
      - a. Same as DDB, but multiply by 1.5 instead of by 2.
- d. Improvements
- i. Decide whether it's a repair (expense) or an improvement (capital).
    1. Significant? If the amount is small, expense it.
    2. Some firms use a "hurdle rate," below which everything gets expensed.
    3. It should be capitalized if it prolongs the asset's useful life, increases productive capacity, or decreases operating costs.
  - ii. To capitalize, DR Asset, CR Cash and reconsider depreciation
- e. Monitoring
- i. Gauge the validity of the original estimates and make adjustments if needed.
  - ii. Asset impairment. (See example later)

f. Disposal

- i.  $\text{Gain || Loss} = \text{Sale Proceeds} - \text{Book Value}$ . Positive differences are gains.
- ii. DR Cash, DR Accumulated Depreciation. CR PP&E. Then CR Gain on Sale or DR Loss on Sale
- iii. Gain or Loss appears on "Other Revenues and Expenses" portion of income statement.