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EXPLORING OUR FINANCIAL FUTURE

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Critical Concepts of Accounting for Capital Assets

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Session Agenda

- Review of the basics:
  - ✓ Definition
  - ✓ Major classifications
  - ✓ Reporting under two measurement focuses
- Valuation for reporting purposes
- Capitalized costs
- Asset retirement obligations
- Impairments

Definition

- Capital assets
  - Assets that are used in operations and that have initial useful lives in excess of one year
    - Include
      - Tangible and intangible assets
      - Construction in progress
    - Exclude
      - Investments
      - Capital-type assets permanently out of service
      - Foreclosure property
      - Joint ventures and other equity interests

Information Requirements

- Data on capital assets needed for a variety of purposes
  - ✓ Financial reporting
  - ✓ Control
  - ✓ Maintenance
  - ✓ Replacement
  - ✓ Insurance
  - ✓ Cost recovery and rate setting

Major Capital Asset Classes

General Considerations

- Distinguish capital assets *being depreciated* or amortized* from those *not being depreciated*
  - ✓ Not in the same major asset class
- Classify intangible capital assets
  - ✓ Includes easements, water rights, timber rights, other right-to-use assets, patents, trademarks, computer software, lease assets, and subscription assets
  - ✓ Usage and nature are key – not intangible nature

* Referred to collectively as *being depreciated*

Major Capital Asset Classes (1/4)

- Land
  - ✓ Includes land under buildings and infrastructure
  - ✓ Includes site preparation improvements with indefinite lives
  - ✓ Generally includes related rights, unless acquired separately
  - ✓ Excludes depreciable land (report separately)
- Construction and development in progress
- Infrastructure
  - ✓ Including only *ancillary* buildings and equipment
  - ✓ If only some networks/subsystems being depreciated, report separately

Major Capital Asset Classes (2/4)

- Buildings
- Land improvements other than buildings
  - ✓ Permanent and unmovable, but limited useful lives
- Furnishing and equipment
  - ✓ May include vehicles, software, collections
- Note – Right-to-use lease, PPP, and subscription assets may be reported in one of two ways:
  - As a classification, reported by major classification of underlying assets
  - Separately identified within major classifications of owned assets

Major Capital Asset Classes (3/4)

- Other
  - May separately report additional classifications significant to government
  - Aggregation of all other capital assets, separately reporting
    - Being depreciated
    - Not being depreciated

Major Capital Asset Classes (4/4)

- Clarifications:
  - ✓ Classifications include improvements to that class of capital assets, where applicable
  - ✓ "Intangible" is not a classification of capital assets
  - ✓ Major classes are not defined in GAAP

Concepts and Basics of Accounting for Capital Assets

Difference in Measurement Focus (1/2)

- Economic resources vs. current financial resources
  - ✓ Economic resources
    - Interperiod equity
    - Focus on cost (expense)
    - Consistent with capitalization/depreciation
  - ✓ Current financial resources
    - Financial/budgetary accountability
    - Focus on liquidity (expenditure)
    - Inconsistent with capitalization/depreciation

Difference in Measurement Focus (2/2)

	Economic Resources (proprietary or fiduciary fund)		Current Financial Resources (governmental fund)	
Year	Annual Expense	Book Value Year End	Annual Expenditures	Book Value Year End
1	$100,000	$900,000	$1,000,000	$0
2	$100,000	$800,000	$0	$0
3	$100,000	$700,000	$0	$0
4	$100,000	$600,000	$0	$0
5	$100,000	$500,000	$0	$0
6	$100,000	$400,000	$0	$0
7	$100,000	$300,000	$0	$0
8	$100,000	$200,000	$0	$0
9	$100,000	$100,000	$0	$0
10	$100,000	$0	$0	$0
Total	$1,000,000		$1,000,000	

Capitalization and Interperiod Equity

- Two operating statement goals of capitalization
  - ✓ Avoid overstating expense of the period(s) of acquisition/construction/development
    - Achieved by capitalization
  - ✓ Avoid understating expense of periods of service provision
    - Achieved by depreciating over useful life
    - Not achievable for assets with indefinite useful lives

Optional Capitalization

- Insignificant/immaterial items (capitalization threshold)
- Infrastructure acquired in fiscal years ended before July 1, 1980
- A collection of works of art and historical treasures that meets all of the following conditions:
  - ✓ Held for public exhibition, education, or research in furtherance of public service, rather than financial gain
  - ✓ Protected, kept unencumbered, cared for, and preserved
  - ✓ Subject to policy that requires the proceeds from sales of collection items to be used to acquire other items for collections

Capitalization Without Expense (1/2)

- Assets with indefinite useful lives
  - ✓ Land
  - ✓ Permanent rights-of-way
- Assets not yet providing service
  - ✓ Construction/development in progress
- Collections of works of art, historical treasures or similar assets (if capitalized)

Capitalization Without Expense (2/2)

- Infrastructure reported using the *modified approach*; option for some or all networks/subsystems, if all of the following conditions are met:
  - ✓ Up-to-date inventory
  - ✓ Replicable periodic condition assessment with results expressed using measurement scale;
  - ✓ Annual estimate of amount needed to maintain and preserve at target condition level
  - ✓ Documentation that assets have been maintained at target condition level

Valuation of Capital Assets for Financial Reporting Purposes

Initial Valuation of Capital Assets

- Purchased or constructed/developed
  - ✓ Historical cost/estimated historical cost
- Donated
  - ✓ *Acquisition value* on date of donation (entry, not exit, price)
    - What it would have cost the government to acquire the asset itself
- Transferred or purchased/sold within a reporting entity
  - ✓ Carrying value at time of transfer
- Trade-ins
  - ✓ If assets are similar: book value of trade-in + monetary consideration = value of new asset

Acquisition of Multiple Capital Assets

- "Bundled Costs" allocation approaches
  - Work from known to unknown
  - Work from relative acquisition value
  - Work from relative construction costs based on a model project

Capitalized Costs

Capitalizable Cost Considerations (1/2)

- Capitalization policies
- Acquisition costs
  - External costs
  - Internal costs – general guidelines
  - Internal costs – special cases
    - Internally generated intangibles
    - Software and subscription assets
    - Lease assets
    - PPP right-to-use assets

Capitalizable Cost Considerations (2/2)

- Training
- Improvements
- Interest incurred before the end of a construction period

Capitalization Policies (1/2)

- Cost and useful life thresholds
  - ✓ Costs vs. benefits of capitalization
    - Significance (materiality)
  - ✓ Not capitalized ≠ no internal control over assets

Capitalization Policies (2/2)

- Cost and useful life thresholds (cont.)
  - ✓ Minimum cost threshold
    - Generally apply to individual items
      - May apply to a group of assets, if significant
    - Might differ for classifications of capital assets
      - i.e., $5,000 or more for equipment vs. $50,000 or more for buildings
    - Test might not include all capitalizable costs
      - Wall and floor treatments, initial outfitting, in building renovation
  - ✓ Minimum useful life

Acquisition Costs (1/9)

- Preconditions for capitalization
  - ✓ *Directly* identifiable with *specific* assets (or specific groups of assets)
    - Only if incurred *after acquisition has become probable* (i.e., “likely to occur”).
    - Feasibility study is *not* capitalized

Acquisition Costs (2/9)

- Examples
  - Purchase, construction, or development costs, e.g.:
    - Payments to vendors
    - Payments to architects, engineers, designers
    - Payments to contractors or subcontractors
    - Payments for employee or contractor labor
    - Payments for supplies and materials
    - Licenses, transportation, inspection
    - Insurance
    - Project management

Acquisition Costs (3/9)

- Examples (cont.)
  - ✓ Initial direct costs that are ancillary charges necessary to place into service, e.g.:
    - Legal and title fees
    - Appraisal and negotiation fees
    - Closing costs
    - Surveying fees
    - Land preparation costs
    - Demolition costs
    - Transportation
    - Installation
    - Testing
    - Audit and accounting fees

Acquisition Costs (4/9)

- Internal costs – three guidelines
  1. General and administrative costs should *not* be capitalized (i.e., overhead)
  2. Costs directly related to the acquisition of a specific asset should be capitalized
  3. Costs clearly related to the acquisition of capital assets, but not to specific projects, should still be capitalized

Acquisition Costs (5/9)

- Internally generated intangibles - only capitalize costs incurred *after*
  - ✓ The specific objective of the project has been determined
  - ✓ The nature of the service capacity to be provided has been determined
  - ✓ The feasibility of successfully completing the project has been demonstrated
  - ✓ The government has demonstrated that it (1) intends, (2) is able, and (3) is making an effort to develop/complete the project

Acquisition Costs (6/9)

- Software –
  - ✓ Internally generated software if
    - Developed in-house by the government's personnel or by a third-party contractor on behalf of the government, or
    - Commercially available software is purchased or licensed by the government and modified using more than minimal incremental effort before being put into operation
  - ✓ Subscription assets acquired in subscription-based information technology arrangements (SBITAs)
    - Subscription liability + up-front payments and prepayments + capitalizable implementation costs

Acquisition Costs (7/9)

- Internally generated software and subscription assets (cont.)
  - ✓ Application development/initial implementation stages costs may be capitalized, but
    - Only if incurred subsequent to preliminary project stage
    - Only if management authorizes and commits to funding
  - ✓ Data conversion costs generally expensed as incurred
    - Capitalize only to the extent necessary to make the computer software operational

Acquisition Costs (8/9)

Internally Generated Software	**Subscription Assets - Capitalizable Implementation Costs**
Preliminary Project Stage – Do not capitalize • Conceptual formulation • Determining existence of needed technology • Evaluation and final selection of alternatives	**Preliminary Project Stage – Do not capitalize** • Conceptual formulation • Determining existence of needed technology • Evaluation and final selection of alternatives
Application Development Stage • Configuration • Software interfaces • Coding • Installation of hardware • Testing, including parallel processing	**Initial Implementation Stage** • Configuration • Coding • Testing and installation • Ancillary costs to place subscription asset into service • *Ends when subscription asset is placed in service*
Post-Implementation/Operation Stage – Do not capitalize • Training • Software maintenance	**Operation and Additional Implementation Stage – Do not capitalize** • [Training] • Maintenance and troubleshooting • On-going access to IT assets

Acquisition Costs (9/9)

- Lease assets (lessee) =

  Lease liability

  + up-front payments and prepayments

  – incentives received at or before beginning of lease term

  + initial direct ancillary costs to place lease asset into service

- PPP right-to-use assets (operator) =

  Liability for installment payments

  + up-front payments and prepayments

  + cost of purchased or constructed underlying PPP asset

  + initial direct ancillary costs to place PPP asset into service

Training

- Training costs are not capitalized
  - ✓ The cost of a capital asset should include any "ancillary charges necessary to place the asset into its intended location and condition for use."
    - Training affects neither
  - ✓ A cost needs to provide benefit throughout the useful life of a capital asset to justify being depreciated over that same period
    - Not true of training costs (e.g., employee turnover)

Improvements (1/2)

- Improvements = additional value
  - ✓ Lengthening estimated useful life
    - Not applicable to indefinite-lived assets, including
      - Infrastructure reported using modified approach
      - Collections
  - ✓ Increasing service capacity (effectiveness, efficiency or functionality)
    - Includes additional software modules
- Repairs and maintenance = retain value

Improvements (2/2)

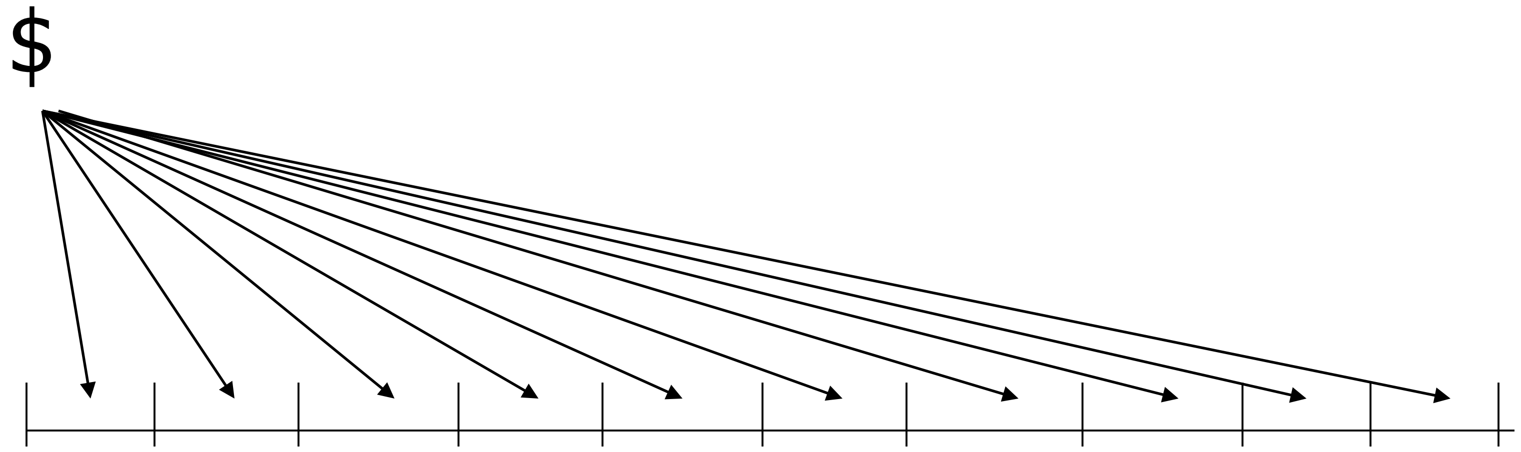
- General rule
  - ✓ Actions that lengthen useful life of asset
    - Capitalizable (e.g., improvements)
  - ✓ Actions that avoid shortening the useful life of asset
    - Expense in period (e.g., repairs and maintenance)
- Combination of improvements and repairs
  - ✓ Separate and treat accordingly
- Effect of using modified approach or undepreciated collections
  - ✓ Improvement only if service capacity is increased

Interest Incurred During Acquisition

- Recognize interest cost as *expense* (other than in governmental funds) in period incurred
- Recognize interest costs as an *expenditure* (governmental funds) in period when they become due and payable

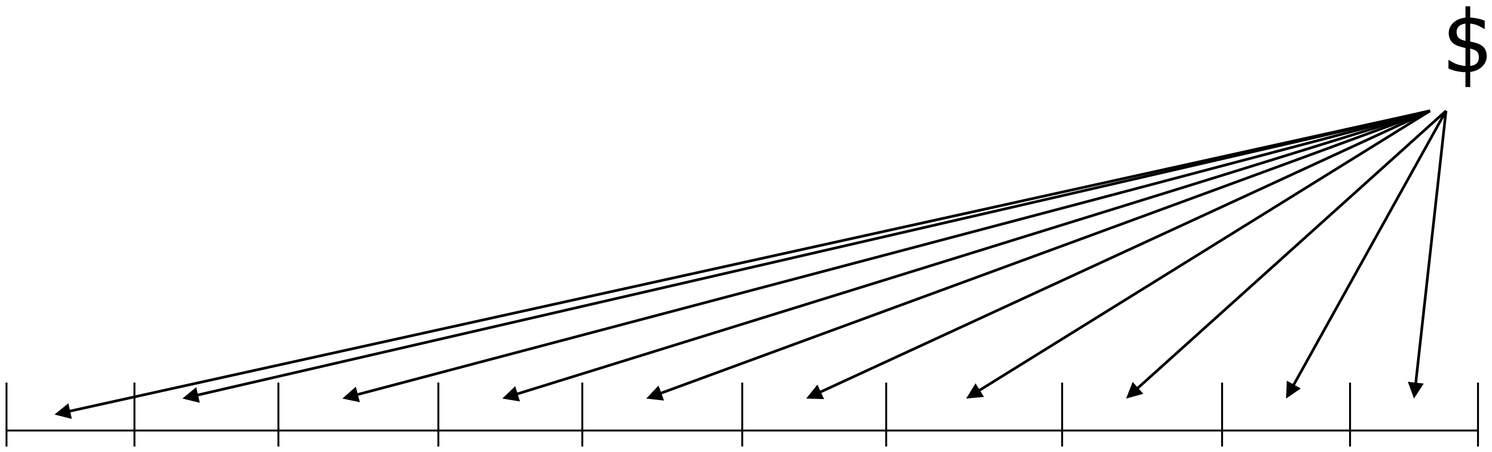
Asset Retirement Obligations

Depreciation



Defer/Capitalize → Allocate

Asset Retirement Obligation



Anticipate/Liability Recognition → Allocate

What is an ARO?

- *Asset retirement obligation* (ARO)
  - ✓ Legally enforceable liability associated with the retirement of a tangible capital asset
    - Retirement = *permanent* end of use such as sale, abandonment, recycling, other types of disposal
  - ✓ Results from the *normal operations* of capital assets
- Examples - costs associated with:
  - ✓ Decommissioning nuclear reactors and medical imaging equipment
  - ✓ Dismantling and removing sewage treatment plants and waste-to-energy plants
  - ✓ Removal and disposal of wind turbines, solar farms

Governmental Funds

- No change from current accounting and reporting
- Recognize liabilities and expenditures for goods and services when received

Economic Resources/Accrual Recognition Required

- Recognize when a liability is *incurred* and the amount is reasonably estimable
  - ✓ *Incurred* if both an external and an internal obligating event has occurred (in any order):

Occurrence of *external obligating event* → Occurrence of *internal obligating event* → Recognize if liability is *reasonably estimable*

↑ Source of potential obligation

↑ Circumstances that trigger the obligation

External Obligating Events

ARO external obligations establish disposal requirements, as a result of:

- Approval of laws and regulations
- Entry into a legally binding contract
- Issuance of a court judgment

Internal Obligating Events (1/3)

ARO internal obligating events trigger obligations at a point in time:

- Acquisition with existing ARO
  - ✓ Recognize - When asset is first acquired
    - Example: County utility acquires a currently-functioning nuclear power plant when private operator exits business
- Contamination (based on normal usage)
  - ✓ Recognize – When contamination first occurs – initial testing
    - Example: Nuclear medical imaging equipment, such as an MRI
- Non-contamination-related
  - ✓ Three triggers, depending on *how* the obligation is incurred

Internal Obligating Events (2/3)

Contamination:

An event or condition normally involving a substance that is deposited in, on, or around a tangible capital asset in a form or concentration that may harm people, equipment, or the environment due to the substance's radiological, chemical, biological, reactive, explosive or mutagenic nature.

Internal Obligating Events (3/3)

- Non-contamination-related triggers depend on the incurrence of the obligation:
  - ✓ Incurred based on a pattern of usage
    - Recognize: when operations begin and some usable capacity is consumed
      - Examples: logging, mining
  - ✓ Incurrence not based on usage
    - Recognize: when placed in service
      - Example: wind turbines
  - ✓ Incurrence as a result of abandonment
    - Recognize: when abandoned
      - Example: power plant abandoned before placed in service

Recognition

- Recognize:
  - ✓ Credit an ARO liability
  - ✓ Debit either
    - An expense – in cases of abandonment (or past usage)
    - A deferred outflow of resources – in all other cases
      - Amortize to expense over asset's estimated remaining useful life

Initial Measurement*

- Include legally enforceable liabilities for
  - ✓ Retirement of tangible capital asset
  - ✓ Disposal of replaced parts of a tangible capital asset
  - ✓ Environmental remediation associated with asset retirement necessitated by normal operation of the asset
- Best estimate of current cost of expected outlays
  - ✓ Use all information available (at a reasonable cost)
  - ✓ Current requirements (enacted laws)
  - ✓ Cost of required goods/services/facilities if purchased at year end
- *Probability weighting* of potential outcomes (expected cash flow technique)

* Special measurement and remeasurement guidance applicable when government is a minority owner and controlling entity follows non-GASB GAAP

Annual Remeasurement*

- Adjust for effects of inflation/deflation
- Evaluate effect of all other relevant factors
  - ✓ Changes in:
    - Price not attributable to inflation or deflation
    - Technology
    - Legal requirements
    - Type of equipment, facilities, or services that will be used to meet ARO
  - ✓ Adjust estimated asset retirement outlays for these factors only if effects are expected to be *significant*

* Special measurement and remeasurement guidance applicable when government is a minority owner and controlling entity follows non-GASB GAAP

Financial Assurance Requirements

- Government may be required to put assets in a trust, escrow or other restricted account to ensure financial ability to pay ARO
- *Cannot* offset (net) restricted assets in reporting the ARO

Impairments

Definition

- A *significant, and unexpected* decline in the service utility of a capital asset
  - ✓ Significant
  - ✓ Unexpected
  - ✓ Permanent

General Characteristics

- Events or changes in circumstances if both:
  - ✓ *Prominent* (i.e., "conspicuous or known to the government"), *and*
  - ✓ "Generally are expected to have prompted discussion by the governing board, management, or the media."
    - Not expected to undertake special efforts to discover
    - Only need to test if *indicators of impairment* are present

Indicators of Impairment

- Physical damage
- Changes in laws, regulations, or other environmental factors
- Technological developments
- Change in the manner or duration of use*
- Stoppage of construction or development

* See clarifications, next slide

Clarifications (1/2)

- Indefinite lived assets cannot be impaired
  - ✓ Including infrastructure using modified approach, nondepreciating collections
  - ✓ Restoration costs must be expensed
- Reduced demand
  - ✓ Not an indicator of impairment *in itself*, but
  - ✓ Often the result of an indicator of impairment (e.g., obsolescence)
    - Impairment recognized
- Change in duration of use ≠ change in estimated useful life

Clarifications (2/2)

- These are not impairment indicators or impairments:
  - ✓ Temporary declines in service utility
    - Impairments are assumed to be permanent unless demonstrated otherwise
  - ✓ Unanticipated increase in construction costs
  - ✓ Outsourcing the operation of a capital asset
  - ✓ Debris removal

Impairment Test (1/2)

- Significant
  - ✓ If all of the expenses associated with the potentially impaired asset are significant compared to its current service utility
    - Continued operation and maintenance costs, including depreciation;
    - Costs associated with restoration
  - ✓ For impairments that do *not* result from physical damage, this criterion is automatically met as soon as management takes action to address a potential impairment

Test of Impairment (2/2)

- Unexpected
  - Not part of the normal life cycle of the asset and not otherwise anticipated *when the asset was originally acquired*
  - Examples
    - Structure originally intended to be used for 20 years
    - Decision made in year 10 to abandon in year 15 (no change in estimated useful life)
      - Not anticipated when asset was originally acquired
      - Treatment: Recognized impairment in year 15
        - Time of change in duration of use

Calculation

- How an impairment is calculated depends on whether the impaired asset will remain in use
  - ✓ Assets will no longer be used in operations
    - Adjust to fair value, if lower than carrying value
  - ✓ Assets will continue to be used in operations
    - Restoration cost approach
    - Service units approach
    - Deflated depreciated replacement cost approach

Asset Will No Longer Be Used in Operations

- Theory
  - ✓ Assets that cannot be used should not be reported at greater than their salvage value
    - Fair value is cap for assets not used in operations
- Lower of cost or fair value
  - ✓ Asset ceases to be a capital asset and becomes instead an asset held for sale
  - ✓ Impairment of asset resulting from stoppage of construction or development that cannot be shown to be temporary

Asset Will Continue to Be Used in Operations

- Theory
  - ✓ The amount of the impairment of a capital asset should equal a portion of carrying value, proportionate to the asset's lost service utility
- Three approaches to the calculation
  - ✓ Restoration cost
  - ✓ Service units
  - ✓ Deflated depreciated replacement cost

Recoveries

- Insurance
  - ✓ Net against loss
    - Recognize as soon as it is realizable
  - ✓ No effect on book value of restored asset
- Losses are not netted against FEMA reimbursements
  - ✓ FEMA is not insurance (no transfer of risk)
  - ✓ Grant

Booking Impairments

- Two options
  - ✓ Adjust (i.e., increase) accumulated depreciation
    - Theory: Impairment shortens useful life
  - ✓ Adjust both capital asset and accumulated depreciation
    - Theory: Impairment tantamount to a partial retirement

Acronyms and Initialisms

- ARO – Asset retirement obligation
- GAAP – Generally accepted accounting principles
- GASB – Governmental Accounting Standards Board
- GFOA – Government Finance Officers Association of the US and Canada
- PEB – Postemployment benefits (including pensions & OPEB)
- PPP – Public-private or public-public partnership
- SBITA – Subscription-based information technology arrangements

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