

CHAPTER 6

ANNEX 3

CAPITAL IMPROVEMENT DEPRECIATION

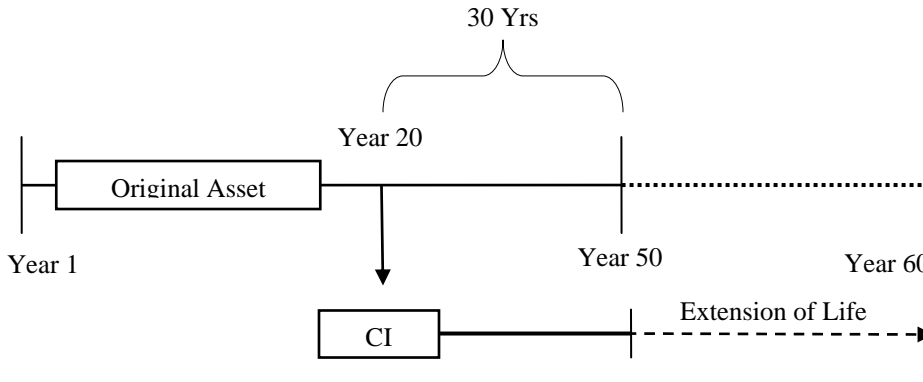
At present, the DoD FMR requires the acquisition costs for all permanent buildings to be depreciated over 40 years and each capital improvement made to the building to be independently depreciated over 20 years. The following Cases I through VIII illustrate depreciation methodology for capital improvements more closely in compliance with the FASAB requirements.

Case I: The Capital Improvement Extends the Useful Life of Existing PP&E

| | |
|----------------------------------------------------------------------------------|-------------------------|
| Original Facility Acquisition Cost | \$200,000 |
| Original Estimated Useful Life (Yrs) | 50 |
| Annual Depreciation Expense | \$4,000 |
| <i>(Using the Straight Line Depreciation Method)</i> | |
| Remaining Useful Life After 20 Years (Yrs) | 30 |
| Accumulated Depreciation for 20 Years: 20*\$4,000 | \$80,000 |
| <i>Net Book Value: \$200,000 - \$80,000</i> | <i>\$120,000</i> |
| Capital Improvement – Year 20 | |
| Capital Improvement Cost | \$200,000 |
| Useful Life of the Capital Improvement (Yrs) | 40 |
| Impact on total useful life by the Capital Improvement | +10 |
| Depreciation Expense Baseline Starting In Year 20 | |
| Cost Baseline for Depreciation: <i>Net Book Value + Capital Improvement Cost</i> | \$320,000 |
| Revised Remaining Estimated Useful Life (Yrs): <i>30 + 10</i> | 40 |
| Revised Annual Depreciation Expense | \$8,000 |

Examples – Extends the Useful Life:

- Major replacements or reconstruction to restore facilities damaged by a natural disaster (i.e., reconstruction of a new building on an existing foundation).



Case II: The Capital Improvement Increases the General PP&E Asset’s Capacity, Size, Efficiency, or Modifies the Functionality/Use

The improvement has the same expected useful life as *the remaining useful life of the PP&E asset* to which it relates. The improvement does not extend the life of the associated PP&E asset.

| | |
|----------------------------------------------------------------------------------|------------------|
| Original Facility Acquisition Cost | \$200,000 |
| Original Estimated Useful Life (Yrs) | 50 |
| Annual Depreciation Expense | \$4,000 |
| <i>(Using the Straight Line Depreciation Method)</i> | |
| Remaining Useful Life After 20 Years (Yrs) | 30 |
| Accumulated Depreciation for 20 Years: 20*\$4,000 | \$80,000 |
| Net Book Value: \$200,000 - \$80,000 | \$120,000 |
| Capital Improvement – Year 20 | |
| Capital Improvement Cost | \$100,000 |
| Useful Life of the Capital Improvement (Yrs) | 30 |
| Impact on total useful life by the Capital Improvement | 0 |
| Depreciation Expense Baseline Starting In Year 20 | |
| Cost Baseline for Depreciation: <i>Net Book Value + Capital Improvement Cost</i> | \$220,000 |
| Remaining Estimated Useful Life (Yrs): <i>Unchanged</i> | 30 |
| Revised Annual Depreciation Expense | \$7,300 |

Examples**Increase Capacity**

- Raising the roof of the warehouse to increase cubic feet.

Increase Size

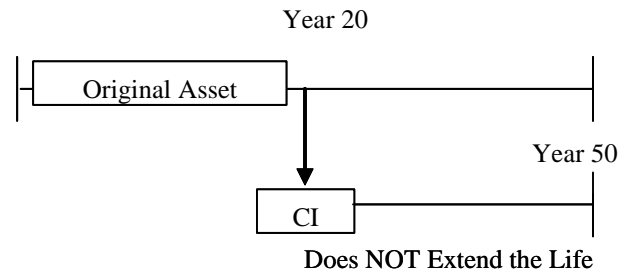
- Build an addition, expansion or extension to the building, i.e., increase footprint.

Increase Efficiency

- Install building insulation.

Modify Functionality

- Convert an office to a warehouse.
- Upgrade architectural elements of a facility that has not or is not failing, e.g., upgrade a flat roof to a pitched roof.

**Case III: The Capital Improvement Increases the General PP&E Asset's Capacity, Size and Efficiency or Modifies the Functionality/Use**

The improvement has an expected useful life that differs from the expected useful life of the PP&E asset to which it relates. The improvement does not extend the life of the associated PP&E asset.

| | |
|---------------------------------------------------------------------|------------------|
| Original Facility Acquisition Cost | \$200,000 |
| Original Estimated Useful Life (Yrs) | 50 |
| Annual Depreciation Expense | \$4,000 |
| Remaining Useful Life After 20 Years (Yrs) | 30 |
| Accumulated Depreciation for 20 Years: 20*\$4,000 | \$80,000 |
| Net Book Value: \$200,000 - \$80,000 | \$120,000 |
| Capital Improvement – Year 20 | |
| Capital Improvement Cost | \$100,000 |
| Extension of the Original Useful Life of the Associated Asset (Yrs) | 0 |
| Capital Improvement Estimated Useful Life (Yrs) | 20 |
| Depreciation Expense Baseline Starting In Year 20 | |
| Record I: | |
| Cost Baseline for Depreciation: <i>Net Book Value</i> of Facility | \$120,000 |
| Remaining Estimated Useful Life of Facility (Yrs) | 30 |
| Revised Annual Depreciation Expense | \$4,000 |
| Record II: | |
| Cost Baseline for Depreciation: <i>Capital Improvement Cost</i> | \$100,000 |
| Estimated Useful Life of Capital Improvement (Yrs) | 20 |
| Revised Annual Depreciation Expense | \$5,000 |

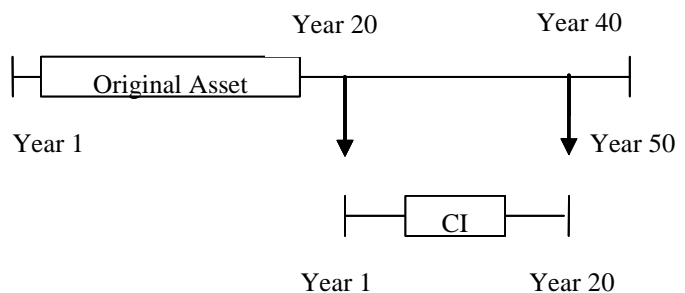
Examples

Increase Efficiency

- Install HVAC system where none existed.

Modify Functionality

- Install elevator where none existed.



Case IV: The Original Asset Is Fully Depreciated

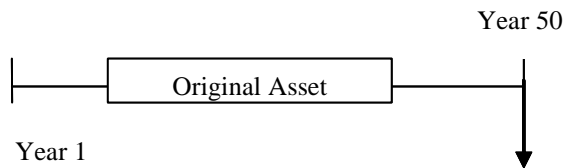
The capital improvement increases the original asset’s size, capacity, and efficiency or modifies the functionality. The improvement does not extend the life of the associated PP&E asset.

| | |
|-------------------------------------------------------------------|------------|
| Original Facility Acquisition Cost | \$200,000 |
| Original Estimated Useful Life (Yrs) | 50 |
| Annual Depreciation Expense | \$4,000 |
| Remaining Useful Life After 50 Years (Yrs) | 0 |
| Accumulated Depreciation for 50 Years: 50*\$4,000 | \$200,000 |
| Net Book Value: \$200,000 - \$200,000 | \$0 |
| Capital Improvement – Year 50 | |
| Capital Improvement Cost | \$100,000 |
| Extension of the Useful Life of the Associated Asset | 0 |
| Capital Improvement Estimated Useful Life (Yrs) | 20 |
| Depreciation Expense Baseline Starting In Year 50 | |
| Record I: | |
| Cost Baseline for Depreciation: <i>Net Book Value</i> of Facility | \$0 |
| Remaining Estimated Useful Life of Facility (Yrs) | 0 |
| Revised Annual Depreciation Expense | \$0 |
| Record II: | |
| Cost Baseline for Depreciation: <i>Capital Improvement Cost</i> | \$100,000 |
| Remaining Estimated Useful Life (Yrs) | 20 |
| Revised Annual Depreciation Expense | \$5000 |

Examples

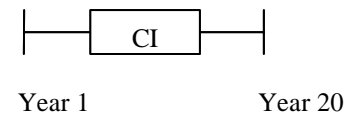
Increase Size

- Extend utility system (e.g., power lines) to the previously un-served areas



Modify Functionality

- Construct office space within a warehouse



Case V: The Original Asset Is Fully Depreciated

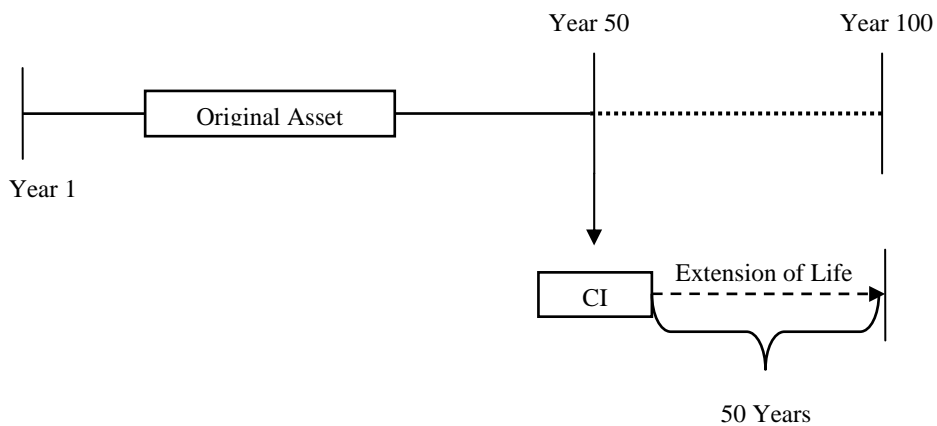
The improvement (major renovation) extends the life of the associated PP&E asset.

| | |
|----------------------------------------------------------------------------------|-------------|
| Original Facility Acquisition Cost | \$200,000 |
| Original Estimated Useful Life (Yrs) | 50 |
| Annual Depreciation Expense | \$4,000 |
| Remaining Useful Life After 50 Years (Yrs) | 0 |
| Accumulated Depreciation for 50 Years: 50*\$4,000 | \$200,000 |
| Net Book Value: \$200,000 - \$200,000 | \$0 |
| Capital Improvement – Year 50 | |
| Capital Improvement Cost | \$1,000,000 |
| <i>Extension of the Useful Life of the Associated Asset (Yrs)</i> | 50 |
| Depreciation Expense Baseline Starting In Year 50 | |
| Cost Baseline for Depreciation: <i>Net Book Value + Capital Improvement Cost</i> | \$1,000,000 |
| Revised Remaining Estimated Useful Life (Yrs): <i>0 + 50</i> | 50 |
| Revised Annual Depreciation Expense | \$20,000 |

Examples

Extends the Useful Life

- Pentagon renovation project.



Case VI: The Capital Improvement Increases the General PP&E Asset’s Capacity, Size and Efficiency or Modifies the Functionality/Use

The improvement has an expected useful life that differs from the expected useful life of the PP&E asset to which it relates. The improvement does not extend the life of the associated PP&E asset. However, it is assumed that the original asset will continue to be used past its estimated economic life of 50 years.

| | |
|---------------------------------------------------------------------|---------------|
| Original Facility Acquisition Cost | \$200,000 |
| Original Estimated Useful Life (Yrs) | 50 |
| Annual Depreciation Expense | \$4,000 |
| Remaining Useful Life After 45 Years (Yrs) | 5 |
| Accumulated Depreciation for 45 Years: 45*\$4,000 | \$180,000 |
| Net Book Value: \$200,000 - \$180,000 | 20,000 |
| Capital Improvement – Year 45 | |
| Capital Improvement Cost | \$100,000 |
| Extension of the Original Useful Life of the Associated Asset (Yrs) | 0 |
| <i>Capital Improvement Estimated Useful Life (Yrs)</i> | 20 |
| Depreciation Expense Baseline Starting In Year 45 | |
| Record I: | |
| Cost Baseline for Depreciation: Net Book Value of Facility | \$20,000 |
| Remaining Estimated Useful Life of Facility (Yrs) | 5 |
| Revised Annual Depreciation Expense | \$4,000 |
| Record II: | |
| Cost Baseline for Depreciation: Capital Improvement Cost | \$100,000 |
| Estimated Useful Life of Capital Improvements (Yrs) | 20 |
| Revised Annual Depreciation Expense | \$2,500 |

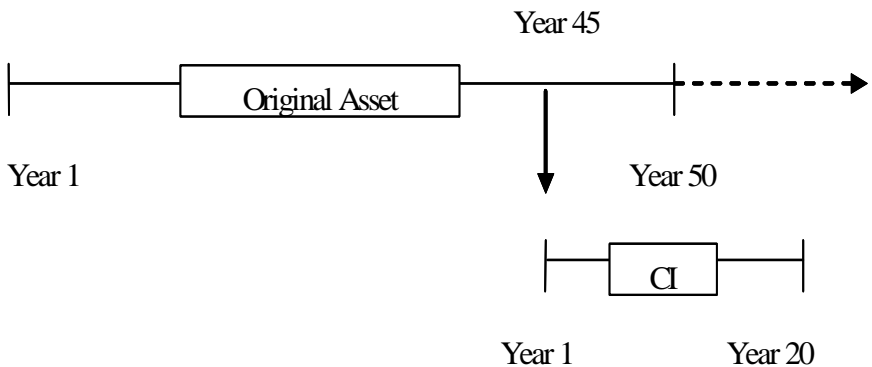
Examples

Increase Efficiency

- Install HVAC system where none existed.

Modify Functionality

- Install elevator where none existed.



Case VII: The Capital Improvement Increases the General PP&E Asset's Capacity, Size, and Efficiency or Modifies the Functionality/Use

The capital improvement is funded by the WCF activity that is not the preponderant user of the facility improved. The associated asset will be reported by the preponderant user of that facility when the capital improvement is reported and depreciated by the WCF activity funding that improvement.

| | |
|---------------------------------------------------------------|------------------|
| Original Facility Acquisition Cost | \$200,000 |
| Original Estimated Useful Life (Yrs) | 50 |
| Annual Depreciation Expense | \$4,000 |
| Remaining Useful Life After 20 Years (Yrs) | 30 |
| Accumulated Depreciation for 20 Years: 20*\$4,000 | \$80,000 |
| Net Book Value: \$200,000 - \$80,000 | \$120,000 |
| Capital Improvement – Year 20 | |
| Capital Improvement Cost | \$100,000 |
| Capital Improvement Estimated Useful Life (Yrs) | 20 |
| Depreciation Expense Baseline Starting In Year 20 | |
| Record I: | |
| Reported by the Preponderant User | |
| Cost Baseline for Depreciation: Net Book Value of Facility | \$120,000 |
| Remaining Estimated Useful Life of Facility (Yrs) | 30 |
| Revised Annual Depreciation Expense | \$4,000 |
| Record II: | |
| Reported by the WCF Activity (Not a Preponderant User) | |
| Cost Baseline for Depreciation: Capital Improvement Cost | \$100,000 |
| Estimated Useful Life of Capital Improvements (Yrs) | 20 |
| Revised Annual Depreciation Expense | \$2,500 |

Examples:

Increase Capacity

- Raising the roof of the warehouse to increase cubic feet.

Increase Size

- Build an addition, expansion or extension to the building, i.e., increase footprint.

Increase Efficiency

- Install building insulation.
- Install HVAC system where none existed.

Modify Functionality

- Convert an office to a warehouse.
- Construct office space within a warehouse.
- Upgrade architectural elements of a facility that has not or is not failing, e.g., upgrade a flat roof to a pitched roof.
- Install elevator where none existed.