

CHAPTER 6

ANNEX 3

CAPITAL IMPROVEMENT DEPRECIATION

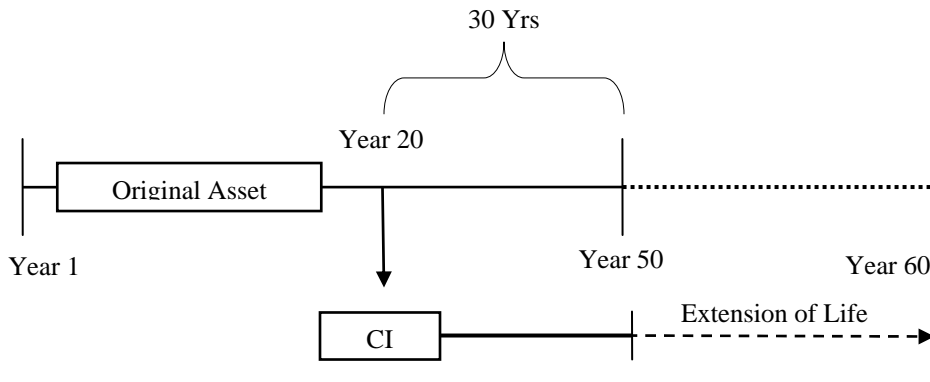
★The following Cases I through VIII illustrate depreciation methodology for capital improvements more closely in compliance with the FASAB requirements.

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
Net Book Value: \$200,000 - \$80,000	\$120,000
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

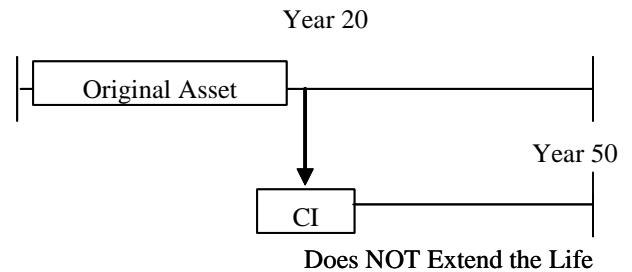
- Build an addition, expansion or extension to the building, i.e., increase footprint.

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

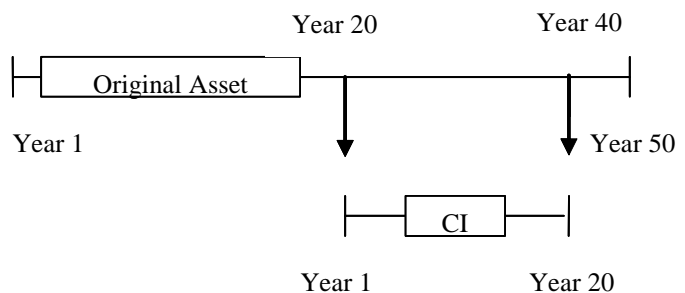
Examples

Increase Efficiency

- Install HVAC system where none existed.

Modify Functionality

- Install elevator where none existed.



Case IV: The Original Asset Is Fully Depreciated

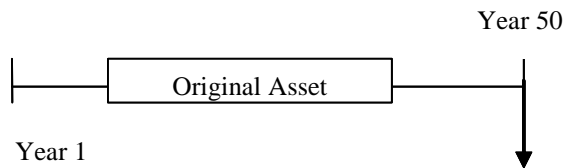
The capital improvement increases the original asset’s size, capacity, and efficiency or modifies the functionality. The improvement does not extend the life of the associated PP&E asset.

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

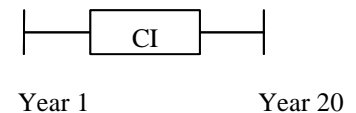
Increase Size

- 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

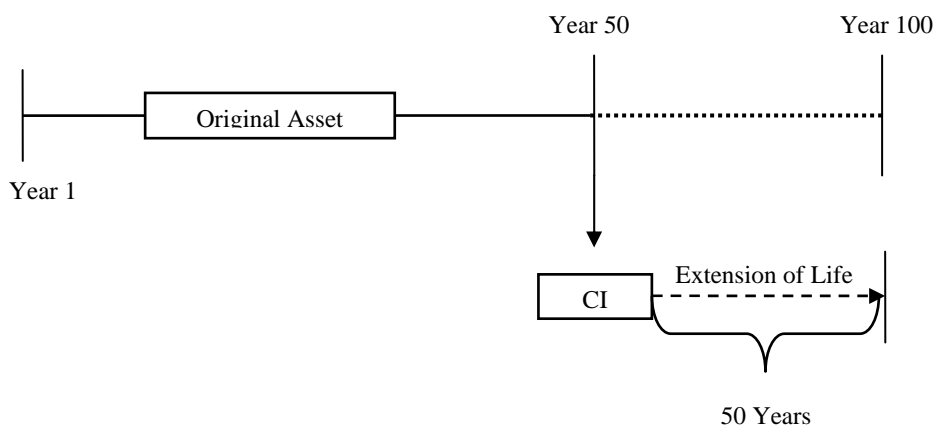
The improvement (major renovation) extends the life of the associated PP&E asset.

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

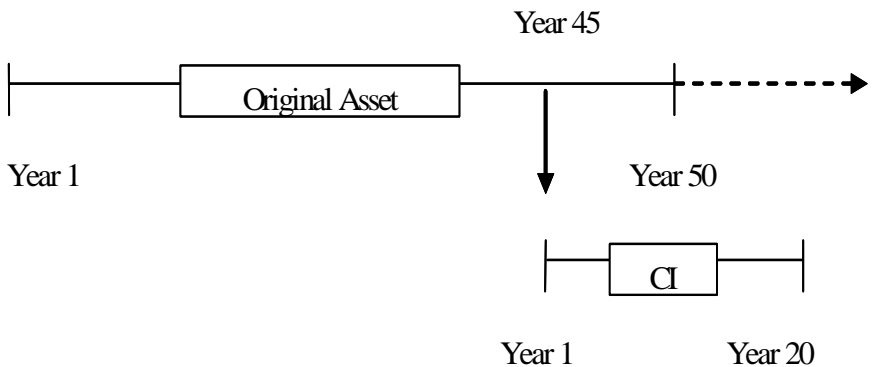
Examples

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.