Bureau of Indian Affairs

The No Child Left Behind School Facilities and Construction Negotiated Rule Making Committee Meeting #5

Presentation

February 1, 2011

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Deterioration Rate / Reinvestment Rate for School Facilities

Impacts to Deterioration Rate

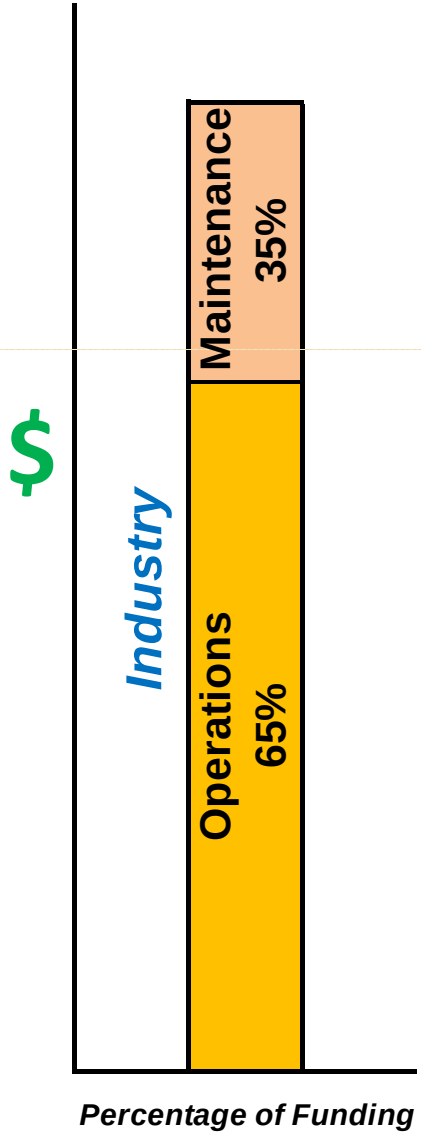
- **Operations & Maintenance Funding**
- **Life Cycle Requirements**
- **Education Program Space Standards**

Annual Requirements

Operations	Maintenance
❖Pest Control	❖Corrective Action
❖Refuse Collection	❖Emergency Maintenance
❖Grounds Care	❖Preventive Maintenance
❖Utility Costs	
❖Custodial	

Operations & Maintenance Funding

Annual Requirements



Operations & Maintenance Funding

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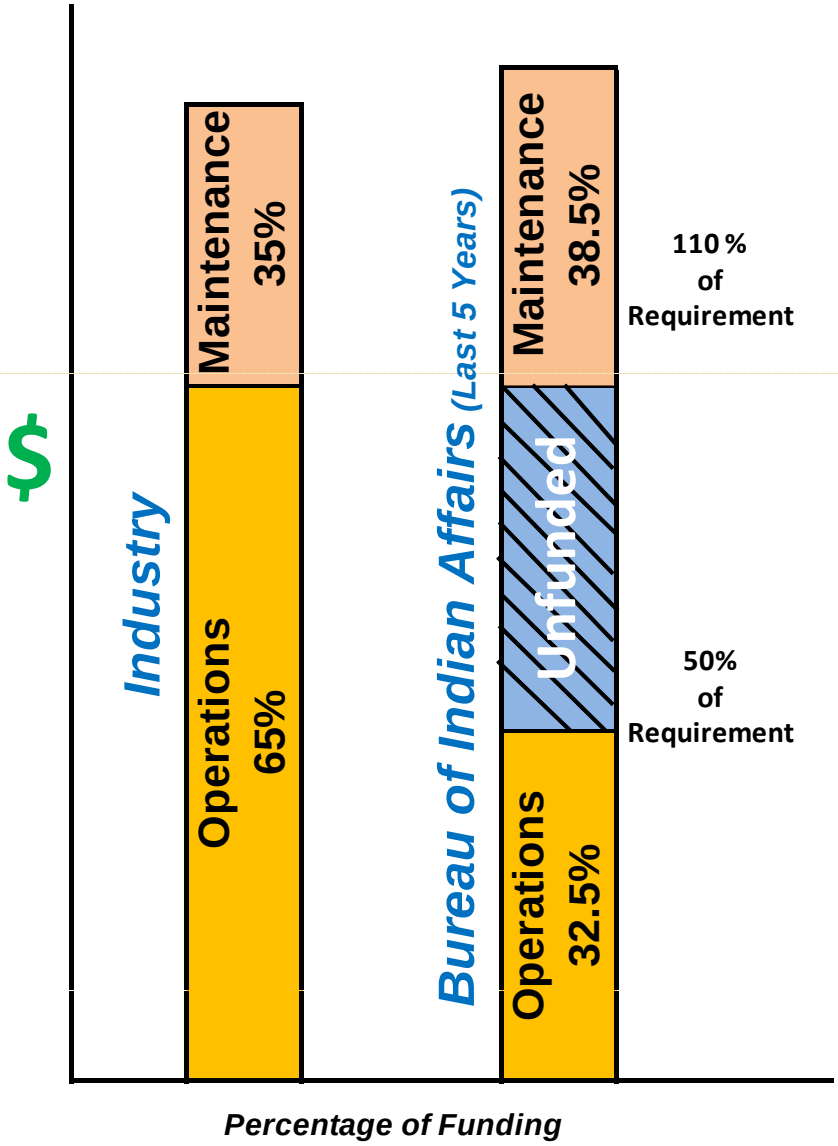
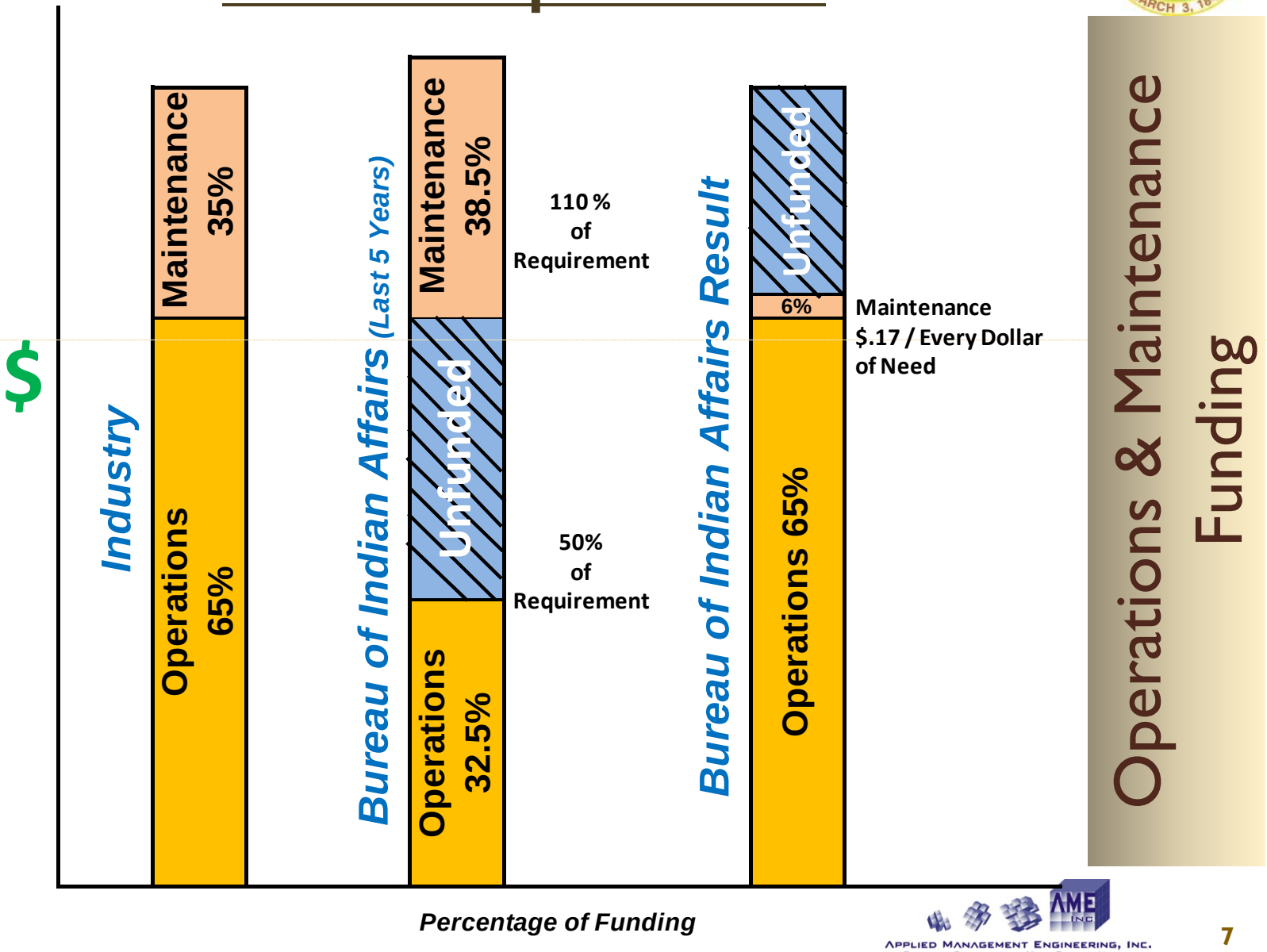
Annual Requirements



Operations & Maintenance Funding

Annual Requirements



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Life Cycle Requirements

(Component Renewal)

System Replacements

Examples:

- Roofs
- HVAC

Cyclic Replacements

Examples:

- Painting
- Carpet

"Annualized on a 50 year design as 2% per year."

Life Cycle Requirements

Expected System / Cyclic Replacement During Building Life

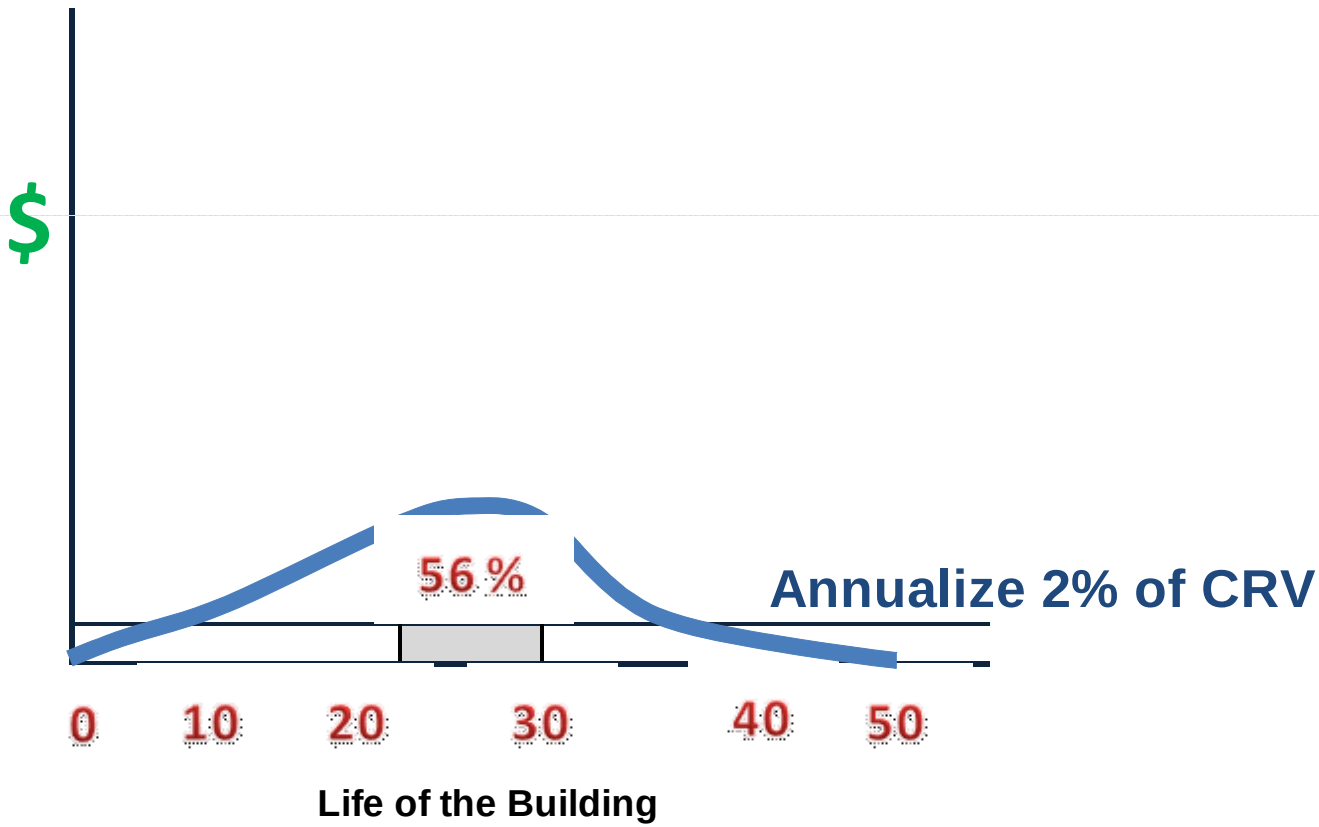
Life Cycle Requirements

Example **- High School 2-3 Stories**

RS Means Square Foot Costs 2010	Percent of Construction	Life Cycle	Times per Life	Percent Cost	Percent Replacement	Component Renewal
Substructure	4.1	50				
Superstructure	14.5	50				
Exterior Enclosurer	15.6	20-30	1	15.6	50%	7.8
Roofing	5.0	25-30	1	5	100%	5.0
Interiors	21.1	10	4	84.4	75%	**63.3**
Conveying	0.5	25	1	0.5	75%	0.4
Plumbing	5.4	25	1	5.4	50%	2.7
HVAC	16.6	25-30	1	16.6	75%	12.5
Fire Protection	2.3	50				
Electrical	12.9	25-30	1	12.9	50%	6.5
Total	**98.0**				**Total**	**98.2**

System / Cyclic Replacements Over Life Cycle

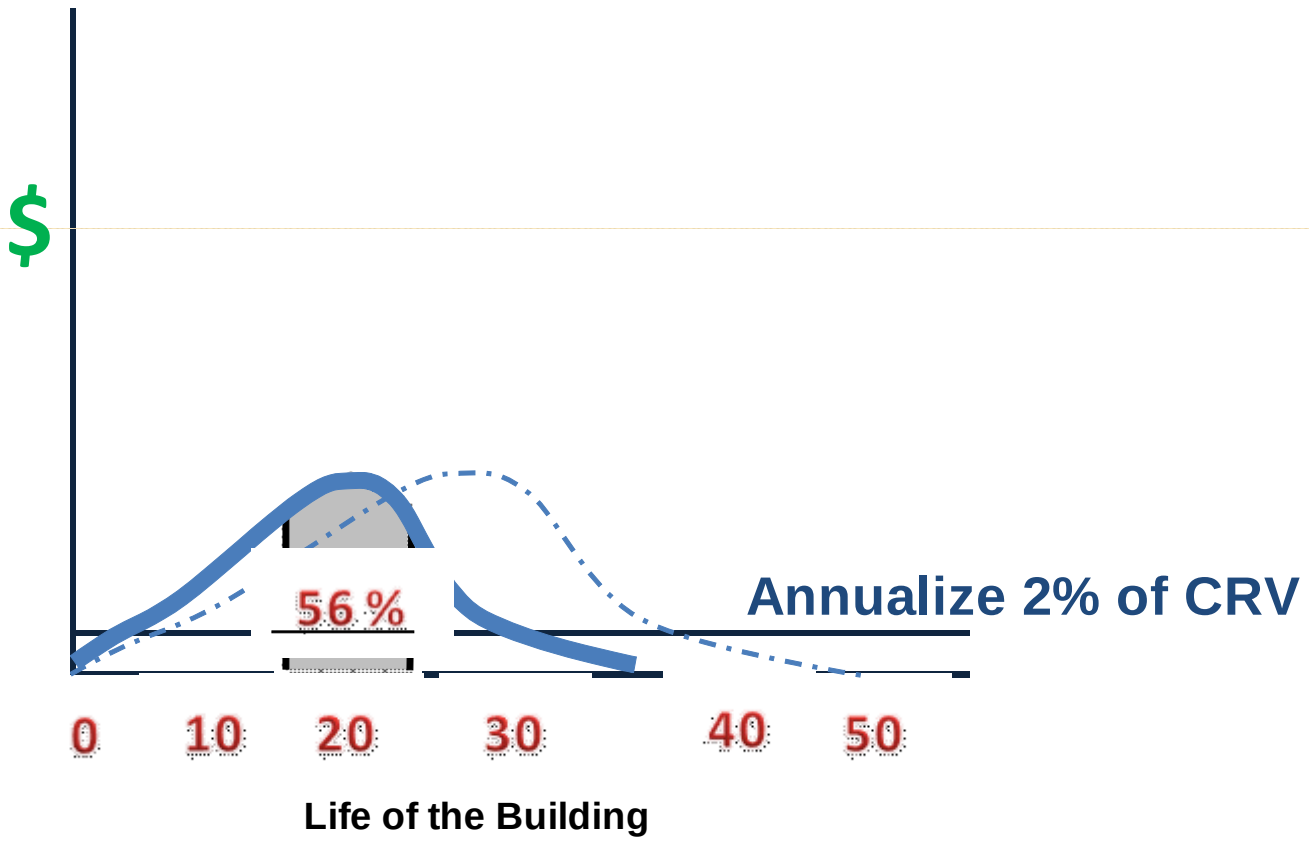
(Assumes Full Funding of Maintenance)



Life Cycle Requirements

System / Cyclic Replacements Over Life Cycle

(Assumes Minimal Funding of Maintenance)



Life Cycle Requirements

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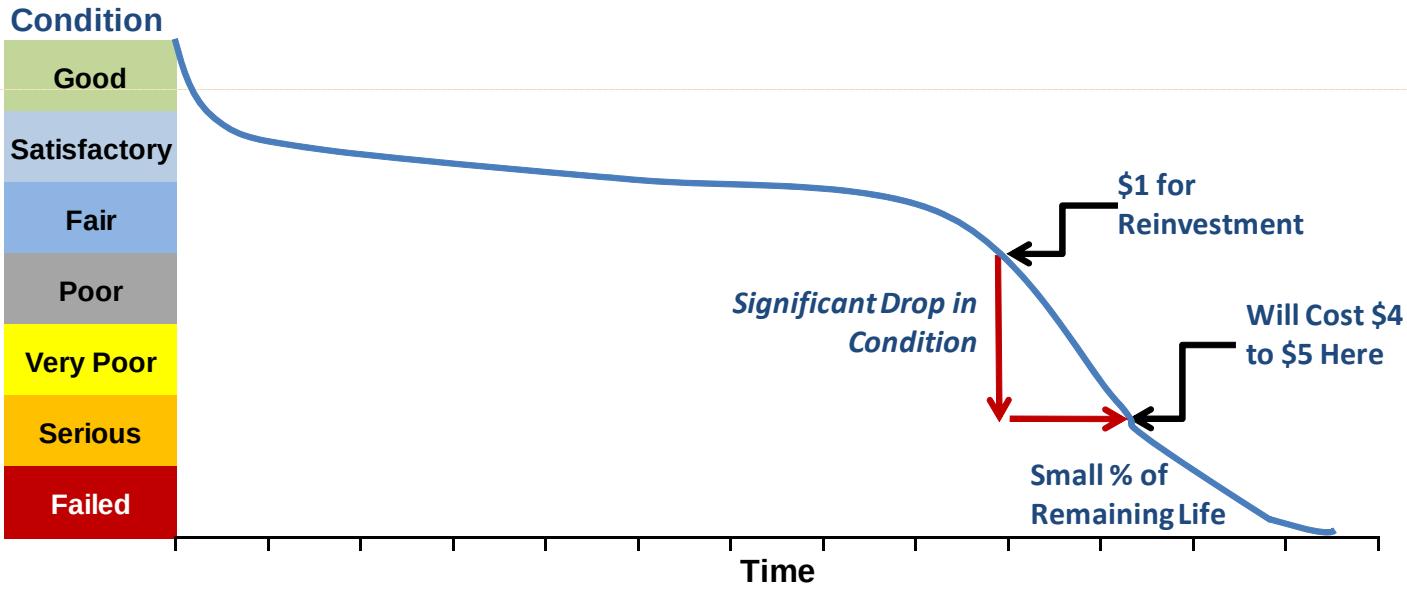
Impact of Deferring Reinvestment



Life Cycle Requirements

Impacts to Reinvestment in School

(Not included in 2% deterioration rate)

- ***Education Program Changes***
- ***Space Requirements***
- ***Technology Requirements***
- ***Student Enrollment Changes***

Education Program Space Standards

BIA Strategic Plan

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Sixty-Four Locations Considered in Poor Condition

- ***There are approximately 500 buildings that are used for education.***
- ***The average weighted age of the buildings is 136 years.***

Questions