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OFFICE OF PUBLIC & INDIAN HOUSING

Section 18

Determining Physical Obsolescence

24 CFR 970.15 and HUD Notice 2018-04

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Introduction and Purpose of Presentation

- **Introduction**

- James Isaacs
- Surendra Patel

- **Purpose:** A Deep Dive on Proving Physical Obsolescence or *“What’s Broken and What Needs to be Repaired or Replaced in the Next 3 Years”*

- *Its an analysis of what existing items, within a building needs to be repaired immediately to keep it going;*

it’s not a rehabilitation estimate, GPNA or redevelopment budget for RAD

“Its an analysis of what existing items, within a building needs to be repaired or Replaced immediately to keep it going”

- “Existing” = only the cost to replace/repair an item can be included No upgrades or install a non-existing item;
- “Within a building” = the building and a 5’ perimeter;
- “Immediately” = next 3 years;

When is an Obsolescence Review Not Required*?

Demolition:

- DeMinimis Exception
- Health and Safety
- Natural Disasters
- Casualty Loss



* An alternative form of proof is still required to prove the property is obsolete, for example fire insurance report, photos, reports, etc.

Disposition:

- Health and Safety
- Infeasible Operation
- Efficient and Effective
- Scattered Sites
- Streamline Voluntary Conversion
- 50 Units or Less
- Vacant Land
- Retentions Part 200
- Section 32 Homeownership

When is an Obsolescence Review Required?



Demolition:

Obsolescence may be Physical or Location or other factors

Disposition:

If justification is Physical Obsolescence of Building



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Physical Condition

- **Step 1:** What's in Need of Immediate Repair/replacement (next 3 years)? then
- **Step 2:** Will it meet substantial rehabilitation cost test
- **Step 3:** What would the local Code Compliance require for the level of proposed repair?

What's Covered



What's Not Covered

Generally, anything beyond 5 feet of building



- Streets
- Sidewalks
- Alleys
- Detached Garages and utility sheds
- Fencing
- Playground equipment
- Landscaping beyond 5'

Does it Need Repair?



Yes!



Does it Need Repair?



No. Maybe Tired or old fashioned but not in need of Repair. *Because something is old does not make it obsolete.*

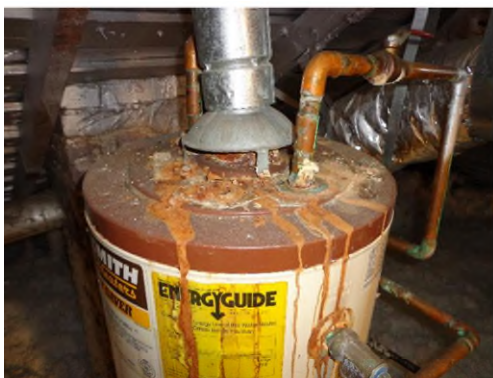


Old does not equal obsolete



Abraham Lincoln's Home: Purchased by Abraham Lincoln in 1844

Does it Need Repair?



Yes!
Replace
with
what?



Window Air Conditioning Unit Needs Replacement, PNA cost should show the replacement price of which system?

The price of a replacement Window unit?



Price to retrofit home with central air system?



Or

Obsolescence – Physical Condition

- Scope of Work: Rehab Needs
 - Captures Immediate Needs (Repairs or Replacement needed in 3 years or less)
 - Third-party report (if structural, environmental issues)
 - International Building Code (IBC)
- Cost-estimates
 - R.S. Means Cost-Index or equivalent
 - Total Development Cost (TDC) published annually
 - 57.14% of TDC for non-elevator (62.5% for elevator)



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Physical Condition

- PHAs must demonstrate substantial **physical issues of the buildings/units** that cannot be corrected in a **cost-effective manner**
- **Physical Needs Assessments (PNA)** should include:
 - Detailed list of specific work-items that require rehabilitation or repair; and
 - rehabilitation cost-estimates
 - Supporting Documents
 - Pictures
 - Reports
 - Evidence of Local Code Requirements



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Physical Condition

- Estimates based on **International Building Code (IBC) and National Fire Protection Association (NFPA) 5000 standards. PHAs may include local code requirements**
- Work items limited to **immediate capital needs for a maximum of three years**
- **Mitigation costs of asbestos, lead-based paint, or other environmental issues must be supported by test result/reports**



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Physical Condition

- Structural defects when supported by reports from a licensed Professional Engineer
- Accessibility improvements for persons with mobility, vision, hearing or other impairments, if triggered by substantial rehabilitation
- Imminent health and/or safety issues



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Physical Condition

Non-Eligible Items

- **Enhancements or Improvements of working systems**
- **New (Not Existing) Amenities**
 - Solar panels;
 - Tank-less water heaters;
 - Trash enclosures;
 - Washer/dryer hook-ups;
 - Garbage disposals;
 - Addition of new porches



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Physical Condition

Non-Eligible Items

- **Local code compliance** if not triggered by the **Substantial** rehabilitation/repair;
- Landscaping or other Site work beyond five feet of the exterior walls of a building;
- Upgrading utility lines that are otherwise in working condition;



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Physical Condition

Non-Eligible Items

- **Site improvements and appurtenances**

- Parking lots,
- Security cameras,
- Playgrounds,
- Community centers



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Physical Condition Non-Eligible Items

- **Replacement of PHA's personal property**
 - Refrigerators,
 - Stove/Ovens, and
 - Window treatments
- **Costs attributable to inflation or “cost escalation”**

Is it included in the Obsolescence Review?





Remember

Obsolescence is “. . . an analysis of what existing items, within a building needs to be repaired immediately to keep it going”

Let's Look at a PNA





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Sample Rehab Cost Review

	Any Town Hosing Authority			Dev. No	AB001000023	
Gross Square Feet:184,375	R.S. Means Location Factor (Building): #####			Row House	Number of Units:	178

	Construction Cost Adjustment Factor: #####					
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RS MEANS	Div.	Item Description	Unit	Unit Cost	Qty	Total Cost	SAC Cost	SAC Comments
072116102220		Add Blanket insulation for floors/ceilings, 12" thick, R38 - attic	SF	\$ 2.46	92,202	\$ 226,816.92	0.00	Ineligible Energy Efficiency Improvement item
073113100355		Asphalt roof shingles, Class A, 240-260 lb per square	Sq.	\$ 237.00	1,107	\$ 262,359.00	\$ 262,359.00	
073113100825		#30 felt underlayment	Sq.	\$ 21.50	1,107	\$ 23,800.50	\$ 23,800.50	
077226100150		Ridge vent, aluminum, painted finish	LF	\$ 8.20	8,525	\$ 69,905.00	\$ 69,905.00	
087120400100		Door hardware, lockset, non-keyed passage, privacy	EA	\$ 139.00	2,044	\$ 284,116.00	\$ 284,116.00	
B2031		Install lever handle hardware at exterior door	1	EA	\$250.84	\$251	\$ 251.00	Permit code required
Z107X ADA		Visual Bell & Strobe, Hearing Impaired, Install	2	EA	\$1,050.69	\$2,101	\$ 2,101.00	Permit code required
081213130025		Frames, steel, knock down, hollow metal, single, up to 5-3/4" jamb depth	EA	\$ 240.00	356	\$ 85,440.00	\$ 85,440.00	
087120652300		Thresholds, ADA compliant, 4" wide, 36" long	EA	\$ 88.00	341	\$ 30,008.00	\$ 30,008.00	
087120501300		Door stops, wall bumper, 4" dia., w/rubber pad	EA	\$ 32.50	2,385	\$ 77,512.50	\$ 77,512.50	



Sample Rehab Cost Review (continued)

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113013150020	Cooking range, residential appliances, free standing, 1 oven, 30" wide, minimum	EA	\$ 625.00	178	\$ 111,250.00	\$0.00	Appliances-ineligible ineligible
113013194150	Hood for range, 2 speed, vented, 20" wide, minimum	EA	\$ 355.00	178	\$ 63,190.00	\$63,190.00	
113013166790	Refrigerator, no frost, Energy-star qualified, 18 CF minimum	EA	\$ 1,050.00	178	\$ 186,900.00	\$0.00	Appliances ineligible
113013246764	Washer. Energy star qualified, top loading, minimum	EA	\$ 885.00	178	\$ 157,530.00	\$0.00	Appliances ineligible
113013256770	Dryer, Electric, fornt loading, energy star qaulified, minimum	EA	\$ 1,075.00	178	\$ 191,350.00	\$0.00	Appliances ineligible
#####	Water Heaters - tankless	EA	1,588	20	\$31,760	\$8,750.00	Upgrade not accepted. Only 10 heaters needing replacement as 10 were replaced 5 years ago. Cost adjusted to \$875 each
122113130020	Blinds, Interior, horizontal, 1" aluminum slats, solid color (6.05 sf)	EA	\$ 72.60	1,421	\$ 103,164.60	\$0.00	Ineligible item Disallowed
028213470210	Asbestos Removal, LBP Removal, and Mold Remediation	SF	\$ 9.70	208,227	\$ 2,019,801.90	0.00	Ineligible- No test report provided



Sample Rehab Cost Review (continued)

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238333102000	6' Base Board heating Replacement	EA	\$ 135.05	534	\$ 72,116.70	\$ 72,116.70	
233423106670	Fans, residential, bath exhaust, grille, back draft damper, 110 CFM	EA	\$ 179.00	232	\$ 41,528.00	0.00	Ineligible - New item - Air Condition not existing
D303030	Electric split-system - heating/cooling, includes ductwork and chase	Apt.	\$ 9,500.00	178	\$ 1,691,000.00	0.00	Ineligible - New item - Air Condition not existing
233113165410	Duct, round, spiral, galv., 4" dia., 26 ga.	LF	\$ 5.85	4,640	\$ 27,144.00	0.00	Ineligible - New item - Air Condition not existing
033053403540	Equipment pad, 3'x3'x6" thick	EA	\$ 133.00	178	\$ 23,674.00	0.00	Ineligible - New item - Air Condition not existing
283146505200	Smoke detector, ceiling type - dwelling units	EA	\$ 252.00	918	\$ 231,336.00	\$ 231,336.00	
265636550130	LED Floodlights, with ballast and lamp, 288 watt	EA	\$ 2,150.00	132	\$ 283,800.00	0.00	New item, ineligible
M.010 D.5010	Electrical and Service Distribution - Square Foot Cost	SF	\$ 2.68	184,375	\$ 494,125.00	0.00	Good Condition Disallowed
Industry Average	CATV/ Internet	Unit	\$ 350.00	178	\$ 62,300.00	\$ 62,300.00	



Sample Rehab Cost Review (continued)

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D40103100530	Install new Sprinkler System for Fire Protection	SF	\$ 16.58	\$20,500	\$ 339,890.00	-	Not existing, No evidence provided that sprinklers are required. Cost might be accepted if PHA provides copy of specific code requirement and corresponding documentation level of repair would trigger code requirement.
Industry Average	Fine Grading green areas - sewer line & patio replacement	SY	3.25	3,640	\$ 11,830.00	0.00	Site Work -ineligible
329113233850	Spread conditioned Topsoil 4" - sewer line & patio replacement	MSF	775.00	33	\$ 25,575.00	0.00	Site Work -ineligible
331113201120	Water supply, polyethylene pipe, 160 psi, 1" diameter - water supply line replacement	LF	\$ 2.55	3,960	\$ 10,098.00	\$ 10,098.00	
333113253040	PVC fittings, bends, or elbows, 4" diameter - sewer line replacement	EA	\$ 66.50	500	\$ 33,250.00	\$ 33,250.00	
333113252080	Polyvinyl chloride pipe, 13' lengths, 8" diameter - sewer line replacement	LF	\$ 11.60	3,960	\$ 45,936.00	0.00	Site Work -ineligible
333113253040	PVC fittings, bends, or elbows, 8" diameter - sewer line replacement	EA	\$ 88.00	356	\$ 31,328.00	0.00	Site Work -ineligible
312316136130	Excavating trench, 1/2 CY excavator, 6' - 10' deep - sewer line replacement	BCY	\$ 10.10	1,320	\$ 13,332.00	0.00	Site Work -ineligible
329113161600	Pea gravel - sewer & water line replacement	CY	\$ 175.00	400	\$ 70,000.00	0.00	Site Work -ineligible



Sample Rehab Cost Review (continued)

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	Security Lights and Security Cameras	EA	\$2,500	10	\$25,000.00	\$ -	Site Work -not attached to Bldg. ineligible
	Replace nonworking light fixtures	EA	\$250	20	\$5,000.00		Site Work -ineligible
		EA	\$ 1,500.00	5	\$7,500.00		Site Work - Regular Maintenance item - Ineligible
	Add new porch for marketability	EA	\$ 3,500.00	178	\$623,000.00		Improvement, not existing - Ineligible
	Addition of Parking Lot				\$0.00	\$ -	Site Work -ineligible
	Playgrounds Equipment				\$0.00	\$ -	Site Work -ineligible
	Parking lots resurfacing				\$0.00	\$ -	Site Work -ineligible
	Solar Panels	EA	\$25,000.00	1	\$25,000.00	\$ -	Improvement, not existing - Ineligible
	Trash Enclosures,	EA	\$ 3,500.00	5	\$17,500.00	\$ -	Site Work -ineligible
329113160350	Seeding, tractor spreader - sewer line replacement	MSF	\$ 55.50	33	\$ 1,831.50	0.00	Site Work -ineligible
329113234150	Fertilizer, tractor spreader - sewer line replacement	MSF	\$ 21.00	33	\$ 693.00	0.00	Site Work -ineligible
329113160350	Hay, power mulcher, large - sewer line replacement	MSF	\$ 55.50	33	\$ 1,831.50	0.00	Site Work -ineligible



Sample Rehab Cost Review (continued)

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D5092	Generator, Diesel, 130 to 300 kW, Replace	EA	\$117,990	1	\$ 117,990.00	0	Not justified replacement
	Total Rehab Cost (TRC) - Immediate Needs (three years)				\$ 11,168,256.12	\$ 4,223,924.70	
Area Location factor	Adjusted TRC - Location factor		0.825		\$ 9,213,811.30	\$ 3,484,737.88	
Markup includes a and 3.5% 2017 Inflation Factor factors applied to the location adjusted unit cost.					\$ 322,483.40	\$ -	Disallowed. No inflation factor allowed.
	Total Adjusted Rehab Cost				\$ 9,536,294.69	\$ 3,484,737.88	
Soft Cost							
General Condition	Permit, Insurance, Bonds etc.		5%		\$ 476,814.73	\$ 174,236.89	
Profit and Overhead up 10 %	Sub-Contractor's Profit and Overhead of TRC (e.g. HVAC, Electric, Plumbing, Elevator)		10%		\$ 953,629.47	\$ 348,473.79	
Totals Constructio Cost (TRC)					\$ 10,966,738.90	\$ 4,007,448.56	



Sample Rehab Cost Review (continued)

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Contingency up to 7.5 %	Contingency 5 % to 10% of TRC		8%		\$ 822,505.42	\$ 300,558.64	
Architectural Fee (4 to 7 %)	Architectural/Engineer's design and construction monitoring fees		6%		\$ 603,170.64	\$ 220,409.67	
	Sub Totals Project Cost				\$ 12,392,414.96	\$ 4,528,416.87	
PHA Administrative Costs up to 2%	HA's Administration: 2%		2%		\$ 247,848.30	\$ 90,568.34	
	Total Project Rehab Cost				\$ 12,640,263.25	\$ 4,618,985.21	

Actual provided by HA

	Total Project Rehab Cost				\$ 30,045,850.70	\$ 21,435,977.91	Approximately 29% Ineligible cost
			2017 TDC		\$ 37,015,680.00		
% of Rehab Cost							57.91% Greater than 57.14%



Things to remember:

- Does it need repair?
- Does it need to be repaired in the next 3 years?
- Is it physically part of the building?
- Is it replacement or an upgrade?
- No escalators or inflation factors

Then ask yourself:

- If I submitted the list of repair items, what else would the municipal building department require?
- Is there supporting evidence of the code requirement?
- Is it 57.14% (non-elevator) or 62% (elevator) of TDC?

Trick Questions: “Is it Part of an Obsolescence Review?”

- Age of the Building?
 - Appliances?
 - Parking lots, sidewalks, detached garages?
 - Escalation factors?
 - Replacement due to end of useful life?
 - New non-existing items?
 - Defensible space improvements?
 - Modernization of kitchens?
 - Cosmetic improvements?
 - No PNA?
- No
 - No
 - No
 - No
 - No
 - No
 - No
 - No
 - No
 - You always need a PNA



The one thing you need to remember:

Obsolescence review is “. . . an analysis of what existing items, within a building needs to be repaired immediately to keep it going;”



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Questions?

For more information

Visit the SAC at www.hud.gov/sac

Email at SACTA@hud.gov

When is an Obsolescence Review Not Required*?

Demolition:

- DeMinimis Exception
- Health and Safety
- Natural Disasters
- Casualty Loss



Disposition:

- Health and Safety
- Infeasible Operation
- Efficient and Effective
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* All demolitions listed here still need proof of physical obsolescence but an alternative is often considered instead of a PNA (i.e. insurance adjuster report, photos, etc.)